MAY 2015 ORDER OF SHEETS

Estimate of Quantities

Miscelloneous Quantities Section No. Right of Way Plat Section No.

Section No. Section No.

Section No. Computer Earthwork Data Section No.

Section No.

TOTAL SHEETS = 174

DESIGN DESIGNATION

(2035)

CONVENTIONAL SYMBOLS

LIMITED HIGHWAY EASEMENT

PROPOSED OR NEW R/W LINE

EXISTING RIGHT OF WAY

17.000

= 59/41

3.3%

= 60/40

∞ 30 MPH

..... 1,467,300

11/1/1/1

A.D.T.

A.D.T.

D.H.V. Đ.

ESALS

PLAN

DESIGN SPEED

CORPORATE LIMITS

SLOPE INTERCEPT

REFERENCE LINE

EXISTING CULVERT

PROPOSED CULVERT (Box or Pipe)

COMBUSTIBLE FLUIDS

MARSH AREA

PROPERTY LINE

Section No. Typical Sections and Details (includes Erosion Control Plans) Section No.

PROFILE

GRADE LINE

UTILITIES

ELECTRIC

WATER

TELEPHONE POLE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

FEDERAL PROJECT STATE PROJECT PROJECT CONTRACT 5992-09-69 5992-09-71

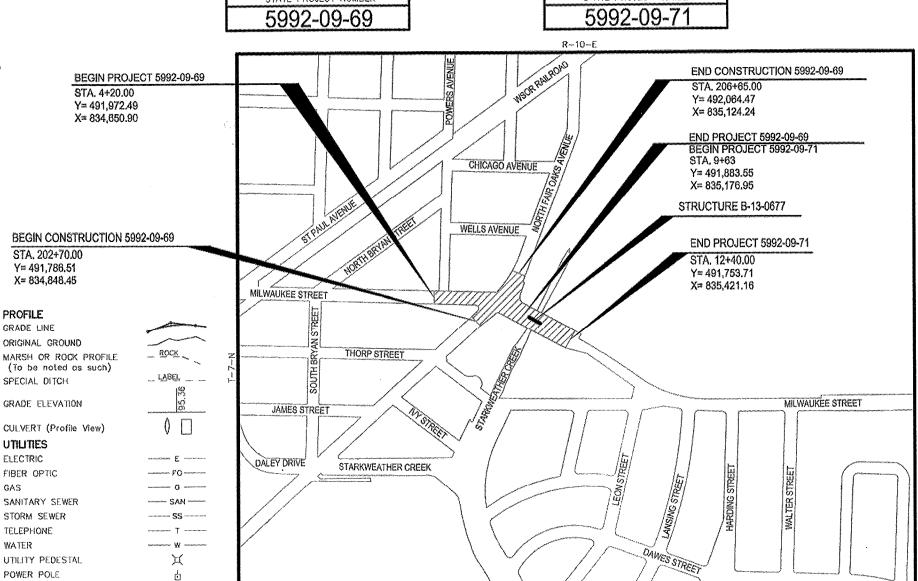
MILWAUKEE STREET, CITY OF MADISON

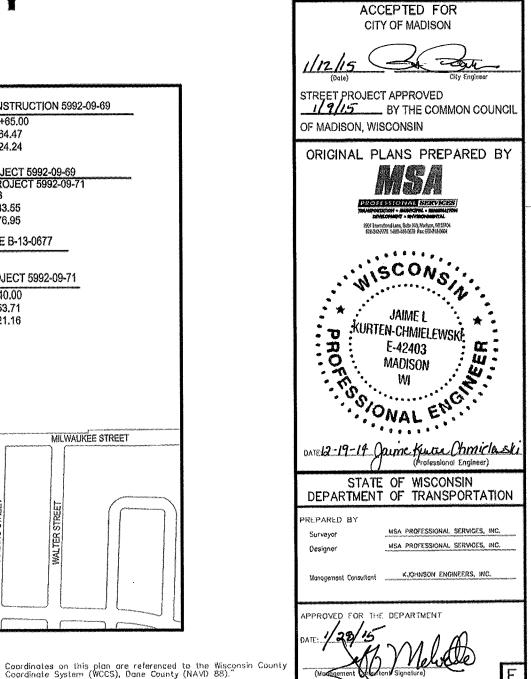
(FAIR OAKS AVENUE INTERSECTION) **LOCAL STREET** DANE COUNTY

(EAST BRANCH STARKWEATHER **CREEK BRIDGE B-13-0677) LOCAL STREET DANE COUNTY**

STATE PROJECT NUMBER 5992-09-69

STATE PROJECT NUMBER 5992-09-7





WOODED OR SHRUB AREA

HIGH VOLTAGE CAUTION

LENGTH OF CENTERLINE PROJECT LD. 5992-09-69 = 0.103 MI

LENGTH OF CENTERLINE PROJECT LD. 5992-09-71 = 0.052 MI.

TOTAL NET LENGTH OF CENTERLINE - 0.155 MI.

GENERAL NOTES

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD88.

TYPICAL FINISHED SECTIONS SHOW THE GENERAL ROADWAY FEATURES THROUGHOUT THE PROJECT. PAVEMENT SLOPES, BORDER SLOPES, ETC., MAY VARY WITHIN THE STATION LIMITS OF THE STATION SECTION. SEE DETAIL SHEETS AND CROSS SECTIONS FOR SLOPES AND GRADES.

TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

PRIOR TO ROAD CLOSURE THE CONTRACTOR SHALL PROVIDE THE ENGINEER. THE CITY OF MADISON POLICE DEPARTMENT. AND THE DANE COUNTY SHERIFF'S DEPARTMENT WITH THE NAME AND TELEPHONE NUMBER OF A LOCAL PERSON RESPONSIBLE FOR THE EMERGENCY MAINTENANCE OF TRAFFIC CONTROL

PRIOR TO ORDERING DRAINAGE PIPES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS AND RESOLVE ALL CONFLICT VERIFICATIONS BY WAY OF ULO'S WITH THE ENGINEER.

ALL LENGTHS ARE IN FEET EXCEPT AS SHOWN

STORM SEWER LENGTHS ARE TO CENTER OF STRUCTURES.

DEPTH OF INLETS AND MANHOLES SHOWN ON THE MISCELLANEOUS QUANTITIES SHEET IS FROM TOP OF BASE TO INVERT.

OFFSETS FOR INLETS 2x3 ARE GIVEN TO THE CENTER OF STRUCTURE.

ELEVATIONS SHOWN ON THE STORM SEWER SHEETS ARE AT THE FLANGE OF THE CASTING. A MINIMUM 6 INCHES OF ADJUSTMENT RINGS REQUIRED, UNLESS OTHERWISE NOTED.

MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALTIC CONCRETE DRIVEWAYS, SIDEWALKS, OR SIDE STREETS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER, OR AS SHOWN ON THE PLANS.

DRIVEWAYS SHALL BE REPLACED IN KIND.

THE EXACT LOCATION AND WIDTH OF DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER IN THE ETELD.

ALL CONCRETE DRIVEWAYS AND SIDEWALKS ACROSS DRIVEWAYS SHALL BE 7" THICK AND SHALL BE PAID FOR AS CONCRETE DRIVEWAY AND CONCRETE SIDEWALK 7-INCH, RESPECTIVELY

PROOF ROLLING OF SUBBASE IS REQUIRED BEFORE PLACEMENT OF BASE COURSE & IS INCIDENTAL TO COMMON EXCAVATION. PROOF ROLLING SHALL BE WITNESSED BY THE ENGINEER.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE CURB FLANGE.

THE CLEAR ZONE BEHIND CURB AND GUTTER IS 2 FEET FROM THE FACE OF THE CURB.

EROSION CONTROL FEATURES TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER AND IN PLACE PRIOR TO START OF CONSTRUCTION.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY WILL BE COVERED WITH TOPSOIL, FERTILIZER (TYPE B), SEED AND EROSION MAT, AS DIRECTED BY THE ENGINEER.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND ALL OTHER. UTILITIES IN THE VICINITY OF THE PROJECT TO LOCATE THEIR FACILITIES AT LEAST 3 WORKING DAYS PRIOR TO BEGINNING WORK.

THE 6.5 INCH HMA PAYEMENT TYPE F-3 SHALL BE CONSTRUCTED IN TWO LAYERS

111011 11111/1 1711	LITT THE E O OFFICE DE OUT	TOTALOGIED IN THE EMILITOR
		NOM MAX SIZE GRADATION
6.5-INCH	ONE 3.0" UPPER LAYER	3/4"
	ONE 3.5" LOWER LAYER	1/2"

ALL STRUCTURES CALLED OUT AS FIELD POUR SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POUR) SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

A 25% EXPANSION FACTOR WAS USED TO CALCULATE FILL QUANTITIES.

ORDER OF TYPICAL SECTION AND DETAIL SHEETS

GENERAL NOTES

PROJECT OVERVIEW TYPICAL SECTIONS CONSTRUCTION DETAILS OVERVIEW CURB RAMP AND ISLAND DETAILS CURB & GUTTER AND SIDEWALK STAKING DETAILS EROSION CONTROL STORM SEWER SANITARY SEWER WATERMATN PAVEMENT MARKINGS PERMANENT SIGNING STREET LIGHTING TRAFFIC SIGNALS DETOUR PLANS TRAFFIC CONTROL CONTROL POINT TIES ALTGNMENT OVERVIEW

UTILITIES

CHARTER COMMUNICATIONS ATTN: JOHN MARSCHKE 2701 DANIELS STREET MADISON, WI 53718 (608) 274-3822 JMARSCHKE@CHARTERCOM.COM

ATTN: CAROL ANASON 316 W. WASHINGTON AVENUE ROOM 607 MADISON. WI 53703 (608) 252-2385 CA2624@ATT.COM

SANTTARY SEWER CITY OF MADISON ATTN: MARK MODER 210 MARTIN LUTHER KING, JR. BLVD ROOM 115 MADISON, WI 53710 608) 261-9250 MMODER@CITYOFMADISON.COM

MADISON METROPOLITAN SEWERAGE DISTRICT ATTN: ERIC HJELLEN 1610 MOORLAND ROAD MADISON, WI 53713 (608) 222-1201

WAUNONA SANITARY DISTRICT ATTN: HAL BOHNE ATTN: JOHN JOHNSON (608) 249-0705 WAUNONA@SBCGLOBAL.NET

US SIGNAL ATTN: CHRIS LENTINE 201 IONIA AVENUE SOUTHWEST GRAND RAPIDS, MI 59503 (616) 988-7194 CELL: (616) 295-8490 CLENTINE OUSSIGNAL . COM

MG&F GAS ATTN: SEAN ENDRES P0 B0X 1231 MADISON, WI 53701 (608) 252-7224 SENDRES@MGE.COM

MG&E ELECTRICAL ATTN: RICH PARKER PO BOX 1231 MADISON, WI 53701 (608) 252-7379 RPARKER@MGE.COM

STORM SEWER CITY OF MADISON

ATTN: ERIC DUNDEE 210 MARTIN LUTHER KING, JR. BLVD ROOM 115 MADISON, WI 53710 608) 266-4913 EDUNDEE@CITYOFMADISON.COM

TRAFFIC SIGNALS/LIGHTING CITY OF MADISON-TRAFFIC ENGINEERING ATTN: YANG TAO 215 MARTIN LUTHER KING, JR. BLVD, ROOM 100 MADISON. WI 53703 (608) 266-4815 YTAO@CITYOFMADISON.COM

WATER MAIN CITY OF MADISON-WATER UTILITY ATTN: ADAM WIEDERHOEFT 119 E. OLIN AVENUE MADISON. WI 53713 (608) 266-9121 AWIEDERHOEFT@MADISONWATER.ORG

OTHER CONTACTS

TOWN OF BLOOMING GROVE ATTN: CORY BUSKE 1880 S. STOUGHTON ROAD MADISON, WI 53716 (608) 575-2369 PW@BLMGROVE.COM

**-DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

Dial 811 or (800) 242-8511 www.DiggersHotline.com

STANDARD ABBREVIATIONS

AHFAD ALUMINUM ACCESS POINT A.P. BK BLK BACK BLOCK BENCHMARK C/L CENTERLINE
CENTRAL ANGLE OF DELTA
CERTIFIED SURVEY MAP
DEGREE OF CURVE CL or CSM EAST EAST GRID COORDINATE X EB ET AL EXIST GN IP MI EAST GRID C EASTBOUND AND OTHERS EXISTING GRID NORTH IRON PIPE MILE LENGTH OF CURVE L LC LCB MH FT IN LONG CHORD LONG CHORD BEARING MANHOL F TNCH MONUMENT NORTH NORTH GRID COORDINATE NORTHBOUND NO PT PC PT PL POB NUMBER POINT POINT OF CURVATURE
POINT OF INTERSECTION
POINT OF TANGENCY PROPERTY LINE
POINT OF BEGINNING R RP RADIUS RADIUS POINT RANGE RL or REQD RT R/L REFER REQUIRED RIGHT RIGHT-OF-WAY ROAD REFERENCE LINE R∕W RD SOUTH S SB SQ FT2 STD SEC STA STR SOUTHBOUND SOLIARE SQUARE FEET STANDARD SECTION STATION STRUCTURE TANGENT İΔN TANGENT TEMPORARY LIMITED EASEMENT UTILITY LINE OPENING WEST TN TOWN T or ULO WESTBOUND

DESIGN CONTACT

WB

MSA PROFESSIONAL SERVICES INC. ATTN: JAIME KURTEN, P.E. 2901 INTERNATIONAL LANE, SUITE 300 MADISON, WI 53704 PHONE: 608-242-7779 JKURTENØMSA-PS.COM

CITY OF MADISON ATTN: STEVE SONNTAG CITY-COUNTY BUILDING ROOM 115 210 MARTIN LUTHER KING, JR. BLVD. MADISON, WI 53709 SSONNTAG@CITYOFMADISON.COM

DNR LIAISON

PLOT SCALE: 1:40_XREF

WISCONSIN DEPARTMENT OF NATURAL RESOURCES ATTN: ERIC HEGGELUND ENVIRONMENTAL ANALYSIS & REVIEW 3911 FISH HATCHERY ROAD FITCHBURG, WI 53711 PHONE: (608) 275-3301 ERIC.HEGGELUND@WISCONSIN.GOV

MADISON GAS & ELECTRIC EMERGENCY CONTACT NUMBERS: ELECTRIC 24-HOUR EMERGENCY SERVICE: (608) 252-7111 GAS 24-HOUR EMERGENCY SERVICE: (608) 252-1111

PROJECT NO:5992-09-69/71

HWY: MILWAUKEE STREET

COUNTY: DANE

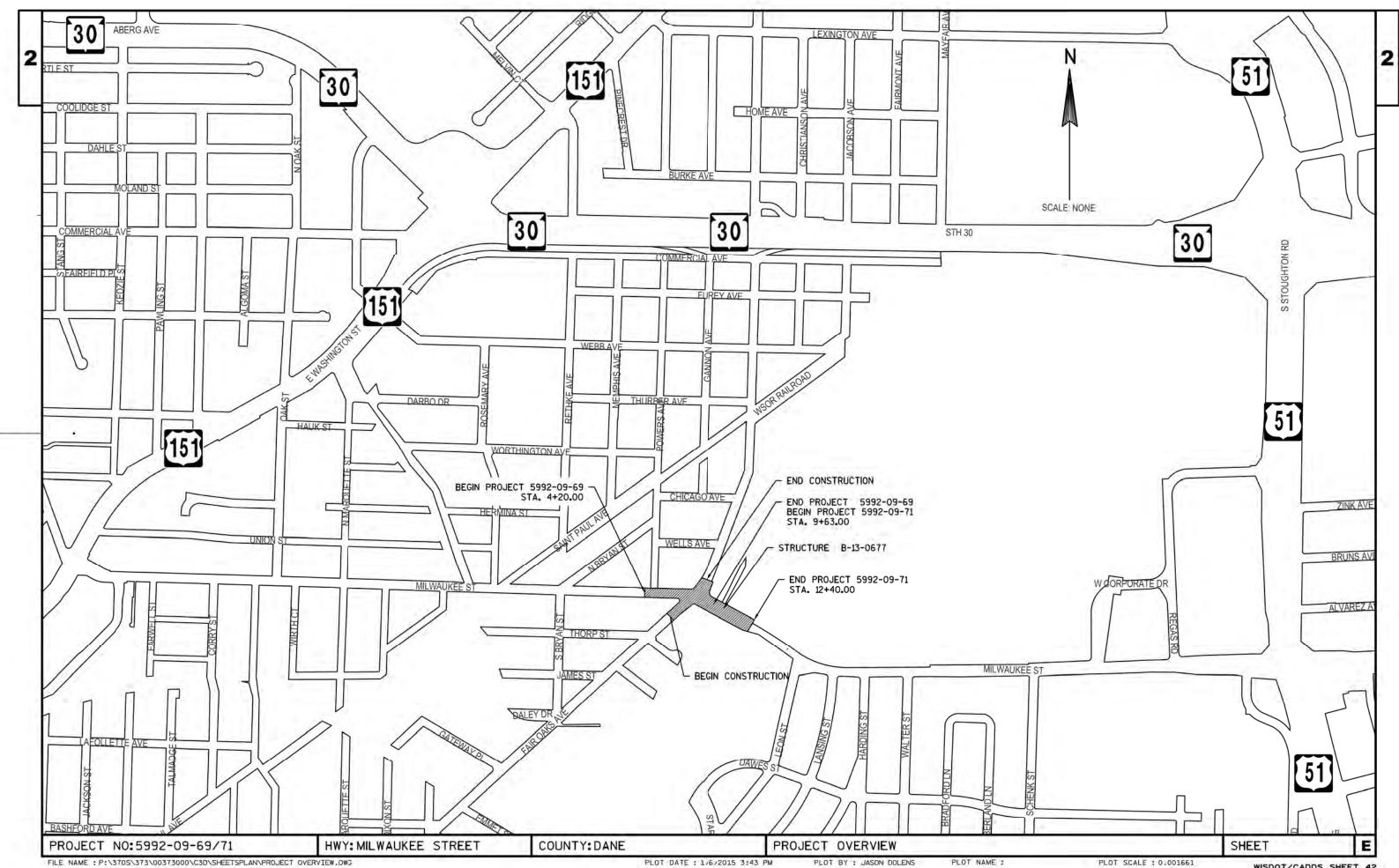
GENERAL NOTES

PLOT NAME :

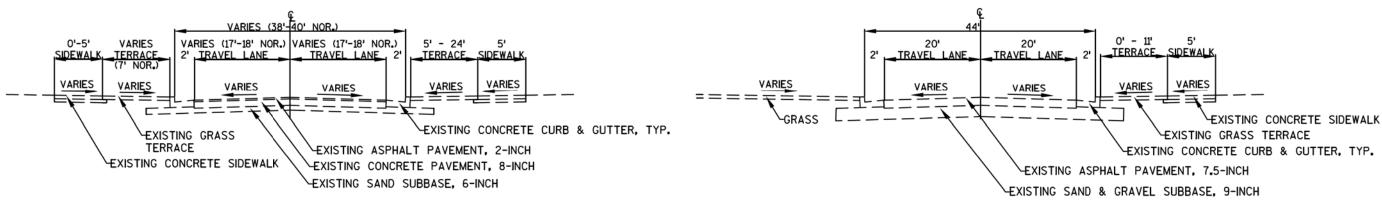
SHEET

WISDOT/CADDS SHEET 42

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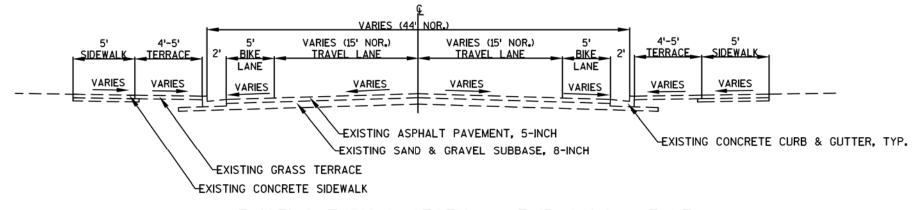




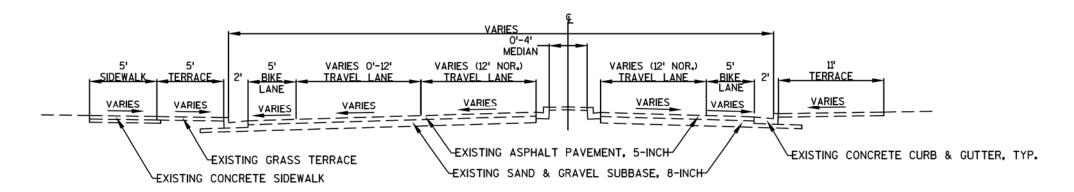


EXISTING TYPICAL SECTION - MILWAUKEE STREET (WEST OF STRUCTURE B-13-0033)

EXISTING TYPICAL SECTION - MILWAUKEE STREET (EAST OF STRUCTURE B-13-0033)

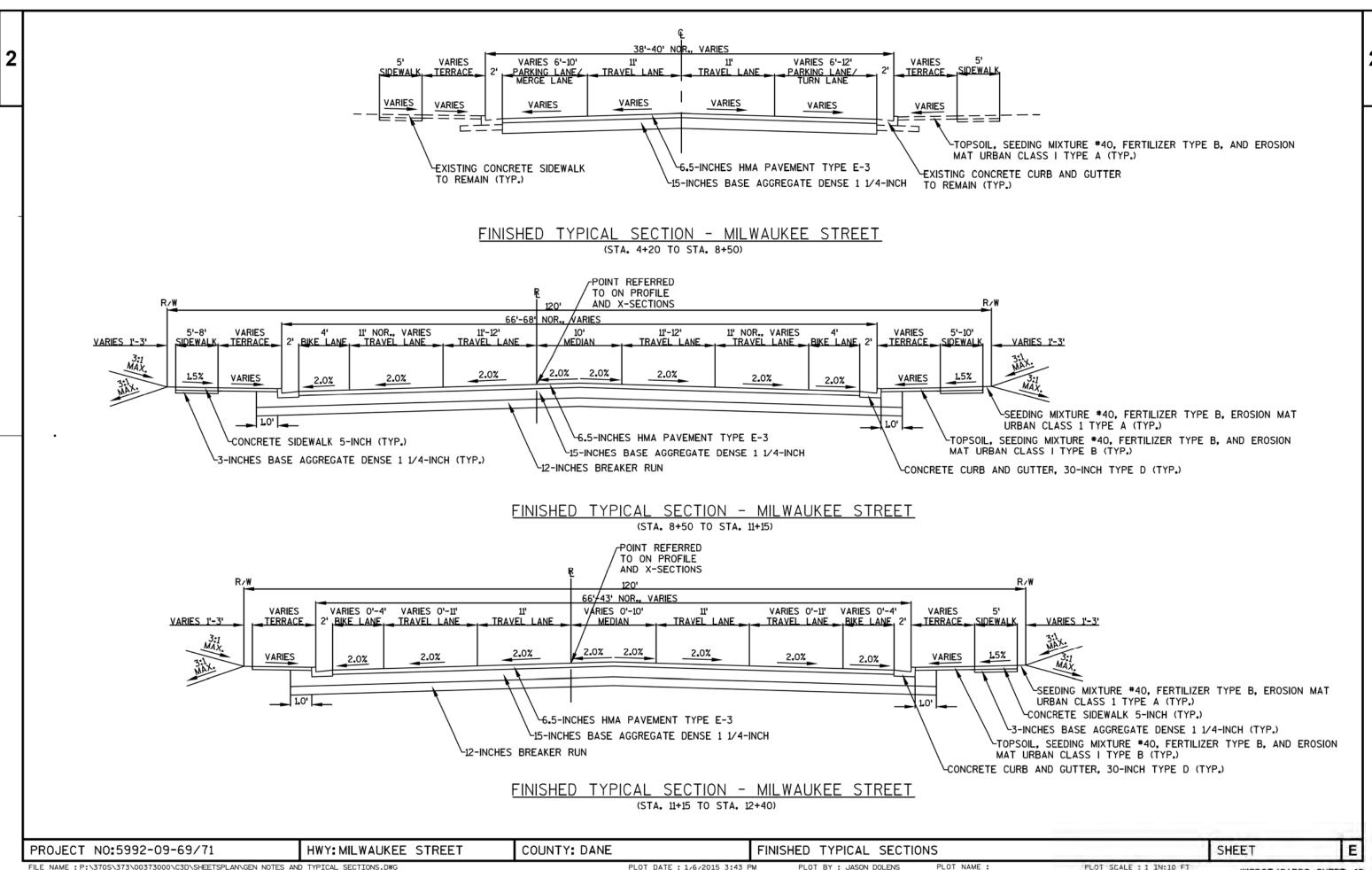


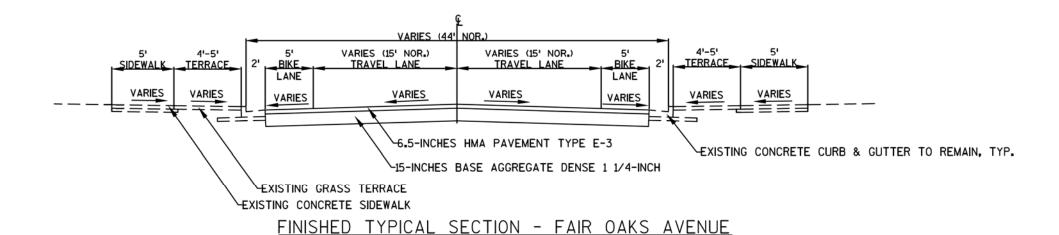
EXISTING TYPICAL SECTION - FAIR OAKS AVENUE (SOUTH OF MILWAUKEE STREET)



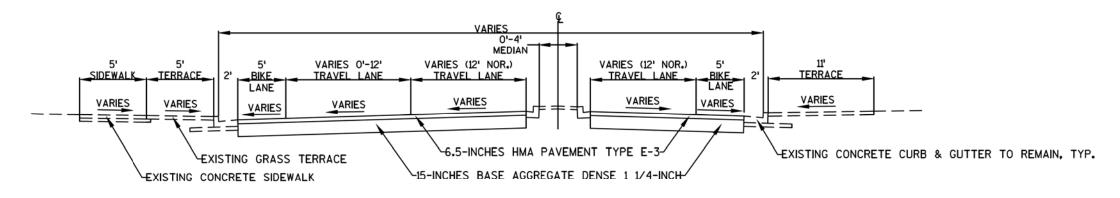
EXISTING TYPICAL SECTION - FAIR OAKS AVENUE (NORTH OF MILWAUKEE STREET)

PROJECT NO:5992-09-69/71 HWY: MILWAUKEE STREET COUNTY: DANE EXISTING TYPICAL SECTIONS SHEET PLOT NAME :





(SOUTH OF MILWAUKEE STREET)

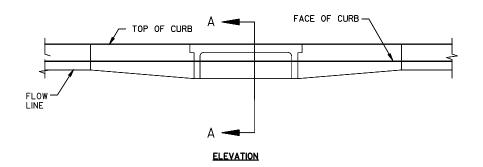


FINISHED TYPICAL SECTION - FAIR OAKS AVENUE

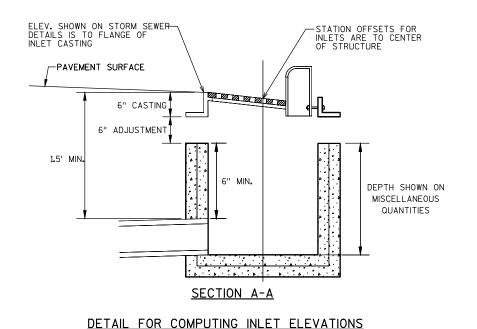
(NORTH OF MILWAUKEE STREET)

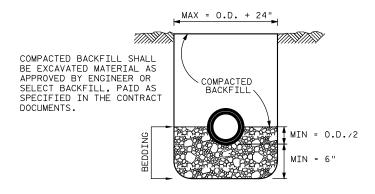
PROJECT NO:5992-09-69/71 HWY:MILWAUKEE STREET COUNTY: DANE FINISHED TYPICAL SECTIONS SHEET E

DETAIL FOR COMPUTING MANHOLE ELEVATIONS



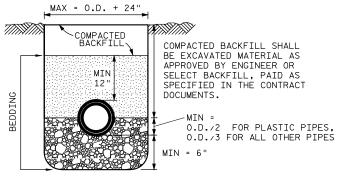
DETAIL - FLOW LINE DEPRESSION AT INLETS





WASHED GRAVEL OR CRUSHED STONE AS SPECIFIED IN SECTION 503.3.

BEDDING FOR REINFORCED CONCRETE PIPE



PIT RUN SAND WASHED GRAVEL. CRUSHED STONE.

SAND OR LIMESTONE SCREENINGS FOR PIPE SIZES 10" IN DIAMETER OR LESS. WASHED GRAVEL OR CRUSHED STONE FOR PIPE SIZES OVER 10" IN DIAMETER. AS SPECIFIED IN SECTION 503.3.

BEDDING FOR VIRTRIFIED CLAY PIPE, DUCTILE IRON PIPE, CAST IRON PIPE, PLASTIC SANITARY SEWER PIPE, AND STORM SEWER PIPES

NOTES:

UNLESS OTHERWISE SPECIFIED, ALL SANITARY AND STORM SEWER PIPES, INCLUDING LATERALS AND LEADS, SHALL BE INSTALLED WITH THE TYPE OF BEDDING SHOWN FOR THE TYPE AND SIZE OF PIPE INSTALLED.

THE COSTS OF BEDDING SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE SELECT FILL.

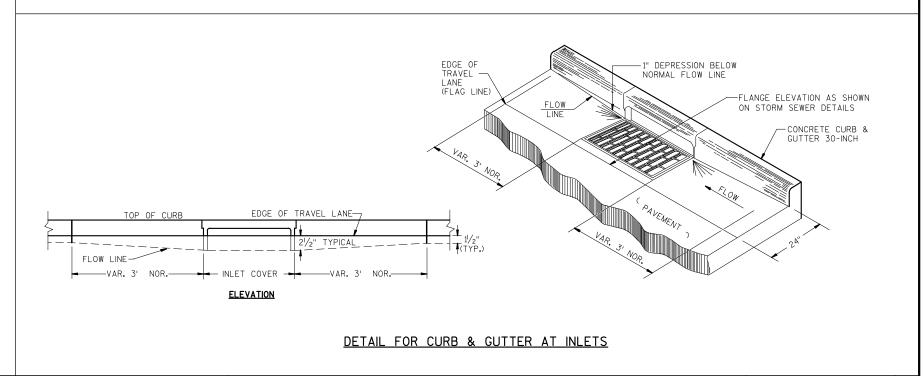
ALL TRENCHES SHALL BE HAND BACKFILLED TO A POINT 12" ABOVE THE TOP OF THE PIPE. ALL BEDDING SHALL BE MECHANICALLY COMPACTED.

PAYMENT SHALL NOT BE MADE FOR BACKFILL WITH EXCAVATED MATERIAL, IF APPROVED. SELECT FILL, IF REQUIRED, SHALL BE PAID PER CONTRACT.

THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE O.D. + 24", AND SHALL APPLY FROM THE BOTTOM OF THE TRENCH TO A POINT 12" ABOVE THE TOP OF THE PIPE. WHERE THIS WIDTH IS EXCEEDED, THE CONTRACTOR SHALL FURNISH AND INSTALL A HIGHER TYPE OF BEDDING AT NO EXTRA COST. THE TYPE OF BEDDING SHALL BE DETERMINED BY THE ENGINEER.

O.D. EQUALS THE OUTSIDE DIAMETER OF THE PIPE. THE MINIMUM DISTANCE OF O.D./2 IS SPECIFIED FOR PLASTIC SEWER PIPE.

STORM SEWER SELECT FILL BEDDINGS



2. PAINTING SPECIFICATIONS

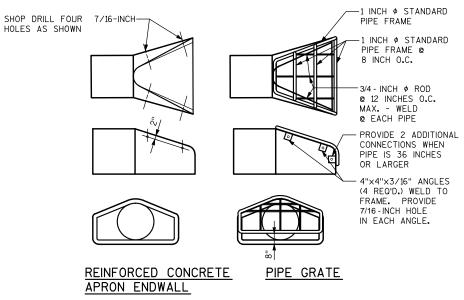
THE PIPE GRATE SHALL RECEIVE THE FOLLOWING PREPARATION AND PAINTING.

PREPARATION:

BARE SURFACES BY THOROUGH SCRAPING, WIRE BRUSHING AND CLEANING.

APPLY A THREE COAT SYSTEM AS RECOMMENDED BY THE MANUFACTURER.

ALLOW 24 - 48 HOURS DRYING TIME BETWEEN COATS.



PIPE GRATE DETAIL

ELEVATION

√6'-0" MINIMUM AT

NVERT EL. AS SHOWN ON STORM SEWER PLANS

RIPRAP HEAVY

CUT-STONE BOULDER COURSING SHALL MATCH TOP OF STORM SEWER AT OUTLET.

CUT STONE BOULDER COURSING SHALL

BE LEVEL.

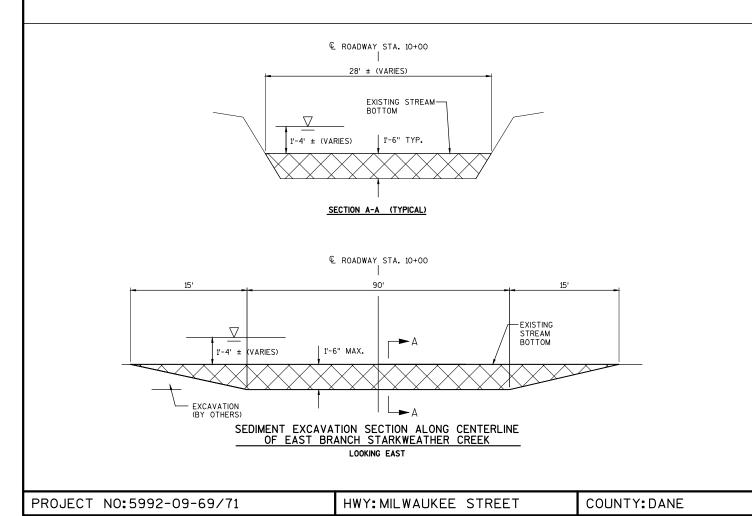
STORM SEWER OUTLET DETAIL

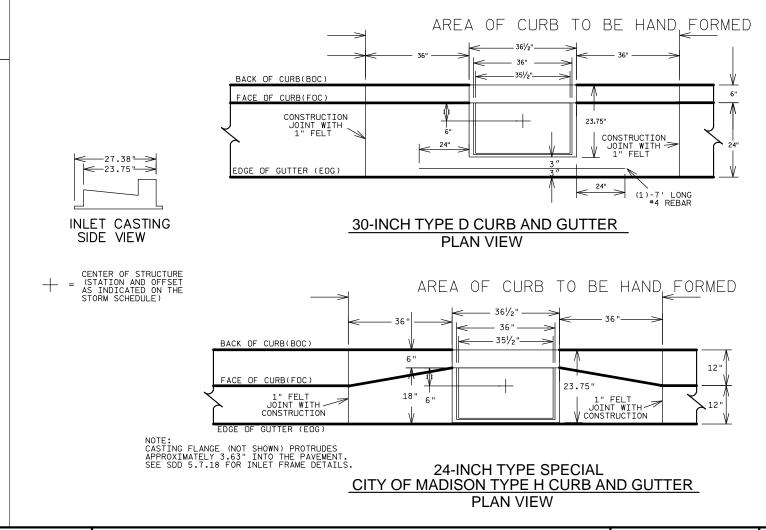
EXTEND CUT-STONE BOULDER

REINFORCED CONCRETE APRON

SECTION

FOUNDATION LAYER TO 1'-0" PAST END OF STORM SEWER OUTFALL





FILE NAME : P:\370S\373\00373000\C3D\SHEETSPLAN\CONSTRUCTION DETAILS.DWG LAYOUT NAME - CONSTRUCTION DETAILS - 21002_CD

TOP OF RIPRAP

HEAVY BERM

PLOT DATE: 1/6/2015 4:38 PM

PLOT BY : JAIME KURTEN

CONSTRUCTION DETAILS

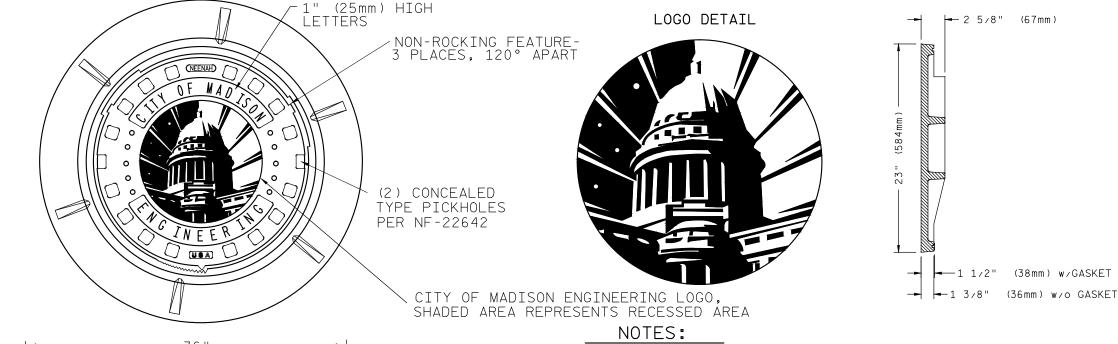
PLOT NAME :

WISDOT/CADDS SHEET 42

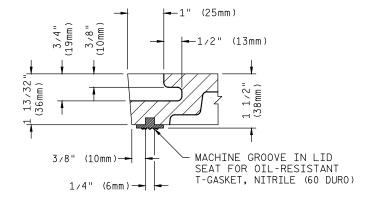
SHEET

E





36" 25 1/4" 23 1/4" 23" 1 7/8" 3/4" 4" OR 9" 201/2"



T-SEAL GASKET / CONCEALED PICK DETAIL

APPROXIMATE TOTAL WEIGHTS: R-1550 w/ LOGO LID 1550-0054, 9" FRAME AND LID = 265 LBS. R-1689 w/ LOGO LID 1550-0054, 4" FRAME AND LID = 279 LBS.

IF LOCKABLE LID IS NECESSARY, R-1920, 83/4" FRAME AND LID = 300 LBS THERE IS NO CITY OF MADISON LOGO LID AVAILABLE FOR THIS FRAME AND CASTING.

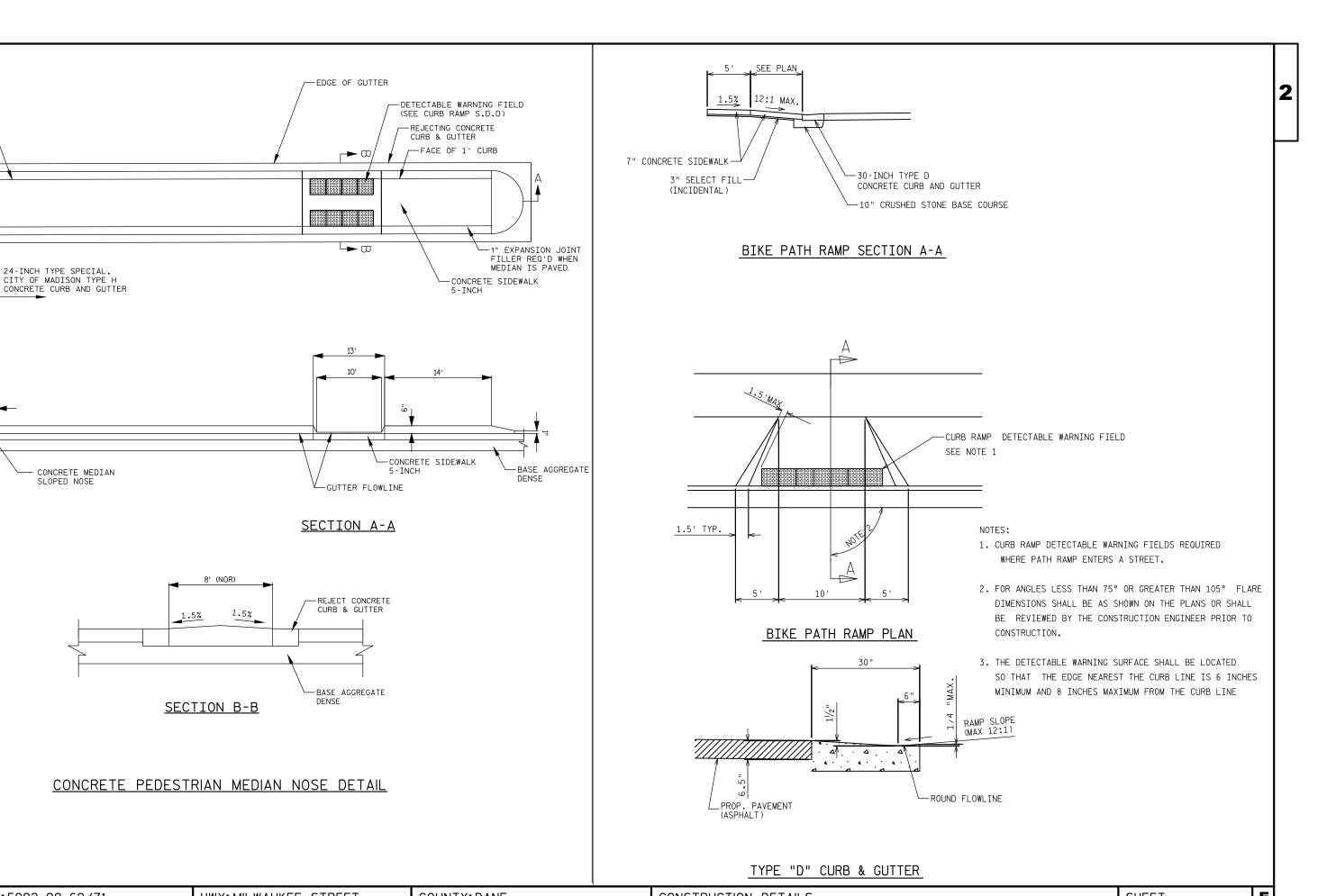
THE FOLLOWING NEENAH FOUNDRY CASTINGS (OR EQUAL CASTINGS) SHALL BE ACCEPTABLE:

- 1. R-1550, 9" NON-ROCKING ACCESS STRUCTURE FRAME.
- 2. R-1689, 4" NON-ROCKING ACCESS STRUCTURE FRAME (WHEN REQUESTED BY THE CITY CONSTRUCTION ENGINEER).
- 3. R-1920, 83/4" ACCESS STRUCTURE FRAME WITH LOCKING LID, TYPE 'F' LOCKS, AND CONCEALED PICK HOLES. TO BE USED IN GREENWAYS AND EASEMENTS.
- 1. FRAME AND COVER SHALL BE MACHINED AND FITTED SO THAT ROCKING AND CHATTERING WILL BE ELIMINATED.
- 2. ALL LIDS SHALL BE SELF-SEALING EXCEPT FOR STORM SEWER.
- 3. ALL LIDS SHALL HAVE CITY OF MADISON LOGO AS SHOWN IN DETAIL (R-1550-0054 OR EQUIV.)

LID NOTES: ALL DIMENSIONS SHOWN ARE IN ENGLISH AND (METRIC) MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B

MANHOLE COVER TYPE SPECIAL LOGO DETAIL

PROJECT NO:5992-09-69/71 HWY:MILWAUKEE STREET COUNTY:DANE CONSTRUCTION DETAILS SHEET **E**



E PROJECT NO:5992-09-69/71 HWY: MILWAUKEE STREET COUNTY: DANE CONSTRUCTION DETAILS SHEET PLOT SCALE : ######## FILE NAME : P:\370S\373\00373000\C3D\SHEETSPLAN\CONSTRUCTION DETAILS.DWG PLOT BY : JAIME KURTEN PLOT NAME :

CONCRETE MEDIAN

SLOPED NOSE

I" EXPANSION

JOINT FILLER

SLOPED NOSE

CONCRETE MEDIAN CITY OF MADISON TYPE H

MAX. GRADE 10%

DRIVEWAY

I. ASPHALT:

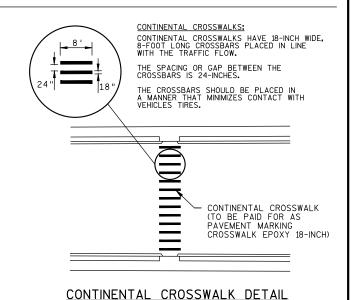
II. CONCRETE:

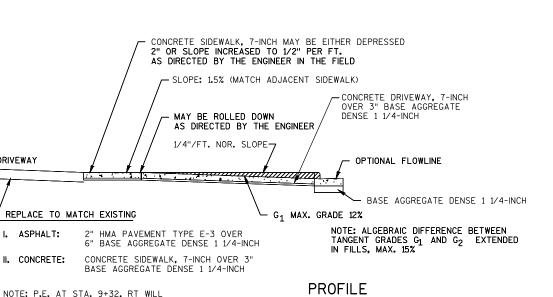
NEW SIDEWALK

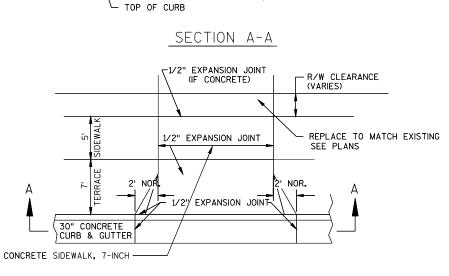
BE REPLACED WITH ASPHALT BEHIND

NOTE: FULL SIZE PATTERNS FOR ARROWS & WORD LEGENDS ARE AVAILABLE AT: CITY OF MADISON TRAFFIC ENGINEERING FIELD OPERATIONS FACILITY 1120 SAYLE ST. (608) 266-4767

SHARROW DETAIL SCALE: NONE





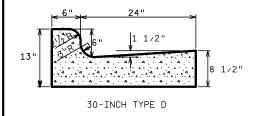


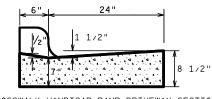
VARIES, 1" MAX

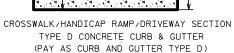
SIDEWALK

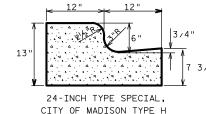
PLAN

URBAN ENTRANCE DETAIL SCALE: NONE

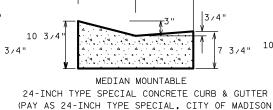




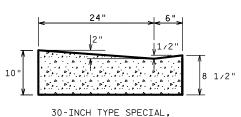




CURB & GUTTER

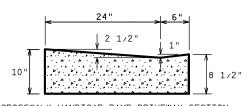


TYPE H CURB & GUTTER)



CITY OF MADISON TYPE X

CURB & GUTTER



CROSSWALK/HANDICAP RAMP/DRIVEWAY SECTION 30-INCH TYPE SPECIAL CONCRETE CURB & GUTTER (PAY AS 30-INCH TYPE SPECIAL, CITY OF MADISON TYPE X CURB & GUTTER)

GENERAL NOTES:

PROJECT NO:5992-09-69/71

LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15' NOR LESS THAN 6' IN LENGTH. THE JOINTS SHALL BE A MINIMUM OF 3" IN DEPTH

EXPANSION JOINTS SHALL BE PLACED TRANSVERSLY AT RADIUS POINTS ON CURVES OF RADIUS 200' OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER. THE EXPANSION JOINT SHALL BE A ONE PIECE ASPHALTIC MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE $1/2^{\circ}$ THICK.

IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED BASE AGGREGATE

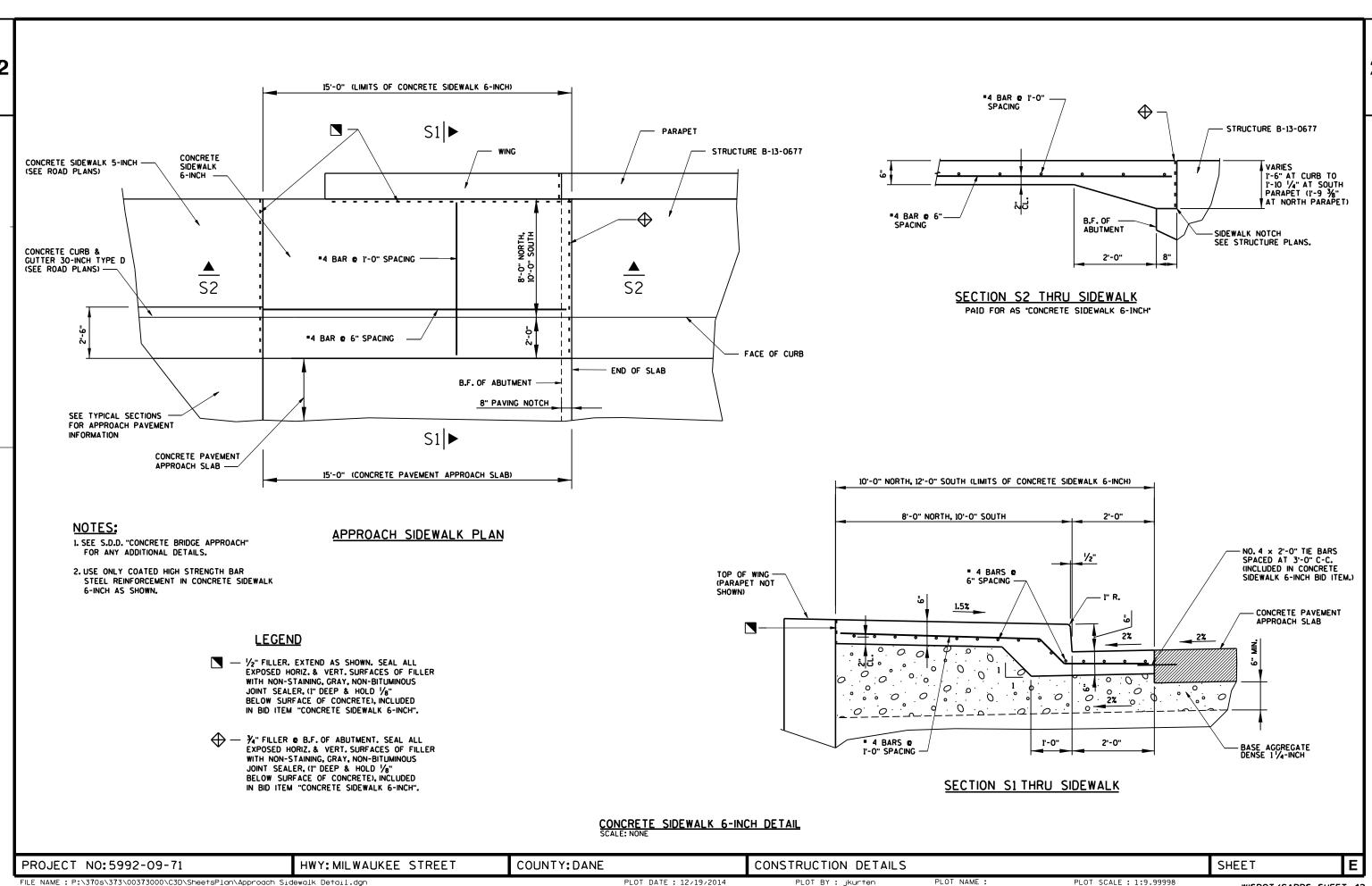
CONCRETE CURB & GUTTER DETAILS SCALE: NONE

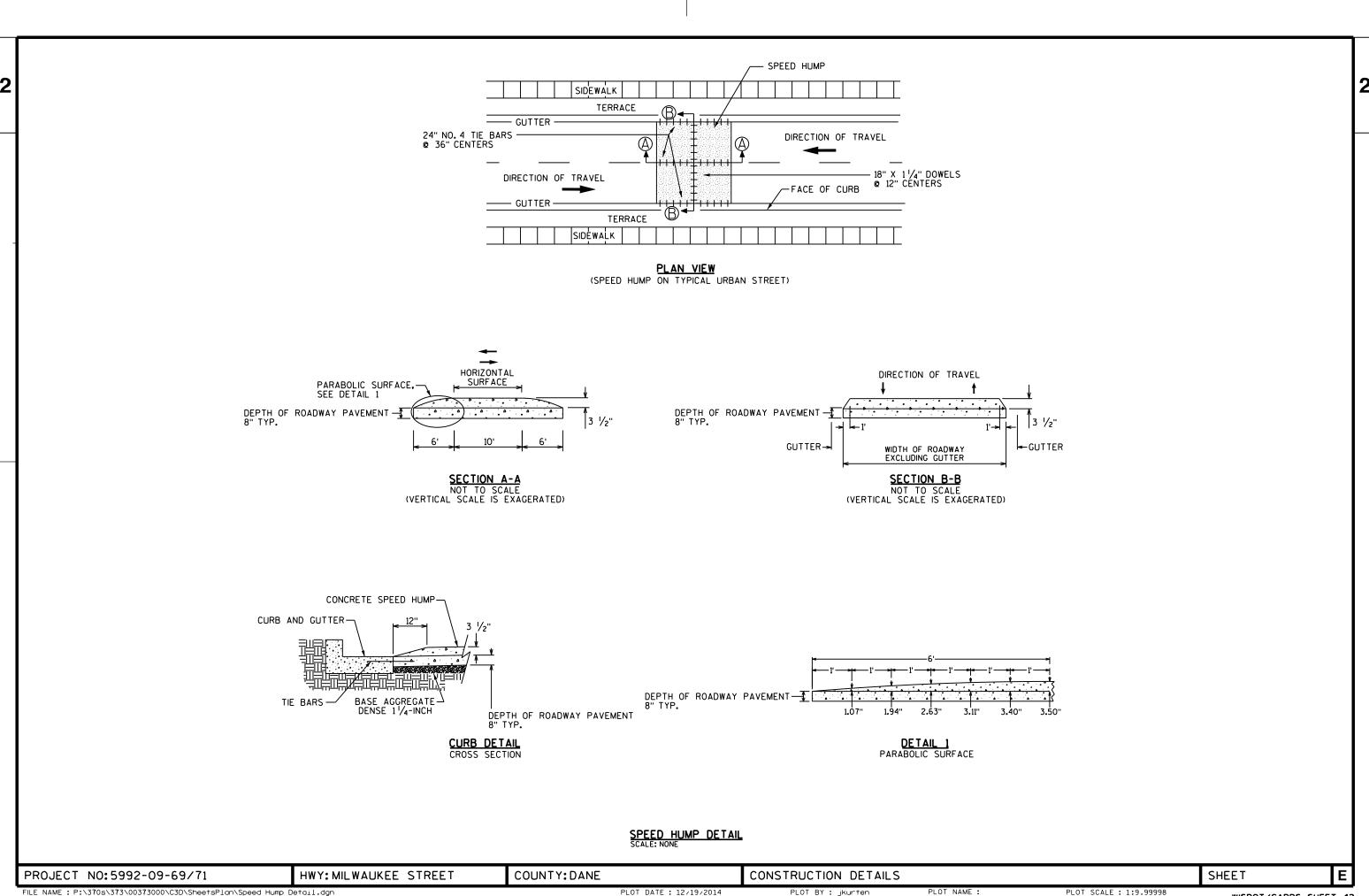
HWY: MILWAUKEE STREET COUNTY: DANE CONSTRUCTION DETAILS

PLOT BY : JAIME KURTEN

PLOT NAME :

SHEET





Speed Hump Detail.dgn 12/19/2014 3:44:56 PM jkurten

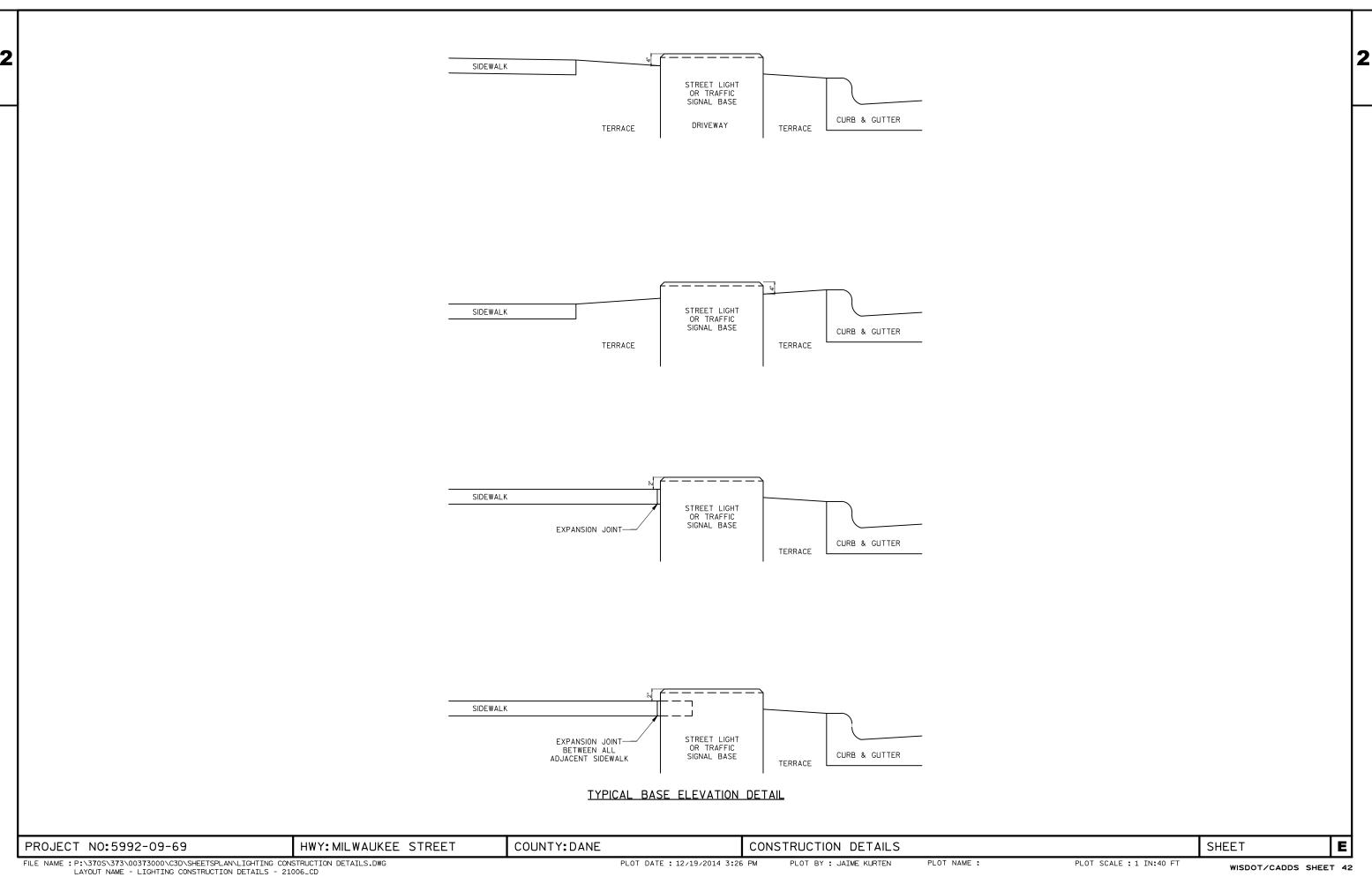
PLOT DATE: 12/19/2014

PLOT NAME :

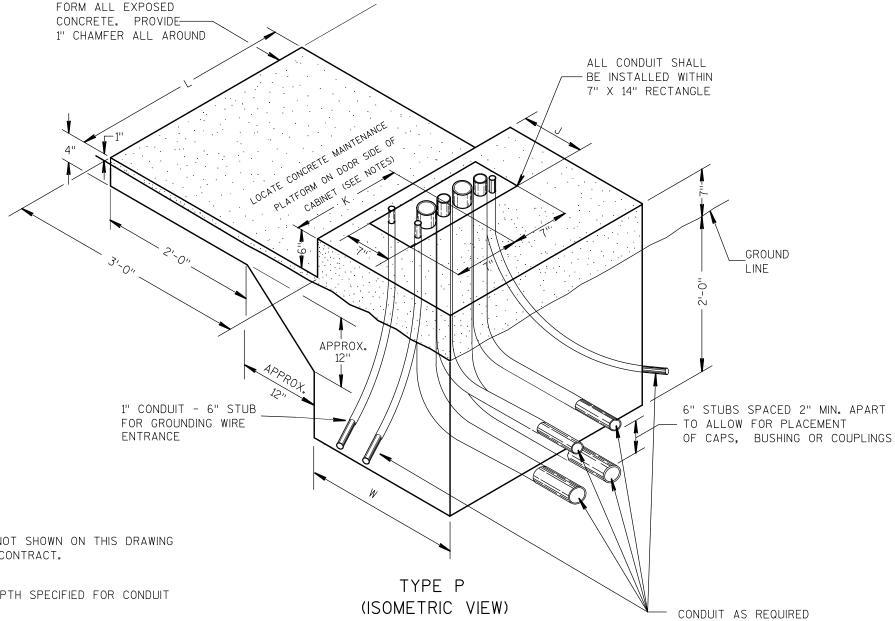
PLOT SCALE : 1:9.99998

WISDOT/CADDS SHEET 42

PLOT BY: jkurten



CONTROL CABINET	DIMENSIONS			IS	C.Y. CONCRETE
BASE TYPE	L	W	7	K	(APPROX.)
TYPE M	40''	30"	12''	20"	.823
TYPE P	48''	30"	16"	24"	1.179
TYPE M MODIFIED		ı	ı	-	-
TYPE P MODIFIED		-	-	-	-
TYPE OTHER		-			=



GENERAL NOTES:

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

ALL CONDUIT SHALL BE PVC, SCHEDULE 40

DEPTH OF CONDUIT EXITING THE BASE SHALL MATCH THE DEPTH SPECIFIED FOR CONDUIT INSTALLATION.

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

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

MAINTENANCE PLATFORM SHALL NOT BE INSTALLED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

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

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

CONDUITS SHALL EXIT THE BASE IN THE DIRECTION OF THE STRUCTURE IT IS TERMINATING INTO.

MAINTENANCE PLATFORM SIZE MAY VARY ON ACCOUNT OF CONDITIONS. VERIFY THE MAINTENANCE PLATFORM SIZE WITH ENGINEER PRIOR TO POURING BASE.

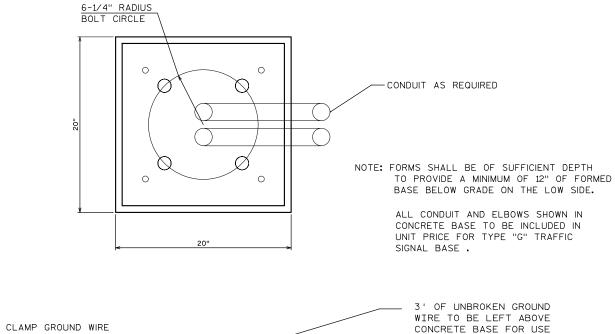
CONCRETE CONTROL CABINET BASES

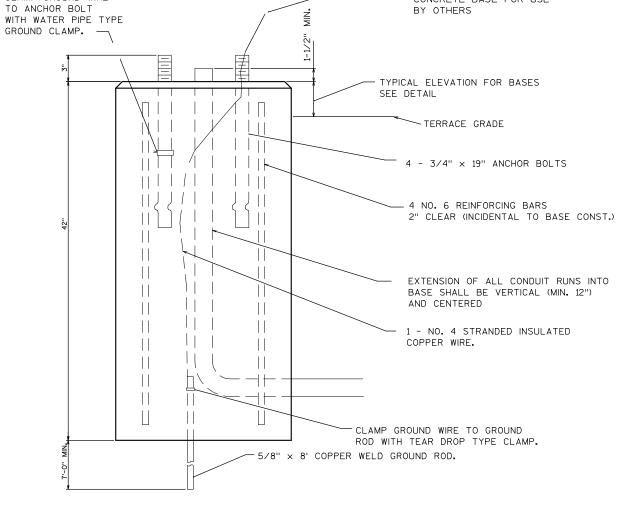
TYPE "P"
CONTROLLER BASE DETAIL

PLOT NAME :

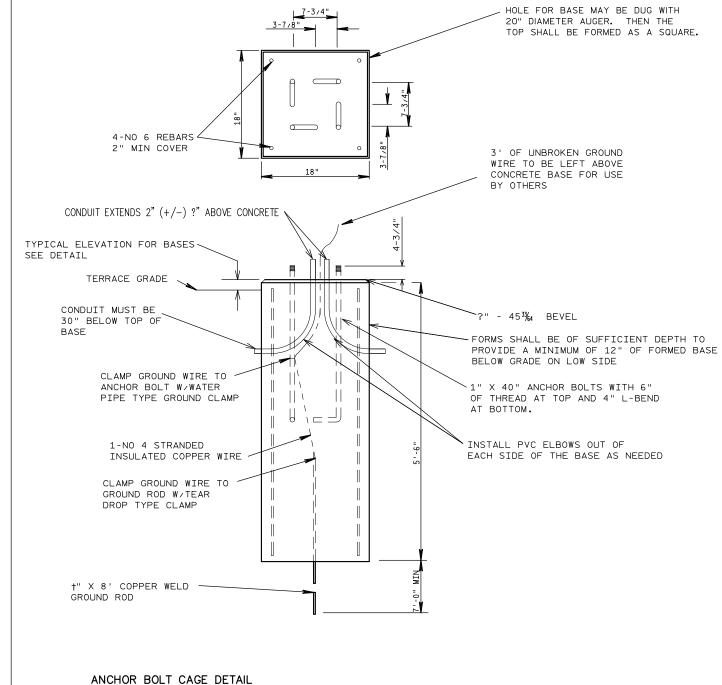
PROJECT NO:5992-09-69 HWY:MILWAUKEE STREET COUNTY:DANE CONSTRUCTION DETAILS SHEET **E**

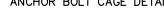


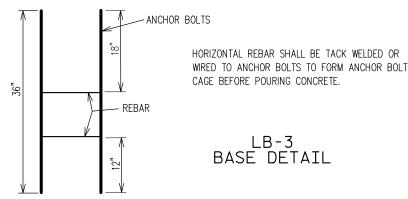




HWY: MILWAUKEE STREET







CONSTRUCTION DETAILS PLOT BY : JAIME KURTEN

SHEET

FILE NAME : P:\370S\373\00373000\C3D\SHEETSPLAN\LIGHTING CONSTRUCTION DETAILS.DWG LAYOUT NAME - LIGHTING CONSTRUCTION DETAILS - 21008_CD

PROJECT NO:5992-09-69

TYPE "G" BASE DETAIL

PLOT DATE: 12/19/2014 3:26 PM

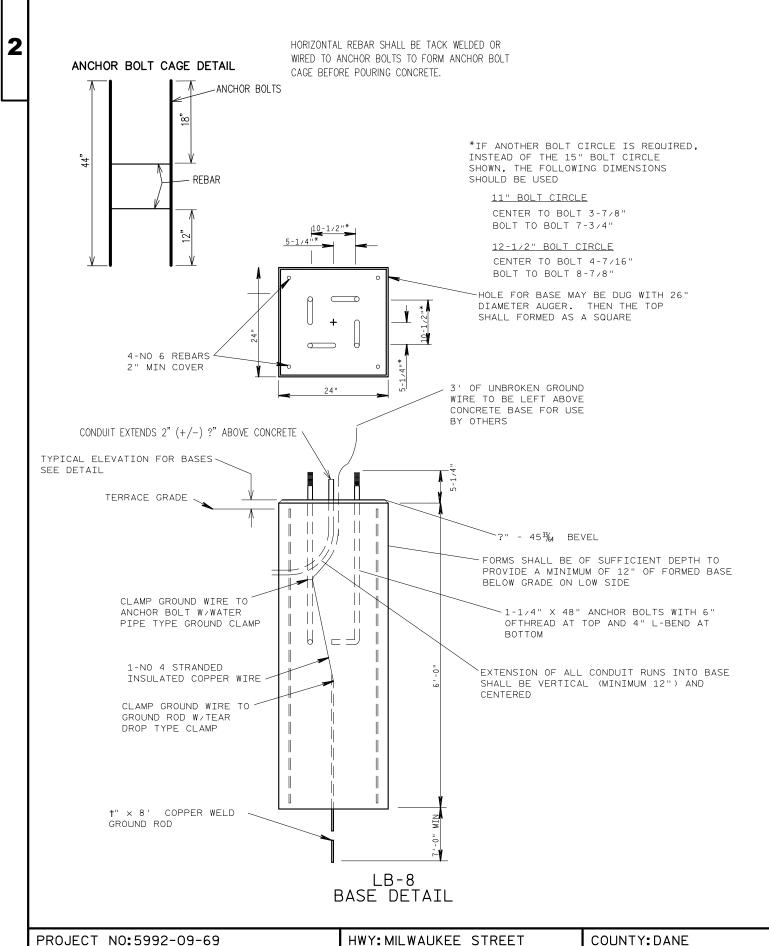
COUNTY: DANE

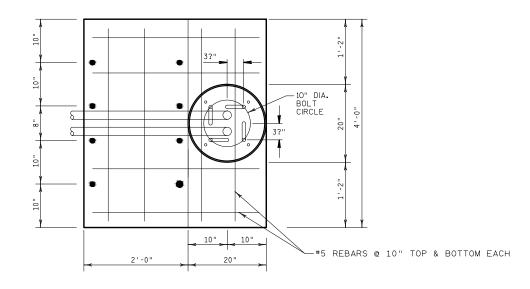
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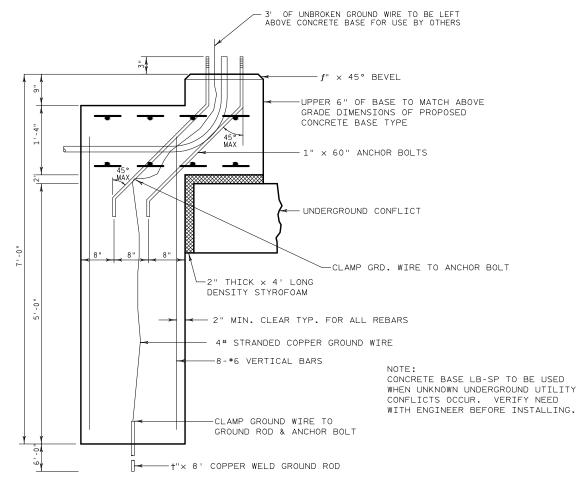
PLOT SCALE : #######

E



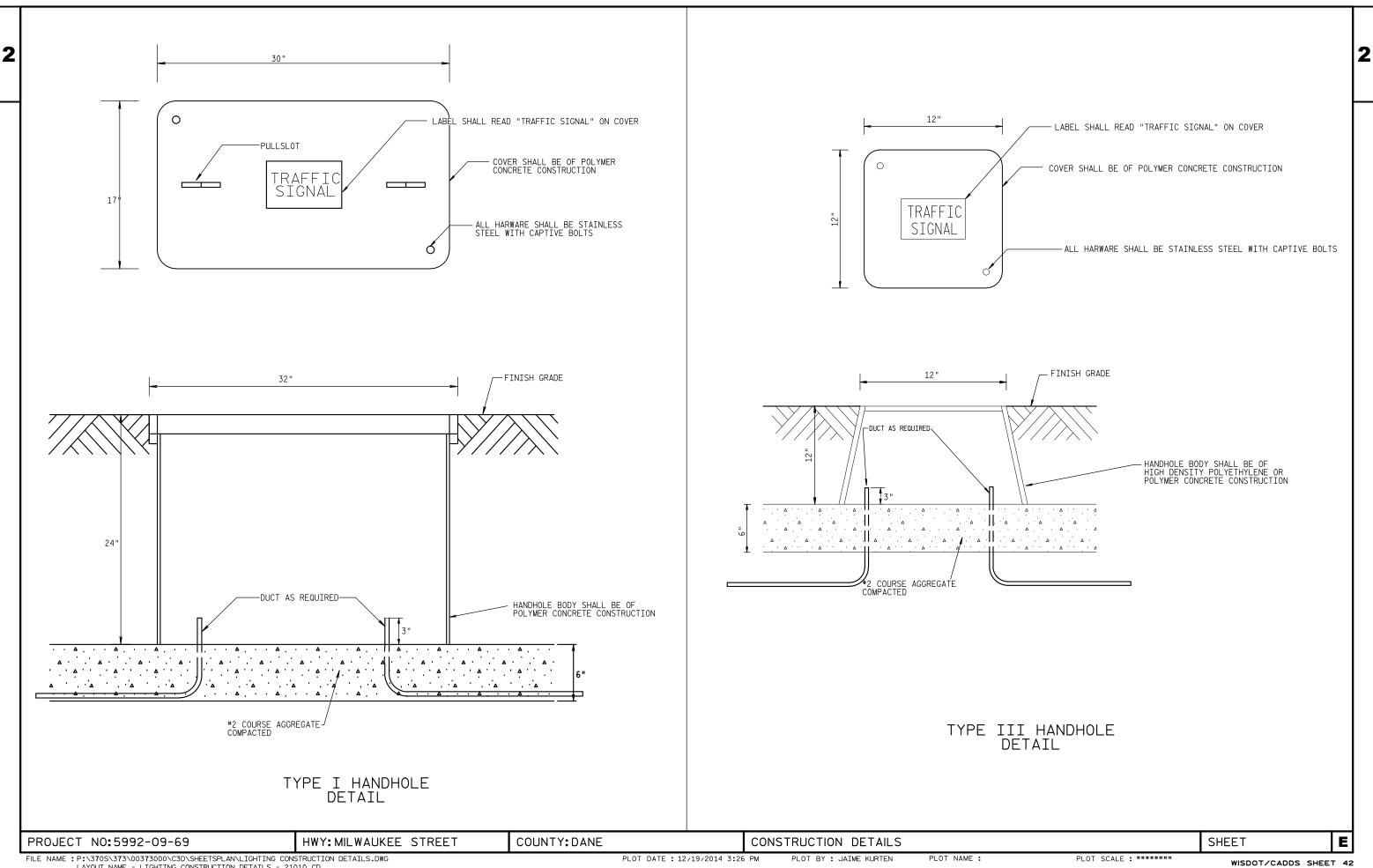


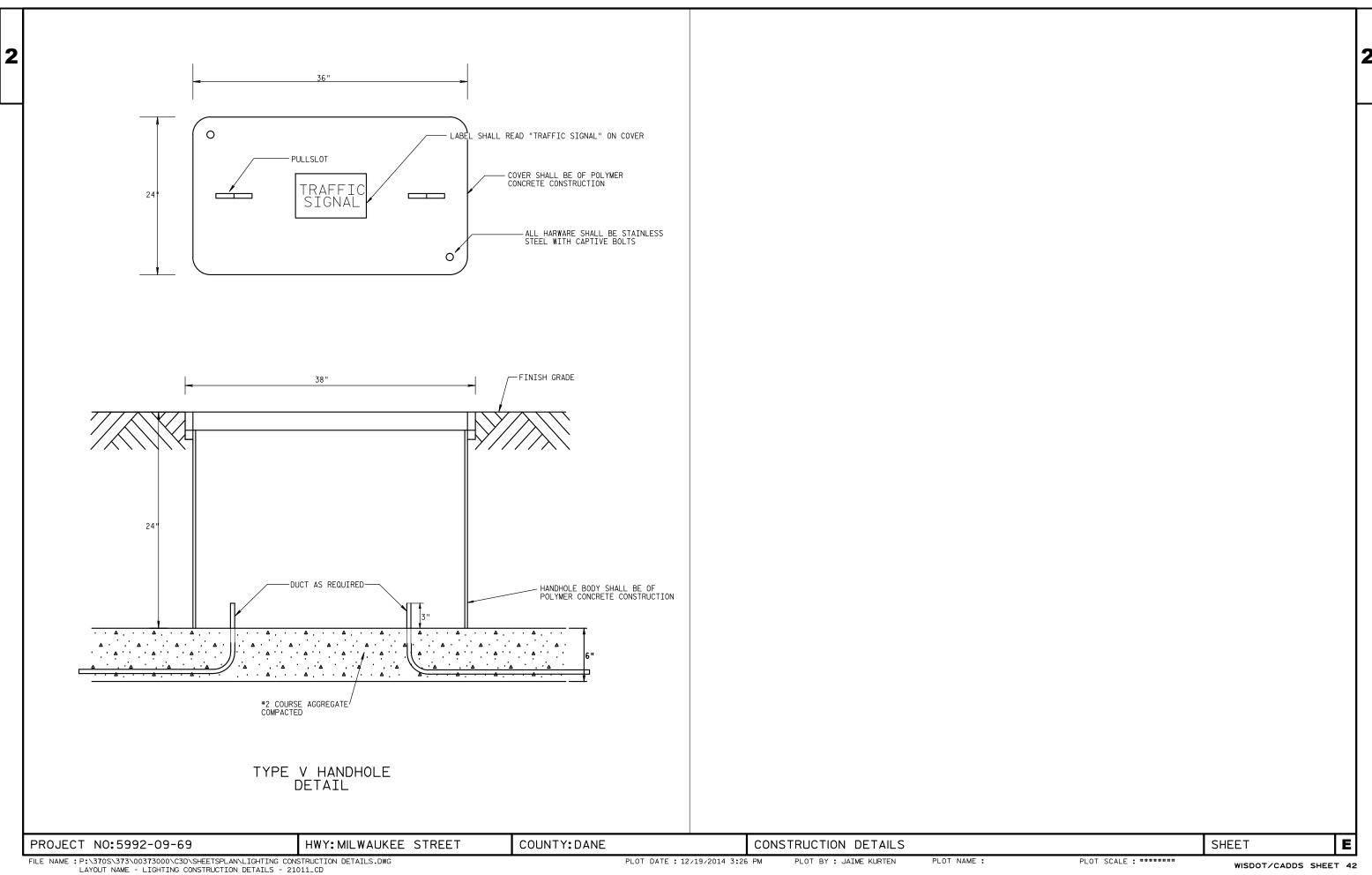


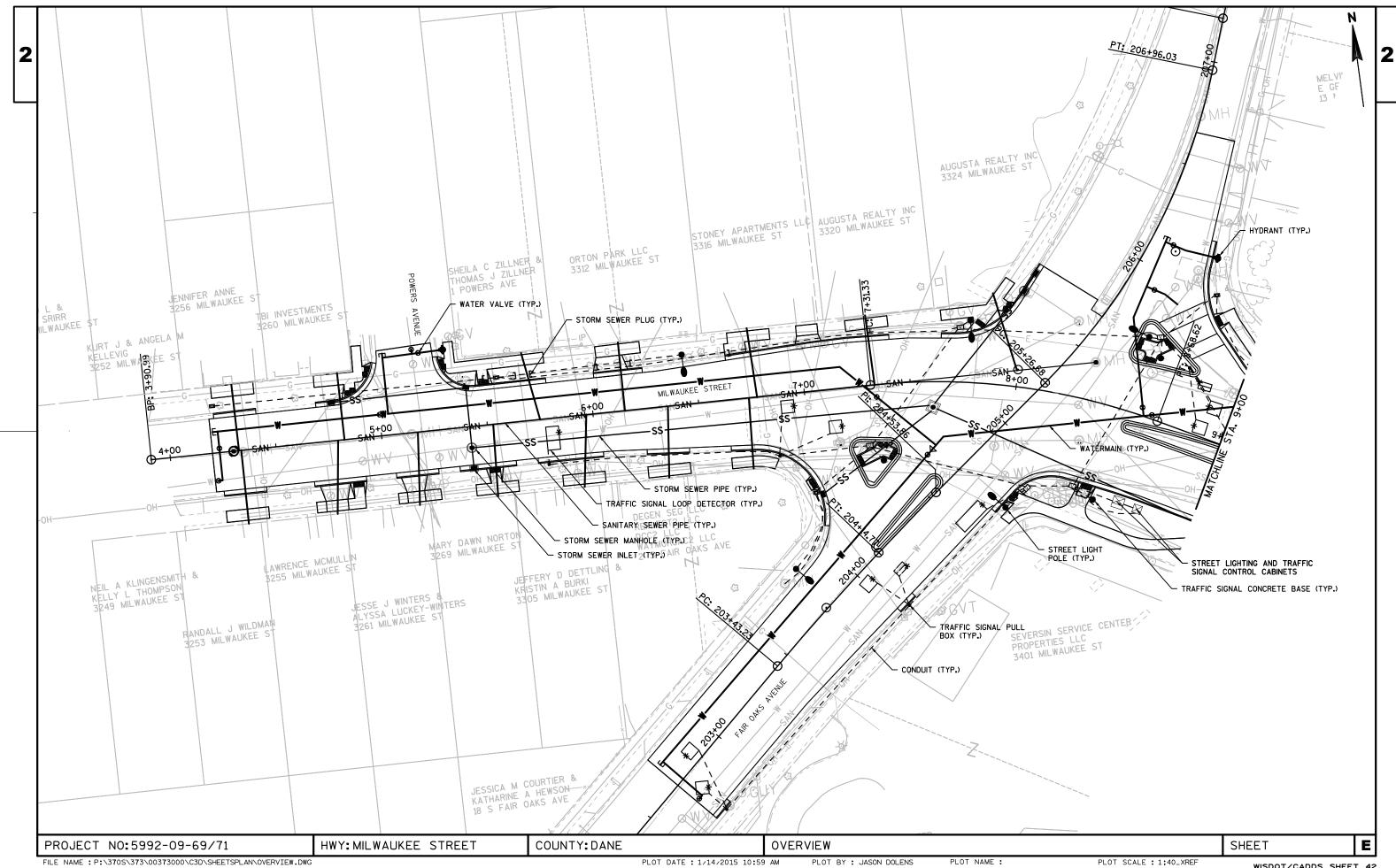


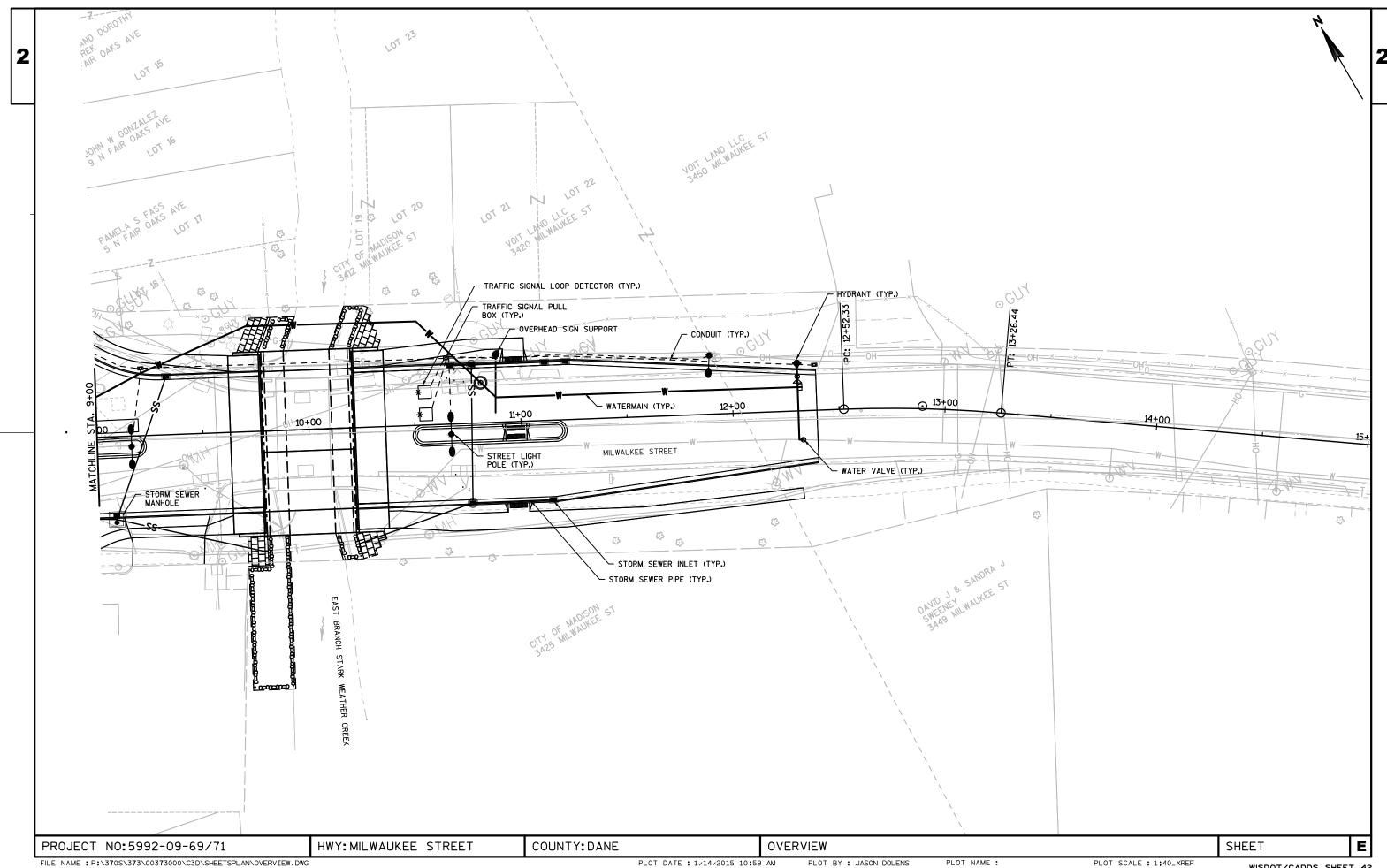
CONCRETE BASE LB-SP

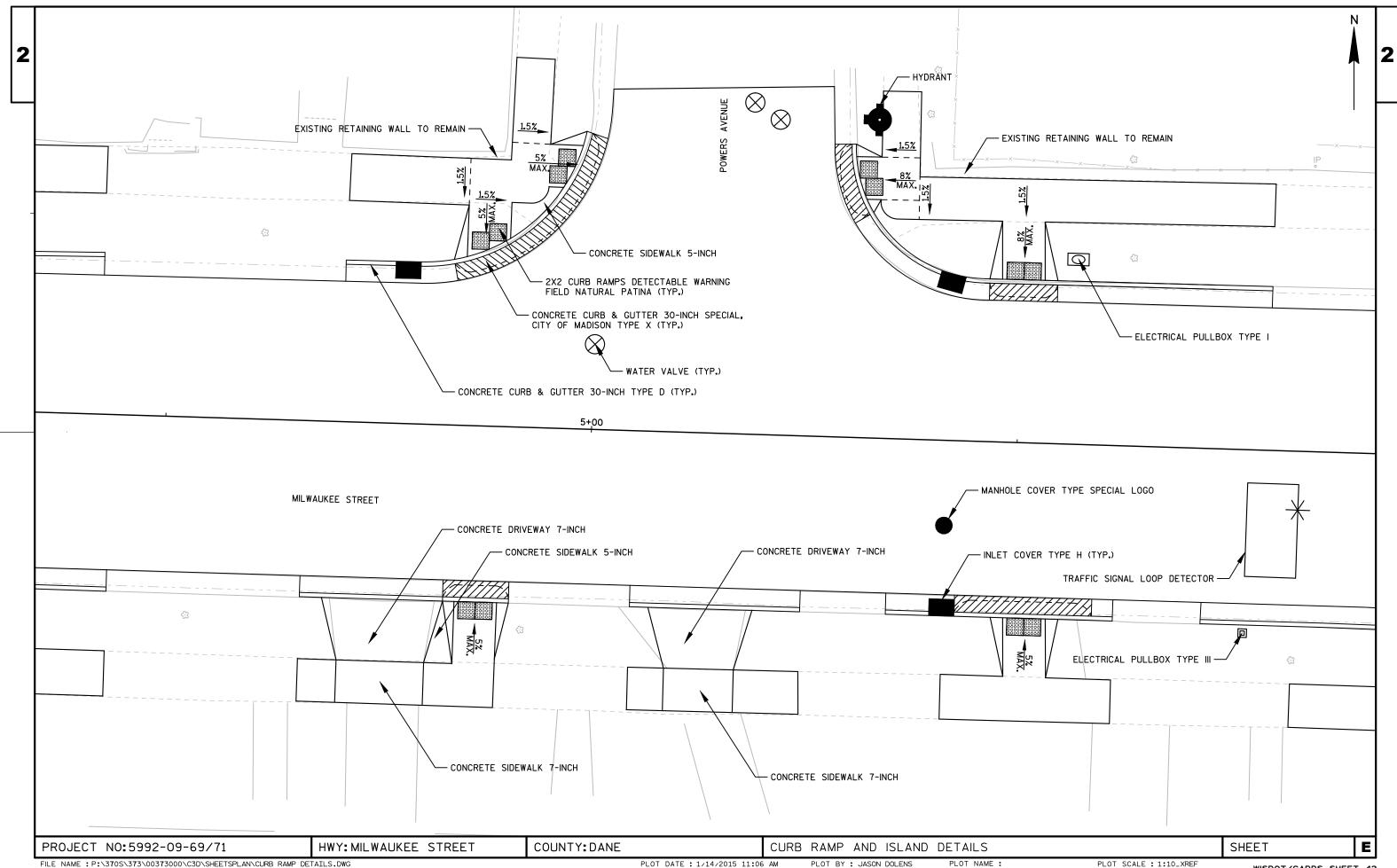
TO BE USED IN PLACE OF CONCRETE BASE LB-3

