WIS

DEC 2013

PROJECT ID: 1430-00-74, 1430-00-76, 1430-00-84, 1430-08-86, 1431-02-72, & 1431-02-74

WITH:

COUNTY: GREEN LAKE & FOND DU LAC

ORDER OF SHEETS

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

TOTAL SHEETS = 838

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1430-00-74	WISC 2013521	1
1430-00-76		
1430-00-84		
1430-08-86	WISC 2013522	1
1431-02-72		
1431-02-74		

GREEN LAKE - FOND DU LAC CTY LINE
WEST JCT CTH A - CTH PP
STH 23
GREEN LAKE COUNTY
STATE PROJECT NUMBER
1430-00-74

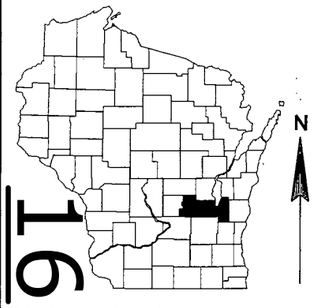
GREEN LAKE CO LINE - CITY OF RIPON
CTH PP - ARCADE GLENN ROAD
STH 23
FOND DU LAC COUNTY
STATE PROJECT NUMBER
1431-02-72

GREEN LAKE CO LINE - CITY OF RIPON
SILVER CREEK BOX CULVERT EXT
STH 23
FOND DU LAC COUNTY
STATE PROJECT NUMBER
1431-02-74

GREEN LAKE - FOND DU LAC CTY LINE
PUCHYAN RIVER BRIDGE
STH 23
GREEN LAKE COUNTY
STATE PROJECT NUMBER
1430-00-76

GREEN LAKE - FOND DU LAC CTY LINE
NORTH LAWSON DRIVE RELOCATION
STH 23
GREEN LAKE COUNTY
STATE PROJECT NUMBER
1430-00-84

COOPERATIVE PATH - BROOKLYN/GREEN LK
GREEN LK CONFERENCE CTR - NORTH ST
STH 23
GREEN LAKE COUNTY
STATE PROJECT NUMBER
1430-08-86



DESIGN DESIGNATION — GREEN LAKE COUNTY — FOND DU LAC COUNTY

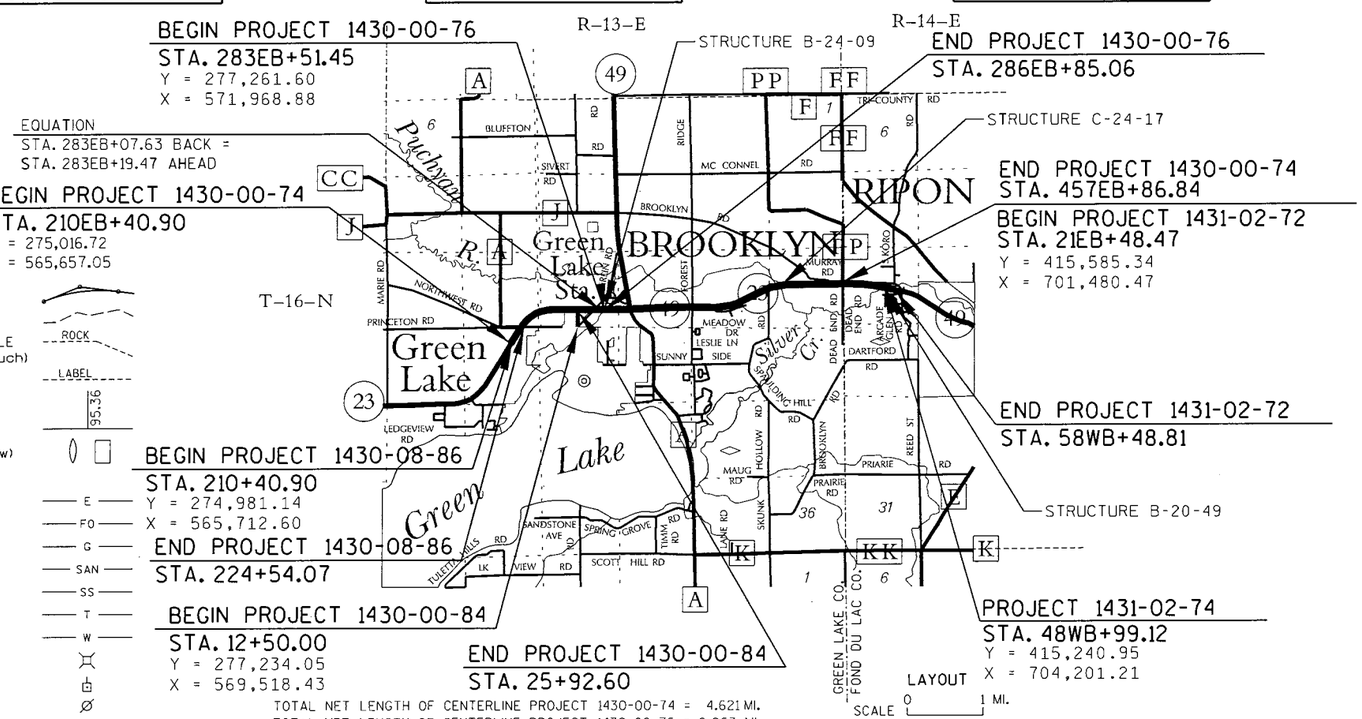
A.A.D.T. 2014	=	15020	V.P.D.	15310 V.P.D.
A.A.D.T. 2034	=	19430	V.P.D.	19810 V.P.D.
D.H.V. 2034	=	1980	V.P.H.	2020 V.P.H
D.D.	=	62/38		58/42
T.	=	8.3%		5.5%
DESIGN SPEED	=	50-60	MPH	40-60 MPH
ESALS	=	5460400		5460400

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE (PL + 58.1)
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA
- FEE (HATCH VARIES)
- TEMPORARY LIMITED EASEMENT
- PERMANENT LIMITED EASEMENT

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

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



TOTAL NET LENGTH OF CENTERLINE PROJECT 1430-00-74 = 4.621 MI.
TOTAL NET LENGTH OF CENTERLINE PROJECT 1430-00-76 = 0.063 MI.
TOTAL NET LENGTH OF CENTERLINE PROJECT 1430-00-84 = 0.254 MI.
TOTAL NET LENGTH OF CENTERLINE PROJECT 1430-08-86 = 0.268 MI.
TOTAL NET LENGTH OF CENTERLINE PROJECT 1431-02-72 = 0.701 MI.
TOTAL NET LENGTH OF CENTERLINE PROJECT 1431-02-74 = 0.000 MI.

"Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), GREEN LAKE County - NAD 1983 (1991) and Coordinate System (WCCS), FOND DU LAC County - NAD 1983 (1991). Elevations shown on this plan are reference to the National Geodetic Vertical Datum of 1929 (NGVD 29)."

ACCEPTED FOR
CITY OF GREEN LAKE
7-18-13 (Date) (Signature & Title)

ORIGINAL PLANS PREPARED BY
DAAR ENGINEERING, INC.
Madison, WI 53704
(608) 225-9817
TAMMY S. TUCKER E-40780 WAUKESHA, WI
WISCONSIN PROFESSIONAL ENGINEER
7/18/2013 (Date) Tammy S. Tucker (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	DAAR ENGINEERING
Designer	DAAR ENGINEERING
Project Manager	DANIEL HOLLOWAY
Regional Examiner	
Regional Supervisor	MICHAEL KRETSCHMER
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 7/22/13 (Signature)

E

GENERAL NOTES

THE LOCATION OF EXISTING OR PROPOSED UTILITIES, AS NOTED ON THE PLANS, IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

ALL DISTURBED AREAS WITHIN THE RIGHT OF WAY THAT ARE NOT INCIDENTAL TO CONTRACT WORK ITEMS SHALL BE FERTILIZED SEEDED AND MULCHED AT THE CONTRACTORS EXPENSE.

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

UNLESS NOTED ON THE PLAN, ALL RADII ARE MEASURED TO THE FLANGE LINE.

CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE LINE.

EXPANSION JOINTS ARE TO BE CONSTRUCTED AT ALL END RADIUS POINTS IN CURB AND GUTTER ADJACENT TO HMA PAVEMENT.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

CONTRACTOR TO COORDINATE WITH GREEN LAKE COUNTY WHEN PLACING FINAL PAVING SURFACE ON W. JUNCTION CTH A.

WHEN THE QUANTITY OF ASPHALTIC CONCRETE PAVEMENT OR BASE COURSE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

ALL HOLES OR OPENINGS RESULTING FROM REMOVAL OF EXISTING STRUCTURES SHALL BE FILLED WITH GRANULAR BACKFILL WHICH SHALL BE INCIDENTAL TO THE RESPECTIVE REMOVAL ITEMS.

ADDRESS NUMBER SIGNS WILL BE RELOCATED BY LOCAL MUNICIPALITIES. CONTACT MUNICIPALITY TWO WEEKS PRIOR TO BEGINNING WORK WHICH MAY DISTURB ADDRESS NUMBER SIGNS.

ALIGNMENT CODES

EB	STH 23 EASTBOUND
WB	STH 23 WESTBOUND
N	WEST JUNCTION CTH A / NORTH STREET
AN	CTH A NORTHBOUND
AS	CTH A SOUTHBOUND
49N	STH 49 NORTHBOUND
49S	STH 49 SOUTHBOUND
FRS	FOREST RIDGE SOUTH
FRN	FOREST RIDGE NORTH
EW	EASTWIND ROAD
SUN	SUNNYSIDE ROAD
BR	BROOKLYN J ROAD
DD	DEAD END ROAD
PP	CTH P
COM	COMORN ROAD

ORDER OF DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
PLAN DETAILS
EROSION CONTROL
STORM SEWER PLAN
SANITARY & WATER
SIGNING REMOVALS
PERMANENT SIGNING
TRAFFIC SIGNAL PLAN
PAVEMENT MARKING
TRAFFIC CONTROL/STAGING
DETOUR PLAN
ALIGNMENT PLAN

DESIGNED BY OTHERS

NORTH LAWSON DRIVE: CITY OF GREEN LAKE/KUNKEL ENGINEERING
B-24-09, B-20-49 STRUCTURE PLANS: WISDOT
C-24-17 STRUCTURE PLANS: CEDAR CORPORATION
TRAFFIC SIGNAL PLAN: TRAFFIC ANALYSIS & DESIGN, INC.
R/W PLAT: AECOM
SIGN PLATES: WISDOT

LOCATION	PAVEMENT TYPE	TOTAL PAVEMENT THICKNESS	LAYERS	NOMINAL SIZE GRADATION	ASPHALTIC MATERIAL
STH 23	E-10	6½"	2½" LOWER	19.0 mm	PG58-28
			2¼" LOWER	19.0 mm	PG58-28
			1¾" UPPER	12.5 mm	PG58-28
STH 23 SHOULDERS	E-10	4"	2¼" LOWER	19.0 mm	PG58-28
			1¾" UPPER	12.5 mm	PG58-28
CTH A, STH 49	E-10	7"	2¾" LOWER	19.0 mm	PG58-28
			2½" LOWER	19.0 mm	PG58-28
			1¾" UPPER	12.5 mm	PG58-28
W. JUNCTION CTH A, NORTH ST	E-1	5"	3¼" LOWER	19.0 mm	PG58-28
			1¾" UPPER	12.5 mm	PG58-28
NORTH LAWSON DR., SIDE ROADS, ACCESS ROADS	E-0.3	5"	3¼" LOWER	19.0 mm	PG58-28
			1¾" UPPER	12.5 mm	PG58-28

UTILITY CONTACTS (FOR WISDOT PROJECTS)

PROJECT ID 1430-00-74, 1430-00-76, 1430-08-86, 1431-02-72, 1431-02-74

ALLIANT ENERGY -ELECTRIC
DAVID KROHN
883 W SCOTT ST
FOND DU LAC, WI 54937
PHONE (920) 322-6772
MOBILE (920) 948-0681

ALLIANT ENERGY –GAS/PETROLEUM
DAVID KROHN
883 W SCOTT ST
FOND DU LAC, WI 54937
PHONE (920) 322-6772
MOBILE (920) 948-0681

CITY OF GREEN LAKE
GLEN MCCARTY
DIRECTOR OF PUBLIC WORKS & UTILITIES
534 MILL STREET
PO BOX 216
GREEN LAKE, WI 54941
(920) 294-0409

CITY OF RIPON – WATER/LIGHTING
TRAVIS DRAKE
100 JACKSON STREET
RIPON, WI 54971-1396
PHONE (920) 748-4908

WISDOT SIGNALS
DOUG KREUSER
1681 2ND AVENUE SOUTH
WISCONSIN RAPIDS, WI 54495
PHONE (715) 421-8372

KOCH PIPELINE COMPANY L.P. - GAS/PETROLEUM
DREW SUYDAM
N 4240 HIGHWAY 26
WAUPUN, WI 53963
PHONE (920) 948-4665

CHARTER COMMUNICATIONS - COMMUNICATION LINES
TONY KLATT
W 7185 STATE ROAD 49 SUITE 1
WAUPUN, WI 53963
PHONE (920) 263-0062

CENTURYLINK -COMMUNICATION LINES
TIM KROEZE
201 STARK STREET
PO BOX 98
RANDOLPH, WI 53956
PHONE (920) 326-2224
MOBILE (920) 219-0112

TOWN OF RIPON – SIREN
BARRY VANDEBRINK, CHAIRMAN
N8191 DOUGLAS STREET
RIPON, WI 54971
PHONE (920) 748-6687

UTILITY CONTACTS (FOR CITY OF GREEN LAKE PROJECT)

PROJECT ID 1430-00-84

ALLIANT ENERGY
DAVID KROHN
883 W SCOTT ST
FOND DU LAC, WI 54937
PHONE (920) 322-6772
MOBILE (920) 948-0681

CENTURYLINK
TIM KROEZE
201 STARK STREET
PO BOX 98
RANDOLPH, WI 53956
PHONE (920) 326-2224
MOBILE (920) 219-0112

CHARTER COMMUNICATIONS
TONY KLATT
W 7185 STATE RD. 49 STE 1
WAUPUN, WI 53963
PHONE (920) 263-0062
FAX (920) 345-1118

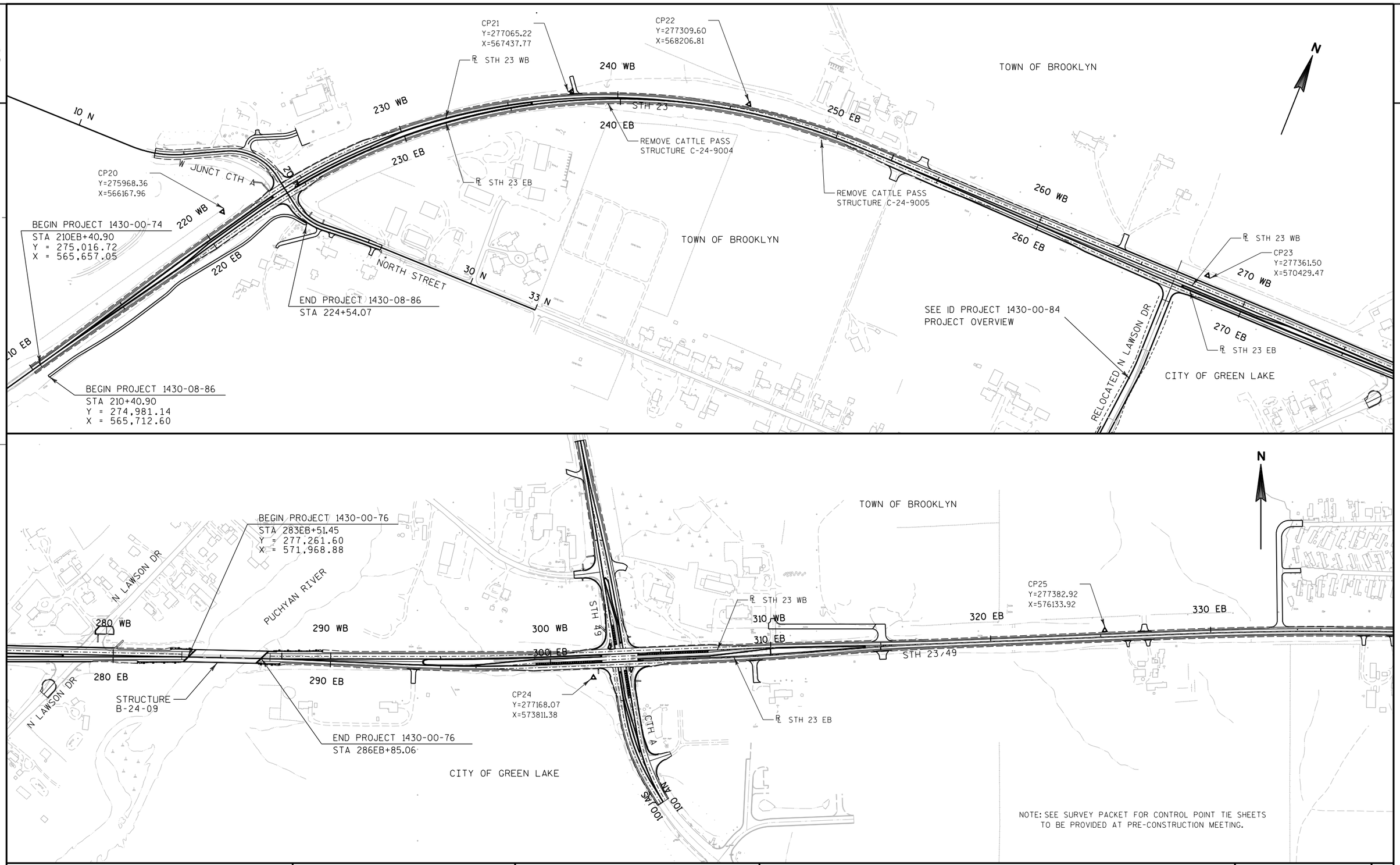
CITY OF GREEN LAKE
GLEN MCCARTY
DIRECTOR OF PUBLIC WORKS & UTILITIES
534 MILL STREET
PO BOX 216
GREEN LAKE, WI 54941
(920) 294-0409

OTHER CONTACTS

WISDNR CONTACT
NORTH CENTRAL/NORTHEAST REGION
BOBBI JO FISCHER
WAUTOMA SERVICE CENTER
427 EAST TOWER DRIVE, SUITE 100
WAUTOMA, WI 54982
PHONE (920) 787-3015

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

2



PROJECT NO:1430-00-74/76, 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	PROJECT OVERVIEW	SHEET 3	E

2

N

TOWN OF BROOKLYN

CP26
Y=277414.95
X=578149.87

340 EB

FOREST RIDGE RD

350 EB

360 EB

370 EB

℄ STH 23 EB

STH 23/49

380 EB

390 EB

400 EB

CP28
Y=278377.08
X=583247.19

SUNNYSIDE RD

WESTWIND RD

CP27
Y=277257.73
X=580320.67

8EW

EASTWIND RD

TOWN OF BROOKLYN

FOREST RIDGE RD

N

TOWN OF BROOKLYN

REPLACE STRUCTURE C-24-17

CP29
Y=278892.01
X=584872.75

410 EB

420 EB

STH 23/49

430 EB

CP30
Y=278934.62
X=586395.64

BROOKLYN J RD

440 EB

450 EB

457 EB

GREEN LAKE
COUNTY

CTH PP

℄ STH 23 EB

EB

SUNNYSIDE RD

CP31
Y=278823.02
X=589544.87

END PROJECT 1430-00-74
STA 457EB+86.84
BEGIN PROJECT 1431-02-72
STA 21EB+48.47

NOTE: SEE SURVEY PACKET FOR CONTROL POINT TIE SHEETS
TO BE PROVIDED AT PRE-CONSTRUCTION MEETING

DEAD END RD

FOND DU LAC
COUNTY

TOWN OF BROOKLYN

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PROJECT OVERVIEW	SHEET 4	E

2

GREEN LAKE COUNTY

CTH PP

END PROJECT 1430-00-74
STA. 457EB+86.84
BEGIN PROJECT 1431-02-72
STA. 21EB+48.47
Y = 415,585.34
X = 701,480.47

FOND DU LAC COUNTY

TOWN OF RIPON

RUINS

ANT.

SIGN

25 EB

STH 23/49

30 EB

35 EB

40 EB

45 WB

45 EB

℄ STH 23 EB

CP 1001
Y=415556.78
X=701331.73

CP 1003
Y=415480.34
X=703345.94

S KORO ROAD

DEAD END ROAD

TANKS

SIGN

N

S KORO ROAD

TOWN OF RIPON

STRUCTURE
B-20-49

℄ STH 23 WB

END PROJECT 1431-02-72
STA 58WB+48.81

45 WB

45 EB

50 WB

50 EB

STH 23/49

55 WB

55 EB

℄ STH 23 EB

PROJECT 1431-02-74
STA. 48WB+99.12
Y = 415,240.95
X = 704,201.21

CP 1000
Y=414996.17
X=705127.16

CITY OF RIPON

GIBBONS STREET

COMORN ROAD

ARCADE GLEN ROAD

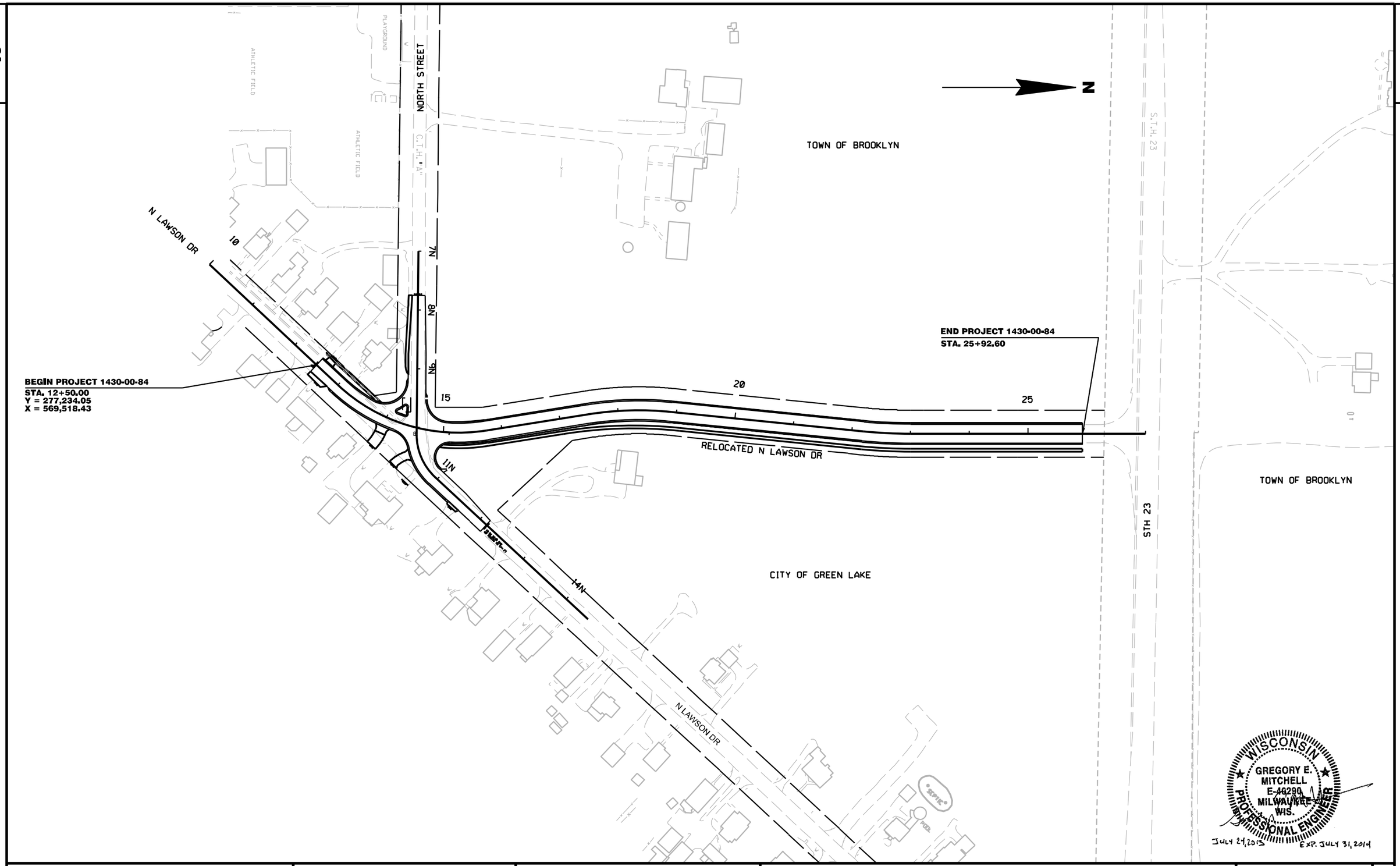
SEPTIC

POOL

NOTE: SEE SURVEY PACKET FOR CONTROL POINT TIE SHEETS TO BE PROVIDED AT PRE-CONSTRUCTION MEETING.

PROJECT NO: 1431-02-72/74	HWY: STH 23	COUNTY: FOND DU LAC	PROJECT OVERVIEW	SHEET 5	E

2



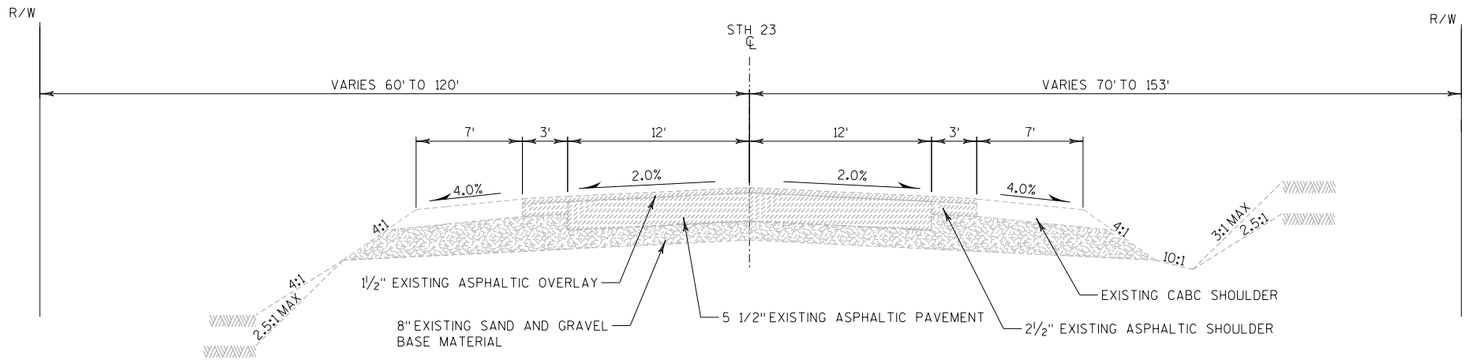
2

WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER
JULY 29,2013
EXP. JULY 31,2014

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	PROJECT OVERVIEW	SHEET 6	E

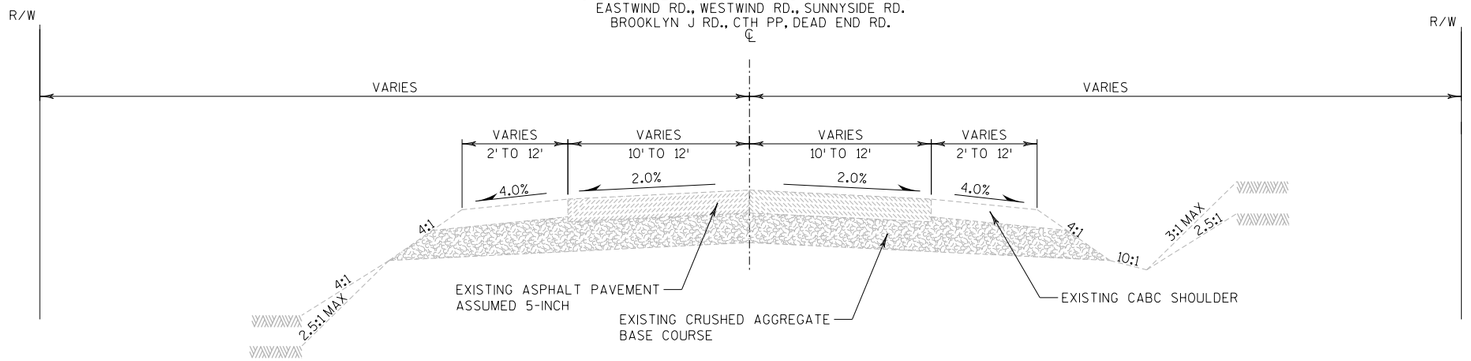
FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-PROJECT OVERVIEW.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 150.0000' / in

WISDOT/CADDS SHEET 21



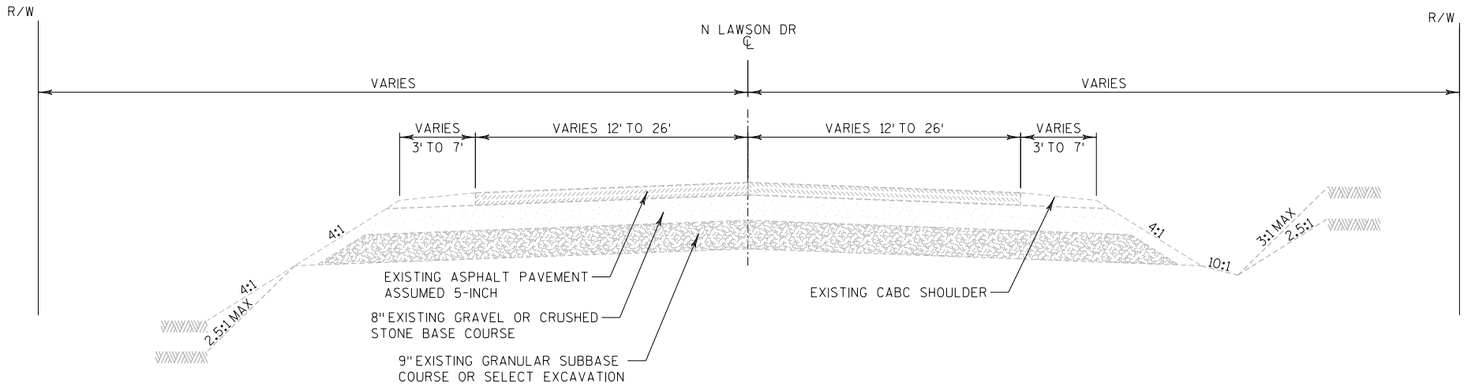
TYPICAL EXISTING SECTION
STH 23
STA. 210+41 TO 457+87

NORTH ST., W. JUNCTION CTH A
FOREST RIDGE RD. NORTH, FOREST RIDGE RD. SOUTH
EASTWIND RD., WESTWIND RD., SUNNYSIDE RD.
BROOKLYN J RD., CTH PP, DEAD END RD.

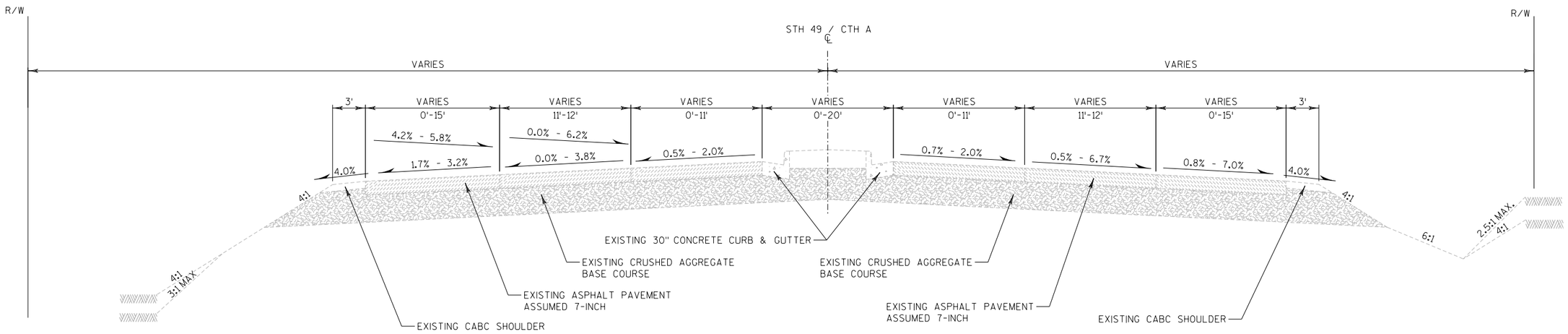


TYPICAL EXISTING SECTION
NORTH ST., W. JUNCTION CTH A
FOREST RIDGE RD. NORTH, FOREST RIDGE RD. SOUTH
EASTWIND RD., WESTWIND RD., SUNNYSIDE RD.
BROOKLYN J RD., CTH PP, DEAD END RD.

NOTE:
AS-BUILT AND SOIL BORING INFORMATION WAS UNAVAILABLE FOR SIDE ROADS. ASSUMED DEPTH OF PAVEMENT FOR UNUSABLE PAVEMENT CALCULATION.



TYPICAL EXISTING SECTION
N LAWSON DR



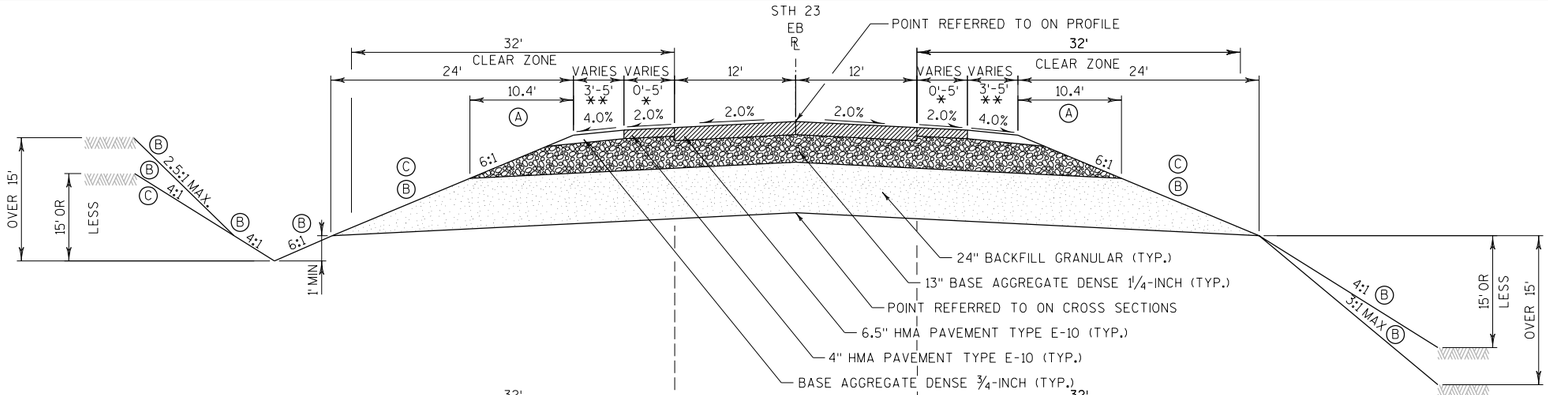
TYPICAL EXISTING SECTION
STH 49 / CTH A

NOTE:
AS-BUILT AND SOIL BORING INFORMATION WAS UNAVAILABLE FOR SIDE ROADS. ASSUMED DEPTH OF PAVEMENT FOR UNUSABLE PAVEMENT CALCULATION.

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 8	E

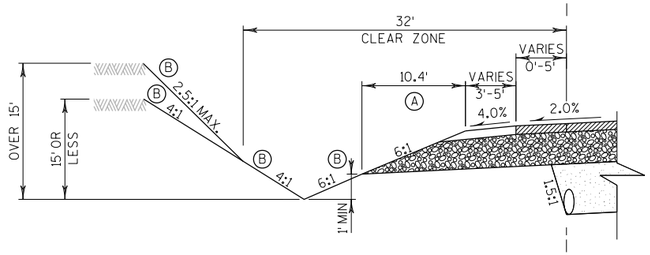
FILE NAME : J:\Active\D4\STH 23\Main\020301_ts.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 10.0000 ' / in.

WISDOT/CADDS SHEET 42

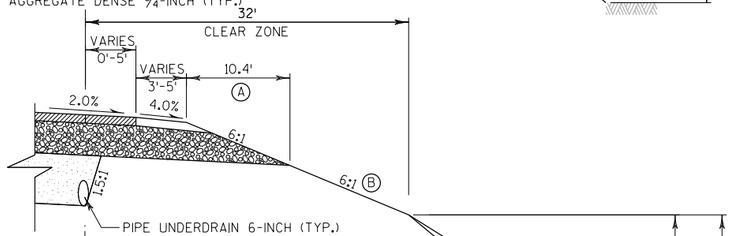


*0'-8': STA. 347EB+77-361EB+43
STA. 332EB+62-335EB+56 (LT SIDE)

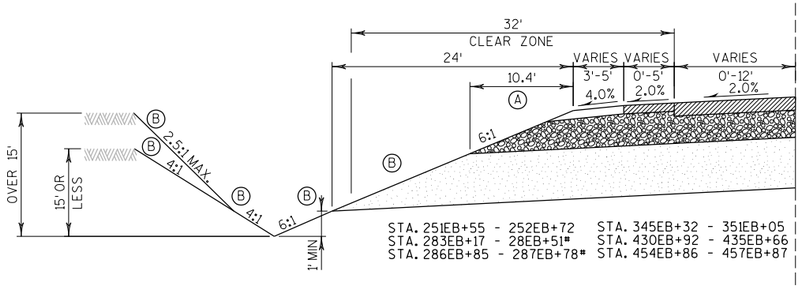
**2'-3': STA. 347EB+77- 361EB+43
STA. 332EB+62-335EB+56 (LT SIDE)



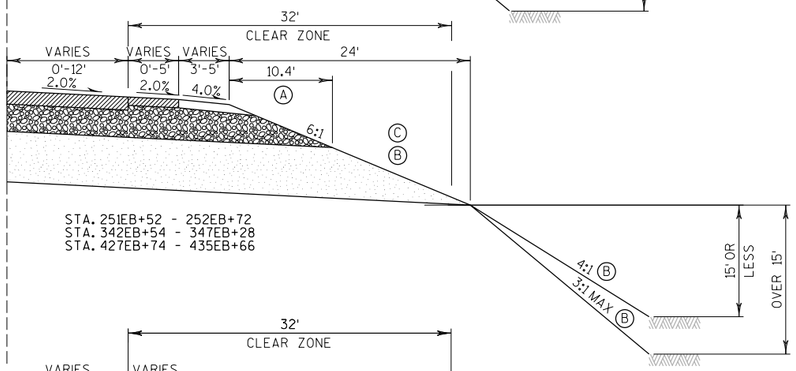
STA. 426EB+74 - 429EB+92



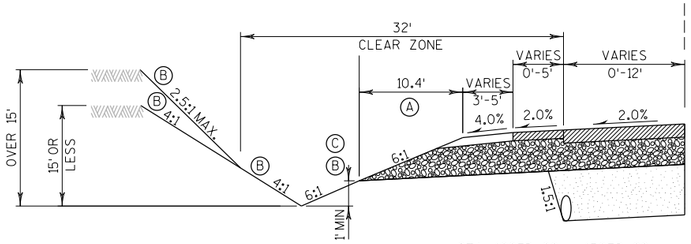
STA. 324EB+00 - 336EB+57
STA. 348EB+28 - 350EB+00
STA. 360EB+00 - 360EB+53
STA. 383EB+61 - 388EB+76



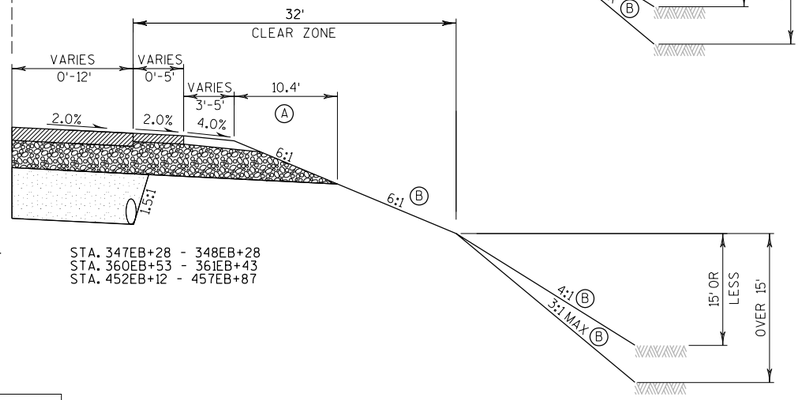
STA. 251EB+55 - 252EB+72
STA. 283EB+17 - 28EB+51*
STA. 286EB+85 - 287EB+78*
STA. 345EB+32 - 351EB+05
STA. 430EB+92 - 435EB+66
STA. 454EB+86 - 457EB+87



STA. 251EB+52 - 252EB+72
STA. 342EB+54 - 347EB+28
STA. 427EB+74 - 435EB+66



STA. 429EB+92 - 430EB+92



STA. 347EB+28 - 348EB+28
STA. 360EB+53 - 361EB+43
STA. 452EB+12 - 457EB+87

LEGEND

(A) = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

(B) = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

(C) = 4:1 FORESLOPE IN WETLAND AREAS.
STA 408EB+97 - STA 414EB+30 (RT)
STA 420EB+83 - STA 428EB+30 (RT)
STA 434EB+30 - STA 440EB+76 (RT)

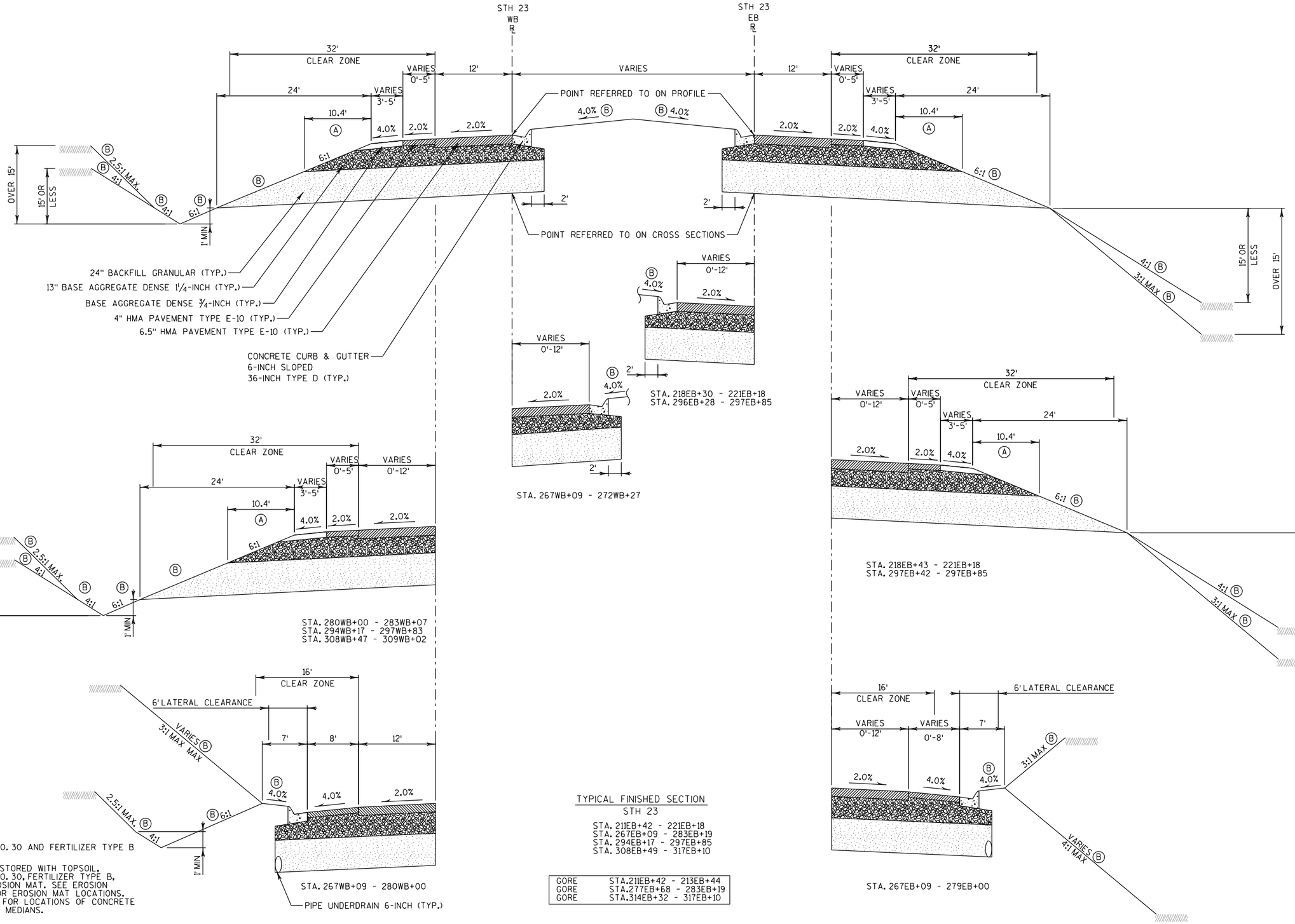
STA 410EB+13 - STA 421EB+57 (LT)
STA 424EB+36 - STA 426EB+74 (LT)
STA 440EB+79 - STA 449EB+39 (LT)

TYPICAL FINISHED SECTION
STH 23

STA. 210EB+41 - 211EB+42
STA. 251EB+52 - 252EB+72
STA. 283EB+17 - 283EB+51
STA. 286EB+85 - 287EB+78
STA. 317EB+12 - 361EB+43
STA. 383EB+61 - 394EB+33
STA. 420EB+83 - 457EB+87

*STRUCTURE STA. 283EB+51 - 286EB+85

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 9	E



LEGEND

(A) = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

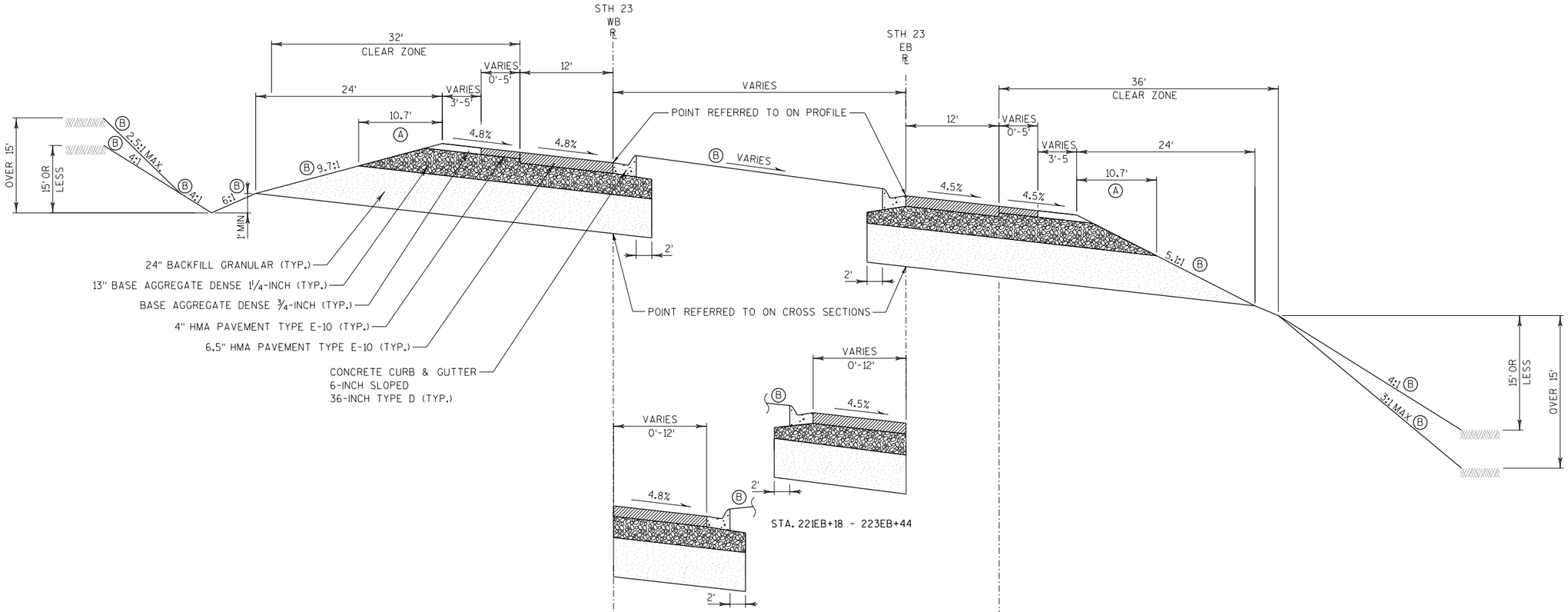
(B) = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

TYPICAL FINISHED SECTION
STH 23

STA. 211EB+42 - 221EB+18
STA. 267EB+09 - 283EB+19
STA. 294EB+17 - 297EB+85
STA. 308EB+49 - 317EB+10

GORE	STA.211EB+42 - 213EB+44
GORE	STA.277EB+68 - 283EB+19
GORE	STA.314EB+32 - 317EB+10

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 10	E



LEGEND

(A) = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

(B) = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

TYPICAL FINISHED SECTION
STH 23

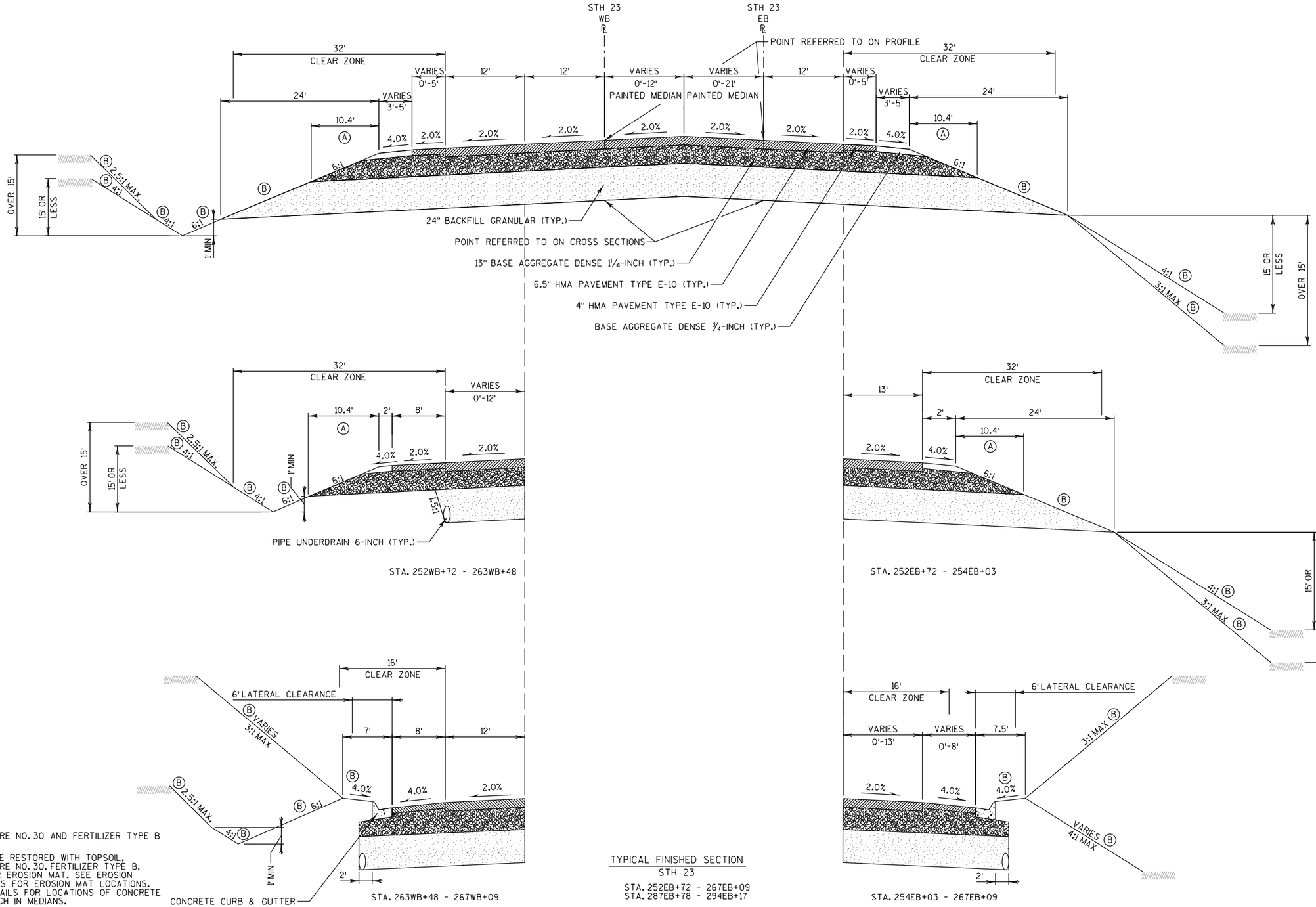
STA. 221EB+18 - 243EB+27 (NOTE 1)

MEDIAN OPENING STA. 223EB+44 - 224EB+64

GORE STA. 236EB+00 - 243EB+27

NOTES:
1) THIS STATION RANGE INCLUDES THE FULL SUPERELEVATION AND SUPERELEVATION TRANSITIONS. FOR MORE DETAILS SEE THE SUPERELEVATION TABLES.

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 11	E



LEGEND

(A) = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

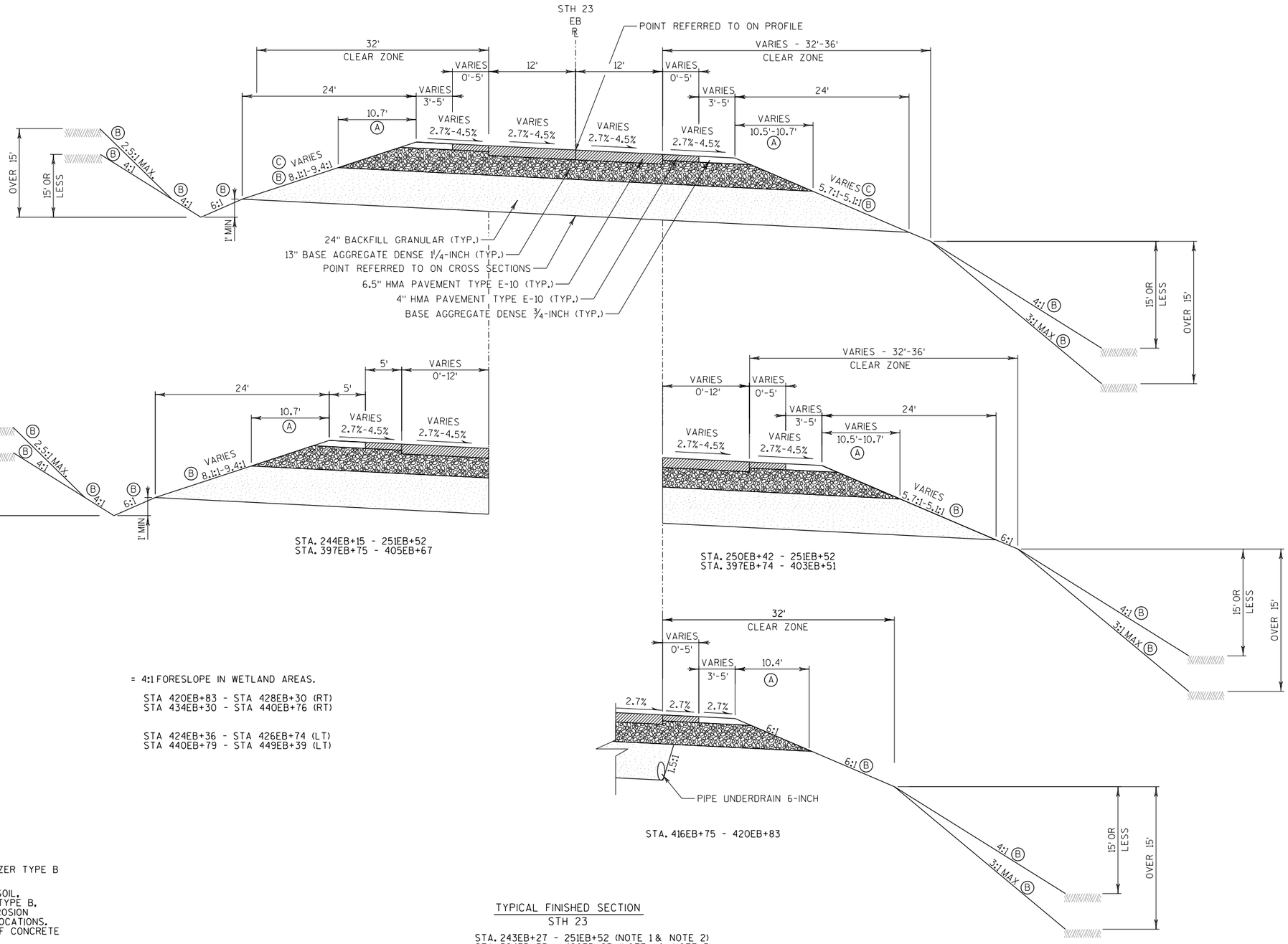
(B) = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

TYPICAL FINISHED SECTION
STH 23

STA. 252EB+72 - 267EB+09
STA. 287EB+78 - 294EB+17

MEDIAN OPENING STA. 266EB+02 - 267EB+13
STA. 293EB+32 - 294EB+17

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 12	E



= 4:1 FORESLOPE IN WETLAND AREAS.

STA 420EB+83 - STA 428EB+30 (RT)
STA 434EB+30 - STA 440EB+76 (RT)

STA 424EB+36 - STA 426EB+74 (LT)
STA 440EB+79 - STA 449EB+39 (LT)

LEGEND

(A) = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

(B) = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

(C) = 4:1 FORESLOPE IN WETLAND AREAS.
STA 408EB+97 - STA 414EB+30 (RT)
STA 410EB+13 - STA 421EB+57 (LT)

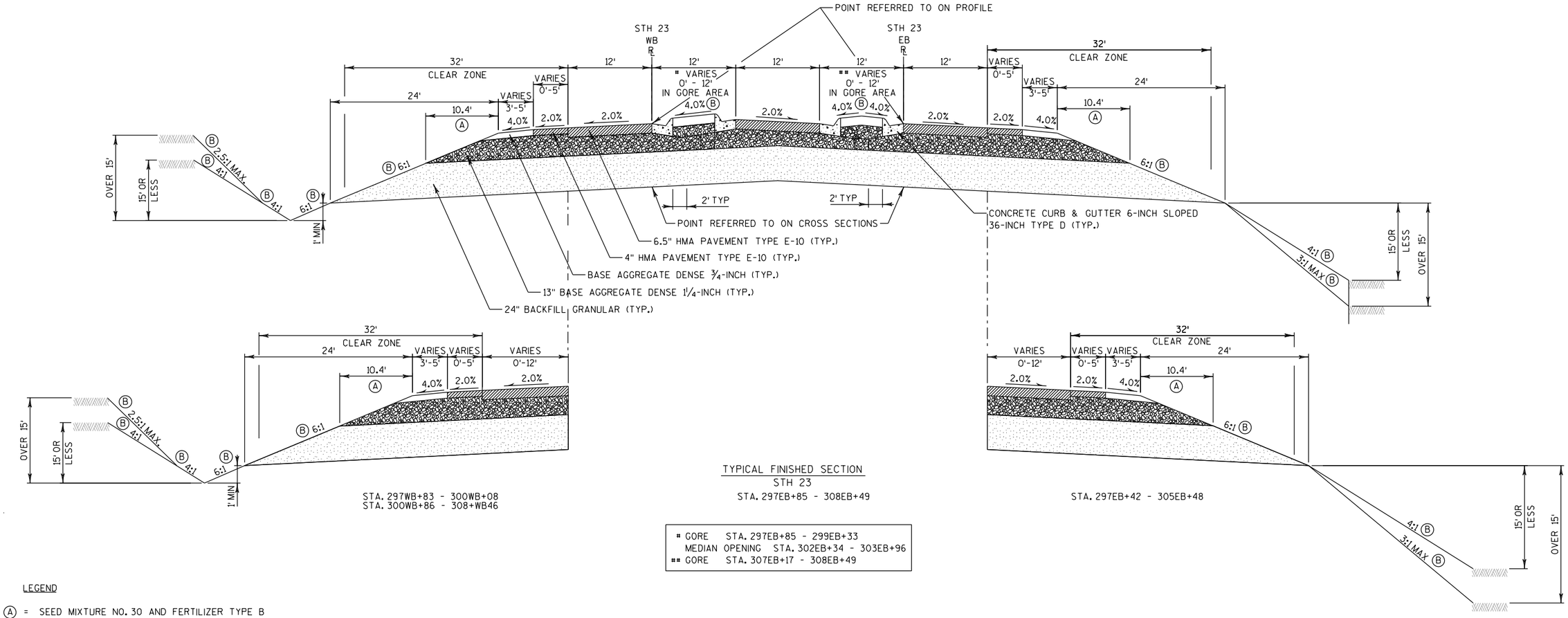
TYPICAL FINISHED SECTION

STH 23

STA. 243EB+27 - 251EB+52 (NOTE 1 & NOTE 2)
STA. 394EB+33 - 420EB+83 (NOTE 1 & NOTE 3)

NOTES:
1) THIS STATION RANGE INCLUDES THE FULL SUPERELEVATION AND SUPERELEVATION TRANSITIONS. FOR MORE DETAILS SEE THE SUPERELEVATION TABLES.
2) THE FULL SUPERELEVATION IN THIS SEGMENT IS 4.5%.
3) THE FULL SUPERELEVATION IN THIS SEGMENT IS 2.7%.

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 13	E



STA. 297WB+83 - 300WB+08
STA. 300WB+86 - 308+WB46

TYPICAL FINISHED SECTION
STH 23
STA. 297EB+85 - 308EB+49

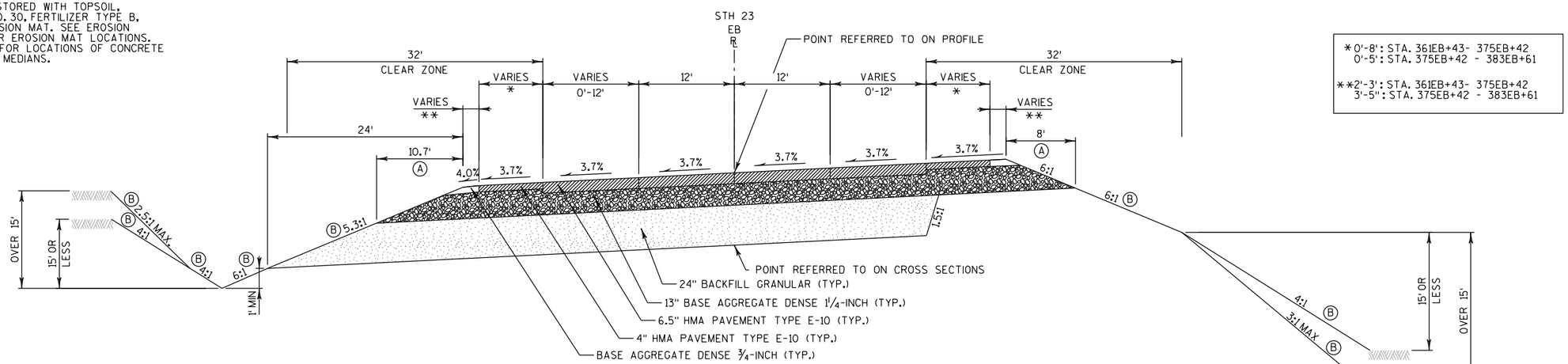
STA. 297EB+42 - 305EB+48

* GORE STA. 297EB+85 - 299EB+33
MEDIAN OPENING STA. 302EB+34 - 303EB+96
** GORE STA. 307EB+17 - 308EB+49

LEGEND

(A) = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

(B) = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.



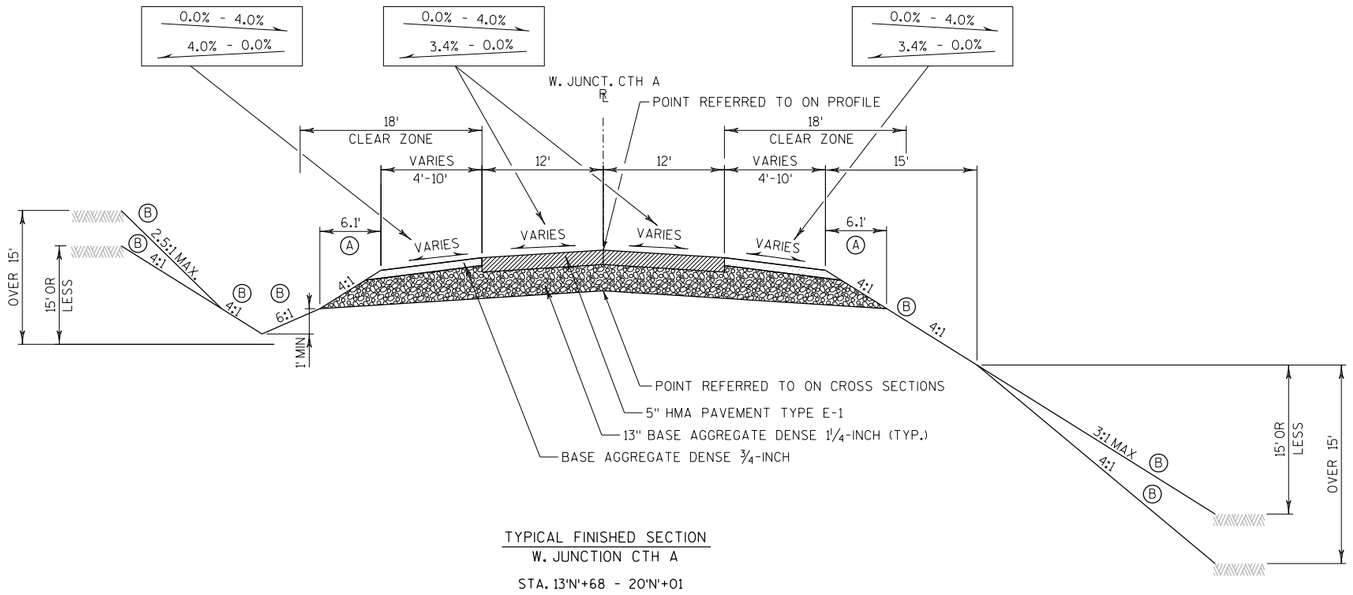
* 0'-8': STA. 361EB+43- 375EB+42
0'-5': STA. 375EB+42 - 383EB+61

** 2'-3': STA. 361EB+43- 375EB+42
3'-5": STA. 375EB+42 - 383EB+61

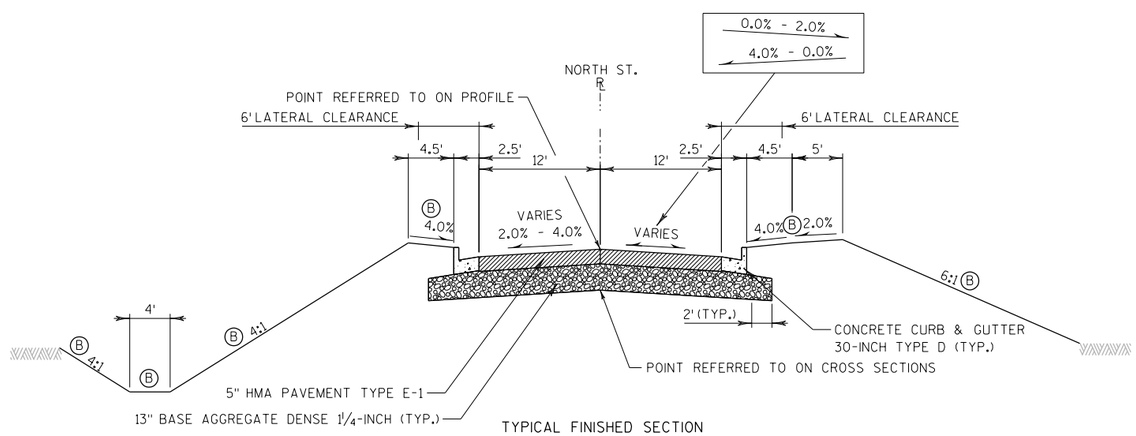
NOTES:
1) THIS STATION RANGE INCLUDES THE FULL SUPERELEVATION AND SUPERELEVATION TRANSITIONS. FOR MORE DETAILS SEE THE SUPERELEVATION TABLES.

TYPICAL FINISHED SECTION
STH 23
STA. 361EB+43 - 383EB+61 (NOTE 1)

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 14	E



TYPICAL FINISHED SECTION
W. JUNCTION CTH A
STA. 13'N'+68 - 20'N'+01



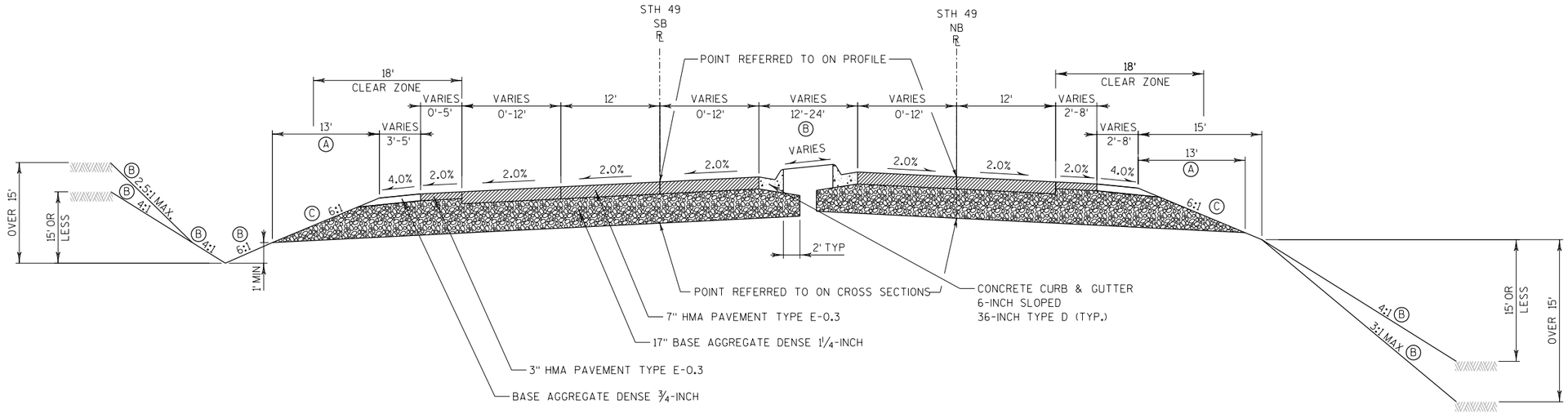
TYPICAL FINISHED SECTION
NORTH ST.
STA. 20'N'+75 - 25'N'+53

LEGEND

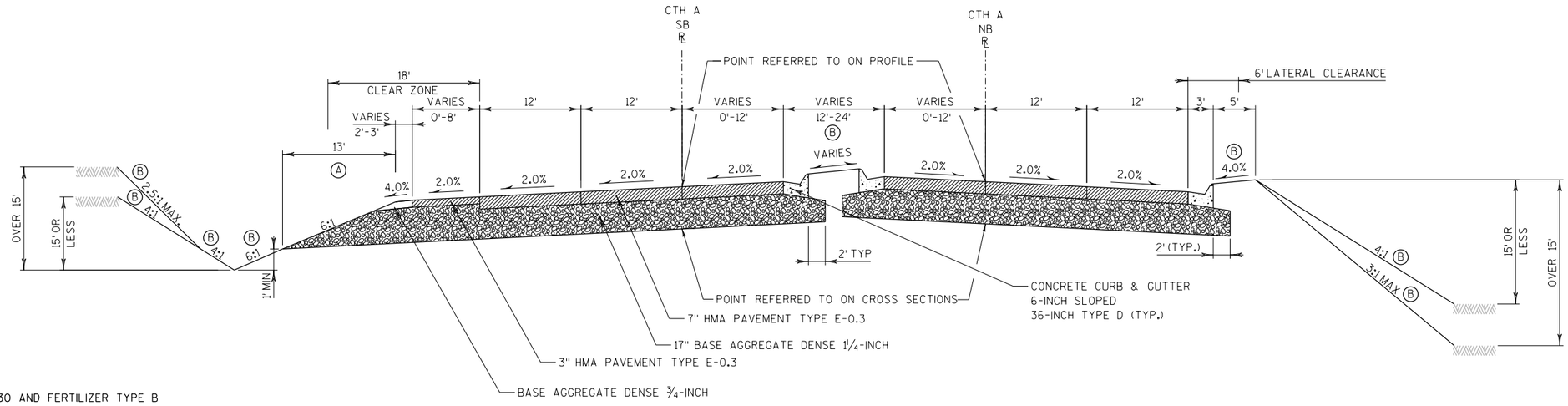
Ⓐ = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

Ⓑ = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 15	E



TYPICAL FINISHED SECTION
STH 49
STA. 200'49N'+00 - 209'49N'+62



LEGEND

(A) = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

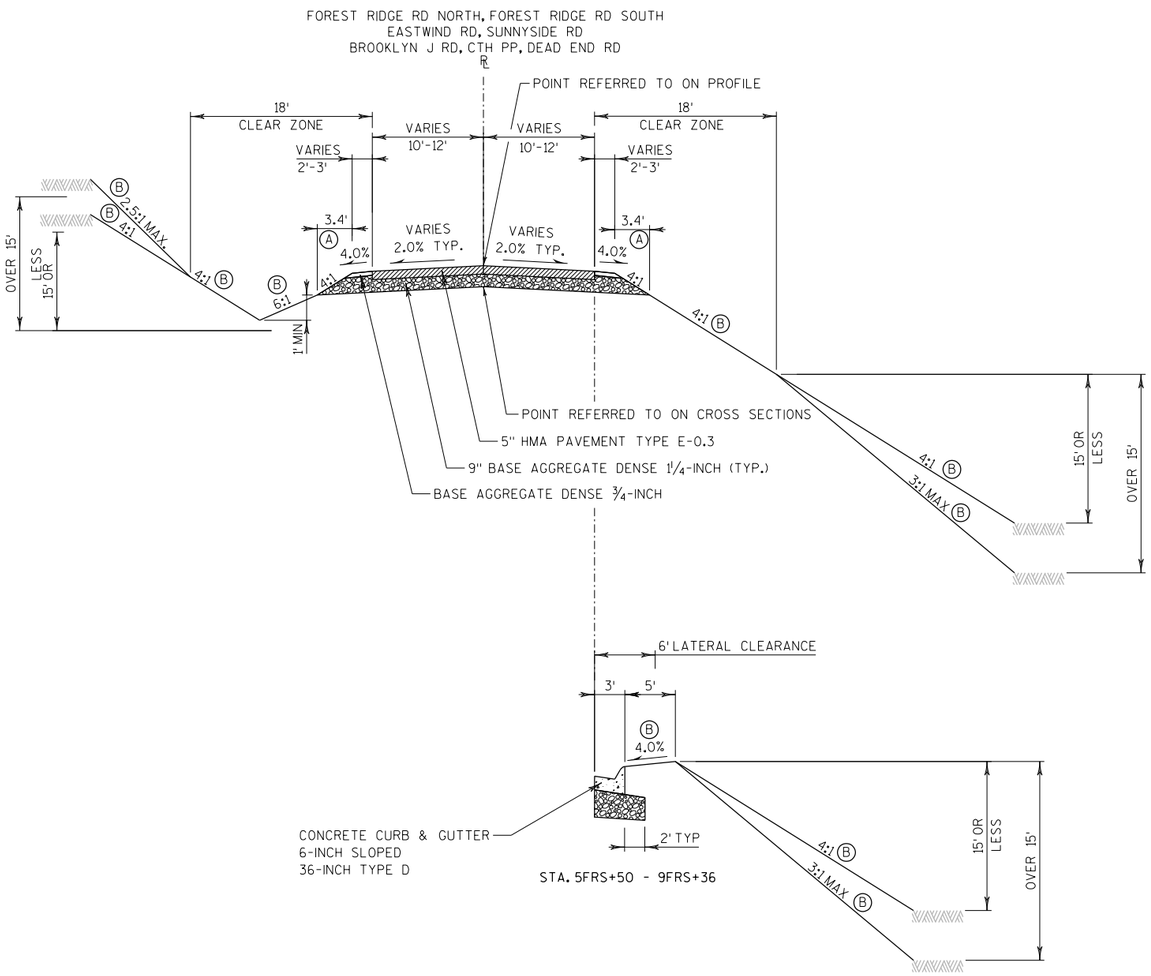
(B) = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

(C) = 4:1 FORESLOPE IN WETLAND AREAS.
STA 204'49N'+84 - STA 209'49N'+62 (RT)
STA 208'49S'+27 - STA 209'49S'+62 (LT)

TYPICAL FINISHED SECTION
CTH A
STA. 100'AN'+00 - 106'AN'+37

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 16	E

2



LEGEND

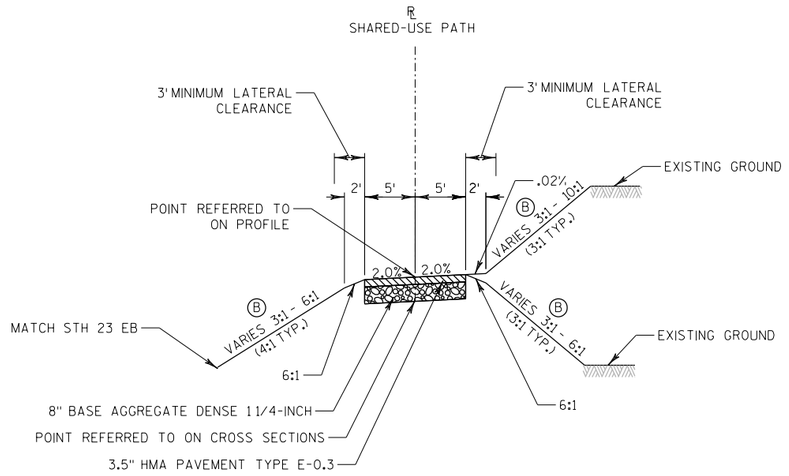
Ⓐ = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

Ⓑ = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

TYPICAL FINISHED SECTION
FOREST RIDGE RD NORTH, FOREST RIDGE RD SOUTH
EASTWIND RD, SUNNYSIDE RD
BROOKLYN J RD, CTH PP, DEAD END RD

STA. 5'FRS'+20 - 9'FRS'+76
STA. 20'FRN'+24 - 27'FRN'+00
STA. 7'EW'+24 - 9'EW'+74
STA. 5'SUN'+70 - 9'SUN'+60
STA. 10'BR'+24 - 12'BR'+61
STA. 7'DD'+71 - 10'DD'+06
STA. 10'PP'+54 - 12'PP'+87

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 17	E



TYPICAL FINISHED SECTION
SHARED USE PATH

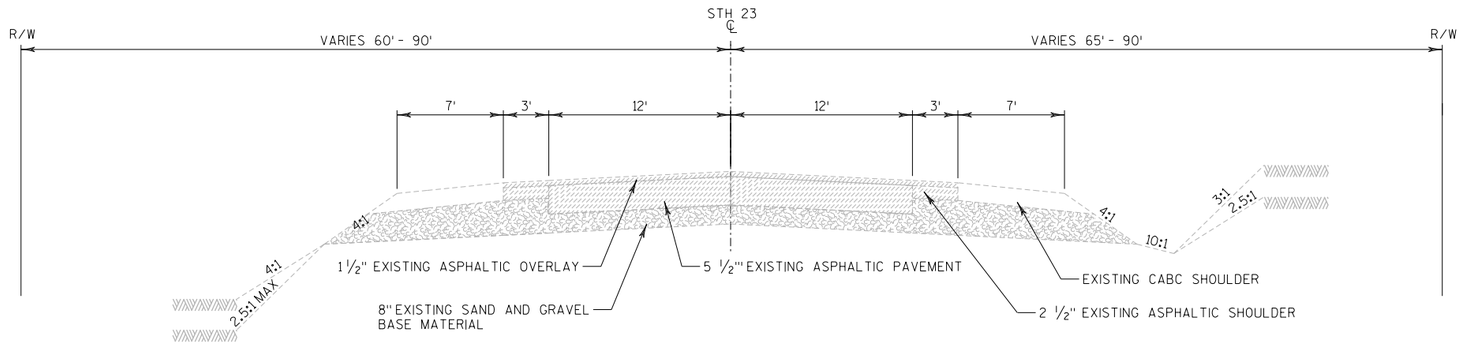
STA. 210+41 - 224+54

LEGEND

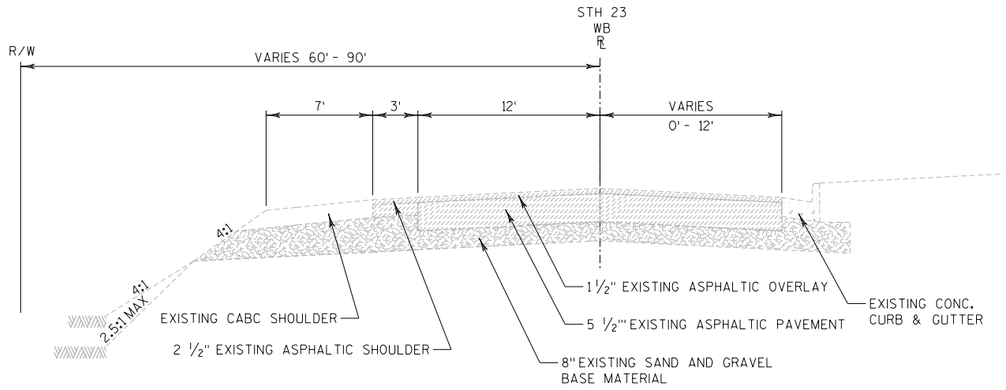
Ⓐ = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

Ⓑ = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

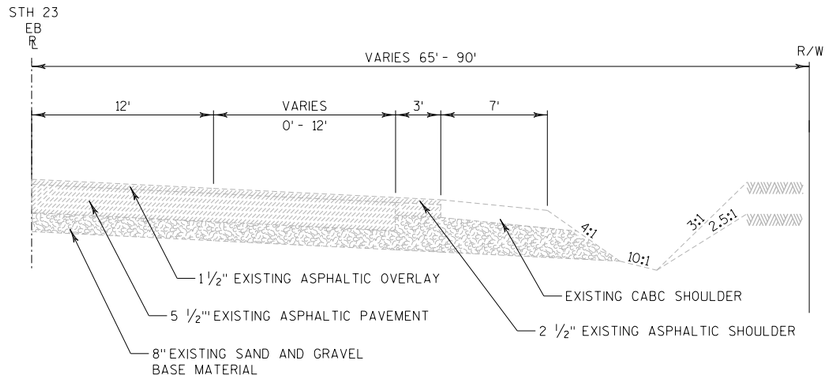
PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION - SHARED USE PATH	SHEET 18	E



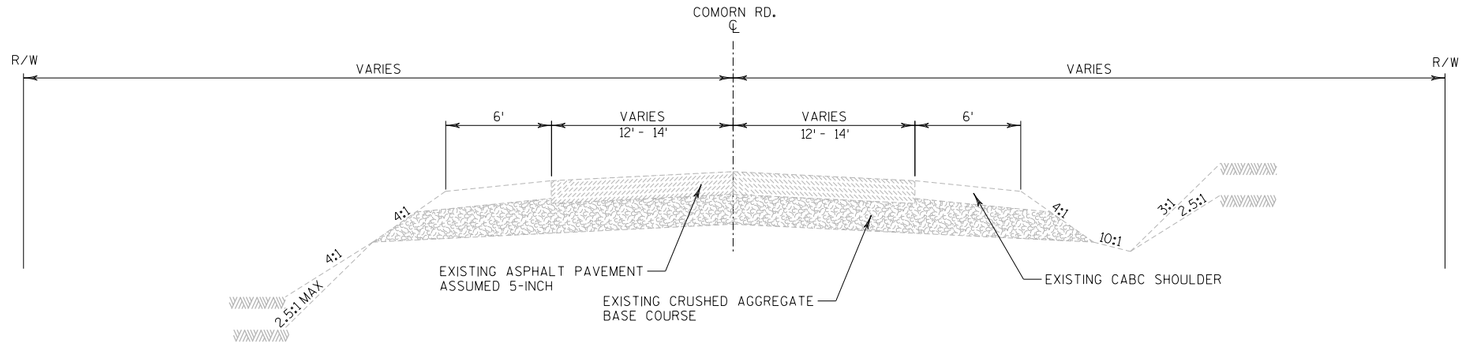
TYPICAL EXISTING SECTION
STH 23
STA. 21+48 TO 50+00



½ TYPICAL EXISTING SECTION
STH 23
STA. 50+00 TO 58+50



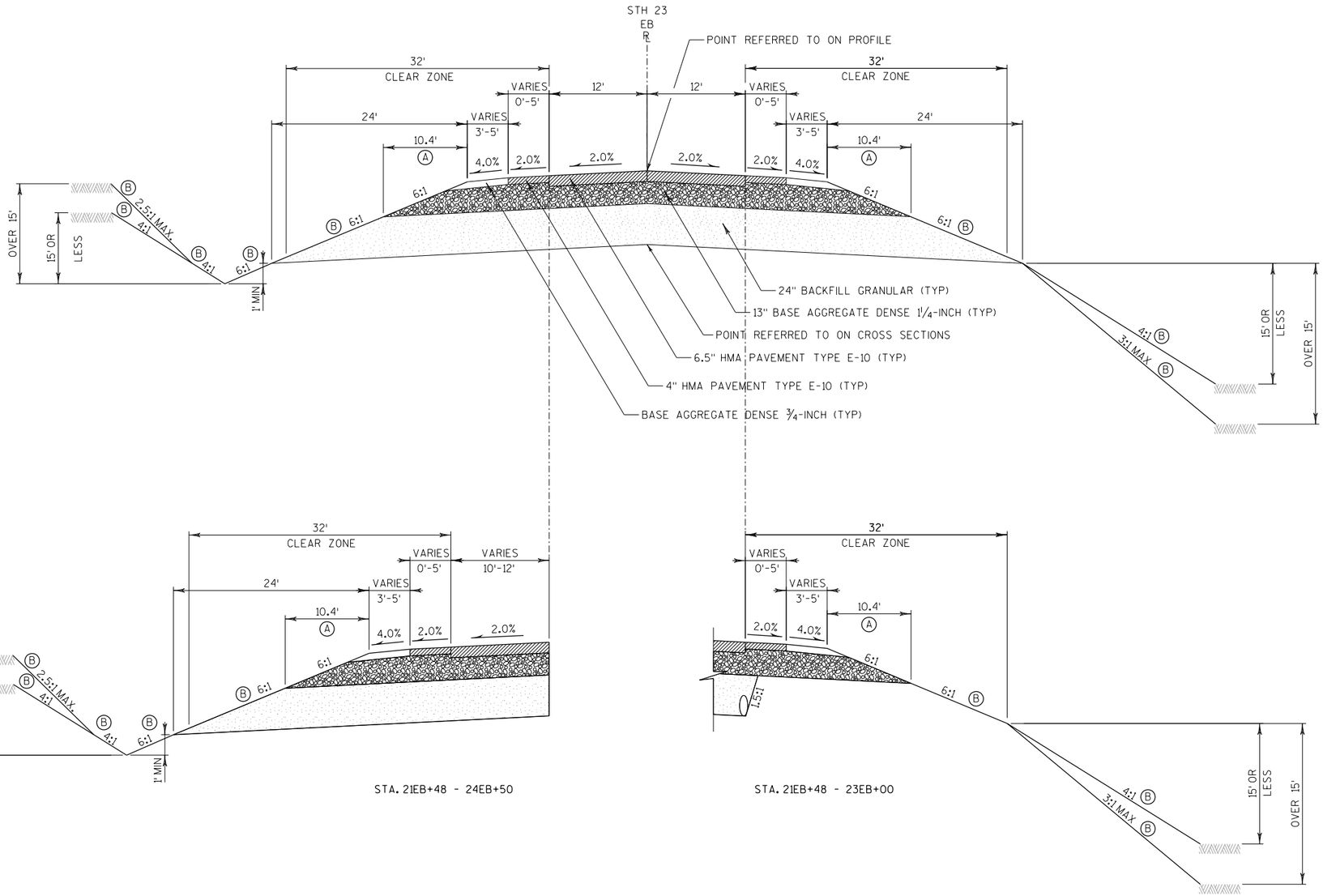
½ TYPICAL EXISTING SECTION
STH 23
STA. 50+00 TO 53+00



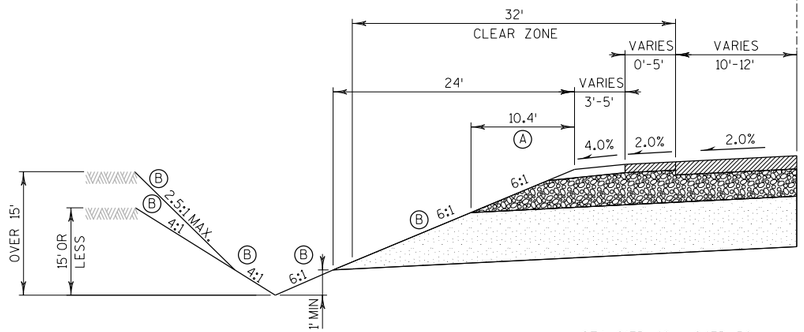
TYPICAL EXISTING SECTION
COMORN RD.

NOTE:
AS-BUILT AND SOIL BORING INFORMATION WAS UNAVAILABLE FOR COMRON ROAD. ASSUMED DEPTH OF PAVEMENT FOR UNUSABLE PAVEMENT CALCULATION.

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 20	E



STA. 21EB+48 - 24EB+50



STA. 21EB+48 - 23EB+00

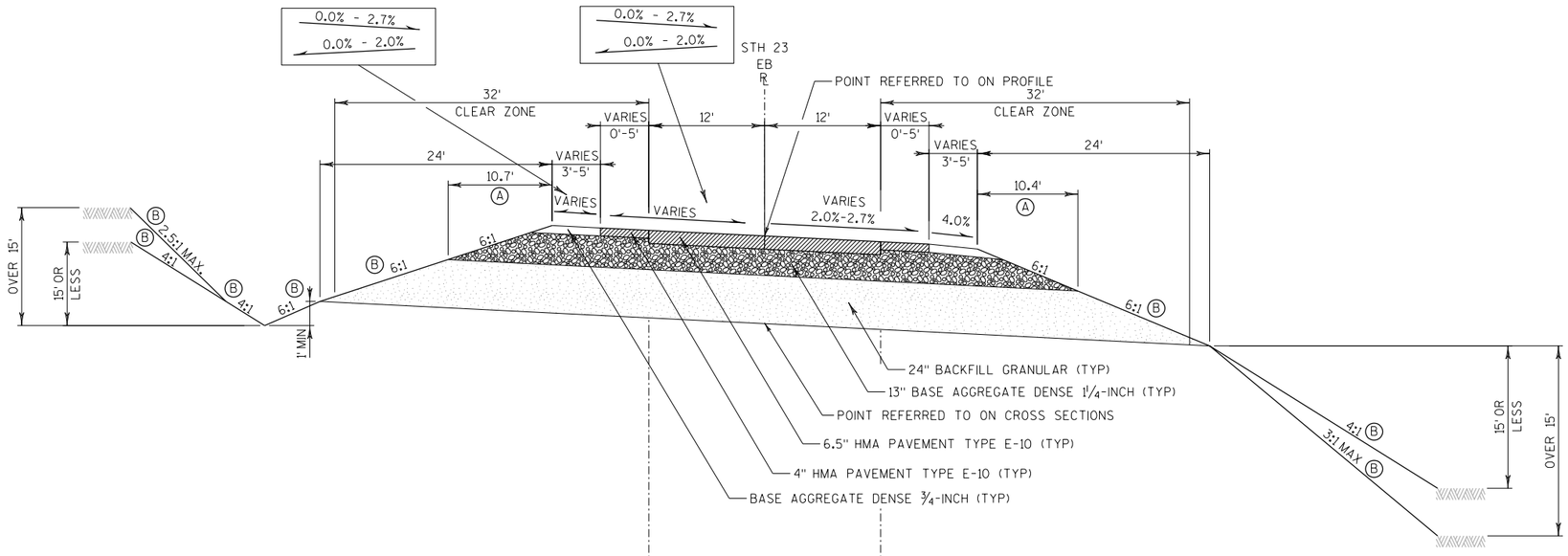
LEGEND

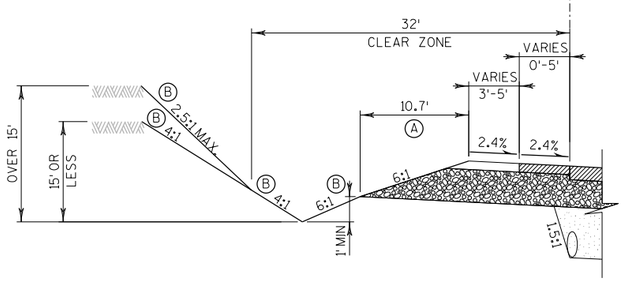
(A) = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

(B) = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

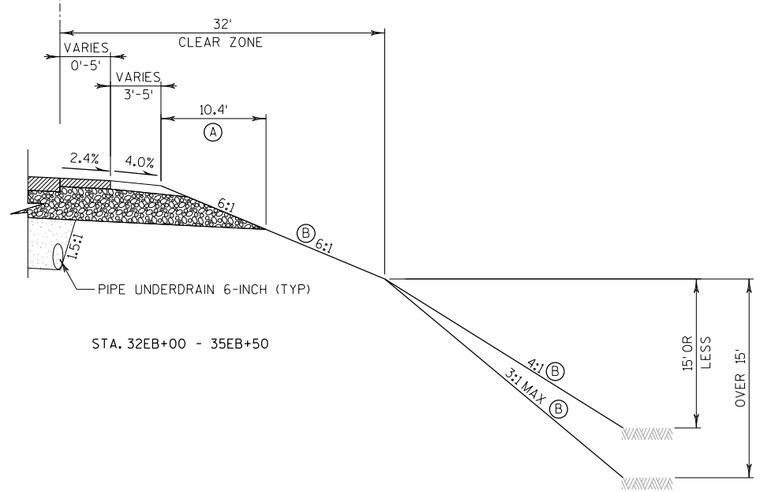
TYPICAL FINISHED SECTION
STH 23
STA. 21EB+48 -26EB+66
STA. 37EB+17 - 44EB+49

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	TYPICAL SECTION	SHEET 21	E





STA. 32EB+00 - 36EB+00



STA. 32EB+00 - 35EB+50

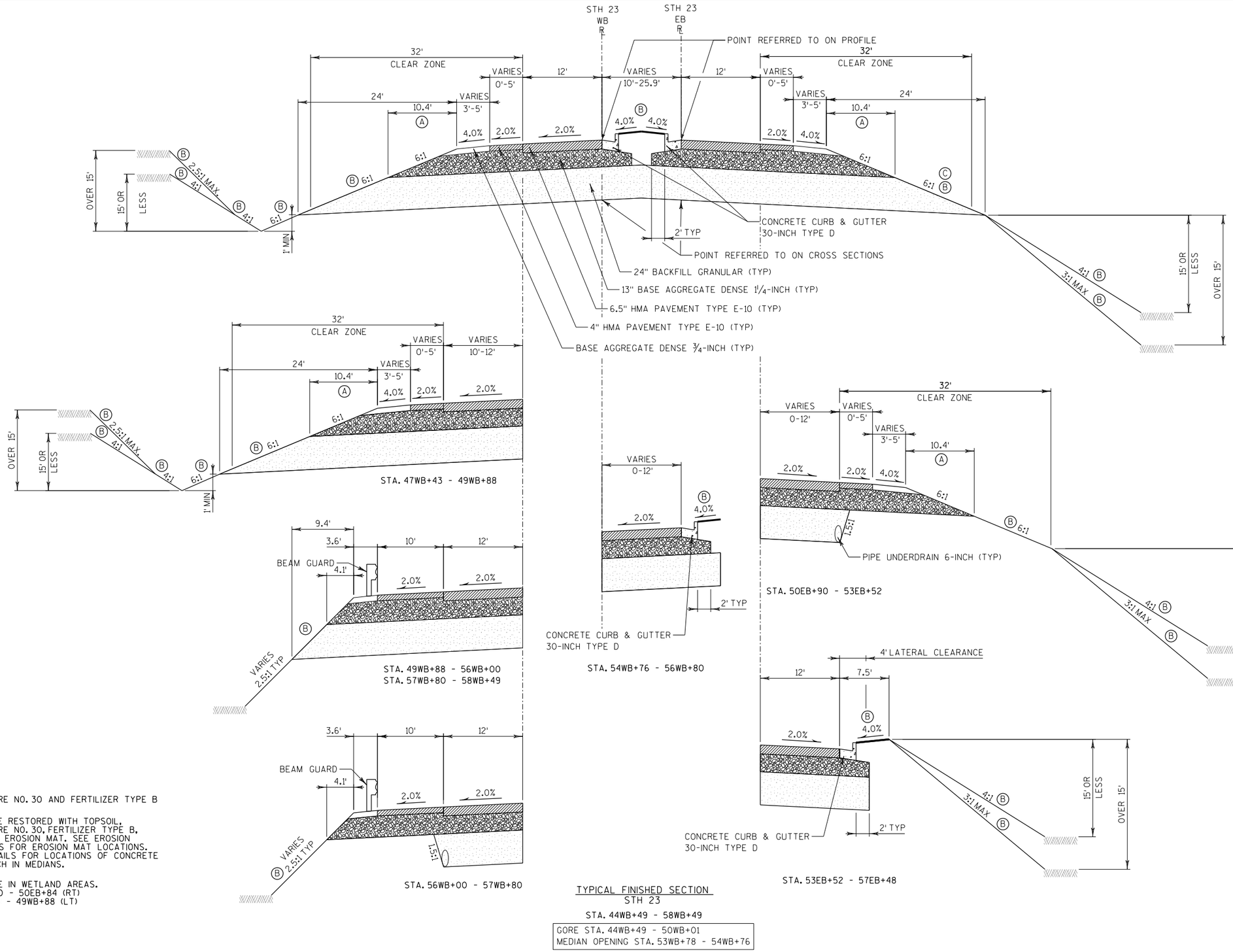
LEGEND

(A) = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

(B) = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

TYPICAL FINISHED SECTION
STH 23
STA. 26EB+66 - 37EB+17

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	TYPICAL SECTION	SHEET 22	E



LEGEND

(A) = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

(B) = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.

(C) = 4:1 FORESLOPE IN WETLAND AREAS.
STA 47EB+00 - 50EB+84 (RT)
STA 48WB+14 - 49WB+88 (LT)

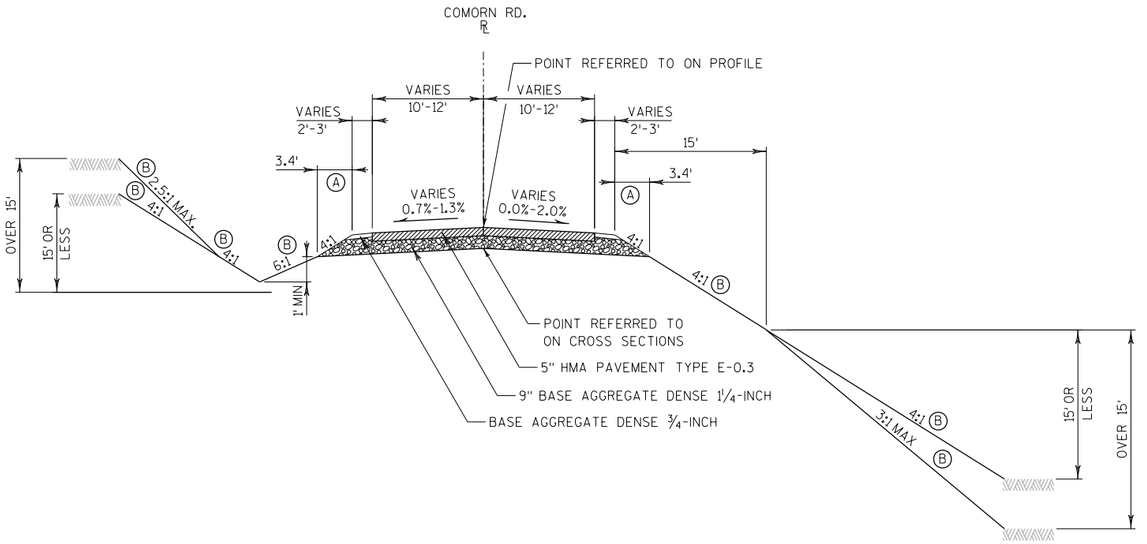
TYPICAL FINISHED SECTION
STH 23

STA. 44WB+49 - 58WB+49

GORE STA. 44WB+49 - 50WB+01
MEDIAN OPENING STA. 53WB+78 - 54WB+76

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	TYPICAL SECTION	SHEET 23	E

2



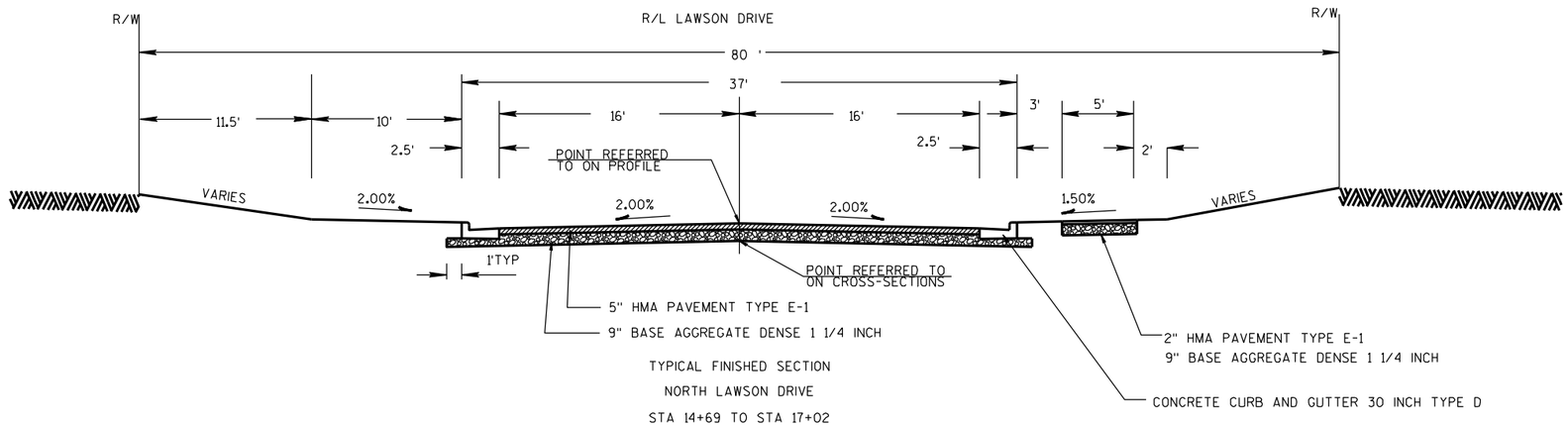
TYPICAL FINISHED SECTION
COMORN RD.

STA. 8'COM'+62 - 9'COM'+60

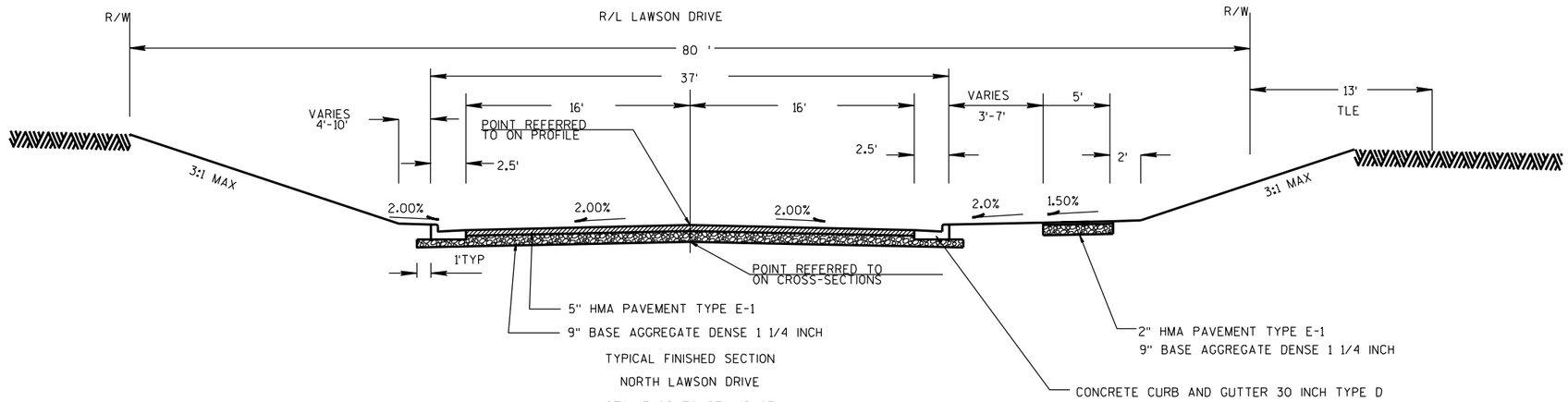
LEGEND

Ⓐ = SEED MIXTURE NO. 30 AND FERTILIZER TYPE B

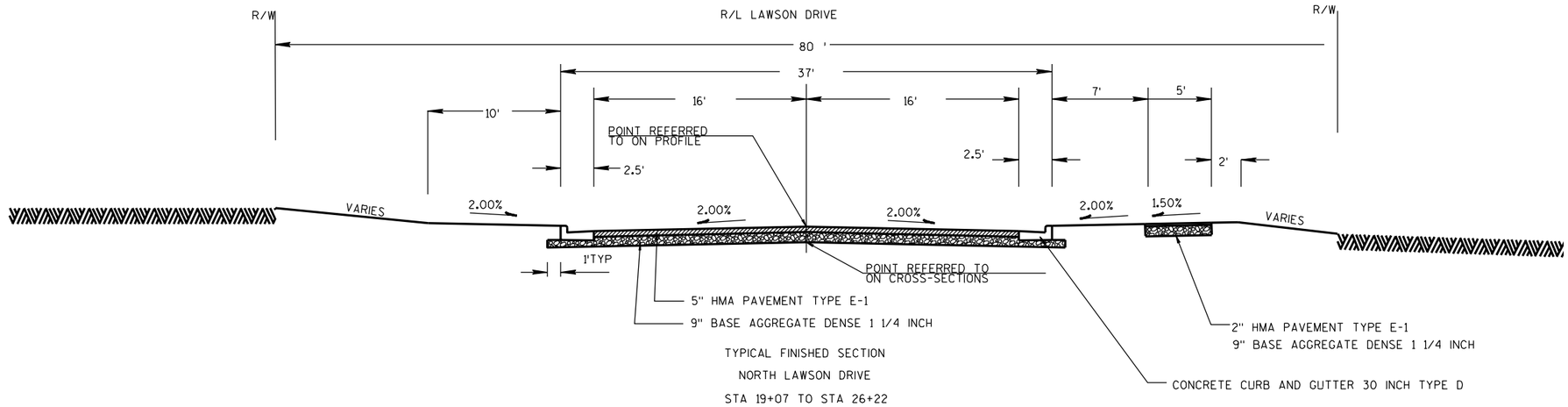
Ⓑ = AREA TO BE RESTORED WITH TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND MULCH OR EROSION MAT. SEE EROSION CONTROL PLANS FOR EROSION MAT LOCATIONS. SEE PLAN DETAILS FOR LOCATIONS OF CONCRETE SIDEWALK 5-INCH IN MEDIANS.



TYPICAL FINISHED SECTION
NORTH LAWSON DRIVE
STA 14+69 TO STA 17+02



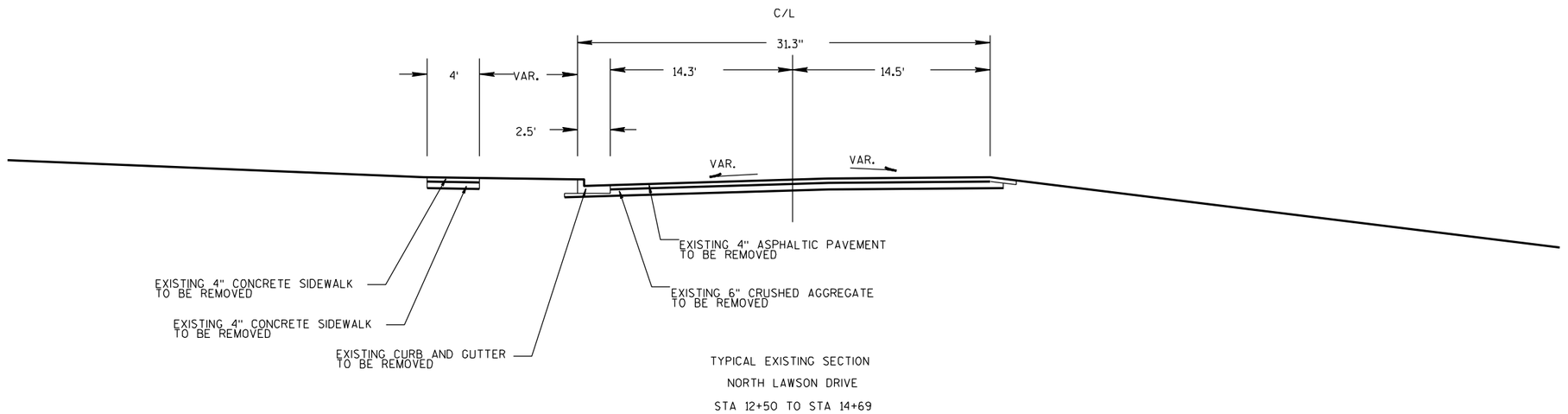
TYPICAL FINISHED SECTION
NORTH LAWSON DRIVE
STA 17+02 TO STA 19+07



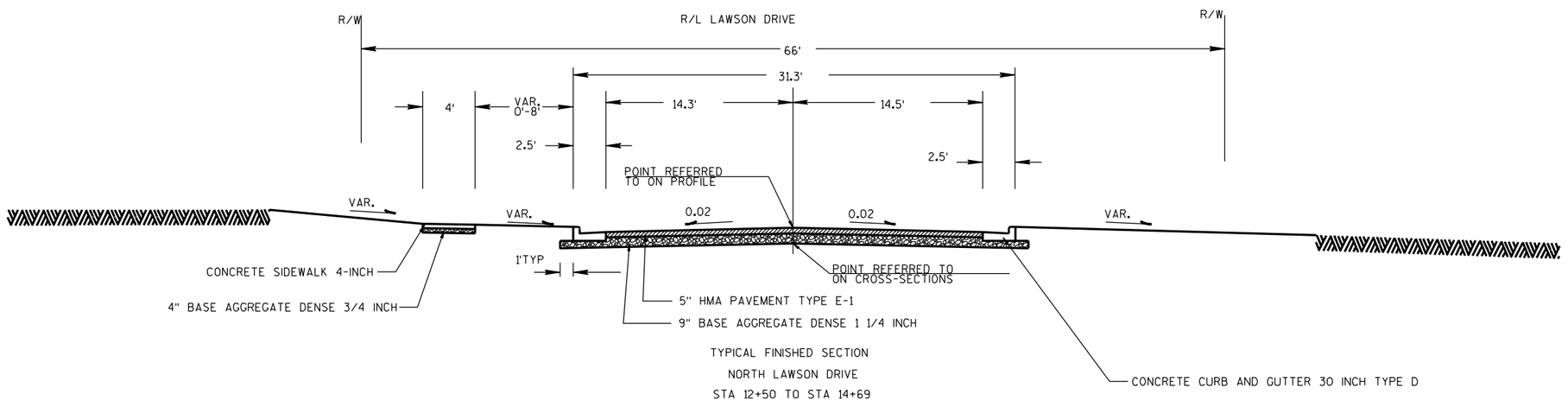
TYPICAL FINISHED SECTION
NORTH LAWSON DRIVE
STA 19+07 TO STA 26+22

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 25	E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING -CURRENT\N-LAWSON-XSTYP1.DGN | PLOT DATE : 07-12-2013 | PLOT BY : G. MITCHELL | PLOT NAME : | PLOT SCALE :



TYPICAL EXISTING SECTION
NORTH LAWSON DRIVE
STA 12+50 TO STA 14+69



TYPICAL FINISHED SECTION
NORTH LAWSON DRIVE
STA 12+50 TO STA 14+69

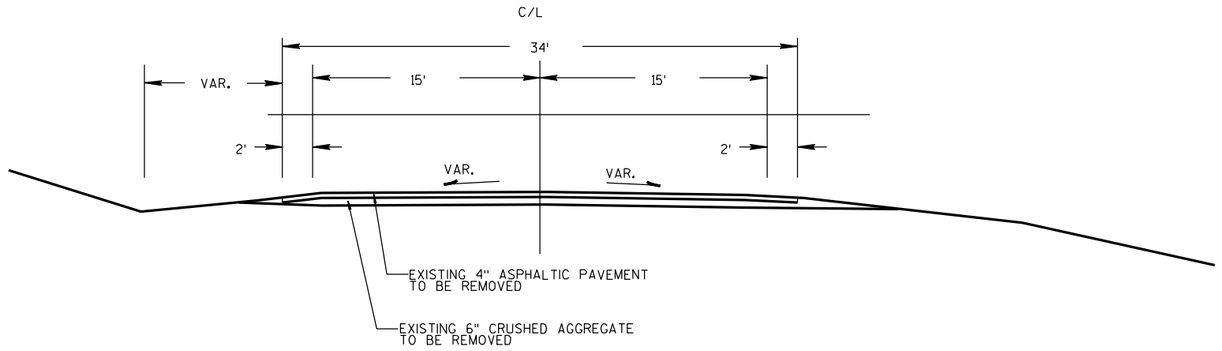
WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER

JULY 29,2013 EXP. JULY 31,2014

PROJECT NO:1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 26	E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING -CURRENT\N-LAWSON-XSTYP2.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE :

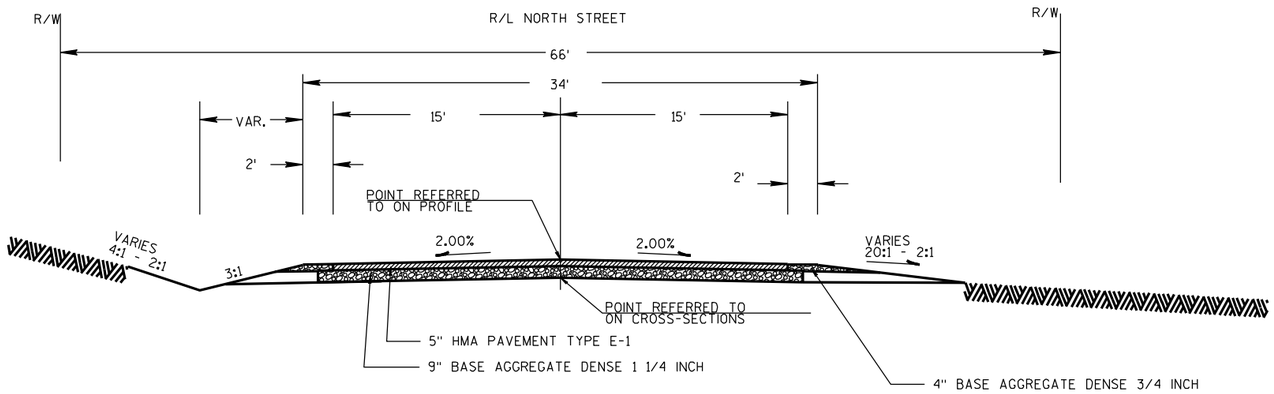
WISDOT/CADDS SHEET 42



TYPICAL EXISTING SECTION

NORTH STREET

STA 40+75 TO STA 45+13



TYPICAL FINISHED SECTION

NORTH STREET

STA 40+75 TO STA 45+13

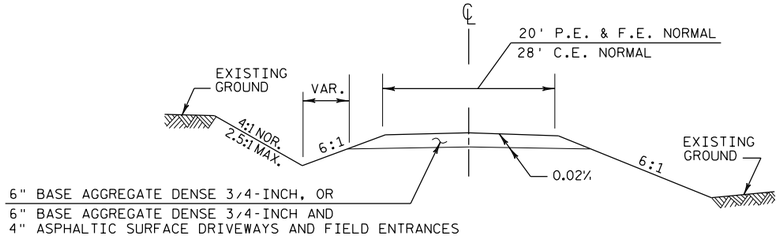
WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER

JULY 24, 2013 EXP. JULY 31, 2014

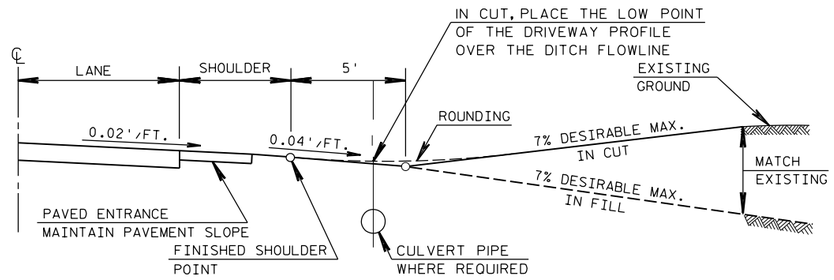
PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	TYPICAL SECTION	SHEET 27	E

FILE NAME : S:\TOWNS\GREENLAKE\NLAWSONDRIVE\DGN\N-LAWSON-XSTYP.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE :

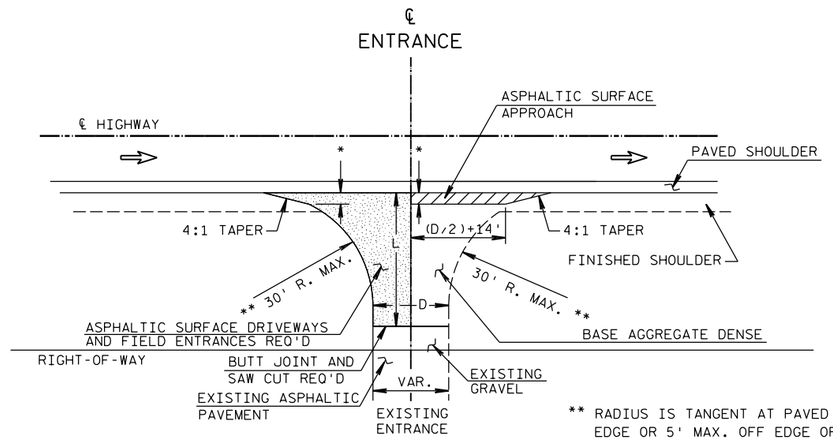
WISDOT/CADDS SHEET 42



TYPICAL CROSS SECTION



PROFILE VIEW



L=VARIABLE, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER. BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

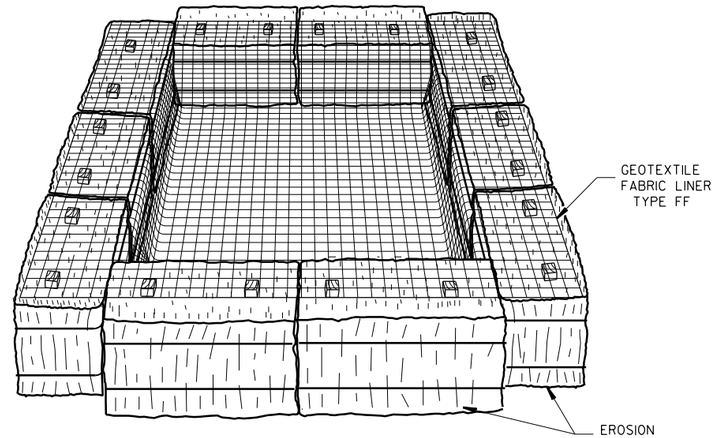
D=DRIVEWAY WIDTH
D=20'TYP.(PE's & FE's) (16'MIN.-24'MAX.)
D=28'TYP.(CE's & FARM ENT.) (24'MIN.-35'MAX.)