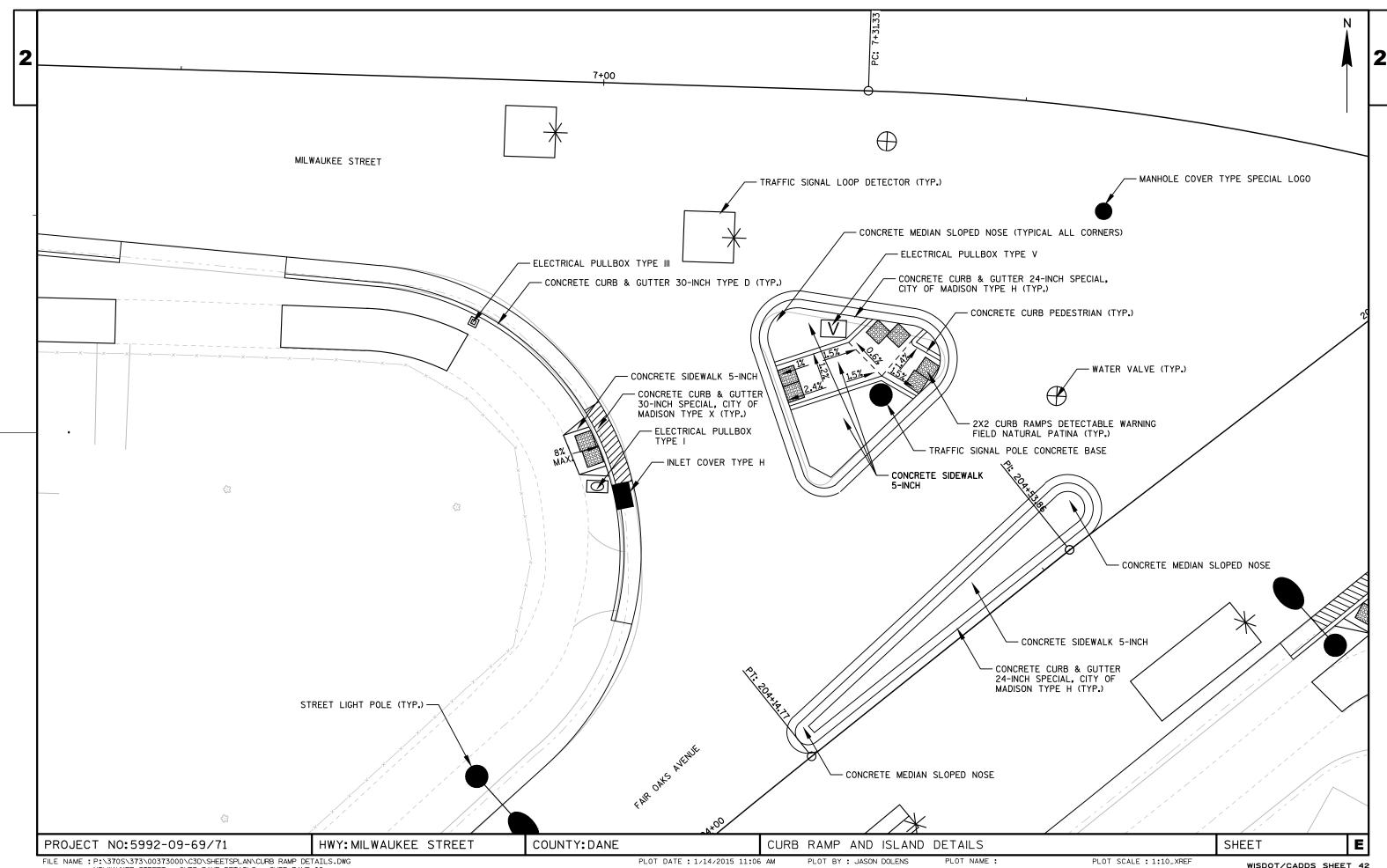


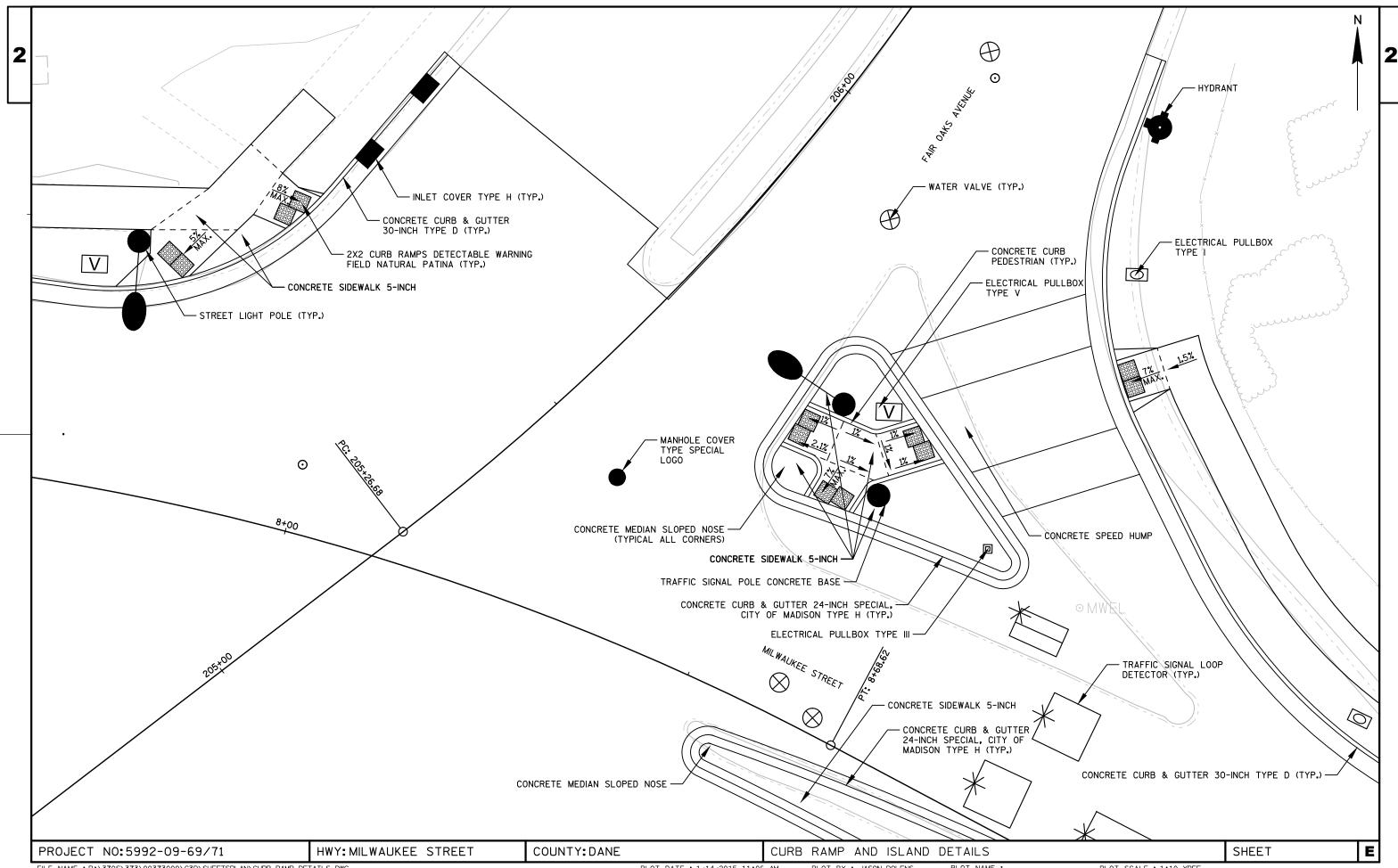


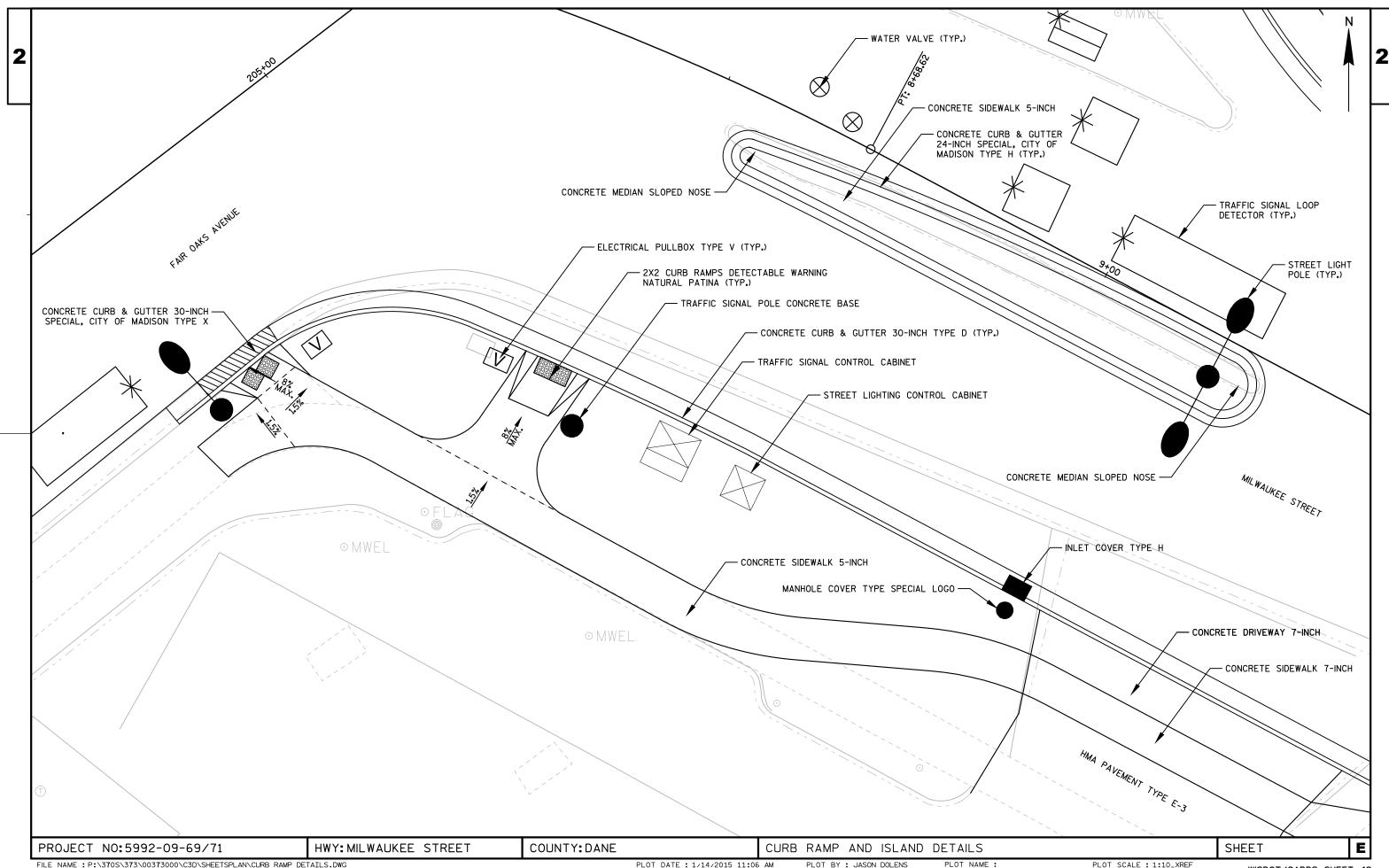


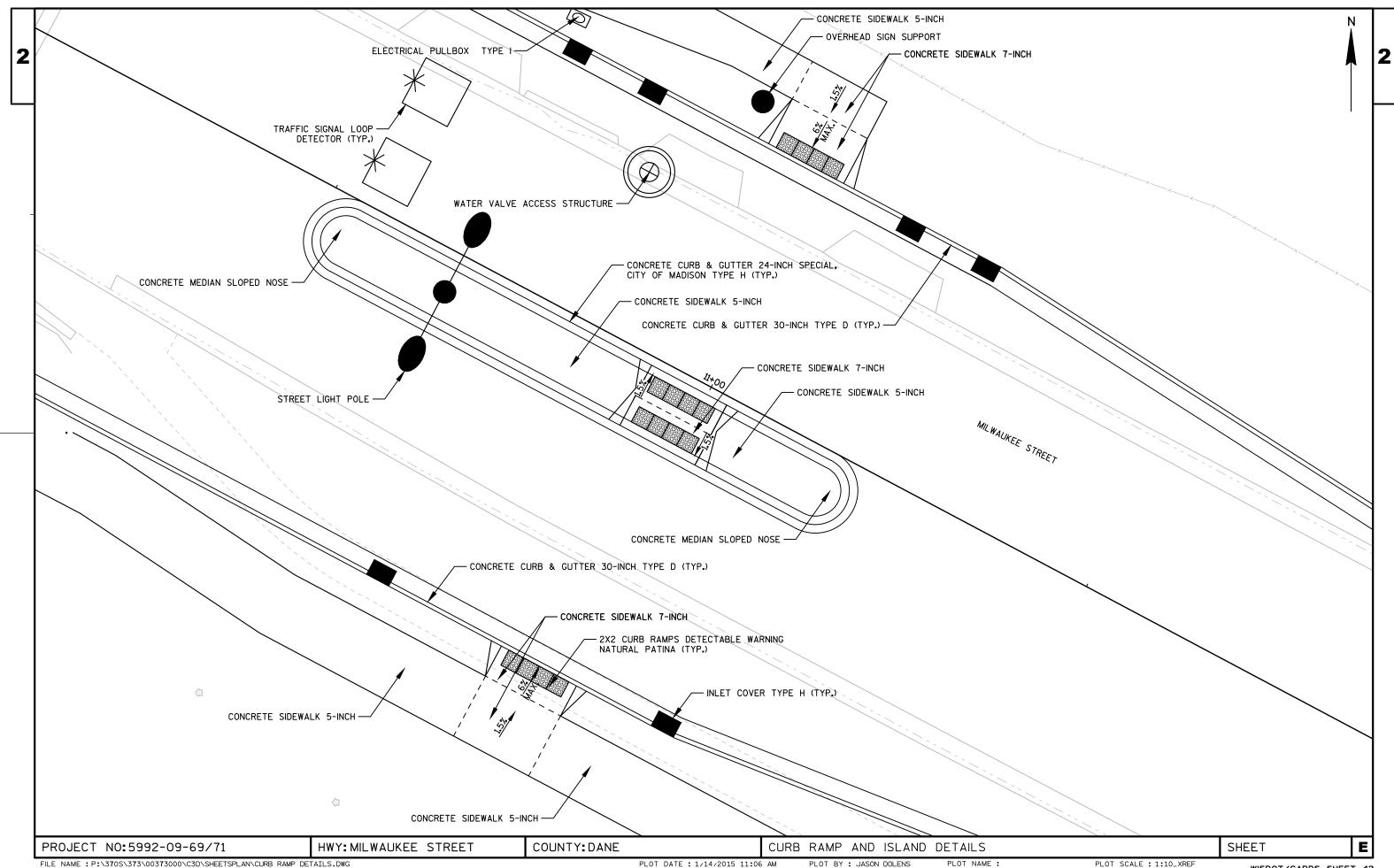










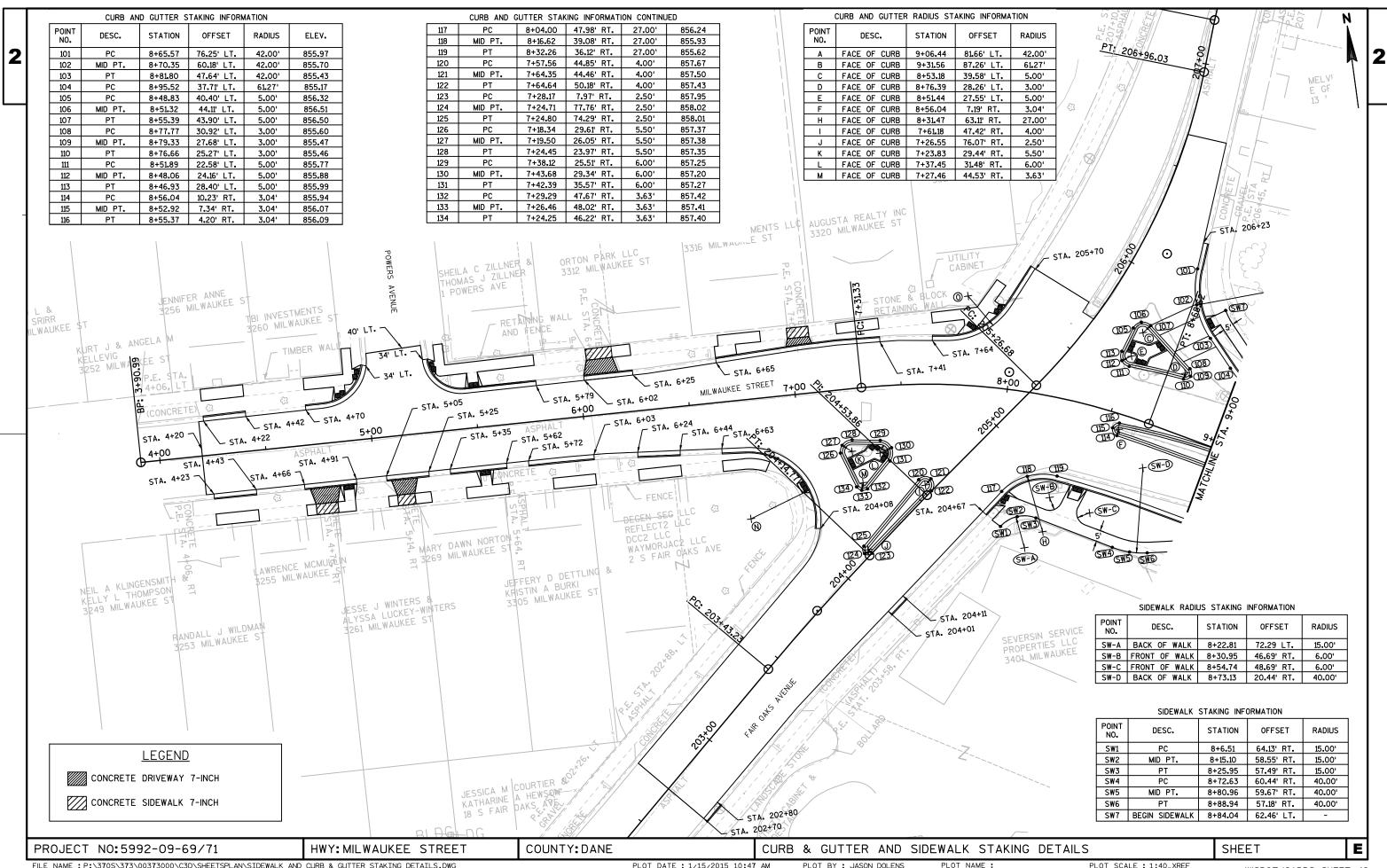


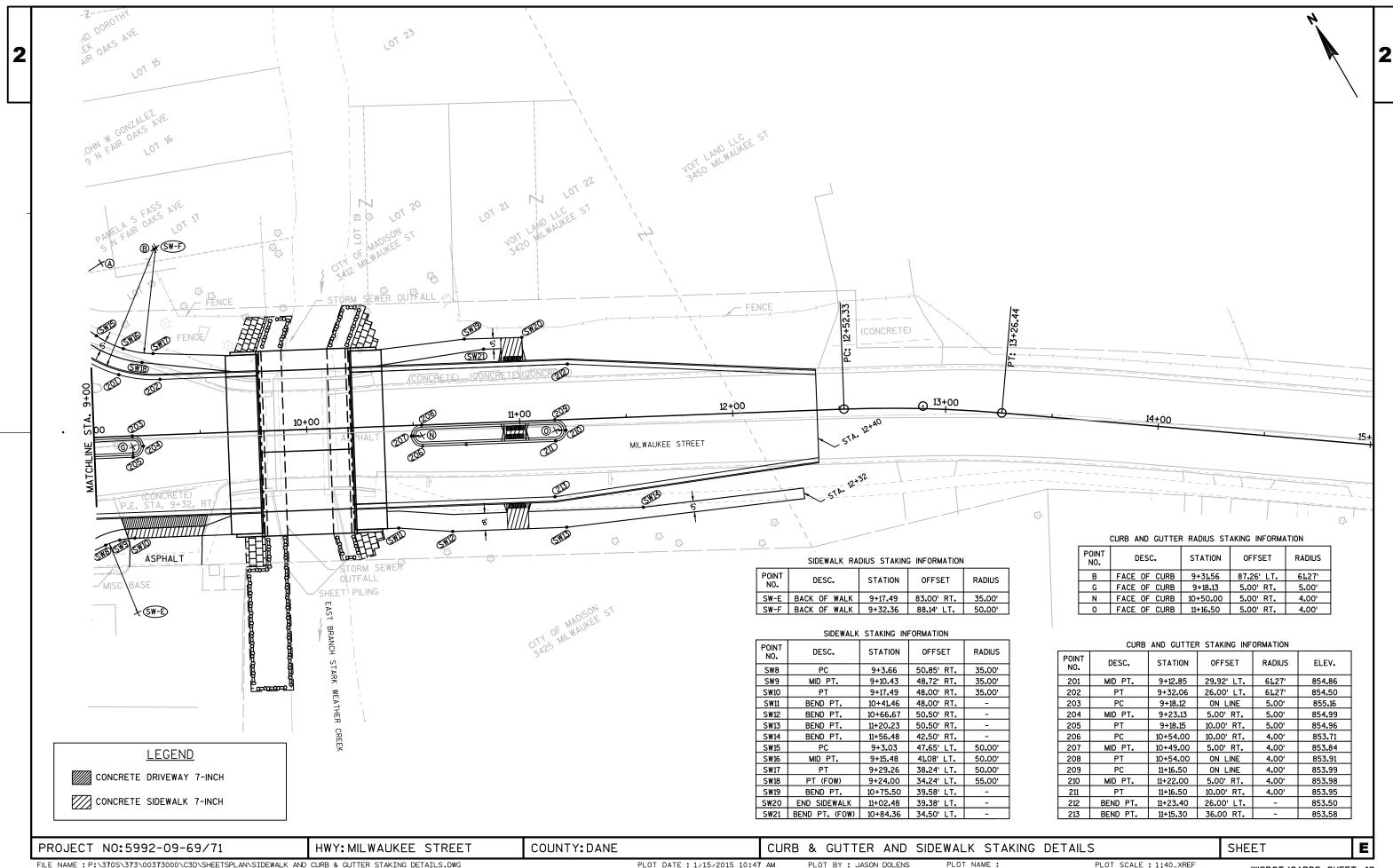
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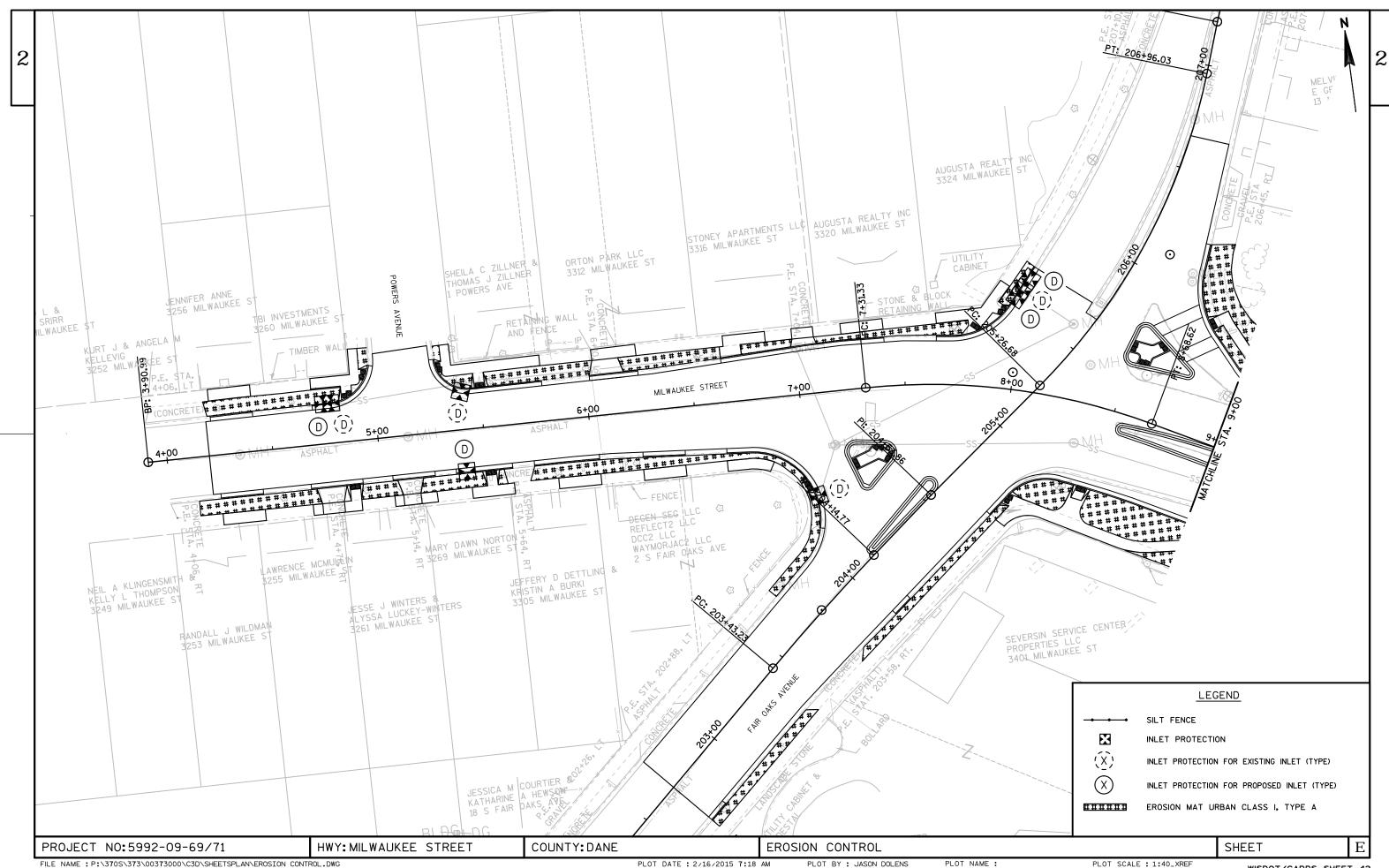
PLOT DATE : 1/14/2015 11:06 AM

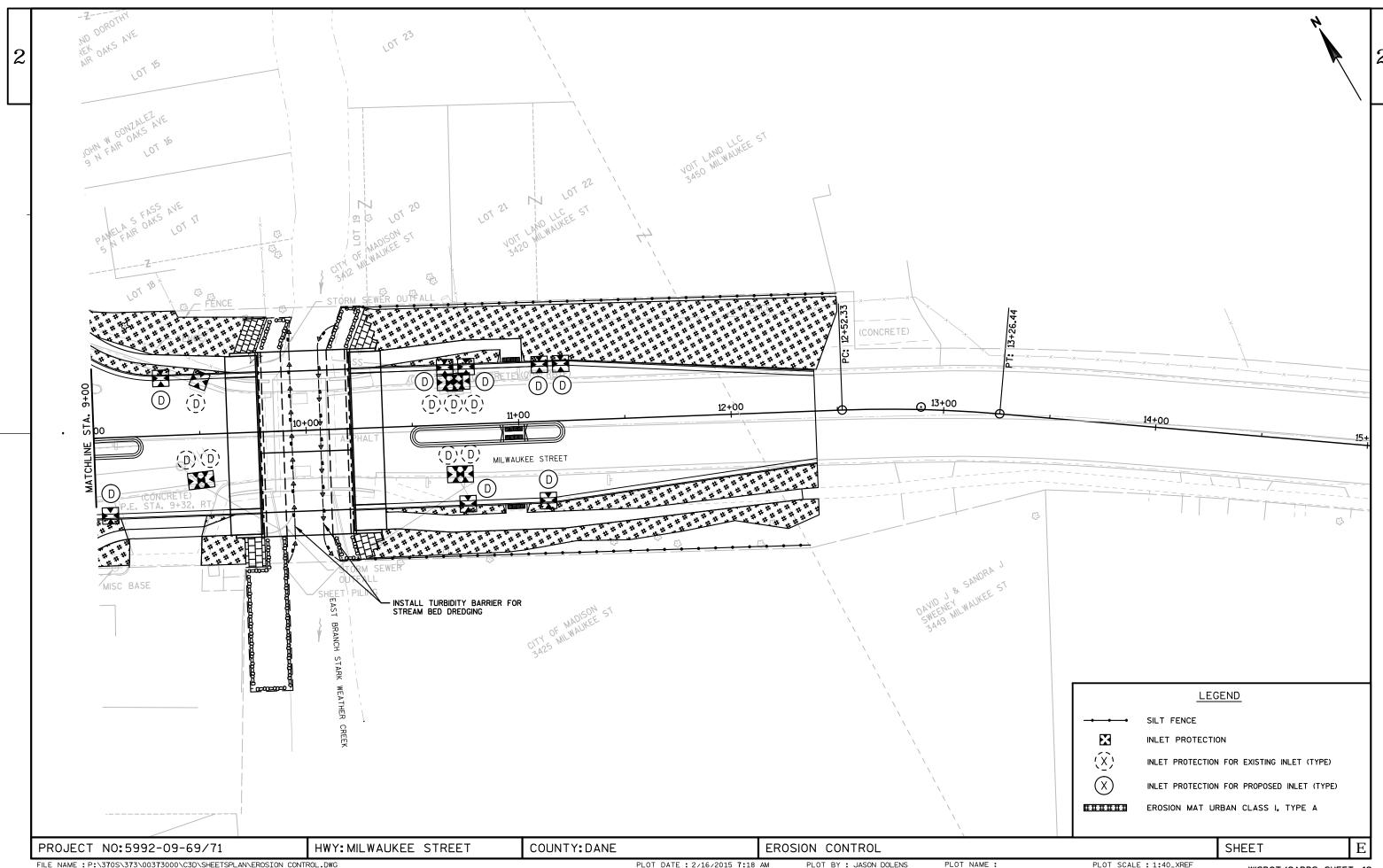
PLOT SCALE : 1:10_XREF

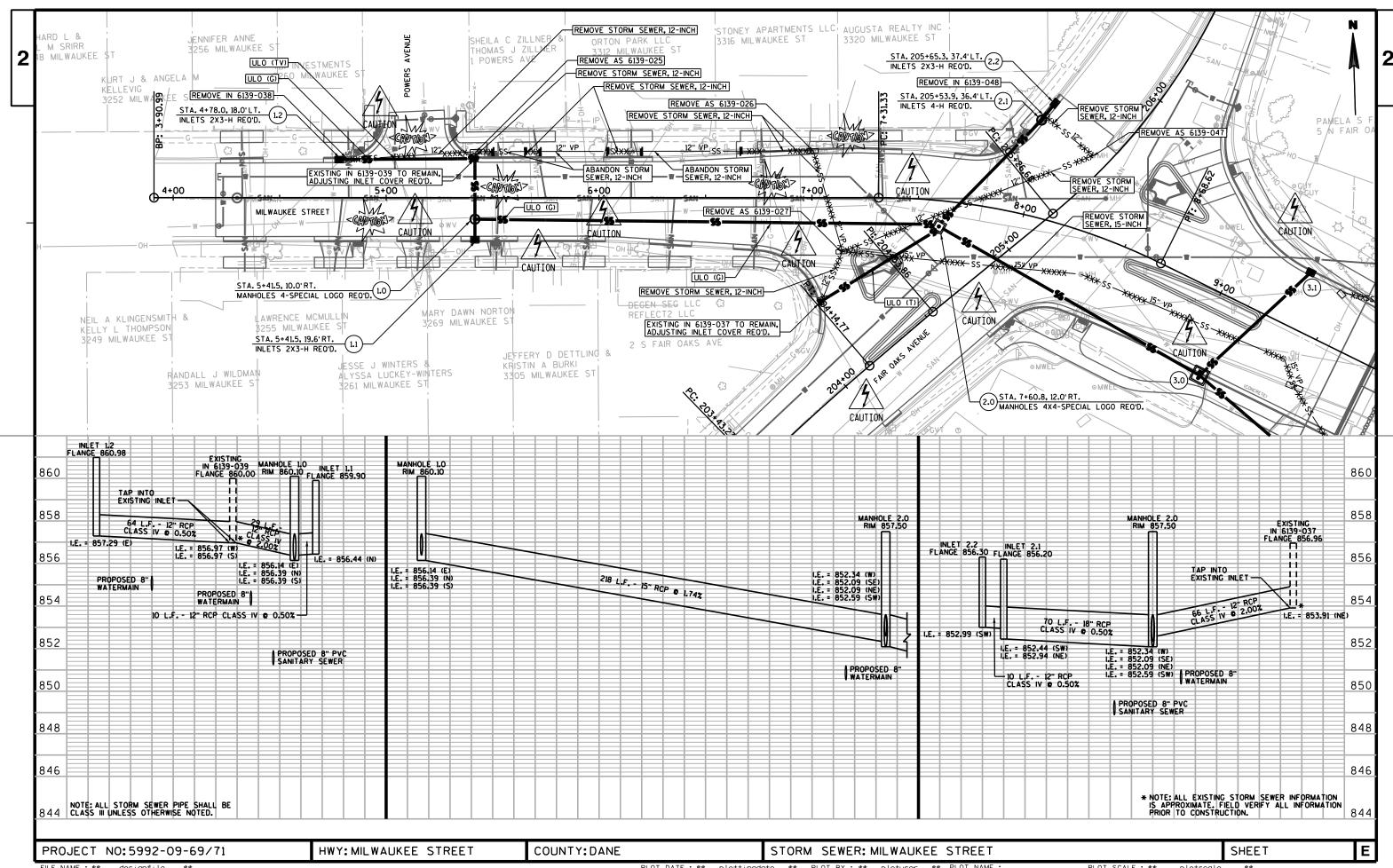
WISDOT/CADDS SHEET 42

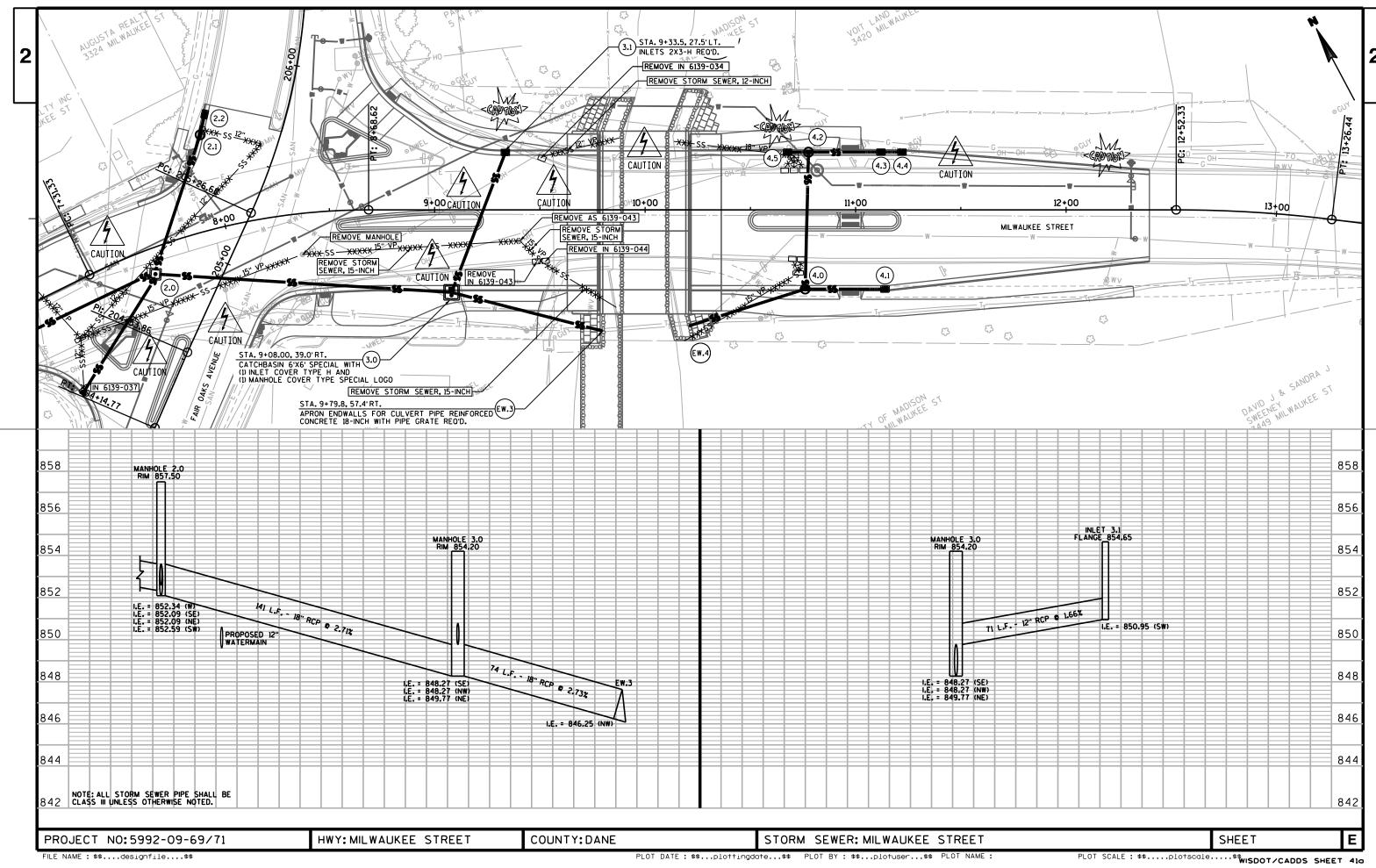


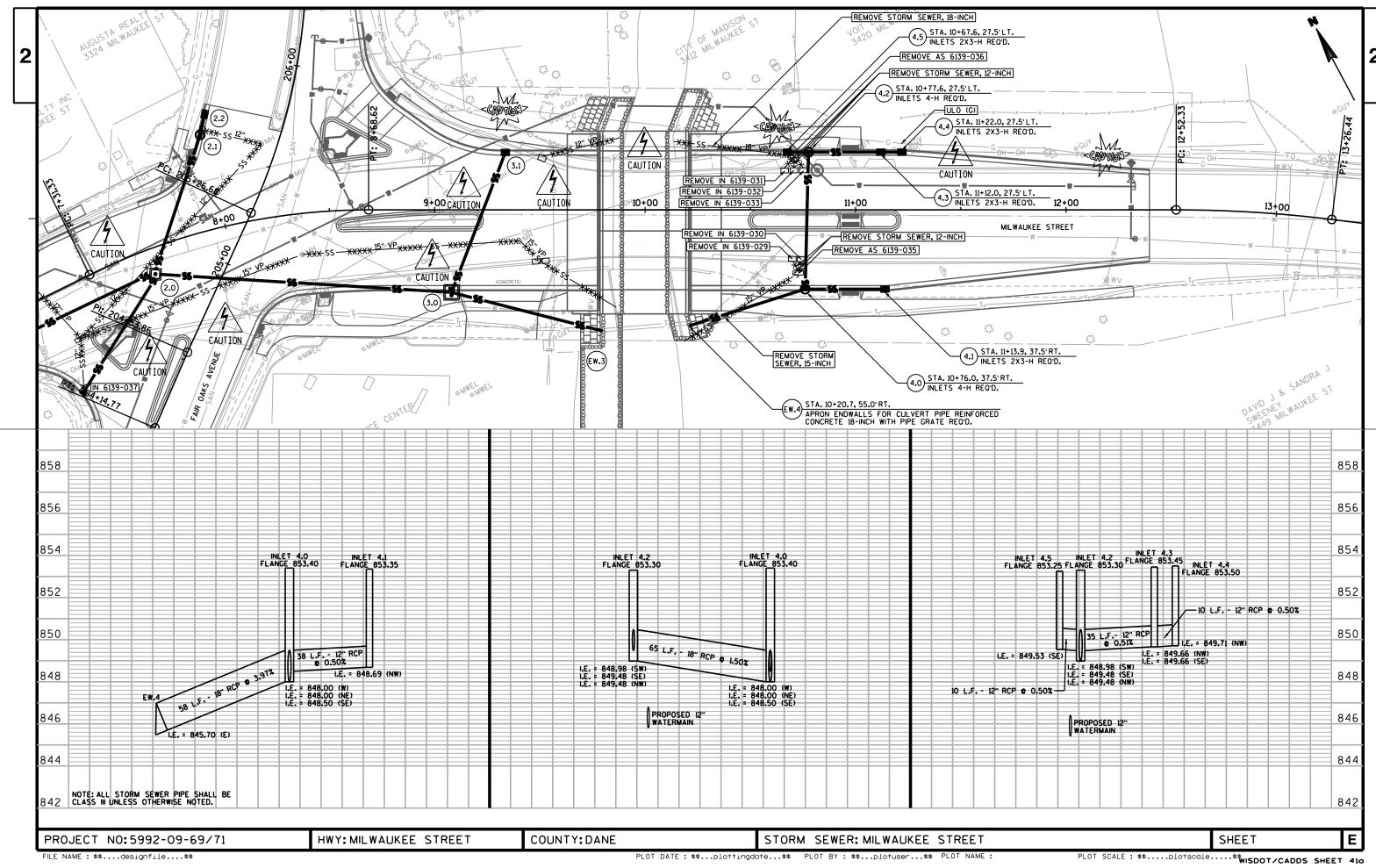


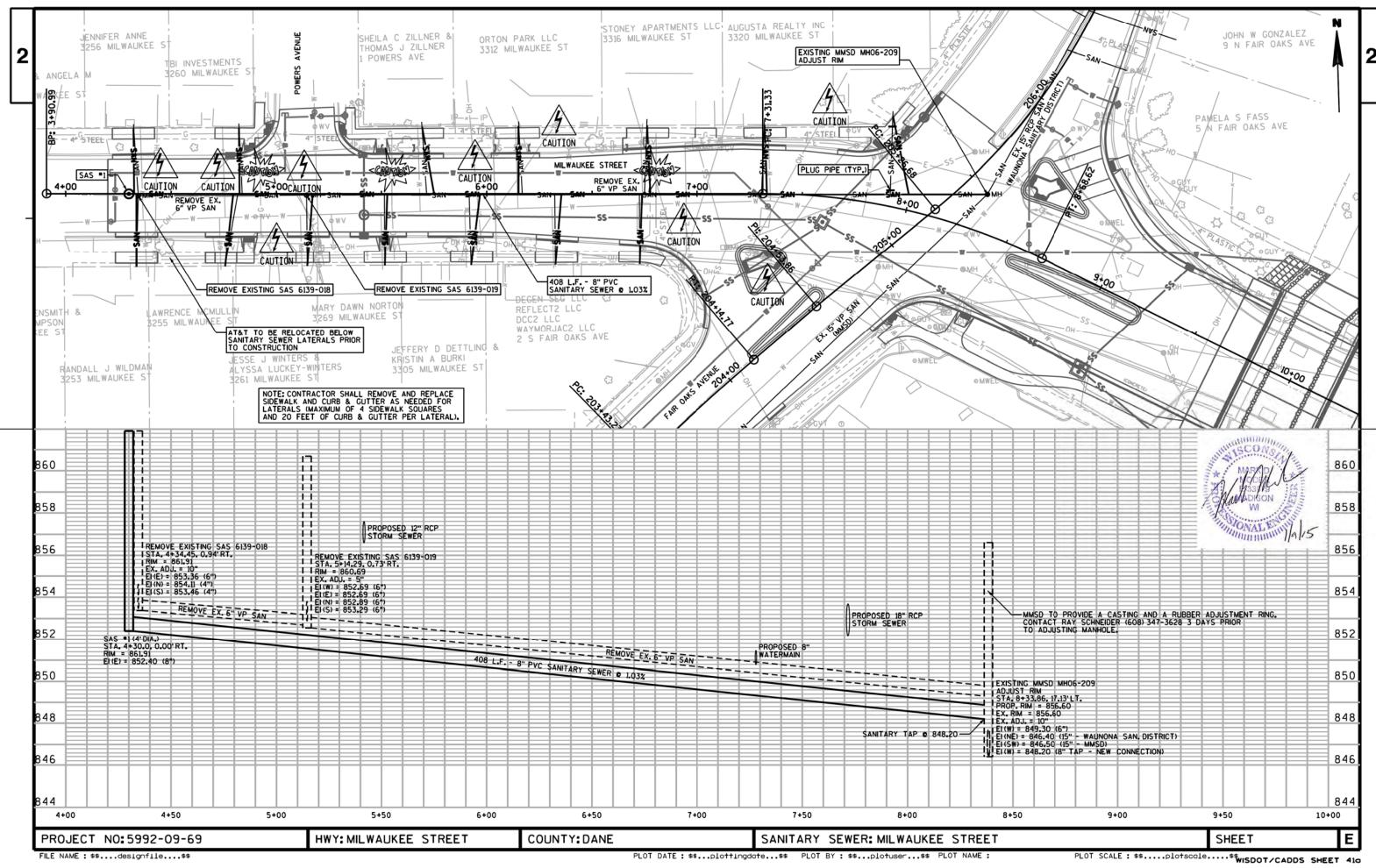




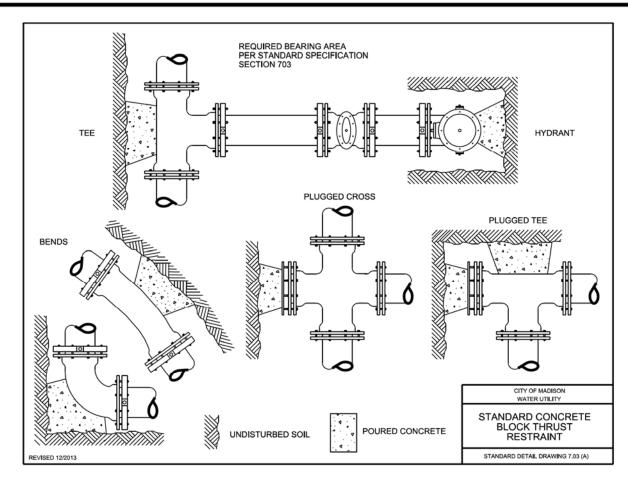


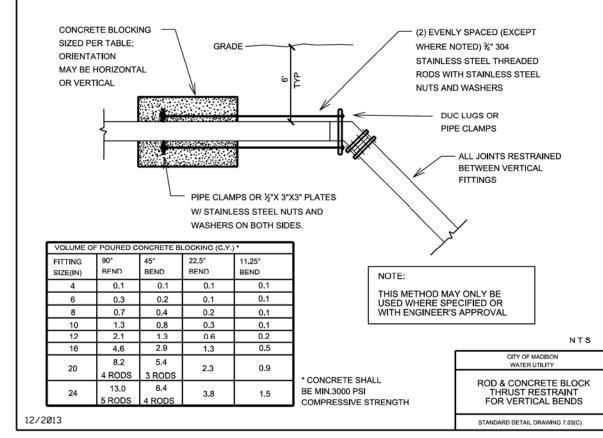


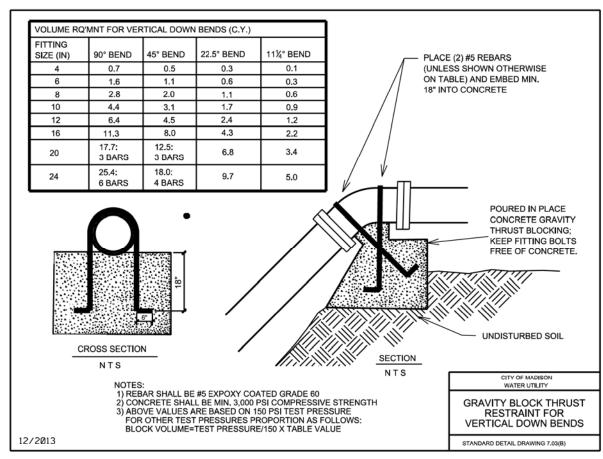






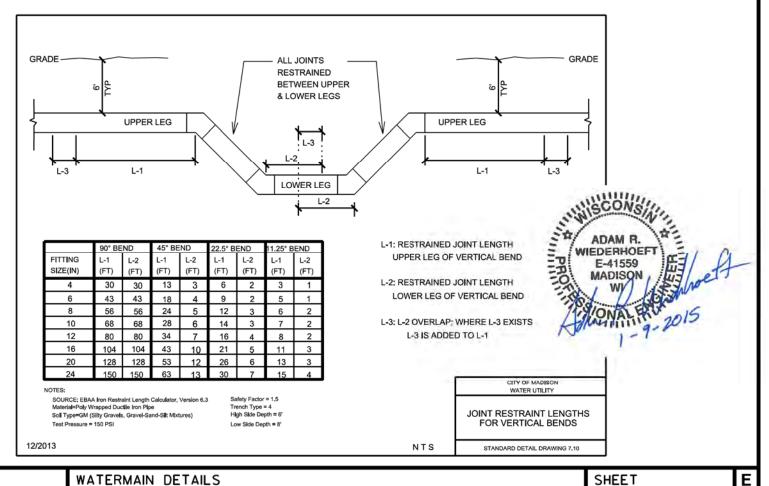




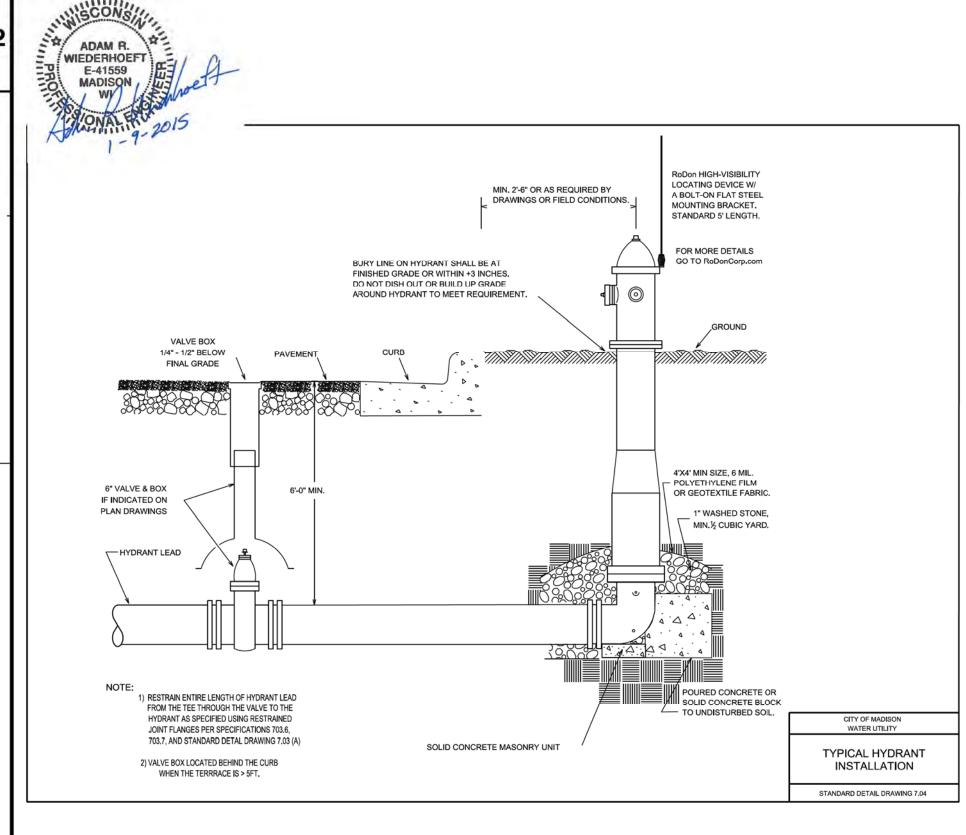


HWY: MILWAUKEE STREET

COUNTY: DANE

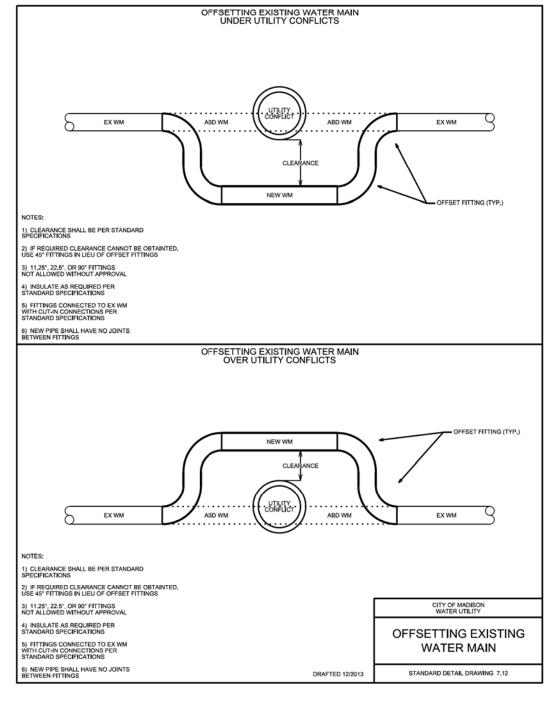






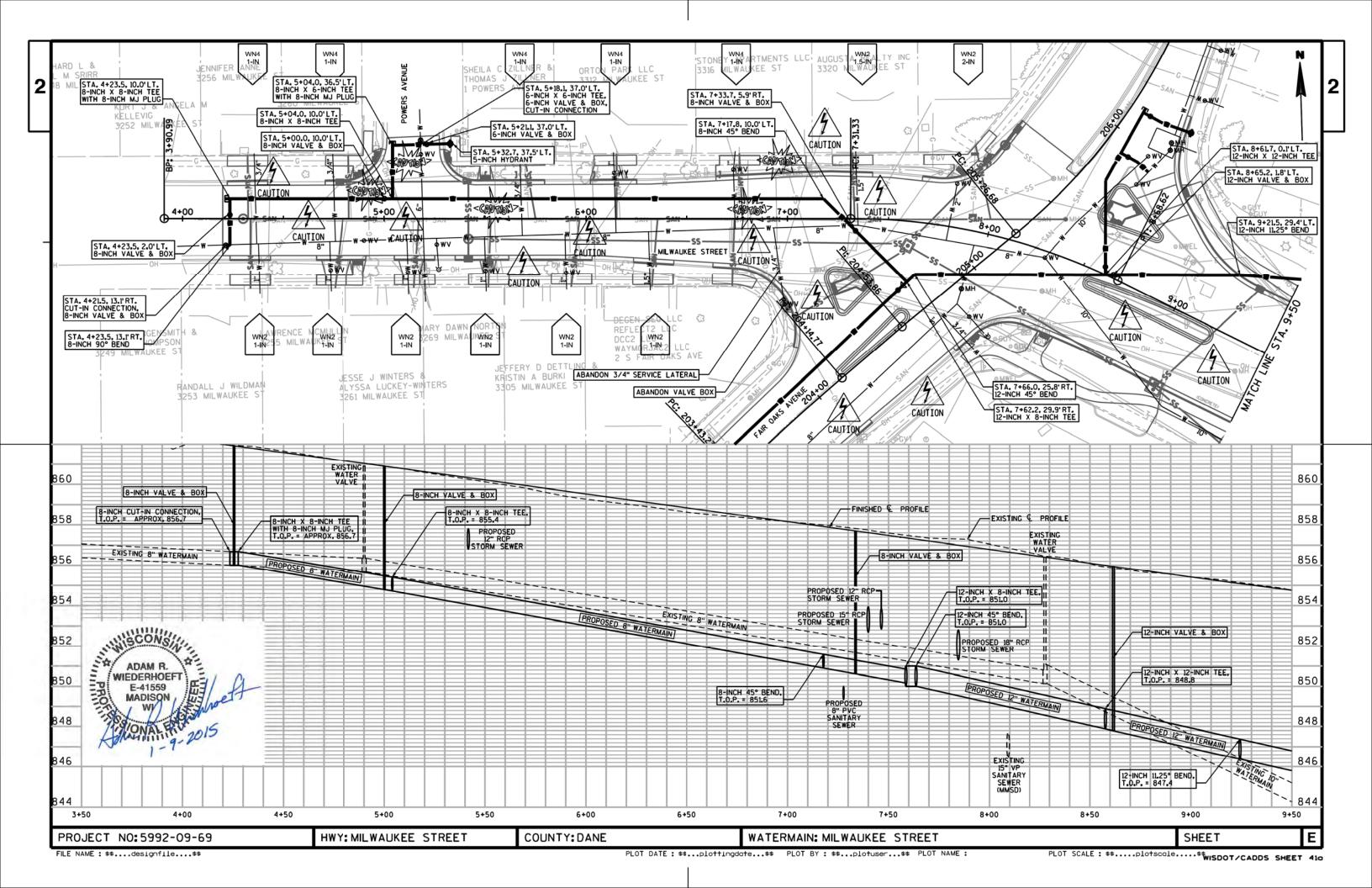
HWY: MILWAUKEE STREET

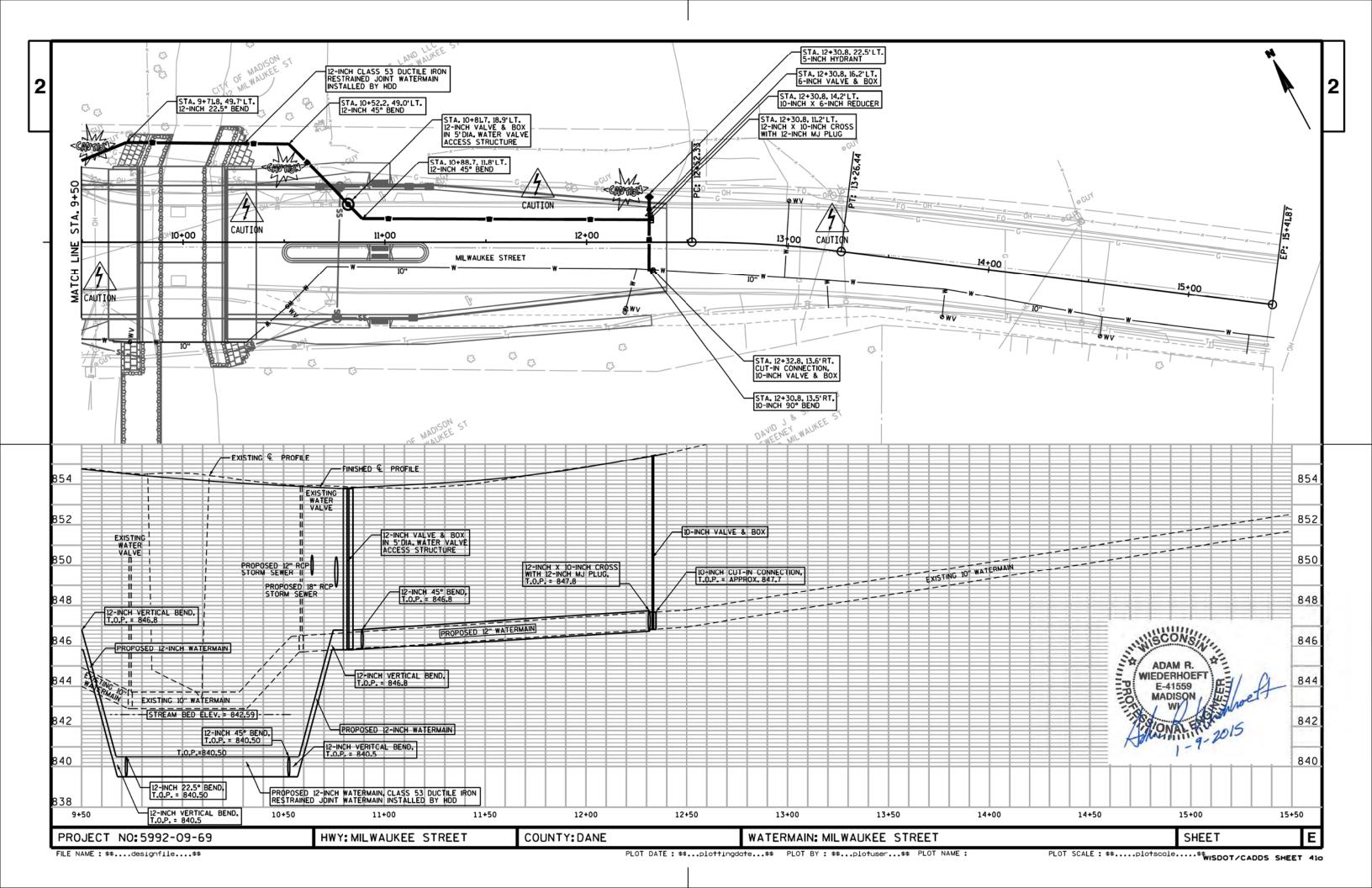
COUNTY: DANE

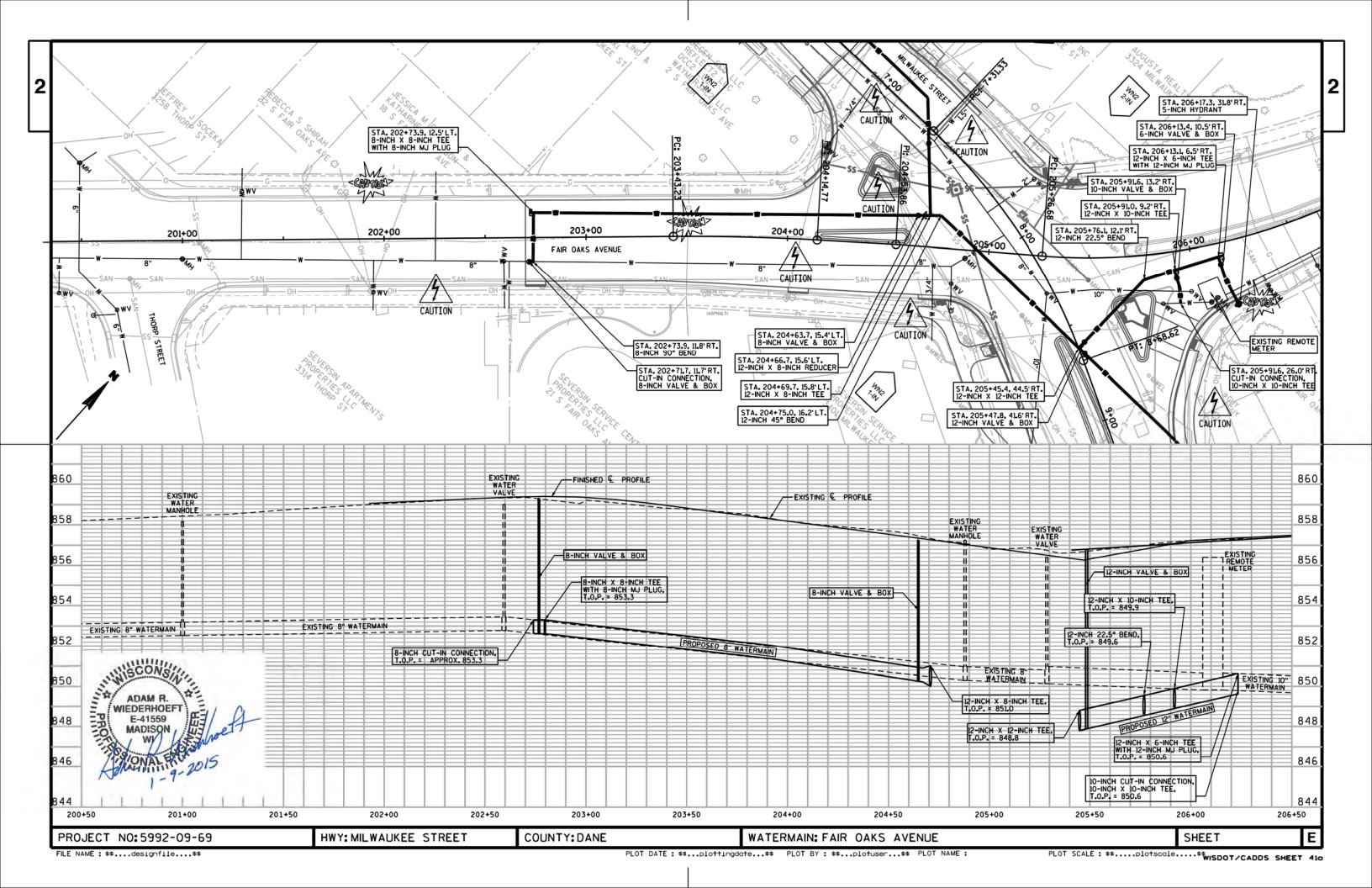


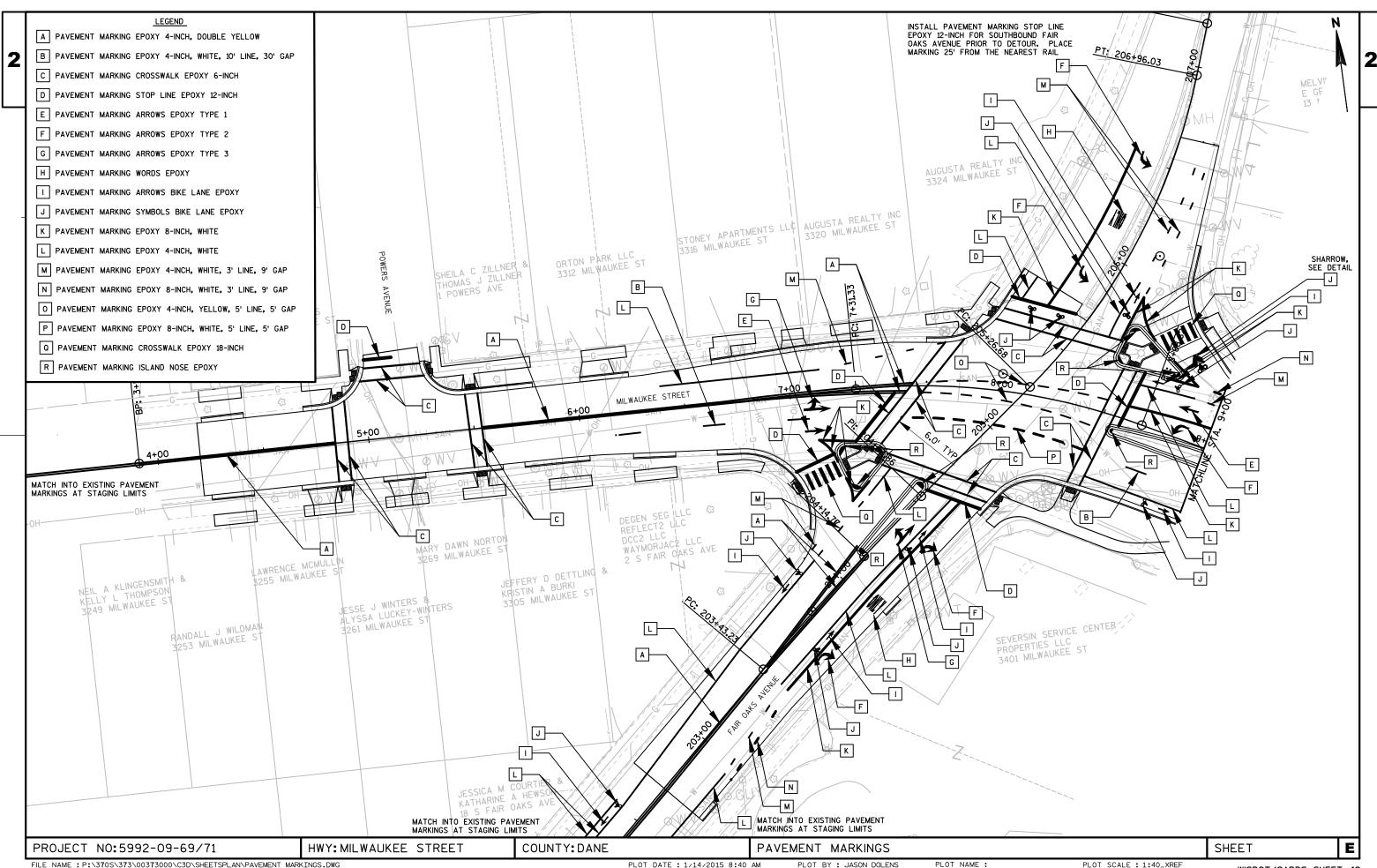
WATERMAIN DETAILS

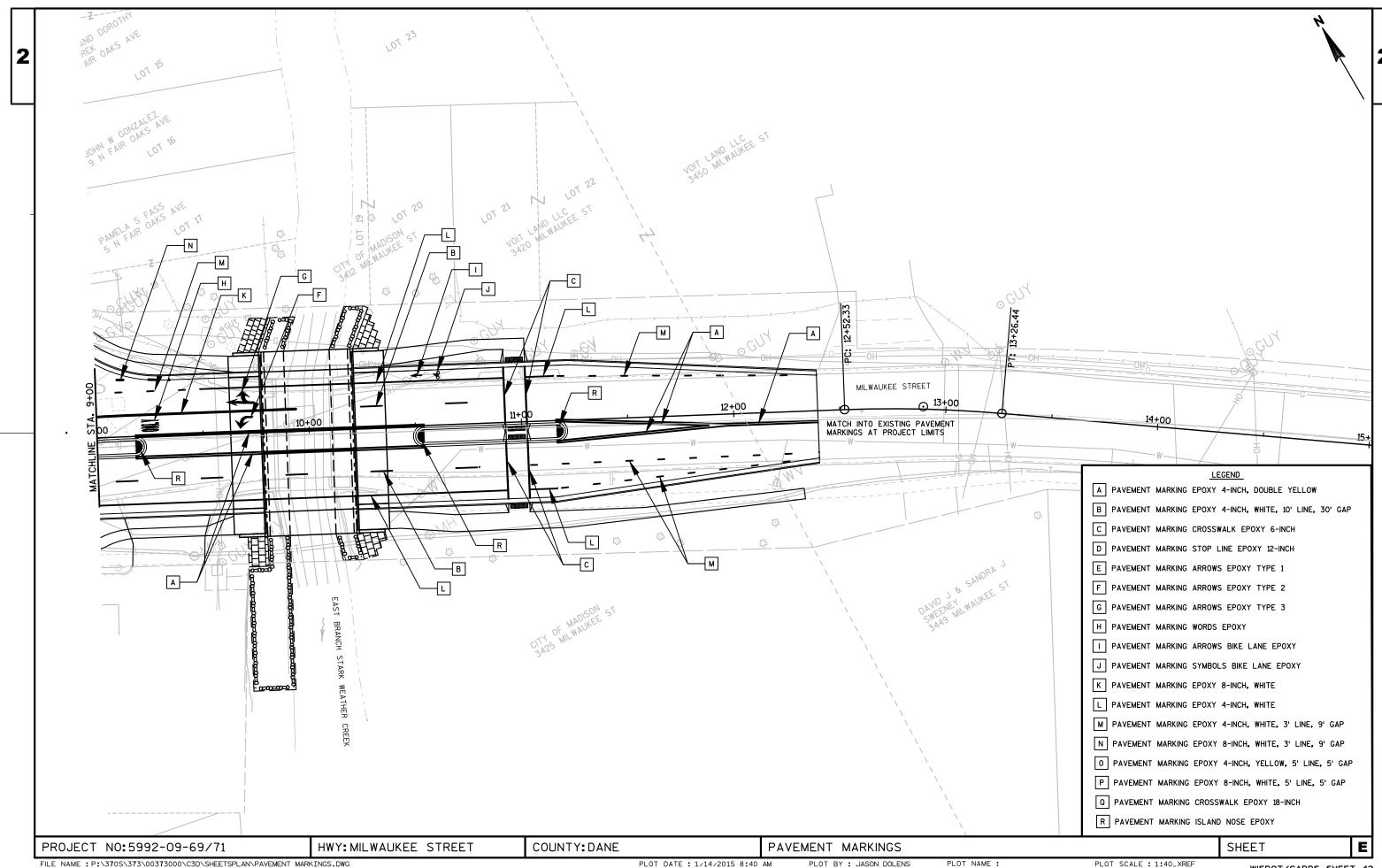
SHEET

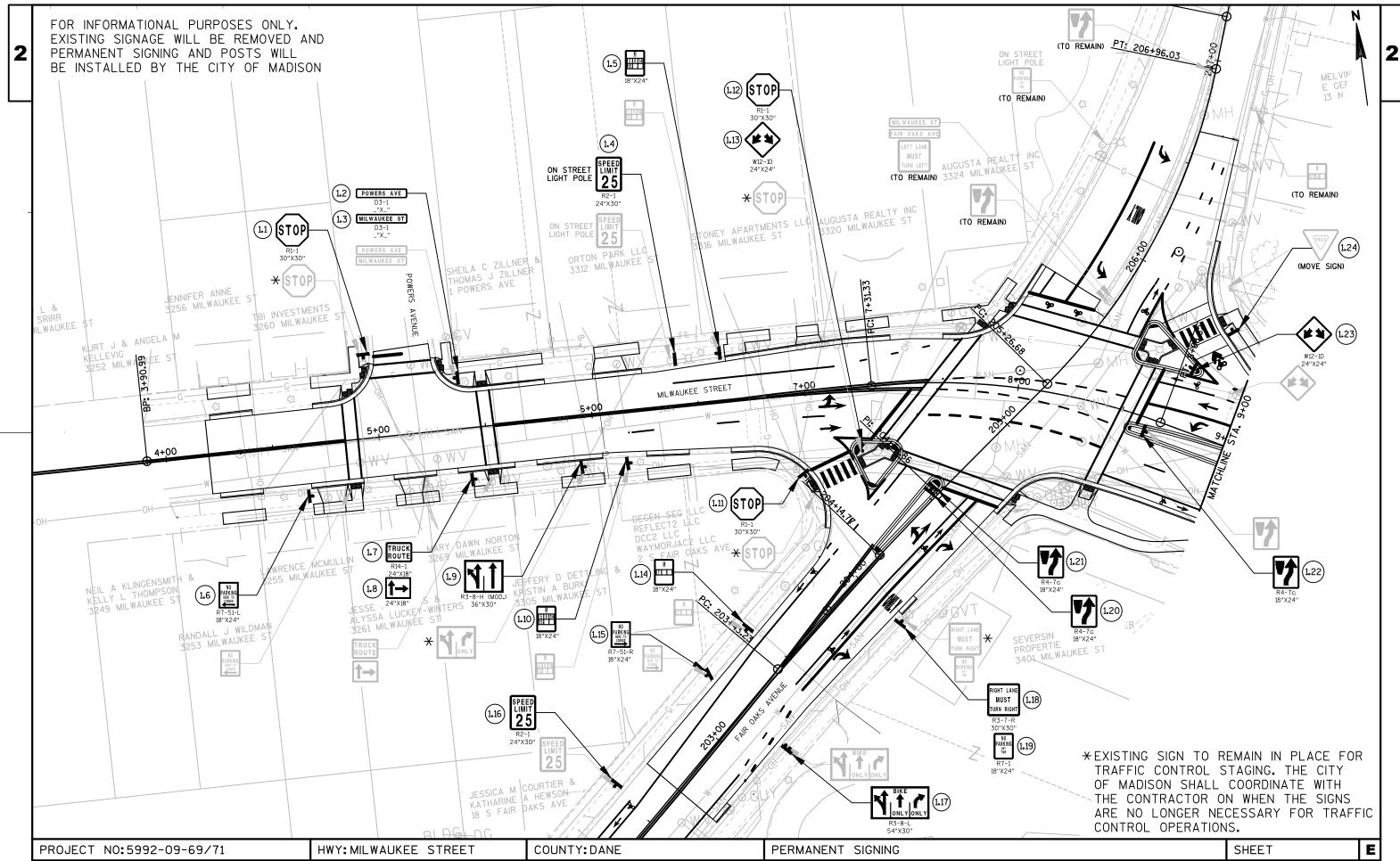


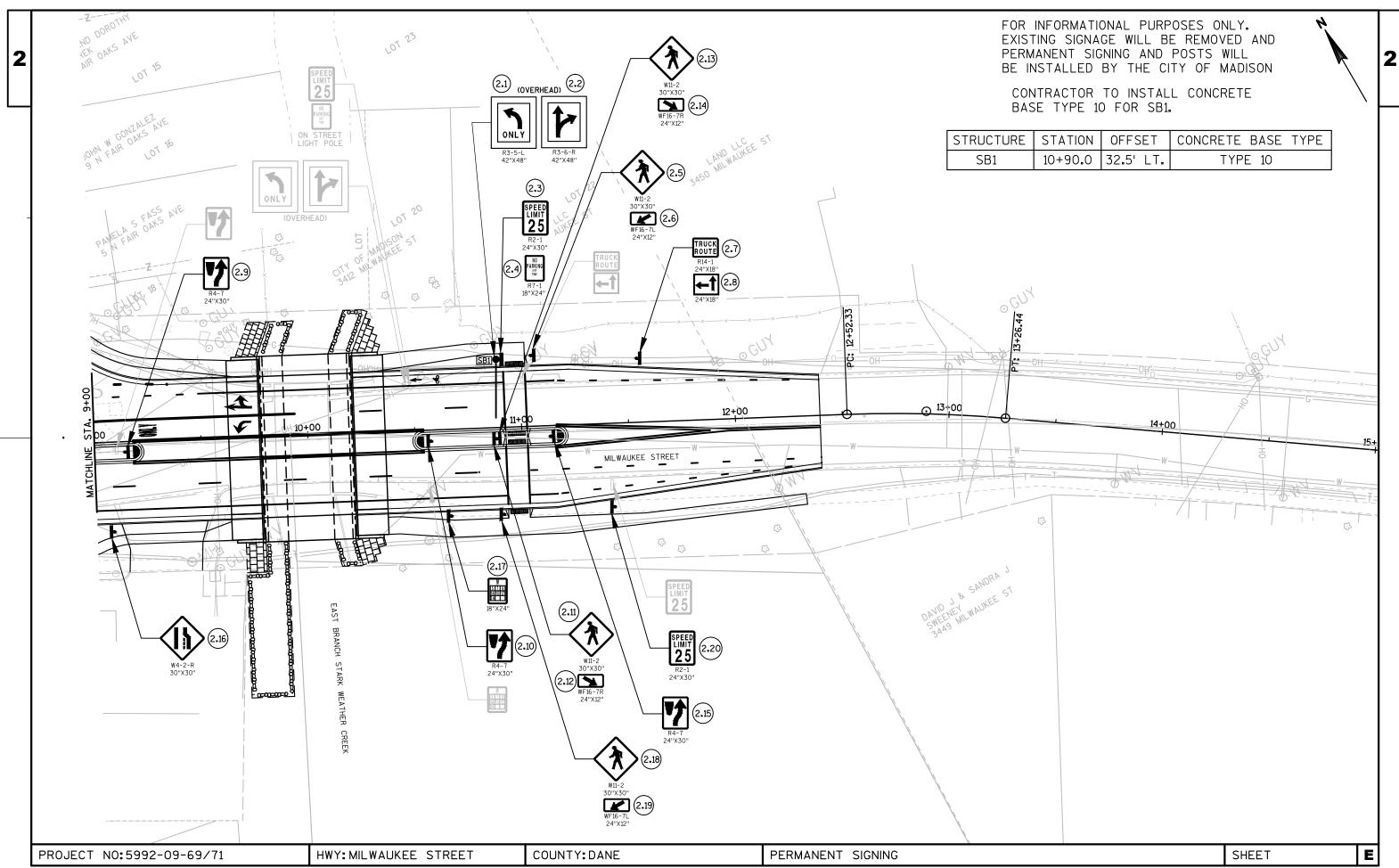












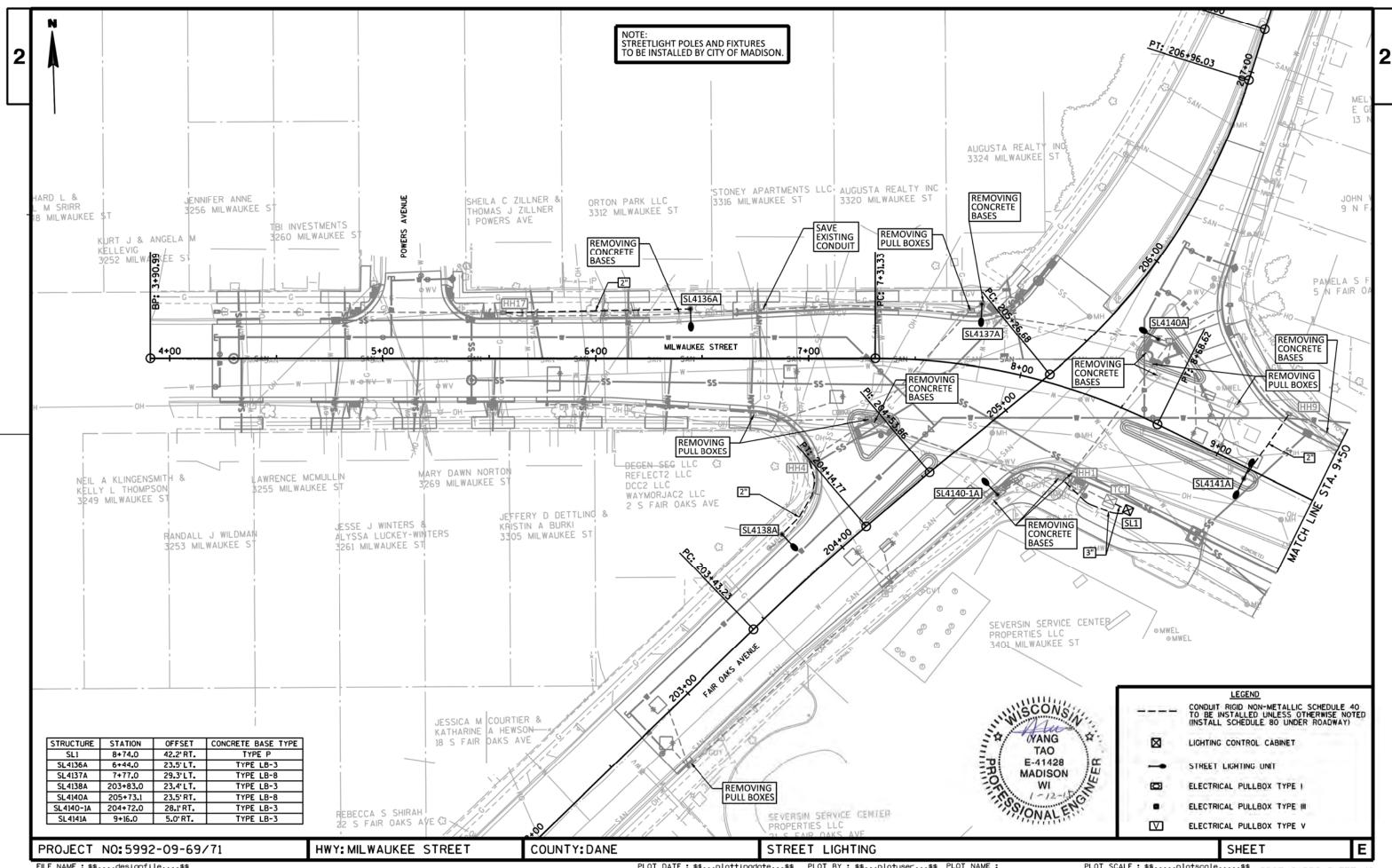
FILE NAME : P:\3705\373\00373000\C3D\SHEETSPLAN\PERMANENT SIGNING.DWG LAYOUT NAME - PERMANENT SIGNING - MKE STREET W

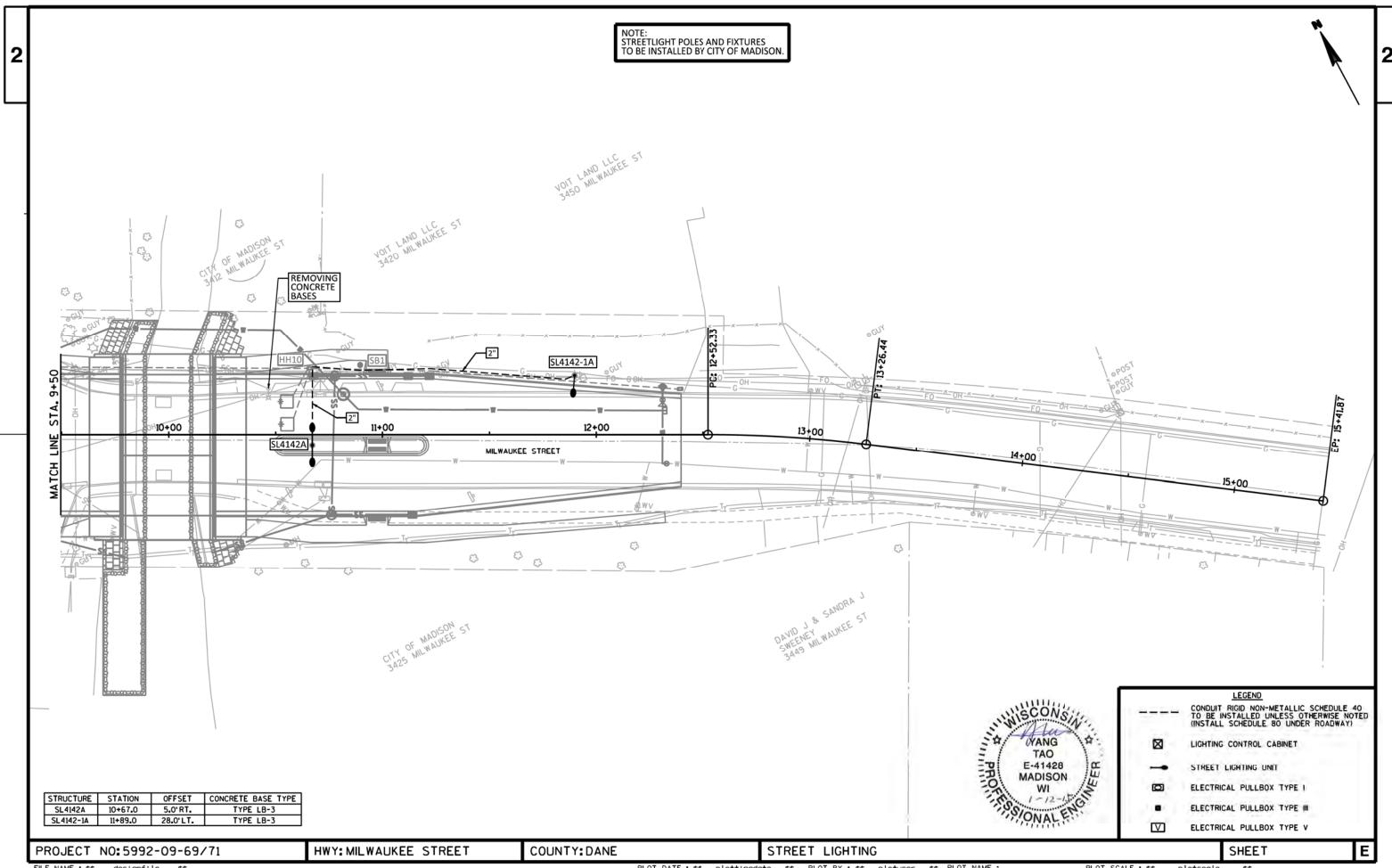
PLOT DATE : 1/14/2015 12:57 PM

PLOT BY: JASON DOLENS

PLOT NAME: PLOT SCALE: 1:40_XREF

WISDOT/CADDS SHEET 42

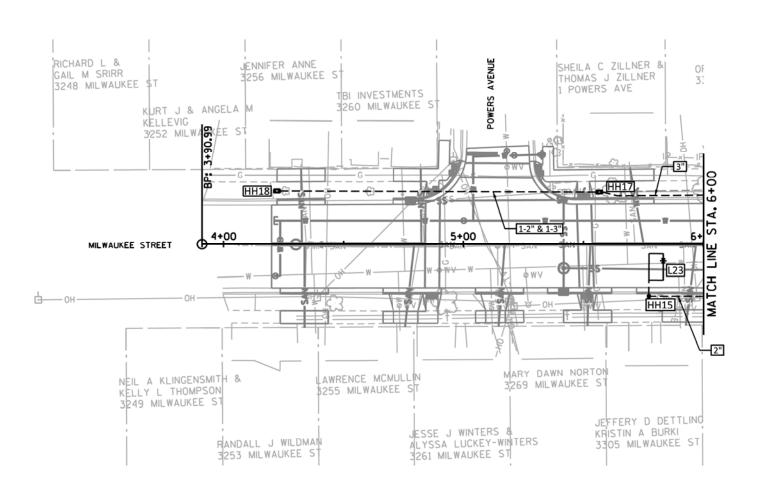


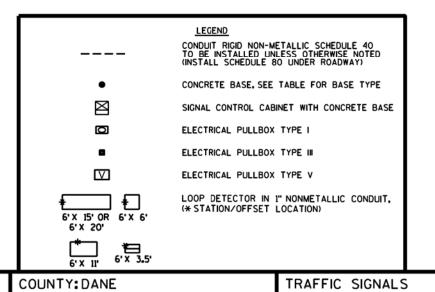


NOTE: TRAFFIC SIGNAL POLES, ARMS, SIGNAL HEADS AND CONTROLLER TO BE INSTALLED BY CITY OF MADISON.

	STRUCTURE	STATION	OFFSET	CONCRETE BASE TYPE
	HH15	5+77.0	21.5' RT.	-
	HH17	5+57.0	22.0'LT.	•
	HH18	4+22.0	22.0'LT.	-
- [L23	5+83.0	7.0' RT.	-

PHO HADISON WI



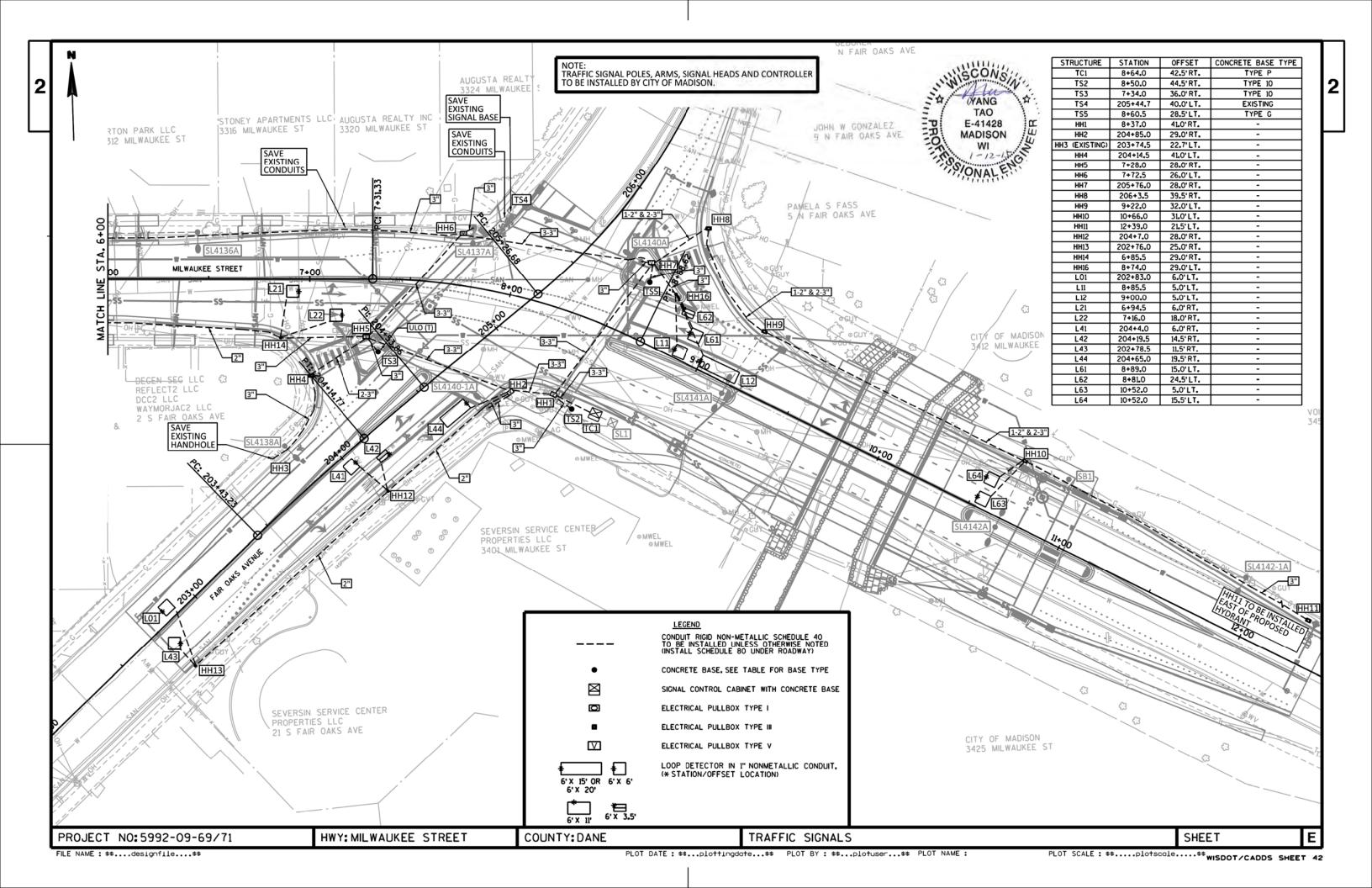


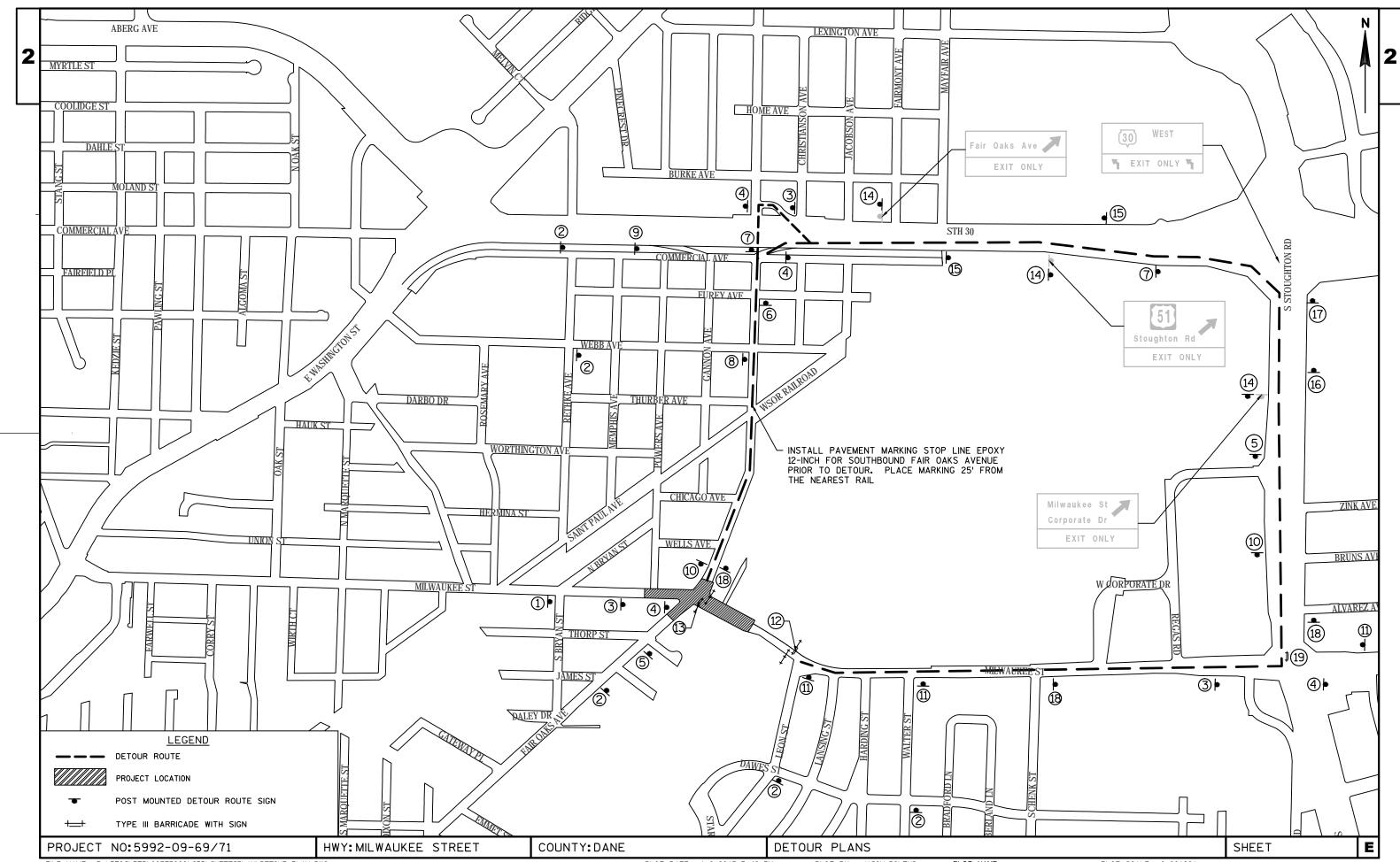
PROJECT NO:5992-09-69/71

HWY: MILWAUKEE STREET

SHEET

Ε





2

1

48"X24 TRAFFIC CONTROL SIGNS



MILWAUKEE (3) STREET

> 48"X24' TRAFFIC CONTROL SIGNS FIXED MESSAGE



MILWAUKEE (4) STREET

48"X24' TRAFFIC CONTROL SIGNS



MILWAUKEE (5) STREET

48"X24 TRAFFIC CONTROL SIGNS FIXED MESSAGE



MILWAUKEE (6) STREET

> 48"X24" TRAFFIC CONTROL SIGNS FIXED MESSAGE



MILWAUKEE

STREET 48"X24' TRAFFIC CONTROL SIGNS



MILWAUKEE (8) STREET

48"X24' TRAFFIC CONTROL SIGNS



R11-2-B 48"X30"



(9)

MILWAUKEE STREET

48"X24" TRAFFIC CONTROL SIGNS FIXED MESSAGE



R11-2-B 48"X30"



30"X24"

(10)

MILWAUKEE STREET

48"X24" TRAFFIC CONTROL SIGNS FIXED MESSAGE





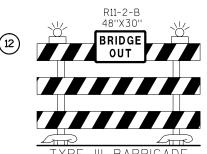
STREET 48"X24" TRAFFIC CONTROL SIGNS FIXED MESSAGE

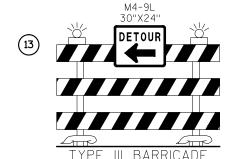
MILWAUKEE



R11-2-B 48"X30"







+ (14)

DETOUR M4-8

30"X15" MILWAUKEE STREET

48"X24" TRAFFIC CONTROL SIGNS FIXED MESSAGE



+ (15)

DETOUR M4-8

30"X15" MILWAUKEE STREET

48"X24" TRAFFIC CONTROL SIGNS FIXED MESSAGE



+ (16)

DETOUR M4-8 30"X15"

MILWAUKEE STREET TRAFFIC CONTROL SIGNS



+ (17)

M4-8 30"X15" MILWAUKEE STREET

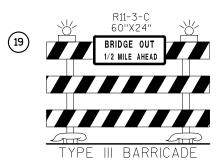
DETOUR

TRAFFIC CONTROL SIGNS FIXED MESSAGE



18 DETOUR M4-8 30"X15" MILWAUKEE STREET

TRAFFIC CONTROL SIGNS FIXED MESSAGE



-X SIGNS POSTED ON STATE TRUNK HIGHWAY AND US HIGHWAY ROUTE (LARGER DIMENSIONS)

PROJECT NO:5992-09-69/71

HWY: MILWAUKEE STREET

COUNTY: DANE

DETOUR KEY

PLOT BY : JASON DOLENS

PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 42

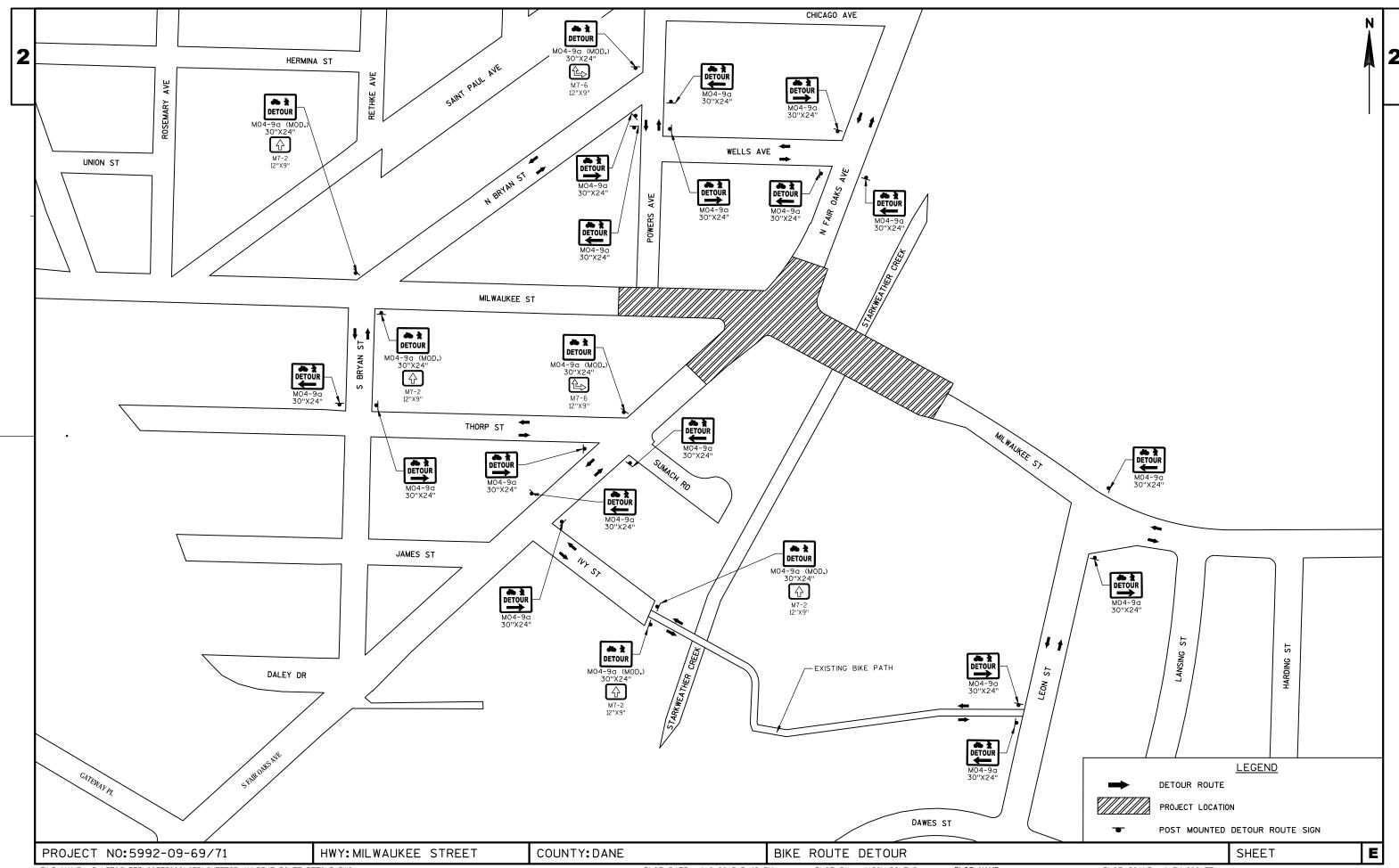
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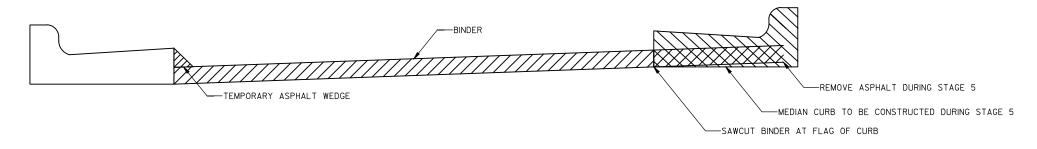
E

FILE NAME : P:\370S\373\00373000\C3D\SHEETSPLAN\DETOUR PLAN.DWG LAYOUT NAME - DETOUR PLAN - DETOUR LEGEND

PLOT DATE: 1/6/2015 3:42 PM

PLOT NAME :

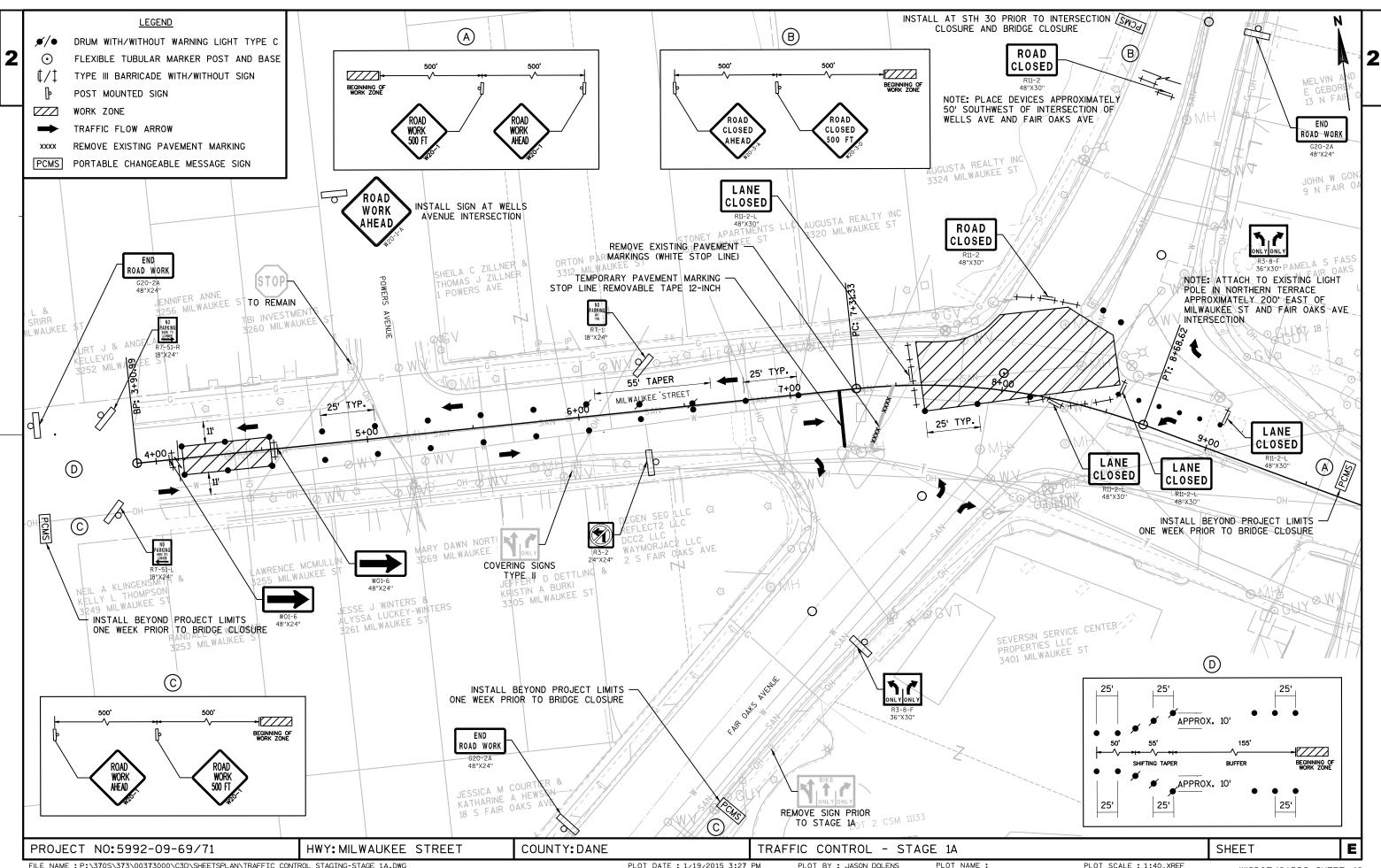


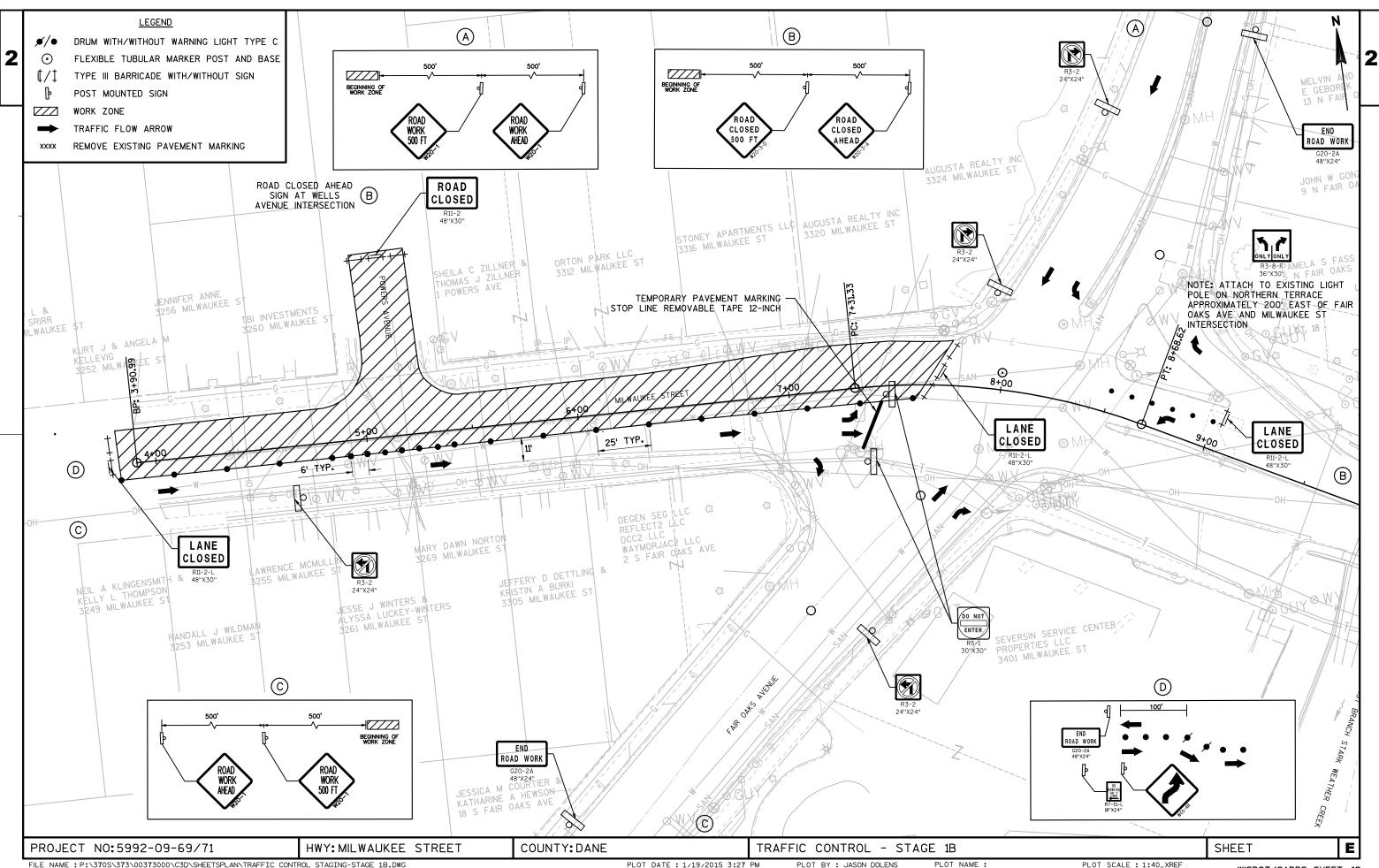


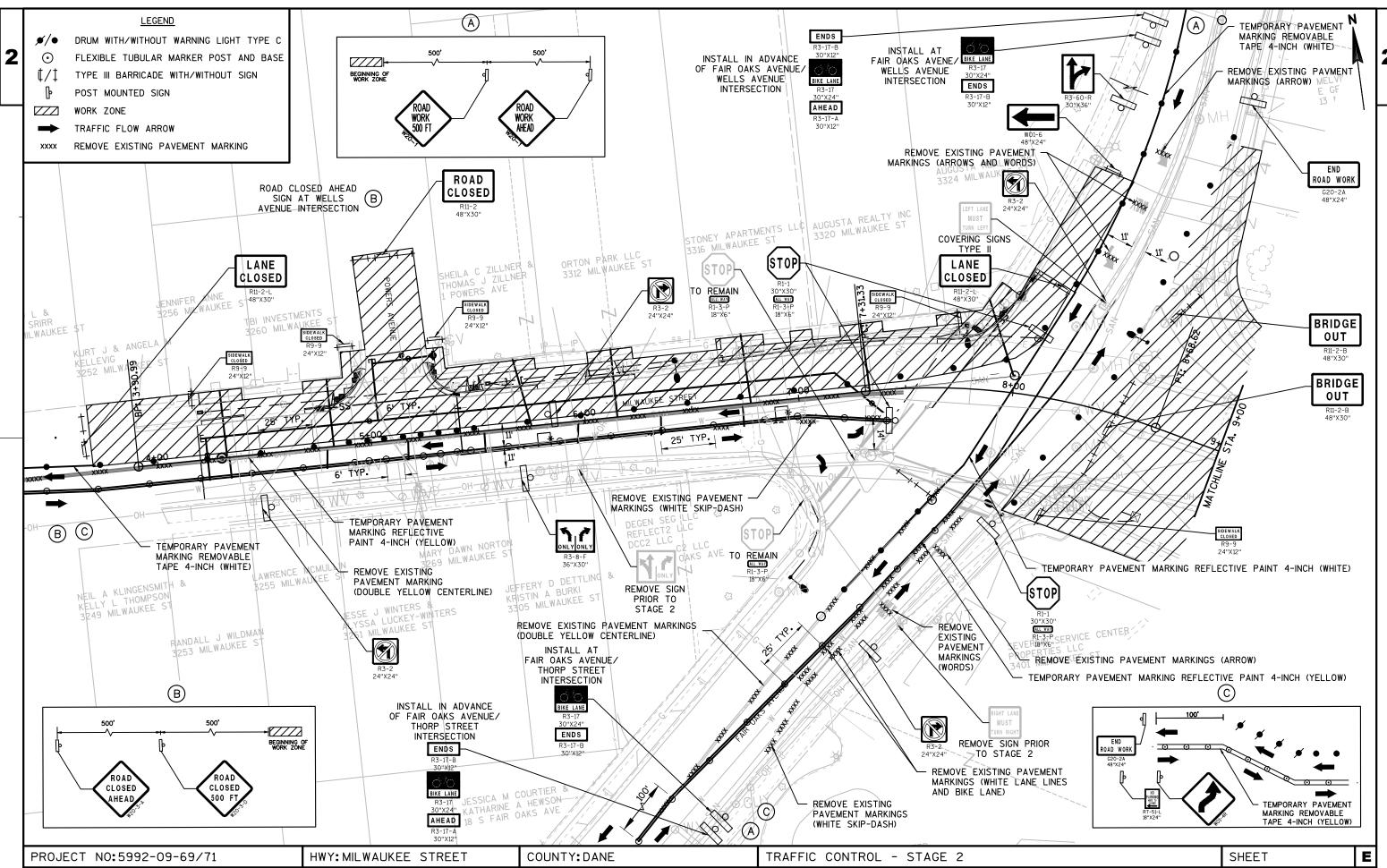
PAVING DETAIL

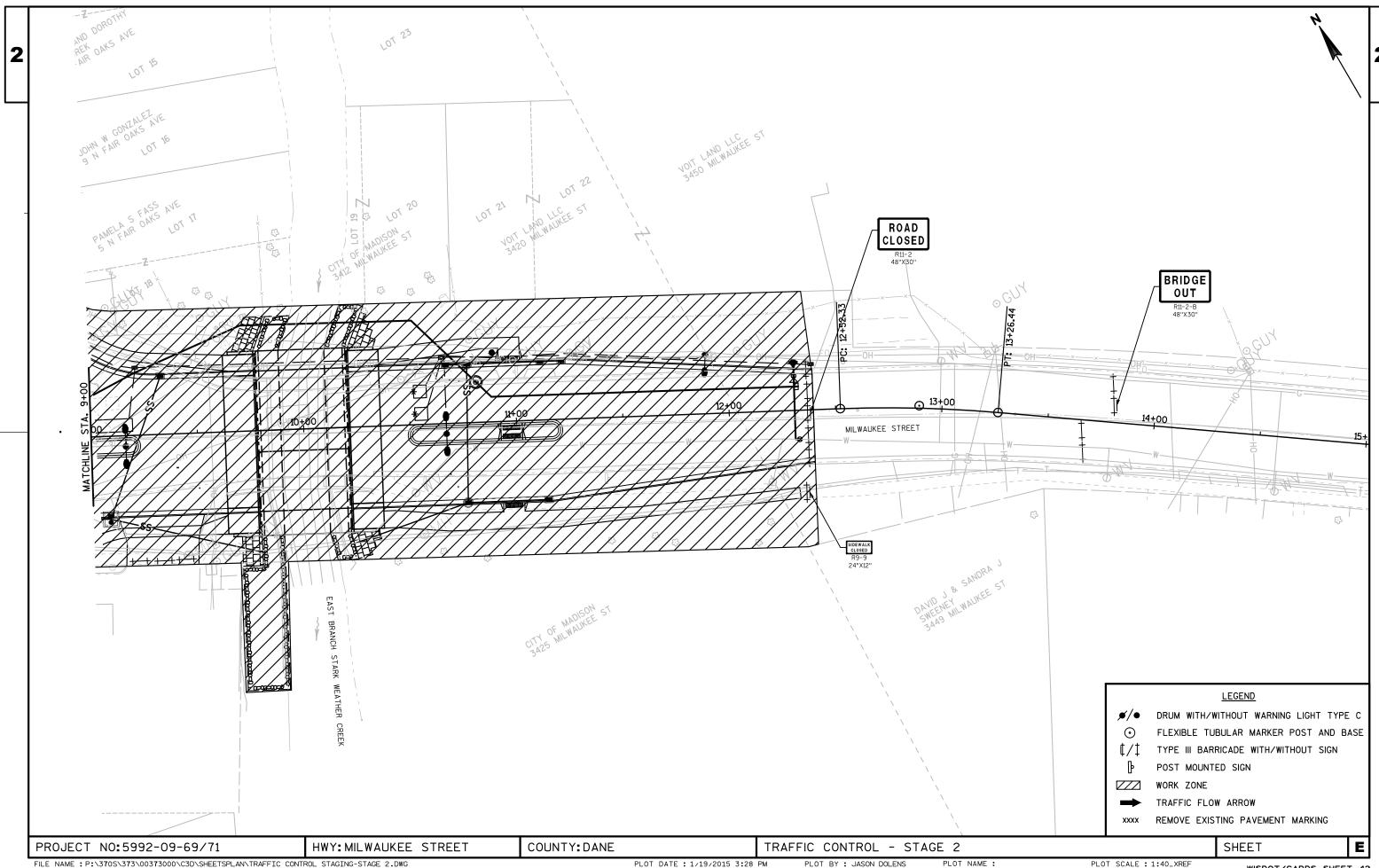
FAIR OAKS AVENUE SOUTHBOUND LANE STA. 204+14 TO STA. 204+60

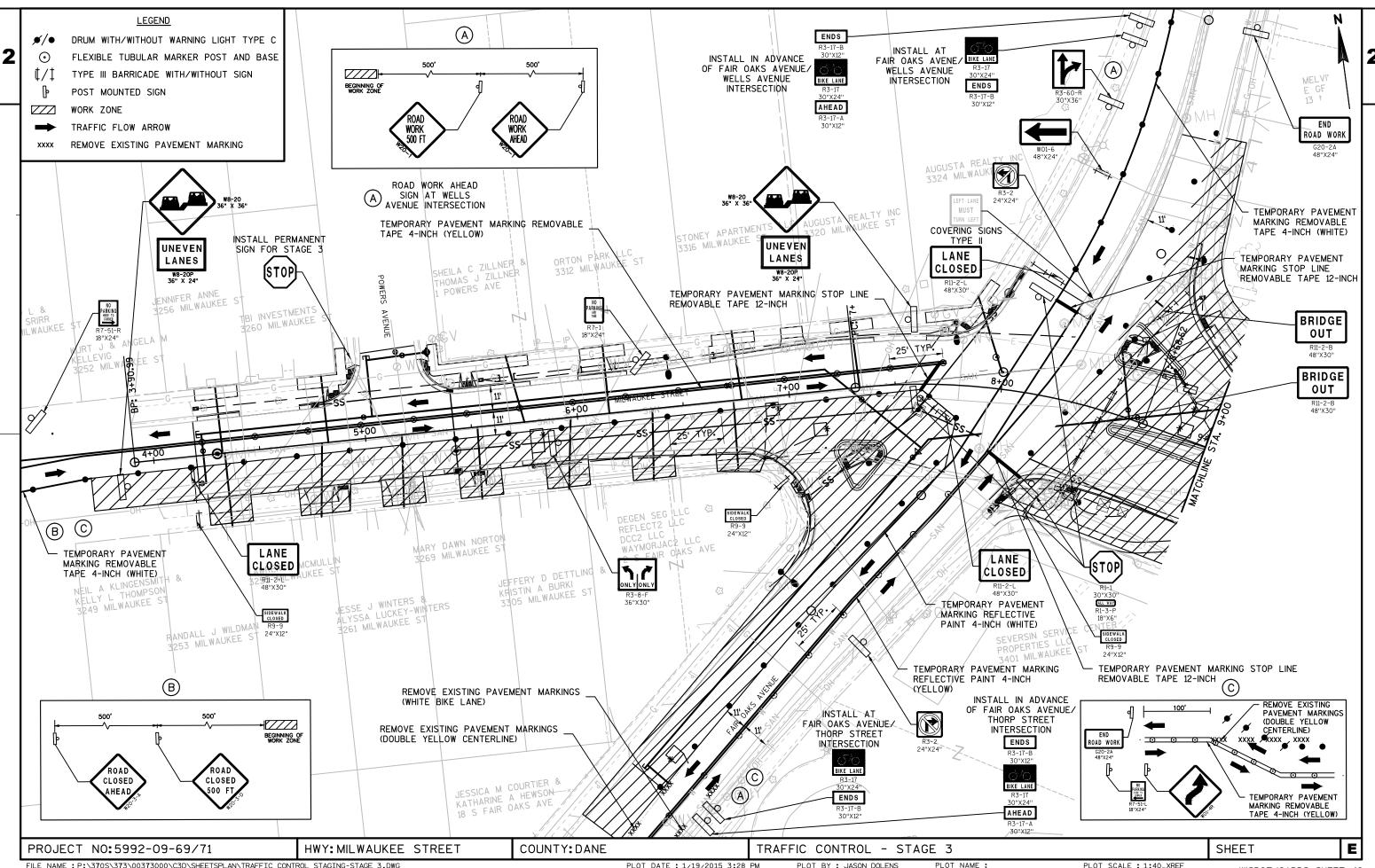
HWY: MILWAUKEE STREET PROJECT NO:5992-09-69/71 COUNTY: DANE TRAFFIC CONTROL DETAILS SHEET E PLOT NAME :

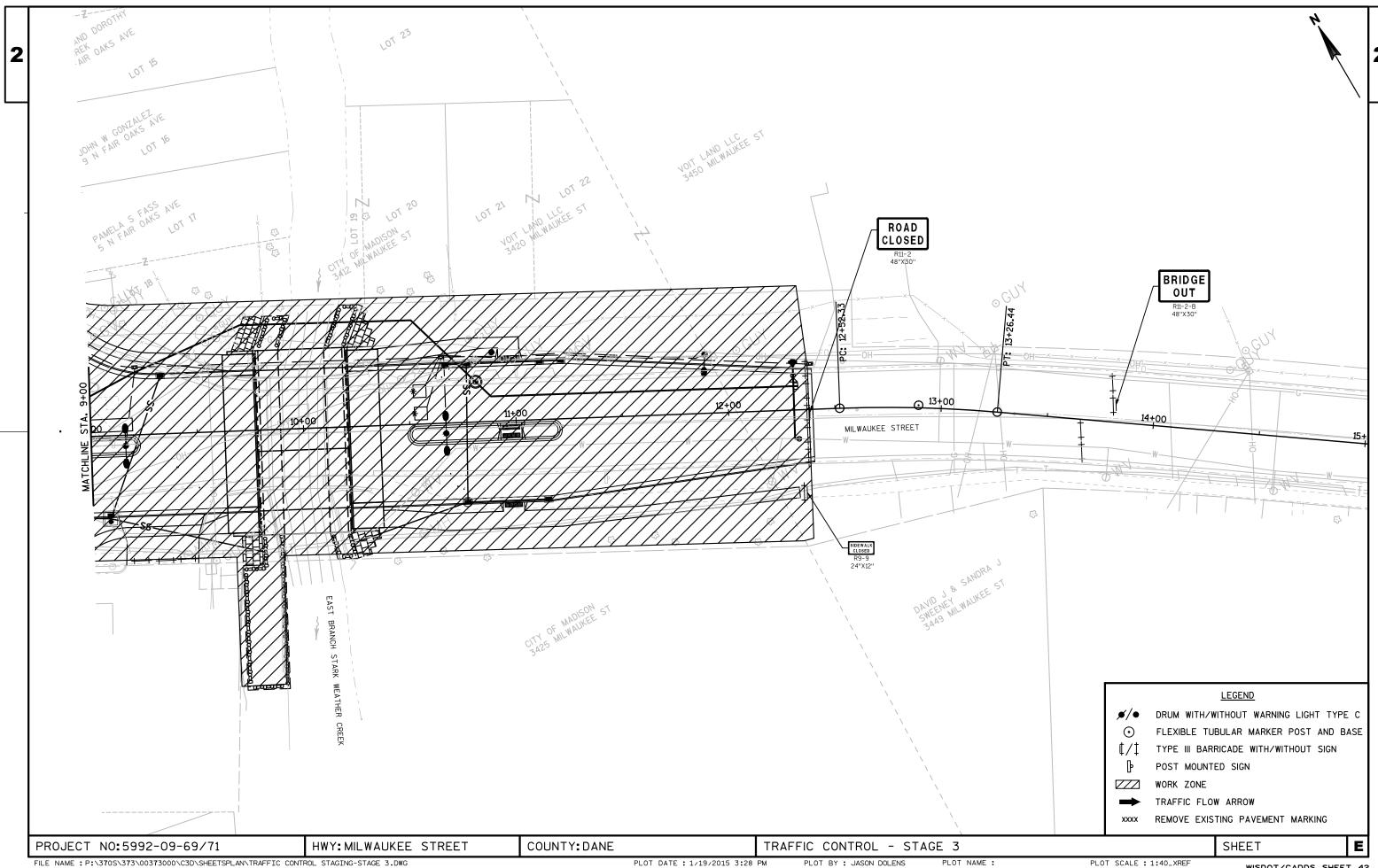


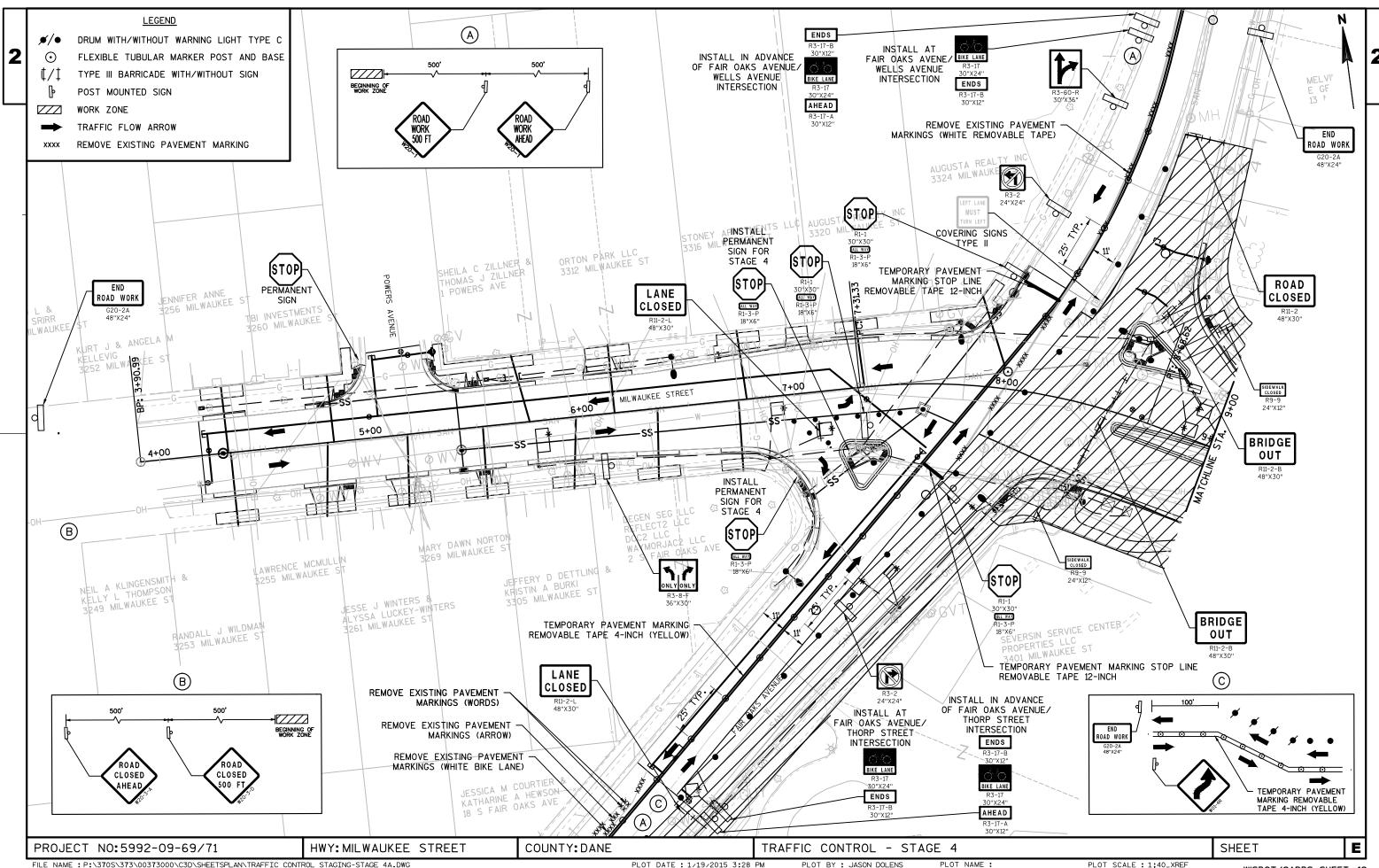


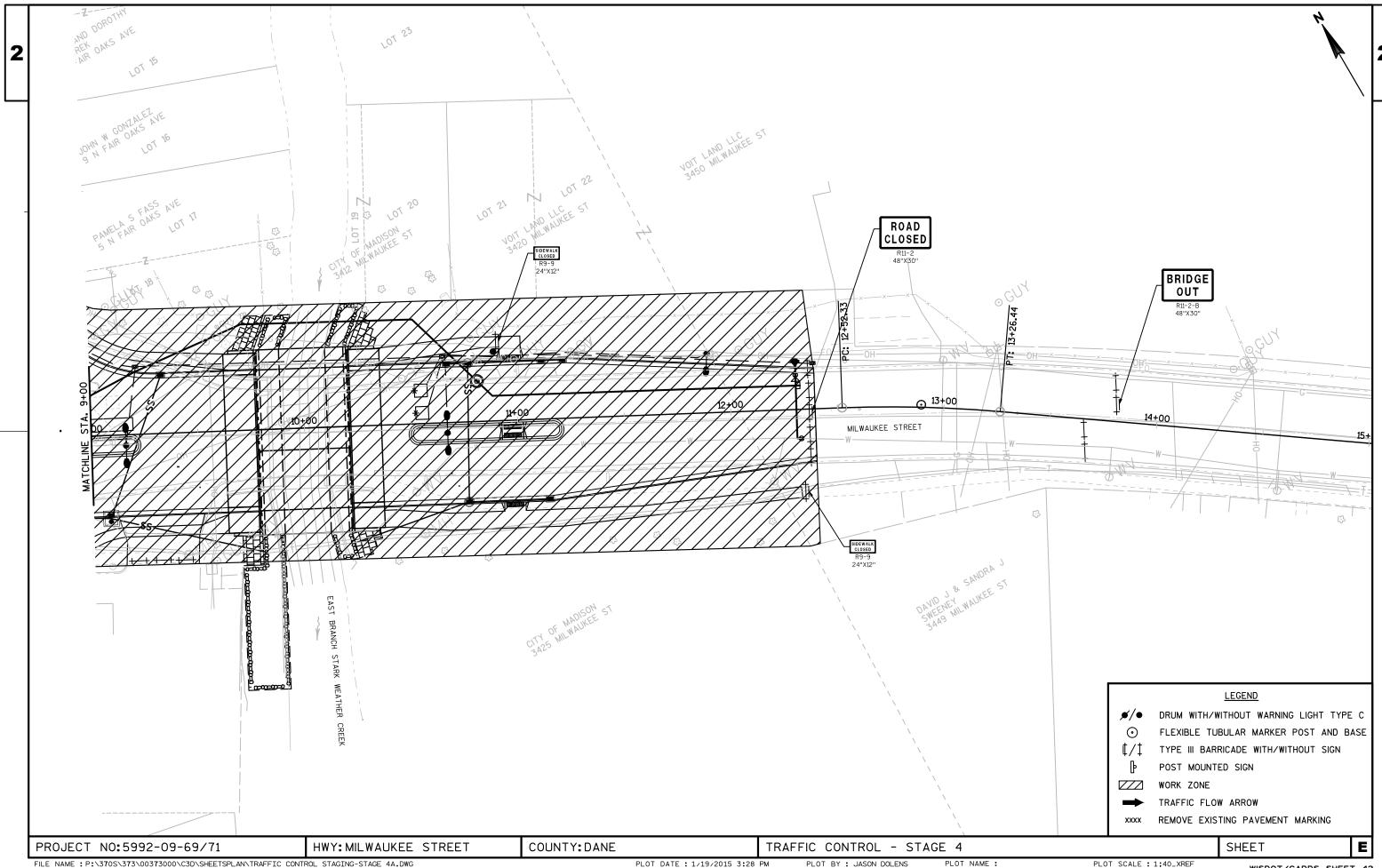


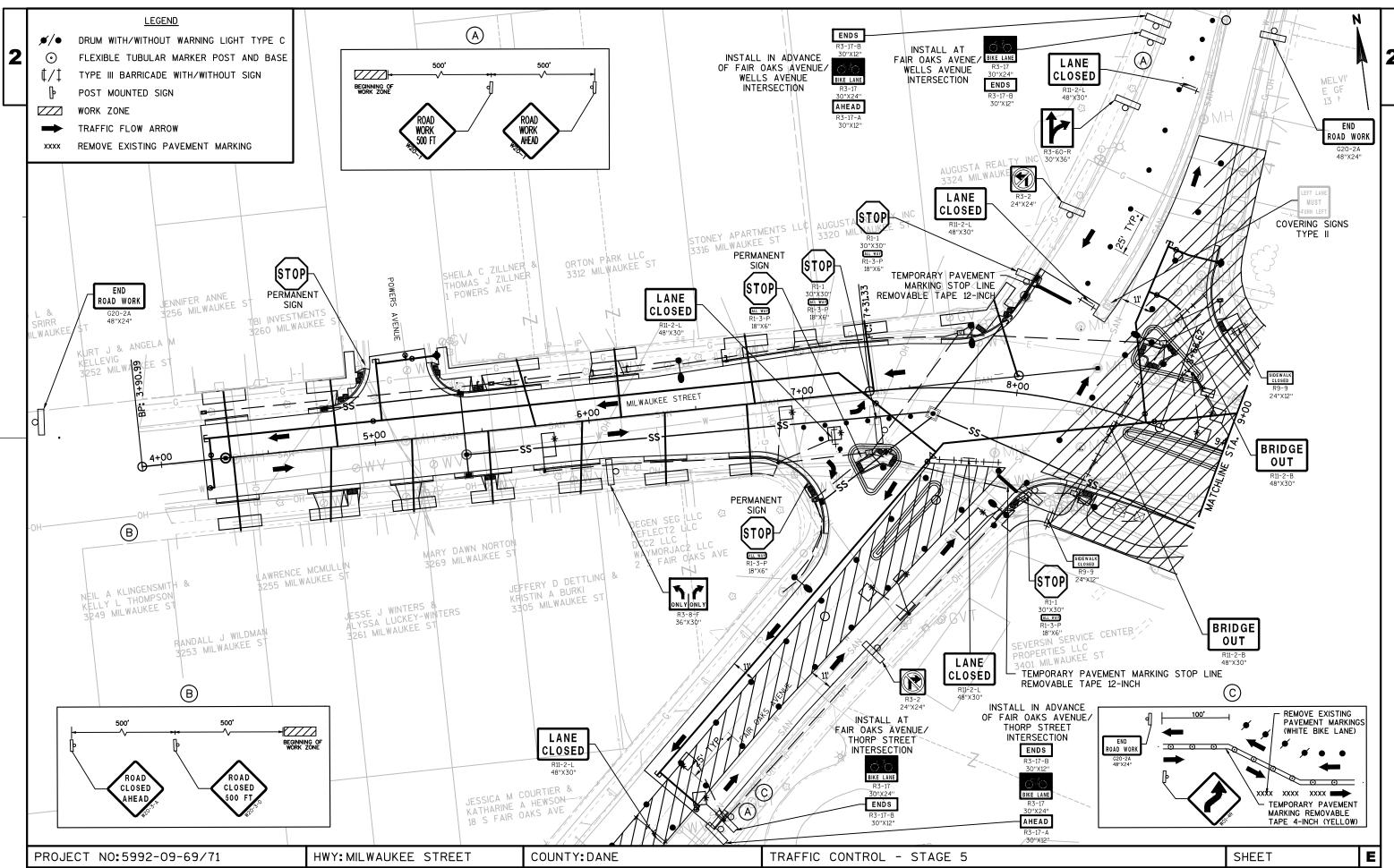


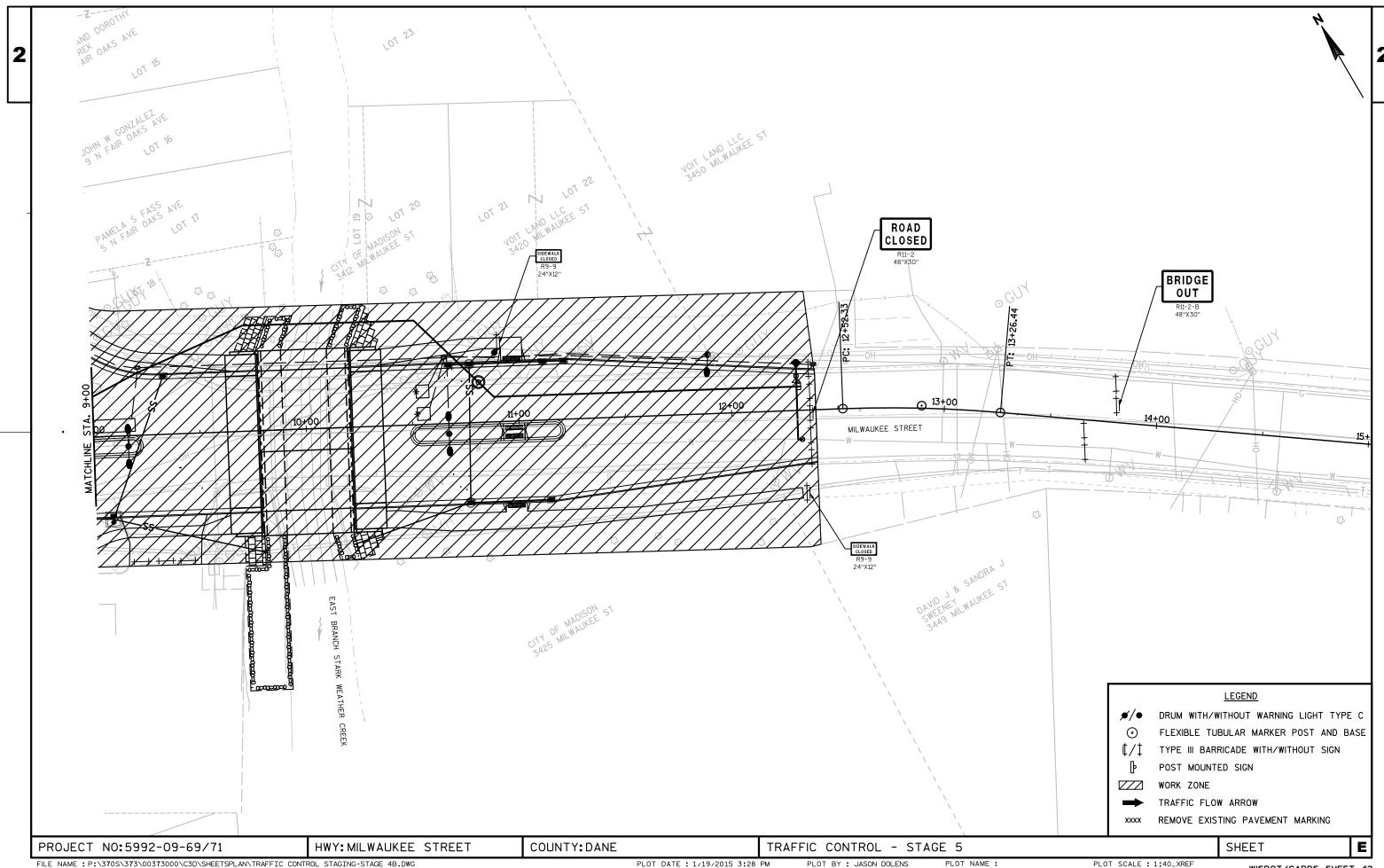


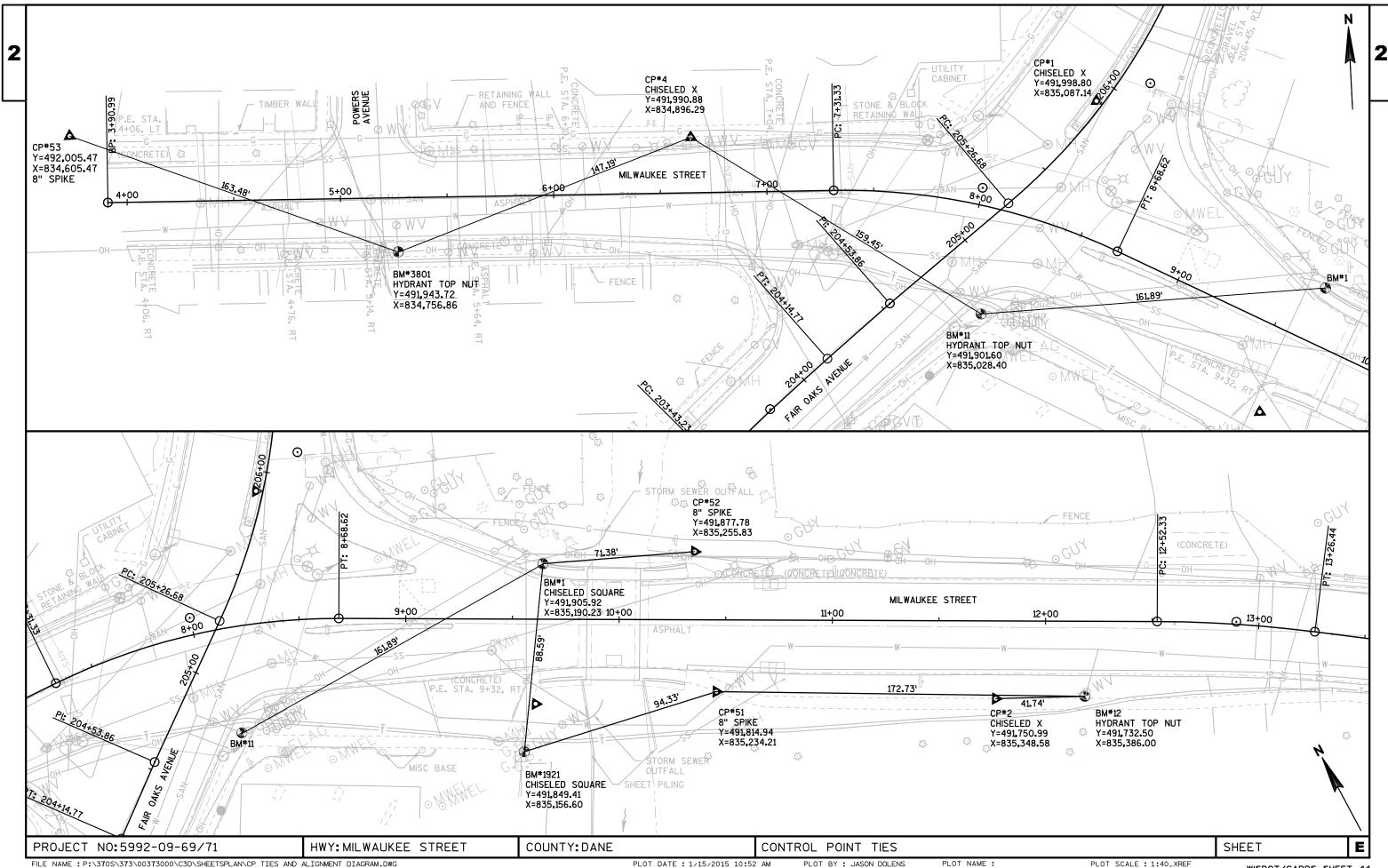


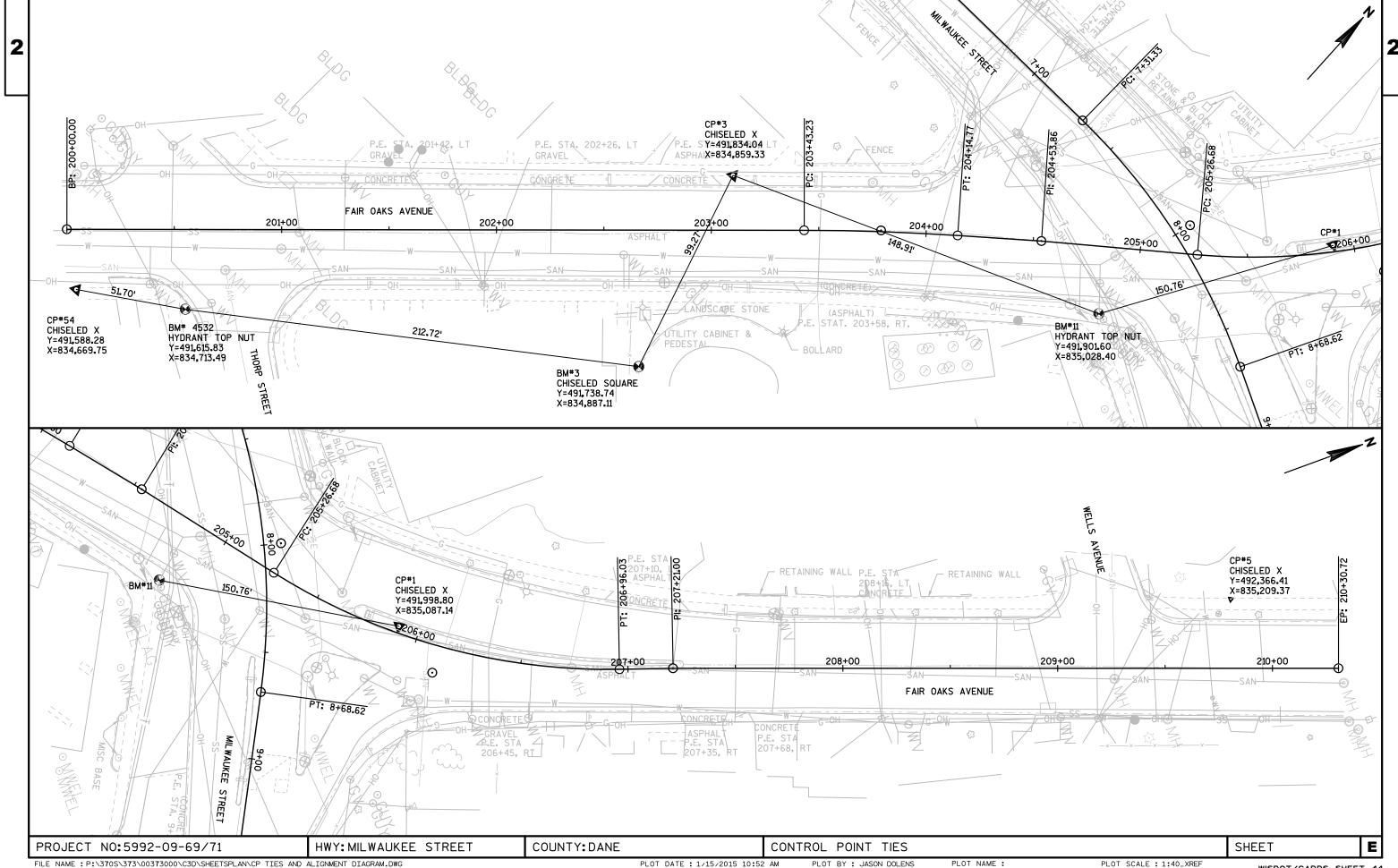


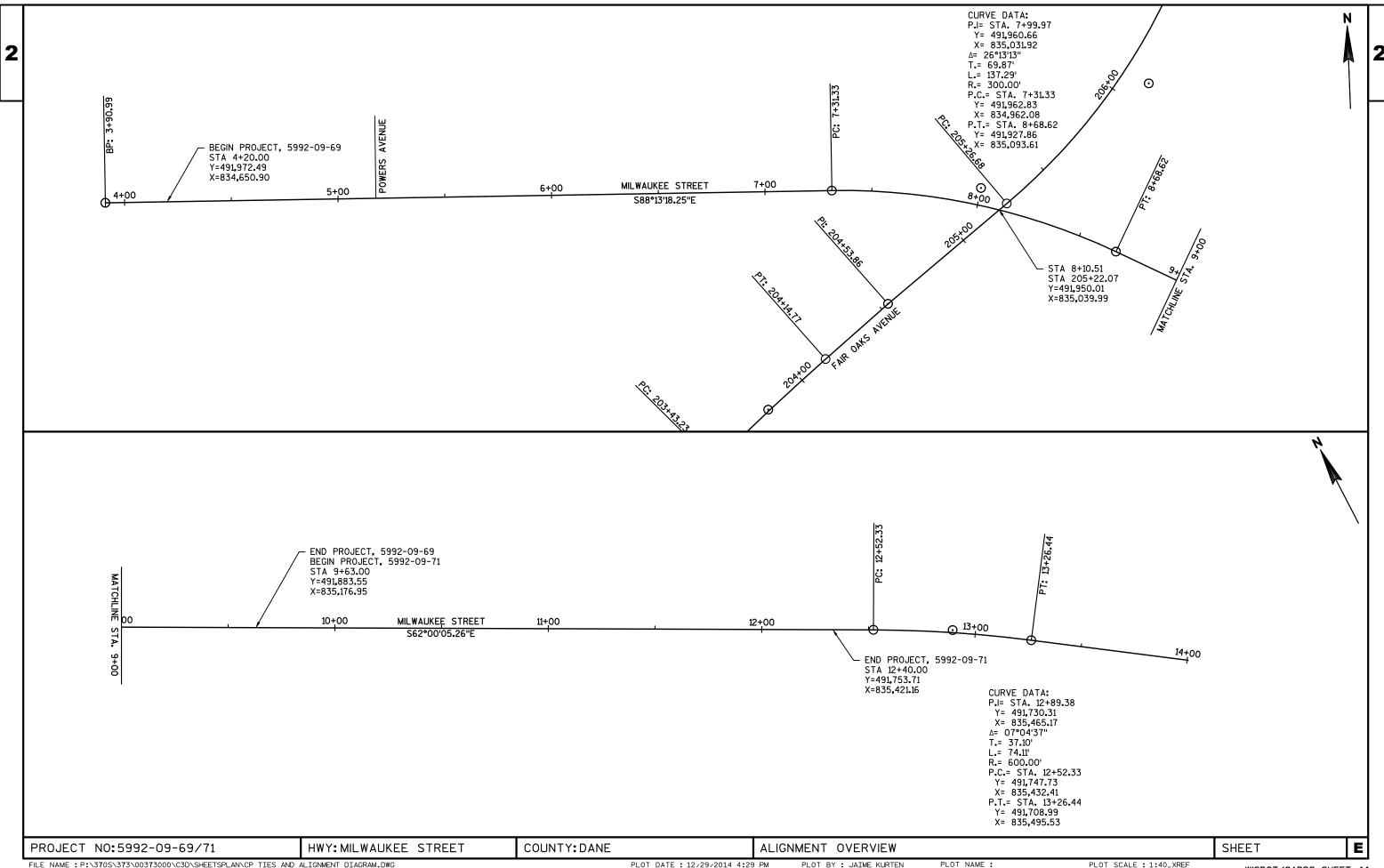


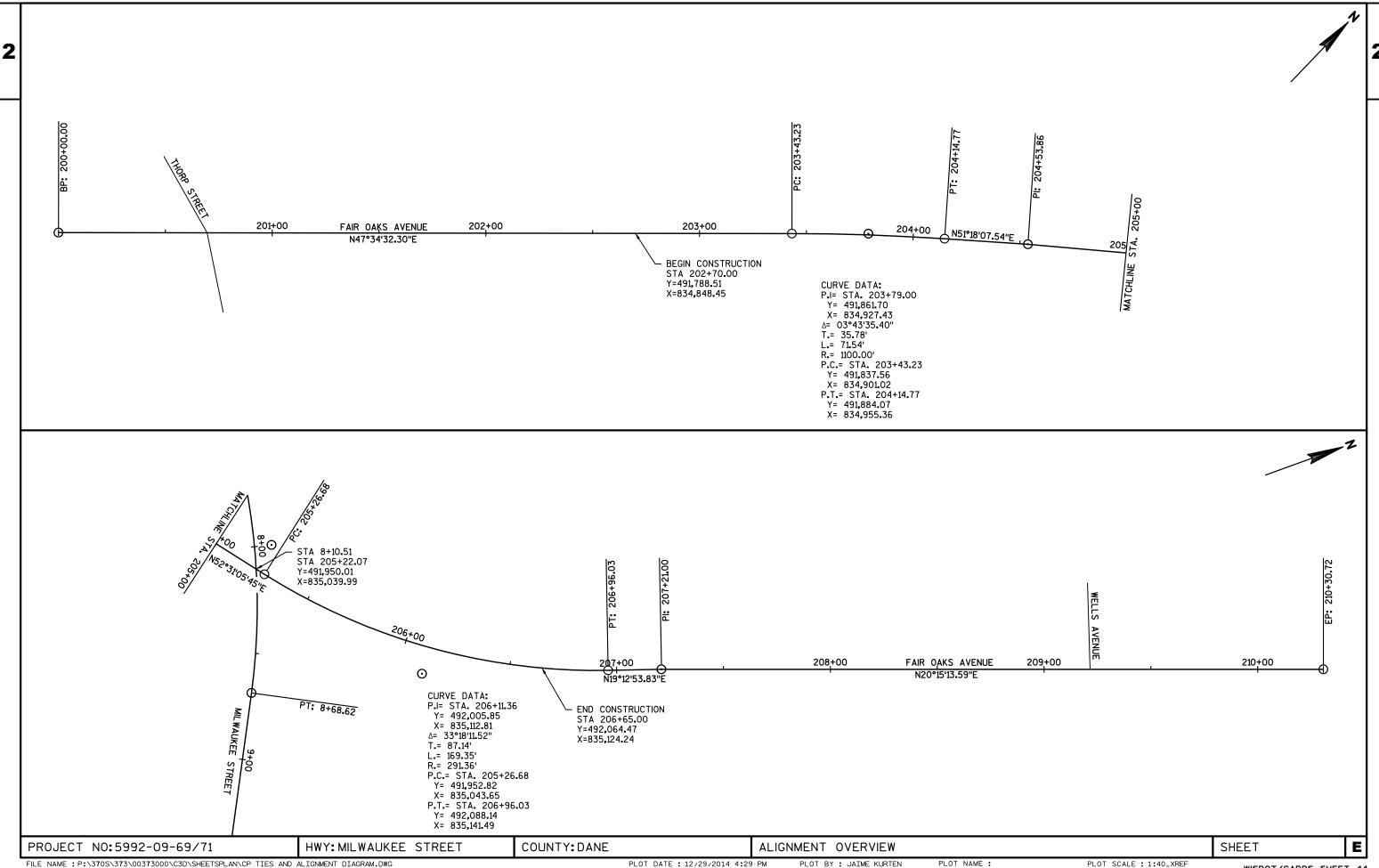












DATE 23 LINE	FEB15	E S	TIMATE	0 F Q U A N	T I T I E S 5992-09-69	5992-09-71	
NUMBER	ITEM	ITEM DESCRIPTION	UNI T	TOTAL	QUANTI TY	QUANTI TY	
0010	201. 0105	CI eari ng	STA	1. 000		1. 000	
0020	201. 0205	Grubbi ng	STA	1.000		1.000	
0030	203. 0600. 3	S Removing Old Structure Over Waterway With Minimal Debris (station) 01.	LS	1. 000		1.000	
		Station 10+00					
0040	204.0100	Removing Pavement	SY	2, 973. 000	2, 849. 000	124.000	
0050	204. 0150	Removing Curb & Gutter	LF	1, 246. 000	831. 000	415. 000	
0060	204. 0155	Removing Concrete Sidewalk	SY	603.000	483. 000	120. 000	
0070	204. 0195	Removing Concrete Bases	EACH	10. 000	9. 000	1. 000	
0800	204.0210	Removing Manholes	EACH	8.000	6.000	2.000	
0090	204. 0220	Removing Inlets	EACH	10. 000	5. 000	5. 000	
0100	204. 0245	Removing Storm Sewer (size) 01. 12-Inch	LF	438. 000	400. 000	38.000	
		Or Less					
0110	204. 0245	Removing Storm Sewer (size) 02. 15 to	LF	395.000	273. 000	122. 000	
		18-I nch					
0120		S Abandoning Sewer	CY	2. 780	2. 780	2 000 000	
0130	205.0100	Excavation Common E Excavation, Hauling, and Disposal of	CY TON	5, 212. 000 400. 000	3, 124. 000	2, 088. 000 400. 000	
0140	205. 0501. 3	Petroleum Contaminated Soil	I ON	400.000		400.000	
0150	206. 1000	Excavation for Structures Bridges	LS	1.000		1.000	
		(structure) 01. B-13-0677					
0160	210. 0100	Backfill Structure	CY	510. 000		510. 000	
0160	210.0100	Finishing Roadway (project) 01.	EACH	1. 000	1. 000	510.000	
0.70	2.0.0100	5992-09-69	2011	1. 000	1.000		
0180	213. 0100	Finishing Roadway (project) 02.	EACH	1.000		1.000	
		5992-09-71		- /			
0190	305. 0120	Base Aggregate Dense 1 1/4-Inch	TON	5, 635. 000	4, 200. 000	1, 435. 000	
0200	311. 0110	Breaker Run	TON	1, 595. 000	622. 000	973. 000	
0210	415. 0410	Concrete Pavement Approach Slab	SY	210. 000		210. 000	
0220	416. 0170	Concrete Driveway 7-Inch	SY	110.000	110.000		
0230	455. 0120	Asphaltic Material PG64-28	TON	112. 000	88. 000	24.000	
0240	455. 0605	Tack Coat	GAL	272. 200	213. 900	58. 300	
0250	460. 1103	HMA Pavement Type E-3	TON	2, 035. 000	1, 599. 000	436. 000	
0260	460. 2000	Incentive Density HMA Pavement	DOL	1, 310. 000	1, 030. 000	280. 000	
0270	460. 4000	HMA Cold Weather Paving	TON	509.000	400. 000	109.000	
0280	502.0100	Concrete Masonry Bridges	CY	471.000		471.000	
0290	502. 3200	Protective Surface Treatment	SY	485.000		485.000	
0300	505. 0405	Bar Steel Reinforcement HS Bridges	LB	16, 420. 000		16, 420. 000	
0310	505. 0605	Bar Steel Reinforcement HS Coated Bridges	LB	56, 040. 000		56, 040. 000	
0320	516. 0500		SY	42.000		42.000	
0330	517. 1015. 5	S Concrete Staining Multi-Color	SF	1, 025. 000		1, 025. 000	
0240	E47 40E0 1	(structure) 01. B-13-0677	C.F.	F00, 000		F00 000	
0340	517. 1050. \$	S Architectural Surface Treatment (structure) 01. B-13-0677	SF	599. 000		599. 000	
0350	517, 1050	S Architectural Surface Treatment	SF	426. 000		426.000	
	3.7. 1000. 0	(structure) 02. Traffic Face B-13-0677	~ .	.23. 000		0. 000	
0360	522. 1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	2. 000	1. 000	1.000	
0370	550. 2106	Piling CIP Concrete 10 3/4 X 0.365-Inch	LF	2, 580. 000		2, 580. 000	
0370	601. 0411	Concrete Curb & Gutter 30-Inch Type D	LF	1, 140. 000	730. 000	410. 000	
0390	601.0600	Concrete Curb Pedestrian	LF	72. 000	72. 000		
0400	602. 0410	Concrete Sidewalk 5-Inch	SF	6, 150. 000	4, 295. 000	1, 855. 000	
0.440	(00.0115	Opposite Chample ()		740.000	146.000	/02 222	
0410 0420	602. 0415 602. 0420	Concrete Sidewalk 6-Inch Concrete Sidewalk 7-Inch	SF SF	740. 000 685. 000	140. 000 370. 000	600. 000 315. 000	
0720	302. 0420	Concrete Studewark /-IIICII	J1	003.000	370.000	313.000	