** RADIUS IS TANGENT AT PAVED SHOULDER EDGE OR 5' MAX. OFF EDGE OF MAIN LINE PAVEMENT WHICH EVER IS LESS.

* 3' MIN OR TO FINISHED SHOULDER WHICH EVER IS GREATER.

PLAN VIEW

RURAL DRIVEWAY INTERSECTION DETAIL
(PE's, FE's & CE'S)
(FOR NEW CONSTRUCTION)

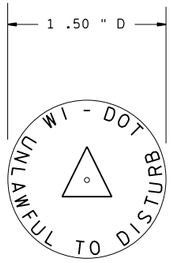


TEMPORARY SETTLING BASIN
(SIZE TO BE DETERMINED IN FIELD AS INDICATED BELOW:)

STORAGE VOLUME (C.F.) = 16 X GPM (PUMP RATE)

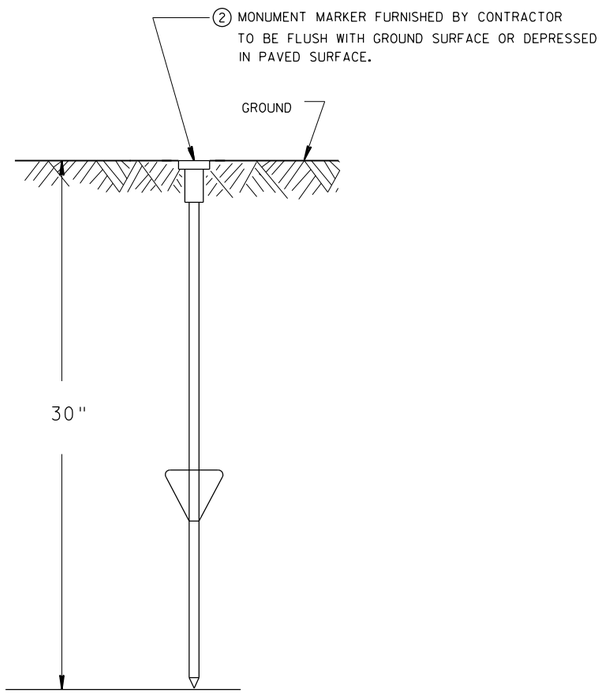
EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.

SOLUTION:
SV (C.F.) = 16 X 50
SV = 800 C.F.
$\frac{800\ C.F.}{1.5\ FT.}$ = 533 S.F.
USE A 20 FT. X 27 FT. BASIN



② WIS DOT MONUMENT CAP MARKER LOGO (SSDRI30)

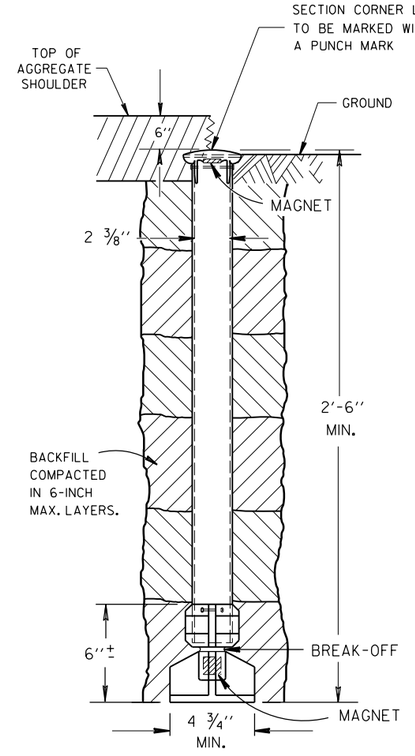
CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING



(FRONT VIEW)

BERNSTEN DRIVABLE MONUMENT SSDR130

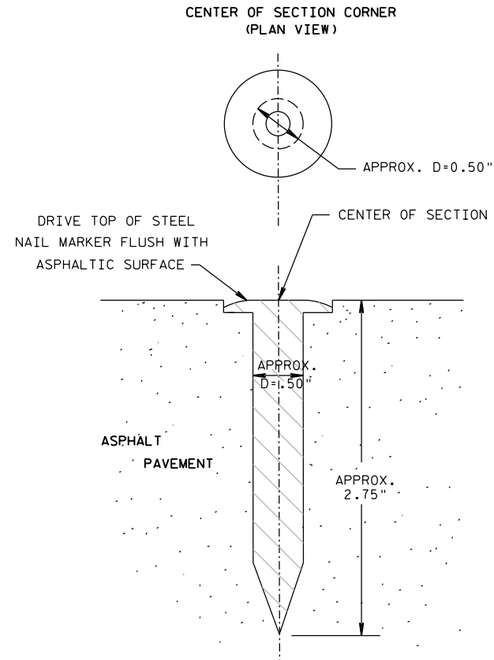
LANDMARK REFERENCE MONUMENT (TIES ONLY)



(SIDE VIEW)

OUTSIDE OF PAVEMENT

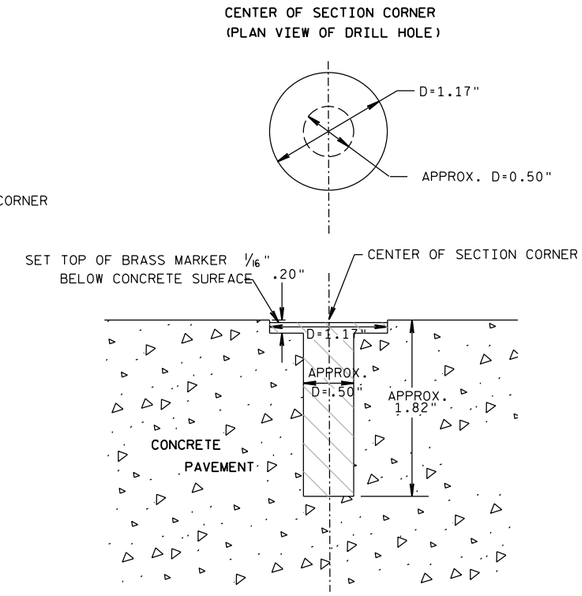
① BERNSTEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



(SIDE VIEW)

IN ASPHALTIC PAVEMENT

① BERNSTEN SNM1 STEEL NAIL MARKER



NOTE: TO DRILL HOLE, USE A "SURVEY MARKER COUNTERSINK DRILL BIT" ITEM *BPMDRL, AVAILABLE FROM BERNTSEN INTERNATIONAL INC.

(SIDE VIEW OF DRILL HOLE)

IN CONCRETE PAVEMENT

① BERNSTEN BP -1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

GENERAL NOTES

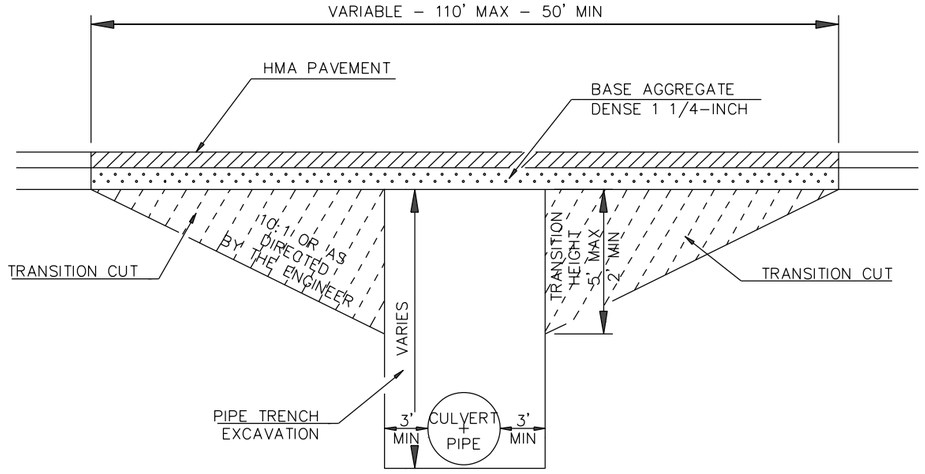
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER.

① = THE REGION SURVEY COORDINATOR WILL SUPPLY.

② = CONTRACTOR WILL SUPPLY.

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL



QUANTITIES FOR INFORMATIONAL PURPOSE

TRANSITIONAL HEIGHT FT	CUT VOL CY
2	50
3	115
4	200
5	315

CULVERT PIPE TRANSITION

TO BE COMPLETED AT ALL CULVERT PIPE REPLACEMENT LOCATIONS

NOTE: MATERIAL REMOVED IN THE TRANSITION CUT AND PIPE TRENCH EXCAVATIONS TO BE REUSED AS BACKFILL UNLESS DETERMINED TO BE UNUSABLE BY THE ENGINEER IN WHICH CASE GRANULAR BACKFILL WILL BE USED.

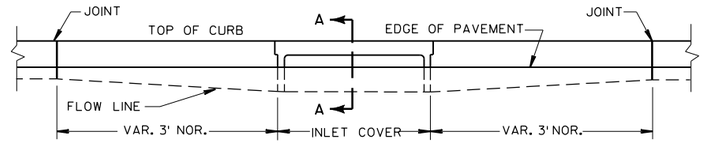
PIPE TRENCH EXCAVATION AND TRANSITION CUT IS CONSIDERED INCIDENTAL TO PIPE INSTALLATION.

TRANSITION CUT WILL BE 36' WIDE, 18' EACH SIDE OF CENTERLINE.

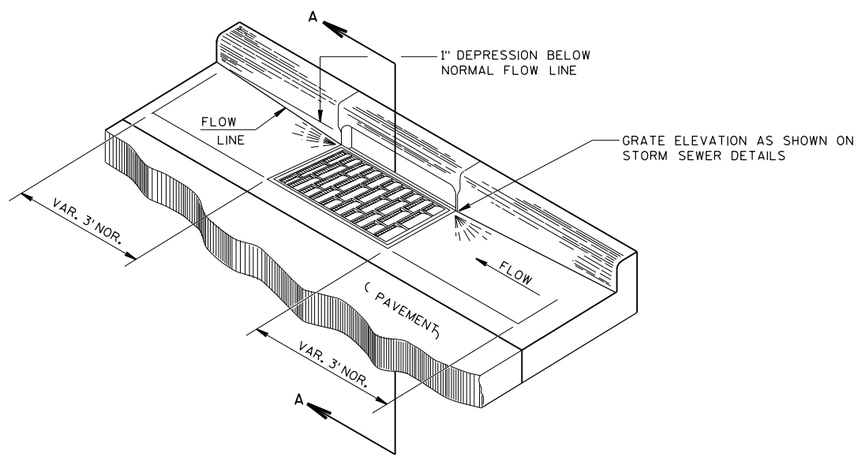
RUNOFF COEFFICIENT TABLE

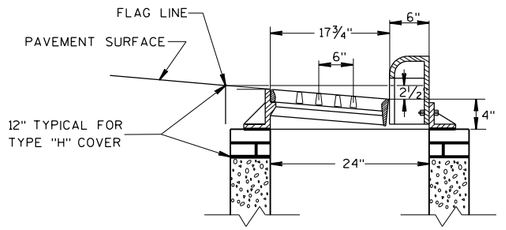
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 160 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 113 ACRES



ELEVATION



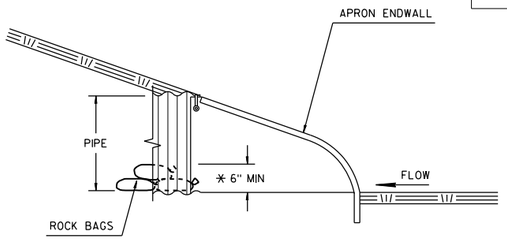


SECTION A-A

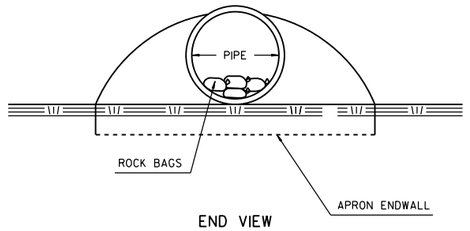
DETAIL OF CURB AND GUTTER AT INLETS

(TYPE 3-H INLET SHOWN)

ESTIMATED BAG SIZE = 24" X 12" X 6"	
PIPE SIZE	ESTIMATED NO. OF BAGS
18"	2
24"	3
30"	5
48"	10
54"	10
60"	13
72"	16

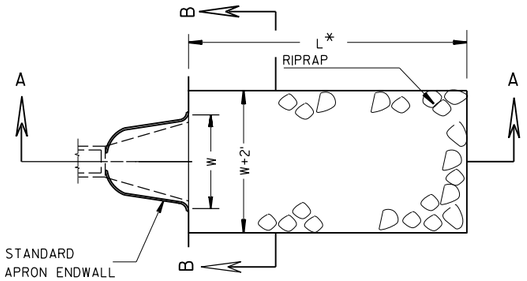


SIDE VIEW



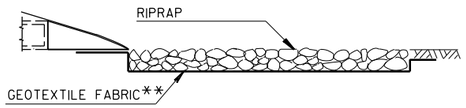
END VIEW

CULVERT PIPE CHECKS

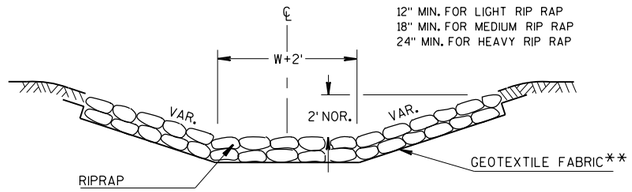


* L = 3 TIMES DIAMETER (NOR.) OR 10' MIN. OR AS DIRECTED BY THE ENGINEER

** USE GEOTEXTILE FABRIC TYPE R FOR LIGHT RIPRAP, USE GEOTEXTILE FABRIC TYPE HR FOR MEDIUM RIPRAP



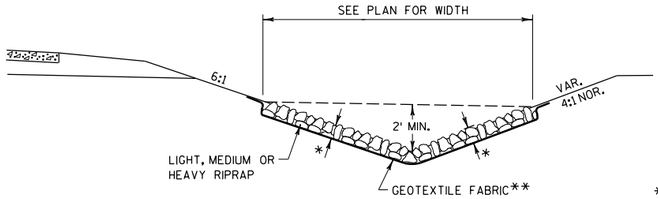
SECTION A-A



12" MIN. FOR LIGHT RIP RAP
18" MIN. FOR MEDIUM RIP RAP
24" MIN. FOR HEAVY RIP RAP

SECTION B-B

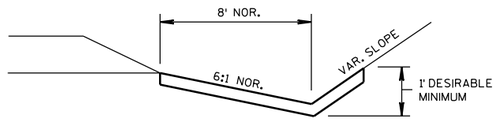
RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS



* 12" MIN. FOR LIGHT RIP RAP
18" MIN. FOR MEDIUM RIP RAP
24" MIN. FOR HEAVY RIP RAP

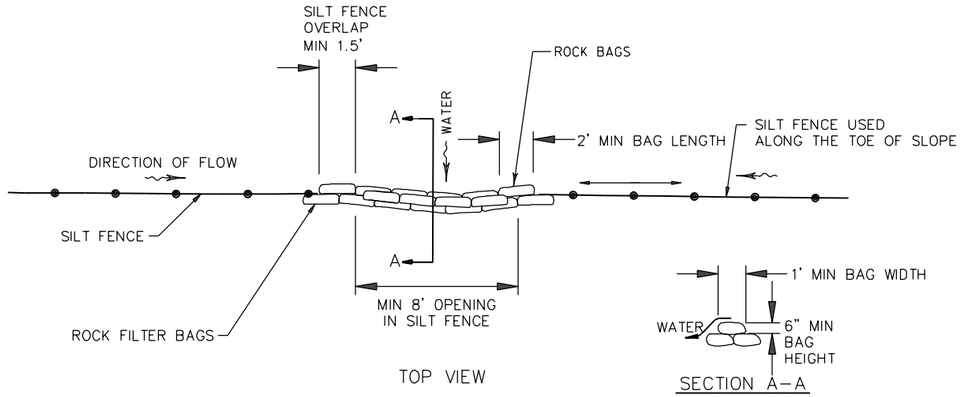
** GEOTEXTILE FABRIC
TYPE "R" FOR LIGHT
TYPE "HR" FOR MEDIUM AND HEAVY

DETAIL OF RIPRAP DITCH

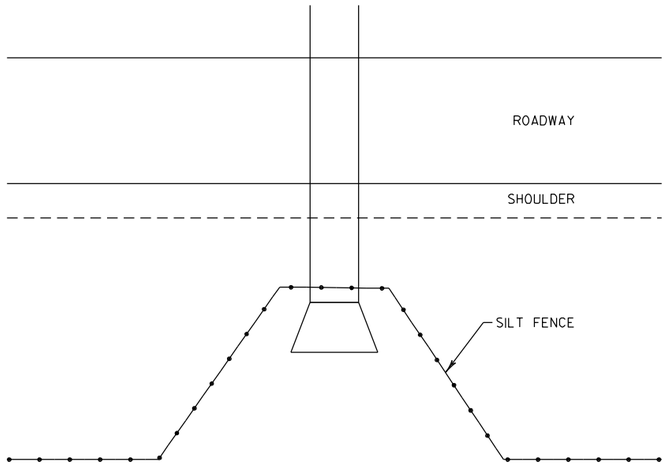


EROSION MAT DETAIL FOR DITCHES

PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE/FOND DU LAC	CONSTRUCTION DETAILS	SHEET 32	E

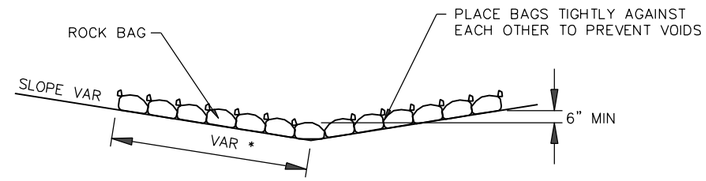


ROCK BAGS USED FOR SILT FENCE RELIEF

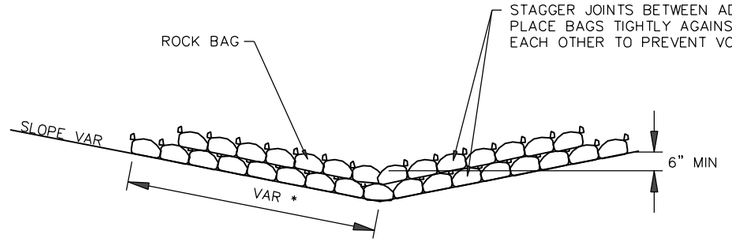


NOTE
SEE SILT FENCE SDD FOR ADDITIONAL INFORMATION.

TYPICAL SILT FENCE DETAIL AT PIPE INLET

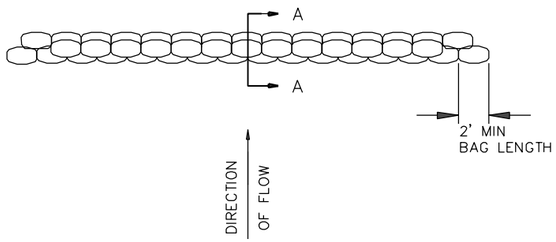


SIDE VIEW (SINGLE LAYER)

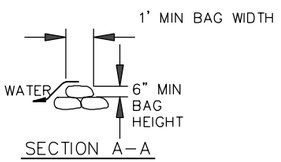


* LENGTH AND NUMBER OF BAGS MAY VARY
DEPENDING ON DESIRED DEPTH OF WATER POOL

SIDE VIEW (MULTIPLE LAYER)

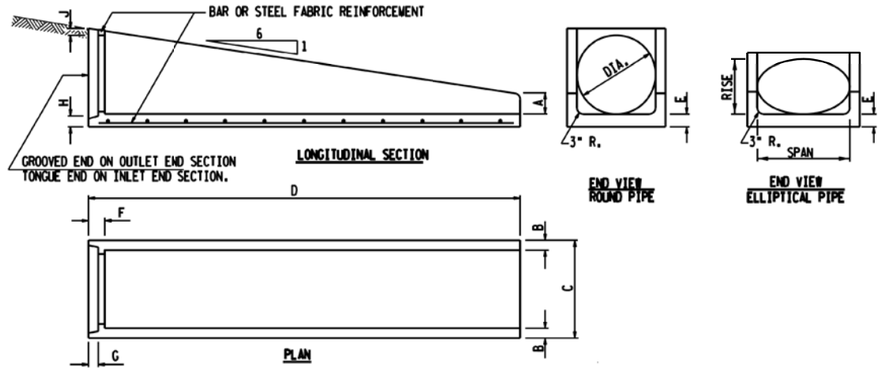


TOP VIEW (MULTIPLE LAYER)

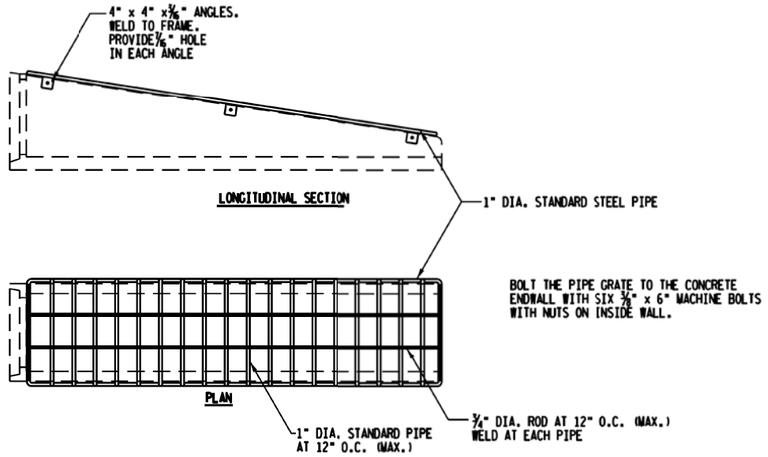


ROCK BAGS USED FOR DITCH CHECKS

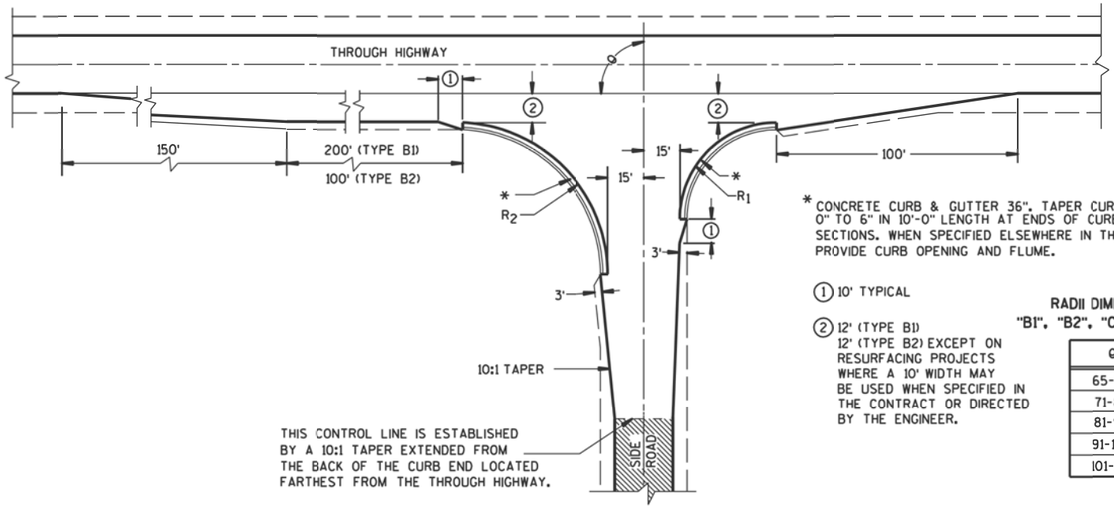
2



PIPE DIA. (IN.)	ELLIPTICAL PIPE		DIMENSIONS (INCHES)								
	RISE (IN.)	SPAN (IN.)	A	B	C	D	E	F	G	H	J
15	-	-	6	2 1/4	19.5	67.5	4	5	3	4	2 1/4
18	-	-	6	2 1/3	24	100	4	5	3	4	2 1/3
24	-	-	6	3	30	125	4	5	3	4	3
-	19	30	6	3 1/4	36 1/2	97 1/2	4	5	3	4	3 1/4
-	24	38	6	3 3/4	45 1/2	130 1/2	4	5	3	4	3 3/4
-	29	45	6	4 1/2	54	165	4	5	3	4	4 1/2



REINFORCED CONCRETE ENDWALLS & GRATES SPECIAL



TYPE "B1" AND "B2"

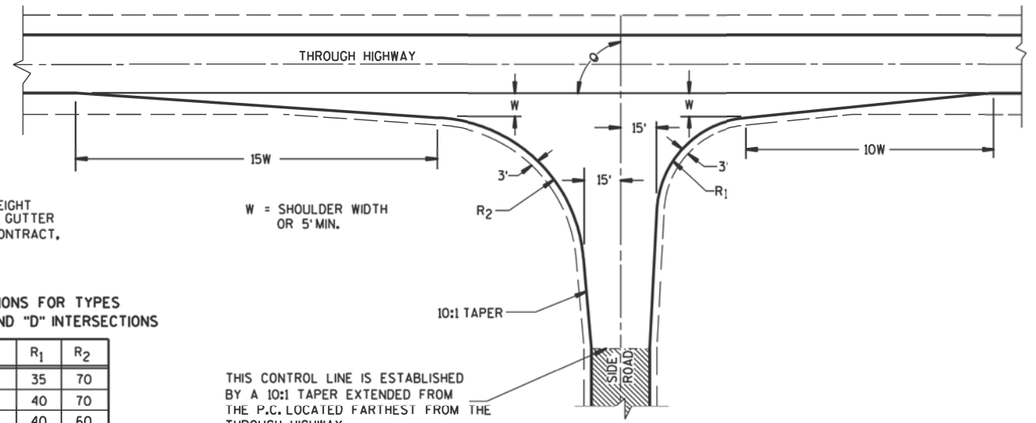
* CONCRETE CURB & GUTTER 36", TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10' TYPICAL

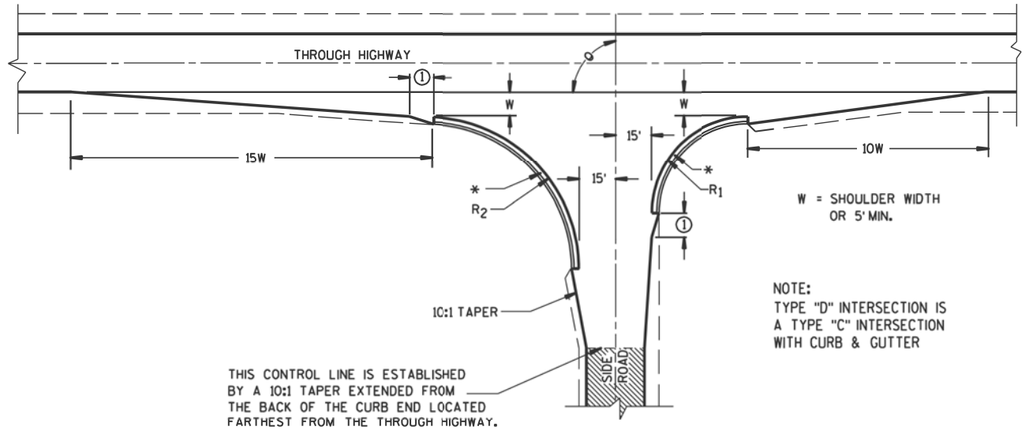
② 12' (TYPE B1)
12' (TYPE B2) EXCEPT ON RESURFACING PROJECTS WHERE A 10' WIDTH MAY BE USED WHEN SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

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

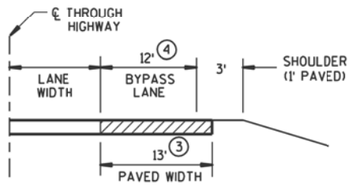
SIDE ROAD SURFACING NOTE

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

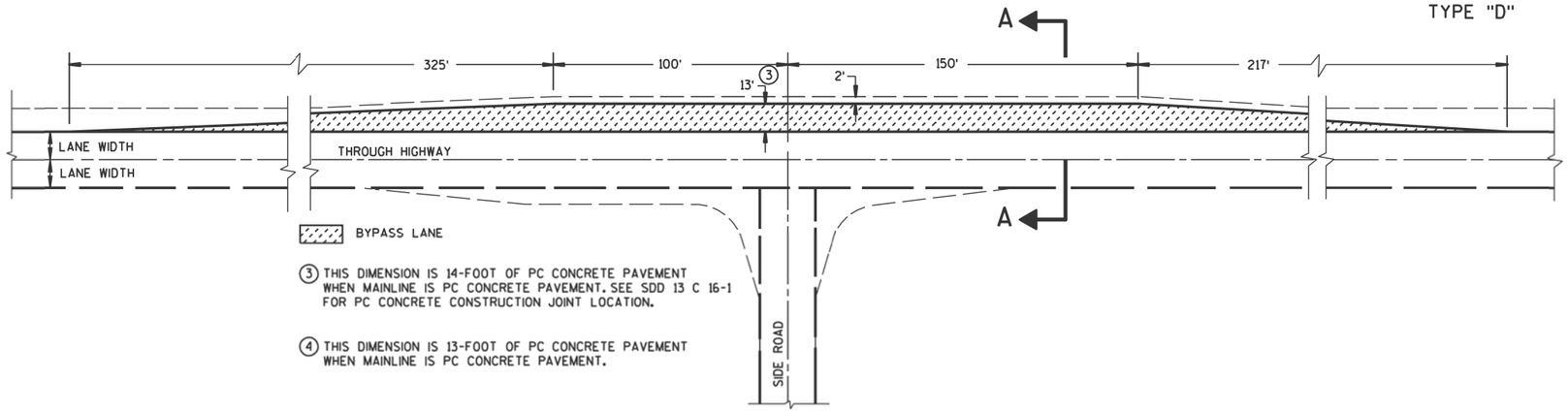
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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

EXISTING SURFACE



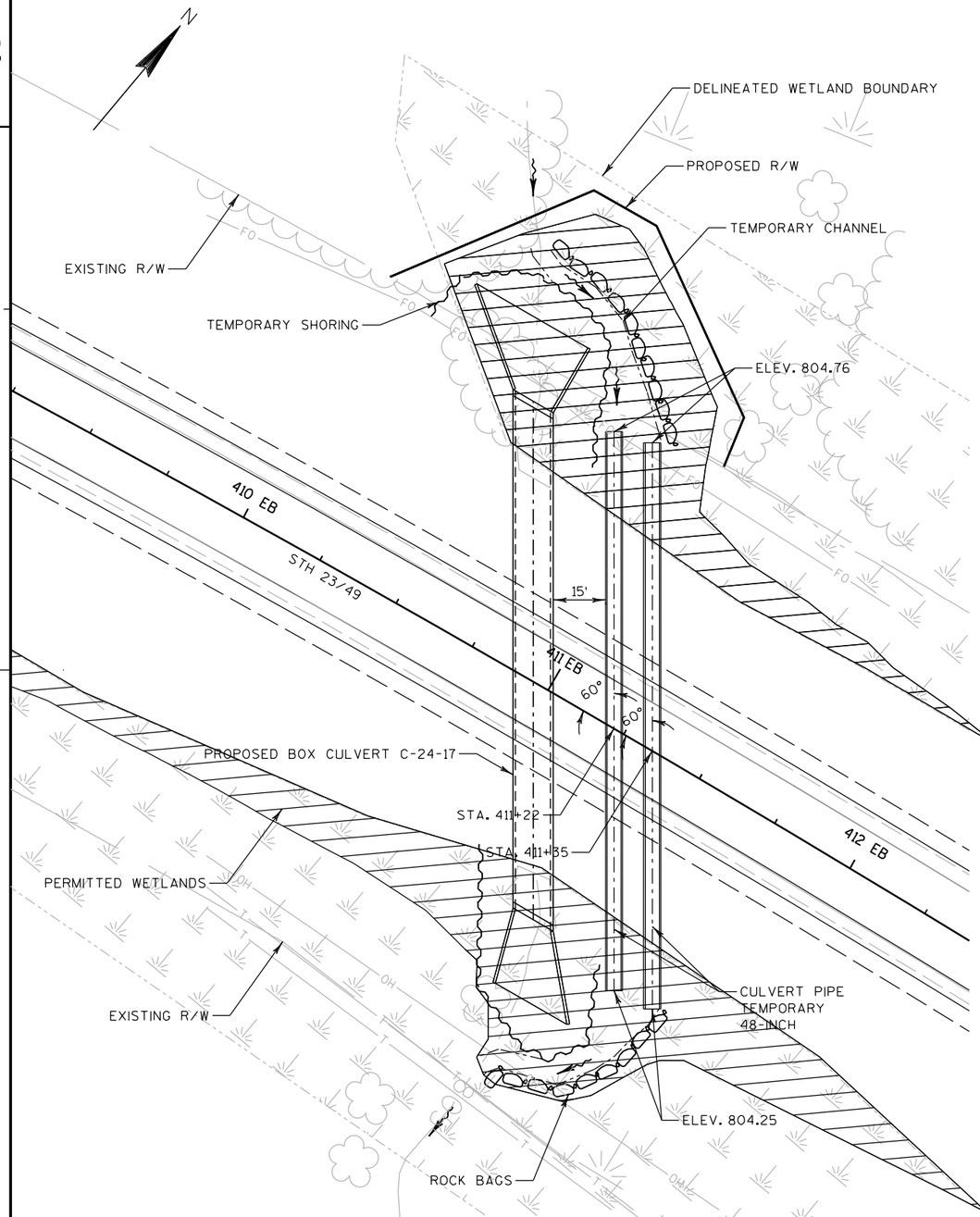
SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)

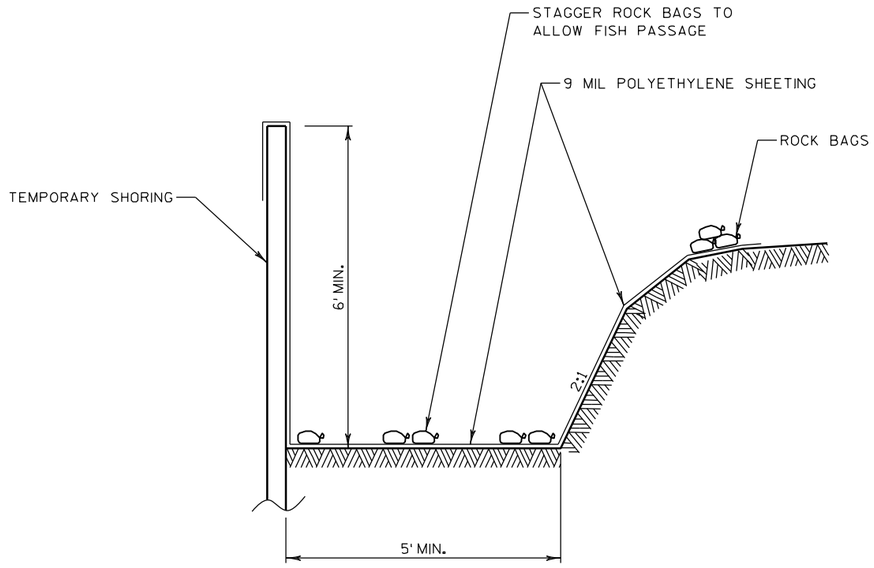


③ THIS DIMENSION IS 14-FOOT OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT. SEE SDD 13 C 16-1 FOR PC CONCRETE CONSTRUCTION JOINT LOCATION.

④ THIS DIMENSION IS 13-FOOT OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT.

TEE INTERSECTION BYPASS LANE DETAIL





SECTIONAL VIEW
TEMPORARY CHANNEL

NOTES:

1. ROAD TEMPORARILY CLOSED FOR BOX CULVERT CONSTRUCTION. ONCE BOX CULVERT IS CONSTRUCTED, MAINTAIN ACCESS IN WORK ZONE FOR LOCALS AND EMERGENCY SERVICES.
2. INSTALL TEMPORARY CULVERT PIPES, TEMPORARY SHORING, AND GRADE TEMPORARY CHANNEL TO DIVERT CREEK FLOW PRIOR TO CONSTRUCTION OF BOX CULVERT.
3. EXCAVATION REQUIRED TO INSTALL TEMPORARY CULVERT PIPES AND GRADE TEMPORARY CHANNEL TO DIVERT WATER IS INCIDENTAL TO THE CULVERT PIPE TEMPORARY ITEM.

BOX CULVERT CONSTRUCTION C-24-17

NOTES:

ROAD TEMPORARILY CLOSED FOR BOX CULVERT CONSTRUCTION. ONCE BOX CULVERT IS CONSTRUCTED. MAINTAIN ACCESS IN WORK ZONE FOR LOCALS AND EMERGENCY SERVICES.

N

DELINEATED WETLAND BOUNDARY

PROPOSED R/W

TEMPORARY LIMITED EASEMENT

TEMPORARY SHORING

PROPOSED BOX CULVERT EXTENSION, B-20-49

SILVER CREEK

EXISTING R/W

SLOPE INTERCEPT

47 WB

47 EB

48 WB

48 EB

49 WB

49 EB

50 WB

50 EB

STH 23

51 WB

51 EB

52 WB

52 EB

EXISTING R/W

PROPOSED R/W

TEMPORARY SHORING

PERMITTED WETLANDS

SILVER CREEK

STAGE 1 BOX CULVERT CONSTRUCTION B-20-49

PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE/FOND DU LAC	CONSTRUCTION DETAILS	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\021001_cd.dgn PLOT DATE : 10/4/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 ' / in.

WISDOT/CADDS SHEET 42

NOTES:

ROAD TEMPORARILY CLOSED FOR BOX CULVERT CONSTRUCTION. ONCE BOX CULVERT IS CONSTRUCTED, MAINTAIN ACCESS IN WORK ZONE FOR LOCALS AND EMERGENCY SERVICES.

ONCE TEMPORARY SHORING IS REMOVED, INSTALL REMAINING RIP RAP IN THE OVERLAP AREA.

N

DELINEATED WETLAND BOUNDARY

PROPOSED R/W

TEMPORARY LIMITED EASEMENT

TEMPORARY SHORING

PROPOSED BOX CULVERT EXTENSION, B-20-49

47 WB

47 EB

48 WB

48 EB

49 WB

49 EB

50 WB

50 EB

51 WB

51 EB

52 WB

52 EB

STH 23

SILVER CREEK

EXISTING R/W

SLOPE INTERCEPT

EXISTING R/W

PROPOSED R/W

ROCK BAGS

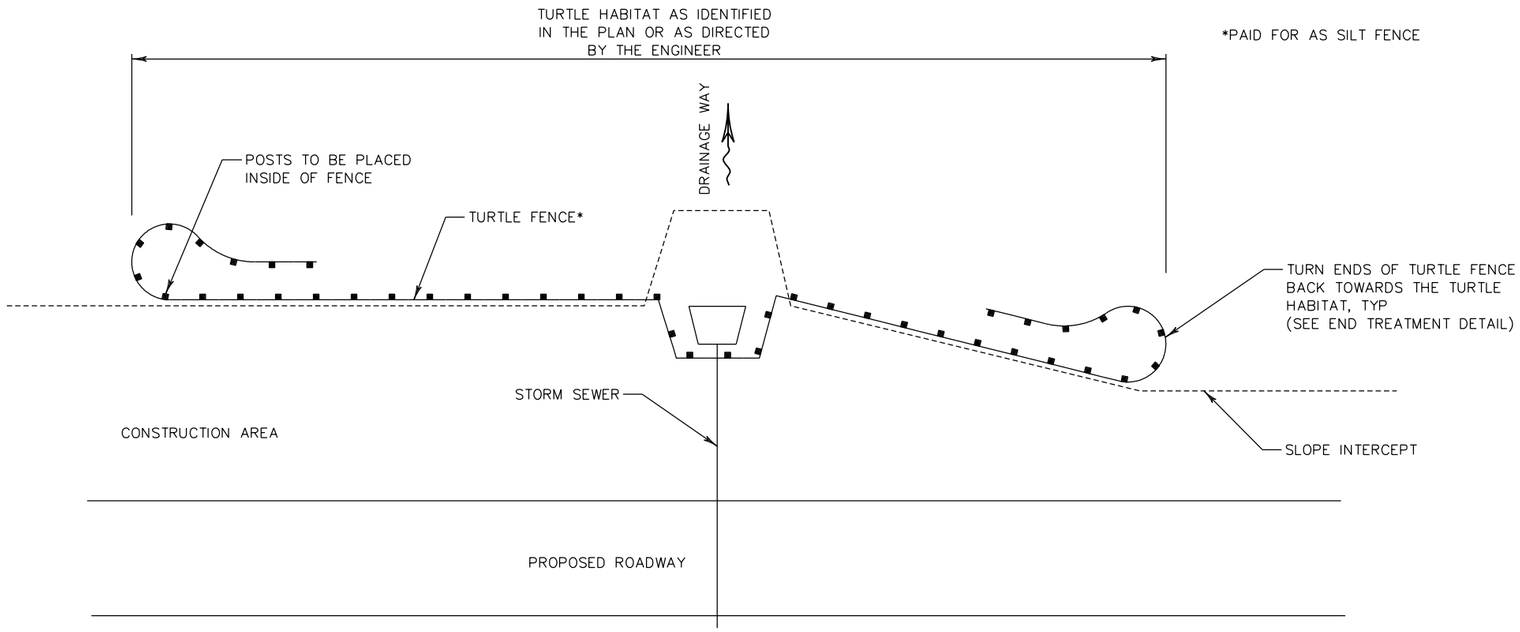
TEMPORARY SHORING

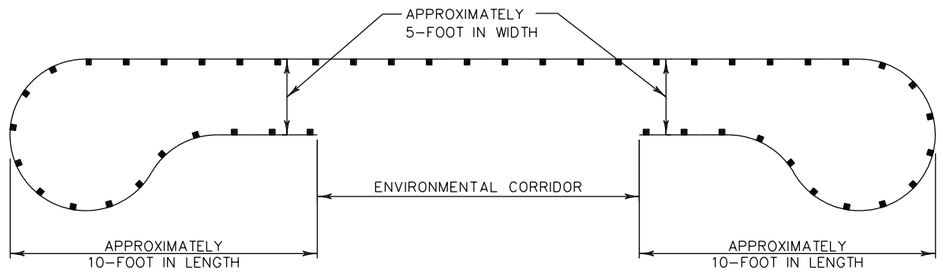
PERMITTED WETLANDS

SILVER CREEK

STAGE 2 BOX CULVERT CONSTRUCTION B-20-49

PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE/FOND DU LAC	CONSTRUCTION DETAILS	SHEET 38	E





END TREATMENT
DETAIL

TURTLE EXCLUSION FENCE DETAIL

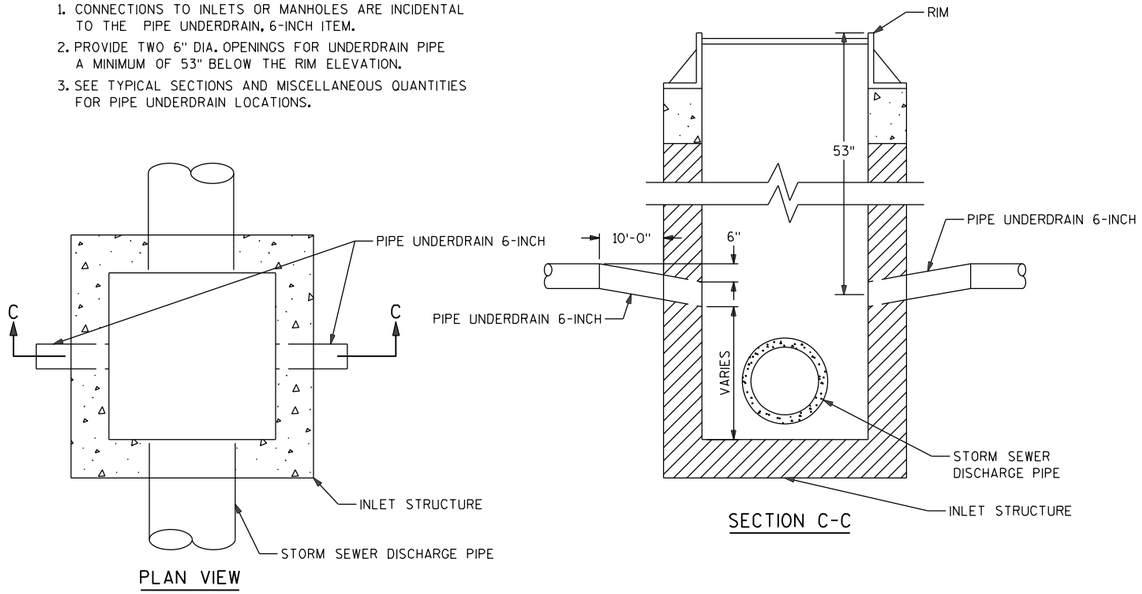
NOTE:

IF LENGTH OF TURTLE FENCE IS LONGER THAN MANUFACTURED LENGTH OF INDIVIDUAL FENCING, JOIN END POSTS AS SHOWN IN S.D.D. "SILT FENCE" – JOINING TWO LENGTHS OF SILT FENCE, TWIST METHOD

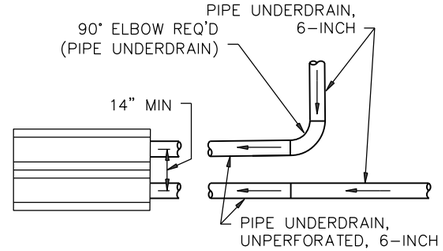
2

NOTES

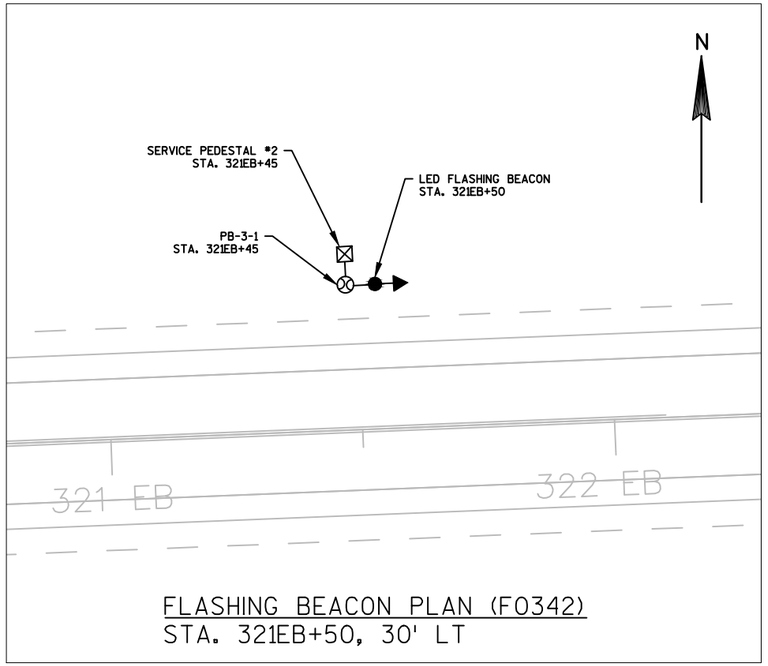
1. CONNECTIONS TO INLETS OR MANHOLES ARE INCIDENTAL TO THE PIPE UNDERDRAIN, 6-INCH ITEM.
2. PROVIDE TWO 6" DIA. OPENINGS FOR UNDERDRAIN PIPE A MINIMUM OF 53" BELOW THE RIM ELEVATION.
3. SEE TYPICAL SECTIONS AND MISCELLANEOUS QUANTITIES FOR PIPE UNDERDRAIN LOCATIONS.



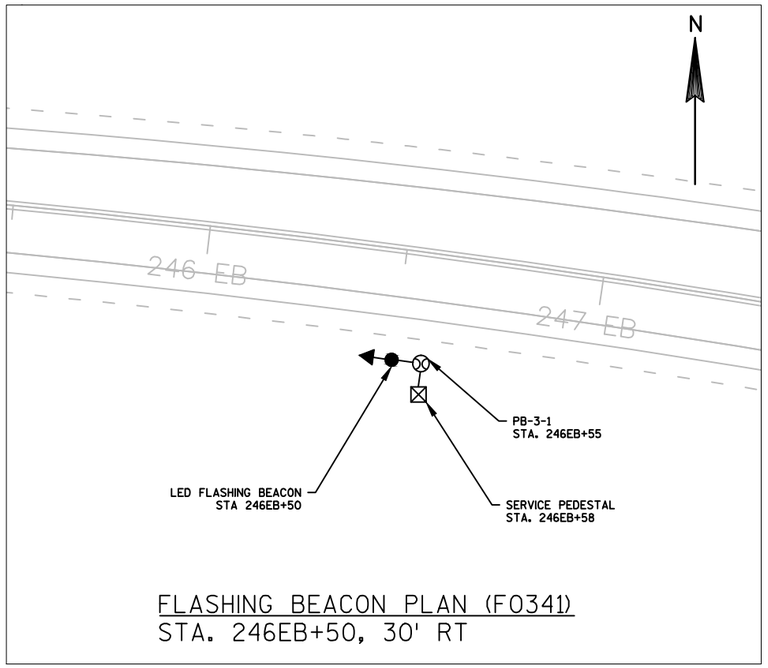
UNDERDRAIN OUTFALL AT INLET



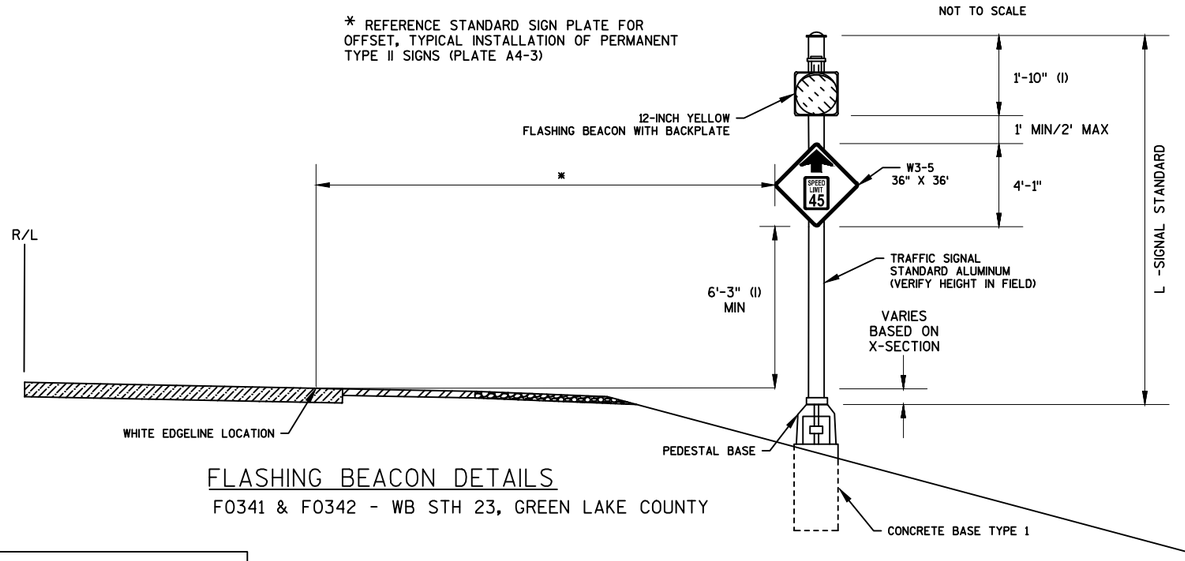
PIPE UNDERDRAIN OUTFALL



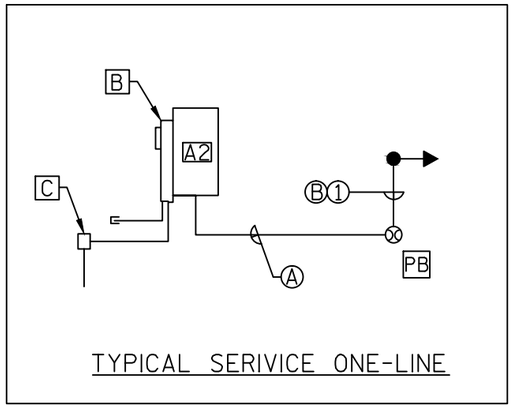
FLASHING BEACON PLAN (F0342)
STA. 321EB+50, 30' LT



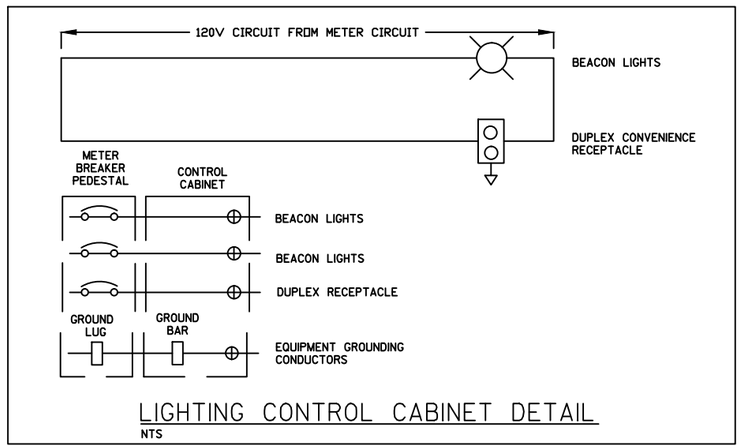
FLASHING BEACON PLAN (F0341)
STA. 246EB+50, 30' RT



FLASHING BEACON DETAILS
F0341 & F0342 - WB STH 23, GREEN LAKE COUNTY



TYPICAL SERIVICE ONE-LINE



LIGHTING CONTROL CABINET DETAIL
NTS

CONDUIT AND WIRING LEGEND

Ⓐ 4*12, *12 GND IN 2"C

Ⓑ 8*12, 2*12 ND IN 2"C

Ⓒ 2*12, *12 GND IN 2"C

① *10 PULL BOX BONDING CONDUCTOR

CONDUIT AND WIRING LEGEND

[A2] METER BREAKER PEDESTAL ELEXTRIC SERVICE, 200VA-120/240V SINGLE PHASE THREE WIRE WITH 3-20A/1P BREAKER FOR LIGHTING CIRCUITS, CABINET, 1-20A/1P BREAKER FOR DUPLEX RECEPTACLE.

[B] LIGHTING CONTROL CABINET IN ACCORDANCE WITH WIRING DIAGRAM

[C] GROUNDING ELECTRODES

→● LED BEACON LIGHTS, X = CIRCUIT NUMBER, Y = CIRCUIT POLE NUMBER

⊗ 24" X 48" PULL BOX, X = CIRCUIT NUMBER, Y = BULL BOX NUMBER.

GENERAL NOTES:

1. ALL FEEDER CONDUIT TO BE 2" SCH 40 PVC. ALL EXPOSED CONDUIT TO BE SCH 80 PVC.

2. COORDINATE AND FINALIZE LOCATIONS OF POWER PEDESTALS, POLE FIXTURES, AND PULL BOXES WITH ENGINEER ON SITE. VERIFY AND STAKE ALL LOCATIONS PRIOR TO INSTALLATION

3. INSTALL POLE AND LUMINARIES PER DOT DETAILS

4. INSTALL UNDERGROUND CONDUIT PER DIRECT BURIED UNDERGROUND CONDUIT DETAIL.

5. INSTALL FUSING IN POLE PER DOT DETAILS.

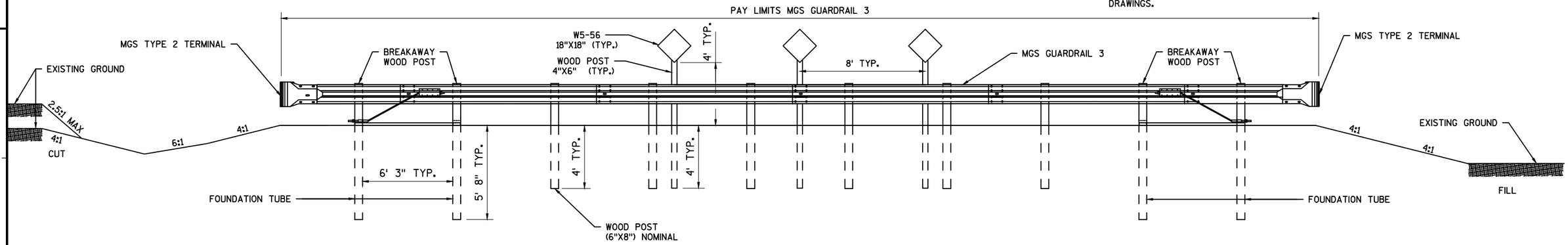
6. GROUND ALL PULL BOXES FROM THE NEAREST LIGHT POLE, USING #10 AWG XLIP WIRE. THIS WIRE SHALL RUN FORM THE GROUNDING SYSTEM OF THE LIGHT POLE TO THE PULL BOX. SEE DRAWING AND PLAN NOTES.

7. POLE LENGTHS SHOWN IN MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POLE LENGTHS AT THE TIME OF FINAL GRADING.

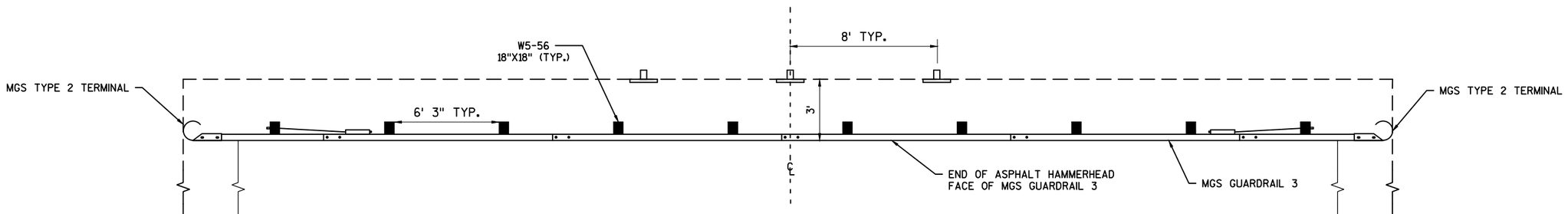
GENERAL NOTES

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

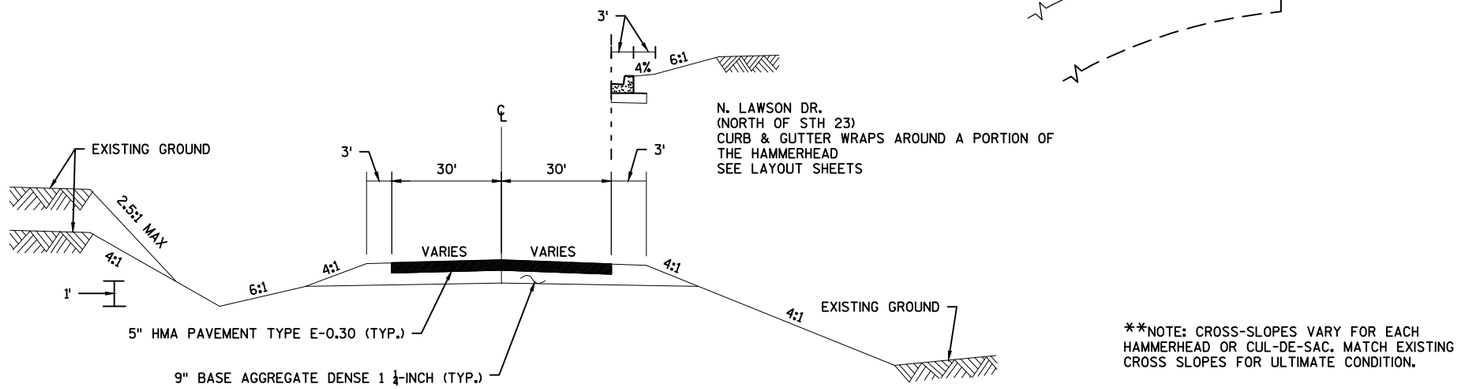
GUARDRAIL DETAILS AND SPECIFICATION SHALL CONFORM TO APPLICABLE STANDARD DETAIL DRAWINGS.



FRONT VIEW
HAMMERHEAD



PLAN VIEW
HAMMERHEAD



**NOTE: CROSS-SLOPES VARY FOR EACH HAMMERHEAD OR CUL-DE-SAC. MATCH EXISTING CROSS SLOPES FOR ULTIMATE CONDITION.

TYPICAL CROSS SECTION**
HAMMERHEAD

N. LAWSON DR.
WESTWIND
S. KORO RD.
CUL-DE-SAC
(SEE LAYOUT SHEETS FOR PLAN VIEW)

CURB AND GUTTER FLANGE LOCATIONS AND ELEVATIONS

STH 23 EB MEDIAN SIDE SOUTH OF NORTH STREET		
STATION	OFFSET	FLANGE ELEVATION
213EB+39.35	0.00' LT	840.78
213EB+50	0.00' LT	840.71
213EB+75	0.00' LT	840.55
214EB+00	0.00' LT	840.40
214EB+25	0.00' LT	840.24
214EB+50	0.00' LT	840.09
214EB+75	0.00' LT	839.93
215EB+00	0.00' LT	839.78
215EB+25	0.00' LT	839.62
215EB+50	0.00' LT	839.47
215EB+75	0.00' LT	839.31
216EB+00	0.00' LT	839.16
216EB+25	0.00' LT	839.00
216EB+50	0.00' LT	838.84
216EB+75	0.00' LT	838.69
217EB+00	0.00' LT	838.53
217EB+25	0.00' LT	838.39
217EB+50	0.00' LT	838.26
217EB+75	0.00' LT	838.14
218EB+00	0.00' LT	838.05
218EB+25	0.00' LT	837.97
218EB+29.85	0.00' LT	837.95
218EB+50	1.61' LT	837.94
218EB+75	3.61' LT	837.93
219EB+00	5.61' LT	837.94
219EB+25	7.61' LT	837.97
219EB+50	9.61' LT	838.02
219EB+75	11.61' LT	838.08
219EB+79.85	12.00' LT	838.09
220EB+00	12.00' LT	838.12
220EB+25	12.00' LT	838.18
220EB+50	12.00' LT	838.25
220EB+75	12.00' LT	838.34
221EB+00	12.00' LT	838.45
221EB+25	12.00' LT	838.56
221EB+50	12.00' LT	838.68
221EB+75	12.00' LT	838.79
222EB+00	12.00' LT	838.97
222EB+25	12.01' LT	839.16
222EB+50	12.19' LT	839.36
222EB+75	12.52' LT	839.57
223EB+00	12.83' LT	839.70
223EB+25	13.12' LT	839.83
223EB+30.14	13.18' LT	839.85
223EB+44.05	14.32' LT	839.97

STH 23 WB MEDIAN SIDE SOUTH OF NORTH STREET		
STATION	OFFSET	FLANGE ELEVATION
213WB+39.35	0.00' RT	840.88
213WB+50	0.00' RT	840.82
213WB+75	0.00' RT	840.68
214WB+00	0.00' RT	840.54
214WB+25	0.00' RT	840.40
214WB+50	0.00' RT	840.26
214WB+75	0.00' RT	840.11
215WB+00	0.00' RT	839.97
215WB+25	0.00' RT	839.83
215WB+50	0.00' RT	839.69
215WB+75	0.00' RT	839.55
216WB+00	0.00' RT	839.40
216WB+25	0.00' RT	839.26
216WB+50	0.00' RT	839.12
216WB+75	0.00' RT	838.98
217WB+00	0.00' RT	838.84
217WB+25	0.00' RT	838.70
217WB+50	0.00' RT	838.55
217WB+75	0.00' RT	838.43
218WB+00	0.00' RT	838.32
218WB+25	0.00' RT	838.23
218WB+50	0.00' RT	838.17
218WB+75	0.00' RT	838.12
219WB+00	0.00' RT	838.10
219WB+25	0.00' RT	838.09
219WB+50	0.00' RT	838.11
219WB+75	0.00' RT	838.15
220WB+00	0.00' RT	838.21
220WB+25	0.00' RT	838.29
220WB+50	0.00' RT	838.39
220WB+75	0.00' RT	838.51
221WB+00	0.00' RT	838.65
221WB+25	0.00' RT	838.82
221WB+50	0.00' RT	839.00
221WB+75	0.00' RT	839.20
222WB+00	0.00' RT	839.39
222WB+25	0.00' RT	839.59
222WB+50	0.00' RT	829.79
222WB+75	0.00' RT	839.99
223WB+00	0.00' RT	840.18
223WB+25.37	0.00' RT	840.38
223WB+45.31	2.16' RT	840.43

STH 23 EB MEDIAN SIDE NORTH OF NORTH STREET		
STATION	OFFSET	FLANGE ELEVATION
224EB+63.97	2.54' LT	839.99
224EB+75	0.61' LT	839.96
224EB+84.76	0.00' LT	839.97
225EB+00	0.00' LT	840.04
225EB+25	0.00' LT	840.16
225EB+50	0.00' LT	840.27
225EB+75	0.00' LT	840.38
226EB+00	0.00' LT	840.50
226EB+25	0.00' LT	840.61
226EB+50	0.00' LT	840.73
226EB+75	0.00' LT	840.84
227EB+00	0.00' LT	840.96
227EB+25	0.00' LT	841.07
227EB+50	0.00' LT	841.19
227EB+75	0.00' LT	841.30
228EB+00	0.00' LT	841.42
228EB+25	0.00' LT	841.53
228EB+50	0.00' LT	841.64
228EB+75	0.00' LT	841.76
229EB+00	0.00' LT	841.87
229EB+25	0.00' LT	841.99
229EB+50	0.00' LT	842.10
229EB+75	0.00' LT	842.22
230EB+00	0.00' LT	842.33
230EB+25	0.00' LT	842.45
230EB+50	0.00' LT	842.56
230EB+75	0.00' LT	842.68
231EB+00	0.00' LT	842.79
231EB+25	0.00' LT	842.91
231EB+50	0.00' LT	843.02
231EB+75	0.00' LT	843.13
232EB+00	0.00' LT	843.25
232EB+25	0.00' LT	843.36
232EB+50	0.00' LT	843.48
232EB+75	0.00' LT	843.59
233EB+00	0.00' LT	843.71
233EB+25	0.00' LT	843.82
233EB+50	0.00' LT	843.94
233EB+75	0.00' LT	844.05
234EB+00	0.00' LT	844.17
234EB+25	0.00' LT	844.28
234EB+50	0.00' LT	844.40
234EB+75	0.00' LT	844.51
235EB+00	0.00' LT	844.62
235EB+25	0.00' LT	844.74
235EB+50	0.00' LT	844.85
235EB+75	0.00' LT	844.93
236EB+00	0.00' LT	845.02

STH 23 WB MEDIAN SIDE NORTH OF NORTH STREET		
STATION	OFFSET	FLANGE ELEVATION
224WB+65.90	15.54' RT	840.38
224WB+75	13.49' RT	840.40
224WB+90.91	12.00' RT	840.54
225WB+00	12.00' RT	840.58
225WB+25	12.00' RT	840.67
225WB+50	12.00' RT	840.77
225WB+75	12.00' RT	840.87
226WB+00	12.00' RT	840.97
226WB+25	12.00' RT	841.07
226WB+50	12.00' RT	841.17
226WB+75	12.00' RT	841.27
227WB+00	12.00' RT	841.36
227WB+25	12.00' RT	841.46
227WB+50	12.00' RT	841.56
227WB+75	12.00' RT	841.66
228WB+00	12.00' RT	841.76
228WB+25	12.00' RT	841.86
228WB+44.45	12.00' RT	841.93
228WB+50	11.72' RT	841.97
228WB+75	10.30' RT	842.14
229WB+00	8.64' RT	842.31
229WB+25	6.73' RT	842.50
229WB+50	4.58' RT	842.71
229WB+75	2.19' RT	842.92
229WB+95.89	0.00' RT	843.11
230WB+00	0.00' RT	843.12
230WB+25	0.00' RT	843.22
230WB+50	0.00' RT	843.32
230WB+75	0.00' RT	843.42
231WB+00	0.00' RT	843.52
231WB+25	0.00' RT	843.62
231WB+50	0.00' RT	843.72
231WB+75	0.00' RT	843.81
232WB+00	0.00' RT	843.91
232WB+25	0.00' RT	844.01
232WB+50	0.00' RT	844.11
232WB+75	0.00' RT	844.21
233WB+00	0.00' RT	844.31
233WB+25	0.00' RT	844.41
233WB+50	0.00' RT	844.50
233WB+75	0.00' RT	844.60
234WB+00	0.00' RT	844.70
234WB+25	0.00' RT	844.80
234WB+50	0.00' RT	844.90
234WB+75	0.00' RT	845.00
235WB+00	0.00' RT	845.10
235WB+25	0.00' RT	845.20
235WB+50	0.00' RT	845.29

STH 23 WB (CONTINUED) MEDIAN SIDE NORTH OF NORTH STREET		
STATION	OFFSET	FLANGE ELEVATION
235WB+75	0.00' RT	845.36
236WB+00	0.00' RT	845.43
236WB+11.03	0.00' RT	845.45

CURB AND GUTTER FLANGE LOCATIONS AND ELEVATIONS (CONTINUED)

STH 23 EB
OUTSIDE
WEST OF RE-ALIGNED N LAWSON DR

STATION	OFFSET	FLANGE ELEVATION
254EB+03.00	25.00' RT	848.82
254EB+25	25.00' RT	849.10
254EB+50	25.00' RT	849.43
254EB+75	25.00' RT	849.77
255EB+00	25.00' RT	850.12
255EB+10.00	25.00' RT	850.26
255EB+25	24.40' RT	850.48
255EB+50	23.40' RT	850.87
255EB+75	22.40' RT	851.26
256EB+00	21.40' RT	851.66
256EB+25	20.40' RT	852.07
256EB+35.00	20.00' RT	852.23
256EB+50	20.00' RT	852.46
256EB+75	20.00' RT	852.84
257EB+00	20.00' RT	853.24
257EB+25	20.00' RT	853.64
257EB+50	20.00' RT	854.05
257EB+75	20.00' RT	854.47
258EB+00	20.00' RT	854.90
258EB+25	20.00' RT	855.33
258EB+50	20.00' RT	855.78
258EB+75	20.00' RT	856.23
259EB+00	20.00' RT	856.64
259EB+25	20.00' RT	857.03
259EB+50	20.00' RT	857.40
259EB+75	20.00' RT	857.74
260EB+00	20.00' RT	858.05
260EB+25	20.00' RT	858.34
260EB+50	20.00' RT	858.60
260EB+75	20.00' RT	858.84
261EB+00	20.00' RT	859.06
261EB+25	20.00' RT	859.29
261EB+50	20.00' RT	859.49
261EB+75	20.00' RT	859.67
261EB+91.61	20.00' RT	859.77
262EB+00	20.67' RT	859.79
262EB+25	22.67' RT	859.84
262EB+41.69	24.00' RT	859.85
262EB+50	24.00' RT	859.87
262EB+75	24.00' RT	859.90
263EB+00	24.00' RT	859.91
263EB+25	24.00' RT	859.89
263EB+50	24.00' RT	859.85
263EB+75	24.00' RT	859.78
264EB+00	24.00' RT	859.69
264EB+25	24.00' RT	859.57
264EB+50	24.00' RT	859.42
264EB+75	24.00' RT	859.25

STH 23 EB (CONTINUED)
OUTSIDE
WEST OF RE-ALIGNED N LAWSON DR

STATION	OFFSET	FLANGE ELEVATION
265EB+00	24.00' RT	859.06
265EB+25	24.00' RT	858.84
265EB+50	24.00' RT	858.59
265EB+75	24.00' RT	858.32
265EB+91.25	24.00' RT	858.12
266EB+13.72	28.83' RT	857.75
266EB+32.73	41.73' RT	856.88
266EB+45.50	60.83' RT	856.23
266EB+50.16	83.33' RT	855.61
266EB+50.17	84.69' RT	855.58

STH 23 EB
OUTSIDE
EAST OF RE-ALIGNED N LAWSON DR

STATION	OFFSET	FLANGE ELEVATION
266EB+82.17	84.32' RT	855.58
266EB+81.94	64.17' RT	855.98
266EB+88.95	41.09' RT	856.35
267EB+03.29	28.33' RT	856.43
267EB+17.17	24.00' RT	856.28
267EB+25	23.06' RT	856.17
267EB+50.50	20.00' RT	855.77
267EB+75	20.00' RT	855.24
268EB+00	20.00' RT	854.68
268EB+25	20.00' RT	854.11
268EB+50	20.00' RT	853.56
268EB+75	20.00' RT	852.98
269EB+00	20.00' RT	852.38
269EB+25	20.00' RT	851.75
269EB+50	20.00' RT	851.09
269EB+75	20.00' RT	850.41
270EB+00	20.00' RT	849.71
270EB+25	20.00' RT	848.97
270EB+50	20.00' RT	848.22
270EB+75	20.00' RT	847.44
271EB+00	20.00' RT	846.63
271EB+25	20.00' RT	845.79
271EB+50	20.00' RT	844.94
271EB+75	20.00' RT	844.05
272EB+00	20.00' RT	843.14
272EB+25	20.00' RT	842.21
272EB+50	20.00' RT	841.25
272EB+75	20.00' RT	840.26
273EB+00	20.00' RT	839.25
273EB+25	20.00' RT	838.21
273EB+50	20.00' RT	837.16
273EB+75	20.00' RT	836.14
274EB+00	20.00' RT	835.13
274EB+25	20.00' RT	834.15
274EB+50	20.00' RT	833.19
274EB+75	20.00' RT	832.25
275EB+00	20.00' RT	831.33
275EB+25	20.00' RT	830.44
275EB+50	20.00' RT	829.56
275EB+75	20.00' RT	828.71
276EB+00	20.00' RT	827.88
276EB+25	20.00' RT	827.07
276EB+50	20.00' RT	826.29
276EB+75	20.00' RT	825.52
277EB+00	20.00' RT	824.78
277EB+25	20.00' RT	824.06
277EB+50	20.00' RT	823.36
277EB+75	20.00' RT	822.69

STH 23 EB (CONTINUED)
OUTSIDE
EAST OF RE-ALIGNED N LAWSON DR

STATION	OFFSET	FLANGE ELEVATION
278EB+00	20.00' RT	822.03
278EB+25	20.00' RT	821.40
278EB+50	20.00' RT	820.79
278EB+75	20.00' RT	820.20
279EB+00	20.00' RT	819.63

STH 23 EB
MEDIAN SIDE
WEST OF RE-ALIGNED N LAWSON DR

STATION	OFFSET	FLANGE ELEVATION
267EB+08.57	0.00' LT	856.91
267EB+25	0.00' LT	856.63
267EB+50	0.00' LT	856.18
267EB+75	0.00' LT	855.69
268EB+00	0.00' LT	855.20
268EB+25	0.00' LT	854.67
268EB+50	0.00' LT	854.12
268EB+75	0.00' LT	853.54
269EB+00	0.00' LT	852.94
269EB+25	0.00' LT	852.31
269EB+50	0.00' LT	851.65
269EB+75	0.00' LT	850.97
270EB+00	0.00' LT	850.27
270EB+25	0.00' LT	849.53
270EB+50	0.00' LT	848.78
270EB+75	0.00' LT	848.00
271EB+00	0.00' LT	847.19
271EB+25	0.00' LT	846.35
271EB+50	0.00' LT	845.50
271EB+75	0.00' LT	844.61
272EB+00	0.00' LT	843.70
272EB+25	0.00' LT	842.77
272EB+50	0.00' LT	841.81
272EB+75	0.00' LT	840.82
273EB+00	0.00' LT	839.81
273EB+25	0.00' LT	838.77
273EB+50	0.00' LT	837.72
273EB+75	0.00' LT	836.70
274EB+00	0.00' LT	835.69
274EB+25	0.00' LT	834.71
274EB+50	0.00' LT	833.75
274EB+75	0.00' LT	832.81
275EB+00	0.00' LT	831.89
275EB+25	0.00' LT	831.00
275EB+50	0.00' LT	830.12
275EB+75	0.00' LT	829.27
276EB+00	0.00' LT	828.44
276EB+25	0.00' LT	827.63
276EB+50	0.00' LT	826.85
276EB+75	0.00' LT	826.08
277EB+00	0.00' LT	825.34
277EB+25	0.00' LT	824.62
277EB+50	0.00' LT	823.92
277EB+74.66	0.00' LT	823.26

STH 23 WB
MEDIAN SIDE
WEST OF RE-ALIGNED N LAWSON DR

STATION	OFFSET	FLANGE ELEVATION
267WB+07.19	15.51' RT	856.62
267WB+25	12.05' RT	856.38
267WB+27.41	12.00' RT	856.34
267WB+50	12.00' RT	855.92
267WB+75	12.00' RT	855.44
268WB+00	12.00' RT	854.94
268WB+25	12.00' RT	854.40
268WB+50	12.00' RT	853.85
268WB+75	12.00' RT	853.26
269WB+00	12.00' RT	852.65
269WB+25	12.00' RT	852.02
269WB+50	12.00' RT	851.36
269WB+75	12.00' RT	850.67
270WB+00	12.00' RT	849.96
270WB+25	12.00' RT	849.23
270WB+50	12.00' RT	848.46
270WB+75	12.00' RT	847.68
270WB+77.41	12.00' RT	847.60
271WB+00	10.19' RT	846.90
271WB+25	8.19' RT	846.10
271WB+50	6.19' RT	845.28
271WB+75	4.19' RT	844.43
272WB+00	2.19' RT	843.55
272WB+27.41	0.00' RT	842.65
272WB+50	0.00' RT	841.69
272WB+75	0.00' RT	840.70
273WB+00	0.00' RT	839.69
273WB+25	0.00' RT	838.68
273WB+50	0.00' RT	837.68
273WB+75	0.00' RT	836.67
274WB+00	0.00' RT	835.67
274WB+25	0.00' RT	834.69
274WB+50	0.00' RT	833.74
274WB+75	0.00' RT	832.81
275WB+00	0.00' RT	831.90
275WB+25	0.00' RT	831.01
275WB+50	0.00' RT	830.14
275WB+75	0.00' RT	829.29
276WB+00	0.00' RT	828.47
276WB+25	0.00' RT	827.66
276WB+50	0.00' RT	826.88
276WB+75	0.00' RT	826.12
277WB+00	0.00' RT	825.38
277WB+25	0.00' RT	824.66
277WB+50	0.00' RT	823.96
277WB+74.36	0.00' RT	823.31

CURB AND GUTTER FLANGE LOCATIONS AND ELEVATIONS (CONTINUED)

2

STH 23 WB OUTSIDE AT RE-ALIGNED N LAWSON DR		
STATION	OFFSET	FLANGE ELEVATION
263WB+48.08	32.00' LT	859.60
263WB+50	32.00' LT	859.60
263WB+64.33	32.00' LT	859.56
263WB+75	32.00' LT	859.52
264WB+00	32.00' LT	859.43
264WB+13.85	32.00' LT	859.36
264WB+25	32.00' LT	859.30
264WB+50	32.00' LT	859.15
264WB+75	32.00' LT	859.98
265WB+00	32.00' LT	858.77
265WB+25	32.00' LT	858.55
265WB+50	32.00' LT	858.30
265WB+75	32.00' LT	858.02
266WB+00	32.00' LT	857.72
266WB+25	32.00' LT	857.39
266WB+50	32.00' LT	857.03
266WB+75	32.00' LT	856.65
267WB+00	32.00' LT	856.25
267WB+25	32.00' LT	855.82
267WB+50	32.00' LT	855.36
267WB+75	32.00' LT	854.88
268WB+00	32.00' LT	854.38
268WB+25	32.00' LT	853.84
268WB+50	32.00' LT	853.29
268WB+75	32.00' LT	852.70
269WB+00	32.00' LT	852.09
269WB+25	32.00' LT	851.46
269WB+50	32.00' LT	850.80
269WB+75	32.00' LT	850.11
270WB+00	32.00' LT	849.40
270WB+25	32.00' LT	848.67
270WB+50	32.00' LT	847.90
270WB+75	32.00' LT	847.12
271WB+00	32.00' LT	846.30
271WB+25	32.00' LT	845.46
271WB+50	32.00' LT	844.60
271WB+75	32.00' LT	843.71
272WB+00	32.00' LT	842.80
272WB+25	32.00' LT	841.86
272WB+50	32.00' LT	840.89
272WB+75	32.00' LT	839.90
273WB+00	32.00' LT	838.89
273WB+25	32.00' LT	837.88
273WB+50	32.00' LT	836.88
273WB+75	32.00' LT	835.87
274WB+00	32.00' LT	834.87
274WB+25	32.00' LT	833.90
274WB+50	32.00' LT	832.94

STH 23 WB (CONTINUED) OUTSIDE AT RE-ALIGNED N LAWSON DR		
STATION	OFFSET	FLANGE ELEVATION
274WB+75	32.00' LT	832.01
275WB+00	32.00' LT	831.10
275WB+25	32.00' LT	830.21
275WB+50	32.00' LT	829.34
275WB+75	32.00' LT	828.49
276WB+00	32.00' LT	827.67
276WB+25	32.00' LT	826.86
276WB+50	32.00' LT	826.08
276WB+75	32.00' LT	825.32
277WB+00	32.00' LT	824.58
277WB+25	32.00' LT	823.86
277WB+50	32.00' LT	823.16
277WB+75	32.00' LT	822.49
278WB+00	32.00' LT	821.84
278WB+25	32.00' LT	821.20
278WB+50	32.00' LT	820.59
278WB+75	32.00' LT	820.01
279WB+00	32.00' LT	819.44
279WB+25	32.00' LT	818.89
279WB+50	32.00' LT	818.37
279WB+75	32.00' LT	817.86
279WB+99.78	32.00' LT	817.39

STH 23 EB MEDIAN SIDE WEST OF STH 49/CTH A		
STATION	OFFSET	FLANGE ELEVATION
294EB+17.33	7.70' LT	814.87
294EB+25	3.77' LT	814.86
294EB+42.00	0.00' LT	814.92
294EB+50	0.00' LT	814.98
294EB+75	0.00' LT	815.18
295EB+00	0.00' LT	815.37
295EB+25	0.00' LT	815.57
295EB+50	0.00' LT	815.77
295EB+75	0.00' LT	815.97
296EB+00	0.00' LT	816.16
296EB+25	0.00' LT	816.36
296EB+28.24	0.00' LT	816.39
296EB+50	2.16' LT	816.60
296EB+75	4.56' LT	816.85
297EB+00	6.87' LT	817.09
297EB+25	9.10' LT	817.33
297EB+50	11.24' LT	817.57
297EB+75	13.29' LT	817.81
298EB+00	15.25' LT	818.04
298EB+25	17.12' LT	818.31
298EB+50	18.91' LT	818.57
298EB+75	20.61' LT	818.82
299EB+00	22.22' LT	819.08
299EB+25	23.75' LT	819.34
299EB+29.25	24.00' LT	819.38
299EB+50	24.00' LT	819.56
299EB+75	24.00' LT	819.79
300EB+00	24.00' LT	820.01
300EB+25	24.00' LT	820.24
300EB+50	24.00' LT	820.46
300EB+75	24.00' LT	820.69
301EB+00	24.00' LT	820.91
301EB+25	24.00' LT	821.13
301EB+50	24.00' LT	821.36
301EB+75	24.00' LT	821.58
302EB+00	24.00' LT	821.81
302EB+25	24.00' LT	822.03
302EB+33.92	24.00' LT	822.09

STH 23 WB MEDIAN SIDE WEST OF STH 49/CTH A		
STATION	OFFSET	FLANGE ELEVATION
294WB+16.88	7.20' RT	814.96
294WB+25	3.86' RT	814.96
294WB+46.16	0.00' RT	815.08
294WB+50	0.00' RT	815.11
294WB+75	0.00' RT	815.32
295WB+00	0.00' RT	815.52
295WB+25	0.00' RT	815.73
295WB+50	0.00' RT	815.93
295WB+75	0.00' RT	816.14
296WB+00	0.00' RT	816.35
296WB+25	0.00' RT	816.55
296WB+50	0.00' RT	816.76
296WB+75	0.00' RT	816.97
297WB+00	0.00' RT	817.17
297WB+25	0.00' RT	817.38
297WB+50	0.00' RT	817.59
297WB+75	0.00' RT	817.79
298WB+00	0.00' RT	818.00
298WB+25	0.00' RT	818.22
298WB+50	0.00' RT	818.45
298WB+75	0.00' RT	818.67
299WB+00	0.00' RT	818.89
299WB+25	0.00' RT	819.12
299WB+50	0.00' RT	819.34
299WB+75	0.00' RT	819.56
300WB+00	0.00' RT	819.79
300WB+25	0.00' RT	820.01
300WB+50	0.00' RT	820.24
300WB+75	0.00' RT	820.46
301WB+00	0.00' RT	820.68
301WB+25	0.00' RT	820.91
301WB+50	0.00' RT	820.13
301WB+75	0.00' RT	821.35
302WB+00	0.00' RT	821.58
302WB+05.05	0.00' RT	821.62
302WB+25	1.54' RT	821.83
302WB+32.70	2.98' RT	821.93

STH 23 EB CORRUGATED MEDIAN INSIDE EDGE WEST OF STH 49/CTH A		
STATION	OFFSET	FLANGE ELEVATION
299EB+33.15	10.00' LT	819.13
299EB+50	10.00' LT	819.28
299EB+75	10.00' LT	819.51
300EB+00	10.00' LT	819.73
300EB+25	10.00' LT	819.96
300EB+50	10.00' LT	820.18
300EB+75	10.00' LT	820.41
301EB+00	10.00' LT	820.63
301EB+25	10.00' LT	820.85
301EB+50	10.00' LT	821.08
301EB+75	10.00' LT	821.3
301EB+93.19	10.00' LT	821.46
302EB+00	10.00' LT	821.53
302EB+25	10.00' LT	821.75
302EB+34.19	10.00' LT	821.83

STH 23 EB CORRUGATED MEDIAN OUTSIDE EDGE WEST OF STH 49/CTH A		
STATION	OFFSET	FLANGE ELEVATION
299EB+33.19	0.00' LT	818.93
299EB+50	0.00' LT	819.08
299EB+75	0.00' LT	819.31
300EB+00	0.00' LT	819.53
300EB+25	0.00' LT	819.76
300EB+50	0.00' LT	819.98
300EB+75	0.00' LT	820.21
301EB+00	0.00' LT	820.93
301EB+25	0.00' LT	820.65
301EB+50	0.00' LT	820.88
301EB+75	0.00' LT	821.10
301EB+93.19	0.00' LT	821.26
302EB+00	0.00' LT	821.33
302EB+25	0.00' LT	821.55
302EB+34.19	0.00' LT	821.63

2

CURB AND GUTTER FLANGE LOCATIONS AND ELEVATIONS (CONTINUED)

N LAWSON DR CUL-DE-SAC
WEST SIDE
NORTH OF STH 23

STATION	OFFSET	FLANGE ELEVATION
279WB+36.56	130.35' LT	821.77
279WB+18.27	109.58' LT	821.26
279WB+18.21	97.13' LT	820.96
279WB+23.21	97.11' LT	820.94

STH 23 EB
MEDIAN SIDE
EAST OF STH 49/CTH A

STATION	OFFSET	FLANGE ELEVATION
303EB+96.10	3.04' LT	823.14
304EB+00	2.19' LT	823.16
304EB+22.36	0.00' LT	823.32
304EB+25	0.00' LT	823.34
304EB+50	0.00' LT	823.57
304EB+75	0.00' LT	823.79
305EB+00	0.00' LT	824.01
305EB+25	0.00' LT	824.24
305EB+50	0.00' LT	824.46
305EB+75	0.00' LT	824.69
306EB+00	0.00' LT	824.91
306EB+25	0.00' LT	825.14
306EB+50	0.00' LT	825.36
306EB+75	0.00' LT	825.58
307EB+00	0.00' LT	825.81
307EB+25	0.00' LT	826.03
307EB+50	0.00' LT	826.26
307EB+75	0.00' LT	826.48
308EB+00	0.00' LT	826.70
308EB+25	0.00' LT	826.93
308EB+50	0.00' LT	827.15
308EB+75	0.00' LT	827.38
309EB+00	0.00' LT	827.60
309EB+25	0.00' LT	827.81
309EB+50	0.00' LT	828.03
309EB+75	0.00' LT	828.24
310EB+00	0.00' LT	828.45
310EB+25	0.00' LT	828.67
310EB+50	0.00' LT	828.88
310EB+75	0.00' LT	829.09
311EB+00	0.00' LT	829.31
311EB+25	0.00' LT	829.52
311EB+50	0.00' LT	829.73
311EB+75	0.00' LT	829.95
312EB+00	0.00' LT	830.16
312EB+25	0.00' LT	830.37
312EB+50	0.00' LT	830.59
312EB+75	0.00' LT	830.80
313EB+00	0.00' LT	831.01
313EB+25	0.00' LT	831.22
313EB+50	0.00' LT	831.44
313EB+75	0.00' LT	831.65
314EB+00	0.00' LT	831.86
314EB+25	0.00' LT	832.08
314EB+32	0.00' LT	832.14

STH 23 WB
MEDIAN SIDE
EAST OF STH 49/CTH A

STATION	OFFSET	FLANGE ELEVATION
303WB+94.87	24.00' RT	823.98
304WB+00	24.00' RT	823.93
304WB+25	24.00' RT	823.51
304WB+50	24.00' RT	823.73
304WB+75	24.00' RT	823.96
305WB+00	24.00' RT	824.18
305WB+25	24.00' RT	824.41
305WB+50	24.00' RT	824.63
305WB+75	24.00' RT	824.85
306WB+00	24.00' RT	825.08
306WB+25	24.00' RT	825.30
306WB+50	24.00' RT	825.52
306WB+75	24.00' RT	825.75
307WB+00	24.00' RT	825.97
307WB+22.13	24.00' RT	826.17
307WB+25	23.77' RT	826.19
307WB+50	21.77' RT	826.37
307WB+75	19.77' RT	826.56
308WB+00	17.77' RT	826.74
308WB+25	15.77' RT	827.06
308WB+50	13.77' RT	827.39
308WB+75	11.77' RT	827.74
309WB+00	9.77' RT	828.04
309WB+25	7.77' RT	828.20
309WB+50	5.77' RT	828.36
309WB+75	3.77' RT	828.52
310WB+00	1.77' RT	828.68
310WB+22.13	0.00' RT	828.83
310WB+25	0.00' RT	828.85
310WB+50	0.00' RT	829.05
310WB+75	0.00' RT	829.25
311WB+00	0.00' RT	829.46
311WB+25	0.00' RT	829.66
311WB+50	0.00' RT	829.86
311WB+75	0.00' RT	830.06
312WB+00	0.00' RT	830.26
312WB+25	0.00' RT	830.47
312WB+50	0.00' RT	830.67
312WB+75	0.00' RT	830.87
313WB+00	0.00' RT	831.07
313WB+25	0.00' RT	831.27
313WB+50	0.00' RT	831.48
313WB+75	0.00' RT	831.68
314WB+00	0.00' RT	831.88
314WB+25	0.00' RT	832.09
314WB+29.97	0.00' RT	832.13

STH 23 WB
CORRUGATED MEDIAN INSIDE EDGE
EAST OF STH 49/CTH A

STATION	OFFSET	FLANGE ELEVATION
303WB+94.43	10.00' RT	823.52
304WB+00	10.00' RT	823.60
304WB+25	10.00' RT	823.79
304WB+35.43	10.00' RT	823.88
304WB+50	10.00' RT	824.01
304WB+75	10.00' RT	824.24
305WB+00	10.00' RT	824.46
305WB+25	10.00' RT	824.69
305WB+50	10.00' RT	824.91
305WB+75	10.00' RT	825.13
306WB+00	10.00' RT	825.36
306WB+25	10.00' RT	825.58
306WB+50	10.00' RT	825.80
306WB+75	10.00' RT	826.03
307WB+00	10.00' RT	826.25
307WB+15.43	10.00' RT	826.39

STH 23 WB
CORRUGATED MEDIAN OUTSIDE EDGE
EAST OF STH 49/CTH A

STATION	OFFSET	FLANGE ELEVATION
303WB+94.43	0.00' RT	823.32
304WB+00	0.00' RT	823.37
304WB+25	0.00' RT	823.59
304WB+35.43	0.00' RT	823.68
304WB+50	0.00' RT	823.81
304WB+75	0.00' RT	824.04
305WB+00	0.00' RT	824.26
305WB+25	0.00' RT	824.49
305WB+50	0.00' RT	824.71
305WB+75	0.00' RT	824.93
306WB+00	0.00' RT	825.16
306WB+25	0.00' RT	825.38
306WB+50	0.00' RT	825.60
306WB+75	0.00' RT	825.83
307WB+00	0.00' RT	826.05
307WB+15.43	0.00' RT	826.19

2

CURB AND GUTTER FLANGE LOCATIONS AND ELEVATIONS (CONTINUED)

2

W JUNCTION CTH A INTERSECTION RADIUS AT STH 23 SW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
19N+49.45	18.00' RT	842.40
19N+75	23.39' RT	842.09
19N+90.00	34.41' RT	841.86
20N+02.61	59.63' RT	841.71

W JUNCTION CTH A INTERSECTION RADIUS AT STH 23 NW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
19N+74.07	24.00' LT	842.87
19N+94.00	38.43' LT	842.37
20N+01.71	61.42' LT	842.18

CTH A NB INTERSECTION RADIUS AT DRIVEWAY SE QUADRANT

STATION	OFFSET	FLANGE ELEVATION
101NB+13.23	30.00' RT	827.78
101NB+25	31.01' RT	827.14
101NB+50	40.58' RT	826.89
101NB+75	68.92' RT	828.23
101NB+80.11	93.70' RT	828.95

CTH A NB PORKCHOP ISLAND BETWEEN THROUGH LANE AND RIGHT-TURN LANE

STATION	OFFSET	FLANGE ELEVATION
ALONG CTH A NB THROUGH LANE		
106NB+15.24	16.00' RT	822.29
106NB+32.71	16.00' RT	822.48
ALONG STH 23 EB THROUGH LANE		
106NB+37.20	20.62' RT	822.56
106NB+36.99	28.49' RT	822.57
ALONG CTH A NB RIGHT-TURN LANE		
106NB+13.78	22.68' RT	822.24
106NB+29.88	32.03' RT	822.47

CTH A SB INTERSECTION RADIUS AT STH 23 SW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
106SB+13.46	39.00' LT	822.02
106SB+37.82	45.34' LT	821.66
106SB+55.92	62.59' LT	821.29
106SB+63.09	82.95' LT	821.04

CTH A NB CORRUGATED MEDIAN INSIDE EDGE SOUTH OF STH 23

STATION	OFFSET	FLANGE ELEVATION
105NB+05.57	12.00' LT	822.93
105AN+25	12.00' LT	822.74
105AN+50	12.00' LT	822.58
105AN+75	12.00' LT	822.45
106AN+00	12.00' LT	822.32
106AN+25	12.00' LT	822.28
106NB+27.57	12.00' LT	822.28

2

NORTH ST/CTH A SOUTH SIDE EAST OF STH 23

STATION	OFFSET	FLANGE ELEVATION
20N+76.13	64.89' RT	838.23
20N+85.00	38.84' RT	838.12
21N+00	27.36' RT	837.70
21N+15.31	24.00' RT	837.26
21N+25	23.86' RT	837.03
21N+50	22.15' RT	836.45
21N+75	18.52' RT	835.69
21N+83.29	16.90' RT	835.41
22N+00	14.06' RT	834.83
22N+25	12.08' RT	834.37
22N+31.27	12.00' RT	834.27
22N+50	12.00' RT	834.02
22N+75	12.00' RT	833.72
23N+00	12.00' RT	833.43
23N+25	12.00' RT	833.14
23N+50	12.00' RT	832.84
23N+75	12.00' RT	832.56
24N+00	12.00' RT	832.44
24N+25	12.00' RT	832.31
24N+50	12.00' RT	832.18
24N+75	12.00' RT	832.05
25N+00	12.00' RT	831.92
25N+03.00	12.00' RT	831.90
25N+25	11.74' RT	831.80
25N+50	11.24' RT	831.68
25N+52.53	11.18' RT	831.66

NORTH ST/CTH A NORTH SIDE EAST OF STH 23

STATION	OFFSET	FLANGE ELEVATION
20N+76.12	64.57' LT	838.83
20NB+85.00	39.86' LT	838.07
21N+00	25.80' LT	837.24
21N+25	18.25' LT	836.09
21N+30.14	18.00' LT	835.87
21N+50	17.40' LT	835.04
21N+75	14.52' LT	834.36
21N+88.19	12.00' LT	834.14
22N+00	12.00' LT	833.87
22N+25	12.00' LT	833.41
22N+50	12.00' LT	833.06
22N+75	12.00' LT	832.92
23N+00	12.00' LT	832.95
23N+25	12.00' LT	832.82
23N+50	12.00' LT	832.69
23N+75	12.00' LT	832.56
24N+00	12.00' LT	832.44
24N+25	12.00' LT	832.31
24N+50	12.00' LT	832.18
24N+75	12.00' LT	832.05
25N+00	12.00' LT	831.92
25N+03.25	12.00' LT	831.90

CTH A NB OUTSIDE SOUTH OF STH 23

STATION	OFFSET	FLANGE ELEVATION
102NB+13.34	71.55' RT	828.13
102NB+25	43.27' RT	825.87
102NB+50	30.52' RT	824.88
102NB+56.81	30.00' RT	824.63
102NB+75	28.61' RT	824.37
103NB+00	26.09' RT	824.07
103NB+16.81	24.00' RT	824.06
103NB+25	24.00' RT	824.01
103NB+50	24.00' RT	823.85
103NB+75	24.00' RT	823.72
104NB+00	24.00' RT	823.59
104NB+25	24.00' RT	823.25
104NB+50	24.00' RT	822.92
104NB+75	24.00' RT	822.58
105NB+00	24.00' RT	822.27
105NB+25	24.00' RT	822.02
105NB+32.20	24.00' RT	821.97
105NB+50	26.17' RT	821.82
105NB+74.63	29.57' RT	821.72
105NB+97.47	39.39' RT	821.75
106NB+15.45	56.57' RT	822.07
106NB+26.28	78.96' RT	822.67
106NB+28.34	106.24' RT	823.07

CTH A NB MEDIAN SIDE SOUTH OF STH 23

STATION	OFFSET	FLANGE ELEVATION
102NB+48.97	0.00' LT	826.58
102AN+50	0.00' LT	826.56
102AN+75	0.00' LT	826.09
103AN+00	0.00' LT	825.63
103NB+10.96	0.00' LT	825.44
103AN+25	1.30' LT	825.19
103AN+50	4.19' LT	824.74
103AN+75	7.41' LT	824.29
104AN+00	10.62' LT	823.86
104AN+25	13.83' LT	823.52
104AN+50	17.05' LT	823.25
104AN+75	20.26' LT	822.98
105AN+00	23.47' LT	822.73
105NB+04.11	24.00' LT	822.70
105AN+25	24.00' LT	822.50
105AN+50	24.00' LT	822.34
105AN+75	24.00' LT	822.23
106AN+00	24.00' LT	822.14
106AN+24.57	24.00' LT	822.13

CTH A SB MEDIAN SIDE SOUTH OF STH 23

STATION	OFFSET	FLANGE ELEVATION
102AS+50.89	12.00' RT	827.02
102AS+75	12.00' RT	826.58
103AS+00	12.00' RT	826.10
103AS+25	12.00' RT	825.59
103AS+50	12.00' RT	825.04
103AS+57.49	12.00' RT	824.88
103AS+75	11.66' RT	824.51
104AS+00	10.57' RT	824.04
104AS+25	8.77' RT	823.58
104AS+50	6.29' RT	823.20
104AS+75	3.64' RT	822.88
105AS+00	1.00' RT	822.61
105AS+09.40	0.00' RT	822.52
105AS+25	0.00' RT	822.35
105AS+50	0.00' RT	822.14
105AS+75	0.00' RT	822.00
106AS+00	0.00' RT	821.95
106AS+25	0.00' RT	821.97
106AS+31.86	0.00' RT	821.99

CTH A NB CORRUGATED MEDIAN OUTSIDE EDGE SOUTH OF STH 23

STATION	OFFSET	FLANGE ELEVATION
105NB+05.57	0.00' LT	822.69
105AN+25	0.00' LT	822.50
105AN+50	0.00' LT	822.34
105AN+75	0.00' LT	822.26
106AN+00	0.00' LT	822.25
106AN+25	0.00' LT	822.33
106NB+27.57	0.00' LT	822.34

CURB AND GUTTER FLANGE LOCATIONS AND ELEVATIONS (CONTINUED)

STH 49 NB
INTERSECTION RADIUS AT STH 23
NE QUADRANT

STATION	OFFSET	FLANGE ELEVATION
STATION AND OFFSETS OBTAINED FROM STH 23 WB REFERENCE LINE		
304WB+00.79	24.00' LT	822.89
303WB+79.55	28.74' LT	820.51
303WB+60.29	44.68' LT	821.88
303WB+51.15	67.95' LT	820.99

STH 49 NB
INTERSECTION RADIUS AT STH 23
NW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
200"49S"+12.96	106.24' LT	820.97
200"49S"+17.22	72.33' LT	821.18
200"49S"+30.32	51.04' LT	820.95
200"49S"+50.04	35.71' LT	820.39
200"49S"+73.93	28.28' LT	819.70

STH 49 SB
PORKCHOP ISLAND BETWEEN THROUGH LANE AND RIGHT-TURN LANE

STATION	OFFSET	FLANGE ELEVATION
ALONG STH 49 SB THROUGH LANE		
200"49S"+08.58	16.00' LT	821.60
200"49S"+25.35	16.00' LT	821.22
ALONG STH 23 WB THROUGH LANE		
200"49S"+04.08	20.61' LT	821.71
200"49S"+04.26	27.95' LT	821.66
ALONG STH 49 SB RIGHT-TURN LANE		
200"49S"+11.34	31.53' LT	821.15
200"49S"+26.81	22.68' LT	821.47

STH 49 SB
INTERSECTION RADIUS AT N LAWSON DR
SW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
202+66.68	17.00' LT	814.38
203+18.60	37.88' LT	811.83
203+41.62	88.89' LT	808.87

FOREST RIDGE RD SOUTH
INTERSECTION RADIUS AT STH 23
SW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
9FRS+18.09	15.00' LT	856.60
9FRS+42.87	20.36' LT	856.10
9FRS+62.99	35.19' LT	856.20
9FRS+75.31	56.94' LT	856.34
9FRS+78.07	73.29' LT	856.48

STH 23 EB
INTERSECTION RADIUS AT
FOREST RIDGE RD NORTH
NW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
346EB+31.84	24.00' LT	856.57
346EB+56.86	38.23' LT	856.13
346EB+65.86	61.55' LT	855.45

STH 49 NB
MEDIAN SIDE
NORTH OF STH 23

STATION	OFFSET	FLANGE ELEVATION
200"49N"+24.18	0.00' LT	821.77
200"49N"+25	0.00' LT	821.75
200"49N"+50	0.00' LT	821.16
200"49N"+75	0.00' LT	820.51
201"49N"+00	0.00' LT	819.83
201"49N"+02.09	0.00' LT	819.78
201"49N"+25	2.67' LT	819.19
201"49N"+50	5.51' LT	818.53
201"49N"+75	8.25' LT	817.84
202"49N"+00	10.91' LT	817.14
202"49N"+10.54	12.00' LT	816.83
202"49N"+25	12.00' LT	816.37
202"49N"+50	12.00' LT	815.57
202"49N"+75	12.00' LT	814.74
202"49N"+98.23	12.00' LT	813.95
203"49N"+00	12.00' LT	813.89
203"49N"+25	18.00' LT	813.14
203"49N"+31.70	22.06' LT	812.97

STH 49 SB
MEDIAN SIDE
NORTH OF STH 23

STATION	OFFSET	FLANGE ELEVATION
200"49S"+19.79	24.00' RT	821.68
200"49S"+25	24.00' RT	821.56
200"49S"+50	24.00' RT	820.90
200"49S"+75	24.00' RT	820.22
201"49S"+00	24.00' RT	819.59
201"49S"+13.77	24.00' RT	819.22
201"49S"+25	22.66' RT	818.90
201"49S"+50	19.66' RT	818.15
201"49S"+75	16.67' RT	817.38
202"49S"+00	13.68' RT	816.59
202"49S"+25	10.69' RT	815.82
202"49S"+50	7.70' RT	815.10
202"49S"+75	4.70' RT	814.36
203"49S"+00	1.71' RT	813.59
203"49S"+14.31	0.00' RT	813.13
203"49S"+25	0.00' RT	812.77
203"49S"+26.53	0.00' RT	812.71

STH 49 SB
INTERSECTION RADIUS AT N LAWSON DR
NW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
203+71.28	78.41' LT	808.73
203+86.88	38.61' LT	809.74
204+26.26	22.00' LT	808.62

FOREST RIDGE RD SOUTH
WEST SIDE
SOUTH OF STH 23

STATION	OFFSET	FLANGE ELEVATION
5FRS+50	11.00' RT	886.43
5FRS+75	11.00' RT	884.68
6FRS+00	11.00' RT	882.84
6FRS+25	11.00' RT	880.92
6FRS+50	11.00' RT	878.90
6FRS+75	11.00' RT	876.79
7FRS+00	11.00' RT	874.59
7FRS+25	11.00' RT	872.31
7FRS+50	11.00' RT	869.93
7FRS+75	11.00' RT	867.47
8FRS+00	11.00' RT	864.97
8FRS+25	11.00' RT	862.48
8FRS+48.09	11.00' RT	860.40
8FRS+50	11.09' RT	860.25
8FRS+75	12.22' RT	858.49
9FRS+00	13.36' RT	857.23
9FRS+25	14.51' RT	856.45
9FRS+36.64	15.04' RT	856.26
9FRS+50	18.13' RT	856.20
9FRS+66.70	30.86' RT	856.49
9FRS+74.55	50.42' RT	856.87

STH 23 EB
INTERSECTION RADIUS AT
FOREST RIDGE RD NORTH
NE QUADRANT

STATION	OFFSET	FLANGE ELEVATION
346EB+95.61	77.05' LT	855.02
347EB+03.61	53.37' LT	855.66
347EB+20.58	35.00' LT	856.36
347EB+55.20	24.00' LT	856.96

2

CURB AND GUTTER FLANGE LOCATIONS AND ELEVATIONS (CONTINUED)

STH 23 EB
INTERSECTION RADIUS AT EAST WIND RD
SW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
377EB+76.73	24.00' RT	884.19
378EB+12.23	36.04' RT	***883.82***
378EB+28.32	55.00' RT	884.12
378EB+35.27	78.98' RT	884.24

STH 23 EB
INTERSECTION RADIUS AT SUNNYSIDE RD
SW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
401EB+23.41	24.00' RT	840.44
401EB+44.38	27.71' RT	839.86
401EB+65.70	40.98' RT	838.64
401EB+79.83	61.69' RT	837.56
401EB+84.28	86.30' RT	836.62

STH 23 EB
INTERSECTION RADIUS AT
BROOKLYN J RD
NW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
430EB+91.98	24.03' LT	811.72
431EB+18.31	39.94' LT	811.20
431EB+26.05	63.71' LT	811.01

STH 23 EB
INTERSECTION RADIUS AT DEAD END RD
SW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
455EB+61.93	24.00' RT	824.61
455EB+98.45	36.39' RT	824.54
456EB+14.68	55.40' RT	824.41
456EB+21.75	79.38' RT	824.28

STH 23 EB
INTERSECTION RADIUS AT CTH PP
NW QUADRANT

STATION	OFFSET	FLANGE ELEVATION
455EB+55.58	24.00' LT	824.57
455EB+89.04	32.51' LT	824.45
456EB+08.52	48.19' LT	824.21
456EB+21.24	69.71' LT	824.15
456EB+25.58	94.33' LT	824.25

STH 23 EB
INTERSECTION RADIUS AT EAST WIND RD
SE QUADRANT

STATION	OFFSET	FLANGE ELEVATION
378EB+64.74	59.55' RT	844.25
378EB+74.65	36.65' RT	883.69
378EB+97.68	24.00' RT	883.56

STH 23 EB
INTERSECTION RADIUS AT SUNNYSIDE RD
SE QUADRANT

STATION	OFFSET	FLANGE ELEVATION
402EB+15.11	63.60' RT	837.50
402EB+25.19	37.29' RT	837.73
402EB+50.13	24.00' RT	837.33

STH 23 EB
INTERSECTION RADIUS AT
BROOKLYN J RD
NE QUADRANT

STATION	OFFSET	FLANGE ELEVATION
431EB+55.98	83.81' LT	810.96
431EB+61.27	59.38' LT	810.93
431EB+76.05	39.22' LT	811.03
431EB+97.77	26.83' LT	811.45
432EB+15.98	24.00' LT	811.49

STH 23 EB
INTERSECTION RADIUS AT DEAD END RD
SE QUADRANT

STATION	OFFSET	FLANGE ELEVATION
456EB+52.14	60.11' RT	824.52
456EB+62.83	36.17' RT	824.95
456EB+86.04	24.00' RT	825.40

STH 23 EB
INTERSECTION RADIUS AT CTH PP
NE QUADRANT

STATION	OFFSET	FLANGE ELEVATION
456EB+55.63	83.71' LT	824.22
456EB+60.96	59.29' LT	824.35
456EB+75.77	39.15' LT	824.56
457EB+15.63	24.00' LT	825.59

2

CURB AND GUTTER FLANGE LOCATIONS AND ELEVATIONS

STH 23 EB MEDIAN SIDE WEST OF COMORN RD		
STATION	OFFSET	FLANGE ELEVATION
49EB+94.39	0.00' LT	819.59
50EB+00	0.00' LT	819.66
50EB+25	0.00' LT	819.96
50EB+50	0.00' LT	820.28
50EB+75	0.00' LT	820.62
51EB+00	0.00' LT	820.97
51EB+25	0.00' LT	821.34
51EB+50	0.00' LT	821.72
51EB+75	0.00' LT	822.13
52EB+00	0.00' LT	822.54
52EB+25	0.00' LT	822.98
52EB+50	0.00' LT	823.43
52EB+75	0.00' LT	823.89
53EB+00	0.00' LT	824.34
53EB+25	0.00' LT	824.80
53EB+50	0.00' LT	825.26
53EB+75	0.00' LT	825.72
53EB+82.43	0.00' LT	825.86

STH 23 EB OUTSIDE WEST OF COMORN RD		
STATION	OFFSET	FLANGE ELEVATION
51EB+48.12	24.00' RT	821.21
51EB+50	24.00' RT	821.24
51EB+75	24.00' RT	821.65
52EB+00	24.00' RT	822.06
52EB+25	24.00' RT	822.50
52EB+50	24.00' RT	822.95
52EB+75	24.00' RT	823.41
53EB+00	24.00' RT	823.86
53EB+25	24.00' RT	824.32
53EB+47.91	24.00' RT	824.74
53EB+50	24.04' RT	824.78
53EB+75	30.46' RT	825.11
54EB+00	54.22' RT	826.31
54EB+07.91	84.00' RT	827.88

STH 23 EB MEDIAN SIDE EAST OF COMORN RD		
STATION	OFFSET	FLANGE ELEVATION
54EB+71.45	0.00' LT	827.49
54EB+75	0.00' LT	827.56
55EB+00	0.00' LT	828.01
55EB+25	0.00' LT	828.47
55EB+50	0.00' LT	828.93
55EB+75	0.00' LT	829.39
56EB+00	0.00' LT	829.85
56EB+25	0.00' LT	830.31
56EB+50	0.00' LT	830.77
56EB+75	0.00' LT	831.22
57EB+00	0.00' LT	831.68
57EB+25	0.00' LT	832.03
57EB+48.44	0.00' LT	832.36

STH 23 WB OUTSIDE EAST OF COMORN RD		
STATION	OFFSET	FLANGE ELEVATION
57WB+81.35	23.60' LT	832.75
58WB+00	23.57' LT	833.07
58WB+25	23.52' LT	833.55
58WB+48.85	23.48' LT	834.00

2

STH 23 WB MEDIAN SIDE WEST OF COMORN RD		
STATION	OFFSET	FLANGE ELEVATION
49WB+94.39	0.00' RT	819.59
50WB+00	0.00' RT	819.66
50WB+25	0.00' RT	819.96
50WB+50	0.00' RT	820.28
50WB+75	0.00' RT	820.62
51WB+00	0.00' RT	820.97
51WB+25	0.00' RT	821.34
51WB+50	0.00' RT	821.72
51WB+75	0.00' RT	822.13
52WB+00	0.00' RT	822.54
52WB+25	0.00' RT	822.98
52WB+50	0.00' RT	823.43
52WB+75	0.00' RT	823.89
53WB+00	0.00' RT	824.34
53WB+25	0.00' RT	824.80
53WB+46.39	0.00' RT	825.20
53WB+50	0.09' RT	825.26
53WB+75	5.89' RT	825.83
53WB+82.43	10.30' RT	826.01

STH 23 EB OUTSIDE EAST OF COMORN RD		
STATION	OFFSET	FLANGE ELEVATION
54EB+37.91	64.00' RT	827.24
54EB+50	35.35' RT	826.56
54EB+75	24.11' RT	827.08
54EB+77.91	24.00' RT	827.13
55EB+00	24.00' RT	827.53
55EB+25	24.00' RT	827.99
55EB+50	24.00' RT	828.45
55EB+75	24.00' RT	828.91
56EB+00	24.00' RT	829.37
56EB+25	24.00' RT	829.83
56EB+50	24.00' RT	830.29
56EB+75	24.00' RT	830.87
57EB+00	24.00' RT	831.45
57EB+25	24.00' RT	831.92
57EB+48.44	24.00' RT	832.36

STH 23 WB MEDIAN SIDE EAST OF COMORN RD		
STATION	OFFSET	FLANGE ELEVATION
54WB+70.48	13.02' RT	827.67
54WB+81.47	12.00' RT	827.91
55WB+00	12.00' RT	828.25
55WB+25	12.00' RT	828.71
55WB+50	12.00' RT	829.17
55WB+75	12.00' RT	829.63
55WB+81.49	12.00' RT	829.75
56WB+00	9.69' RT	830.04
56WB+25	6.58' RT	830.44
56WB+50	3.46' RT	830.84
56WB+75	0.34' RT	831.23
56WB+77.74	0.00' RT	831.27
57WB+00	0.00' RT	831.68
57WB+25	0.00' RT	832.14
57WB+50	0.00' RT	832.60
57WB+75	0.00' RT	832.96
58WB+00	0.00' RT	833.31
58WB+25	0.00' RT	833.67
58WB+48.81	0.00' RT	834.01

STH 23 EB

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 1					
BEGIN SUPER TRANSITION	220EB+17	-4.00%	-2.00%	-2.00%	-4.00%
END CROWN RUN OFF	220EB+97	-4.00%	0.00%	-2.00%	-4.00%
REMOVE ADVERSE CROWN	221EB+77	-4.00%	2.00%	-2.00%	-4.00%
BEGIN HIGH SIDE SHOULDER LOCKOUT	222EB+57	-4.00%	4.00%	-4.00%	-4.00%
BEGIN LOW SIDE SHOULDER LOCK	222EB+57	N/A	4.00%	-4.00%	-4.00%
BEGIN FULL SUPER	222EB+77	4.50%	4.50%	-4.50%	-4.50%
END FULL SUPER	250EB+52	4.50%	4.50%	-4.50%	-4.50%
END LOW SIDE SHOULDER LOCK	250EB+72	-4.00%	4.00%	-4.00%	-4.00%
END HIGH SIDE SHOULDER LOCKOUT	250EB+72	-4.00%	4.00%	-4.00%	-4.00%
REMOVE ADVERSE CROWN	251EB+52	-4.00%	2.00%	-2.00%	-4.00%
BEGIN CROWN RUN ON	252EB+32	-4.00%	0.00%	-2.00%	-4.00%
END SUPER TRANSITION	253EB+12	-4.00%	-2.00%	-2.00%	-4.00%

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 2					
BEGIN SUPER TRANSITION	361EB+43	-4.00%	-2.00%	-2.00%	-4.00%
END CROWN RUN OFF	362EB+23	-4.00%	-2.00%	0.00%	0.00%
REMOVE ADVERSE CROWN	363EB+03	-4.00%	-2.00%	2.00%	N/A
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	363EB+71	-4.00%	-3.70%	3.70%	3.70%
END FULL SUPER	381EB+33	-4.00%	-3.70%	3.70%	3.70%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	382EB+01	-4.00%	-2.00%	2.00%	N/A
BEGIN CROWN RUN ON	382EB+81	-4.00%	-2.00%	0.00%	0.00%
END SUPER TRANSITION	383EB+61	-4.00%	-2.00%	-2.00%	-4.00%

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 3					
BEGIN SUPER TRANSITION	393EB+27	-4.00%	-2.00%	-2.00%	-4.00%
END CROWN RUN OFF	393EB+80	0.00%	0.00%	-2.00%	-4.00%
REMOVE ADVERSE CROWN	394EB+33	2.00%	2.00%	-2.00%	-4.00%
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	394EB+52	2.70%	2.70%	-2.70%	-4.00%
END FULL SUPER	420EB+64	2.70%	2.70%	-2.70%	-4.00%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	420EB+83	2.00%	2.00%	-2.00%	-4.00%
BEGIN CROWN RUN ON	421EB+36	0.00%	0.00%	-2.00%	-4.00%
END SUPER TRANSITION	421EB+89	-4.00%	-2.00%	-2.00%	-4.00%