LINE
0440 606. 0300 Ri prap Heavy CY 350.000 350.000 0450 608. 0312 Storm Sewer Pipe Reinforced Concrete LF 164.000 71.000 93.000 0460 608. 0315 Storm Sewer Pipe Reinforced Concrete LF 218.000 218.000 0470 608. 0318 Storm Sewer Pipe Reinforced Concrete LF 338.000 215.000 123.000 0480 608. 0412 Storm Sewer Pipe Reinforced Concrete LF 77.000 70.000 0490 608. 0418 Storm Sewer Pipe Reinforced Concrete LF 70.000 70.000 0500 611. 0624 Inlet Covers Type H EACH 12.000 6.000 6.000 0510 611. 2004 Manholes 4-FT Di simeter EACH 1.000 1.000 2.000 0520 611. 3004 Inlets 4-FT Di simeter EACH 3.000 1.000 2.000 0530 611. 3004 Inlets 2-FT Di simeter EACH 3.000 1.000 2.000 0550 611. 8115 Adjus
Accordance Acc
Class III 15-inch
0470 608. 0318 Storm Sewer Pipe Reinforced Concrete F 338. 000 215. 000 123. 000
0480 048
0490 608, 0418 Storm Sewer Pipe Reinforced Concrete LF 70.000 70.000
Description
0520
11 3004
0540 611. 3230 Inlets 2x3-FT EACH 8.000 4.000 4.000 0550 611. 8115 Adjusting Manhole Covers EACH 1.000 1.000 1.000 0560 611. 8115 Adjusting Inlet Covers EACH 2.000 1.000 1.000 0570 611. 9800. S Pipe Grates EACH 2.000 1.000 310.000 0580 612. 0406 Pipe Underdrain Wrapped 6-Inch LF 310.000 310.000 0590 616. 0700. S Fence Safety LF 1,500.000 310.000 0600 619. 1000 Mobilization EACH 1.000 320.000 120.000 0610 620. 2030 Concrete Median Sloped Nose SF 440.000 320.000 120.000 0620 623. 0200 Dust Control Surface Treatment SY 13,210.000 9,874.000 3,336.000 0620 623. 0200 Dust Control Surface Treatment SY 2,154.000 958.000 1,196.000 0630 628. 1500 Silt Fence LF </td
0550 611. 8110 Adjusting Manhole Covers EACH 1.000 1.000 0560 611. 8115 Adjusting Inlet Covers EACH 2.000 2.000 0570 611. 9800. S Pipe Grates EACH 2.000 1.000 1.000 0580 612. 0406 Pipe Underdrain Wrapped 6-Inch LF 310.000 310.000 0590 616.0700. S Fence Safety LF 1,500.000 1,500.000 0600 619.1000 Mobilization EACH 1.000 0.530 0.470 0610 620.0300 Concrete Median Sloped Nose SF 440.000 320.000 120.000 0620 623.0200 Dust Control Surface Treatment SY 13,210.000 9,874.000 3,336.000 0630 625.0100 Topsoil SY 2,154.000 958.000 1,196.000 0640 628.1520 Silt Fence LF 700.000 700.000 0650 628.1905 Mobilizations Erosion Control EACH 4.000 2.000 2.000
DS70 611,9800. S Pipe Grates EACH 2,000 1,000 310,000 1,
DS70 611,9800. S Pipe Grates EACH 2,000 1,00
0590 0600 616.0700. S Fence Safety Mobilization LF EACH 1,500.000 1.000 1,500.000 0.530 0.470 0610 0610 620.0300 623.0200 Concrete Median SI oped Nose 0620 SF V 13,210.000 320.000 9,874.000 120.000 3,336.000 0630 0630 625.0100 628.1504 Topsoil SI I Fence 058.1504 SY 13,210.000 958.000 958.000 700.000 1,196.000 700.000 0640 0640 628.1504 628.1520 SI I Fence SI I Fence Maintenance LF LF 1,400.000 2.000 1,400.000 2.000 4.000 0660 0670 628.1905 628.2006 Mobilizations Erosi on Control 628.6005 EACH SY 2,154.000 4.000 958.000 4.000 4.000 0690 0690 628.7020 Incribidity Barriers SY 150.000 SY 150.000 150.000 11.000 0710 0628.7560 Tracking Pads Fertilizer Type B CWT 1.350 EACH 24.000 5.000 13.000 2.000 13.000 0720 0730 0730 0730 0740 0740 0740 0750 0750 0750 0750 075
0600 619.1000 Mobilization EACH 1.000 0.530 0.470 0610 620.0300 Concrete Median Sloped Nose SF 440.000 320.000 120.000 0620 623.0200 Dust Control Surface Treatment SY 13,210.000 9,874.000 3,336.000 0630 625.0100 Topsoil SY 2,154.000 958.000 1,196.000 0640 628.1504 Silt Fence LF 700.000 700.000 0650 628.1520 Silt Fence Maintenance LF 1,400.000 1,400.000 0660 628.1905 Mobilizations Erosion Control EACH 4.000 2.000 2.000 0670 628.1910 Mobilizations Emergency Erosion Control EACH 8.000 4.000 4.000 0680 628.2006 Erosion Mat Urban Class I Type A SY 2,154.000 958.000 1,196.000 0690 628.6005 Turbidity Barriers SY 150.000 150.000 0700 628.7020 Inlet Protection
0620 623 0200 Dust Control Surface Treatment SY 13,210.000 9,874.000 3,336.000 0630 625.0100 Topsoil SY 2,154.000 958.000 1,196.000 0640 628.1504 Silt Fence LF 700.000 700.000 0650 628.1520 Silt Fence Maintenance LF 1,400.000 1,400.000 0660 628.1905 Mobilizations Erosion Control EACH 4.000 2.000 0670 628.1910 Mobilizations Emergency Erosion Control EACH 8.000 4.000 4.000 0680 628.2006 Erosion Mat Urban Class I Type A SY 2,154.000 958.000 1,196.000 0690 628.6005 Turbidity Barriers SY 150.000 150.000 150.000 0700 628.7020 Inlet Protection Type D EACH 24.000 13.000 11.000 0710 628.7560 Tracking Pads EACH 5.000 3.000 2.000 0720 629.0210 Fertilizer Type B </td
0620 623 0200 Dust Control Surface Treatment SY 13,210.000 9,874.000 3,336.000 0630 625.0100 Topsoil SY 2,154.000 958.000 1,196.000 0640 628.1504 Silt Fence LF 700.000 700.000 0650 628.1520 Silt Fence Maintenance LF 1,400.000 1,400.000 0660 628.1905 Mobilizations Erosion Control EACH 4.000 2.000 0670 628.1910 Mobilizations Emergency Erosion Control EACH 8.000 4.000 4.000 0680 628.2006 Erosion Mat Urban Class I Type A SY 2,154.000 958.000 1,196.000 0690 628.6005 Turbidity Barriers SY 150.000 150.000 150.000 0700 628.7020 Inlet Protection Type D EACH 24.000 13.000 11.000 0710 628.7560 Tracking Pads EACH 5.000 3.000 2.000 0720 629.0210 Fertilizer Type B </td
0640 628.1504 Silt Fence LF 700.000 700.000 0650 628.1520 Silt Fence Maintenance LF 700.000 1,400.000 0660 628.1905 Mobilizations Erosion Control EACH 4.000 2.000 2.000 0670 628.1910 Mobilizations Emergency Erosion Control EACH 8.000 4.000 4.000 0680 628.2006 Erosion Mat Urban Class I Type A SY 2,154.000 958.000 1,196.000 0690 628.6005 Turbidity Barriers SY 150.000 150.000 0700 628.7020 Inlet Protection Type D EACH 24.000 13.000 11.000 0710 628.7560 Tracking Pads EACH 5.000 3.000 2.000 0720 629.0210 Fertilizer Type B CWT 1.350 0.600 0.750 0730 630.0140 Seeding Mixture No. 40 LB 39.000 18.000 21.000 0740 642.5201 Field Office Type C EAC
0650 628. 1520 Silt Fence Maintenance LF 1, 400. 000 1, 400. 000 0660 628. 1905 Mobilizations Erosion Control EACH 4. 000 2. 000 2. 000 0670 628. 1910 Mobilizations Emergency Erosion Control EACH 8. 000 4. 000 4. 000 0680 628. 2006 Erosion Mat Urban Class I Type A SY 2, 154. 000 958. 000 1, 196. 000 0690 628. 6005 Turbidity Barriers SY 150. 000 150. 000 0700 628. 7020 Inlet Protection Type D EACH 24. 000 13. 000 11. 000 0710 628. 7560 Tracking Pads EACH 5. 000 3. 000 2. 000 0720 629. 0210 Fertilizer Type B CWT 1. 350 0. 600 0. 750 0730 630. 0140 Seeding Mixture No. 40 LB 39. 000 18. 000 21. 000 0740 642. 5201 Field Office Type C EACH 1. 000 1. 000 0750 643. 0100
0660 628. 1905 Mobilizations Erosion Control EACH 4.000 2.000 2.000 0670 628. 1910 Mobilizations Emergency Erosion Control EACH 8.000 4.000 4.000 0680 628. 2006 Erosion Mat Urban Class I Type A SY 2,154.000 958.000 1,196.000 0690 628. 6005 Turbidity Barriers SY 150.000 150.000 0700 628. 7020 Inlet Protection Type D EACH 24.000 13.000 11.000 0710 628. 7560 Tracking Pads EACH 5.000 3.000 2.000 0720 629.0210 Fertilizer Type B CWT 1.350 0.600 0.750 0730 630.0140 Seeding Mixture No. 40 LB 39.000 18.000 21.000 0740 642.5201 Field Office Type C EACH 1.000 1.000 0750 643.0100 Traffic Control (project) 01. 5992-09-69 EACH 1.000 1.000
0670 628. 1910 Mobilizations Emergency Erosion Control EACH 8.000 4.000 4.000 0680 628. 2006 Erosion Mat Urban Class I Type A SY 2,154.000 958.000 1,196.000 0690 628. 6005 Turbi di ty Barri ers SY 150.000 150.000 0700 628. 7020 Inlet Protection Type D EACH 24.000 13.000 11.000 0710 628. 7560 Tracki ng Pads EACH 5.000 3.000 2.000 0720 629. 0210 Fertilizer Type B CWT 1.350 0.600 0.750 0730 630. 0140 Seeding Mixture No. 40 LB 39.000 18.000 21.000 0740 642. 5201 Field Office Type C EACH 1.000 1.000 0750 643. 0100 Traffic Control (project) 01. 5992-09-69 EACH 1.000 1.000 0760 643. 0100 Traffic Control (project) 02. 5992-09-71 EACH 1.000 1.000
0680 628. 2006 Erosi on Mat Urban Člass I Type A SY 2,154.000 958.000 1,196.000 0690 628. 6005 Turbi di ty Barri ers SY 150.000 150.000 0700 628. 7020 Inl et Protecti on Type D EACH 24.000 13.000 11.000 0710 628. 7560 Tracki ng Pads EACH 5.000 3.000 2.000 0720 629.0210 Fertilizer Type B CWT 1.350 0.600 0.750 0730 630.0140 Seeding Mixture No. 40 LB 39.000 18.000 21.000 0740 642.5201 Field Office Type C EACH 1.000 1.000 0750 643.0100 Traffic Control (project) 01. 5992-09-69 EACH 1.000 1.000 0760 643.0100 Traffic Control (project) 02. 5992-09-71 EACH 1.000 1.000
0690 628. 6005 Turbidity Barriers SY 150. 000 150. 000 0700 628. 7020 Inlet Protection Type D EACH 24. 000 13. 000 11. 000 0710 628. 7560 Tracking Pads EACH 5. 000 3. 000 2. 000 0720 629. 0210 Fertilizer Type B CWT 1. 350 0. 600 0. 750 0730 630. 0140 Seeding Mixture No. 40 LB 39. 000 18. 000 21. 000 0740 642. 5201 Field Office Type C EACH 1. 000 1. 000 0750 643. 0100 Traffic Control (project) 01. 5992-09-69 EACH 1. 000 1. 000 0760 643. 0100 Traffic Control (project) 02. 5992-09-71 EACH 1. 000 1. 000
0700 628. 7020 Inlet Protection Type D EACH 24.000 13.000 11.000 0710 628. 7560 Tracking Pads EACH 5.000 3.000 2.000 0720 629. 0210 Fertilizer Type B CWT 1.350 0.600 0.750 0730 630. 0140 Seeding Mixture No. 40 LB 39.000 18.000 21.000 0740 642. 5201 Field Office Type C EACH 1.000 1.000 0750 643. 0100 Traffic Control (project) 01. 5992-09-69 EACH 1.000 1.000 0760 643. 0100 Traffic Control (project) 02. 5992-09-71 EACH 1.000 1.000
0720 629.0210 Fertilizer Type B CWT 1.350 0.600 0.750 0730 630.0140 Seeding Mixture No. 40 LB 39.000 18.000 21.000 0740 642.5201 Field Office Type C EACH 1.000 1.000 0750 643.0100 Traffic Control (project) 01. 5992-09-69 EACH 1.000 1.000
0720 629.0210 Fertilizer Type B CWT 1.350 0.600 0.750 0730 630.0140 Seeding Mixture No. 40 LB 39.000 18.000 21.000 0740 642.5201 Field Office Type C EACH 1.000 1.000 0750 643.0100 Traffic Control (project) 01. 5992-09-69 EACH 1.000 1.000
0730 630.0140 Seeding Mixture No. 40 LB 39.000 18.000 21.000 0740 642.5201 Field Office Type C EACH 1.000 1.000 0750 643.0100 Traffic Control (project) 01. 5992-09-69 EACH 1.000 1.000 0760 643.0100 Traffic Control (project) 02. 5992-09-71 EACH 1.000 1.000
0740 642.5201 Field Öffice Type C EACH 1.000 1.000 0750 643.0100 Traffic Control (project) 01. 5992-09-69 EACH 1.000 1.000 0760 643.0100 Traffic Control (project) 02. 5992-09-71 EACH 1.000 1.000
0760 643.0100 Traffic Control (project) 02. 5992-09-71 EACH 1.000 1.000
0770 442 0200 Traffic Control Drums DAV 2 274 000 2 274 000
0770 643. 0300 Traffic Control Drums DAY 3, 274. 000 3, 274. 000
0780 643.0420 Traffic Control Barricades Type III DAY 1,931.000 657.000 1,274.000 0790 643.0500 Traffic Control Flexible Tubular Marker EACH 123.000 123.000
Posts
0800 643.0600 Traffic Control Flexible Tubular Marker EACH 123.000 123.000 Bases
0810 643.0705 Traffic Control Warning Lights Type A DAY 3,886.000 1,338.000 2,548.000 0820 643.0715 Traffic Control Warning Lights Type C DAY 794.000 794.000
0820 643. 0715 Traffic Control Warning Lights Type C DAY 794. 000 794. 000 643. 0900 Traffic Control Signs DAY 3, 318. 000 2, 872. 000 446. 000
0840 643.0920 Traffic Control Covering Signs Type II EACH 1.000 1.000
0850 643.1000 Traffic Control Signs Fixed Message SF 272.000 272.000
0860 643.1050 Traffic Control Signs PCMS DAY 35.000 35.000
0870 643. 2000 Traffic Control Detour (project) 01. EACH 1. 000 1. 000 5992-09-69

LINE	3FEB15	E 3 I	ı W A I	E O F Q U A N	5992-09-69	5992-09-71	
NUMBER 0880	I TEM 643. 2000	ITEM DESCRIPTION Traffic Control Detour (project) 02. 5992-09-71	UNI T EACH	TOTAL 1. 000	QUANTI TY	QUANTI TY 1. 000	
0890 0900	643. 3000 645. 0120	Traffic Control Detour Signs Geotextile Fabric Type HR	DAY SY	5, 451. 000 735. 000	2,001.000	3, 450. 000 735. 000	
0910	646. 0106	Pavement Marking Epoxy 4-Inch	LF	4, 400. 000	3, 035. 000	1, 365. 000	
0920	646. 0126	Pavement Marking Epoxy 8-Inch	LF	555. 000	525. 000	30.000	
0930 0940	646. 0600 647. 0156	Removing Pavement Markings Pavement Marking Arrows Epoxy Type 1	LF EACH	3, 100. 000 2. 000	3, 100. 000 2. 000		
0950	647. 0166	Pavement Marking Arrows Epoxy Type 2	EACH	6. 000	5. 000	1. 000	
0960	647. 0176	Pavement Marking Arrows Epoxy Type 3	EACH	3. 000	2. 000	1. 000	
0970	647. 0206	Pavement Marking Arrows Bike Lane Epoxy	EACH	8. 000	7. 000	1. 000	
0980	647. 0306	Pavement Marking Symbols Bike Lane Epoxy	EACH	11. 000	10.000	1. 000	
0990 1000	647. 0356 647. 0556	Pavement Marking Words Epoxy Pavement Marking Stop Line Epoxy 12-Inch	EACH LF	3.000	3. 000 155. 000	20. 000	
				175. 000			
1010	647. 0606 647. 0766	Pavement Marking Island Nose Epoxy Pavement Marking Crosswalk Epoxy 6-Inch	EACH LF	12. 000 785. 000	10. 000 555. 000	2. 000 230. 000	
1020 1030	647.0786	Pavement Marking Crosswalk Epoxy 6-Inch	LF LF	80. 000	80. 000	∠ა∪. ∪∪∪	
1040	647. 0955	Removing Pavement Markings Arrows	EACH	4. 000	4. 000		
1050	647. 0965	Removing Pavement Markings Words	EACH	4.000	4. 000		
1060	649. 0200	Temporary Pavement Marking Reflective Paint 4-Inch	LF	2, 430. 000	2, 430. 000		
1070	649. 0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	1, 860. 000	1, 860. 000		
1080	649. 1000	Temporary Pavement Marking Stop Line Removable Tape 12-Inch	LF	161. 000	161. 000		
1090 1100	650. 4000 650. 4500	Construction Staking Storm Sewer Construction Staking Subgrade	EACH LF	16. 000 1, 100. 000	9. 000 868. 000	7. 000 232. 000	
1110	650. 5000	Construction Staking Base	LF	1, 100. 000	868. 000	232.000	
1120	650. 5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1, 660. 000	1, 125. 000	535. 000	
1130	650. 6500	Construction Staking Structure Layout (structure) 01. B-13-0677	LS	1. 000		1. 000	
1140	650. 8500	Construction Staking Electrical Installations (project) 01. 5992-09-69	LS	1. 000	1. 000		
1150	650. 8500	Construction Staking Electrical Installations (project) 02. 5992-09-71	LS	1. 000		1. 000	
1160	650. 9910	Construction Staking Supplemental Control (project) 01. 5992-09-69	LS	1.000	1. 000		
1170	650. 9910	Construction Staking Supplemental Control (project) 02. 5992-09-71	LS	1.000		1.000	
1180	650. 9920	Construction Staking Slope Stakes	LF	1, 100. 000	868. 000	232.000	
1190	652. 0125	Conduit Rigid Metallic 2-Inch	LF	12. 000		12.000	
1200	652. 0135	Conduit Rigid Metallic 3-Inch	LF	24. 000		24. 000	
1210	652. 0225	Conduit Rigid Nonmetallic Schedule 40	LF	831.000	645. 000	186. 000	
1220	652. 0235	2-Inch Conduit Rigid Nonmetallic Schedule 40	LF	1, 122. 000	820. 000	302.000	
1230	652. 0325	3-Inch Conduit Rigid Nonmetallic Schedule 80	LF	265. 000	75. 000	190. 000	
1240	652. 0335	2-Inch Conduit Rigid Nonmetallic Schedule 80 3-Inch	LF	1, 520. 000	1, 220. 000	300.000	
1250	652. 0605	Conduit Special 2-Inch	LF	40. 000	40. 000		
1260	652. 0800	Conduit Loop Detector	LF	661. 000	574. 000	87. 000	
1270	653. 0905	Removing Pull Boxes	EACH	6. 000	6. 000		
1280 1290	654. 0110	Concrete Bases Type 10	EACH	3.000	2.000	1.000	
	655. 0800	Loop Detector Wire	LF	1, 704. 000	1, 482. 000	222. 000	

DATE 23 LINE	BFEB15	E S	TIMAT	E O F Q U A N	T I T I E S 5992-09-69	5992-09-71	
NUMBER	LTEM	ITEM DESCRIPTION	UNI T	TOTAL	QUANTI TY	QUANTI TY	
1690	SPV. 0090	Special O6. Remove Sanitary Sewer Pipe	LF	10. 000	10. 000	COANTITI	
1700	SPV. 0090	Special 07. Utility Trench Patch Type	LF	195. 000	195. 000		
1700	31 1.0070	III	LI	173.000	173.000		
1710	SPV. 0090	Special 08. Furnish & Install 6-Inch	LF	56. 000	56. 000		
		Pipe & Fittings					
1720	SPV. 0090	Special 09. Furnish & Install 8-Inch	LF	574. 000	574.000		
4700	001/ 0000	Pipe & Fittings		44.000	44.000		
1730	SPV. 0090	Special 10. Furnish & Install 10-Inch	LF	44. 000	44. 000		
1740	CDV 0000	Pipe & Fittings		E12 000	E12 000		
1740	SPV. 0090	Special 11. Furnish & Install 12-Inch Pipe & Fittings	LF	512. 000	512. 000		
1750	SPV. 0090	Special 12. Horizontal Directional	LF	81. 000	81. 000		
1750	3F V. 0090	Drill Water 12-Inch Pipe	LI	81.000	61.000		
		billi water 12-men ripe					
1760	SPV. 0090	Special 13. Extend and Reconnect 1-Inch	LF	125. 000	125. 000		
		Servi ce Lateral					
1770	SPV. 0090	Special 14. Extend and Reconnect 1.	LF	25.000	25.000		
		5-Inch Service Lateral					
1780	SPV. 0090	Special 15. Extend and Reconnect 2-Inch	LF	20.000	20.000		
		Servi ce Lateral					
1790	SPV. 0090	Special 16. Select Fill for Water Main	LF	1, 186. 000	1, 186. 000		
1800	SPV. 0090	Special 17. Furnish and Install 2-Inch	LF	48. 000	48. 000		
		Foam Board Insulation					
1810	SPV. 0105	Special 01. Removing Steel Sheet Piling	LS	1. 000		1. 000	
1820	SPV. 0105	Special 02. Wastewater Control 150 GPM	LS	1. 000	1. 000	1.000	
1830	SPV. 0105	Special 03. Construction Staking	LS	1. 000	1. 000		
. 500	1	Sani tary Sewer			555		
1840	SPV. 0105	Special 04. Construction Staking Water	LS	1. 000	1.000		
		Mai n					
1850	SPV. 0105	Special 05. Project Dewatering	LS	1. 000	1.000		
10/0	001/ 04/5						
1860	SPV. 0165	Special 01. Cut-Stone Boulders	SF	540.000	EO 000	540.000	
1870	SPV. 0180	Special 01. Concrete Speed Hump	SY	50.000	50.000	EE 000	
1880	SPV. 0195	Special O1. Select Crushed Material For Travel Corridor Interstitial Space	TON	55. 000		55. 000	
1890	SPV. 0195	Special 02. Sediment Excavation	TON	350. 000		350. 000	
1070	361.0193	special oz. seulilletti Excavation	IUN	330.000		330. 000	

				(201.0105) CLEARING	(201.0205) GRUBBING
CATEGORY	STATION	TO STATION	LOCATION	STA.	STA.
PROJECT 5992-09-	71				
0010	10+00	11+00	LT & RT	1	1
	1	1			
	OVERA	1	1		

CLEARING & GRUBBING

	REM	OVING PAVEME	ENT	
				(204.0100)
CATEGORY	STATION	TO STATION	LOCATION	SY
PROJECT 59	92-09-69			
0010	4+20	4+75	LT & RT	216
	4+75	5+50	LT & RT	388
	5+50	7+00	LT & RT	639
	7+00	9+63	LT & RT	1,607
	PROJ	ECT 5992-09-69	TOTAL	2,849
PROJECT 59	92-09-71			
0010	9+63	9+85	LT & RT	107
	10+48	11+19	LT	17
	124			
	OVER	RALL PROJECT	TOTAL	2,973

REMOVING CURB & GUTTER

				(204.0150)					
CATEGORY	STATION	TO STATION	LOCATION	LF					
PROJECT 599	PROJECT 5992-09-69								
0010	4+22	4+42	LT	20					
	4+23	4+43	RT	20					
	4+66	4+91	RT	25					
	4+70	4+99	LT	37					
	5+05	5+25	RT	20					
	5+29	5+79	LT	60					
	5+35	5+62	RT	27					
	5+72	6+03	RT	31					
	6+02	6+25	LT	23					
	6+24	6+44	RT	20					
	6+65	7+41	LT	78					
	6+63	204+08	RT	68					
	7+64	205+73	LT	62					
	8+50	9+63	RT	80					
	202+70	202+80	RT	10					
	204+01	204+11	RT	10					
	204+67	8+50	RT	55					
	206+15	9+63	LT	185					
	PRO	DJECT 5992-09-69	TOTAL	831					
PROJECT 599	2-09-71								
0010	10+32	12+40	LT	208					
	10+32	12+40	RT	207					
	PRO	OJECT 5992-09-71	TOTAL	415					
	OV	ERALL PROJECT	TOTAL	1,246					

ABANDONING SEWER						
CATEGORY	STATION	TO STATION	LOCATION	(204.0291.S) CY		
PROJECT 599	2-09-69					
0010	5+50	5+65	LT	0.44		
	5+72	6+04	LT	0.95		
	6+20	6+67	LT	1.39		
	2.78					
	2.78					

				(204.0155)
CATEGORY	STATION	TO STATION	LOCATION	SY
PROJECT 5992				
0010	4+22	4+42	LT	13
	4+23	4+43	RT	12
	4+66	4+90	RT	13
	4+70	4+97	LT	21
	5+05	5+25	RT	12
	5+31	5+79	LT	34
	5+42	5+62	RT	12
	5+83	6+03	RT	11
	6+02	6+25	LT	12
	6+24	6+44	RT	12
	6+65	6+87	LT	17
	6+63	6+85	RT	12
	6+98	7+11	LT	6
	6+99	7+04	RT	4
	7+20	7+43	RT (ISLAND)	29
	7+21	7+41	LT	11
	7+65	205+54	LT	34
	8+01	8+50	RT	31
	8+50	9+53	RT	58
	8+50	9+04	LT (ISLAND)	110
	8+53	9+22	RT (MEDIAN)	19
	PRO	JECT 5992-09-69	TOTAL	483
PROJECT 5992				
0010	10+32	12+32	RT	120

OVERALL PROJECT TOTAL

603

				(204.0210)	(204.0220)
				REMOVING	REMOVING
				MANHOLES	INLETS
CATEGORY	STRUCTURE I.D.	STATION	LOCATION	EACH	EACH
PROJECT 599	92-09-69				
0010	IN 6139-038	4+79	18' LT	-	1
	AS 6139-025	5+42	22' LT	1	-
	AS 6139-026	7+00	22' LT	1	-
	AS 6139-027	7+14	25' RT	1	-
	IN 6139-048	205+57	36' LT	-	11
	AS 6139-047	8+23	35' LT	1	-
	-	8+35	19' RT	1	-
	AS 6139-043	9+40	15' RT	1	-
	IN 6139-043	9+48	24' RT	-	1
	IN 6139-034	9+51	25' LT	-	1
	IN 6139-044	9+53	24' RT	-	1
	PROJECT	5992-09-69 TO	TALS	6	5
PROJECT 599	92-09-71				
0010	IN 6139-031	10+66	19' LT	-	1
	IN 6139-029	10+70	23' RT	-	1
	AS 6139-036	10+71	26' LT	1	-
	IN 6139-032	10+71	19' LT	-	1
	AS 6139-035	10+73	30' RT	1	-
	IN 6139-030	10+74	23' RT	-	1
	IN 6139-033	10+75	19' LT	-	1
	PROJECT	5992-09-71 TO	TALS	2	5
	OVERALI	PROJECT TO	TALS	8	10

REMOVING CONCRETE BASES							
STATION		(204.0195)	NOTES				
	LOCATION	LACIT	NOTES				
	20' I T	4	STREET LIGHT POLE				
		1					
7+31	30' RT	1	TRAFFIC SIGNAL/STREET LIGHT POLE				
7+77	29' LT	1	TRAFFIC SIGNAL/STREET LIGHT POLE				
8+34	41' RT	1	TRAFFIC SIGNAL CONTROLLER				
8+39	37' RT	1	TRAFFIC SIGNAL/STREET LIGHT POLE				
204+70	28' RT	1	TRAFFIC SIGNAL POLE				
8+51	29' LT	1	TRAFFIC SIGNAL/STREET LIGHT POLE				
8+59	21' LT	1	TRAFFIC SIGNAL POLE				
9+42	32' LT	1	STREET LIGHT POLE				
PROJECT 599	2-09-69 TOTAL	9					
-09-71							
10+47	22' LT	1	STREET LIGHT POLE				
PROJECT 599	2-09-71 TOTAL	1					
OVERALL PR	OJECT TOTAL	10					
	8+34 8+39 204+70 8+51 8+59 9+42 PROJECT 599 -09-71 10+47 PROJECT 599	-09-69 6+39 22' LT 7+31 30' RT 7+77 29' LT 8+34 41' RT 8+39 37' RT 204+70 28' RT 8+51 29' LT 8+59 21' LT 9+42 32' LT PROJECT 5992-09-69 TOTAL -09-71	STATION LOCATION EACH -09-69 6+39 22' LT 1 7+31 30' RT 1 1 7+77 29' LT 1 1 8+34 41' RT 1 1 8+39 37' RT 1 1 204+70 28' RT 1 1 8+51 29' LT 1 1 8+59 21' LT 1 1 9+42 32' LT 1 PROJECT 5992-09-69 TOTAL 9 -09-71 10+47 22' LT 1 PROJECT 5992-09-71 TOTAL 1 1				

		OJECT TOTAL	6
	PROJECT 599	2-09-69 TOTAL	6
	8+98	25' RT	1
	8+55	25' RT	1
	202+78	25' RT	1
	7+73	26' LT	1
	7+28	29' RT	1
0040	6+75	27' RT	1
PROJECT 599	2-09-69		
CATEGORY	STATION	LOCATION	(653.0905) EACH
			(050 0005)

		REMOVI	NG STORM SE	WER	
				(204.0245.01) 12-INCH OR LESS	(204.0245.02) 15 TO 18-INCH
CATEGORY	STATION	TO STATION	LOCATION	12-INCH OR LESS LF	LF
PROJECT 5992-		TO OTATION	LOOATION	LI	
0010	4+79	5+42	LT	63	_
0010	5+42	5+42	LT	4	-
	5+42	5+50	LT	8	_
	5+65	5+72	LT	7	_
	6+04	6+20	LT	16	-
	6+67	7+00	LT	33	-
	7+00	7+14	LT & RT	50	-
	7+00	8+23	RT & LT	126	-
	7+00	8+35	RT	-	113
	7+04	7+14	RT	25	-
	8+00	8+23	LT	30	-
	8+35	9+40	RT	-	104
	9+40	9+48	RT	-	14
	9+48	9+86	RT	-	42
	9+51	9+88	LT	38	-
	PROJE	CT 5992-09-69 T	OTALS	400	273
PROJECT 5992-	-09-71				
0010	10+13	10+71	LT	-	58
	10+18	10+73	RT	-	64
	10+71	10+66	LT	8	-
	10+71	10+71	LT	7	-
	10+71	10+75	LT	8	-
	10+73	10+70	RT	8	-
	10+73	10+74	RT	7	<u>-</u>
	PROJE	CT 5992-09-71 T	OTALS	38	122
	OVER	ALL PROJECT T	OTALS	438	395
TIES				SHEE	T

EARTHWORK PROJ	JECT I.D.	5992-09-69/71

Division	From/To Station	Location	Common Excavation (1)	(item # 205.0100)	Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste	Borrow	Comment:
			Cut (2)	EBS Excavation (3)				Factor			(item #208.0100)	
Project ID 5992	2-09-69							1.20			(110111 // 200.0100)	
	4+20 - 9+63	Milwaukee Street	2178	0	591	1586	6	8	1579	1579		
	202+70 - 206+64	Fair Oaks Avenue	892	0	21	871	0	0	871	871		
	300+16 - 300+40	Powers Avenue	54	0	0	54	0	0	54	54		
Project ID 5992-09-	-69 Subtotal		3124	0	612	2512	6	8	2504	2504		
Project ID 5992	2-09-71											
1	9+63 - 9+77	Milwaukee Street- West Approach	104	0	16	88	24	30	58	58		
2	10+21 - 12+40	Milwaukee Street - East Approach	1359	0	202	1157	185	231	926	926		
	STRUCTURE B	-13-0677	150	0	0	150	0	0	150	150		
	UNDISTRIBUT	ED EBS	0	475	0	0	0	0	0	0		
Project ID 5992-09-	-71 Subtotal		1613	475	218	1395	209	261	1134	1134		
Grand Total			4737	475	830	3907	215	269	3638	3638		
			52	12								

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- 2) Salvaged/Unsuable Pavement Material is included in Cut.
- 3) EBS Excavation to be backfilled with Breaker Run material.
- 4) Salvaged/Unusable Pavement Material
- 5) Available Material = Cut Salvaged/Unusuable Pavement Material
- 14) The Mass Ordinate + or Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

BASE AGGREGATE DENSE 1 1/4-INCH

	OVE	RALL PROJECT TO	OTAL	5,635
		JECT 5992-09-71 T		1,435
	10+22	12+40	LT & RT	1,333
0010	9+63	9+77	LT & RT	102
PROJECT 599	2-09-71			
	PRO	JECT 5992-09-69 T	OTAL	4,200
	205+50	206+65	LT & RT	339
	202+70	204+50	LT & RT	935
	8+50	9+63	LT & RT	920
	7+00	8+50	LT & RT	798
0010	4+20	7+00	LT & RT	1,209
PROJECT 599	2-09-69			
CATEGORY	STATION	TO STATION	LOCATION	(305.0120 TON

CONCRETE PAVEMENT APPROACH SLAB

CATEGORY	STATION	TO STATION	(415.0410) SY
PROJECT 5992-	09-71		
0010	9+62	9+77	105
	10+22	10+37	105
	PROJECT 5992	2-09-71 TOTAL	210
	OVERALL PRO	DJECT TOTAL	210

HMA PAVEMENT

		RALL PROJECT		24 112	58.3 272.2	436 2,035
0010	10+37	12+40	LT & RT	24	58.3	436
PROJECT 599	2-09-71					
	PROJ	ECT 5992-09-69	TOTALS	88	213.9	1,599
	8+50	9+62	LT & RT	15	37.4	279
	205+50	206+65	LT & RT	8	18.6	139
	202+70	204+50	LT & RT	21	51.2	383
	7+00	8+50	LT & RT	19	45.2	338
0010	4+20	7+00	LT & RT	25	61.5	460
PROJECT 599	2-09-69					
CATEGORY	STATION	TO STATION	LOCATION	TON	GAL	TON
				PG-64-28	COAT	TYPE E-3
				ASPHALTIC MATERIAL	TACK	HMA PAVEMI
				(455.0120)	(455.0605)	(460.1103)

BREAKER RUN

CATEGORY	STATION	TO STATION	LOCATION	(311.0110) TON
PROJECT 59	992-09-69			
0010	8+50	9+63	LT & RT	622
	PROJE	CT 5992-09-69	TOTAL	622
PROJECT 59	992-09-71			
0010	9+63	9+77	LT & RT	69
	10+22	12+40	LT & RT	904
	PROJE	CT 5992-09-71	TOTAL	973
	OVERA	LL PROJECT	TOTAL	1,595

CONCRETE DRIVEWAY 7-INCH

CATEGORY	STATION	LOCATION	(416.0170) SY
PROJECT 5992	2-09-69		
0010	4+76	RT	11
	5+15	RT	9
	6+10	LT	11
	7+04	LT	5
	9+32	RT	75
	PROJECT 599	2-09-69 TOTAL	110
	OVERALL PR	OJECT TOTAL	110

CONCRETE SPEED HUMP

50		OTAL	ALL PROJECT T	OVER	
50		TOTAL	ECT 5992-09-69	PROJ	
50		LT	8+86	8+55	0010
				2-09-69	PROJECT 599
.0180.0 SY	•	LOCATION	TO STATION	STATION	CATEGORY
.((SPV.0				

PROJECT NO:5992-09-69/71

HWY: MILWAUKEE STREET

COUNTY: DANE

MISCELLANEOUS QUANTITIES

PLOT NAME :

SHEET

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			С	ONCRETE CURB & GUT	TER		
				(SPV.0090.01) 24-INCH SPECIAL, CITY OF MADISON TYPE H	(601.0411) 30-INCH TYPE D	(SPV.0090.02) 30-INCH SPECIAL, CITY OF MADISON TYPE X	(650.5500) CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER
CATEGORY	STATION	TO STATION	LOCATION	LF	LF	LF	LF
PROJECT 599	92-09-69						
0010	4+22	4+42	LT	-	20	-	20
	4+23	4+43	RT	-	20	-	20
	4+66	4+91	RT	-	20	10	30
	4+70	5+00	LT	-	15	25	40
	5+05	5+25	RT	-	20	-	20
	5+35	5+62	RT	-	10	20	30
	5+29	5+79	LT	-	40	20	60
	5+72	6+03	RT	-	30	-	30
	6+02	6+25	LT	-	25	-	25
	6+24	6+44	RT	-	20	-	20
	6+65	7+41	LT	-	80	-	80
	6+63	204+08	RT	-	60	10	70
	7+19	7+43	RT (ISLAND)	50	-	-	50
	7+64	205+73	LT	-	65	-	65
	8+50	8+79	LT (ISLAND)	60	-	-	60
	8+59	9+17	RT (MEDIAN)	120	-	-	120
	8+66	9+63	LT	-	130	-	130
	202+70	202+80	RT	-	10	-	10
	204+01	204+11	RT	-	10	-	10
	204+20	204+55	LT (MEDIAN)	70	-	-	70
	204+67	9+63	RT	-	155	10	165
	PR	OJECT 5992-09-69	TOTALS	300	730	95	1,125
PROJECT 599	92-09-71						
0010	10+39	12+40	LT	-	205	-	205
	10+39	12+40	RT	-	205	-	205
	10+55	11+15	RT (MEDIAN)	125	-	<u>-</u> _	125
	PR	OJECT 5992-09-71	1 TOTALS	125	410	0	535
	OV	ERALL PROJECT	TOTALS	425	1,140	95	1,660

CLIBB BAMP	DETECTABLE	WARNING.	EIEI D N	ΙΔΤΙΙΡΔΙ	
CONDINAINI					1 / 11111/

				(004,0000)
CATEGORY	STATION	TO STATION	LOCATION	(601.0600) LF
PROJECT 599	92-09-69			
0010	7+21	7+33	RT (ISLAND)	13
	7+23	7+39	RT (ISLAND)	16
	7+39	7+42	RT (ISLAND)	6
	8+50	8+54	LT (ISLAND)	10
	8+50	8+61	LT (ISLAND)	14
	8+59	8+65	LT (ISLAND)	13
	PRO	JECT 5992-09-69	TOTAL	72
	OVE	RALL PROJECT	TOTAL	72

CATEGORY	STATION	LOCATION	(602.0515) SF
PROJECT 5992-	09-69		
0010	4+87	LT	8
	4+87	RT	8
	4+95	LT	8
	5+32	LT	8
	5+50	LT	8
	5+50	RT	8
	7+00	RT	8
	7+23	RT (ISLAND)	8
	7+35	RT (ISLAND)	8
	7+40	RT (ISLAND)	8
	7+81	LT	8
	7+92	LT	8
	8+06	RT	8
	8+45	RT	8
	8+50	LT (ISLAND)	8
	8+56	LT (ISLAND)	8
	8+62	LT (ISLAND)	8
	8+80	LT	8
	PROJECT 599	2-09-69 TOTAL	144
PROJECT 5992-	09-71		
0010	10+97	RT	16
	10+97	RT (MEDIAN)	16
	10+97	RT (MEDIAN)	16
	10+97	LT	16
	PROJECT 599	2-09-71 TOTAL	64
	OVERALL PR	OJECT TOTAL	208

CONCRETE	SIDEWALK

				(602.0410) 5-INCH	(602.0415) 6-INCH	(602.0420) 7-INCH
CATEGORY	STATION	TO STATION	LOCATION	SF	SF	SF
PROJECT 5992	-09-69					
0010	4+22	4+42	LT	110	-	-
	4+23	4+43	RT	110	-	-
	4+66	4+91	RT	125	-	55
	4+70	5+00	LT	245	-	-
	5+05	5+25	RT	60	-	40
	5+29	5+79	LT	345	-	-
	5+42	5+62	RT	150	-	-
	5+83	6+03	RT	105	-	-
	6+02	6+25	LT	45	-	65
	6+24	6+44	RT	105	-	-
	6+65	6+87	LT	150	-	-
	6+63	6+85	RT	110	-	-
	6+96	7+02	RT	20	-	-
	6+99	7+09	LT	-	-	50
	7+20	7+42	RT (ISLAND)	255	-	-
	7+21	7+41	LT	100	-	-
	7+65	205+54	LT	280	-	-
	8+02	8+50	RT	410	-	-
	204+17	204+58	LT (MEDIAN)	90	-	-
	8+50	9+63	RT	400	140	160
	8+50	8+77	LT (ISLAND)	305	-	-
	8+55	9+21	RT (MEDIAN)	280	-	-
	8+76	9+63	LT	495	-	-
	PROJE	CT 5992-09-69 TO	TALS	4,295	140	370
PROJECT 5992	-09-71					
0010	9+63	9+77	RT	-	150	-
	9+63	9+77	LT	-	150	-
	10+22	10+37	RT	-	150	-
	10+22	10+37	LT	-	150	-
	10+37	12+32	RT	1,205	-	125
	10+37	11+04	LT	355	-	120
	10+51	11+20	RT (MEDIAN)	295	-	70
	PROJE	CT 5992-09-71 TO	TALS	1,855	600	315
	OVER	ALL PROJECT TO	TALS	6,150	740	685

CONCRETE MEDIAN SLOPED NOSE

			(620.0300)	
CATEGORY	STATION	LOCATION	SF	NOTES
PROJECT 5992-	09-69			
0010	7+21	RT (ISLAND)	25	TYPE 2
	7+27	RT (ISLAND)	20	TYPE 2
	7+41	RT (ISLAND)	15	TYPE 2
	8+50	LT (ISLAND)	20	TYPE 2
	8+52	LT (ISLAND)	20	TYPE 2
	8+55	RT (MEDIAN)	40	TYPE 1
	8+75	LT (ISLAND)	40	TYPE 1
	9+20	RT (MEDIAN)	60	TYPE 1
	204+15	LT (MEDIAN)	30	TYPE 1
	204+60	LT (MEDIAN)	50	TYPE 1
	PROJECT 59	92-09-69 TOTAL	320	
PROJECT 5992-	09-71			
0010	10+52	RT (MEDIAN)	60	TYPE 1
	11+18	RT (MEDIAN)	60	TYPE 1
	PROJECT 59	92-09-71 TOTAL	120	
	OVERALL PI	ROJECT TOTAL	440	

PROJECT NO:5992-09-69/71 HWY: MILWAUKEE STREET

COUNTY: DANE

MISCELLANEOUS QUANTITIES

PLOT NAME:

SHEET

WISDOT/CADDS SHEET 43

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1								STORM SEWE	R STRUCTURES								
				(611.2004) MANHOLES 4-FT DIAMETER	(611.2044) MANHOLES 4X4-FT	(SPV.0060.02) CATCH BASIN 6X6-FT SPECIAL	(611.3004) INLETS 4-FT DIAMETER	(611.3230) INLETS 2X3-FT	(SPV.0060.03) MANHOLE COVER TYPE SPECIAL LOGO	(611.0624) INLET COVERS TYPE H	(522.1018) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	(611.9800.S) PIPE GRATES	(650.4000) CONSTRUCTION STAKING STORM SEWER	TOP OF STRUCTURE	BOX DEPTH	FLANGE OR RIM	
CATEGORY	STRUCTURE I.D.	STATION	LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	ELEVATION	FEET	ELEVATION	INVER
PROJECT 599	92-09-69																
0010	1.0	5+41.5	10.0' RT	1	-	-	-	-	1	-	-	-	1	858.85	2.71	860.10	856.14
	1.1	5+41.5	19.6' RT	-	-	-	-	1	-	1	-	-	1	858.90	2.46	859.90	856.44
	1.2	4+78.0	18.0' LT	-	-	-	-	1	-	1	-	-	1	859.98	2.69	860.98	857.29
	2.0	7+60.8	12.0' RT	-	1	-	-	-	1	-	-	-	1	856.25	4.16	857.50	852.09
	2.1	205+53.9	36.4' LT	-	-	-	1	-	-	1	-	-	1	855.20	2.76	856.20	852.44
	2.2	205+65.3	37.4' LT	-	-	-	-	1	-	1	-	-	1	855.30	2.31	856.30	852.99
	3.0	9+08.0	39.0' RT	-	-	1	-	-	1	1	-	-	1	852.95	4.68	854.20	848.27
	3.1	9+33.5	27.5' LT	-	-	-	-	1	-	1	-	-	1	853.65	2.70	854.65	850.95
	EW.3	9+79.8	57.4' RT	-	-	-	-	-	-	-	1	1	1	-	-	-	846.25
		992-09-69 TO	TALS	1	1	1	1	4	3	6	1	1	9				
PROJECT 599																	
0010	EW.4	10+20.7	55.0' RT	-	-	-	-	-	-	-	1	1	1	-	-	-	845.70
	4.0	10+76.0	37.5' RT	-	-	-	1	-	-	1	-	-	1	852.40	4.40	853.40	848.00
	4.1	11+13.9	37.5' RT	-	-	-	-	1	-	1	-	-	1	852.35	3.66	853.35	848.69
	4.2	10+77.6	27.5' LT	-	-	-	1	-	-	1	-	-	1	852.30	3.32	853.30	848.98
	4.3	11+12.0	27.5' LT	-	-	-	-	11	-	1	-	-	1	852.45	2.79	853.45	849.66
	4.4	11+22.0	27.5' LT	-	-	-	-	1	-	1	-	-	1	852.50	2.79	853.50	849.71
	4.5	10+67.6	27.5' LT			-		1		1	-		11	852.25	2.72	853.25	849.53
		992-09-71 TO		0	0	00	2	4	0	6	1	1	7				
	OVERALL I	PROJECT TO	ALS	1	1	1	3	8	3	12	2	2	16				

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

STORM	SEWER	PIPE	REINF	ORCED	CONCRETE	

			(608.0312)	(608.0315)	(608.0318)	(608.0412)	(608.0418)
			CLASS III	CLASS III	CLASS III	CLASS IV	CLASS IV
	STRUCTURE I.D.	STRUCTURE I.D.	12-INCH	15-INCH	18-INCH	12-INCH	18-INCH
CATEGORY	FROM	TO	LF	LF	LF	LF	LF
PROJECT 5992	2-09-69						
0010	1.0	1.1	-	-	-	10	-
	1.0	2.0	-	218	-	-	-
	1.0	IN 6139-039	-	-	-	29	-
	1.2	IN 6139-039	-	-	-	64	-
	2.0	2.1	-	-	-	-	70
	2.0	IN 6139-037	-	-	-	66	-
	2.0	3.0	-	-	141	-	-
	2.1	2.2	-	-	-	10	-
	3.0	EW.3	-	-	74	-	-
	3.0	3.1	71	-	-	-	-
	PROJECT 5992	-09-69 TOTALS	71	218	215	179	70
PROJECT 5992	2-09-71						
0010	4.0	EW.4	-	-	58	-	-
	4.0	4.1	38	-	-	-	-
	4.0	4.2	-	-	65	-	-
	4.2	4.3	35	-	-	-	-
	4.2	4.5	10	-	-	-	-
	4.3	4.4	10	-	-	-	-
	PROJECT 5992	-09-71 TOTALS	93	0	123	0	0
	OVERALL PRO	JECT TOTALS	164	218	338	179	70

ADJUSTING INLET COVERS

	OVERALL	PROJECT TO	TAL	2
	2			
	IN 6139-037	7+04	48.5' RT	1
0010	IN 6139-039	5+42	18.5' LT	1
PROJECT 599	2-09-69			
CATEGORY	STRUCTURE I.D.	STATION	LOCATION	EACH
				(611.8115)

UTILITY LINE OPENING (ULO)

			*	
			(SPV.0060.01)	
CATEGORY	STATION	LOCATION	EACH	NOTES
PROJECT 5992	2-09-69			
0010	4+92	18' LT	1	GAS
	5+05	18' LT	1	TELEVISION
	5+55	10' RT	1	GAS
	6+80	12' RT	1	GAS
	7+28	33' RT	1	TELEPHONE
	UNDIST	RIBUTED	2	
	PROJECT 599	2-09-69 TOTAL	7	
PROJECT 5992	2-09-71			
0010	11+22	31' LT	1	GAS
	UNDIST	RIBUTED	2	
	PROJECT 599	2-09-71 TOTAL	3	
	OVERALL PR	OJECT TOTAL	10	
*ADDITIONAL C	QUANTITIES FOR	UND ELSEWHER	E	

PLOT NAME:

FINISHING ITEMS

CATEGORY	STATION	TO STATION	LOCATION	(625.0100) TOPSOIL SY	(629.0210) FERTILIZER TYPE B CWT	(630.0140) SEEDING MIXTURE NO. 40 LB	(628.2006) EROSION MAT URBAN CLASS 1 TYPE A SY
		TO GIATION	LOCATION	- 01	OVVI		
PROJECT 5992-09-69							
0010	4+13	203+70	RT	180	0.11	3	180
	4+20	5+00	LT	55	0.03	1	55
	5+30	205+70	LT	139	0.09	3	139
	202+70	8+50	RT	103	0.06	2	103
	8+50	9+70	RT	148	0.09	3	148
	8+65	9+85	LT	255	0.16	5	255
		UNDISTRIBUTE	D	78	0.05	1	78
	PRO	DJECT 5992-09-69	TOTALS	958	0.60	18	958
PROJECT 5992-09-7							
0010	10+22	12+40	RT	393	0.25	7	393
	10+27	12+52	LT	685	0.43	12	685
		UNDISTRIBUTE	D	118	0.07	2	118
	PRO	DJECT 5992-09-71	TOTALS	1,196	0.75	21	1,196
	OV	ERALL PROJECT	TOTALS	2,155	1.36	39	2,155

SILT FENCE

				(628.1504)	(628.1520) MAINTENANCE
CATEGORY	STATION	TO STATION	LOCATION	LF	LF
PROJECT 5992	:-09-71				
0010	10+15	12+50	RT	225	450
	10+15	12+55	LT	235	470
		UNDISTRIBUTED)	240	480
	PROJECT 5992-09-71 TOTALS				1,400
	OVERALL PROJECT TOTALS			700	1,400

MOBILIZATIONS EROSION CONTROL

	(628.1905)	(628.1910) EMERGENCY
CATEGORY	EACH	EROSION CONTROL EACH
PROJECT 5992-09-69		
0010	2	4
PROJECT 5992-09-69 TOTALS	2	4
PROJECT 5992-09-71		
0010	2	4
PROJECT 5992-09-71 TOTALS	2	4
OVERALL PROJECT TOTALS	4	8

TURBIDITY BARRIERS

CATEGORY	STATION	LOCATION	(628.6005) SY						
PROJECT 599	PROJECT 5992-09-71								
0010	10+00	LT & RT	150						
	PROJECT 5992-09-71 TOTAL								
	150								

INLET PROTECTION TYPE D

0.475.000.4	OTD OT DE D	074701		(628.702)
CATEGORY	STRUCTURE I.D.	STATION	LOCATION	EACH
PROJECT 599				
0010	1.2	4+78	LT	1
	IN 6139-038	4+79	LT	1
	IN 6139-039	5+42	LT	1
	1.1	5+42	RT	1
	IN 6139-037	7+04	RT	1
	2.1	205+54	LT	1
	IN 6139-048	205+57	LT	1
	2.2	205+65	LT	1
	3.0	9+08	RT	1
	3.1	9+34	LT	1
	IN 6139-043	9+48	RT	1
	IN 6139-034	9+51	LT	1
	IN 6139-044	9+53	RT	1
	PROJECT	5992-09-69 TC	OTAL	13
PROJECT 599	2-09-71			
0010	IN 6139-031	10+66	LT	1
	4.5	10+68	LT	1
	IN 6139-029	10+70	RT	1
	IN 6139-032	10+71	LT	1
	IN 6139-030	10+74	RT	1
	IN 6139-033	10+75	LT	1
	4.0	10+76	RT	1
	4.2	10+78	LT	1
	4.3	11+12	LT	1
	4.1	11+14	RT	1
	4.4	11+22	LT	1
	PROJECT	5992-09-71 TC	OTAL	11
			TAL	

TRACKING PADS

		(628.7560)
CATEGORY	STATION	EACH
PROJECT 5992-09	9-69	
0010	4+20	1
	202+70	1
	206+15	1
PI	ROJECT 5992-09-69 TOTAL	3
PROJECT 5992-09		3
		3
PROJECT 5992-09	9-71	1 1
PROJECT 5992-09 0010	9+63	1 1 2
PROJECT 5992-09 0010	9+63 11+90	1 1

DUST CONTROL SURFACE TREATMENT

			()
			(623.0200)
CATEGORY	STATION	TO STATION	SY
PROJECT 599	2-09-69		
0010	4+20	9+63	6,860
	202+70	204+50	2,220
	205+50	206+65	793
	PROJECT 59	992-09-69 TOTAL	9,874
PROJECT 599	2-09-71		
0010	9+63	9+77	238
	10+22	12+40	3,098
	3,336		
	13,210		

PLOT NAME :

ı	
	- 4
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						TRAF	FIC CONTROL								
CATEGORY	STAGE	DRUMS NO. DEVICES	(643.0300) DRUMS DAY	WARNING LIGHTS TYPE C NO. DEVICES	(643.0715) WARNING LIGHTS TYPE C DAY	BARRICADES TYPE III NO. DEVICES	(643.0420) BARRICADES TYPE III DAY	(643.0500) FLEXIBLE TUBULAR MARKER POSTS EACH	(643.0600) FLEXIBLE TUBULAR MARKER BASES EACH	WARNING LIGHTS TYPE A NO. DEVICES	(643.0705) WARNING LIGHTS TYPE A DAY	SIGNS NO. DEVICES	(643.0900 SIGNS DAY	DURATION	١
PROJECT 599	92-09-69														
0010	STAGE 1A	47	188	14	56	16	64	0	0	38	152	25	100	4	DAYS
	STAGE 1B	32	160	16	80	9	45	0	0	18	90	26	130	5	DAYS
	STAGE 2	45	990	14	308	12	264	45	45	24	528	48	1,056	22	DAYS
	STAGE 3	57	1,254	14	308	9	198	48	48	18	396	48	1,056	22	DAYS
	STAGE 4	31	310	0	0	5	50	30	30	10	100	32	320	10	DAYS
	STAGE 5	62	372	7	42	6	36	0	0	12	72	35	210	6	DAYS
	PROJECT 5992-09-69 TOTALS		3,274		794		657	123	123		1,338		2,872	•	
PROJECT 599	92-09-71														
0010	BRIDGE CONSTRUCTION (STAGES 1-3)	0	0	0	0	18	954	0	0	36	1,908	6	318	53	DAYS
	BRIDGE CONSTRUCTION (STAGE 4)	0	0	0	0	20	320	0	0	40	640	8	128	16	DAYS
	PROJECT 5992-09-71 TOTALS		0		0		1,274	0	0		2,548		446		
	OVERALL PROJECT TOTALS		3,274		794		1,931	123	123		3,886		3,318	-	

		(649.0	0200)	(649.0)400)	(649.1000)
		REFLECTIVE	PAINT 4-INCH	REMOVABLE	TAPE 4-INCH	STOP LINE REMOVABLE
	-	YELLOW	WHITE	YELLOW	WHITE	TAPE 12-INCH
CATEGORY	STAGE	LF	LF	LF	LF	LF
PROJECT 5992-09-69						
0010	STAGE 1A	-	-	-	-	25
	STAGE 1B	-	-	-	-	30
	STAGE 2	2,080	350	-	-	-
	STAGE 3	-	-	1,110	150	60
	STAGE 4	-	-	600	-	35
	STAGE 5	-	-	-	-	11
P	ROJECT 5992-09-69 TOTALS	2,080	350	1,710	150	161
		2,4	30	1,8	60	
0	VERALL PROJECT TOTALS	2,080	350	1,710	150	161
		2,4	30	1,8	60	

FENCE SAFETY								
	(616.0700.S)							
CATEGORY	STATION	LOCATION	LF					
PROJECT 5992	2-09-69							
0010	1,500							
	1,500							
	1,500							

TRAFFIC CONTROL DETOL	JR SIGNS	
LOCATION	# OF SIGNS	(643.3000) DAY
9-69		
N FAIR OAKS AVENUE	2	138
S FAIR OAKS AVENUE	4	276
WELLS AVENUE	2	138
POWERS AVENUE	4	276
N BRYAN STREET	3	207
S BRYAN STREET	3	207
THORP STREET	2	138
IVY STREEET	5	345
LEON STREET	3	207
MILWAUKEE STREET	1	69
PROJECT 5992-09-69 TOTAL		2,001
9-71		
MILWAUKEE STREET	11	759
FAIR OAKS AVENUE	6	414
STOUGHTON ROAD (USH 51)	9	621
STH 30	15	1,035
WALTER STREET	3	207
LEON STREET	3	207
WEBB AVENUE	3	207
PROJECT 5992-09-71 TOTAL		3,450
OVERALL PROJECT TOTAL		5,451
	LOCATION 19-69 N FAIR OAKS AVENUE S FAIR OAKS AVENUE WELLS AVENUE POWERS AVENUE POWERS AVENUE N BRYAN STREET S BRYAN STREET THORP STREET IVY STREEET LEON STREET MILWAUKEE STREET PROJECT 5992-09-69 TOTAL 19-71 MILWAUKEE STREET FAIR OAKS AVENUE STOUGHTON ROAD (USH 51) STH 30 WALTER STREET LEON STREET UEDN STREET WEBB AVENUE PROJECT 5992-09-71 TOTAL	9-69 N FAIR OAKS AVENUE 2 S FAIR OAKS AVENUE 4 WELLS AVENUE 2 POWERS AVENUE 4 N BRYAN STREET 3 S BRYAN STREET 2 IVY STREET 5 LEON STREET 3 MILWAUKEE STREET 1 PROJECT 5992-09-69 TOTAL 19-71 MILWAUKEE STREET 11 FAIR OAKS AVENUE 6 STOUGHTON ROAD (USH 51) 9 STH 30 15 WALTER STREET 3 LEON STREET 3 LEON STREET 3 LEON STREET 3 PROJECT 5992-09-71 TOTAL

	REMOVING	G PAVEMENT	MARKINGS		
			(646.0600)	(647.0955) ARROWS	(647.0965) WORDS
CATEGORY	DESCRIPTION	STAGE	LF	EACH	EACH
PROJECT 5992-09-	69				
0010	MILWAUKEE STREET	1B	25	-	-
	MILWAUKEE STREET	2	1,320	-	-
	FAIR OAKS AVENUE	2	620	3	2
	FAIR OAKS AVENUE	3	410	-	-
	FAIR OAKS AVENUE	4	325	1	2
	FAIR OAKS AVENUE	5	80	-	-
	UNDISTRIBUTED		320	-	-
	PROJECT 5992-09-69 TOTALS	3	3,100	4	4
	OVERALL PROJECT TOTALS	3	3,100	4	4

CATEGORY	DESCRIPTION	(643.1050) DAY
PROJECT 5992	2-09-69	
0010	FAIR OAKS AVENUE AT STH 30	14
	MILWAUKEE STREET WEST OF PROJECT LIMITS	7
	MILWAUKEE STREET EAST OF PROJECT LIMITS	7
	FAIR OAKS AVENUE SOUTH OF PROJECT LIMITS	7
	PROJECT 5992-09-69 TOTAL	35
	OVERALL PROJECT TOTAL	35

TEI	MPORARY CROSSWALK ACCE	SS
OATE OODV	DEGODIDA	(SPV.0045.01)
CATEGORY	DESCRIPTION	DAY
O010	STAGE 1A	8
0010	STAGE 1A STAGE 1B	10
	STAGE 15 STAGE 2	10 44
	STAGE 2 STAGE 3	44
	STAGE 3	20
	STAGE 5	12
	PROJECT 5992-09-69 TOTAL	138
	OVERALL PROJECT TOTAL	138

TRAFFIC CONTROL COVERING SIGNS	IYPE	II

CATEGORY	LOCATION	STAGE	(643.0920) EACH	NOTES
PROJECT 5992-09-69				
0010	FAIR OAK AVENUE MEDIAN	2, 3, 4 & 5	1	LEFT LANE MUST TURN LEFT
	PROJECT 5992-09-69 TO	OTAL	1	
	OVERALL PROJECT TO	1		

TRAFFIC CONTROL SIGNS FIXED MESSAGE								
(643.1000)								
CATEGORY	SIGN DESCRIPTION	# OF SIGNS	(643.1000) SF					
PROJECT 599	PROJECT 5992-09-71							
0010	0010 MILWAUKEE STREET 34							
	272.0							
	272.0							

PROJECT NO: 5992-09-69/71 HWY: MILWAUKEE STREET

COUNTY: DANE

MISCELLANEOUS QUANTITIES

PLOT NAME :

SHEET

WISDOT/CADDS SHEET 43

18-INCH	12-INCH	
LF	LF	

			(646.0 PAVEMENT MARKI	,	(646.0126) PAVEMENT MARKING	(647.0766) PAVEMENT MARKING	(647.0786) PAVEMENT MARKING	(647.0556) PAVEMENT MARKING
			(YELLOW)	(WHITE)	EPOXY 8-INCH (WHITE)	CROSSWALK EPOXY 6-INCH	CROSSWALK EPOXY 18-INCH	STOP LINE EPOXY 12-INCH
CATEGORY	STATION	STATION	LF	LF	LF	LF	LF	LF
PROJECT 5992	2-09-69							
0010	STAGING LIMITS	4+84	430	-	-	-	-	-
	4+84	5+54	-	-	-	205	-	15
	5+54	7+57	540	130	35	-	40	50
	7+57	9+62	265	35	200	125	40	30
	STAGING LIMITS	204+70	795	760	160	110	-	30
	205+56	206+65	-	80	130	115	-	30
	PROJECT 5992-09	9-69 TOTALS	2,030	1,005	525	555	80	155
			3,0	35				
PROJECT 5992	2-09-71				-			
0010	9+62	10+93	370	475	30	120	-	-
	10+93	12+40	390	130	-	110	-	-
	DETOUR ROUTE -	AT RAILROAD	-	-	-	-	-	20
	PROJECT 5992-09	9-71 TOTALS	760	605	30	230	0	20
			1,3	65				
	OVERALL PROJI	ECT TOTALS	2,790	1,610	555	785	80	175
			4,4	00				

PAVEMENT MARKINGS

PA۱	/FM	IFNT	MA	RKING	

CATEGORY	STATION	LOCATION	(647.0156) ARROWS EPOXY TYPE 1 EACH	(647.0166) ARROWS EPOXY TYPE 2 EACH	(647.0176) ARROWS EPOXY TYPE 3 EACH	(647.0206) ARROWS BIKE LANE EPOXY EACH	(647.0306) SYMBOLS BIKE LANE EPOXY EACH	(647.0356) WORDS EPOXY EACH	(647.0606) ISLAND NOSE EPOXY EACH	NOTES
PROJECT 5992-09-6	9									
0010	7+10	RT	1	-	1	-	-	-	-	
	7+21	LT (ISLAND)	-	-	-	-	-	-	1	
	7+27	LT (ISLAND)	-	-	-	-	-	-	1	
	7+41	LT (ISLAND)	-	-	-	-	-	-	1	
	8+50	LT (ISLAND)	-	-	-	-	-	-	1	
	8+52	LT (ISLAND)	-	-	-	-	-	-	1	
	8+55	RT (MEDIAN)	-	-	-	-	-	-	1	
	8+75	LT (ISLAND)	-	-	-	-	-	-	1	
	8+75	LT	-	-	-	1	1	-	-	
	8+80	LT	-	-	-	-	1	-	-	SHARROW
	8+85	RT	-	-	-	1	1	-	-	
	8+85	LT	1	1	-	-	-	-	-	
	9+20	RT (MEDIAN)	-	-	-	-	-	-	1	
	9+25	LT	-	-	-	-	-	1	-	ONLY
	202+45	LT	-	-	-	1	1	-	-	
	203+70	RT	-	1	-	1	1	-	-	
	203+85	LT	-	-	-	1	1	-	-	
	204+05	RT	-	-	-	-	-	1	-	ONLY
	204+15	LT (MEDIAN)	-	-	-	-	-	-	1	
	204+35	RT	-	1	1	1	1	-	-	
	204+60	LT (MEDIAN)	-	-	-	-	-	-	1	
	205+55	LT	-	-	-	-	1	-	-	
	205+60	LT	-	-	-	-	1	-	-	
	205+85	RT	-	-	-	1	1	-	-	
	205+85	LT		1						
	206+18	LT	-	-	-	-	-	1	-	ONLY
	206+52	LT	-	1	-	-	-	-	-	
		92-09-69 TOTALS	2	5	2	7	10	3	10	
PROJECT 5992-09-7	1									
0010	9+70	LT	-	1	1	-	-	-	-	
	10+52	RT (MEDIAN)	-	-	-	-	-	-	1	
	10+55	LT	-	-	-	1	1	-	-	
	11+18	RT (MEDIAN)	-	-	-	-	-	-	1	
	PROJECT 59	92-09-71 TOTALS	0	1	1	1	1	0	2	
	OVERALL P	ROJECT TOTALS	2	6	3	8	11	3	12	

PROJECT NO:5992-09-69/71

COUNTY: DANE

MISCELLANEOUS QUANTITIES

PLOT NAME :

WISDOT/CADDS SHEET 43

SHEET

HWY: MILWAUKEE STREET

3

CONSTRUCTION STAKING

			(650.4500) SUBGRADE	(650.5000) BASE	(650.9920) SLOPE STAKES	(650.9910) SUPPLEMENTAL CONTROL
CATEGORY	STATION	TO STATION	LF	LF	LF	LS
PROJECT 599	2-09-69					
0010	4+20	9+63	543	543	543	-
	202+70	204+80	210	210	210	-
	205+50	206+65	115	115	115	-
	PROJECT 5	992-09-69 TOTALS	868	868	868	1
PROJECT 599	2-09-71					,
0010	9+63	9+77	14	14	14	-
	10+22	12+40	218	218	218	-
	PROJECT 5	992-09-71 TOTALS	232	232	232	1
	OVERALL F	PROJECT TOTALS	1,100	1,100	1,100	2

SAWING ASPHALT

				(690.0150)	
CATEGORY	STATION	TO STATION	LOCATION	LF	NOTES
PROJECT 599	92-09-69				
0010	5+01	5+27	LT	26	POWERS AVENUE PAVEMENT
	202+70	202+70	LT & RT	40	FAIR OAKS AVENUE PAVEMENT
	205+73	205+73	LT	30	FAIR OAKS AVENUE PAVEMENT
	206+65	206+65	RT	19	FAIR OAKS AVENUE PAVEMENT
	9+14	9+48	RT	35	DRIVEWAY
	205+41	205+73	LT	20	STAGE 2 PAVEMENT
	205+69	206+65	RT	110	STAGE 2 PAVEMENT
	202+70	204+57	ON LINE	200	STAGE 3 PAVEMENT
		UNDISTRIBUTED		220	ADDITIONAL FOR STAGING
	PRO	JECT 5992-09-69 T	OTAL	700	
PROJECT 599	92-09-71				
0010	12+40	12+40	LT & RT	40	MILWAUKEE STREET PAVEMENT
	PRO	JECT 5992-09-71 T	OTAL	40	
	OVE	RALL PROJECT T	OTAL	740	

SEDIMENT EXCAVATION

CATEGORY	STATION	LOCATION	(SPV.0195.02) TON
PROJECT 599	2-09-71		
0010	10+00	LT & RT	350
	PROJECT 599	2-09-71 TOTAL	350
	OVERALL PR	OJECT TOTAL	350

EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL

			(205.0501.S)
CATEGORY	STATION	LOCATION	TON
PROJECT 5992-09-71			
0010	PROJECT 59	92-09-71	400
	PROJECT 5992-0	09-71 TOTAL	400
	OVERALL PROJ	IECT TOTAL	400

SAWING CONCRETE

				(690.0250)	
CATEGORY	STATION	TO STATION	LOCATION	LF	NOTES
PROJECT 59	92-09-69				
0010	4+20	4+20	LT & RT	35	MILWAUKEE STREET PAVEMENT
	4+22	4+42	LT	15	CURB & GUTTER AND SIDEWALK
	4+23	4+43	RT	15	CURB & GUTTER AND SIDEWALK
	4+66	4+91	RT	25	CURB & GUTTER, SIDEWALK AND DRIVEWA
	4+70	5+00	LT	15	CURB & GUTTER AND SIDEWALK
	5+05	5+25	RT	25	CURB & GUTTER, SIDEWALK AND DRIVEW.
	5+35	5+62	RT	15	CURB & GUTTER AND SIDEWALK
	5+29	5+79	LT	15	CURB & GUTTER AND SIDEWALK
	5+72	6+03	RT	15	CURB & GUTTER AND SIDEWALK
	6+02	6+25	LT	30	CURB & GUTTER, SIDEWALK AND DRIVEW.
	6+24	6+44	RT	15	CURB & GUTTER AND SIDEWALK
	6+65	7+41	LT	40	CURB & GUTTER, SIDEWALK AND DRIVEW.
	6+63	204+08	RT & LT	25	CURB & GUTTER AND SIDEWALK
	7+64	205+73	LT	20	CURB & GUTTER AND SIDEWALK
	202+70	202+80	RT	5	CURB & GUTTER
	204+01	204+11	RT	5	CURB & GUTTER
	204+67	204+67	RT	8	CURB & GUTTER AND SIDEWALK
	206+23	206+23	RT	2	CURB & GUTTER
	4+20	4+54	LT & RT	100	STAGE 1A PAVEMENT
	7+64	8+54	LT & RT	250	STAGE 1A PAVEMENT
	4+20	7+66	LT & RT	430	STAGE 1B & STAGE 2 PAVEMENT
	8+35	8+35	LT & RT	110	STAGE 2 PAVEMENT
	4+20	7+80	RT	150	STAGE 3 PAVEMENT
		UNDISTRIBUTE)	235	ADDITIONAL FOR STAGING
	PRO.	JECT 5992-09-69	TOTAL	1,600	
PROJECT 59	92-09-71			<u>-</u>	
0010	12+32	12+32	RT	5	SIDEWALK
	12+40	12+40	LT & RT	5	CURB & GUTTER
		JECT 5992-09-71		10	
•	OVE	RALL PROJECT	TOTAL	1,610	

HWY: MILWAUKEE STREET

COUNTY: DANE

MISCELLANEOUS QUANTITIES
PLOT BY: Jdolens P

SHEET

WISDOT/CADDS SHEET 43

PROJECT NO: 5992-09-69/71

REMOVE SANITARY SEWER PIPE

							(SPV.0090.06)	
							REMOVE SANITARY	
	FROM STRUCTURE #	TO STRUCTURE #				PIPE	SEWER PIPE	
CATEGORY	DWNSTRM	UPSTREAM	LENGTH	PAID (Y/N)	SIZE	MATERIAL	LF	NOTES
PROJECT 5992-09-69	9							
0020	MMSD MH06-209	6546-003	408.00	N	6"	VCP	-	
	LATER	ALS	-	-	-	-	-	
	UNDISTRI	BUTED	-	-	-	-	10	
				PROJ	ECT 5992-09-69	ΓΟΤΑL	10	
				OVER	RALL PROJECT 1	OTAL	10	
	(=== =================================						0=D 0=:!!=D 1D= 00!!0!D=D	SED INCIDENTAL TO INCIDENTALL ATION

ALL SANITARY SEWER PIPE REMOVALS CALLED OUT ABOVE THAT ARE NOT CALLED OUT FOR PAYMENT LOCATED WITHIN 3' OF THE PROPOSED SEWER ARE CONSIDERED INCIDENTAL TO INSTALLATION OF THE NEW SANITARY SEWER PIPE IN ACCORDANCE WITH ARTICLE 203.2 THE CITY OF MADISON STANDARD SPECIFICATIONS, PLUGGING OF PIPES LESS THAN 10" DIAMETER NOT CALLED OUT FOR PAYMENT ARE CONSIDERED INCIDENTAL TO PIPE INSTALLATION OR SEWER ACCESS STRUCTURE REMOVAL

REMOVE SANITARY SEWER STRUCTURE

							(SPV.0060.08) REMOVE SANITARY				
	EXIST. STRUCTURE	STATION	LOCATION				SEWER STRUCTURE				
CATEGORY	NUMBER		(OFFSET)	RIM	EI	DEPTH	EACH	NOTES			
PROJECT 5992	2-09-69										
0020	6139-018	4+34.45	RT-0.94	861.91	853.36	8.55	1				
	6139-019	5+14.29	RT-0.73	860.69	852.69	8.00	1				
				PROJE	CT 5992-09-69	TOTAL	2				
		OVERALL PROJECT TOTAL 2									

UTILITY TRENCH PATCH TYPE III

					*	
					(SPV.0090.07)	
					UTILITY TRENCH	
	FROM		TO		PATCH TYPE III	
CATEGORY	STATION	LOCATION	STATION	LOCATION	LF	NOTES
PROJECT 5992	-09-69					
0020	7+75.00	LT 1'	8+40.00	LT 18'	75	
		UNDISTR	IBUTED		20	
			PROJECT 599	92-09-69 TOTAL	95	
			OVERALL PR	ROJECT TOTAL	95	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

MISC. SANITARY ITEMS

CATEGORY	STATION	LOCATION	(SPV.0105.02) WASTEWATER CONTROL 150 GPM LS	* (SPV.0060.01) UTILITY LINE OPENING (ULO) EACH	(SPV.0105.03) CONSTRUCTION STAKING SANITARY SEWER LS	(SPV.0105.05) PROJECT DEWATERING LS	(SPV.0060.09) ABANDON SANITARY SEWER - PIPE PLUG EACH	NOTES
PROJECT 5992	-09-69							
0020	UNDISTE	RIBUTED	1	1	1	1	4	
	PROJECT 5992	-09-69 TOTALS	1	1	1	1	4	
	OVERALL PRO	JECT TOTALS	1	1	1	1	4	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

HWY: MILWAUKEE STREET

PROJECT NO:5992-09-69/71

COUNTY: DANE

PLOT DATE: 10/21/2014

PLOT BY: Jdolens

MISCELLANEOUS QUANTITIES

PLOT NAME:

SHEET

WISDOT/CADDS SHEET 43

SANITARY SEWER PIPES (SEWER MAIN)

			OVERALL	PROJECT TOTA	LS	408	408	
			PROJECT	5992-09-69 TOTA	LS	408	408	
0020	MMSD MH06-209	SAS#1	848.20	852.40	1.03%	408	408	
PROJECT 5992	2-09-69							
CATEGORY	(DOWNSTREAM)	(UPSTREAM)	(DOWNSTREAM)	(UPSTREAM)	(%)	LF	LF	NOTES
	LOCATION	LOCATION	EI	EI	SLOPE	SEWER	8-INCH	
						FOR SANITARY	SEWER PIPE PVC,	
						SELECT FILL	SANITARY	
						(SPV.0090.05)	(SPV.0090.03)	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

SANITARY SEWER STRUCTURES

											*			
										(SPV.0060.04)	(SPV.0060.03)	(611.8110)	(SPV.0060.05)	
										SANITARY	MANHOLE	ADJUSTING	SANITARY	
										SEWER ACCESS	COVER TYPE	MANHOLE	SEWER	
										STRUCTURE,	SPECIAL LOGO	COVERS	TAP	
	STRUCTURE			FINAL	TEMP	EXISTING	EXISTING	NET		4-FOOT DIAMETER				
CATEGORY	NUMBER	STATION	LOCATION	RIM	RIM ELEV.	RIM	ADJUST	ADJUST	IE DEPTH	I EACH	EACH	EACH	EACH	NOTES
PROJECT 5	992-09-69													
0020	SAS#1	4+30.00	RT-0.00	861.91	0.00	-	0.00	0.00	852.40 9.51	1	1	-	1	
	MMSD MH 06-209	8+33.86	LT-17.13	856.60	0.00	856.60	0.83	0.00	846.40 10.20	-	-	1	1	**MMSD MANHOLE CONTACT RAY SCHNEIDER (608)347-3628 3 DAYS PRIOR TO ADJUSTING MANHOLE
							PROJE	CT 5992-09	9-69 TOTALS	1	1	1	2	
							OVERA	LL PROJE	CT TOTALS	1	1	1	2	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

**MMSD TO PROVIDE A CASTING AND A RUBBER ADJUSTMENT RING

SANITARY SEWER LATERALS

						*	*	
				(SPV.0090.04)	(SPV.0060.07)	(SPV.0090.05)	(SPV.0060.06)	
				SANITARY SEWER	SANITARY	SELECT FILL	SEWER	
				LATERAL	LATERAL	FOR SANITARY	ELECTRONIC	
	CITY		LOCATION		RECONNECT	SEWER	MARKERS	
CATEGORY	BLOCK	STATION	(OFFSET)	LF	EACH	LF	EACH	NOTES
PROJECT 59	92-09-69							
0020	300 BLK	4+32	LT	27	1	27	2	
		4+33	RT	30	1	30	2	
		4+80	RT	30	1	30	2	
		4+83	LT	27	1	27	2	
		5+17	RT	29	1	29	2	
		5+53	RT	29	1	29	2	
		5+75	LT	28	1	28	2	
		5+96	RT	29	1	29	2	
		6+15	LT	28	1	28	2	
		6+35	RT	29	1	29	2	
		6+73	RT	28	1	28	2	
		6+77	LT	28	1	28	2	
		7+33	LT	29	1	29	2	
1		7+99	LT	34	1	34	2	
		T 5992-09-69		405	14	405	28	
	OVERAL	L PROJECT	TOTALS	405	14	405	28	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

ALL SANITARY SEWER PIPE REMOVALS CALLED OUT ABOVE THAT ARE NOT CALLED OUT FOR PAYMENT LOCATED WITHIN 3' OF THE PROPOSED SEWER ARE CONSIDERED TO THE INSTALLATION OF THE NEW SANITARY SEWER PIPE IN ACCORDANCE WITH ARTICLE 203.2 THE CITY OF MADISON STANDARD SPECIFICATIONS. PLUGGING OF PIPES LESS THAN 10" DIAMETER NOT CALLED OUT FOR PAYMENT ARE CONSIDERED INCIDENTAL TO PIPE INSTALLATION OR SEWER ACCESS STRUCTURE REMOVAL

PROJECT NO:5992-09-69/71 HWY: MILW/

HWY: MILWAUKEE STREET

COUNTY: DANE

MISCELLANEOUS QUANTITIES

SHEET

HEET

SECTION COSSES L. ROMANICANOL. IN. JAVAN. MICROPED MICH. 2. 1

PLOT NAME:

3

WATER MAIN AND FITTINGS, SELECT FILL, INSULATION

	FROM		то			(SPV.0090.08) FURNISH & INSTALL 6-INCH PIPE & FITTINGS	(SPV.0090.09) FURNISH & INSTALL 8-INCH PIPE & FITTINGS	(SPV.0090.10) FURNISH & INSTALL 10-INCH PIPE & FITTINGS	(SPV.0090.11) FURNISH & INSTALL 12-INCH PIPE & FITTINGS	(SPV.0090.12) HORIZONTAL DIRECTIONAL DRILL WATER 12-INCH PIPE	(SPV.0090.16) SELECT FILL FOR WATER MAIN	(SPV.0090.17) FURNISH AND INSTALL 2-INCH FOAM BOARD INSULATION
CATEGORY	STATION	OFFSET	STATION	OFFSET	LOCATION	LF	LF	LF	LF	LF	LF	LF
PROJECT 5992	-09-69											
0030	4+21.5	13.1' RT	7+62.2	29.9' RT	MILWAUKEE ST (WEST OF FAIR OAKS AVE)	-	323	-	-	-	323	16
	5+04.0	10.0' LT	5+18.1	37.0' LT	POWERS AVE CONNECTION	31	29	-	-	-	60	8
	7+62.2	29.9' RT	202+71.7	11.7' RT	FAIR OAKS AVE (SOUTH OF MILWAUKEE ST)	-	222	-	3	-	225	-
	205+45.4	44.5' RT	206+13.1	6.5' RT	FAIR OAKS AVE (NORTH OF MILWAUKEE ST)	16	-	17	88	-	121	•
	7+62.2	29.9' RT	12+32.8	13.6' RT	MILWAUKEE ST (EAST OF FAIR OAKS AVE)	9	-	27	421	81	457	24
	•	•			PROJECT 5992-09-69 TOTALS	56	574	44	512	81	1,186	48
					OVERALL PROJECT TOTALS	56	574	44	512	81	1,186	48

WATER VALVES & HYDRANTS

	STATION	OFFSET	LOCATION / DESCRIPTION	(SPV.0060.11) FURNISH & INSTALL 6-INCH VALVE EACH	(SPV.0060.12) FURNISH & INSTALL 8-INCH VALVE EACH	(SPV.0060.13) FURNISH & INSTALL 10-INCH VALVE EACH	(SPV.0060.14) FURNISH & INSTALL 12-INCH VALVE EACH	(SPV.0060.10) WATER VALVE ACCESS STRUCTURE EACH	(SPV.0060.20) ABANDON WATER VALVE BOX EACH	(SPV.0060.21) ABANDON WATER VALVE ACCESS STRUCTURE EACH	(SPV.0060.15) FURNISH AND INSTALL HYDRANT EACH	(SPV.0060.22) REMOVE AND SALVAGE EXISTING HYDRANT EACH
PROJECT 5992-0												
0030	4+21.5	13.1' RT	MILWAUKEE ST (WEST CONNECTION)	-	1	-	-	-	-	-	-	-
	4+23.5	2.0' LT	MILWAUKEE ST	-	1	-	-	-	-	-	-	-
	5+00.0	10.0' LT	MILWAUKEE ST (AT POWERS AVE)	-	1	-	-	-	-	-	-	-
	5+18.1	37.0' LT	POWERS AVE CONNECTION	1	-	-	-	-	-	-	-	-
	5+21.1	37.0' LT	POWERS AVE HYDRANT LEAD	1	-	-	-	-	-	-	-	-
	7+33.7	5.9' RT	MILWAUKEE ST (AT FAIR OAKS AVE, WEST)	-	1	-	-	-	-	-	-	-
	8+65.2	1.8' LT	MILWAUKEE ST (AT FAIR OAKS AVE, EAST)	-	-	-	1	-	-	-	-	-
	10+81.7	18.9' LT	MILWAUKEE ST (EAST OF BRIDGE)	-	-	-	-	1	-	-	-	-
	12+30.8	16.2' LT	MILWAUKEE ST EAST END HYDRANT LEAD	1	-	-	-	-	-	-	-	-
	12+32.8	13.6' RT	MILWAUKEE ST (EAST CONNECTION)	-	-	1	-	-	-	-	-	-
-	202+71.7	11.7' RT	FAIR OAKS AVE (SOUTH CONNECTION)	-	1	-	-	-	-	-	-	-
:	204+63.7	15.4' LT	FAIR OAKS AVE (AT MILWAUKEE ST, SOUTH)	-	1	-	-	-	-	-	-	-
:	205+47.8	41.6' RT	FAIR OAKS AVE (AT MILWAUKEE ST, NORTH)	-	-	-	1	-	-	-	-	-
:	205+91.6	13.2' RT	FAIR OAKS AVE (NORTH CONNECTION)	-	-	1	-	-	-	-	-	-
:	206+13.4	10.5' RT	FAIR OAKS AVE HYDRANT LEAD	1	-	-	-	-	-	-	-	-
	5+32.7	37.5' LT	POWERS AVE HYDRANT	-	-	-	-	-	-	-	1	-
	12+30.8	22.5' LT	FAIR OAKS AVE HYDRANT	-	-	-	-	-	-	-	1	-
:	206+17.3	31.8' RT	MILWAUKEE ST HYDRANT (EAST END)	-	-	-	-	-	-	-	1	-
	-	-	MILWAUKEE STAT POWERS AVE MAINLINE	-	-	-	-	-	1	-	-	-
	-	-	MILWAUKEE ST AT POWERS AVE HYDRANT	-	-	-	-	-	1	-		1
	-	-	POWERS AVE MAINLINE	-	-	-	-	-	1	-	-	-
	-	-	FORMER SERVICE BOX TO 2 FAIR OAKS AVE	-	-	-	-	-	1	-	-	-
	-	-	FAIR OAKS AVE AT MILWAUKEE ST (SOUTH)	-	-	-	-	-	-	1	-	-
	-	-	FAIR OAKS AVE AT MILWAUKEE ST HYDRANT	-	-	-	-	-	1	-	-	1
	-	-	MILWAUKEE ST AT FAIR OAKS AVE (WEST)	-	-	-	-	-	1	-	-	-
	-	-	MILWAUKEE ST AT STARKWEATHER CREEK (WEST)	-	-	-	-	-	1	-	-	-
	-	-	MILWAUKEE ST AT STARKWEATHER CREEK (EAST)	-	-	-	-	-	1	-	-	-
	-	-	MILWAUKEE ST HYDRANT (EAST END)	-	-	-	_	-	1	-	-	1
			PROJECT 5992-09-69 TOTALS	4	6	2	2	1	9	1	3	3
-			OVERALL PROJECT TOTALS	4	6	2	2	1	9	1	3	3

PROJECT NO: 5992-09-69/71 HWY: MILWAUKEE STREET COUNTY: DANE MISCELLANEOUS QUANTITIES SHEET E

PLOT NAME:

COPPER WATER SERVICE LATERALS

				(SPV.0090.13)	(SPV.0090.14)	(SPV.0090.15)	(SPV.0060.16)
				EXTEND AND	EXTEND AND	EXTEND AND	DISCONNECT AND
				RECONNECT	RECONNECT	RECONNECT	RECONNECT 1-INCH
				1-INCH SERVICE	1.5-INCH SERVICE	2-INCH SERVICE	SERVICE LATERAL
	FROM	TO		LATERAL	LATERAL	LATERAL	
CATEGORY	STATION	STATION	LOCATION / DESCRIPTION	LF	LF	LF	EACH
PROJECT 599	2-09-69						
0030	4+00	8+00	MILWAUKEE ST (WEST OF FAIR OAKS AVE)	100	25	20	5
	202+00	206+00	FAIR OAKS AVE (SOUTH OF MILWAUKEE ST)	25	-	-	-
			PROJECT 5992-09-69 TOTALS	125	25	20	5
			OVERALL PROJECT TOTALS	125	25	20	5

CUT-IN OR CONNECT-TO EXISTING WATER SYSTEM

				(SPV.0060.17)
				CUT-IN OR
				CONNECT-TO
				EXISTING WATER
				SYSTEM
CATEGORY	STATION	OFFSET	LOCATION / DESCRIPTION	EACH
PROJECT 599	2-09-69			
0030	4+21.5	13.1' RT	WEST CONNECTION, MILWAUKEE ST	1
	12+32.8	13.6' RT	EAST CONNECTION, MILWAUKEE ST	1
	202+71.7	11.7' RT	SOUTH CONNECTION, FAIR OAKS AVE	1
	205+91.6	26.0' RT	NORTH CONNECTION, FAIR OAKS AVE	1
	5+18.1	37.0' LT	POWERS AVE CONNECTION	1
			PROJECT 5992-09-69 TOTAL	5
			OVERALL PROJECT TOTAL	5

WATER MISCELLANEOUS

		*	*			
		(SPV.0060.01)	(SPV.0090.07)	(SPV.0105.04)	(SPV.0060.18)	(SPV.0060.19)
		UTILITY	UTILITY	CONSTRUCTION	FURNISH EXCAVATION	CUT OFF
		LINE OPENING	TRENCH PATCH	STAKING	AND DITCH FOR	EXISTING
		(ULO)	TYPE III	WATER MAIN	LIVE TAP	WATER MAIN
CATEGORY	LOCATION / DESCRIPTION	EACH	LF	LS	EACH	EACH
PROJECT 5992-09-69						
0030	UNDISTRIBUTED, AS REQUIRED AND APPROVED BY ENGINEER	2	100	1	1	1
	PROJECT 5992-09-69 TOTALS	2	100	1	1	1
	OVERALL PROJECT TOTALS	2	100	1	1	1

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

PROJECT NO: 5992-09-69/71 COUNTY: DANE SHEET HWY: MILWAUKEE STREET MISCELLANEOUS QUANTITIES PLOT BY: Jdolens

3

CONCRETE BASE

(SPV.0060.27) (SPV.0060.28) (SPV.0060.29) (SPV.0060.30) (SPV.006	60.23) (654.0110)	
TYPE G TYPE LB-3 TYPE LB-8 TYPE P OFFS	SET TYPE 10	
CATEGORY STRUCTURE STATION LOCATION EACH EACH EACH EACH EACH	CH EACH NOTES	
PROJECT 5992-09-69		
0040 TC1 8+64.0 42.5' RT 1 - 1 -	-	
TS2 8+50.0 44.5' RT	1	
TS3 7+34.0 36.0' RT	1	
TS4 205+44.7 40.0' LT	- EXISTING	
TS5 8+60.5 28.5' LT 1	-	
SL1 8+74.0 42.2' RT 1 - 1 -	-	
SL4136A 6+44.0 23.5' LT - 1	-	
SL4137A 7+77.0 29.3' LT 1	-	
SL4138A 203+83.0 23.4' LT - 1	-	
SL4140A 205+73.1 23.5' RT 1 1	-	
SL4140-1A 204+72.0 28.1' RT - 1	-	
SL4141A 9+16.0 5.0' RT - 1	-	
UNDISTRIBUTED 1	-	
PROJECT 5992-09-69 TOTALS 1 4 2 2 1	2	
PROJECT 5992-09-71		
0010 SB1 10+90.0 32.5' LT	1	
SL4142A 10+67.0 5.0' RT - 1	-	
SL4142-1A 11+89.0 28.0' LT - 1	-	
PROJECT 5992-09-71 TOTALS 0 2 0 0 0	1	
OVERALL PROJECT TOTALS 1 6 2 2 1	3	

			ELECTRICA	L PULLBOX			
CATEGORY	STRUCTURE	STATION	LOCATION	(SPV.0060.24) TYPE I EACH	(SPV.0060.25) TYPE III EACH	(SPV.0060.26) TYPE V EACH	NOTES
PROJECT 5992-09-69							
0040	HH1	8+37.0	41.0' RT	-	-	1	
	HH2	204+85.0	29.0' RT	-	-	1	
	HH3	203+74.5	22.7' LT	-	-	-	EXISTING
	HH4	204+14.5	41.0' LT	1	-	-	
	HH5	7+28.0	28.0' RT	-	-	1	
	HH6	7+72.5	26.0' LT	-	-	1	
	HH7	205+76.0	28.0' RT	-	-	1	
	HH8	206+3.5	39.5' RT	1	-	-	
	HH9	9+22.0	32.0' LT	1	-	-	
	HH12	204+7.0	28.0' RT	-	1	-	
	HH13	202+76.0	25.0' RT	-	1	-	
	HH14	6+85.5	29.0' RT	-	1	-	
	HH15	5+77.0	21.5' RT	-	1	-	
	HH16	8+74.0	29.0' LT	-	1	-	
	HH17	5+57.0	22.0' LT	1	-	-	
	HH18	4+22.0	22.0' LT	1	-	-	
	PROJEC1	Г 5992-09-69 Т	OTALS	5	5	5	
PROJECT 5992-09-71							
0010	HH10	10+66.0	31.0' LT	1	-	-	
	HH11	12+39.0	21.5' LT	1	-	-	
	PROJEC1	Г 5992-09-71 Т	OTALS	2	0	0	
	OVERAL	L PROJECT T	OTALS	7	5	5	

TRAFFI	TOR L	OOF

				110/11/10/02		011 2001 0				
CATEGORY	LOOP NO.	STATION	LOCATION	DISTANCE FROM CURB FACE *		CURB FACE REFRENCE **	SIZE	NO. TURNS	(652.0800) CONDUIT LOOP DETECTOR LF	(655.0800) LOOP DETECTOR WIRE LF
PROJECT 5992-09-69										
0040	L01	202+83.0	6.0' LT	29	FT	EAST	6' x 6'	3	56	136
	L11	8+85.5	5.0' LT	22	FT	ISLAND	6' x 6'	3	49	122
	L12	9+00.0	5.0' LT	30	FT	ISLAND	6' x 20'	3	85	222
	L21	6+94.5	6.0' RT	19	FT	SOUTH	6' x 6'	3	46	116
	L22	7+16.0	18.0' RT	25	FT	SOUTH	6' x 6'	3	52	128
	L23	5+83.0	7.0' RT	5	FT	SOUTH	6' x 11'	3	42	118
	L41	204+4.0	6.0' RT	17	FT	EAST	6' x 6'	3	44	112
	L42	204+19.5	14.5' RT	13	FT	EAST	3.5' x 6' QUADRUPOLE	3	35	89
	L43	202+78.5	11.5' RT	10	FT	EAST	6' x 6' DIAMOND	3	37	98
	L44	204+65.0	19.5' RT	16	FT	EAST	6' x 15'	3	61	164
	L61	8+89.0	15.0' LT	15	FT	ISLAND	6' x 6'	3	42	108
	L62	8+81.0	24.5' LT	3	FT	ISLAND	3.5' x 6' QUADRUPOLE	3	25	69
						PROJEC1	5992-09-69 TOTAL	S	574	1,482
PROJECT 5992-09-71										
0010	L63	10+52.0	5.0' LT	21	FT	NORTH	6' x 6'	3	48	120
	L64	10+52.0	15.5' LT	12	FT	NORTH	6' x 6'	3	39	102
						PROJEC1	5992-09-71 TOTAL	S	87	222
						OVERALI	L PROJECT TOTAL	S	661	1,704
*DISTANCE IS NOT TH	E OFFSET F	OR REFERE	NCE ONLY							, -

PLOT NAME :

*DISTANCE IS NOT THE OFFSET, FOR REFERENCE ONLY

**CURBLINE REFERENCE

NORTH = CURB FACE NORTH OF LOOP

SOUTH = CURB FACE SOUTH OF LOOP EAST = CURB FACE EAST OF LOOP

ISLAND = CURB FACE OF ISLAND

PROJECT NO:5992-09-69/71 HWY: MILWAUKEE STREET COUNTY: DANE MISCELLANEOUS QUANTITIES SHEET

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			00110	OIT RIGID NOTWIE	ITTELIO			
CATEGORY	FROM	то	# OF CONDUITS	* (652.0235) SCHEDULE 40 3-INCH LF	* (652.0225) SCHEDULE 40 2-INCH LF	(652.0335) SCHEDULE 80 3-INCH LF	(652.0325) SCHEDULE 80 2-INCH LF	(652.0605) CONDUIT SPECIA 2-INCH LF
PROJECT 5992-09-69								
0040	HH18	HH17	2	140	140	-	-	-
	HH17	SL4136A	1	-	100	-	-	-
	HH17	HH6	1	230	-	-	-	-
	HH15	HH14	1	-	120	-	-	-
	HH14	HH5	1	-	-	50	-	-
	HH5	HH4	2	-	-	80	-	-
	HH4	SL4138A	1	-	45	-	-	-
	HH4	HH3	1	55	-	-	-	-
	HH5	HH6	3	-	-	225	-	-
	HH5	HH2	3	-	-	240	-	-
	HH5	TS3	1	13	-	-	-	-
	HH6	SL4137A	1	12	-	-	-	-
	HH6	HH7	3	-	-	300	-	-
	HH2	HH12	1	-	80	-	-	-
	HH12	HH13	1	-	90	-	-	40
	HH2	SL4140-1	1	15	-	-	-	-
	HH2	HH1	3	75	-	-	-	-
	HH1	TS2	1	15	-	-	-	-
	HH1	TC1	1	25	-	-	-	-
	TC1	SL1	1	15	-	-	-	-
	HH1	SL1	1	35	-	-	-	-
	HH1	HH7	3	-	-	255	-	-
	HH7	SL4140A	1	10	-	-	-	-
	HH7	TS5	1	15	-	-	-	-
	HH7	HH16	1	25	-	-	-	-
	HH7	HH8	3	-	-	70	35	-
	HH8	HH9	3	140	70	-	-	-
	HH9	SL4141A	1	-	-	-	40	-
	PRO	JECT 5992-09-69 TO	TALS	820	645	1,220	75	40
PROJECT 5992-09-71								
0010	HH9	HH10	3	-	-	300	150	-
	HH10	SL4142A	1	-	-	-	40	-
	HH10	SL4142-1A	1	-	125	-	-	-
	HH10	HH11	1	180	-	-	-	-
	PRO	JECT 5992-09-71 TO	TALS	180	125	300	190	0
	OVE	RALL PROJECT TO	TALS	1,000	770	1,520	265	40
*A DOUTIONIAL OLIANITITI	EO EOUND ELG	SEMULEDE						

CONDUIT RIGID NONMETALLIC

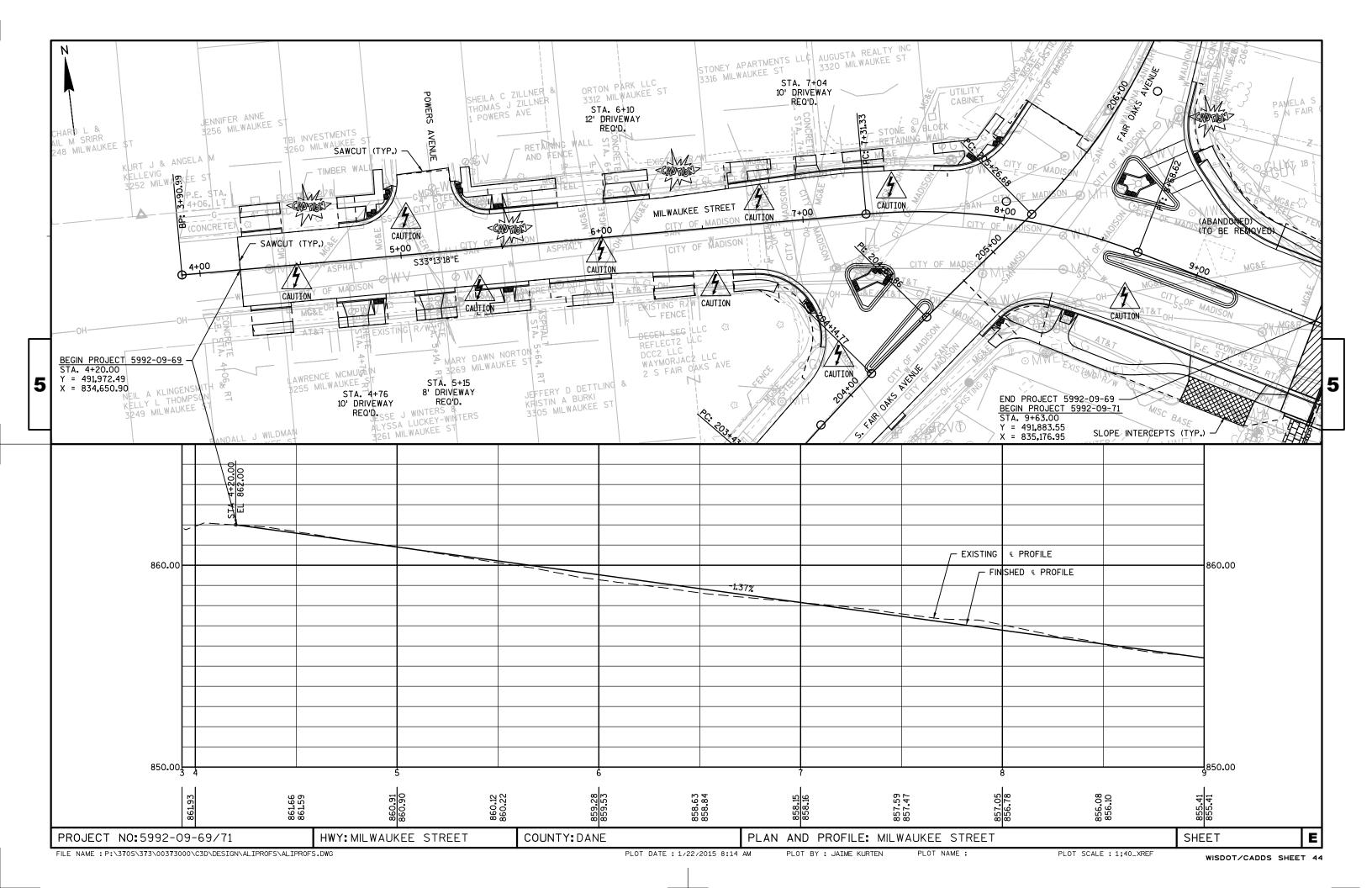
*ADDITIONAL QUANTITIES FOUND ELSEWHERE

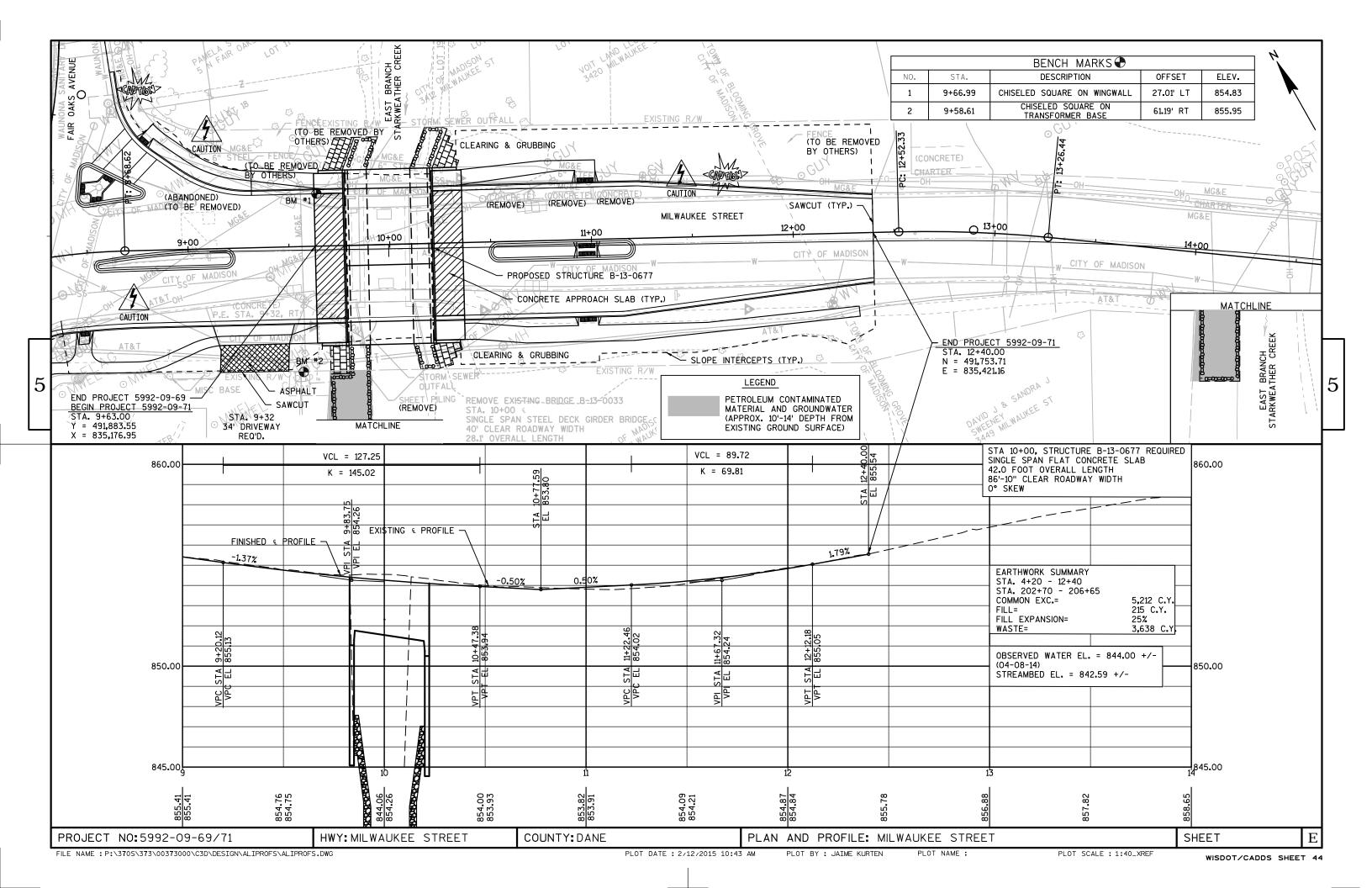
UTILITY LINE OPENING (ULO)

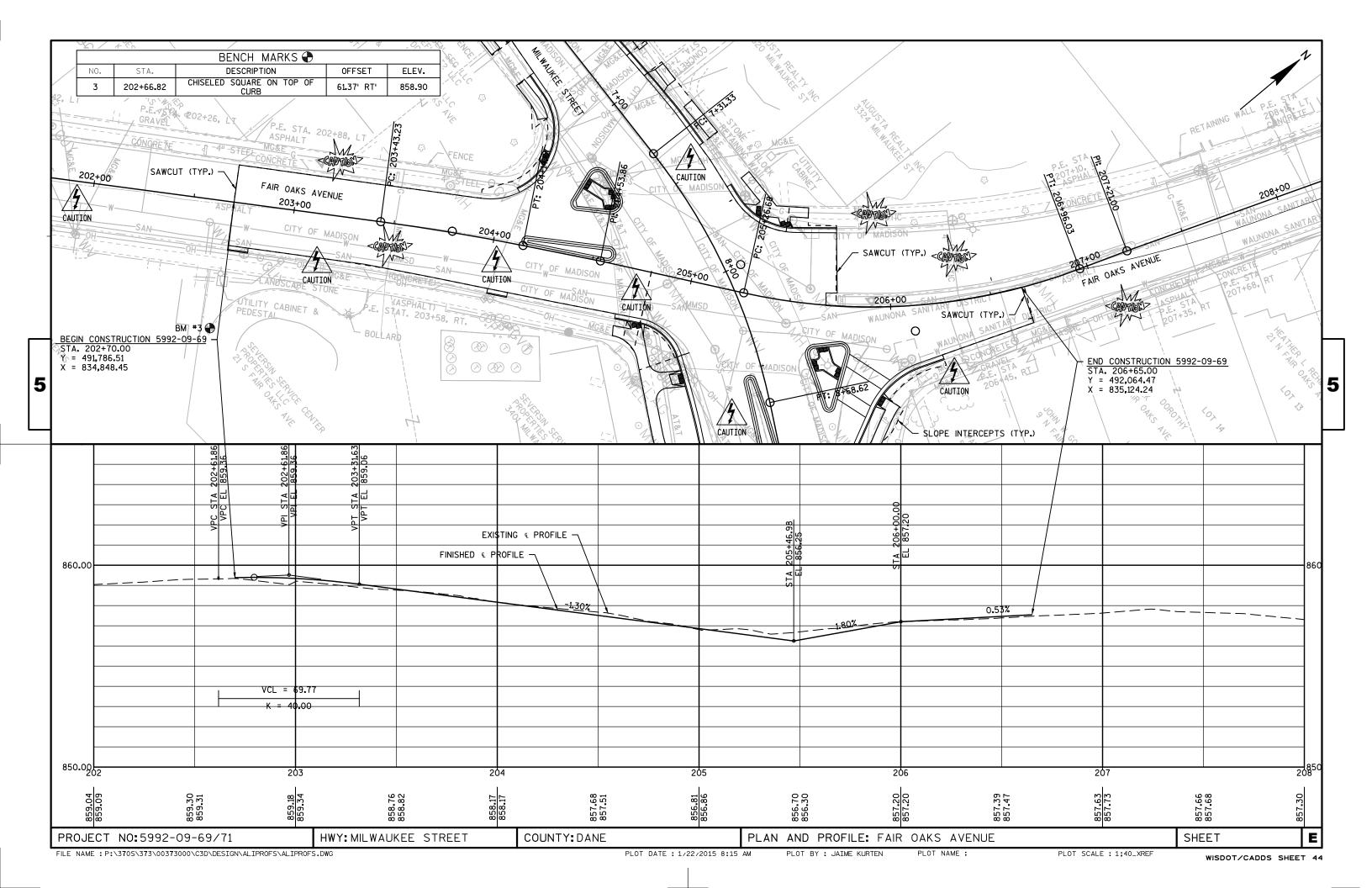
			(SPV.0060.01)	
CATEGORY	STATION	LOCATION	EACH	NOTES
PROJECT 5992-09-69				
0040	7+34	35' RT	1	TELEPHONE
	UNDIS	TRIBUTED	2	-
	PROJECT 59	3		
	OVERALL PI	ROJECT TOTAL	3	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

PLOT BY: Jdolens

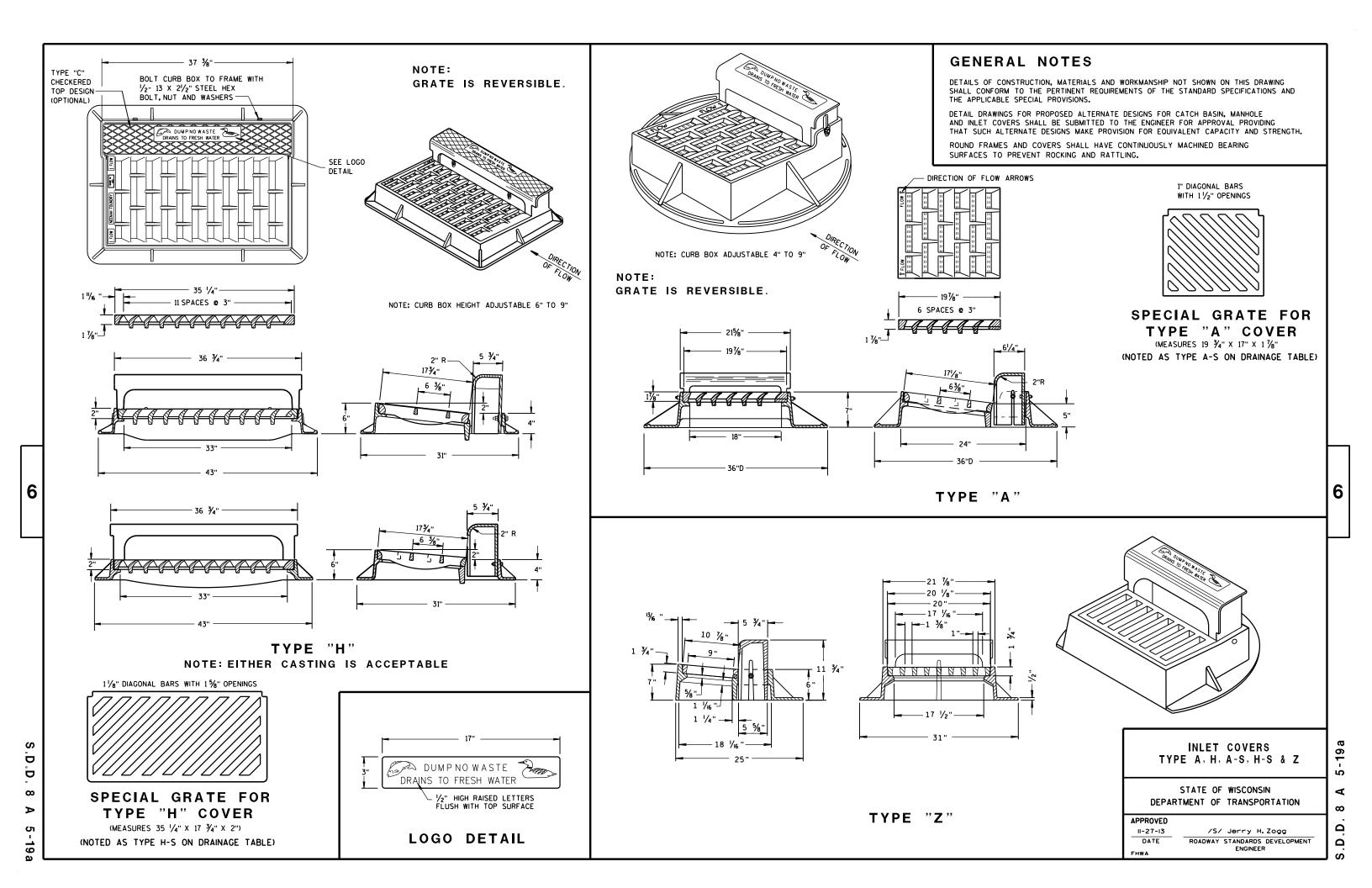






Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08B10-01	MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT
08C06-01	INLETS 3-FT AND 4-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
08E11-02	TURBI DI TY BARRI ER
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-08	CONDUIT UNDER PAVED HIGHWAYS
09C11-05	CONCRETE BASE TYPE 10
09F08-04	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)
11B02-02	CONCRETE MEDI AN NOSE
12A03-10	NAME PLATE (STRUCTURES)
13B02-07A	CONCRETE BRIDGE APPROACH
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	BARRI CADES AND SI GNS FOR SI DEROAD 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)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C29-03A	BI CYCLE LANE MARKI NG
15C29-03B	BI CYCLE LANE MARKI NG
15C29-03C	URBAN BICYCLE LANE MARKING
15C29-03D	URBAN BICYCLE LANE MARKING
15C29-03E	PAVEMENT MARKING FOR BIKE LANES
15C29-03F	PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-02	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE



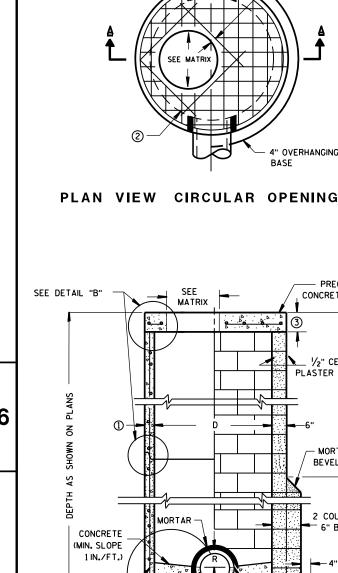






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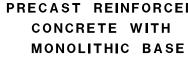
SEE

MORTAR -

MATRIX

• 4° • •

PRECAST REINFORCED — CONCRETE FLAT SLAB TOP



②-

CONTRACTOR TO PROVIDE DRAWING(S)

STAMPED BY A PROFESSIONAL ENGINEER

SEE DETAIL "A"

(I)·

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

2" (TYP)

" OVERHANGING

- PRECAST REINFORCED

CONCRETE FLAT SLAB TOP

1/2" CEMENT

- MORTAR

BEVEL 45°

2 COURSES 으는

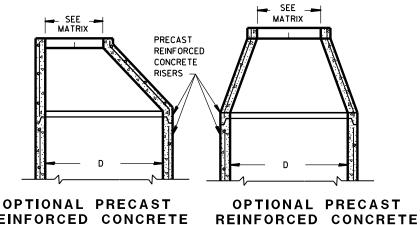
12'. EPT

6" BLOCK

4" MIN

SPLIT PIPE OR FORM CONCRETE TO FIT

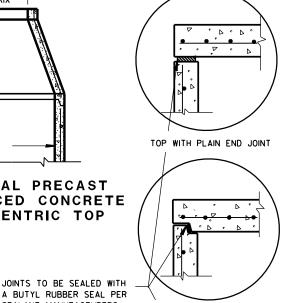
PLASTER COAT



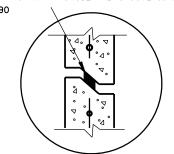
REINFORCED CONCRETE **ECCENTRIC TOP** CONCENTRIC TOP

PRECAST

WALL

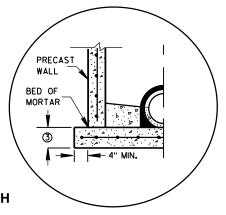


A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS TOP WITH TONGUE AND GROOVE JOINT RECOMMENDATIONS CONFORMING TO ASTM C990



RISER WITH TONGUE AND GROOVE JOINT

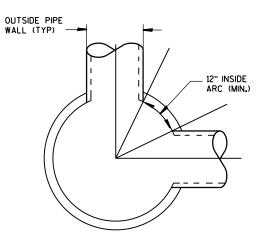
DETAIL "B"



PRECAST REINFORCED

CONCRETE WITH INTEGRAL BASE OPTION

SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION DETAIL "A"



DETAIL "C"

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

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

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 1/2" 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".

- 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

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	С	ALL J'S	К	L	M
OPENING SIZE (FT)					
2 DIA.	х	х		х	
3 DIA.			×		Х

PIPE MATRIX

MANHOLE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES								
SIZE	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	/S/ Jerry H.Zogg
DATE	ROADWAY STANDARDS DEVELOPMENT
FHWA	ENGINEER

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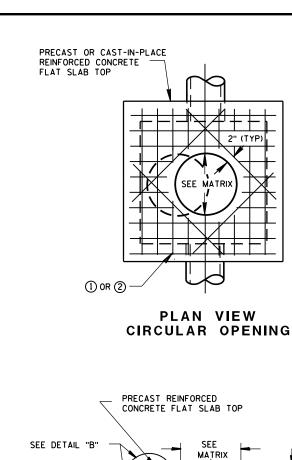


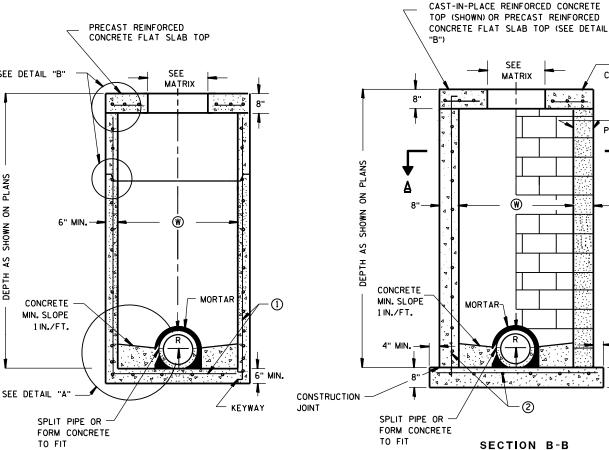
PRECAST REINFORCED

CONCRETE WITH

MONOLITHIC BASE

6





PRECAST REINFORCED

CONCRETE WITH

INTEGRAL BASE

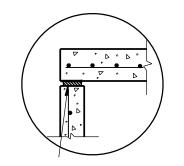
SECTION A-A

PLAN VIEW

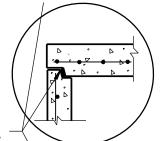
CAST-IN-PLACE CONCRETE BLOCK WITH REINFORCED CAST-IN-PLACE OR CONCRETE PRECAST REINFORCED CONCRETE BASE

SQUARE MANHOLES W/ FLAT TOP

MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT



TOP WITH PLAIN END JOINT



JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS TOP WITH TONGUE AND GROOVE JOINT RECOMMENDATIONS CONFORMING TO ASTM C 990

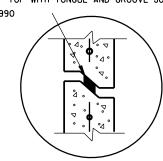
4" OVERHANGING BASE

(TYP)

1/2" CEMENT PLASTER COAT

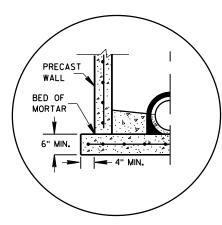
- PRECAST REINFORCED

CONCRETE FLAT SLAB TOP



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

GENERAL NOTES

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

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

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 FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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 $\frac{1}{2}$ INCH 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 WIDTH.

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 ASTM C 913.

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.

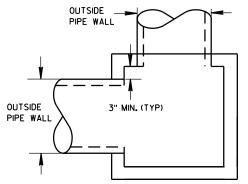
MAXIMUM PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "C". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

- (1) FOR PRECAST MANHOLES 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.

MANHOLE COVER OPENING MATRIX

PIPE MATRIX

MANHOLE COVER TYPE	С	ALL J'S	К	L	М
OPENING SIZE (FT)					
2 DIA.	Х	×		Х	
3 DIA.			Х		Х



MANHOLE	MAXIMUM INSIDE PIPE DIAMETER							
SIZE	WIDTH (W) (IN)	LENGTH (IN)						
3x3-FT	24	24						
4X4-FT	30	30						
5X5-FT	42	42						
6X6-FT	54	54						

MANHOLES 3X3-FT, 4X4-FT 5X5-FT AND 6X6-FT

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

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

DETAIL "C"

1/2" CEMENT

CONCRETE

(MIN. SLOPE 1 IN. /FT.)

CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER

FOR STEEL REINFORCING DESIGN

CONCRETE BLOCK

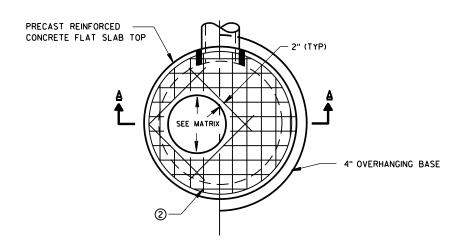
OR PRECAST REINFORCED

CONCRETE BASE 2

WITH CAST-IN-PLACE

FOR CAST-IN-PLACE STRUCTURES

PLASTER COAT

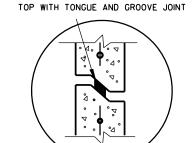


PLAN VIEW CIRCULAR OPENING

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP) PRECAST DISCHARGE WALL TOP WITH PLAIN END JOINT



DISCHARGE PRECAST RED OF MORTAR



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

RISER WITH TONGUE AND GROOVE JOINT

DETAIL "A"

DETAIL "B"

INLETS 3-FT AND 4-FT DIAMETER

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

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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.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

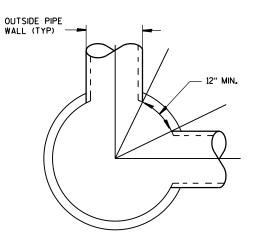
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.
- (2) FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	С	F	ALL H'S	S	T	٧	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				×							х
	2X2	х	х					х		х		
4-FT	2 DIA.				х							х
	2X2	х	x					х		х		
	2X2.5			Х				х	х	х	Х	
	2X3						х					
	2.5X3					Х						



DETAIL "C"

PIPE MATRIX

INLET	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES								
SIZE	180° SEPARATION (IN)	90° SEPARATION (IN)							
3-FT	15	12							
4-FT	24	18							

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012 /S/ Jerry H. Zogg DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER FHW4

SEE DETAIL "A"

8 (1)

PRECAST REINFORCED

MONOLITHIC BASE

CONCRETE WITH

DISCHARGE PIPE

SECTION A-A

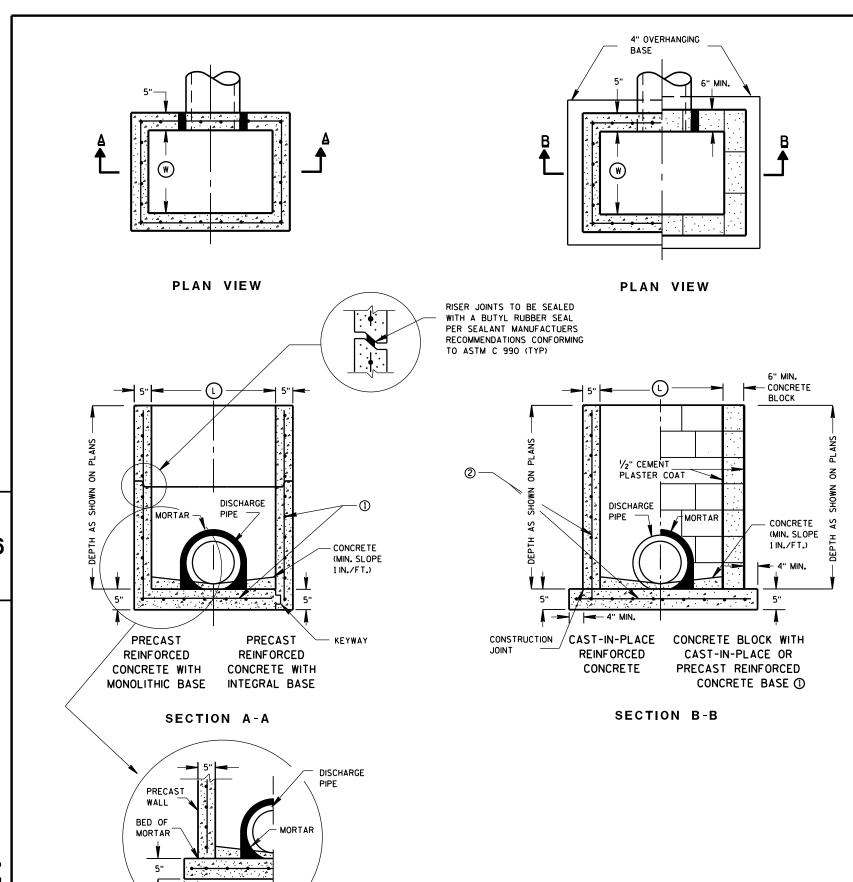
CIRCULAR INLETS W/ FLAT TOP

MORTAR

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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.

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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.

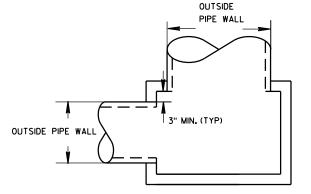
- 1) FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- (2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

	INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	s	т	v	WM
		WIDTH (W) (FT)	LENGTH (L) (FT)									
	2X2-FT	2	2	X	х				Х		Х	
ſ	2X2.5-FT	2	2.5			Х			Х	Х	Х	Х
[2X3-FT	2	3					Х				
	2.5X3-FT	2.5	3				Х					

PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER								
INLET SIZE	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

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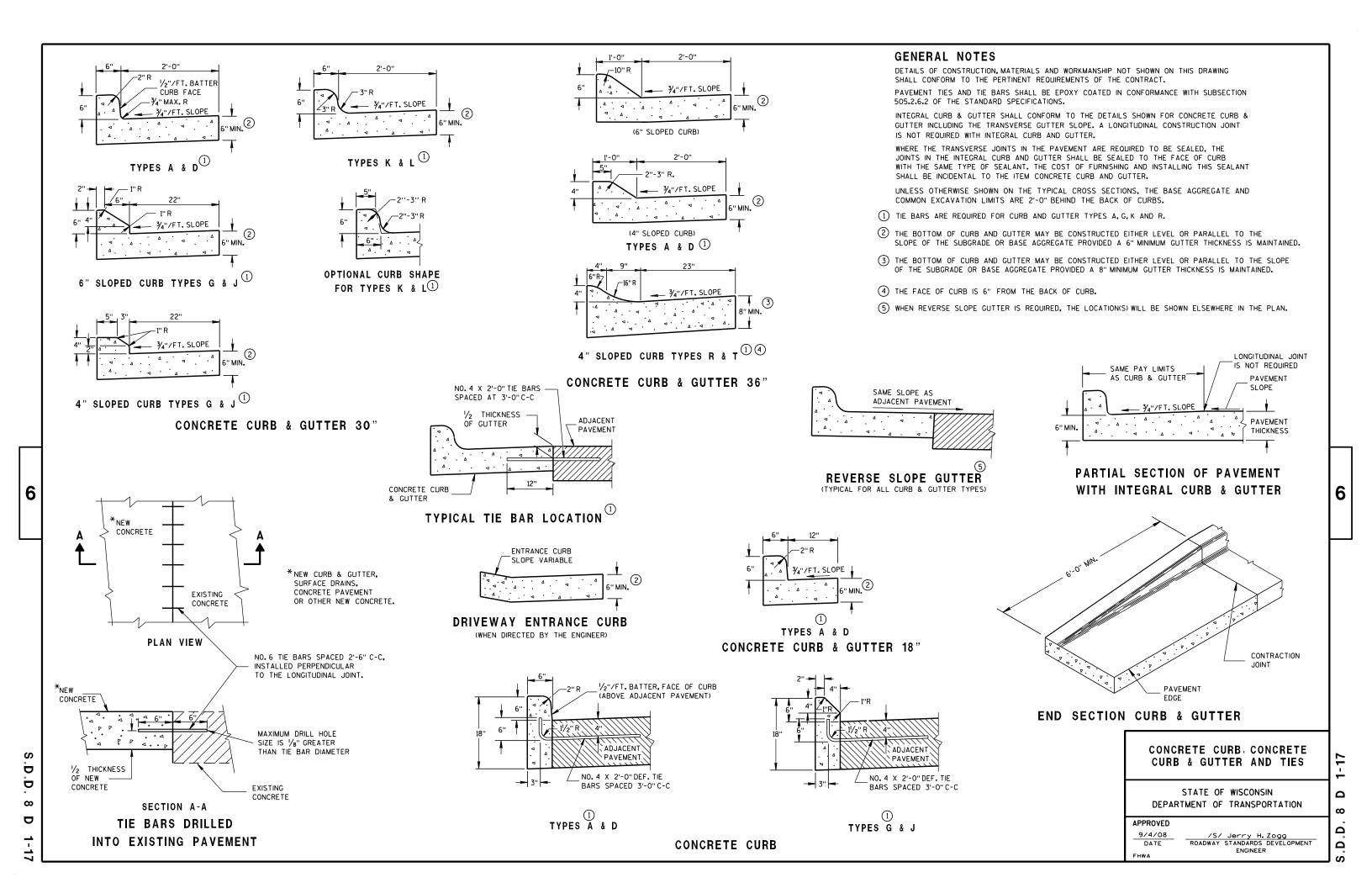
/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT

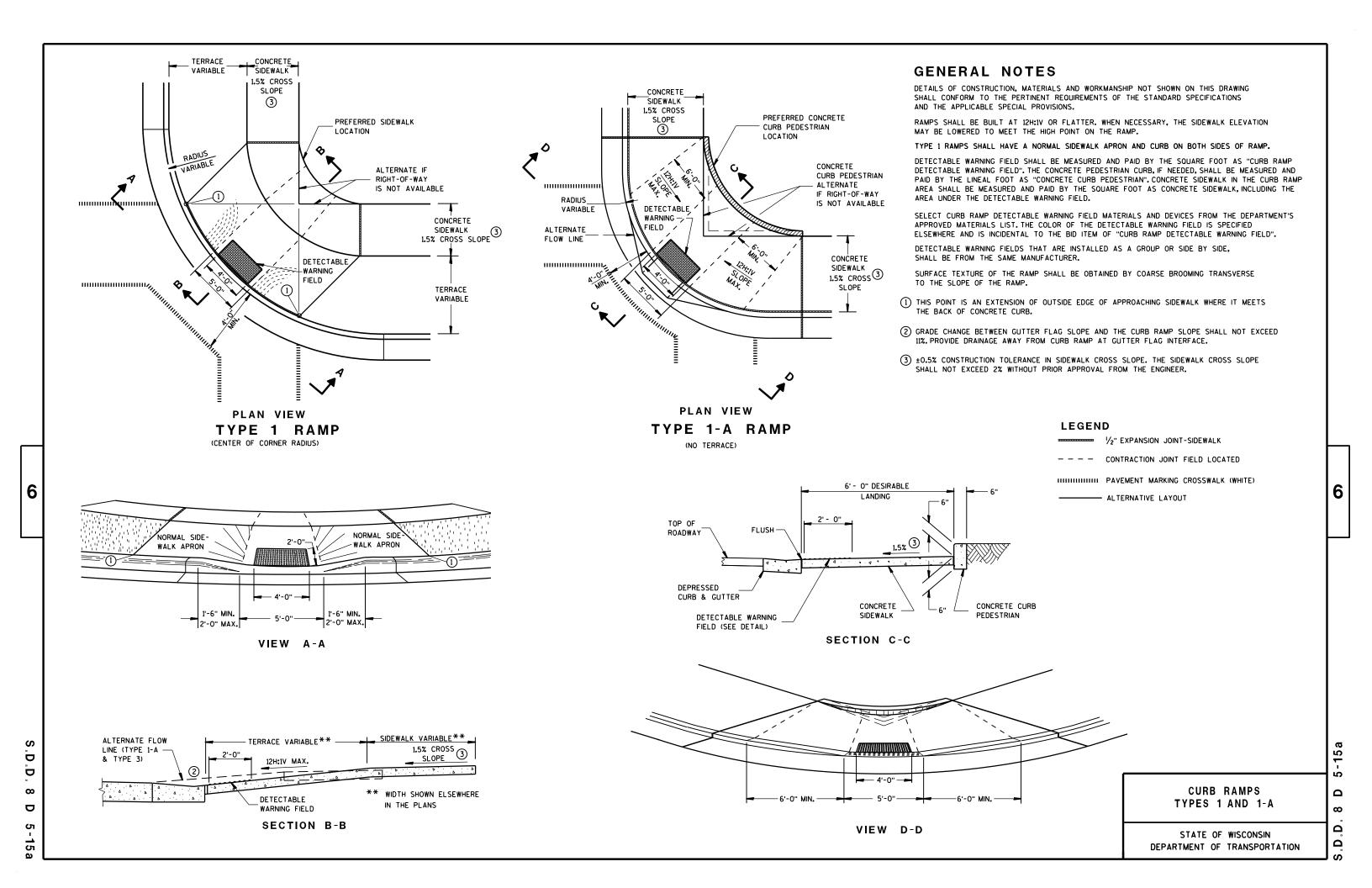
ENGINEER

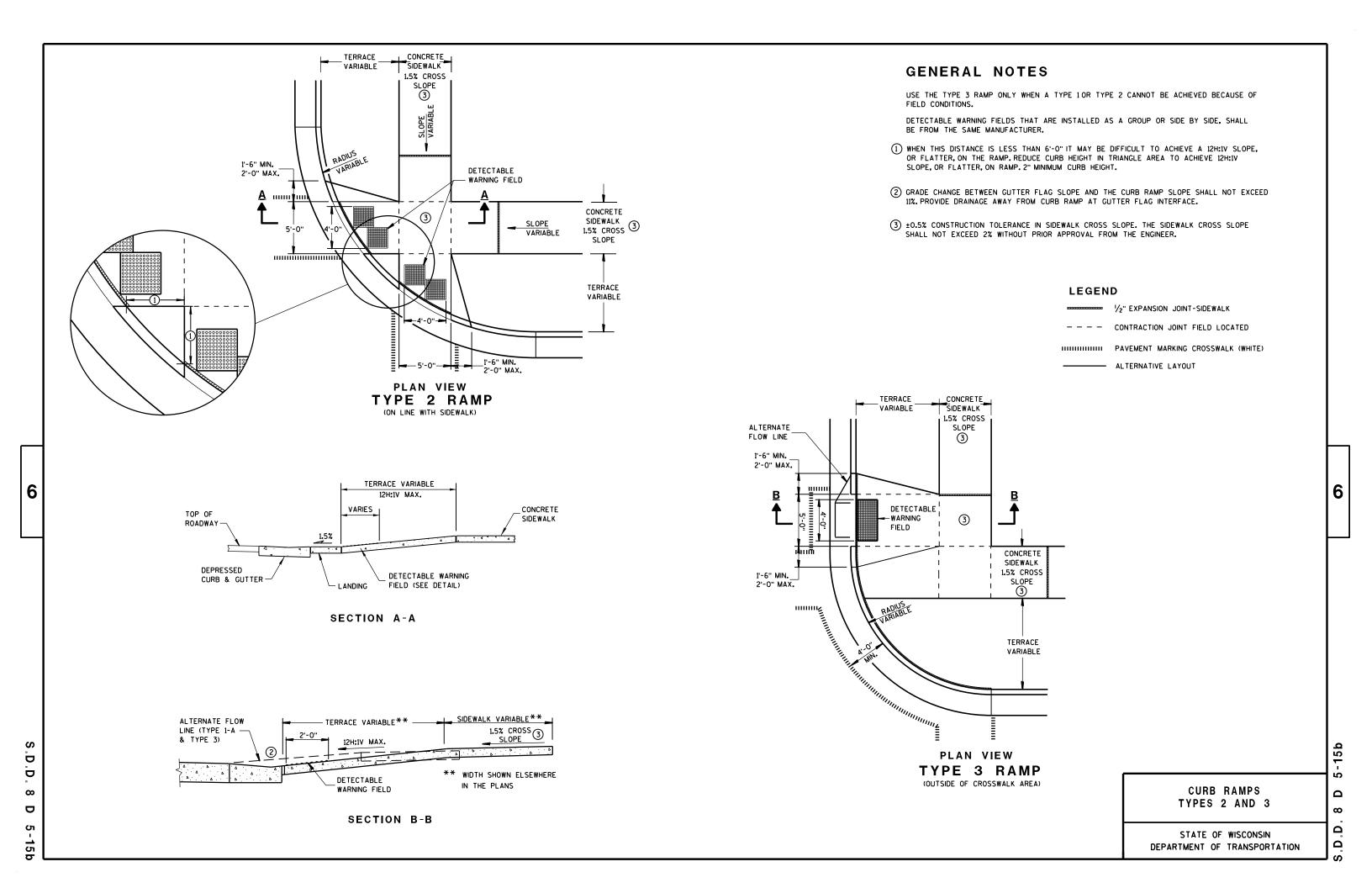
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

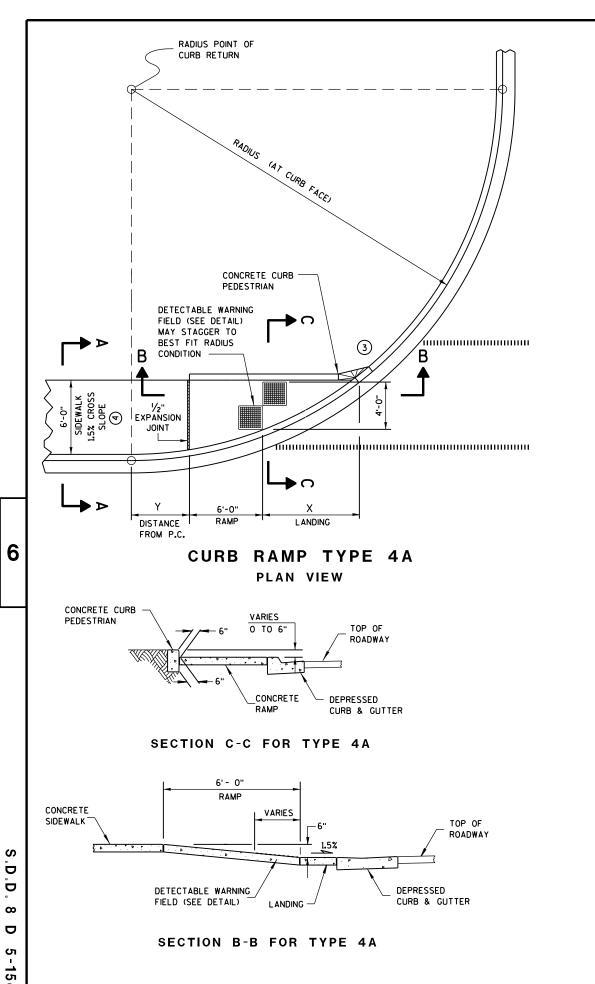
SEPARATE PRECAST REINFORCED

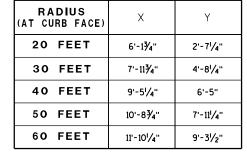
CONCRETE BASE OPTION











GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE.

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

ISOMETRIC VIEW FOR TYPE 4A1

₩ 1/2" EXPANSION JOINT-SIDEWALK

HIHIHIHIH PAVEMENT MARKING CROSSWALK (WHITE)

CONTRACTION JOINT FIELD LOCATED

CURB RAMPS

TYPES 4A AND 4A1

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

LEGEND

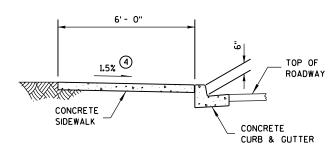
OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

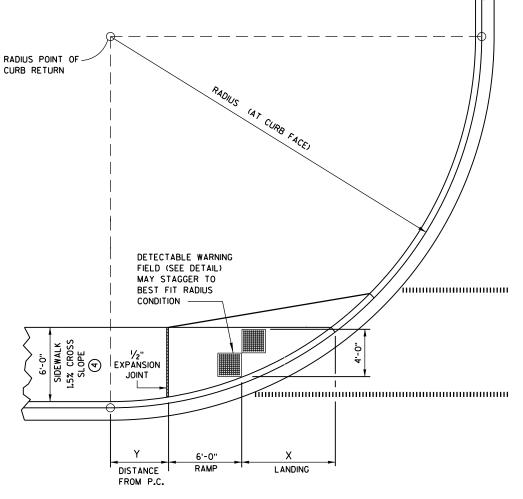
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

SHALL BE FROM THE SAME MANUFACTURER.

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

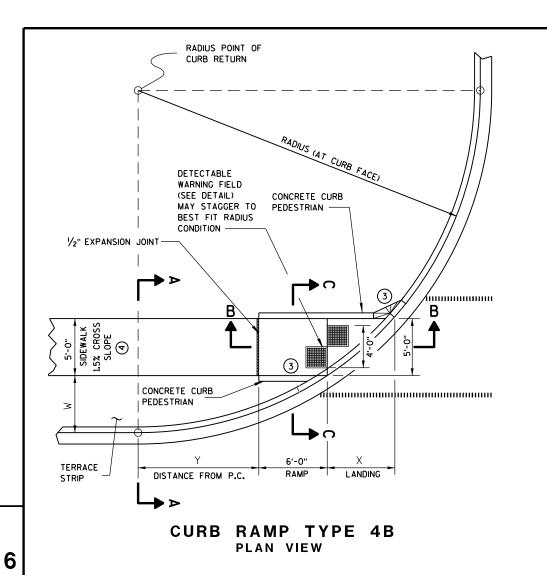


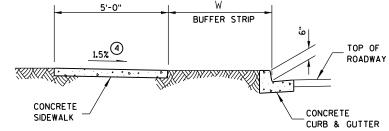
CURB RAMP TYPE 4A1
PLAN VIEW

15c

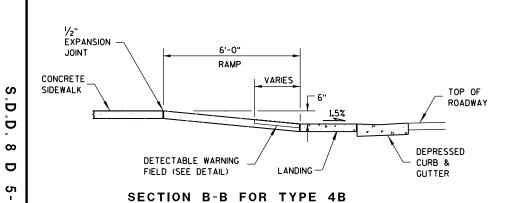
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SECTION A-A FOR TYPE 4B



LEGEND

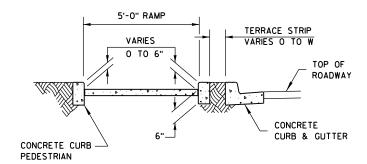
/2" EXPANSION JOINT-SIDEWALK

---- CONTRACTION JOINT FIELD LOCATED

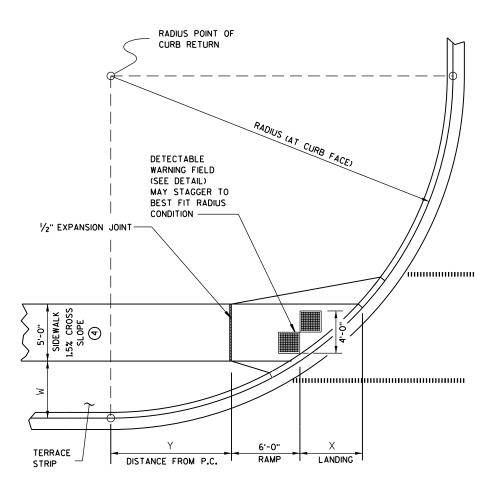
HIHIHIHIH PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS	W =	3' - Ø"	W =	4' - Ø"	W =	5′ - 0"	W =	6′ - Ø"	W =	7' - Ø"
(AT CURB FACE)	X	Y	X	Υ	X	Y	X	Y	X	Y
20 FEET	5'-51/2"	4'-61/2"	4'-81/2"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-31/2"	3'-11/2"	9'-21/2"
30 FEET	7'-3¾"	7'-1"	6'-51/2"	8'-11'/2"	5'-91/4"	10'-7"	5'-21/2"	12'-0"	4'-8¾"	13'-3'/4"
40 FEET	8'-91/2"	9'-21/2"	7'-10"	11'-5'/4"	7'-1"	13'-41/2"	6'-5¾"	15'-¾"	5'-111/2"	16'-7'/4"
50 FEET	10'-¾"	11'-3⁄4''	9'-1/4"	13'-7'/4"	8'-21/2"	15'-91/2"	7'-61/2"	17'-9"	6'-11¾"	19'-6'/4"
60 FEET	11'-21/2"	12'-8¾"	10'-¾"	15'-61/2"	9'-21/4"	17'-11¾"	8'-5¾"	20'-1¾"	7'-101/2"	22'-11/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B



CURB RAMP TYPE 4B1
PLAN VIEW

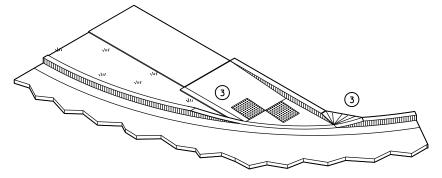
GENERAL NOTES

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

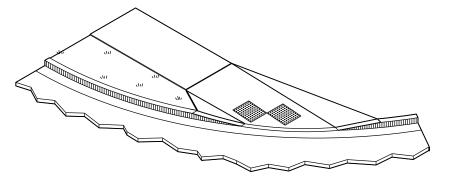
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

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 4B

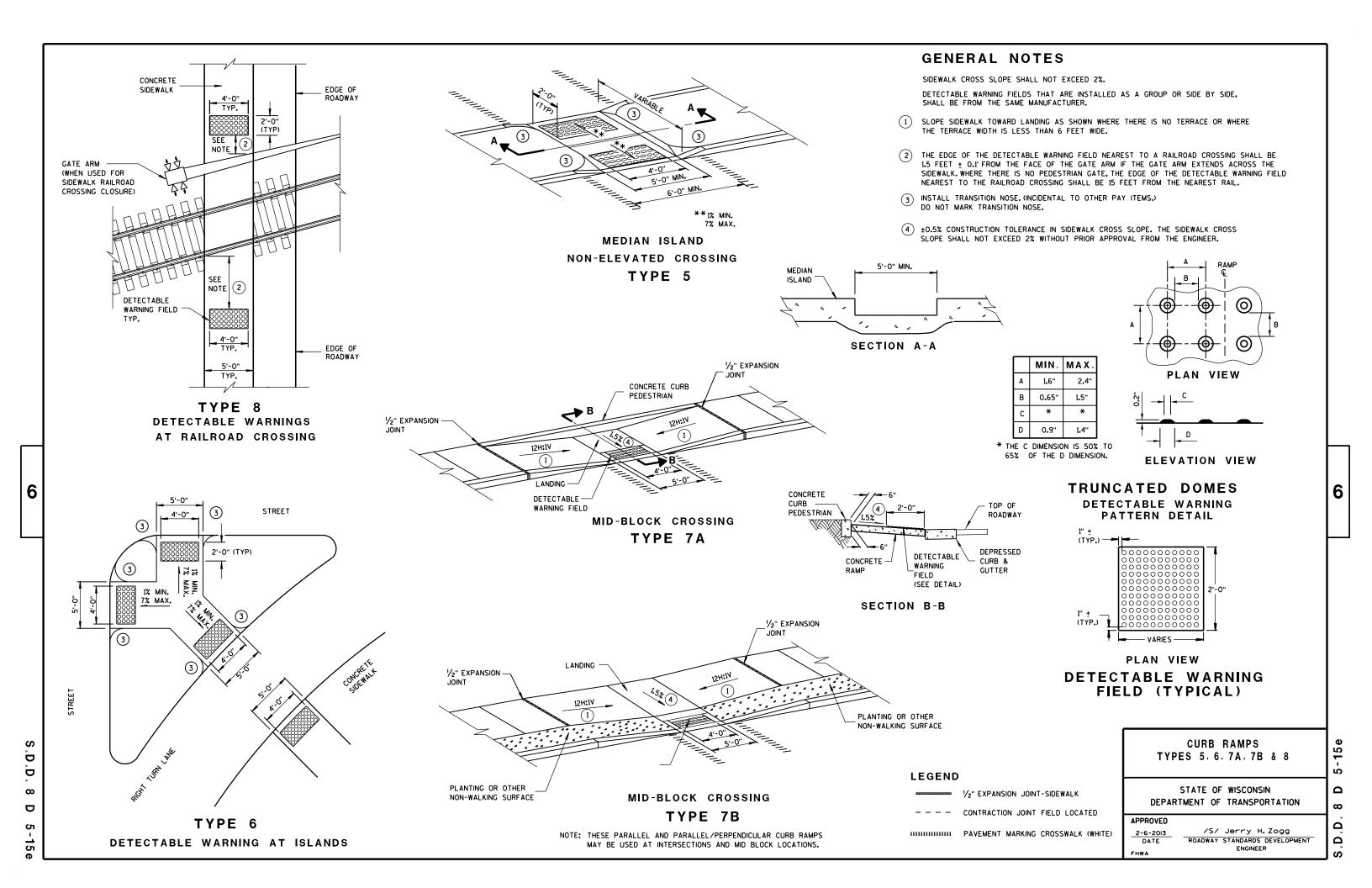


ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS Type 4B and 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

D.D. 8 D 5-15d



TYPICAL APPLICATION OF SILT FENCE

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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 11/8" X 11/8" 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 TIE BACK

(WHEN REQUIRED BY THE ENGINEER)



SILT FENCE

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INLET PROTECTION, TYPE A

GENERAL NOTES

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

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

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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION TYPE A, B, C, AND D

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02

/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER 6

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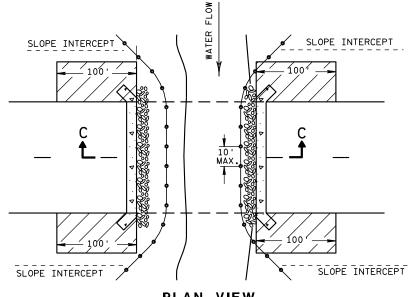
D

GENERAL NOTES

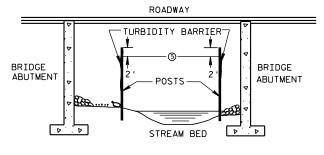
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- ① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- 2 SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- (3) WHEN BARRIER HEIGHT, H. EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.
- (4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- (5) ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.
- (6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.
- (7) ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- (8) USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

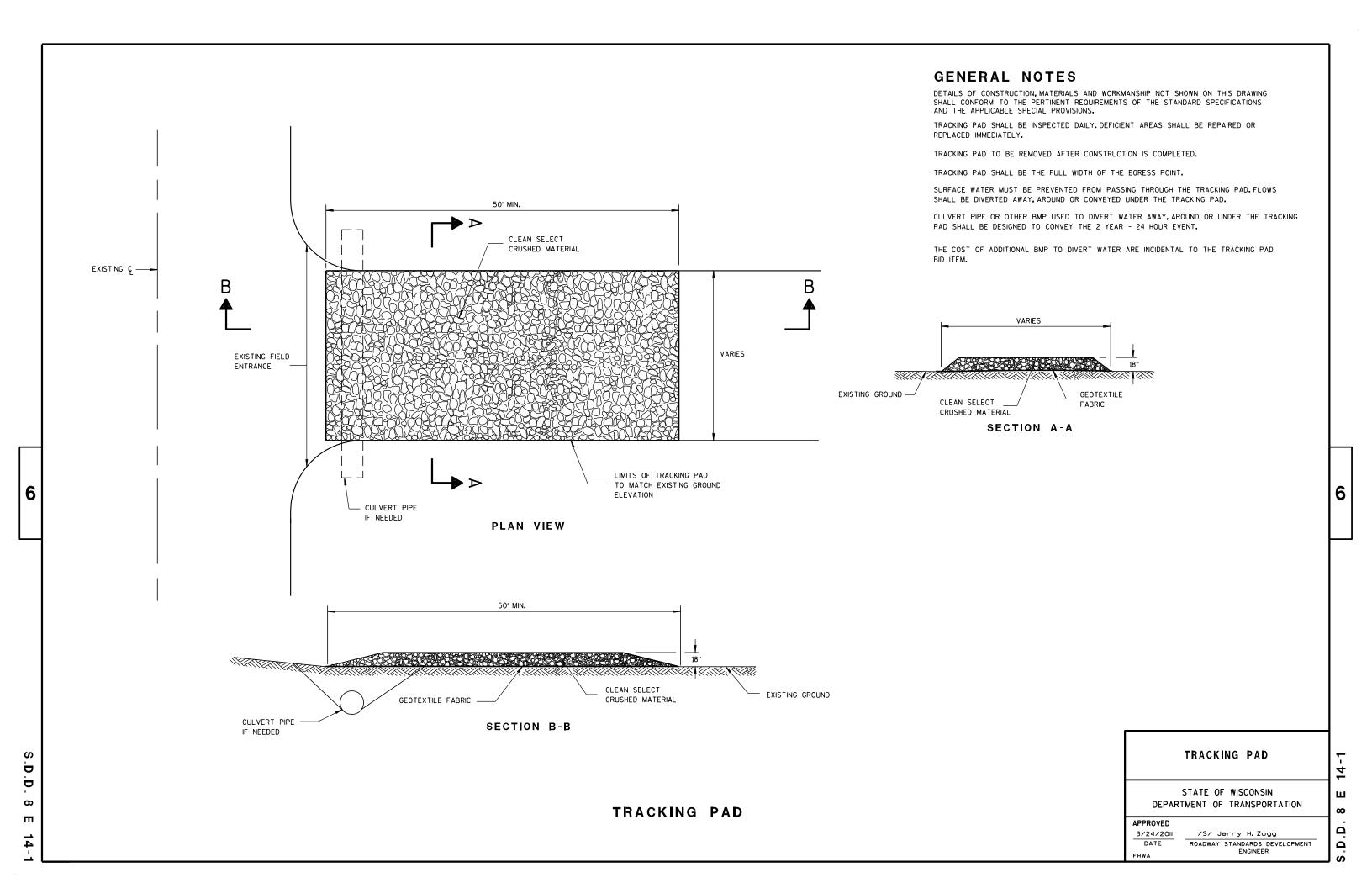
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 /S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

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	METAL APRON ENDWALLS												
PIPE	MIN. 1	THICK.				APPROX.							
DIA.	(Inches)		A	В	Н	L	Lį	L ₂	W	SLOPE	BODY		
(IN.)	STEEL	ALUM.	(±]")	(MAX.)	(±]")	(±1½")	①	0	(±2")				
12	.064	.060	6	6	6	21	12	171/2	24	21/2+o 1	1Pc.		
15	.064	.060	7	8	6	26	14	213/4	30	2½+o 1	1Pc.		
18	.064	.060	8	10	6	31	15	281/4	36	2½+o 1	1Pc.		
21	.064	.060	9	12	6	36	18	29%	42	$2\frac{1}{2}$ to 1	1Pc.		
24	.064	. 075	10	13	6	41	18	371/4	48	$2\frac{1}{2}$ to 1	1Pc.		
30	.079	. 075	12	16	8	51	18	521/4	60	$2\frac{1}{2}$ to 1	1Pc.		
36	.079	. 105	14	19	9	60	24	59¾	72	$2\frac{1}{2}$ to 1	2 Pc.		
42	.109	. 105	16	22	11	69	24	75%	84	$2\frac{1}{2}$ to 1	2 Pc.		
48	.109	.105	18	27	12	78	24	81	90	2 ¹ / ₄ +o 1	3 Pc.		
54	.109	. 105	18	30	12	84	30	851/2	102	21/4+0 1	3 Pc.		
60	.109×	.105×	18	33	12	87	_		114	2 to 1	3 Pc.		
66	.109×	.105×	18	36	12	87	_	_	120	2 to 1	3 Pc.		
72	.109×	.105×	18	39	12	87	_	_	126	2 to 1	3 Pc.		
78	.109×	.105×	18	42	12	87	_	_	132	11/2+0 1	3 Pc.		
84	.109×		18	45	12	87	_	_	138	1/2+0 1	3 Pc.		
90	.109×	.105×	18	37	12	87	_	_	144	11/2+0 1	3 Pc.		
96	.109×	.105×	18	35	12	87	_		150	11/2+0 1	3 Pc.		