NORTH STREET

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 1					
BEGIN SUPER TRANSITION	20N+76	0.46%	0.46%	-0.46%	-0.46%
END CROWN RUN OFF	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	21N+58	-4.00%	-4.00%	4.00%	4.00%
END FULL SUPER	22N+63	-4.00%	-4.00%	4.00%	4.00%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	22N+99	-4.00%	-2.00%	2.00%	2.00%
BEGIN CROWN RUN ON	23N+36	-4.00%	-2.00%	0.00%	0.00%
END SUPER TRANSITION	23N+73	-4.00%	-2.00%	-2.00%	-4.00%

STH 23 WB

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 1					
BEGIN SUPER TRANSITION	221WB+18	-4.00%	-2.00%	-2.00%	-4.00%
END CROWN RUN OFF	221WB+71	0.00%	0.00%	-2.00%	-4.00%
REMOVE ADVERSE CROWN	222WB+24	2.00%	2.00%	-2.00%	-4.00%
BEGIN HIGH SIDE SHOULDER LOCKOUT	222WB+78	4.00%	4.00%	-4.00%	-4.00%
BEGIN LOW SIDE SHOULDER LOCK	222WB+78	N/A	4.00%	-4.00%	-4.00%
BEGIN FULL SUPER	222WB+99	4.80%	4.80%	-4.80%	-4.80%
END FULL SUPER	230WB+70	4.80%	4.80%	-4.80%	-4.80%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN CROWN RUN ON	N/A	N/A	N/A	N/A	N/A
END SUPER TRANSITION	N/A	N/A	N/A	N/A	N/A

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 2					
BEGIN SUPER TRANSITION	N/A	N/A	N/A	N/A	N/A
END CROWN RUN OFF	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	230WB+80	4.50%	4.50%	-4.50%	-4.50%
END FULL SUPER	250WB+55	4.50%	4.50%	-4.50%	-4.50%
END LOW SIDE SHOULDER LOCK	250WB+75	-4.00%	4.00%	-4.00%	-4.00%
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	251WB+55	2.00%	2.00%	-2.00%	-4.00%
BEGIN CROWN RUN ON	252WB+35	0.00%	0.00%	-2.00%	-4.00%
END SUPER TRANSITION	253WB+15	-4.00%	-2.00%	-2.00%	-4.00%

W-CTH A

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 1					
BEGIN SUPER TRANSITION	N/A	N/A	N/A	N/A	N/A
END CROWN RUN OFF	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	N/A	N/A	N/A	N/A	N/A
END FULL SUPER	14N+79	-4.00%	-3.40%	3.40%	3.40%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	15N+05	-4.00%	-2.00%	2.00%	2.00%
BEGIN CROWN RUN ON	15N+41	-4.00%	-2.00%	0.00%	0.00%
END SUPER TRANSITION	15N+77	-4.00%	-2.00%	-2.00%	-4.00%

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 2					
BEGIN SUPER TRANSITION	16N+07	-4.00%	-2.00%	-2.00%	-4.00%
END CROWN RUN OFF	16N+44	0.00%	0.00%	-2.00%	-4.00%
REMOVE ADVERSE CROWN	16N+81	2.00%	2.00%	-2.00%	-4.00%
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	17N+17	4.00%	4.00%	-4.00%	-4.00%
END FULL SUPER	19N+21	4.00%	4.00%	-4.00%	-4.00%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN CROWN RUN ON	N/A	N/A	N/A	N/A	N/A
END SUPER TRANSITION	20N+03	-0.30%	-0.30%	0.30%	0.30%

CTH A NB

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 1					
BEGIN SUPER TRANSITION	100AN+00	4.00%	4.00%	-4.00%	-4.00%
END CROWN RUN OFF	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	100AN+48	6.00%	6.00%	-6.00%	-6.00%
END FULL SUPER	103AN+00	6.00%	6.00%	-6.00%	-6.00%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN CROWN RUN ON	N/A	N/A	N/A	N/A	N/A
END SUPER TRANSITION	103AN+97	2.00%	2.00%	-2.00%	-4.00%

CTH A SB

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 1					
BEGIN SUPER TRANSITION	100AS+00	4.00%	4.00%	-4.00%	-4.00%
END CROWN RUN OFF	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	101AS+62	6.00%	6.00%	-6.00%	-6.00%
END FULL SUPER	103AS+70	6.00%	6.00%	-6.00%	-6.00%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN CROWN RUN ON	N/A	N/A	N/A	N/A	N/A
END SUPER TRANSITION	106AS+52	-4.00%	-0.75%	0.75%	0.75%

EASTWIND

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 1					
BEGIN SUPER TRANSITION	7EW+24	4.00%	-0.60%	-0.50%	-4.00%
END CROWN RUN OFF	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	7EW+86	-4.00%	-2.30%	2.30%	2.30%
END FULL SUPER	8EW+88	-4.00%	-2.30%	2.30%	2.30%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN CROWN RUN ON	N/A	N/A	N/A	N/A	N/A
END SUPER TRANSITION	9EW+74	0.54%	0.54%	-0.54%	-0.54%

SUNNYSIDE

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 1					
BEGIN SUPER TRANSITION	5SUN+70	4.00%	-2.50%	-2.00%	-4.00%
END CROWN RUN OFF	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	6SUN+68	-4.00%	-2.60%	2.60%	2.60%
END FULL SUPER	8SUN+85	-4.00%	-2.60%	2.60%	2.60%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	N/A	N/A	N/A	N/A	N/A
BEGIN CROWN RUN ON	N/A	N/A	N/A	N/A	N/A
END SUPER TRANSITION	9SUN+59	2.80%	2.80%	-2.80%	-2.80%

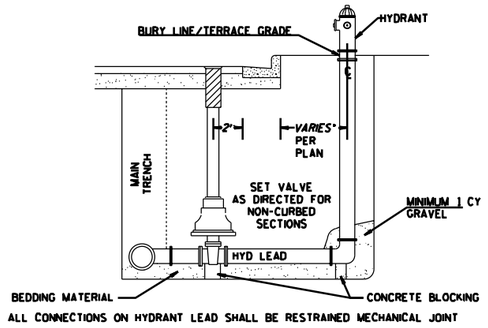
2

STH 23 EB

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 1					
BEGIN SUPER TRANSITION	25EB+54	-4.00%	-2.00%	-2.00%	-4.00%
END CROWN RUN OFF	26EB+07	0.00%	0.00%	-2.00%	-4.00%
REMOVE ADVERSE CROWN	26EB+60	2.00%	2.00%	-2.00%	-4.00%
BEGIN HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
BEGIN LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
BEGIN FULL SUPER	26EB+79	2.70%	2.70%	-2.70%	-4.00%
END FULL SUPER	37EB+03	2.70%	2.70%	-2.70%	-4.00%
END LOW SIDE SHOULDER LOCK	N/A	N/A	N/A	N/A	N/A
END HIGH SIDE SHOULDER LOCKOUT	N/A	N/A	N/A	N/A	N/A
REMOVE ADVERSE CROWN	37EB+22	2.00%	2.00%	-2.00%	-4.00%
BEGIN CROWN RUN ON	37EB+75	0.00%	0.00%	-2.00%	-4.00%
END SUPER TRANSITION	38EB+28	-4.00%	-2.00%	-2.00%	-4.00%

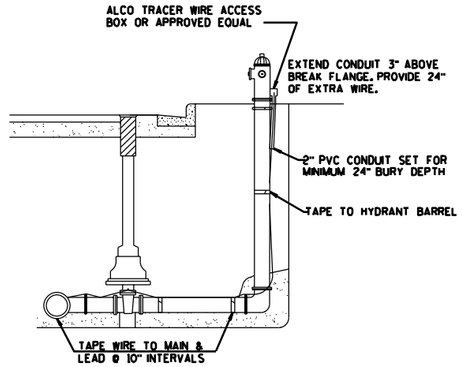
SHARED USE PATH

SUPERELEVATION TABLE	STATION	RATE			
		LEFT SHLDR	LEFT	RIGHT	RIGHT SHLDR
CURVE 1					
BEGIN SUPER TRANSITION	210+40.90	2.00%	2.00%	-2.00%	-2.00%
END CROWN RUN OFF	212+40.00	2.00%	2.00%	-2.00%	-2.00%
REMOVE ADVERSE CROWN	212+69.98	-2.00%	-2.00%	2.00%	2.00%
BEGIN HIGH SIDE SHOULDER LOCKOUT	217+15.00	-2.00%	-2.00%	2.00%	2.00%
BEGIN LOW SIDE SHOULDER LOCK	217+45.01	2.00%	2.00%	-2.00%	-2.00%
BEGIN FULL SUPER	218+50.00	2.00%	2.00%	-2.00%	-2.00%
END FULL SUPER	218+80.00	-2.00%	-2.00%	2.00%	2.00%
END LOW SIDE SHOULDER LOCK	222+40.00	-2.00%	-2.00%	2.00%	2.00%
END HIGH SIDE SHOULDER LOCKOUT	222+70.00	2.00%	2.00%	-2.00%	-2.00%
REMOVE ADVERSE CROWN	223+97.00	2.00%	2.00%	-2.00%	-2.00%
BEGIN CROWN RUN ON	224+27.00	-2.00%	-2.00%	2.00%	2.00%
END SUPER TRANSITION	224+54.07	-2.00%	-2.00%	2.00%	2.00%



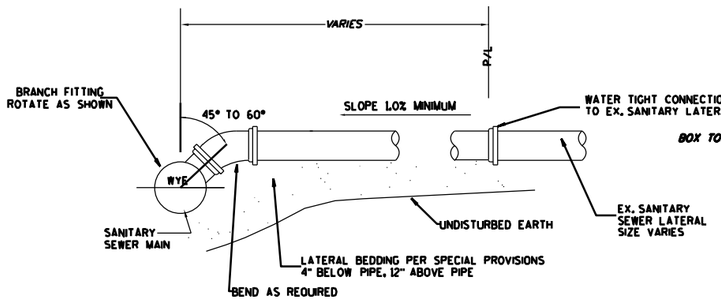
ALL CONNECTIONS ON HYDRANT LEAD SHALL BE RESTRAINED MECHANICAL JOINT

HYDRANT DETAIL

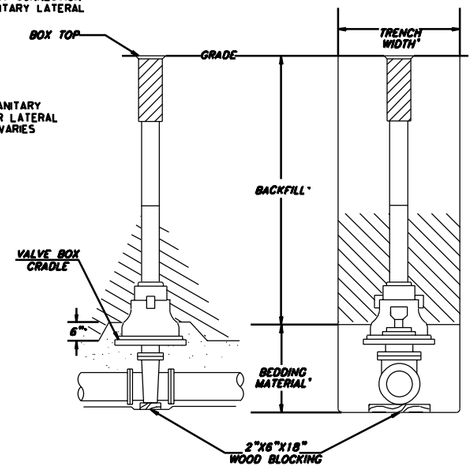


WATERMAIN TRACER WIRE DETAIL

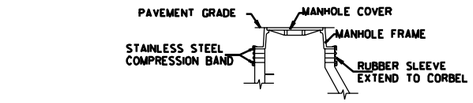
LOCATING WIRE SHALL BE INSTALLED AT ALL HYDRANTS



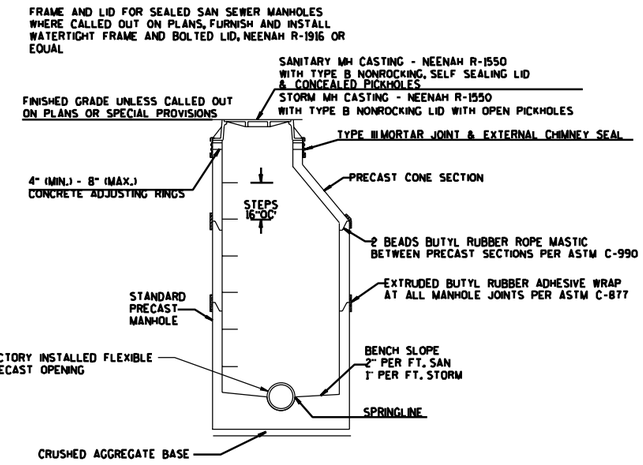
SANITARY SERVICE LATERAL



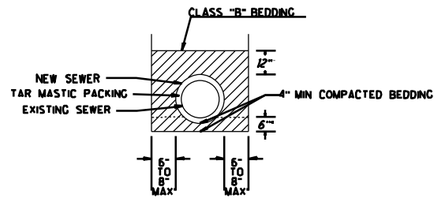
GATE VALVE AND BOX



EXTERNAL RUBBER SLEEVE FRAME/CHIMNEY SEAL

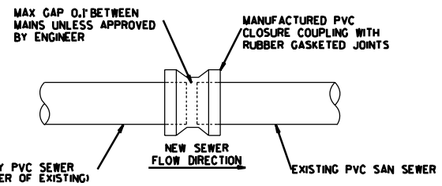


SANITARY SEWER MANHOLE

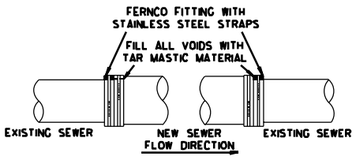


WHEN EXISTING SEWER IS UPSTREAM AND OUTSIDE DIAMETER ALLOWS, EXTEND THE EXISTING SEWER INTO THE NEW SEWER

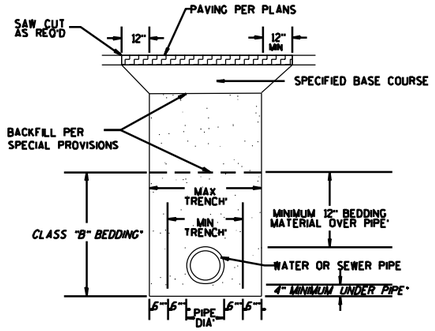
CONNECT TO EXISTING SANITARY SEWER



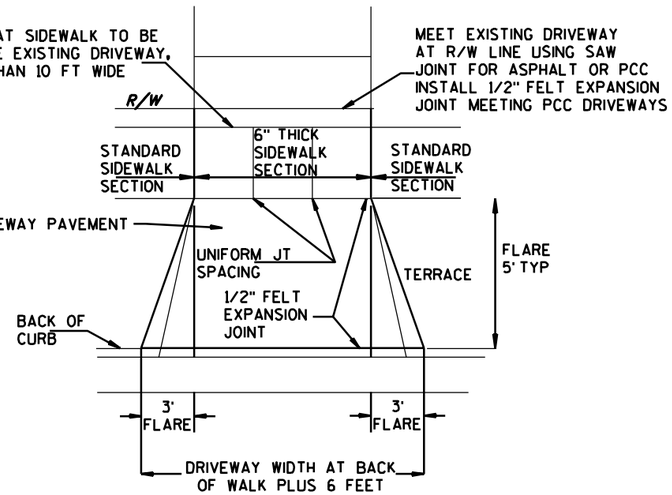
CONNECT TO EXISTING SANITARY SEWER SAME DIAMETER PVC



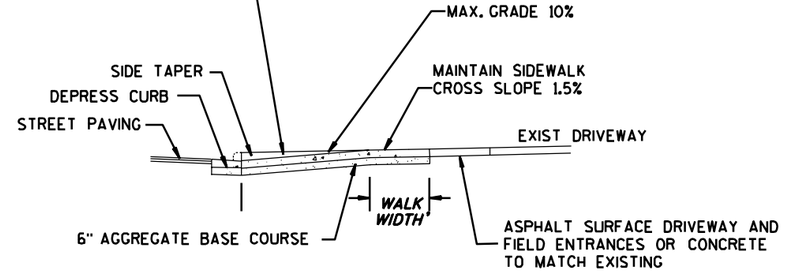
CONNECT TO EXISTING SANITARY SEWER



STANDARD TRENCH DETAIL



REDUCE WIDTH OF FLARE FOR NARROW TERRACE AS DIRECTED BY ENGINEER



DRIVEWAY APPROACH EXTENSION AND GRADE TRANSITION NOTES:

IF FIELD CONDITIONS WARRANT, AND ONLY UPON WRITTED DIRECTION OF THE ENGINEER, EXTEND DRIVEWAY APPROACHES BEYOND P/L TO TRANSITION TO THE GRADE OF THE EXISTING DRIVEWAY APPROACH. REPLACE EXISTING PAVEMENT EXTENSIONS BEYOND THE BACK OF WALKIN KIND WITH THE FOLLOWING MINIMUM THICKNESSES:

PCC: 6" PCC DRIVEWAY PAVEMENT ON 6" AGGREGATE BASE

HMA: 2" HMA SURFACE COURSE ON 9" AGGREGATE BASE

GRAVEL: 9" AGGREGATE BASE COURSE

CONCRETE DRIVEWAY

STATION - STATION	LOCATION
12+50 -12+87.2	N LAWSON DR
12+55.7 -12+72.8	N LAWSON DR
13+88.2 - 14+11.5	N LAWSON DR
43+34.4 -43+51.4	NORTH ST

WISCONSIN PROFESSIONAL ENGINEER
GREGORY E. MITCHELL
E-40290
MILWAUKEE WIS.
JULY 24, 2013
EXP. JULY 31, 2014

2

2

CONCRETE SAFETY ISLAND RADIUS POINTS

POINT NO.	RADIUS	STA
1	2'	14+24.45 28.88 LT
2	2'	14+28.73 17' LT
3	2'	14+14.15 17' LT

STA 40+15
BEGIN CONSTRUCTION

XXXXX

41+00

42+00

15'

15'

NORTH ST

STA 42+46 15' RT
BEGIN CURB & GUTTER
1' TAPER CURB

STA 15+05.1 56' LT

R 40'

810.61

811.47

813.02

813.76

811.67

812.04

812.49

STA 42+20.8 15' RT
END CURB & GUTTER
1' TAPER CURB

STA 13+65.05 54.29' LT

R 40'

810.24

810.39

810.14

809.15

16.5'

810.29

808.04

806.95

809.44

809.44

810.04

43+00

810.86

812.42

15+00

17+00

16+00

STA 15+13.02 43' RT

813.53

812.97

R 26.7'

811.86

STA 43+94.6 15' LT
BEGIN CURB AND GUTTER
1' TAPER CURB

STA 12+50
BEGIN CONSTRUCTION

XXX

14+00

REVERSE SLOPE GUTTER

11+00

NORTH LAWSON DRIVE

12+00

13+00

XXXXX

809.74

R 40'

808.95

810.53

811.68

44+00

45+00

15'

15'

XXXXX

TO BE DEAD END
NO ACCESS TO STH 23

XXX

XXX

XXX

XXX

XXX

STA 44+32 15' RT
END CURB AND GUTTER
1' TAPER CURB

STA 45+13
END CONSTRUCTION

STA R124 95.4 14.6' RT
BEGIN CURB & GUTTER
1' TAPER CURB

STA 14+19.02 54.54' RT

WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER

JULY 29, 2013

EXP. JULY 31, 2014

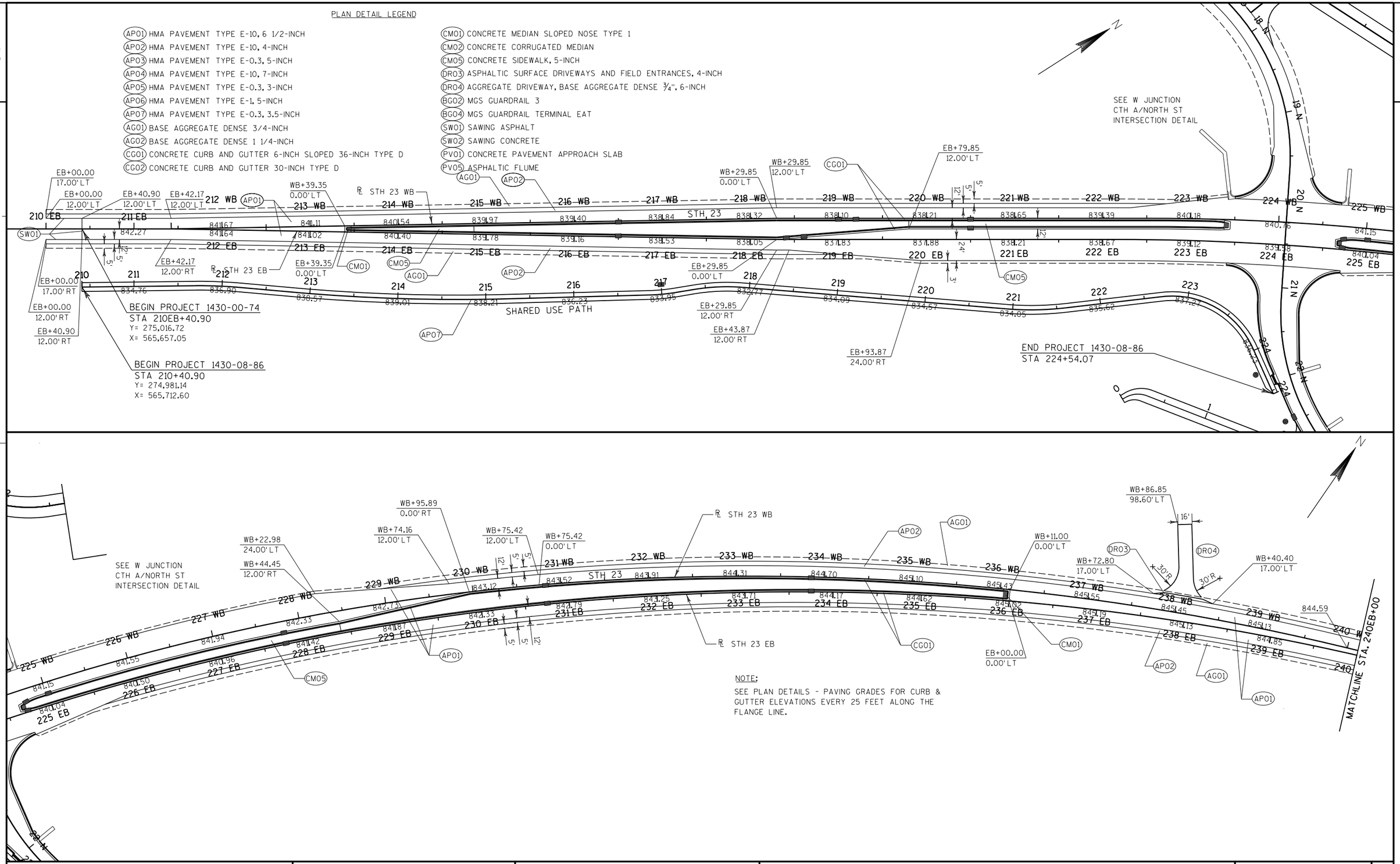
PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	INTERSECTION DETAIL - NORTH LAWSON DRIVE	SHEET	E

FILE NAME : S:\TOWNS\GREEN LAKE CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-PAVING DETAIL.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=40'

WISDOT/CADDS SHEET 42

PLAN DETAIL LEGEND

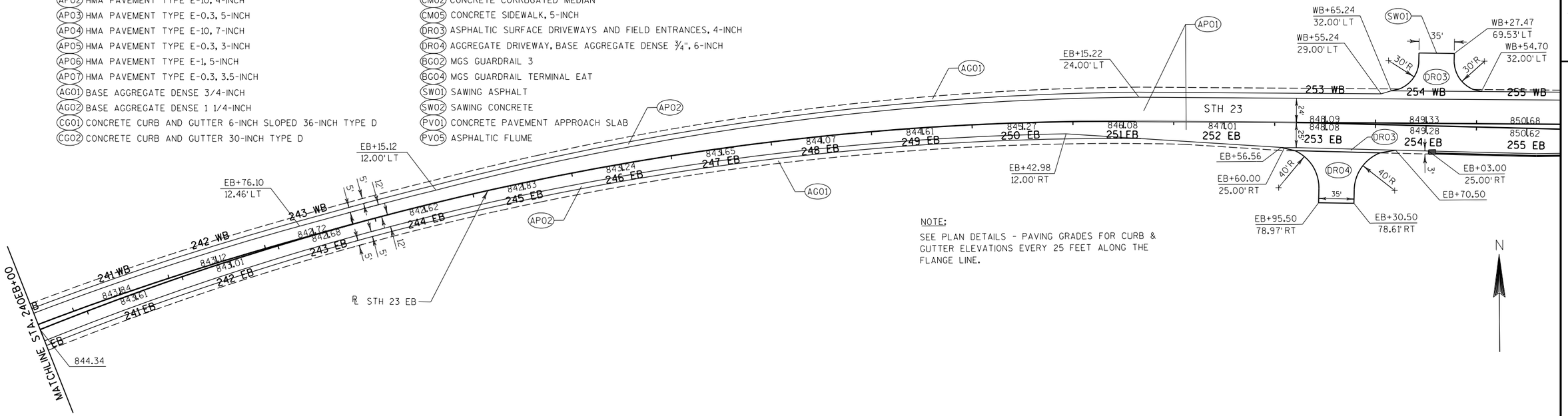
- (APO1) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (APO2) HMA PAVEMENT TYPE E-10, 4-INCH
- (APO3) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (APO4) HMA PAVEMENT TYPE E-10, 7-INCH
- (APO5) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (APO6) HMA PAVEMENT TYPE E-1, 5-INCH
- (APO7) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AGO1) BASE AGGREGATE DENSE 3/4-INCH
- (AGO2) BASE AGGREGATE DENSE 1 1/4-INCH
- (CGO1) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CGO2) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CMO1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CMO2) CONCRETE CORRUGATED MEDIAN
- (CMO5) CONCRETE SIDEWALK, 5-INCH
- (DRO3) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DRO4) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- (BGO2) MGS GUARDRAIL 3
- (BGO4) MGS GUARDRAIL TERMINAL EAT
- (SWO1) SAWING ASPHALT
- (SWO2) SAWING CONCRETE
- (PVO1) CONCRETE PAVEMENT APPROACH SLAB
- (PVO5) ASPHALTIC FLUME



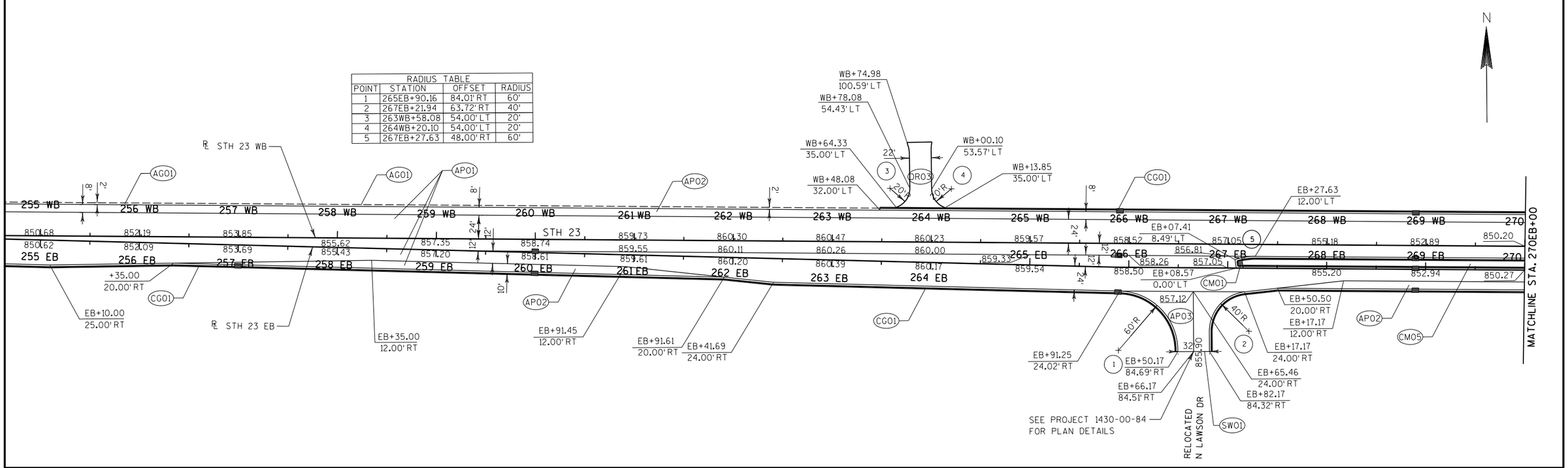
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS	SHEET 57	E

PLAN DETAIL LEGEND

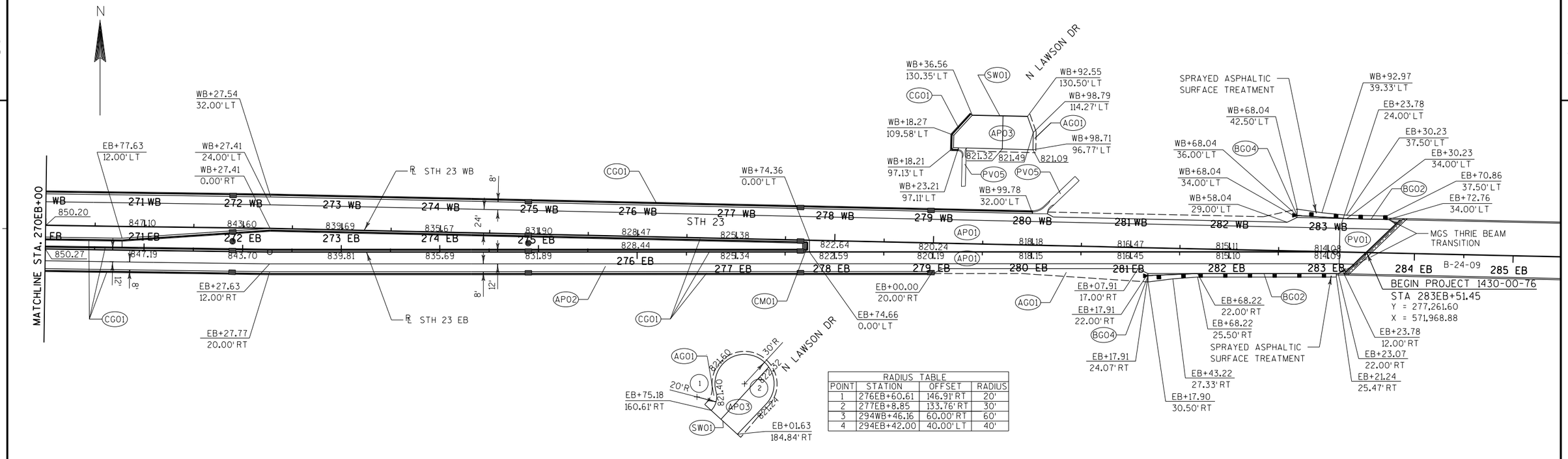
- (AP01) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-10, 4-INCH
- (AP03) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (AP04) HMA PAVEMENT TYPE E-10, 7-INCH
- (AP05) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (AP06) HMA PAVEMENT TYPE E-1, 5-INCH
- (AP07) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG02) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM02) CONCRETE CORRUGATED MEDIAN
- (CM05) CONCRETE SIDEWALK, 5-INCH
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE
- (PV01) CONCRETE PAVEMENT APPROACH SLAB
- (PV05) ASPHALTIC FLUME

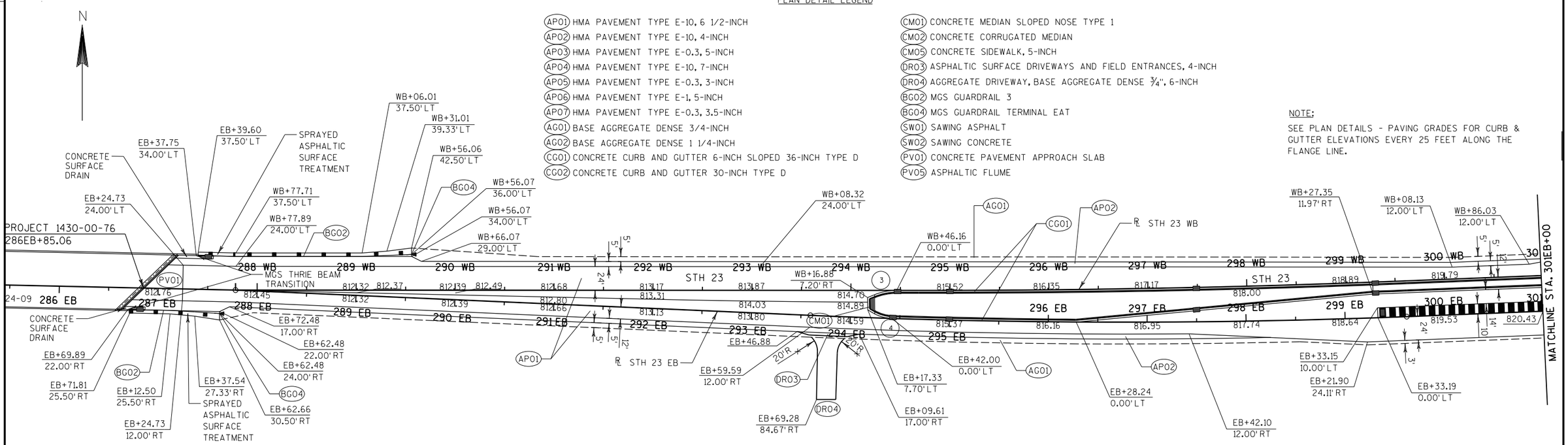


RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	265EB+90.16	84.01' RT	60'
2	267EB+21.94	63.72' RT	40'
3	263WB+58.08	54.00' LT	20'
4	264WB+20.10	54.00' LT	20'
5	267EB+27.63	48.00' RT	60'



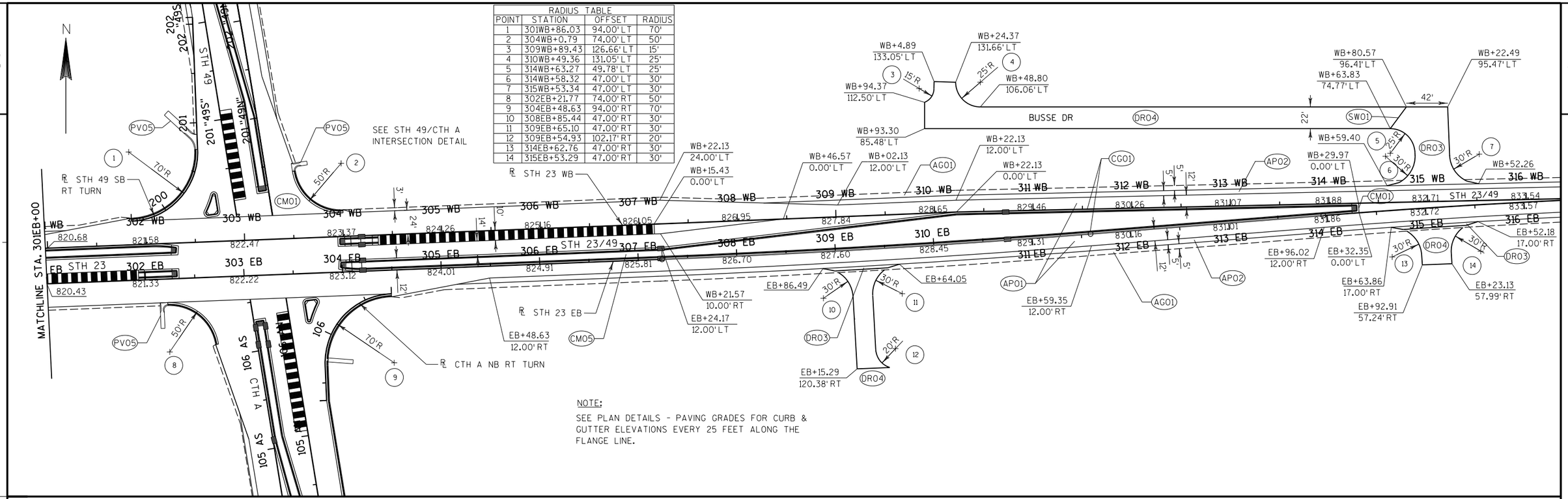
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS	SHEET 58	E





PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS	SHEET 59	E

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	301WB+86.03	94.00'LT	70'
2	304WB+0.79	74.00'LT	50'
3	309WB+89.43	126.66'LT	15'
4	310WB+49.36	131.05'LT	25'
5	314WB+63.27	49.78'LT	25'
6	314WB+58.32	47.00'LT	30'
7	315WB+53.34	47.00'LT	30'
8	302EB+21.77	74.00'RT	50'
9	304EB+48.63	94.00'RT	70'
10	308EB+85.44	47.00'RT	30'
11	309EB+65.10	47.00'RT	30'
12	309EB+54.93	102.17'RT	20'
13	314EB+62.76	47.00'RT	30'
14	315EB+53.29	47.00'RT	30'



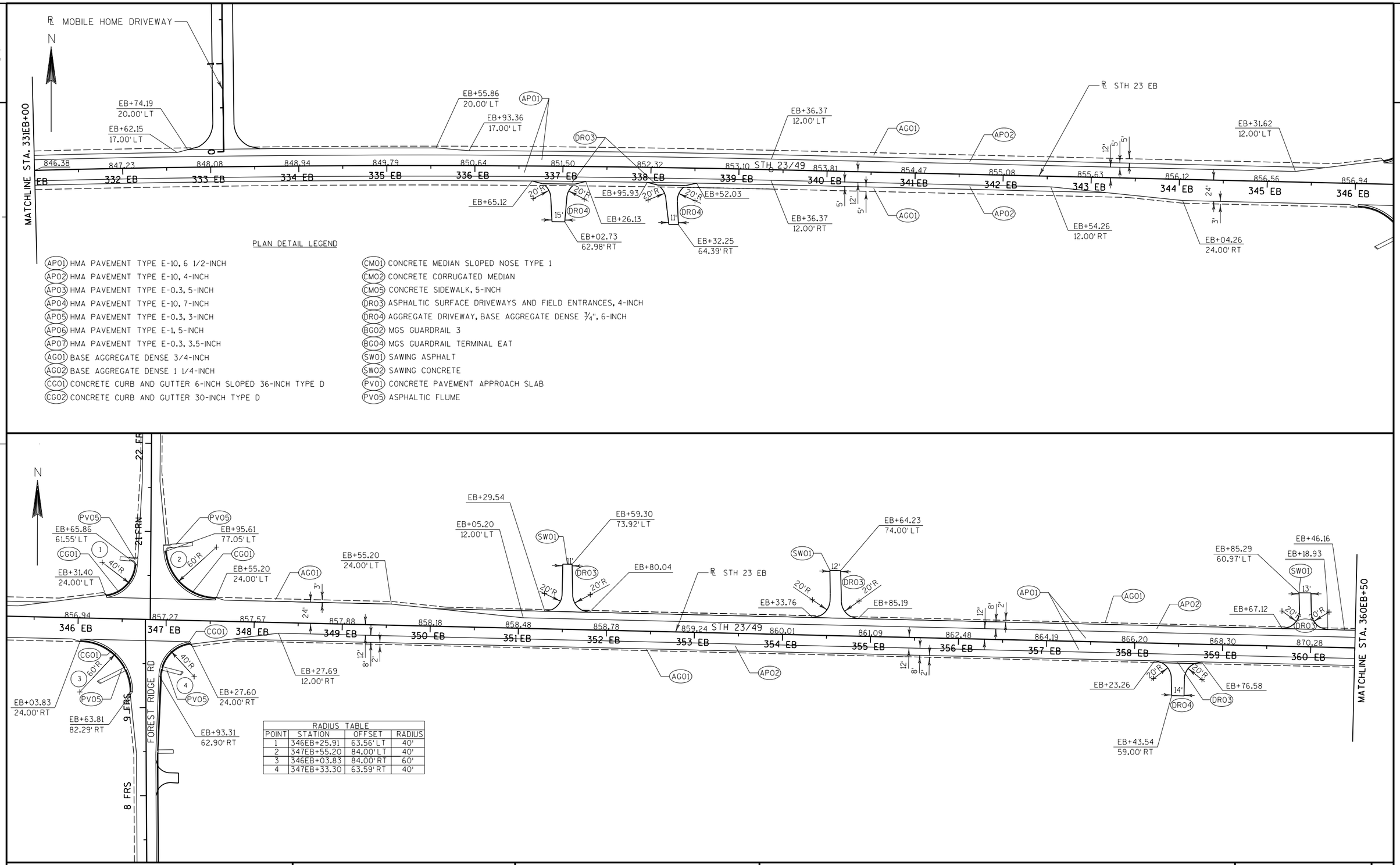
NOTE:

SEE PLAN DETAILS - PAVING GRADES FOR CURB & GUTTER ELEVATIONS EVERY 25 FEET ALONG THE FLANGE LINE.

PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-10, 4-INCH
- (AP03) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (AP04) HMA PAVEMENT TYPE E-10, 7-INCH
- (AP05) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (AP06) HMA PAVEMENT TYPE E-1, 5-INCH
- (AP07) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG02) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM02) CONCRETE CORRUGATED MEDIAN
- (CM05) CONCRETE SIDEWALK, 5-INCH
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE ¾", 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE
- (PV01) CONCRETE PAVEMENT APPROACH SLAB
- (PV05) ASPHALTIC FLUME

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS	SHEET 60	E



RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	346EB+25.91	63.56'LT	40'
2	347EB+55.20	84.00'LT	40'
3	346EB+03.83	84.00'RT	60'
4	347EB+33.30	63.59'RT	40'

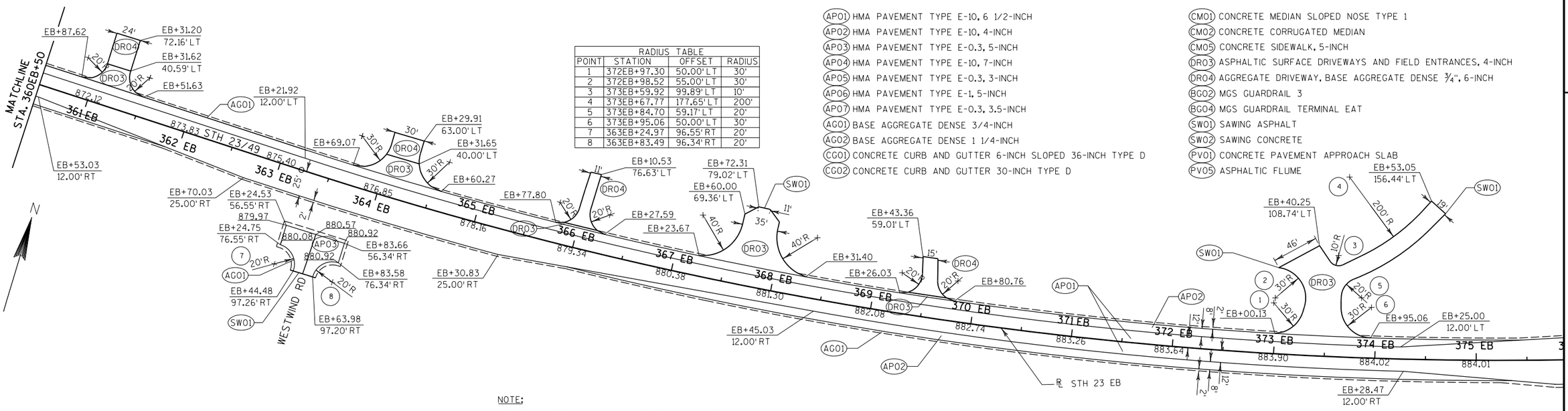
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS	SHEET 61	E

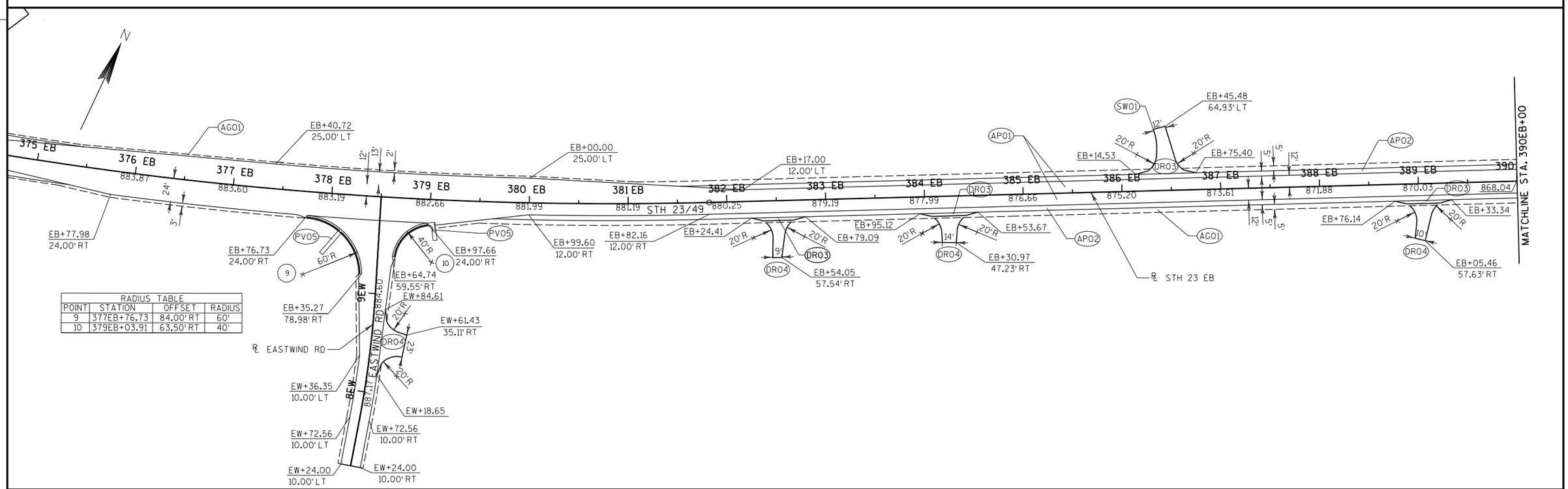
FILE NAME : J:\Active\D4\STH 23\Main\021205_pd.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

PLAN DETAIL LEGEND

- APO1 HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- APO2 HMA PAVEMENT TYPE E-10, 4-INCH
- APO3 HMA PAVEMENT TYPE E-0.3, 5-INCH
- APO4 HMA PAVEMENT TYPE E-10, 7-INCH
- APO5 HMA PAVEMENT TYPE E-0.3, 3-INCH
- APO6 HMA PAVEMENT TYPE E-1, 5-INCH
- APO7 HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- AGO2 BASE AGGREGATE DENSE 1 1/4-INCH
- CGO1 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- CGO2 CONCRETE CURB AND GUTTER 30-INCH TYPE D
- CMO1 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CMO2 CONCRETE CORRUGATED MEDIAN
- CMO5 CONCRETE SIDEWALK, 5-INCH
- DRO3 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- DRO4 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- BGO2 MGS GUARDRAIL 3
- BGO4 MGS GUARDRAIL TERMINAL EAT
- SWO1 SAWING ASPHALT
- SWO2 SAWING CONCRETE
- PVO1 CONCRETE PAVEMENT APPROACH SLAB
- PVO5 ASPHALTIC FLUME

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	372EB+97.30	50.00' LT	30'
2	372EB+98.52	55.00' LT	30'
3	373EB+59.92	99.89' LT	10'
4	373EB+67.77	177.65' LT	200'
5	373EB+84.70	59.17' LT	20'
6	373EB+95.06	50.00' LT	30'
7	363EB+24.97	96.55' RT	20'
8	363EB+83.49	96.34' RT	20'

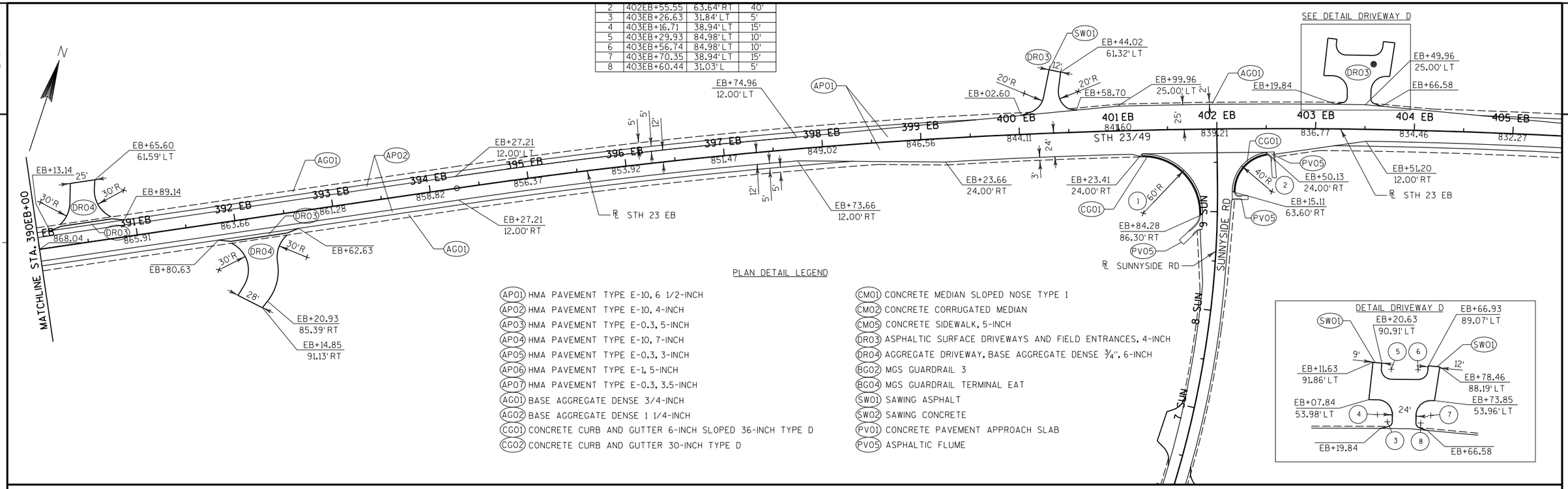




RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
9	377EB+76.73	84.00' RT	60'
10	379EB+03.91	63.50' RT	40'

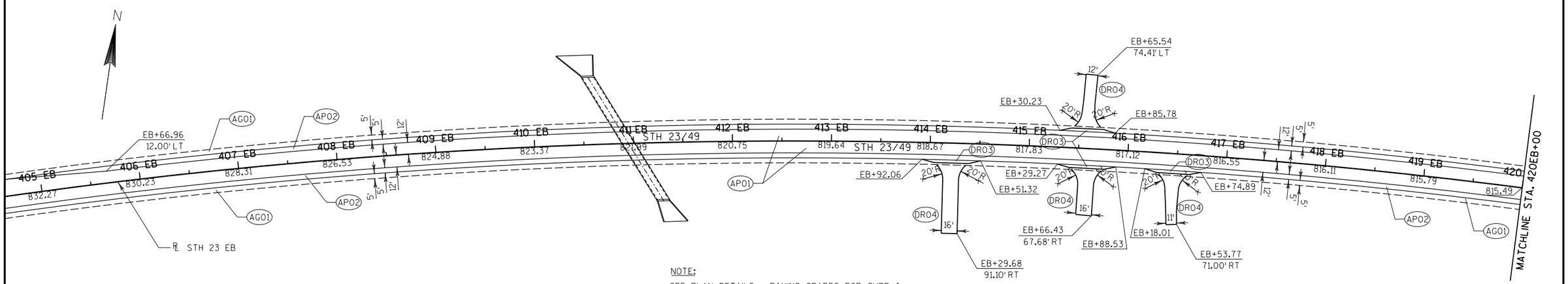
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS	SHEET 62	E

2	402EB+55.55	63.64' RT	40'
3	403EB+26.63	31.84' LT	5'
4	403EB+16.71	38.94' LT	15'
5	403EB+29.93	84.98' LT	10'
6	403EB+56.74	84.98' LT	10'
7	403EB+70.35	38.94' LT	15'
8	403EB+60.44	31.03' L	5'



PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-10, 4-INCH
- (AP03) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (AP04) HMA PAVEMENT TYPE E-10, 7-INCH
- (AP05) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (AP06) HMA PAVEMENT TYPE E-1, 5-INCH
- (AP07) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG02) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM02) CONCRETE CORRUGATED MEDIAN
- (CM05) CONCRETE SIDEWALK, 5-INCH
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE
- (PV01) CONCRETE PAVEMENT APPROACH SLAB
- (PV05) ASPHALTIC FLUME



NOTE:

SEE PLAN DETAILS - PAVING GRADES FOR CURB & GUTTER ELEVATIONS EVERY 25 FEET ALONG THE FLANGE LINE.

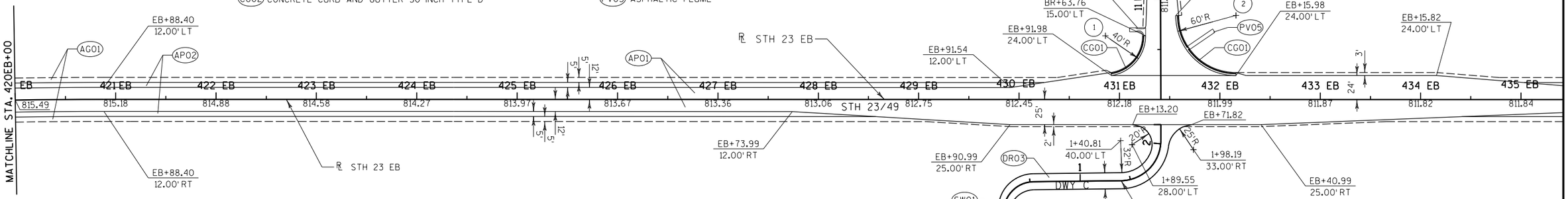
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS	SHEET 63	E

PLAN DETAIL LEGEND

- (APO1) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (APO2) HMA PAVEMENT TYPE E-10, 4-INCH
- (APO3) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (APO4) HMA PAVEMENT TYPE E-10, 7-INCH
- (APO5) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (APO6) HMA PAVEMENT TYPE E-1, 5-INCH
- (APO7) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AGO1) BASE AGGREGATE DENSE 3/4-INCH
- (AGO2) BASE AGGREGATE DENSE 1 1/4-INCH
- (CGO1) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CGO2) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CMO1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CMO2) CONCRETE CORRUGATED MEDIAN
- (CMO5) CONCRETE SIDEWALK, 5-INCH
- (DRO3) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DRO4) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- (BGO2) MGS GUARDRAIL 3
- (BGO4) MGS GUARDRAIL TERMINAL EAT
- (SWO1) SAWING ASPHALT
- (SWO2) SAWING CONCRETE
- (PVO1) CONCRETE PAVEMENT APPROACH SLAB
- (PVO5) ASPHALTIC FLUME

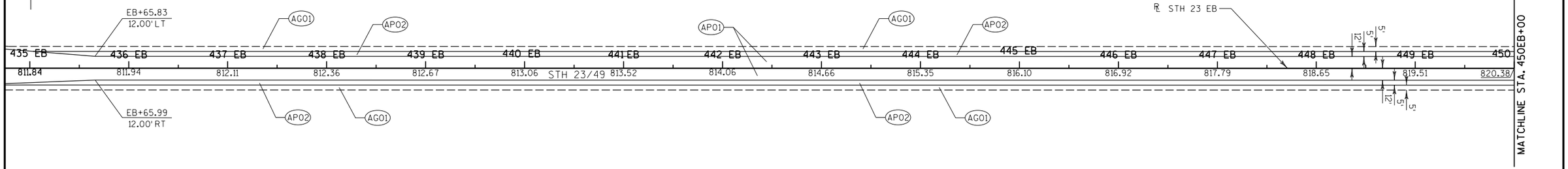
RADIUS TABLE

POINT	STATION	OFFSET	RADIUS
1	430EB+86.05	63.59' LT	40'
2	432EB+15.98	84.00' LT	60'



NOTE:

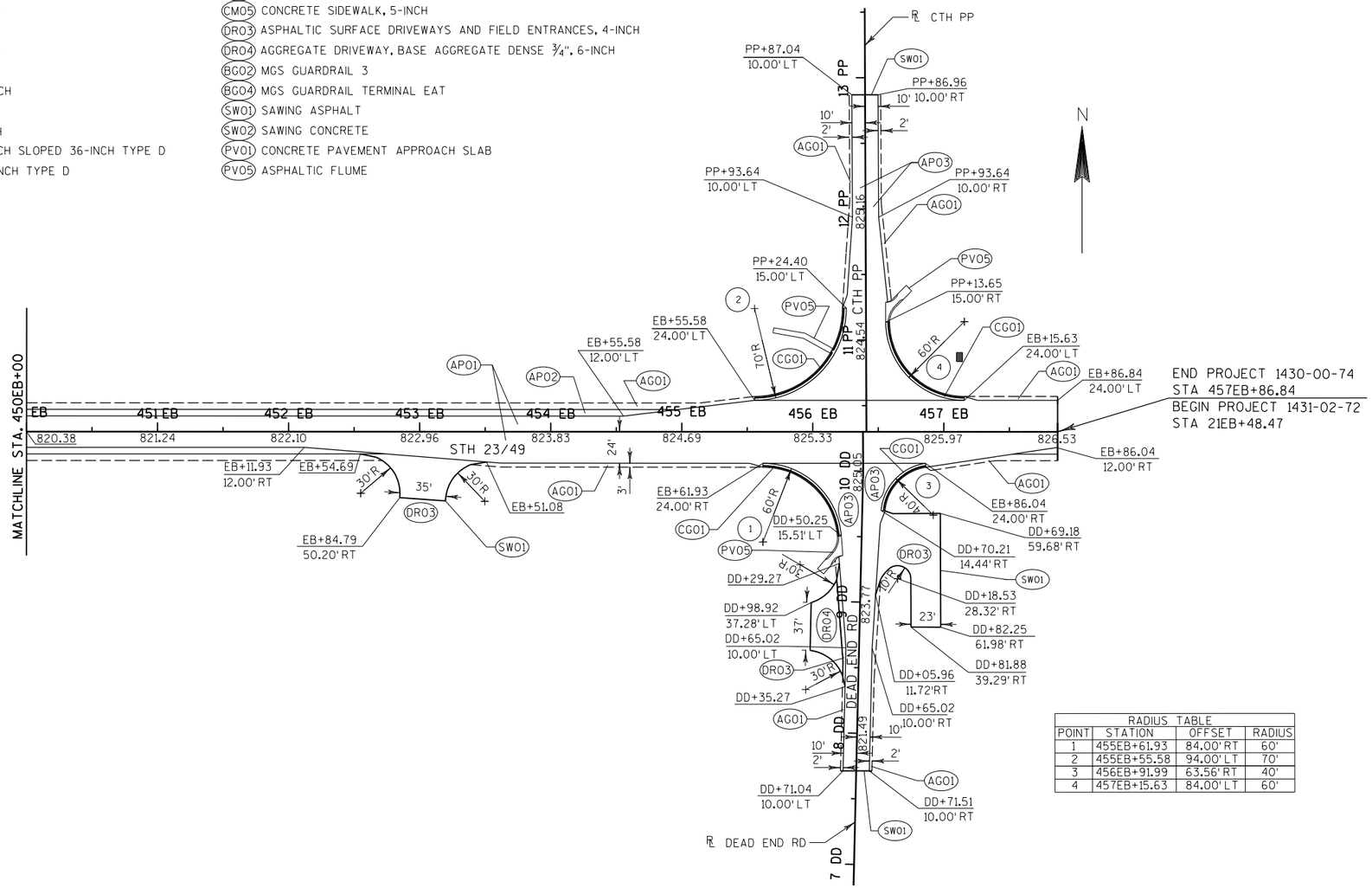
SEE PLAN DETAILS - PAVING GRADES FOR CURB & GUTTER ELEVATIONS EVERY 25 FEET ALONG THE FLANGE LINE.



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS	SHEET 64	E

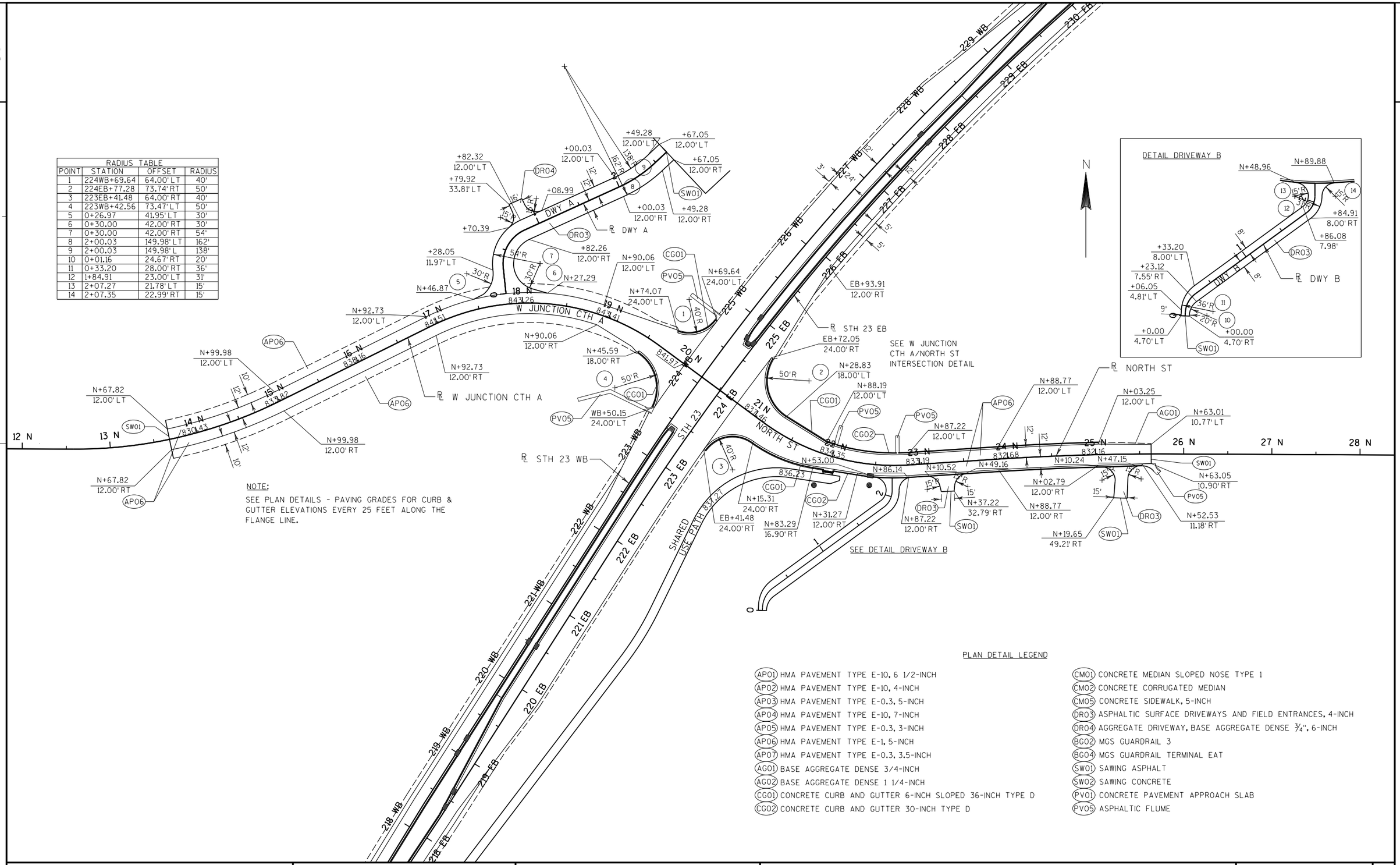
PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-10, 4-INCH
- (AP03) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (AP04) HMA PAVEMENT TYPE E-10, 7-INCH
- (AP05) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (AP06) HMA PAVEMENT TYPE E-1, 5-INCH
- (AP07) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG02) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM02) CONCRETE CORRUGATED MEDIAN
- (CM05) CONCRETE SIDEWALK, 5-INCH
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE
- (PV01) CONCRETE PAVEMENT APPROACH SLAB
- (PV05) ASPHALTIC FLUME



RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	455EB+61.93	84.00' RT	60'
2	455EB+55.58	94.00' LT	70'
3	456EB+91.99	63.56' RT	40'
4	457EB+15.63	84.00' LT	60'

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	224WB+69.64	64.00' LT	40'
2	224EB+77.28	73.74' RT	50'
3	223EB+41.48	64.00' RT	40'
4	223WB+42.56	73.47' LT	50'
5	0+26.97	41.95' LT	30'
6	0+30.00	42.00' RT	30'
7	0+30.00	42.00' RT	54'
8	2+00.03	149.98' LT	162'
9	2+00.03	149.98' L	138'
10	0+01.16	24.67' RT	20'
11	0+33.20	28.00' RT	36'
12	1+84.91	23.00' LT	31'
13	2+07.27	21.78' LT	15'
14	2+07.35	22.99' RT	15'



NOTE:

SEE PLAN DETAILS - PAVING GRADES FOR CURB & GUTTER ELEVATIONS EVERY 25 FEET ALONG THE FLANGE LINE.

PLAN DETAIL LEGEND

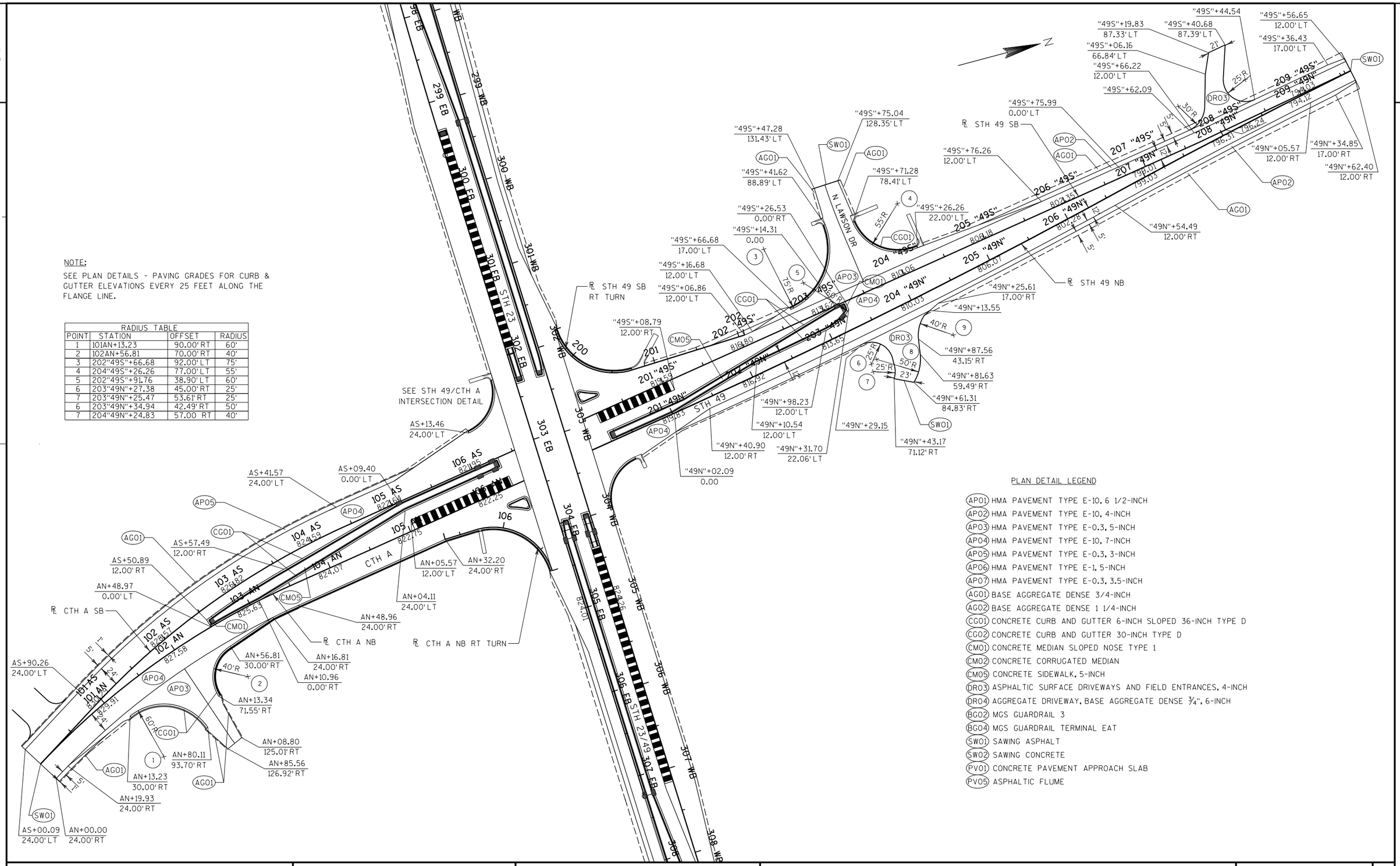
(AP01)	HMA PAVEMENT TYPE E-10, 6 1/2-INCH
(AP02)	HMA PAVEMENT TYPE E-10, 4-INCH
(AP03)	HMA PAVEMENT TYPE E-0.3, 5-INCH
(AP04)	HMA PAVEMENT TYPE E-10, 7-INCH
(AP05)	HMA PAVEMENT TYPE E-0.3, 3-INCH
(AP06)	HMA PAVEMENT TYPE E-1, 5-INCH
(AP07)	HMA PAVEMENT TYPE E-0.3, 3.5-INCH
(AG01)	BASE AGGREGATE DENSE 3/4-INCH
(AG02)	BASE AGGREGATE DENSE 1 1/4-INCH
(CG01)	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
(CG02)	CONCRETE CURB AND GUTTER 30-INCH TYPE D
(CM01)	CONCRETE MEDIAN SLOPED NOSE TYPE 1
(CM02)	CONCRETE CORRUGATED MEDIAN
(CM05)	CONCRETE SIDEWALK, 5-INCH
(DR03)	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
(DR04)	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
(BG02)	MGS GUARDRAIL 3
(BG04)	MGS GUARDRAIL TERMINAL EAT
(SW01)	SAWING ASPHALT
(SW02)	SAWING CONCRETE
(PV01)	CONCRETE PAVEMENT APPROACH SLAB
(PV05)	ASPHALTIC FLUME

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS - W JUNCTION CTH A/NORTH STREET	SHEET 66	E

NOTE:

SEE PLAN DETAILS - PAVING GRADES FOR CURB & GUTTER ELEVATIONS EVERY 25 FEET ALONG THE FLANGE LINE.

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	101AN+13.23	90.00'RT	60'
2	102AN+56.81	70.00'RT	40'
3	202"49S"+66.68	92.00'LT	75'
4	204"49S"+26.26	77.00'LT	55'
5	202"49S"+91.76	38.90'LT	60'
6	203"49N"+27.38	45.00'RT	25'
7	203"49N"+25.47	53.61'RT	25'
6	203"49N"+34.94	42.49'RT	50'
7	204"49N"+24.83	57.00 RT	40'



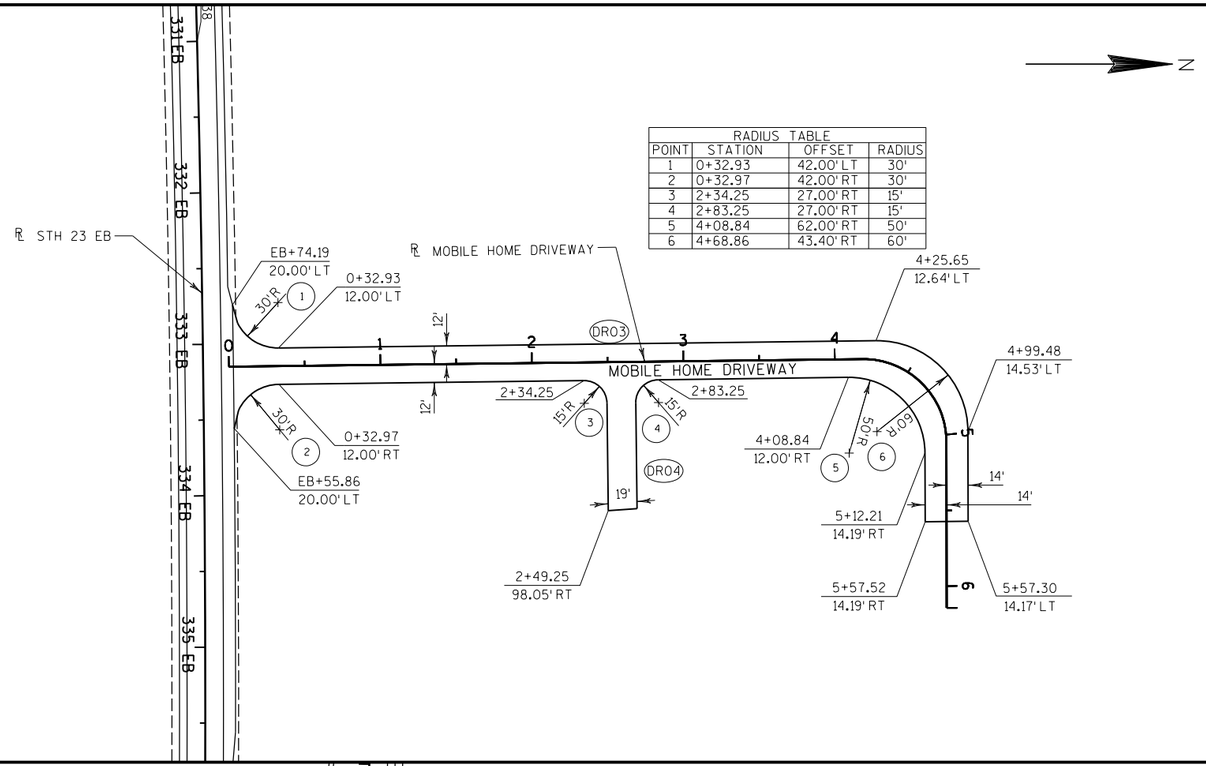
PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-10, 4-INCH
- (AP03) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (AP04) HMA PAVEMENT TYPE E-10, 7-INCH
- (AP05) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (AP06) HMA PAVEMENT TYPE E-1, 5-INCH
- (AP07) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG02) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM02) CONCRETE CORRUGATED MEDIAN
- (CM05) CONCRETE SIDEWALK, 5-INCH
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE
- (PV01) CONCRETE PAVEMENT APPROACH SLAB
- (PV05) ASPHALTIC FLUME

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS - STH 49/CTH A	SHEET 67	E

PLAN DETAIL LEGEND

- APO1 HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- APO2 HMA PAVEMENT TYPE E-10, 4-INCH
- APO3 HMA PAVEMENT TYPE E-0.3, 5-INCH
- APO4 HMA PAVEMENT TYPE E-10, 7-INCH
- APO5 HMA PAVEMENT TYPE E-0.3, 3-INCH
- APO6 HMA PAVEMENT TYPE E-1, 5-INCH
- APO7 HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- AGO1 BASE AGGREGATE DENSE 3/4-INCH
- AGO2 BASE AGGREGATE DENSE 1 1/4-INCH
- CGO1 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- CGO2 CONCRETE CURB AND GUTTER 30-INCH TYPE D
- CMO1 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- CMO2 CONCRETE CORRUGATED MEDIAN
- CMO5 CONCRETE SIDEWALK, 5-INCH
- DRO3 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- DRO4 AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- BGO2 MGS GUARDRAIL 3
- BGO4 MGS GUARDRAIL TERMINAL EAT
- SWO1 SAWING ASPHALT
- SWO2 SAWING CONCRETE
- PVO1 CONCRETE PAVEMENT APPROACH SLAB
- PVO5 ASPHALTIC FLUME



RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	0+32.93	42.00' LT	30'
2	0+32.97	42.00' RT	30'
3	2+34.25	27.00' RT	15'
4	2+83.25	27.00' RT	15'
5	4+08.84	62.00' RT	50'
6	4+68.86	43.40' RT	60'

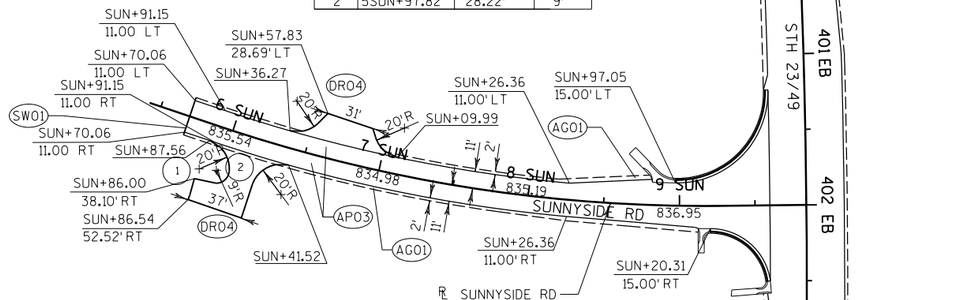
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS - MOBILE HOME DRIVEWAY/FOREST RIDGE RD	SHEET 68	E

2

PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-10, 4-INCH
- (AP03) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (AP04) HMA PAVEMENT TYPE E-10, 7-INCH
- (AP05) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (AP06) HMA PAVEMENT TYPE E-1, 5-INCH
- (AP07) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG02) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM02) CONCRETE CORRUGATED MEDIAN
- (CM05) CONCRETE SIDEWALK, 5-INCH
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE
- (PV01) CONCRETE PAVEMENT APPROACH SLAB
- (PV05) ASPHALTIC FLUME

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	5SUN+86.88	30.99' RT	20'
2	5SUN+97.82	28.22'	9'



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS - SUNNYSIDE RD	SHEET 69	E

FILE NAME : J:\Active\D4\STH 23\Main\021213_pd.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	223WB+42.56	73.47' LT	50'
2	224WB+69.64	64.00' LT	40'
3	224EB+77.28	73.74' RT	50'
4	223EB+41.48	64.00' RT	40'
5	223WB+25.37	80.00' RT	80'
6	224WB+90.91	92.00' RT	80'
7	223EB+29.30	93.18' LT	80'
8	224EB+84.76	80.00' LT	80'

℄ W JUNCTION CTH A
N+90.06
12.00' RT
N+90.06
12.00' LT
W JUNCTION CTH A
19 N
20 N
21 N
22 N
NORTH ST
STH 23
℄ STH 23 WB
℄ STH 23 EB
℄ NORTH ST
10'
12'
12'
10'
N+49.45
18.00' RT
1
50'R
PV05
AP06
N+74.07
24.00' LT
2
40'R
WB+69.64
24.00' LT
AP01
AG01
3'
24'
226 WB
841.55
225 WB
841.15
227 WB
841.94
12'
14'
WB+72.51
14.06' RT
WB+90.91
12.00' RT
6
WB+65.90
15.54' RT
CM05
226 EB
840.50
227 EB
840.96
CG01
AP02
WB+49.69
24.00' LT
WB+38.72
1.09' RT
WB+45.31
2.16' RT
WB+25.37
0.00' LT
5
224 WB
840.76
223 WB
840.18
CM01
AP01
225 EB
840.04
EB+84.76
0.00' LT
8
EB+63.97
2.54' LT
EB+71.00
1.23' LT
EB+72.05
24.00' RT
EB+93.92
12.00' RT
WB+31.34
12.00' LT
5'
5'
12'
12'
EB+30.14
13.19' LT
7
223 EB
839.12
224 EB
839.58
EB+44.05
14.32' LT
EB+37.45
13.61' LT
222 WB
839.39
222 EB
838.67
EB+41.48
24.00' RT
36'
3'
4
40'R
N+15.31
24.00' RT
50'R
3
N+30.14
18.00' LT
SHARED USE PATH
AP07
N+05.69
13.38' RT
N+83.29
16.90' RT
N+95.81
21.61' RT
DETECTABLE WARNING FIELD
SEE SDD "CURB RAMPS
TYPE 2 AND 3"
N+04.95
20.29' RT
N+05.61
30.27' RT
N+14.00
24.35' RT
N+14.00
19.37' RT
CG02
N+88.19
12.00' LT
PV05
N+98.94
12.00' LT
12'

PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-10, 4-INCH
- (AP03) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (AP04) HMA PAVEMENT TYPE E-10, 7-INCH
- (AP05) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (AP06) HMA PAVEMENT TYPE E-1, 5-INCH
- (AP07) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG02) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM02) CONCRETE CORRUGATED MEDIAN
- (CM05) CONCRETE SIDEWALK, 5-INCH
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE
- (PV01) CONCRETE PAVEMENT APPROACH SLAB
- (PV05) ASPHALTIC FLUME

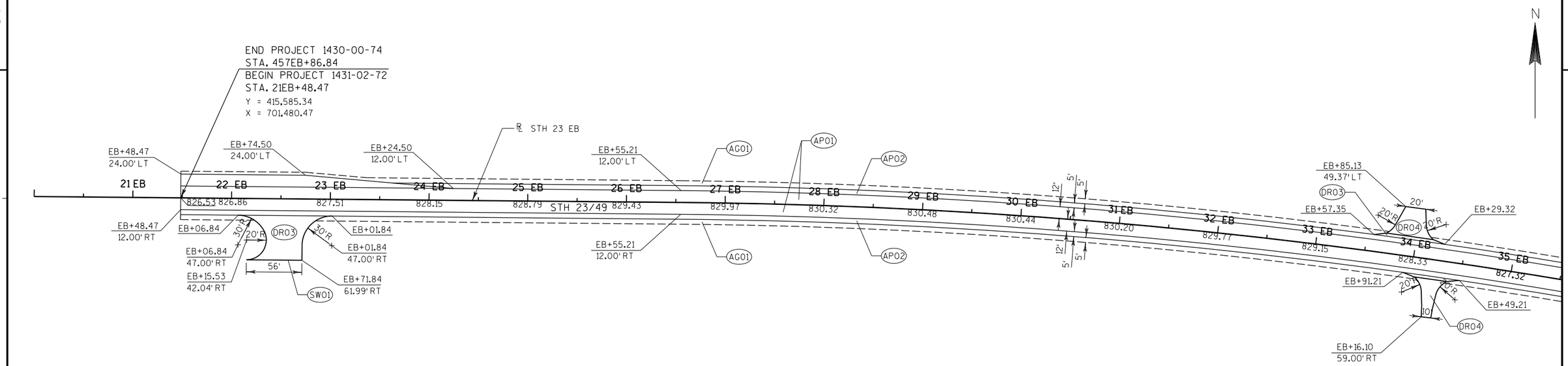
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS - W JUNCTION CTH A/NORTH ST INTERSECTION DETAIL	SHEET 70	E

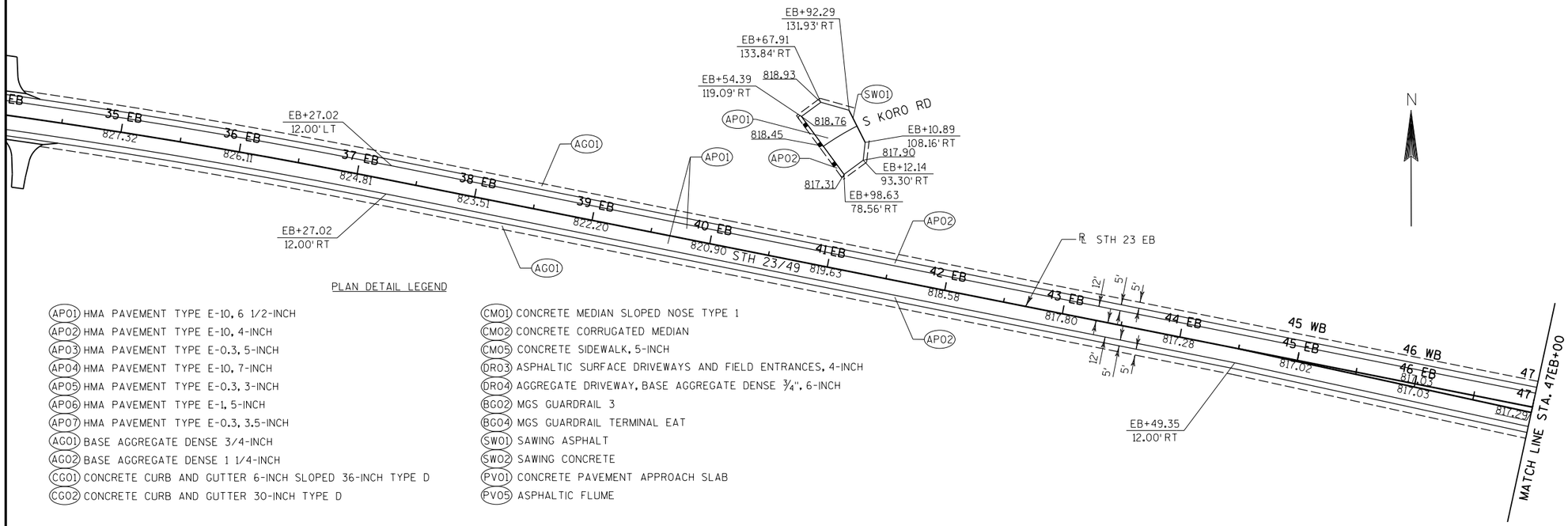
PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-10, 4-INCH
- (AP03) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (AP04) HMA PAVEMENT TYPE E-10, 7-INCH
- (AP05) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (AP06) HMA PAVEMENT TYPE E-1, 5-INCH
- (AP07) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG02) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM02) CONCRETE CORRUGATED MEDIAN
- (CM05) CONCRETE SIDEWALK, 5-INCH
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4", 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE
- (PV01) CONCRETE PAVEMENT APPROACH SLAB
- (PV05) ASPHALTIC FLUME

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	301WB+86.03	94.00' LT	70'
2	302WB+64.35	29.33' LT	4.5'
3	302WB+70.62	46.81' LT	3.5'
4	302WB+71.66	30.03' LT	4.5'
5	304WB+00.79	74.00' LT	50'
6	302WB+05.05	130.00' RT	130'
7	304EB+22.36	115.00' LT	115'
8	302EB+21.77	74.00' RT	50'
9	303EB+62.98	30.05' RT	4.5'
10	303EB+64.11	47.50' RT	3.5'
11	303EB+70.81	29.31' RT	4.5'
12	304EB+48.63	94.00' RT	70'
13	301EB+72.02	78.26' LT	100'
14	304EB+62.63	79.22' RT	100'

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN DETAILS - STH 49/CTH A INTERSECTION DETAIL	SHEET 71	E



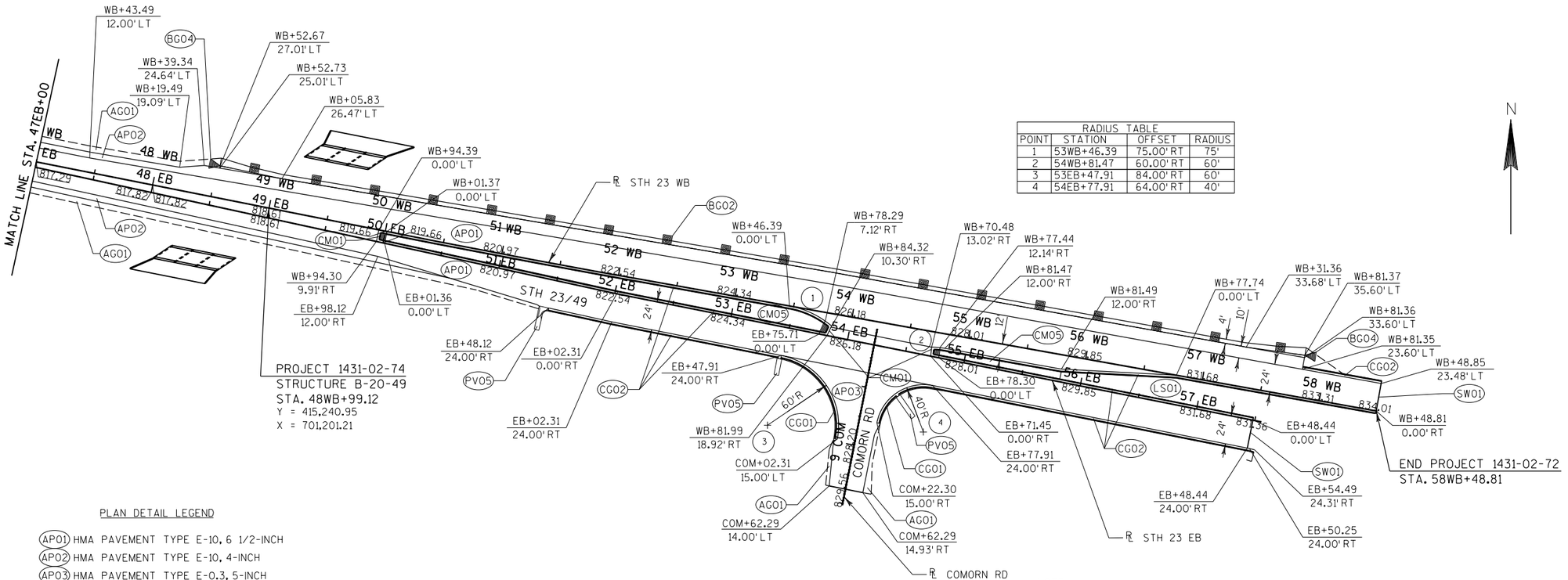


PLAN DETAIL LEGEND

(APO1) HMA PAVEMENT TYPE E-10, 6 1/2-INCH	(CMO1) CONCRETE MEDIAN SLOPED NOSE TYPE 1
(APO2) HMA PAVEMENT TYPE E-10, 4-INCH	(CMO2) CONCRETE CORRUGATED MEDIAN
(APO3) HMA PAVEMENT TYPE E-0.3, 5-INCH	(CMO5) CONCRETE SIDEWALK, 5-INCH
(APO4) HMA PAVEMENT TYPE E-10, 7-INCH	(DRO3) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
(APO5) HMA PAVEMENT TYPE E-0.3, 3-INCH	(DRO4) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE ¾", 6-INCH
(APO6) HMA PAVEMENT TYPE E-1, 5-INCH	(BGO2) MGS GUARDRAIL 3
(APO7) HMA PAVEMENT TYPE E-0.3, 3.5-INCH	(BGO4) MGS GUARDRAIL TERMINAL EAT
(AGO1) BASE AGGREGATE DENSE 3/4-INCH	(SWO1) SAWING ASPHALT
(AGO2) BASE AGGREGATE DENSE 1 1/4-INCH	(SWO2) SAWING CONCRETE
(CGO1) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	(PVO1) CONCRETE PAVEMENT APPROACH SLAB
(CGO2) CONCRETE CURB AND GUTTER 30-INCH TYPE D	(PVO5) ASPHALTIC FLUME

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	PLAN DETAILS	SHEET 72	E

2



RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	53WB+46.39	75.00' RT	75'
2	54WB+81.47	60.00' RT	60'
3	53EB+47.91	84.00' RT	60'
4	54EB+77.91	64.00' RT	40'

PLAN DETAIL LEGEND

- (AP01) HMA PAVEMENT TYPE E-10, 6 1/2-INCH
- (AP02) HMA PAVEMENT TYPE E-10, 4-INCH
- (AP03) HMA PAVEMENT TYPE E-0.3, 5-INCH
- (AP04) HMA PAVEMENT TYPE E-10, 7-INCH
- (AP05) HMA PAVEMENT TYPE E-0.3, 3-INCH
- (AP06) HMA PAVEMENT TYPE E-1, 5-INCH
- (AP07) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (AG02) BASE AGGREGATE DENSE 1 1/4-INCH
- (CG01) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG02) CONCRETE CURB AND GUTTER 30-INCH TYPE D
- (CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
- (CM02) CONCRETE CORRUGATED MEDIAN
- (CM05) CONCRETE SIDEWALK, 5-INCH
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE ¾", 6-INCH
- (BG02) MGS GUARDRAIL 3
- (BG04) MGS GUARDRAIL TERMINAL EAT
- (SW01) SAWING ASPHALT
- (SW02) SAWING CONCRETE
- (PV01) CONCRETE PAVEMENT APPROACH SLAB
- (PV05) ASPHALTIC FLUME

NOTE:
SEE PLAN DETAILS - PAVING GRADES FOR CURB & GUTTER ELEVATIONS EVERY 25 FEET ALONG THE FLANGE LINE.

2

BEGIN PROJECT 1430-00-74
STA 210EB+40.90
Y = 275016.72
X = 565657.05

PIER

INL

EXISTING R/W

℄ STH 23 WB

℄ STH 23 EB

STH 23

203 EB 204 EB 205 EB 206 EB 207 EB 208 EB 209 EB 210 EB 211 EB 212 EB 213 EB 214 EB 215 EB 216 EB 217 EB 218 EB

212 WB 213 WB 214 WB 215 WB 216 WB 217 WB 218 WB

(A)(D)

FEE

LEGEND

EROSION MAT CLASS I, TYPE A	ROCK BAGS DITCH CHECK
EROSION MAT CLASS I, TYPE B	SILT FENCE RELIEF ROCK BAGS
EROSION MAT, URBAN, CLASS I, TYPE A	CULVERT PIPE CHECK
RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)	TURBIDITY BARRIER
SILT FENCE	SURFACE WATER FLOW
EROSION BALES	SLOPE INTERCEPT
INLET PROTECTION, TYPE A, B OR D	404 PERMITTED WETLAND IMPACTS
TEMPORARY DITCH CHECKS	

W JUNCTION CTH A

18 N

19 N

20 N

21 N

NORTH ST

RUINS

TLE

FEE

EXISTING R/W

℄ W JUNCTION CTH A

℄ STH 23 WB

℄ STH 23 EB

℄ NORTH ST

STH 23

218 WB 219 WB 220 WB 221 WB 222 WB 223 WB 224 WB 225 WB 226 WB 227 WB 228 WB 229 WB 230 WB 231 WB 232 WB 233

218 EB 219 EB 220 EB 221 EB 222 EB 223 EB 224 EB 225 EB 226 EB 227 EB 228 EB 229 EB 230 EB 231 EB 232 EB 233

(A)(D)

MATCHLINE STA. 233EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL	SHEET 74	E

FILE NAME : J:\Active\D4\STH 23\Main\022002_ec.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

2

EXISTING R/W

℄ STH 23 WB

STH 23

℄ STH 23 EB

EXISTING R/W

MATCHLINE STA. 233EB+00

FEE

N

LEGEND

EROSION MAT CLASS I, TYPE A	ROCK BAGS DITCH CHECK
EROSION MAT CLASS I, TYPE B	SILT FENCE RELIEF ROCK BAGS
EROSION MAT, URBAN, CLASS I, TYPE A	CULVERT PIPE CHECK
RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)	TURBIDITY BARRIER
SILT FENCE	SURFACE WATER FLOW
EROSION BALES	SLOPE INTERCEPT
INLET PROTECTION, TYPE A, B OR D	404 PERMITTED WETLAND IMPACTS
TEMPORARY DITCH CHECKS	

TLE

EXISTING R/W

℄ STH 23 WB

STH 23

℄ STH 23 EB

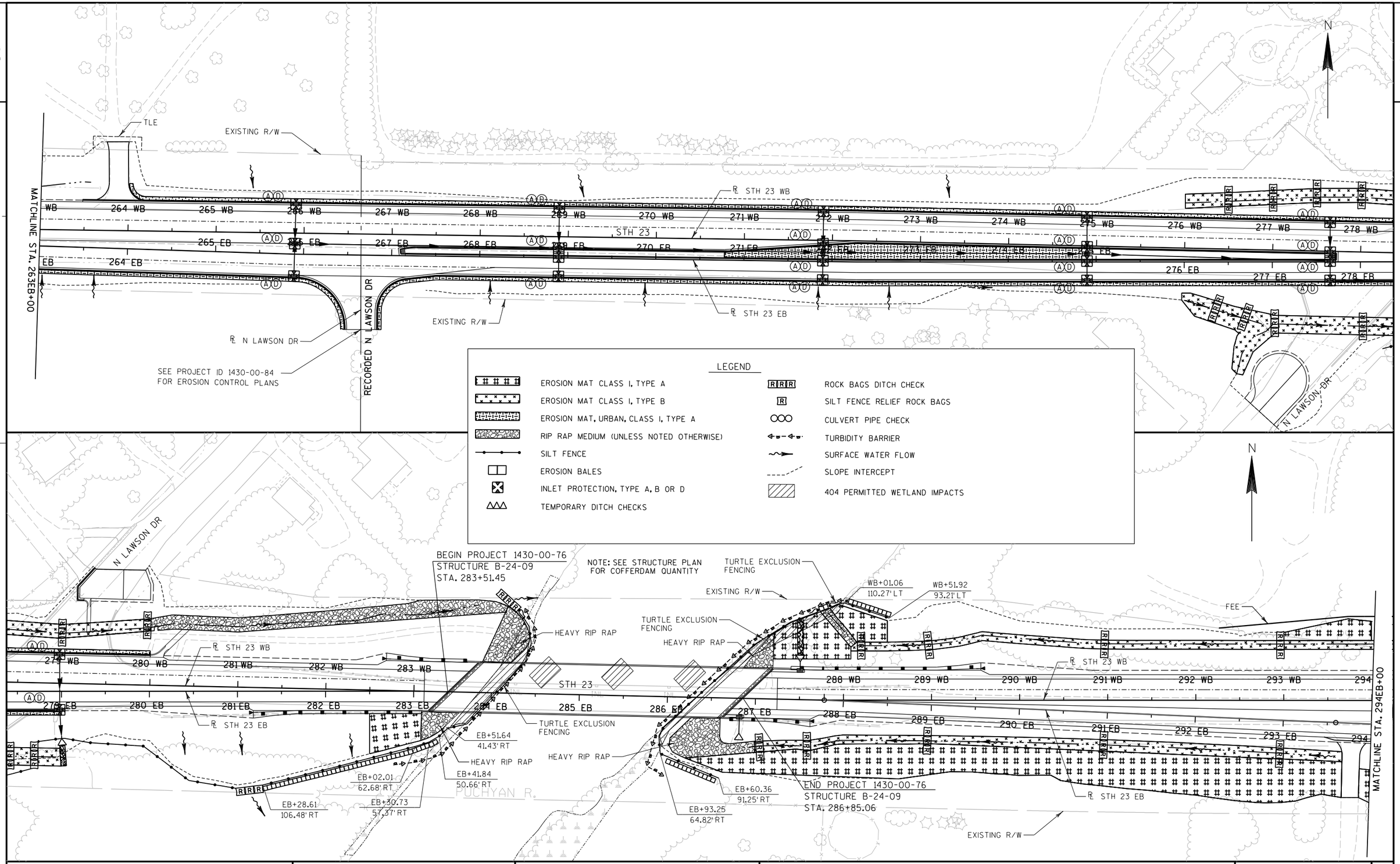
EXISTING R/W

MATCHLINE STA. 263EB+00

N

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL	SHEET 75	E

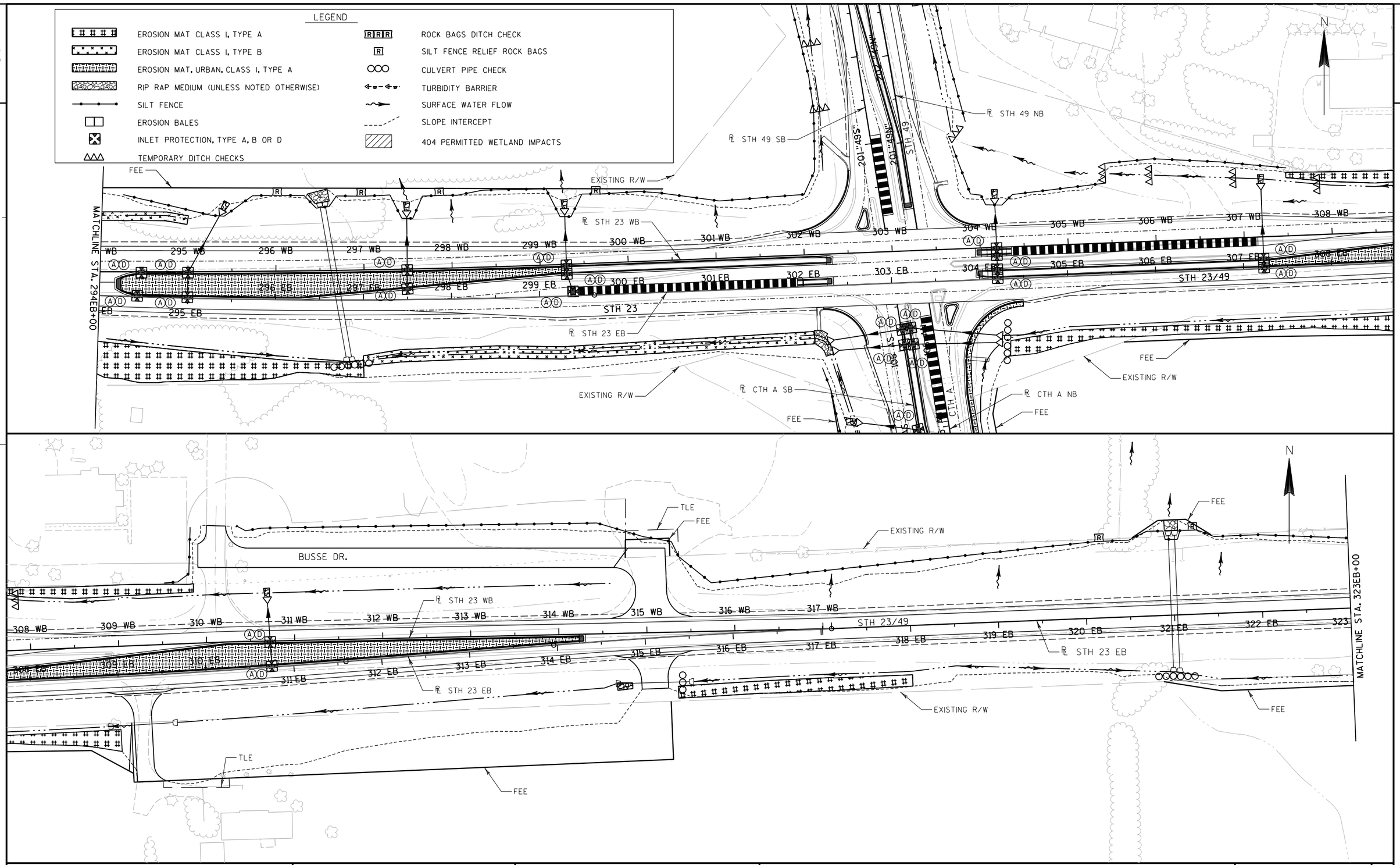
2



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL	SHEET 76	E

LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT, URBAN, CLASS I, TYPE A
- RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- EROSION BALES
- INLET PROTECTION, TYPE A, B OR D
- TEMPORARY DITCH CHECKS
- ROCK BAGS DITCH CHECK
- SILT FENCE RELIEF ROCK BAGS
- CULVERT PIPE CHECK
- TURBIDITY BARRIER
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- 404 PERMITTED WETLAND IMPACTS



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL	SHEET 77	E

FILE NAME : J:\Active\D4\STH 23\Main\022005_ec.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

EXISTING R/W

FEE

℄ STH 23 EB

℄ MOBILE HOME DRIVEWAY

STH 23/49

MATCHLINE STA. 323EB+00

EB 324 EB 325 EB 326 EB 327 EB 328 EB 329 EB 330 EB 331EB 332 EB 333 EB 334 EB 335 EB 336 EB 337 EB 338 EB

TLE

FEE

FEE

EXISTING R/W

FEE

N

LEGEND

EROSION MAT CLASS I, TYPE A	ROCK BAGS DITCH CHECK
EROSION MAT CLASS I, TYPE B	SILT FENCE RELIEF ROCK BAGS
EROSION MAT, URBAN, CLASS I, TYPE A	CULVERT PIPE CHECK
RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)	TURBIDITY BARRIER
SILT FENCE	SURFACE WATER FLOW
EROSION BALES	SLOPE INTERCEPT
INLET PROTECTION, TYPE A, B OR D	404 PERMITTED WETLAND IMPACTS
TEMPORARY DITCH CHECKS	

22 FERN FOREST RIDGE RD

℄ FOREST RIDGE RD NORTH

FEE

FEE

TLE

N

℄ STH 23 EB

STH 23/49

338 EB 339 EB 340 EB 341 EB 342 EB 343 EB 344 EB 345 EB 346 EB 347 EB 348 EB 349 EB 350 EB 351 EB 352 EB 353

MATCHLINE STA. 353EB+00

FEE

EXISTING R/W

FEE

℄ FOREST RIDGE RD SOUTH

FOREST RIDGE RD

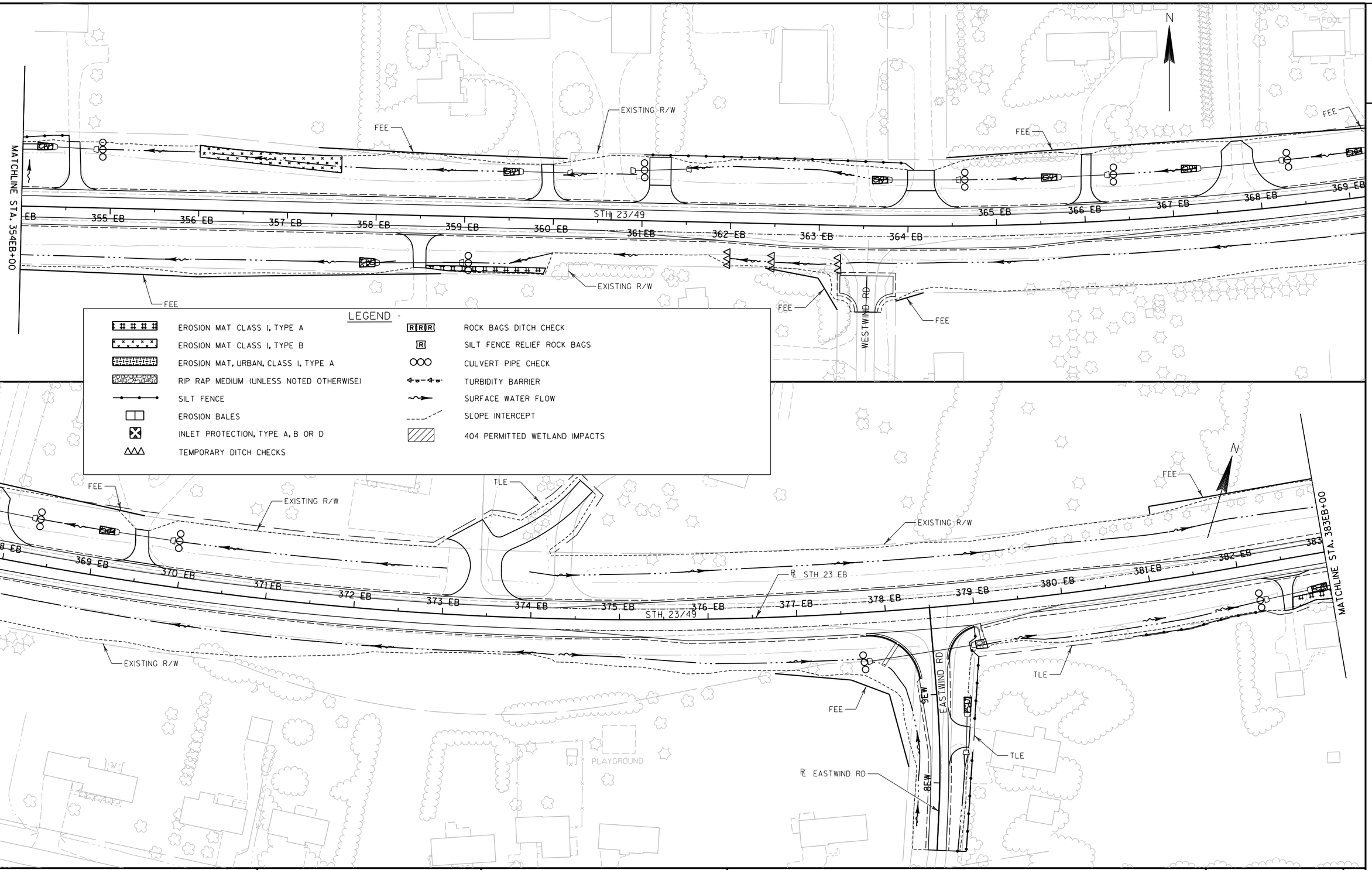
FEE

FEE

FOUND

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL	SHEET 78	E

2



PROJECT NO:1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL	SHEET 79	E

2

2

MATCHLINE STA. 383EB+00

EB 384 EB 385 EB 386 EB 387 EB 388 EB 389 EB 390 EB 391 EB 392 EB 393 EB 394 EB 395 EB 396 EB 397 EB 398 EB

STH 23/49

℄ STH 23 EB

EXISTING R/W

TLE

EXISTING R/W

TLE

FEE

MEDIUM RIP RAP

WALLS

U/C

398 EB 399 EB 400 EB 401 EB 402 EB 403 EB 404 EB 405 EB 406 EB 407 EB 408 EB 409 EB 410 EB 411 EB 412 EB 413

STH 23/49

℄ STH 23 EB

EXISTING R/W

FEE

EXISTING R/W

TLE

℄ SUNNYSIDE RD

FEE

SUNNYSIDE RD

9 SUN

8 SUN

7 SUN

6 SUN

WETLAND BOUNDARY

FEE

EB+49.60 127.49'LT

EB+59.21 127.50'LT

EB+77.46 79.52'LT

EB+92.53 79.61'LT

EB+26.60 79.[illegible]'LT

EB+06.57 92.96'LT

EB+64.55 45.76'LT

EB+43.42 65.13'LT

EB+10.51 65.34'LT

EB+70.72 65.14'LT

STRUCTURE C-24-17

EB+51.94 65.66'RT

EB+17.73 56.35'RT

EB+40.76 56.21'RT

EB+42.88 91.08'RT

EB+03.99 72.74'RT

EB+66.58 73.89'RT

EB+83.19 63.57'RT

EB+90.94 70.77'RT

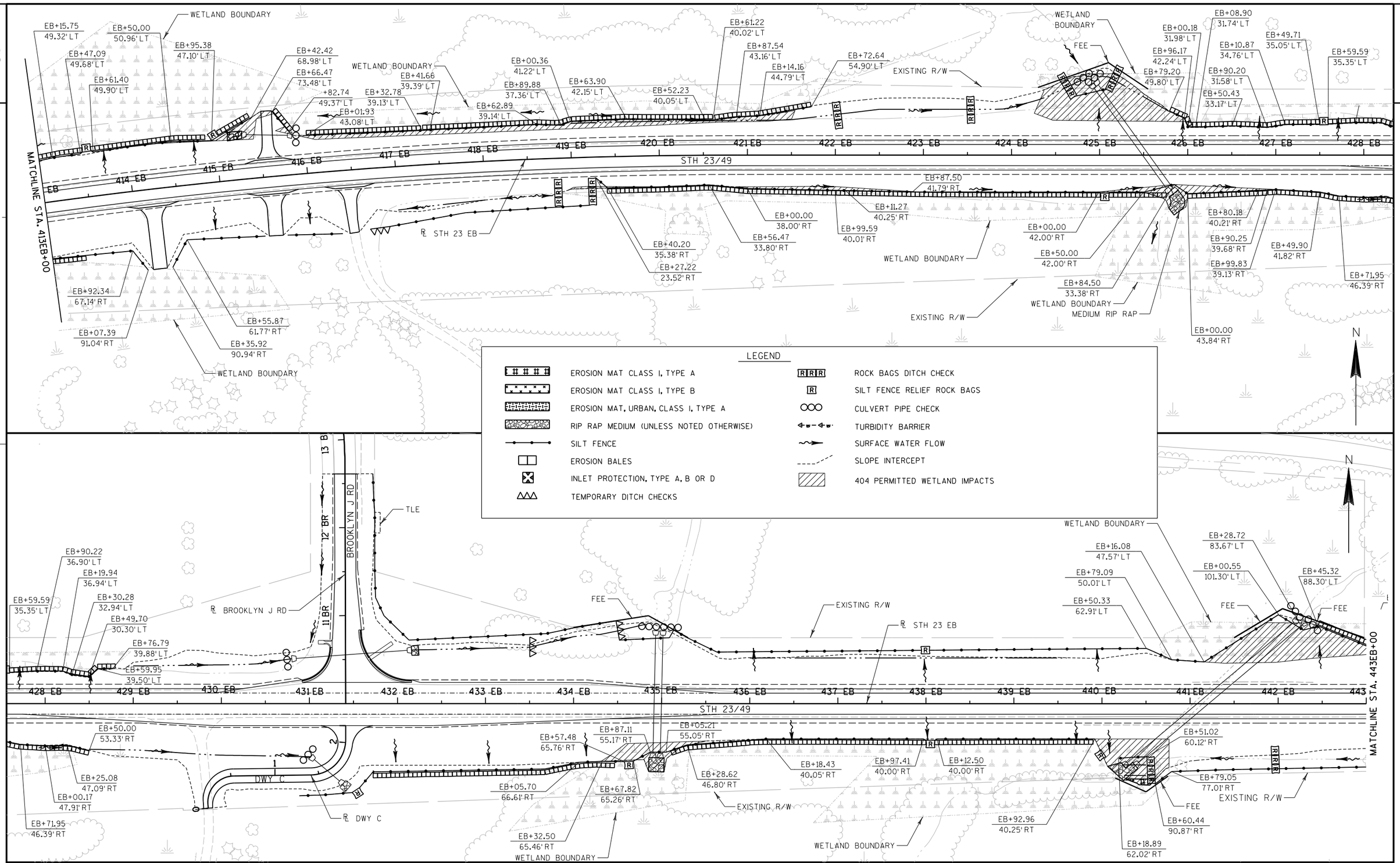
WETLAND BOUNDARY

MATCHLINE STA. 413EB+00

LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT, URBAN, CLASS I, TYPE A
- RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- EROSION BALES
- INLET PROTECTION, TYPE A, B OR D
- TEMPORARY DITCH CHECKS
- ROCK BAGS DITCH CHECK
- SILT FENCE RELIEF ROCK BAGS
- CULVERT PIPE CHECK
- TURBIDITY BARRIER
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- 404 PERMITTED WETLAND IMPACTS

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL	SHEET 80	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL	SHEET 81	E

2

MATCHLINE STA. 443EB+00

EB+89.76
67.99' LT
EB+00.84
65.53' LT
WETLAND BOUNDARY
EB+02.49
68.12' LT
EB+00.22
50.13' LT
EB+91.78
51.97' LT
EB+00.22
61.67' LT
EB+50.15
52.43' LT
EB+40.26
49.38' LT
EB+00.12
58.21' LT
EB+38.32
58.52' LT
EB+48.44
58.33' LT
EB+75.33
58.28' LT
EB+15.57
67.32' LT
EB+39.03
70.46' LT

N

WETLAND BOUNDARY

FEE

END PROJECT 1430-00-74
STA 457EB+86.84
BEGIN PROJECT 1431-02-72
STA. 21EB+48.47

12 PP
11 PP
CTH PP
℄ CTH PP

EB 444 EB 445 EB 446 EB 447 EB 448 EB 449 EB 450 EB 451 EB 452 EB 453 EB 454 EB 455 EB 456 EB 457 EB 457 EB

STH 23/49

℄ STH 23 EB

EXISTING R/W

10 DD
8 DD
DEAD END RD
℄ DEAD END RD

TLE

TANKS

LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT, URBAN, CLASS I, TYPE A
- RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- EROSION BALES
- INLET PROTECTION, TYPE A, B OR D
- TEMPORARY DITCH CHECKS
- ROCK BAGS DITCH CHECK
- SILT FENCE RELIEF ROCK BAGS
- CULVERT PIPE CHECK
- TURBIDITY BARRIER
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- 404 PERMITTED WETLAND IMPACTS

N

332 EB
333 EB
334 EB
335 EB
STH 23/49
STH 23

℄ STH 23 EB

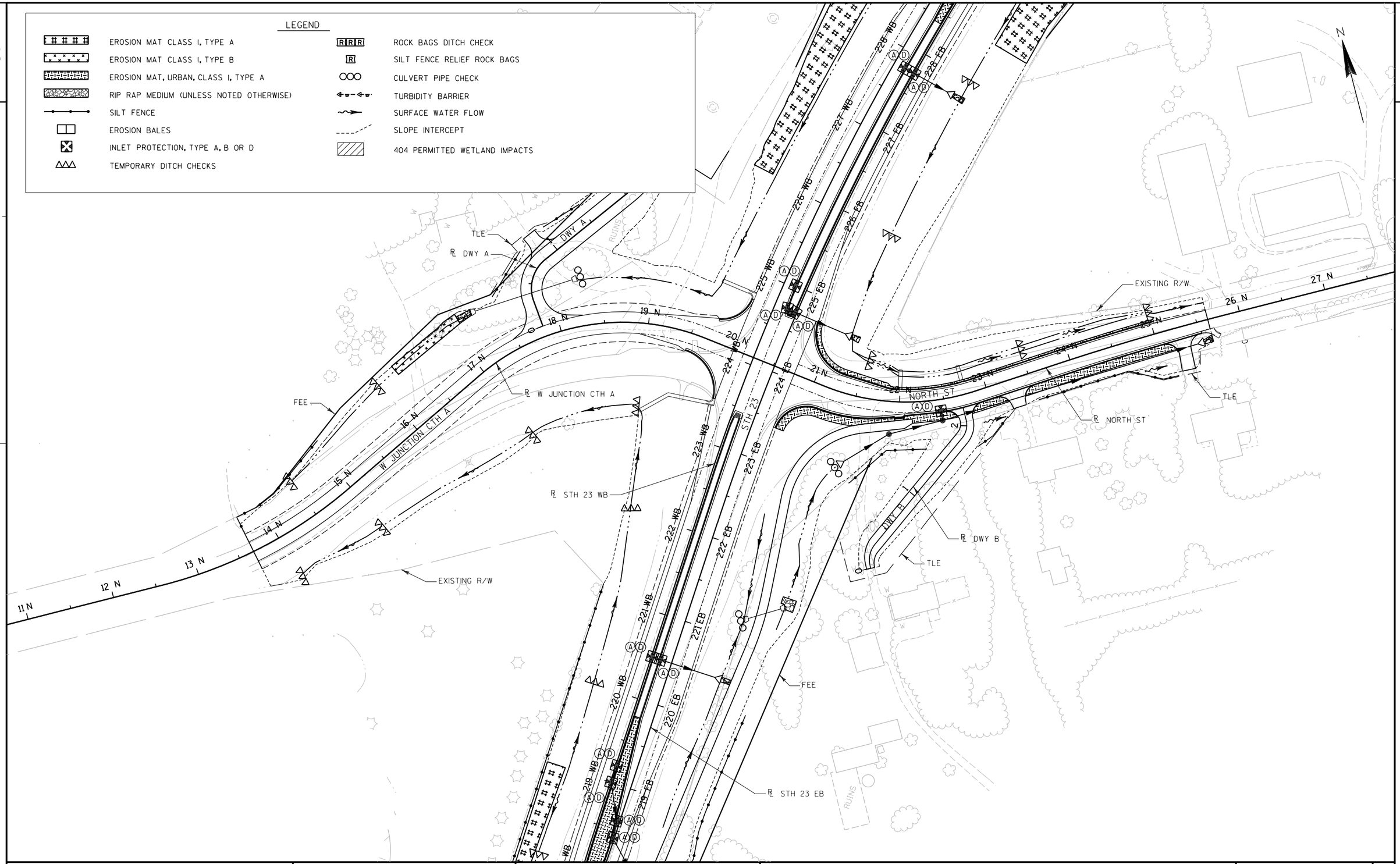
EXISTING R/W

FEE
℄ MOBILE HOME DRIVEWAY
MOBILE HOME DRIVEWAY
0 1 2 3 4 5 6
FEE
TLE
TLE

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL & STH 23/MOBILE HOME DRIVEWAY	SHEET 82	E

LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT, URBAN, CLASS I, TYPE A
- RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- EROSION BALES
- INLET PROTECTION, TYPE A, B OR D
- TEMPORARY DITCH CHECKS
- ROCK BAGS DITCH CHECK
- SILT FENCE RELIEF ROCK BAGS
- CULVERT PIPE CHECK
- TURBIDITY BARRIER
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- 404 PERMITTED WETLAND IMPACTS



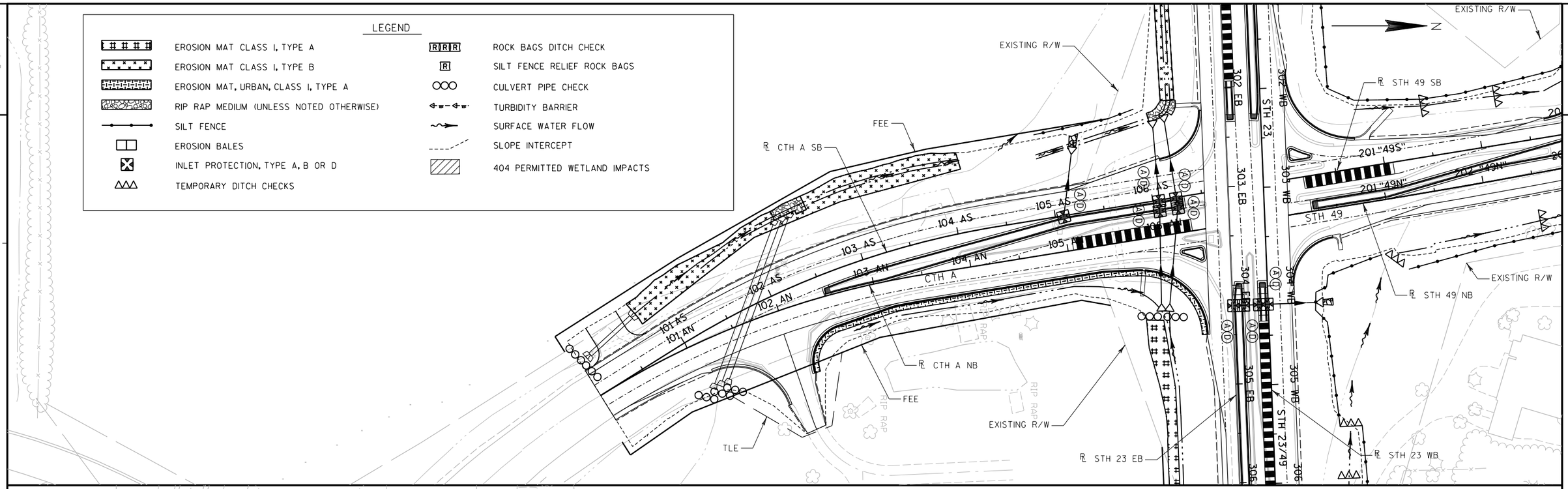
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL - W. JUNCTION CTH A/NORTH ST.	SHEET 83	E

FILE NAME : J:\Active\D4\STH 23\Main\022011_ec.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

LEGEND

EROSION MAT CLASS I, TYPE A	ROCK BAGS DITCH CHECK
EROSION MAT CLASS I, TYPE B	SILT FENCE RELIEF ROCK BAGS
EROSION MAT, URBAN, CLASS I, TYPE A	CULVERT PIPE CHECK
RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)	TURBIDITY BARRIER
SILT FENCE	SURFACE WATER FLOW
EROSION BALES	SLOPE INTERCEPT
INLET PROTECTION, TYPE A, B OR D	404 PERMITTED WETLAND IMPACTS
TEMPORARY DITCH CHECKS	



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL - CTH A / STH 49	SHEET 84	E

2

N

LEGEND

EROSION MAT CLASS I, TYPE A	ROCK BAGS DITCH CHECK
EROSION MAT CLASS I, TYPE B	SILT FENCE RELIEF ROCK BAGS
EROSION MAT, URBAN, CLASS I, TYPE A	CULVERT PIPE CHECK
RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)	TURBIDITY BARRIER
SILT FENCE	SURFACE WATER FLOW
EROSION BALES	SLOPE INTERCEPT
INLET PROTECTION, TYPE A, B OR D	404 PERMITTED WETLAND IMPACTS
TEMPORARY DITCH CHECKS	

℄ STH 23 EB

343 EB
344 EB
345 EB
346 EB
STH 23/49
347 EB
348 EB
349 EB
350 EB
351 EB
352 EB

FEE
EXISTING R/W
TLE

5 FRS
6 FRS
7 FRS
8 FRS
9 FRS

21 FRN
22 FRN
23 FRN
24 FRN
25 FRN
26 FRN
27 FRN

FOREST RIDGE RD
FOREST RIDGE RD

A/B

℄ FOREST RIDGE RD SOUTH
℄ FOREST RIDGE RD NORTH

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL - FOREST RIDGE RD	SHEET 85 E

FILE NAME : J:\Active\D4\STH 23\Main\022013_ec.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

END PROJECT 1430-00-74
STA 457EB+86.84
BEGIN PROJECT 1431-02-72
STA 21EB+48.47
Y = 415585.34
X = 701480.47

CTH PP

DEAD END RD

21 EB 22 EB 23 EB 24 EB 25 EB 26 EB 27 EB 28 EB 29 EB 30 EB 31 EB 32 EB 33 EB 34 EB 35 EB

STH 23/49

FEE

EXISTING R/W

TLE

℄ STH 23 EB

SIGN

ANT.