* EXCEPT CENTER PANEL

SEE GENERAL NOTES

PLAN VIEW

END VIEW

SIDE ELEVATION

METAL ENDWALLS

SHOULDER

SLOPE

REINFORCED CONCRETE APRON ENDWALLS										
PIPE	DIMENSIONS (Inches)							APPROX.		
DIA.	Т	A	В	С	D	E	G	SLOPE		
12	2	4	24	48 1/8	721/8	24	2	3 to 1		
15	21/4	6	27	46	73	30	21/4	3 to 1		
18	21/2	9	27	46	73	36	21/2	3 to 1		
21	23/4	9	36	371/2	731/2	42	23/4	3 to 1		
24	3	91/2	431/2	30	731/2	48	3	3 to 1		
27	31/4	101/2	$49^{1}/_{2}$	24	731/2	54	31/4	3 to 1		
30	$3\frac{1}{2}$	12	54	193⁄4	731/2	60	31/2	3 to 1		
36	4	15	63	34¾	97¾	72	4	3 to 1		
42	$4\frac{1}{2}$	21	63	35	98	78	41/2	3 to 1		
48	5	24	72	26	98	84	5	3 to 1		
54	51/2		65	* ** 33 ¹ / ₄ -35	* 98 ¹ / ₄ - 100	90	51/2	2% to 1		
60	6	* ** 30-35	60	39	99	96	5	2 to 1		
66	61/2		* ** 72-78	* * * 21-27	99	102	51/2	2 to 1		
72	7	* ** 24-36	78	21	99	108	6	2 to 1		
78	71/2	* ** 24-36	78	21	99	114	61/2	2 to 1		
84	8	36	901/2	21	1111/2	120	61/2	11/2+0 1		
90	81/2	41	871/2	24	1111/2	132	61/2	11/2+0 1		

*MINIMUM

PLAN

END VIEW

END SECTION

GROOVED END ON OUTLET END SECTION TONGUE END ON INLET END SECTION

BAR OR STEEL FABRIC

REINFORCEMENT

LONGITUDINAL SECTION

CONCRETE ENDWALLS

OPTIONAL

1 1/2" R

CULVERT

MEASURED LENGTH

OF CULVERT (TO-

NEAREST FOOT)

DESIGN

REINFORCED

SECTION A-A)

END CORNER PLATES MAY

BE FASTENED TO APRON

THE SURFACES TIGHTLY

TOGETHER

PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD

TOE PLATE (SAME THICKNESS

AND METAL AS APRON) SHALL

BE FURNISHED WHEN CALLED

FOR ON THE PLANS

FDGE (SFE

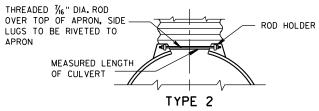
END SECTION CONNECTOR STRAP LUG

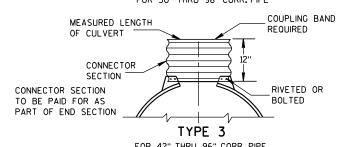
1" WIDE, 12 GA. (0.109"

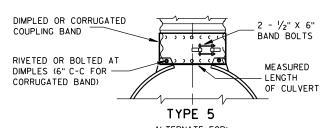
THICK) GALVANIZED STRAP

WITH STANDARD 6" X 1/2" BAND BOLT AND NUT

TYPE 1 FOR 12" THRU 24" CORR. PIPE





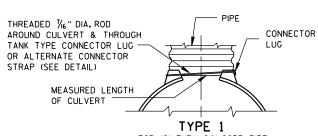


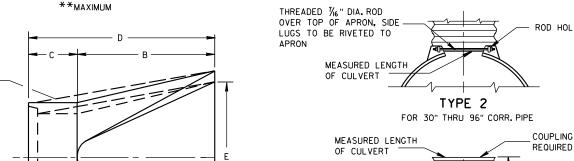
ALTERNATE FOR: ALL SIZES CORRUGATED CIRCULAR PIPE

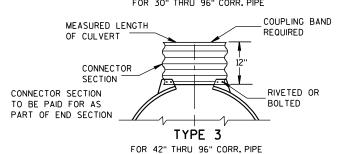
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

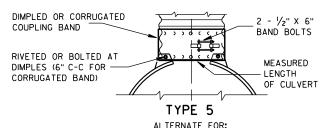
CONNECTION DETAILS 1, 2 OR 5.

ALTERNATE FOR TYPE 1 CONNECTION







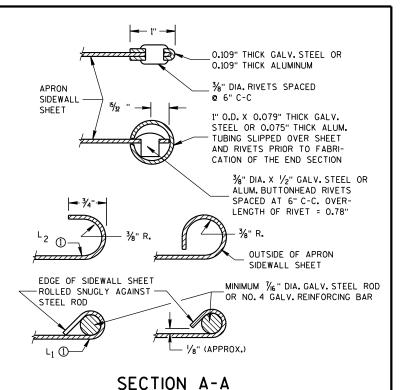


FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5

FOR HELICALLY CORRUGATED PIPE USE ENDWALL

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

CONNECTION DETAILS



GENERAL NOTES

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

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

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

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

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

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

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

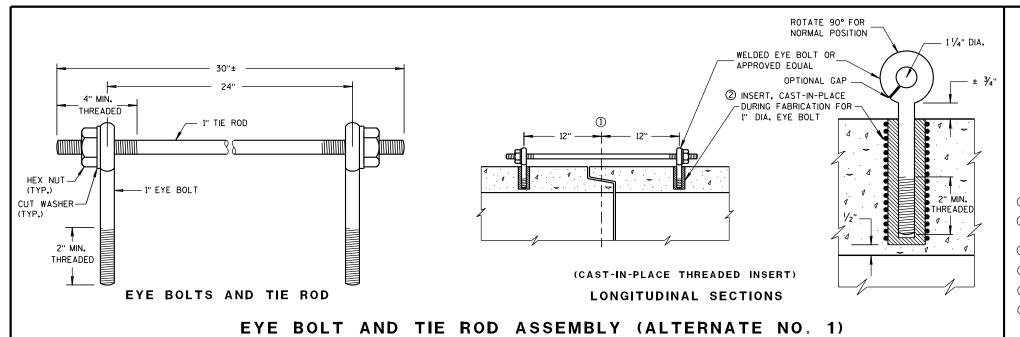
11/30/94 /S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER

END CORNER

1/16" DIA. HOLES FOR

BOLTS OR RIVETS -

12" C-C MAX. SPACING



GENERAL NOTES

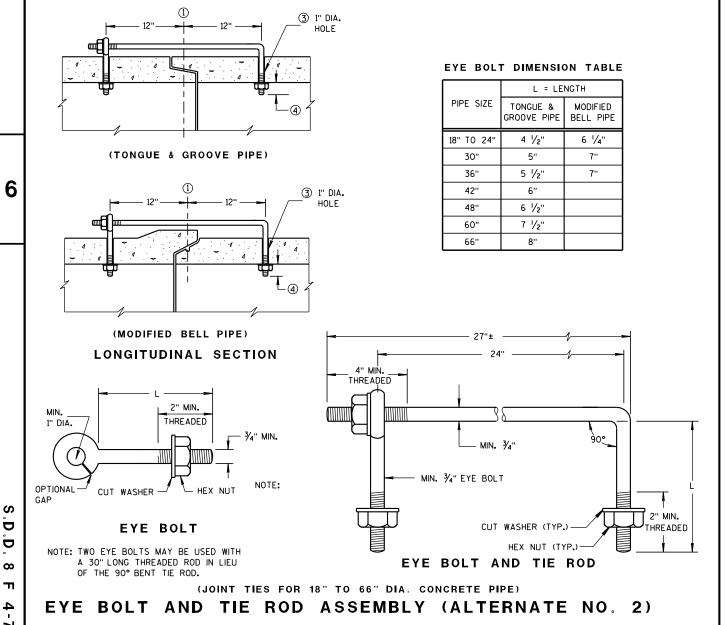
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.

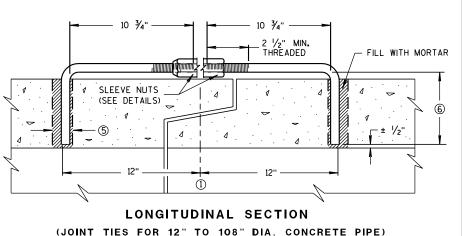
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- (1) & OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE
- ${\mathfrak S}$ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ${\mathfrak L}$ 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 $rac{1}{2}$ INCH OF THE INNER SURFACE OF THE PIPE.

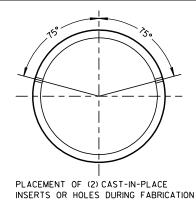


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ADJUSTABLE TIE ROD TABLE 5/8 5 12-60 3/4 5 1/2 3/4 90-108 DIMENSIONS SHOWN ARE IN INCHES **TAPERED** PLAIN RIGHT AND LEFT THREADS **SLEEVE NUTS** 2 1/2" MIN. THREADED

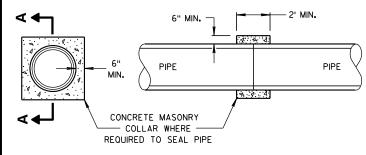


ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

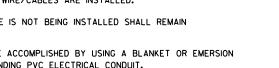
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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

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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 REIN-STALLED 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

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.

BOTTOM OF ¼" HOLE PVC CONDUIT-CONDUIT TRENCH BOTTOM OF METALLIC CONDUIT-FOR DRAINAGE CONDUIT TRENCH 1" DIA. X 6" NIPPLE NO. 2 COARSE NO. 2 COARSE AGGREGATE FILL AGGREGATE FILL I'-0" DIA. OR SQUARE → —1'-0" DIA. OR SQUARE —>

NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS

CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT DRAIN SUMP FOR PVC CONDUIT

NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS

CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

ARROW MARK INSCRIBED IN PAVEMENT SURFACE OVER € OF CONDUIT (BOTH ENDS) — 2'-0"*—* — 2'-0" NORMAL PAVEMENT EDGE OF PAVEMENT THICKNESS PAVEMENT OR BACK OF CURB BASE COURSE **BACKFILL** SLOPE 1/8"/FT. EITHER DIRECTION *DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES CONDUIT, PITCH TO DRAIN WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT UNDER PAVED HIGHWAYS

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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APPROVED Sept. 2014 /S/ Ahmet Demirbilek DATE STATE ELECTRICAL ENGINEER FHWA

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ARROW MARK SHALL BE INSCRIBED IN PAVEMENT SURFACE 1/4" TO 3/8"

DEEP AT EACH LOCATION WHERE CONDUITS ARE PLACED UNDER

PLAN VIEW

ARROW MARK

CONDUIT

THE PAVEMENT

EDGE OF

PAVEMENT OR BACK

OF CURB

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND

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 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

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. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE 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.

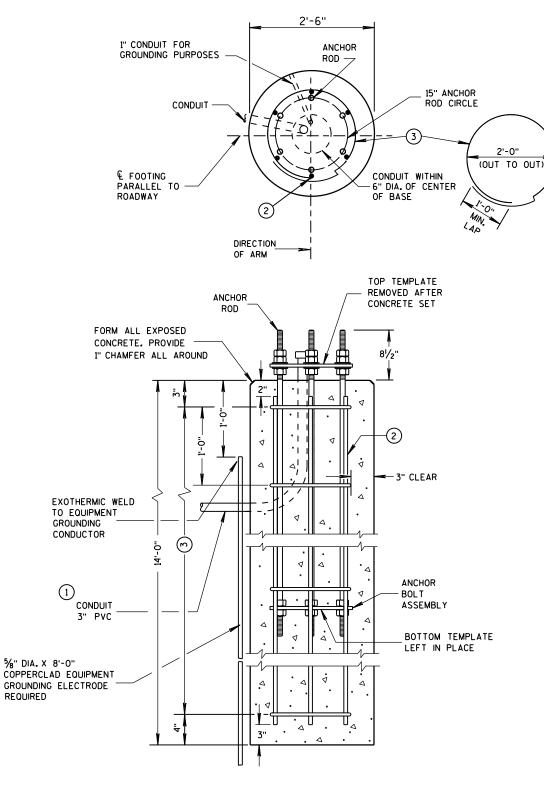
WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS

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

- 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, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.
- (2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.
- (3) (15) NO. 4 X 7'-4" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

CONCRETE MASONRY	fc=3,500 p).S.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000	p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy=55,000	p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000	p.s.i.



CONCRETE BASE TYPE 10 (FOR TYPE 9 & 10 POLES)

TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

€ FOOTING PARALLEL TO-1/2" THICK TEMPLATES ROADWAY 11/2" ANCHOR RODS DIRECTION TOP AND BOTTOM TEMPLATES TOP TEMPLATE REMOVED AFTER CONCRETE SET TOP OF CONCRETE THREAD TOP 81/2" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 51/2" FOR 2 NUTS PER ANCHOR ROD. HOT-DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR RODS (AASHTO M111) AND HOT-DIP NUTS AND WASHERS (AASHTO M232). USE ZINC COATED NUTS MANUFACTURED WITH (6) - 1¹/₂" X 50" SUFFICIENT ALLOWANCE TO ALLOW NUTS ANCHOR RODS TO RUN FREELY ON THE THREADS. BOTTOM TEMPLATE LEFT IN PLACE THREAD BOTTOM OF ANCHOR ROD 51/2" ANCHOR BOLT ASSEMBLY DETAIL

NO MORE THAN 4" BELOW

GRADE ON THE LOWER

SIDE OF BASE

4" MAX.

ANCHOR ROD CIRCLE

DIAMETER = 15"

CONCRETE BASE TYPE 10

TROWEL FINISH

OF CONCRETE

2" MAX.-

- FORM

4" MAX.

FORMING DETAIL

AND LEVEL TOP

FORMING SHALL BE REMOVED AFTER

CONCRETE HAS SET

APPROX. CUBIC 2.5 YARDS OF CONCRETE STATE OF WISCONSIN LBS. OF HOOP 69 DEPARTMENT OF TRANSPORTATION BAR STEEL LBS. OF VERTICAL 122 BAR STEEL

CONCRETE BASE TYPE 10

QUANTITY REQUIREMENTS

ANCHOR ASSEMBLY

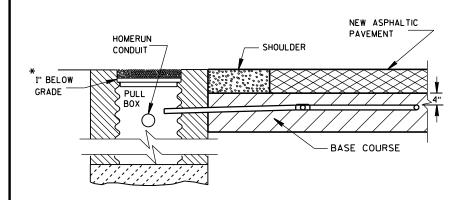
APPROVED /S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER FHWA

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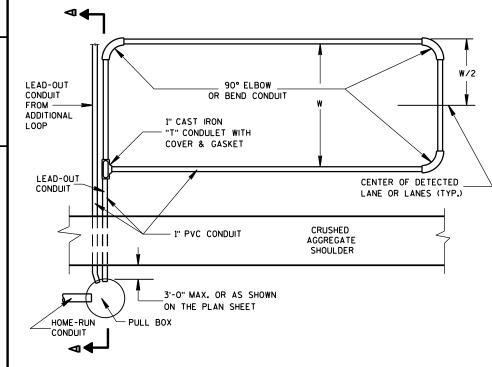
Ö D 9 C



SECTION A-A NO CURB & GUTTER

DETECTOR LOOP INSTALLATION DETAIL

*RECESS PULL 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.



TYPICAL PLAN OF LOOP DETECTOR

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GENERAL NOTES

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

LOOP SIZE, 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 BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER 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 FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

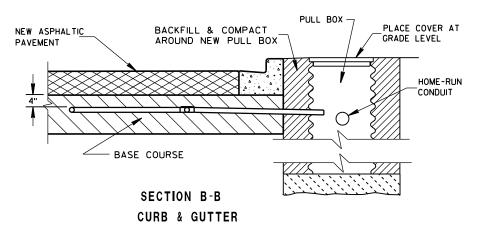
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

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

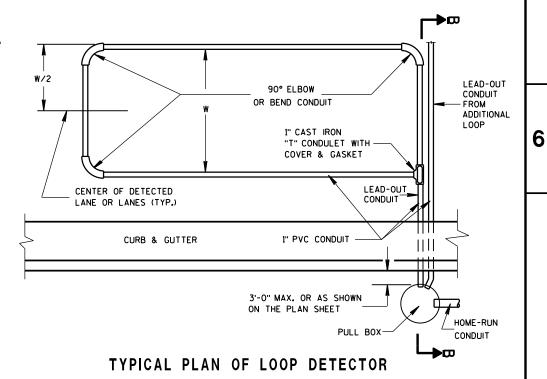
PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC

SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT. THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".



LOOP DETECTOR INSTALLATION DETAIL



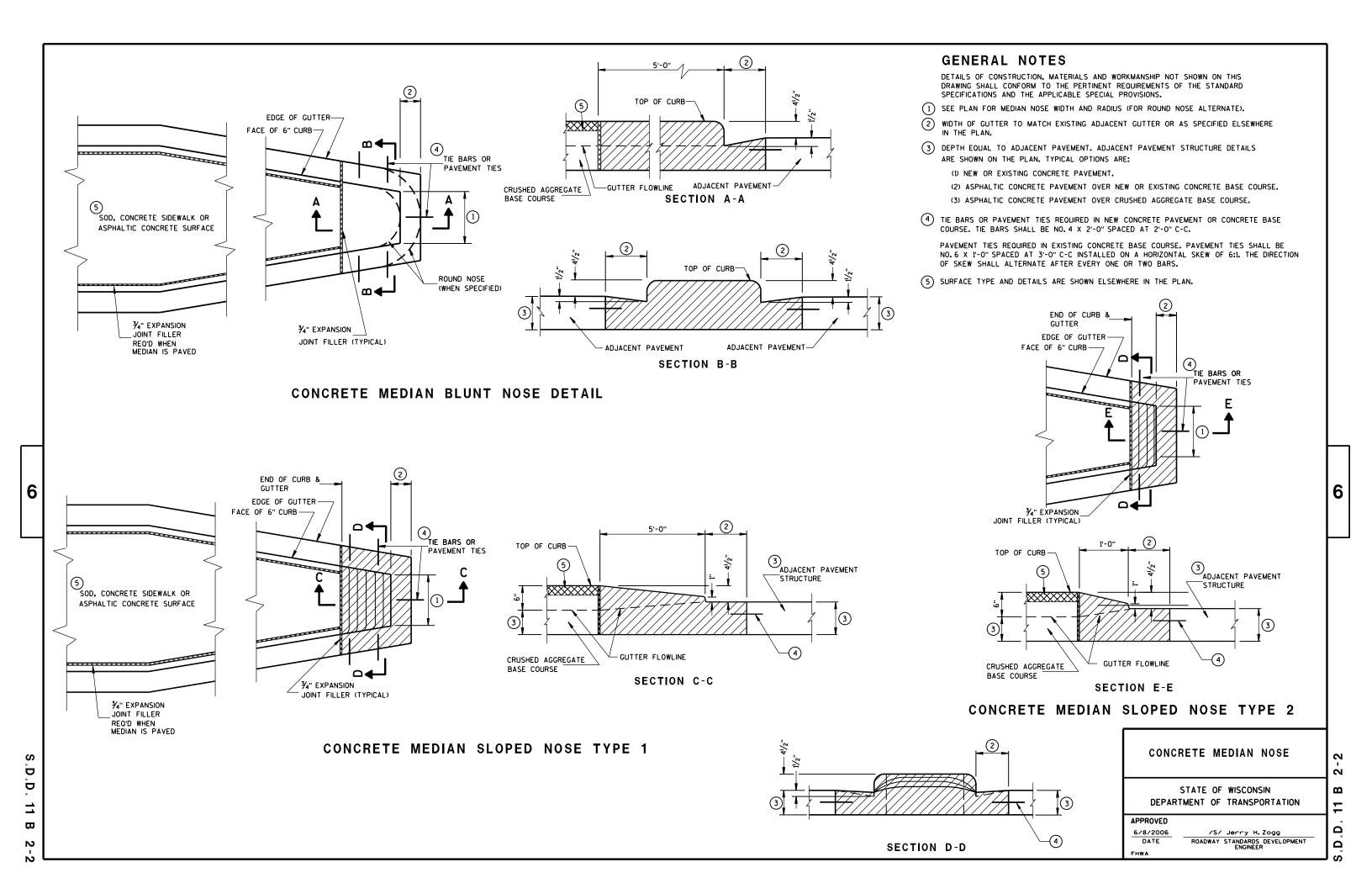
LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

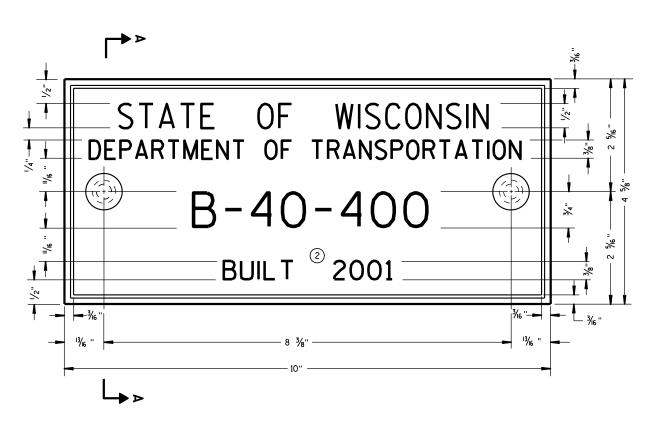
APPROVED Sept. 2014

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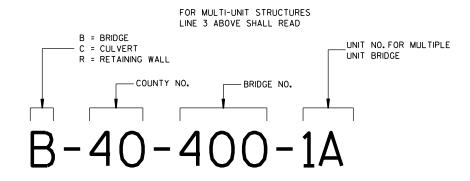






TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



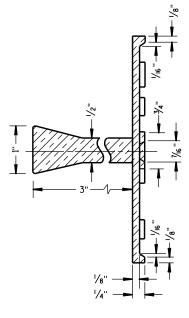
NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

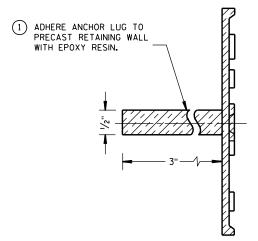
- 1 EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- (2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SPREAD OPEN SO THE TOP OF LUG IS 11/4" WIDE

SECTION A-A

ALTERNATE LUG



ALTERNATE LUG

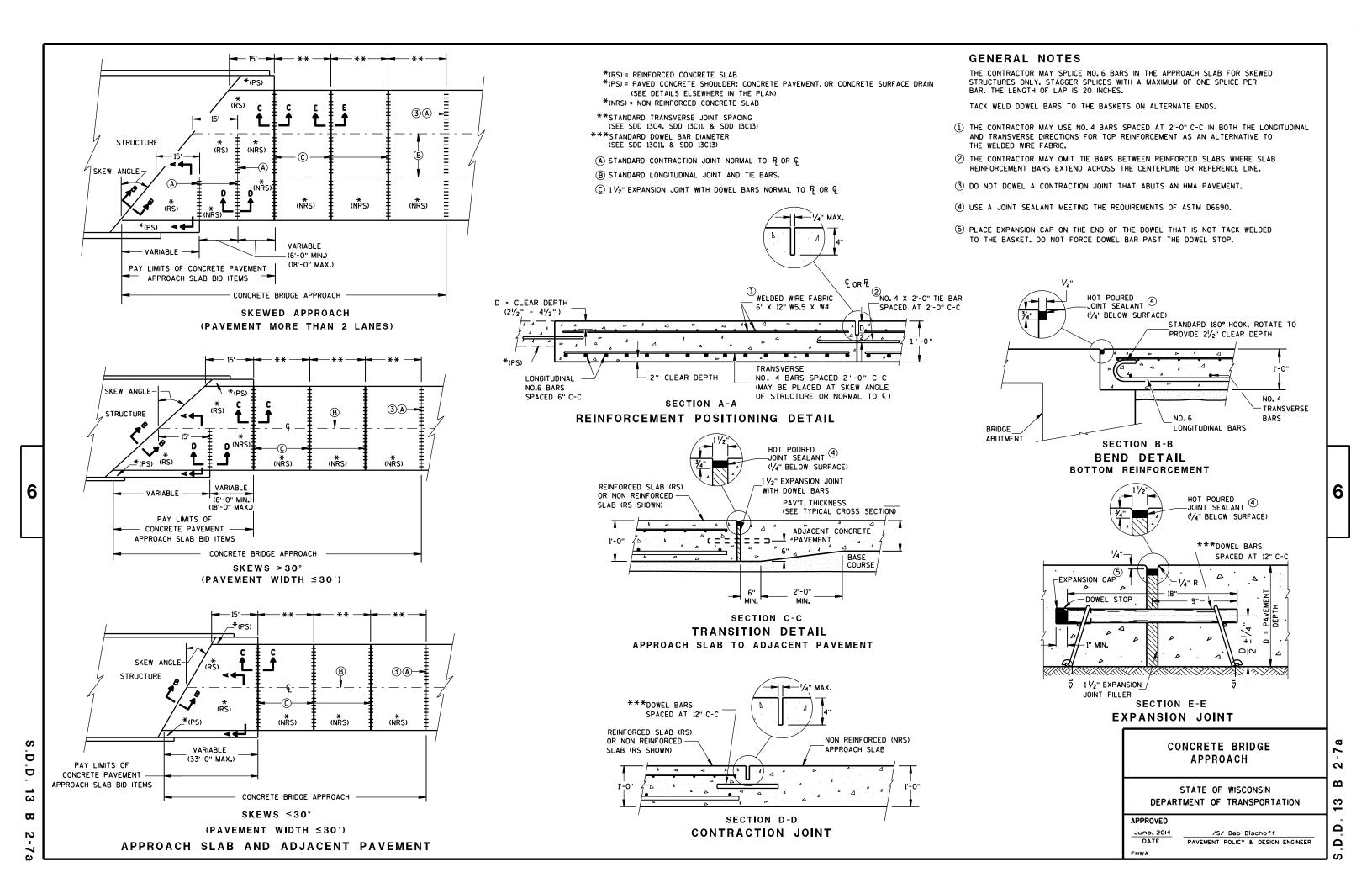
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

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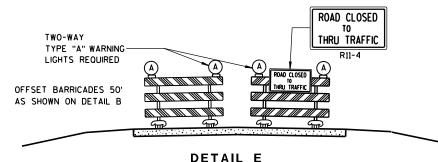




BRIDGE ROAD 1)TWO-WAY **CLOSED** TYPE "A" WARNING LIGHTS REQUIRED OUTSIDE EDGE OF SHOULDER OUTSIDE EDGE OF SHOULDER OR FACE OF CURB OR FACE OF CURB **DETAIL D**

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



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

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.) MO5-1 AND MO6-1 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
- THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 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.
- "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

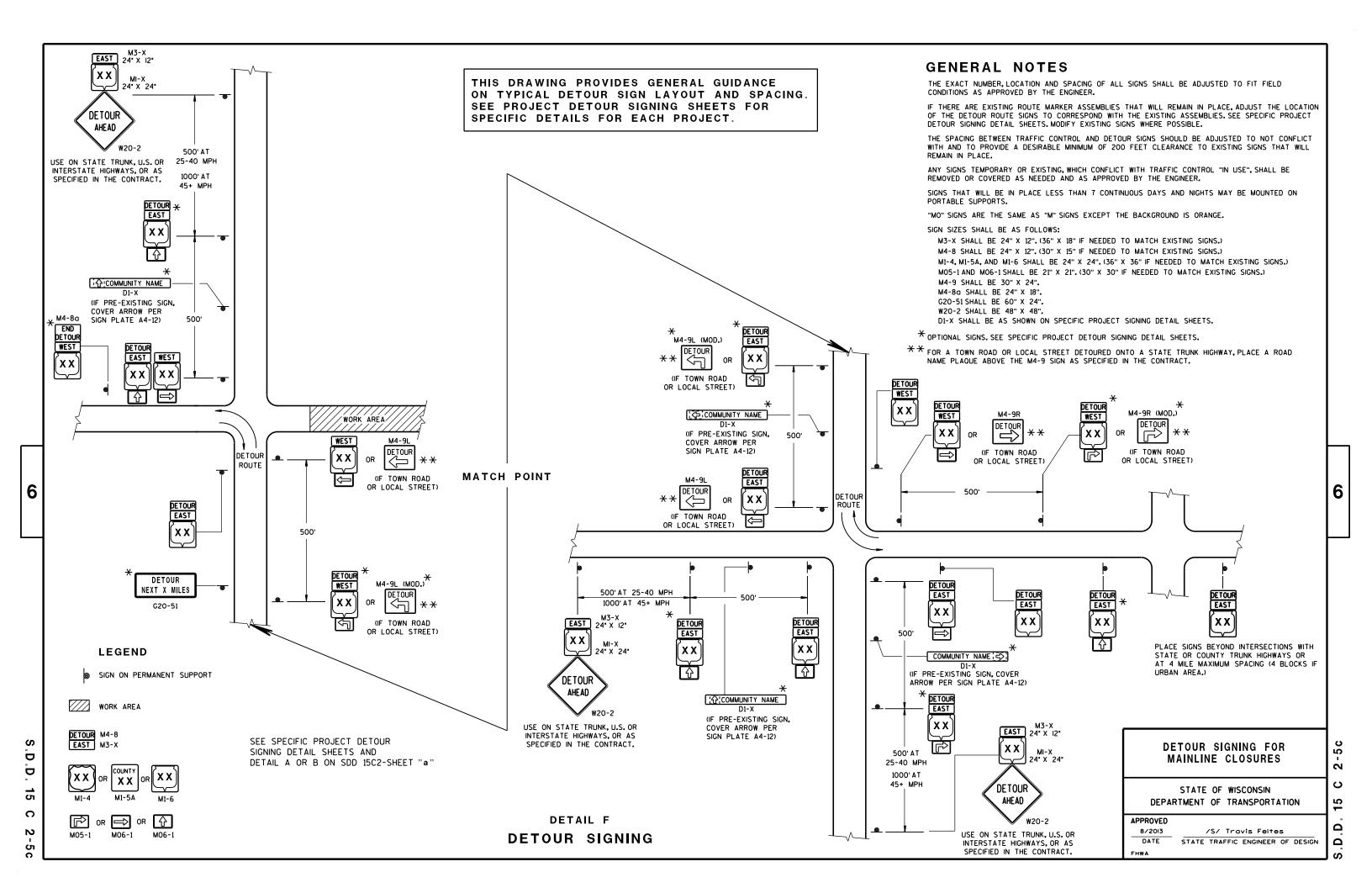
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN

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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:
RI1-2 SHALL BE 48" X 30".
RI1-4 AND RI1-3 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)

//// w

WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 /S/ Travis Feltes

DATE STATE TRAFFIC ENGINEER OF DESIGN

S.D.D. 15 C 3-2

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

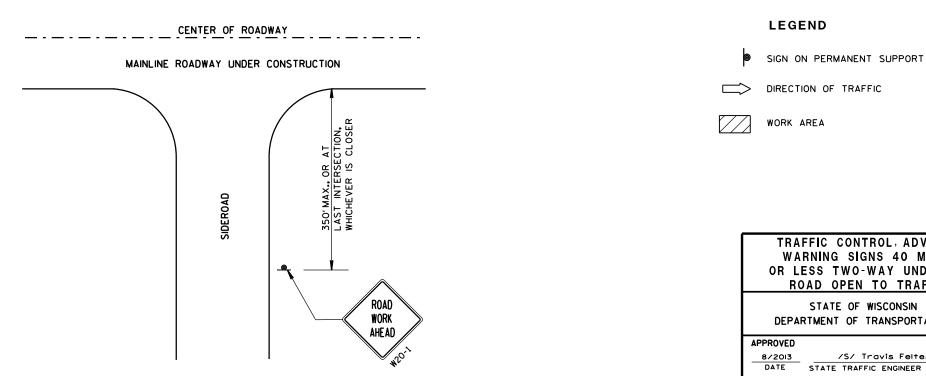
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48"

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.



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

DEPARTMENT OF TRANSPORTATION

/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN

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2

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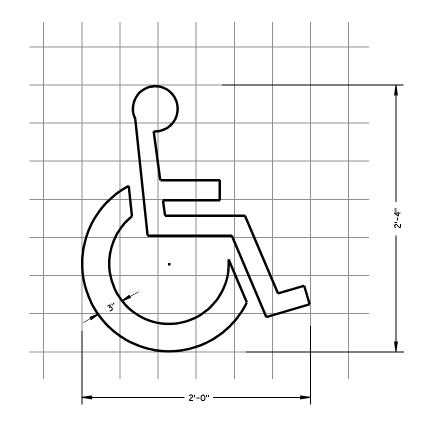
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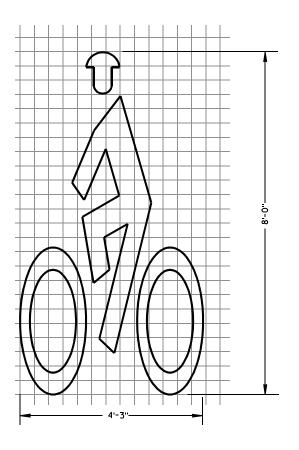
D Ö 15 C

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.

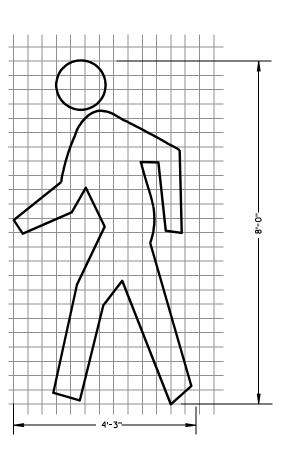
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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

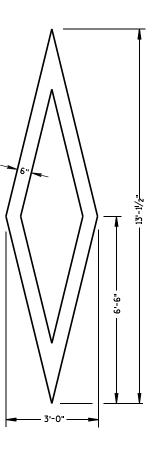




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

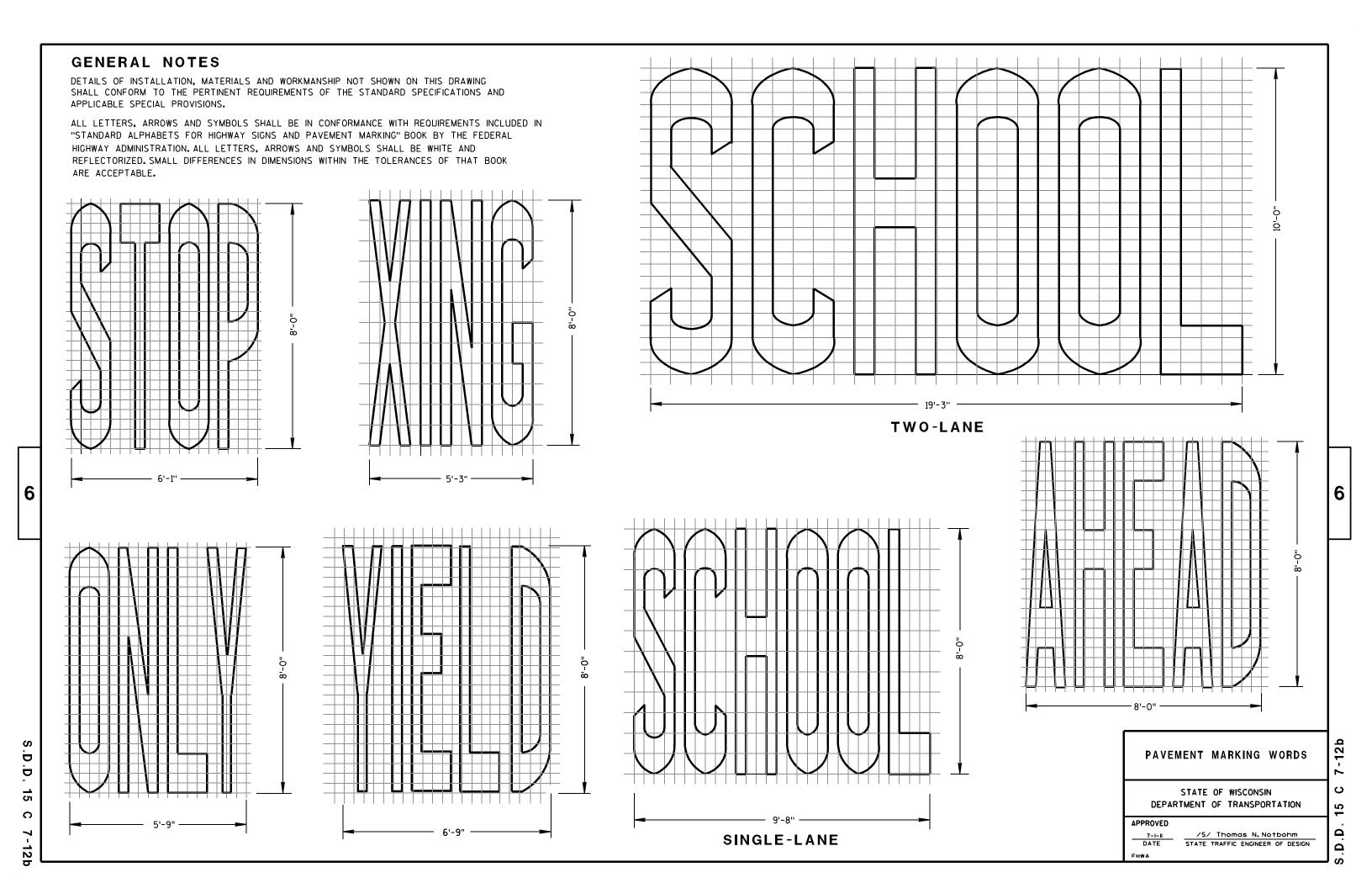
APPROVED

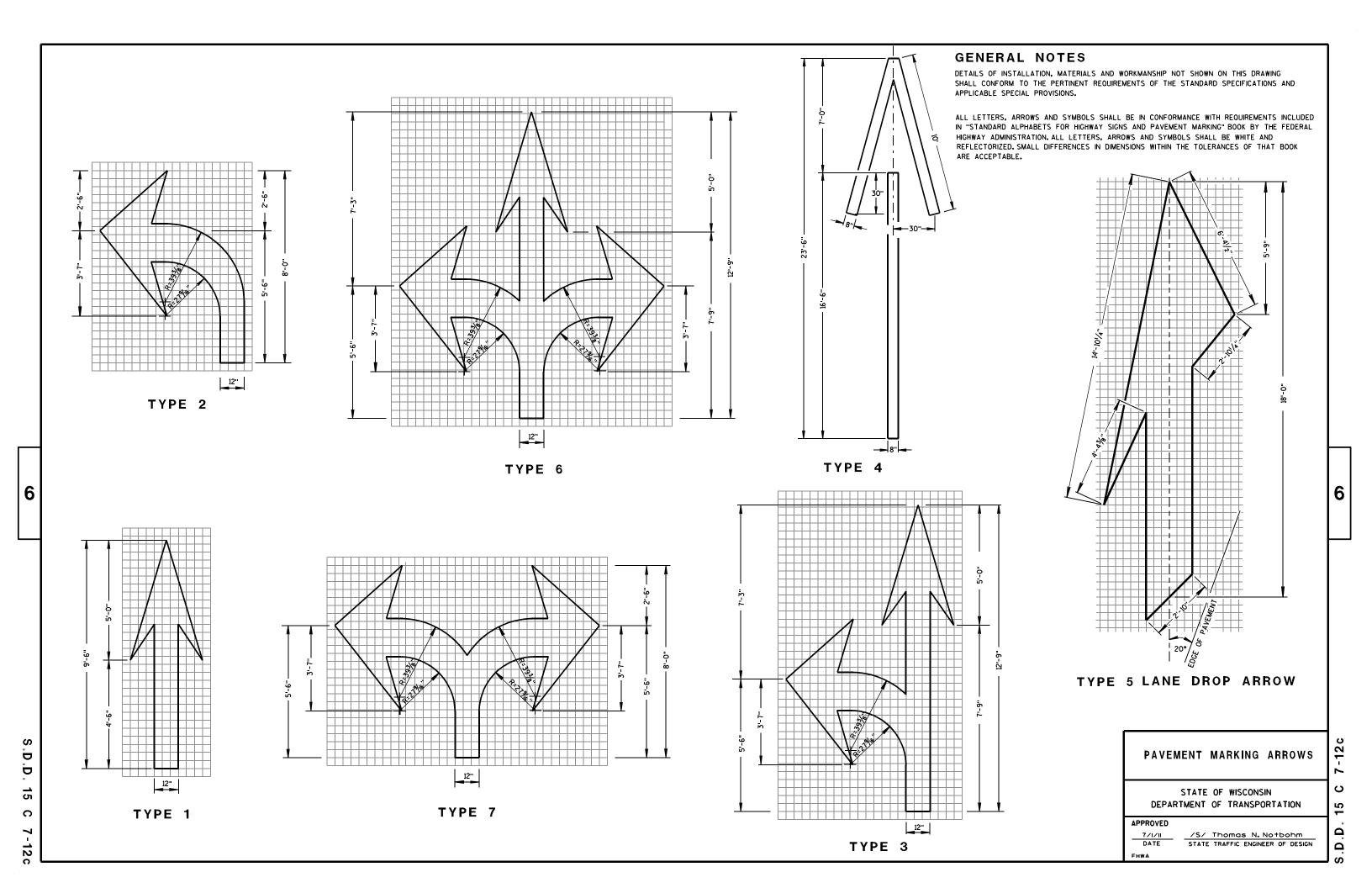
7/I/II /S/ DATE STATE

/S/ Thomas N Notbohm STATE TRAFFIC ENGINEER OF DESIGN 6

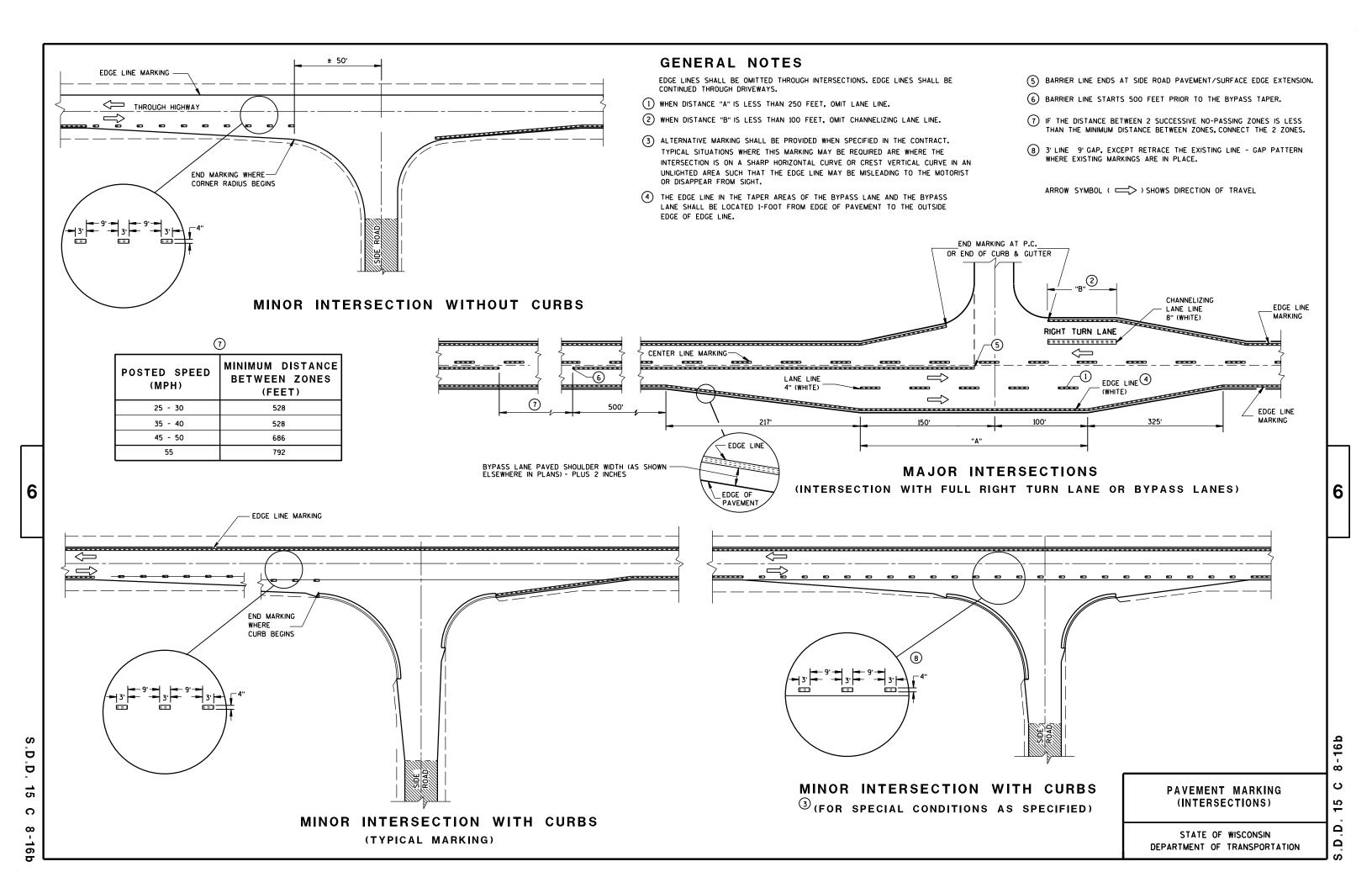
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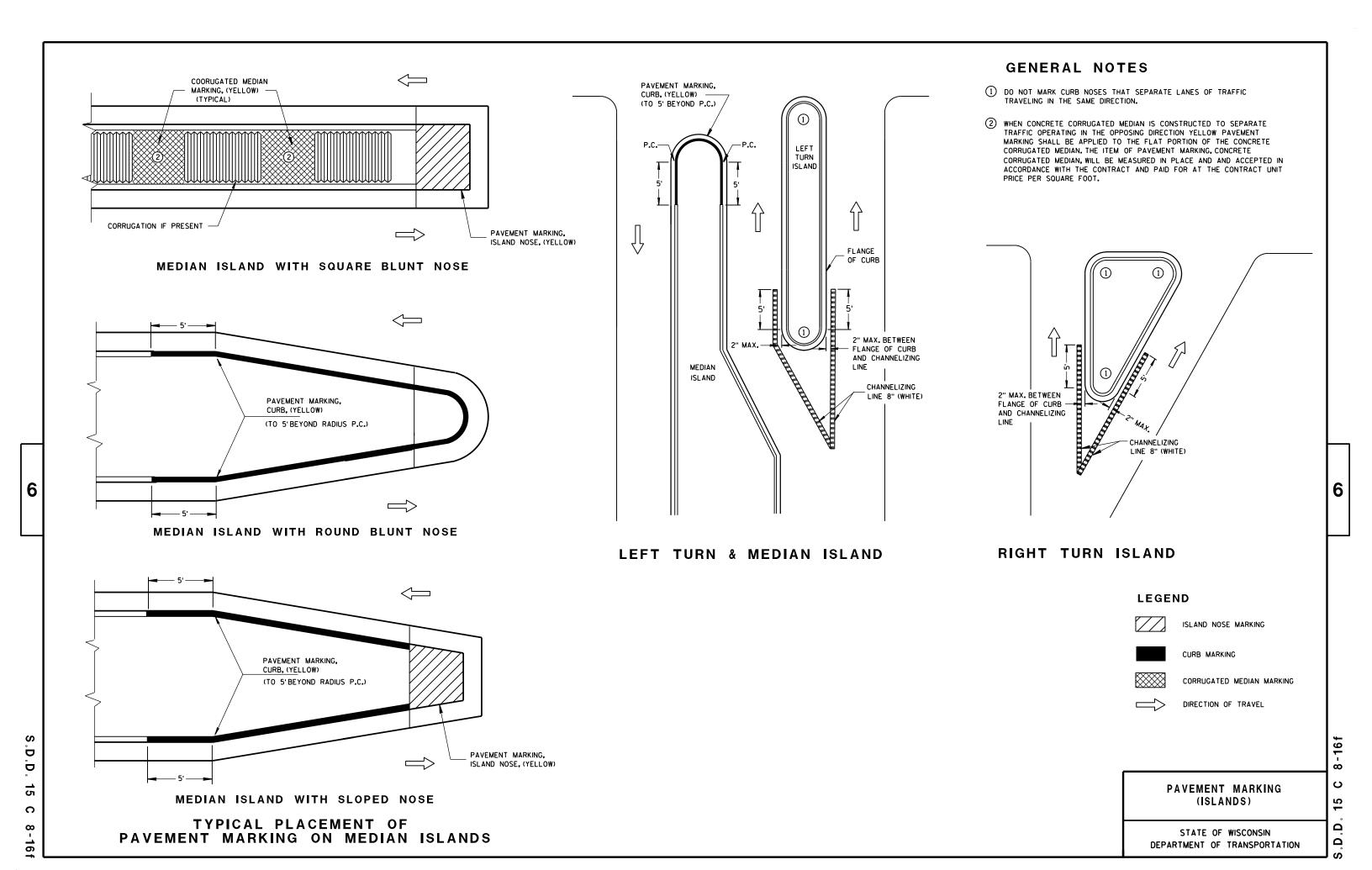
.D.D. 15 C 7-12a

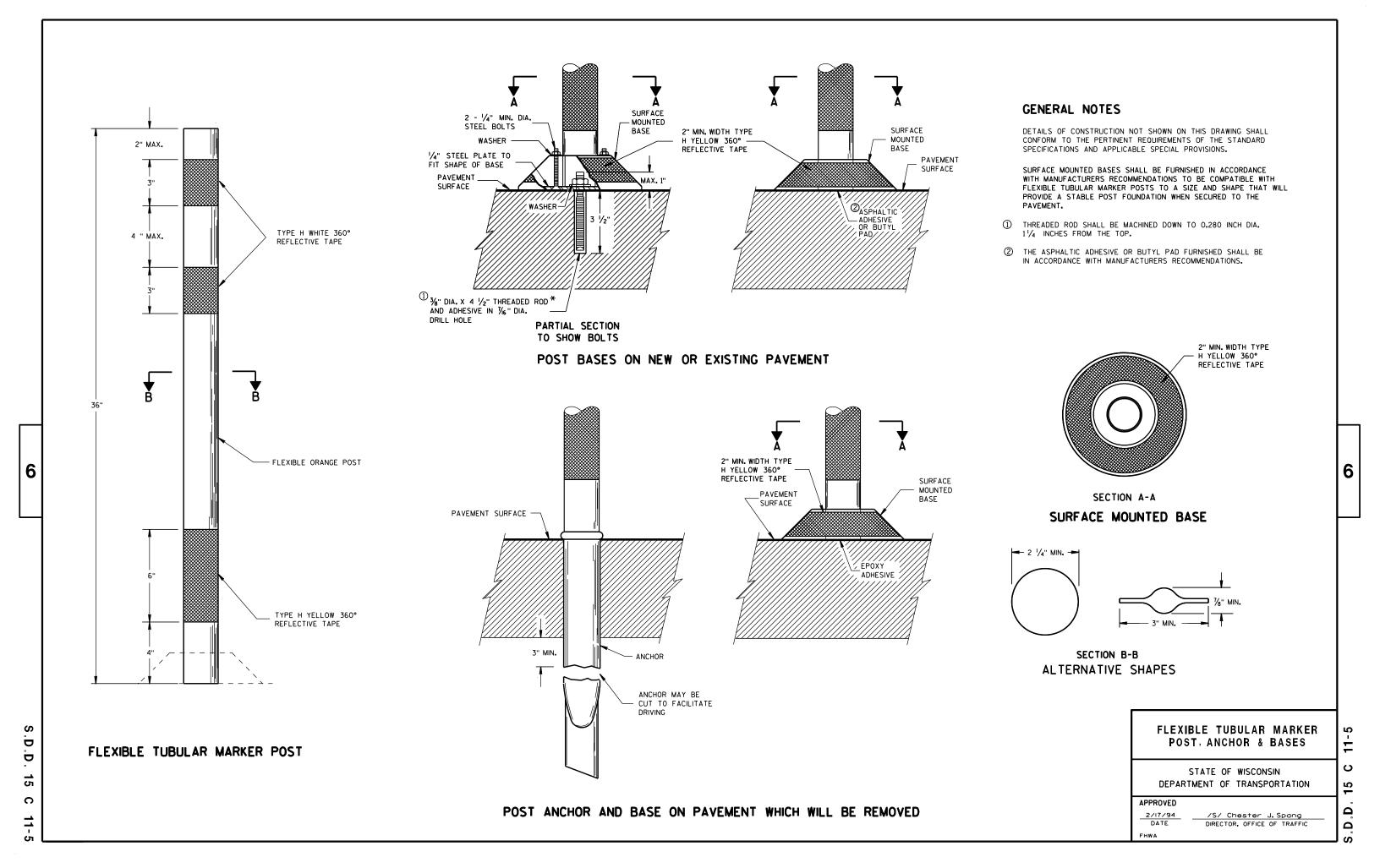


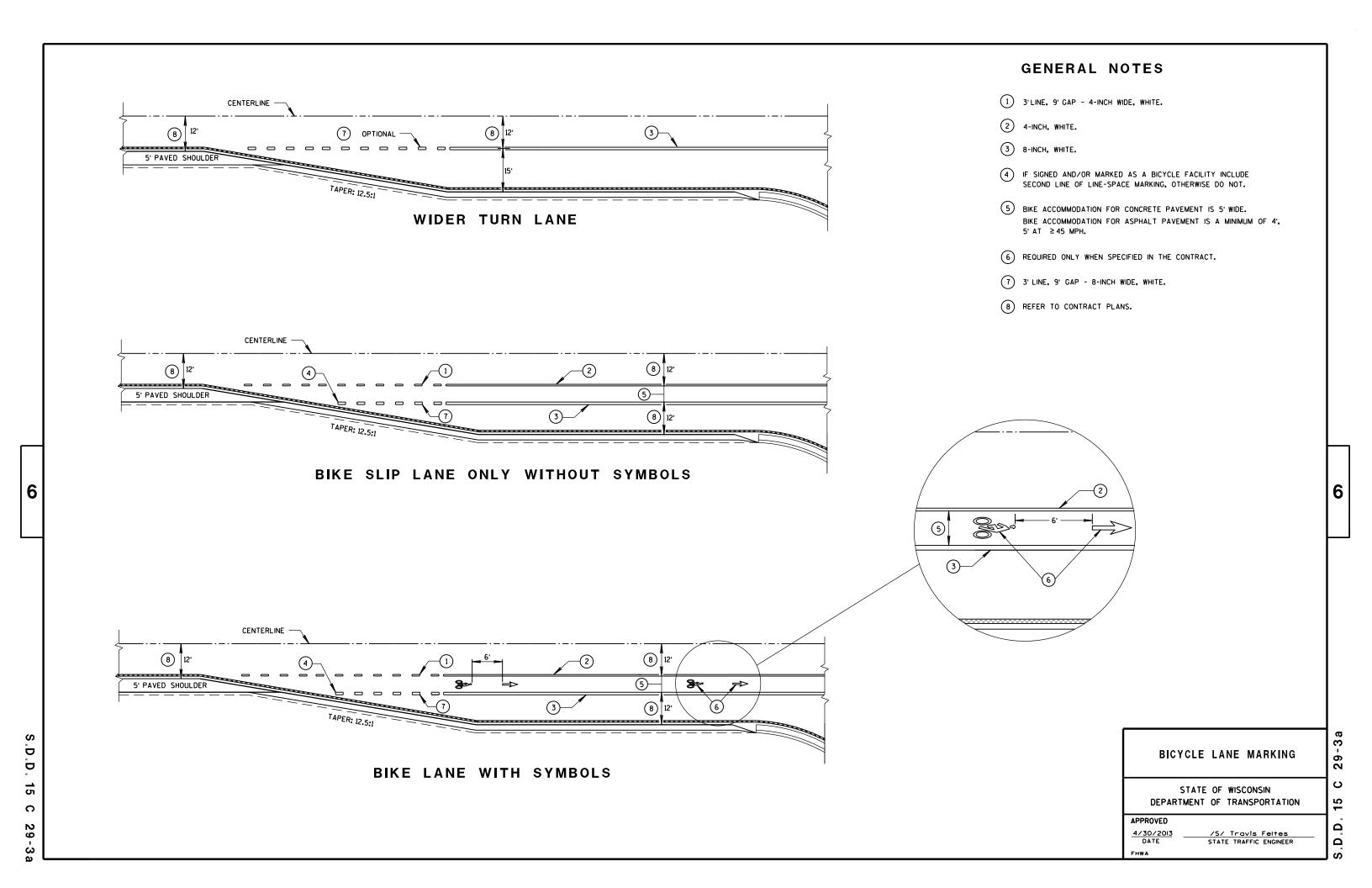




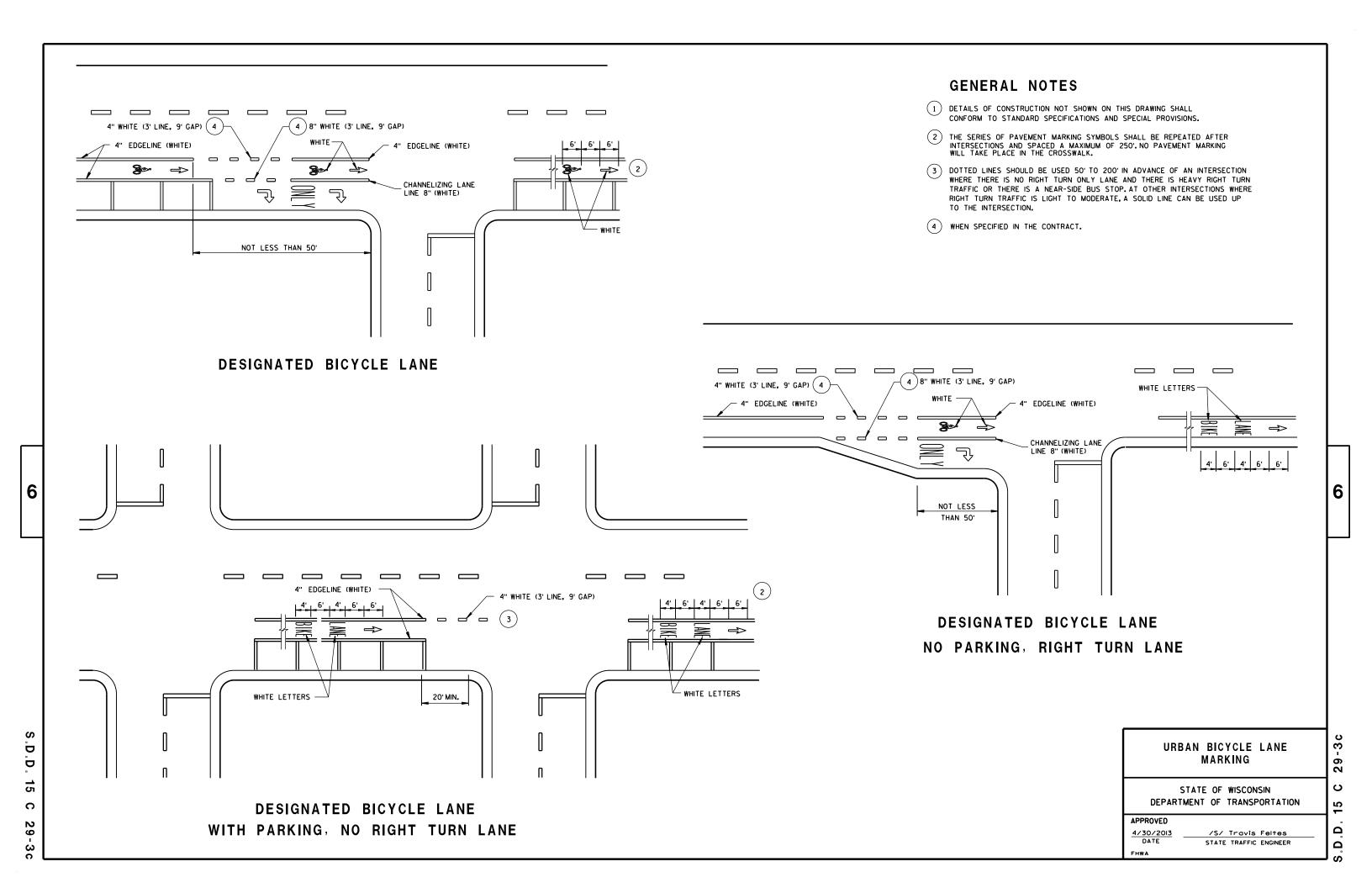


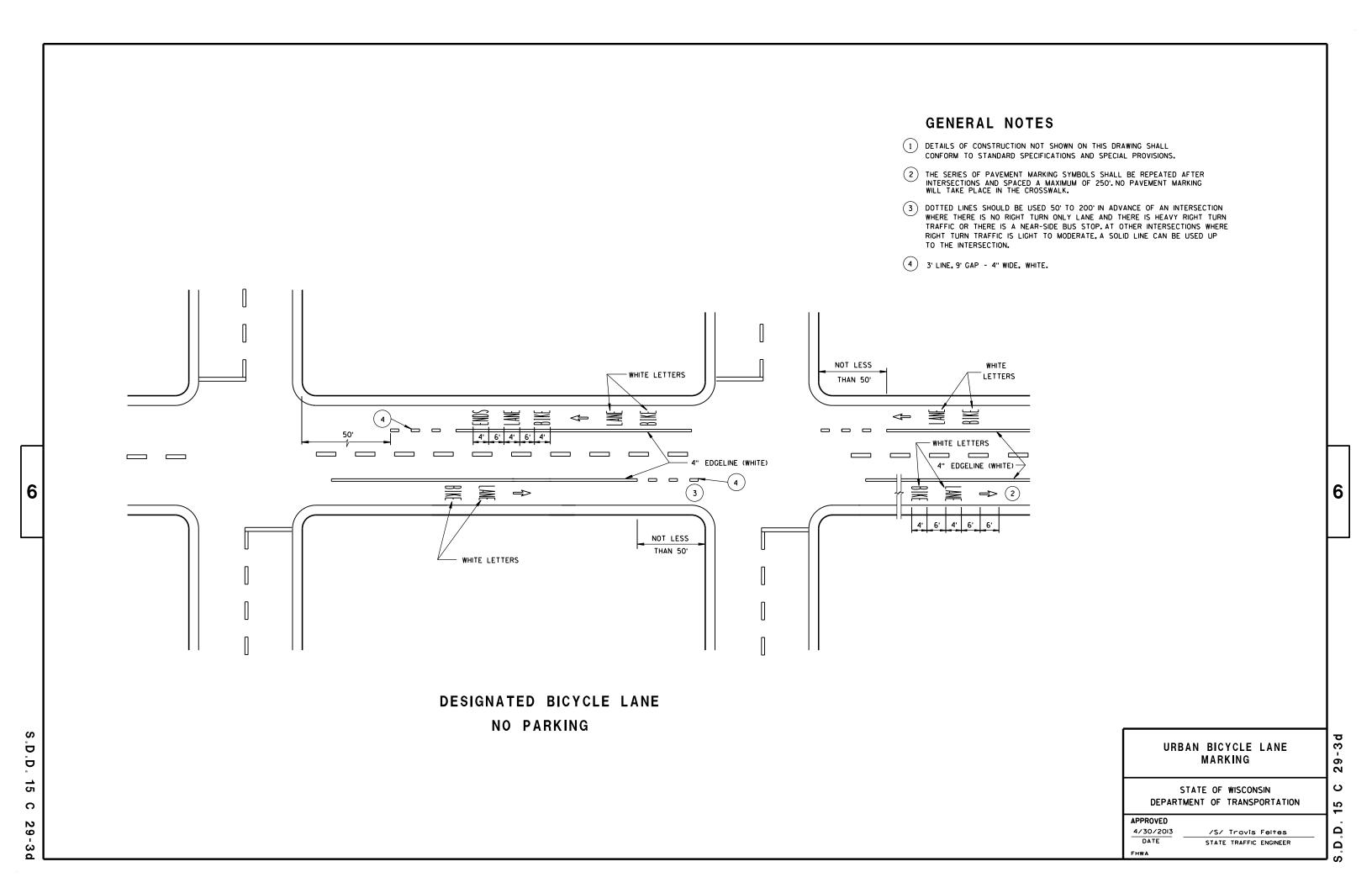






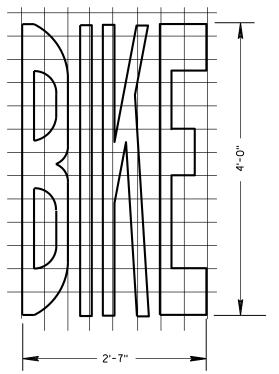
GENERAL NOTES 5 5' TYPICAL. 1 3'LINE, 9' GAP - 4-INCH WIDE, WHITE. 2 4-INCH, WHITE. 6) REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT. 3 8-INCH, WHITE. 7) 3' LINE, 9' GAP - 8-INCH WIDE, WHITE. 4) IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE (8) REFER TO CONTRACT PLANS. SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT. STOP BAR IF APPLICABLE TAPER: 12.5:1 6 6 BIKE LANE - 4-LANE DIVIDED WITH RIGHT TURN LANE D BICYCLE LANE MARKING Ď 15 STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION C 4 LANE DIVIDED WITH ISLAND 4 LANE DIVIDED WITHOUT ISLAND APPROVED Ω 4/30/2013 DATE /S/ Travis Feltes STATE TRAFFIC ENGINEER ۵ FHWA





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.



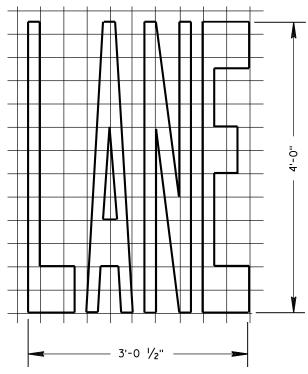
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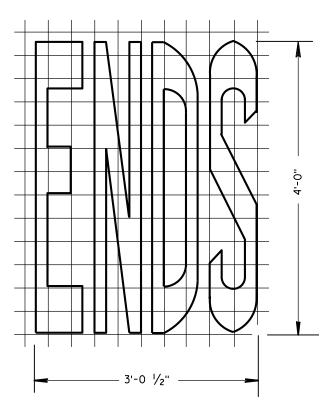
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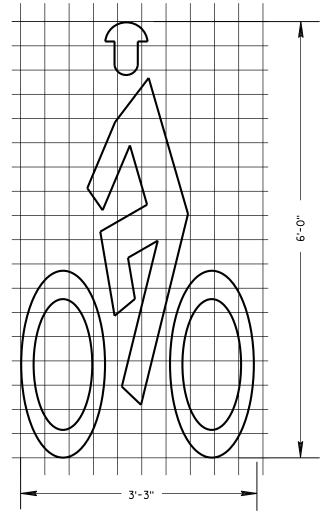
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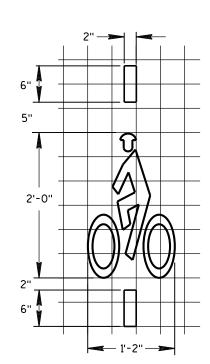




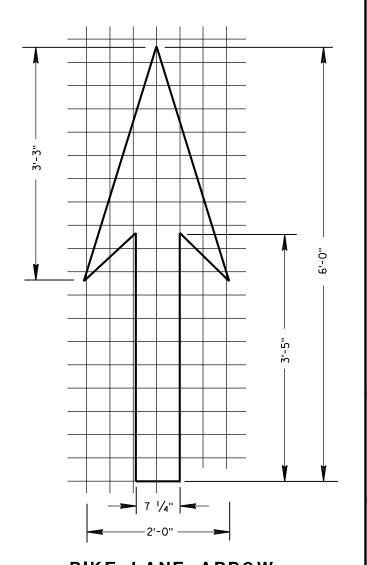
BIKE LANE WORDS



BIKE LANE SYMBOL



BICYCLE DETECTOR PAVEMENT MARKING



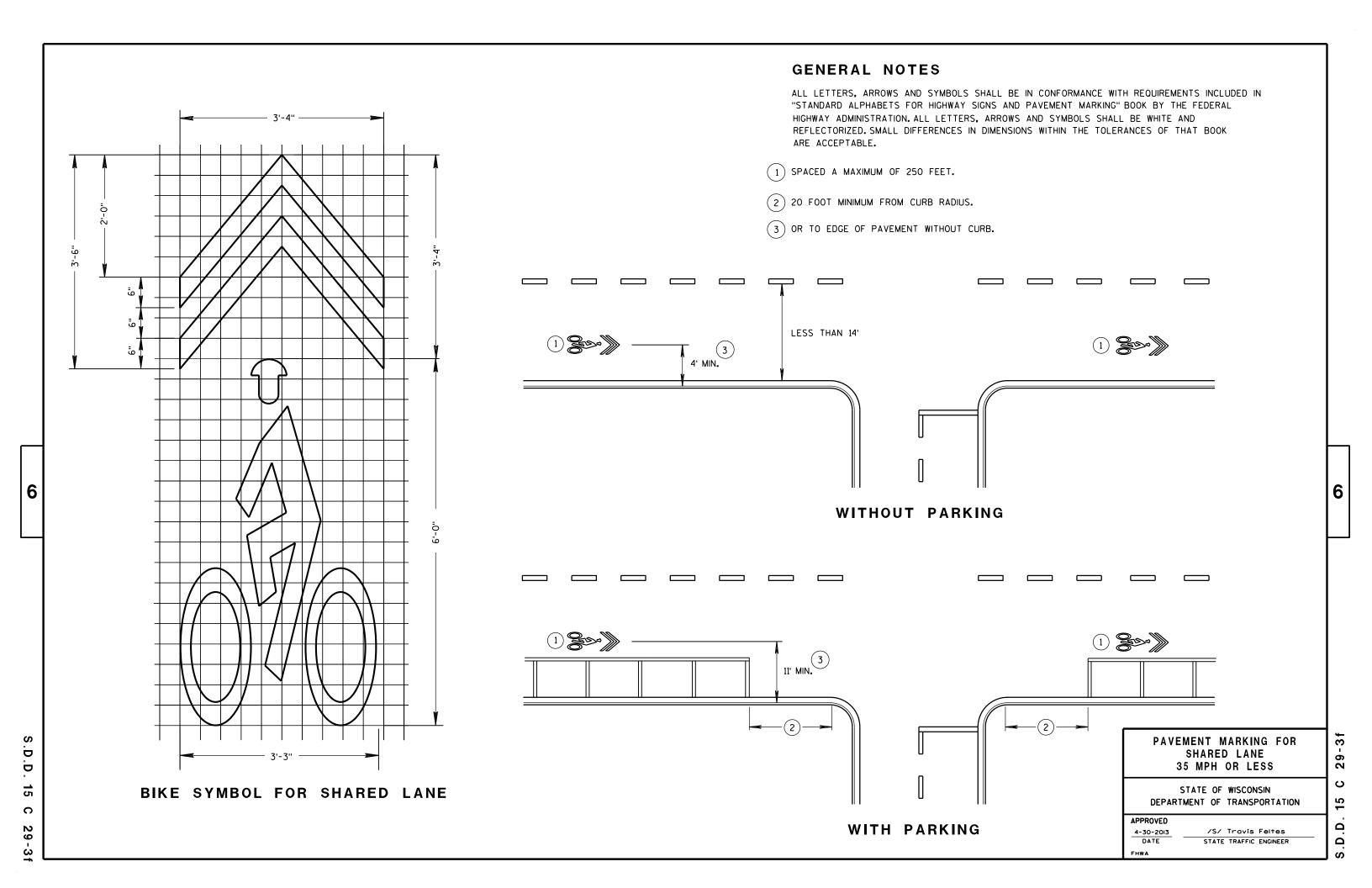
BIKE LANE ARROW

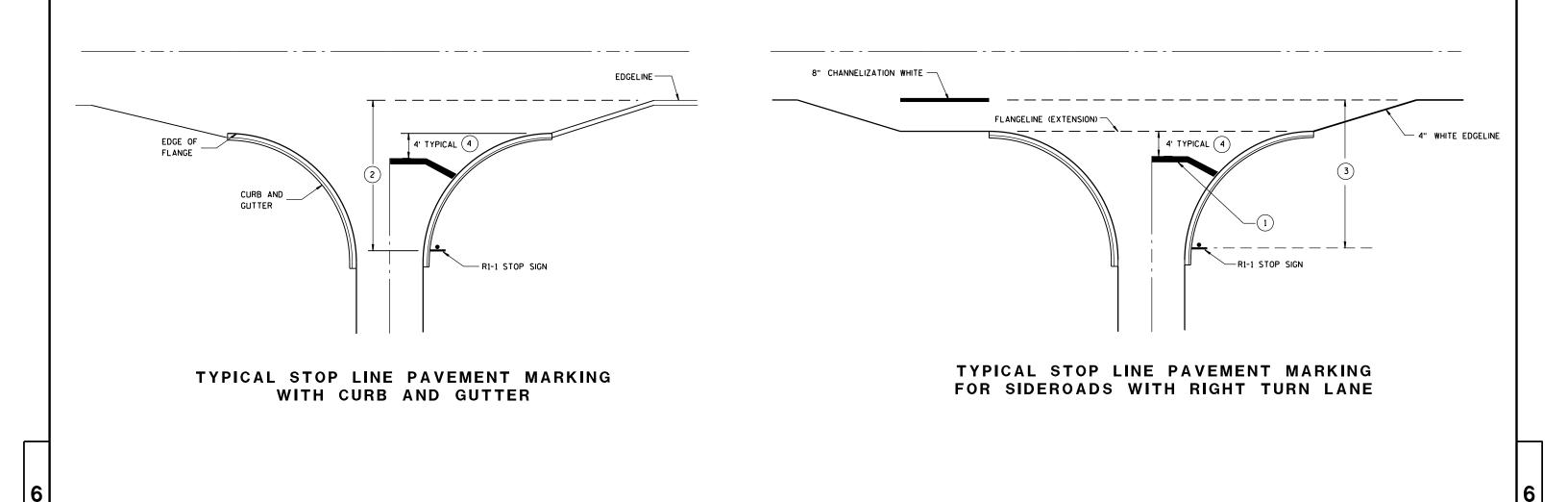
PAVEMENT	MARKING	FOR
BIKE	LANES	

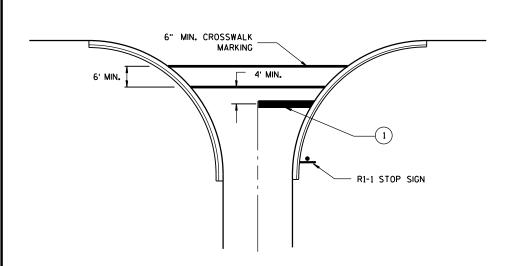
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED	
4-30-2013	/S/ Travis Feltes
DATE	STATE TRAFFIC ENGINEER

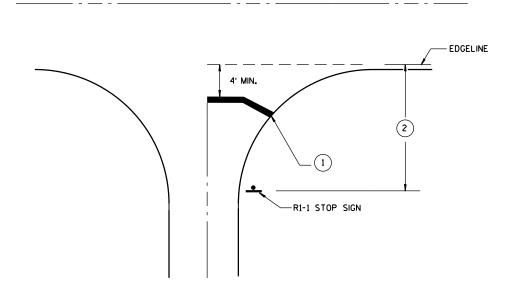
S.D.D. 15 C 2







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.
- MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

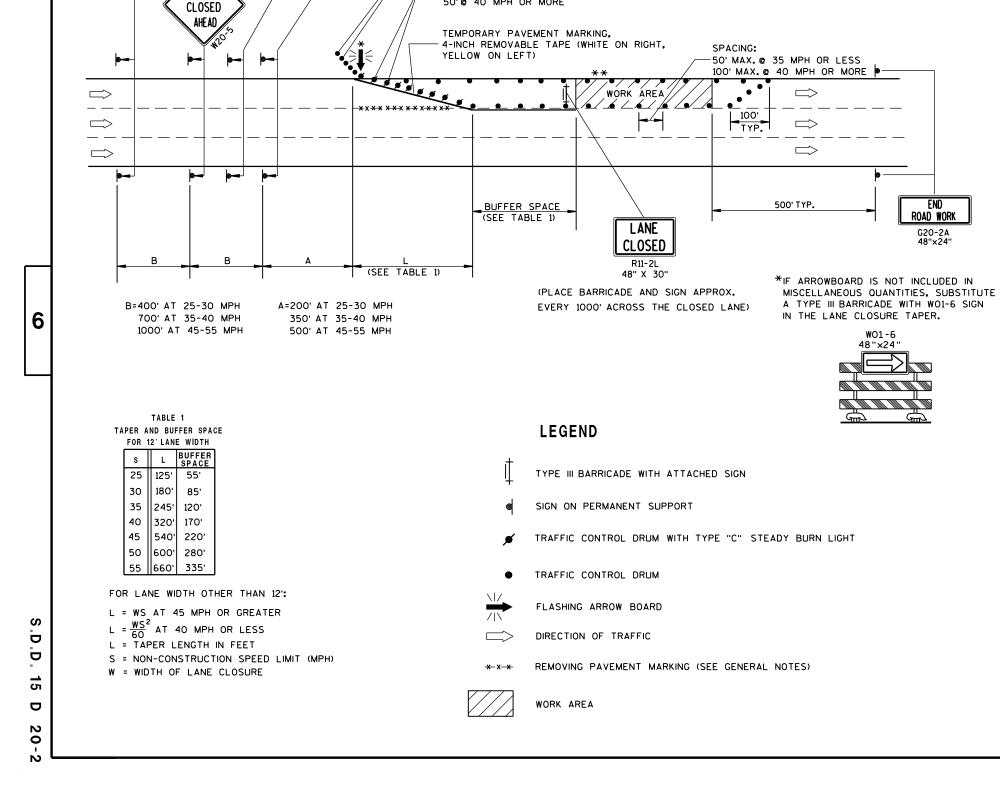
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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

.D.D. 15 C 33-1

S.D.D.