RUINS

35 EB 36 EB 37 EB 38 EB 39 EB 40 EB 41 EB 42 EB 43 EB 44 EB 45 WB 45 EB 46 WB 46 EB 47

S KORO RD

℄ STH 23 WB

MATCHLINE STA. 47EB+00.00

43EB+51.48
62.54' RT

44EB+93.75
55.24' RT

46EB+08.02
61.31' RT

WETLAND BOUNDARY

N

LEGEND

EROSION MAT CLASS I, TYPE A	ROCK BAGS DITCH CHECK
EROSION MAT CLASS I, TYPE B	SILT FENCE RELIEF ROCK BAGS
EROSION MAT, URBAN, CLASS I, TYPE A	CULVERT PIPE CHECK
RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)	TURBIDITY BARRIER
SILT FENCE	SURFACE WATER FLOW
EROSION BALES	SLOPE INTERCEPT
INLET PROTECTION, TYPE A, B OR D	404 PERMITTED WETLAND IMPACTS
TEMPORARY DITCH CHECKS	

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 86	E

2

LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT, URBAN, CLASS I, TYPE A
- RIP RAP MEDIUM (UNLESS NOTED OTHERWISE)
- SILT FENCE
- EROSION BALES
- INLET PROTECTION, TYPE A, B OR D
- TEMPORARY DITCH CHECKS
- ROCK BAGS DITCH CHECK
- SILT FENCE RELIEF ROCK BAGS
- CULVERT PIPE CHECK
- TURBIDITY BARRIER
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- 404 PERMITTED WETLAND IMPACTS

STRUCTURE B-20-49
PROJECT 1431-02-74
STA. 48WB+99.12
Y = 415240.95
X = 704201.21

MATCHLINE STA. 47EB+00

47EB+57.99
61.15' RT

WETLAND BOUNDARY
FEE
TLE
50WB+39.62
55.09' LT
WETLAND BOUNDARY
51WB+80.36
52.75' LT
53WB+69.65
69.35' LT
FEE
℄ STH 23 WB
56WB+33.30
76.21' LT
EXISTING R/W
FEE
58WB+49.35
76.85' LT
S KORO RD

WB
EB
48 WB
48 EB
49 WB
49 EB
50 WB
50 EB
51 WB
51 EB
52 WB
52 EB
53 WB
53 EB
54 WB
54 EB
55 WB
55 EB
56 WB
56 EB
57 WB
57 EB
58 WB
STH 23/49

FEE
WETLAND BOUNDARY
FEE
EXISTING R/W

℄ COMORN RD
9' CSM
COMORN RD
℄ STH 23 EB

END PROJECT 1431-02-72
STA. 58WB+48.81

ARCADE GLEN RD

N

FOOTBRIDGE

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 87	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\022002_ec.dgn
PLOT DATE : 7/31/2013
PLOT BY : fred.schunke
PLOT NAME :
PLOT SCALE : 100.0000 ' / in.
WISDOT/CADDS SHEET 42

2

2

STA 40+75
BEGIN CONSTRUCTION

STA 12+50
BEGIN CONSTRUCTION

NORTH LAWSON DRIVE

NORTH ST

EX. R/W

STA 45+13
END CONSTRUCTION

ASPH

LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- SILT FENCE
- RIP RAP LIGHT (UNLESS NOTED OTHERWISE)
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION, TYPE A, C OR D
- SURFACE WATER FLOW
- RIRIR — ROCK BAGS DITCH CHECK

WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE WIS.
PROFESSIONAL ENGINEER
SEP 24, '13
EXP JUL 31, '14

PROJECT NO:1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL PLAN - NORTH LAWSON DRIVE	SHEET	E

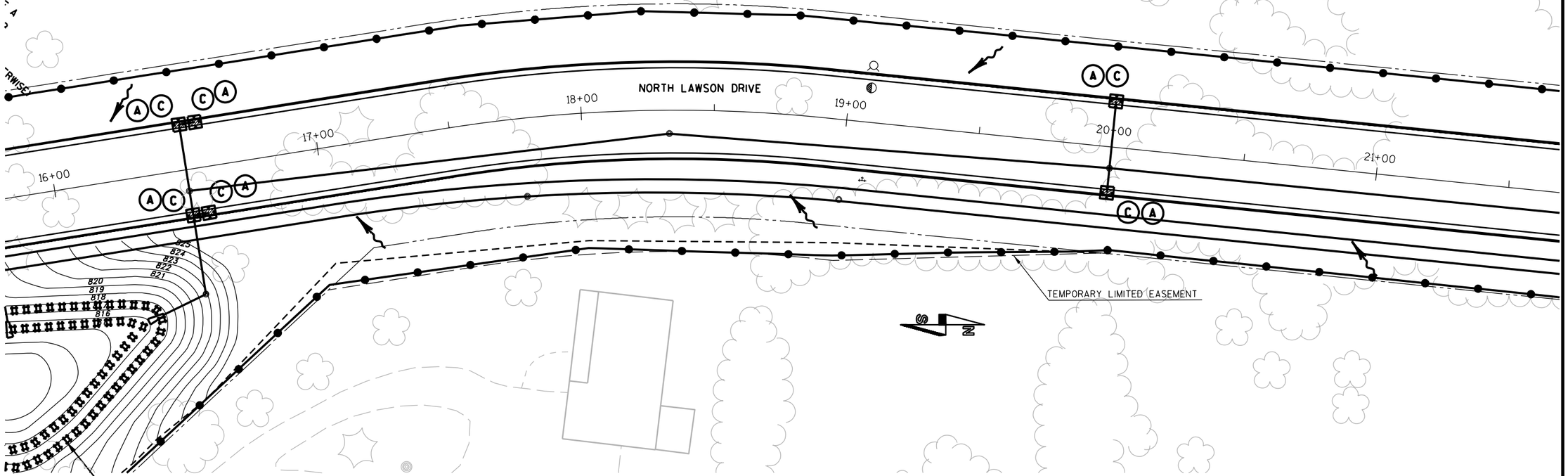
FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-EC01.DGN PLOT DATE : 09-24-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=40'

2

2

LEGEND

- EROSION MAT CLASS I, TYPE A
- SILT FENCE
- RIP RAP LIGHT (UNLESS OTHERWISE NOTED)
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION TYPE A, C OR D
- SURFACE WATER FLOW



WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER
SEP 24, '13
EXP JUL 31, '14

PROJECT NO:1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL PLAN - NORTH LAWSON DRIVE	SHEET 89	E

FILE NAME :S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-EC02.DGN PLOT DATE : 09-24-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE :1"=40'

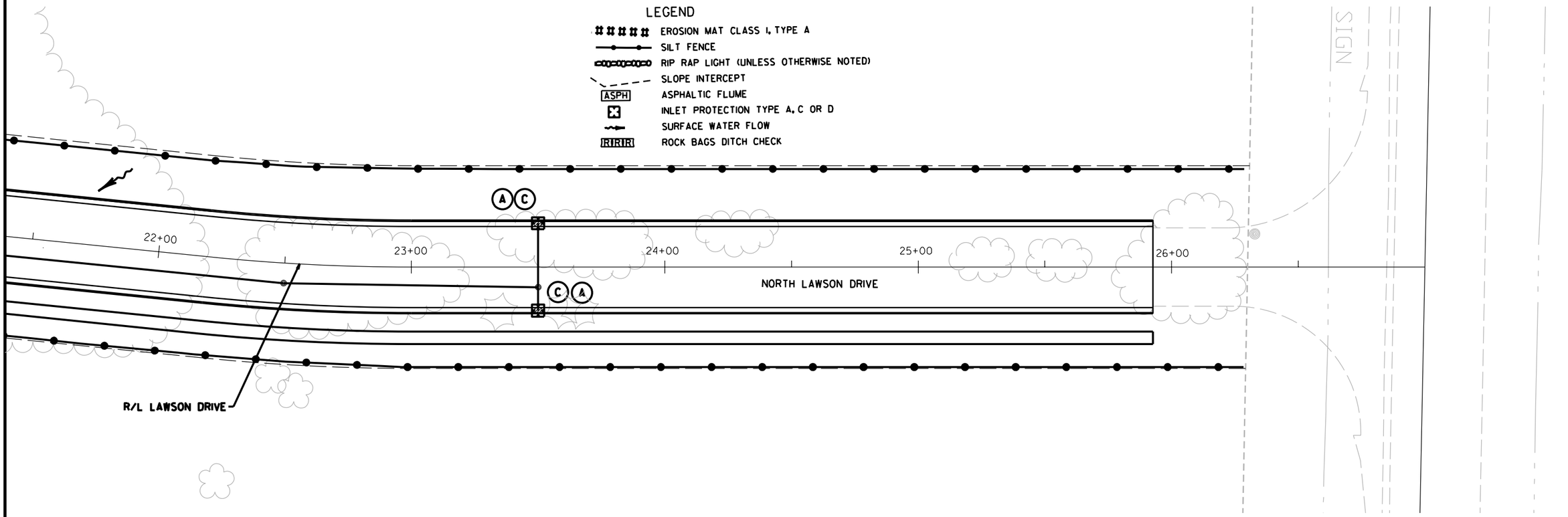
WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT CLASS I, TYPE A
- SILT FENCE
- RIP RAP LIGHT (UNLESS OTHERWISE NOTED)
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION TYPE A, C OR D
- SURFACE WATER FLOW
- RIRIRI — ROCK BAGS DITCH CHECK

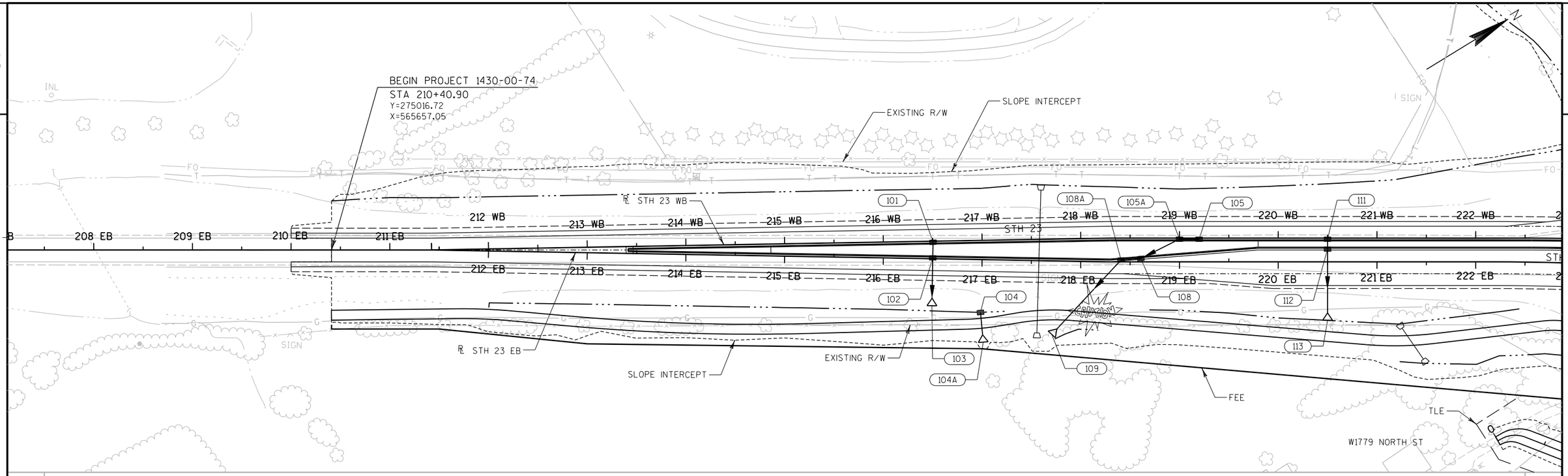


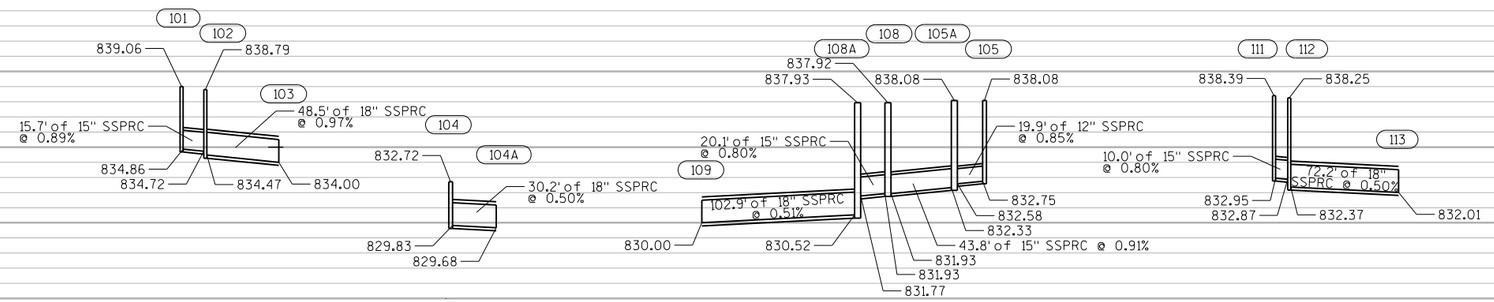
WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER
SEP 24, '13
EXP JUL 31, '14

PROJECT NO:1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	EROSION CONTROL PLAN - NORTH LAWSON DRIVE	SHEET 90	E

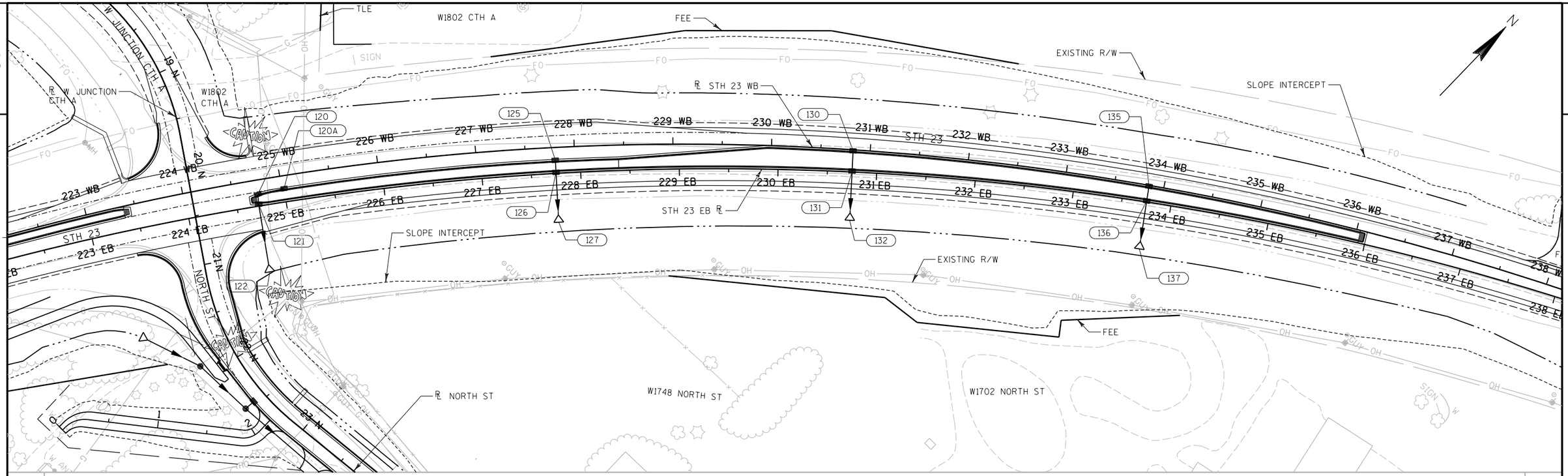
FILE NAME : S:\TOWNS\GREENLAKE\NLAWSONDRIVE\DGN\N-LAWSON-EC03.DGN PLOT DATE : 09-24-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=40'

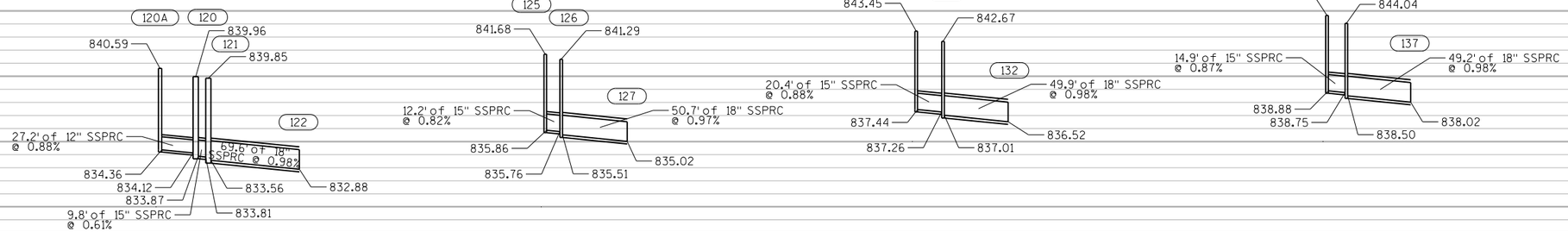
WISDOT/CADDS SHEET 42





PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER	SHEET 91	E

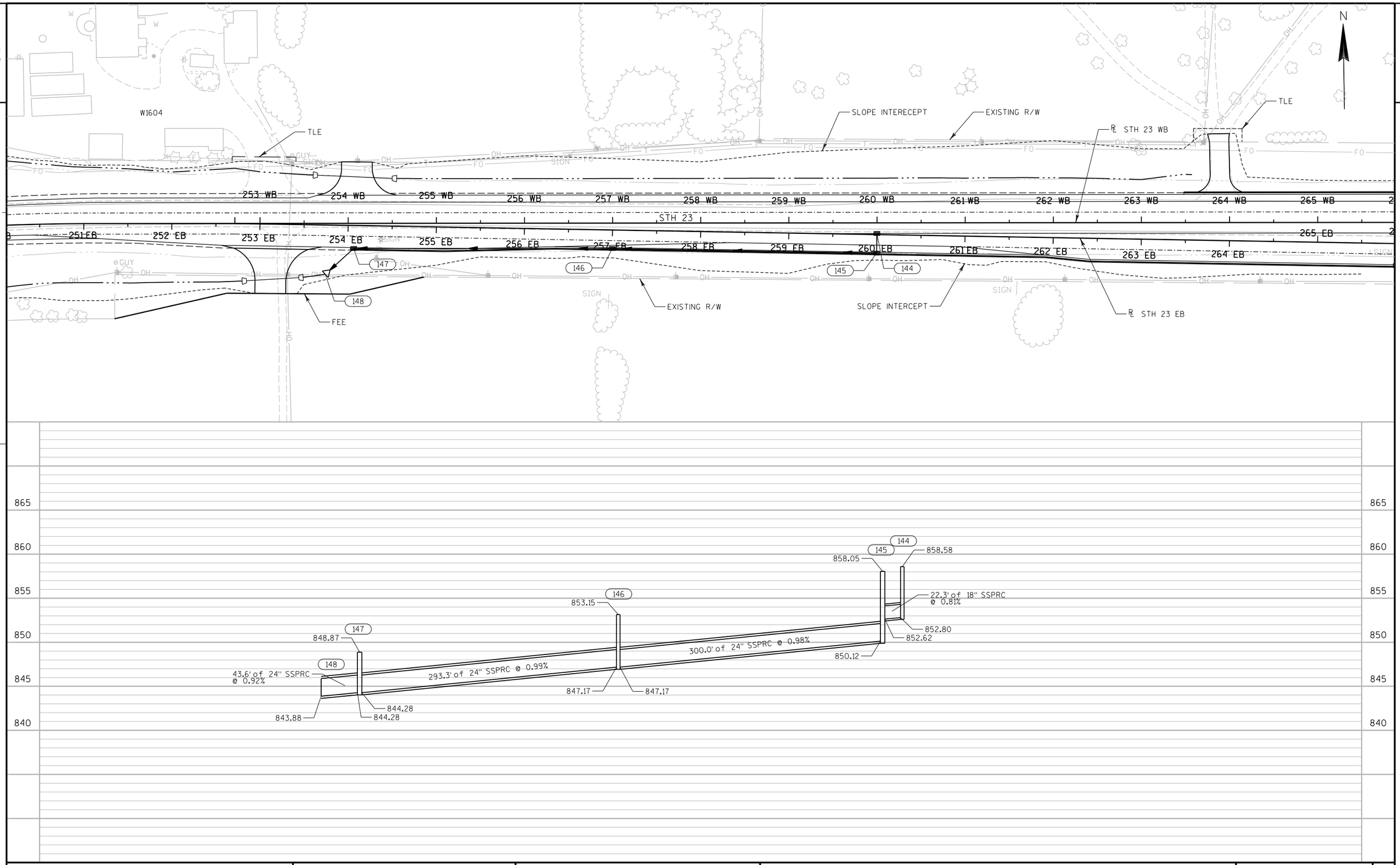




PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER	SHEET 92	E

FILE NAME : J:\Active\D4\STH 23\Main\022502_ss.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

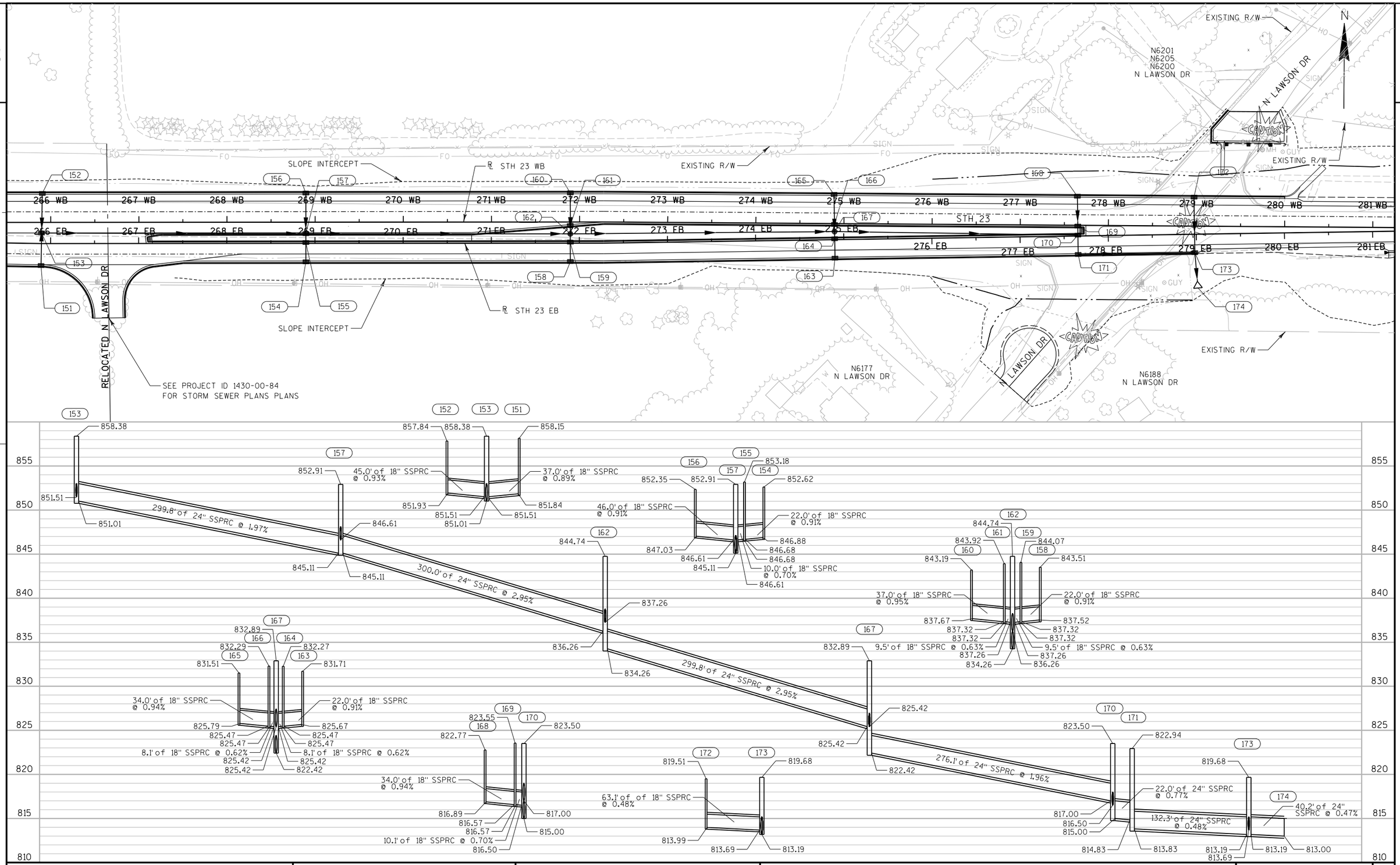
WISDOT/CADDS SHEET 41



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER	SHEET 93	E

FILE NAME : J:\Active\D4\STH 23\Main\022503_ss.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

2



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER	SHEET 94	E

2

N6226
N. LAWSON RD

N 6222
N LAWSON DR

BEGIN PROJECT 1430-00-76
STA 283+51.45
Y=277261.60
X=571968.88

PUCHYAN RIVER

272

273

SLOPE INTERCEPT

EXISTING R/W

WETLAND BOUNDARY

℄ STH 23 WB

FEE

179

178

177

81 WB | 282 WB | 283 WB | 288 WB | 289 WB | 290 WB | 291 WB | 292 WB | 293 WB | STH 23 | 294 WB | 295 WB | 296 WB

81 EB | 282 EB | 283 EB | 284 EB | 285 EB | 286 EB | 287 EB | 288 EB | 289 EB | 290 EB | 291 EB | 292 EB | 293 EB | 294 EB | 295 EB | 296 EB

STRUCTURE
B-24-09

EQUATION

PI 283+07.63 BACK
PI 283+19.47 AHEAD

270

271

END PROJECT 1430-00-76
STA 286+85.06

℄ STH 23 EB

175

176

WETLAND BOUNDARY

PUCHYAN RIVER

WETLAND BOUNDARY

EXISTING R/W

SLOPE INTERCEPT

W1307

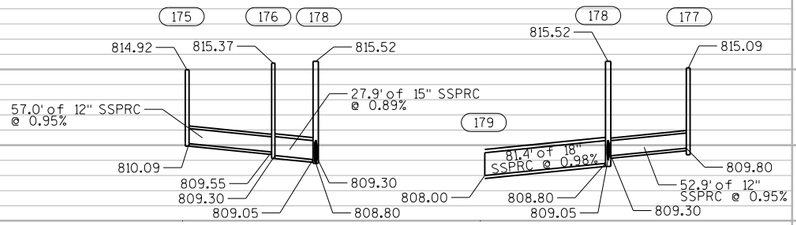
W1301

N

SIGN

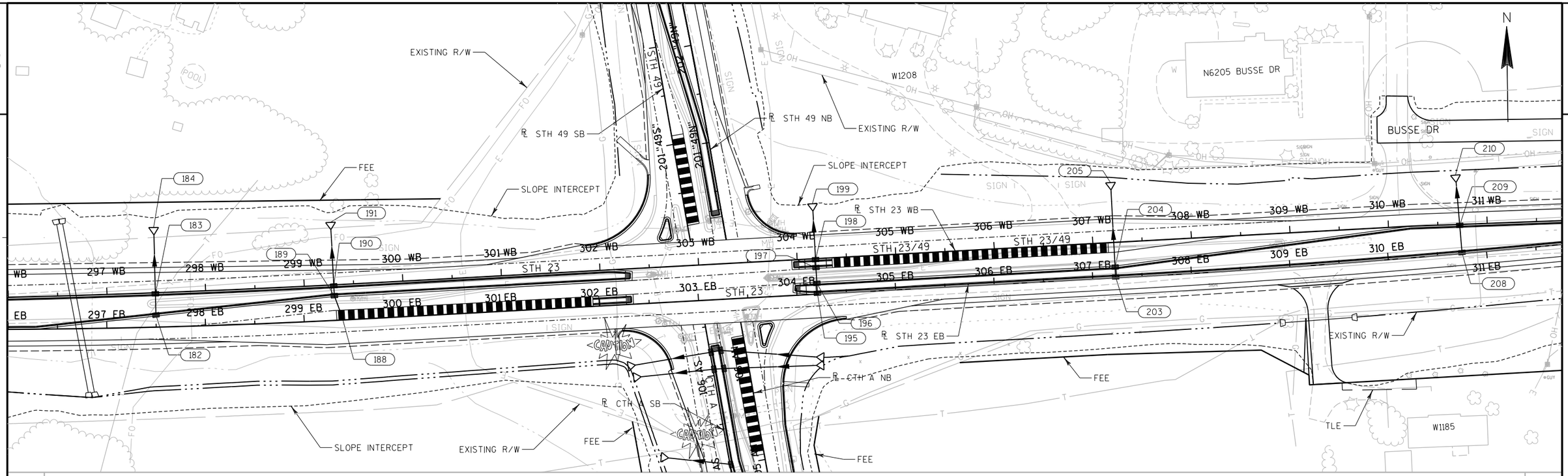
TOP

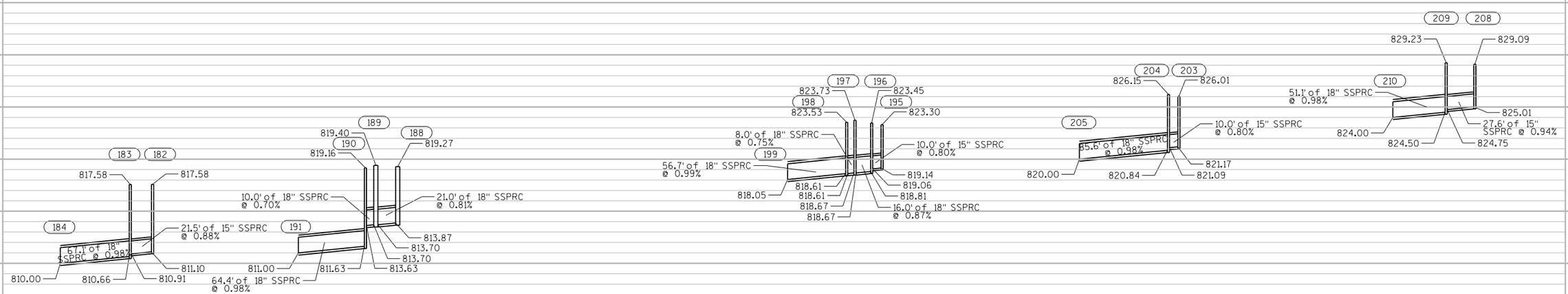
INL



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER	SHEET 95	E

FILE NAME : J:\Active\D4\STH 23\Main\022505_ss.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.



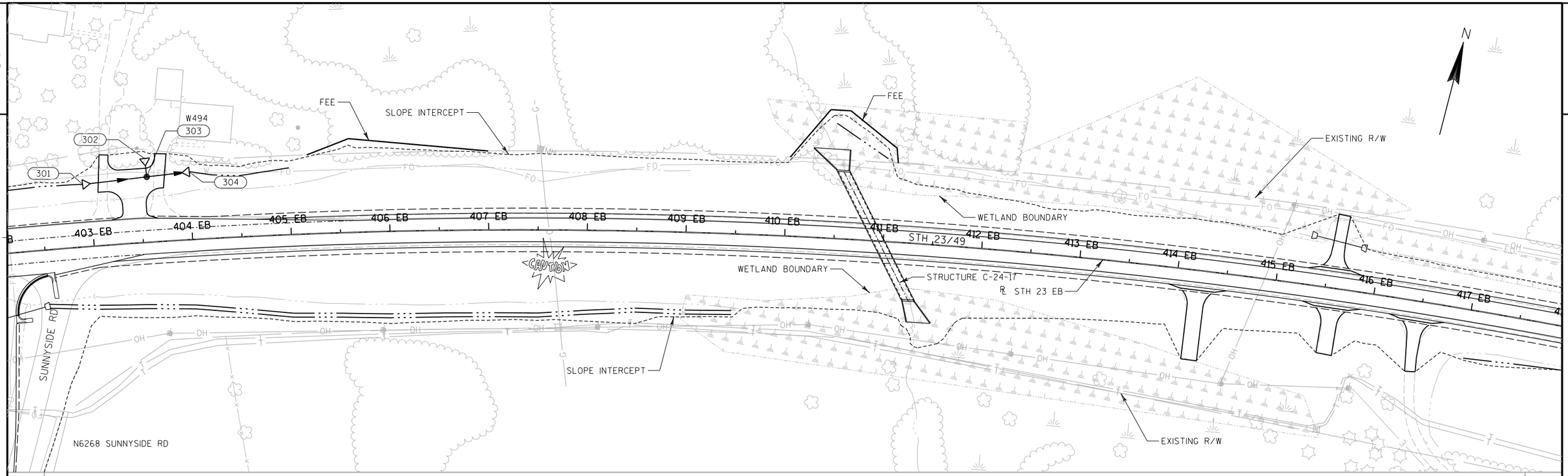


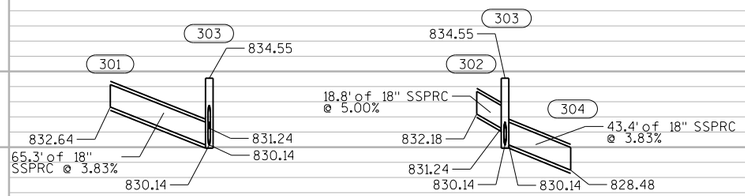
840 835 830 825 820 815 810 805 800 795

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER	SHEET 96	E

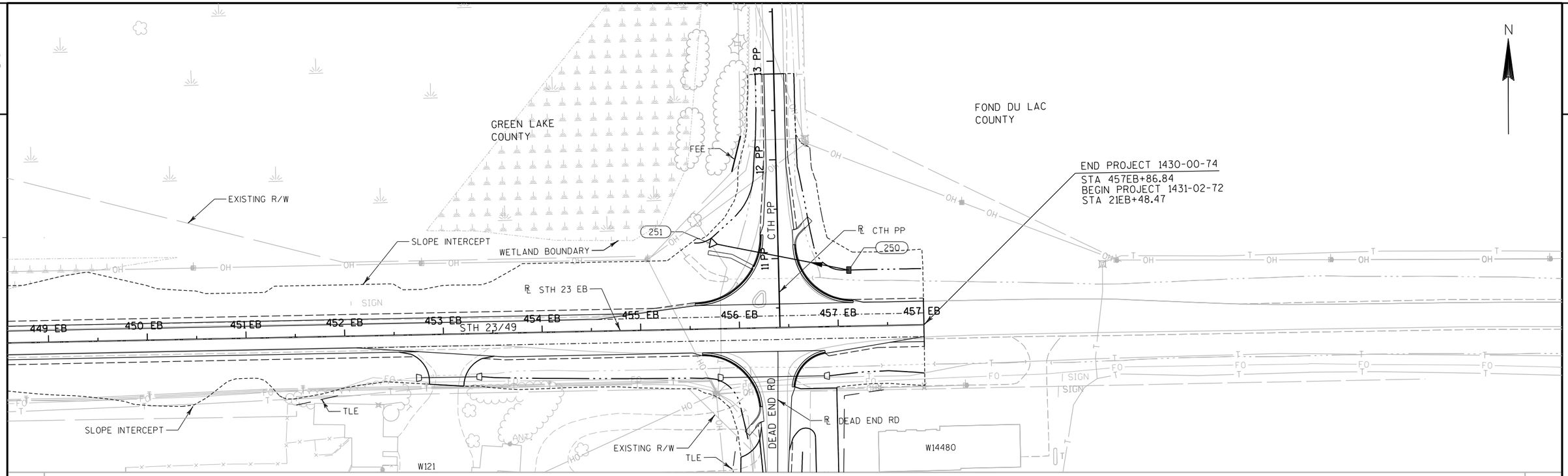
FILE NAME : J:\Active\D4\STH 23\Main\022506_ss.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

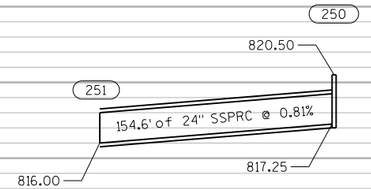
WISDOT/CADDS SHEET 41



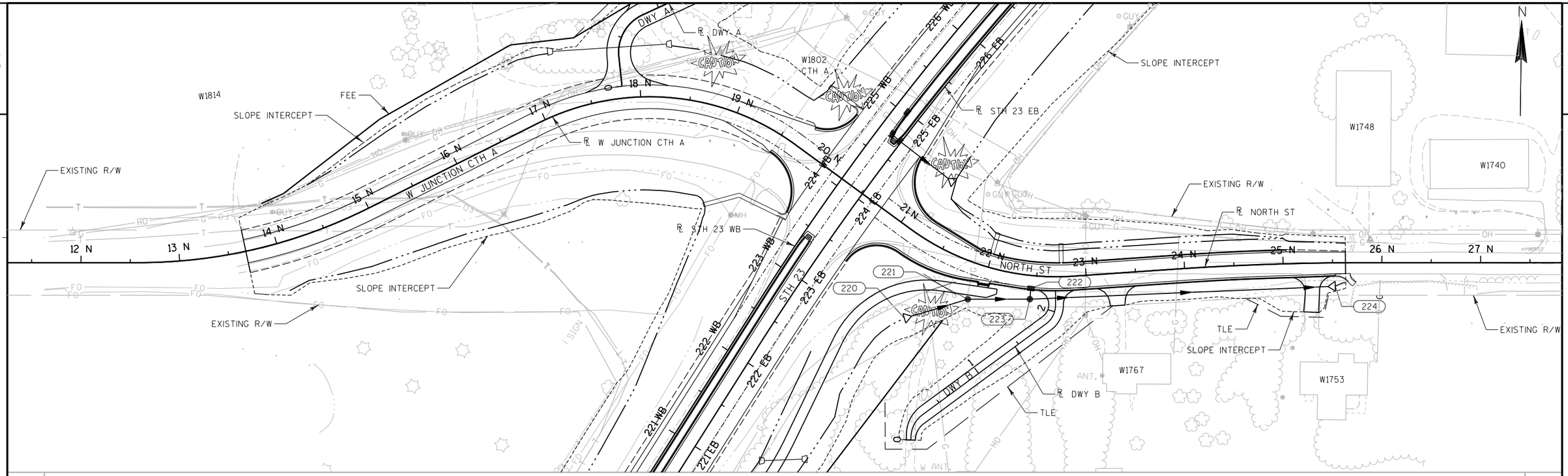


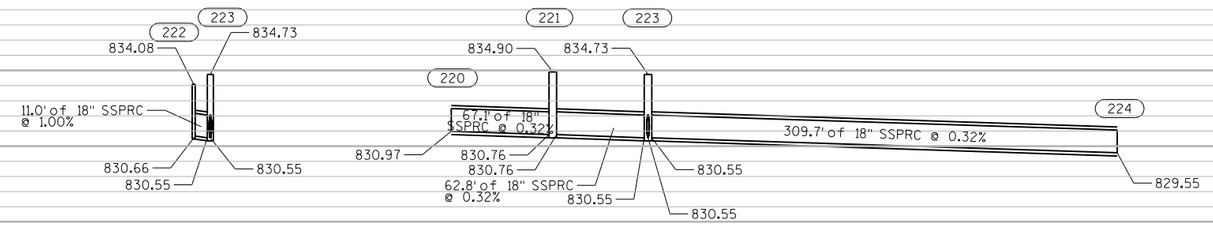
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER	SHEET 97	E





PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER	SHEET 98 E

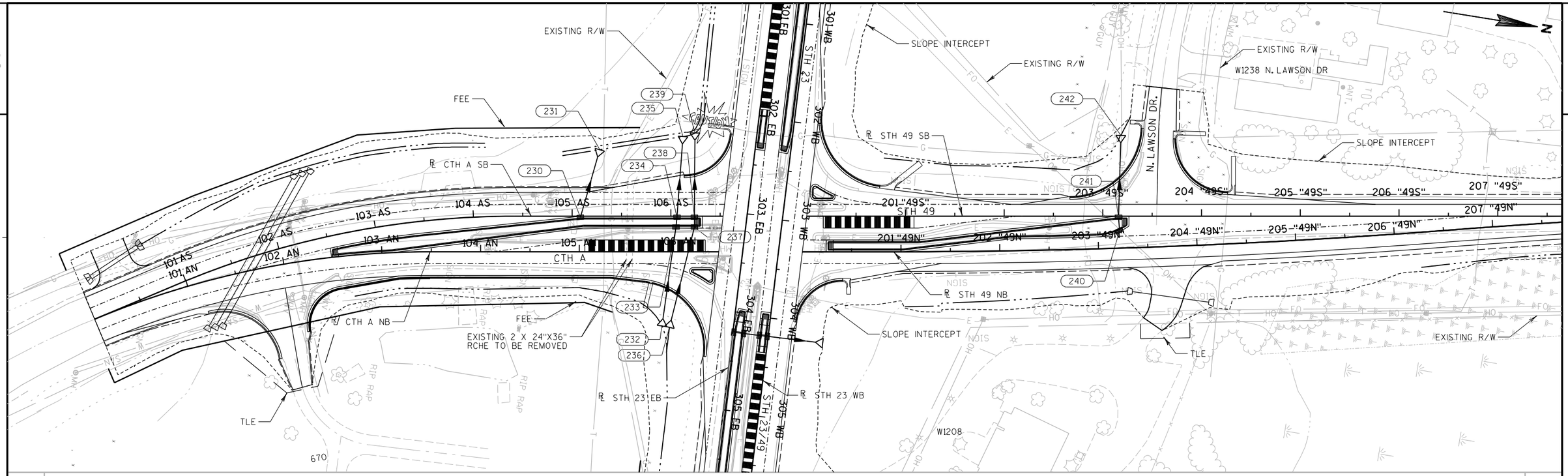


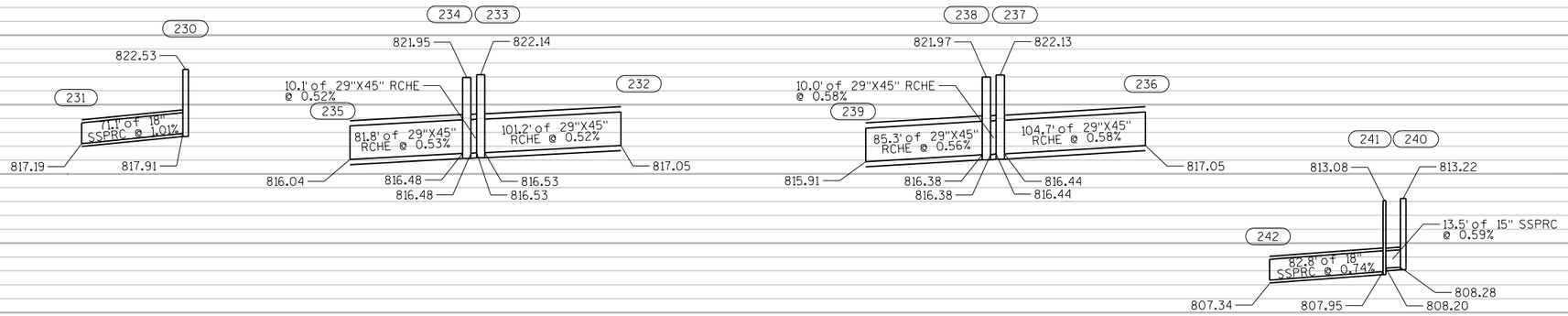


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER - W JUNCTION CTH A / NORTH ST	SHEET 99	E

FILE NAME : J:\Active\D4\STH 23\Main\022509_ss.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 41

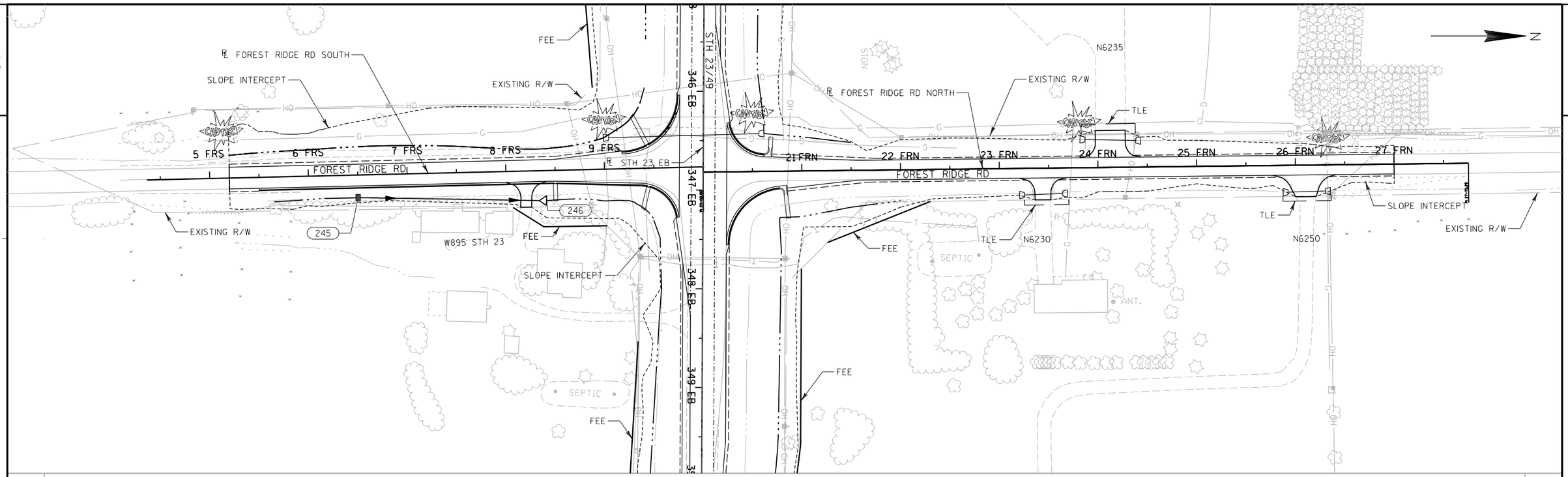


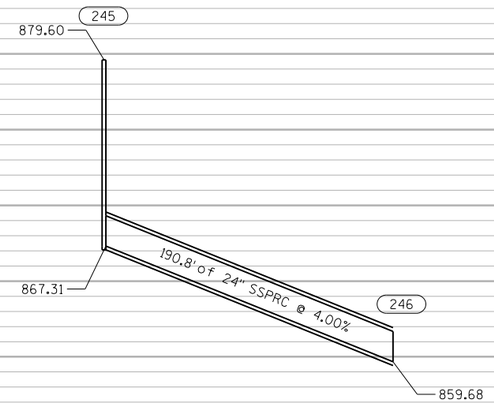


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER - CTH A / STH 49	SHEET 100	E

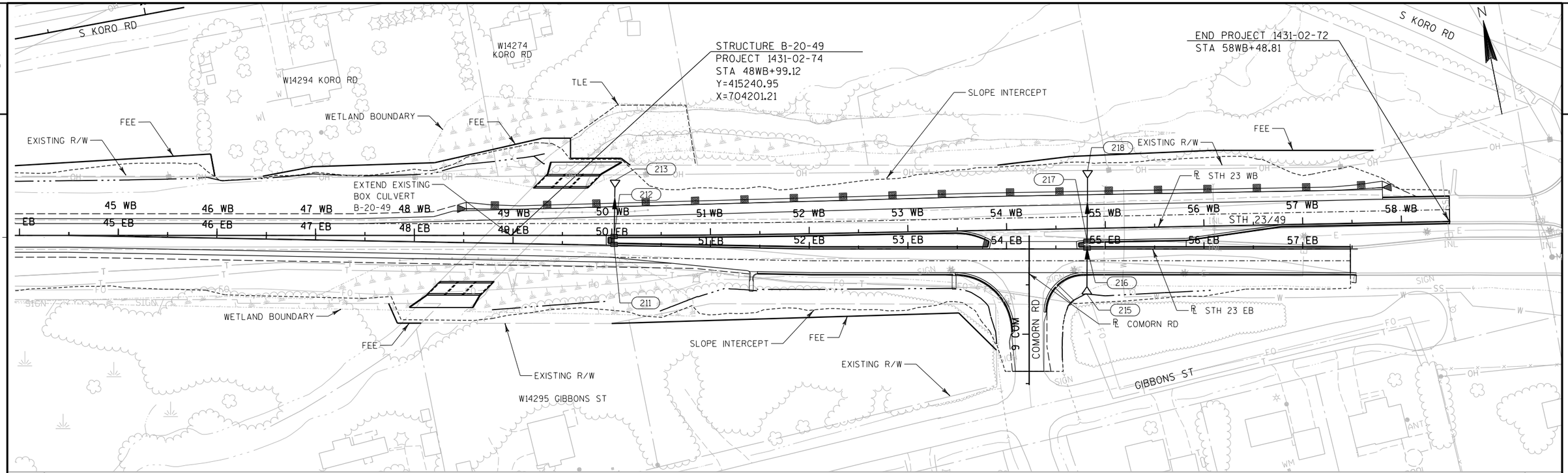
FILE NAME : J:\Active\D4\STH 23\Main\022510_ss.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0001 ' / in.

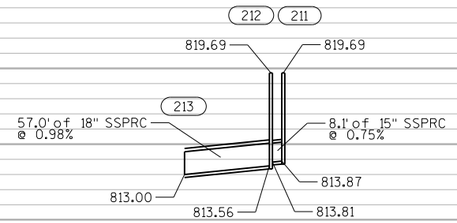
WISDOT/CADDS SHEET 41

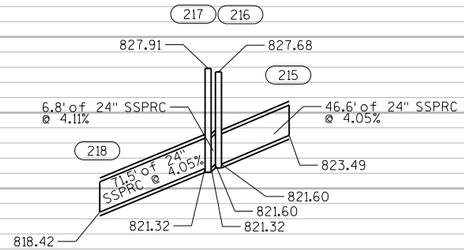




PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER - FOREST RIDGE ROAD	SHEET 101	E

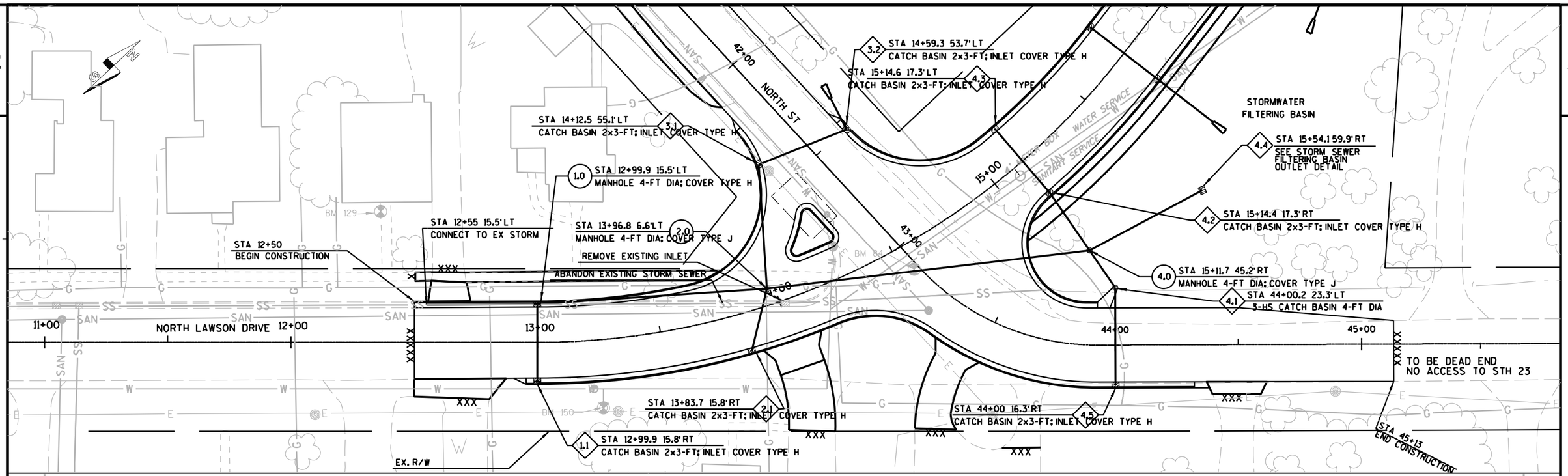


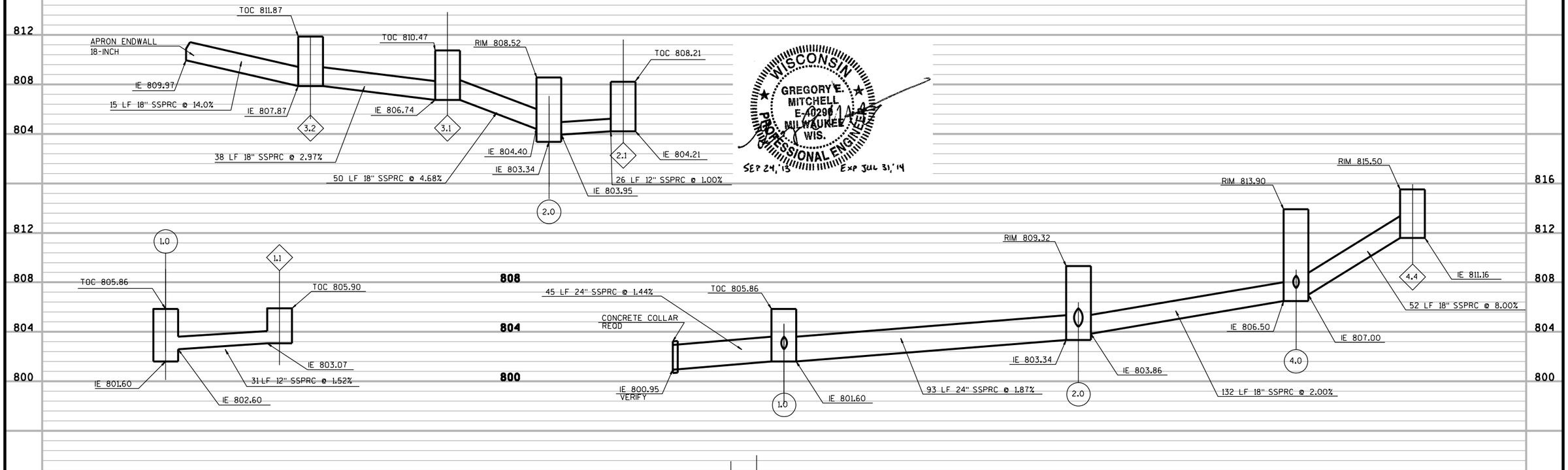




PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	STORM SEWER	SHEET 102	E

2





PROJECT NO:1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER - NORTH LAWSON DRIVE	SHEET 103	E

2

STA 16+50 17.3'RT
CATCH BASIN 2x3-FT; INLET COVER TYPE H

6.3

STA 16+56 17.3'LT
CATCH BASIN 2x3-FT; INLET COVER TYPE H

6.4

0.2 STA 15+74.7 17.3'LT
CATCH BASIN 2x3-FT; INLET COVER TYPE H

6.0 STA 16+50 8'RT
MANHOLE 4-FT DIA; COVER TYPE J

8.2 STA 20+00 17.3'LT
CATCH BASIN 2x3-FT; INLET COVER TYPE H

8.0 STA 20+00 8'RT
MANHOLE 4-FT DIA; COVER TYPE J

16+00 17+00 18+00 19+00 20+00 21+00

WATER SERVICE W
SAN W
SANITARY SERVICE

0.1 STA 15+74.7 17.3'RT
CATCH BASIN 2x3-FT; INLET COVER TYPE H

6.2 STA 16+56 17.3'RT
CATCH BASIN 2x3-FT; INLET COVER TYPE H

6.1 STA 16+50 17.3'RT
CATCH BASIN 2x3-FT; INLET COVER TYPE H

5.0 STA 16+50 53.3'RT
MANHOLE 4-FT DIA; COVER TYPE H

7.0 STA 18+33.1 8.7'RT
MANHOLE 4-FT DIA; COVER TYPE J

TEMPORARY LIMITED EASEMENT

8.1 STA 20+00 17.3'RT
CATCH BASIN 2x3-FT; INLET COVER TYPE H

N

824 820 816 832 828 836 844 840

TOC 823.26 RIM 823.04 TOC 823.26 TOC 821.90

IE 819.16 IE 818.54 IE 818.04 IE 817.76 IE 816.63 IE 816.00

APRON ENDWALL 18-INCH

25 LF 12" SSPRC @ 2.48%
9 LF 18" SSPRC @ 3.11%
35 LF 18" SSPRC @ 3.22%
20 LF 18" SSPRC @ 3.15%

6.3 6.0 6.1 5.0

RIM 834.80 IE 829.55 IE 829.80

166 LF 15" SSPRC @ 3.25%

7.0

RIM 840.44 IE 835.19 IE 835.44

250 LF 12" SSPRC @ 2.18%

8.0

6.0 RIM 823.04 IE 818.04

182 LF 18" SSPRC @ 6.32%

TOC 823.26 TOC 823.68 TOC 823.26 TOC 823.68

6 LF 12" SSPRC @ 1.67%

IE 819.16 IE 819.26 IE 817.76 IE 817.86

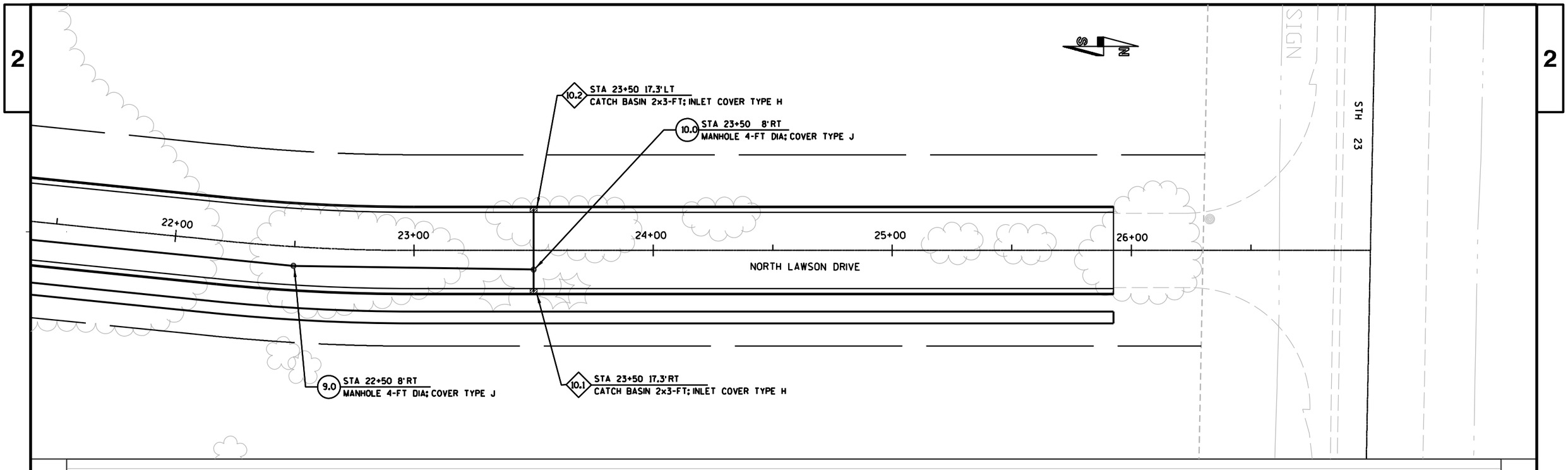
6.3 6.4 6.1 6.2

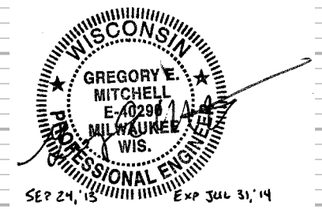
WISCONSIN
GREGORY E. MITCHELL
E-40298
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER
SEP 24, '13
Exp JUL 31, '14

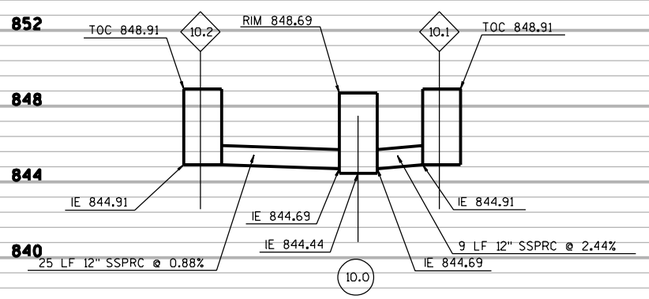
PROJECT NO:1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER - NORTH LAWSON DRIVE	SHEET 104 E

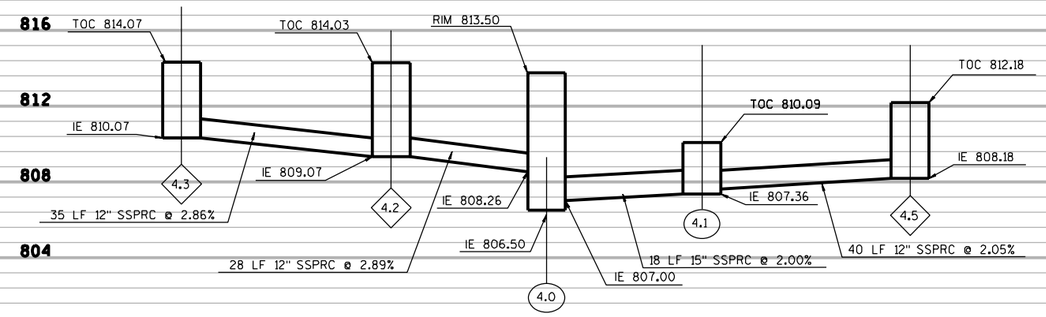
FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-SS02.DGN PLOT DATE : 09-24-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=40'

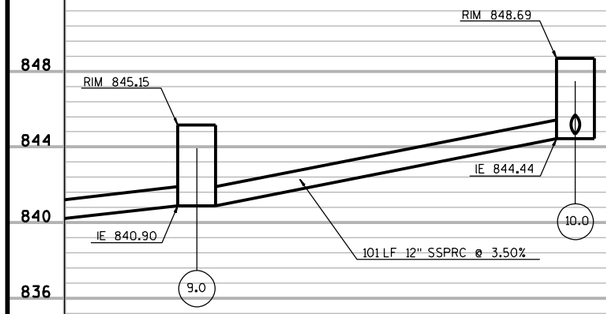
WISDOT/CADDS SHEET 41

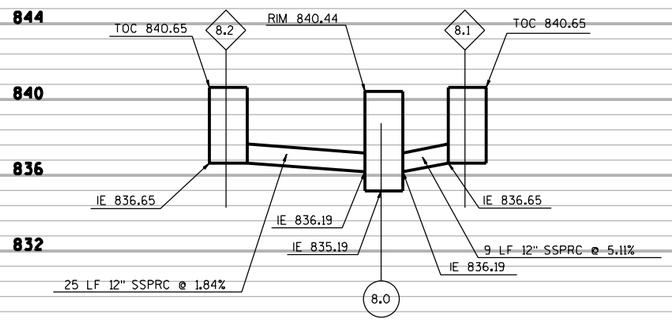


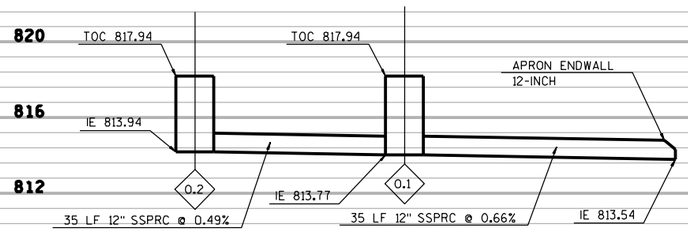








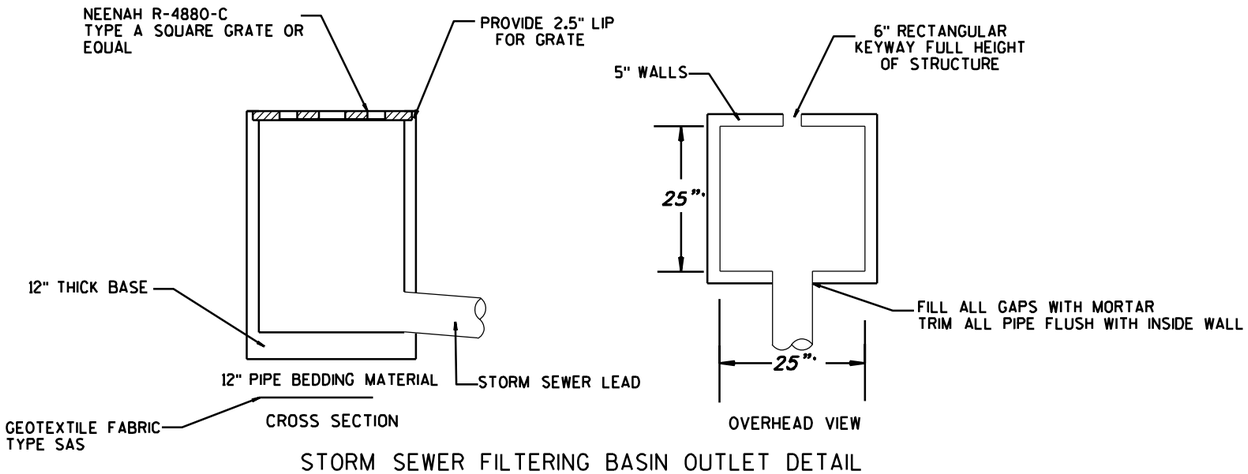




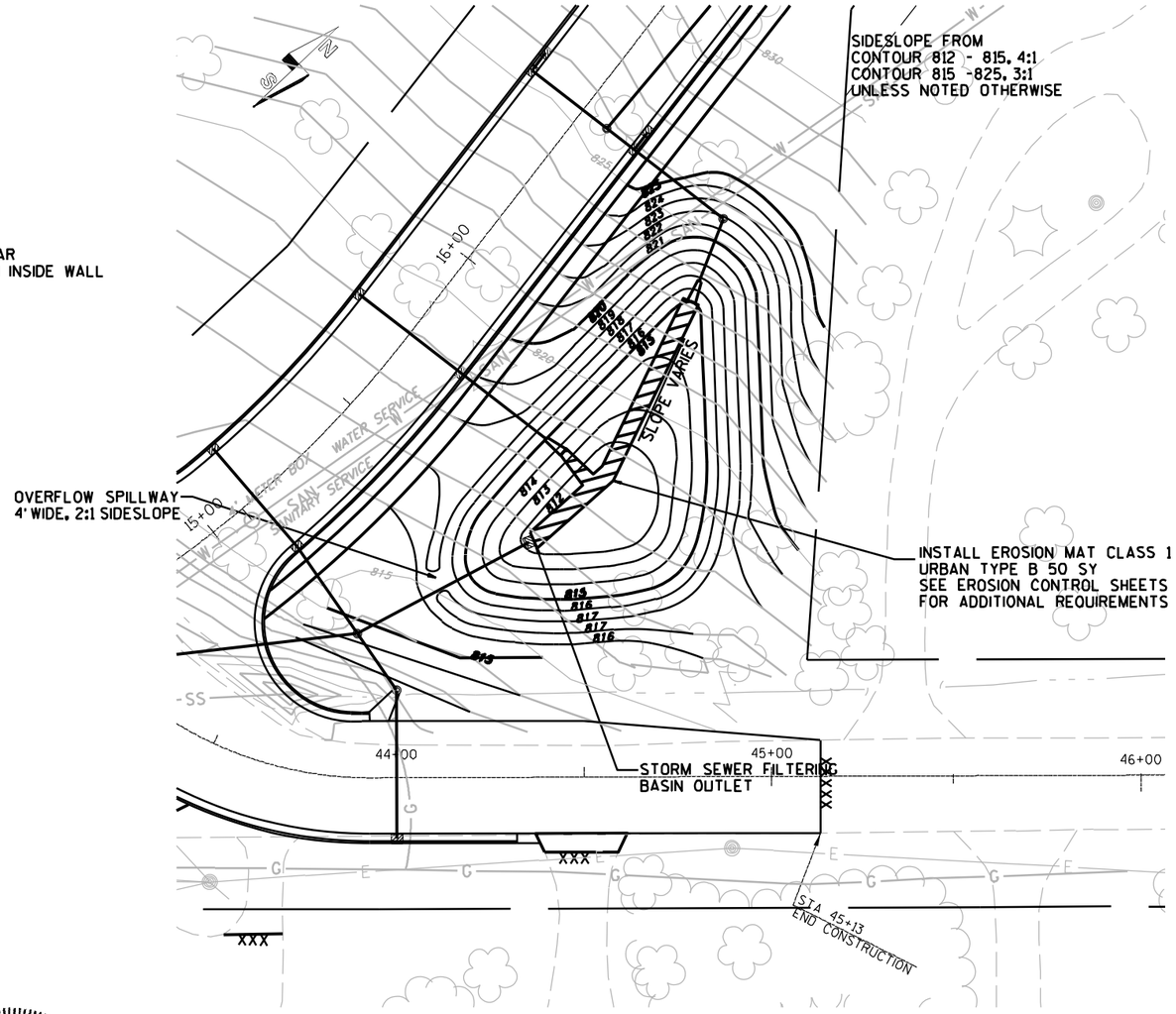
PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER - NORTH LAWSON DRIVE	SHEET 105	E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-SS03.DGN PLOT DATE : 09-24-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=40'

WISDOT/CADDS SHEET 41



STORM SEWER FILTERING BASIN OUTLET DETAIL



STORM SEWER FILTERING BASIN
DETAIL

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	STORM SEWER - NORTH LAWSON DRIVE	SHEET	E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-SSDETAIL.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

UTILITY CONTACTS

Alliant Energy
506 Fenton Street
Ripon, WI 54971
Tom Walters
P 920-748-4013
F 920-748-4090

CenturyLink
P.O. Box 98
Randolph, WI 53956
Tim Kroeze
P 920-326-2224
F 920-326-4127

Charter Communications
W7185 STH 49, Suite 1
Waupun, WI 53963
Tony Klatt
P 920-263-0062
F 920-345-1118

STA 12+55 10.8'LT
INSTALL SANITARY SEWER MANHOLE
48-INCH MH 1
CONNECT TO EXISTING SANITARY SEWER

STA 12+50
BEGIN CONSTRUCTION

STA 13+10 8.17'RT
INSTALL GATE VALVE AND BOX 8-INCH

INSTALL WATER SERVICE LATERAL
VERIFY LOCATION

INSTALL SAN SERVICE LATERAL
VERIFY LOCATION

ABANDON EXISTING SANITARY SEWER

INSTALL SANITARY SEWER
8-INCH 225 LF

STA 42+70.6 13'RT
EXISTING CISTERN TO REMAIN

STA 15+43.1 23.8'RT
INSTALL GATE VALVE AND BOX 10-INCH

STA 15+32.8 21.5'LT
INSTALL HYDRANT WITH
GATE VALVE AND BOX 6-INCH
TEE FITTING 10-INCH X 6-INCH
WATERMAIN 6-INCH 46LF

INSTALL WATERMAIN 10-INCH, 72 LF
FROM REDUCER TO HYD TEE

REMOVE EXISTING
MANHOLE

STA 15+13 28.5'RT
WATER MAIN INSULATION 8LF
AT STORM SEWER CROSSING

STA 14+94.6 33.4'RT
WATER MAIN INSULATION 8LF
AT STORM SEWER CROSSING

STA 14+89.4 35'RT
DEFLECT WATERMAIN

SEE NORTH ST PROFILE

NORTH LAWSON DRIVE 12+00

13+00

14+00

15+00

44+00

45+00

NORTH ST

STA 12+54.1 18.9'RT
INSTALL 45 DEGREE BEND FITTING 8-INCH

STA 12+50 18.9'RT
CONNECT TO EXISTING WATERMAIN
INSTALL REDUCER FITTING 8-INCH X 6-INCH

STA 12+65.8RT
INSTALL 45 DEGREE BEND FITTING 8-INCH

STA 13+05 20.04'LT
INSTALL HYDRANT WITH
GATE VALVE AND BOX 6-INCH
TEE FITTING 8-INCH X 6-INCH
WATERMAIN 6-INCH 12LF

REMOVE EXISTING HYDRANT

INSTALL WATERMAIN 8-INCH 246LF
FROM CONNECTION TO REDUCER

ABANDON EXISTING WATERMAIN

STA 14+41.2 45.7'RT
INSTALL 45 DEGREE BEND FITTING 8-INCH

REMOVE EXISTING MANHOLE

STA 14+74.6 37.3'RT
INSTALL REDUCER FITTING 10-INCH X 8-INCH

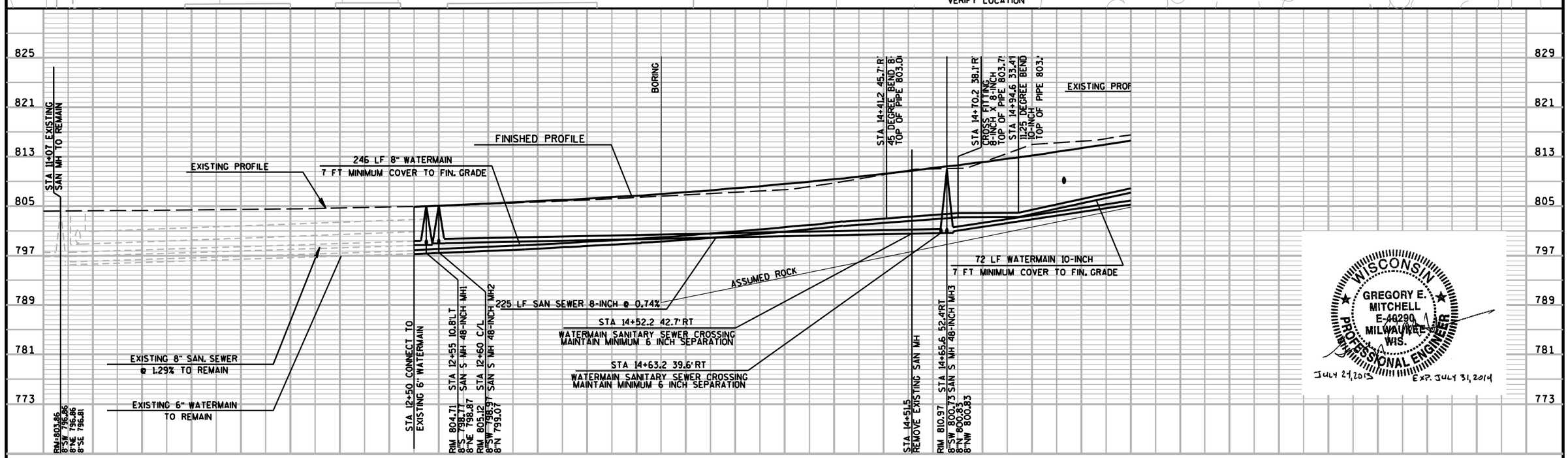
STA 14+70.2 38.1'RT
INSTALL CROSS FITTING 8-INCH X 8-INCH
CAP FITTING 8-INCH TO EAST

STA 14+65.6 52.4'RT
INSTALL SANITARY SEWER MANHOLE
48-INCH MH 3

INSTALL WATER SERVICE LATERAL
VERIFY LOCATION

STA 45+13
END CONSTRUCTION

TO BE DEAD END
NO ACCESS TO STH 23



WISCONSIN
GREGORY E. MITCHELL
E-46290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER
JULY 24, 2013
EXP. JULY 31, 2014

PROJECT NO:1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	SANITARY SEWER & WATERMAIN - NORTH LAWSON DRIVE	SHEET E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-SAN01.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 410

STA 17+94.6 20.2'RT
INSTALL 11.25 DEGREE BEND FITTING 10-INCH

STA 19+00 22.0'RT
INSTALL 11.25 DEGREE BEND FITTING 10-INCH

STA 19+08 21.5'LT
INSTALL HYDRANT WITH GATE VALVE AND BOX 6-INCH TEE FITTING 10-INCH X 6-INCH WATERMAIN 6-INCH, 43.5LF CAP HYDRANT TEE TO NORTH

INSTALL WATERMAIN 10-INCH, 257 LF
FROM HYD TEE TO 11.25 DEGREE BEND

INSTALL WATERMAIN 10-INCH 109 LF
FROM 11.25 TO HYD TEE

STA 19+08 10.1'RT
INSULATE 8LF OF WATER MAIN AT STORM SEWER CROSSING

STA 17+76.5 29.3'RT
INSTALL SANITARY SEWER MANHOLE 48-INCH SAN MH 4

INSTALL SANITARY SEWER
8-INCH 326 LF

16+00 17+00 18+00 19+00 20+00 21+00

NORTH LAWSON DRIVE

WATER SERVICE

STA 16+50 22'RT
WATER MAIN INSULATION 8LF
AT STORM SEWER CROSSING

INSTALL SANITARY SEWER
8-INCH 117 LF

STA 19+00 30'RT
INSTALL SANITARY SEWER MANHOLE
48-INCH SAN MH 5

TEMPORARY LIMITED EASEMENT

STA 15+74.7 22'RT
WATER MAIN INSULATION 8LF
AT STORM SEWER CROSSING

INSTALL WATER SERVICE LATERAL &
SANITARY SERVICE LATERAL
VERIFY LOCATION

RIM 834.35 STA 17+76.5 29.3'RT
8"SE 819.55 SAN S MH 48-INCH MH4
8"N 819.65

BORING B-4

FINISHED PROFILE

EXISTING PROFILE

ASSUMED ROCK

109 LF WATERMAIN 10-INCH
7 FT MINIMUM COVER TO FIN. GRADE

257 LF WATERMAIN 10-INCH
7 FT MINIMUM COVER TO FIN. GRADE

326 LF SAN SEWER 8-INCH @ 5.75%

117 LF SAN. SEWER 8-INCH @ 3.30%

RIM 839.17 STA 19+00 30.0'RT
8"S 823.41 SAN S MH 48-INCH MH5
8"N/W 823.61

857 849 841 833 825 817 809 801

WISCONSIN
GREGORY E. MITCHELL
E-46290
MILWAUKEE
WIS.
PROFESSIONAL ENGINEER
JULY 24, 2013
EXP. JULY 31, 2014

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	SANITARY SEWER & WATERMAIN - NORTH LAWSON DRIVE	SHEET E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-SAN02.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 41a

STA 40+76.4 11'RT
INSTALL 45 DEGREE BEND FITTING 8-INCH

STA 40+95.5 8'LT
INSTALL 45 DEGREE BEND FITTING 8-INCH

INSTALL WATERMAIN 8-INCH, 269 LF
FROM CONNECTION TO TEE

STA 43+21.3 8.4'LT
WATER MAIN INSULATION 8LF
AT STORM SEWER CROSSING

STA 42+55.9 8'LT
INSULATE 8LF OF WATER MAIN
AT STORM SEWER CROSSING

STA 40+75
BEGIN CONSTRUCTION

STA 40+71.4 11'RT
CONNECT TO EXISTING WATERMAIN
INSTALL REDUCER FITTING 8-INCH X 6-INCH

STA 40+92.9 7.1'RT
INSTALL SANITARY SEWER MANHOLE
48-INCH MH 6
CONNECT TO EXISTING SANITARY SEWER

INSTALL SANITARY SEWER
8-INCH 262 LF

ABANDON EXISTING SANITARY SEWER

STA 42+70 8'LT
DEFLECT WATERMAIN

STA 43+38.2 5.8'LT
INSTALL WATERMAIN 8-INCH 5LF
INSTALL GATE VALVE AND BOX 8-INCH

XXXXX TO BE DEAD END
NO ACCESS TO STH 23

STA 45+13
END CONSTRUCTION

NORTH ST

R/L LAWSON DR

EXISTING PROFILE

FINISHED PROFILE

STA 40+92.9 / 7.1'RT
SAN SEWER MH 6
RIM 815.07
8"E 804.50
8"W 804.60

STA 43+21.3 /8.4'LT
22.5 DEGREE BEND FITTING
TOP OF PIPE 802.40

STA 14+70.2 /38.1'RT
TEE FITTING
TOP OF PIPE 803.79

STA 14+65.6 / 52.4'RT
SAN SEWER MH 3
RIM 810.97
8"SW 800.73
8"NW 800.83
8"W 800.83

EXISTING 8" SAN SEWER
@ 0.91% TO REMAIN

262 LF SAN SEWER 8-INCH @ 1.4%

820 816 812 808 804 800 796 792

40+00 41+00 42+00 43+00 44+00 45+00

GREGORY E. MITCHELL E-46290 MILWAUKEE, WIS. PROFESSIONAL ENGINEER
JULY 29, 2013 EXP. JULY 31, 2014

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	SANITARY SEWER & WATERMAIN - NORTH LAWSON DRIVE	SHEET E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-SAN04.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 410

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

BEGIN PROJECT 1430-00-74
STA 210EB+40.90
Y= 275016.72
X= 565657.05

1R01 NO PASSING ZONE REMOVE

℄ STH 23 WB

℄ STH 23 EB

STH 23

203 EB 204 EB 205 EB 206 EB 207 EB 208 EB 209 EB 210 EB 211 EB 212 EB 213 EB 214 EB 215 EB 216 EB 217 EB 218 EB

212 WB 213 WB 214 WB 215 WB 216 WB 217 WB 218 WB

JCT COUNTY A REMOVE 1R02

Green Lake → REMOVE 1R03

18 N

19 N

20 N

21 N

22 N NORTH ST 23

℄ W JUNCTION CTH A

℄ NORTH ST

1R04 REMOVE

1R05 23 REMOVE

1R06 STOP REMOVE

1R07 STOP REMOVE

1R08 REMOVE

W JUNCTION CTH A

218 WB 219 WB 220 WB 221 WB 222 WB 223 WB 224 WB 225 WB 226 WB 227 WB 228 WB 229 WB 230 WB 231 WB 232 WB 233

218 EB 219 EB 220 EB 221 EB 222 EB 223 EB 224 EB 225 EB 226 EB 227 EB 228 EB 229 EB 230 EB 231 EB 232 EB 233

MATCHLINE STA. 233EB+00

1R09 COUNTY A REMOVE

1R10 STOP REMOVE

North St. REMOVE AND SALVAGE BY LOCAL MUNICIPALITY

1R11 STOP REMOVE

1R12 23 REMOVE

EAST 23 REMOVE 1R13

ADOPT-A-HIGHWAY SPONSOR ROTARY CLUB OF GREEN LAKE MOVE 1M14

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS	SHEET 110	E

2

2

℄ STH 23 WB

STH 23

℄ STH 23 EB

234 WB 235 WB 236 WB 237 WB 238 WB 239 WB 240 WB 241 WB 242 WB 243 WB

234 EB 235 EB 236 EB 237 EB 238 EB 239 EB 240 EB 241 EB 242 EB 243 EB 244 EB 245 EB 246 EB 247 EB 248 EB

MATCHLINE STA. 233EB+00

EB

WB

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

XXX DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

N

℄ STH 23 WB

STH 23

℄ STH 23 EB

248 EB 249 EB 250 EB 251 EB 252 EB 253 EB 254 EB 255 EB 256 EB 257 EB 258 EB 259 EB 260 EB 261 EB 262 EB 263

253 WB 254 WB 255 WB 256 WB 257 WB 258 WB 259 WB 260 WB 261 WB 262 WB 263

MATCHLINE STA. 263EB+00

SPEED LIMIT 45

REMOVE

2R01

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS	SHEET 111	E

FILE NAME : J:\Active\D4\STH 23\Main\023202_es.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

MATCHLINE STA. 263EB+00

STH 23

WB: 264 WB, 265 WB, 266 WB, 267 WB, 268 WB, 269 WB, 270 WB, 271 WB, 272 WB, 273 WB, 274 WB, 275 WB, 276 WB, 277 WB, 278 WB

EB: 264 EB, 265 EB, 266 EB, 267 EB, 268 EB, 269 EB, 270 EB, 271 EB, 272 EB, 273 EB, 274 EB, 275 EB, 276 EB, 277 EB, 278 EB

℄ STH 23 WB

℄ STH 23 EB

3R01 SPEED LIMIT 55 — REMOVE

3R02 — REMOVE

3R03 — REMOVE

3R04 SPEED LIMIT 45 — REMOVE

3R05 WEST 23 — REMOVE

3R06 SLOWER TRAFFIC KEEP RIGHT — REMOVE

3R14 STOP — REMOVE

3R07 ONCOMING TRAFFIC USES CENTER LANE — REMOVE

3R08 SPEED LIMIT 45 — REMOVE

.1 DARTFORD INN/MOTEL — MOVED BY DERSE CO 1-800-345-5772

3R09 — REMOVE

3R10 — REMOVE

GREEN LAKE BUSINESS DISTRICT →

3R11 — REMOVE

3R12 SPEED LIMIT 45 — REMOVE

3R13 WEST BUSINESS 23 → — REMOVE

STH 23
N LAWSON DR
REMOVE AND SALVAGE BY LOCAL MUNICIPALITY

N LAWSON DR

N

REMOVE AND SALVAGE BY LOCAL MUNICIPALITY
STH 23
N LAWSON DR

3R15 45 TON BRIDGE .3 MILES AHEAD — REMOVE

3R16 BUSINESS 23 ← — REMOVE

3R17 — REMOVE

3R18 DARTFORD HIST. SOCIETY ←256 — REMOVE

3R19 THRASHER'S OPERA HOUSE ←282 — REMOVE

3R20 GREEN LAKE BUSINESS DISTRICT ← — REMOVE

3R21 — REMOVE

3R22 3R23 PUCHYAN RIVER — REMOVE

3R24 — REMOVE

3R25 BUSINESS 23 ↰ WEST 23 ↑ — REMOVE

3R26 NO PASSING ZONE — REMOVE

3M27 ADOPT-A-HIGHWAY SPONSOR G.L. ROTARY CLUB — MOVE

279 WB, 280 WB, 281 WB, 282 WB, 283 WB, 284 WB, 285 WB, 286 WB, 287 WB, 288 WB, 289 WB, 290 WB, 291 WB, 292 WB, 293 WB

279 EB, 280 EB, 281 EB, 282 EB, 283 EB, 284 EB, 285 EB, 286 EB, 287 EB, 288 EB, 289 EB, 290 EB, 291 EB, 292 EB, 293 EB

℄ STH 23 WB

℄ STH 23 EB

3R28 STOP — REMOVE

3R29 EAST 23 — REMOVE

3R30 — REMOVE

PUCHYAN R.

3R31 — REMOVE

3R32 SPEED LIMIT 45 — REMOVE

3R33 NO PASSING ZONE — REMOVE

3R34 COUNTY A ↱ — REMOVE

3R35 NORTH EAST SOUTH 49 ↰ 23 ↑ 49 ↑ — REMOVE

MATCHLINE STA. 293EB+50

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS	SHEET 112	E

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SEE STH 49/ CTH A PLAN SHEET FOR SIGN REMOVALS ON SIDEROADS

REMOVE SMALL SIGN SUPPORTS ONLY 4R10 4R11 4R12 4R13

4R01 JCT BUSINESS 23 — REMOVE

4R02 SPEED LIMIT 45 — REMOVE

4R03 — REMOVE

4R04 PRINCETON 10 — REMOVE

4R05 WEST 23 — REMOVE

℄ STH 49 SB

℄ STH 49 NB

202 "49S" / 201 "49S" / 202 "49N" / 201 "49N"

STH 49

4R06 COUNTY A NORTH 49 — REMOVE

4R08 4R09 STOP — REMOVE

4R14 PRINCETON / BERLIN — REMOVE

MATCHLINE STA. 293EB+50

STH 23

294 WB 295 WB 296 WB 297 WB 298 WB 299 WB 300 WB 301 WB 302 WB 303 WB 304 WB 305 WB 306 WB 307 WB 308 WB

294 EB 295 EB 296 EB 297 EB 298 EB 299 EB 300 EB 301 EB 302 EB 303 EB 304 EB 305 EB 306 EB 307 EB 308 EB

STH 23/49

℄ STH 23 WB

℄ STH 23 EB

4R15 H — REMOVE

4R16 SPEED LIMIT 45 — REMOVE

CROSSROADS MARKET & FUEL .3 — MOVED BY DERSE CO 1-800-345-5772

4R17 — REMOVE

4R18 RIPON / BERLIN — REMOVE

4R19 RIGHT TURN LANE — REMOVE

4R20 NORTH 49 / SOUTH 49 — REMOVE

4R21 COUNTY A — REMOVE

4R22 4R34 4R35 — REMOVE

106 AS / 106 AN

CTH A

℄ CTH A NB

℄ CTH A SB

4R23 EAST 23 / SOUTH 49 — REMOVE

ADOPT-A-HIGHWAY SPONSOR GREEN LAKE ROTARY CLUB — MOVE 4M24

N

4R25 WEST 23 / NORTH 49 — REMOVE

BUSSE DR

REMOVE AND SALVAGE BY LOCAL MUNICIPALITY — BUSSE DR

4R26 — REMOVE

4R27 SPEED LIMIT 45 — REMOVE

4R28 JCT COUNTY A — REMOVE

4R29 SPEED LIMIT 45 — REMOVE

2 HEIDEL HOUSE / DARTFORD INN/MOTEL .5 — MOVED BY DERSE CO 1-800-345-5772

MATCHLINE STA. 323EB+00

STH 23/49

308 WB 309 WB 310 WB 311 WB 312 WB 313 WB 314 WB 315 WB 316 WB 317 WB 318 EB 319 EB 320 EB 321 EB 322 EB 323

308 EB 309 EB 310 EB 311 EB 312 EB 313 EB 314 EB 315 EB 316 EB 317 EB

℄ STH 23 WB

℄ STH 23 EB

4R30 — REMOVE

4R31 RIPON 6 — REMOVE

4R32 SPEED LIMIT 55 — REMOVE

4R33 NO PASSING ZONE — REMOVE

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS	SHEET 113	E

FILE NAME : J:\Active\D4\STH 23\Main\023204_es.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

℄ STH 23 EB

STH 23/49

MATCHLINE STA. 323EB+00

EB | 324 EB | 325 EB | 326 EB | 327 EB | 328 EB | 329 EB | 330 EB | 331 EB | 332 EB | 333 EB | 334 EB | 335 EB | 336 EB | 337 EB | 338 EB

REMOVE
5R01

2

5R02
NO PASSING ZONE
REMOVE

5M03
ADOPT-A-HIGHWAY
SPONSOR
GREEN LAKE ROTARY CLUB
MOVE

22 FRN

21 FRN

℄ FOREST RIDGE RD NORTH

SEE FOREST RIDGE RD PLAN SHEET
FOR SIGN REMOVALS ON SIDEROADS

℄ STH 23 EB

N

338 EB | 339 EB | 340 EB | 341 EB | 342 EB | 343 EB | 344 EB | 345 EB | 346 EB | 347 EB | 348 EB | 349 EB | 350 EB | 351 EB | 352 EB | 353

FOREST RIDGE RD
ST HWY 49-23
REMOVE AND SALVAGE BY
LOCAL MUNICIPALITY

9 FRS

8 FRS

FOREST RIDGE RD

℄ FOREST RIDGE RD SOUTH

MATCHLINE STA. 353EB+00

NO PASSING ZONE
REMOVE
5R04

FOUND

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS	SHEET 114	E

FILE NAME : J:\Active\D4\STH 23\Main\023205_es.dgn | PLOT DATE : 7/31/2013 | PLOT BY : fred.schunke | PLOT NAME : | PLOT SCALE : 100.0000 ' / in.

2

6R01
NO PASSING ZONE
REMOVE

6R02
REMOVE

MATCHLINE STA. 353EB+00

℄ STH 23 EB

STH 23/49

EB 354 EB 355 EB 356 EB 357 EB 358 EB 359 EB 360 EB 361 EB 362 EB 363 EB 364 EB 365 EB 366 EB 367 EB 368 EB

WESTWIND RD

STOP
REMOVE
6R03

WESTWIND RD
STH 23/49
REMOVE AND SALVAGE BY LOCAL MUNICIPALITY

N

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

2

368 EB 369 EB 370 EB 371 EB 372 EB 373 EB 374 EB 375 EB 376 EB 377 EB 378 EB 379 EB 380 EB 381 EB 382 EB 383

℄ STH 23 EB

STH 23/49

MATCHLINE STA. 383EB+00

N

EASTWIND RD

9EW

8EW

STOP
REMOVE
6R04

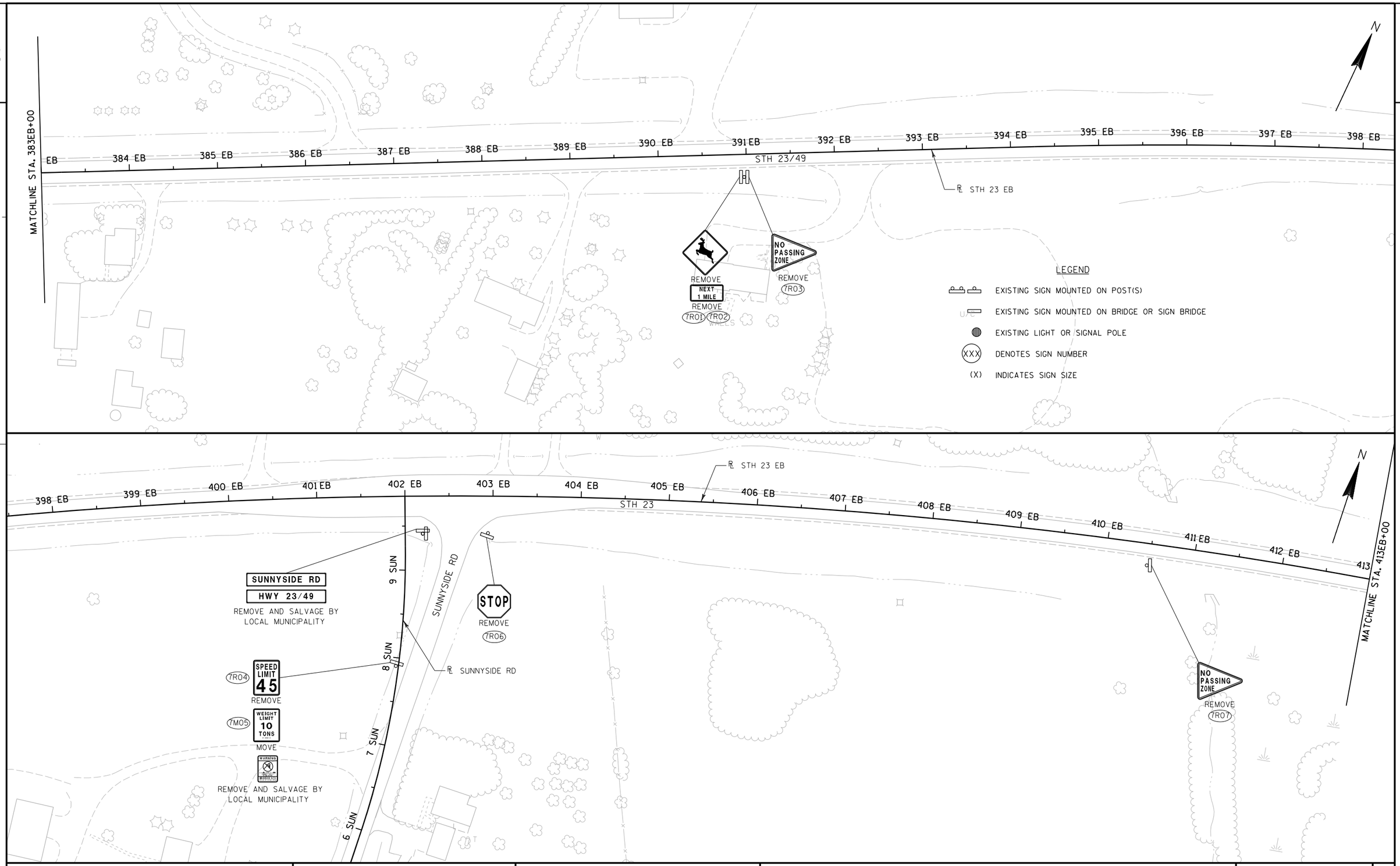
℄ EASTWIND RD

EASTWIND RD
STH 23/49
REMOVE AND SALVAGE BY LOCAL MUNICIPALITY

PLAYGROUND

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\023206_es.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.
WISDOT/CADDS SHEET 42



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS	SHEET 116	E

2

N

MATCH LINE STA. 413EB+00

EB 414 EB 415 EB 416 EB 417 EB 418 EB 419 EB 420 EB 421 EB 422 EB 423 EB 424 EB 425 EB 426 EB 427 EB 428 EB

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

13 BR

12 BR

11 BR

℄ BROOKLYN J RD

BROOKLYN J RD

8M04
WEIGHT LIMIT 10 TONS
MOVE

8R01
23
REMOVE

8R02
STOP
REMOVE

BROOKLYN J RD
HWY 23/49
REMOVE AND SALVAGE BY LOCAL MUNICIPALITY

N

428 EB 429 EB 430 EB 431 EB 432 EB 433 EB 434 EB 435 EB 436 EB 437 EB 438 EB 439 EB 440 EB 441 EB 442 EB 443

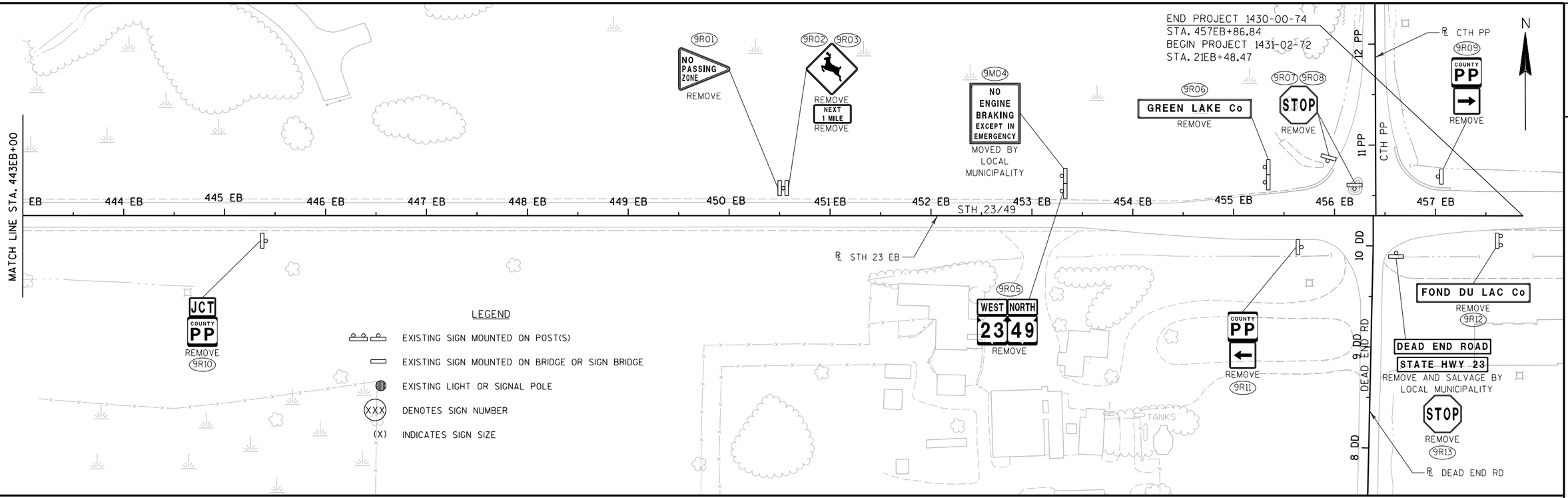
MATCH LINE STA. 443EB+00

STH 23/49

℄ STH 23 EB

REMOVE
8R03

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS	SHEET 117	E



2

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS	SHEET 118	E

N

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

11R01 ONLY ONLY ONLY — REMOVE

11R02 — REMOVE

11R03 — REMOVE

11R04 SPEED LIMIT 45 — REMOVE

11R05 COUNTY A — REMOVE

11R06 11R07 11R08 11R34 11R35 36 STOP — REMOVE

11R09 — REMOVE

STH 23 302 EB

11R10 11R11 — REMOVE

11R12 RIPON / GREEN LAKE PRINCETON — REMOVE

302 WB

℄ STH 49 SB

202 "49S" 201 "49S" 202 "49N" 201 "49N"

305 WB STH 49

℄ STH 49 NB

303 EB

101 AS 101 AN 102 AS 102 AN 103 AS 103 AN 104 AS 104 AN 105 AS 105 AN 106 AS 106 AN

℄ CTH A SB

CTH A

℄ CTH A NB

304 EB

304 WB

11R21 11R22 11R23 11R24 — REMOVE

11R25 EAST SOUTH WEST 23 49 23 — REMOVE

11R26 COUNTY A — REMOVE

STH 23/49

305 EB

305 WB

11R13 11R14 RIGHT LANE MUST TURN RIGHT — REMOVE

11R15 STOP — REMOVE

11R16 — REMOVE

11R17 RIPON / PRINCETON / GREEN LAKE / BERLIN — REMOVE

11R18 COUNTY A — REMOVE

11R19 WEST NORTH 23 49 — REMOVE

11R20 SOUTH EAST 49 23 — REMOVE

℄ STH 23 EB

306

℄ STH 23 WB

N

11M28 45 TON BRIDGE .2 MILES AHEAD — MOVE

N LAWSON RD / STATE HWY 49 — REMOVE AND SALVAGE BY LOCAL MUNICIPALITY

11R29 — REMOVE

11R27 STOP — REMOVE

N LAWSON DR

CROSSROADS .3 MARKET&FUEL / DARTFORD INN/MOTEL .2 — MOVED BY DERSE CO 1-800-345-5772

℄ STH 49 SB

207 "49S" 208 "49S" 208 "49N" 209 "49S" 209 "49N"

205 "49S" 206 "49S" STH 49 207 "49N"

204 "49S" 205 "49N" 206 "49N"

203 "49S" 203 "49N" 204 "49N"

202 "49S" 202 "49N"

℄ STH 49 NB

11R30 DARTFORD .2 INN/MOTEL — MOVED BY DERSE CO 1-800-345-5772 — REMOVE

10M31 BADGER MINING CORPORATION SPONSOR — MOVE

11R32 NORTH 49 — REMOVE

11R33 SPEED LIMIT 55 — REMOVE

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS - CTH A/STH 49	SHEET 119 E

2

2

N

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

℄ STH 23 EB

STH 23/49

343 EB
344 EB
345 EB
346 EB
347 EB
348 EB
349 EB
350 EB
351 EB
352 EB

12M02 WEIGHT LIMIT 10 TONS MOVE

12R01 SPEED LIMIT 40 REMOVE

12R03 STOP REMOVE

12R04 STOP AHEAD REMOVE

℄ FOREST RIDGE RD NORTH

℄ FOREST RIDGE RD SOUTH

5 FRS 6 FRS 7 FRS 8 FRS 9 FRS

FOREST RIDGE RD

21 FRN 22 FRN 23 FRN 24 FRN 25 FRN 26 FRN 27 FRN

FOREST RIDGE RD

STOP REMOVE 12R05

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SIGN REMOVALS - FOREST RIDGE RD	SHEET 120	E

FILE NAME : J:\Active\D4\STH 23\Main\023211_es.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

END PROJECT 1430-00-74
BEGIN PROJECT 1431-02-72
STA 21EB+48.47
Y= 415,585.34
X= 701,480.47

N

RUINS

21 EB 22 EB 23 EB 24 EB 25 EB 26 EB 27 EB 28 EB 29 EB 30 EB 31 EB STH 23/49 32 EB 33 EB 34 EB 35 EB

(13R02) JCT COUNTY PP
REMOVE

℄ STH 23 EB

SPONSOR
RIPON ROTARY CLUB
MOVE
(13M01)

EB 35 EB 36 EB 37 EB STH 23/49 38 EB 39 EB 40 EB 41 EB 42 EB 43 EB 44 EB 45 WB 45 EB 46 WB 46 EB 47 47

(13R03) STOP
REMOVE

S. KORO RD
HWY 23
REMOVE AND SALAVAGE BY LOCAL MUNICIPALITY

S KORO RD

℄ STH 23 EB

MATCH LINE STA 47EB+00

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	SIGN REMOVALS	SHEET 121	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\023201_es.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

MATCH LINE STA. 47EB+00

14R16 WEST NORTH 23 49 REMOVE

14R17 REMOVE

STRUCTURE B-20-49
PROJECT 1431-02-74
STA. 48WB+99.12
Y= 415,240.95
X= 704,201.21

14R01 SPEED LIMIT 35 REMOVE

14R02 REMOVE

14R03 DO NOT ENTER REMOVE

14R04 REMOVE

14R05 WRONG WAY REMOVE

14R06 SPEED LIMIT 35 REMOVE

14R07 REMOVE

14R08 REMOVE

14R09 RIGHT TURN LANE REMOVE

14R10 SPEED LIMIT 35 REMOVE

14M11 14M12 NO TRUCKS MOVE

14R13 SPEED LIMIT 25 REMOVE

14R14 STOP REMOVE

14R15 SPEED LIMIT 35 REMOVE

48 WB
48 EB
49 WB
49 EB
50 WB
50 EB
51 WB
51 EB
52 WB
52 EB
53 WB
53 EB
54 WB
54 EB
55 WB
55 EB
56 WB
56 EB
57 WB
57 EB
58 WB

STH 23/49

℄ STH 23 WB

℄ STH 23 EB

℄ COMORN RD

COMORN RD

COMORN RD
REMOVE AND SALAVAGE BY LOCAL MUNICIPALITY

END PROJECT 1431-02-72
STA 58WB+48.81

N

POOL

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	SIGN REMOVALS	SHEET 122	E

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- (XPXX) DENOTES SIGN NUMBER PROPOSED
- (XMXX) DENOTES SIGN NUMBER MOVED
- (X) INDICATES SIGN SIZE
- PROPOSED LIGHT OR SIGNAL POLE AND PULL BOX

203 EB 204 EB 205 EB 206 EB 207 EB 208 EB 209 EB 210 EB 211 EB 212 EB 213 EB 214 EB 215 EB 216 EB 217 EB 218 EB

212 WB 213 WB 214 WB 215 WB 216 WB 217 WB 218 WB

STH 23

℄ STH 23 WB

℄ STH 23 EB

1P01 W6-1 36" X 36"

1P02 W6-3 36" X 36"

1P03 JCT COUNTY A J1-1 24" X 39"

1P04 DO NOT ENTER R5-1 36" X 36"

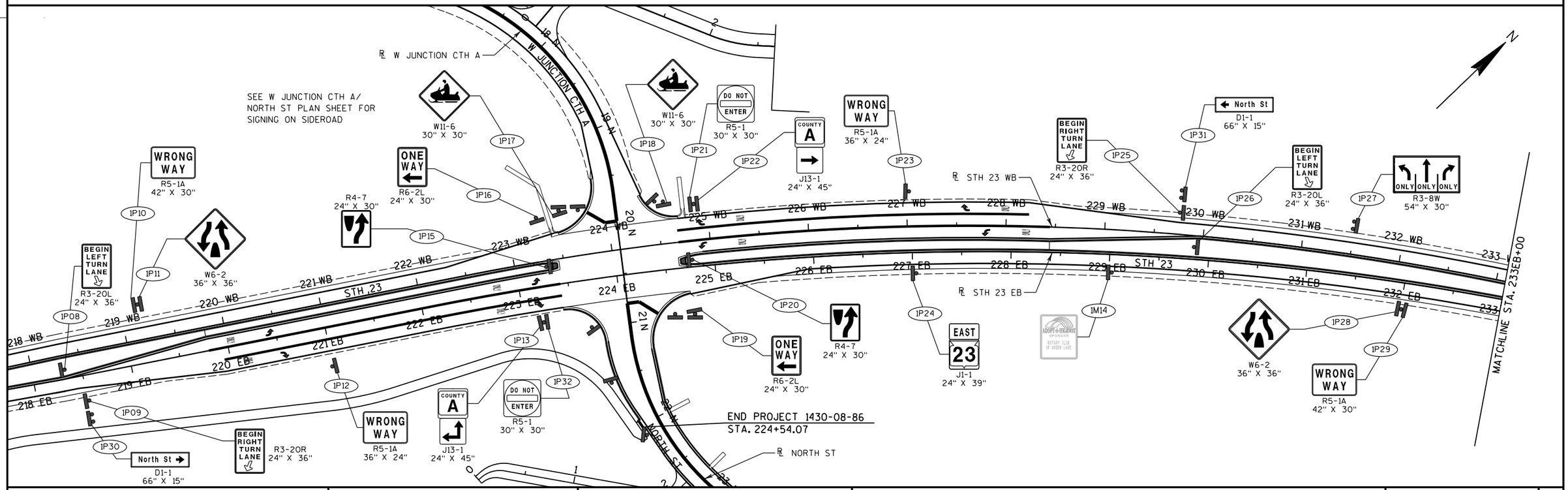
1P05 R4-7 36" X 48"

1P06 W5-54 18" X 18"

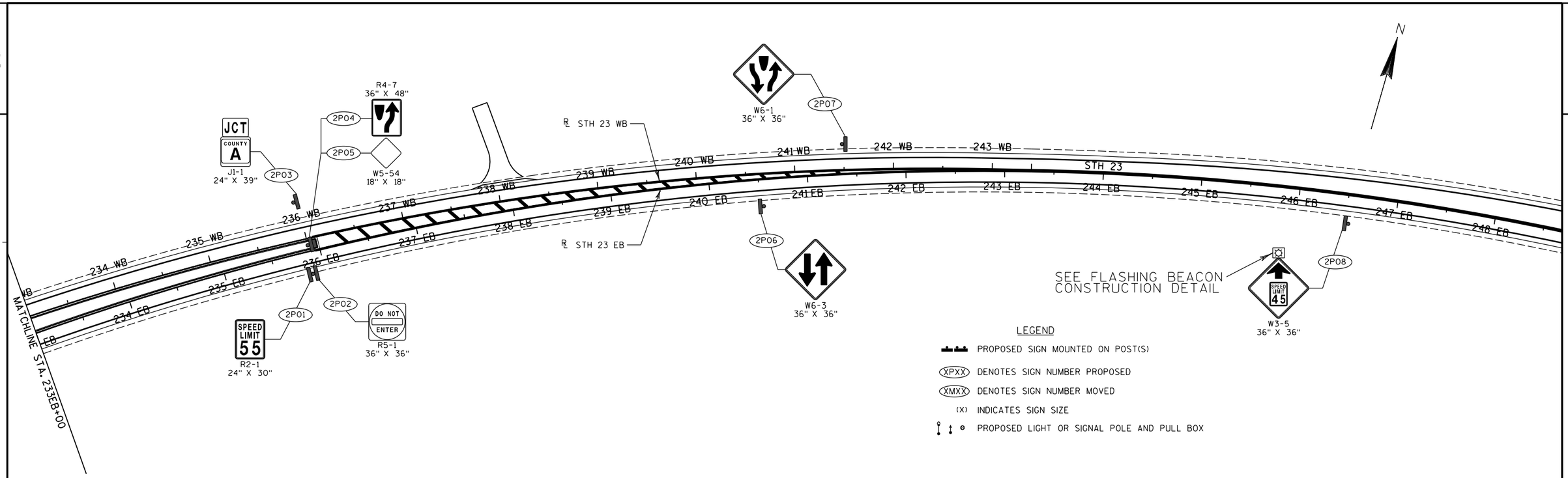
1P07 ONLY ONLY ONLY R3-8W 54" X 30"

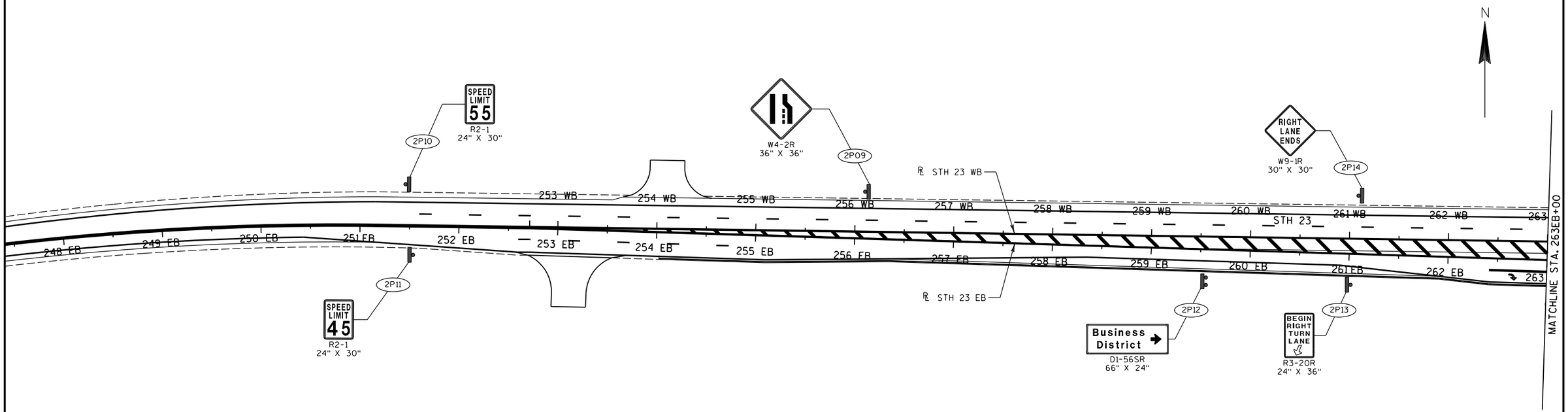
BEGIN PROJECT 1430-00-74
STA 210EB+40.90
Y= 275016.72
X= 565657.05

BEGIN PROJECT 1430-08-86
STA 210+40.90
Y= 274981.14
X= 565712.60



PROJECT NO: 1430-00-74 / 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET 123	E





PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET 124	E

2

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

(XPXX) DENOTES SIGN NUMBER PROPOSED

(XMXX) DENOTES SIGN NUMBER MOVED

(X) INDICATES SIGN SIZE

PROPOSED LIGHT OR SIGNAL POLE AND PULL BOX

N

MATCHLINE STA. 263EB+00

3P01 WRONG WAY R5-1A 36" X 24"

3P02 DO NOT ENTER R5-1 30" X 30"

DARTFORD .1 INN/MOTEL MOVED BY DERSE CO 1-800-345-5772

3P03 ONE WAY R6-2L 24" X 30"

RELOCATED N LAWSON DR

SEE PROJECT 1430-00-84 PLANS FOR PERMANENT SIGNING

3P04 R4-7 36" X 48"

3P05 W5-54 18" X 18"

3P06 DO NOT ENTER R5-1 36" X 36"

℄ STH 23 EB

℄ STH 23 WB

3P07 WRONG WAY R5-1A 42" X 30"

3P08 SPEED LIMIT 45 R2-1 24" X 30"

3P09 BEGIN LEFT TURN LANE R3-20L 24" X 36"

3P10 M1-85 24" X 24"

3P11 DARTFORD HIST. SOCIETY →256 M1-85C 24" X 12"

3P12 THRASHER'S OPERA HOUSE →202 M1-85C 24" X 12"

3P13 W6-2 36" X 36"

3P14 WRONG WAY R5-1A 42" X 30"

3P15 Business District D1-56SL 66" X 24"

3P16 DO NOT ENTER R5-1 36" X 36"

3P17 3P18 3P19 W5-56 18" X 18"

N LAWSON DR

3P20 R4-7 36" X 48"

3P21 W5-54 18" X 18"

WB 264 WB 265 WB 266 WB 267 WB 268 WB 269 WB 270 WB 271 WB 272 WB 273 WB 274 WB 275 WB 276 WB 277 WB 278 WB

EB 264 EB 265 EB 266 EB 267 EB 268 EB 269 EB 270 EB 271 EB 272 EB 273 EB 274 EB 275 EB 276 EB 277 EB 278 EB

STH 23

N

BEGIN PROJECT 1430-00-76
STA. 283EB+51.45
Y= 277261.60
X= 571968.88

END PROJECT 1430-00-76
STA. 286EB+85.06

3P22 3P23 3P24 W5-56 18" X 18"

N. LAWSON DR

3P25 EAST 23 J1-1 24" X 39"

3P26 W6-1 36" X 36"

℄ STH 23 WB

℄ STH 23 EB

3P28 Puchyan River I3-1 78" X 15"

STRUCTURE B-24-09

3P29 Puchyan River I3-1 78" X 15"

3P30 JCT 49 J1-1 24" X 39"

3P31 W6-1 36" X 36"

3P32 NORTH EAST SOUTH 49 23 49 COUNTY A J2-4 96" X 57"

3M27

ADOPT-A-HIGHWAY SPONSOR GREEN LAKE ROTARY CLUB

MATCHLINE STA. 293EB+50

279 WB 280 WB 281 WB 282 WB 283 WB 284 WB 285 WB 286 WB 287 WB 288 WB 289 WB 290 WB 291 WB 292 WB 293 WB

279 EB 280 EB 281 EB 282 EB 283 EB 284 EB 285 EB 286 EB 287 EB 288 EB 289 EB 290 EB 291 EB 292 EB 293 EB

STH 23

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET 125	E

2

SEE CTH A/ STH 49 PLAN SHEET
FOR SIGNING ON SIDEROAD

ONE WAY
R6-2L
24" X 30"
(ON POLE)
4P20

R4-7
24" X 30"
(ON POLE)
4P19

STOP
R1-1F
36" X 36"
(ON POLE)
4P18

WEST
23
J4-1
24" X 36"
4P14

202 "49S"

201 "49S"

200 "49S"

STH 49

℄ STH 49 NB

DO NOT ENTER
R5-1
36" X 36"
(ON POLE)
4P21

℄ STH 49 SB

NORTH
COUNTY A 49
J2-2
48" X 57"
4P22

PRINCETON
BERLIN
D1-2
72" X 30"

WRONG WAY
R5-1A
42" X 30"
4P29

4P30

STOP
R1-1F
36" X 36"
(ON POLE)
4P23

℄ STH 23 WB

SPEED LIMIT 45
R2-1
24" X 30"
4P09

ONE WAY
R6-2L
24" X 30"
4P01

4P02

R4-7
36" X 48"

4P03

W5-54
18" X 18"

4P07

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

4P08

W6-2
36" X 36"

PRINCETON 10
D2-1
78" X 15"
4P12

294 WB 295 WB 296 WB 297 WB 298 WB 299 WB 300 WB 301 WB 302 WB 303 WB 304 WB 305 WB 306 WB 307 WB 308 WB

STH 23/49

296 EB 297 EB 298 EB 299 EB 300 EB 301 EB 302 EB 303 EB 304 EB 305 EB 306 EB 307 EB 308 EB

STH 23

294 EB 295 EB

MATCHLINE STA. 293EB+50

℄ STH 23 EB

4P04 4P05

H

ONLY ONLY ONLY
R3-8W
54" X 30"

CROSSROADS MARKET & FUEL .3
MOVED BY
DERSE CO
1-800-345-5772

4P06

RIPON
BERLIN
D1-2
54" X 30"

4P10

W3-3
36" X 36"

4P11

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"

4P13

WRONG WAY
R5-1A
42" X 30"

STOP
R1-1F
36" X 36"
(ON POLE)
4P15

NORTH
49 COUNTY A
J2-2
48" X 57"
4P16

DO NOT ENTER
R5-1
36" X 36"
(ON POLE)
4P17

℄ CTH A SB

106-AS

CTH A

℄ CTH A NB

ONE WAY
R6-2L
24" X 30"
4P25

4P26

STOP
R1-1F
36" X 36"
(ON POLE)
4P27

4P28

R4-7
24" X 30"
(ON POLE)

EAST SOUTH
23 49
J4-2
48" X 36"

4M24

N

W3-3
36" X 36"

WEST NORTH
COUNTY A 23 49
J2-3
72" X 57"

ONLY ONLY ONLY
R3-8W
54" X 30"

4P39

R4-7
36" X 48"

4P40

W5-54
18" X 18"

4P38

SPEED LIMIT 45
R2-1
24" X 30"
4P43

SEE FLASHING BEACON
CONSTRUCTION DETAIL

JCT
COUNTY A
J1-1
4P44 24" X 39"

SPEED LIMIT 45
W3-5
36" X 36"

4P45

4P32

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"
4P31

BUSSE DR

4P36

℄ STH 23 WB

308 WB 309 WB 310 WB 311 WB 312 WB 313 WB 314 WB 315 WB 316 WB 317 WB 318 EB 319 EB 320 EB 321 EB 322 EB 323

308 EB 309 EB 310 EB 311 EB 312 EB 313 EB 314 EB 315 EB 316 EB 317 EB

MATCHLINE STA. 323EB+00

4P35

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

4P34

WRONG WAY
R5-1A
42" X 30"

4P33

W6-2
36" X 36"

4P37

℄ STH 23 EB

RIPON 6
D2-1
54" X 15"

4P41

DO NOT ENTER
R5-1
36" X 36"

4P42

SPEED LIMIT 55
R2-1
24" X 30"

4P46

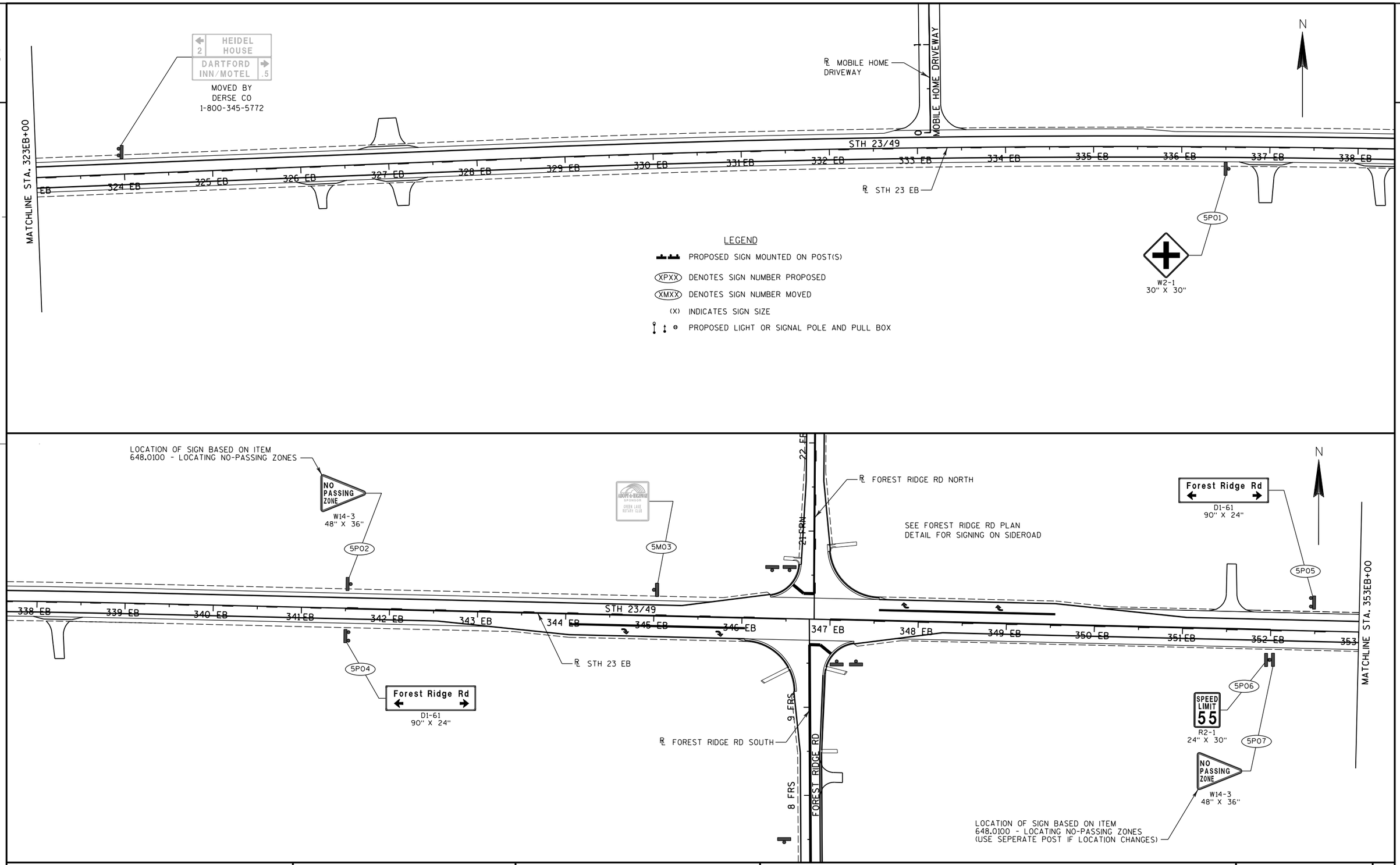
NO PASSING ZONE
W14-3
48" X 36"

LOCATION OF SIGN BASED ON ITEM
648.0100 - LOCATING NO-PASSING ZONES
(USE SEPERATE POST IF LOCATION CHANGES)

LEGEND

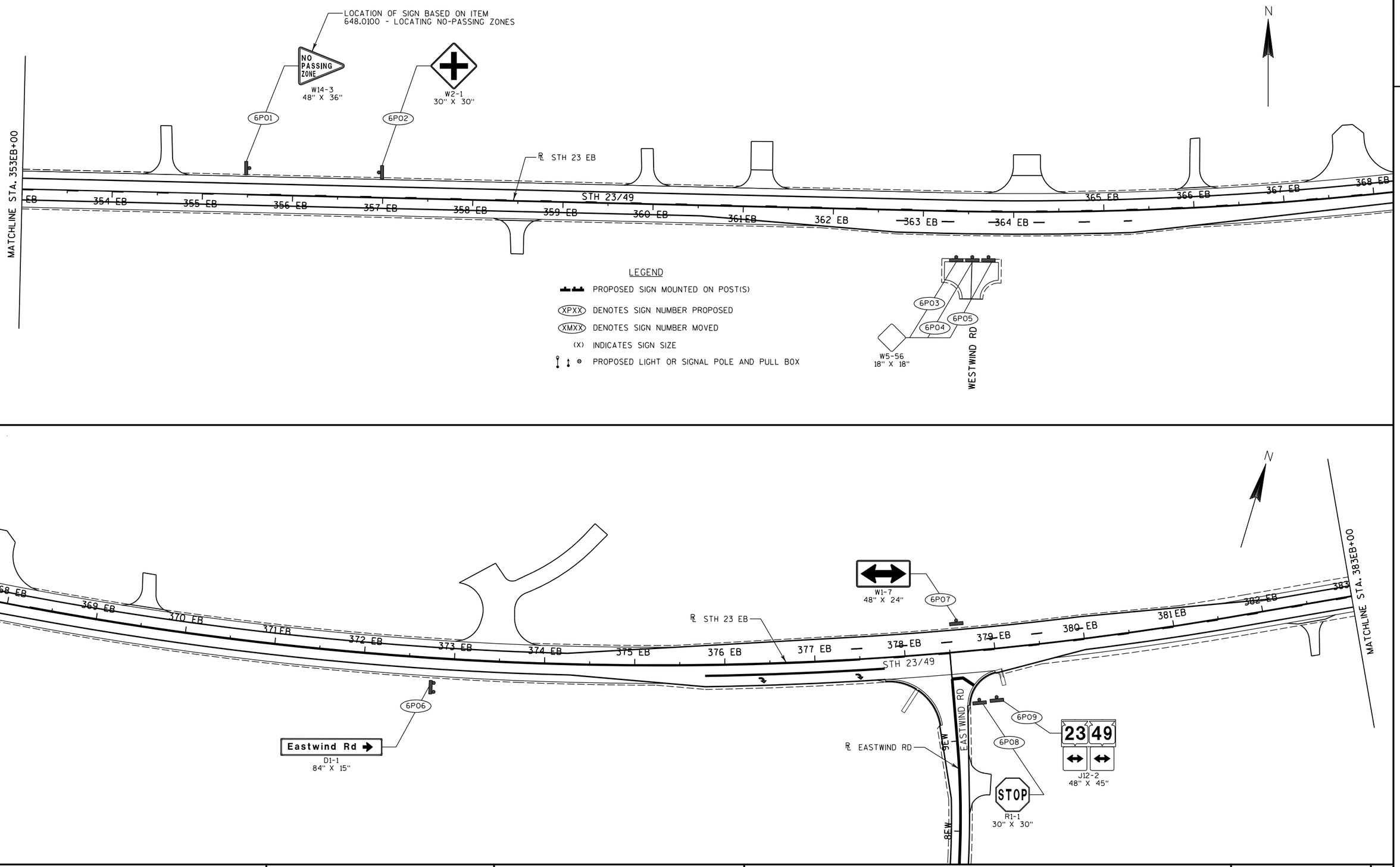
- PROPOSED SIGN MOUNTED ON POST(S)
- (XPXX) DENOTES SIGN NUMBER PROPOSED
- (XMXX) DENOTES SIGN NUMBER MOVED
- (X) INDICATES SIGN SIZE
- PROPOSED LIGHT OR SIGNAL POLE AND PULL BOX

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET 126	E



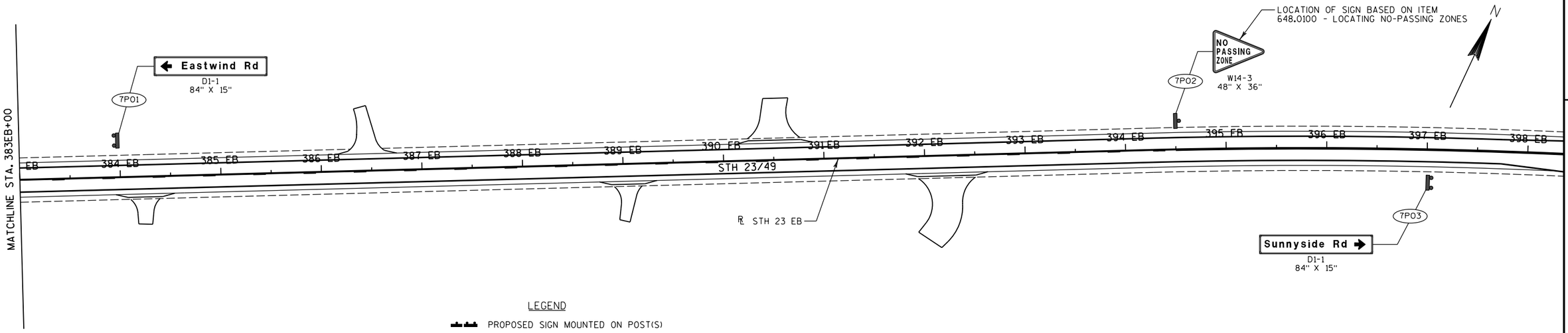
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\023216_ps.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.



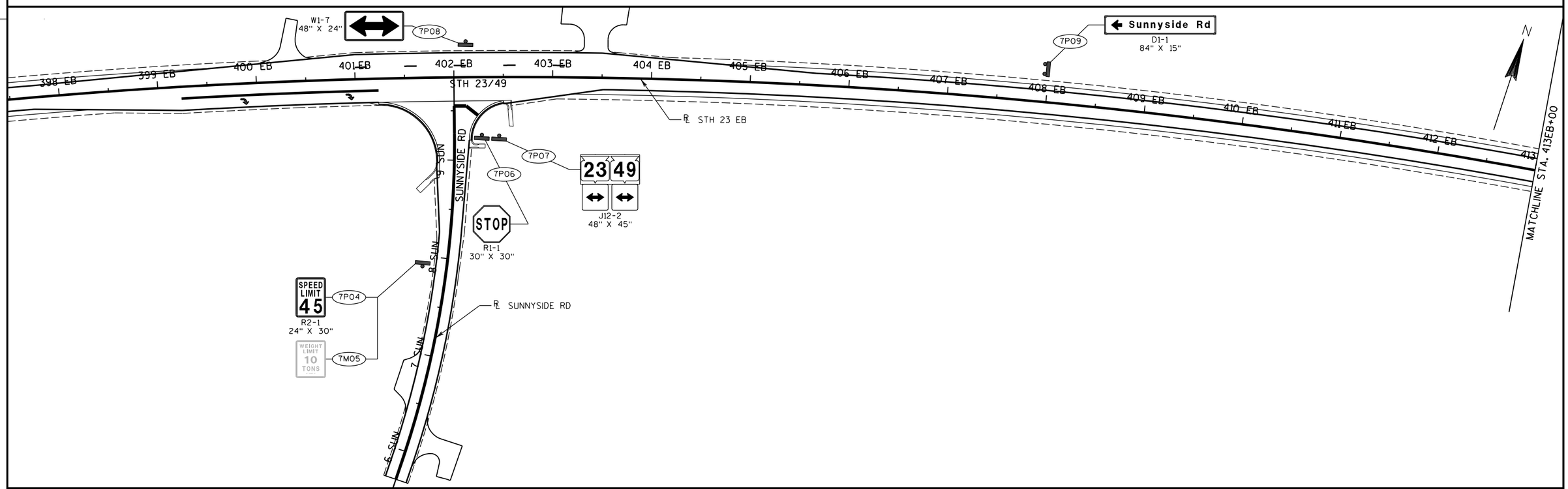
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\023217_ps.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

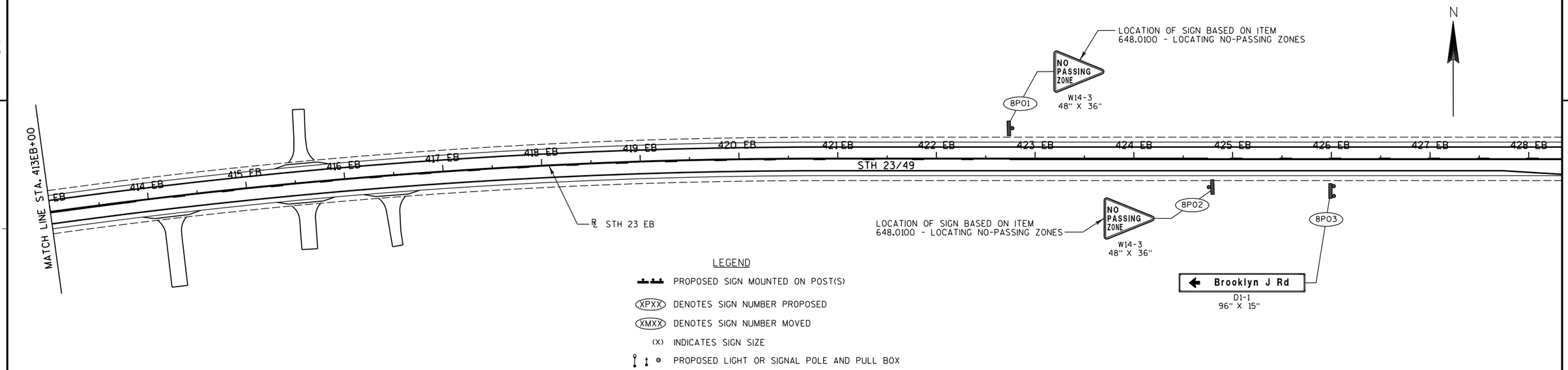


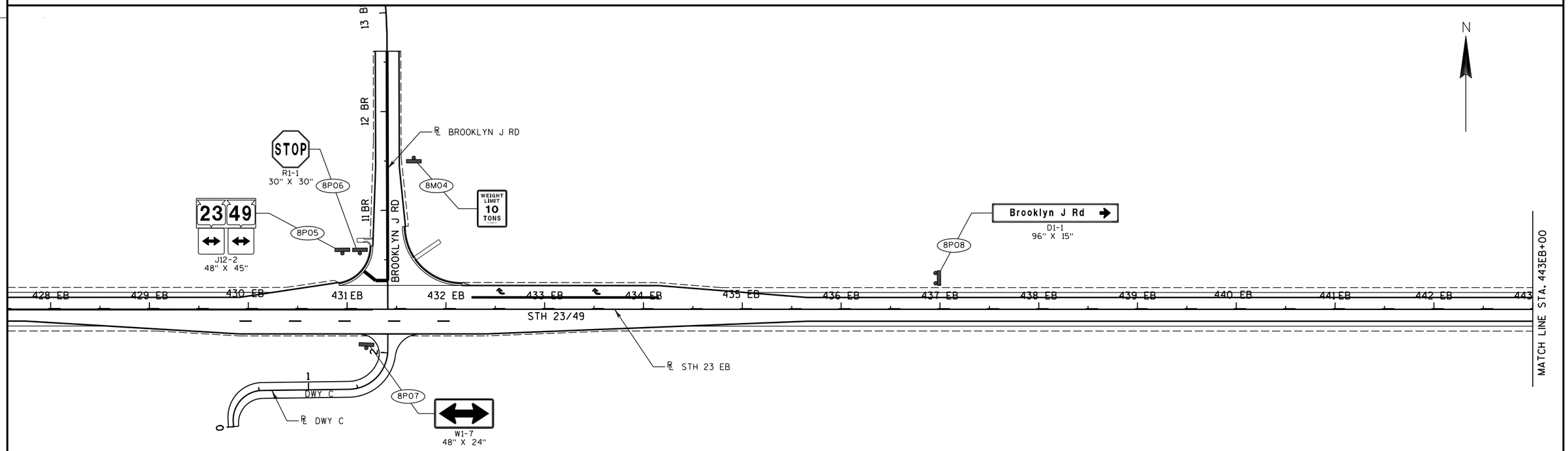
LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- (XPXX) DENOTES SIGN NUMBER PROPOSED
- (XMXX) DENOTES SIGN NUMBER MOVED
- (X) INDICATES SIGN SIZE
- PROPOSED LIGHT OR SIGNAL POLE AND PULL BOX

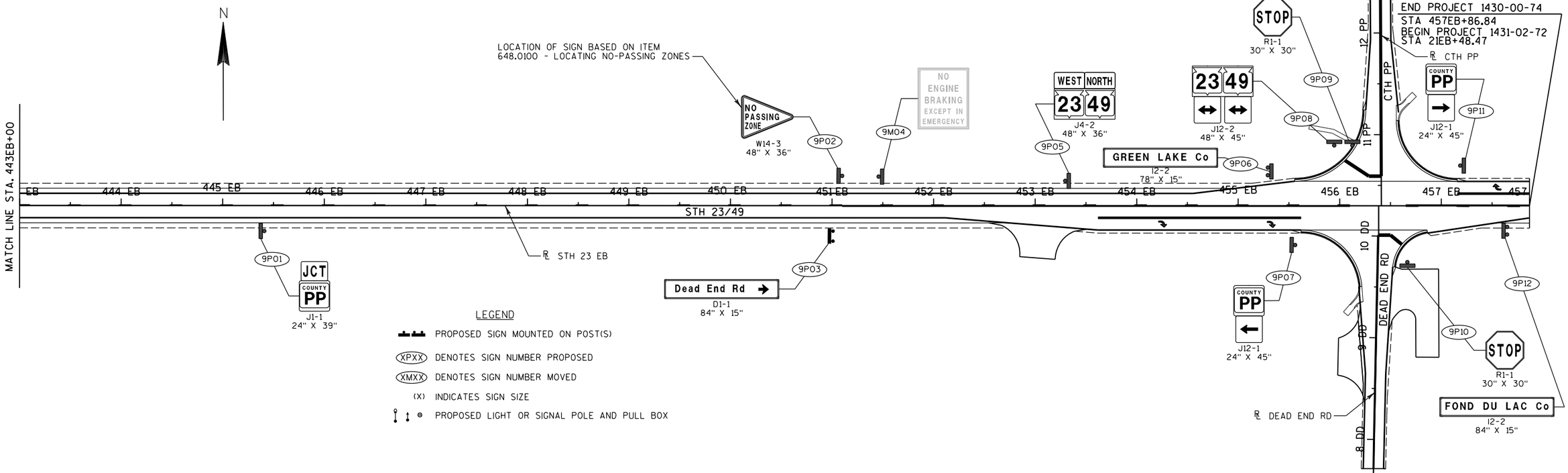


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET 129	E





PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET 130	E



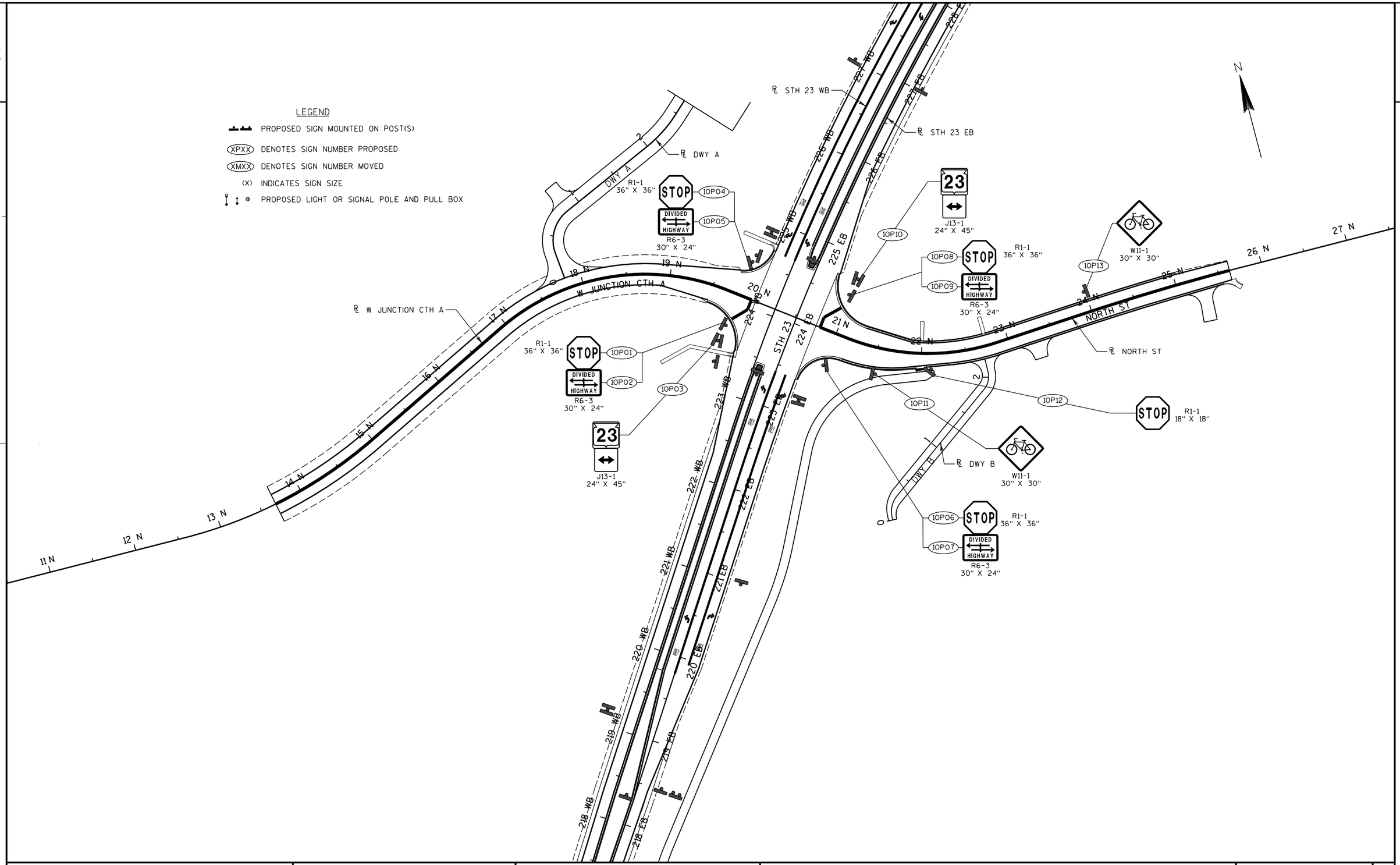
2

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET 131	E

2

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- (XPXX) DENOTES SIGN NUMBER PROPOSED
- (XMXX) DENOTES SIGN NUMBER MOVED
- (X) INDICATES SIGN SIZE
- PROPOSED LIGHT OR SIGNAL POLE AND PULL BOX



PROJECT NO:1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING - W JUNCTION CTH A / NORTH ST	SHEET 132	E

LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

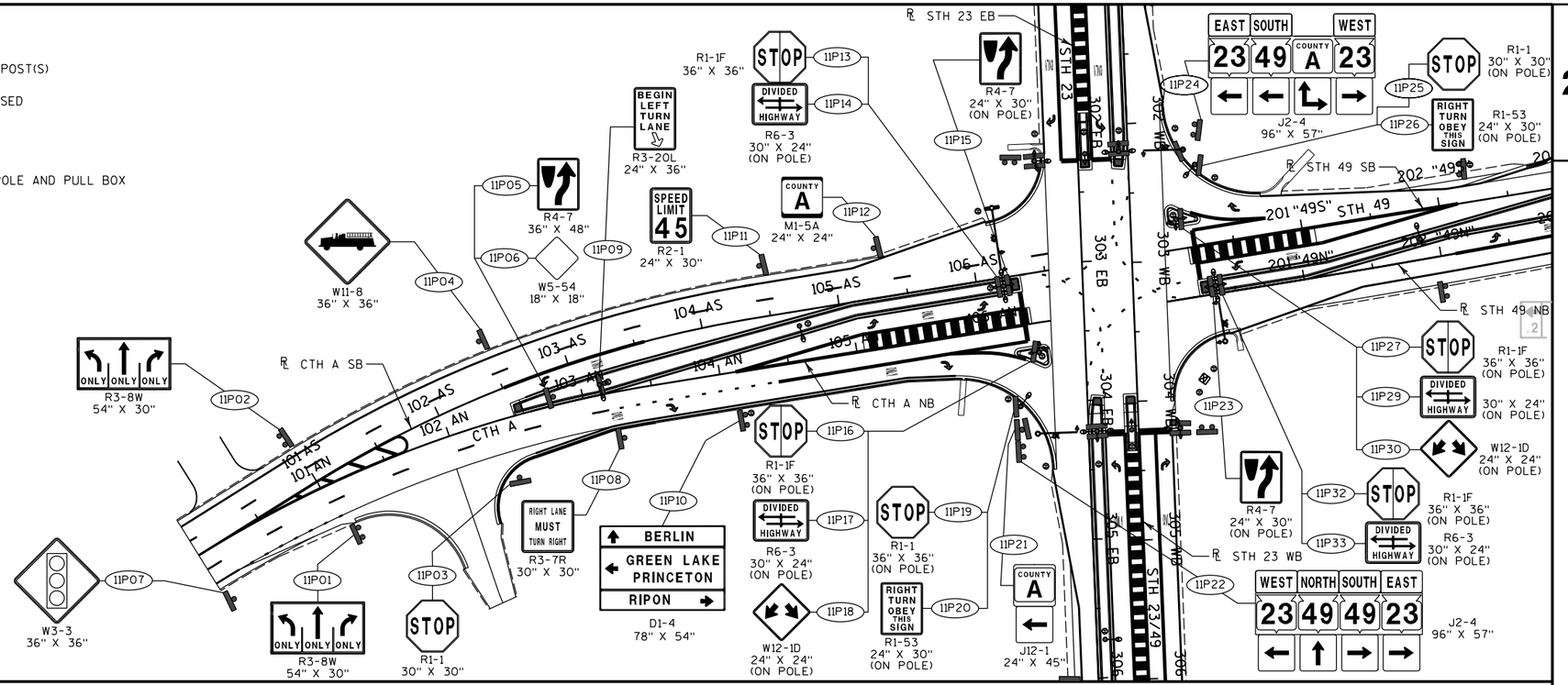
(XPXX) DENOTES SIGN NUMBER PROPOSED

(XMXX) DENOTES SIGN NUMBER MOVED

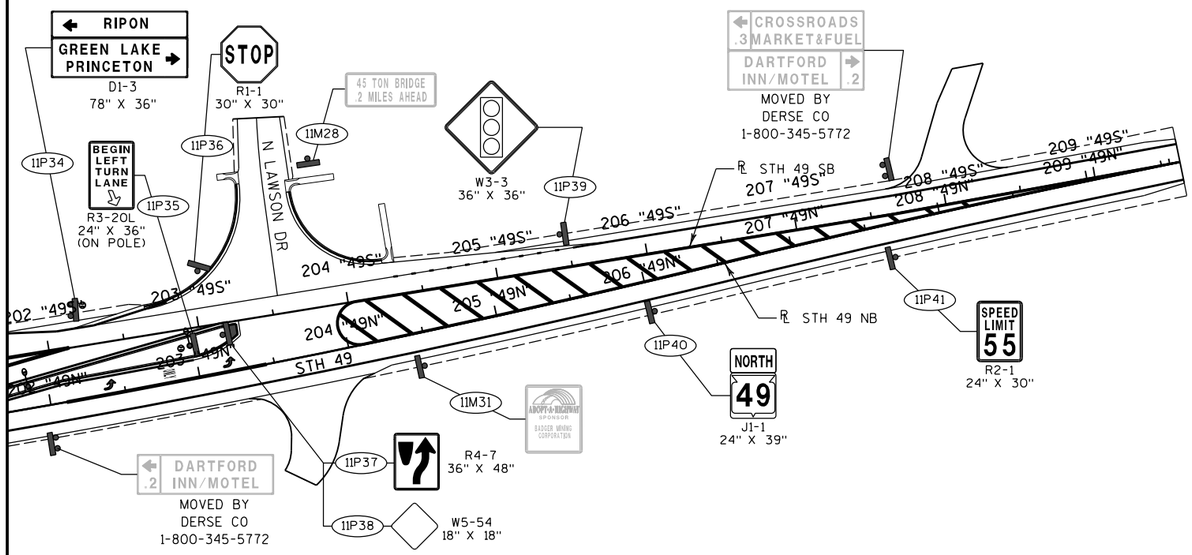
(X) INDICATES SIGN SIZE

PROPOSED LIGHT OR SIGNAL POLE AND PULL BOX

N



N



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING - CTH A/STH 49	SHEET 133	E

2

N

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- (XPXX) DENOTES SIGN NUMBER PROPOSED
- (XMXX) DENOTES SIGN NUMBER MOVED
- (X) INDICATES SIGN SIZE
- PROPOSED LIGHT OR SIGNAL POLE AND PULL BOX

343 EB
344 EB
345 EB
346 EB
STH 23/49
347 EB
348 EB
349 EB
350 EB
351 EB
352 EB

SPEED LIMIT 40
R2-1
24" X 30"
12P01
WEIGHT LIMIT 10 TONS
12M02

23 49
J12-2
48" X 45"
12P05

STOP
R1-1
30" X 30"
12P06

W3-1
36" X 36"
12P07

℄ FOREST RIDGE RD NORTH

5 FRS 6 FRS 7 FRS 8 FRS 9 FRS
FOREST RIDGE RD
21 FRN 22 FRN 23 FRN 24 FRN 25 FRN 26 FRN 27 FRN

℄ FOREST RIDGE RD SOUTH

STOP
R1-1
30" X 30"
12P03
12P04

23 49
J12-2
48" X 45"

℄ STH 23 EB

H

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING - FOREST RIDGE RD	SHEET 134	E

END PROJECT 1430-00-74
BEGIN PROJECT 1431-02-72
STA 21EB+48.47
Y = 415585.34
X = 701480.47

13P03
Dead End Rd
D1-1
84" X 15"

℄ STH 23 EB

13P05
JCT
COUNTY PP
J1-1
24" X 39"

22 EB 23 EB 24 EB 25 EB 26 EB 27 EB 28 EB 29 EB 30 EB 31 EB 32 EB 33 EB 34 EB 35 EB

STH 23/49

13M01
13P02
EAST SOUTH
23 49
J4-2
48" X 36"

LOCATION OF SIGN BASED ON ITEM
648.0100 - LOCATING NO-PASSING ZONES

13P04
NO PASSING ZONE
W14-3
48" X 36"

N

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- (XPXX) DENOTES SIGN NUMBER PROPOSED
- (XMXX) DENOTES SIGN NUMBER MOVED
- (X) INDICATES SIGN SIZE
- PROPOSED LIGHT OR SIGNAL POLE AND PULL BOX

EB 35 EB 36 EB 37 EB 38 EB 39 EB 40 EB 41 EB 42 EB 43 EB 44 EB 45 WB 45 EB 46 WB 46 EB 47 WB 47 EB 48 48

STH 23/49

℄ STH 23 EB

13P06
13P07
13P08
S KORO RD
W5-56
18" X 18"

13P09
SPEED LIMIT 55
R2-1
24" X 30"

13P10
SPEED LIMIT 35
W3-5
36" X 36"

13P11
W6-1
36" X 36"

13P12
WEST NORTH
23 49
J4-2
48" X 36"

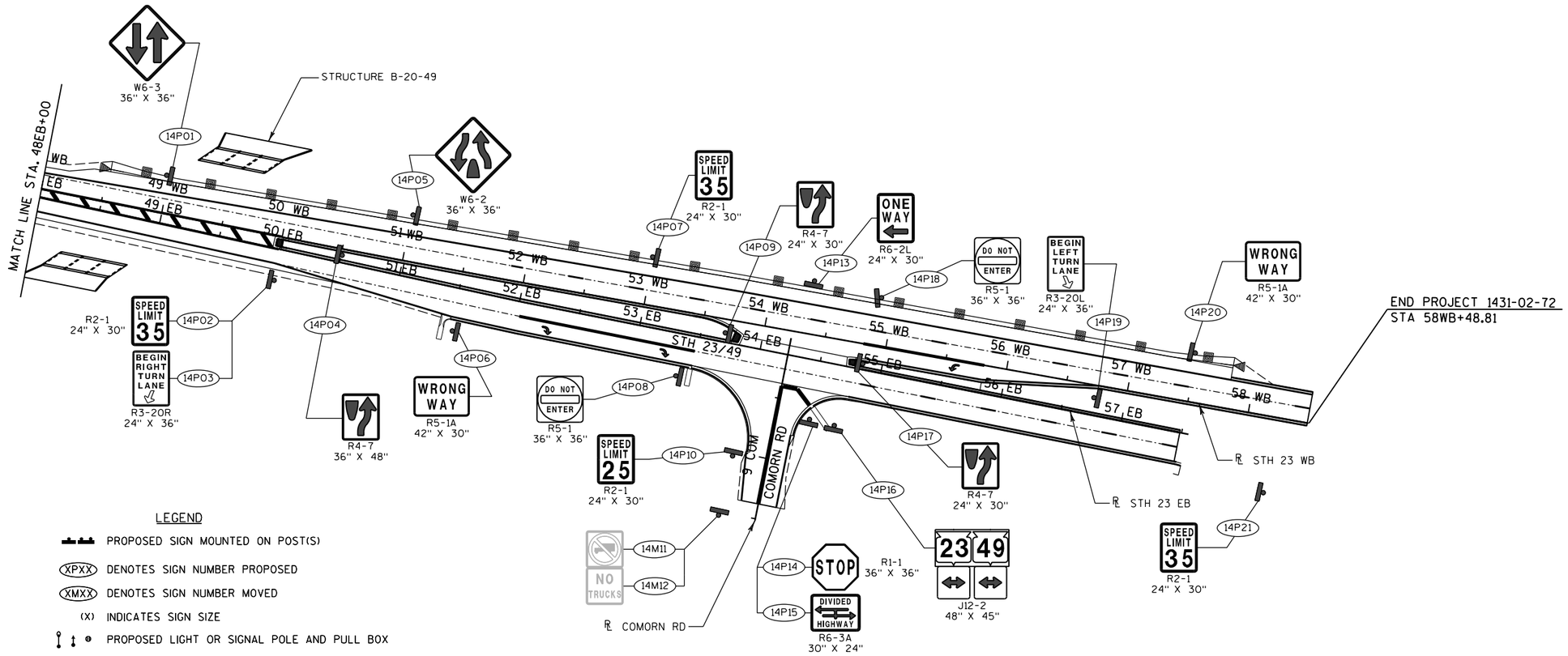
MATCH LINE STA. 48EB+00

N

PROJECT NO:1431-02-72	HWY: STH 23	COUNTY:FOND DU LAC	PERMANENT SIGNING	SHEET 135	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\023203_ps.dgn PLOT DATE : 8/1/2013 PLOT BY : tammy.tucker PLOT NAME : PLOT SCALE : 100.0000 ' / in.

2

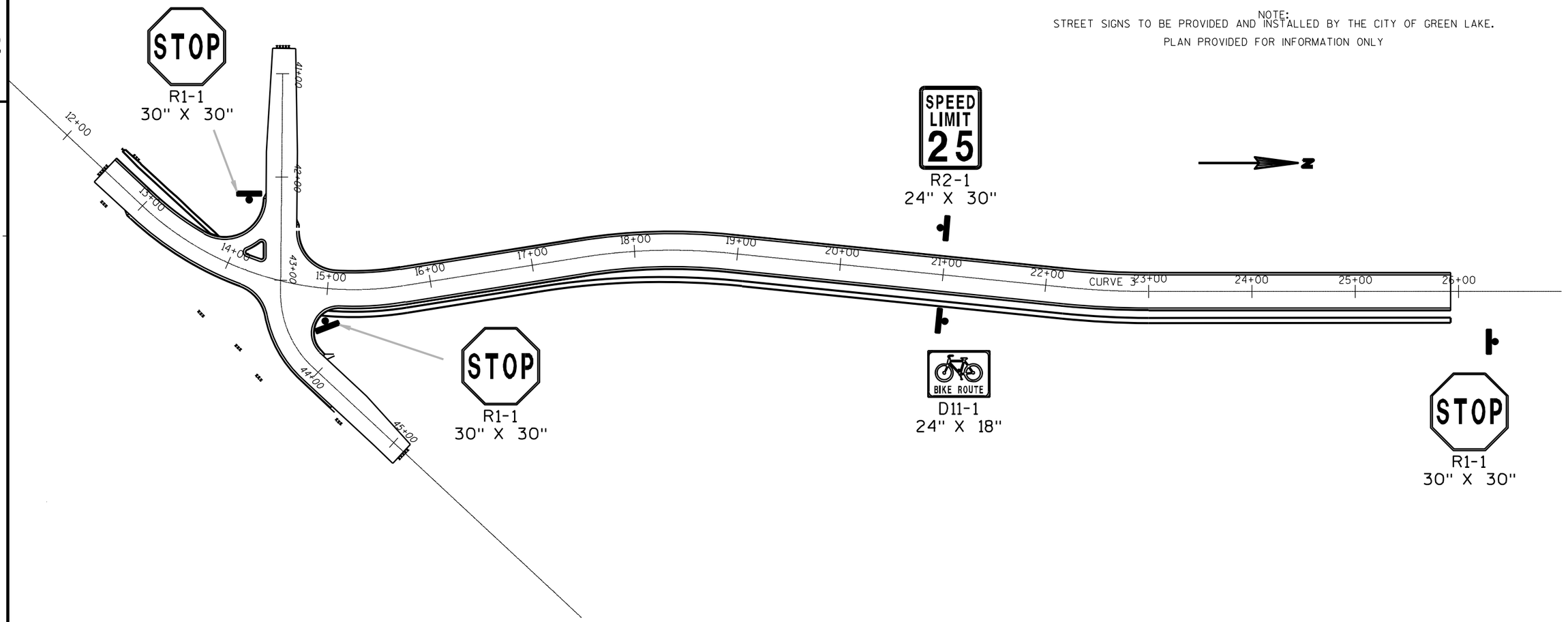


LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- (XPXX) DENOTES SIGN NUMBER PROPOSED
- (XMXX) DENOTES SIGN NUMBER MOVED
- (X) INDICATES SIGN SIZE
- PROPOSED LIGHT OR SIGNAL POLE AND PULL BOX

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET 136	E

NOTE:
STREET SIGNS TO BE PROVIDED AND INSTALLED BY THE CITY OF GREEN LAKE.
PLAN PROVIDED FOR INFORMATION ONLY



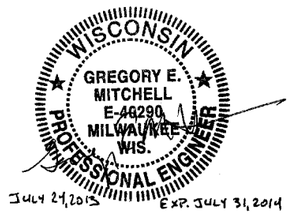
LEGEND

PROPOSED SIGN MOUNTED ON POST(S)

STOP
R1-1
30" X 30"

PROPOSED SIGN

(XX-X) SIGN NUMBER
(XX" X XX") SIGN SIZE



JULY 29, 2013 EXP. JULY 31, 2014

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING - RELOCATED LAWSON DRIVE	SHEET	E

FILE NAME : S:\TOWNS\GREEN LAKE CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-PERMANENT SIGNING.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=100'

WISDOT/CADDS SHEET 42

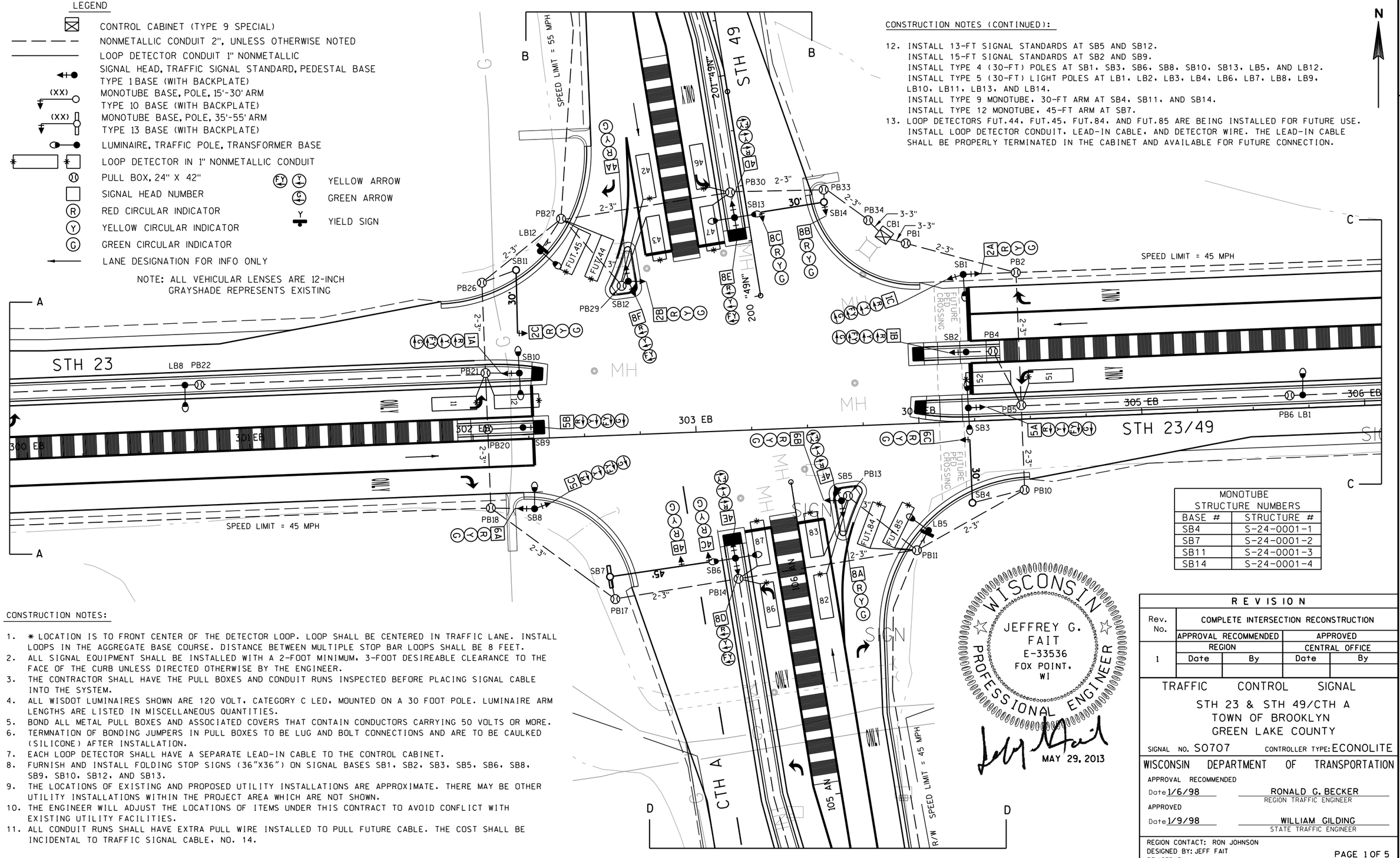
LEGEND

- CONTROL CABINET (TYPE 9 SPECIAL)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE TYPE 1 BASE (WITH BACKPLATE)
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM TYPE 10 BASE (WITH BACKPLATE)
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM TYPE 13 BASE (WITH BACKPLATE)
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PB PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- LANE DESIGNATION FOR INFO ONLY
- FY Y YELLOW ARROW
- G GREEN ARROW
- Y YIELD SIGN

NOTE: ALL VEHICULAR LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES (CONTINUED):

12. INSTALL 13-FT SIGNAL STANDARDS AT SB5 AND SB12.
    INSTALL 15-FT SIGNAL STANDARDS AT SB2 AND SB9.
    INSTALL TYPE 4 (30-FT) POLES AT SB1, SB3, SB6, SB8, SB10, SB13, LB5, AND LB12.
    INSTALL TYPE 5 (30-FT) LIGHT POLES AT LB1, LB2, LB3, LB4, LB6, LB7, LB8, LB9, LB10, LB11, LB13, AND LB14.
    INSTALL TYPE 9 MONOTUBE, 30-FT ARM AT SB4, SB11, AND SB14.
    INSTALL TYPE 12 MONOTUBE, 45-FT ARM AT SB7.
13. LOOP DETECTORS FUT.44, FUT.45, FUT.84, AND FUT.85 ARE BEING INSTALLED FOR FUTURE USE. INSTALL LOOP DETECTOR CONDUIT, LEAD-IN CABLE, AND DETECTOR WIRE. THE LEAD-IN CABLE SHALL BE PROPERLY TERMINATED IN THE CABINET AND AVAILABLE FOR FUTURE CONNECTION.



CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF THE DETECTOR LOOP. LOOP SHALL BE CENTERED IN TRAFFIC LANE. INSTALL LOOPS IN THE AGGREGATE BASE COURSE. DISTANCE BETWEEN MULTIPLE STOP BAR LOOPS SHALL BE 8 FEET.
2. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A 2-FOOT MINIMUM, 3-FOOT DESIREABLE CLEARANCE TO THE FACE OF THE CURB UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED BEFORE PLACING SIGNAL CABLE INTO THE SYSTEM.
4. ALL WISDOT LUMINAIRES SHOWN ARE 120 VOLT, CATEGORY C LED, MOUNTED ON A 30 FOOT POLE. LUMINAIRE ARM LENGTHS ARE LISTED IN MISCELLANEOUS QUANTITIES.
5. BOND ALL METAL PULL BOXES AND ASSOCIATED COVERS THAT CONTAIN CONDUCTORS CARRYING 50 VOLTS OR MORE.
6. TERMNATION OF BONDING JUMPERS IN PULL BOXES TO BE LUG AND BOLT CONNECTIONS AND ARE TO BE CAULKED (SILICONE) AFTER INSTALLATION.
7. EACH LOOP DETECTOR SHALL HAVE A SEPARATE LEAD-IN CABLE TO THE CONTROL CABINET.
8. FURNISH AND INSTALL FOLDING STOP SIGNS (36"X36") ON SIGNAL BASES SB1, SB2, SB3, SB5, SB6, SB8, SB9, SB10, SB12, AND SB13.
9. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
10. THE ENGINEER WILL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
11. ALL CONDUIT RUNS SHALL HAVE EXTRA PULL WIRE INSTALLED TO PULL FUTURE CABLE. THE COST SHALL BE INCIDENTAL TO TRAFFIC SIGNAL CABLE, NO. 14.

MONOTUBE STRUCTURE NUMBERS	
BASE #	STRUCTURE #
SB4	S-24-0001-1
SB7	S-24-0001-2
SB11	S-24-0001-3
SB14	S-24-0001-4

WISCONSIN
JEFFREY G. FAIT
E-33536
FOX POINT, WI
PROFESSIONAL ENGINEER
MAY 29, 2013

REVISION				
Rev. No.	COMPLETE INTERSECTION RECONSTRUCTION			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	Date	By	Date	By
1				

TRAFFIC CONTROL SIGNAL

STH 23 & STH 49/CTH A
TOWN OF BROOKLYN
GREEN LAKE COUNTY

SIGNAL NO. S0707 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 1/6/98 RONALD G. BECKER, REGION TRAFFIC ENGINEER

APPROVED
Date 1/9/98 WILLIAM GILDING, STATE TRAFFIC ENGINEER

REGION CONTACT: RON JOHNSON
DESIGNED BY: JEFF FAIT
REVISED BY:

PAGE 1 OF 5

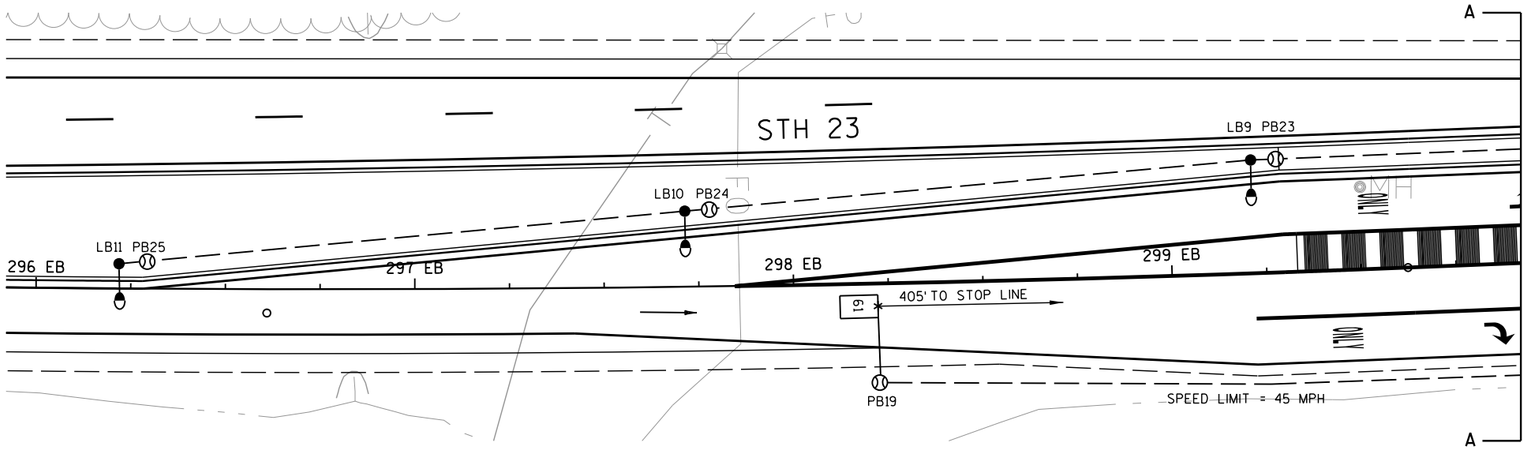
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC SIGNAL PLAN	SHEET 138 E

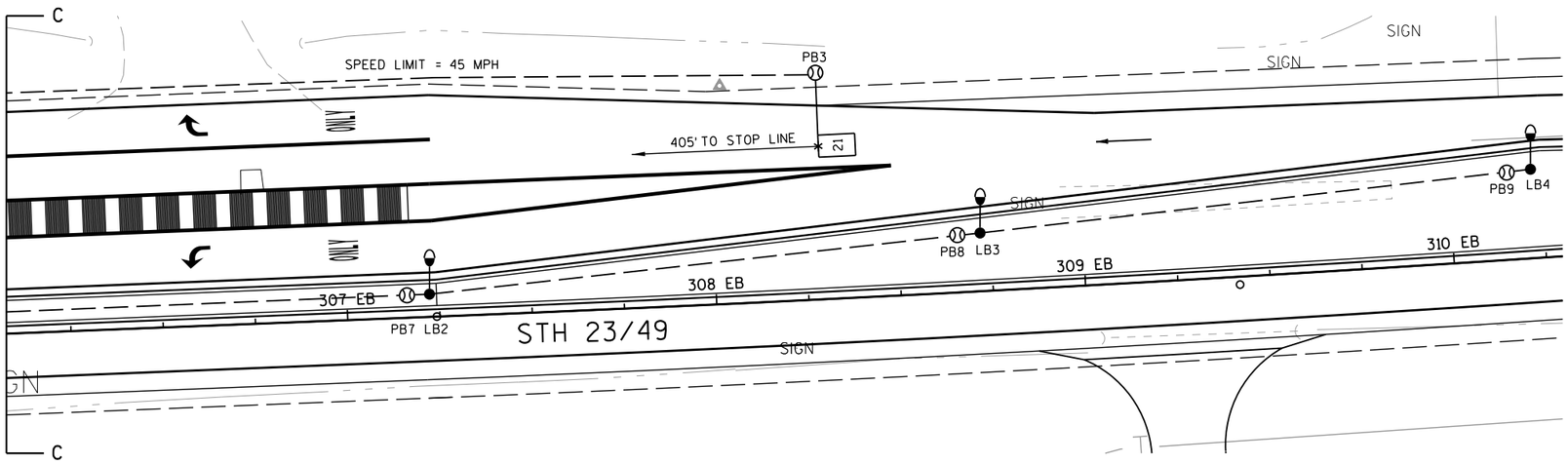
FILE NAME : Proposed Signals.dgn PLOT DATE : 5/29/2013 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 42

2

N





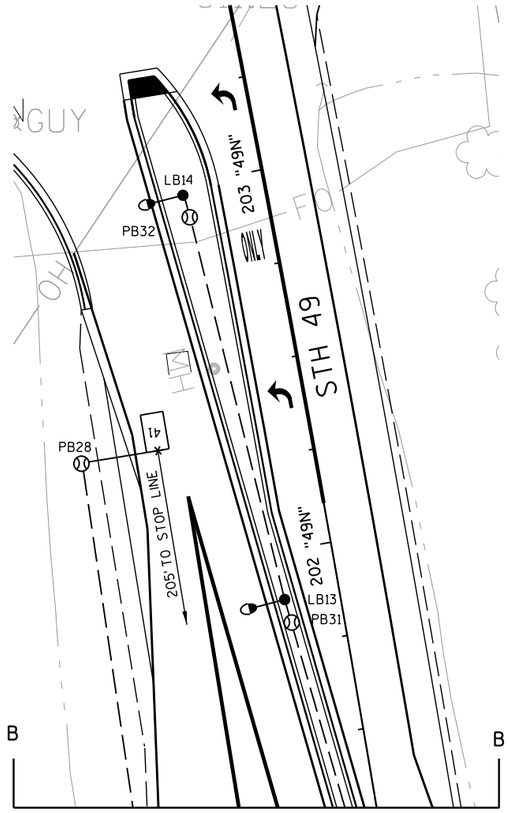
TRAFFIC CONTROL SIGNAL
STH 23 & STH 49/CTH A
TOWN OF BROOKLYN
GREEN LAKE COUNTY

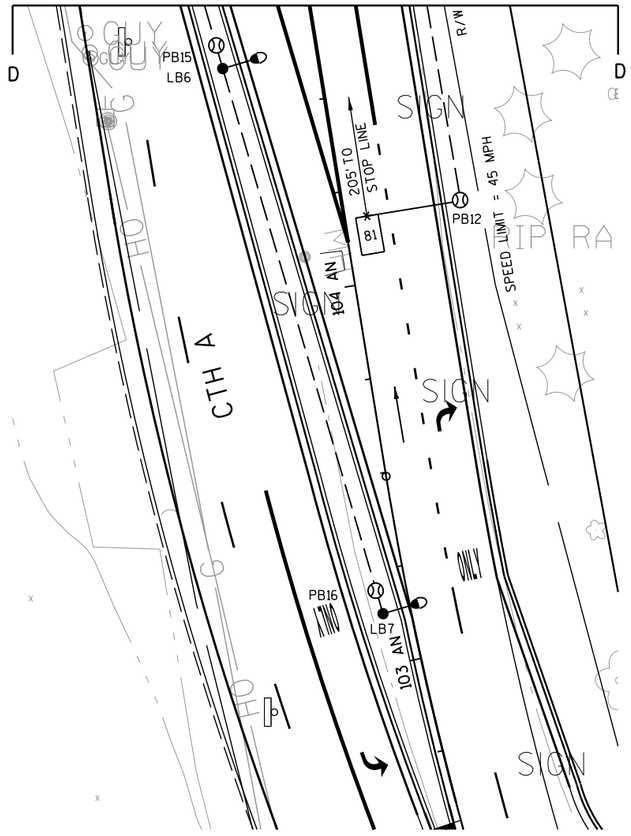
SIGNAL NO. S0707 CONTROLLER TYPE: ECONOLITE

REGION CONTACT: RON JOHNSON
DESIGNED BY: JEFF FAIT
REVISED BY:

PAGE 2 OF 5

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC SIGNAL PLAN	SHEET 139	E





TRAFFIC CONTROL SIGNAL
STH 23 & STH 49/CTH A
TOWN OF BROOKLYN
GREEN LAKE COUNTY

SIGNAL NO. S0707 CONTROLLER TYPE: ECONOLITE

REGION CONTACT: RON JOHNSON
DESIGNED BY: JEFF FAIT
REVISED BY:

PAGE 3 OF 5

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC SIGNAL PLAN	SHEET 140	E

FILE NAME : Proposed Signals.dgn PLOT DATE : 5/29/2013 PLOT BY : JFAIT-TADI PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	01 R/W	01 CLEAR TO **	02 R/W	02 CLEAR TO **	03 R/W	03 CLEAR TO **	04 R/W	04 CLEAR TO **	FLASH
01	1A,1B,1C	G	- -	-	- -			-	- -	-
02	2A,2B,2C	R	R R	G	Y R			R	R R	R
03										
04	4A,4B,4C	R	R R	R	R R			G	Y R	R
05	5A,5B,5C	-	- -	-	- -			-	- -	-
06	6A,6B,6C	R	R R	R	R R			R	R R	R
07										
08	8A,8B,8C	R	R R	R	R R			R	R R	R
OL'E'	1A,1B,1C	-	Y R	FY	Y R			R	R R	R
OL'F'	8D,8E,8F	R	R R	R	R R			FY	Y R	R
OL'G'	5A,5B,5C	R	R R	R	R R			R	R R	R
OL'H'	4D,4E,4F	R	R R	R	R R			R	R R	R
02P										
04P										
06P										
08P										

RING 2

	HEAD NUMBERS	05 R/W	05 CLEAR TO **	06 R/W	06 CLEAR TO **	07 R/W	07 CLEAR TO **	08 R/W	08 CLEAR TO **
01	1A,1B,1C	-	- -	-	- -			-	- -
02	2A,2B,2C	R	R R	R	R R			R	R R
03									
04	4A,4B,4C	R	R R	R	R R			R	R R
05	5A,5B,5C	G	- -	-	- -			-	- -
06	6A,6B,6C	R	R R	G	Y R			R	R R
07									
08	8A,8B,8C	R	R R	R	R R			G	Y R
OL'E'	1A,1B,1C	R	R R	R	R R			R	R R
OL'F'	8D,8E,8F	R	R R	R	R R			R	R R
OL'G'	5A,5B,5C	-	Y R	FY	Y R			R	R R
OL'H'	4D,4E,4F	R	R R	R	R R			FY	Y R
02P									
04P									
06P									
08P									

FY = FLASHING YELLOW ARROW

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

BARRIER

N

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	61	11	21	51	41	42	*44	46
CALLS & EXTENDS	X	X	X	X		X	X	X
CALLS ONLY								
EXTENDS ONLY					X			
PHASE CALLED	6	1	2	5		4	4	4
PHASE EXTENDED	6	1	2	5	4	4	4	4
DISCONNECT PHASE								
CALLING DELAY							X	
EXTENSION STRETCH					X			
SIZE	6X10	6X20	6X10	6X20	6X10	6X20	6X20	6X20
NUMBER OF TURNS	4	3	4	3	4	3	3	3
DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)		12		52		43	*45	47
CALLS & EXTENDS		X		X		X	X	X
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED		1		5		4	4	4
PHASE EXTENDED		1		5		4	4	4
DISCONNECT PHASE								
CALLING DELAY							X	
EXTENSION STRETCH								
SIZE		6X20		6X20		6X20	6X20	6X20
NUMBER OF TURNS		3		3		3	3	3

	19	17	23	21	27	25	31	29
	81	82	*84	86				
		X	X	X				
	X							
		8	8	8				
	8	8	8	8				
			X					
	X							
	6X10	6X20	6X20	6X20				
	4	3	3	3				
	20	18	24	22	28	26	32	30
		83	*85	87				
		X	X	X				
		8	8	8				
		8	8	8				
			X					
		6X20	6X20	6X20				
		3	3	3				

* DETECTORS INSTALLED FOR FUTURE USE (44, 45, 84, 85)

TYPE OF INTERCONNECT COMMUNICATION	
NONE	x
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM *: SS- -	

TYPE OF PRE-EMPT	
NONE	x
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	x
IN SEPARATE DOT LIGHTING CABINET	

SPECIAL OVERLAPS

	PROTECTIVE	PERMISSIVE
O.L. "E" =	1	2
O.L. "F" =	-	4
O.L. "G" =	5	6
O.L. "H" =	-	8

OVERLAPS

O.L. "A" = NONE
O.L. "B" = NONE
O.L. "C" = NONE
O.L. "D" = NONE

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL
1		6	
2	X	6	MIN.
3			
4		8	
5		2	
6	X	2	MIN.
7			
8		4	

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6, OLG	2,4,8, OLF, OLH
2	5 OR 6, OLE, OLG	1,4,8, OLF, OLH
3		
4	8, OLF, OLH	1,2,5,6, OLE, OLG
5	1 OR 2, OLE	4,6,8, OLF, OLH
6	1 OR 2, OLE, OLG	4,5,8, OLF, OLH
7		
8	4, OLF, OLH	1,2,5,6, OLE, OLG

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

STH 23 & STH 49/CTH A
TOWN OF BROOKLYN
GREEN LAKE COUNTY

SIGNAL NO. S0707

CONTROLLER TYPE: ECONOLITE

DATE 05/13

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	SEQUENCE OF OPERATIONS	SHEET 141 E

PROJECT ID:	1430-00-74
INTERSECTION:	S0707

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

CB1 TO	JUMPER	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	BLANK OUT
				RED	YELLOW	GREEN	<RED	<YELLOW>	<GREEN>	<FL YELLOW>	D/WALK	WALK		
SB 1		12	1C				RED	ORG	GRN	BLK/WHT				
			2A	RED/BLK	ORG/BLK	GRN/BLK								
			FUTURE 8-1								BLK	BLU	WHT/BLK	
SB2		7	1B				RED	ORG	GRN	BLK				
SB3		7	5A				RED	ORG	GRN	BLK				
SB4		12	6C	RED	ORG	GRN								
			FUTURE 8-2								BLK	BLU	WHT/BLK	
SB5		12	4F				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
			6B	BLK	BLU/BLK	BLU								
			8A	RED	ORG	GRN								
SB6		12	4E				RED/BLK	ORG/BLK		BLK/WHT				
			8D				RED	ORG		BLK				
SB7		7	4B	RED	ORG	GRN								
			4C	RED	ORG	GRN								
SB8		12	5C				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
			6A	RED	ORG	GRN								
SB9		7	5B				RED	ORG	GRN	BLK				
SB10		7	1A				RED	ORG	GRN	BLK				
SB11		7	2C	RED	ORG	GRN								
SB12		12	2B	BLK/WHT	BLU	GRN								
			4A	RED/BLK	ORG/BLK	GRN/BLK								
			8F				RED	ORG		BLK				
SB13		12	4D				RED/BLK	ORG/BLK		BLK/WHT				
			8E				RED	ORG		BLK				
SB14		7	8B	RED	ORG	GRN								
			8C	RED	ORG	GRN								

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	LB4
LB4	LB3
LB3	LB2
LB2	LB1
LB1	SB3
SB3	SB4
SB4	LB5
LB5	SB5
SB5	LB7
LB7	LB6
LB6	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	LB11
LB11	LB10
LB10	LB9
LB9	LB8
LB8	SB10
SB10	SB11
SB11	LB12
LB12	SB12
SB12	LB14
LB14	LB13
LB13	SB13
SB13	SB14
SB14	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB1	PB2
SB2	PB4
SB3	PB5
LB1	PB6
LB2	PB7
LB3	PB8
LB4	PB9
SB4	PB10
LB5	PB11
SB5	PB13
SB6	PB14
LB6	PB15
LB7	PB16
SB7	PB17
SB8	PB18
SB9	PB20
SB10	PB21
LB8	PB22
LB9	PB23
LB10	PB24
LB11	PB25
SB11	PB26
LB12	PB27
SB12	PB29
SB13	PB30
LB13	PB31
LB14	PB32
SB14	PB33
CB1	PB34

LIGHTING UF 12 AWG W/GROUND	
FROM	TO
CB1	SB1
SB1	SB3
SB3	LB1
LB1	LB2
LB2	LB3
LB3	LB4
CB1	LB5
LB5	SB6
SB6	LB6
LB6	LB7
CB1	SB13
SB13	LB13
LB13	LB14
CB1	LB12
LB12	SB10
SB10	SB8
SB10	LB8
LB8	LB9
LB9	LB10
LB10	LB11

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
4. "OTHER" COLUMN MAY INCLUDE SHADOW BOX (BLANK OUT) SIGN.

WIRING CHART PREPARED BY DOUG KREUSER, WISDOT

TRAFFIC CONTROL SIGNAL
STH 23 & STH 49/CTH A
TOWN OF BROOKLYN
GREEN LAKE COUNTY

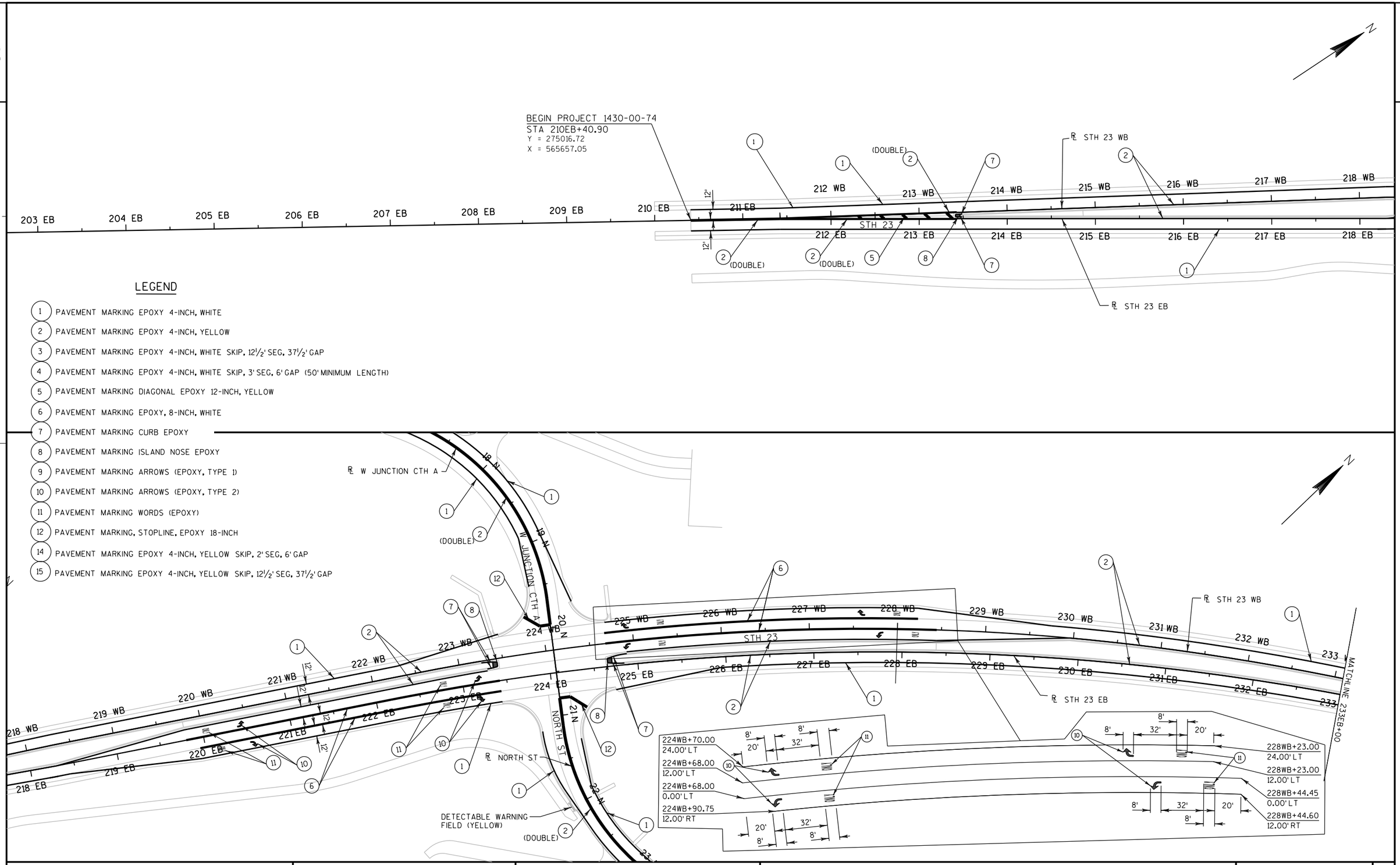
SIGNAL NO. S0707 CONTROLLER TYPE: ECONOLITE

REGION CONTACT: RON JOHNSON
DESIGNED BY: DOUG KREUSER
REVISED BY:

PAGE 5 OF 5

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CABLE ROUTING	SHEET 142	E

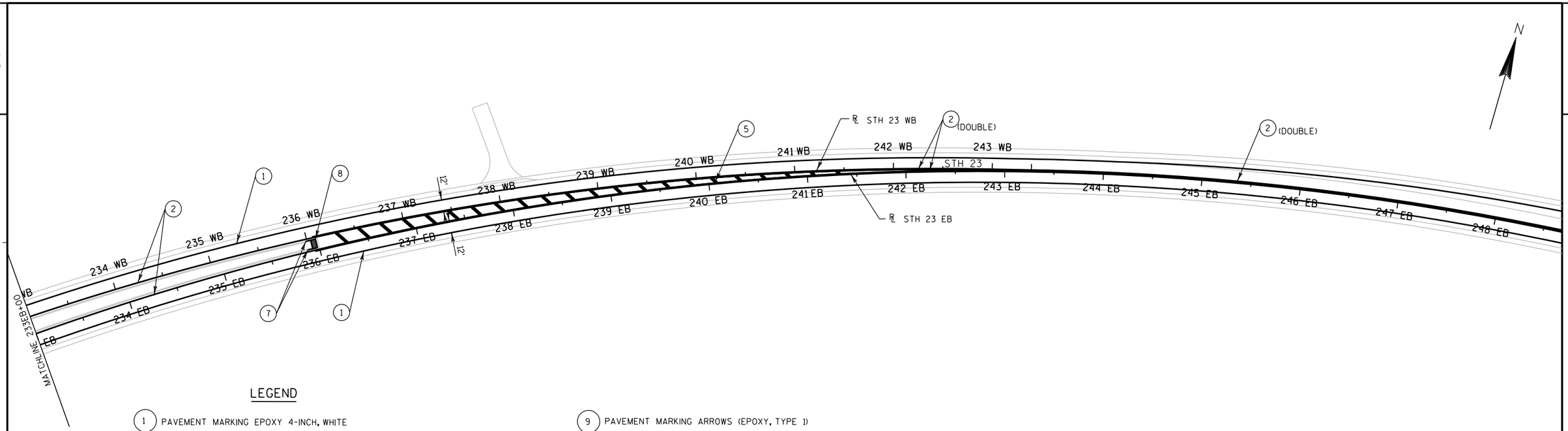
2



LEGEND

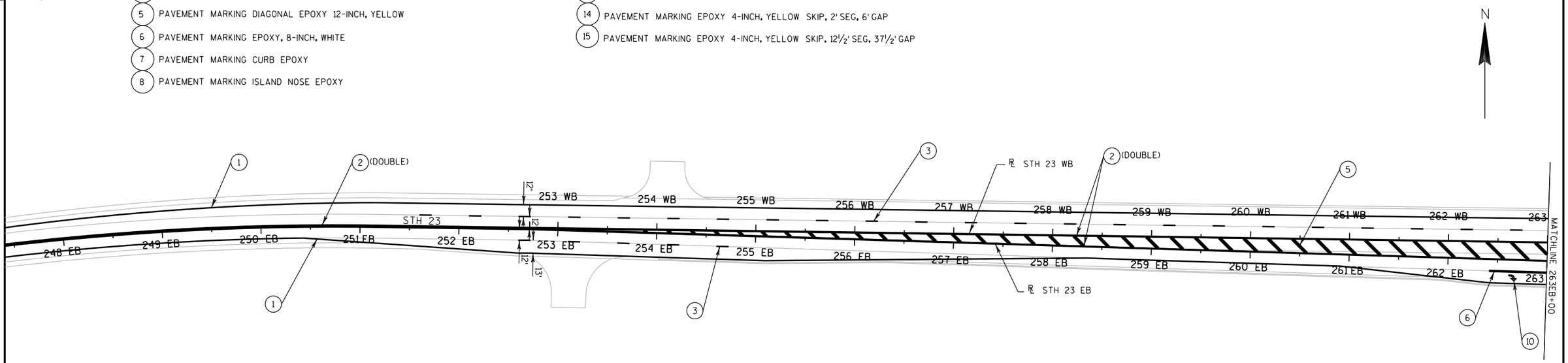
1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING	SHEET 143	E

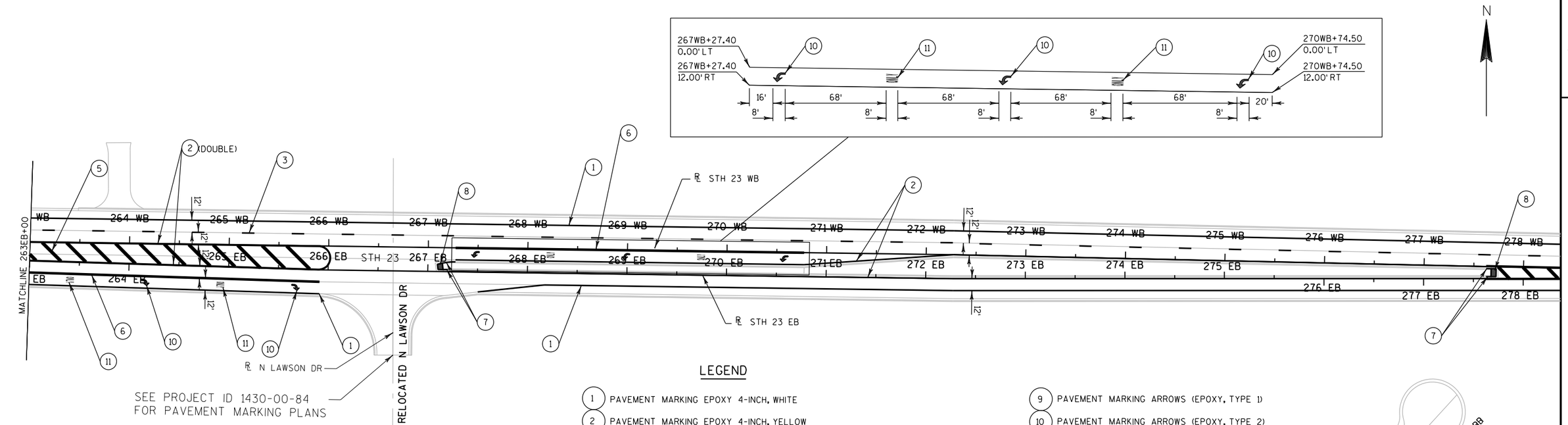


LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP

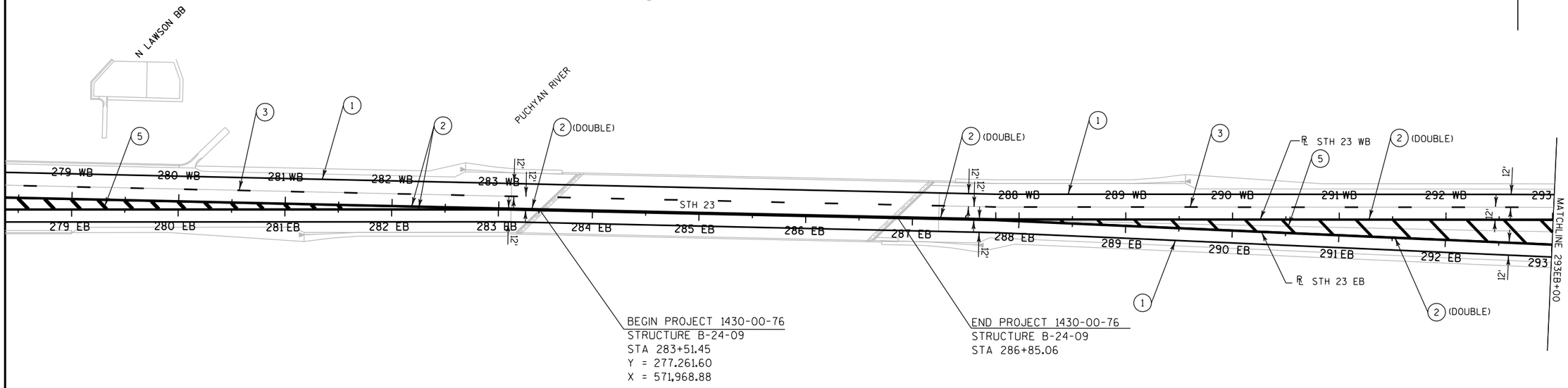


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING	SHEET 144	E



LEGEND

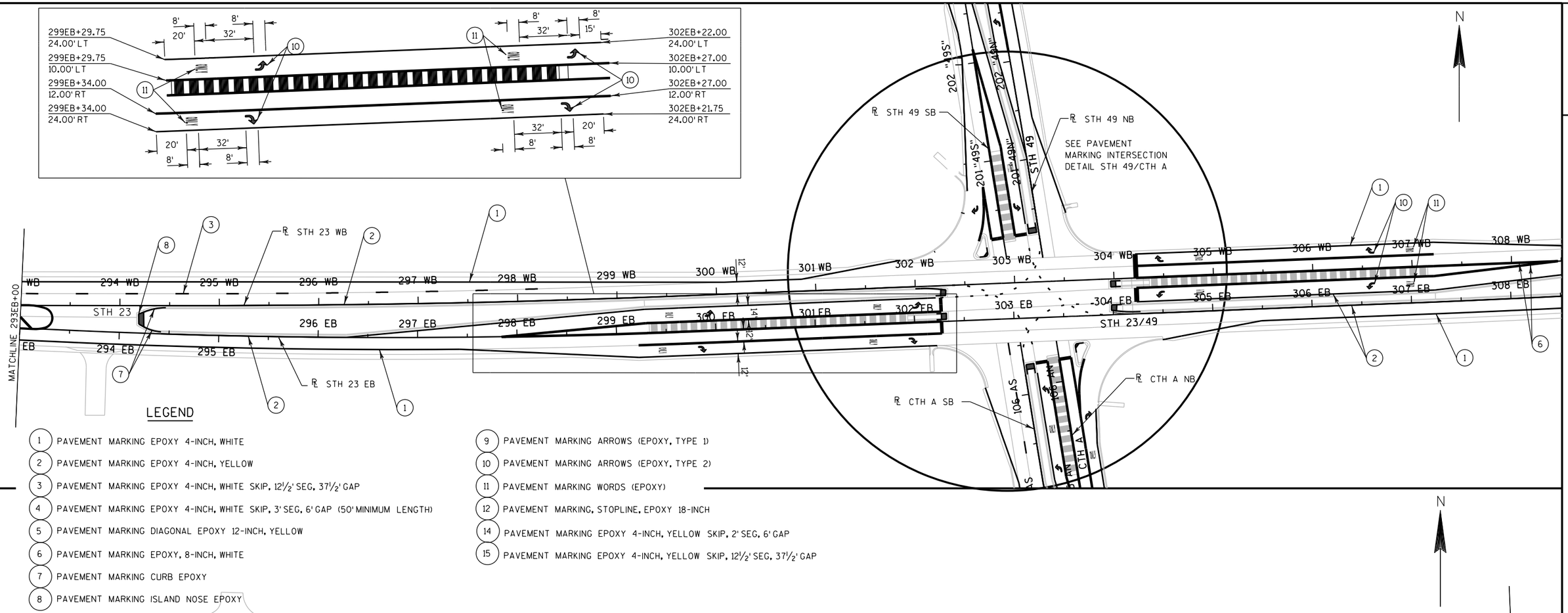
1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP



BEGIN PROJECT 1430-00-76
STRUCTURE B-24-09
STA 283+51.45
Y = 277,261.60
X = 571,968.88

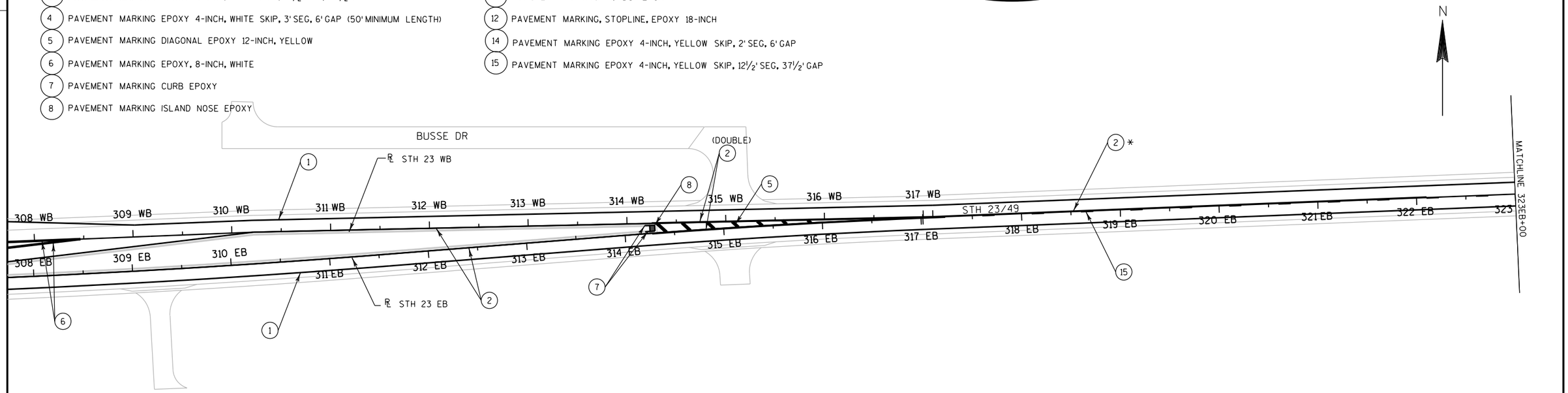
END PROJECT 1430-00-76
STRUCTURE B-24-09
STA 286+85.06

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING	SHEET 145	E



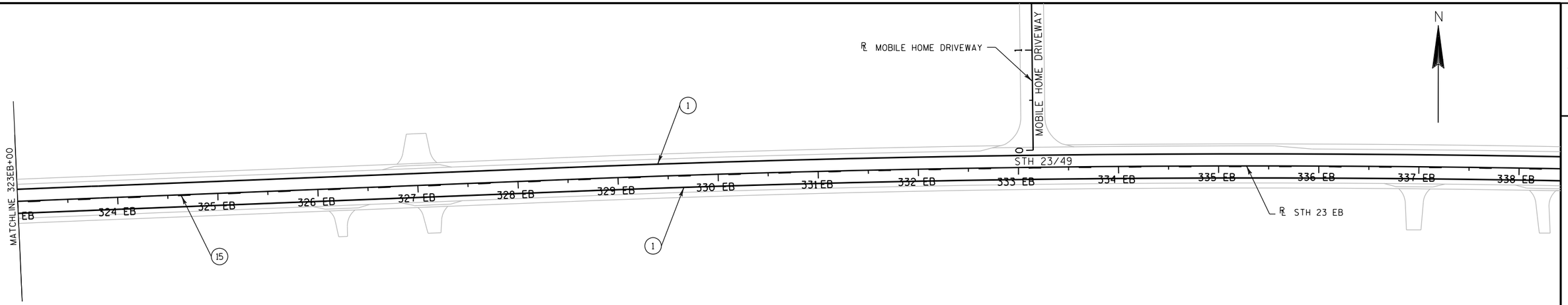
LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP



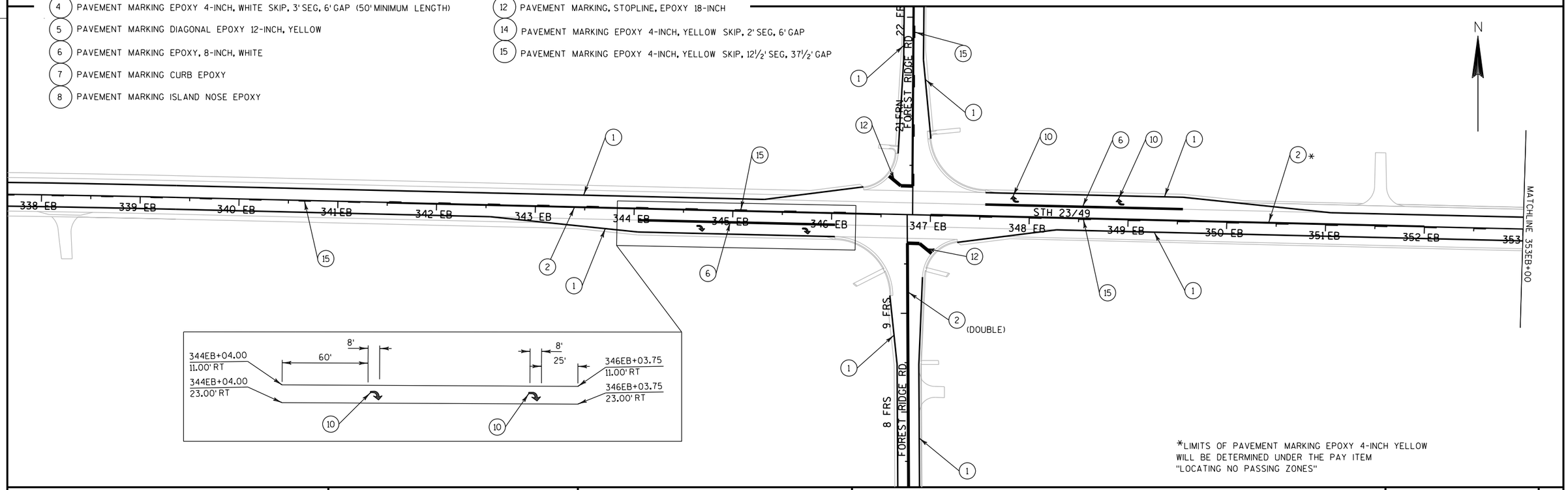
*LIMITS OF PAVEMENT MARKING EPOXY 4-INCH YELLOW WILL BE DETERMINED UNDER THE PAY ITEM "LOCATING NO PASSING ZONES"

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING	SHEET 146	E

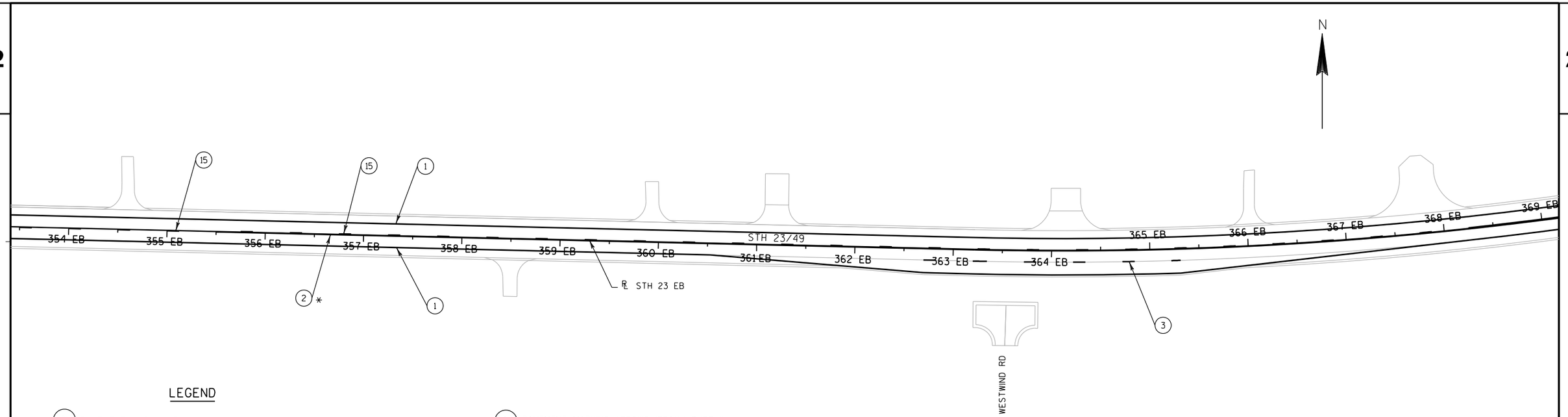


LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP

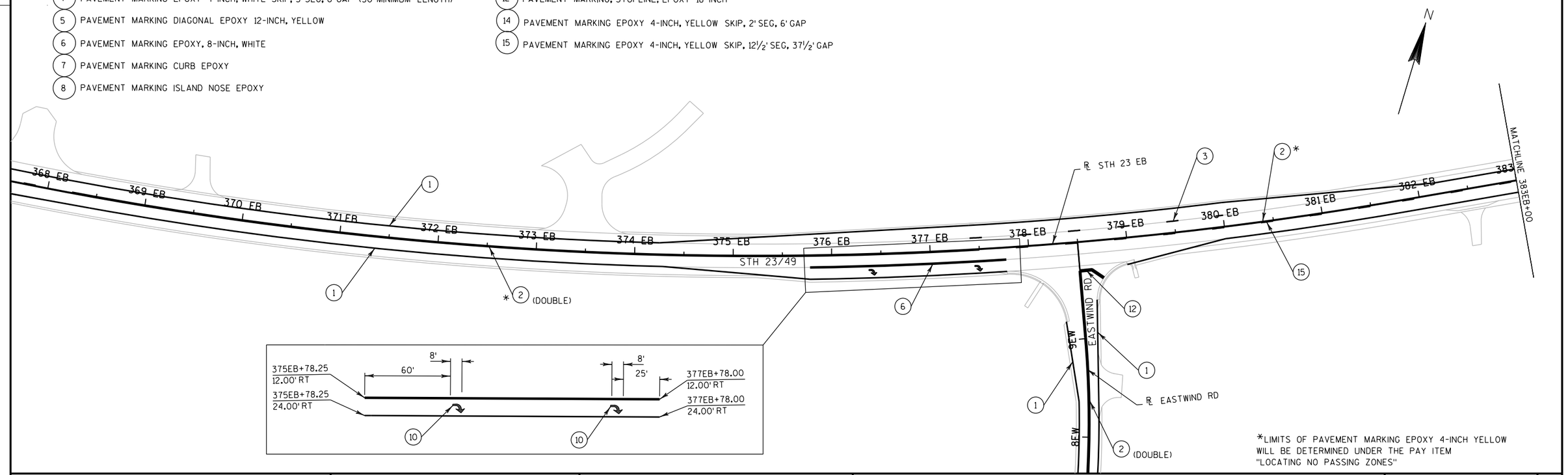


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING	SHEET 147	E



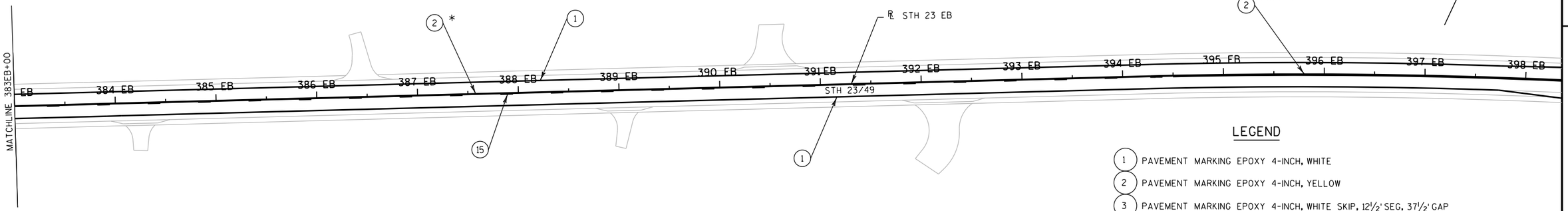
LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP



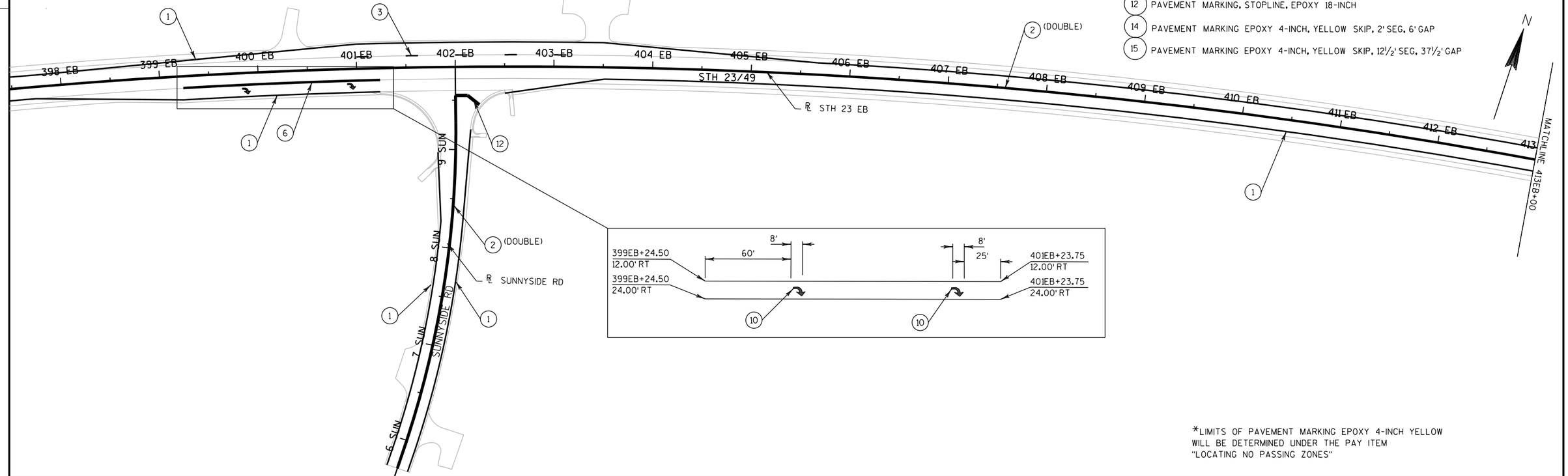
*LIMITS OF PAVEMENT MARKING EPOXY 4-INCH YELLOW WILL BE DETERMINED UNDER THE PAY ITEM "LOCATING NO PASSING ZONES"

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING	SHEET 148	E



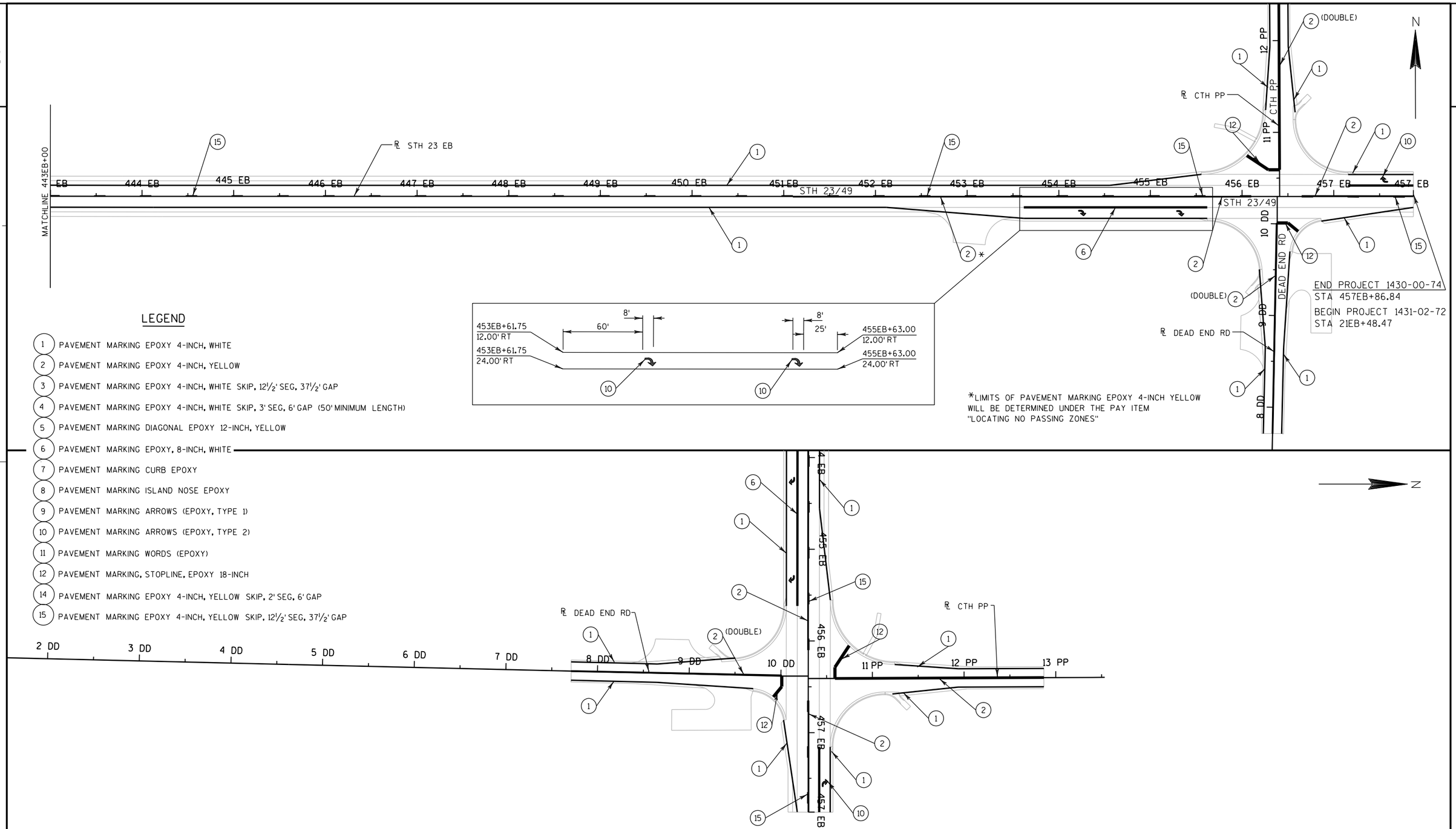
LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP



*LIMITS OF PAVEMENT MARKING EPOXY 4-INCH YELLOW WILL BE DETERMINED UNDER THE PAY ITEM "LOCATING NO PASSING ZONES"

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING	SHEET 149	E



*LIMITS OF PAVEMENT MARKING EPOXY 4-INCH YELLOW WILL BE DETERMINED UNDER THE PAY ITEM "LOCATING NO PASSING ZONES"

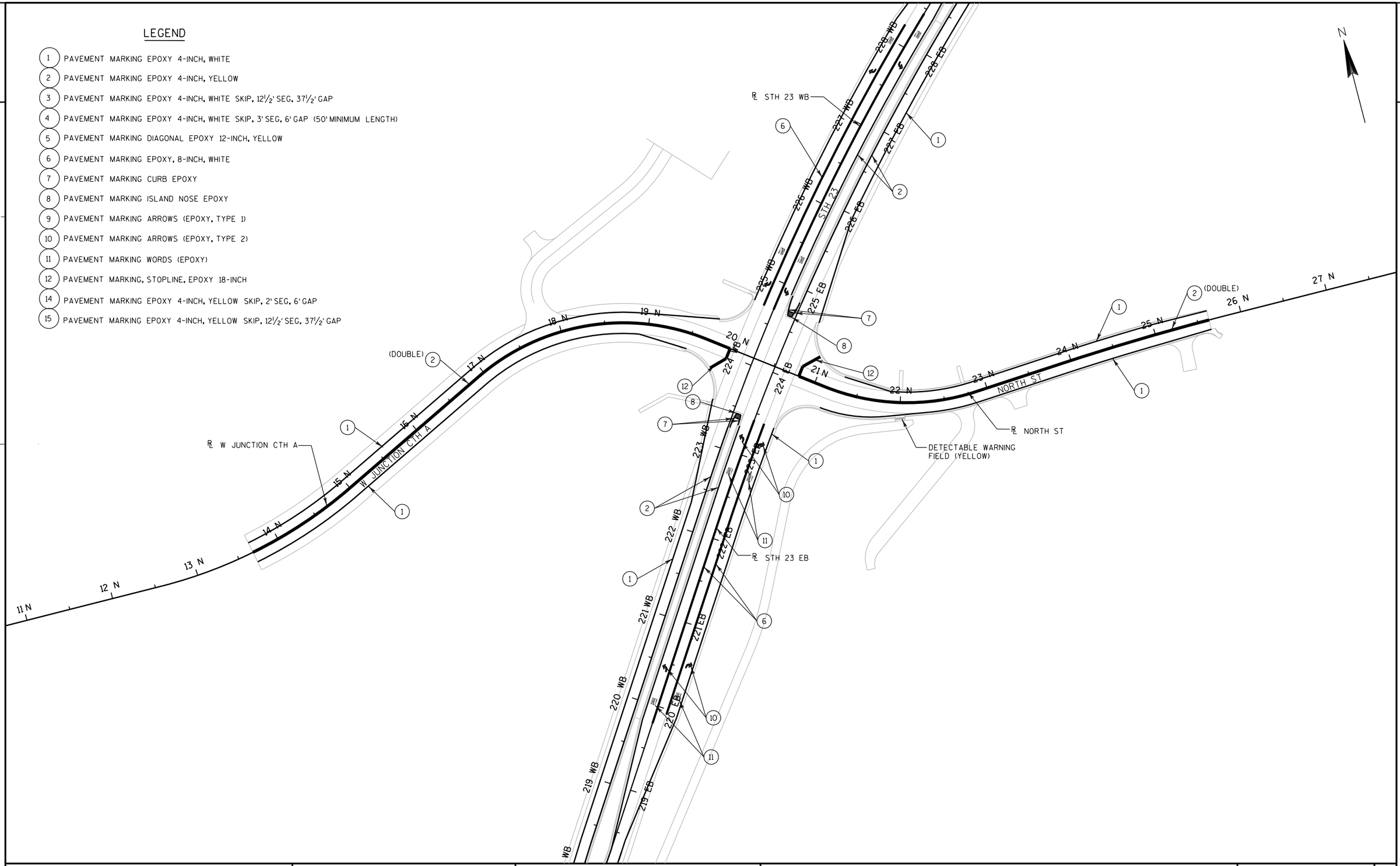
LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING-STH 23/CTH PP/DEAD END RD	SHEET 150	E

LEGEND

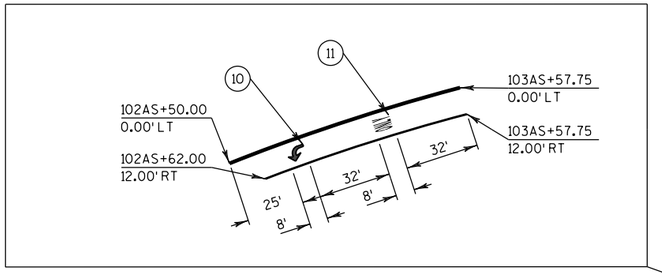
1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP

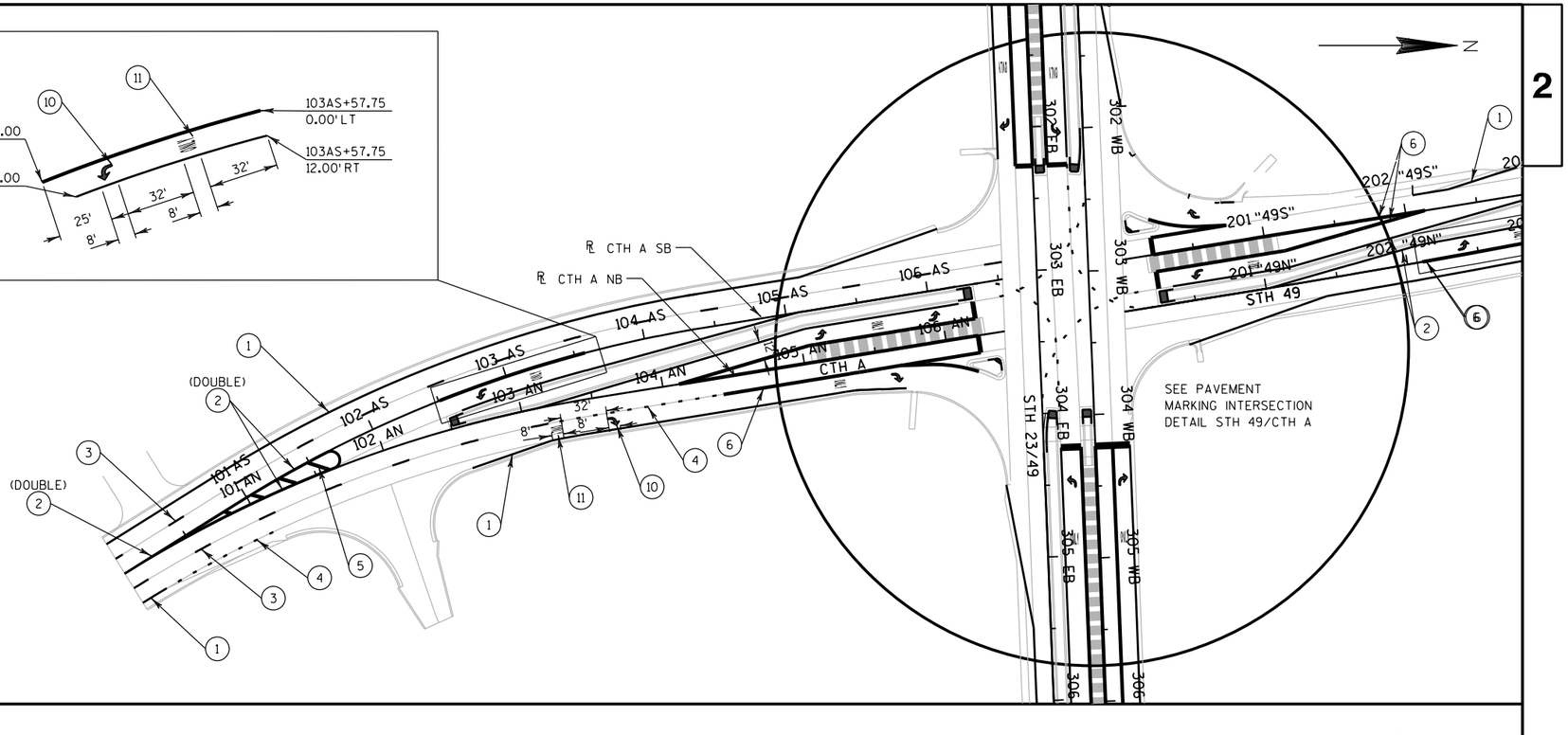


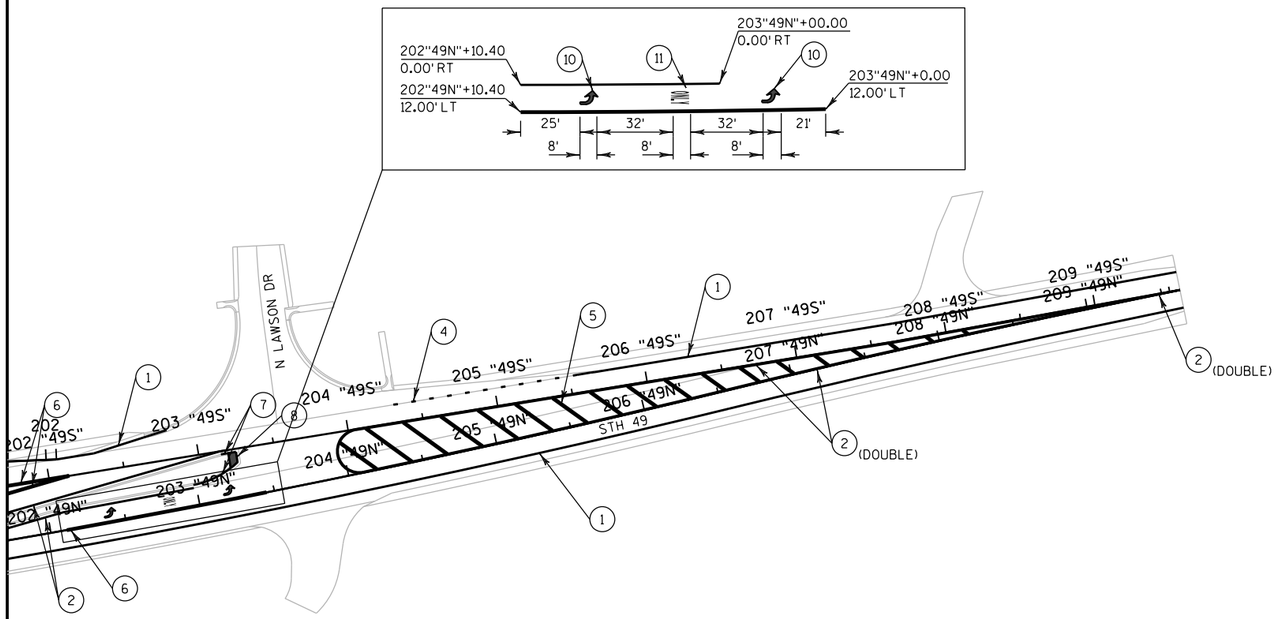
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING-W JUNCTION CTH A/NORTH ST	SHEET 151	E

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP



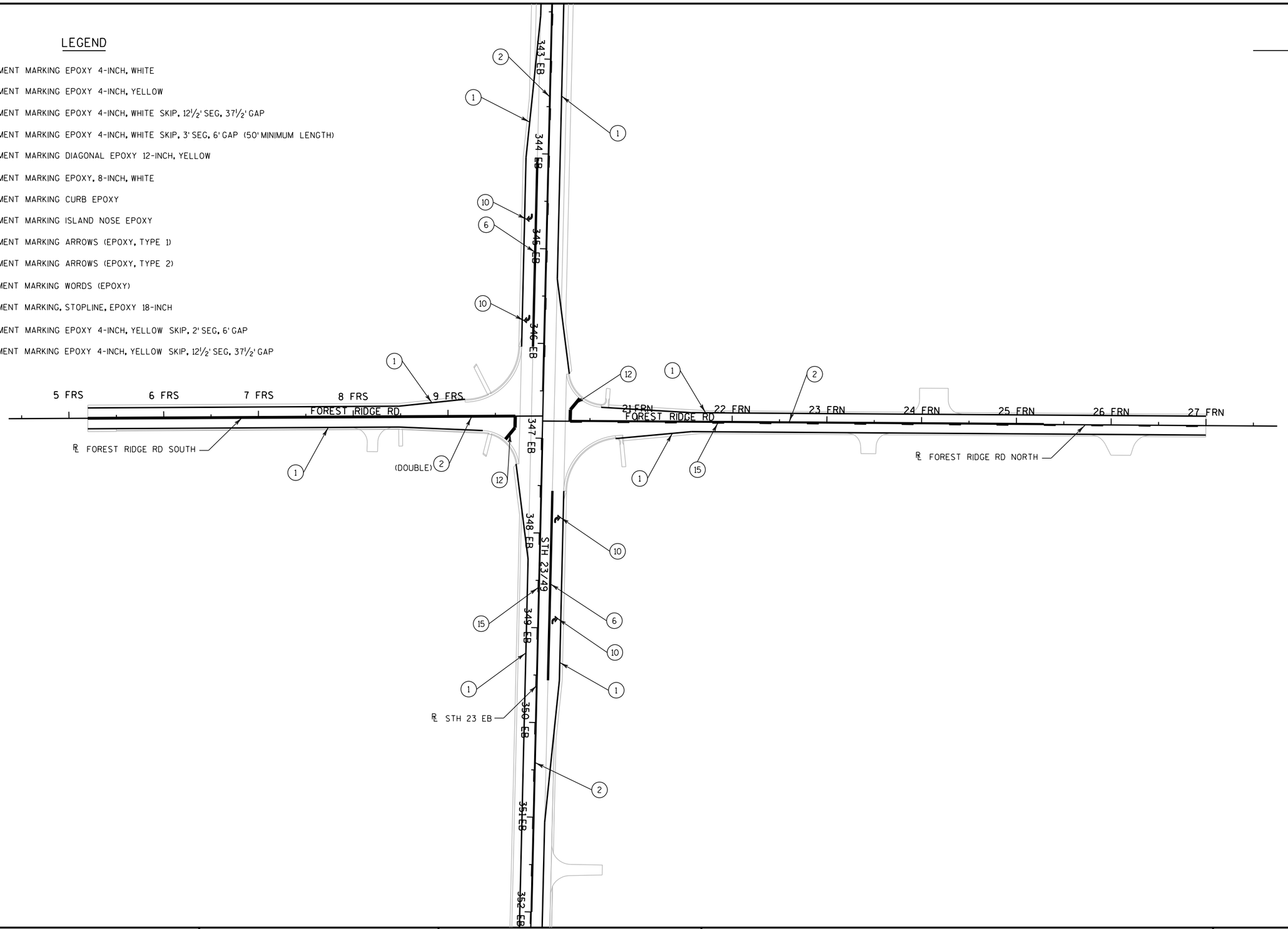




PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING-STH 49/CTH A	SHEET 152	E

LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP



LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP

N

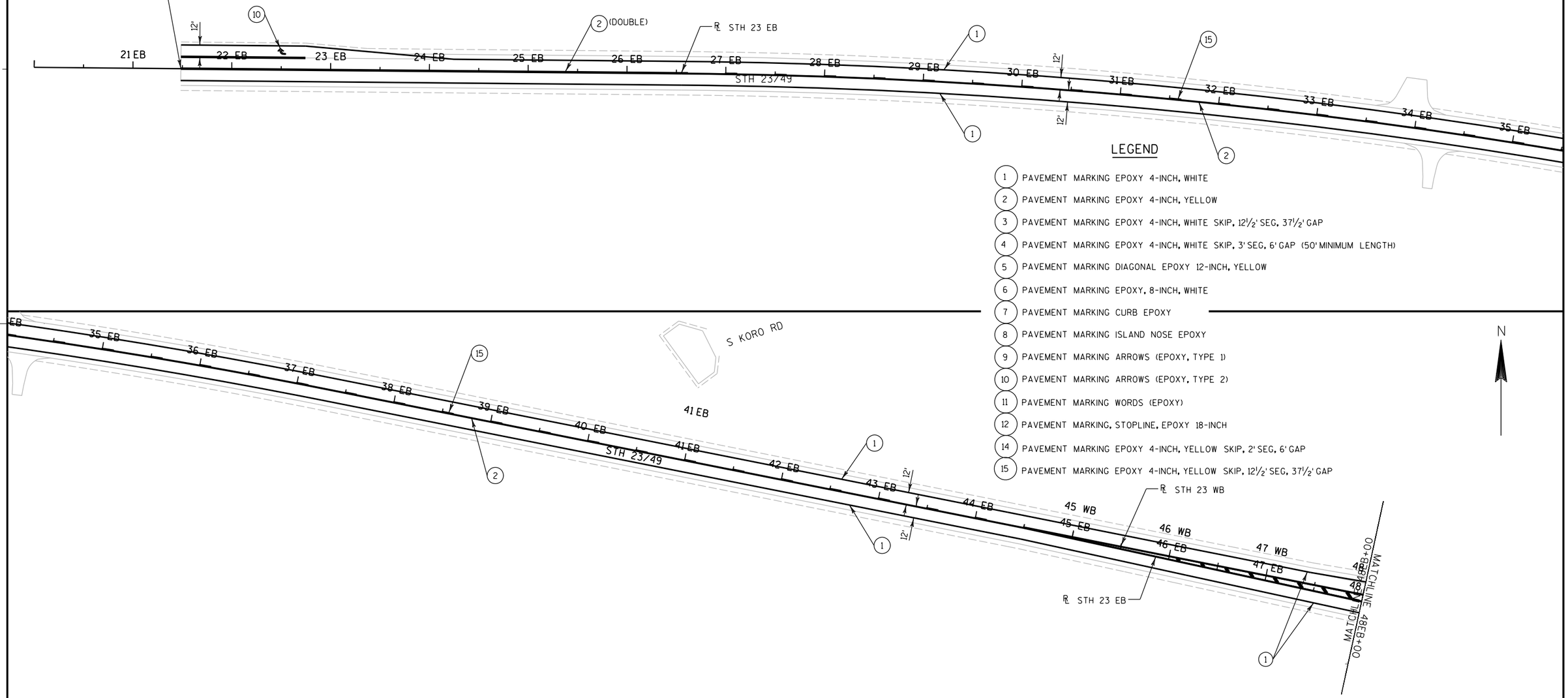
STH 49
STH 23
CTH A
201
201 "49S"
201 "49N"
200
200 "49N"
106
106 AS
106 AN
301 WB
302 WB
303 WB
304 WB
305 WB
306 WB
301 EB
302 EB
303 EB
304 EB
305 EB
306 EB
50'R
80'R

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PAVEMENT MARKING INTERSECTION DETAIL-STH 49/CTH A	SHEET 154	E

FILE NAME : J:\Active\D4\STH 23\Main\024512_pm.dgn PLOT DATE : 7/31/2013 PLOT BY : jeanna.schwinn PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 42

END PROJECT 1430-00-74
STA. 457EB+86.84
BEGIN PROJECT 1431-02-72
STA. 21EB+48.47
Y = 415,585.34
X = 701,480.47



LEGEND

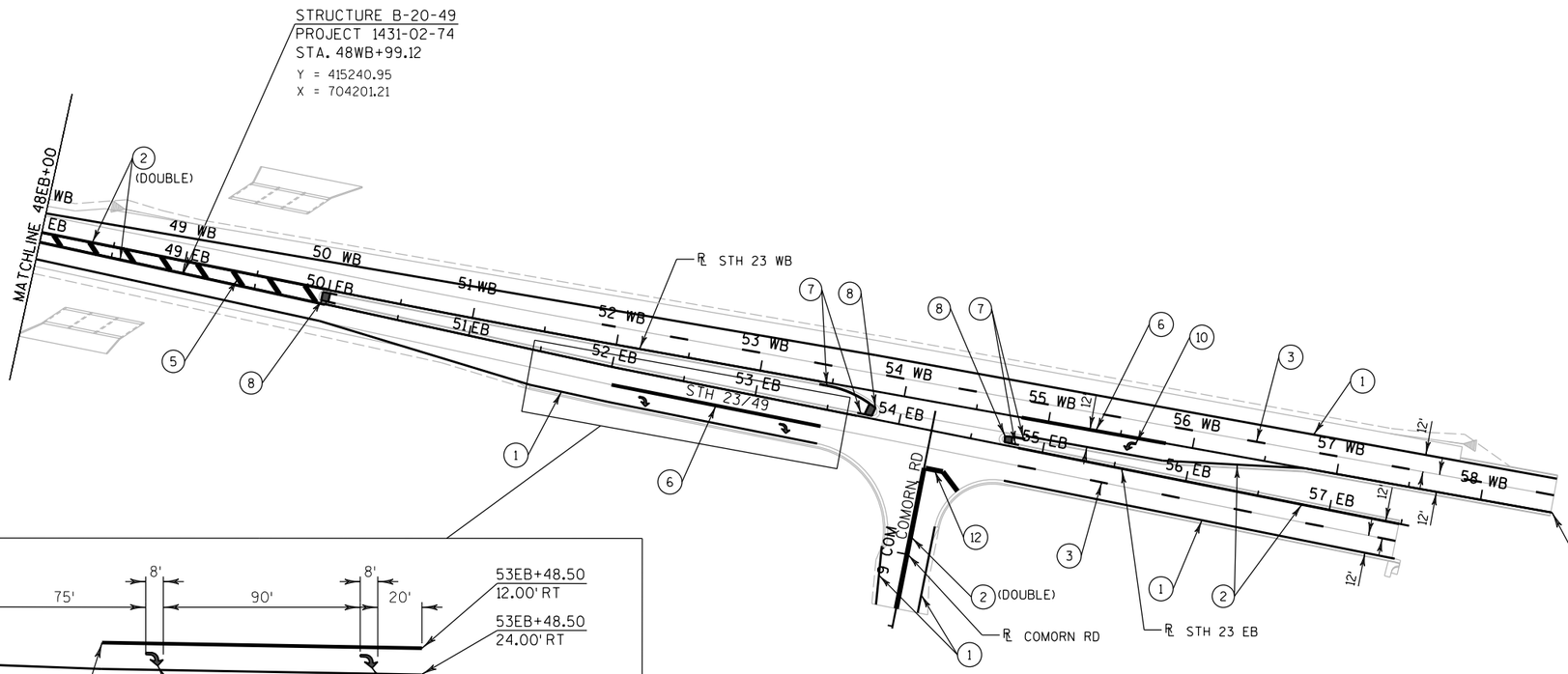
1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP

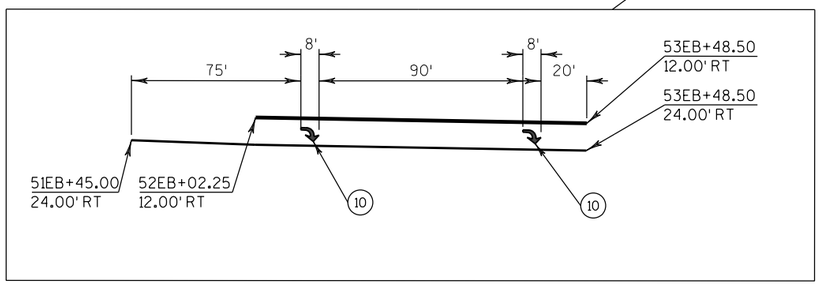
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING	SHEET 155	E

2

N

STRUCTURE B-20-49
PROJECT 1431-02-74
STA. 48WB+99.12
Y = 415240.95
X = 704201.21





LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW
3. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 12½' SEG, 37½' GAP
4. PAVEMENT MARKING EPOXY 4-INCH, WHITE SKIP, 3' SEG, 6' GAP (50' MINIMUM LENGTH)
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW
6. PAVEMENT MARKING EPOXY, 8-INCH, WHITE
7. PAVEMENT MARKING CURB EPOXY
8. PAVEMENT MARKING ISLAND NOSE EPOXY
9. PAVEMENT MARKING ARROWS (EPOXY, TYPE 1)
10. PAVEMENT MARKING ARROWS (EPOXY, TYPE 2)
11. PAVEMENT MARKING WORDS (EPOXY)
12. PAVEMENT MARKING, STOPLINE, EPOXY 18-INCH
14. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 2' SEG, 6' GAP
15. PAVEMENT MARKING EPOXY 4-INCH, YELLOW SKIP, 12½' SEG, 37½' GAP

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING	SHEET 156	E

GENERAL NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.

3. TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH TRAFFIC CONTROL WARNING LIGHTS, TYPE "C". ONE WAY LIGHTS UNLESS OTHERWISE SHOWN, DRUMS SHALL BE SPACED AT 25-FT OC IN TAPERS AND 50-FT OC ON TANGENTS OR AS OTHERWISE SHOWN.

4. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.

5. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER.

6. ALL EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED.

7. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.

8. CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKINGS WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

9. ADEQUATE TURNING PROVISIONS SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS AS DIRECTED BY THE ENGINEER.

10. TEMPORARY SIDE ROAD CLOSURES MAY BE NECESSARY FOR ASPHALTIC CONCRETE PAVING OF SIDE ROADS.

11. BARRICADE STRIPES ARE TO BE SLOPED DOWNWARD IN THE DIRECTION OF TRAFFIC FLOW.

12. MINIMUM LANE WIDTH OF 12' TO BE MAINTAINED FOR LOCAL ACCESS WITHIN THE WORKZONE. AREAS WHERE STH 23 WILL BE CLOSED WITHIN THE WORK ZONE AREA TO COMPLETE ROADWAY CONSTRUCTION INCLUDE:
- BOX CULVERT C-24-17 (STAGE 1)
- BOX CULVERT B-20-49 EXTENSION AT SILVER CREEK (STAGE 1)
- CATTLE PASS REMOVALS BETWEEN STA 239EB+00 AND STA 251EB+00 (STAGE 2)
- WIDENING AND REDECKING OF BRIDGE B-24-09 OVER PUCHYAN RIVER (STAGE 2)

13. APPROXIMATE LOCATIONS OF PORTABLE CHANGEABLE MESSAGE SIGNS ARE PROVIDED ON DETOUR PLANS. OBTAIN APPROVAL FROM THE ENGINEER FOR EXACT LOCATIONS OF THE SIGNS. THE SIGNS SHALL INFORM DRIVERS OF UPCOMING ROAD CLOSURES AND DETOURS DURING THE 10 DAYS PRIOR TO CONSTRUCTION.

14. LOCATE NO-PASSING ZONES AND INSTALL NO-PASSING ZONE SIGNS ON CTH KK PRIOR TO USE AS A DETOUR ROUTE FOR STAGE 1 AND STAGE 2 CONSTRUCTION. REVIEW ROADWAY CENTERLINE AND EDGELINE PAVEMENT MARKING ON STH 73, CTH K, CTH A, CTH KK, CTH K, AND STH 44/49. MARK ROADWAY CENTERLINE AND EDGELINE AS NEEDED PRIOR TO USE AS A DETOUR ROUTE FOR STAGE 1 AND STAGE 2 CONSTRUCTION AS DIRECTED BY THE ENGINEER

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- EXISTING SIGN
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- FMS — FIXED MESSAGE SIGN
- EXISTING TRAFFIC SIGNAL POLE
- PROPOSED TRAFFIC SIGNAL POLE OR LIGHT POLE

PAVEMENT MARKING LEGEND

(1) PAVEMENT MARKING EPOXY 4-INCH, WHITE
(2) PAVEMENT MARKING EPOXY 4-INCH, YELLOW
(6) PAVEMENT MARKING EPOXY 8-INCH, WHITE
(9) PAVEMENT MARKING WORDS EPOXY
(10) PAVEMENT MARKING ARROWS EPOXY, TYPE 2
(16) TEMPORARY PAVEMENT MARKING REFLECTIVE TAPE 4-INCH (YELLOW)
(17) TEMPORARY PAVEMENT MARKING REFLECTIVE TAPE 4-INCH (WHITE)
(18) TEMPORARY PAVEMENT MARKING STOP LINE 12-INCH
(19) TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE

STAGE 1 CONSTRUCTION

- CONSTRUCT STH 23 EAST OF THE STH 49/CTH A INTERSECTION

STAGE 1A CONSTRUCTION

- CONSTRUCT TEMPORARY WIDENING OF SOUTHBOUND LANE CTH A
- REMOVE MEDIAN/PORK CHOP ISLAND AS SPECIFIED ON PLANS AND INSTALL TEMPORARY PAVEMENT

- IMPLEMENT A 4-WAY STOP AT THE INTERSECTION OF STH 49/CTH A PRIOR TO STAGE 1A. INSTALL STOP AHEAD WARNING SIGNS FOR DURATION OF INTERSECTION CONSTRUCTION AS NOTED IN THE PLANS. PLACE TRAFFIC CONTROL SIGNS PORTABLE CHANGEABLE MESSAGE ON STH 49, CTH A, AND ON STH 23 JUST WEST OF THE STH 49/CTH A INTERSECTION TWO WEEKS PRIOR TO IMPLEMENTING A 4-WAY STOP. UTILIZE TRAFFIC CONTROL SIGNS PORTABLE CHANGEABLE MESSAGE DURING THE FIRST WEEK TO NOTIFY TRAFFIC OF TRAFFIC PATTERN CHANGE.

STAGE 1B CONSTRUCTION

- SHIFT TRAFFIC TO SOUTHBOUND LANES AND TEMPORARY WIDENING ON STH 49/CTH A
- CONSTRUCT EAST SIDE OF THE STH 49/CTH A INTERSECTION
- CONSTRUCT TEMPORARY CONNECTION TO STH 49 NORTHBOUND

STAGE 1 TRAFFIC

- STH 23 CLOSED TO THRU TRAFFIC FROM STH 49/CTH A TO ARCADE GLEN RD.
- TRAFFIC SHIFTED TO SOUTHBOUND LANES AND TEMPORARY WIDENING ON STH 49/CTH A
- MAINTAIN ACCESS TO LOCAL BUSINESS AND RESIDENCES DURING CONSTRUCTION
- MAINTAIN ACCESS TO WESTWIND ROAD UNTIL EASTWIND ROAD CONSTRUCTION IS COMPLETE.
- MAINTAIN ACCESS TO S KORO ROAD UNTIL SILVER CREEK BOX CULVER EXTENSION, B-20-49 CONSTRUCTION IS COMPLETE

- COMPLETE STAGE 1, 1A, AND 1B BEFORE STAGE 2 CAN BEGIN. STAGE 1A AND 1B CAN BE CONSTRUCTED AS SEPARATE OPERATIONS WITHIN AN OVERALL STAGE 1 TIME PERIOD. STAGE 2A AND 2B CAN BE CONSTRUCTED AS SEPARATE OPERATIONS WITHIN AN OVERALL STAGE 2 TIME PERIOD

STAGE 2 CONSTRUCTION

- CONSTRUCT STH 23 WEST OF THE STH 49/CTH A INTERSECTION TO W JUNCTION CTH A
- CONSTRUCT PUCHYAN RIVER BRIDGE B-24-09 (PROJECT ID 1430-00-76)
- CONSTRUCT SHARED USE PATH ON SOUTH SIDE OF STH 23 FROM BEGINNING OF PROJECT TO NORTH ST (PROJECT ID 1430-08-86)

STAGE 2A CONSTRUCTION

- SHIFT TRAFFIC TO NEWLY CONSTRUCTED NORTHBOUND LANES ON STH 49/CTH A
- CONSTRUCT WEST SIDE OF THE STH 49/CTH A INTERSECTION

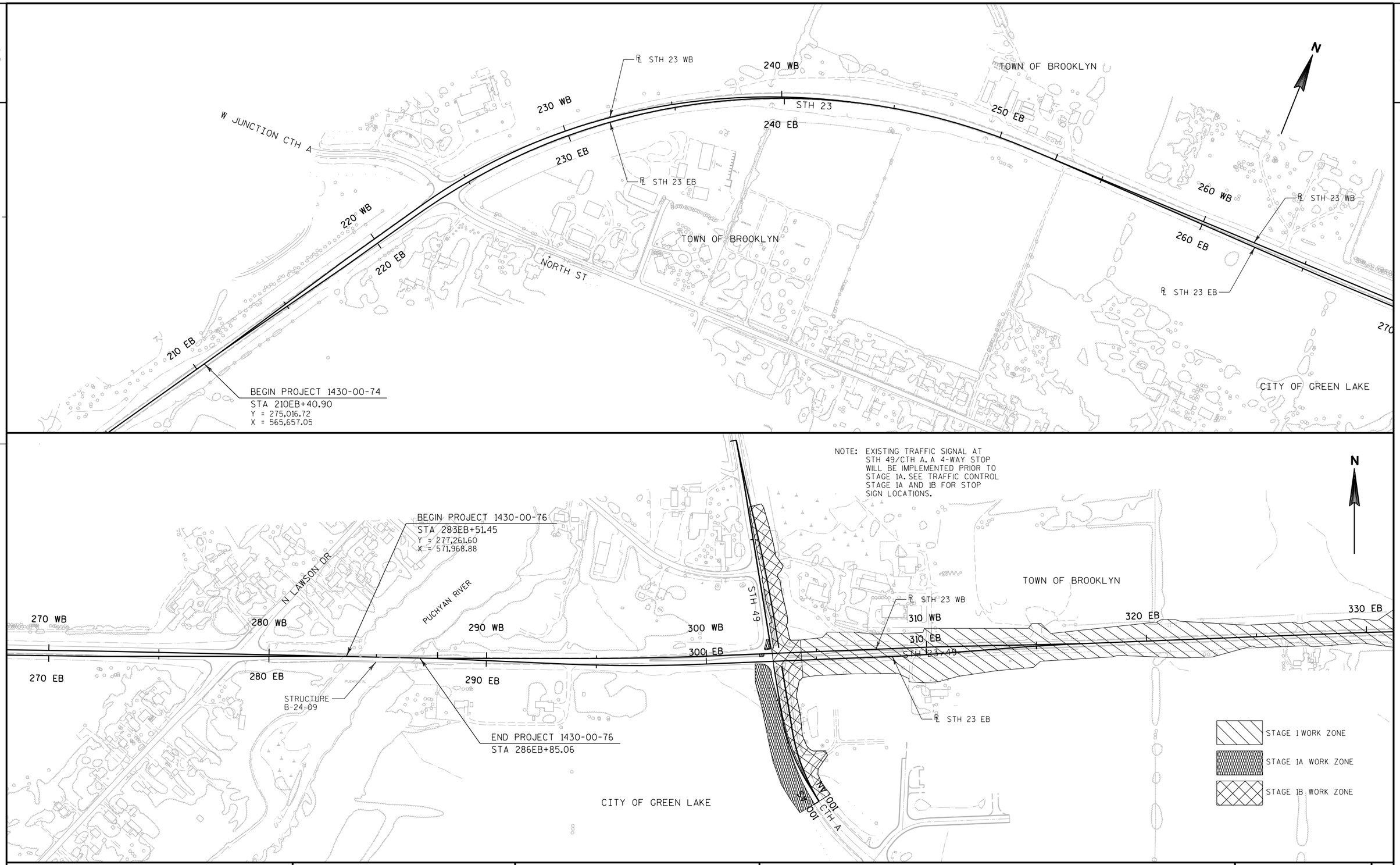
STAGE 2B CONSTRUCTION

- CONSTRUCT STH 49 STA 206+62 TO STA 207+50, CORRUGATED MEDIAN, MEDIAN, PORK CHOP ISLAND; CTH A CORRUGATED MEDIAN AND PORK CHOP ISLAND AS SHOWN ON PLANS

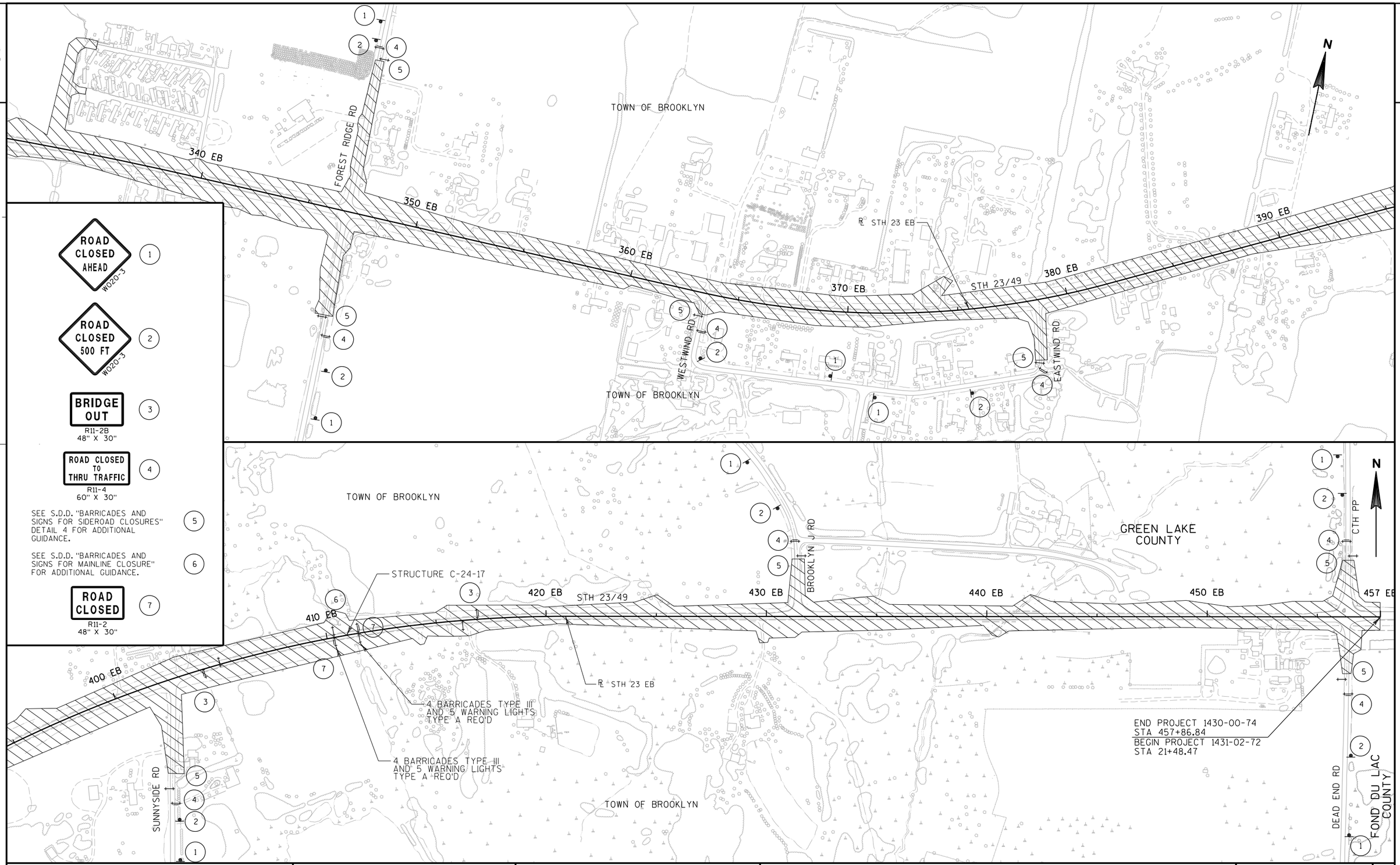
STAGE 2 TRAFFIC

- STH 23 CLOSED TO THRU TRAFFIC FROM W. JUNCTION CTH A TO STH 49/CTH A
- TRAFFIC SHIFTED TO NORTHBOUND LANES ON STH 49/CTH A IN STAGE 2A
- SINGLE LANE CLOSURES AND FLAGGING OPERATIONS ON STH 49/CTH A IN STAGE 2B
- MAINTAIN ACCESS TO LOCAL BUSINESSES AND RESIDENCES DURING CONSTRUCTION
- MAINTAIN ACCESS AT EXISTING N. LAWSON DR. (SOUTH LEG) AND STH 23 UNTIL RELOCATED N. LAWSON DR. CONNECTION TO STH 23 IS OPEN TO TO TRAFFIC

2



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 1 OVERVIEW	SHEET 158	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 1 OVERVIEW	SHEET 159 E

2

N

GREEN LAKE COUNTY

CTH PP

DEAD END ROAD

FOND DU LAC COUNTY

TOWN OF RIPON

END PROJECT 1430-00-74
STA. 457EB+86.84

BEGIN PROJECT 1431-02-72
STA. 21EB+48.47
Y = 415,585.34
X = 701,480.47

STH 23 / 49

30 EB

℄ STH 23

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURE" DETAIL 4 FOR ADDITIONAL GUIDANCE

S KORO ROAD

ROAD CLOSED 500 FT
W020-3

ROAD CLOSED AHEAD
W020-3

ROAD WORK AHEAD
W020-1

ROAD CLOSED
R11-2
48" X 30"

TOWN OF RIPON

STRUCTURE B-20-49

40 EB

50 WB

50 EB

BRIDGE OUT
R11-2B
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

BRIDGE OUT
R11-2B
48" X 30"

℄ STH 23 WB

END PROJECT 1431-02-72
STA 58WB+48.81

ROAD CLOSED 500 FT
W020-3

ROAD CLOSED 1000 FT
W020-3

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" FOR ADDITIONAL GUIDANCE

5 BARRICADES TYPE III AND 6 WARNING LIGHTS TYPE A REQ'D

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" FOR ADDITIONAL GUIDANCE

℄ STH 23 EB

COMORN ROAD

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

CITY OF RIPON

PROJECT 1431-02-74
STA. 48WB+99.12
Y = 415,240.95
X = 704,201.21

5 BARRICADES TYPE III AND 6 WARNING LIGHTS TYPE A REQ'D

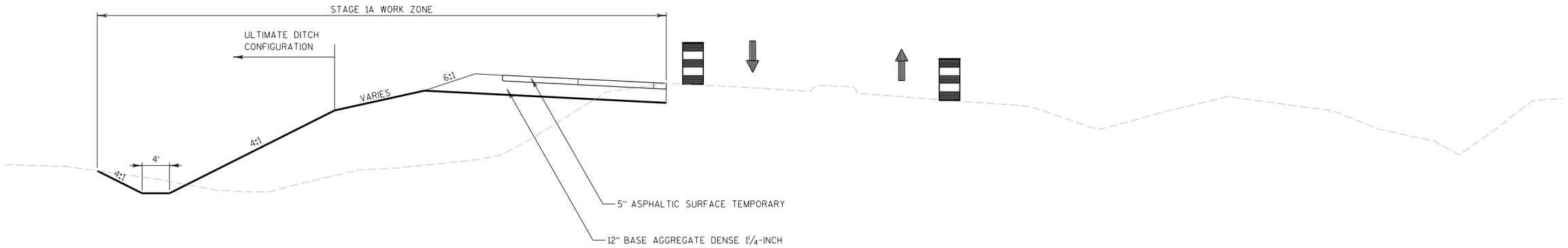
SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURE" DETAIL 4 FOR ADDITIONAL GUIDANCE

ARCADE GLEN ROAD

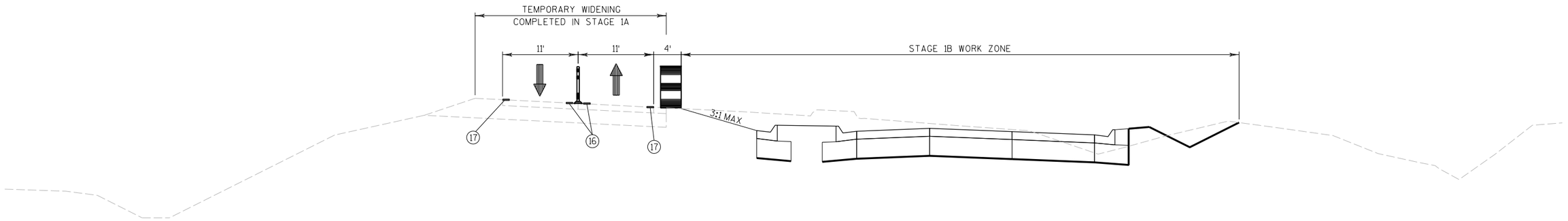
ROAD WORK AHEAD
W020-1

ROAD CLOSED AHEAD
W020-3

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE 1 OVERVIEW	SHEET 160	E



TYPICAL SECTION - STAGE 1A
CTH A (LOOKING NORTH)



TYPICAL SECTION - STAGE 1B
CTH A (LOOKING NORTH)

* TEMPORARY WIDENING TO BE CONSTRUCTED WITHIN THE ULTIMATE ROADWAY FOOTPRINT

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 1A/1B TYPICAL SECTION	SHEET 161	E

STH 23, STA. 295EB+50 RT

REMOVE WHEN SIGNALS BECOME NON OPERATIONAL AND INSTALL STOP AHEAD SIGN

W03-1

NOTE: COVER ALL TRAFFIC SIGNAL FACES WHEN NON OPERATIONAL AND UTILIZE SIGNAL POLE MOUNTED FOLDING STOP SIGNS

* INSTALL STOP SIGNS ON TEMPORARY SUPPORTS IMMEDIATELY AFTER EXISTING FOLDING STOP SIGNS AND SIGNAL POLES ARE REMOVED

ROAD WORK AHEAD W020-1

LEFT LANE CLOSED AHEAD W020-5 - OR - LEFT LANE CLOSED AHEAD W020-5

FOR TEMPORARY PAVING IN MEDIAN

FOR TEMPORARY WIDENING

W01-6 48" X 24"

END ROAD WORK G20-2A 48" X 24"

BEGIN RIGHT TURN LANE

REMOVE IN STAGE 1A

33' TEMPORARY STORM SEWER PIPE EXTENSIONS ELEV = 816.99

REMOVE SIGNAL POLES

40' TEMPORARY PIPE EXTENSIONS ELEV = 816.74

INSTALL TEMPORARY WIDENING

54' TEMPORARY PIPE EXTENSION ELEV = 822.05

52' TEMPORARY PIPE EXTENSION ELEV = 822.03

50' TEMPORARY PIPE EXTENSION ELEV = 822.14

INSTALL PIPES IN PERMANENT LOCATIONS AS CALLED OUT IN MISCELLANEOUS QUANTITIES

STOP R1-1 36" X 36"

COUNTY A TO REMAIN, MOVE TO TEMPORARY SUPPORT

R11-2(MOD) 48" X 30" LANE CLOSED

STOP EXISTING SIGN TO REMAIN

RIGHT TURN OBEY THIS SIGN EXISTING SIGN TO REMAIN

MOVE TO TEMPORARY SUPPORT

FOR TEMPORARY PAVING OF PORK CHOP ISLAND

W9-3B

CENTER LANE CLOSED AHEAD W020-5 - OR - SHOULDER WORK W021-5

FOR TEMPORARY WIDENING

ROAD WORK AHEAD W020-1

REMOVE AND REPLACE WHEN SIGNALS BECOME NON OPERATIONAL

W03-1

298 EB, 299 EB, 300 EB, 301 EB, 302 EB, 303 EB, 304 EB, 305 EB, 306 EB, 307 EB

238 WB, 299 WB, 300 WB, 301 WB, 302 WB, 304 WB, 305 WB, 306 WB, 307 WB

STH 23

CTH A

101 AS, 101 AN, 102 AS, 102 AN, 103 AS, 103 AN, 104 AS, 104 AN, 105 AS, 105 AN, 106 AS, 106 AN

201 "49S", 202 "49S", 203 "49S", 204 "49S", 205 "49S", 206 "49S"

STH 49

201 "49N", 202 "49N", 203 "49N", 204 "49N", 205 "49N", 206 "49N"

SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADDITIONAL GUIDANCE

REMOVE MEDIAN/PORK CHOP ISLAND AND SIGNAL POLES. INSTALL TEMPORARY ASPHALT

W01-6 48" X 24"

REMOVE

SPEED LIMIT 45 REMOVE

W01-6 48" X 24"

ONLY ONLY ONLY REMOVE

REMOVE

RIGHT LANE MUST TURN RIGHT REMOVE

R11-2(MOD) 48" X 30" LANE CLOSED

R11-4 60" X 30" ROAD CLOSED TO THRU TRAFFIC

STOP MOVE TO TEMPORARY SUPPORT

RIGHT TURN OBEY THIS SIGN REMOVE

REMOVE WHEN SIGNALS BECOME NON OPERATIONAL AND INSTALL STOP AHEAD SIGN

W03-1

ROAD WORK AHEAD W020-1

RIGHT LANE CLOSED AHEAD W20-5

W04-2R

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 1A	SHEET E

FILE NAME : J:\Active\D4\STH 23\Main\025005_tc.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

N

TEMPORARY WIDENING COMPLETED IN STAGE 1A

SEE S.D.D. "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR ADDITIONAL GUIDANCE

COMMERCIAL AVE

ROAD WORK AHEAD W020-1

REMOVE SOLID WHITE LANE DELINEATOR 100' NORTH OF COMMERCIAL AVE TO STA 101AS+25

REMOVE SOLID WHITE LANE DELINEATOR

REMOVE ARROWS

REMOVE YELLOW CENTERLINE FROM COMMERCIAL AVE TO CONSTRUCTION LIMITS

REMOVE ARROWS

DOUBLE (16) (17) (18)

101 AS 101 AN 102 AS 102 AN 103 AS 103 AN CTH A 104 AS 104 AN 105 AS 105 AN 106 AS 106 AN

50' 50' 25' 15' 11' 4' 4'

R11-2(MOD) 48" X 30" LANE CLOSED

RIGHT LANE MUST TURN RIGHT REMOVE

W03-1

STOP R1-1 30" X 30"

R11-2(MOD) 48" X 30" LANE CLOSED

REMOVE

REMOVE

STOP R1-1 36" X 36"

301 EB 302 EB 303 EB 303 WB 304 EB 304 WB 305 EB 305 WB 306 EB 306 WB 307 EB 307 WB 308 EB 308 WB 309 EB 309 WB

STH 23

W01-6 48" X 24"

END ROAD WORK G20-2A 48" X 24"

SPEED LIMIT 35 W03-5 36" X 36"

RIGHT LANE CLOSED AHEAD W020-5

ROAD WORK AHEAD W020-1

REMOVE 50' OF 8-INCH WHITE LANE LINES

W04-2R

ROAD WORK 500 FT W020-1

ROAD WORK AHEAD W020-1

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" AND "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL GUIDANCE

SPEED LIMIT 35 R2-1 48" X 60"

FOR TEMPORARY USE ONLY COVER

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 1B	SHEET 163	E

2

2

ROAD CLOSED AHEAD
W020-3

W01-6
48" X 24"

W03-1

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR MORE INFORMATION

R11-2(MOD)
48" X 30"
LANE CLOSED

ROAD CLOSED 500 FT
W020-3

RIGHT TURN LANE CLOSURE TO REMAIN IN EFFECT FOR DURATION ON STAGE 1

ROAD WORK AHEAD
W020-1

N LAWSON DR

TANKS

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" AND "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR ADDITIONAL GUIDANCE

SPEED LIMIT 45
R2-1
48" X 60"

SPEED LIMIT 45
W03-5
36" X 36"

ROAD WORK AHEAD
W020-1

ROAD WORK 1000 FT
W020-1

ROAD WORK 500 FT
W020-1

W03-1

TEMPORARY PAVEMENT COMPLETED IN STAGE 1A

STOP
R1-1
36" X 36"

REMOVE WHITE AND YELLOW EDGE LINES

STOP
R1-1
36" X 36"

REMOVE WHITE DASH LANE LINE AND YELLOW EDGE/CENTERLINE

DOUBLE

STH 49

END ROAD WORK
G20-2A
48" X 24"

REMOVE SIGNAL POLES

STOP
REMOVE

RIGHT TURN OBEY THIS SIGN
REMOVE

REMOVE

NORTH 49
MOVE TO TEMPORARY SUPPORT

R11-2(MOD)
48" X 30"
LANE CLOSED

SPEED LIMIT 55
MOVE TO TEMPORARY SUPPORT

R11-4
60" X 30"
ROAD CLOSED TO THRU TRAFFIC

STH 23/49

CTH A

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 1B	SHEET 164	E

2

①

②

STAGE 1 OVERVIEW

CONSTRUCTION

- RELOCATED NORTH LAWSON DRIVE FROM STH 23 TO NORTH STREET.
- INTERSECTION OF NORTH LAWSON DRIVE AND NORTH STREET. NO CONSTRUCTION EFFORTS SHALL TAKE PLACE WITHIN THE INTERSECTION PRIOR TO JUNE 4, 2014.

TRAFFIC

- RELOCATED NORTH LAWSON DRIVE CLOSED TO ALL TRAFFIC FOR DURATION OF PROJECT.
- TRAFFIC ON NORTH STREET AND EXISTING LAWSON DRIVE TO BE MAINTAINED UNTIL INTERSECTION IS CLOSED.
- INTERSECTION OF RELOCATED NORTH LAWSON DRIVE AND NORTH STREET CLOSED TO THRU TRAFFIC FOR THE DURATION OF WORK IN INTERSECTION.
- RESIDENTS WITHIN CONSTRUCTION LIMITS SHALL HAVE ACCESS TO DRIVEWAYS AT END OF EACH WORK DAY EXCEPT DURING CONCRETE POURS / CURE TIME ON EXISTING NORTH LAWSON DRIVE.
- ACCESS TO EXISTING NORTH LAWSON DRIVE FROM STH 23 SHALL BE MAINTAINED UNTIL INTERSECTION CONSTRUCTION IS COMPLETE.

GENERAL NOTES

ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH TRAFFIC CONTROL SHALL BE COVERED OR REMOVED.

ACCESS TO ALL EXISTING PROPERTIES WITHIN THE PROJECT LIMITS MUST BE MAINTAINED THROUGHOUT CONSTRUCTION, DURING TIMES WHEN CONSTRUCTION DOES NOT ALLOW ACCESS, PROPERTY OWNERS SHALL BE NOTIFIED WELL IN ADVANCE BY THE CONTRACTOR.

ALL CROSS STREETS WILL BE CLOSED USING TYPE III BARRICADES.

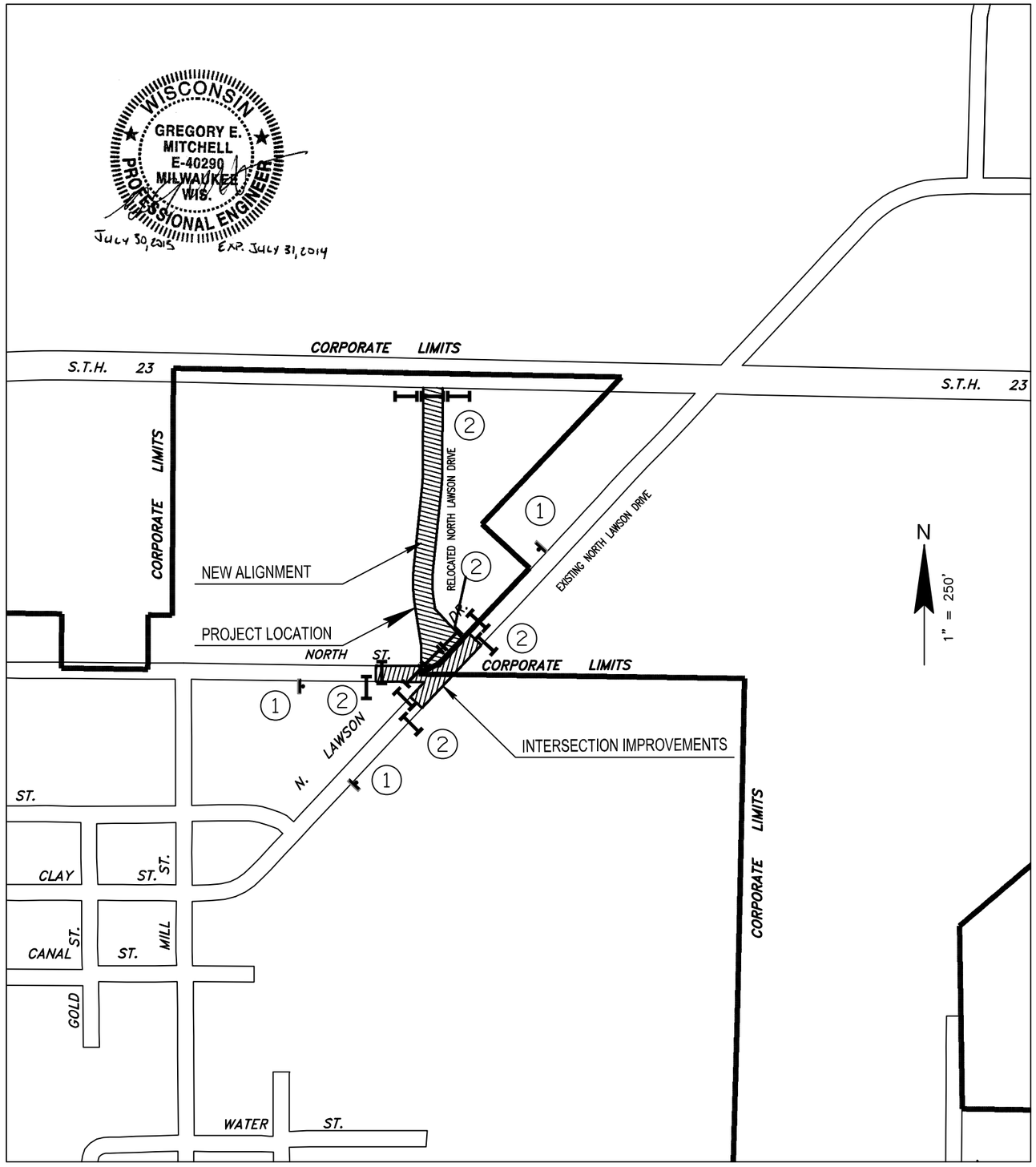
PLACE DESIGNATED SIGNS ON TYPE III BARRICADES IN THE PATH OF APPROACHING TRAFFIC.

SIGN ON PERMANENT SUPPORT

TYPE III BARRICADE WITH TYPE 'A' FLASHERS.
(TWO EACH BARRICADE) WARNING SIGN OR SIGNS TO BE MOUNTED ON BARRICADE WHERE INDICATED ON PLANS.

WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE WIS.
PROFESSIONAL ENGINEER

JULY 30, 2013 EXP. JULY 31, 2014



PROJECT NO: 1430-00-84	HWY: N. LAWSON DRIVE	COUNTY: GREEN LAKE	TRAFFIC CONTROL / CONSTRUCTION STAGING PLAN	SHEET	E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DWG\TRAFFIC DETOUR 2.DWG PLOT DATE : 07-30-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 250.000' / IN WISDOT/CADDS SHEET 42

2

4 BARRICADES TYPE III AND
5 WARNING LIGHTS TYPE A REQ'D

REMOVE CATTLE PASS
STRUCTURE C-24-9004

REMOVE CATTLE PASS
STRUCTURE C-24-9005

TOWN OF BROOKLYN

N

W JUNCT CTH A

230 WB

240 WB

STH 23

240 EB

230 EB

250 EB

260 WB

260 EB

4 BARRICADES TYPE III AND
5 WARNING LIGHTS TYPE A REQ'D

R STH 23 WB

R STH 23 EB

220 WB

220 EB

NORTH STREET

TOWN OF BROOKLYN

BEGIN PROJECT 1430-00-74
STA 210EB+40.90
Y = 275,016.72
X = 565,657.05

SHARED USE PATH CONSTRUCTED
IN STAGE 1

210 EB

INSTALL FIXED MESSAGE SIGN ADJACENT TO
PATH AT INTERSECTION WITH S LAWSON DR
TO READ:

PATH CLOSED 1 MILE AHEAD
ACCESS TO GREEN LAKE
FOLLOW S. LAWSON DR.

SEE PROJECT
ID 1430-00-84
FOR TRAFFIC
CONTROL PLANS

RELOCATED
N LAWSON DR

CITY OF
GREEN LAKE

ROAD CLOSED AHEAD W20-3 — 1

ROAD CLOSED 500 FT W20-3 — 2

ROAD CLOSED 1000 FT W20-3 — 3

SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURE" DETAIL 4 FOR ADDITIONAL GUIDANCE. — 4

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" FOR ADDITIONAL GUIDANCE. — 5

PATH CLOSED — R9-9, 24" X 12" — MOUNTED ON TYPE II BARRICADE WITH TYPE A WARNING LIGHT — 6

SEE S.D.D. "TRAFFIC CONTROL, SIDEWALK CLOSURE" FOR ADDITIONAL GUIDANCE. — 7

ROAD CLOSED TO THRU TRAFFIC — R11-4, 60" X 30" — 8

BRIDGE OUT — R11-2B, 48" X 30" — 9

ROAD CLOSED — R11-2, 48" X 30" — 10

N

BEGIN PROJECT 1430-00-76
STA 283EB+51.45
Y = 277,261.60
X = 571,968.88

N LAWSON DR

270 WB

280 WB

290 WB

300 WB

270 EB

280 EB

290 EB

300 EB

SEE TRAFFIC CONTROL - STAGE 2
DETAILS FOR ADVANCED WARNING
SIGNS AT STH 49/CTH A

STH 49

R STH 23 WB

TOWN OF BROOKLYN

310 WB

310 EB

320 EB

330 EB

STH 23/49

R STH 23 EB

CTH A

100 AVE

100 ST

7 BARRICADES TYPE III AND
8 WARNING LIGHTS TYPE A REQ'D

STRUCTURE
B-24-09

END PROJECT 1430-00-76
STA 286EB+85.06

7 BARRICADES TYPE III AND
8 WARNING LIGHTS TYPE A REQ'D

CITY OF GREEN LAKE

PUCHYAN RIVER

NOTE: EXISTING TRAFFIC SIGNALS AT
STH 49/CTH A. A 4-WAY STOP
WILL BE IMPLEMENTED PRIOR
TO STAGE 1A.

STAGE 2 WORK ZONE

STAGE 2A WORK ZONE

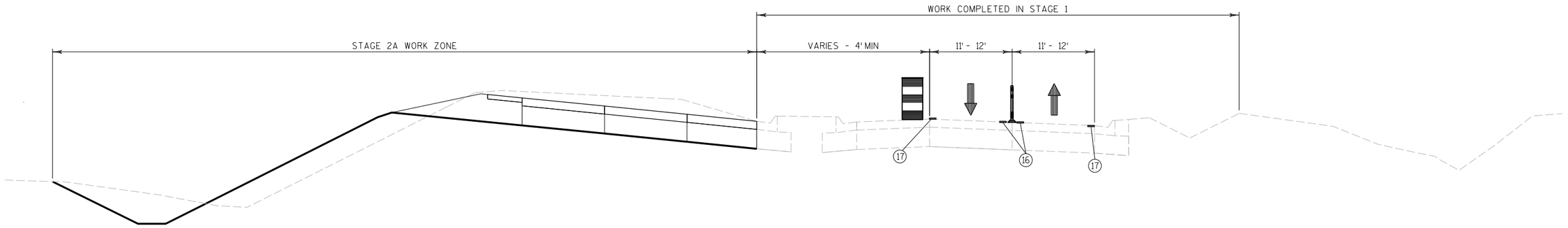
STAGE 2B WORK ZONE

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 2 OVERVIEW	SHEET 166	E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 2 OVERVIEW	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\025009_tc.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 400.0000 ' / in.
WISDOT/CADDS SHEET 42

2



TYPICAL SECTION - STAGE 2A
CTH A (LOOKING NORTH)

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 2A TYPICAL SECTION	SHEET 168	E

NOTES:

COVER ALL TRAFFIC SIGNALS WHEN NON OPERATIONAL AND UTILIZE FOLDING STOP SIGNS

SEE PAVEMENT MARKING PLAN FOR ADDITIONAL PERMANENT PAVEMENT MARKINGS TO BE INSTALLED WITHIN THE CONSTRUCTION LIMITS

ROAD WORK AHEAD W020-1

SPEED LIMIT 35 R2-1 48" X 60"

W03-5 36" X 36"

END ROAD WORK G20-2A 48" X 24"

REMOVE TEMPORARY TAPE PLACED IN STAGE 1

W04-2L

ROAD WORK AHEAD W020-1

LEFT LANE CLOSED AHEAD W020-5

ROAD WORK 500 FT W020-1

ROAD WORK AHEAD W020-1

COMMERCIAL AVE

CTH A

REMOVE WORDS/ARROWS

REMOVE WHITE LANE LINE

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" AND "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL GUIDANCE

50'

DOUBLE

REMOVE WORDS/ARROWS

W03-1

ONLY ONLY ONLY

*PERMANENT SIGN INSTALLED IN PREVIOUS STAGE TO BE COVERED

SIGNAL POLE INSTALLED IN STAGE 1

R11-4 60" X 30" ROAD CLOSED TO THRU TRAFFIC

101 AS 101 AN 102 AS 102 AN 103 AS 103 AN 104 AS 104 AN 105 AS 105 AN 106 AS 106 AN

301 EB 302 EB 303 EB 304 EB 305 EB 305 WB 306 EB 306 WB 307 EB 307 WB 308 EB 308 WB 309 EB 309 WB 310 EB

STH 23/49

DOUBLE

RIGHT LANE MUST TURN RIGHT *

SEE S.D.D. "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR ADDITIONAL GUIDANCE

STOP R1-1 36" X 36"

RIGHT TURN OBEY THIS SIGN *(MOUNTED ON POLE)

SIGNAL/LIGHT POLES INSTALLED IN STAGE 1 (UTILIZE FOLDING STOP SIGNS WHERE APPLICABLE)

R11-2(MOD) 48" X 30" LANE CLOSED

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" FOR ADDITIONAL GUIDANCE

ROAD CLOSED 500 FT W020-3

W03-1

ROAD CLOSED AHEAD W020-3

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 2A	SHEET 169 E

2

N

ROAD WORK AHEAD
W020-1

N LAWSON DR

R11-2(MOD)
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2(MOD)
48" X 30"
LANE CLOSED
TYPE III BARRICADE

W01-6
48" X 24"
TYPE III BARRICADE

W03-1

ROAD WORK 500 FT
W020-1

ROAD WORK 1000 FT
W020-1

ROAD WORK AHEAD
W020-1

SPEED LIMIT 45
R2-1
48" X 60"

SPEED LIMIT 45
W03-5
36" X 36"

TEMPORARY PAVEMENT COMPLETED IN STAGE 1B

300 EB
300 WB
301 EB
301 WB
STH 23
302 EB
302 WB
303 EB
303 WB
304 EB
304 WB
305 EB
305 WB
306 EB
306 WB
307 WB
308 EB
308 WB
STH 23/49

106 AS
106 AN
CTH A

201 "49S"
202 "49S"
203 "49S"
204 "49S"
205 "49S"
206 "49S"
207 "49S"
208 "49S"
209 "49S"
201 "49N"
202 "49N"
203 "49N"
204 "49N"
205 "49N"
206 "49N"
207 "49N"
208 "49N"
209 "49N"

"49N"+58
MATCH EXISTING
"49N"+10

STH 49

50'
50'
25'

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" AND "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" FOR ADDITIONAL GUIDANCE

END ROAD WORK
G20-2A
48" X 24"

TEMPORARY PAVEMENT COMPLETED IN STAGE 1B

STOP
R1-1
36" X 36"

STOP
R1-1
36" X 36"

16 DOUBLE
17
18

SIGNAL/LIGHT POLES INSTALLED IN STAGE 1 (UTILIZE FOLDING STOP SIGNS WHERE APPLICABLE)

SEPTIC
TANKS

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 2A	SHEET 170	E

2

2

* PERMANENT SIGN INSTALLED IN PREVIOUS STAGE TO BE COVERED

ROAD WORK AHEAD W020-1

COMMERCIAL AVE

SPEED LIMIT 35 R2-1 48" X 60"

SPEED LIMIT 35 W03-5 36" X 36"

END ROAD WORK G20-2A 48" X 24"

ROAD WORK AHEAD W020-1

ROAD WORK AHEAD W020-1

DOUBLE (2)

CTH A

(10) (11) (1)

REMAIN COVERED

W03-1

ONLY ONLY ONLY

REMAIN COVERED

101 AS 101 AN 102 AS 102 AN 103 AS 103 AN 104 AS 104 AN 105 AS 105 AN 106 AS 106 AN

50'

R11-2 (MOD.) 48" X 30" LANE CLOSED

INSTALL SIGNAL/LIGHT POLES

SIGNAL POLE INSTALLED IN STAGE 1

CONSTRUCT CORRUGATED MEDIAN

STOP R1-1 36" X 36"

STOP R1-1 36" X 36"

CONSTRUCT PORK CHOP ISLAND

BEGIN LEFT TURN LANE *

SIGNAL/LIGHT POLES INSTALLED IN STAGE 1 (UTILIZE FOLDING STOP SIGNS WHERE APPLICABLE)

303 EB 303 WB 304 EB 304 WB 305 EB 305 WB 306 EB 306 WB 307 EB 307 WB 308 EB 308 WB 309 EB 309 WB 310 EB 310

STH 23

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" FOR ADDITIONAL GUIDANCE

ROAD CLOSED 500 FT W020-3

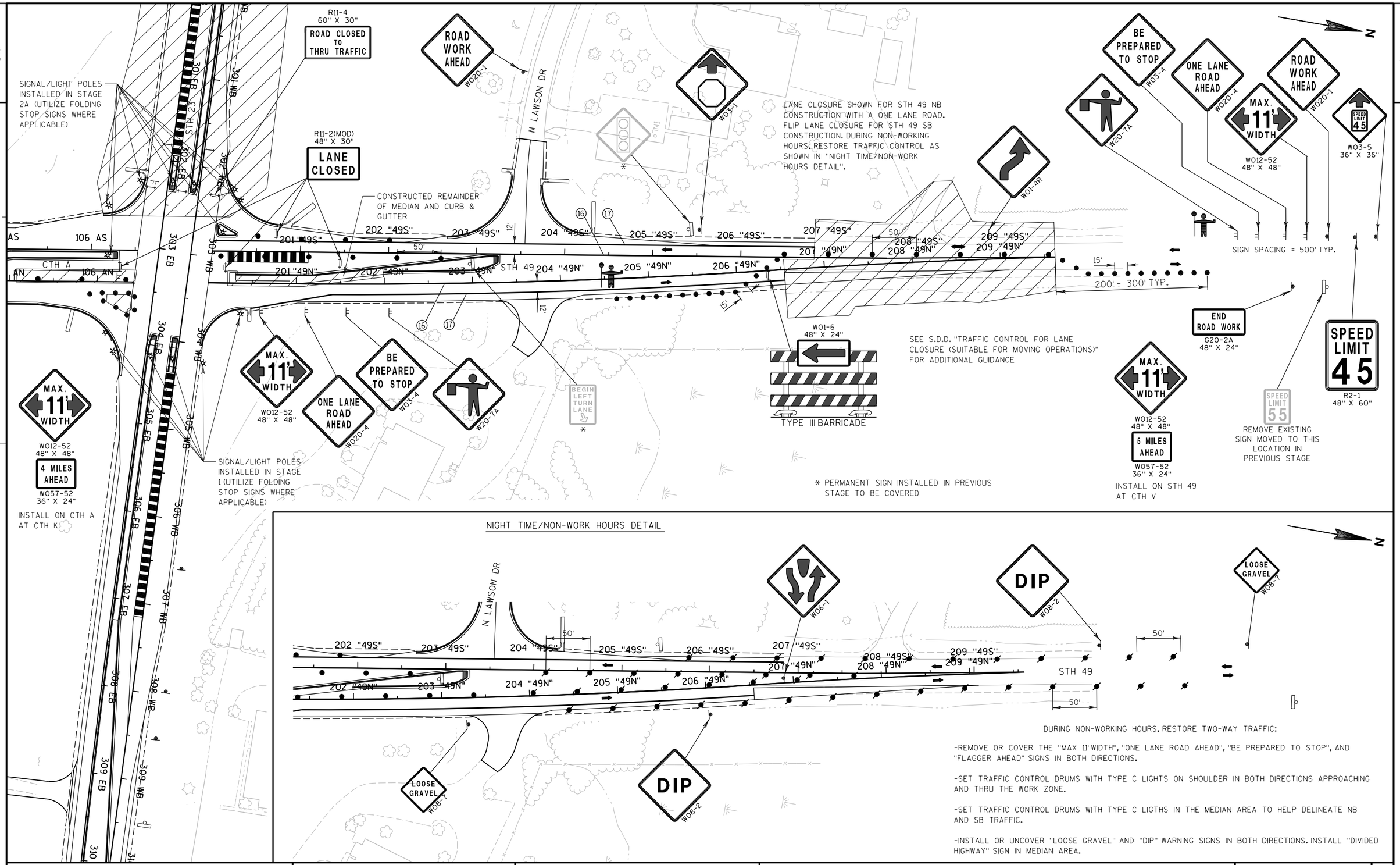
W03-1

ROAD CLOSED AHEAD W020-3

REMAIN COVERED

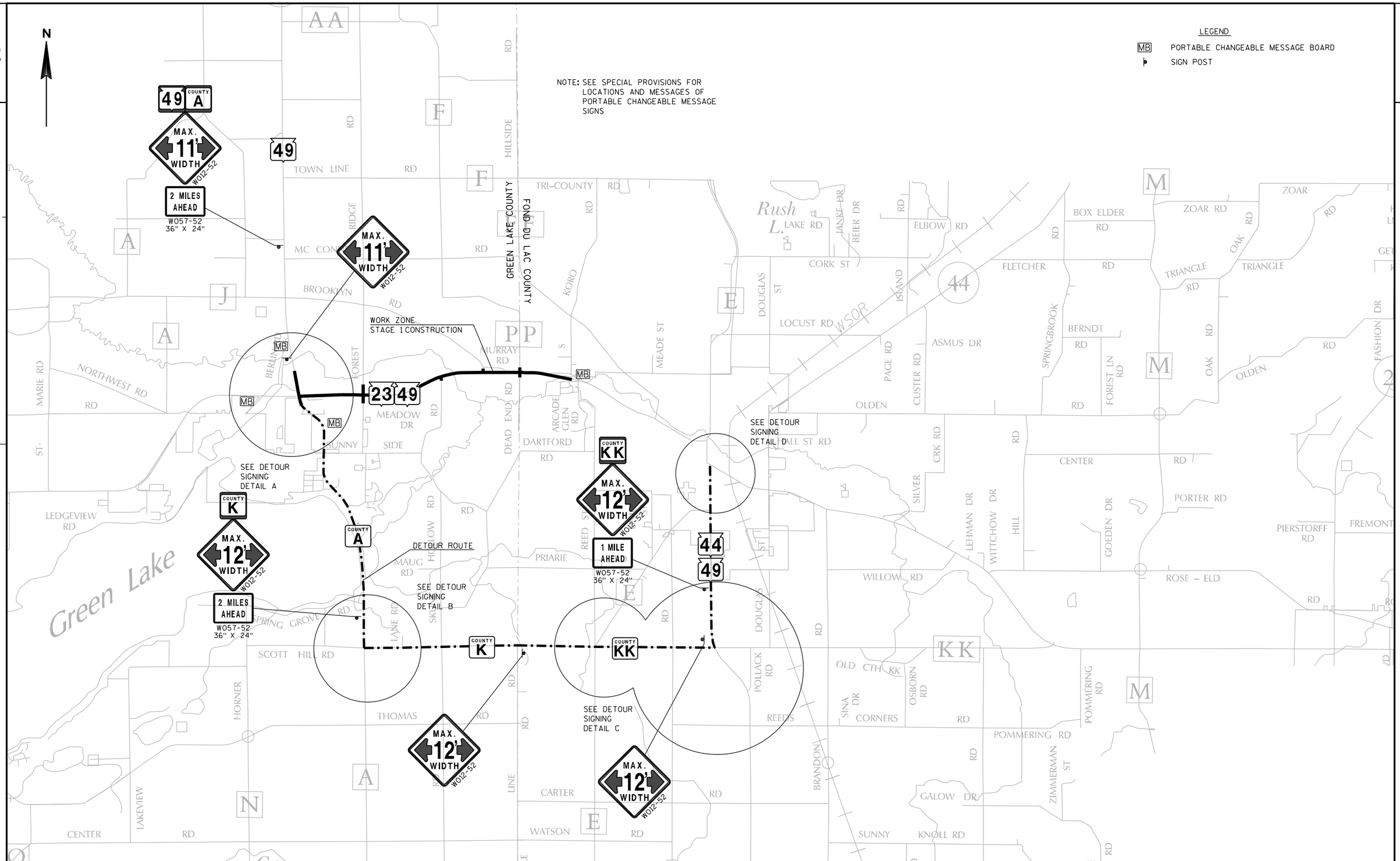
N

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 2B	SHEET 171	E



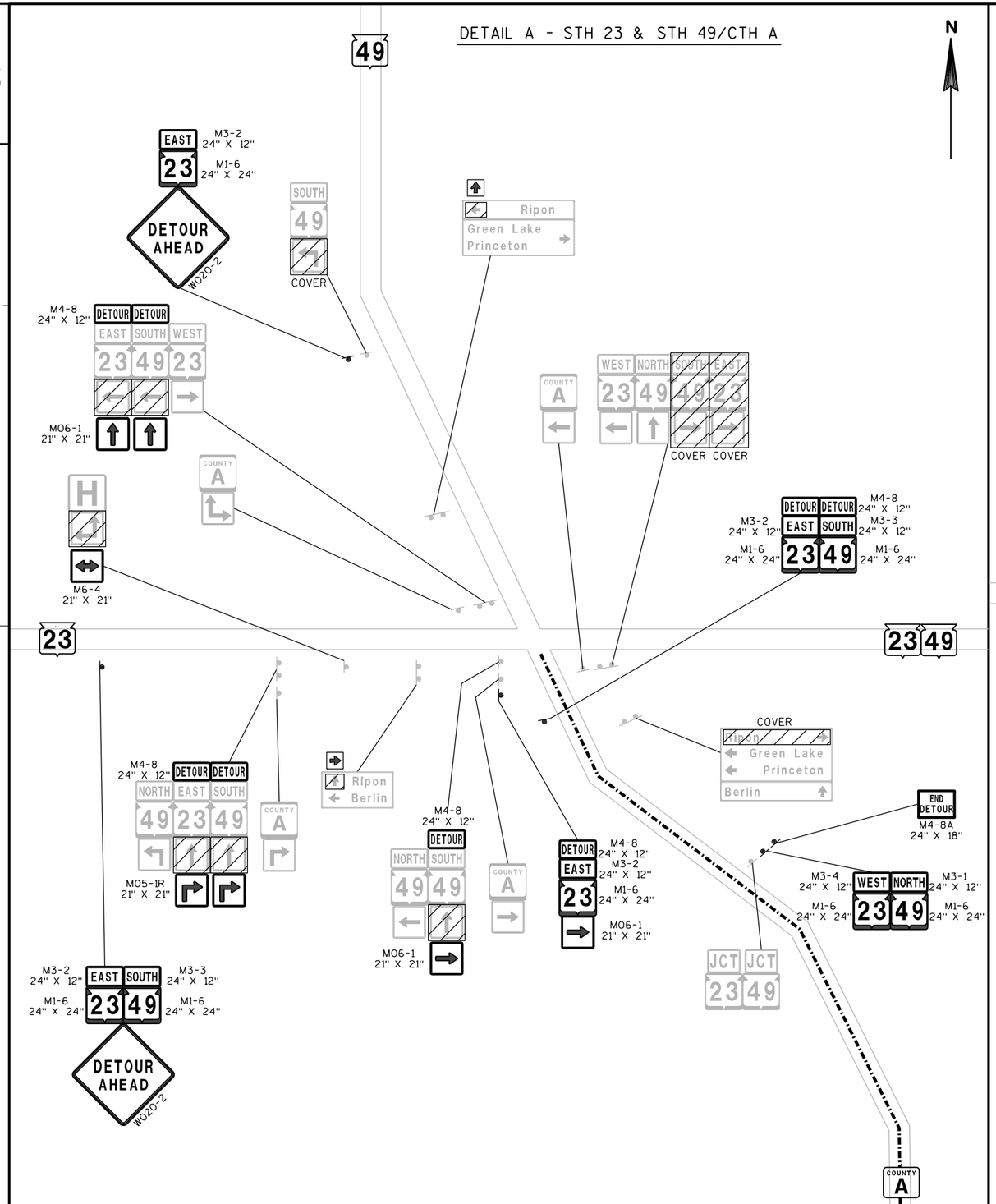
* PERMANENT SIGN INSTALLED IN PREVIOUS STAGE TO BE COVERED

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	TRAFFIC CONTROL - STAGE 2B	SHEET 172	E

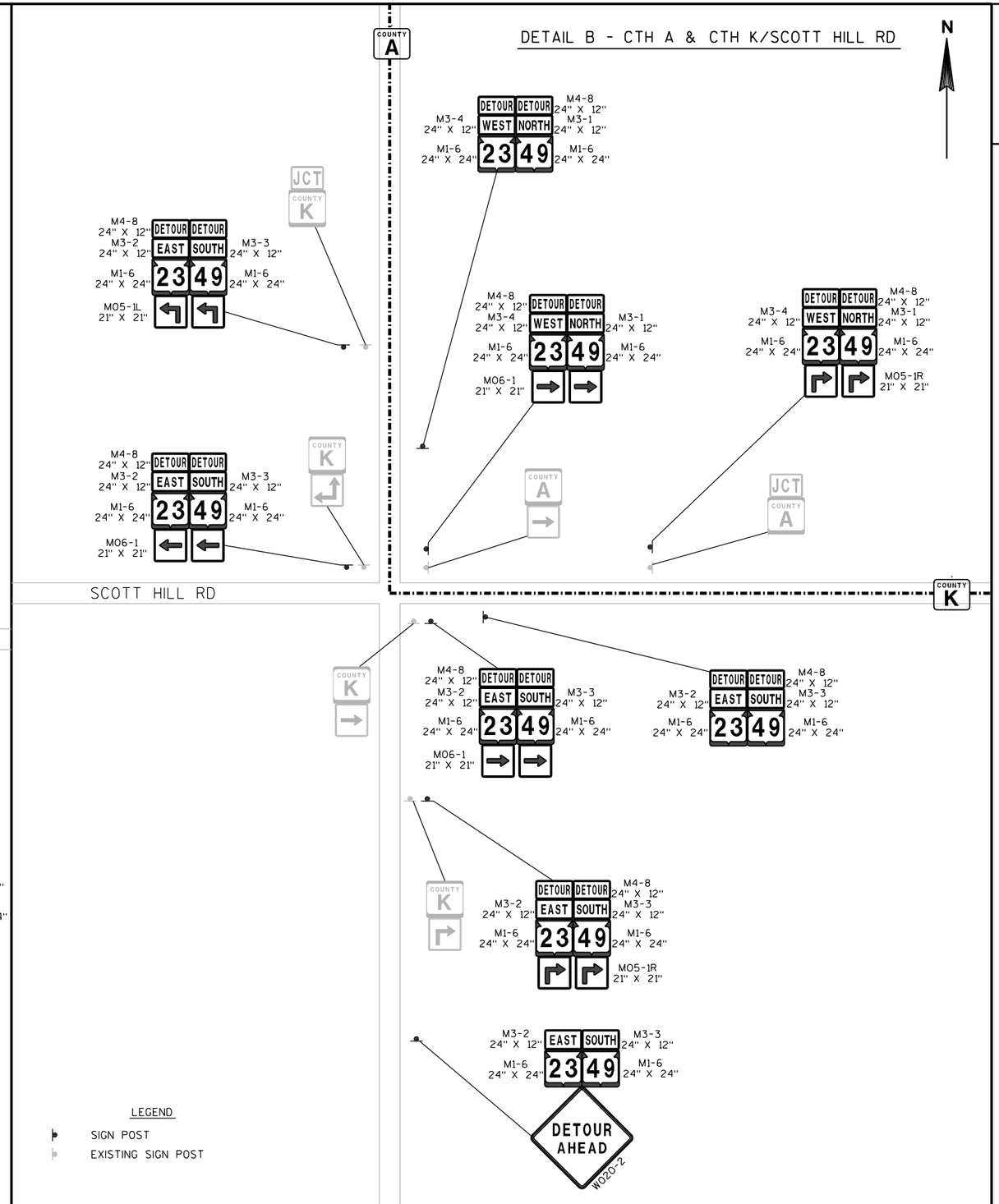


PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE & FOND DU LAC	DETOUR PLAN - STAGE 1 ADVANCED WARNING	SHEET 173 E

DETAIL A - STH 23 & STH 49/CTH A



DETAIL B - CTH A & CTH K/SCOTT HILL RD



LEGEND

- SIGN POST
- EXISTING SIGN POST

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE & FOND DU LAC	DETOUR SIGNING - STAGE 1	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\025017_tc.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 6000.0000 ' / in.
WISDOT/CADDS SHEET 42

DETAIL C - STH 44/49 & CTH KK

2

N

REED ST

COUNTY E

COUNTY KK

JCT COUNTY KK

44 49

DETOUR WEST NORTH 23 49
M4-8 24" X 12"
M3-4 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M1-6 24" X 24"
M5-1R 21" X 21"

DETOUR WEST NORTH 23 49
M4-8 24" X 12"
M3-4 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M1-6 24" X 24"
M06-1 21" X 21"

DETOUR EAST 23
M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"

DETOUR EAST SOUTH 23 49
M4-8 24" X 12"
M3-2 24" X 12"
M3-3 24" X 12"
M1-6 24" X 24"
M1-6 24" X 24"

DETOUR EAST 23
M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
M05-1L 21" X 21"

END DETOUR SOUTH 49
M4-8A 24" X 18"
M3-3 24" X 12"
M1-6 24" X 24"

DETOUR EAST 23
M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

DETOUR WEST NORTH 23 49
M4-8 24" X 12"
M3-4 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M1-6 24" X 24"
M06-1 21" X 21"

DETOUR WEST NORTH 23 49
M4-8 24" X 12"
M3-4 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M1-6 24" X 24"
M05-1L 21" X 21"

WEST NORTH 23 49
M3-4 24" X 12"
M3-1 24" X 12"
M1-6 24" X 24"
M1-6 24" X 24"

DETOUR AHEAD
W020-2

HWYS 23-49 CLOSED
6 MILES AHEAD
FOLLOW DETOUR
*

LEGEND

SIGN POST

EXISTING SIGN POST

* SEE FIXED MESSAGE SIGN DETAILS

PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE & FOND DU LAC	DETOUR SIGNING - STAGE 1	SHEET 175	E

DETAIL D - STH 44/49 & DOWNTOWN RIPON

N

2

2

W OSHKOSH ST

UNION ST

HWYS 23-49
CLOSED
1 MILE AHEAD
FOLLOW DETOUR
*

HARRIS ST

PACIFIC ST

BLACKBURN ST

E JACKSON ST

W FOND DU LAC ST

ONE WAY

ONE WAY

SCOTT ST

E BLOSSOM ST

RANSOM ST

WATSON ST

HOUSTON ST

SEWARD ST

E FOND DU LAC ST

ROAD OPEN TO
DOWNTOWN
R10-61
60" X 30"

HWYS 23-49
CLOSED
2.5 MILES AHEAD
FOLLOW DETOUR
*

FENTON ST

JCT 23

END DETOUR
M4-8A
24" X 18"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M5-1L 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M5-1R 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M 6-2 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M5-1L 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M3-1 24" X 12"
M1-6 24" X 24"
M5-1L 21" X 21"

M3-2 24" X 12"
M1-6 24" X 24"

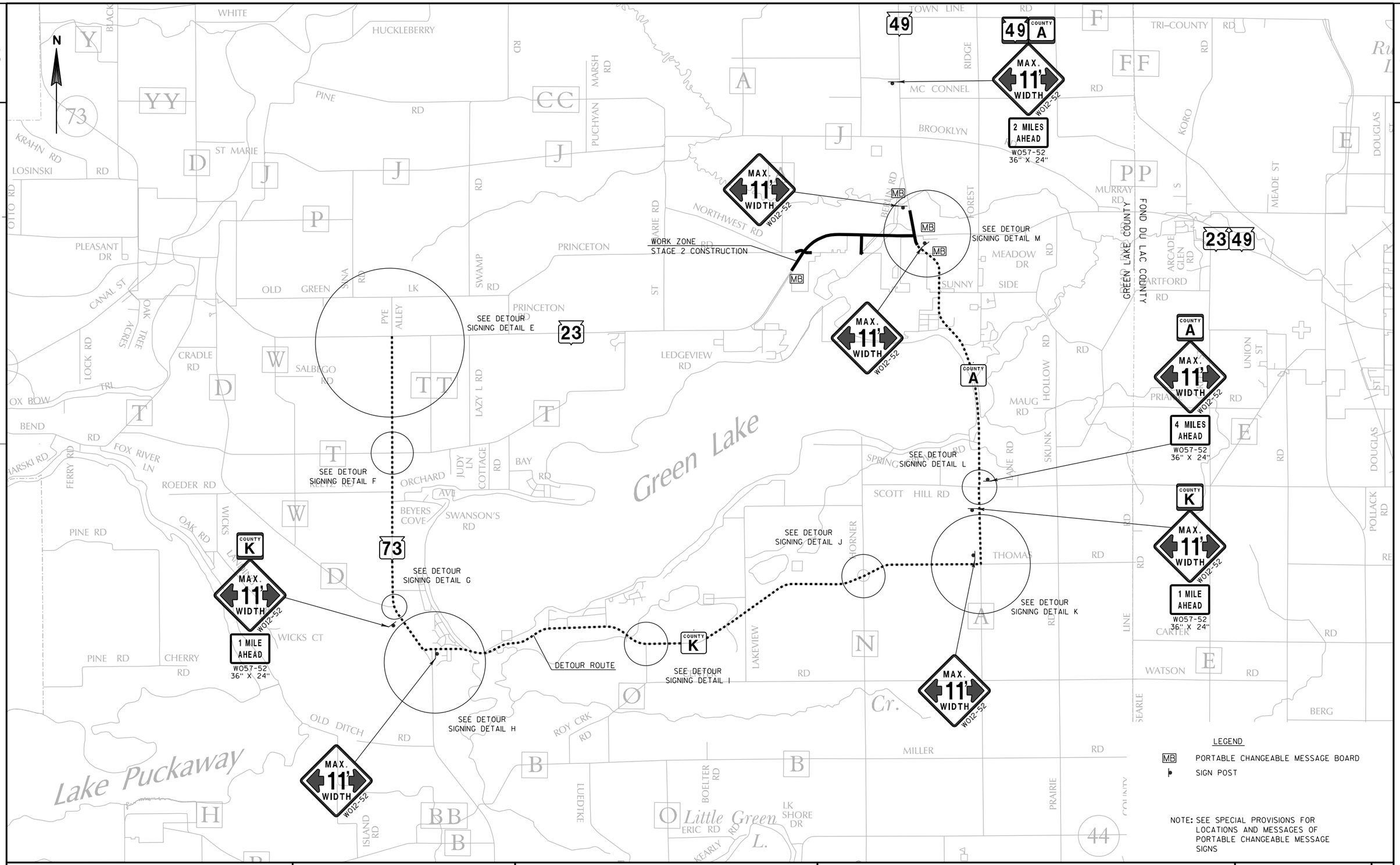
LEGEND

- SIGN POST
- EXISTING SIGN POST
- INTERSECTION CONTROLLED BY STOP SIGNS
- INTERSECTION CONTROLLED BY TRAFFIC SIGNALS

* SEE FIXED MESSAGE SIGN DETAILS

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	DETOUR SIGNING - STAGE 1	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\025019_tc.dgn PLOT DATE : 7/31/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 6000.0000 ' / in.
WISDOT/CADDS SHEET 42



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE & FOND DU LAC	DETOUR PLAN - STAGE 2 ADVANCED WARNING	SHEET 177 E

FILE NAME : J:\Active\D4\STH 23\Main\025016_tc.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 6000.0000 ' / in.

WISDOT/CADDS SHEET 42

DETAIL E - STH 23 & STH 73

N

PYE ALLEY

23 73

M3-2
24" X 12"
M1-6
24" X 24"
EAST 23
DETOUR AHEAD
W20D-2

DETOUR M4-8 24" X 12"
EAST SOUTH
23 73
M05-1R
21" X 21"

Green Lake
Marquette

SOUTH 73

M4-8
24" X 12"
M3-2
24" X 12"
M1-6
24" X 24"
M06-1
21" X 21"
DETOUR
EAST 23

M4-8
24" X 12"
M3-2
24" X 12"
M1-6
24" X 24"
DETOUR
EAST 23

ROAD CLOSED
5.5 MILES AHEAD
OPEN TO
S LAWSON DR
*

23

WEST NORTH EAST
23 73 23

Princeton
Green Lake
COVER

WEST NORTH EAST
23 73 23

JCT
23

END DETOUR
M4-8A
24" X 18"
WEST
M3-4
24" X 12"
23
M1-6
24" X 24"

73

LEGEND

SIGN POST
EXISTING SIGN POST

* SEE FIXED MESSAGE SIGN DETAILS

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	DETOUR SIGNING - STAGE 2	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\025020_tc.dgn PLOT DATE : 8/1/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 6000.0000 ' / in.

2

DETAIL F - STH 73 & CTH T

N

JCT COUNTY T

COUNTY T

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
DETOUR WEST 23

COUNTY T

COUNTY T

M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
DETOUR EAST 23

JCT COUNTY T

73

LEGEND

SIGN POST

EXISTING SIGN POST

DETAIL G - STH 73 & CTH D

N

JCT COUNTY D

COUNTY D

COUNTY D

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
DETOUR WEST 23

COUNTY D

M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
DETOUR EAST 23

JCT COUNTY D

73

2

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	DETOUR SIGNING - STAGE 2	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\025021_tc.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 6000.0000 ' / in.
WISDOT/CADDS SHEET 42

DETAIL H - STH 73 & CTH K

N

2

JCT COUNTY K

M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
M05-1L 21" X 21"
DETOUR EAST 23

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
DETOUR WEST 23

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"
DETOUR WEST 23

JCT 73

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M05-1R 21" X 21"
DETOUR WEST 23

COUNTY K

PARK WAY

COUNTY K

M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"
DETOUR EAST 23

COUNTY K

M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"
DETOUR EAST 23

MAPLE RD

M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
DETOUR EAST 23

REX ST

COUNTY K

JCT COUNTY K

M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
M05-1R 21" X 21"
DETOUR EAST 23

M3-2 24" X 12"
M1-6 24" X 24"
EAST 23

DETOUR AHEAD W020-2

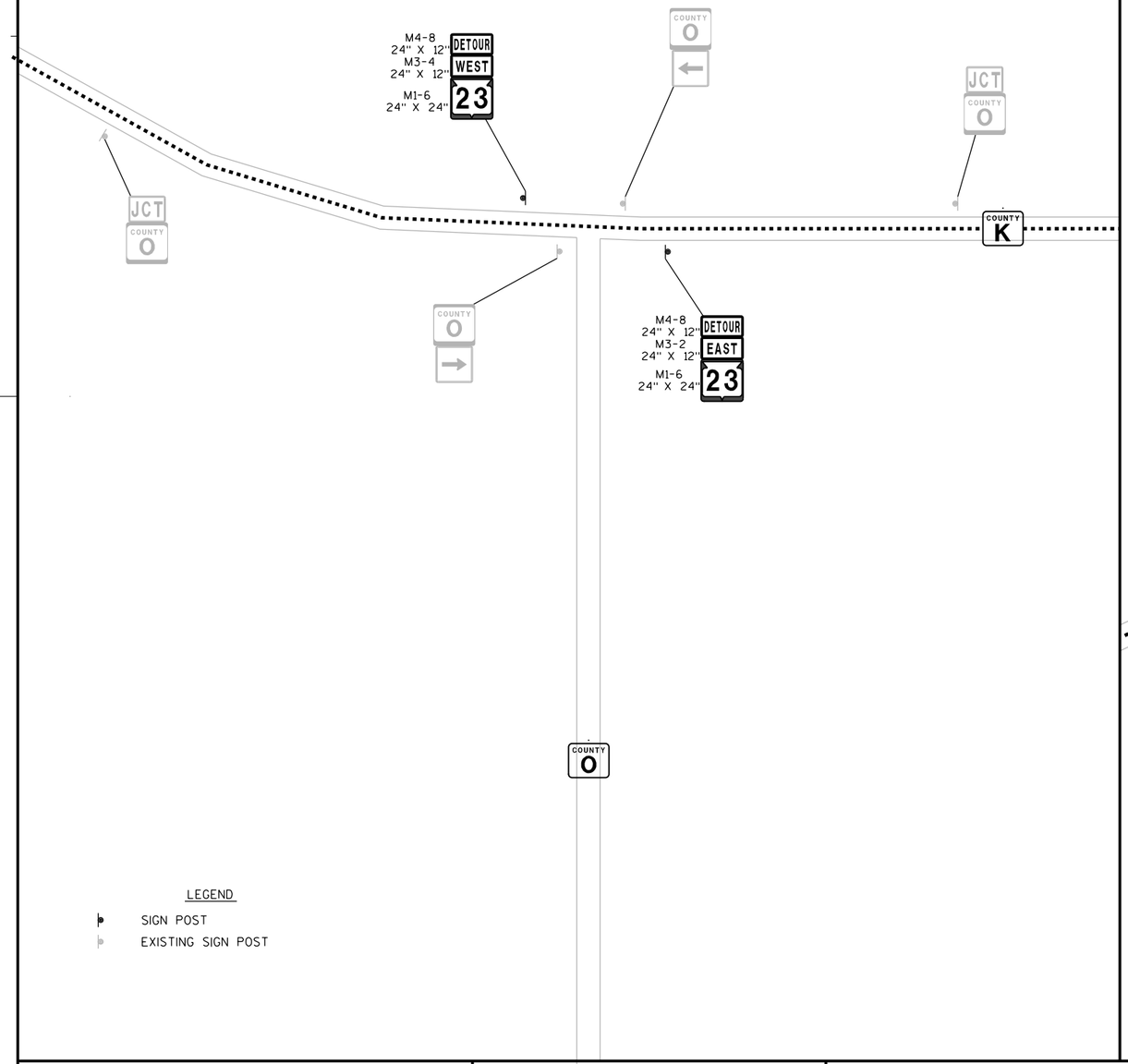
73

LEGEND

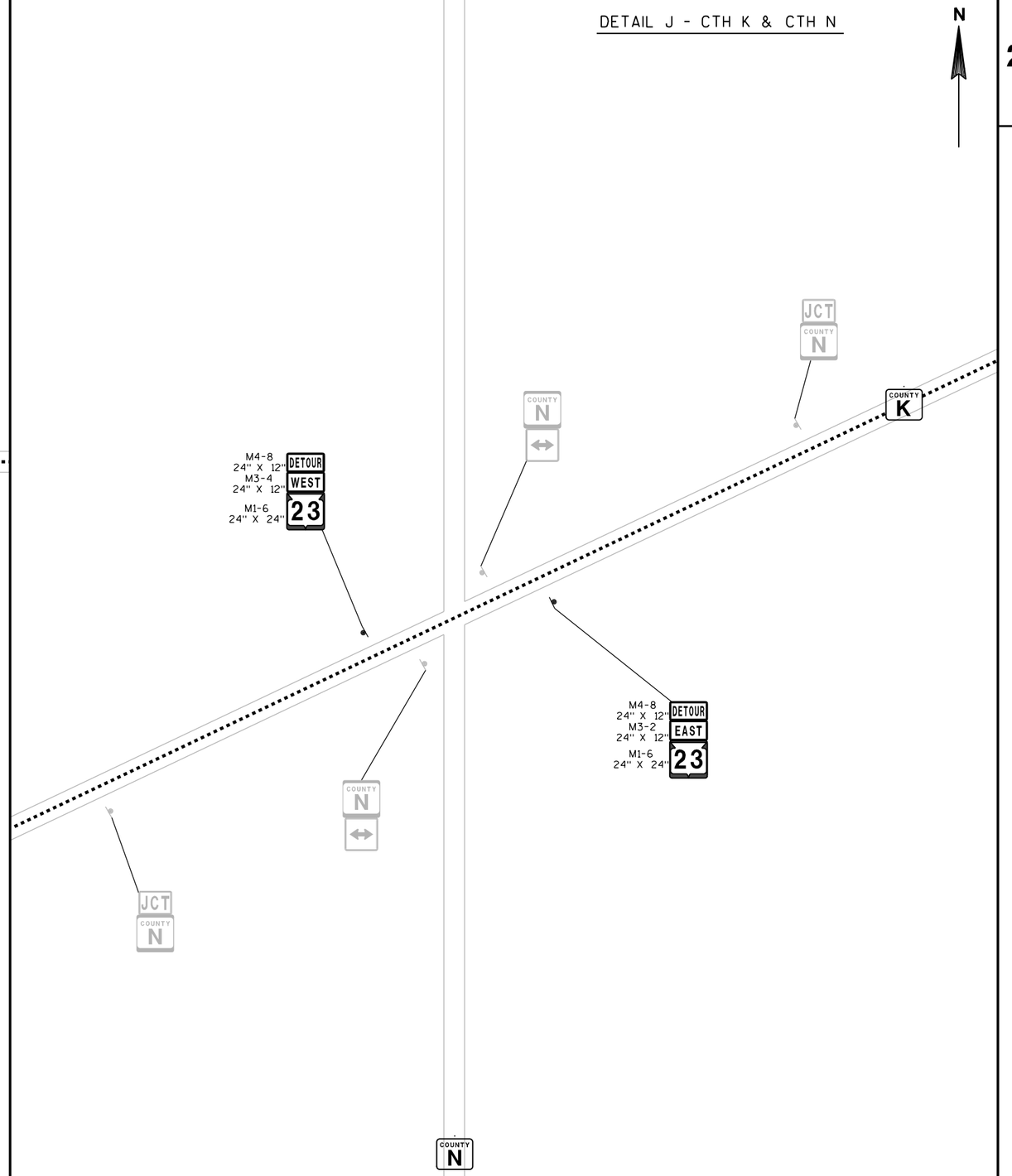
- SIGN POST
- EXISTING SIGN POST

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	DETOUR SIGNING - STAGE 2	SHEET 180	E

DETAIL I - CTH K & CTH O



DETAIL J - CTH K & CTH N



2

DETAIL K - CTH K & CTH A
(SOUTH JUNCTION)

N

COUNTY A
COUNTY K

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M05-1R 21" X 21"
DETOUR WEST 23

COUNTY K

DETOUR EAST 23
M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"
DETOUR WEST 23

COUNTY K

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
DETOUR WEST 23

JCT COUNTY A

COUNTY K

THOMAS RD

COUNTY K
COUNTY A

M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
M05-1L 21" X 21"
DETOUR EAST 23

M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
M06-1 21" X 21"
DETOUR EAST 23

COUNTY K

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
DETOUR WEST 23

JCT COUNTY K

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
M05-1L 21" X 21"
DETOUR WEST 23

M3-4 24" X 12"
M1-6 24" X 24"
WEST 23

DETOUR AHEAD W020-2

COUNTY A

LEGEND

- SIGN POST
- EXISTING SIGN POST

DETAIL L - CTH K & CTH A
(NORTH JUNCTION)

N

2

COUNTY A

JCT COUNTY K

COUNTY K

M4-8 24" X 12"
M3-2 24" X 12"
M1-6 24" X 24"
DETOUR EAST 23

SCOTT HILL RD

COUNTY K

M4-8 24" X 12"
M3-4 24" X 12"
M1-6 24" X 24"
DETOUR WEST 23

COUNTY K

COUNTY A
COUNTY K

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	DETOUR SIGNING - STAGE 2	SHEET 182	E

DETAIL M - STH 23/49 & CTH A

N

2

2

M3-4
24" X 12"
M1-6
24" X 24"
WEST
23
DETOUR AHEAD
W020-2

JCT
23

49

SOUTH
49

N LAWSON DR

M4-8
24" X 12"
DETOUR
M3-4
24" X 12"
M1-6
24" X 24"
WEST
23
M06-1
21" X 21"

COUNTY
A
NORTH
49
M06-1
21" X 21"

Ripon
Green Lake
Princeton

Princeton
Berlin

M4-8
24" X 12"
DETOUR
WEST
23
NORTH
49
M05-1L
21" X 21"

M3-4
24" X 12"
M1-6
24" X 24"
WEST
23
DETOUR AHEAD
W020-2

23

23 49

M4-8
24" X 12"
DETOUR
EAST
23
SOUTH
49
WEST
23
COUNTY
A
M06-1
21" X 21"

M4-8
24" X 12"
DETOUR
M3-4
24" X 12"
M1-6
24" X 24"
WEST
23

COUNTY
A
WEST
23
NORTH
49
NORTH
49
SOUTH
49
EAST
23
COVER COVER

Ripon
Green Lake
Princeton
Berlin
COVER

END
DETOUR
M4-8A
24" X 18"
EAST
M3-2
24" X 12"
23
M1-6
24" X 24"

JCT
23
JCT
49

COMMERCIAL AVE

COUNTY
A

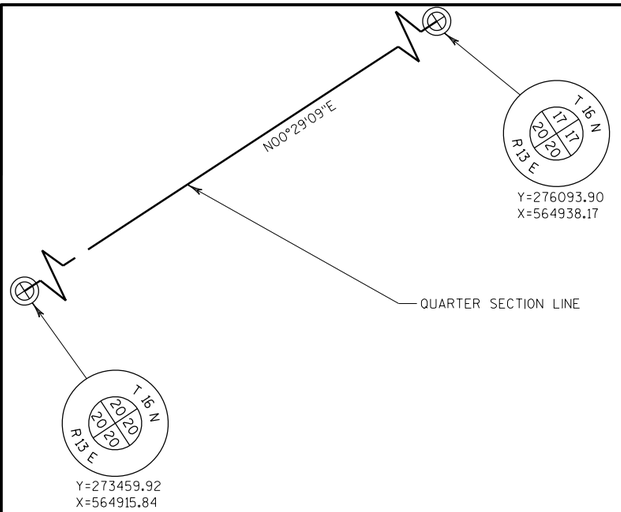
LEGEND

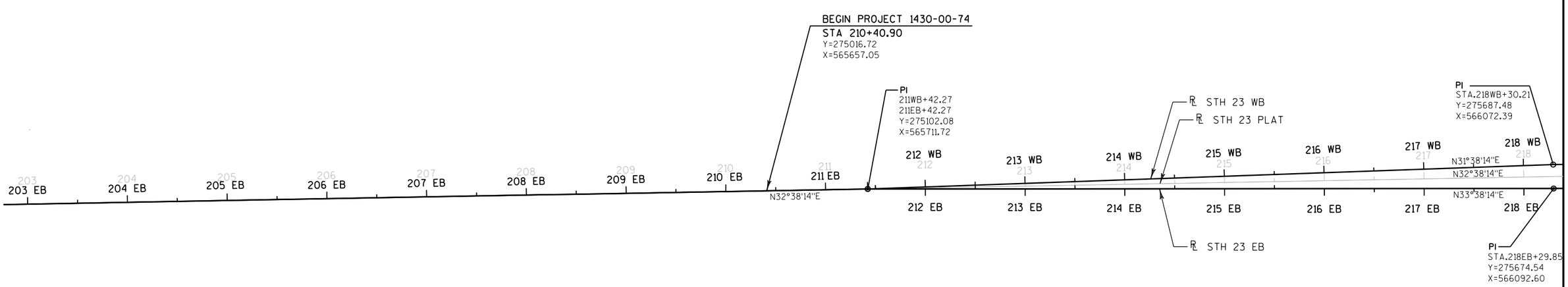
- SIGN POST
- EXISTING SIGN POST

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	DETOUR SIGNING - STAGE 2	SHEET 183	E

FILE NAME : J:\Active\D4\STH 23\Main\025025_tc.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 6000.0000 ' / in.

WISDOT/CADDS SHEET 42


N00°29'09"E
T 16 N
R 13 E
17
17
20
20
Y=276093.90
X=564938.17
QUARTER SECTION LINE
T 16 N
R 13 E
20
20
20
20
Y=273459.92
X=564915.84


BEGIN PROJECT 1430-00-74
STA 210+40.90
Y=275016.72
X=565657.05
PI
211WB+42.27
211EB+42.27
Y=275102.08
X=565711.72
℄ STH 23 WB
℄ STH 23 PLAT
PI
STA.218WB+30.21
Y=275687.48
X=566072.39
203 EB
204 EB
205 EB
206 EB
207 EB
208 EB
209 EB
210 EB
211 EB
N32°38'14"E
212 WB
213 WB
214 WB
215 WB
216 WB
217 WB
218 WB
N31°38'14"E
N32°38'14"E
N33°38'14"E
212 EB
213 EB
214 EB
215 EB
216 EB
217 EB
218 EB
℄ STH 23 EB
PI
STA.218EB+29.85
Y=275674.54
X=566092.60

2

DWY A

CURVE A-1	CURVE A-2
PI STA.0+60.17	PI STA.2+24.93
Y : 276326.70	Y : 276398.17
X : 566159.86	X : 566317.14
DELTA = 71°21'49.94"	DELTA = 18°48'52.20"
D = 136°25'06.68"	D = 38°11'49.87"
T = 30.16'	T = 24.85'
L = 52.31	L = 49.26
R = 42.00	R = 150.00
PC STA.0+30.01	PC STA.2+00.08
Y : 276296.69	Y : 276387.89
X : 566162.91	X : 566294.52
PT STA.0+82.33	PT STA.2+49.33
Y : 276339.18	Y : 276415.20
X : 566187.31	X : 566335.24
BA: N5°48'10"W	BA: N65°33'40" E
AH: N65°33'40"E	AH: N46°44'47" E

T 16 N
R 13 E
17 17
20 20

Y=276093.90
X=564938.17

℄ W JUNCTION CTH A

STA. 0+00, DWY A
STA. 17+82.37, W JUNCTION CTH A, 12' LT
Y = 276266.83
X = 566165.94

PI
STA.0+56.17
Y = 276326.70
X = 566159.86

N5°48'10" W
N65°33'40" E
CURVE A-1
CURVE A-2
PC
PT
PI
STA. 2+24.70
Y = 276398.17
X = 566317.14
N46°44'47" E
℄ DWY A

N89°44'26"W
QUARTER SECTION LINE

STA. 224WB+08.60, STH23WB
STA. 20+25.47, W JUNCTION CTH A
Y=276172.37
X=566388.21

PI
STA.226WB+69.56
Y=276394.60
X=566525.25

CURVE WB-1
CURVE 23PLAT-1
CURVE EB-1
CURVE WB-2
PCC
℄ STH 23 WB
℄ STH 23 PLAT
℄ STH 23 EB

PI
STA. 218WB+29.85
Y=275687.48
X=566072.39

N32°38'14"E

PI
STA. 218EB+29.85
Y=275674.54
X=566092.60

STA. 224+07.62, STH23-PLAT
STA. 20N+39.38, NORTH ST/W JUNCTION CTH A
Y=276164.11
X=566399.40

STA. 224EB+06.93, STH23EB
STA. 20N+51.38, NORTH ST
Y=276156.98
X=566409.06

STA. 2+21.42, DWY B
STA. 22+69.00, NORTH ST, 14.00' RT
Y = 276058.05
X = 566604.19

PI
STA.0+17.32
Y=275924.80
X=566457.69

N2°22'52"E
N53°54'39"E
N0°28'31"E
CURVE B-1
CURVE B-2
PI
STA.1+96.49
Y=276031.42
X=566603.97
℄ DWY B

℄ NORTH ST

T 16 N
R 13 E
17 16
20 21

Y=276081.61
X=567651.75

DWY B

CURVE B-1	CURVE B-2
PI STA.0+17.32	PI STA.1+96.49
Y : 275924.80	Y : 276031.42
X : 566457.69	X : 566603.97
DELTA = 51°31'47.66"	DELTA = 53°26'08.55"
D = 204°37'40.02"	D = 249°06'43.51"
T = 13.51'	T = 11.58'
L = 25.18	L = 21.45
R = 28.00	R = 23.00
PC STA.0+03.81	PC STA.1+84.91
Y : 275911.29	Y : 276024.60
X : 566457.13	X : 566594.61
PT STA.0+28.99	PT STA.2+06.36
Y : 275932.76	Y : 276043.00
X : 566468.61	X : 566604.06
BA: N2°22'52"E	BA: N53°54'39"E
AH: N53°54'39"E	AH: N0°28'31"E

PLAT

CURVE 23PLAT-1
PI STA.238+25.32
Y : 277361.49
X : 567158.74
DELTA = 58°36'54.98"
D = 2°00'00.00"
T = 1608.15'
L = 2930.76
R = 2864.79
PC STA.222+17.18
Y : 276007.27
X : 566291.44
PT STA.251+47.94
Y : 277326.34
X : 568766.50
BA: N32°38'14"E
AH: S88°44'51"E

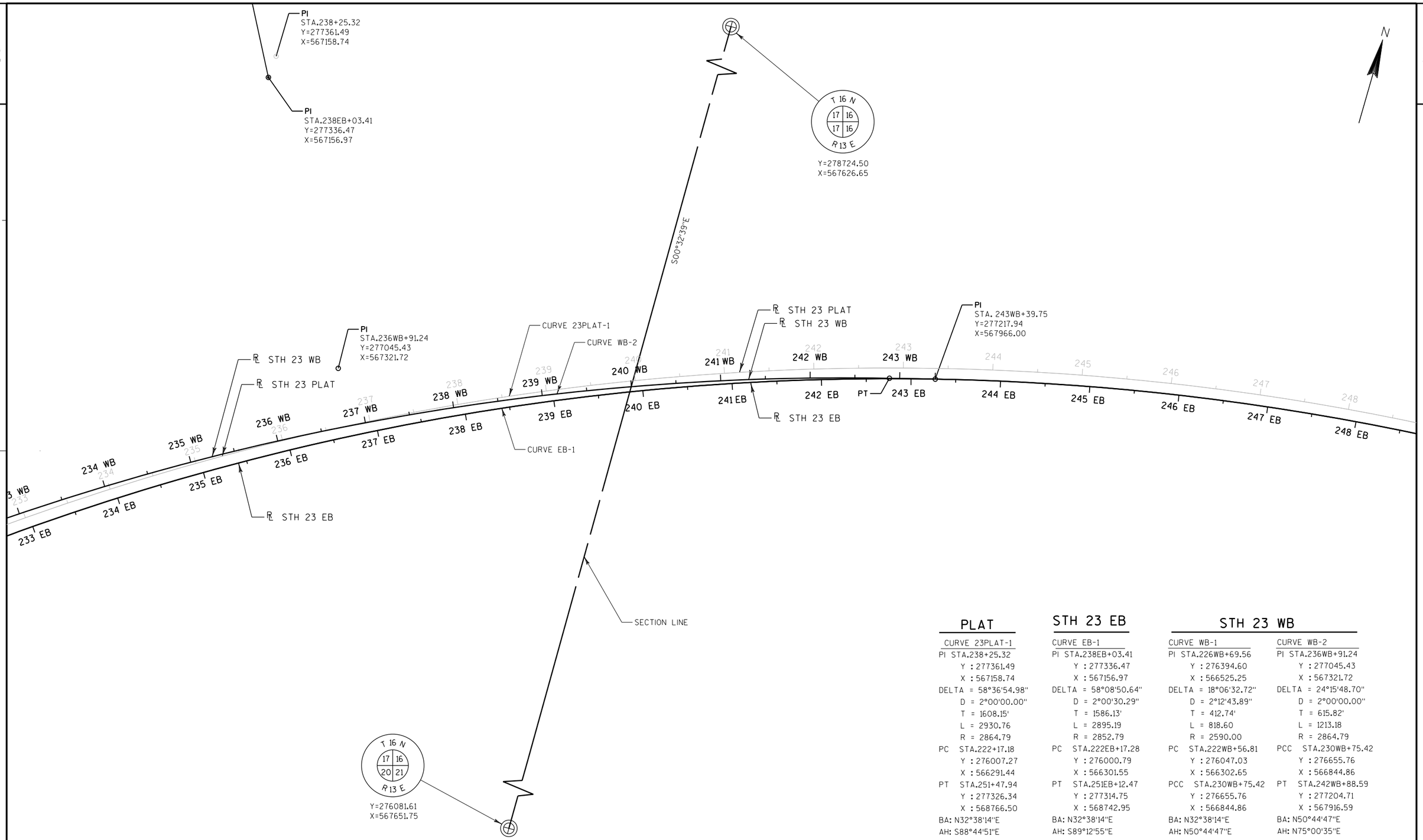
STH 23 EB

CURVE EB-1
PI STA.238EB+03.41
Y : 277336.47
X : 567156.97
DELTA = 58°08'50.64"
D = 2°00'30.29"
T = 1586.13'
L = 2895.19
R = 2852.79
PC STA.222EB+17.28
Y : 276000.79
X : 566301.55
PT STA.251EB+12.47
Y : 277314.75
X : 568742.95
BA: N32°38'14"E
AH: S89°12'55"E

STH 23 WB

CURVE WB-1	CURVE WB-2
PI STA.226WB+69.56	PI STA.236WB+91.24
Y : 276394.60	Y : 277045.43
X : 566525.25	X : 567321.72
DELTA = 18°06'32.72"	DELTA = 24°15'48.70"
D = 2°12'43.89"	D = 2°00'00.00"
T = 412.74'	T = 615.82'
L = 818.60	L = 1213.18
R = 2590.00	R = 2864.79
PC STA.222WB+56.81	PCC STA.230WB+75.42
Y : 276047.03	Y : 276655.76
X : 566302.65	X : 566844.86
PCC STA.230WB+75.42	PT STA.242WB+88.59
Y : 276655.76	Y : 277204.71
X : 566844.86	X : 567916.59
BA: N32°38'14"E	BA: N50°44'47"E
AH: N50°44'47"E	AH: N75°00'35"E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 185	E



PLAT

CURVE 23PLAT-1
PI STA.238+25.32
Y : 277361.49
X : 567158.74
DELTA = 58°36'54.98"
D = 2°00'00.00"
T = 1608.15'
L = 2930.76
R = 2864.79
PC STA.222+17.18
Y : 276007.27
X : 566291.44
PT STA.251+47.94
Y : 277326.34
X : 568766.50
BA: N32°38'14"E
AH: S88°44'51"E

STH 23 EB

CURVE EB-1
PI STA.238EB+03.41
Y : 277336.47
X : 567156.97
DELTA = 58°08'50.64"
D = 2°00'30.29"
T = 1586.13'
L = 2895.19
R = 2852.79
PC STA.222EB+17.28
Y : 276000.79
X : 566301.55
PT STA.251EB+12.47
Y : 277314.75
X : 568742.95
BA: N32°38'14"E
AH: S89°12'55"E

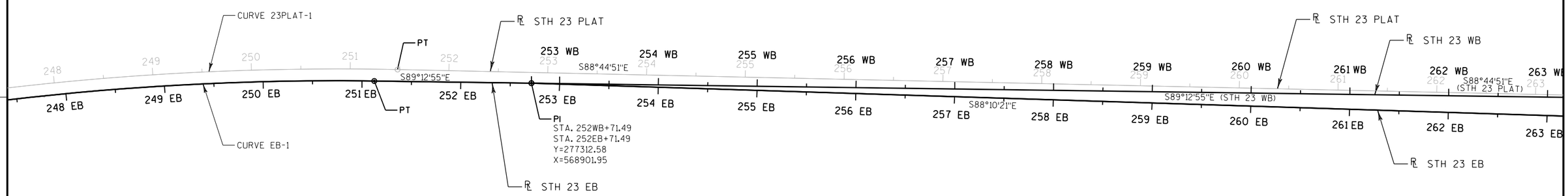
STH 23 WB

CURVE WB-1
PI STA.226WB+69.56
Y : 276394.60
X : 566525.25
DELTA = 18°06'32.72"
D = 2°12'43.89"
T = 412.74'
L = 818.60
R = 2590.00
PC STA.222WB+56.81
Y : 276047.03
X : 566302.65
PCC STA.230WB+75.42
Y : 276655.76
X : 566844.86
BA: N32°38'14"E
AH: N50°44'47"E

CURVE WB-2
PI STA.236WB+91.24
Y : 277045.43
X : 567321.72
DELTA = 24°15'48.70"
D = 2°00'00.00"
T = 615.82'
L = 1213.18
R = 2864.79
PCC STA.230WB+75.42
Y : 276655.76
X : 566844.86
PT STA.242WB+88.59
Y : 277204.71
X : 567916.59
BA: N50°44'47"E
AH: N75°00'35"E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 186	E

2



PLAT

CURVE 23PLAT-1
PI STA.238+25.32
Y : 277361.49
X : 567158.74
DELTA = 58°36'54.98"
D = 2°00'00.00"
T = 1608.15'
L = 2930.76
R = 2864.79
PC STA.222+17.18
Y : 276007.27
X : 566291.44
PT STA.251+47.94
Y : 277326.34
X : 568766.50
BA: N32°38'14"E
AH: S88°44'51"E

STH 23 EB

CURVE EB-1
PI STA.238EB+03.41
Y : 277336.47
X : 567156.97
DELTA = 58°08'50.64"
D = 2°00'30.29"
T = 1586.13'
L = 2895.19
R = 2852.79
PC STA.222EB+17.28
Y : 276000.79
X : 566301.55
PT STA.251EB+12.47
Y : 277314.75
X : 568742.95
BA: N32°38'14"E
AH: S89°12'55"E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 187	E

2

N

T 16 N
16 16
16 16
R 13 E

Y=278703.17
X=570274.04

S00°23'18"E

℄ STH 23 WB

℄ STH 23 PLAT

263 WB 264 WB 265 WB 266 WB 267 WB 268 WB 269 WB 270 WB 271 WB 272 WB 273 WB 274 WB 275 WB 276 WB 277 WB 278 WB

263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278

S88°44'51"E (STH 23 PLAT)

S89°12'55"E (STH 23 WB)

263 EB 264 EB 265 EB 266 EB 267 EB 268 EB 269 EB 270 EB 271 EB 272 EB 273 EB 274 EB 275 EB 276 EB 277 EB 278 EB

S88°10'21"E

S89°12'55"E

N89°58'30"E

S89°27'19"E (STH 23 PLAT)

S88°44'52"E (STH 23 PLAT)

S88°45'6"E (STH 23 WB)

℄ STH 23 EB

PI
STA. 265EB+90.16
Y=277270.52
X=570219.95

℄ STH 23 EB

℄ STH 23 PLAT

PI
STA. 270+96.14
Y=277283.75
X=570714.23

PI
STA. 272WB+27.41
Y=277285.79
X=570857.69

PI
STA. 272EB+27.63
Y=277261.79
X=570857.36

PI
STA. 275+21.17
Y=277279.71
X=571139.23

℄ STH 23 WB

℄ STH 23 EB

QUARTER SECTION LINE

T 16 N
16 16
21 21
R 13 E

Y=276050.07
X=570292.03

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\027205_ad.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

2

N

℄ STH 23 WB
& PLAT

PI
STA. 283WB+07.34
STA. 283EB+19.47
Y=277262.27
X=571937.36

PI
STA. 287WB+78.15
STA. 287EB+78.15
Y=277252.24
X=572395.93

℄ STH 23 WB

℄ STH 23 PLAT

CURVE 23PLAT-2

278 WB 279 WB 280 WB 281 WB 282 WB 283 WB 284 285 286 287 288 WB 289 WB 290 WB 291 WB 292 WB 293 WB

S88°44'52"E (STH 23 PLAT)

S88°45'6"E (STH 23 WB)

N89°58'30"E

S88°44'52"E

S89°58'46"E

S88°44'52"E

S87°29'52"E

278 EB 279 EB 280 EB 281 EB 282 EB 283 EB 284 EB 285 EB 286 EB 287 EB 288 EB 289 EB 290 EB 291 EB 292 EB 293 EB

℄ STH 23 EB

EQUATION

PI 283+07.63 BACK
PI 283+19.47 AHEAD

℄ STH 23 EB
& PLAT

PC

℄ STH 23 EB

PLAT

CURVE 23PLAT-2
PI STA.295+83.43
Y : 277234.65
X : 573201.02
DELTA = 3°31'59.01"
D = 0°27'58.18"
T = 379.07'
L = 757.91
R = 12291.00
PC STA.292+04.36
Y : 277242.93
X : 572822.04
PT STA.299+62.27
Y : 277249.73
X : 573579.79
BA= S88°44'52"E
AH= N87°43'09"E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 189	E

PLAT

CURVE 23PLAT-2
PI STA.295+83.43
Y : 277234.65
X : 573201.02
DELTA = 3°31'59.01"
D = 0°27'58.18"
T = 379.07'
L = 757.91
R = 12291.00
PC STA.292+04.36
Y : 277242.93
X : 572822.04
PT STA.299+62.27
Y : 277249.73
X : 573579.79
BA= S88°44'52"E
AH= N87°43'09"E

STH 23 EB

CURVE EB-2
PI STA. 296EB+61.12
Y : 277213.69
X : 573278.06
DELTA = 4°46'59.00"
D = 0°47'36.85"
T = 301.54'
L = 602.73
R = 7220.00
PC STA. 293EB+59.59
Y : 277226.86
X : 572976.81
PT STA. 299EB+62.31
Y : 277225.70
X : 573579.36
BA= S87°29'52"E
AH= N87°43'09"E

CURVE EB-3
PI STA. 309EB+41.79
Y : 277264.68
X : 574558.06
DELTA = 2°14'46.77"
D = 0°30'58.24"
T = 217.62'
L = 435.18
R = 11100.00
PC STA. 307EB+24.17
Y : 277256.02
X : 574340.61
PT STA. 311EB+59.35
Y : 277281.85
X : 574775.00
BA= N87°43'09"E
AH= N85°28'22"E

STH 23 WB

CURVE WB-3
PI STA.297WB+15.09
Y : 277251.91
X : 573332.86
DELTA = 2°18'05.33"
D = 0°27'59.80"
T = 246.65'
L = 493.23
R = 12279.13
PC STA.294WB+68.44
Y : 277252.00
X : 573086.21
PT STA.299WB+61.67
Y : 277261.72
X : 573579.32
BA= S89°58'46"E
AH= N87°43'09"E

STH 49 SB RT TURN

CURVE SB-1
PI STA.200+32.99
Y : 277297.42
X : 573872.45
DELTA = 89°58'17.17"
D = 81°51'04.01"
T = 69.97'
L = 109.92
R = 70.00
PC STA.199+63.02
Y : 277294.63
X : 573802.54
PT STA.200+72.94
Y : 277367.33
X : 573869.70

CTH A NB RT TURN

CURVE NB-1
PI STA.106+37.59
Y : 277218.28
X : 573996.30
DELTA = 90°00'00.00"
D = 81°51'04.01"
T = 70.00'
L = 109.96
R = 70.00
PC STA.105+67.59
Y : 277148.34
X : 573999.08
PT STA.106+77.54
Y : 277221.07
X : 574066.24

N

T 16 N
16 15
16 15
R 13 E

Y=278680.33
X=573010.71

2643.35'
N 00° 02' 51"E

℄ STH 49 SB
℄ STH 49 NB
℄ STH 49 PLAT
℄ STH 49 SB RT TURN
℄ STH 23 WB
℄ STH 23 PLAT
℄ STH 23 EB
℄ CTH A NB RT TURN
℄ CTH A NB
℄ CTH A SB
℄ CTH A PLAT

CURVE SB-1
CURVE NB-1
CURVE EB-2
CURVE EB-3
CURVE 23PLAT-2
CURVE WB-3

STA. 302WB+93.05, 24.00'LT
STA. 200"49S"+00.00
Y=277298.89
X=573909.48

STA. 303WB+29.31, 24.00'LT
STA. 200"49N"+00.00
Y=277300.34
X=573945.72

STA. 303+15.14, STH 23 PLAT
STA. 9+65.68, STH49 PLAT
Y=277263.78
X=573932.39

STA. 303+14.85, STH 23 PLAT
STA. 45+63.94, CTHA PLAT
Y=277263.76
X=573932.09

STA. 303EB+41.30, 24.00'RT
STA. 106AN+41.30
Y=277216.81
X=573959.30

STA. 303EB+05.33, 24.00'RT
STA 106AS+52.97
Y=277215.37
X=573923.06

PI STA.295+83.43 Y=277234.65 X=573201.02
PI STA. 296EB+61.12 Y=277213.69 X=573278.06
PI STA.297WB+15.09 Y=277251.91 X=573332.86

N2°15'8"W
N2°16'51"W
N87°43'9"E
S89°58'46"E
S87°29'52"E

293 WB 294 WB 295 WB 296 WB 297 WB 298 WB 299 WB 300 WB 301 WB 302 WB 303 WB 304 WB 305 WB 306 WB 307 WB 308 WB
293 EB 294 EB 295 EB 296 EB 297 EB 298 EB 299 EB 300 EB 301 EB 302 EB 303 EB 304 EB 305 EB 306 EB 307 EB 308 EB

SECTION LINE

T 16 N
16 15
21 22
R 13 E

Y=276036.99
X=573008.52

PROJECT NO:1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 190	E

STH 23 EB

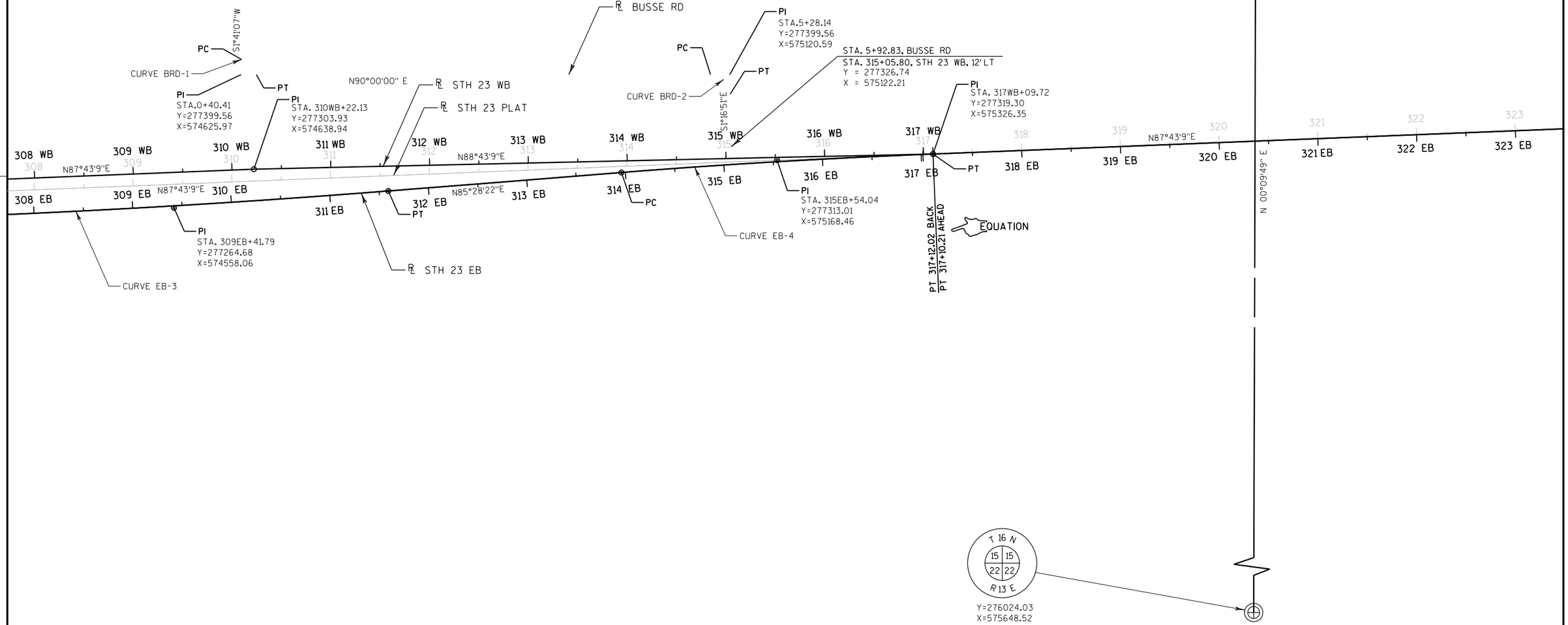
CURVE EB-3
PI STA. 309EB+41.79
Y : 277264.68
X : 574558.06
DELTA = 2°14'46.77"
D = 0°30'58.24"
T = 217.62'
L = 435.18
R = 11100.00
PC STA. 307EB+24.17
Y : 277256.02
X : 574340.61
PT STA. 311EB+59.35
Y : 277281.85
X : 574775.00
BA= N87°43'09"E
AH= N85°28'22"E