(5) DRUMS SPACED @ 10'

INTERVALS AS NEEDED IN

FRONT OF ARROW BOARD

25' @ 35 MPH OR LESS 50' @ 40 MPH OR MORE

SPACING:

ROAD WORK

NEXT___MILES

G20-1

60" X 24"

AHEAD

GENERAL NOTES

**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE

ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL

W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF

IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC

TRAFFIC. IN ADVANCE OF THE WORK AREA.

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"×48" 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.

W2O-1, G2O-1 AND G2O-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

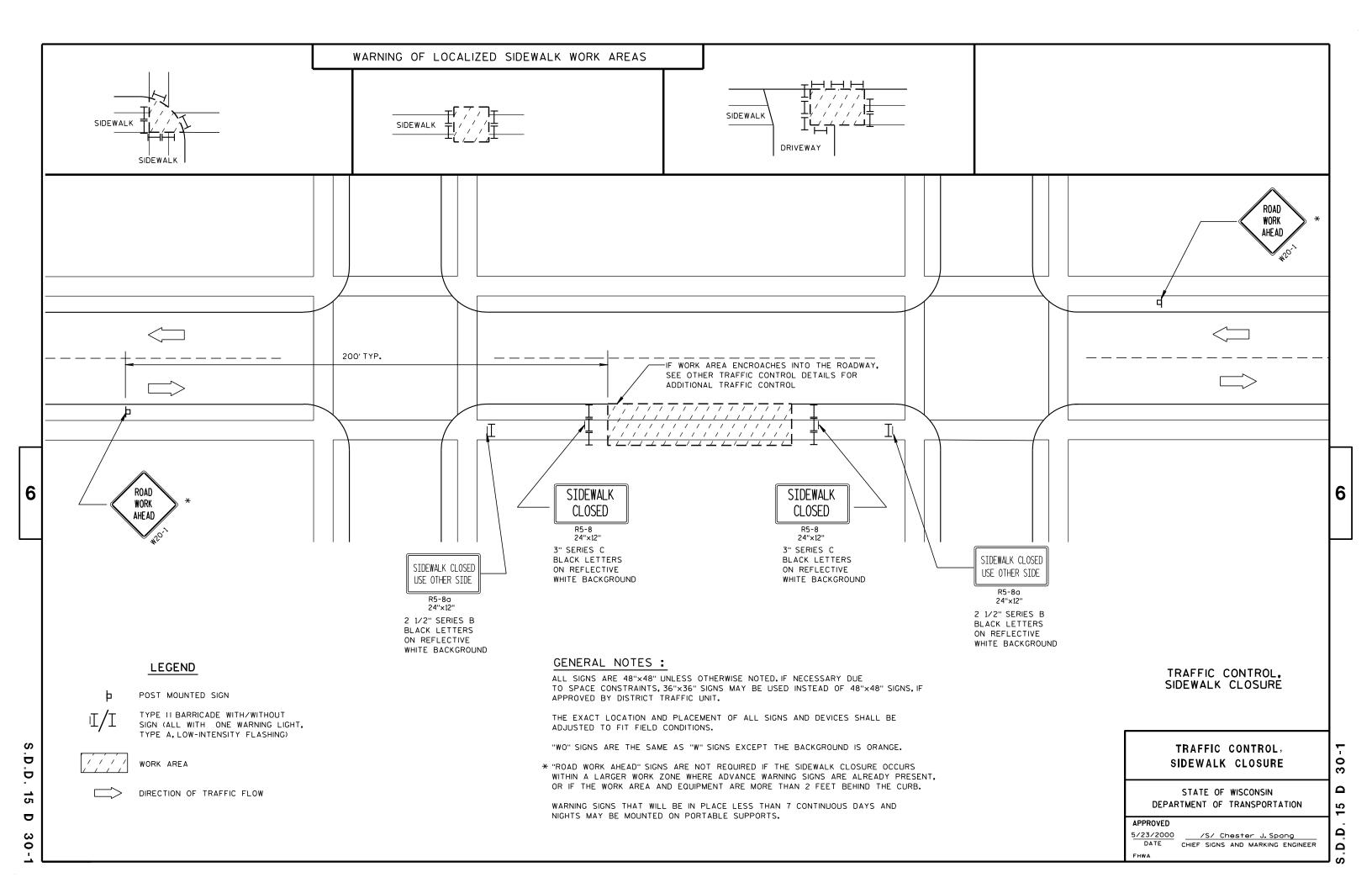
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 /S/ Travis Feites

DATE TRAFFIC ENGINEER OF DESIGN

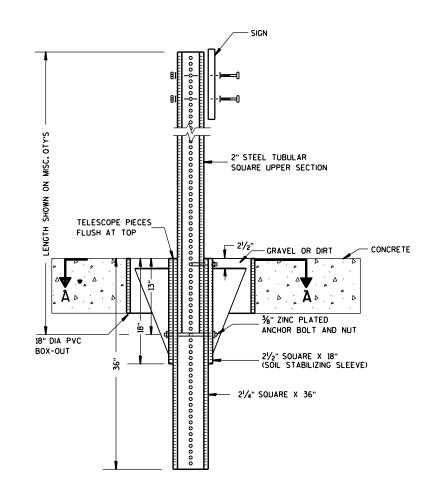
S.D.D. 15 D 2



NOTES: 1. ALL MATERIAL TO BE APPROVED

BY ENGINEER PRIOR TO INSTALLATION

- 2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
- 3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



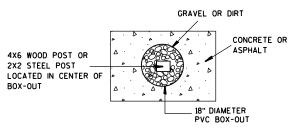
ELEVATION VIEW

PLOT NAME :

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT

ELEVATION VIEW

DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthe

For State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

SHEET NO:

PROJECT NO: 5992-09-69/71

HWY: MILWAUKEE STREET

COUNTY: DANE

SIGN PLATE DETAIL

B. 67. 60.1.5. 47. 65.040.4. 60.000

SHEET 140

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN

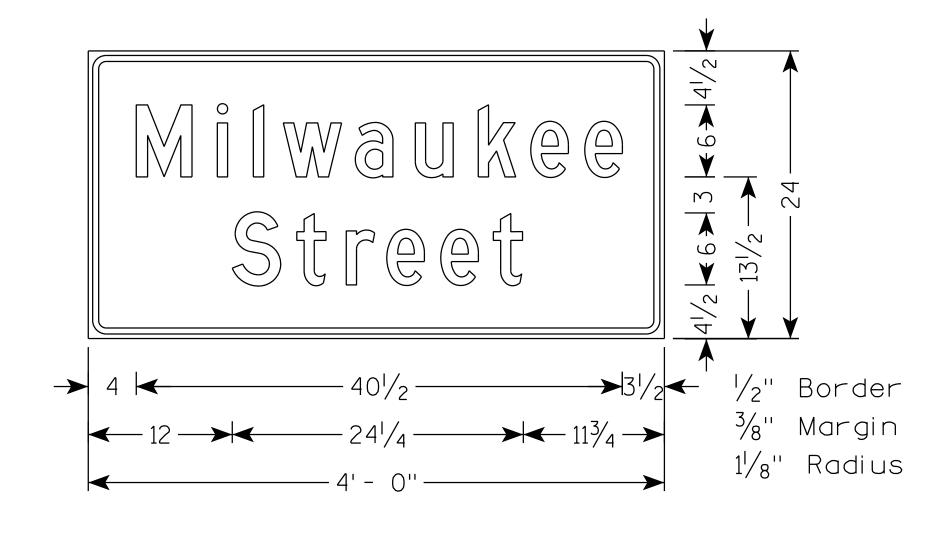
PLOT DATE: 27-JAN-2014 09:48

PLOT SCALE: 13.659812:1.000000

- 1. Sign is Type II Type F Reflective
- 2. Color:

Background - ORANGE Message - BLACK

3. Message Series - D



PROJECT NO:5992-09-69/71

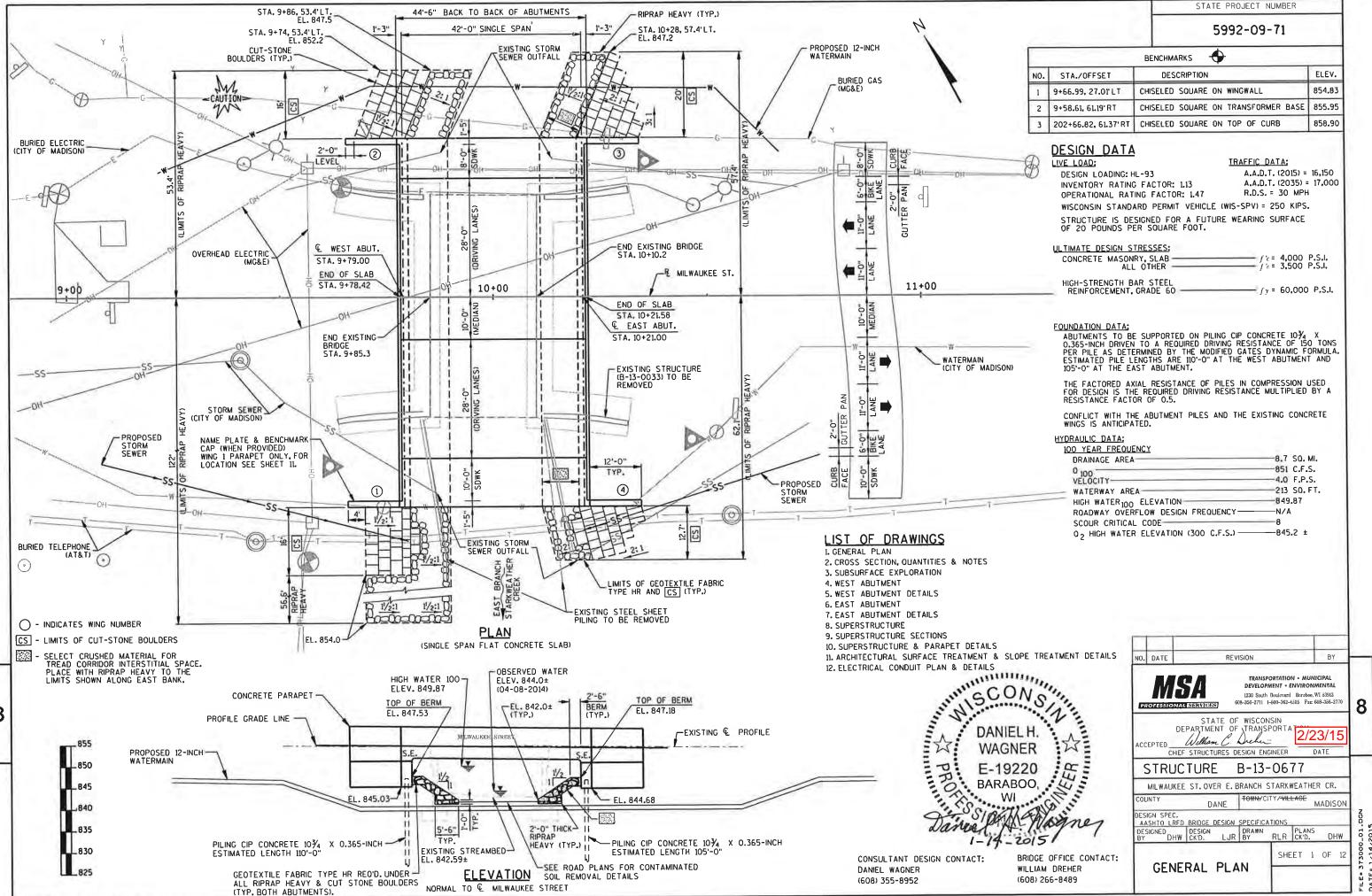
HWY: MILWAUKEE STREET

COUNTY: DANE

SIGN PLATES

SHEET NO:

PLOT SCALE: \$\$.....plotscale.....\$\$ wisdot/cadds SHEET 42



373000_01.dgn 1/14/2015 10:42:03 AM rrabsk

ESTIMATED STRUCTURE QUANTITIES ITEM NUMBER BID ITEM UNIT WEST ABUT. EAST ABUT. **SU PER** 203.0600.S.01 REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00 LS 206.1000.01 EXCAVATION FOR STRUCTURES BRIDGES B-13-0677 LS CY 210.0100 255 BACKFILL STRUCTURE 255 502.0100 CY 73 CONCRETE MASONRY BRIDGES 73 325 502.3200 SY PROTECTIVE SURFACE TREATMENT 485 LB 8210 505.0405 BAR STEEL REINFORCEMENT HS BRIDGES 8210

510 471 485

16420 1830 505.0605 BAR STEEL REINFORCEMENT HS COATED BRIDGES LB 1830 52380 56040 516.0500 RUBBERIZED MEMBRANE WATERPROOFING SY 21 21

42 517.1015.S.01 CONCRETE STAINING MULTI-COLOR B-13-0677 SF 74 74 877 1025 SF 517.1050.S.01 ARCHITECTURAL SURFACE TREATMENT B-13-0677 74 74 599 451 SF 517.1050.S.02 ARCHITECTURAL SURFACE TREATMENT TRAFFIC FACE B-13-0677 426 426 550.2106 LF 1320 2580 PILING CIP CONCRETE 10 3/4 X 0.365-INCH

1260 CY 350 606.0300 RIPRAP HEAVY 235 115 612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH LF 155 155 310 GEOTEXTILE FABRIC TYPE HR SY 475 260

645.0120 735 652.0125 CONDUIT RIGID METALLIC 2-INCH 1 F 12 12 652.0135 CONDUIT RIGID METALLIC 3-INCH li F 24 24 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF 61 61 652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH 122 122 SPV.0105.01 REMOVING STEEL SHEET PILING LS 1

SPV.0165.01

SPV.0195.01

CUT-STONE BOULDERS

SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR INTERSTITIAL SPACE

NON-BID ITEMS PREFORMED FILLER SIZE 1/2", 3/4" CORK FILLER SIZE

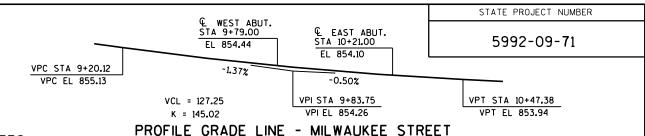
SF

TON

305

235

55



GENERAL NOTES

TOTAL

540

55

3/4"

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFY THE BAR SIZE.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" FOR THE ABUTMENTS.

AT THE ABUTMENTS ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE. THE BACKFILL STRUCTURE ESTIMATED QUANTITIES ASSUMED A 11/2:1 EXCAVATION SLOPE AT THE ABUTMENTS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE FABRIC TYPE HR TO THE LIMITS SHOWN ON SHEET 1 AND ON THE ABUTMENT SHEETS OR AS DIRECTED BY THE ENGINEER. PLACE SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR INTERSTITIAL SPACE WITH THE RIPRAP HEAVY AT THE EAST ABUTMENT.

RIPRAP HEAVY SHALL BE LIMESTONE OR DOLOMITE.

THE EMBANKMENTS ADJACENT TO THE BRIDGE SHALL BE COVERED WITH RIPRAP HEAVY AND CUT STONE BOULDERS TO THE EXTENT SHOWN ON THE GENERAL PLAN AND SHEET 11 OR AS DIRECTED BY THE ENGINEER. THE ENTIRE SLOPE UNDER THE CUT-STONE BOULDERS AND RIPRAP HEAVY SHALL BE COVERED WITH GEOTEXTILE FABRIC TYPE HR WITH A 1'-0" PERIMETER WRAP. COORDINATE PLACEMENT OF CUT-STONE BOULDERS WITH INSTALLATION OF STORM SEWER OUTFALLS.

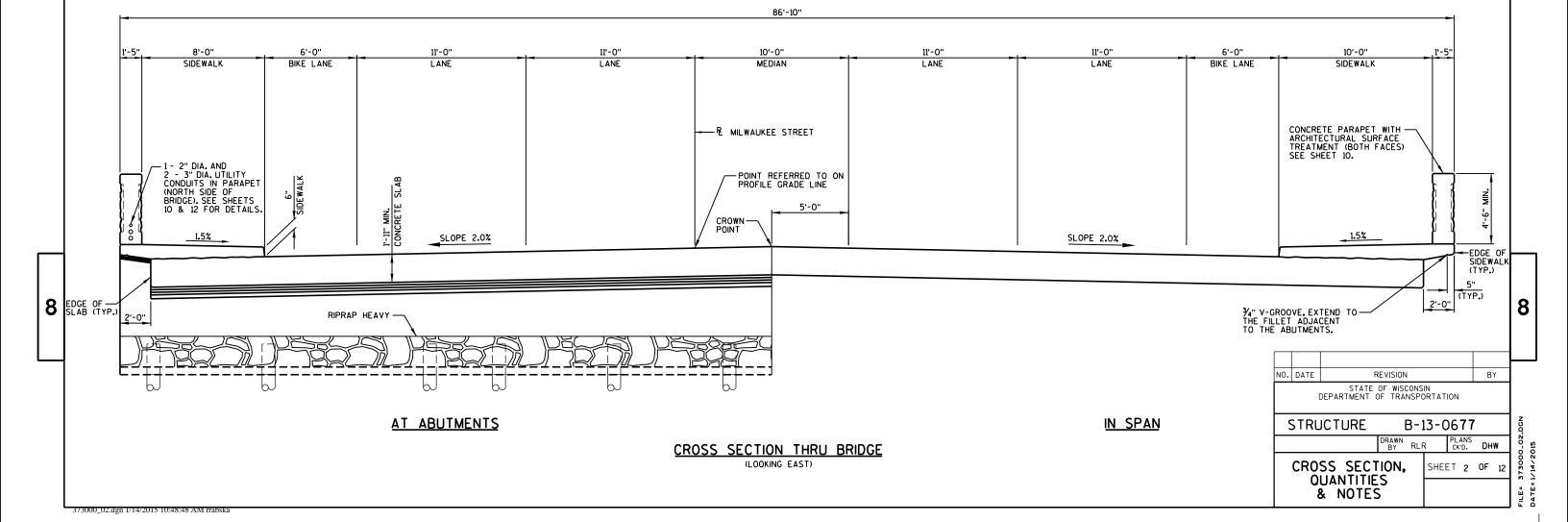
THIS STRUCTURE WILL REPLACE THE EXISTING STRUCTURE, B-13-0033, A 24.9', SINGLE SPAN STEEL DECK GIRDER BRIDGE WITH FULL RETAINING CONCRETE ABUTMENTS.

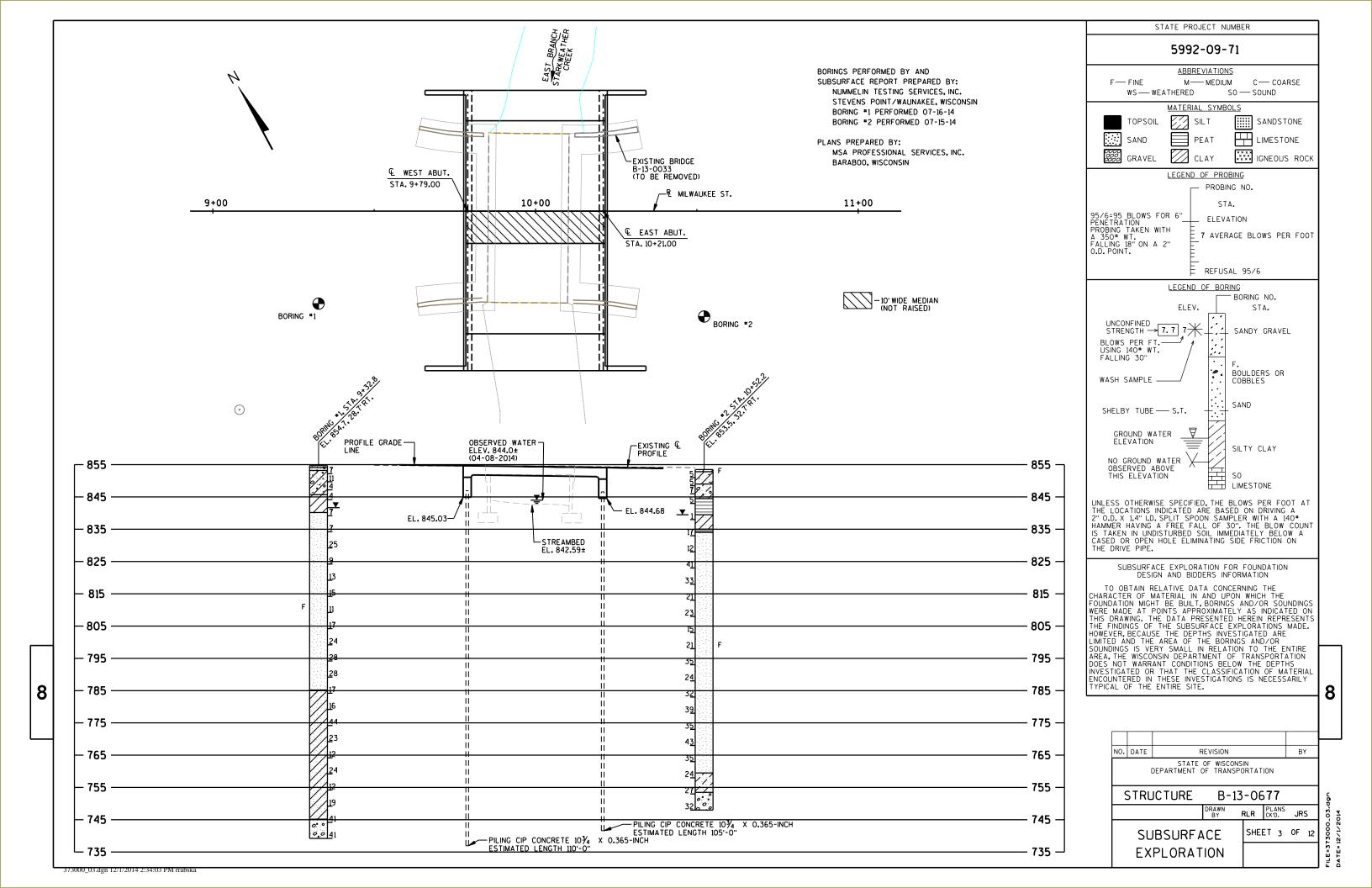
ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO USGS NAVD 88.

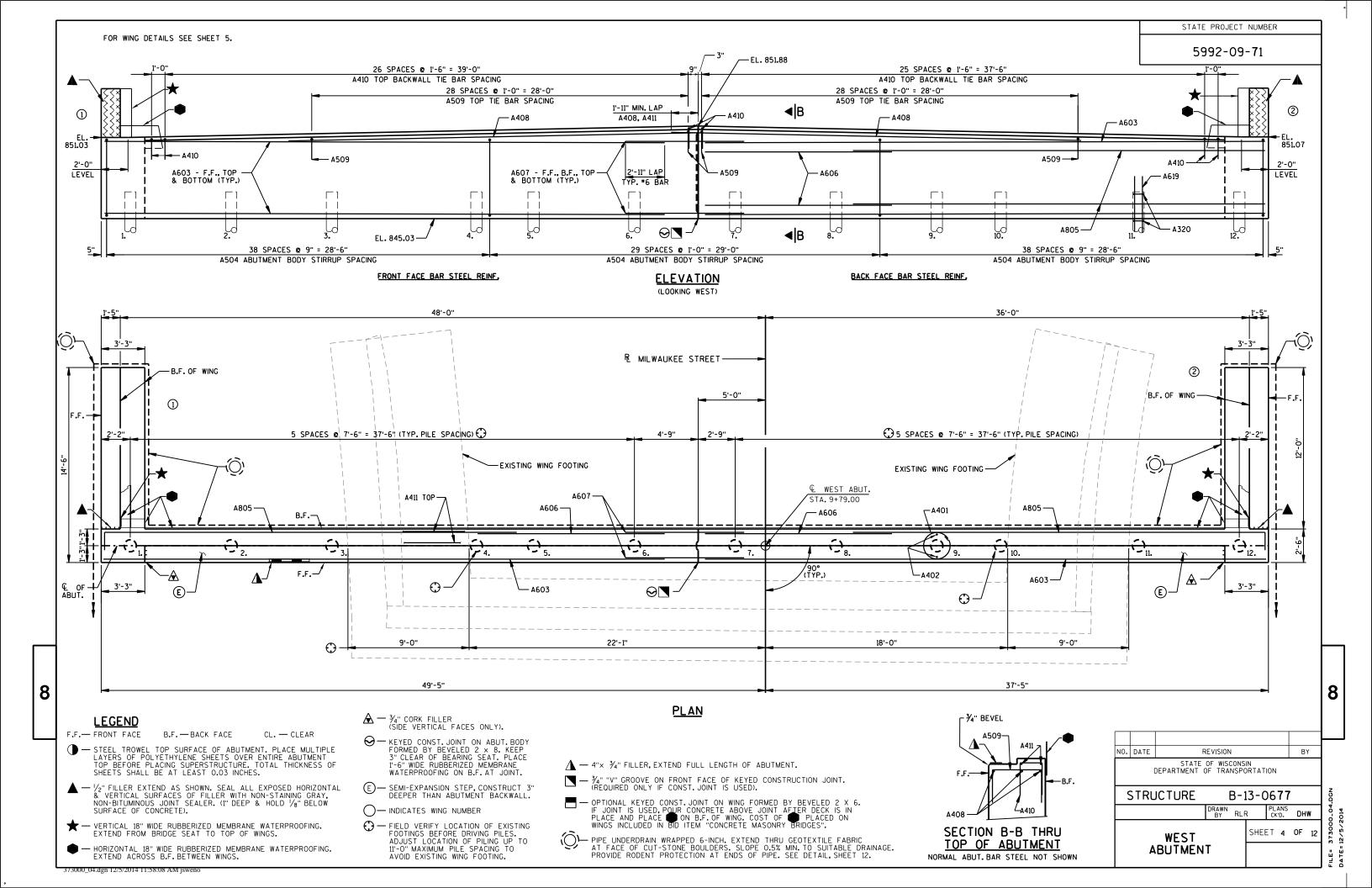
AS DETAILED ON SHEET 11 APPLY AN ARCHITECTURAL SURFACE TREATMENT TO THE WINGS AND BOTH FACES OF PARAPET. SEE SPECIAL PROVISION FOR FORMLINER PATTERN. ALL FORMLINED AREAS SHALL BE STAINED TO RESEMBLE WEATHERED LIMESTONE.

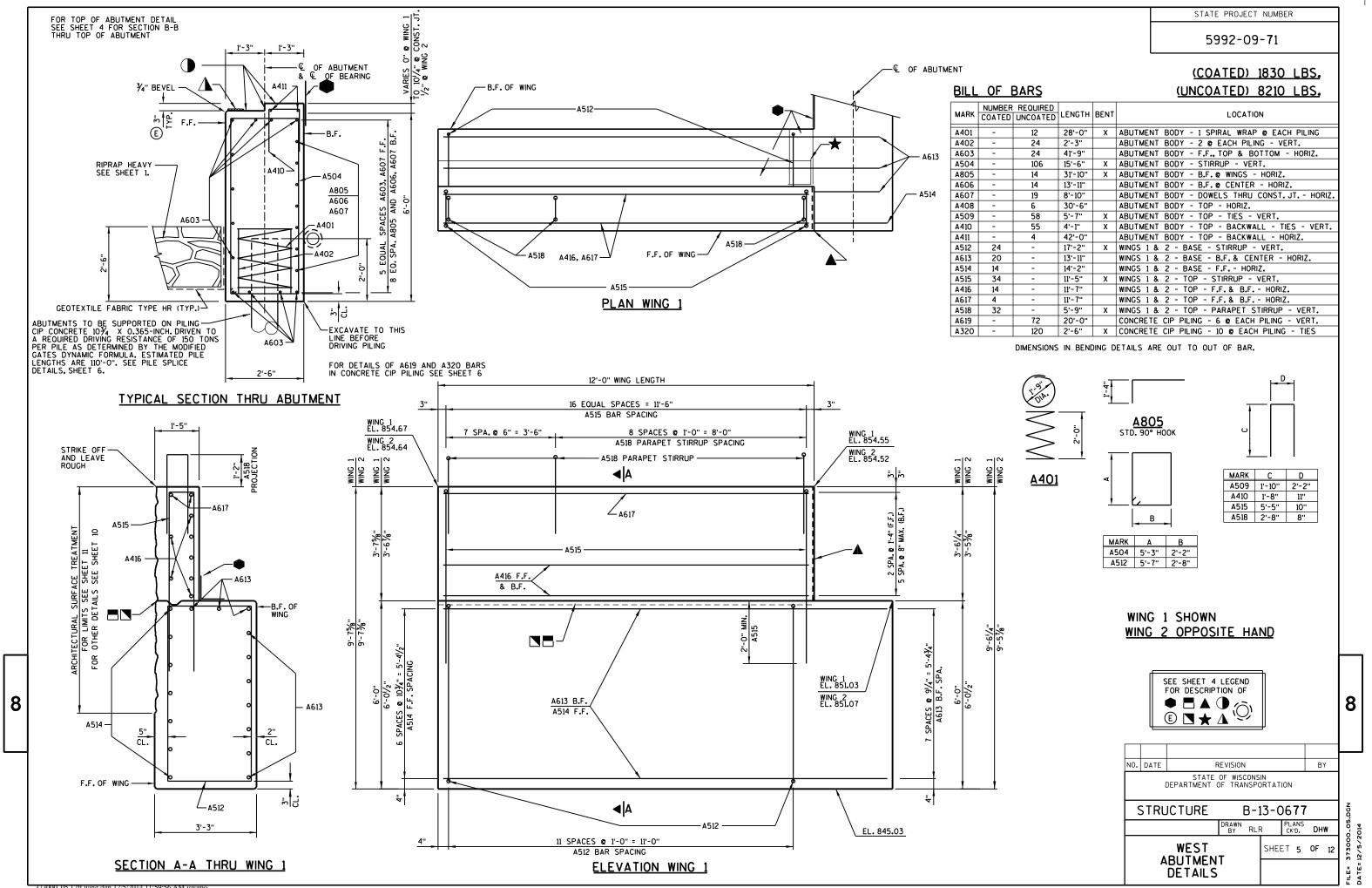
SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

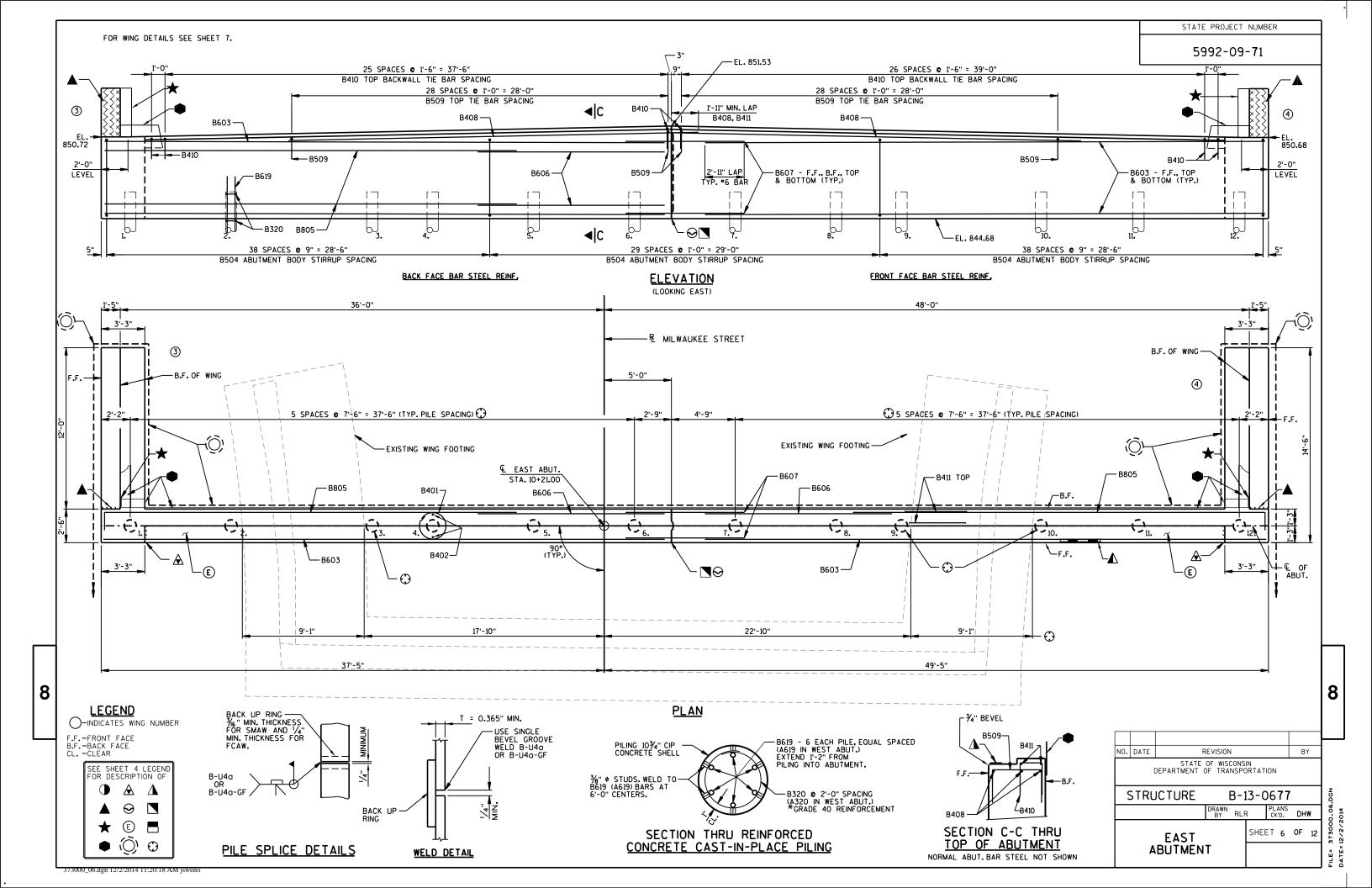
APPLY CLEAR PROTECTIVE SURFACE TREATMENT TO THE EXPOSED TOP OF SLAB AND TO THE TOP AND INSIDE FACES OF THE BRIDGE SIDEWALKS. APPLY GRAY PIGMENTED PROTECTIVE SURFACE TREATMENT TO THE OUTSIDE EDGE OF THE BRIDGE SIDEWALKS, TO THE EXPOSED OUTSIDE EDGES OF THE ABUTMENTS AND DIAPHRAGMS, AND TO THE INSIDE FACES, TOPS, AND OUTSIDE FACES OF THE PARAPETS. DO NOT APPLY PROTECTIVE SURFACE TREATMENT TO AREAS RECEIVING ARCHITECTURAL SURFACE TREATMENT AND STAIN.

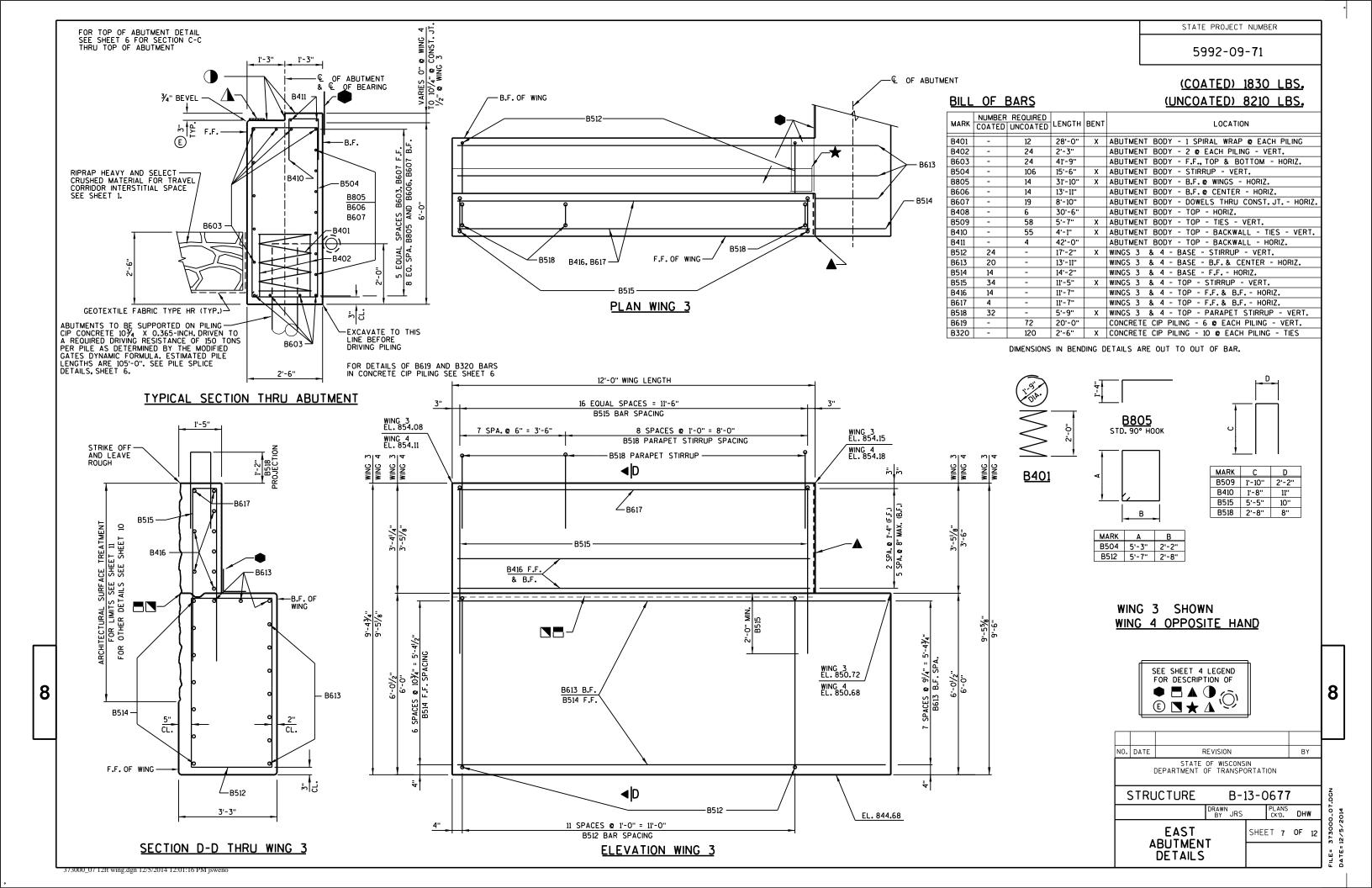


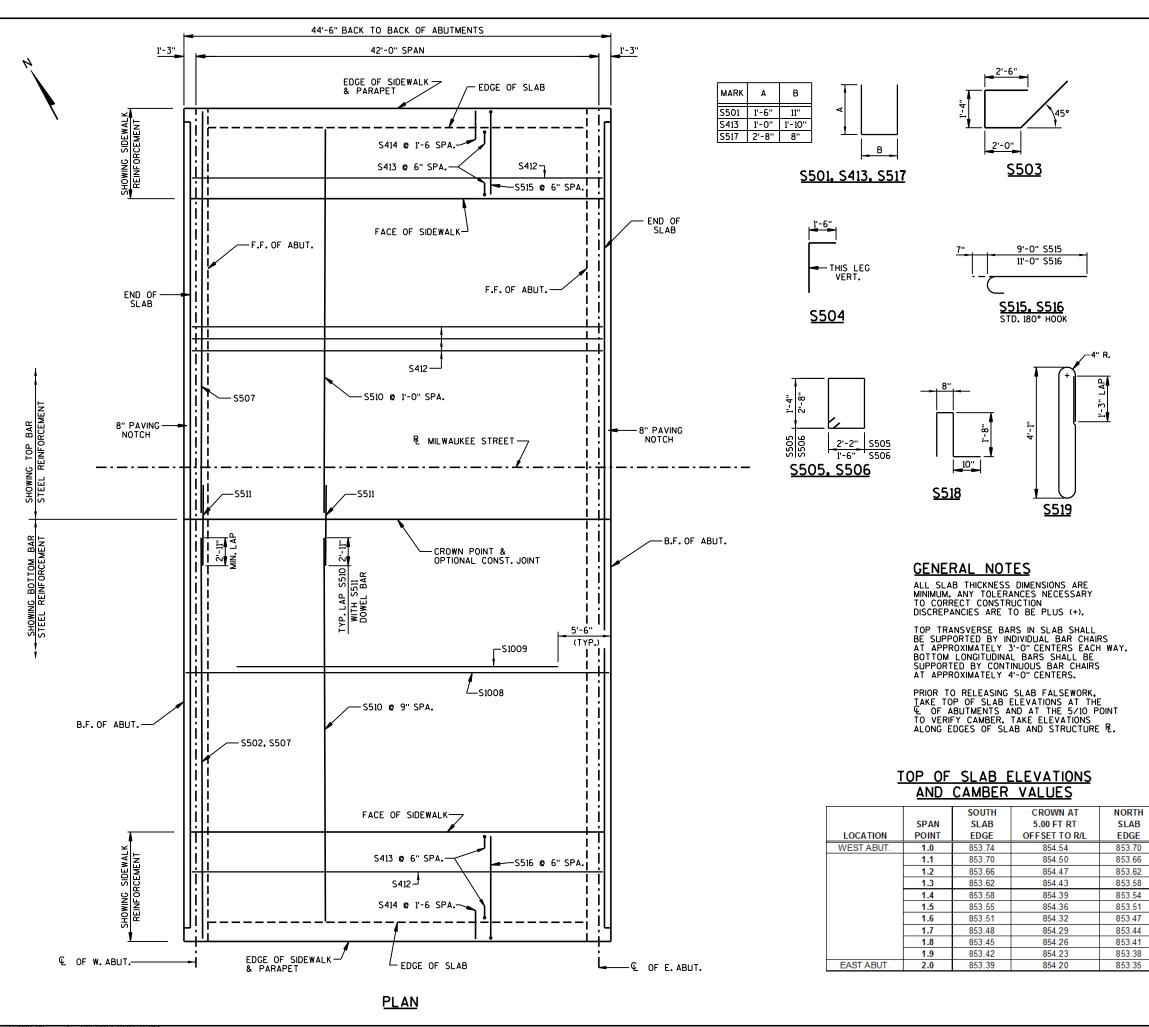












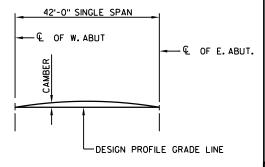
BILL OF BARS (COATED) 52,380 LBS.

MARK	NO. REO'D.	LENGTH	BENT	LOCATION
S501	160	3'-8"	Х	DIAPHRAGM @ ABUTS S.E. POCKET - VERT.
S502	8	38'-9"		DIAPHRAGM @ ABUTS S.E. POCKET - LONGIT.
S503	168	7'-7"	Х	DIAPHRAGM @ ABUTS VERT.
S504	136	3'-8"	Х	DIAPHRAGM @ ABUTS VERT.
S505	8	7'-8"	Х	DIAPHRAGM @ ABUT. ENDS VERT.
S506	40	9'-0"	Х	DIAPHRAGM @ ABUT. ENDS VERT.
S507	32	42'-0"		DIAPHRAGM @ ABUTS TRANS.
S1008	88	44'-2"		SLAB BOTTOM - LONGIT.
S1009	86	33'-6"		SLAB BOTTOM - LONGIT.
S510	198	40'-0"		SLAB TOP & BOTTOM - TRANS.
S511	119	8'-5"		SLAB & DIAPHRAGM - DOWEL AT JT TRANS.
S412	121	42'-10"		SLAB TOP & SIDEWALK - LONGIT.
S413	348	3'-8"	Х	SLAB & INTO SIDEWALK - VERT.
S414	60	3'-0"		SIDEWALK BOTTOM - TRANS.
S515	87	9'-7"	Х	SIDEWALK - NORTH - TOP - TRANS.
S516	87	11'-7"	Х	SIDEWALK - SOUTH - TOP - TRANS.
S517	12	5'-9"	Х	PARAPET STIRRUP OVER ABUT VERT.
S518	78	4'-6"	Х	PARAPET STIRRUP IN SPAN - VERT.
S519	154	10'-2"	Х	PARAPET STIRRUP - TOP - VERT.
S420	20	44'-2"		PARAPET ON SLAB - LONGIT.
S421	40	11'-7"		PARAPET ON WINGS - LONGIT.

STATE PROJECT NUMBER

5992-09-71

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR. EPOXY COAT ALL SUPERSTRUCTURE BAR STEEL REINFORCEMENT.



CAMBER DIAGRAM

CAMBER

VALUE

(INCHES)

0.0

0.5

1.0

1.3

1.6

1.6

1.6

1.3

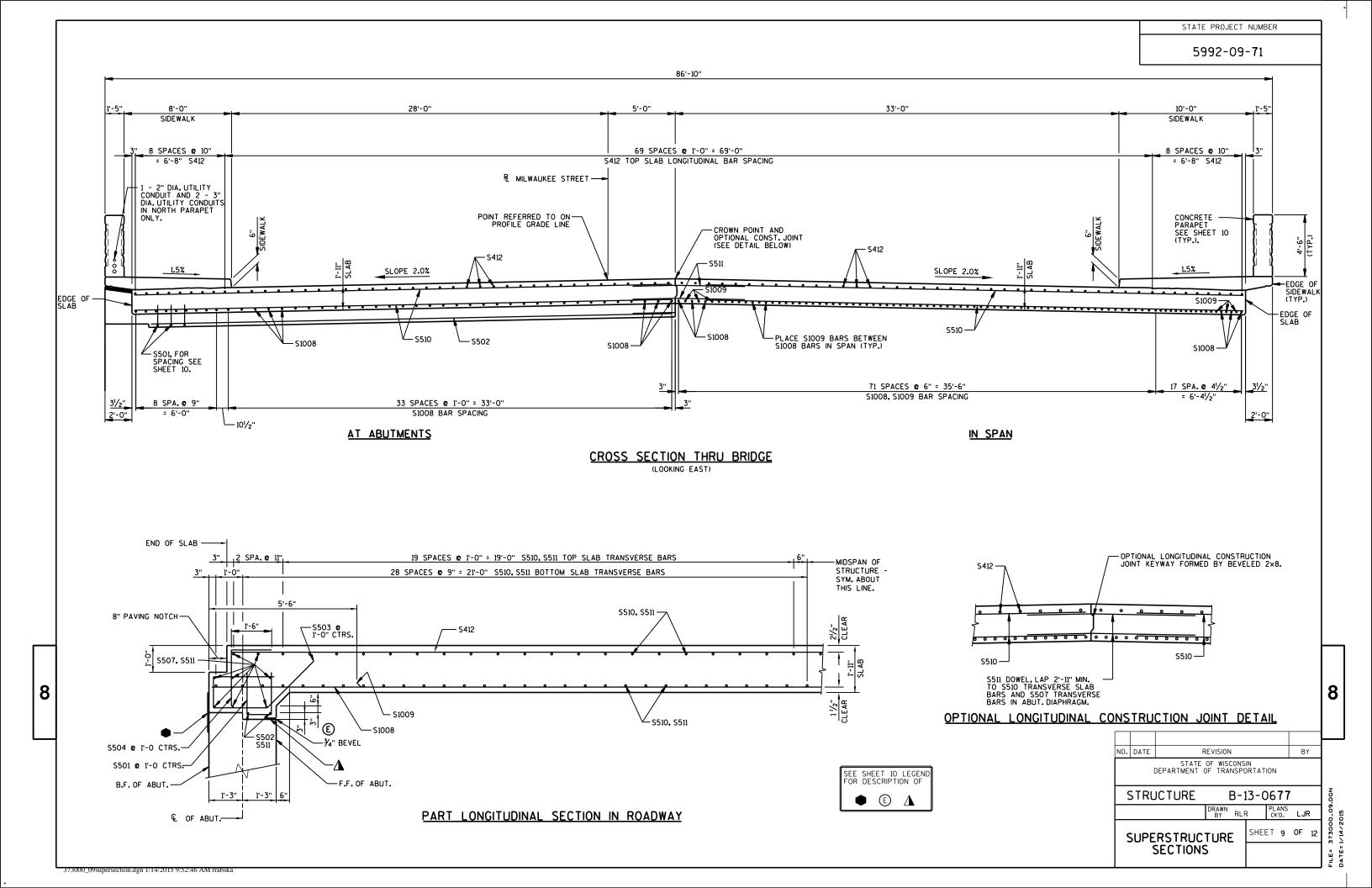
1.0

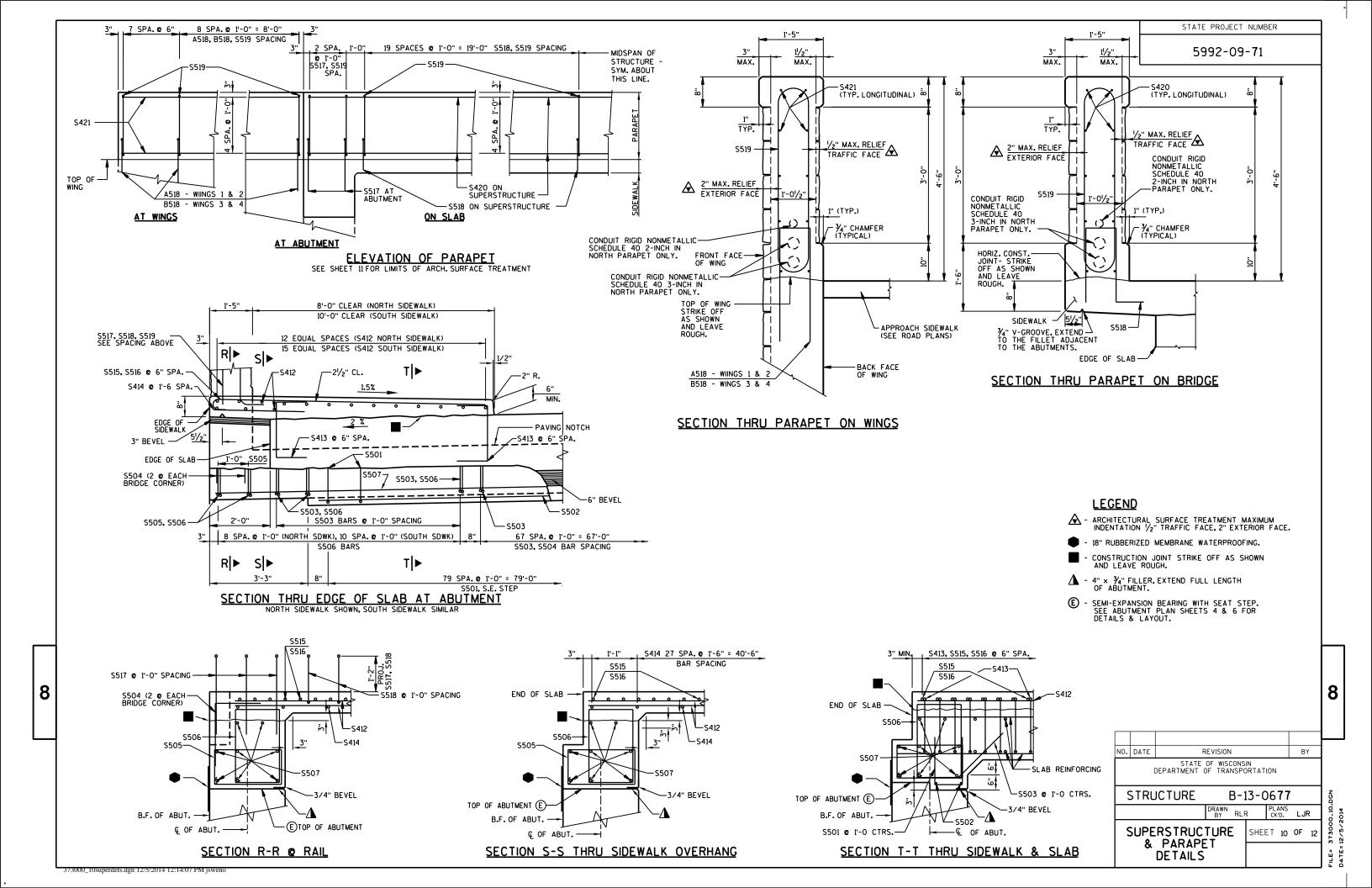
0.5

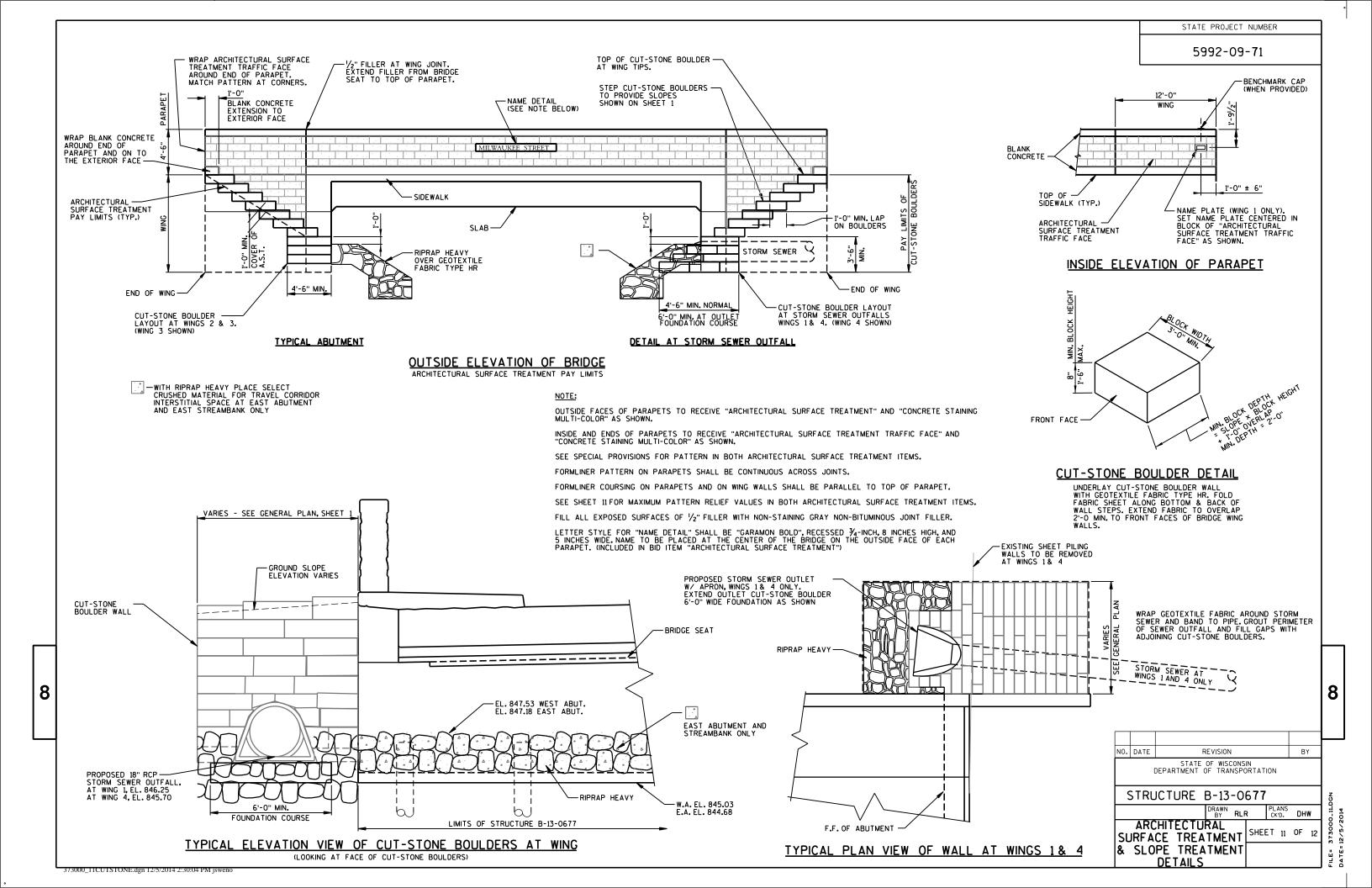
0.0

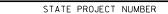
CAMBER SPANS AS SHOWN ABOVE AND IN THE TABLE OF VALUES TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. DEAD LOAD DEFLECTION APPROXIMATES 1/3 OF CAMBER VALUES SHOWN.

								ı
NO.	DATE		REVISION			В	<u> </u>	┝
NO.	DATE		OF WISCONS	IN		Ь		
	[DEPARTMENT (OF TRANSPO	ORTAT	ION			
5	STRL	JCTURE	B-1	13-0	677	,		;
			DRAWN BY RLF	₹	PLANS CK'D.	LJ	R	
				SHEE	ET 8	OF	12	000000
	SUPERSTRUCTURE						١.	

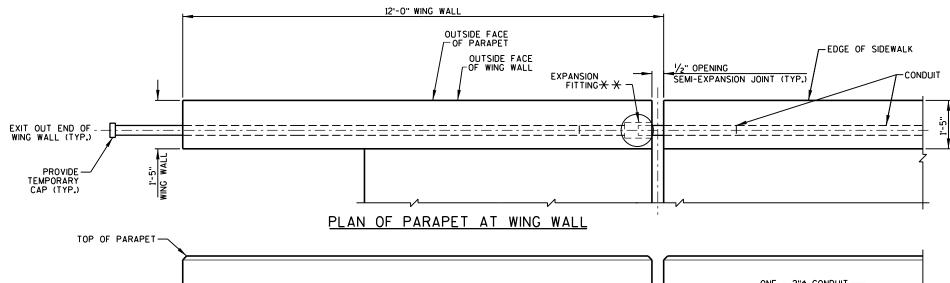








5992-09-71



ONE - 2" OCONDUIT REQUIRED, (TYP.) 45° BEND IN CONDUIT. (USE MINIMUM BENDING RADIUS PER WISCONSIN ELECTRIC CODE.) 3'-0" 3'-0" TOP OF WING WALL END OF WING-TOP OF SIDEWALK TWO - 3"¢ CONDUITS REQUIRED, (TYP.) CONTINUE RIGID NONMETALLIC CONDUIT OFF OF STRUCTURE (BY OTHERS). 6" MIN. -BACK FACE OF BID ITEMS. 1/2" FILLER AND SEALER EXTENDS TO TOP OF PARAPET, NOT SHOWN

> <u>OUTSIDE ELEVATION OF PARAPET AT NORTH WING WALLS</u> PLACE CONDUIT ON NORTH SIDE OF BRIDGE ONLY WING 2 SHOWN, WING 3 SIMILAR

NOTES

BID ITEMS SHALL BE:
"CONDUIT RIGID METALLIC 2-INCH".
"CONDUIT RIGID METALLIC 3-INCH".
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH"

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCLUDED IN THE BID ITEMS FOR CONDUIT RIGID METALLIC 2-INCH AND 3-INCH.

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING: O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

JUNCTION BOX REQUIREMENTS: NONE

CONDUIT REQUIREMENTS: USE ONE 2" OCONDUIT AND TWO 3" CONDUITS.

** EXPANSION FITTING REQUIREMENTS

• USE AN APPROVED EXPANSION FITTING AT EACH SEMIEXPANSION JOINT.

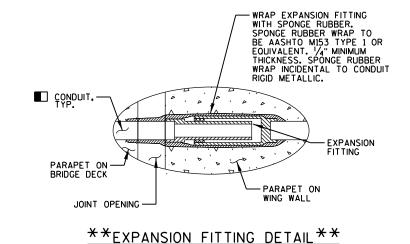
• POSITION MOVABLE END OF CONDUIT INSIDE EXPANSION FITTING TO ALLOW FOR EXPANSION/CONTRACTION MOVEMENT OF 1/2" EACH WAY. INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.

POSITION CONDUITS VERTICALLY TO ENSURE DRAINAGE OF CONDENSATE.

BRIDGE CONTRACTOR TO PROVIDE A PULL WIRE IN ALL CONDUIT FOR FUTURE CABLE INSTALLATION BY OTHERS AS PROVIDED IN THE STANDARD SPECIFICATIONS OR SPECIAL PROVISIONS.

LEGEND

USE RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTING. AT EXPANSION FITTING USE RIGID METALLIC CONDUIT EXTENDING 3'-0" EACH SIDE OF THE JOINT OPENING.

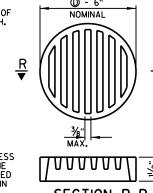


RODENT SHIELD NOTES:

APPLY RODENT SHIELD TO ENDS OF PIPE UNDERDRAIN WRAPPED 6-INCH.

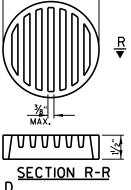
ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SHIELD SHALL
BE A PVC GRATE SIMILAR TO
THIS DETAIL. THE GRATE IS
COMMERCIALLY AVAILABLE
AS A FLOOR STRAINER.
A PIPE COUPLING IS REQUIRED
FOR THE ATTACHEMENT OF THIS
SHIELD TO THE PIPE UNDERDRAIN.
THE SHIELD SHALL BE FASTENED
TO THE PIPE COUPLING WITH TWO
OR MORE NO. 10 × 1-INCH STAINLESS
STEEL SHEET METAL SCREWS. THE
RODENT SHIELD SHALL BE INCLUDED
IN THE BID ITEM "PIPE UNDERDRAIN
WRAPPED 6-INCH".



RODENT SHIELD

① - DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



REVISION STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-0677 DRAWN BY RLR

ELECTRICAL CONDUIT PLAN & DETAILS

DHW SHEET 12 OF

8

EARTHWORK PROJECT I.D. 5992-09-69 - MILWAUKEE STREET

		AREA (SF)			Incremental Vo	ol (CY) (Unadjusted)		Cumulative Vol (0	CY)	4
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 8
4+20		0	0	0	0	0	0	0	0	0
4+25	5.00	85	30	0	8	3	0	8	0	5
4+50	25.00	64	30	0	69	19	0	77	0	56
4+75	25.00	82	30	1	68	28	1	145	1	95
5+00	25.00	52	30	0	62	28	1	207	1	129
5+15	15.00	114	30	0	46	17	0	253	1	158
5+25	10.00	59	30	1	32	11	0	285	2	179
5+50	25.00	83	30	0	66	28	0	351	2	216
5+64	14.00	71	30	0	40	16	0	391	2	241
5+75	11.00	77	30	0	30	12	0	421	2	259
6+00	25.00	69	30	0	68	28	0	489	2	298
6+11	11.00	70	30	0	28	12	0	517	2	314
6+25	14.00	85	30	0	40	16	0	557	2	339
6+50	25.00	66	30	0	70	28	0	627	2	381
6+75	25.00	89	30	0	72	28	0	698	2	425
7+00	25.00	89	30	0	82	28	0	781	2	479
7+25	25.00	108	30	0	91	28	0	872	2	542
7+50	25.00	98	30	0	95	28	0	967	2	610
7+75	25.00	102	30	0	92	28	0	1059	2	674
8+00	25.00	101	30	0	94	28	0	1153	2	741
8+25	25.00	101	30	0	93	28	0	1247	2	806
8+44	19.00	152	30	0	89	21	0	1336	2	874
8+75	31.00	183	30	1	192	34	0	1528	3	1032
9+00	25.00	190	30	1	173	28	1	1701	4	1175
9+25	25.00	208	30	2	184	28	2	1885	6	1330
9+50	25.00	208	30	0	192	28	1	2078	8	1493
9+63	13.00	208	30	0	100	14	0	2178	8	1579

2178

591

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusab	This does not show up in cross sections
3 - Fill 8 - Mass Ordinate	Does not include Unusable Pavement Exc volume If Marsh and EBS to be backfilled with Granular: [(Cut) - ((Fill - Expanded Rock) * Fill Factor))]

9

9

WISDOT/CADDS SHEET 49

PROJECT NO: 5992-09-69/71 HWY: MILWAUKEE STREET COUNTY: DANE EARTHWORK SHEET E

EARTHWORK PROJECT I	\Box	E002 00 40	EAID	OVEC WENTE
EARTHWORK PROJECT I	. U.	399Z-U9-09 -	FAIR	OAKS AVEINUE

		AREA (SF)			Incremental Vo	ol (CY) (Unadjusted)		Cumulative Vol (CY)	
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut Note 1	alvaged/Unusabl Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate Note 8
202+70.		65	16	0	0	0	0	0	0	0
202+75	5.00	72	16	0	13	3	0	13	0	13
203+00	25.00	70	16	0	66	15	0	78	0	78
203+25	25.00	70	16	0	65	15	0	143	0	143
203+50	25.00	75	16	0	67	15	0	211	0	211
203+75	25.00	81	16	0	73	15	0	283	0	283
204+00	25.00	97	16	0	83	15	0	366	0	366
204+25	25.00	89	16	0	86	15	0	452	0	452
204+50	25.00	100	16	0	87	15	0	539	0	539
204+75	25.00	83	16	0	85	15	0	623	0	623
204+84	9.00	83	16	0	28	5	0	651	0	651
MILWAUKEE STREET										
205+47		92	20	0	0	0	0	651	0	651
205+75	28.00	43	20	0	70	21	0	721	0	721
206+00	25.00	79	20	0	56	18	0	777	0	777
206+25	25.00	46	20	0	58	19	0	835	0	835
206+50	25.00	36	20	0	38	19	0	873	0	873
206+65	15.00	33	20	0	19	11	0	892	0	892
					892	213	0			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Mat	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume וו ואמו אוו בסט נט טפ טמכגוווופט שונוו Granular: [(Cut) - ((Fill - Expanded Rock)
8 - Mass Ordinate	* Fill Factor))]

EARTHWORK PROJECT I.D. 5992-09-69 - POWERS AVENUE

		AREA (SF)	AREA (SF)			ol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	Mass Ordinate
					Note 1	Note 2	Note 3	Note 1		Note 8
300+16		65	0	0	0	0	0	0	0	0
300+25.	9.00	65	0	0	22	0	0	22	0	22
300+40.	15.00	51	0	0	32	0	0	54	0	54
										<u> </u>
					54	0	0			

9

PROJECT NO:5992-09-69/71 HWY:MILWAUKEE STREET COUNTY:DANE EARTHWORK SHEET E

EARTHWORK PROJECT I.D. 5992-09-71 - MILWAUKEE STREET - BRIDGE RECONSTRUCTION

		AREA (SF)	AREA (SF)			I (CY) (Unadjusted)		Cumulative Vol (
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	Mass Ordinate
					Note 1	Note 2	Note 3	Note 1		Note 8
9+63		208	30	0	0	0	0	0	0	0
9+77.75	14.75	175	30	88	104	16	24	104	30	74
B-13-0677										
					104	16	24			

EARTHWORK PROJECT I.D. 5992-09-71 - MILWAUKEE STREET - BRIDGE RECONSTRUCTION

		AREA (SF)			Incremental Vo	l (CY) (Unadjusted)		Cumulative Vol (CY)	-
STATION	Distance	Cut	Salvaged/Unusable Pavement Material	Fill	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	Mass Ordinate
B-13-0677										
10+22.25		175	25	103	0	0	0	0	0	0
10+35	12.75	200	25	64	89	12	39	89	49	39
10+50	15	195	25	42	110	14	30	198	86	112
10+75	25	176	25	36	172	23	36	370	132	238
11+00	25	183	25	7	166	23	20	536	157	379
11+25	25	180	25	13	168	23	9	704	169	535
11+50	25	168	25	15	161	23	13	865	185	680
11+75	25	160	25	13	152	23	13	1017	201	815
12+00	25	146	25	8	142	23	10	1158	213	945
12+25	25	130	25	10	128	23	8	1286	224	1063
12+40	15	130	25	10	72	14	6	1359	231	1128
					1359	202	185			

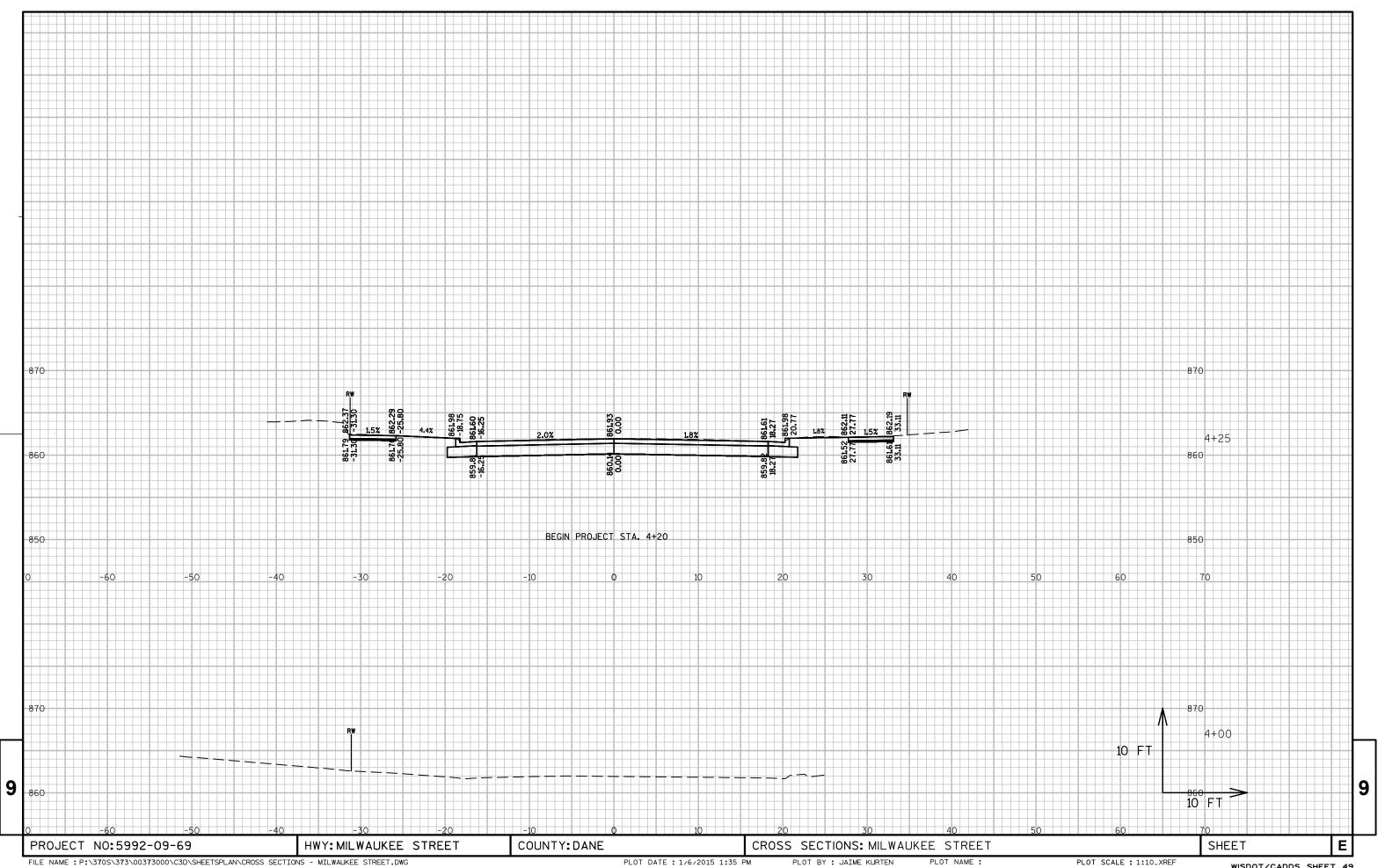
Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusab	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: [(Cut) - ((Fill - Expanded Rock) * Fill Factor))]

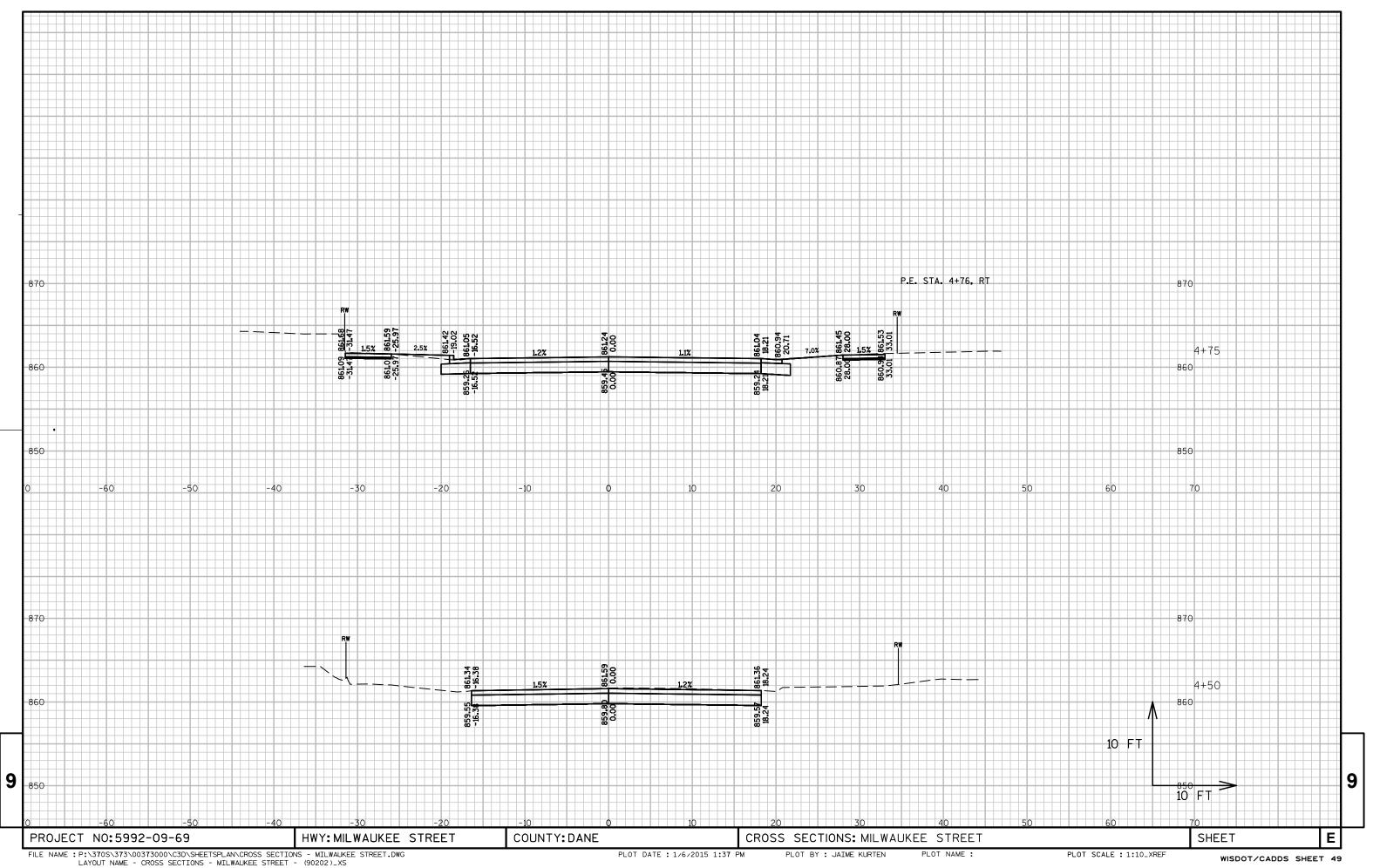
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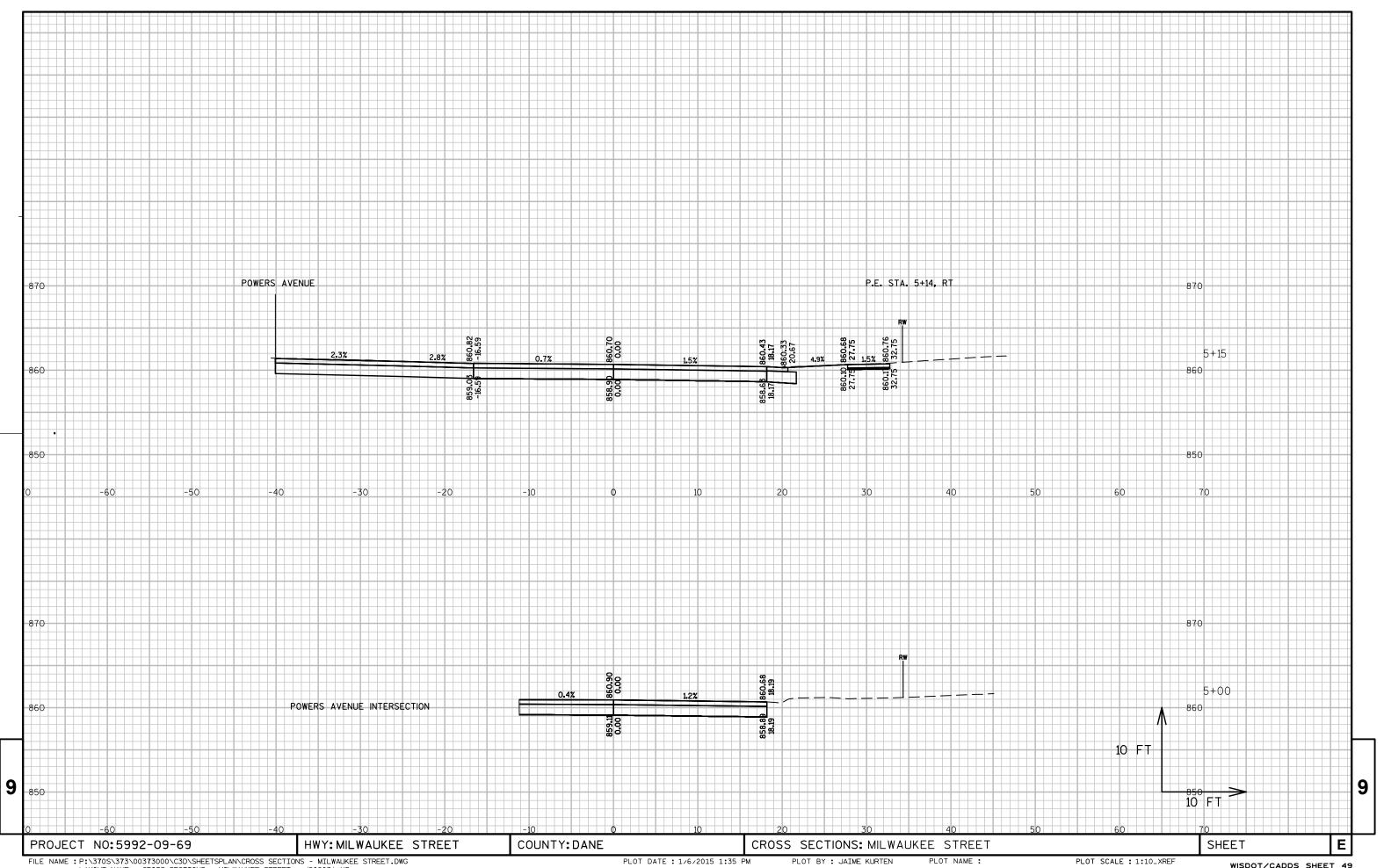
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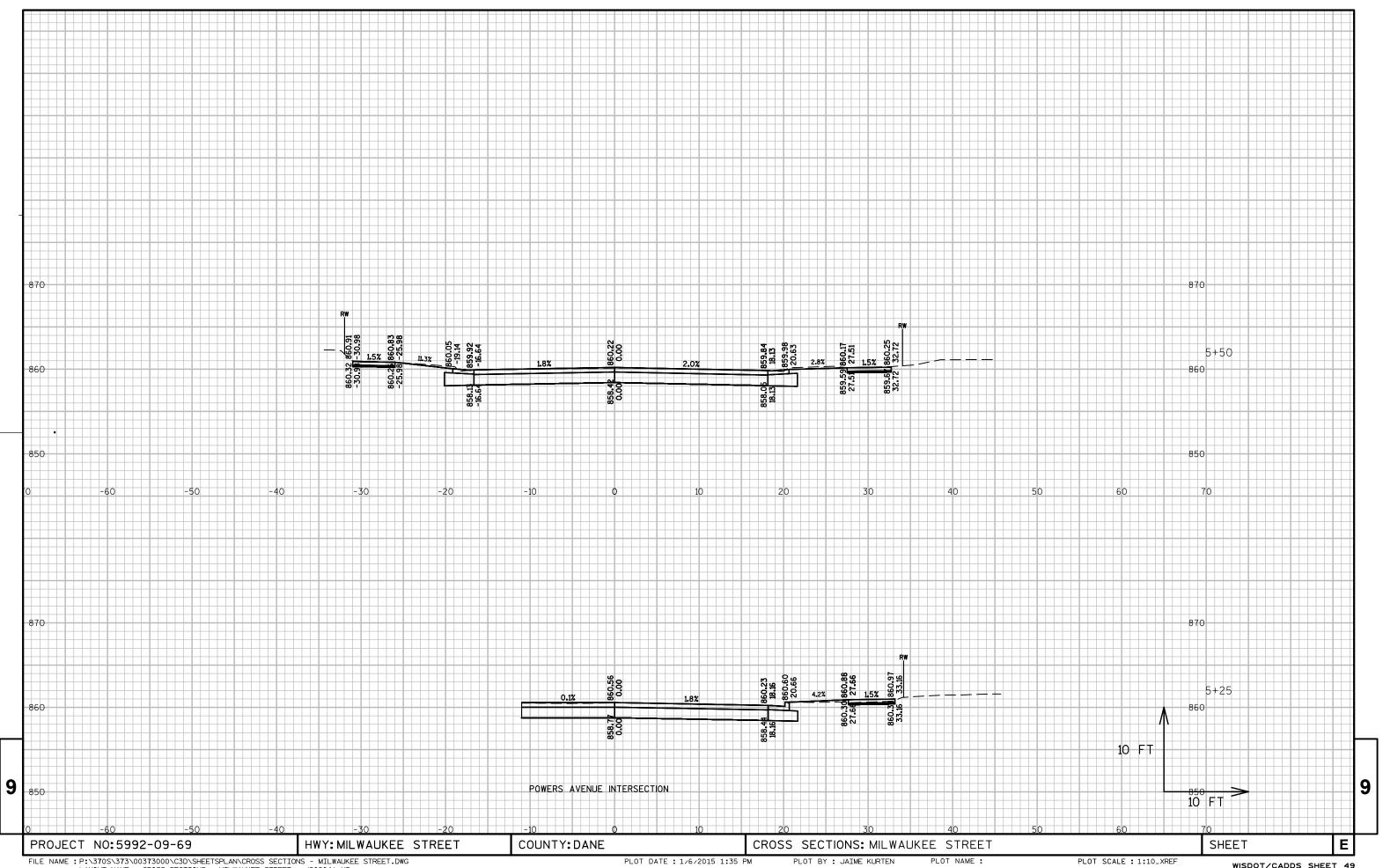
PROJECT NO:5992-09-69/71 HWY:MILWAUKEE STREET COUNTY:DANE EARTHWORK SHEET E