CURVE EB-4
PI STA. 315EB+54.04
Y : 277313.01
X : 575168.46
DELTA = 2°14'46.77"
D = 0°42'39.12"
T = 158.02'
L = 316.00
R = 8060.00
PC STA. 313EB+96.02
Y : 277300.54
X : 575010.93
PT STA. 317EB+10.21
Y : 277319.30
X : 575326.35
BA= N85°28'22"E
AH= N87°43'09"E

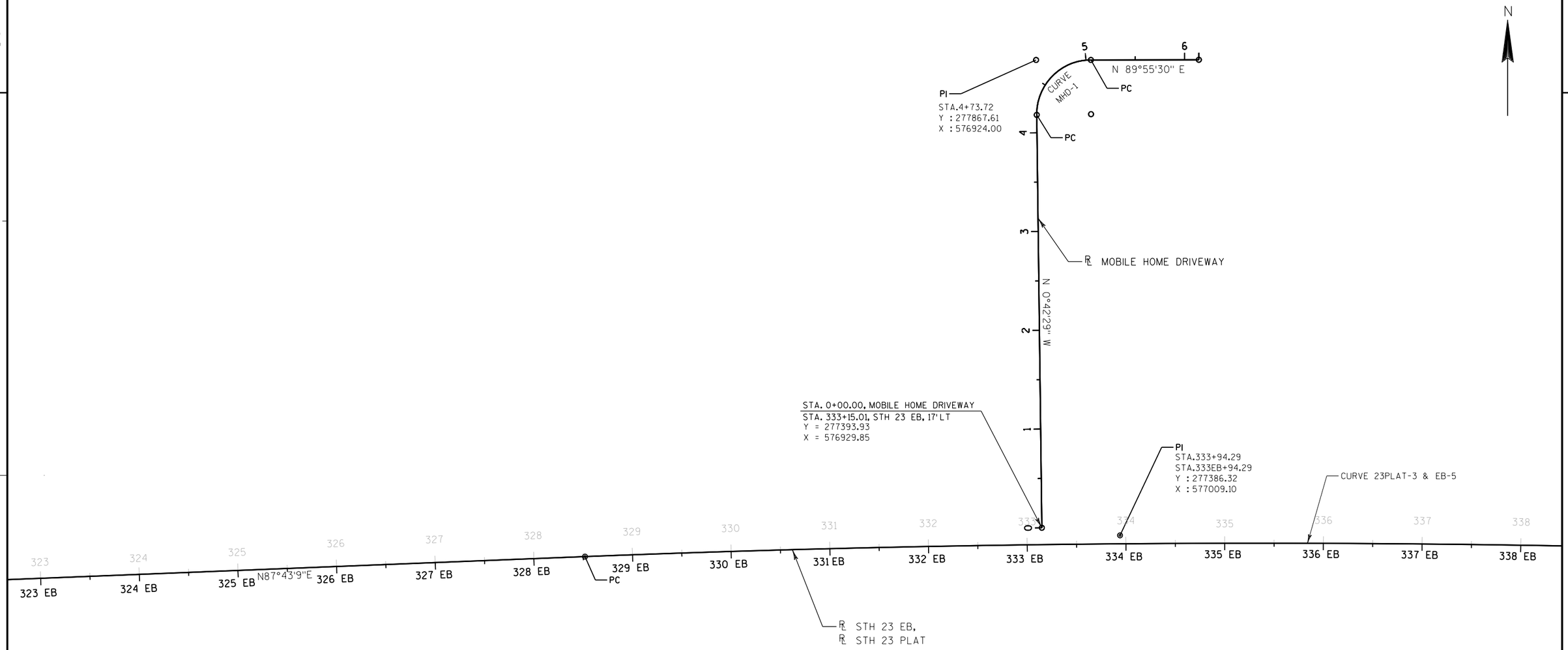
BUSSE RD

CURVE BRD-1
PI STA.0+40.41
Y : 277399.56
X : 574625.97
DELTA = 91°41'07.01"
D = 381°58'18.71"
T = 15.45'
L = 24.00
R = 15.00
PC STA.0+24.96
Y : 277415.00
X : 574626.42
PT STA.0+48.97
Y : 277399.56
X : 574641.42
BA= S1°41'07"W
AH= N90°00'00" E

CURVE BRD-2
PI STA.5+28.14
Y : 277399.56
X : 575120.59
DELTA = 88°43'08.83"
D = 286°28'44.03"
T = 19.56'
L = 30.97
R = 20.00
PC STA.5+08.58
Y : 277399.56
X : 575101.03
PT STA.5+39.55
Y : 277380.00
X : 575121.02
BA= N90°00'00" E
AH= S1°16'51"E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 191	E



STH 23 EB, PLAT

CURVE EB-5, 23PLAT-3
PI STA.333+94.29
Y : 277386.32
X : 577009.10
DELTA = 3°36'54.18"
D = 0°20'00.00"
T = 542.44'
L = 1084.52
R = 17188.73
PC STA.328+51.86
Y : 277364.73
X : 576467.09
PT STA.339+36.37
Y : 277373.69
X : 577551.39
BA= N87°43'09"E
AH= S88°39'57"E

MOBILE HOME DRIVEWAY

CURVE MHD-1
PI STA.4+73.72
Y : 277867.61
X : 576924.00
DELTA = 90°37'59.31"
D = 104°10'26.92"
T = 55.61'
L = 87.00
R = 55.00
PC STA.4+18.10
Y : 277812.00
X : 576924.68
PT STA.5+05.11
Y : 277867.68
X : 576979.61
BA= N 0°42'29" W
AH= N 89°55'30" E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 192	E

2

STH 23 EB, PLAT

CURVE EB-5, 23PLAT-3
PI STA. 333EB+94.29
Y : 277386.32
X : 577009.10
DELTA = 3°36'54.18"
D = 0°20'00.00"
T = 542.44'
L = 1084.52
R = 17188.73
PC STA. 328EB+51.86
Y : 277364.73
X : 576467.09
PT STA. 339EB+36.37
Y : 277373.69
X : 577551.39
BA= N87°43'09"E
AH= S88°39'57"E

T 16 N
15 14
15 14
R 13 E
Y=278651.21
X=578301.98

N

℄ FOREST RIDGE NORTH PLAT

℄ FOREST RIDGE NORTH

STA. 346+81.83, STH 23-PLAT
STA. 346EB+81.83, STH 23 EB
STA. 20+00.00, FOREST RIDGE NORTH PLAT
Y=277356.33
X=578296.64

STA. 346+81.87, STH 23-PLAT
STA. 346EB+81.87, STH 23 EB
STA. 20FRN+00.00, FOREST RIDGE NORTH
Y=277356.33
X=578296.69

338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353

338 EB 339 EB PT 340 EB 341 EB 342 EB 343 EB 344 EB 345 EB 346 EB 347 EB 348 EB 349 EB 350 EB 351 EB 352 EB 353 EB

CURVE 23PLAT-3 & EB-5

CURVE 23PLAT-3 & EB-5

℄ STH 23 EB,
℄ STH 23 PLAT

STA. 346+76.47, STH 23-PLAT
STA. 345EB+76.47, STH 23 EB
STA. 10FRS+00.00, FOREST RIDGE SOUTH
Y=277356.46
X=578291.29

STA. 346+81.83, STH 23-PLAT
STA. 346FRS+81.83, STH 23 EB
STA. 10+00.00, FOREST RIDGE SOUTH PLAT
Y=277356.33
X=578296.64

24 FRN
23 FRN
22 FRN
21 FRN
9 FRS
8 FRS
7 FRS
6 FRS
5 FRS

N 00°14'10" E

℄ FOREST RIDGE SOUTH

℄ FOREST RIDGE SOUTH PLAT

SECTION LINE

T 16 N
15 14
22 23
R 13 E
Y=276010.20
X=578291.10

2

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 193	E

2

2

N

353 EB
354 EB
355 EB
356 EB
357 EB
S88°39'57"E
358 EB
359 EB
360 EB
361 EB
362 EB
363 EB
PC
364 EB
365 EB
366 EB
367 EB
368 EB

℄ STH 23 EB,
℄ STH 23 PLAT

CURVE 23PLAT-4 & EB-6

STH 23 EB, PLAT

CURVE EB-6, 23PLAT-4
PI STA. 372EB+70.87
Y : 277296.05
X : 580884.99
DELTA = 27°54'13.03"
D = 1°30'00.00"
T = 948.95'
L = 1860.24
R = 3819.72
PC STA. 363EB+21.92
Y : 277318.15
X : 579936.29
PT STA. 381EB+82.16
Y : 277720.50
X : 581733.72
BA= S88°39'57"W
AH= N63°25'50"E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 194	E

FILE NAME : J:\Active\D4\STH 23\Main\027211_ad.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

EASTWIND

CURVE EW-1
PI STA.8EW+36.91
Y : 277435.02
X : 581489.88
DELTA = 7°21'47.76"
D = 5°43'46.48"
T = 64.35'
L = 128.51
R = 1000.00
PC STA.7EW+72.56
Y : 277372.64
X : 581505.68
PT STA.9EW+01.07
Y : 277494.85
X : 581466.20
BA= N14°13'20"W
AH= N21°35'07"W

STH 23 EB, PLAT

CURVE EB-6, 23PLAT-4
PI STA. 372EB+70.87
Y : 277296.05
X : 580884.99
DELTA = 27°54'13.03"
D = 1°30'00.00"
T = 948.95'
L = 1860.24
R = 3819.72
PC STA. 363EB+21.92
Y : 277318.15
X : 579936.29
PT STA. 381EB+82.16
Y : 277720.50
X : 581733.72
BA= S88°39'57"W
AH= N63°25'50"E

N

T 16 N
14 14
14 14
R 13 E
Y=278660.34
X=580969.20

N 00°13'43" E

368 EB 369 EB 370 EB 371 EB 372 EB 373 EB 374 EB 375 EB 376 EB 377 EB 378 EB 379 EB 380 EB 381 EB 382 EB 383 EB

N63°25'50"E

PT

STA. 378+50.00, STH 23 PLAT
STA. 378EB+50.00, STH 23 EB
STA. 9EW+98.04, EASTWIND
Y=277585.03
X=581430.56

N21°35'07"W

9EW

PT

CURVE 23PLAT-4 & EB-6

℄ STH 23 EB,
℄ STH 23 PLAT

CURVE EW-1

℄ EASTWIND

PI
STA. 8EW+36.91
Y=277435.02
X=581489.88

8EW

N14°13'20"W

PC

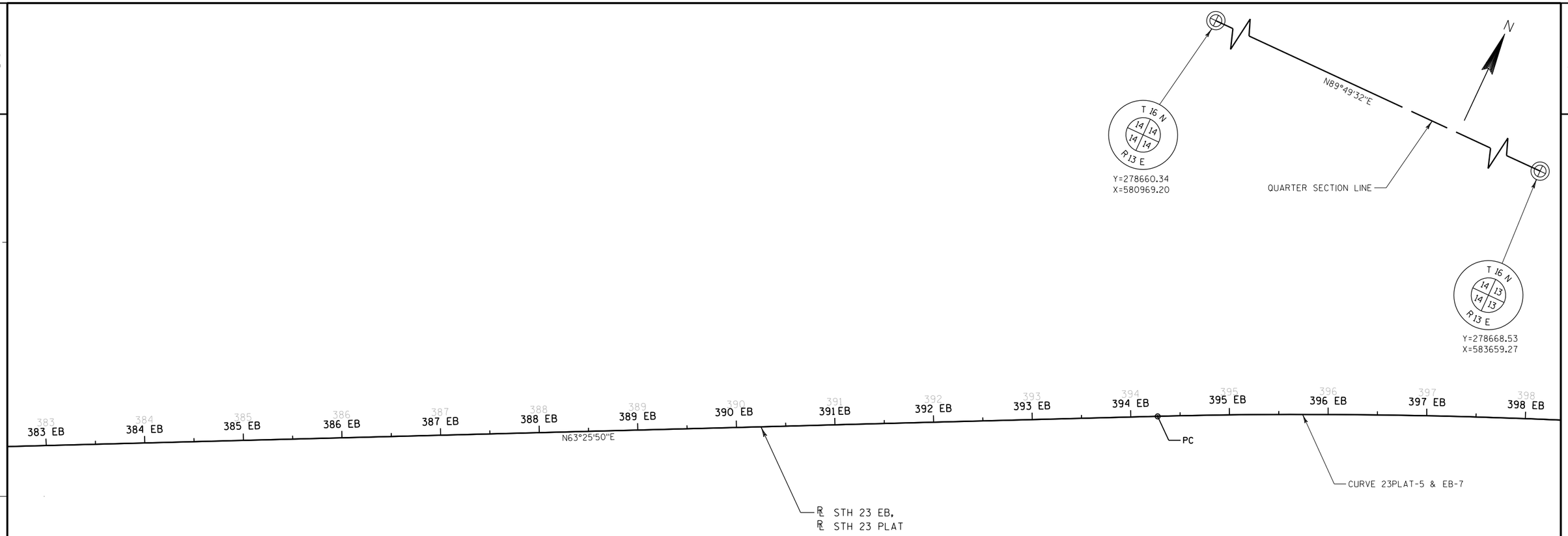
PI
STA. 7EW+24.00
Y=277325.57
X=581517.62

PI
STA. 372+70.87
STA. 372EB+70.87
Y=277296.05
X=580884.99

T 16 N
14 14
23 23
R 13 E
Y=276010.99
X=580958.63

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 195	E

2



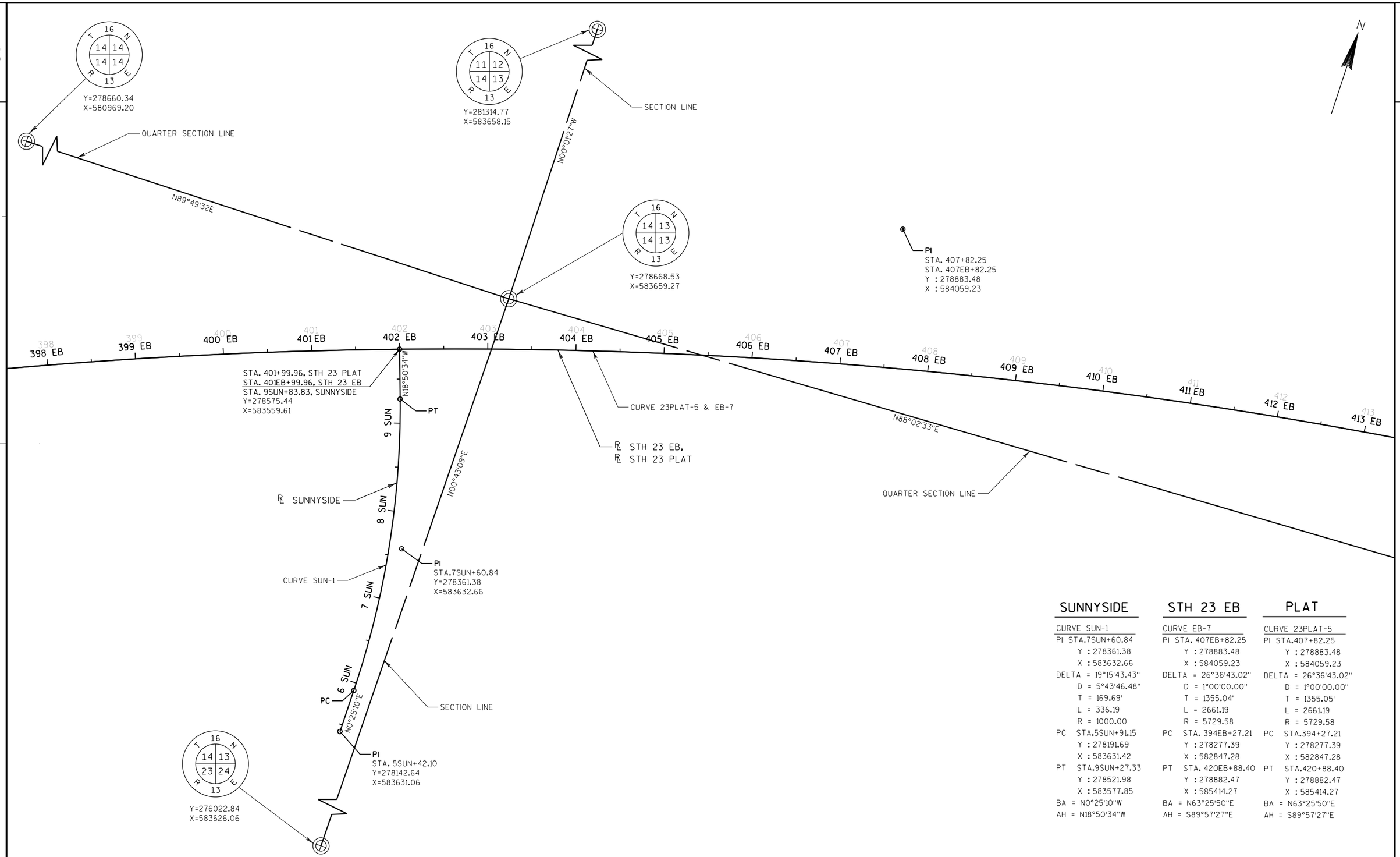
STH 23 EB

CURVE EB-7
PI STA. 407EB+82.25
Y : 278883.48
X : 584059.23
DELTA = 26°36'43.02"
D = 1°00'00.00"
T = 1355.04'
L = 2661.19
R = 5729.58
PC STA. 394EB+27.21
Y : 278277.39
X : 582847.28
PT STA. 420EB+88.40
Y : 278882.47
X : 585414.27
BA = N63°25'50"E
AH = S89°57'27"E

PLAT

CURVE 23PLAT-5
PI STA.407+82.25
Y : 278883.48
X : 584059.23
DELTA = 26°36'43.02"
D = 1°00'00.00"
T = 1355.05'
L = 2661.19
R = 5729.58
PC STA.394+27.21
Y : 278277.39
X : 582847.28
PT STA.420+88.40
Y : 278882.47
X : 585414.27
BA = N63°25'50"E
AH = S89°57'27"E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 196	E



SUNNYSIDE		STH 23 EB		PLAT	
CURVE SUN-1		CURVE EB-7		CURVE 23PLAT-5	
PI	STA.7SUN+60.84	PI	STA. 407EB+82.25	PI	STA.407+82.25
	Y : 278361.38		Y : 278883.48		Y : 278883.48
	X : 583632.66		X : 584059.23		X : 584059.23
DELTA	= 19°15'43.43"	DELTA	= 26°36'43.02"	DELTA	= 26°36'43.02"
D	= 5°43'46.48"	D	= 1°00'00.00"	D	= 1°00'00.00"
T	= 169.69'	T	= 1355.04'	T	= 1355.05'
L	= 336.19	L	= 2661.19	L	= 2661.19
R	= 1000.00	R	= 5729.58	R	= 5729.58
PC	STA.5SUN+91.15	PC	STA. 394EB+27.21	PC	STA.394+27.21
	Y : 278191.69		Y : 278277.39		Y : 278277.39
	X : 583631.42		X : 582847.28		X : 582847.28
PT	STA.9SUN+27.33	PT	STA. 420EB+88.40	PT	STA.420+88.40
	Y : 278521.98		Y : 278882.47		Y : 278882.47
	X : 583577.85		X : 585414.27		X : 585414.27
BA	= N0°25'10"W	BA	= N63°25'50"E	BA	= N63°25'50"E
AH	= N18°50'34"W	AH	= S89°57'27"E	AH	= S89°57'27"E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 197	E

2

2

N

413 EB
414 EB
415 EB
416 EB
417 EB
418 EB
419 EB
420 EB
421 EB
422 EB
423 EB
424 EB
425 EB
426 EB
427 EB
428 EB

S89°57'27"E

CURVE 23PLAT-5 & EB-7

PT

℄ STH 23 EB,
℄ STH 23 PLAT

N88°02'33"E

QUARTER SECTION LINE

T 16 N
14 13
14 13
R 13 E

Y=278668.53
X=583659.27

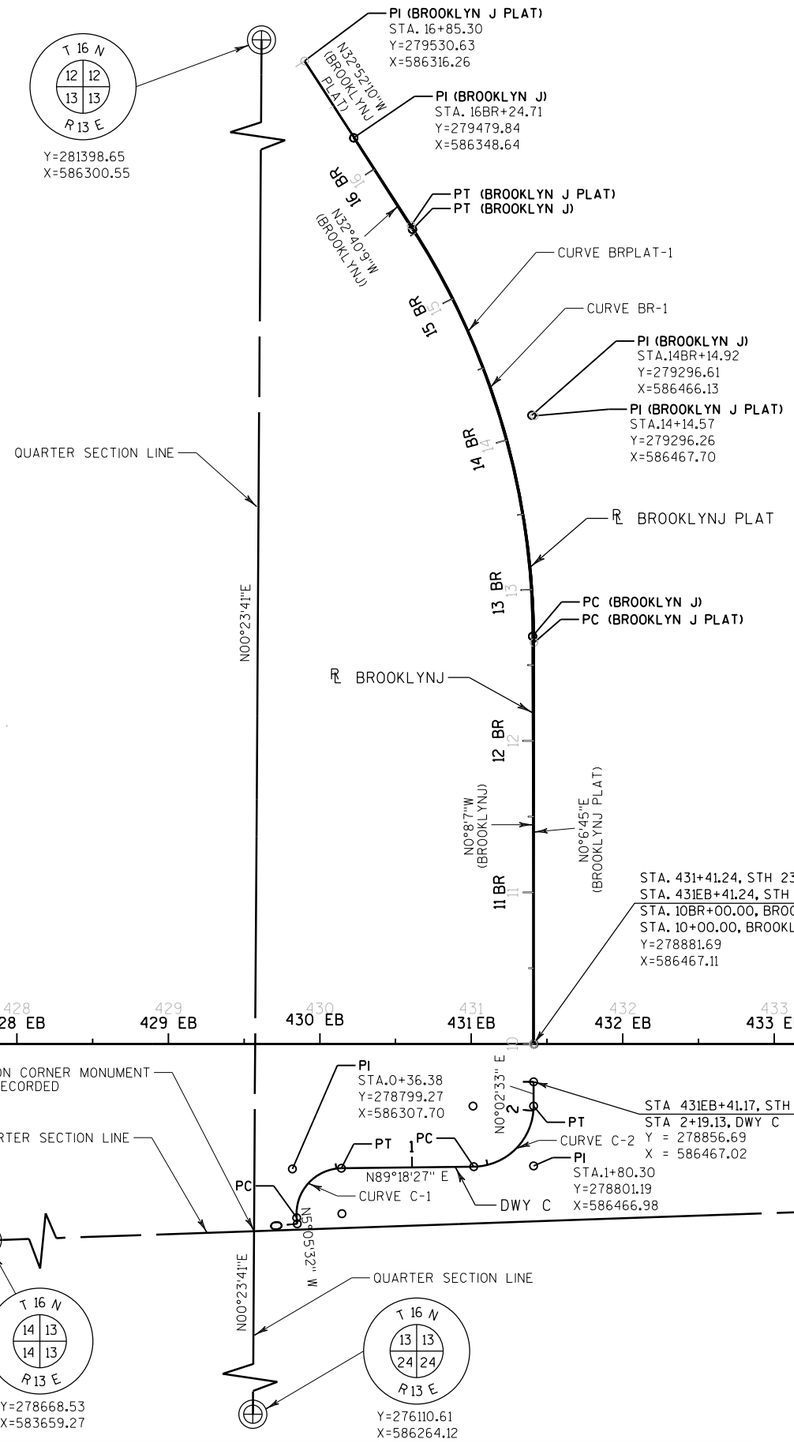
STH 23 EB

CURVE EB-7
PI STA. 407EB+82.25
Y : 278883.48
X : 584059.23
DELTA = 26°36'43.02"
D = 1°00'00.00"
T = 1355.04'
L = 2661.19
R = 5729.58
PC STA. 394EB+27.21
Y : 278277.39
X : 582847.28
PT STA. 420EB+88.40
Y : 278882.47
X : 585414.27
BA = N63°25'50"E
AH = S89°57'27"E

PLAT

CURVE 23PLAT-5
PI STA.407+82.25
Y : 278883.48
X : 584059.23
DELTA = 26°36'43.02"
D = 1°00'00.00"
T = 1355.05'
L = 2661.19
R = 5729.58
PC STA.394+27.21
Y : 278277.39
X : 582847.28
PT STA.420+88.40
Y : 278882.47
X : 585414.27
BA = N63°25'50"E
AH = S89°57'27"E

PROJECT NO:1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 198	E



BROOKLYNJ

CURVE CURVE BR-1	
PI	STA.14BR+14.92
	Y : 279296.61
	X : 586466.13
DELTA	= 32°32'01.89"
	D = 11°27'32.96"
	T = 145.90'
	L = 283.91
	R = 500.00
PC	STA.12BR+69.02
	Y : 279150.71
	X : 586466.48
PT	STA.15BR+52.94
	Y : 279419.43
	X : 586387.38
BA=	N0°08'07"W
AH=	N32°40'09"W

BROOKLYNJ PLAT

CURVE CURVE BRPLAT-1	
PI	STA.14+14.57
	Y : 279296.26
	X : 586467.70
DELTA	= 32°58'54.68"
	D = 11°20'00.00"
	T = 149.66'
	L = 291.02
	R = 505.55
PC	STA.12+64.90
	Y : 279146.59
	X : 586467.41
PT	STA.15+55.92
	Y : 279421.96
	X : 586386.47
BA=	N0°06'45"E
AH=	N32°52'10"W

DWY C

CURVE C-1	
PI	STA.0+36.38
	Y : 278799.27
	X : 586307.70
DELTA	= 94°23'59.37"
	D = 190°59'09.35"
	T = 32.40'
	L = 49.43
	R = 30.00
PC	STA.0+03.98
	Y : 278767.00
	X : 586310.58
PT	STA.0+53.41
	Y : 278799.66
	X : 586340.10
BA=	N5°05'32" W
AH=	N89°18'27" E

CURVE C-2	
PI	STA.1+80.30
	Y : 278801.19
	X : 586466.98
DELTA	= 89°15'54.49"
	D = 143°14'22.02"
	T = 39.49'
	L = 62.32
	R = 40.00
PC	STA.1+40.81
	Y : 278840.68
	X : 586467.01
BA=	N89°18'27" E
AH=	N0°02'33" E

N

2

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 199	E

2

N

T 16 N R 13 E 12 13

SECTION LINE

Y=281498.24
X=588961.17

℄ CTH PP

℄ CTH PP PLAT

℄ STH 23 EB,
℄ STH 23 PLAT

443 EB | 444 EB | 445 EB | 446 EB | 447 EB | 448 EB | 449 EB | 450 EB | 451 EB | 452 EB | 453 EB | 454 EB | 455 EB | 456 EB | 457 EB | 457 EB

S89°57'27"E

N88°02'33"E

QUARTER SECTION LINE

N89°58'40"W

N00°03'51"E

13 PP | 12 PP | 11 PP | 10 DD | 9 DD | 8 DD | 7 DD | 6 DD

STA. 456+38.24, STH 23-PLAT
STA. 456EB+38.24, STH 23 EB
STA. 10+30.00, CTH PP-PLAT
Y=278879.84
X=588964.11

STA. 456+41.03, STH 23-PLAT
STA. 456EB+41.03, STH 23 EB
STA. 10PP+30.00, CTH PP
Y=278879.84
X=588966.90

STA. 456EB+38.33, STH 23 EB
STA. 456+38.33, STH 23-PLAT
STA. 10DD+30.00, DEAD END RD.
Y=278879.84
X=588964.19

END PROJECT 1430-00-74
STA 457+86.84
Y=278879.73
X=589112.71

T 16 N R 13 E 13 13

Y=278849.85
X=588964.14

℄ CTH PP PLAT

℄ DEAD END RD.

N01°20'19"E

SECTION LINE

T 16 N R 13 E 13 24

Y=276198.39
X=588902.18

PROJECT NO:1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 200	E

FILE NAME : J:\Active\D4\STH 23\Main\027217_ad.dgn | PLOT DATE : 7/31/2013 | PLOT BY : fred.schunke | PLOT NAME : | PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

N

SECTION LINE

T 16 N
17 17
20 20
R 13 E

Y=276093.90
X=564938.17

℄ W. JUNCTION CTH A

CURVE N-1

CURVE N-2

6 N 7 N 8 N 9 N 10 N 11 N 12 N 13 N 14 N 15 N 16 N 17 N 18 N 19 N 20 N 21 N

S89°44'33"E

N63°39'15"E

S53°33'14"E

PC

PT

PI
STA. 5N+20.99
Y=276093.89
X=564938.12

PI
STA.13N+81.28
Y=276090.02
X=565798.40

PI
STA.18N+45.31
Y : 276297.92
X : 566218.21

STA. 224WB+08.60, STH 23 WB
STA. 20+25.47, W. JUNCTION CTH A
Y=276172.37
X=566388.21

STA. 224+07.62, STH 23 PLAT
STA. 20N+39.38, NORTH ST./W. JUNCTION CTH A
X=566399.40
Y=276164.11

2713.61'
N89°44'26"W

SECTION LINE

STA. 224EB+06.93, STH 23 EB
STA. 20N+51.38, NORTH ST.
Y=276156.98
X=566409.06

225 WB 224 WB 223 WB 222 WB 221 WB 220 WB 219 WB 218 WB

225 EB 224 EB 223 EB 222 EB 221 EB 220 EB 219 EB 218 EB

℄ STH 23 WB

℄ STH 23 PLAT

℄ STH 23 EB

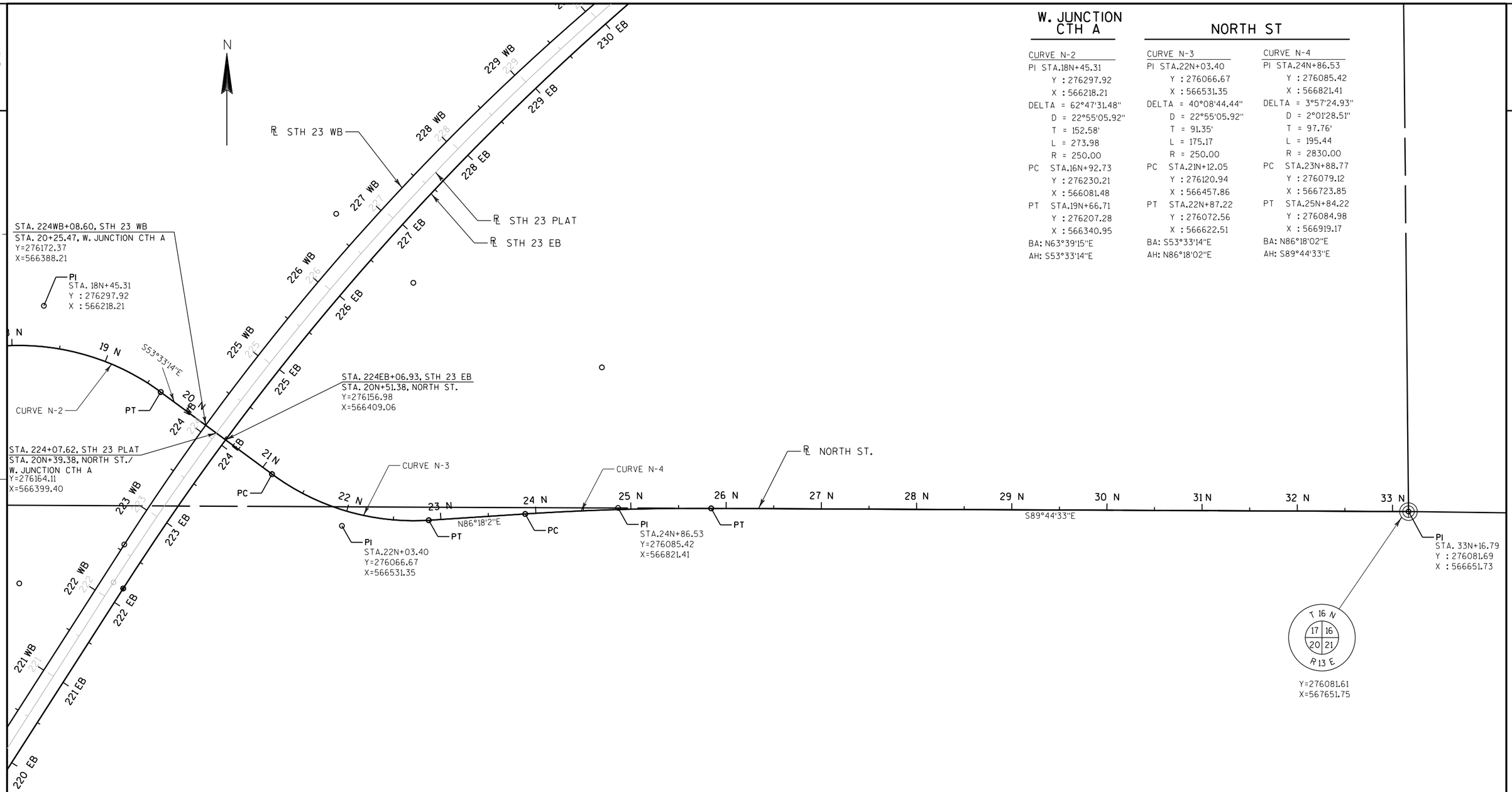
W. JUNCTION CTH A

CURVE N-1		CURVE N-2	
PI	STA.13N+81.28	PI	STA.18N+45.31
	Y : 276090.02		Y : 276297.92
	X : 565798.40		X : 566218.21
DELTA	= 26°36'12.08"	DELTA	= 62°47'31.48"
D	= 11°00'00.82"	D	= 22°55'05.92"
T	= 123.14'	T	= 152.58'
L	= 241.84	L	= 273.98
R	= 520.86	R	= 250.00
PC	STA.12N+58.14	PC	STA.16N+92.73
	Y : 276090.57		Y : 276230.21
	X : 565675.26		X : 566081.48
PT	STA.14N+99.98	PT	STA.19N+66.71
	Y : 276144.67		Y : 276207.28
	X : 565908.76		X : 566340.95
BA:	S89°44'33"E	BA:	N63°39'15"E
AH:	N63°39'15"E	AH:	S53°33'14"E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 201	E

FILE NAME : J:\Active\D4\STH 23\Main\027218_ad.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42



W. JUNCTION CTH A

CURVE N-2
PI STA.18N+45.31
Y : 276297.92
X : 566218.21
DELTA = 62°47'31.48"
D = 22°55'05.92"
T = 152.58'
L = 273.98
R = 250.00
PC STA.16N+92.73
Y : 276230.21
X : 566081.48
PT STA.19N+66.71
Y : 276207.28
X : 566340.95
BA: N63°39'15"E
AH: S53°33'14"E

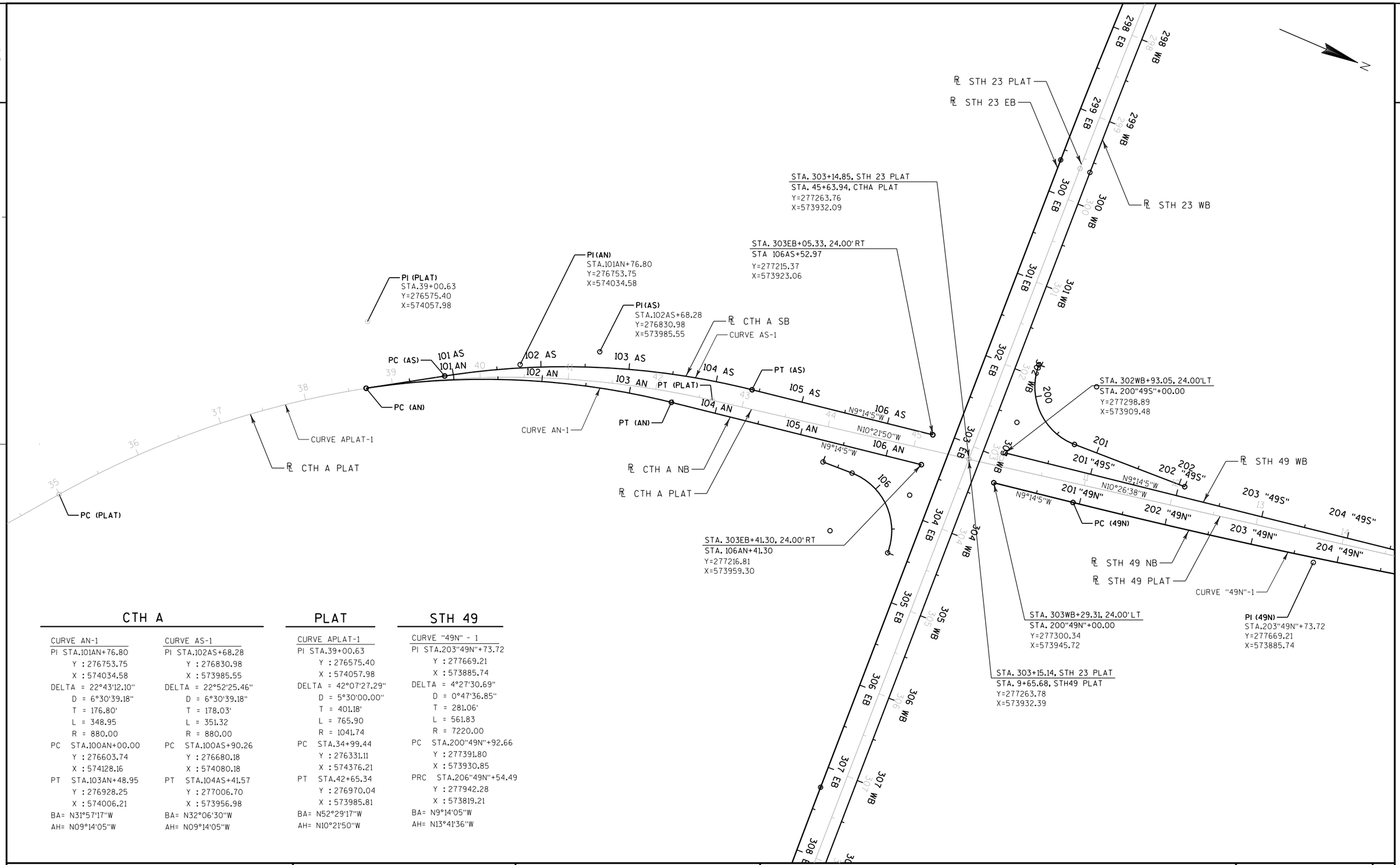
NORTH ST

CURVE N-3
PI STA.22N+03.40
Y : 276066.67
X : 566531.35
DELTA = 40°08'44.44"
D = 22°55'05.92"
T = 91.35'
L = 175.17
R = 250.00
PC STA.21N+12.05
Y : 276120.94
X : 566457.86
PT STA.22N+87.22
Y : 276072.56
X : 566622.51
BA: S53°33'14"E
AH: N86°18'02"E

CURVE N-4
PI STA.24N+86.53
Y : 276085.42
X : 566821.41
DELTA = 3°57'24.93"
D = 2°01'28.51"
T = 97.76'
L = 195.44
R = 2830.00
PC STA.23N+88.77
Y : 276079.12
X : 566723.85
PT STA.25N+84.22
Y : 276084.98
X : 566919.17
BA: N86°18'02"E
AH: S89°44'33"E

2

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 202	E



CTH A

CURVE AN-1		CURVE AS-1	
PI	STA.101AN+76.80	PI	STA.102AS+68.28
	Y : 276753.75		Y : 276830.98
	X : 574034.58		X : 573985.55
DELTA	= 22°43'12.10"	DELTA	= 22°52'25.46"
	D = 6°30'39.18"		D = 6°30'39.18"
	T = 176.80'		T = 178.03'
	L = 348.95		L = 351.32
	R = 880.00		R = 880.00
PC	STA.100AN+00.00	PC	STA.100AS+90.26
	Y : 276603.74		Y : 276680.18
	X : 574128.16		X : 574080.18
PT	STA.103AN+48.95	PT	STA.104AS+41.57
	Y : 276928.25		Y : 277006.70
	X : 574006.21		X : 573956.98
BA=	N31°57'17"W	BA=	N32°06'30"W
AH=	N09°14'05"W	AH=	N09°14'05"W

PLAT

CURVE APLAT-1	
PI	STA.39+00.63
	Y : 276575.40
	X : 574057.98
DELTA	= 42°07'27.29"
	D = 5°30'00.00"
	T = 401.18'
	L = 765.90
	R = 1041.74
PC	STA.34+99.44
	Y : 276331.11
	X : 574376.21
PT	STA.42+65.34
	Y : 276970.04
	X : 573985.81
BA=	N52°29'17"W
AH=	N10°21'50"W

STH 49

CURVE "49N" - 1	
PI	STA.203"49N"+73.72
	Y : 277669.21
	X : 573885.74
DELTA	= 4°27'30.69"
	D = 0°47'36.85"
	T = 281.06'
	L = 561.83
	R = 7220.00
PC	STA.200"49N"+92.66
	Y : 277391.80
	X : 573930.85
PRC	STA.206"49N"+54.49
	Y : 277942.28
	X : 573819.21
BA=	N9°14'05"W
AH=	N13°41'36"W

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 203	E

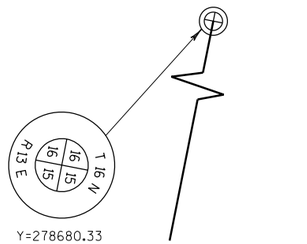
FILE NAME : J:\Active\D4\STH 23\Main\027221_ad.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

STH 49

CURVE "49N" - 1	CURVE "49N" - 2
PI STA.203"49"+73.72	PI STA.207"49N"+80.05
Y : 277669.21	Y : 278064.27
X : 573885.74	X : 573789.49
DELTA = 4°27'30.69"	DELTA = 1°59'32.99"
D = 0°47'36.85"	D = 0°47'36.85"
T = 281.06'	T = 125.55'
L = 561.83	L = 251.08
R = 7220.00	R = 7220.00
PC STA.200"49N"+92.66	PRC STA.206"49N"+54.49
Y : 277391.80	Y : 277942.28
X : 573930.85	X : 573819.21
PRC STA.206"49N"+54.49	PT STA.209"49N"+05.57
Y : 277942.28	Y : 278187.21
X : 573819.21	X : 573764.03
BA= N9°14'05"W	BA= N13°41'36"W
AH= N13°41'36"W	AH= N11°42'03"W



Y=278680.33
X=573010.71

N

S89°40'37"E

QUARTER SECTION LINE

℄ STH 49 SB

205 "49S"
206 "49S"
207 "49S"
208 "49S"
209 "49S"
205 "49N"
206 "49N"
207 "49N"
208 "49N"
209 "49N"

15 16 17 18 19 20 21 22 23

N9°14'5"W

N10°26'38"W

PRC (49N)

PT (49N)

PI (49S)
STA. 207"49S"+66.11
Y=278055.07
X=573786.53

N10°16'20"W
(STH 49 SB)

PI (49S)
STA. 209"49S"+56.95
Y=278242.85
X=573752.50

PI (49N)
STA.207"49N"+80.05
Y=278064.27
X=573789.49

N11°42'3"W
(STH 49 NB)

PI (49N)
STA. 209"49N"+62.40
Y=278242.85
X=573752.50

N10°26'38"W

PI (PLAT)
STA. 23+81.74
Y=278656.37
X=573675.70

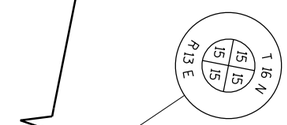
℄ STH 49 PLAT

℄ STH 49 NB

CURVE "49N"-2

CURVE "49N"-1

℄ STH 49 PLAT



Y=278665.78
X=575655.91

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 204	E

2

N

℄ STH 23 EB & PLAT

℄ FOREST RIDGE SOUTH PLAT

℄ FOREST RIDGE SOUTH

℄ FOREST RIDGE NORTH PLAT

℄ FOREST RIDGE NORTH

T 16 N
R 13 E
15 14
22 23

Y=276010.20
X=578291.10

PI (PLAT)
STA. 0+00.00
Y=276356.35
X=578292.52

N0°14'10"E (PLAT)

PI (FRS)
STA. 4FRS+36.44
Y=276792.91
X=578294.20

N0°17'44"W (FRS)

N0°14'10"E (PLAT)

N0°14'10"E

N0°23'32"E

STA. 346+76.47, STH 23-PLAT
STA. 345EB+76.47, STH 23 EB
STA. 10FRS+00.00, FOREST RIDGE SOUTH
Y=277356.46
X=578291.29

STA. 346+81.83, STH 23-PLAT
STA. 346EB+81.83, STH 23 EB
STA. 20+00.00, FOREST RIDGE NORTH PLAT
Y=277356.33
X=578296.64

STA. 346+81.83, STH 23-PLAT
STA. 346FRS+81.83, STH 23 EB
STA. 10+00.00, FOREST RIDGE SOUTH PLAT
Y=277356.33
X=578296.64

STA. 346+81.87, STH 23-PLAT
STA. 346EB+81.87, STH 23 EB
STA. 20FRN+00.00, FOREST RIDGE NORTH
Y=277356.33
X=578296.69

Y=278651.21
X=578301.98

342 EB
343 EB
344 EB
345 EB
346 EB
347 EB
348 EB
349 EB
350 EB
351 EB

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET	E

FILE NAME : J:\Active\D4\STH 23\Main\027223_ad.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

2

N

T 16 N
R 13 E
15 15
15 15

Y=278665.78
X=575655.91

N89°41'33"W

T 16 N
R 13 E
15 14
14 14

Y=278651.21
X=578301.98

℄ FOREST RIDGE SOUTH PLAT

24 FRN 25 FRN 26 FRN 27 FRN 28 29 30 31 32

N0°14'10"E

N0°23'32"E

PI
STA. 27FRN+75.29
Y=278131.60
X=578302.00

℄ FOREST RIDGE NORTH

℄ FOREST RIDGE SOUTH PLAT

N0°14'10"E

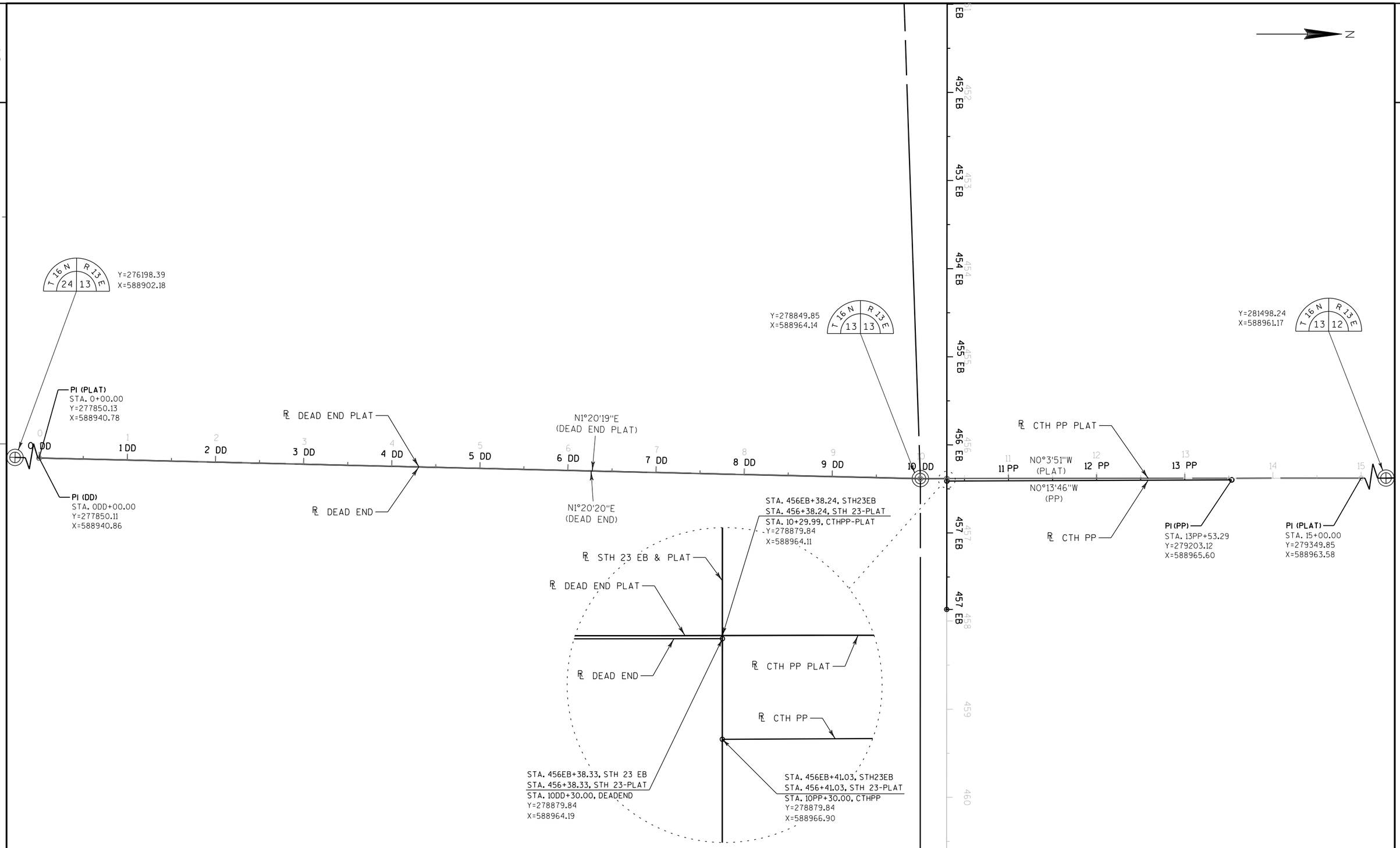
PI
STA. 32+94.89
Y=278651.21
X=578301.98

S89°48'14"W

T 16 N
R 13 E
14 14
14 14

Y=278660.34
X=580969.20

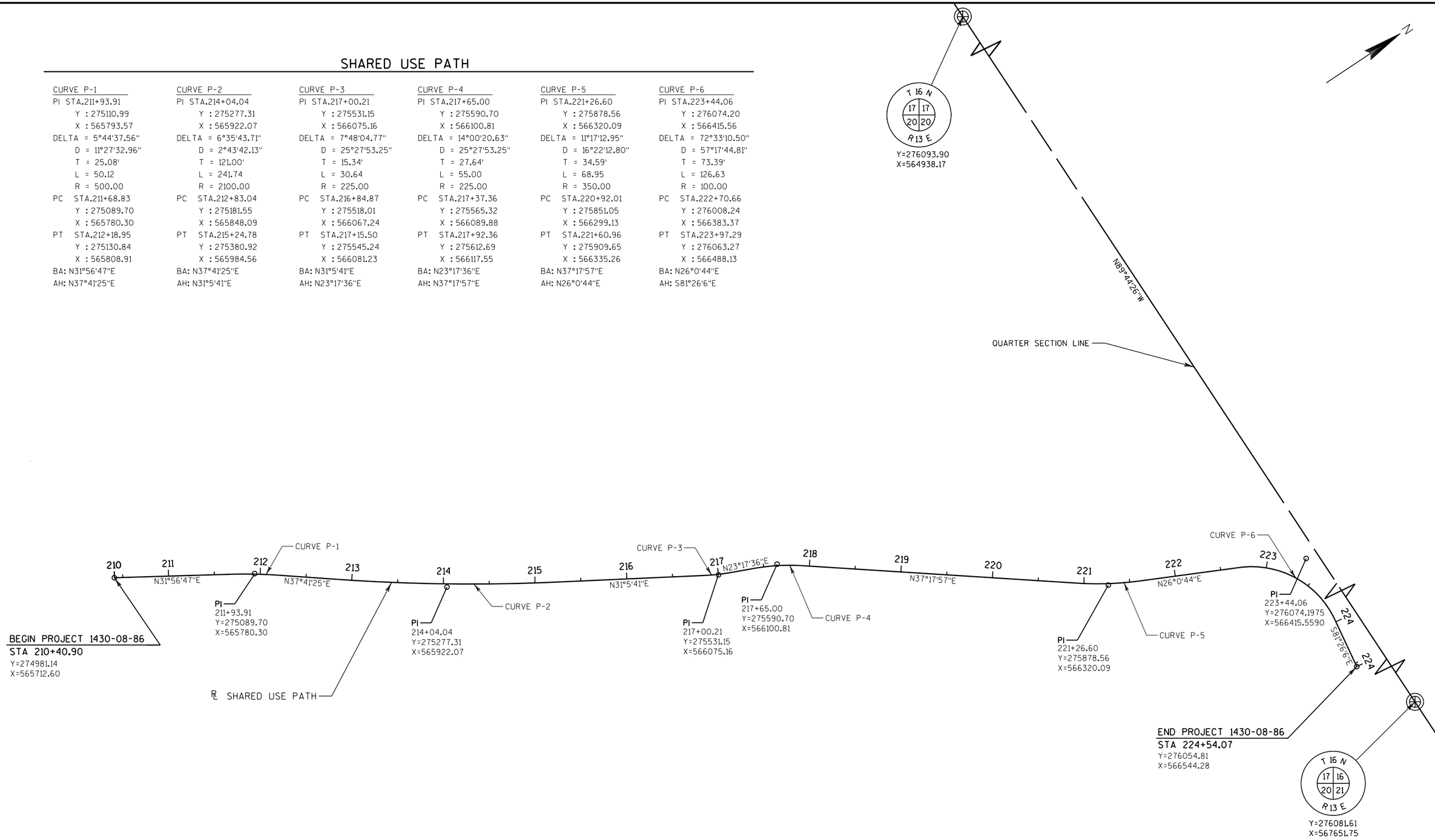
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 206	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN	SHEET 207	E

SHARED USE PATH

CURVE P-1	CURVE P-2	CURVE P-3	CURVE P-4	CURVE P-5	CURVE P-6
PI STA.211+93.91	PI STA.214+04.04	PI STA.217+00.21	PI STA.217+65.00	PI STA.221+26.60	PI STA.223+44.06
Y : 275110.99	Y : 275277.31	Y : 275531.15	Y : 275590.70	Y : 275878.56	Y : 276074.20
X : 565793.57	X : 565922.07	X : 566075.16	X : 566100.81	X : 566320.09	X : 566415.56
DELTA = 5°44'37.56"	DELTA = 6°35'43.71"	DELTA = 7°48'04.77"	DELTA = 14°00'20.63"	DELTA = 11°17'12.95"	DELTA = 72°33'10.50"
D = 11°27'32.96"	D = 2°43'42.13"	D = 25°27'53.25"	D = 25°27'53.25"	D = 16°22'12.80"	D = 57°17'44.81"
T = 25.08'	T = 121.00'	T = 15.34'	T = 27.64'	T = 34.59'	T = 73.39'
L = 50.12	L = 241.74	L = 30.64	L = 55.00	L = 68.95	L = 126.63
R = 500.00	R = 2100.00	R = 225.00	R = 225.00	R = 350.00	R = 100.00
PC STA.211+68.83	PC STA.212+83.04	PC STA.216+84.87	PC STA.217+37.36	PC STA.220+92.01	PC STA.222+70.66
Y : 275089.70	Y : 275181.55	Y : 275518.01	Y : 275565.32	Y : 275851.05	Y : 276008.24
X : 565780.30	X : 565848.09	X : 566067.24	X : 566089.88	X : 566299.13	X : 566383.37
PT STA.212+18.95	PT STA.215+24.78	PT STA.217+15.50	PT STA.217+92.36	PT STA.221+60.96	PT STA.223+97.29
Y : 275130.84	Y : 275380.92	Y : 275545.24	Y : 275612.69	Y : 275909.65	Y : 276063.27
X : 565808.91	X : 565984.56	X : 566081.23	X : 566117.55	X : 566335.26	X : 566488.13
BA: N31°56'47"E	BA: N37°41'25"E	BA: N31°5'41"E	BA: N23°17'36"E	BA: N37°17'57"E	BA: N26°0'44"E
AH: N37°41'25"E	AH: N31°5'41"E	AH: N23°17'36"E	AH: N37°17'57"E	AH: N26°0'44"E	AH: S81°26'6"E



PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	ALIGNMENT PLAN - SHARED USE PATH	SHEET 208	E

2

N

T 16N R 14E 18

Y=418205.13
X=701352.49

N00°26'57"E

SECTION LINE

PI
STA. 19EB+99.95
Y=415586.78
X=701331.96

PI
STA. 19+99.95
Y=415586.78
X=701331.96

BEGIN PROJECT 1431-02-72
STA 21+48.47
Y=415585.34
X=701480.47

℄ STH 23 EB & PLAT

PC

21 EB 22 EB 23 EB 24 EB 25 EB 26 EB 27 EB 28 EB 29 EB 30 EB 31 EB 32 EB 33 EB 34 EB 35 EB

S89°26'38"E

S89°27'52"E

QUARTER SECTION LINE

PI
STA. 31EB+92.76
Y=415575.20
X=702524.71

PI
STA. 31+92.76
Y=415575.20
X=702524.71

CURVE 23PLAT-6 & EB-8

T 16N R 14E 18

Y=415556.78
X=701331.72

S01°01'09"W

SECTION LINE

T 16N R 14E 19

Y=412905.97
X=701245.98

STH 23 EB

CURVE EB-8
PI STA.31EB+92.76
Y : 415575.20
X : 702524.71
DELTA = 10°43'09.24"
D = 1°00'00.00"
T = 537.53'
L = 1071.92
R = 5729.58
PC STA.26EB+55.23
Y : 415580.42
X : 701987.20
PT STA.37EB+27.15
Y : 415470.10
X : 703051.86
BA = S89°26'38"E
AH = S78°43'29"E

PLAT

CURVE 23PLAT-6
PI STA.31+92.76
Y : 415575.20
X : 702524.71
DELTA = 10°43'09.24"
D = 1°00'00.00"
T = 537.53'
L = 1071.92
R = 5729.58
PC STA.26+55.23
Y : 415580.42
X : 701987.20
PT STA.37+27.15
Y : 415470.10
X : 703051.86
BA = S89°26'38"E
AH = S78°43'29"E

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	ALIGNMENT PLAN	SHEET 209	E

STH 23 EB

CURVE EB-8
PI STA.31EB+92.76
Y : 415575.20
X : 702524.71
DELTA = 10°43'09.24"
D = 1°00'00.00"
T = 537.53'
L = 1071.92
R = 5729.58
PC STA.26EB+55.23
Y : 415580.42
X : 701987.20
PT STA.37EB+27.15
Y : 415470.10
X : 703051.86
BA = S89°26'38"E
AH = S78°43'29"E

PLAT

CURVE 23PLAT-6
PI STA.31+92.76
Y : 415575.20
X : 702524.71
DELTA = 10°43'09.24"
D = 1°00'00.00"
T = 537.53'
L = 1071.92
R = 5729.58
PC STA.26+55.23
Y : 415580.42
X : 701987.20
PT STA.37+27.15
Y : 415470.10
X : 703051.86
BA = S89°26'38"E
AH = S78°43'29"E

N

T16N R14E
18 18
18 18
Y=415532.58
X=703920.54

S89°27'52"E

QUARTER LINE

34 EB
35 EB
36 EB
37 EB
38 EB
39 EB
40 EB
41 EB
42 EB
43 EB
44 EB
45 WB
45 EB
46 WB
46 EB
47 WB
47 EB
48 WB
48 EB
49 WB
49 EB

CURVE 23PLAT-6 & EB-8

PT

S78°43'29"E

℄ STH 23 EB & PLAT

PI
STA. 44WB+49.24
Y=415328.92
X=703760.01

PI
STA. 44EB+49.24
Y=415328.92
X=703760.01

℄ STH 23 WB & PLAT

S78°43'29"E

S77°40'59"E

℄ STH 23 EB

S01°00'36"W

QUARTER LINE

T16N R14E
18 18
19 19
Y=412889.97
X=703873.95

PROJECT NO:1431-02-72	HWY: STH 23	COUNTY:FOND DU LAC	ALIGNMENT PLAN	SHEET 210	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\027202_ad.dgn
PLOT DATE : 7/31/2013
PLOT BY : fred.schunke
PLOT NAME :
PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

2

N

QUARTER SECTION LINE

STH 23 EB

CURVE WB-4
PI STA.51WB+09.57
Y : 415199.81
X : 704407.60
DELTA = 1°05'55.78"
D = 0°30'56.23"
T = 106.56'
L = 213.11
R = 11112.00
PC STA.50WB+03.01
Y : 415220.64
X : 704303.10
PT STA.52WB+16.12
Y : 415180.98
X : 704512.48
BA = S78°43'29"E
AH = S79°49'24"E

CURVE 23PLAT-6 & EB-8

PI
STA.51WB+09.57
Y=415199.81
X=704407.60

50 WB
PC
S78°43'29"E
50 EB
S77°40'59"E
51 WB
51 EB
52 WB
PT
52 EB
53 WB
53 EB
54 WB
54 EB
55 WB
S79°49'24"E
55 EB
S78°43'29"E
56 WB
S78°43'29"E
56 EB
57 WB
57 EB
58 WB

℄ STH 23 WB
℄ STH 23 PLAT

END PROJECT 1431-02-72
STA 58WB+48.81

℄ STH 23 EB

STA. 54+22.78, STH 23 PLAT
STA. 10COM+00.00, COMORN
Y=415138.56
X=704714.77

9 COM
N11°16'17"E

STA. 54EB+22.91, STH 23 EB
STA. 9COM+86.31, COMORN
Y=415125.14
X=704712.09

℄ COMORN

PI
STA. 8COM+48.45
Y=414989.94
X=704685.15

PI
STA. 57EB+55.63
Y=415060.08
X=705038.39

59
60
61
62
63
64

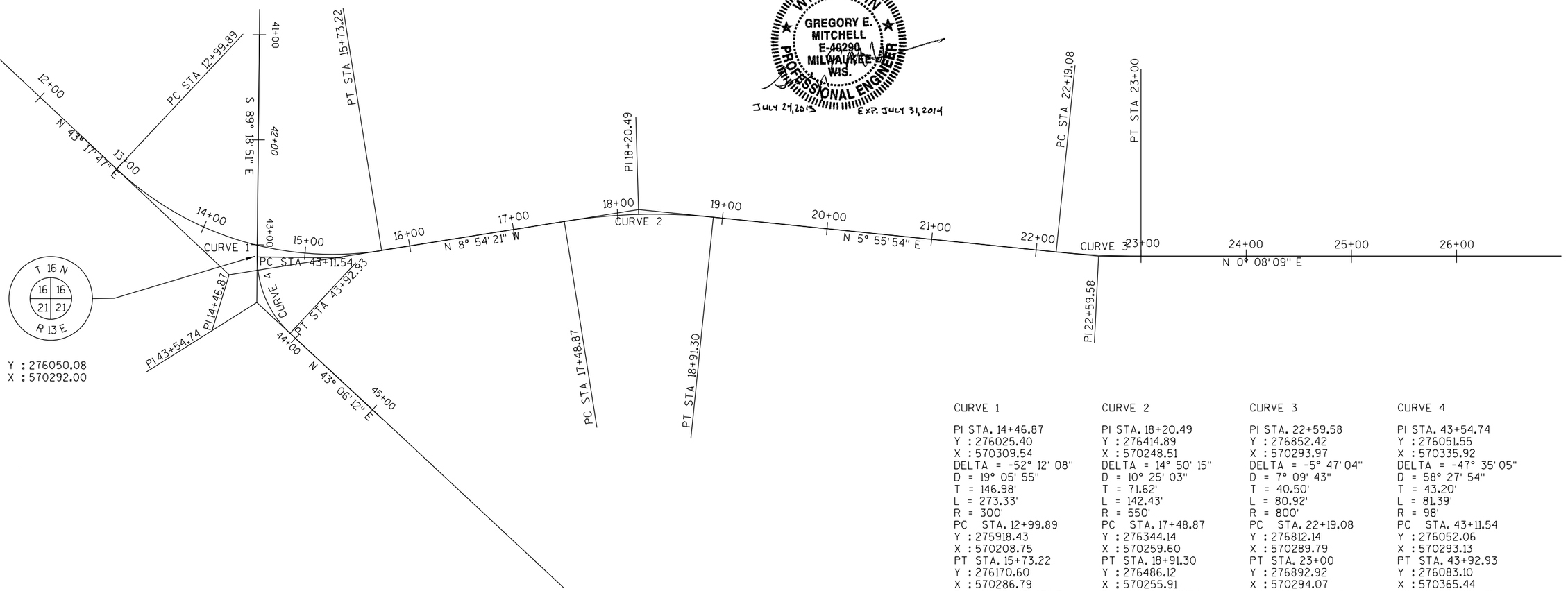
PI
STA. 64+93.41
Y=414929.23
X=705764.73

PROJECT NO:1431-02-72	HWY: STH 23	COUNTY:FOND DU LAC	ALIGNMENT PLAN	SHEET 211	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\027203_ad.dgn PLOT DATE : 8/1/2013 PLOT BY : tammy.tucker PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2



JULY 24, 2013 EXP. JULY 31, 2014

CURVE 1

PI STA. 14+46.87
Y : 276025.40
X : 570309.54
DELTA = -52° 12' 08"
D = 19° 05' 55"
T = 146.98'
L = 273.33'
R = 300'
PC STA. 12+99.89
Y : 275918.43
X : 570208.75
PT STA. 15+73.22
Y : 276170.60
X : 570286.79
BK : N 43° 17' 47" E
AH : N 8° 54' 21" W

CURVE 2

PI STA. 18+20.49
Y : 276414.89
X : 570248.51
DELTA = 14° 50' 15"
D = 10° 25' 03"
T = 71.62'
L = 142.43'
R = 550'
PC STA. 17+48.87
Y : 276344.14
X : 570259.60
PT STA. 18+91.30
Y : 276486.12
X : 570255.91
BK : N 8° 54' 21" W
AH : N 5° 55' 54" E

CURVE 3

PI STA. 22+59.58
Y : 276852.42
X : 570293.97
DELTA = -5° 47' 04"
D = 7° 09' 43"
T = 40.50'
L = 80.92'
R = 800'
PC STA. 22+19.08
Y : 276812.14
X : 570289.79
PT STA. 23+00
Y : 276892.92
X : 570294.07
BK : N 5° 55' 54" E
AH : N 0° 08' 09" E

CURVE 4

PI STA. 43+54.74
Y : 276051.55
X : 570335.92
DELTA = -47° 35' 05"
D = 58° 27' 54"
T = 43.20'
L = 81.39'
R = 98'
PC STA. 43+11.54
Y : 276052.06
X : 570293.13
PT STA. 43+92.93
Y : 276083.10
X : 570365.44
BK : S 89° 18' 51" E
AH : N 43° 06' 12" E

SUPER ELEVATION TABLE NORTH LAWSON DRIVE

STATION	TYPE	LEFT	RIGHT
16+82.87	END NC	-0.02	-0.02
17+16.87	ZERO SUPER	0.00	-0.02
17+64.87	BEGIN FS	+0.028	-0.028
18+75.30	END FS	+0.028	-0.028
19+23.3	ZERO SUPER	0.00	-0.02
19+57.30	BEGIN NC	-0.02	-0.02
21+56.41	END NC	-0.02	-0.02
21+90.41	ZERO SUPER	-0.02	0.00
22+33.41	BEGIN FS	-0.025	+0.025
22+85.67	END FS	-0.025	+0.025
23+28.67	ZERO SUPER	-0.02	0.00
23+62.67	BEGIN NC	-0.02	-0.020

DATE 30OCT13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1430-00-74 QUANTITY	1430-00-76 QUANTITY	1430-00-84 QUANTITY	1430-08-86 QUANTITY	1431-02-72 QUANTITY	1431-02-74 QUANTITY
0010	201.0105	CLEARING	STA	167.000	140.000		11.000		16.000	
0020	201.0205	GRUBBING	STA	167.000	140.000		11.000		16.000	
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	83.000	76.000				7.000	
0040	203.0200	REMOVING OLD STRUCTURE (STATION) 01. STA. 239EB+43	LS	1.000	1.000					
0050	203.0200	REMOVING OLD STRUCTURE (STATION) 02. STA. 249EB+40	LS	1.000	1.000					
0060	203.0200	REMOVING OLD STRUCTURE (STATION) 03. STA. 49+00.00	LS	1.000						1.000
0070	203.0210.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL (STRUCTURE) 01. STRUCTURE B-24-09	LS	1.000		1.000				
0080	203.0500.S	REMOVING OLD STRUCTURE OVER WATERWAY (STATION) 01. STA. 410+95	LS	1.000	1.000					
0090	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STATION) 01. STA. 285+18.25	LS	1.000		1.000				
0100	204.0110	REMOVING ASPHALTIC SURFACE	SY	550.000	500.000				50.000	
0110	204.0150	REMOVING CURB & GUTTER	LF	5,720.000	5,110.000		190.000		420.000	
0120	204.0155	REMOVING CONCRETE SIDEWALK	SY	730.000	650.000		80.000			
0130	204.0165	REMOVING GUARDRAIL	LF	1,190.000	900.000				290.000	
0140	204.0170	REMOVING FENCE	LF	370.000	370.000					
0150	204.0180	REMOVING DELINEATORS AND MARKERS	EACH	4.000	4.000					
0160	204.0210	REMOVING MANHOLES	EACH	2.000			2.000			
0170	204.0215	REMOVING CATCH BASINS	EACH	1.000			1.000			
0180	204.0220	REMOVING INLETS	EACH	7.000	4.000				3.000	
0190	204.0245	REMOVING STORM SEWER (SIZE) 01. 15-INCH	LF	235.000	100.000				135.000	
0200	204.0245	REMOVING STORM SEWER (SIZE) 02. 18-INCH	LF	100.000	100.000					
0210	204.0245	REMOVING STORM SEWER (SIZE) 03. 24-INCH	LF	100.000	100.000					
0220	205.0100	EXCAVATION COMMON	CY	375,828.000	330,926.000		11,300.000		33,602.000	
0230	205.0200	EXCAVATION ROCK	CY	4,230.000	4,000.000		230.000			
0240	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. STRUCTURE B-24-09	LS	1.000		1.000				
0250	206.1050.S	UNDERWATER FOUNDATION INSPECTION	EACH	3.000		3.000				
0260	206.2000	EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 01. STRUCTURE C-24-0017	LS	1.000	1.000					
0270	206.2000	EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 03. STRUCTURE B-20-49	LS	1.000						1.000
0280	206.5000	COFFERDAMS (STRUCTURE) 01. STRUCTURE B-24-09	LS	1.000		1.000				
0290	206.6000.S	TEMPORARY SHORING	SF	3,550.000	1,260.000				2,290.000	
0300	209.0100	BACKFILL GRANULAR	CY	158,410.000	137,410.000				21,000.000	
0310	210.0100	BACKFILL STRUCTURE	CY	5,713.000	4,690.000	623.000				400.000
0320	213.0100	FINISHING ROADWAY (PROJECT) 01. PROJECT I.D. 1430-00-74	EACH	1.000	1.000					
0330	213.0100	FINISHING ROADWAY (PROJECT) 02. PROJECT I.D. 1431-02-72	EACH	1.000					1.000	
0340	213.0100	FINISHING ROADWAY (PROJECT) 03. PROJECT I.D. 1430-00-84	EACH	1.000			1.000			
0350	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	27,067.000	23,453.000		206.000		3,408.000	
0360	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	201,274.000	172,517.000		4,067.000	700.000	23,990.000	
0370	311.0115	BREAKER RUN	CY	185.000	185.000					
0380	312.0110	SELECT CRUSHED MATERIAL	TON	3,190.000			3,190.000			
0390	415.0410	CONCRETE PAVEMENT APPROACH SLAB	SY	270.000	270.000					
0400	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	61.000			61.000			
0410	416.0610	DRILLED TIE BARS	EACH	27.000	27.000					

DATE 30OCT13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1430-00-74 QUANTITY	1430-00-76 QUANTITY	1430-00-84 QUANTITY	1430-08-86 QUANTITY	1431-02-72 QUANTITY	1431-02-74 QUANTITY
0420	416.1010	CONCRETE SURFACE DRAINS	CY	5.000	5.000					
0430	440.4410.S	INCENTIVE IRI RIDE	DOL	21,560.000	18,760.000				2,800.000	
0440	455.0105	ASPHALTIC MATERIAL PG58-28	TON	2,866.000	2,537.000			17.000	312.000	
0450	455.0120	ASPHALTIC MATERIAL PG64-28	TON	104.000			104.000			
0460	455.0605	TACK COAT	GAL	6,534.000	5,684.000		180.000		670.000	
0470	460.1100	HMA PAVEMENT TYPE E-0.3	TON	2,964.000	2,474.000			305.000	185.000	
0480	460.1101	HMA PAVEMENT TYPE E-1	TON	2,965.000	970.000		1,995.000			
0490	460.1110	HMA PAVEMENT TYPE E-10	TON	47,885.000	42,435.000				5,450.000	
0500	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	30,590.000	25,340.000		2,020.000	200.000	3,030.000	
0510	465.0105	ASPHALTIC SURFACE	TON	76.000			76.000			
0520	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	1,703.000	1,636.000		17.000		50.000	
0530	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	499.000	499.000					
0540	465.0315	ASPHALTIC FLUMES	SY	498.000	468.000		4.000		26.000	
0550	465.0425	ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL	LF	37,760.000	31,700.000				6,060.000	
0560	465.0475	ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL	LF	13,930.000	11,730.000				2,200.000	
0570	502.0100	CONCRETE MASONRY BRIDGES	CY	950.000		950.000				
0580	502.1100	CONCRETE MASONRY SEAL	CY	312.000		312.000				
0590	502.3100	EXPANSION DEVICE (STRUCTURE) 01. STRUCTURE B-24-09	LS	1.000		1.000				
0600	502.3200	PROTECTIVE SURFACE TREATMENT	SY	2,348.000		2,348.000				
0610	502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	400.000		400.000				
0620	502.5010	MASONRY ANCHORS TYPE L NO. 6 BARS	EACH	12.000		12.000				
0630	502.5020	MASONRY ANCHORS TYPE L NO. 8 BARS	EACH	5.000		5.000				
0640	502.5025	MASONRY ANCHORS TYPE L NO. 9 BARS	EACH	9.000		9.000				
0650	502.6105	MASONRY ANCHORS TYPE S 5/8-INCH	EACH	158.000						158.000
0660	503.0145	PRESTRESSED GIRDER TYPE I 45-INCH	LF	1,065.000		1,065.000				
0670	504.0100	CONCRETE MASONRY CULVERTS	CY	484.000	242.000					242.000
0680	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	45,205.000		45,205.000				
0690	505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	LB	64,055.000	29,260.000					34,795.000
0700	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	169,650.000		169,650.000				
0710	505.0610	BAR STEEL REINFORCEMENT HS COATED CULVERTS	LB	1,710.000						1,710.000
0720	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	48.000		48.000				
0730	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 01. STRUCTURE B-24-09	EACH	28.000		28.000				
0740	506.6000	BEARING ASSEMBLIES EXPANSION (STRUCTURE) 01. STRUCTURE B-24-09	EACH	16.000		16.000				
0750	506.7050.S	REMOVING BEARINGS (STRUCTURE) 01. STRUCTURE B-24-09	EACH	25.000		25.000				
0760	509.1500	CONCRETE SURFACE REPAIR	SF	25.000		25.000				
0770	509.9020.S	EPOXY CRACK SEALING	LF	42.000		42.000				
0780	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	99.000	20.000	39.000				40.000
0790	520.4018	CULVERT PIPE TEMPORARY 18-INCH	LF	72.000	72.000					
0800	520.4048	CULVERT PIPE TEMPORARY 48-INCH	LF	322.000	322.000					
0810	520.8000	CONCRETE COLLARS FOR PIPE	EACH	3.000	3.000					
0820	521.1012	APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	EACH	2.000	2.000					
0830	521.1524	APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 24-INCH 6 TO 1	EACH	12.000	10.000			2.000		
0840	521.1530	APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 30-INCH 6 TO 1	EACH	2.000	2.000					

3

DATE 30OCT13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1430-00-74 QUANTITY	1430-00-76 QUANTITY	1430-00-84 QUANTITY	1430-08-86 QUANTITY	1431-02-72 QUANTITY	1431-02-74 QUANTITY
0850	522.0124	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	930.000	930.000					
0860	522.0130	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	516.000	402.000				114.000	
0870	522.0136	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	414.000	414.000					
0880	522.0142	CULVERT PIPE REINFORCED CONCRETE CLASS III 42-INCH	LF	158.000	158.000					
0890	522.0148	CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH	LF	914.000	914.000					
0900	522.0318	CULVERT PIPE REINFORCED CONCRETE CLASS IV 18-INCH	LF	126.000	42.000				84.000	
0910	522.0324	CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH	LF	716.000	574.000				142.000	
0920	522.0330	CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH	LF	54.000	54.000					
0930	522.0336	CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH	LF	242.000	242.000					
0940	522.0518	CULVERT PIPE REINFORCED CONCRETE CLASS V 18-INCH	LF	140.000	140.000					
0950	522.0524	CULVERT PIPE REINFORCED CONCRETE CLASS V 24-INCH	LF	530.000	530.000					
0960	522.0530	CULVERT PIPE REINFORCED CONCRETE CLASS V 30-INCH	LF	212.000	212.000					
0970	522.0536	CULVERT PIPE REINFORCED CONCRETE CLASS V 36-INCH	LF	174.000	174.000					
0980	522.1012	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	EACH	1.000			1.000			
0990	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	34.000	29.000		2.000		3.000	
1000	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	48.000	44.000				4.000	
1010	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	12.000	10.000				2.000	
1020	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	14.000	14.000					
1030	522.1042	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH	EACH	2.000	2.000					
1040	522.1048	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH	EACH	10.000	10.000					
1050	523.0114	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 14X23-INCH	LF	220.000	220.000					
1060	523.0119	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH	LF	302.000	302.000					
1070	523.0419	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH	LF	288.000	288.000					
1080	523.0424	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 24X38-INCH	LF	800.000	800.000					
1090	523.0514	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 14X23-INCH	EACH	8.000	8.000					
1100	523.0519	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH	EACH	16.000	16.000					

DATE 30OCT13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1430-00-74 QUANTITY	1430-00-76 QUANTITY	1430-00-84 QUANTITY	1430-08-86 QUANTITY	1431-02-72 QUANTITY	1431-02-74 QUANTITY
1110	523.0524	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH	EACH	10.000	10.000					
1120	523.0529	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH	EACH	4.000	4.000					
1130	550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	770.000		770.000				
1140	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	5,565.000	690.000		2,920.000		1,955.000	
1150	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	19,550.000	19,395.000				155.000	
1160	602.0405	CONCRETE SIDEWALK 4-INCH	SF	480.000			480.000			
1170	602.0410	CONCRETE SIDEWALK 5-INCH	SF	18,897.000	14,902.000			45.000	3,950.000	
1180	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	16.000			8.000	8.000		
1190	602.2400	CONCRETE SAFETY ISLANDS	SF	170.000			170.000			
1200	604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	333.000		333.000				
1210	606.0200	RIPRAP MEDIUM	CY	1,790.000	1,709.000				81.000	
1220	606.0300	RIPRAP HEAVY	CY	815.000	575.000	160.000				80.000
1230	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	870.000	158.000		712.000			
1240	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	455.000	262.000		184.000		9.000	
1250	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	1,579.000	986.000		536.000		57.000	
1260	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	2,282.000	2,063.000		140.000		79.000	
1270	608.0418	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH	LF	562.000	562.000					
1280	608.0518	STORM SEWER PIPE REINFORCED CONCRETE CLASS V 18-INCH	LF	575.000	575.000					
1290	608.0524	STORM SEWER PIPE REINFORCED CONCRETE CLASS V 24-INCH	LF	341.000	294.000				47.000	
1300	610.0429	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 29X45-INCH	LF	396.000	396.000					
1310	611.0530	MANHOLE COVERS TYPE J	EACH	13.000	5.000		8.000			
1320	611.0606	INLET COVERS TYPE B	EACH	3.000	3.000					
1330	611.0624	INLET COVERS TYPE H	EACH	18.000			18.000			
1340	611.0636	INLET COVERS TYPE HM-S	EACH	63.000	63.000					
1350	611.0639	INLET COVERS TYPE H-S	EACH	6.000	1.000		1.000		4.000	
1360	611.0642	INLET COVERS TYPE MS	EACH	5.000	5.000					
1370	611.0654	INLET COVERS TYPE V	EACH	2.000	2.000					
1380	611.1230	CATCH BASINS 2X3-FT	EACH	18.000			18.000			
1390	611.2004	MANHOLES 4-FT DIAMETER	EACH	9.000			9.000			
1400	611.2005	MANHOLES 5-FT DIAMETER	EACH	12.000	12.000					
1410	611.2006	MANHOLES 6-FT DIAMETER	EACH	4.000	4.000					
1420	611.3004	INLETS 4-FT DIAMETER	EACH	14.000	12.000				2.000	
1430	611.3220	INLETS 2X2-FT	EACH	2.000	2.000					
1440	611.3230	INLETS 2X3-FT	EACH	46.000	44.000				2.000	
1450	611.3901	INLETS MEDIAN 1 GRATE	EACH	1.000	1.000					
1460	611.3902	INLETS MEDIAN 2 GRATE	EACH	2.000	2.000					
1470	612.0106	PIPE UNDERDRAIN 6-INCH	LF	12,230.000	11,120.000				1,110.000	
1480	612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	985.000	855.000				130.000	
1490	612.0212	PIPE UNDERDRAIN UNPERFORATED 12-INCH	LF	28.000	28.000					
1500	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	235.000		235.000				

DATE 30OCT13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1430-00-74 QUANTITY	1430-00-76 QUANTITY	1430-00-84 QUANTITY	1430-08-86 QUANTITY	1431-02-72 QUANTITY	1431-02-74 QUANTITY
1510	612.0806	APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH	EACH	19.000	16.000				3.000	
1520	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4.000		4.000				
1530	614.2300	MGS GUARDRAIL 3	LF	1,348.000	463.000				885.000	
1540	614.2500	MGS THRIE BEAM TRANSITION	LF	158.000	158.000					
1550	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	6.000	4.000				2.000	
1560	614.2620	MGS GUARDRAIL TERMINAL TYPE 2	EACH	6.000	4.000				2.000	
1570	616.0700.S	FENCE SAFETY	LF	350.000	350.000					
1580	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. PROJECT I.D. 1430-00-74	EACH	1.000	1.000					
1590	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 02. PROJECT I.D. 1431-02-72	EACH	1.000					1.000	
1600	619.1000	MOBILIZATION	EACH	1.000	0.850		0.020		0.130	
1610	620.0100	CONCRETE CORRUGATED MEDIAN	SF	8,050.000	8,050.000					
1620	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	1,590.000	1,395.000				195.000	
1630	621.0100	LANDMARK REFERENCE MONUMENTS	EACH	8.000	8.000					
1640	625.0100	TOPSOIL	SY	285,840.000	253,200.000		8,740.000		23,900.000	
1650	627.0200	MULCHING	SY	246,340.000	217,450.000		8,740.000		20,150.000	
1660	628.1104	EROSION BALES	EACH	2,752.000	2,258.000				494.000	
1670	628.1504	SILT FENCE	LF	36,033.000	30,070.000		2,800.000		3,163.000	
1680	628.1520	SILT FENCE MAINTENANCE	LF	36,033.000	30,070.000		2,800.000		3,163.000	
1690	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	4.000	2.000		1.000		1.000	
1700	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	7.000	4.000		1.000		2.000	
1710	628.2002	EROSION MAT CLASS I TYPE A	SY	26,323.000	22,638.000		310.000		3,375.000	
1720	628.2004	EROSION MAT CLASS I TYPE B	SY	14,488.000	13,175.000				1,313.000	
1730	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	9,050.000	9,050.000					
1740	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	50.000			50.000			
1750	628.2023	EROSION MAT CLASS II TYPE B	SY	90.000			90.000			
1760	628.5505	POLYETHYLENE SHEETING	SY	220.000	220.000					
1770	628.6005	TURBIDITY BARRIERS	SY	763.000	763.000					
1780	628.7005	INLET PROTECTION TYPE A	EACH	90.000	84.000		1.000		5.000	
1790	628.7010	INLET PROTECTION TYPE B	EACH	3.000	3.000					
1800	628.7015	INLET PROTECTION TYPE C	EACH	21.000			21.000			
1810	628.7020	INLET PROTECTION TYPE D	EACH	86.000	81.000				5.000	
1820	628.7504	TEMPORARY DITCH CHECKS	LF	645.000	605.000				40.000	
1830	628.7555	CULVERT PIPE CHECKS	EACH	86.000	81.000				5.000	
1840	628.7560	TRACKING PADS	EACH	8.000	7.000				1.000	
1850	628.7570	ROCK BAGS	EACH	960.000	820.000		40.000		100.000	
1860	629.0205	FERTILIZER TYPE A	CWT	18.000	18.000					
1870	629.0210	FERTILIZER TYPE B	CWT	182.000	160.000		7.000		15.000	
1880	630.0120	SEEDING MIXTURE NO. 20	LB	135.000	135.000					
1890	630.0130	SEEDING MIXTURE NO. 30	LB	2,400.000	2,055.000		150.000		195.000	
1900	630.0140	SEEDING MIXTURE NO. 40	LB	1,250.000	1,140.000				110.000	
1910	630.0170	SEEDING MIXTURE NO. 70	LB	300.000	275.000				25.000	
1920	630.0175	SEEDING MIXTURE NO. 75	LB	3.000			3.000			
1930	630.0200	SEEDING TEMPORARY	LB	135.000	135.000					
1940	630.0400	SEEDING NURSE CROP	LB	4.000			4.000			
1950	633.5200	MARKERS CULVERT END	EACH	76.000	69.000				7.000	
1960	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	2.000	2.000					
1970	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	229.000	191.000				38.000	
1980	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	23.000	19.000				4.000	
1990	637.2210	SIGNS TYPE II REFLECTIVE H	SF	1,592.380	1,358.630				233.750	
2000	637.2215	SIGNS TYPE II REFLECTIVE H FOLDING	SF	72.000	72.000					

DATE 30OCT13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1430-00-74 QUANTITY	1430-00-76 QUANTITY	1430-00-84 QUANTITY	1430-08-86 QUANTITY	1431-02-72 QUANTITY	1431-02-74 QUANTITY
2010	637.2230	SIGNS TYPE II REFLECTIVE F	SF	390.500	341.750				48.750	
2020	638.2102	MOVING SIGNS TYPE II	EACH	13.000	10.000				3.000	
2030	638.2602	REMOVING SIGNS TYPE II	EACH	160.000	143.000				17.000	
2040	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	146.000	130.000				16.000	
2050	642.5201	FIELD OFFICE TYPE C	EACH	1.000	1.000					
2060	643.0200	TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01. PROJECT I.D. 1430-00-74	DAY	230.000	230.000					
2070	643.0200	TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 02. PROJECT I.D. 1431-02-72	DAY	230.000					230.000	
2080	643.0300	TRAFFIC CONTROL DRUMS	DAY	9,498.000	9,498.000					
2090	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	67.000	67.000					
2100	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	8,134.000	6,214.000		1,080.000		840.000	
2110	643.0500	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	EACH	71.000	71.000					
2120	643.0600	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	EACH	71.000	71.000					
2130	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	11,722.000	10,714.000				1,008.000	
2140	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	756.000	756.000					
2150	643.0900	TRAFFIC CONTROL SIGNS	DAY	9,686.000	8,594.000				1,092.000	
2160	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	25.000	25.000					
2170	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SF	110.250	41.000				69.250	
2180	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	177.000	160.000				17.000	
2190	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. PROJECT I.D. 1430-00-74	EACH	1.000	1.000					
2200	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 02. PROJECT I.D. 1431-02-72	EACH	1.000					1.000	
2210	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	32,122.000	19,942.000				12,180.000	
2220	645.0105	GEOTEXTILE FABRIC TYPE C	SY	430.000	430.000					
2230	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	5,015.000	4,350.000	380.000			165.000	120.000
2240	645.0140	GEOTEXTILE FABRIC TYPE SAS	SY	4,800.000			4,800.000			
2250	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	337,130.000	294,120.000				43,010.000	
2260	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	7,805.000	7,430.000				375.000	
2270	646.0600	REMOVING PAVEMENT MARKINGS	LF	2,550.000	2,550.000					
2280	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	54.000	51.000				3.000	
2290	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	29.000	29.000					
2300	647.0456	PAVEMENT MARKING CURB EPOXY	LF	394.000	328.000				66.000	
2310	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	386.000	357.000				29.000	
2320	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	21.000	18.000				3.000	
2330	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	2,312.000	2,167.000				145.000	
2340	647.0955	REMOVING PAVEMENT MARKINGS ARROWS	EACH	7.000	7.000					
2350	647.0965	REMOVING PAVEMENT MARKINGS WORDS	EACH	3.000	3.000					
2360	648.0100	LOCATING NO-PASSING ZONES	MI	6.970	4.240				2.730	
2370	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	1,000.000	1,000.000					
2380	649.0300	TEMPORARY PAVEMENT MARKING REFLECTIVE TAPE 4-INCH	LF	16,195.000	16,195.000					
2390	649.0900	TEMPORARY PAVEMENT MARKING STOP LINE 12-INCH	LF	78.000	78.000					
2400	649.1800	TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE	EACH	2.000	2.000					
2410	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	177.000	112.000		58.000		7.000	
2420	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	35,880.000	30,225.000		1,820.000		3,835.000	
2430	650.5000	CONSTRUCTION STAKING BASE	LF	35,880.000	30,225.000		1,820.000		3,835.000	

DATE 30OCT13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1430-00-74 QUANTITY	1430-00-76 QUANTITY	1430-00-84 QUANTITY	1430-08-86 QUANTITY	1431-02-72 QUANTITY	1431-02-74 QUANTITY
2440	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	25,155.000	20,125.000		2,920.000		2,110.000	
2450	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	32.000	30.000				2.000	
2460	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. STRUCTURE C-24-0017	LS	1.000	1.000					
2470	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 02. STRUCTURE B-24-09	LS	1.000		1.000				
2480	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 03. STRUCTURE B-20-49	LS	1.000						1.000
2490	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. PROJECT I.D. 1430-00-74	LS	1.000	1.000					
2500	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. PROJECT I.D. 1430-00-74	LS	1.000	1.000					
2510	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 02. PROJECT I.D. 1431-02-72	LS	1.000					1.000	
2520	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	34,060.000	30,225.000				3,835.000	
2530	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	3,032.000	3,032.000					
2540	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	1,535.000	1,535.000					
2550	652.0800	CONDUIT LOOP DETECTOR	LF	1,606.000	1,606.000					
2560	653.0140	PULL BOXES STEEL 24X42-INCH	EACH	34.000	34.000					
2570	653.0145	PULL BOXES STEEL 24X48-INCH	EACH	2.000	2.000					
2580	654.0101	CONCRETE BASES TYPE 1	EACH	6.000	6.000					
2590	654.0102	CONCRETE BASES TYPE 2	EACH	8.000	8.000					
2600	654.0105	CONCRETE BASES TYPE 5	EACH	12.000	12.000					
2610	654.0110	CONCRETE BASES TYPE 10	EACH	3.000	3.000					
2620	654.0113	CONCRETE BASES TYPE 13	EACH	1.000	1.000					
2630	654.0217	CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL	EACH	1.000	1.000					
2640	655.0220	CABLE TRAFFIC SIGNAL 4-14 AWG	LF	76.000	76.000					
2650	655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	LF	530.000	530.000					
2660	655.0240	CABLE TRAFFIC SIGNAL 7-14 AWG	LF	1,835.000	1,835.000					
2670	655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	LF	1,730.000	1,730.000					
2680	655.0305	CABLE TYPE UF 2-12 AWG GROUNDED	LF	3,655.000	3,655.000					
2690	655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	LF	5,964.000	5,964.000					
2700	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	2,880.000	2,880.000					
2710	655.0700	LOOP DETECTOR LEAD IN CABLE	LF	5,205.000	5,205.000					
2720	655.0800	LOOP DETECTOR WIRE	LF	5,334.000	5,334.000					
2730	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. STH 23 & STH 49	LS	1.000	1.000					
2740	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 02. STA. 244EB+75	LS	1.000	1.000					
2750	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 03. STA. 321EB+50	LS	1.000	1.000					
2760	657.0100	PEDESTAL BASES	EACH	6.000	6.000					
2770	657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	EACH	20.000	20.000					
2780	657.0315	POLES TYPE 4	EACH	8.000	8.000					
2790	657.0322	POLES TYPE 5-ALUMINUM	EACH	12.000	12.000					
2800	657.0420	TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT	EACH	4.000	4.000					
2810	657.0425	TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT	EACH	2.000	2.000					

3

DATE 30OCT13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1430-00-74 QUANTITY	1430-00-76 QUANTITY	1430-00-84 QUANTITY	1430-08-86 QUANTITY	1431-02-72 QUANTITY	1431-02-74 QUANTITY
2820	657.0614	LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 8-FT	EACH	24.000	24.000					
2830	657.1345	INSTALL POLES TYPE 9	EACH	2.000	2.000					
2840	657.1355	INSTALL POLES TYPE 12	EACH	2.000	2.000					
2850	657.1530	INSTALL MONOTUBE ARMS 30-FT	EACH	3.000	3.000					
2860	657.1545	INSTALL MONOTUBE ARMS 45-FT	EACH	1.000	1.000					
2870	658.0110	TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL	EACH	18.000	18.000					
2880	658.0115	TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL	EACH	6.000	6.000					
2890	658.0215	BACKPLATES SIGNAL FACE 3 SECTION 12-INCH	EACH	18.000	18.000					
2900	658.0220	BACKPLATES SIGNAL FACE 4 SECTION 12-INCH	EACH	6.000	6.000					
2910	658.0600	LED MODULES 12-INCH RED BALL	EACH	12.000	12.000					
2920	658.0605	LED MODULES 12-INCH YELLOW BALL	EACH	12.000	12.000					
2930	658.0610	LED MODULES 12-INCH GREEN BALL	EACH	12.000	12.000					
2940	658.0615	LED MODULES 12-INCH RED ARROW	EACH	12.000	12.000					
2950	658.0620	LED MODULES 12-INCH YELLOW ARROW	EACH	24.000	24.000					
2960	658.0625	LED MODULES 12-INCH GREEN ARROW	EACH	6.000	6.000					
2970	658.5069	SIGNAL MOUNTING HARDWARE (LOCATION) 01. STH 23 & STH 49	LS	1.000	1.000					
2980	690.0150	SAWING ASPHALT	LF	1,580.000	1,285.000		180.000		115.000	
2990	690.0250	SAWING CONCRETE	LF	16.000			7.000		9.000	
3000	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	500.000	500.000					
3010	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	8,604.000	1,452.000	5,700.000				1,452.000
3020	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	1,200.000	1,200.000					
3030	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	600.000	600.000					
3040	SPV.0035	SPECIAL 01. TRENCH BACKFILL WATER AND SANITARY	CY	1,637.000			1,637.000			
3050	SPV.0060	SPECIAL 01. CONNECT TO EXISTING WATERMAIN	EACH	2.000				2.000		
3060	SPV.0060	SPECIAL 02. REMOVE EXISTING HYDRANT	EACH	1.000				1.000		
3070	SPV.0060	SPECIAL 03. GATE VALVE AND BOX 10-INCH	EACH	1.000				1.000		
3080	SPV.0060	SPECIAL 04. GATE VALVE AND BOX 8-INCH	EACH	2.000				2.000		
3090	SPV.0060	SPECIAL 05. GATE VALVE AND BOX 6-INCH	EACH	3.000				3.000		
3100	SPV.0060	SPECIAL 06. REDUCER FITTING 10-INCH X 8-INCH	EACH	1.000				1.000		
3110	SPV.0060	SPECIAL 07. REDUCER FITTING 8-INCH X 6-INCH	EACH	2.000				2.000		
3120	SPV.0060	SPECIAL 08. 11.25-DEGREE BEND FITTING 10-INCH	EACH	3.000				3.000		
3130	SPV.0060	SPECIAL 09. 45-DEGREE BEND FITTING 8-INCH	EACH	5.000				5.000		
3140	SPV.0060	SPECIAL 10. TEE FITTING 8-INCH X 6-INCH	EACH	1.000				1.000		
3150	SPV.0060	SPECIAL 11. TEE FITTING 10-INCH X 6-INCH	EACH	2.000				2.000		
3160	SPV.0060	SPECIAL 12. CROSS FITTING 8-INCH X 8-INCH	EACH	1.000				1.000		
3170	SPV.0060	SPECIAL 13. CAP FITTING 10-INCH	EACH	1.000				1.000		
3180	SPV.0060	SPECIAL 14. CAP FITTING 8-INCH	EACH	1.000				1.000		
3190	SPV.0060	SPECIAL 15. HYDRANT	EACH	3.000				3.000		
3200	SPV.0060	SPECIAL 16. CORPORATION STOP 1 1/4-INCH	EACH	5.000				5.000		
3210	SPV.0060	SPECIAL 17. CURB STOP AND BOX 1 1/4-INCH	EACH	5.000				5.000		
3220	SPV.0060	SPECIAL 18. CONNECT TO EXISTING WATER SERVICE	EACH	5.000				5.000		
3230	SPV.0060	SPECIAL 19. CONNECT TO EXISTING SANITARY SEWER	EACH	2.000				2.000		
3240	SPV.0060	SPECIAL 20. SANITARY SERVICE WYE 8-INCH X 6-INCH	EACH	2.000				2.000		

DATE 30OCT13 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1430-00-74 QUANTITY	1430-00-76 QUANTITY	1430-00-84 QUANTITY	1430-08-86 QUANTITY	1431-02-72 QUANTITY	1431-02-74 QUANTITY
3250	SPV.0060	SPECIAL 21. CONNECT TO EXISTING SANITARY SERVICE	EACH	2.000			2.000			
3260	SPV.0060	SPECIAL 22. STORM SEWER FILTERING BASIN OUTLETS	EACH	1.000			1.000			
3270	SPV.0060	SPECIAL 23. REESTABLISH SECTION CORNER MONUMENTS	EACH	2.000	2.000					
3280	SPV.0060	SPECIAL 24. REINFORCED ENDWALLS AND GRATES 19X30-INCH SPECIAL	EACH	2.000	2.000					
3290	SPV.0060	SPECIAL 25. LED LUMINAIRE CATEGORY C	EACH	24.000	24.000					
3300	SPV.0060	SPECIAL 26. ADJUSTING EXISTING SANITARY MANHOLE AND BARREL HEIGHT	EACH	2.000	2.000					
3310	SPV.0060	SPECIAL 27. WATER VALVE BOX ADJUSTMENT	EACH	2.000	2.000					
3320	SPV.0060	SPECIAL 28. SALVAGE AND REINSTALL HYDRANT	EACH	2.000	2.000					
3330	SPV.0090	SPECIAL 01. WATERMAIN 10-INCH	LF	432.000			432.000			
3340	SPV.0090	SPECIAL 02. WATERMAIN 8-INCH	LF	520.000			520.000			
3350	SPV.0090	SPECIAL 03. WATERMAIN 6-INCH	LF	102.000			102.000			
3360	SPV.0090	SPECIAL 04. WATER SERVICE LATERAL 1 1/4-INCH	LF	175.000			175.000			
3370	SPV.0090	SPECIAL 05. SANITARY SEWER 8-INCH	LF	694.000			694.000			
3380	SPV.0090	SPECIAL 06. SANITARY SERVICE LATERAL 6-INCH	LF	75.000			75.000			
3390	SPV.0090	SPECIAL 07. ROCK BAGS DITCH CHECK	LF	556.000	431.000				125.000	
3400	SPV.0105	SPECIAL 01. REMOVE AND SALVAGE TRAFFIC SIGNALS	LS	1.000	1.000					
3410	SPV.0105	SPECIAL 02. TRANSPORT DEPARTMENT FURNISHED TRAFFIC SIGNAL MONOTUBE MATERIALS	LS	1.000	1.000					
3420	SPV.0105	SPECIAL 03. REMOVING GEODETIC SURVEY MONUMENT	LS	1.000					1.000	
3430	SPV.0105	SPECIAL 04. FLASHING LED BEACON STA. 244EB+75	LS	1.000	1.000					
3440	SPV.0105	SPECIAL 05. FLASHING LED BEACON STA. 321EB+50	LS	1.000	1.000					
3450	SPV.0120	SPECIAL 01. WATER FOR SEEDED AREAS	MGAL	6,371.000	5,835.000				536.000	
3460	SPV.0165	SPECIAL 01. WATERMAIN TOP INSULATION	SF	160.000			160.000			
3470	SPV.0165	SPECIAL 02. SPRAYED ASPHALTIC SHOULDER TREATMENT	SF	2,490.000	2,490.000					
3480	SPV.0195	SPECIAL 01. BASE AGGREGATE DISINTEGRATED GRANITE	TON	150.000	140.000				10.000	
3490	SPV.0200	SPECIAL 01. SANITARY SEWER MANHOLE 48-INCH	VF	63.000			63.000			

3

Division	From / To Station	Location	Common Excavation (1) (item # 205.0100)		Salvaged / Unusable Pavement Material (3)	Available Material (4)	Marsh Excavation	Rock Excavation	Reduced Marsh in Fill	Reduced EBS in Fill	Expanded Marsh Backfill	Expanded EBS Backfill	Expanded Rock	Unexpanded Fill	Expanded Fill (5)	Mass Ordinate + / (6)	Waste	Borrow	Comment:
			Cut (2)	EBS Excavation			(item #205.0500)	(item #205.0200)	Factor 0.60	Factor 0.80	Factor 1.50	Factor 1.30	Factor 1.10		Factor 1.25		(item #208.0100)		
1	303+00-457+86	STH 23	158621	0	10320	148302	0	0	0	0	0	0	0	18410	23012	125290			
		CTH A NB	2538		442	2097								259	323	1773			
		STH 49 NB	2497		249	2248								1051	1314	933			
		FOREST RIDGE S	3657		190	3467								13	16	3450			
		FOREST RIDGE N	664		246	419								260	325	94			
		EASTWIND	339		110	229								51	63	166			
		SUNNYSIDE	683		160	522								494	618	-96			
		BROOKLYN J	438		140	298								0	0	298			
		DEAD END RD	533		110	423								48	60	364			
		CTH PP	941		144	797								1	2	795			
		DRIVEWAYS	2385		416	1969								4377	5471	-3502			
	345+00-387+00	STH 23 (UNDISTRIBUTED)	---		---	---		4000											
Division 1 Subtotal			173297	0	12527	160770	0	4000	0	0	0	0	0	24964	31205	129565	129565		
2	210+49-283+28	STH 23	146458	0	6597	139861	0	0	0	0	0	0	0	24850	31063	108798			
		W. CTH A	2227	0	328	1899								4794	5993	-4094			
		NORTH STREET	1262	0	199	1063								982	1227	-164			
		CTH A SB	2316	0	373	1943								2725	3407	-1464			
		STH 49	3218	0	663	2556								349	437	2119			
		SHARED USE PATH	1269	0	0	1269								1236	1545	-275			
		DRIVEWAYS	878		99	779								1358	1698	-919			
Division 2 Subtotal			157629	0	8259	149370	0	0	0	0	0	0	0	36295	45369	104002	104002	0	
Grand Total			330926	0	20786	310140	0	4000	0	0	0	0	0	61259	76574	233566	233566	0	

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unusable Pavement Material is included in Cut.
3) Salvaged/Unusable Pavement Material
4) Available Material = Cut - Salvaged/Unusable Pavement Material
5) Expanded Fill. Factor = 1.25. Expanded Fill = (Unexpanded Fill) * Fill Factor
6) 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

3

Division	From / To Station	Location	Common Excavation (1) (item # 205.0100)		Salvaged / Unusable Pavement Material (3)	Available Material (4)	Marsh Excavation	Rock Excavation	Reduced Marsh in Fill	Reduced EBS in Fill	Expanded Marsh Backfill	Expanded EBS Backfill	Expanded Rock	Unexpanded Fill	Expanded Fill (5)	Mass Ordinate + / - (6)	Waste	Borrow	Comment:
			Cut (2)	EBS Excavation			(item #205.0500	item #205.0200	Factor 0.60	Factor 0.80	Factor 1.50	Factor 1.30	Factor 1.10		Factor 1.25		(item #208.0100)		
1	21+48-58+50	STH 23	33301	0	2515	30786	0	0	0	0	0	0	0	3124	3905	26881			
		COMORN ROAD	250		57	194								3	3	190			
		DRIVEWAYS	51		0	51								87	109	-58			
Grand Total			33602	0	2571	31031	0	0	0	0	0	0	0	3214	4018	27013	27013	0	
		Total Common Exc		33602															

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unusable Pavement Material is included in Cut.
3) Salvaged/Unusable Pavement Material
4) Available Material = Cut - Salvaged/Unusable Pavement Material
5) Expanded Fill. Factor = 1.25. Expanded Fill = (Unexpanded Fill) * Fill Factor
6) 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

3

CLEARING AND GRUBBING

PROJECT I.D.	ROADWAY	STATION	TO	STATION	OFFSET	201.0105 CLEARING STA	201.0205 GRUBBING STA	COMMENTS
1430-00-74								
	STH 23	210EB+83	-	214EB+19	LT	5	5	
	STH 23	227EB+47	-	228EB+91	LT	2	2	
	STH 23	230EB+67			LT	1	1	SINGLE TREE
	STH 23	232EB+00	-	234EB+44	LT	3	3	
	STH 23	245EB+65	-	247EB+55	LT	3	3	
	STH 23	280EB+34	-	284EB+31	LT	5	5	
	STH 23	286EB+69	-	297EB+25	LT	12	12	
	STH 23	298EB+50	-	299EB+07	LT	2	2	
	STH 23	310EB+40			LT	1	1	SINGLE TREE
	STH 23	320EB+16	-	320EB+79	LT	1	1	
	STH 23	349EB+47	-	349EB+61	LT	1	1	
	STH 23	358EB+17	-	358EB+92	LT	1	1	
	STH 23	364EB+50	-	366EB+58	LT	3	3	
	STH 23	375EB+28	-	376EB+20	LT	2	2	
	STH 23	384EB+75	-	388EB+75	LT	5	5	
	STH 23	210EB+68	-	214EB+87	RT	5	5	
	STH 23	216EB+21	-	223EB+40	RT	8	8	
	STH 23	244EB-94	-	245EB+88	RT	2	2	
	STH 23	251EB+40			RT	1	1	SINGLE TREE
	STH 23	278EB+43	-	279EB+10	RT	2	2	
	STH 23	280EB+10	-	283EB+41	RT	4	4	
	STH 23	285EB+93	-	286EB+41	RT	2	2	
	STH 23	292EB+25	-	295EB+92	RT	4	4	
	STH 23	306EB+19			RT	1	1	SINGLE TREE
	STH 23	308EB+85			RT	1	1	SINGLE TREE
	STH 23	320EB+40	-	320EB+92	RT	1	1	
	STH 23	322EB+52	-	323EB+18	RT	2	2	
	STH 23	326EB+36	-	333EB+78	RT	8	8	
	STH 23	337EB+13	-	339EB+30	RT	3	3	
	STH 23	341EB+15	-	344EB+97	RT	4	4	
	STH 23	363EB+00	-	363EB+35	RT	1	1	
	STH 23	365EB+27	-	366EB+49	RT	2	2	
	STH 23	370EB+24	-	370EB+66	RT	1	1	
	STH 23	377EB+07	-	377EB+58	RT	1	1	
	STH 23	380EB+45			RT	1	1	SINGLE TREE
	STH 23	382EB+67	-	384EB+14	RT	3	3	
	STH 23	440EB+13	-	440EB+96	RT	1	1	
	STH 23	445EB+59			RT	1	1	SINGLE TREE
	STH 23	447EB+78			RT	1	1	SINGLE TREE
	STH 23	451EB+37	-	454EB+18	RT	4	4	
	NORTH ST	16N+81	-	18N-93	LT	3	3	
	NORTH ST	21N+69	-	23N+21	RT	3	3	
	NORTH ST	24N+72	-	25N+38	RT	2	2	
	STH 49	203"49N"+01	-	203"49N"+22	LT	1	1	
	STH 49	204"49N"+21	-	205"49N"+39	RT	2	2	
	STH 49	204"49N"+42	-	206"49N"+60	RT	3	3	
	FOREST RIDGE	5"FRS"+60	-	9"FRS"+08	RT	5	5	
	FOREST RIDGE	21"FRN"+22	-	22"FRN"+03	RT	2	2	
	EASTWIND	7"EW"+24	-	7"EW"+82	RT	1	1	
	SUNNYSIDE	6"SUN"+19	-	7"SUN"+25	RT	2	2	
	TRAILDWY	1+84	-	5+57	RT	5	5	
PROJECT 1430-00-74 TOTALS						140	140	
1431-02-72								
	STH 23	48EB+95	-	49EB+75	LT	2	2	
	STH 23	53EB+16	-	57EB+85	LT	5	5	
	STH 23	34EB+87			RT	1	1	SINGLE TREE
	STH 23	45EB+76	-	47EB+13	RT	3	3	
	STH 23	48EB+71	-	52EB+78	RT	5	5	
PROJECT 1431-02-72 TOTALS						16	16	
TOTALS						156	156	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

REMOVING CONCRETE SIDEWALK

PROJECT I.D.	ROADWAY	STATION	OFFSET	STATION	OFFSET	204.0155 REMOVING CONCRETE SIDEWALK SY
1430-00-74						
	STH 23	279EB+96	58' LT	284EB+20	60' LT	350
	FOREST RIDGE RD	5FRS+00	20' LT	9FRS+72	52' LT	300
PROJECT 1430-00-74 TOTALS						650
TOTALS						650

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

REMOVING DELINEATORS AND MARKERS

PROJECT I.D.	ROADWAY	STATION	OFFSET	204.0180 EACH
1430-00-74				
	STH 23	283EB+13	RT	1
	STH 23	283EB+78	LT	1
	STH 23	286EB+59	RT	1
	STH 23	287EB+23	LT	1
PROJECT 1430-00-74 TOTAL				4
TOTAL				4

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

FINSHING ROADWAY

PROJECT I.D.	ROADWAY	213.0100 FINSIHING ROADWAY EACH
1430-00-74		
	STH 23	1
PROJECT 1430-00-74 TOTAL		1
1431-02-72		
	STH 23	1
PROJECT 1431-02-72 TOTAL		1
TOTAL		2

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

REMOVING SMALL PIPE CULVERTS

PROJECT I.D.	STAGE	ROADWAY	STATION	LOCATION	203.0100 EACH	SIZE/TYPE	LENGTH (LF)
1430-00-74							
	STAGE 1						
		STH 23	217EB+57	0' LT	1	30" CMCP	82
		STH 23	242EB+92	0' LT	1	36" CMCP	146
		STH 23	253EB+07	58' LT	1	24" CMCP	52
		STH 23	253EB+25	38' RT	1	24" CMCP	20
		STH 23	263EB+89	48' LT	1	18" CMCP	43
		STH 23	277EB+49	91' RT	1	36" RCCP	99
		STH 23	279EB+23	68' LT	1	30" RCCP	136
		STH 23	296EB+85	0' LT	1	42" CMCP	89
		W. JCT CTH A	16N+29	34' LT	1	24" CMCP	56
		W. JCT CTH A	18N+95	8' RT	1	CMCP	60
		NORTH STREET	21N+14	25' RT	1	24" CMCP	38
		NORTH STREET	23N+32	19' RT	1	18" CMCP	24
		NORTH STREET	25N+30	18' RT	1	12" CMCP	29
		CTH A	100AN+37	36' LT	1	24" CMCP	46
		CTH A	100AN+37	41' LT	1	24" CMCP	46
		CTH A	103AN+72	60' LT	1	18" CMCP	43
		CTH A	103AN+77	26' RT	1	18" CMCP	42
	STAGE 1 SUBTOTAL				17		
	STAGE 2						
		STH 23	306EB+62	78' LT	1	18" CMCP	58
		STH 23	309EB+30	15' RT	1	18" CMCP	52
		STH 23	320EB+99	0' LT	1	36" CMCP	107
		STH 23	321EB+09	0' LT	1	36" CMCP	107
		STH 23	326EB+23	33' RT	1	18" CMCP	24
		STH 23	331EB+82	0' LT	1	42" CMCP	87
		STH 23	336EB+95	42' RT	1	18" CMCP	30
		STH 23	338EB+25	38' RT	1	18" CMCP	22
		STH 23	346EB+37	0' LT	1		62
		STH 23	348EB+31	42' RT	1	18" CMCP	25
		STH 23	352EB+46	0' LT	1		77
		STH 23	352EB+56	0' LT	1		76
		STH 23	354EB+59	61' LT	1		24
		STH 23	358EB+49	40' RT	1	18" CMCP	25
		STH 23	359EB+93	44' LT	1	18" CMCP	21
		STH 23	360EB+71	46' LT	1	18" CMCP	45
		STH 23	363EB+49	47' LT	1	18" CMCP	22
		STH 23	363EB+55	38' RT	1	18" CMCP	57
		STH 23	364EB+18	44' LT	1	18" CMCP	40
		STH 23	366EB+02	41' LT	1	18" CMCP	26
		STH 23	367EB+77	39' LT	1	18" CMCP	27
		STH 23	369EB+52	42' LT	1	18" CMCP	26
		STH 23	373EB+22	41' LT	1	18" CMCP	57
		STH 23	382EB+52	37' RT	1	18" CMCP	25
		STH 23	384EB+23	36' RT	1	18" CMCP	24
		STH 23	386EB+42	39' LT	1	24" CMCP	39
		STH 23	389EB+05	41' RT	1	24" CMCP	24

REMOVING SMALL PIPE CULVERTS

PROJECT I.D.	ROADWAY	STATION	LOCATION	203.0100 EACH	SIZE/TYPE	LENGTH (LF)
1430-00-74	STH 23	390EB+49	39' LT	1	36" CMCP	40
	STH 23	392EB+23	60' RT	1	24" CMCP	66
	STH 23	396EB+16	0' LT	1	42" CMCP	88
	STH 23	400EB+34	41' LT	1	15" CMCP	33
	STH 23	402EB+54	53' RT	1	30" CMCP	61
	STH 23	403EB+12	45' LT	1	18" CMCP	20
	STH 23	403EB+69	46' LT	1	18" CMCP	25
	STH 23	415EB+57	48' LT	1	18" CMCP	23
	STH 23	425EB+23	0' LT	1		103
	STH 23	434EB+91	0' LT	1		112
	STH 23	435EB+02	0' LT	1		111
	STH 23	441EB+03	0' LT	1		149
	STH 23	441EB+14	0' LT	1		149
	STH 23	453EB+10	41' RT	1	24" CMCP	35
	STH 23	457EB+70	40' RT	1	24" CMCP	53
	CTH A	101AN+05	0' LT	1	RCCP 24"X36"	133
	CTH A	101AN+13	0' LT	1	RCCP 24"X36"	133
	CTH A	101AN+20	0' LT	1	RCCP 24"X36"	133
	CTH A	105AN+48	0' LT	1	24"X48" RCCP	101
	CTH A	105AN+54	0' LT	1	24"X48" RCCP	101
	STH 49	203"49N"+67	30' RT	1	18" CMCP	98
	FOREST RIDGE RD	8FRS+21	25' RT	1	18" CMCP	20
	FOREST RIDGE RD	23FRN+44	26' RT	1	18" CMCP	21
	FOREST RIDGE RD	24FRN+13	28' LT	1	24" CMCP	51
	FOREST RIDGE RD	26FRN+10	27' RT	1	15" CMCP	31
	EASTWIND RD	8EW+52	30' RT	1		29
	EASTWIND RD	9EW+55	0' LT	1	18" CMCP	57
	SUNNYSIDE RD	6SUN+75	22' LT	1	12" CMCP	54
	BROOKLYN J RD	10BR+54	0' LT	1	18" CMCP	80
	DEAD END RD	9DD+90	0' LT	1	24" CMCP	65
	CTH PP	10PP+80	0' LT	1	24" CMCP	83
STAGE 2 SUBTOTAL				58		
STAGE 3						
	STH 49	208"49N"+12	45' LT	1	18" CMCP	40
STAGE 3 SUBTOTAL				1		
PROJECT 1430-00-74 TOTAL				76		
1431-02-72						
STAGE 1						
	STH 23	22EB+64	40' RT	1	18" CMPC	27
	STH 23	31EB+04	0' LT	1		62
	STH 23	32EB+48	38' LT	1	18" CMCP	30
	STH 23	34EB+21	35' RT	1	18" CMCP	30
	STH 23	40EB+46	46' LT	1	24" CMCP	93
	STH 23	41EB+99	0' LT	1	30" CMCP	91
	STH 23	54EB+99	0' LT	1	24" CMCP	90
STAGE 1 SUBTOTAL				7		
PROJECT 1431-02-72 TOTAL				7		
TOTAL				82		

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

REMOVING OLD STRUCTURE

PROJECT I.D.	ROADWAY	STATION	LOCATION	203.0200.01 REMOVING OLD STRUCTURE 239EB+43 LS	203.0200.02 REMOVING OLD STRUCTURE 249EB+40 LS
1430-00-74					
	STH 23	239EB+43	0' LT	1	--
	STH 23	249EB+40	0' LT	--	1
PROJECT 1430-00-74 TOTALS				1	1
TOTALS				1	1

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

REMOVING GUARDRAIL

PROJECT I.D.	STAGE	ROADWAY	STATION		STATION	LOCATION	204.0165 LF
1430-00-74							
	STAGE 2						
		STH 23	280EB+13	-	283EB+08	RT	300
		STH 23	281EB+08	-	283EB+54	LT	240
		STH 23	286EB+71	-	288EB+43	RT	180
		STH 23	287EB+04	-	286EB+74	LT	180
	STAGE 2 SUBTOTAL						900
PROJECT 1430-00-74 TOTAL							900
1431-02-72							
	STAGE 1						
		STH 23	47EB+85	-	49EB+17	RT	140
		STH 23	48EB+90	-	50EB+37	LT	150
	STAGE 1 SUBTOTAL						290
PROJECT 1431-02-72 TOTAL							290
TOTAL							1190

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

REMOVING STORM SEWER

PROJECT I.D.	ROADWAY	LOCATION	204.0245.01 15-INCH LF	204.0245.02 18-INCH LF	204.0245.03 24-INCH LF
1430-00-74					
	STH 23	UNDISTRIBUTED	100	100	100
PROJECT 1430-00-74 TOTALS			100	100	100
1431-02-72					
	STH 23	56EB+10 LT & RT	57	---	---
	STH 23	58WB+48 LT & RT	78	---	---
PROJECT 1431-02-72 TOTALS			135	0	0
TOTALS			235	100	100

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

REMOVING ASPHALTIC SURFACE

PROJECT I.D.	ROADWAY	204.0110 SY
1430-00-74		
	UNDISTRIBUTED	500
PROJECT 1430-00-74 TOTAL		500
1431-02-72		
	UNDISTRIBUTED	50
PROJECT 1431-02-72 TOTAL		50
TOTAL		550