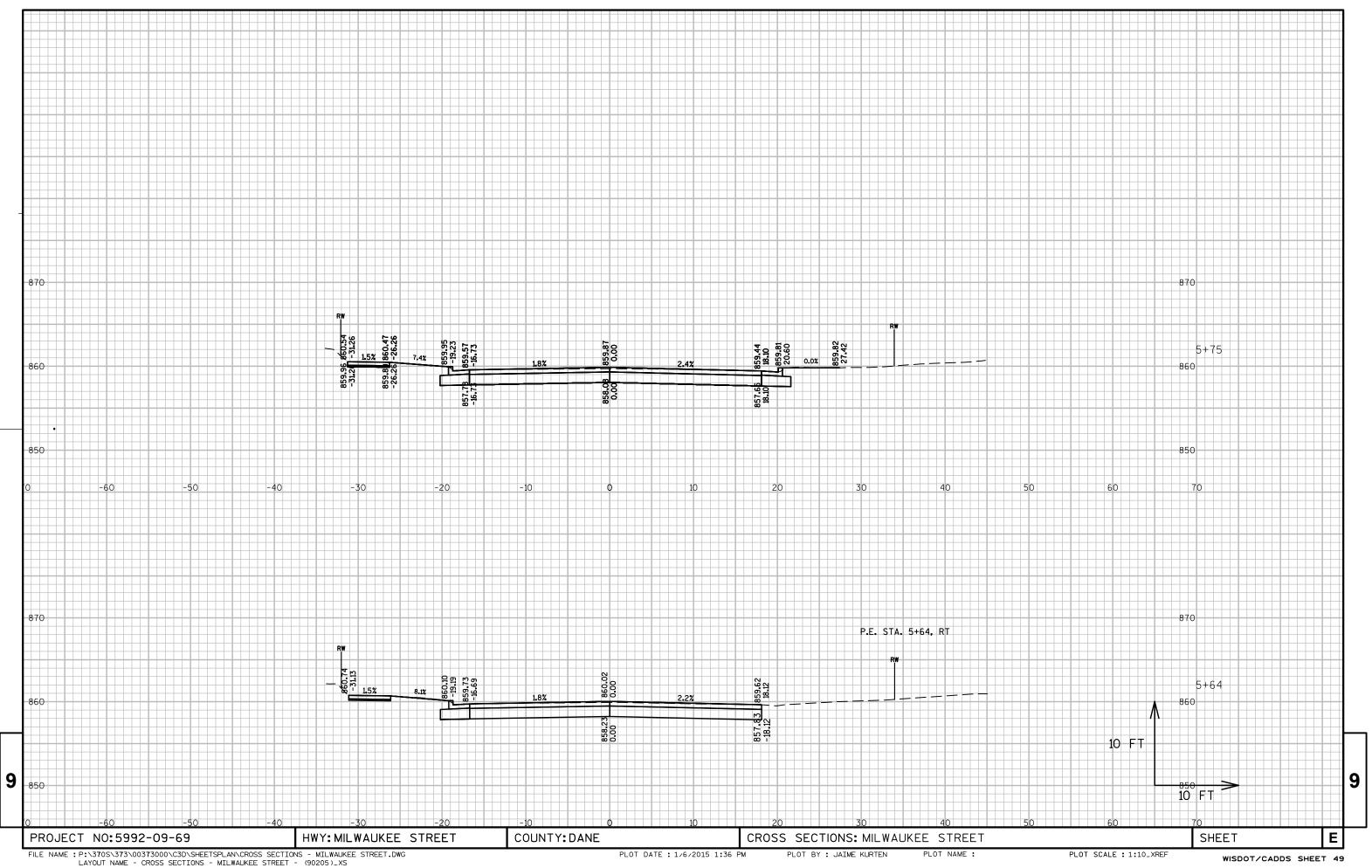
PLOT BY: Jdolens

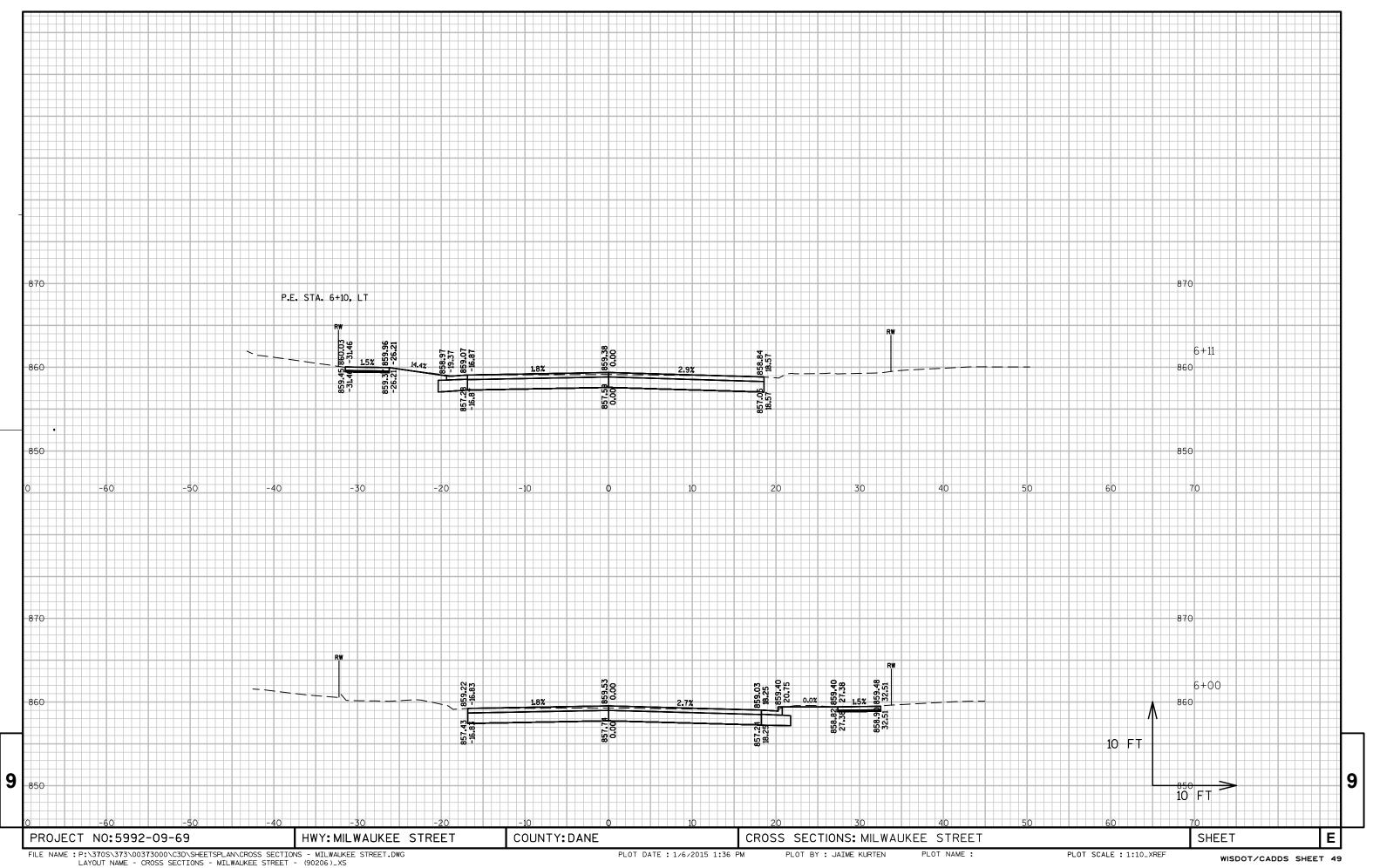


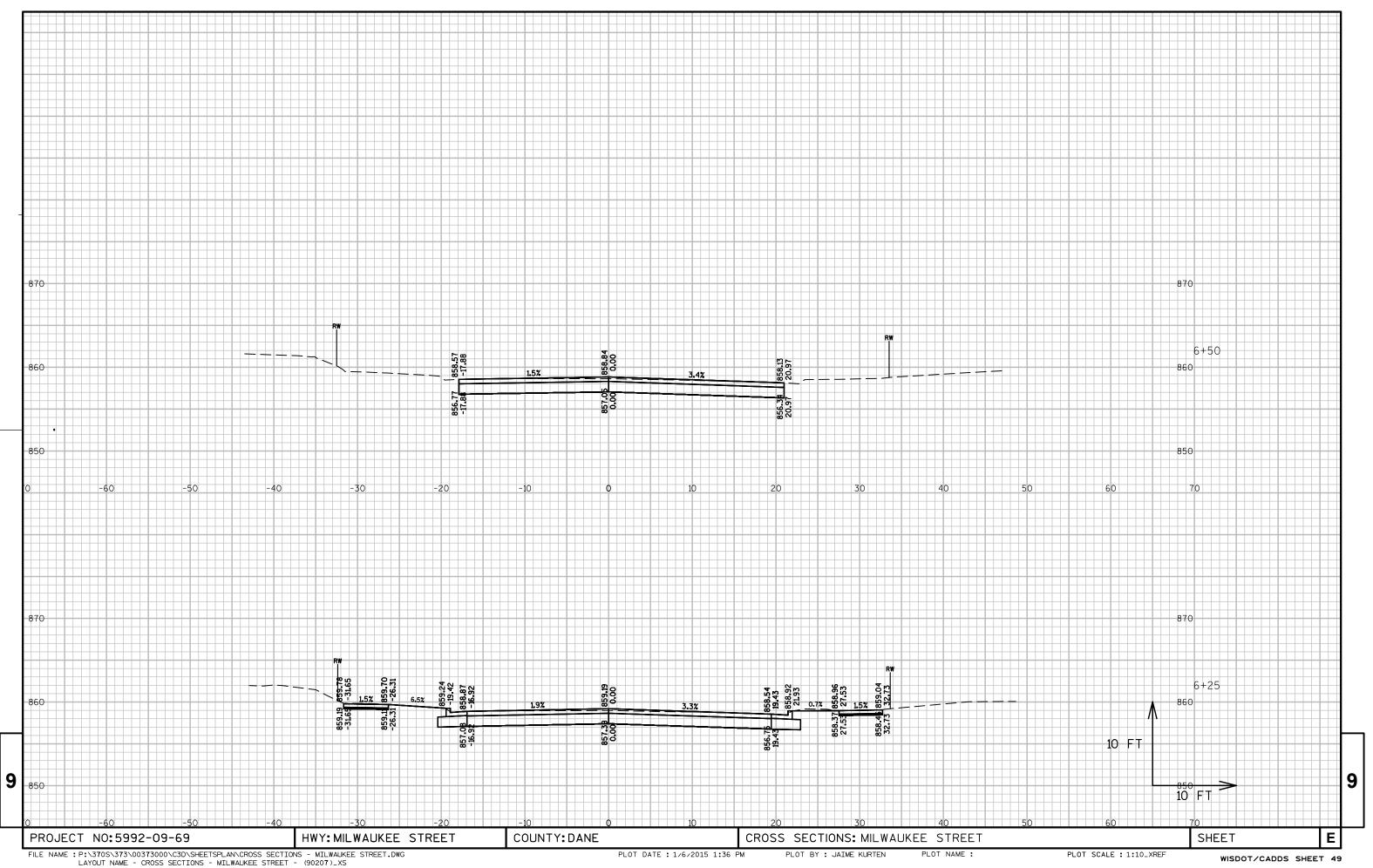


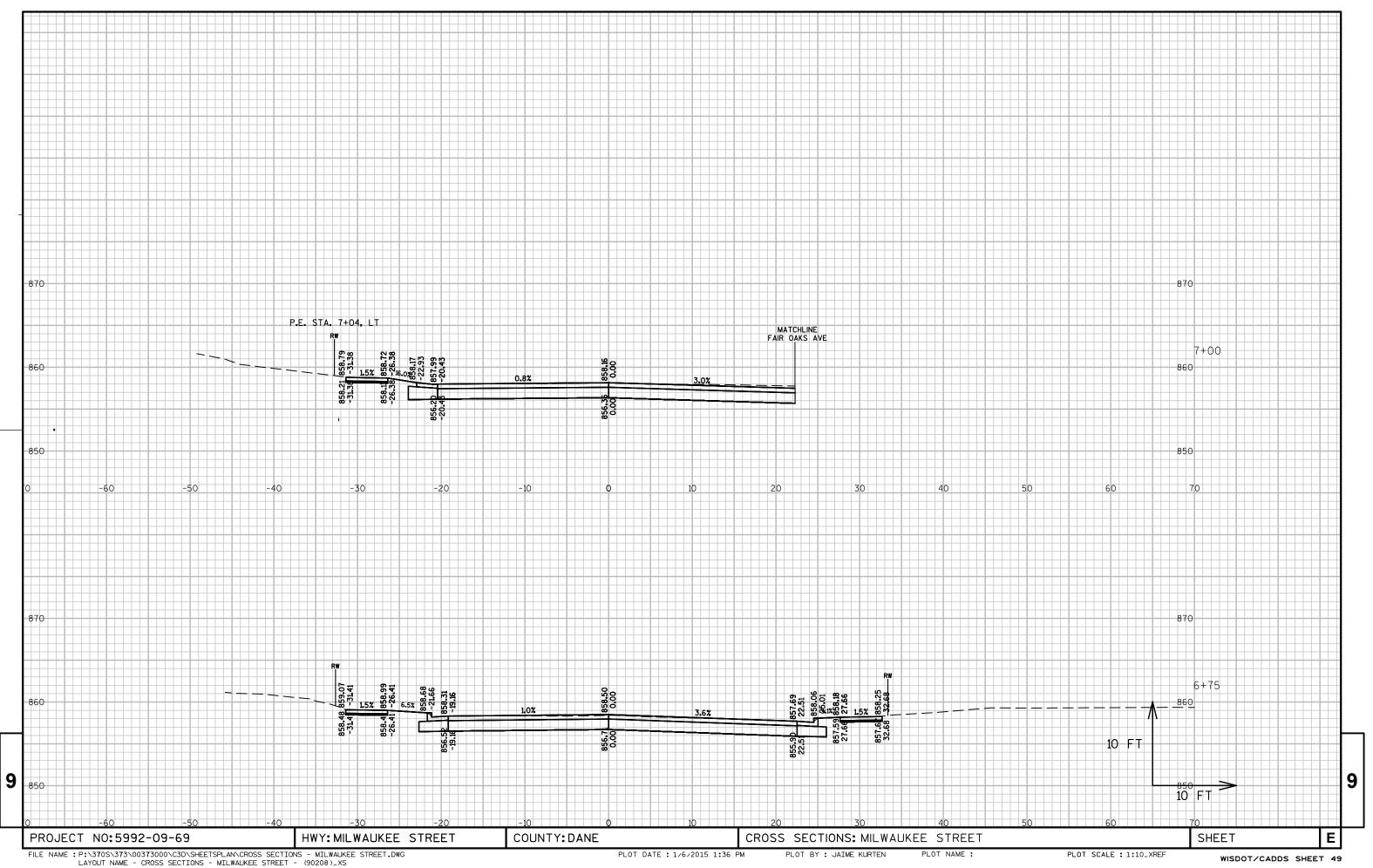


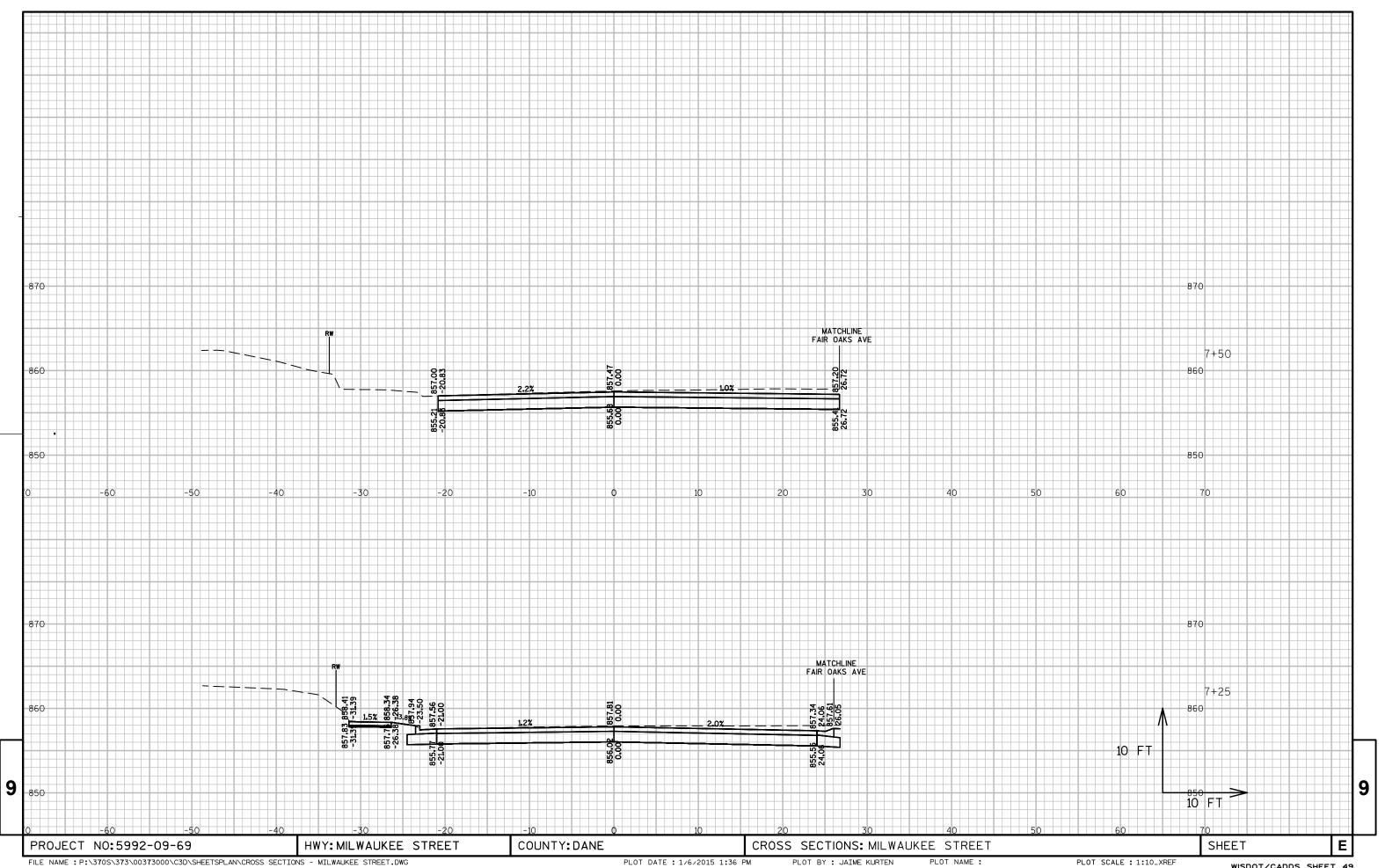


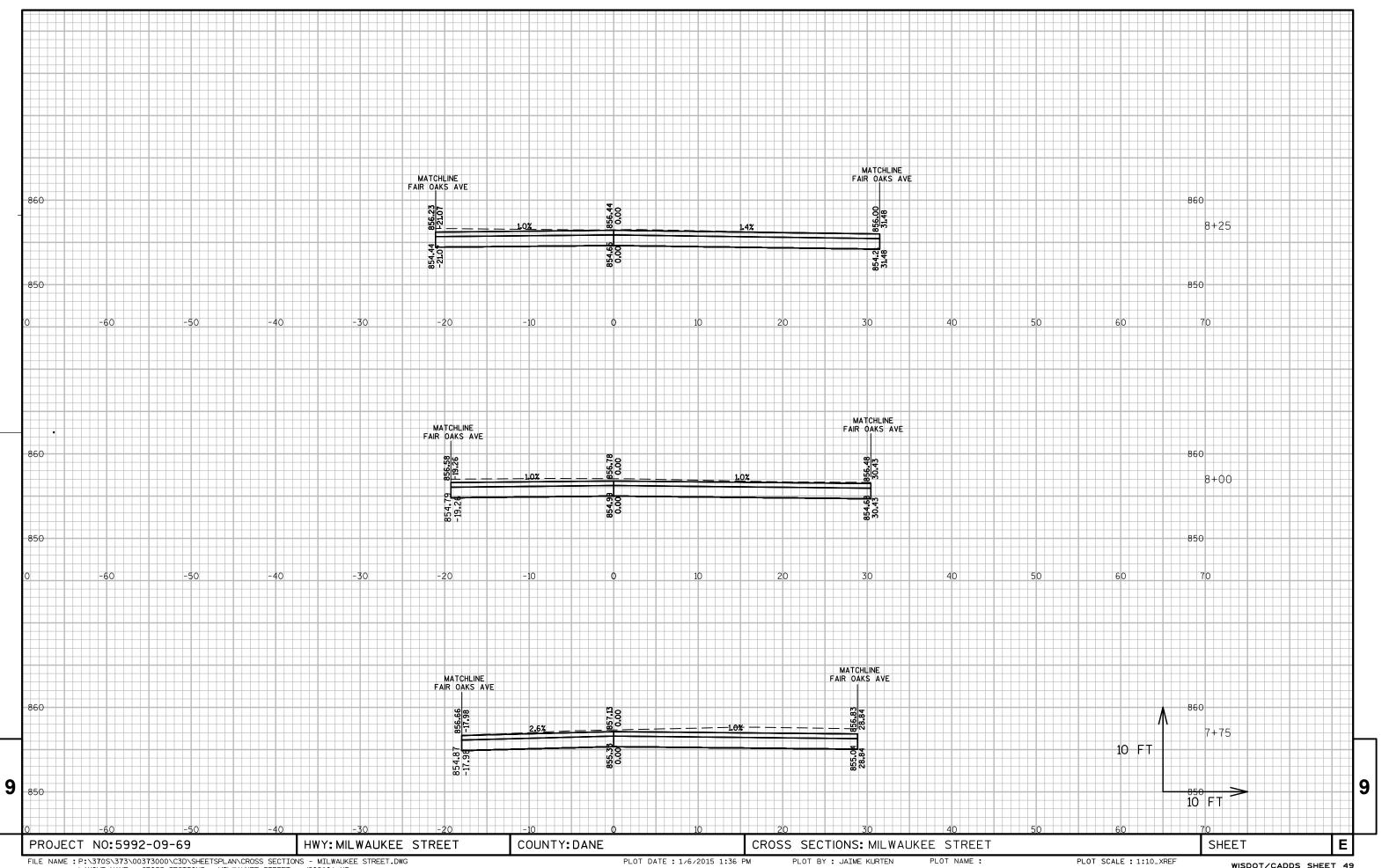


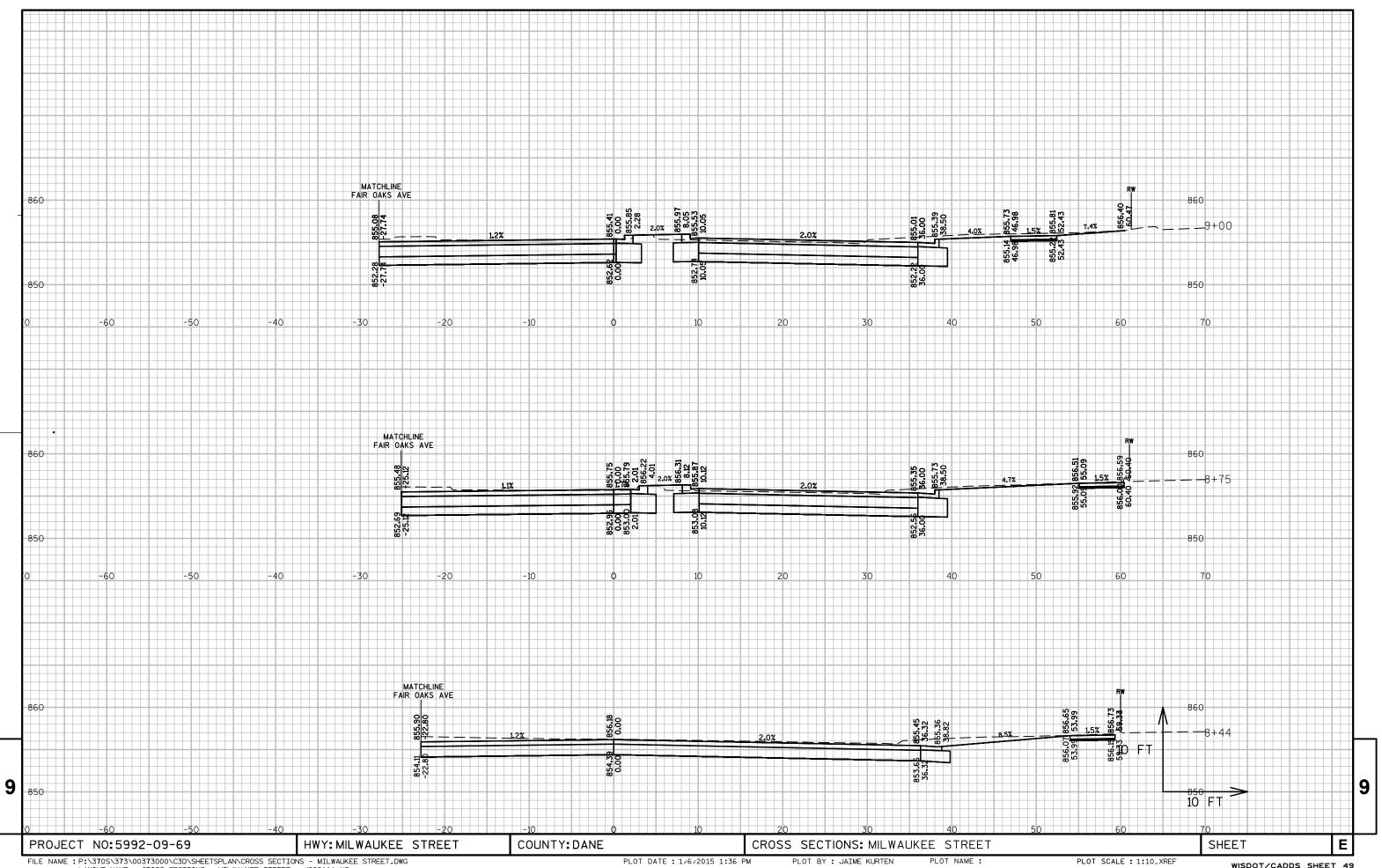


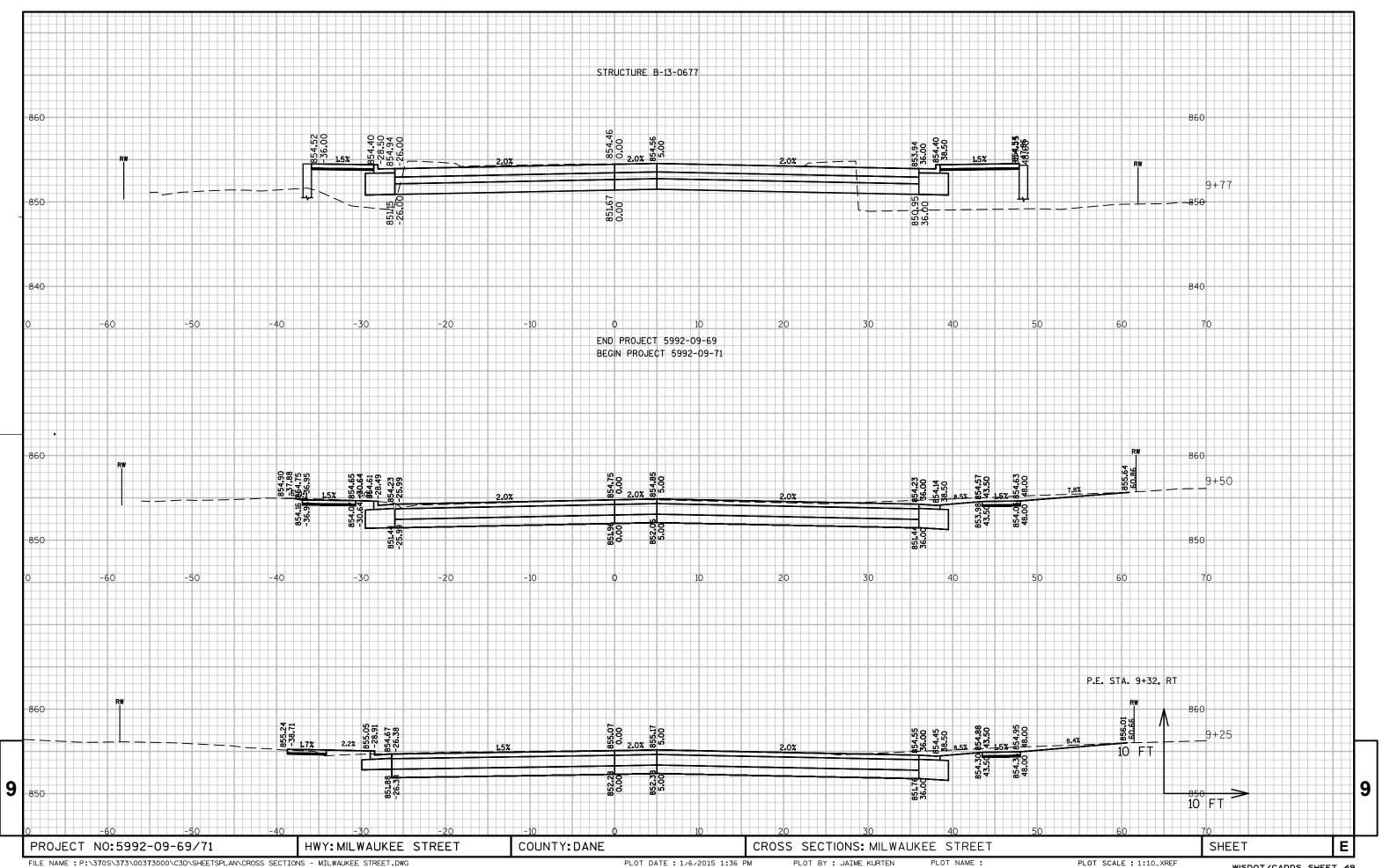


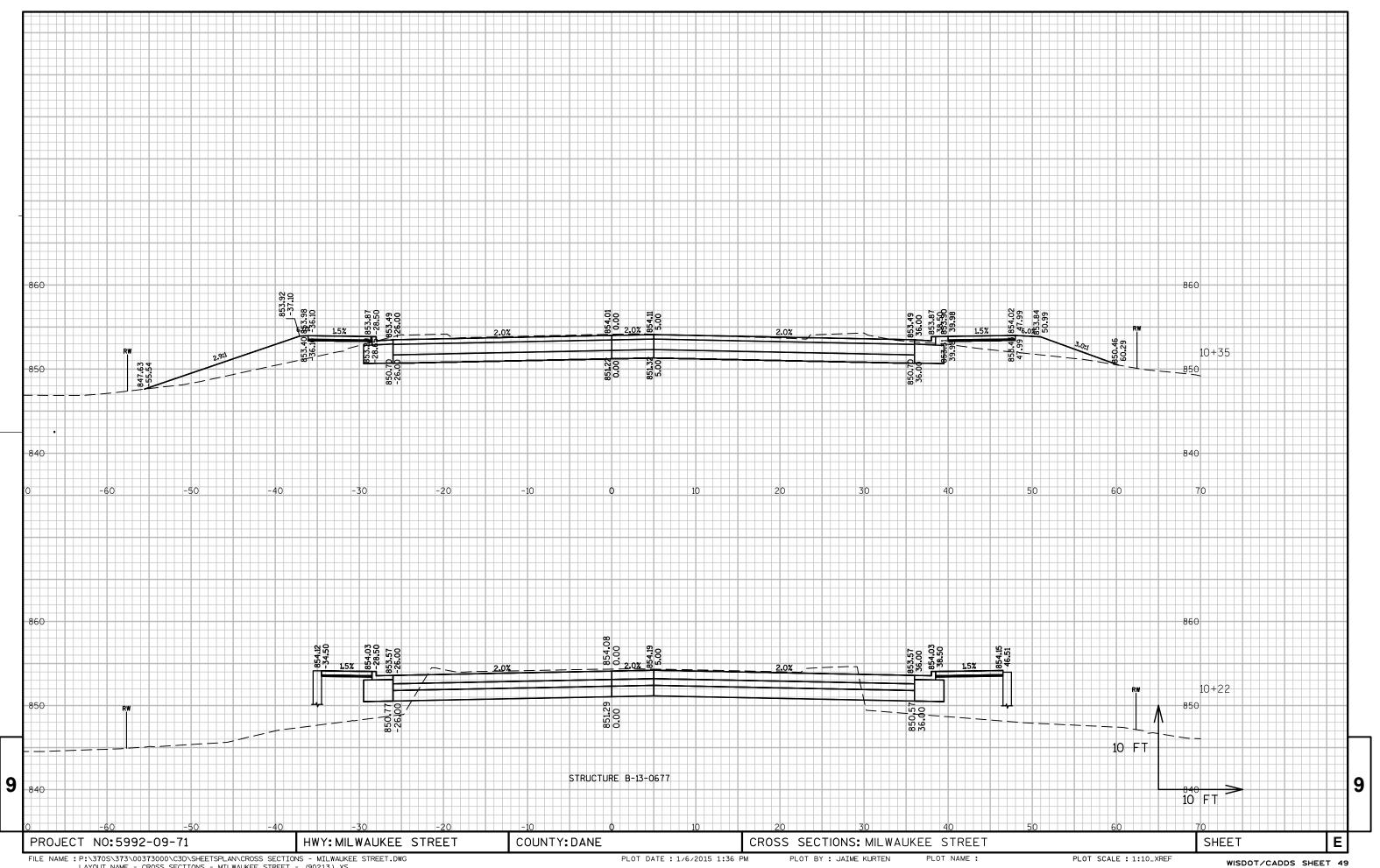


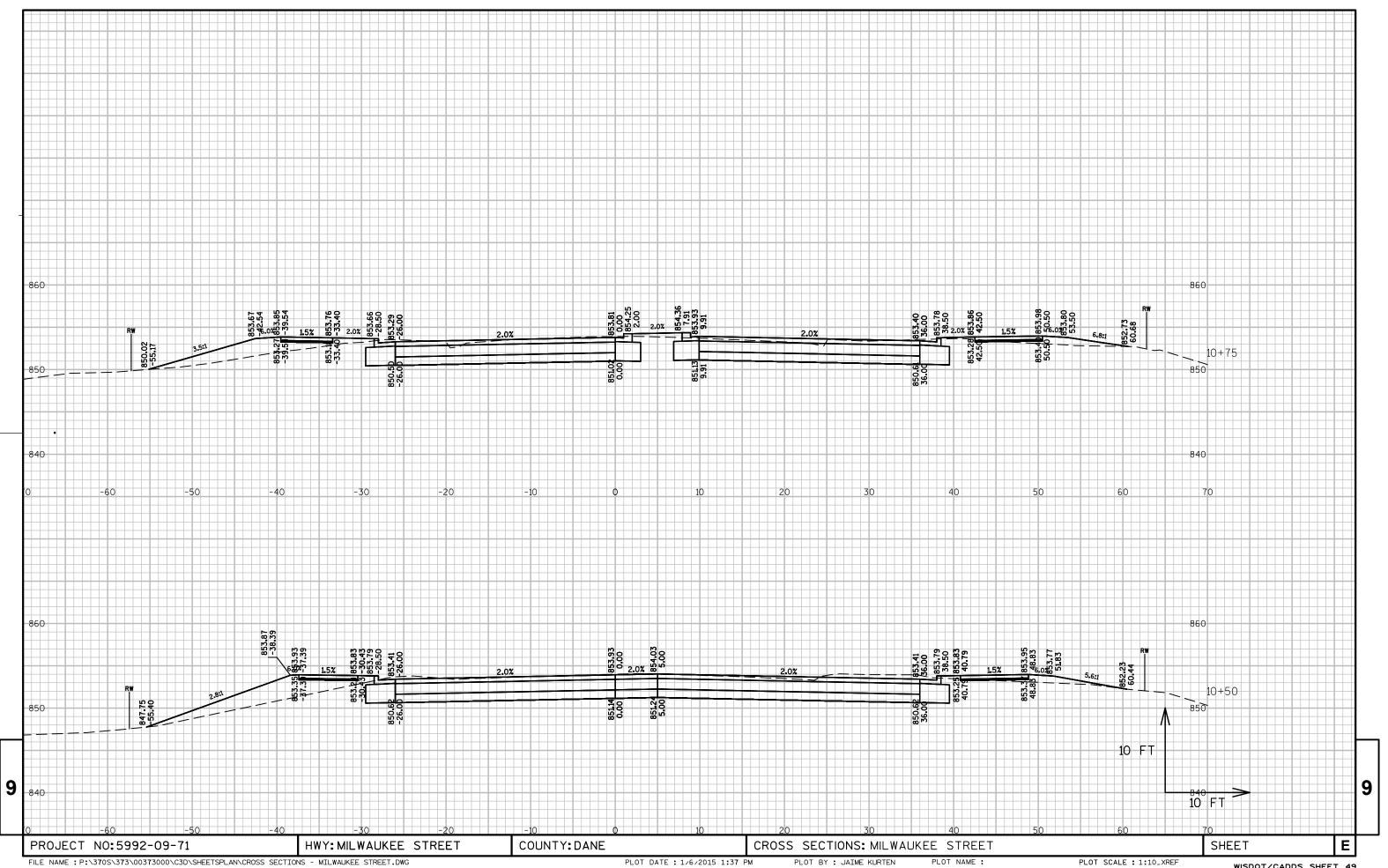


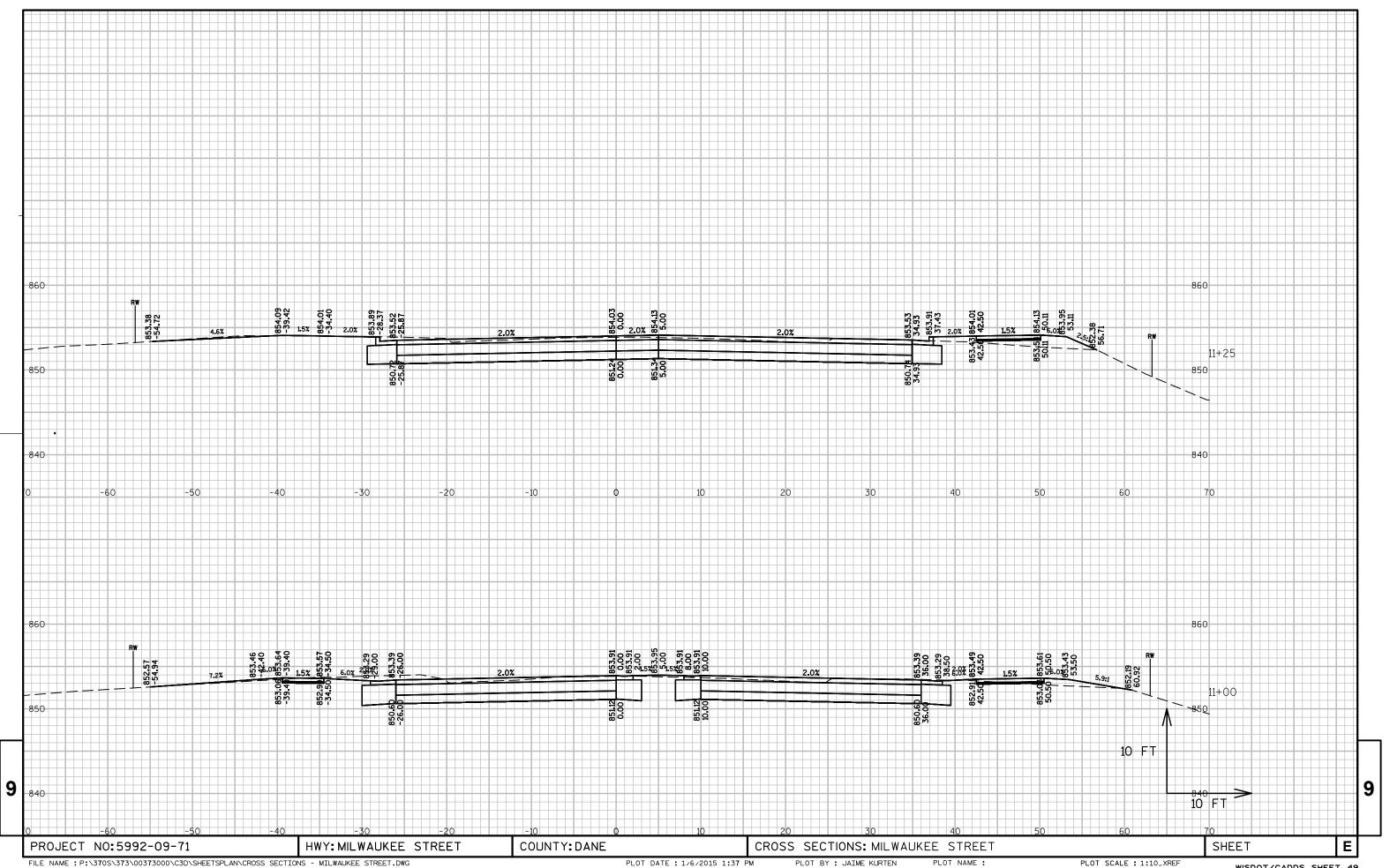


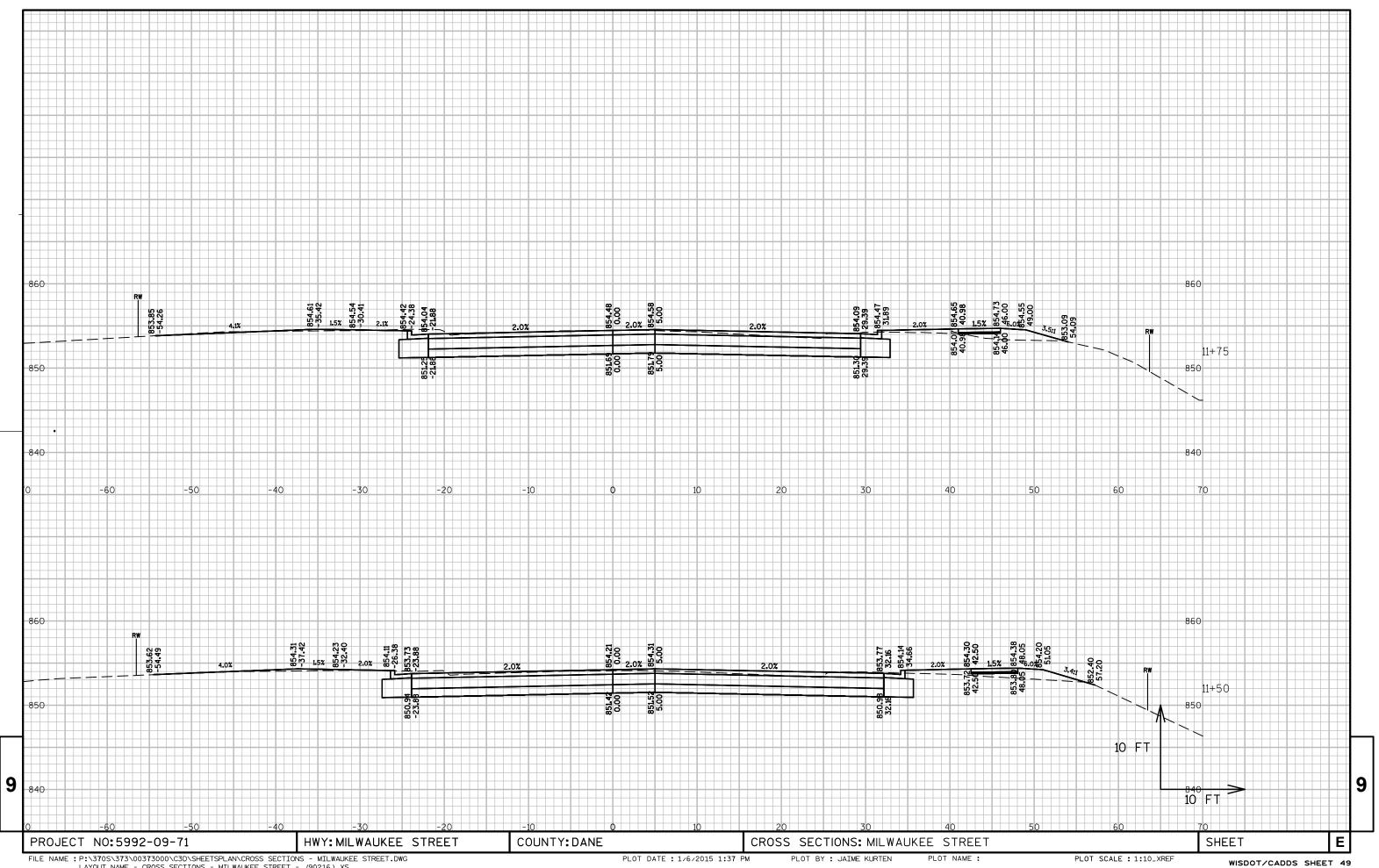


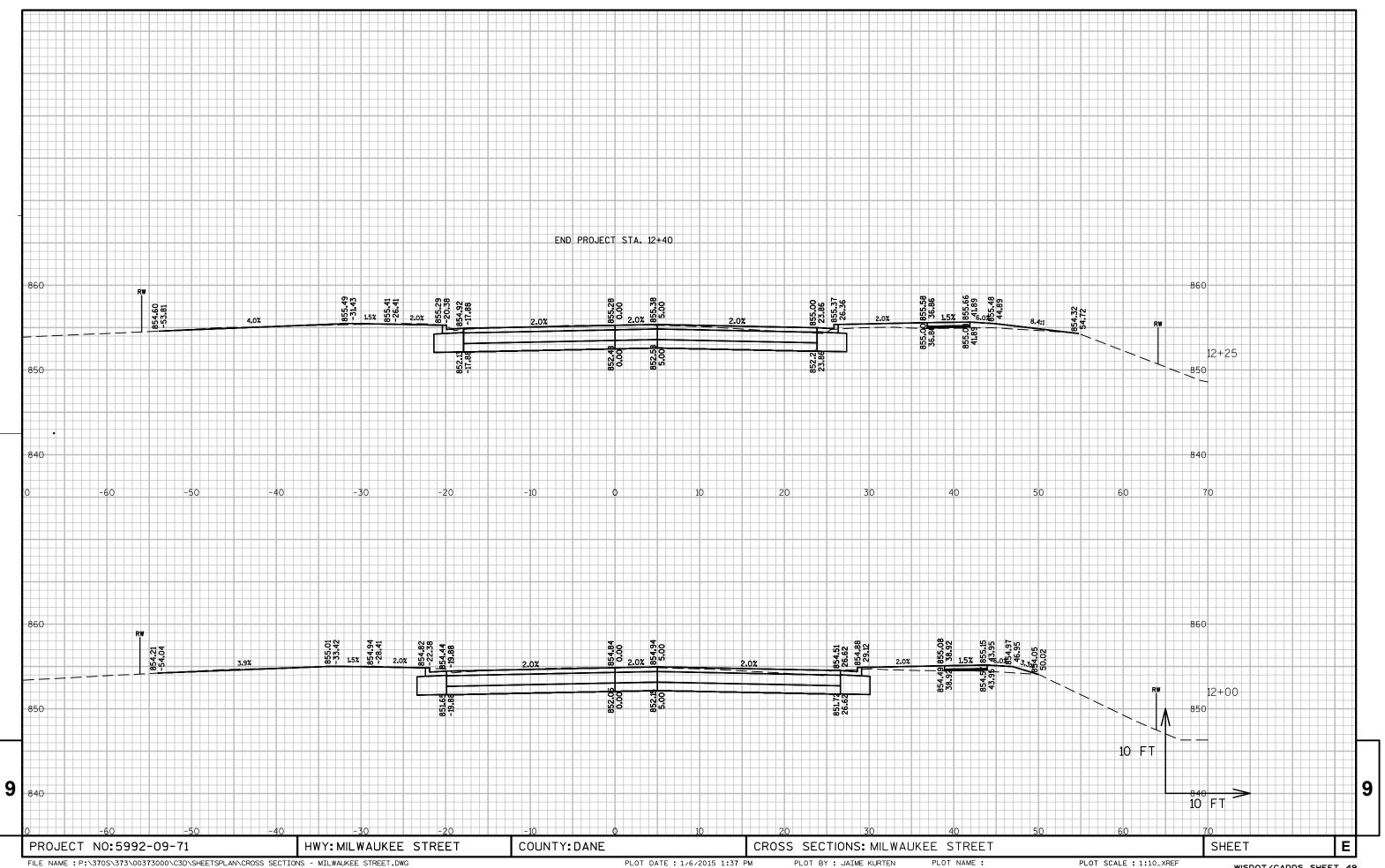


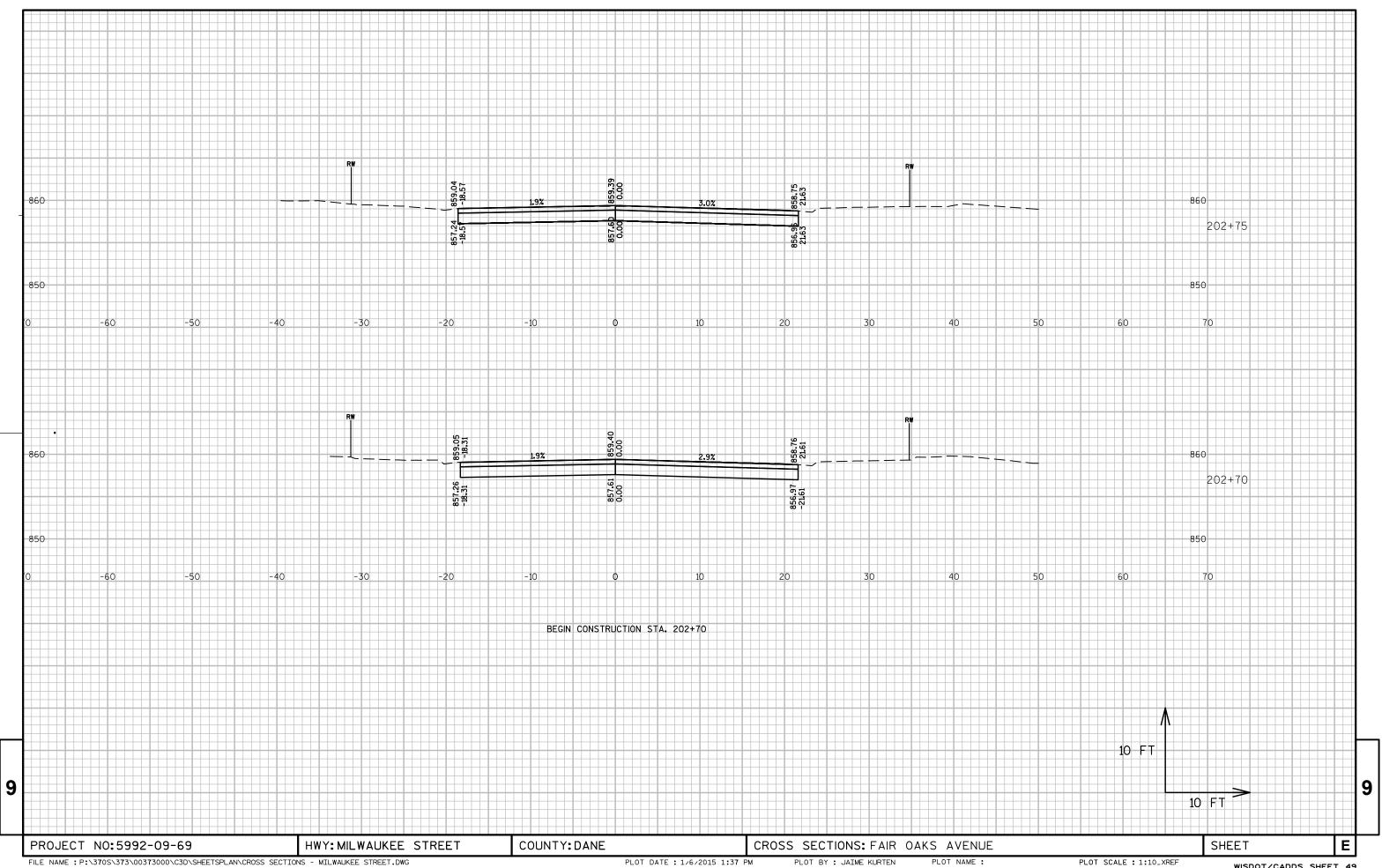


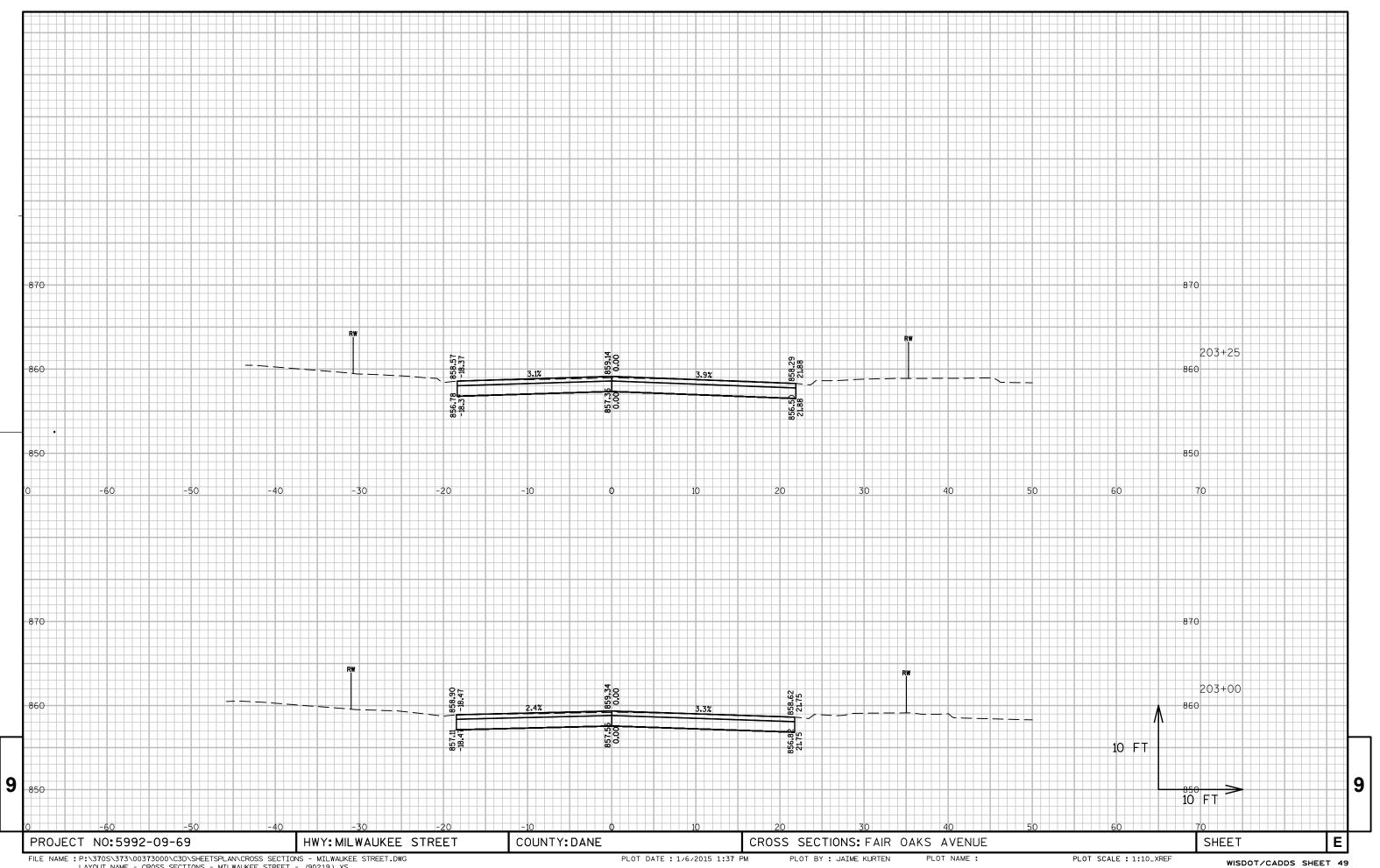


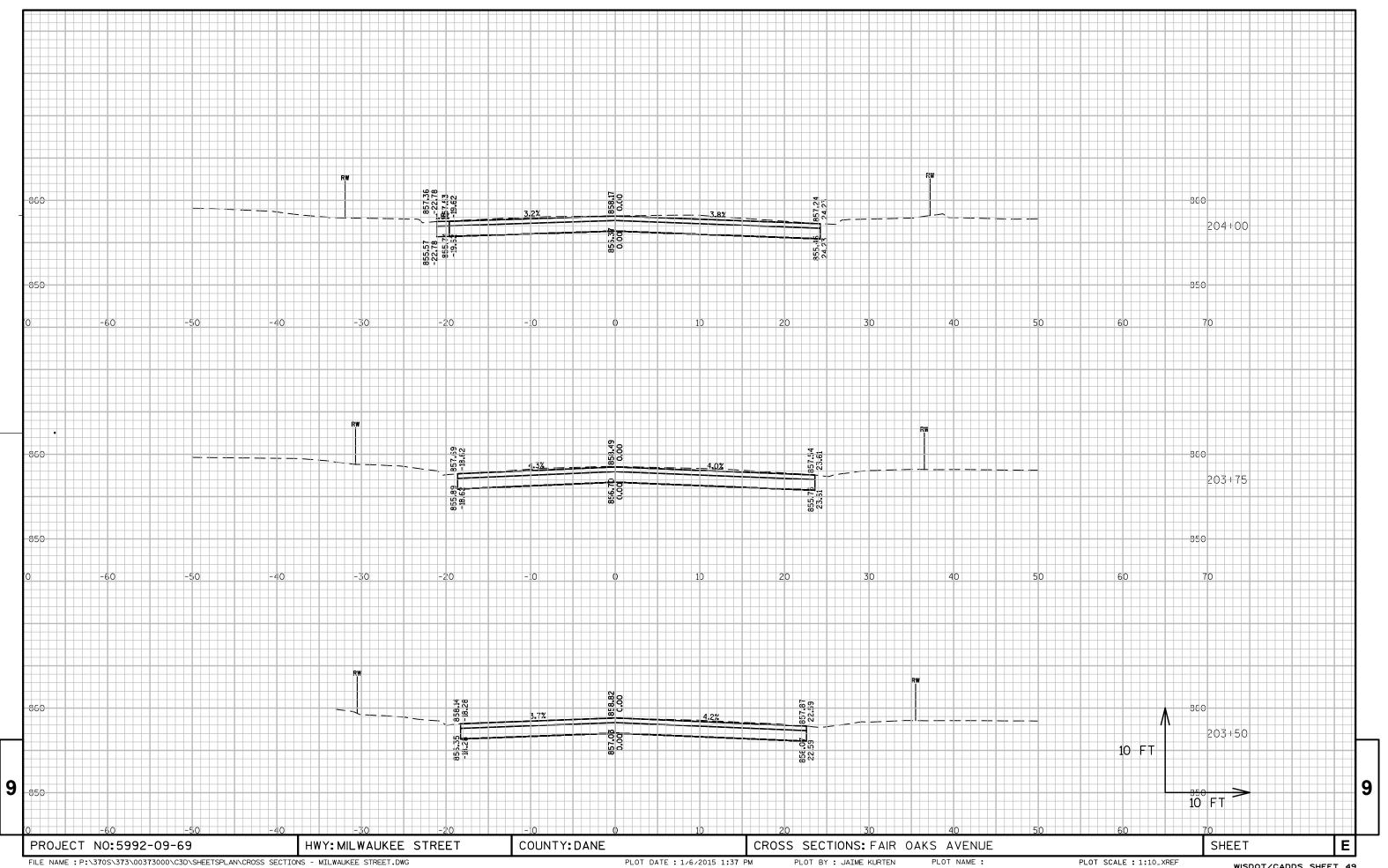


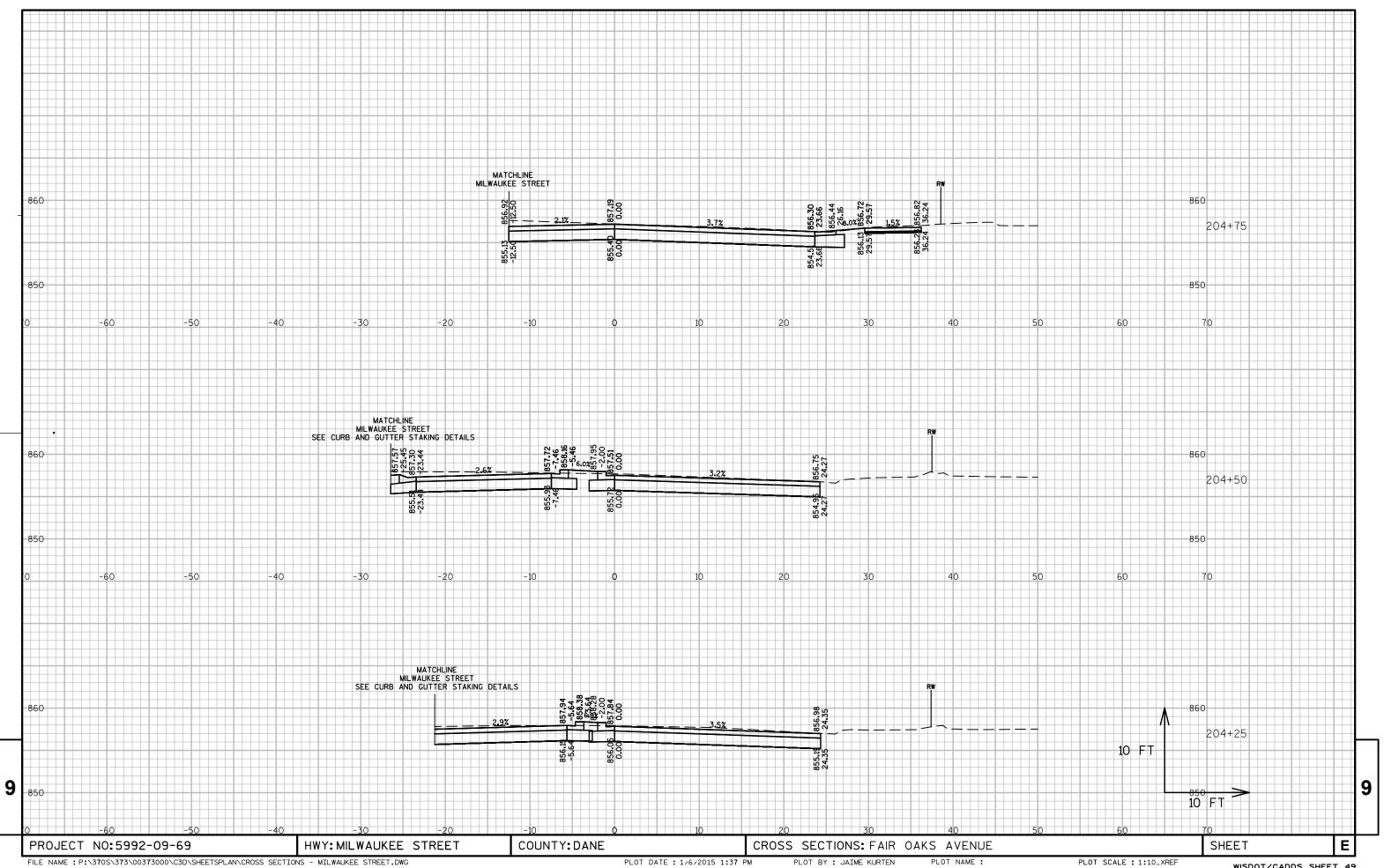


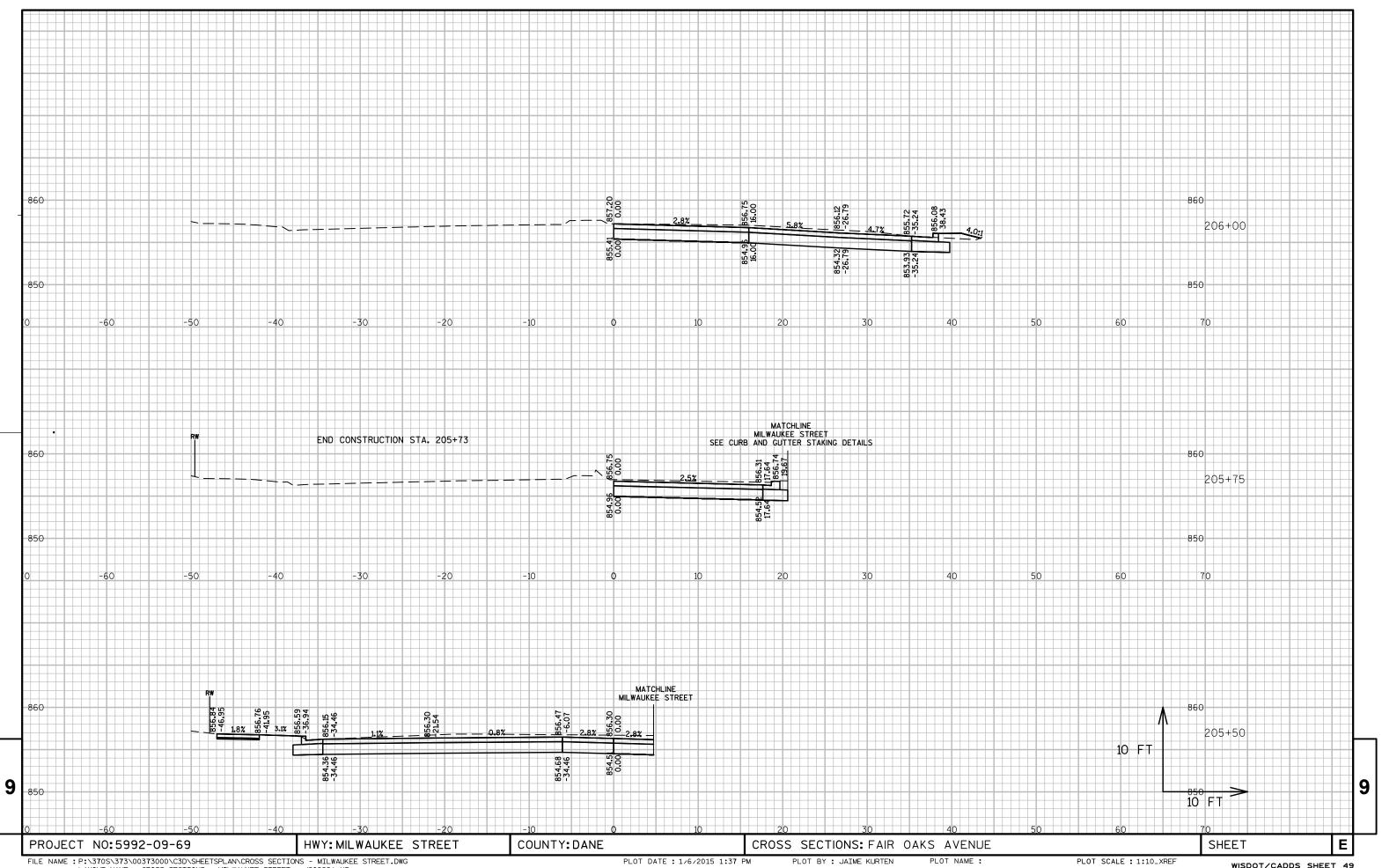


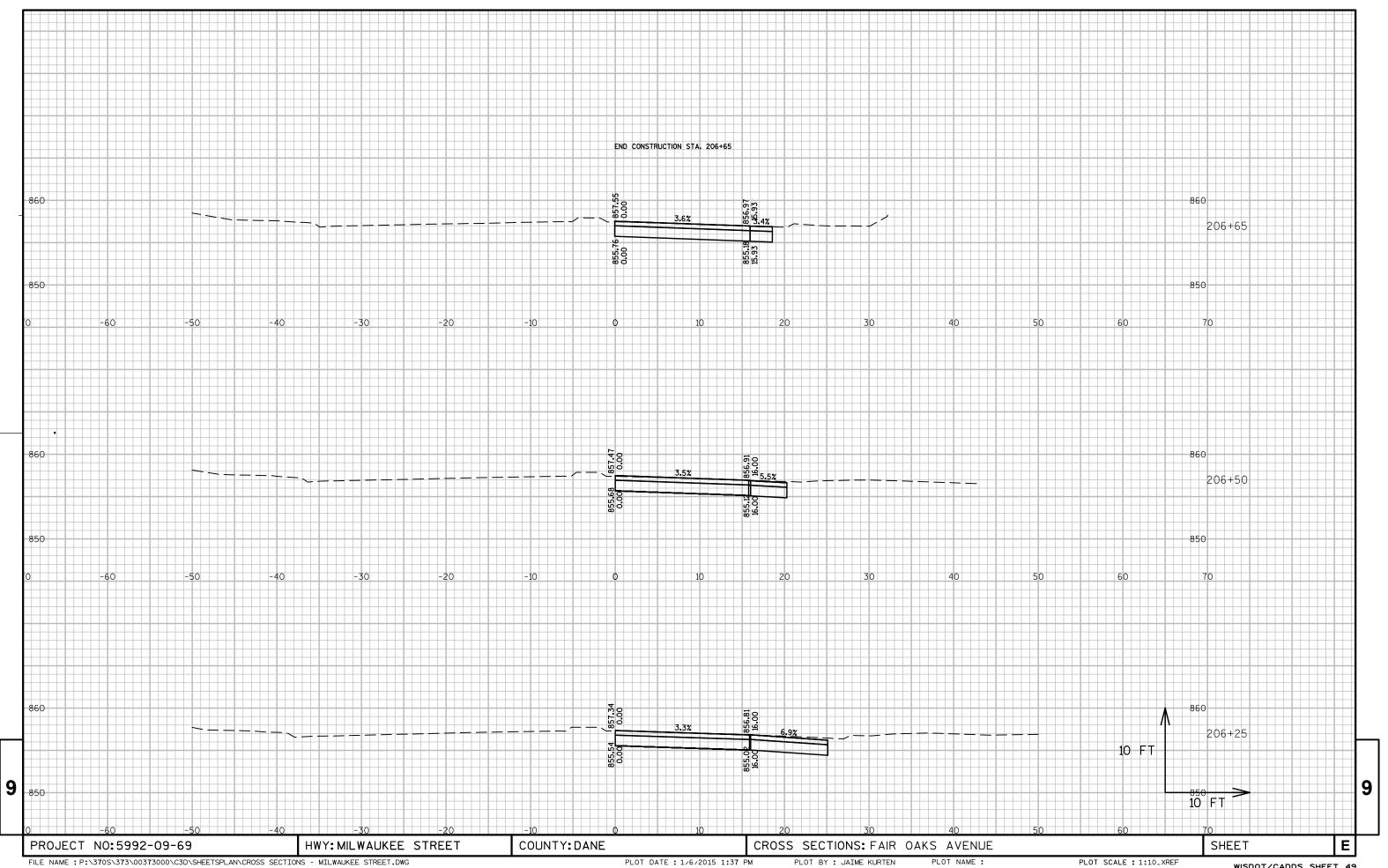


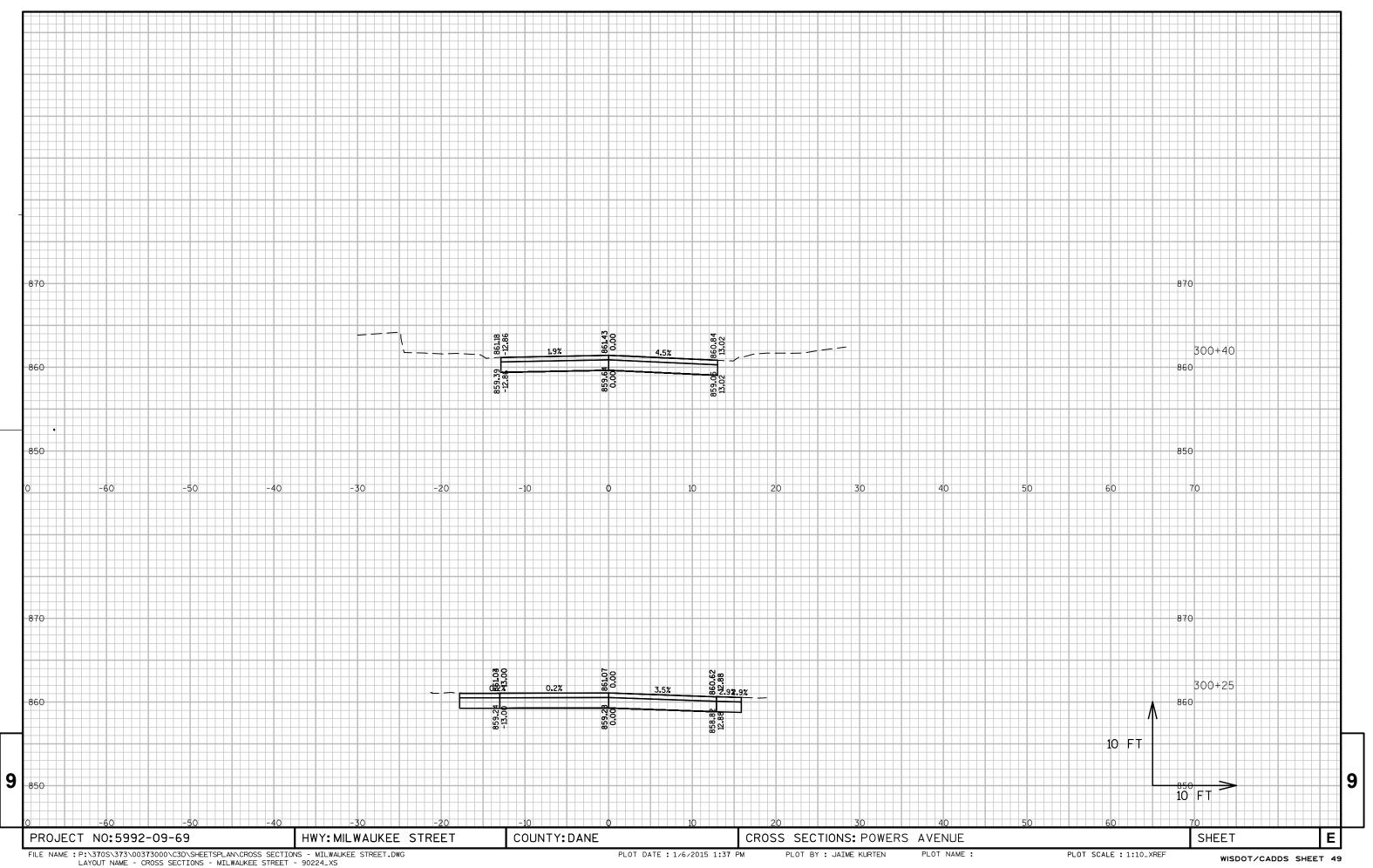


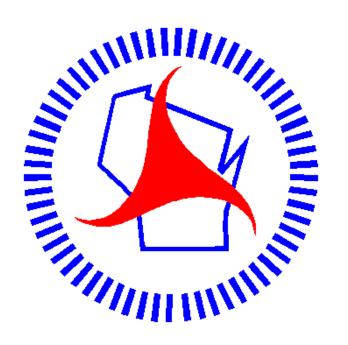












Wisconsin Department of Transportation

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