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

REMOVING FENCE

PROJECT I.D.	STAGE	ROADWAY	STATION		STATION	OFFSET	204.0170 LF
1430-00-74							
	STAGE 1						
		STH 23	368EB+05			LT	10
		STH 23	386EB+12	-	386EB+23	LT	20
		STH 23	386EB+63	-	386EB+74	LT	20
	STAGE 1 SUBTOTAL						50
	STAGE 2						
		STH 23	218EB+76	-	221EB+53	RT	280
		STH 23	229EB+60	-	229EB+95	RT	40
	STAGE 2 SUBTOTAL						320
PROJECT 1430-00-74 TOTAL							370
TOTAL							370

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

REMOVING CURB & GUTTER

PROJECT I.D.	STAGE	ROADWAY	STATION	OFFSET	STATION	OFFSET	204.0150 LF	COMMENT
1430-00-74								
	STAGE 1							
		STH 23	303EB+96	21' LT	308EB+94	23' LT	1000	MEDIAN-WESTBOUND
		STH 23	430EB+84	25' LT	431EB+24	62' LT	60	RADII
		STH 23	431EB+60	81' LT	432EB+16	24' LT	90	RADII
		STH 23	455EB+65	28' LT	455EB+97	47' LT	40	RADII
		STH 23	456EB+20	23' LT			40	SPLITTER ISLAND
		STH 23	456EB+62	68' LT	457EB+14	28' LT	80	RADII
	STAGE 1 SUBTOTAL						1310	
	STAGE 1A							
		STH 23	303EB+47	102' LT	303EB+95	95' LT	70	RADII
		STH 23	303EB+69	19' LT	303EB+96	21' LT	60	MEDIAN-EASTBOUND
		STH 23	303EB+71	58'RT	304EB+18	12' RT	80	RADII
		CTH A	101AN+10	25' RT	101AN+76	84' RT	100	RADII
		CTH A	102AN+14	59' RT	102AN+54	20' RT	60	RADII
		CTH A	103AN+91	14' LT	106AN+43	25' LT	260	MEDIAN - NORTHBOUND SIDE
		CTH A	103AS+98	21' RT	106AS+50	12' RT	260	MEDIAN - SOUTHBOUND SIDE
		CTH A	106AN+20	7' RT			90	SPLITTER ISLAND
		STH 49	200"49N"+13	14' LT	202"49N"+71	20' LT	270	MEDIAN - NORTHBOUND SIDE
		STH 49	200"49S"+09	22' RT	202"49S"+66	14' RT	270	MEDIAN - SOUTHBOUND SIDE
	STAGE 1 SUBTOTAL						1520	
	STAGE 2							
		STH 23	223EB+22	36' LT	223EB+54	81' LT	60	RADII
		STH 23	223EB+23	15' RT	223EB+88	65' RT	90	RADII
		STH 23	223EB+91	85' LT	224EB+52	40' LT	90	RADII
		STH 23	224EB+25	64' RT	224EB+60	16' RT	70	RADII
		STH 23	277EB+03	19' RT	277EB+29	81' RT	90	RADII
		STH 23	277EB+67	119' RT	278EB+89	23' RT	160	RADII
		STH 23	278EB+07	33' LT	279EB+38	141' LT	180	RADII
		STH 23	279EB+64	91' LT	279EB+89	28' LT	90	RADII
		STH 23	297EB+44	24' LT	302EB+34	27'LT	980	MEDIAN - EASTBOUND SIDE
	STAGE 1 SUBTOTAL						1810	
	STAGE 2A							
		STH 23	302EB+34	27' LT	302EB+59	29'LT	60	MEDIAN-EASTBOUND
		STH 23	302EB+19	60' LT	302EB+61	109' LT	70	RADII
		STH 23	302EB+43	12' RT	302EB+91	58' RT	80	RADII
		STH 49	200"49N"+05	44' LT			90	SPLITTER ISLAND
		STH 49	202"49N"+93	50' LT	203"49N"+46	96' LT	80	RADII
		STH 49	203"49N"+84	112' LT	204"49N"+31	48' LT	90	RADII
	STAGE 2A SUBTOTAL						470	
PROJECT 1430-00-74 TOTAL							5110	
1431-02-72								
	STAGE 2							
		STH 23	55EB+98	8' LT	57EB+48	2' LT	160	MEDIAN - EASTBOUND SIDE
		STH 23	55WB+98	4' RT	58WB+49	2' RT	260	MEDIAN - WESTBOUND SIDE
	STAGE 2 SUBTOTAL						420	
PROJECT 1431-02-72 TOTAL							420	
TOTAL							5530	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

REMOVING INLETS

PROJECT I.D.	STAGE	ROADWAY	STATION	LOCATION	204.0220 EACH
1430-00-74					
	STAGE 1				
		STH 23	279EB+13.39	115.17' LT	1
	STAGE 1 SUBTOTAL				1
	STAGE 1A				
		CTH A	104AN+95.84	27.40' RT	1
	STAGE 1A SUBTOTAL				1
	STAGE 1B				
		STH 23	303EB+50	20.00' RT	1
	STAGE 1A SUBTOTAL				1
	STAGE 2A				
		CTH A	104AN+94.89	22.02' LT	1
	STAGE 2A SUBTOTAL				1
PROJECT 1430-00-74 TOTAL					4
1431-02-72					
	STAGE 1				
		STH 23	56EB+10.58	20.27' LT	1
		STH 23	56EB+10.66	6.86' LT	1
		STH 23	58WB+48.11	17.02' RT	1
PROJECT 1431-02-72 TOTAL					3
TOTAL					7

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

BACKFILL GRANULAR

PROJECT	STAGE	ROADWAY	209.0100 CY
1430-00-74			
	STAGE 1	STH 23	79,000
	STAGE 1A	STH 23	540
	STAGE 2	STH 23	57,500
	STAGE 2A	STH 23	370
PROJECT 1430-00-74 TOTAL			137,410
1431-02-72			
	STAGE 1	STH 23	21,000
PROJECT 1431-02-72 TOTAL			21,000
TOTAL			158,410

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

SHARED USE PATH ITEMS

PROJECT I.D.	ROADWAY	STATION - STATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	455.0105 ASPHALTIC MATERIAL PG58-28 TON	460.1100 HMA PAVEMENT TYPE E-0.3 TON	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
1430-08-86	SHARED USE PATH	210+40.89 - 224+54.07	700	17	305	45	8
TOTAL 1430-08-86			700	17	305	45	8

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

CONCRETE ITEMS

PROJECT I.D.	STAGE	ROADWAY	STATION	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY
1430-00-74				
	STAGE 2			
		STH 23	283EB+24 - 283EB+85	135
		STH 23	286EB+64 - 287EB+25	135
	STAGE 2 SUBTOTAL			270
PROJECT 1430-00-74 TOTAL				270
TOTAL				270

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

CONCRETE SURFACE DRAINS

PROJECT I.D.	ROADWAY	STATION	OFFSET	416.0610 DRILLED TIE BARS EACH	416.1010 CONCRETE SURFACE DRAINS CY	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	612.0212 PIPE UNDERDRAIN UNPERFORATED 12-INCH LF
1430-00-74							
	STH 23	286EB+82	RT	8	2	1	18
	STH 23	287EB+50	LT	19	3	1	10
PROJECT 1430-00-74 TOTALS				27	5	2	28
TOTALS				27	5	2	28

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

BASE AGGREGATE ITEMS

PROJECT I.D.	STAGE	ROADWAY	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	SPV.0195.01 BASE AGGREGATE DISINTEGRATED GRANITE TON
1430-00-74					
	STAGE 1				
		STH 23	13,300	75,000	---
		FOREST RIDGE S	85	930	---
		FOREST RIDGE N	170	1,300	---
		EASTWIND	70	560	---
		SUNNYSIDE	95	840	---
		BROOKLYN J	60	570	---
		CTH PP	45	520	---
		DEAD END	60	590	---
		DRIVEWAYS	60	1,200	120
		ACCESS STAGING	--	8,100	---
	STAGE 1 SUBTOTALS		13,945	89,610	120
	STAGE 1A				
		CTH A NB	40	4,300	---
		STH 49 NB	260	3,350	---
		DRIVEWAYS	1	---	---
	STAGE 1A SUBTOTALS		301	7,650	0
	STAGE 2				
		STH 23	7,500	57,000	---
		W CTH A	900	2,600	---
		NORTH ST	15	1,550	---
		DRIVEWAYS	20	200	20
		ACCESS STAGING	--	6,200	---
	STAGE 2 SUBTOTALS		8,435	67,550	20
	STAGE 2A				
		CTH A SB	170	2,800	---
		STH 49 SB	260	2,850	---
		DRIVEWAYS	---	---	---
	STAGE 2A SUBTOTALS		430	5,650	0
	STAGE 2B				
		STH 49 NB	20	300	---
		STH 49 SB	320	1,750	---
		DRIVEWAYS	2	7	---
	STAGE 2B SUBTOTALS		342	2,057	0
PROJECT 1430-00-74 TOTALS			23,453	172,517	140
1431-02-72					
	STAGE 1				
		STH 23	3,400	21,300	---
		COMORN RD	4	420	---
		DRIVEWAYS	4	70	10
		ACCESS STAGING	--	2,200	---
PROJECT 1431-02-72 TOTALS			3,408	23,990	10
TOTALS			26,861	196,507	150

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

ASPHALTIC FLUMES

PROJECT I.D.	STAGE	ROADWAY	STATION	OFFSET	465.0315 SY
1430-00-74					
	STAGE 1				
		FOREST RIDGE RD	8FRS+47	RT	8
		FOREST RIDGE RD	9FRS+41	LT	15
		FOREST RIDGE RD	9FRS+42	RT	10
		FOREST RIDGE RD	20FRN+61	LT	11
		FOREST RIDGE RD	20FRN+84	RT	17
		STH 23	378EB+12	RT	13
		STH 23	378EB+97	RT	10
		SUNNYSIDE RD	9SUN+13	RT	9
		SUNNYSIDE RD	8SUN+70	LT	24
		STH 23	402EB+49	RT	13
		BROOKLYN J RD	10BR+63	LT	9
		BROOKLYN J RD	10BR+83	RT	13
		CTH PP	11PP+13	RT	20
		CTH PP	11PP+24	LT	21
		DEAD END RD	9DD+25	LT	20
	STAGE 1 SUBTOTAL				212
	STAGE 2				
		STH 23	223EB+40	LT	41
		NORTH ST	21N+93	LT	10
		NORTH ST	22N+71	LT	8
		NORTH ST	26N+25	LT	12
		STH 23	224EB+72	LT	20
		STH 23	279EB+23	LT	19
		STH 23	280EB+00	LT	38
		STH 23	302EB+13	RT	13
		STH 49	200"49N"+98	RT	9
		STH 49	201"49N"+28	LT	32
		STH 49	203"49N"+20	LT	8
		STH 49	203"49N"+75	LT	16
		STH 49	204"49N"+40	LT	19
		CTH A	106AN+70	RT	11
	STAGE 2 SUBTOTAL				256
PROJECT 1430-00-74 TOTAL					468
1431-02-72					
	STAGE 1				
		STH 23	51EB+40	RT	10
		STH 23	53EB+45	RT	6
		COMORN RD	9COM+46	RT	10
	STAGE 1 SUBTOTAL				26
PROJECT 1431-02-72 TOTAL					26
TOTAL					495

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

ASPHALT ITEMS

PROJECT	STAGE	ROADWAY	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0605 TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1101 HMA PAVEMENT TYPE E-1 TON	460.1110 HMA PAVEMENT TYPE E-10 TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON
1430-00-74									
	STAGE 1								
		STH 23	1,150	2,500	55	---	20,860	---	---
		FOREST RIDGE N	27	50	480	---	---	---	---
		FOREST RIDGE S	21	40	365	---	---	---	---
		EASTWIND	12	20	220	---	---	---	---
		SUNNYSIDE	18	30	325	---	---	---	---
		BROOKLYN	13	30	230	---	---	---	---
		CTH PP	13	30	235	---	---	---	---
		DEAD END	12	20	215	---	---	---	---
		DRIVEWAYS	---	---	---	---	---	1,170	---
	STAGE 1 SUBTOTALS		1,266	2,720	2,125	0	20,860	1,170	0
	STAGE 1A								
		STH 23	19	50	---	---	340	---	8
		CTH A NB	74	180	6	---	1,330	---	---
		CTH A SB	---	40	---	---	---	---	335
		STH 49 NB	49	150	88	---	805	---	---
		STH 49 SB	---	2	---	---	---	---	17
		DRIVEWAYS	---	---	---	---	---	56	---
	STAGE 1A SUBTOTALS		142	422	94	0	2,475	56	359
	STAGE 2								
		STH 23	930	2,100	185	---	16,650	---	---
		W JCT CTH A	30	50	---	530	---	---	---
		NORTH STREET	25	40	---	440	---	---	---
		DRIVEWAYS	---	---	---	---	---	360	---
	STAGE 2 SUBTOTALS		985	2,190	185	970	16,650	360	0
	STAGE 2A								
		STH 23	14	40	---	---	250	---	---
		CTH A SB	46	100	---	---	765	---	---
		CTH A NB	---	7	---	---	---	---	76
		STH 49 SB	61	150	---	---	1,090	---	---
		STH 49 NB	---	6	---	---	---	---	64
		DRIVEWAYS	---	---	---	---	---	49	---
	STAGE 2A SUBTOTALS		121	303	0	0	2,105	49	140
	STAGE 2B								
		STH 49 NB & SB	23	50	70	---	345	---	---
	STAGE 2B SUBTOTALS		23	50	70	0	345	0	0
PROJECT 1430-00-74 TOTALS			2,537	5,684	2,474	970	42,435	1,636	499
1431-02-72									
	STAGE 1								
		STH 23	305	650	55	---	5,450	---	---
		COMORN ROAD	7	20	130	---	---	---	---
		DRIVEWAYS	---	---	---	---	---	50	---
	STAGE 1 SUBTOTALS		312	670	185	0	5,450	50	0
PROJECT 1431-02-72 TOTALS			312	670	185	0	5,450	50	0
TOTALS			2,849	6,354	2,659	970	47,885	1,685	499

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

RUMBLE STRIPS

PROJECT I.D.	ROADWAY	STATION		STATION	OFFSET	465.0425 ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL LF	465.0475 ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL LF
1430-00-74							
	STH 23	317EB+35	-	344EB+82	RT/LT	---	2,750
	STH 23	348EB+82	-	363EB+21	RT/LT	---	1,440
	STH 23	365EB+21	-	372EB+47	RT/LT	---	730
	STH 23	374EB+47	-	376EB+50	RT/LT	---	210
	STH 23	380EB+50	-	400EB+00	RT/LT	---	1,950
	STH 23	404EB+00	-	429EB+41	RT/LT	---	2,550
	STH 23	433EB+41	-	454EB+41	RT/LT	---	2,100
	STH 23	210EB+41	-	457EB+87	LT	15,450	---
	STH 23	210EB+41	-	457EB+87	RT	16,250	---
PROJECT 1430-00-74 TOTALS						31,700	11,730
1431-02-72							
	STH 23	22EB+30	-	44EB+24	RT/LT	---	2,200
	STH 23	24EB+25		58EB+49	LT	3,310	---
	STH 23	21EB+48		49EB+98	RT	2,750	---
PROJECT 1431-02-72 TOTALS						6,060	2,200
TOTALS						37,760	13,930

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

TEMPORARY SHORING

PROJECT I.D.	ROADWAY	206.6000.S SF	COMMENT
1430-00-74			
	STH 23	1260	CULVERT C-24-17
PROJECT 1430-00-74 TOTALS		1260	
1431-02-72			
	STH 23	2290	CULVERT B-20-49
PROJECT 1431-02-72 TOTALS		2290	
TOTALS		3550	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

CROSS CULVERT PIPES

PROJECT I.D.	ROADWAY	INLET END STA	INLET END OFFSET	INLET END ELEV	DISCHARGE END STA	DISCHARGE END OFFSET	DISCHARGE END ELEV	SLOPE	520.4018 CULVERT PIPE TEMPORARY 18-INCH LF	520.4048 CULVERT PIPE TEMPORARY 48-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH	522.0124* CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	522.0130* CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	522.0148 CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH LF	522.0324* CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	522.0524* CULVERT PIPE REINFORCED CONCRETE CLASS V 24-INCH LF	522.0530* CULVERT PIPE REINFORCED CONCRETE CLASS V 30-INCH LF	522.0536* CULVERT PIPE REINFORCED CONCRETE CLASS V 36-INCH LF	523.0419 CULVERT PIPEREINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	523.0424 CULVERT PIPEREINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 24X38-INCH LF
1430-00-74																				
	STH 23 EB	217EB+58	76' LT	832.21	217EB+57	78' RT	828.81	2.39%	---	---	---	---	---	---	---	---	144	---	---	---
	STH 23 EB	221EB+23	63' RT	831.68	221EB+50	103' RT	831.58	0.25%	---	---	---	---	---	---	---	---	---	---	38	---
	STH 23 EB	239EB+53	80' RT	832.43	239EB+57	98' LT	831.74	0.43%	---	---	---	---	---	162	---	---	---	---	---	---
	STH 23 EB	242EB+97	90' RT	823.69	242EB+84	104' LT	822.06	0.90%	---	---	---	182	---	---	---	---	---	---	---	---
	STH 23 EB	243EB+02	90' RT	823.69	242EB+89	104' LT	822.06	0.90%	---	---	---	182	---	---	---	---	---	---	---	---
	STH 23 EB	296EB+81	70' RT	808.18	296EB+49	111' LT	805.21	1.74%	---	---	---	---	172	---	---	---	---	---	---	---
	STH 23 EB	296EB+87	70' RT	808.18	296EB+56	111' LT	805.21	1.74%	---	---	---	---	172	---	---	---	---	---	---	---
	STH 23 EB	346EB+48	101' RT	854.32	346EB+42	61' LT	850.28	2.76%	---	---	---	---	---	---	---	---	---	---	148	---
	STH 23 EB	410EB+80	73' LT	804.76	411EB+60	65' RT	804.25	0.32%	---	160	---	---	---	---	---	---	---	---	---	---
	STH 23 EB	410EB+90	76' LT	804.76	411EB+72	63' RT	804.25	0.32%	---	162	---	---	---	---	---	---	---	---	---	---
	CTH A NB	101+06	48' RT	823.82	102+24	88' LT	822.30	0.89%	---	---	1	---	---	---	---	---	---	---	---	170
	CTH A NB	101+15	49' RT	823.74	102+32	90' LT	822.04	1.00%	---	---	1	---	---	---	---	---	---	---	---	172
	CTH A NB	101+23	50' RT	823.69	102+39	91' LT	821.77	1.12%	---	---	1	---	---	---	---	---	---	---	---	174
	CTH A NB	103AN+72	60' LT						36	---	---	---	---	---	---	---	---	---	---	---
	CTH A NB	103AN+77	26' RT						36	---	---	---	---	---	---	---	---	---	---	---
	MOBILE HOME DWY	0+57	39' RT	836.86	1+21	35' LT	835.45	1.65%	---	---	---	---	---	---	86	---	---	---	---	---
	MOBILE HOME DWY	2+24	33' RT	833.11	2+32	35' LT	832.85	0.47%	---	---	---	---	---	---	---	58	---	---	---	---
	EASTWIND	9EW+43	74' LT	880.08	9EW+52	49' RT	879.55	0.48%	---	---	---	---	---	---	112	---	---	---	---	---
	SUNNYSIDE	9SUN+06	54' LT	832.10	9UN+27	50' RT	831.95	0.16%	---	---	---	---	---	---	---	---	---	90	---	---
	BROOKLYN J	10BR+51	61' LT	807.74	10BR+61	75' RT	806.28	1.17%	---	---	---	---	---	---	---	126	---	---	---	---
	DEAD END	9DD+81	52' RT	821.03	9DD+79	61' LT	820.81	0.21%	---	---	---	---	---	---	---	---	---	---	102	---
PROJECT 1430-00-74 TOTALS									72	322	3	364	344	162	324	184	144	90	288	516
1431-02-72																				
	STH 23 EB	31EB+00	52' LT	825.74	31EB+00	56' RT	824.44	1.35%	---	---	---	---	---	---	96	---	---	---	---	---
	STH 23 EB	42EB+00	64' LT	810.91	42EB+00	60' RT	809.35	1.40%	---	---	---	---	114	---	---	---	---	---	---	---
PROJECT 1431-02-72 TOTALS									0	0	0	0	114	0	96	0	0	0	0	0
TOTALS									72	322	3	364	458	162	420	184	144	90	288	516

STATION AND OFFSETS ARE TO THE APRON END OF ENDWALLS
PIPE LENGTHS AND ELEVATIONS ARE FROM THE END OF PIPE TO END OF PIPE AND DO NOT INCLUDE LENGTH OF APRON ENDWALL

NOTES:
1) REQUIRED FOR CONSTRUCTION OF CULVERT C-24-17, SEE CONSTRUCTION DETAILS
2) REQUIRED FOR CONSTRUCTION OF TEMPORARY WIDENING. SEE STAGE 1A DETAILS.

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

CROSS CULVERT APRON ENDWALLS

PROJECT I.D.	ROADWAY	INLET END STA	INLET END OFFSET	INLET END ELEV	DISCHARGE END STA	DISCHARGE END OFFSET	DISCHARGE END ELEV	SLOPE	522.1024* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1048 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH EACH	523.0519* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH EACH	523.0524 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH EACH	633.5200* MARKERS CULVERT END EACH	SPV.0060.24 REINFORCED CONCRETE ENDWALLS AND GRATES 19X30-INCH SPECIAL EACH	COMMENT
1430-00-74																	
	STH 23 EB	217EB+58	76' LT	832.21	217EB+57	78' RT	828.81	2.39%	---	2	---	---	---	---	2	---	
	STH 23 EB	221EB+23	63' RT	831.68	221EB+50	103' RT	831.58	0.25%	---	---	---	---	2	---	2	---	
	STH 23 EB	239EB+53	80' RT	832.43	239EB+57	98' LT	831.74	0.43%	---	---	---	2	---	---	2	---	
	STH 23 EB	242EB+97	90' RT	823.69	242EB+84	104' LT	822.06	0.90%	2	---	---	---	---	---	2	---	
	STH 23 EB	243EB+02	90' RT	823.69	242EB+89	104' LT	822.06	0.90%	2	---	---	---	---	---	---	---	
	STH 23 EB	296EB+81	70' RT	808.18	296EB+49	111' LT	805.21	1.74%	---	2	---	---	---	---	2	---	
	STH 23 EB	296EB+87	70' RT	808.18	296EB+56	111' LT	805.21	1.74%	---	2	---	---	---	---	---	---	
	STH 23 EB	346EB+48	101' RT	854.32	346EB+42	61' LT	850.28	2.76%	---	---	---	---	---	---	2	2	
	STH 23 EB	410EB+80	73' LT	804.76	411EB+60	65' RT	804.25	0.32%	---	---	---	---	---	---	---	---	SEE NOTE 1
	STH 23 EB	410EB+90	76' LT	804.76	411EB+72	63' RT	804.25	0.32%	---	---	---	---	---	---	---	---	SEE NOTE 1
	CTH A NB	101+06	48' RT	823.82	102+24	88' LT	822.30	0.89%	---	---	---	---	---	2	2	---	
	CTH A NB	101+15	49' RT	823.74	102+32	90' LT	822.04	1.00%	---	---	---	---	---	2	---	---	
	CTH A NB	101+23	50' RT	823.69	102+39	91' LT	821.77	1.12%	---	---	---	---	---	2	---	---	
	CTH A NB	103AN+72	60' LT						---	---	---	---	---	---	---	---	SEE NOTE 2
	CTH A NB	103AN+77	26' RT						---	---	---	---	---	---	---	---	SEE NOTE 2
	MOBILE HOME DWY	0+57	39' RT	836.86	1+21	35' LT	835.45	1.65%	2	---	---	---	---	---	2	---	
	MOBILE HOME DWY	2+24	33' RT	833.11	2+32	35' LT	832.85	0.47%	2	---	---	---	---	---	2	---	
	EASTWIND	9EW+43	74' LT	880.08	9EW+52	49' RT	879.55	0.48%	2	---	---	---	---	---	2	---	
	SUNNYSIDE	9SUN+06	54' LT	832.10	9SUN+27	50' RT	831.95	0.16%	---	---	2	---	---	---	2	---	
	BROOKLYN J	10BR+51	61' LT	807.74	10BR+61	75' RT	806.28	1.17%	2	---	---	---	---	---	2	---	
	DEAD END	9DD+81	52' RT	821.03	9DD+79	61' LT	820.81	0.21%	---	---	---	---	2	---	2	---	
PROJECT 1430-00-74 TOTALS									12	6	2	2	4	6	26	2	
1431-02-72																	
	STH 23 EB	31EB+00	52' LT	825.74	31EB+00	56' RT	824.44	1.35%	2	---	---	---	---	---	2	---	
	STH 23 EB	42EB+00	64' LT	810.91	42EB+00	60' RT	809.35	1.40%	---	2	---	---	---	---	2	---	
PROJECT 1431-02-72 TOTALS									2	2	0	0	0	0	4	0	
TOTALS									14	8	2	2	4	6	30	2	

STATION AND OFFSETS ARE TO THE APRON END OF ENDWALLS
PIPE LENGTHS AND ELEVATIONS ARE FROM THE END OF PIPE TO END OF PIPE AND DO NOT INCLUDE LENGTH OF APRON ENDWALL

NOTES:
1) REQUIRED FOR CONSTRUCTION OF CULVERT C-24-17, SEE CONSTRUCTION DETAILS
2) REQUIRED FOR CONSTRUCTION OF TEMPORARY WIDENING. SEE STAGE 1A DETAILS.

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

PIPE CULVERT QUANTITIES FOR CSS FUNDS

										522.0136	522.0142	522.0148	522.0336	522.1036	522.1042	522.1048	523.0424	523.0524	633.5200*
										CULVERT PIPE REINFORCED CONCRETE				APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE			CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	
		INLET END			DISCHARGE END					CLASS III 36-INCH	CLASS III 42-INCH	CLASS III 48-INCH	CLASS IV 36-INCH	36-INCH	42-INCH	48-INCH	CLASS HE-IV 24X38-INCH	24X38-INCH	MARKERS CULVERT END
PROJECT I.D.	ROADWAY	STA	OFFSET	ELEV	STA	OFFSET	ELEV	SLOPE		LF	LF	LF	LF	EACH	EACH	EACH	LF	EACH	EACH
1430-00-74																			
	STH 23	320EB+96	64' RT	828.42	320EB+96	96' LT	824.08	3.03%		144	---	---	---	2	---	---	---	---	2
	STH 23	321EB+04	65' RT	828.42	321EB+04	96' LT	824.08	3.01%		146	---	---	---	2	---	---	---	---	---
	STH 23	331EB+50	55' RT	838.90	331EB+52	85' LT	835.87	2.45%		124	---	---	---	2	---	---	---	---	2
	STH 23	352EB+43	66' RT	851.07	352EB+56	71' LT	850.66	0.34%		---	---	---	122	2	---	---	---	---	2
	STH 23	352EB+50	66' RT	851.07	352EB+64	70' LT	850.66	0.35%		---	---	---	120	2	---	---	---	---	---
	STH 23	396EB+15	67' RT	843.47	396EB+20	106' LT	842.84	0.40%		---	158	---	---	---	2	---	---	---	2
	STH 23	424EB+91	80' LT	806.82	425EB+79	42' RT	805.26	1.13%		---	---	---	---	---	---	---	140	2	2
	STH 23	424EB+96	84' LT	806.82	425EB+86	42' RT	805.26	1.09%		---	---	---	---	---	---	---	144	2	---
	STH 23	434EB+93	83' LT	800.07	434EB+90	61' RT	799.82	0.20%		---	---	128	---	---	---	2	---	---	2
	STH 23	435EB+02	83' LT	800.07	434EB+98	61' RT	799.82	0.20%		---	---	128	---	---	---	2	---	---	---
	STH 23	442EB+21	96' LT	800.89	440EB+25	70' RT	800.32	0.24%		---	---	242	---	---	---	2	---	---	2
	STH 23	442EB+31	93' LT	800.89	440EB+25	81' RT	800.32	0.23%		---	---	254	---	---	---	2	---	---	---
PROJECT 1430-00-74 TOTALS										414	158	752	242	10	2	8	284	4	14

STATION AND OFFSETS ARE TO THE APRON END OF ENDWALLS
PIPE LENGTHS AND ELEVATIONS ARE FROM THE END OF PIPE TO END OF PIPE AND DO NOT INCLUDE LENGTH OF APRON ENDWALL

ALL ITEMS CATEGORY 0020 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

DRIVEWAY CULVERTS

PROJECT I.D.	ROADWAY	INLET END STA	INLET END OFFSET	INLET END ELEV	DISCHARGE END STA	DISCHARGE END OFFSET	DISCHARGE END ELEV	SLOPE	522.0124* CLASS III 24-INCH LF	522.0130* CLASS III 30-INCH LF	522.0318 CLASS IV 18-INCH LF	522.0324* CLASS IV 24-INCH LF	522.0330 CLASS IV 30-INCH LF	522.0518 CLASS V 18-INCH LF	522.0524* CLASS V 24-INCH LF	522.0530* CLASS V 30-INCH LF	522.0536* CLASS V 36-INCH LF	523.0114 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 14X23-INCH LF	523.0119 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH LF	521.1524 APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 24-INCH 6 TO 1 EACH	521.1530 APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 30-INCH 6 TO 1 EACH	522.1018* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	523.0514 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELIPTICAL 14X23-INCH EACH	523.0519* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELIPTICAL 19X30-INCH EACH
1430-00-74																											
	STH 23	253EB+50	60' RT	842.55	252EB+81	65' RT	841.15	2.45%	---	---	---	---	---	---	58	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	254EB+54	54' LT	846.40	253EB+59	57' LT	844.72	2.03%	---	---	---	---	---	---	---	---	---	84	---	---	---	---	---	---	---	2	---
	STH 24	309EB+64	55' RT	821.96	308EB+86	56' RT	821.35	0.94%	66	---	---	---	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	315EB+52	52' RT	827.51	314EB+64	49' RT	826.80	0.94%	76	---	---	---	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	326EB+52	39' RT	839.29	325EB+91	38' RT	838.88	0.87%	---	---	---	---	---	---	48	---	---	---	---	2	---	---	---	---	---	---	---
	STH 23	327EB+44	36' RT	840.56	326EB+83	38' RT	839.73	1.76%	---	---	---	---	---	---	48	---	---	---	---	2	---	---	---	---	---	---	---
	STH 23	337EB+27	52' RT	846.22	336EB+55	41' RT	845.97	0.48%	---	---	---	---	54	---	---	---	---	---	---	---	2	---	---	---	---	---	---
	STH 23	338EB+52	52' RT	847.23	337EB+93	52' RT	846.86	0.79%	48	---	---	---	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	354EB+85	66' LT	851.37	354EB+34	68' LT	851.14	0.60%	---	---	---	40	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	359EB+00	52' RT	862.60	358EB+00	54' RT	860.49	2.51%	---	---	---	---	---	---	---	---	84	---	---	---	---	---	---	---	2	---	---
	STH 23	360EB+20	52' LT	864.68	359EB+60	52' LT	864.08	1.26%	---	---	---	---	---	---	48	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	361EB+54	60' LT	866.07	360EB+86	56' LT	865.37	1.26%	---	---	---	---	---	---	56	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	364EB+60	52' LT	871.27	363EB+77	52' LT	870.30	1.37%	---	---	---	72	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	366EB+30	52' LT	873.29	365EB+70	52' LT	872.77	1.12%	48	---	---	---	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	368EB+30	52' LT	875.18	367EB+30	52' LT	874.40	0.89%	88	---	---	---	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	369EB+90	52' LT	876.33	369EB+20	52' LT	875.96	0.65%	58	---	---	---	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	382EB+24	41' RT	876.99	382EB+79	39' RT	876.66	0.82%	---	---	---	---	---	---	42	---	---	---	---	2	---	---	---	---	---	---	---
	STH 23	383EB+94	35' RT	875.26	384EB+54	37' RT	874.42	1.78%	---	---	---	---	---	---	---	---	---	---	48	---	---	---	---	---	---	---	2
	STH 23	386EB+10	52' LT	869.38	386EB+80	52' LT	868.47	1.59%	---	58	---	---	---	---	---	---	---	---	---	---	---	---	---	2	---	---	---
	STH 23	388EB+75	41' RT	866.37	389EB+50	52' RT	863.77	4.24%	---	---	---	62	---	---	---	---	---	---	---	2	---	---	---	---	---	---	---
	STH 23	390EB+10	52' LT	862.12	390EB+89	52' LT	860.70	2.12%	---	---	---	---	---	---	---	68	---	---	---	---	---	---	---	2	---	---	---
	STH 23	391EB+81	63' RT	856.15	392EB+56	78' RT	850.38	8.89%	66	---	---	---	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	400EB+03	53' LT	840.42	400EB+59	55' LT	839.30	2.50%	---	---	---	---	---	46	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	415EB+86	66' LT	811.80	415EB+30	49' LT	811.72	0.17%	---	---	---	---	---	---	---	---	---	---	48	---	---	---	---	---	---	---	2
	STH 23	431EB+02	60' RT	805.96	431EB+38	91' RT	805.81	0.44%	---	---	---	---	---	36	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	453EB+38	44' RT	819.57	452EB+72	43' RT	818.82	1.41%	---	---	---	---	---	---	54	---	---	---	---	2	---	---	---	---	---	---	---
	W JUNCTION CTH A	18N+27	54' LT	837.04	17N+25	63' LT	833.40	3.21%	116	---	---	---	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	CTH A	100AN+07	42' LT	830.28	100AN+68	57' LT	829.57	1.31%	---	---	---	---	---	---	---	---	---	---	56	---	---	---	---	---	---	---	2
	CTH A	100AN+08	38' LT	830.28	100AN+69	53' LT	829.57	1.31%	---	---	---	---	---	---	---	---	---	---	56	---	---	---	---	---	---	---	2
	STH 49	203"49N"+28	44' RT	808.00	204"49N"+14	59' RT	801.50	8.57%	---	---	---	76	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 49	207"49N"+75	45' LT	793.48	208"49N"+42	44' LT	791.85	2.93%	---	---	---	---	---	---	---	---	---	---	56	---	---	---	---	---	---	---	2
	MOBILE HOME DWY	2+84	29' RT	834.44	2+31	33' RT	833.37	2.61%	---	---	42	---	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	FOREST RIDGE	23FRN+20	27' RT	844.00	23FRN+69	26' RT	843.36	1.73%	---	---	---	---	---	---	---	---	---	---	38	---	---	---	---	---	---	---	2
	FOREST RIDGE	23FRN+82	29' LT	841.75	24FRN+44	27' LT	840.72	2.10%	---	---	---	---	---	---	50	---	---	---	---	---	---	2	---	---	---	---	---
	FOREST RIDGE	25FRN+87	27' RT	837.45	26FRN+35	26' RT	836.47	2.71%	---	---	---	---	---	---	---	---	---	38	---	---	---	---	---	---	---	2	---
	EASTWIND	8EW+32	30' RT	882.60	8EW+78	33' RT	881.69	2.54%	---	---	---	---	---	---	---	---	---	36	---	---	---	---	---	---	---	2	---
	SUNNYSIDE	6UN+36	22' LT	833.15	7SUN+10	21' LT	832.84	0.51%	---	---	---	---	---	---	---	---	---	62	---	---	---	---	---	---	---	2	---
PROJECT 1430-00-74 TOTALS									566	58	42	250	54	140	346	68	84	220	302	10	2	8	28	4	2	8	12
1431-02-72																											
	STH 23	23EB+02	50' RT	821.98	22EB+07	49' RT	821.84	0.17%	---	---	84	---	---	---	---	---	---	---	---	---	---	2	---	---	---	---	---
	STH 23	33EB+91	45' RT	823.85	34EB+50	45' RT	823.60	0.54%	---	---	---	46	---	---	---	---	---	---	---	2	---	---	---	---	---	---	---
PROJECT 1431-02-72 TOTALS									0	0	84	46	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0
TOTALS									566	58	126	296	54	140	346	68	84	220	302	12	2	10	28	4	2	8	12

STATION AND OFFSETS ARE TO THE APRON END OF ENDWALLS
PIPE LENGTHS AND ELEVATIONS ARE FROM THE END OF PIPE TO END OF PIPE AND DO NOT INCLUDE LENGTH OF APRON ENDWALL

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

STORM SEWER PIPE ITEMS

PROJECT I.D.	ROADWAY	STRUCTURE NUMBER	STA	OFFSET FT		FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0518 STORM SEWER PIPE REINFORCED CONCRETE CLASS V 18-INCH LF	608.0524 STORM SEWER PIPE REINFORCED CONCRETE CLASS V 24-INCH LF	610.0429 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 29X45-INCH LF	522.1018* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	523.0529 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH EACH	633.5200* MARKERS CULVERT END EACH
1430-00-74	STH 23	101	216EB+50	16.7	LT	101	102	834.86	834.72	0.89%	---	16	---	---	---	---	---	---	---	---	---	---
	STH 23	102	216EB+50	1.0	LT	102	103	834.47	834.00	0.97%	---	---	---	---	---	49	---	---	---	---	---	---
	STH 23	103	216EB+50	47.5	RT	---	103	---	834.00	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	104	216EB+99	53.4	RT	104	104A	829.83	829.68	0.50%	---	---	---	---	31	---	---	---	---	---	---	---
	STH 23	104A	217EB+03	83.4	RT	---	104A	---	829.68	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	105	219EB+20	23.0	LT	105	105A	832.75	832.58	0.85%	20	---	---	---	---	---	---	---	---	---	---	---
	STH 23	105A	219EB+00	23.0	LT	105A	108	832.33	831.93	0.91%	---	44	---	---	---	---	---	---	---	---	---	---
	STH 23	108	218EB+61	3.5	LT	108	108A	831.93	831.77	0.80%	---	21	---	---	---	---	---	---	---	---	---	---
	STH 23	108A	218EB+41	1.9	LT	108A	109	830.52	830.00	0.51%	---	---	---	---	---	103	---	---	---	---	---	---
	STH 23	109	217EB+72	74.4	RT	---	109	---	830.00	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	111	220EB+50	23.0	LT	111	112	832.95	832.87	0.80%	---	10	---	---	---	---	---	---	---	---	---	---
	STH 23	112	220EB+50	13.0	LT	112	113	832.37	832.01	0.50%	---	---	---	---	73	---	---	---	---	---	---	---
	STH 23	113	220EB+50	53.2	RT	---	113	---	832.01	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	120	224EB+73	11.8	LT	120	121	833.87	833.81	0.61%	---	10	---	---	---	---	---	---	---	---	---	---
	STH 23	120A	225EB+00	13.5	LT	120A	120	834.36	834.12	0.88%	28	---	---	---	---	---	---	---	---	---	---	---
	STH 23	121	224EB+72	2.0	LT	121	122	833.56	832.88	0.98%	---	---	70	---	---	---	---	---	---	---	---	---
	STH 23	122	224EB+72	67.5	RT	---	122	---	832.88	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	125	227EB+75	13.2	LT	125	126	835.86	835.76	0.82%	---	13	---	---	---	---	---	---	---	---	---	---
	STH 23	126	227EB+75	1.0	LT	126	127	835.51	835.02	0.97%	---	---	---	---	51	---	---	---	---	---	---	---
	STH 23	127	227EB+75	49.7	RT	---	127	---	835.02	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	130	230EB+75	21.4	LT	130	131	837.44	837.26	0.88%	---	21	---	---	---	---	---	---	---	---	---	---
	STH 23	131	230EB+75	1.0	LT	131	132	837.01	836.52	0.98%	---	---	---	---	50	---	---	---	---	---	---	---
	STH 23	132	230EB+75	48.9	RT	---	132	---	836.52	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	135	233EB+75	15.9	LT	135	136	838.88	838.75	0.87%	---	15	---	---	---	---	---	---	---	---	---	---
	STH 23	136	233EB+75	1.0	LT	136	137	838.50	838.02	0.98%	---	---	---	---	50	---	---	---	---	---	---	---
	STH 23	137	233EB+75	48.2	RT	---	137	---	838.02	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	144	260EB+00	1.3	LT	144	145	852.80	852.62	0.81%	---	---	23	---	---	---	---	---	---	---	---	---
	STH 23	145	260EB+00	21.0	RT	145	146	850.12	847.17	0.98%	---	---	---	300	---	---	---	---	---	---	---	---
	STH 23	146	257EB+00	21.0	RT	146	147	847.17	844.28	0.99%	---	---	---	---	---	---	294	---	---	---	---	---
	STH 23	147	254EB+07	25.9	RT	147	148	844.28	843.88	0.92%	---	---	---	44	---	---	---	---	---	---	---	---
	STH 23	148	253EB+75	55.8	RT	---	148	---	843.88	---	---	---	---	---	---	---	---	---	---	1	---	1
	STH 23	151	265EB+90	25.0	RT	151	153	851.84	851.51	0.89%	---	---	37	---	---	---	---	---	---	---	---	---
	STH 23	152	265EB+90	57.0	LT	152	153	851.93	851.51	0.93%	---	---	45	---	---	---	---	---	---	---	---	---
	STH 23	153	265EB+90	12.0	LT	153	157	851.01	845.11	1.97%	---	---	---	300	---	---	---	---	---	---	---	---
	STH 23	154	268EB+90	21.0	RT	154	155	846.88	846.68	0.91%	---	---	22	---	---	---	---	---	---	---	---	---
	STH 23	155	268EB+90	1.0	LT	155	157	846.68	846.61	0.70%	---	---	10	---	---	---	---	---	---	---	---	---
	STH 23	156	268EB+90	57.0	LT	156	157	847.03	846.61	0.91%	---	---	46	---	---	---	---	---	---	---	---	---
	STH 23	157	268EB+90	11.0	LT	157	162	845.11	836.26	2.95%	---	---	---	300	---	---	---	---	---	---	---	---
	STH 23	158	271EB+90	21.0	RT	158	159	837.52	837.32	0.91%	---	---	22	---	---	---	---	---	---	---	---	---
	STH 23	159	271EB+90	1.0	LT	159	162	837.32	837.26	0.63%	---	---	10	---	---	---	---	---	---	---	---	---
	STH 23	160	271EB+90	57.0	LT	160	161	837.67	837.32	0.95%	---	---	37	---	---	---	---	---	---	---	---	---
	STH 23	161	271EB+90	20.0	LT	161	162	837.32	837.26	0.63%	---	---	10	---	---	---	---	---	---	---	---	---
	STH 23	162	271EB+90	10.5	LT	162	167	834.26	825.42	2.95%	---	---	---	300	---	---	---	---	---	---	---	---
	STH 23	163	274EB+90	21.0	RT	163	164	825.67	825.47	0.91%	---	---	22	---	---	---	---	---	---	---	---	---
	STH 23	164	274EB+90	1.0	LT	164	167	825.47	825.42	0.62%	---	---	9	---	---	---	---	---	---	---	---	---
	STH 23	165	274EB+90	51.2	LT	165	166	825.79	825.47	0.94%	---	---	34	---	---	---	---	---	---	---	---	---
	STH 23	166	274EB+90	17.2	LT	166	167	825.47	825.42	0.62%	---	---	9	---	---	---	---	---	---	---	---	---
	STH 23	167	274EB+90	9.1	LT	167	170	822.42	817.00	1.96%	---	---	---	277	---	---	---	---	---	---	---	---
	STH 23	168	277EB+66	45.1	LT	168	169	816.89	816.57	0.94%	---	---	34	---	---	---	---	---	---	---	---	---
	STH 23	169	277EB+66	11.1	LT	169	170	816.57	816.50	0.70%	---	---	11	---	---	---	---	---	---	---	---	---
	STH 23	170	277EB+66	1.0	LT	170	171	815.00	814.83	0.77%	---	---	---	22	---	---	---	---	---	---	---	---
	STH 23	171	277EB+66	21.0	RT	171	173	813.83	813.19	0.48%	---	---	---	133	---	---	---	---	---	---	---	---
	STH 23	172	278EB+98	42.1	LT	172	173	813.99	813.69	0.48%	---	---	64	---	---	---	---	---	---	---	---	---
	STH 23	173	278EB+98	21.0	RT	173	174	813.19	813.00	0.47%	---	---	---	41	---	---	---	---	---	---	---	---
	STH 23	174	279EB+01	61.1	RT	---	174	---	813.00	---	---	---	---	---	---	---	---	---	---	1	---	1
	STH 23	175	294EB+43	1.0	LT	175	176	810.09	809.55	0.95%	57	---	---	---	---	---	---	---	---	---	---	---
	STH 23	176	295EB+00	1.0	LT	176	178	809.30	809.05	0.89%	---	28	---	---	---	---	---	---	---	---	---	---
	STH 23	177	294EB+47	27.4	LT	177	178	809.80	809.30	0.95%	53	---	---	---	---	---	---	---	---	---	---	---
	STH 23	178	295EB+00	28.9	LT	178	179	808.80	808.00	0.98%	---	---	82	---	---	---	---	---	---	---	---	---
	STH 23	179	295EB+38	100.9	LT	---	179	---	808.00	---	---	---	---	---	---	---	---	---	1	---	---	1

STATION AND OFFSETS ARE TO THE CENTER OF STRUCTURE OR TO THE APRON END OF ENDWALLS
PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES OR TO THE APRON END OF ENDWALLS
RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE COVER FOR MANHOLES AND MEDIAN AND FIELD INLETS
STRUCTURE DEPTH = RIM ELEVATION MINUS LOWEST INVERT PLUS PIPE THICKNESS MINUS CASTING HEIGHT MINUS ADJUSMENT RING
CASTING HEIGH EQUALS 0.7396 FT FOR TYPE J COVERS; 0 FT FOR TYPE MS COVERS; 0.5 FT FOR TYPE H-S AND HM-S COVERS; 0.8333 FT FOR TYPE B AND TYPE V COVERS
ADJUSTMENT RING HEIGHT EQUALS 0.5 FT
FLAT SLAB TOP WITH CENTERED 21"X31" RECTANGULAR OPENING REQUIRED ON ALL MANHOLES WITH TYPE WM INLET COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

(CONTINUED FROM PREVIOUS PAGE)

STORM SEWER PIPE ITEMS

PROJECT I.D.	ROADWAY	STRUCTURE NUMBER	STA	OFFSET FT		FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0518 STORM SEWER PIPE REINFORCED CONCRETE CLASS V 18-INCH LF	608.0524 STORM SEWER PIPE REINFORCED CONCRETE CLASS V 24-INCH LF	610.0429 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 29X45-INCH LF	522.1018* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	523.0529 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH EACH	633.5200* MARKERS CULVERT END EACH
1430-00-74	STH 23	182	297EB+50	12.2	LT	182	183	811.10	810.91	0.88%	---	22	---	---	---	---	---	---	---	---	---	---
	STH 23	183	297EB+50	33.7	LT	183	184	810.66	810.00	0.98%	---	---	68	---	---	---	---	---	---	---	---	---
	STH 23	184	297EB+50	100.9	LT	---	184	---	810.00	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	188	299EB+32	11.0	LT	188	189	813.87	813.70	0.81%	---	---	21	---	---	---	---	---	---	---	---	---
	STH 23	189	299EB+32	25.0	LT	189	190	813.70	813.63	0.70%	---	---	10	---	---	---	---	---	---	---	---	---
	STH 23	190	299EB+32	35.0	LT	190	191	811.63	811.00	0.98%	---	---	65	---	---	---	---	---	---	---	---	---
	STH 23	191	299EB+32	99.3	LT	---	191	---	811.00	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	195	304EB+21	1.0	LT	195	196	819.14	819.06	0.80%	---	10	---	---	---	---	---	---	---	---	---	---
	STH 23	196	304EB+21	11.0	LT	196	197	818.81	818.67	0.87%	---	---	---	---	16	---	---	---	---	---	---	---
	STH 23	197	304EB+21	25.0	LT	197	198	818.67	818.61	0.75%	---	---	8	---	---	---	---	---	---	---	---	---
	STH 23	198	304EB+21	35.0	LT	198	199	818.61	818.05	0.99%	---	---	---	---	57	---	---	---	---	---	---	---
	STH 23	199	304EB+21	91.7	LT	---	199	---	818.05	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	203	307EB+23	1.0	LT	203	204	821.17	821.09	0.80%	---	10	---	---	---	---	---	---	---	---	---	---
	STH 23	204	307EB+23	11.0	LT	204	205	820.84	820.00	0.98%	---	---	86	---	---	---	---	---	---	---	---	---
	STH 23	205	307EB+23	96.6	LT	---	205	---	820.00	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	208	310EB+75	1.0	LT	208	209	825.01	824.75	0.94%	---	28	---	---	---	---	---	---	---	---	---	---
	STH 23	209	310EB+75	28.6	LT	209	210	824.50	824.00	0.98%	---	---	---	---	52	---	---	---	---	---	---	---
	STH 23	210	310EB+75	79.7	LT	---	210	---	824.00	---	---	---	---	---	---	---	---	---	1	---	---	1
	NORTH AVE	220	21N+49	80.2	RT	220	221	830.97	830.76	0.32%	---	---	68	---	---	---	---	---	1	---	---	1
	NORTH AVE	221	21N+90	37.1	RT	221	223	830.76	830.55	0.32%	---	---	63	---	---	---	---	---	---	---	---	---
	NORTH AVE	222	22N+45	13.0	RT	222	223	830.66	830.55	1.00%	---	---	---	---	---	11	---	---	---	---	---	---
	NORTH AVE	223	22N+45	24.0	RT	223	224	830.55	829.55	0.32%	---	---	---	---	---	310	---	---	---	---	---	---
	NORTH AVE	224	25N+53	23.7	RT	---	224	---	829.55	---	---	---	---	---	---	---	---	---	1	---	---	1
	CTH A	230	105AN+01	34.9	LT	230	231	817.91	817.19	1.01%	---	---	---	---	72	---	---	---	---	---	---	---
	CTH A	231	105AN+21	103.3	LT	---	231	---	817.19	---	---	---	---	---	---	---	---	---	1	---	---	1
	CTH A	232	105AN+84	75.2	RT	232	233	817.05	816.53	0.52%	---	---	---	---	---	---	---	102	---	---	1	---
	CTH A	233	105AN+98	24.0	LT	233	234	816.53	816.48	0.52%	---	---	---	---	---	---	---	11	---	---	---	---
	CTH A	234	105AN+99	36.0	LT	234	235	816.48	816.04	0.53%	---	---	---	---	---	---	---	82	---	---	---	---
	CTH A	235	106AN+05	116.6	LT	---	235	---	816.04	---	---	---	---	---	---	---	---	---	---	---	1	---
	CTH A	236	105AN+91	76.6	RT	236	237	817.05	816.44	0.58%	---	---	---	---	---	---	---	105	---	---	1	1
	CTH A	237	106AN+17	24.0	LT	237	238	816.44	816.38	0.58%	---	---	---	---	---	---	---	10	---	---	---	---
	CTH A	238	106AN+17	36.0	LT	238	239	816.38	815.91	0.56%	---	---	---	---	---	---	---	86	---	---	---	---
	CTH A	239	106AN+17	120.2	LT	---	239	---	815.91	---	---	---	---	---	---	---	---	---	---	---	1	1
	STH 49	240	203"49N"+22	17.9	LT	240	241	808.28	808.20	0.59%	---	14	---	---	---	---	---	---	---	---	---	---
	STH 49	241	203"49N"+21	31.4	LT	241	242	807.95	807.34	0.74%	---	---	---	---	---	83	---	---	---	---	---	---
	STH 49	242	203"49N"+26	114.0	LT	---	242	---	807.34	---	---	---	---	---	---	---	---	---	1	---	---	1
	FOREST RIDGE	245	6FR+50	23.0	RT	245	246	867.31	859.68	4.00%	---	---	---	191	---	---	---	---	---	---	---	---
	FOREST RIDGE	246	8FR+41	30.5	RT	---	246	---	859.68	---	---	---	---	---	---	---	---	---	---	1	---	1
	CTH PP	250	10PP+87	71.2	RT	250	251	817.25	816.00	0.81%	---	---	---	155	---	---	---	---	---	---	---	---
	CTH PP	251	11PP+15	80.9	LT	---	251	---	816.00	---	---	---	---	---	---	---	---	---	---	1	---	1
	STH 23	270	286EB+82	20.5	RT	280	271	809.00	807.00	---	---	---	---	---	---	---	---	---	---	---	---	---
	STH 23	271	286EB+82	47.2	RT	---	271	---	807.00	---	---	---	---	---	---	---	---	---	---	---	---	1
	STH 23	272	287EB+50	32.0	LT	272	273	808.50	806.50	---	---	---	---	---	---	---	---	---	---	---	---	---
	STH 23	273	287EB+50	50.1	LT	---	273	---	806.50	---	---	---	---	---	---	---	---	---	---	---	---	1
	STH 23	301	402EB+93	63.1	LT	301	303	832.64	830.14	3.83%	---	---	---	---	66	---	---	---	1	---	---	1
	STH 23	302	403EB+57	84.9	LT	302	303	832.18	831.24	5.00%	---	---	---	---	---	19	---	---	1	---	---	1
	STH 23	303	403EB+58	66.1	LT	303	304	830.14	828.48	3.83%	---	---	---	---	44	---	---	---	---	---	---	
	STH 23	304	403EB+96	68.6	LT	---	304	---	828.48	---	---	---	---	---	---	---	---	---	1	---	---	1
PROJECT 1430-00-74 TOTALS											158	262	986	2063	562	575	294	396	21	4	4	29
1431-02-72																						
	STH 23	211	50EB+02	1.0	LT	211	212	813.87	813.81	0.75%	---	9	---	---	---	---	---	---	---	---	---	---
	STH 23	212	50EB+02	9.1	LT	212	213	813.56	813.00	0.98%	---	---	57	---	---	---	---	---	---	---	---	---
	STH 23	213	50EB+02	66.1	LT	---	213	---	813.00	---	---	---	---	---	---	---	---	---	1	---	---	1
	STH 23	215	54EB+81	45.6	RT	215	216	823.49	821.60	4.05%	---	---	---	---	---	---	47	---	---	1	---	1
	STH 23	216	54EB+82	1.0	LT	216	217	821.60	821.32	4.11%	---	---	---	7	---	---	---	---	---	---	---	---
	STH 23	217	54EB+82	7.8	LT	217	218	821.32	818.42	4.05%	---	---	---	72	---	---	---	---	---	---	---	---
	STH 23	218	54EB+82	79.4	LT	---	218	---	818.42	---	---	---	---	---	---	---	---	---	---	1	---	1
PROJECT 1431-02-72 TOTALS											0	9	57	79	0	0	47	0	1	2	0	3
TOTALS											158	271	1043	2142	562	575	341	396	22	6	4	32

STATION AND OFFSETS ARE TO THE CENTER OF STRUCTURE OR TO THE APRON END OF ENDWALLS
PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES OR TO THE APRON END OF ENDWALLS
RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE COVER FOR MANHOLES AND MEDIAN AND FIELD INLETS
STRUCTURE DEPTH = RIM ELEVATION MINUS LOWEST INVERT PLUS PIPE THICKNESS MINUS CASTING HEIGHT MINUS ADJUSMENT RING
CASTING HEIGH EQUALS 0.7396 FT FOR TYPE J COVERS; 0 FT FOR TYPE MS COVERS; 0.5 FT FOR TYPE H-S AND HM-S COVERS; 0.8333 FT FOR TYPE B AND TYPE V COVERS
ADJUSTMENT RING HEIGHT EQUALS 0.5 FT
FLAT SLAB TOP WITH CENTERED 21"X31" RECTANGULAR OPENING REQUIRED ON ALL MANHOLES WITH TYPE WM INLET COVERS

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

STORM SEWER STRUCTURE ITEMS

PROJECT I.D.	ROADWAY	STRUCTURE NUMBER	STA	OFFSET FT		RIM OR FLANGE ELEV	LOWEST INVERT ELEV	STR DEPTH FT	611.0530 MANHOLE COVERS TYPE J EACH	611.0606 INLET COVERS TYPE B EACH	611.0636 INLET COVERS TYPE HM-S EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.0654 INLET COVERS TYPE V EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2X2-FT EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	COMMENT
1430-00-74																						
	STH 23	101	216EB+50	16.7	LT	839.06	834.86	3.39	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	102	216EB+50	1.0	LT	838.79	834.47	3.51	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	104	216EB+99	53.4	RT	832.72	829.83	2.89	---	---	---	---	1	---	---	---	---	---	---	1	---	SEE NOTE 1
	STH 23	105	219EB+20	23.0	LT	838.08	832.75	4.50	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	105A	219EB+00	23.0	LT	838.08	832.33	4.94	---	---	1	---	---	---	---	---	1	---	---	---	---	
	STH 23	108	218EB+61	3.5	LT	837.92	831.93	5.18	---	---	1	---	---	---	---	---	1	---	---	---	---	
	STH 23	108A	218EB+41	1.9	LT	837.93	830.52	6.62	---	---	1	---	---	---	---	---	1	---	---	---	---	
	STH 23	111	220EB+50	23.0	LT	838.39	832.95	4.63	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	112	220EB+50	13.0	LT	838.25	832.37	5.09	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	120	224EB+73	11.8	LT	839.96	833.87	5.28	---	---	1	---	---	---	---	---	1	---	---	---	---	
	STH 23	120A	225EB+00	13.5	LT	840.59	834.36	5.40	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	121	224EB+72	2.0	LT	839.85	833.56	5.50	---	---	1	---	---	---	---	---	1	---		---	---	
	STH 23	125	227EB+75	13.2	LT	841.68	835.86	5.01	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	126	227EB+75	1.0	LT	841.29	835.51	4.97	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	130	230EB+75	21.4	LT	843.45	837.44	5.20	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	131	230EB+75	1.0	LT	842.67	837.01	4.87	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	135	233EB+75	15.9	LT	844.64	838.88	4.95	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	136	233EB+75	1.0	LT	844.04	838.50	4.75	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	144	260EB+00	1.3	LT	858.58	852.80	4.66	---	1	---	---	---	---	---	---	1	---	---	---	---	
	STH 23	145	260EB+00	21.0	RT	858.05	850.12	7.18	---	---	1	---	---	---	1	---	---	---	---	---	---	
	STH 23	146	257EB+00	21.0	RT	853.15	847.17	5.23	---	---	1	---	---	---	---	---	1	---	---	---	---	
	STH 23	147	254EB+07	25.9	RT	848.87	844.28	3.84	---	---	1	---	---	---	1	---	---	---	---	---	---	
	STH 23	151	265EB+90	25.0	RT	858.15	851.84	5.52	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	152	265EB+90	57.0	LT	857.84	851.93	5.12	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	153	265EB+90	12.0	LT	858.38	851.01	6.29	---	1	---	---	---	---	1	---	---	---	---	---	---	
	STH 23	154	268EB+90	21.0	RT	852.62	846.88	4.95	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	155	268EB+90	1.0	LT	853.18	846.68	5.71	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	156	268EB+90	57.0	LT	852.35	847.03	4.53	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	157	268EB+90	11.0	LT	852.91	845.11	7.05	---	---	1	---	---	---	1	---	---	---	---	---	---	
	STH 23	158	271EB+90	21.0	RT	843.51	837.52	5.20	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	159	271EB+90	1.0	LT	844.07	837.32	5.96	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	160	271EB+90	57.0	LT	843.19	837.67	4.73	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	161	271EB+90	20.0	LT	843.92	837.32	5.81	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	162	271EB+90	10.5	LT	844.74	834.26	9.44	1	---	---	---	---	---	1	---	---	---	---	---	---	
	STH 23	163	274EB+90	21.0	RT	831.71	825.67	5.25	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	164	274EB+90	1.0	LT	832.27	825.47	6.01	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	165	274EB+90	51.2	LT	831.51	825.79	4.93	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	166	274EB+90	17.2	LT	832.29	825.47	6.03	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	167	274EB+90	9.1	LT	832.89	822.42	9.43	1	---	---	---	---	---	1	---	---	---	---	---	---	
	STH 23	168	277EB+66	45.1	LT	822.77	816.89	5.09	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	169	277EB+66	11.1	LT	823.55	816.57	6.19	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	170	277EB+66	1.0	LT	823.50	815.00	7.71	---	---	1	---	---	---	1	---	---	---	---	---	---	
	STH 23	171	277EB+66	21.0	RT	822.94	813.83	8.32	---	---	1	---	---	---	1	---	---	---	---	---	---	
	STH 23	172	278EB+98	42.1	LT	819.51	813.99	4.73	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	173	278EB+98	21.0	RT	819.68	813.19	5.74	---	---	1	---	---	---	1	---	---	---	---	---	---	

STATION AND OFFSETS ARE TO THE CENTER OF STRUCTURE OR TO THE APRON END OF ENDWALLS
PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES OR TO THE APRON END OF ENDWALLS
RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE COVER FOR MANHOLES AND MEDIAN AND FIELD INLETS
STRUCTURE DEPTH = RIM ELEVATION MINUS LOWEST INVERT PLUS PIPE THICKNESS MINUS CASTING HEIGHT MINUS ADJUSMENT RING
CASTING HEIGH EQUALS 0.7396 FT FOR TYPE J COVERS; 0 FT FOR TYPE MS COVERS; 0.5 FT FOR TYPE H-S AND HM-S COVERS; 0.8333 FT FOR TYPE B AND TYPE V COVERS
ADJUSTMENT RING HEIGHT EQUALS 0.5 FT
FLAT SLAB TOP WITH CENTERED 21"X31" RECTANGULAR OPENING REQUIRED ON ALL MANHOLES WITH TYPE WM INLET COVERS

NOTES:
1) STRUCTURE DEPTH IS TO INSIDE PIPE INVERT (DEPTH CALCULATION DOES NOT ADD PIPE THICKNESS)
2) SEE STANDARD DETAIL "CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES" FOR PLACEMENT

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

STORM SEWER STRUCTURE ITEMS (CONTINUED FROM PREVIOUS PAGE)

PROJECT I.D.	ROADWAY	STRUCTURE NUMBER	STA	OFFSET FT		RIM OR FLANGE ELEV	LOWEST INVERT ELEV	STR DEPTH FT	611.0530 MANHOLE COVERS TYPE J EACH	611.0606 INLET COVERS TYPE B EACH	611.0636 INLET COVERS TYPE HM-S EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.0654 INLET COVERS TYPE V EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2X2-FT EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	COMMENT
1430-00-74	STH 23	175	294EB+43	1.0	LT	814.92	810.09	4.00	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	176	295EB+00	1.0	LT	815.37	809.30	5.26	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	177	294EB+47	27.4	LT	815.09	809.80	4.48	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	178	295EB+00	28.9	LT	815.52	808.80	5.93	---	---	1	---	---	---	---	---	1	---	---	---	---	
	STH 23	182	297EB+50	12.2	LT	817.58	811.10	5.67	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	183	297EB+50	33.7	LT	817.58	810.66	6.13	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	188	299EB+32	11.0	LT	819.27	813.87	4.28	---	1	---	---	---	---	---	---	1	---	---	---	---	
	STH 23	189	299EB+32	25.0	LT	819.40	813.70	4.55	---	---	1	---	---	---	---	---	1	---	---	---	---	
	STH 23	190	299EB+32	35.0	LT	819.16	811.63	6.74	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	195	304EB+21	1.0	LT	823.30	819.14	3.35	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	196	304EB+21	11.0	LT	823.45	818.81	3.85	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	197	304EB+21	25.0	LT	823.73	818.67	4.27	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	198	304EB+21	35.0	LT	823.53	818.61	4.13	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	203	307EB+23	1.0	LT	826.01	821.17	4.03	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	204	307EB+23	11.0	LT	826.15	820.84	4.52	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	208	310EB+75	1.0	LT	829.09	825.01	3.27	---	---	1	---	---	---	---	---	---	---	1	---	---	
	STH 23	209	310EB+75	28.6	LT	829.23	824.50	3.94	---	---	1	---	---	---	---	---	---	---	1	---	---	
	NORTH AVE	221	21N+90	37.1	RT	834.90	830.76	3.06	1	---	---	---	---	---	1	---	---	---	---	---	---	
	NORTH AVE	222	22N+45	13.0	RT	834.08	830.66	2.63	---	---	---	1	---	---	---	---	---	---	1	---	---	
	NORTH AVE	223	22N+45	24.0	RT	834.73	830.55	3.09	1	---	---	---	---	---	1	---	---	---	---	---	---	
	CTH A	230	105AN+01	34.9	LT	822.53	817.91	3.83	---	---	1	---	---	---	---	---	1	---	---	---	---	
	CTH A	233	105AN+98	24.0	LT	822.14	816.53	4.99	---	---	1	---	---	---	---	1	---	---	---	---	---	
	CTH A	234	105AN+99	36.0	LT	821.95	816.48	4.85	---	---	1	---	---	---	---	1	---	---	---	---	---	
	CTH A	237	106AN+17	24.0	LT	822.13	816.44	5.06	---	---	1	---	---	---	---	1	---	---	---	---	---	
	CTH A	238	106AN+17	36.0	LT	821.97	816.38	4.97	---	---	1	---	---	---	---	1	---	---	---	---	---	
	STH 49	240	203"49N"+22	17.9	LT	813.22	808.28	4.13	---	---	1	---	---	---	---	---	1	---	---	---	---	
	STH 49	241	203"49N"+21	31.4	LT	813.08	807.95	4.34	---	---	1	---	---	---	---	---	---	---	1	---	---	
	FOREST RIDGE	245	6FRS+50	23.0	RT	879.60	867.31	12.29	---	---	---	---	2	---	---	---	---	---	---	---	1	SEE NOTE 1
	CTH PP	250	10PP+87	71.2	RT	820.50	817.25	3.25	---	---	---	---	2	---	---	---	---	---	---	---	1	SEE NOTE 1
	STH 23	270	286EB+82	20.5	RT	812.40	809.00	2.07	---	---	---	---	---	1	---	---	---	1	---	---	---	SEE NOTES 1 & 2
	STH 23	272	287EB+50	32.0	LT	811.95	808.50	2.12	---	---	---	---	---	1	---	---	---	1	---	---	---	SEE NOTES 1 & 2
	STH 23	303	403EB+58	66.1	LT	834.55	830.14	3.32	1	---	---	---	---	---	1	---	---	---	---	---	---	
PROJECT 1430-00-74 TOTALS									5	3	63	1	5	2	12	4	12	2	44	1	2	
1431-02-72																						
	STH 23	211	50EB+02	1.0	LT	819.69	813.87	5.01	---	---	---	1	---	---	---	---	---	---	1	---	---	
	STH 23	212	50EB+02	9.1	LT	819.69	813.56	5.34	---	---	---	1	---	---	---	---	---	---	1	---	---	
	STH 23	216	54EB+82	1.0	LT	827.68	821.60	5.33	---	---	---	1	---	---	---	---	1	---	---	---	---	
	STH 23	217	54EB+82	7.8	LT	827.91	821.32	5.84	---	---	---	1	---	---	---	---	1	---	---	---	---	
PROJECT 1431-02-72 TOTALS									0	0	0	4	0	0	0	0	2	0	2	0	0	
TOTALS									5	3	63	5	5	2	12	4	14	2	46	1	2	

STATION AND OFFSETS ARE TO THE CENTER OF STRUCTURE OR TO THE APRON END OF ENDWALLS
PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES OR TO THE APRON END OF ENDWALLS
RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE COVER FOR MANHOLES AND MEDIAN AND FIELD INLETS
STRUCTURE DEPTH = RIM ELEVATION MINUS LOWEST INVERT PLUS PIPE THICKNESS MINUS CASTING HEIGHT MINUS ADJUSMENT RING
CASTING HEIGH EQUALS 0.7396 FT FOR TYPE J COVERS; 0 FT FOR TYPE MS COVERS; 0.5 FT FOR TYPE H-S AND HM-S COVERS; 0.8333 FT FOR TYPE B AND TYPE V COVERS
ADJUSTMENT RING HEIGHT EQUALS 0.5 FT
FLAT SLAB TOP WITH CENTERED 21"X31" RECTANGULAR OPENING REQUIRED ON ALL MANHOLES WITH TYPE WM INLET COVERS

NOTES:
1) STRUCTURE DEPTH IS TO INSIDE PIPE INVERT (DEPTH CALCULATION DOES NOT ADD PIPE THICKNESS)
2) SEE STANDARD DETAIL "CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES" FOR PLACEMENT

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

CURB & GUTTER ITEMS

PROJECT	STAGE	ROADWAY	STATION	-	STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF
1430-00-74								
	STAGE 1							
		STH 23	304WB+01	-	304WB+35	RT	---	70
		STH 23	304WB+02	-	314WB+23	RT	---	1,030
		STH 23	304EB+03	-	314EB+25	RT	---	1,030
		FOREST RIDGE RD	5FRS+50	-	9FRS+73	RT	---	445
		FOREST RIDGE RD	9FRS+18	-	9FRS+76	LT	---	90
		FOREST RIDGE RD	20FRN+27	-	20FRN+62	LT	---	55
		FOREST RIDGE RD	20FRN+25	-	20FRN+77	RT	---	85
		EASTWIND RD	9EW+19	-	9EW+73	LT	---	90
		EASTWIND RD	9EW+38	-	9EW+72	RT	---	50
		SUNNYSIDE RD	8SUN+97	-	9SUN+57	LT	---	95
		SUNNYSIDE RD	9SUN+20	-	9SUN+58	RT	---	55
		BROOKLYN J RD	10BR+26	-	10BR+64	LT	---	55
		BROOKLYN J RD	10BR+26	-	10BR+84	RT	---	95
		DEADEND RD	9DD+50	-	10DD+04	LT	---	90
		DEADEND RD	9DD+71	-	10DD+04	RT	---	55
		CTH PP	10PP+56	-	11PP+24	LT	---	110
		CTH PP	10PP+56	-	11PP+14	RT	---	95
	STAGE 1 SUBTOTALS						0	3,595
	STAGE 1A							
		STH 49	200"49N"+00	-	200"49N"+41	RT	---	70
		STH 49	201"49N"+64	-	203"49N"+25	LT	---	165
		STH 49	200"49N"+31	-	202"49N"+43	LT	---	215
		CTH A	101AN+13	-	101AN+77	LT	---	100
		CTH A	102AN+16	-	106AN+36	LT	---	475
		CTH A	102AN+56	-	106AN+17	LT	---	730
	STAGE 1A SUBTOTALS						0	1,755
	STAGE 2							
		STH 23	213EB+46	-	223EB+37	LT	---	995
		STH 23	213WB+46	-	223WB+38	RT	---	995
		STH 23	224EB+71	-	239EB+12	LT	---	1,450
		STH 23	224WB+73	-	239WB+24	RT	---	1,450
		STH 23	254EB+05	-	265EB+91	RT	---	1,190
		STH 23	263WB+48	-	280WB+00	LT	---	1,660
		STH 23	267EB+15	-	277EB+68	RT	---	1,060
		STH 23	267WB+14	-	277WB+67	LT	---	1,060
		STH 23	267EB+51	-	279EB+00	RT	---	1,150
		STH 23	294WB+24	-	302WB+26	RT	---	805
		STH 23	294EB+24	-	302EB+27	LT	---	805
		STH 23	301EB+93	-	302EB+27	LT	---	70
		NORTH ST	19N+49	-	20N+01	RT	---	70
		NORTH ST	19N+73	-	20N+00	LT	---	50
		NORTH ST	20N+78	-	21N+83	RT	---	135
		NORTH ST	21N+83	-	25N+53	RT	375	---
		NORTH ST	20N+78	-	21N+88	LT	---	130
		NORTH ST	21N+88	-	25N+03	LT	315	---
		LAWSON DR	265EB+91	-	266EB+48	LT	---	95
		LAWSON DR	266EB+84	-	267EB+51	LT	---	110
		LAWSON DR	279EB+20	-	279EB+40	LT	---	55

CURB & GUTTER ITEMS

PROJECT	STAGE	ROADWAY	STATION	-	STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF
1430-00-74								
	STAGE 2A							
		CTH A	106AS+13	-	106AS+61	LT	---	70
		STH 49	200"49S"+13	-	200"49S"+74	LT	---	110
		STH 49	200"49S"+06	-	200"49S"+25	LT	---	60
		STH 49	202"49S"+38	-	203"49S"+70	RT	---	85
		STH 49	202"49S"+67	-	203"49S"+40	LT	---	115
		STH 49	203"49S"+73	-	204"49S"+26	LT	---	85
	STAGE 2A SUBTOTALS						690	13,860
	STAGE 2B							
		CTH A	106AN+15	-	106AN+50	LT	---	50
		STH 49	200"49N"+20	-	202"49N"+20	LT	---	135
	STAGE 2B SUBTOTALS						0	185
PROJECT 1430-00-74 TOTALS							690	19,395
1431-02-72								
	STAGE 1							
		STH 23	50EB+01	-	53EB+76	RT	375	---
		STH 23	50WB+01	-	53WB+77	LT	380	---
		STH 23	53EB+47	-	9COM+02	RT	---	95
		STH 23	51EB+48	-	53B+47	RT	205	---
		STH 23	9COM+22	-	54EB+78	RT	---	60
		STH 23	54EB+78	-	57EB+55	RT	280	---
		STH 23	54EB+78	-	57EB+48	LT	270	---
		STH 23	54WB+78	-	58WB+49	RT	375	---
		STH 23	57WB+81	-	58WB+49	LT	70	---
	STAGE 1 SUBTOTALS						1,955	155
PROJECT 1431-02-72 TOTALS							1,955	155
TOTALS							2,645	19,550

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

CONCRETE ITEMS

PROJECT I.D.	ROADWAY	STATION	OFFSET	STATION	OFFSET	602.0410 CONCRETE SIDEWALK 5-INCH SF	620.0100 CONCRETE CORRUGATED MEDIAN SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
1430-00-74								
	STH 23	213EB+41	LT	---	---	---	---	50
	STH 23	223EB+37	LT	---	---	---	---	70
	STH 23	224EB+66	LT	---	---	---	---	70
	STH 23	236EB+00	LT	---	---	---	---	95
	STH 23	267EB+10	LT	---	---	---	---	70
	STH 23	277EB+68	LT	---	---	---	---	85
	STH 23	294EB+19	LT	---	---	---	---	120
	STH 23	302EB+27	LT	---	---	---	---	70
	STH 23	302EB+27	LT	---	---	---	---	70
	STH 23	303EB+98	LT	---	---	---	---	70
	STH 23	303EB+98	LT	---	---	---	---	70
	STH 23	314EB+26	LT	---	---	---	---	75
	CTH A	102AN+52	LT	---	---	---	---	70
	CTH A	106AN+23	LT	---	---	---	---	85
	CTH A	106AN+34	RT	---	---	---	---	75
	STH 49	200"49N"+26	LT	---	---	---	---	85
	STH 49	200"49N"+11	LT	---	---	---	---	75
	STH 49	203"49N"+25	LT	---	---	---	---	90
	STH 23	299EB+35	LT	301EB+93	LT	---	2,600	---
	STH 23	304EB+37	LT	307EB+17	LT	---	2,800	---
	STH 23	105AN+06	LT	106AN+28	LT	---	1,500	---
	STH 49	200"49N"+17	LT	201"49N"+09	LT	---	1,150	---
	STH 23	213EB+39	LT	214EB+86	LT	500	---	---
	STH 23	219EB+80	LT	223EB+38	LT	2,300	---	---
	STH 23	224EB+71	LT	228EB+39	LT	3,100	---	---
	STH 23	267EB+09	LT	270EB+78	LT	2,200	---	---
	STH 23	299EB+29	LT	302EB+27	LT	1,800	---	---
	STH 23	301EB+99	LT	302EB+27	LT	140	---	---
	CTH A	102AN+56	LT	106AN+18	LT	2,650	---	---
	CTH A	106AN+18	RT	106AN+34	RT	140	---	---
	STH 49	200"49N"+11	LT	200"49N"+30	LT	122	---	---
	STH 49	200"49N"+31	LT	203"49N"+24	LT	1,950	---	---
PROJECT 1430-00-74 TOTALS						14,902	8,050	1,395
1431-02-72								
	STH 23	50EB+00	RT	---	---	---	---	55
	STH 23	53EB+77	LT	---	---	---	---	80
	STH 23	54EB+73	LT	---	---	---	---	60
	STH 23	50EB+01	LT	- 53EB+76	LT	3,450	---	---
	STH 23	54EB+78	LT	- 55EB+82	LT	500	---	---
PROJECT 1431-02-72 TOTALS						3,950	0	195
TOTALS						18,852	8,050	1,590

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

PIPE UNDERDRAIN ITEMS

PROJECT I.D.	ROADWAY	STATION	-	STATION	LOCATION	612.0106 PIPE UNDERDRAIN 6-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0806 APRON ENDWALLS FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH	COMMENT
1430-00-74									
	STH 23	252WB+72	-	254WB+00	LT	130	15	1	OUTFALL 252WB+72, LT
	STH 23	254EB+00	-	257EB+00	RT	300	--	--	OUTFALL TO INLET AT 254EB+00, RT
	STH 23	254WB+00	-	257WB+00	LT	300	55	--	OUTFALL TO INLET AT 254EB+00, RT
	STH 23	257EB+00	-	260EB+00	RT	300	--	--	OUTFALL TO INLET AT 257EB+00, RT
	STH 23	257WB+00	-	260WB+00	LT	300	55	--	OUTFALL TO INLET AT 257EB+00, RT
	STH 23	260EB+00	-	262EB+90	RT	290	--	--	OUTFALL TO INLET AT 260EB+00, RT
	STH 23	260EB+00	-	262EB+90	LT	290	--	--	OUTFALL TO INLET AT 260EB+00, LT
	STH 23	260WB+00	-	262WB+90	LT	290	40	--	OUTFALL TO INLET AT 260EB+00, LT
	STH 23	262EB+90	-	265EB+90	RT	300	--	--	OUTFALL TO INLET AT 265EB+90, RT
	STH 23	262EB+90	-	265EB+90	LT	300	--	--	OUTFALL TO INLET AT 265EB+90, LT
	STH 23	262WB+90	-	265WB+90	LT	300	--	--	OUTFALL TO INLET AT 265WB+90, LT
	STH 23	265EB+90	-	268EB+90	RT	300	--	--	OUTFALL TO INLET AT 268EB+90, RT
	STH 23	265EB+90	-	268EB+90	LT	300	--	--	OUTFALL TO INLET AT 268EB+90, LT
	STH 23	265WB+90	-	268WB+90	LT	300	--	--	OUTFALL TO INLET AT 268WB+90, LT
	STH 23	268EB+90	-	272EB+00	RT	310	--	--	OUTFALL TO INLET AT 272EB+00, RT
	STH 23	268EB+90	-	272EB+00	LT	310	--	--	OUTFALL TO INLET AT 272EB+00, LT
	STH 23	268WB+90	-	272WB+00	LT	310	--	--	OUTFALL TO INLET AT 272WB+00, LT
	STH 23	272EB+00	-	275EB+00	RT	300	--	--	OUTFALL TO INLET AT 275EB+00, RT
	STH 23	272WB+00	-	275WB+00	LT	300	--	--	OUTFALL TO INLET AT 275WB+00, LT
	STH 23	275EB+00	-	277EB+66	RT	270	--	--	OUTFALL TO INLET AT 277EB+66, RT
	STH 23	275WB+00	-	277WB+66	LT	270	--	--	OUTFALL TO INLET AT 277WB+66, LT
	STH 23	277EB+66	-	278EB+98	RT	135	--	--	OUTFALL TO INLET AT 278EB+98, RT
	STH 23	277WB+66	-	278WB+98	LT	135	--	--	OUTFALL TO INLET AT 278WB+98, LT
	STH 23	278WB+98	-	280WB+15	LT	120	15	1	OUTFALL 280WB+15, LT
	STH 23	324EB+00	-	327EB+00	RT	300	15	1	OUTFALL 324EB+00, LT
	STH 23	327EB+00	-	330EB+00	RT	300	65	1	OUTFALL 326EB+75, LT
	STH 23	330EB+00	-	333EB+00	RT	300	60	1	OUTFALL 330EB+00, LT
	STH 23	333EB+00	-	336EB+00	RT	300	60	1	OUTFALL 332EB+75, LT
	STH 23	336EB+00	-	337EB+00	RT	100	60	1	OUTFALL 336EB+00, LT
	STH 23	347EB+25	-	350EB+00	RT	275	65	1	OUTFALL 347EB+25, LT
	STH 23	359EB+75	-	362EB+50	RT	275	20	1	OUTFALL 359EB+50, RT
	STH 23	382EB+50	-	385EB+50	RT	300	65	1	OUTFALL 385EB+50, LT
	STH 23	385EB+50	-	389EB+00	RT	350	35	1	OUTFALL 389EB+20, RT
	STH 23	417EB+00	-	420EB+50	RT	350	35	1	OUTFALL 420EB+70, RT
	STH 23	426EB+75	-	430EB+00	LT	325	60	1	OUTFALL 430EB+00, RT
	STH 23	453EB+00	-	457EB+00	RT	400	55	1	OUTFALL 452EB+65, RT
	STH 23	457EB+87	-	457EB+00	RT	90	65	1	OUTFALL 457EB+00, RT
	CTH A	102AN+50	-	105AN+75	RT	350	15	1	OUTFALL 105AN+75, RT
	CTH A	102AN+50	-	106AN+05	LT	355	--	--	OUTFALL TO INLET AT 106AN+05, LT
	STH 49	200"49N"+35	-	203"49N"+25	LT	290	--	--	OUTFALL TO INLET AT 203"AN"+25, LT
PROJECT 1430-00-74 TOTALS						11,120	855	16	
1431-02-72									
	STH 23	21EB+48	-	23EB+00	RT	155	--	--	AS PART OF RUN BEGINING IN GREEN LAKE 457EB+87, RT
	STH 23	32EB+00	-	35EB+50	RT	350	15	1	OUTFALL 35EB+50, RT
	STH 23	54EB+00	-	51EB+00	RT	300	20	1	OUTFALL 50EB+90, RT
	STH 23	54EB+50	-	57EB+55	RT	305	95	1	OUTFALL 54EB+50, LT
PROJECT 1431-02-72 TOTALS						1,110	130	3	
TOTALS						12,230	985	19	

NOTE: TAPPING UNDERDRAIN OUTFALLS INTO INLETS IS INCIDENTAL TO THE STORM SEWER STRUCTURE ITEM
ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

3

BEAM GUARD ITEMS

PROJECT I.D.	STAGE	ROADWAY	STATION		STATION	OFFSET	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EA	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EA	SPV.0165.02 SPRAYED ASPHALTIC SHOULDER TREATMENT SF
	STAGE 1										
		STH 23	279EB+26	-	280EB+02	LT	75	---	---	2	---
		STH 23	281EB+18	-	281EB+71	RT	--	--	1	---	785
		STH 23	281EB+18	-	283EB+09	RT	--	--	--	---	---
		STH 23	281EB+71	-	282EB+71	RT	200	--	--	---	---
		STH 23	282EB+71	-	283EB+24	RT	--	39	--	---	---
		STH 23	282EB+69	-	283EB+33	LT	--	--	1	---	---
		STH 23	282EB+69	-	283EB+59	LT	--	--	--	---	425
		STH 23	283EB+33	-	283EB+73	LT	--	39	--	---	---
		STH 23	286EB+70	-	287EB+09	RT	--	39	--	---	---
		STH 23	286EB+72	-	287EB+62	RT	--	--	--	---	425
		STH 23	287EB+09	-	287EB+62	RT	--	--	1	---	---
		STH 23	287EB+38	-	287EB+77	LT	--	39	--	---	---
		STH 23	287EB+14	-	289EB+54	LT	--	--	--	---	855
		STH 23	287EB+77	-	289EB+01	LT	125	--	--	---	---
		STH 23	289EB+01	-	289EB+54	LT	--	--	1	---	---
		STH 23	363EB+25	-	363EB+82	RT	63	---	---	2	---
	STAGE 1 SUBTOTALS						463	158	4	4	2,490
PROJECT 1430-00-74 TOTALS							463	158	4	4	2,490
1431-02-72											
	STAGE 1										
		STH 23	41WB+54	-	40WB+93	LT	63	--	--	2	---
		STH23	49WB+05	-	57WB+27	LT	822	--	--	--	--
		STH 23	48WB+53	-	49WB+06	LT	--	--	1	--	--
		STH 23	57WB+27	-	57WB+81	LT	--	--	1	--	--
		STH 23	48WB+53	-	57WB+81	LT	--	--	--	--	--
	STAGE 1 SUBTOTALS						885	0	2	2	0
PROJECT 1431-02-72 TOTALS							885	0	2	2	0
TOTALS							1,347	158	6	6	2,490

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

FENCE SAFETY

PROJECT I.D.	ROADWAY	LOCATION	616.0700.S LF
1430-00-74			
	STH 23	333EB+00 - 336EB+50 RT	350
PROJECT 1430-00-74 TOTAL			350

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

TEMPORARY DITCH

PROJECT I.D.	ROADWAY	**628.5505 POLYETHYLENE SHEETING SY	628.7570* ROCK BAGS EACH	COMMENT
1430-00-74				
	STH 23	220	220	TEMPORARY DITCH CHANNEL FOR CULVERT C-24-17
PROJECT 1430-00-74 TOTALS		220	220	
TOTALS		220	220	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE
** 9 MM POLYETHYLENE SHEETING

LANDMARK REFERENCE MONUMENTS

PROJECT I.D.	ROADWAY	621.0100 LANDMARK REFERENCE MONUMENTS EACH	SPV.0060.23 REESTABLISH SECTION CORNER MONUMENTS EACH	SPV.0105.03 REMOVING GEODETIC SURVEY MONUMENT LS
1430-00-74				
	STH 23	8	2	---
PROJECT 1430-00-74 TOTALS		8	2	0
1431-02-72				
	STH 23	---	---	1
PROJECT 1431-02-72 TOTALS		0	0	1
TOTALS		8	2	1

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

MAINTENANCE AND REPAIR OF HAUL ROADS

PROJECT I.D.	ROADWAY	618.0100.01 MAINTENACE AND REPAIR OF HAUL ROADS 1430-00-74 EACH	618.0100.02 MAINTENACE AND REPAIR OF HAUL ROADS 1431-02-72 EACH
1430-00-74			
	STH 23	1	---
PROJECT 1430-00-74 TOTAL		1	---
1431-02-72			
	STH 23	---	1
PROJECT 1431-02-72 TOTAL		---	1
TOTAL		1	1

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

TRACKING PADS

PROJECT I.D.	ROADWAY	628.7560 EACH
1430-00-74		
	STH 23	7
PROJECT 1430-00-74 TOTAL		7
1431-02-72		
	STH 23	1
PROJECT 1431-02-72 TOTAL		1
TOTAL		8

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

MOBILIZATION

PROJECT I.D.	ROADWAY	619.1000 MOBILIZATION EACH
1430-00-74		
	STH 23	0.85
PROJECT 1430-00-74 TOTAL		0.85
1431-02-72		
	STH 23	0.13
PROJECT 1431-02-72 TOTAL		0.13
*1430-00-84		
	N LAWSON DR	0.02
PROJECT 1430-00-84 TOTAL		0.02
TOTAL		1.00

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
*FOR INFORMATION ONLY

MOBILIZATION EROSION CONTROL

PROJECT I.D.	ROADWAY	628.1905 MOBILIZATION EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH
1430-00-74			
	STH 23	2	4
PROJECT 1430-00-74 TOTAL		2	4
1431-02-72			
	STH 23	1	2
PROJECT 1431-02-72 TOTAL		1	2
TOTAL		3	6

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

EROSION CONTROL ITEMS

PROJECT I.D.	STAGE	ROADWAY	606.0200 RIPRAP MEDIUM CY	606.0300 RIPRAP HEAVY CY	628.1104 EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2002 EROSION MAT CLASS 1 TYPE A SY	628.2004 EROSION MAT CLASS 1 TYPE B SY	628.2006 EROSION MAT URBAN CLASS 1 TYPE A SY	628.6005 TURBIDITY BARRIER SY
1430-00-74											
	STAGE 1										
		STH23	265	---	1,510	15,050	15,050	6,000	2,900	1,250	---
		MOBILE HOME DRIVEWAY	10	---	---	535	535	---	---	---	---
		FOREST RIDGE ROAD	225	---	---	64	64	1,500	---	---	---
		EASTWIND ROAD	7	---	---	245	245	---	---	---	---
		SUNNYSIDE ROAD	8	---	---	72	72	110	---	---	---
		BROOKLYN J ROAD	7	---	---	205	205	---	---	---	---
		CTH PP	4	---	---	---	---	---	---	---	---
		DEAD END ROAD	4	---	---	230	230	---	---	---	---
	STAGE 1 SUBTOTALS		530	0	1,510	16,401	16,401	7,610	2,900	1,250	0
	STAGE 2										
		STH 23	765	460	106	6,050	6,050	10,500	6,650	5,200	610
		WEST JUNCTION CTH A	4	---	---	240	240	---	130	---	---
		NORTH STREET	7	---	---	315	315	---	---	530	---
		STH 49	15	---	190	945	945	---	---	---	---
		CTH A	46	---	---	105	105	---	860	260	---
	STAGE 2 SUBTOTALS		837	460	296	7,655	7,655	10,500	7,640	5,990	610
	UNDISTRIBUTED		342	115	452	6,014	6,014	4,528	2,635	1,810	153
PROJECT 1430-00-74 TOTALS			1,709	575	2,258	30,070	30,070	22,638	13,175	9,050	763
1431-02-72											
	STAGE 1										
		STH 23	65	---	395	2,530	2,530	2,700	1,050	---	---
		COMORN ROAD	---	---	---	---	---	---		---	---
	UNDISTRIBUTED		16	0	99	633	633	675	263	0	0
PROJECT 1431-02-72 TOTALS			81	0	494	3,163	3,163	3,375	1,313	0	0
TOTALS			1,790	575	2,751	33,233	33,233	26,013	14,488	9,050	763

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

EROSION CONTROL ITEMS (CONTINUED)

PROJECT I.D.	STAGE	ROADWAY	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7020 INLET PROTECTION TYPE D EACH	628.7504 TEMPORARY DITCH CHECK LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570* ROCK BAGS EACH	645.0120 GEOTEXTILE FABRIC TYPE HR SY	SPV.0090.07 ROCK BAGS DITCH CHECK LF
1430-00-74										
	STAGE 1									
		STH23	8	---	8	140	39	320	530	140
		MOBILE HOME DRIVEWAY	--	---	---	---	2	---	20	---
		FOREST RIDGE ROAD	1	1	---	---	4	---	450	---
		EASTWIND ROAD	---	---	---	---	---	---	15	---
		SUNNYSIDE ROAD	---	---	---	---	2	---	20	---
		BROOKLYN J ROAD	---	---	---	---	---	---	15	---
		CTH PP	---	---	---	---	---	---	8	---
		DEAD END ROAD	---	---	---	8	---	---	8	---
	STAGE 1 SUBTOTALS		9	1	8	148	47	320	1,066	140
	STAGE 2									
		STH 23	52	1	51	240	10	112	2,240	180
		WEST JUNCTION CTH A	---	---	---	48	1	---	8	---
		NORTH STREET	1	---	1	24	---	---	15	---
		STH 49	---	---	---	24	2	48	30	25
		CTH A	5	---	5	---	5	---	95	---
	STAGE 2 SUBTOTALS		58	1	57	336	18	160	2,388	205
	UNDISTRIBUTED		17	1	16	121	16	120	896	86
PROJECT 1430-00-74 TOTALS			84	3	81	605	81	600	4,350	431
1431-02-72										
	STAGE 1									
		STH 23	4	---	4	32	4	80	130	100
		COMORN ROAD	--	---	---	---	---	---	---	---
	UNDISTRIBUTED		1	0	1	8	1	20	35	25
PROJECT 1431-02-72 TOTALS			5	0	5	40	5	100	165	125
TOTALS			89	3	86	645	86	700	4,515	556

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

RESTORATION ITEMS

PROJECT I.D.	ROADWAY	STAGE	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0205 FERTILIZER TYPE A CWT	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0170 SEEDING MIXTURE NO. 70 LB	630.0200 SEEDING TEMPORARY LB	SPV.0120.01 WATER FOR SEEDED AREAS MGAL
1430-00-74												
	STH 23	STAGE 1	136,700	125,000	--	86	--	1,110	615	150	--	3,100
	STH 23	STAGE 2	116,500	92,450	--	74	--	945	525	125	--	2,620
	WASTE SITE		--	--	18	--	135	--	--	--	135	115
PROJECT 1430-00-74 TOTALS			253,200	217,450	18	160	135	2,055	1,140	275	135	5,835
1431-02-72												
	STH 23	STAGE 1	23,900	20,150	--	15	--	195	110	25	--	536
PROJECT 1431-02-72 TOTALS			23,900	20,150	--	15	--	195	110	25	--	536
TOTALS			277,100	237,600	18	175	135	2,250	1,250	300	135	6,371

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

PERMANENT SIGNING

PROJECT I.D.	ROADWAY	SIGN NO.	CODE NO.	SIGN MESSAGE	COMMENTS	SIGN SIZE INCH X INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230* SIGNS TYPE II REFLECTIVE F SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	STATION	LOCATION	SAME POST AS SIGN NO.	634.0614* POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH
1430-00-74															
	STH 23	1P01	W6-1	DIVIDED HIGHWAY AHEAD	---	36 X 36	---	9.00	---	206EB+50	RT	---	1	---	---
	STH 23	1P02	W6-3	TWO WAY TRAFFIC	---	36 X 36	---	9.00	---	209EB+50	LT	---	1	---	---
	STH 23	1P03	J1-1	JUNCTION ASSEMBLY	---	24 X 39	6.50	---	---	213EB+40	RT	---	1	---	---
	STH 23		M2-1	JCT	---	21 X 15	---	---	---	213EB+40	RT	---	---	---	---
	STH 23		M1-5A	COUNTY MARKER	A	24 X 24	---	---	---	213EB+40	RT	---	---	---	---
	STH 23	1P04	R5-1	DO NOT ENTER	---	36 X 36	9.00	---	---	214EB+60	LT	---	1	---	---
	STH 23	1P05	R4-7	KEEP RIGHT	---	36 X 48	12.00	---	---	214EB+60	LT	---	1	---	---
	STH 23	1P06	W5-54	CLEARANCE MARKER YELLOW	---	18 X 18	---	2.25	---	214EB+60	LT	1P05	---	---	---
	STH 23	1P07	R3-8W	LANE DESIGNATION LO SO RO	---	54 X 30	11.25	---	---	216EB+50	RT	---	2	---	---
	STH 23	1P08	R3-20L	BEGIN LEFT TURN LANE	---	24 X 36	6.00	---	---	218EB+28	LT	---	1	---	---
	STH 23	1P09	R3-20R	BEGIN RIGHT TURN LANE	---	24 X 36	6.00	---	---	218EB+50	RT	---	1	---	---
	STH 23	1P10	R5-1A	WRONG WAY	---	42 X 30	8.75	---	---	219EB+15	LT	---	1	---	---
	STH 23	1P11	W6-2	DIVIDED HIGHWAY ENDS	---	36 X 36	---	9.00	---	219EB+15	LT	1P10	---	---	---
	STH 23	1P12	R5-1A	WRONG WAY	---	36 X 24	6.00	---	---	221EB+00	RT	---	1	---	---
	STH 23	1P13	J13-1	DIRECTIONAL WO CARDINAL	---	24 X 45	7.50	---	---	223EB+15	RT	---	1	---	---
	STH 23		M1-5A	COUNTY MARKER	A	24 X 24	---	---	---	223EB+15	RT	---	---	---	---
	STH 23		M6-6	DIRECTIONAL ARROW LAUA COMB	---	21 X 21	---	---	---	223EB+15	RT	---	---	---	---
	STH 23	1M14	---	ADOPT A HIGHWAY	---	--- X ---	---	---	---	229EB+00	RT	---	1	---	1
	STH 23	1P15	R4-7	KEEP RIGHT	---	24 X 30	5.00	---	---	223EB+32	LT	---	1	---	---
	STH 23	1P16	R6-2L	ONE WAY	---	24 X 30	5.00	---	---	223EB+32	LT	---	1	---	---
	STH 23	1P17	W11-6	SNOWMOBILE CROSSING	---	30 X 30	---	6.25	---	223EB+55	LT	---	1	---	---
	STH 23	1P18	W11-6	SNOWMOBILE CROSSING	---	30 X 30	---	6.25	---	224EB+58	LT	---	1	---	---
	STH 23	1P19	R6-2L	WRONG WAY	---	24 X 30	5.00	---	---	224EB+75	RT	---	1	---	---
	STH 23	1P20	R4-7	KEEP RIGHT	---	24 X 30	5.00	---	---	224EB+75	LT	---	1	---	---
	STH 23	1P21	R5-1	DO NOT ENTER	---	30 X 30	6.25	---	---	224EB+85	LT	---	1	---	---
	STH 23	1P22	J13-1	DIRECTIONAL WO CARDINAL	---	24 X 45	7.50	---	---	224EB+85	LT	1P21	---	---	---
	STH 23		M1-5A	COUNTY MARKER	A	24 X 24	---	---	---	224EB+85	LT	---	---	---	---
	STH 23		M6-1	ARROW RT	---	21 X 21	---	---	---	224EB+85	LT	---	---	---	---
	STH 23	1P23	R5-1A	WRONG WAY	---	36 X 24	6.00	---	---	227EB+00	LT	---	1	---	---
	STH 23	1P24	J1-1	JUNCTION ASSEMBLY	---	24 X 39	6.50	---	---	227EB+00.	RT	---	1	---	---
	STH 23		M3-2	EAST	---	24 X 12	---	---	---	227EB+00.	RT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	227EB+00.	RT	---	---	---	---
	STH 23	1P25	R3-20R	BEGIN RIGHT TURN LANE	---	24 X 36	6.00	---	---	229EB+70	LT	---	1	---	---
	STH 23	1P26	R3-20L	BEGIN LEFT TURN LANE	---	24 X 36	6.00	---	---	229EB+85	LT	---	1	---	---
	STH 23	1P27	R3-8W	LANE DESIGNATION LO SO RO	---	54 X 30	11.25	---	---	231EB+50	LT	---	2	---	---
	STH 23	1P28	W6-2	DIVIDED HIGHWAY ENDS	---	36 X 36	---	9.00	---	232EB+00	RT	---	1	---	---
	STH 23	1P29	R5-1A	WRONG WAY	---	42 X 30	8.75	---	---	232EB+00	RT	1P28	---	---	---
	STH 23	1P30	D1-1	NORTH ST	---	66 X 15	6.88	---	---	218EB+50	RT	---	2	---	---
	STH 23	1P31	D1-1	NORTH ST	---	66 X 15	6.88	---	---	229EB+70	LT	---	2	---	---
	STH 23	1P32	R5-1	DO NOT ENTER	---	30 X 30	6.25	---	---	223EB+15	RT	1P13	---	---	---
	STH 23	2P01	R2-1	SPEED LIMIT	55 MPH	24 X 30	5.00	---	---	236EB+00	RT	---	1	---	---
	STH 23	2P02	R5-1	DO NOT ENTER	---	36 X 36	9.00	---	---	236EB+00	RT	2P01	---	---	---
	STH 23	2P03	J1-1	JUNCTION ASSEMBLY	---	24 X 39	6.50	---	---	236EB+00	LT	---	1	---	---
	STH 23		M2-1	JCT	---	21 X 15	---	---	---	236EB+00	LT	---	---	---	---
	STH 23		M1-5A	COUNTY MARKER	A	24 X 24	---	---	---	236EB+00	LT	---	---	---	---
	STH 23	2P04	R4-7	KEEP RIGHT	---	36 X 48	12.00	---	---	236EB+00	LT	---	1	---	---
	STH 23	2P05	W5-54	CLEARANCE MARKER YELLOW	---	18 X 18	---	2.25	---	236EB+00	LT	2P05	---	---	---
	STH 23	2P06	W6-3	TWO WAY TRAFFIC	---	36 X 36	---	9.00	---	240EB+50	RT	---	1	---	---
	STH 23	2P07	W6-1	DIVIDED HIGHWAY AHEAD	---	36 X 36	---	9.00	---	241EB+40	LT	---	1	---	---
	STH 23	2P08	W3-5	SPEED LIMIT AHEAD	45 MPH	36 X 36	---	9.00	---	246EB+50	RT	---	---	---	---

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

(CONTINUED FROM PREVIOUS PAGE)

PERMANENT SIGNING

PROJECT I.D.	ROADWAY	SIGN NO.	CODE NO.	SIGN MESSAGE	COMMENTS	SIGN SIZE INCH X INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230* SIGNS TYPE II REFLECTIVE F SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	STATION	LOCATION	SAME POST AS SIGN NO.	634.0614* POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH
1430-00-74	STH 23	2P09	W4-2R	LANE REDUCTION TRANSITION	---	36 X 36	---	9.00	---	256EB+10	LT	---	1	---	---
	STH 23	2P10	R2-1	SPEED LIMIT	55 MPH	24 X 30	5.00	---	---	251EB+50	LT	---	1	---	---
	STH 23	2P11	R2-1	SPEED LIMIT	45 MPH	24 X 30	5.00	---	---	251EB+50	RT	---	1	---	---
	STH 23	2P12	D1-56SR	BUSINESS DISTRICT	---	66 X 24	11.00	---	---	259EB+50	RT	---	2	---	---
	STH 23	2P13	W9-1R	BEGIN RIGHT TURN LANE	---	24 X 36	---	6.00	---	261EB+00	RT	---	1	---	---
	STH 23	2P14	R3-20R	RIGHT LANE ENDS	---	30 X 30	6.25	---	---	261EB+10	LT	---	1	---	---
	STH 23	3P01	R5-1A	WRONG WAY	---	36 X 24	6.00	---	---	263EB+00	RT	---	1	---	---
	STH 23	3P02	R5-1	DO NOT ENTER	---	30 X 30	6.25	---	---	265EB+60	RT	---	1	---	---
	STH 23	3P03	R6-2L	ONE WAY	---	24 X 30	5.00	---	---	266EB+55	LT	---	1	---	---
	STH 23	3P04	R4-7	KEEP RIGHT	---	36 X 48	12.00	---	---	267EB+25	RT	---	1	---	---
	STH 23	3P05	W5-54	CLEARANCE MARKER YELLOW	---	18 X 18	---	2.25	---	267EB+25	RT	3P04	---	---	---
	STH 23	3P06	R5-1	DO NOT ENTER	---	36 X 36	9.00	---	---	267EB+50	LT	---	1	---	---
	STH 23	3P07	R5-1A	WRONG WAY	---	42 X 30	8.75	---	---	270EB+50	LT	---	1	---	---
	STH 23	3P08	R2-1	SPEED LIMIT	45MPH	24 X 30	5.00	---	---	270EB+55	RT	---	1	---	---
	STH 23	3P09	R3-20L	BEGIN LEFT TURN LANE	---	24 X 36	6.00	---	---	272EB+25	LT	---	1	---	---
	STH 23	3P10	M1-85	WISCONSIN HERITAGE TRAIL	---	24 X 24	4.00	---	---	272EB+50	LT	---	1	---	---
	STH 23	3P11	M1-85C	WISCONSIN HERITAGE TRAIL	DARTFORD HIST. SOCIETY	24 X 12	2.00	---	---	272EB+50	LT	---	---	---	---
	STH 23	3P12	M1-85C	WISCONSIN HERITAGE TRAIL	THRASHER'S OPERA HOUSE #282	24 X 12	2.00	---	---	272EB+50	LT	---	---	---	---
	STH 23	3P13	W6-2	DIVIDED HIGHWAY ENDS	---	36 X 36	---	9.00	---	273EB+50	RT	---	1	---	---
	STH 23	3P14	R5-1A	WRONG WAY	---	42 X 30	8.75	---	---	273EB+50	RT	3P14	---	---	---
	STH 23	3P15	D1-56SL	BUSINESS DISTRICT	---	66 X 24	11.00	---	---	274EB+50	LT	---	2	---	---
	STH 23	3P16	R5-1A	DO NOT ENTER	---	36 X 36	9.00	---	---	277EB+50	RT	---	1	---	---
	STH 23	3P17	W5-56	END OF ROAD MARKER	---	18 X 18	---	2.25	---	277EB+10	RT	---	1	---	---
	STH 23	3P18	W5-56	END OF ROAD MARKER	---	18 X 18	---	2.25	---	277EB+25	RT	---	1	---	---
	STH 23	3P19	W5-56	END OF ROAD MARKER	---	18 X 18	---	2.25	---	277EB+40	RT	---	1	---	---
	STH 23	3P20	R4-7	KEEP RIGHT	---	36 X 48	12.00	---	---	277EB+70	LT	---	1	---	---
	STH 23	3P21	W5-54	CLEARANCE MARKER YELLOW	---	18 X 18	---	2.25	---	277EB+70	LT	3P20	---	---	---
	STH 23	3P22	W5-56	END OF ROAD MARKER	---	18 X 18	---	2.25	---	279EB+40	LT	---	1	---	---
	STH 23	3P23	W5-56	END OF ROAD MARKER	---	18 X 18	---	2.25	---	279EB+55	LT	---	1	---	---
	STH 23	3P24	W5-56	END OF ROAD MARKER	---	18 X 18	---	2.25	---	279EB+70	LT	---	1	---	---
	STH 23	3P25	J1-1	JUNCTION ASSEMBLY	---	24 X 39	6.50	---	---	280EB+00	RT	---	1	---	---
	STH 23		M3-2	EAST	---	24 X 12	---	---	---	280EB+00	RT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	280EB+00	RT	---	---	---	---
	STH 23	3P26	W6-1	DIVIDED HIGHWAY AHEAD	---	36 X 36	---	9.00	---	281EB+00	LT	---	1	---	---
	STH 23	3M27	---	ADOPT A HIGHWAY	---	--- X ---	---	---	---	292EB+00	LT	---	1	---	1
	STH 23	3P28	I3-1	PUCHYAN RIVER	---	78 X 15	8.13	---	---	283EB+15	RT	---	2	---	---
	STH 23	3P29	I3-1	PUCHYAN RIVER	---	78 X 15	8.13	---	---	287EB+15	LT	---	2	---	---
	STH 23	3P30	J1-1	JUNCTION ASSEMBLY	---	24 X 39	6.50	---	---	288EB+50	RT	---	1	---	---
	STH 23	3P31	W6-1	DIVIDED HIGHWAY AHEAD	---	36 X 36	---	9.00	---	290EB+75	RT	---	1	---	---
	STH 23	3P32	J2-4	ROUTE TURN ASSEMBLY	---	96 X 57	38.00	---	---	292EB+50	RT	---	2	---	---
	STH 23		M3-1	NORTH	---	24 X 12	---	---	---	292EB+50	RT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	49	24 X 24	---	---	---	292EB+50	RT	---	---	---	---
	STH 23		M5-1L	ADVANCE ARROW LT TURN	---	21 X 21	---	---	---	292EB+50	RT	---	---	---	---
	STH 23		M3-2	EAST	---	24 X 12	---	---	---	292EB+50	RT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	292EB+50	RT	---	---	---	---
	STH 23		M6-1A	ARROW AHEAD	---	21 X 21	---	---	---	292EB+50	RT	---	---	---	---
	STH 23		M3-3	SOUTH	---	24 X 12	---	---	---	292EB+50	RT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	49	24 X 24	---	---	---	292EB+50	RT	---	---	---	---

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

(CONTINUED FROM PREVIOUS PAGE)

PERMANENT SIGNING

PROJECT I.D.	ROADWAY	SIGN NO.	CODE NO.	SIGN MESSAGE	COMMENTS	SIGN SIZE INCH X INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230* SIGNS TYPE II REFLECTIVE F SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	STATION	LOCATION	SAME POST AS SIGN NO.	634.0614* POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH
1430-00-74	STH 23		M6-1A	ARROW AHEAD	---	21 X 21	---	---	---	292EB+50	RT	---	---	---	---
	STH 23		M1-5A	COUNTY MARKER	A	24 X 24	---	---	---	292EB+50	RT	---	---	---	---
	STH 23		M5-1R	ADVANCE ARROW RT TURN	---	21 X 21	---	---	---	292EB+50	RT	---	---	---	---
	STH 23	4P01	R6-2L	ONE WAY	---	24 X 30	5.00	---	---	293EB+75	LT	---	1	---	---
	STH 23	4P02	R4-7	KEEP RIGHT	---	36 X 48	12.00	---	---	294EB+30	LT	---	1	---	---
	STH 23	4P03	W5-54	CLEARANCE MARKER YELLOW	---	18 X 18	---	2.25	---	294EB+30	LT	4P02	---	---	---
	STH 23	4P04	R3-8W	LANE DESIGNATION LO SO RO	---	54 X 30	11.25	---	---	294EB+50	RT	---	2	---	---
	STH 23	4P05	J13-1	DIRECTIONAL WO CARDINAL	---	24 X 45	7.50	---	---	294EB+50	RT	---	1	---	---
	STH 23		W54-59	HOSPITAL	---	30 X 30	---	---	---	294EB+50	RT	---	---	---	---
	STH 23		M6-6	ADVANCE ARROW LAUA COMB	---	21 X 21	---	---	---	294EB+50	RT	---	---	---	---
	STH 23	4P06	D1-2	RIPON/BERLIN	---	54 X 30	11.25	---	---	296EB+00	RT	---	2	---	---
	STH 23	4P07	R3-20L	BEGIN LEFT TURN LANE	---	24 X 36	6.00	---	---	296EB+46	LT	---	1	---	---
	STH 23	4P08	W6-2	DIVIDED HIGHWAY ENDS	---	36 X 36	---	9.00	---	297EB+00	LT	---	1	---	---
	STH 23	4P09	R2-1	SPEED LIMIT	45MPH	24 X 30	5.00	---	---	296EB+00	LT	---	1	---	---
	STH 23	4P10	W3-3	SIGNAL LIGHTS AHEAD	---	36 X 36	---	9.00	---	297EB+00	RT	---	1	---	---
	STH 23	4P11	R3-20R	BEGIN RIGHT TURN LANE	---	24 X 36	6.00	---	---	297EB+50	RT	---	1	---	---
	STH 23	4P12	D2-1	PRINCETON 10	---	78 X 15	8.13	---	---	299EB+00	LT	---	2	---	---
	STH 23	4P13	R5-1A	WRONG WAY	---	42 X 30	8.75	---	---	299EB+50	RT	---	1	---	---
	STH 23	4P14	J4-1	REASSURANCE ASSEMBLY	---	24 X 36	6.00	---	---	300EB+50	LT	---	1	---	---
	STH 23		M3-4	WEST	---	24 X 12	---	---	---	300EB+50	LT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	300EB+50	LT	---	---	---	---
	STH 23	4P15	R1-1F	FOLDING STOP SIGN	---	36 X 36	---	---	9.00	302EB+25	RT	BAND TO POLE	---	---	---
	STH 23	4P16	J2-2	ROUTE TURN ASSEMBLY	---	48 X 57	19.00	---	---	302EB+25	RT	---	1	---	---
	STH 23		M3-1	NORTH	---	24 X 12	---	---	---	302EB+25	RT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	49	24 X 24	---	---	---	302EB+25	RT	---	---	---	---
	STH 23		M6-1	ARROW LT	---	21 X 21	---	---	---	302EB+25	RT	---	---	---	---
	STH 23		M1-5A	COUNTY MARKER	A	24 X 24	---	---	---	302EB+25	RT	---	---	---	---
	STH 23		M6-1	ARROW RT	---	21 X 21	---	---	---	302EB+25	RT	---	---	---	---
	STH 23	4P17	R5-1	DO NOT ENTER	---	36 X 36	9.00	---	---	302EB+25	RT	BAND TO POLE	---	---	---
	STH 23	4P18	R1-1F	FOLDING STOP SIGN	---	36 X 36	---	---	9.00	302EB+25	LT	BAND TO POLE	---	---	---
	STH 23	4P19	R4-7	KEEP RIGHT	---	24 X 30	5.00	---	---	302EB+25	LT	BAND TO POLE	---	---	---
	STH 23	4P20	R6-2L	ONE WAY	---	24 X 30	5.00	---	---	302EB+30	LT	BAND TO POLE	---	---	---
	STH 23	4P21	R5-1	DO NOT ENTER	---	36 X 36	9.00	---	---	304EB+25	LT	BAND TO POLE	---	---	---
	STH 23	4P22	J2-2	DIRECTIONAL ASSEMBLY	---	48 X 57	19.00	---	---	304EB+25	LT	---	---	1	---
	STH 23		M1-5A	COUNTY MARKER	A	24 X 24	---	---	---	304EB+25	LT	---	---	---	---
	STH 23		M6-6	ADVANCE ARROW LAUA COMB	---	21 X 21	---	---	---	304EB+25	LT	---	---	---	---
	STH 23		M3-1	NORTH	---	24 X 12	---	---	---	304EB+25	LT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	49	24 X 24	---	---	---	304EB+25	LT	---	---	---	---
	STH 23		M6-1	ARROW RT	---	21 X 21	---	---	---	304EB+25	LT	---	---	---	---
	STH 23	4P23	R1-1F	FOLDING STOP SIGN	---	36 X 36	---	---	9.00	304EB+25	LT	BAND TO POLE	---	---	---
	STH 23	4M24	---	ADOPT A HIGHWAY	---	--- X ---	---	---	---	308EB+00	RT	---	1	---	1
	STH 23	4P25	R6-2L	ONE WAY	---	24 X 30	5.00	---	---	304EB+25	RT	---	1	---	---
	STH 23	4P26	R4-7	KEEP RIGHT	---	24 X 30	5.00	---	---	304EB+25	RT	BAND TO POLE	---	---	---
	STH 23	4P27	R1-1F	FOLDING STOP SIGN	---	36 X 36	---	---	9.00	304EB+25	RT	BAND TO POLE	---	---	---
	STH 23	4P28	J4-2	REASSURANCE ASSEMBLY	---	48 X 36	12.00	---	---	306EB+00	RT	---	1	---	---
	STH 23		M3-2	EAST	---	24 X 12	---	---	---	306EB+00	RT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	306EB+00	RT	---	---	---	---
	STH 23		M3-3	SOUTH	---	24 X 12	---	---	---	306EB+00	RT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	49	24 X 24	---	---	---	306EB+00	RT	---	---	---	---
	STH 23	4P29	R5-1A	WRONG WAY	---	42 X 30	8.75	---	---	306EB+10	LT	---	1	---	---

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

(CONTINUED FROM PREVIOUS PAGE)

3

PERMANENT SIGNING

PROJECT I.D.	ROADWAY	SIGN NO.	CODE NO.	SIGN MESSAGE	COMMENTS	SIGN SIZE INCH	X	INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230* SIGNS TYPE II REFLECTIVE F SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	STATION	LOCATION	SAME POST AS SIGN NO.	634.0614* POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH
1430-00-74	STH 23	4P30	D1-2	PRINCETON/BERLIN	---	72	X	30	15.00	---	---	307EB+60	LT	---	2	---	---
	STH 23	4P31	R3-20R	BEGIN RIGHT TURN LANE	---	24	X	36	6.00	---	---	309EB+00	LT	---	1	---	---
	STH 23	4P32	W3-3	SIGNAL LIGHTS AHEAD	---	36	X	36	---	9.00	---	309EB+50	LT	---	1	---	---
	STH 23	4P33	W6-2	DIVIDED HIGHWAY ENDS	---	36	X	36	---	9.00	---	310EB+00	RT	---	1	---	---
	STH 23	4P34	R5-1A	WRONG WAY	---	42	X	30	8.75	---	---	310EB+00	RT	4P33	---	---	---
	STH 23	4P35	R3-20L	BEGIN LEFT TURN LANE	---	24	X	36	6.00	---	---	310EB+25	RT	---	1	---	---
	STH 23	4P36	R3-8W	LANE DESIGNATION LO SO RO	---	54	X	30	11.25	---	---	311EB+25	LT	---	2	---	---
	STH 23	4P37	D2-1	RIPON 6	---	54	X	15	5.63	---	---	312EB+00	RT	---	2	---	---
	STH 23	4P38	J2-3	ROUTE TURN ASSEMBLY	---	72	X	57	28.50	---	---	313EB+50	LT	---	---	2	---
	STH 23		M1-5A	COUNTY MARKER	A	24	X	24	---	---	---	313EB+50	LT	---	---	---	---
	STH 23		M6-6	DIRECTIONAL ARROW LAUA COMB	---	21	X	21	---	---	---	313EB+50	LT	---	---	---	---
	STH 23		M3-4	WEST	---	24	X	12	---	---	---	313EB+50	LT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	23	24	X	24	---	---	---	313EB+50	LT	---	---	---	---
	STH 23		M6-1	ARROW AHEAD	---	21	X	21	---	---	---	313EB+50	LT	---	---	---	---
	STH 23		M3-1	NORTH	---	24	X	12	---	---	---	313EB+50	LT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	49	24	X	24	---	---	---	313EB+50	LT	---	---	---	---
	STH 23		M5-1R	ADVANCE ARROW RT	---	21	X	21	---	---	---	313EB+50	LT	---	---	---	---
	STH 23	4P39	R4-7	KEEP RIGHT	---	36	X	48	12.00	---	---	313EB+75	LT	---	1	---	---
	STH 23	4P40	W5-54	CLEARANCE MARKER YELLOW	---	18	X	18	---	2.25	---	313EB+75	LT	4P39	---	---	---
	STH 23	4P41	R5-1	DO NOT ENTER	---	36	X	36	9.00	---	---	313EB+75	RT	---	1	---	---
	STH 23	4P42	R2-1	SPEED LIMIT	55 MPH	24	X	30	5.00	---	---	316EB+00	RT	---	1	---	---
	STH 23	4P43	R2-1	SPEED LIMIT	45 MPH	24	X	30	5.00	---	---	316EB+00	LT	---	1	---	---
	STH 23	4P44	J1-1	JUNCTION ASSEMBLY	---	24	X	39	6.50	---	---	319EB+00	LT	---	1	---	---
	STH 23		M2-1	JCT	---	21	X	15	---	---	---	319EB+00	LT	---	---	---	---
	STH 23		M1-5A	COUNTY MARKER	A	24	X	24	---	---	---	319EB+00	LT	---	---	---	---
	STH 23	4P45	W3-5	SPEED LIMIT AHEAD	45 MPH	36	X	36	---	9.00	---	321EB+50	LT	---	---	---	---
	STH 23	4P46	W14-3	NO PASSING ZONE	---	48	X	36	---	6.00	---	322EB+00	RT	---	1	---	---
	STH 23	5P01	W2-1	CROSSROAD	---	30	X	30	---	6.25	---	336EB+50	RT	---	1	---	---
	STH 23	5P02	W14-3	NO PASSING ZONE	---	48	X	36	---	6.00	---	341EB+50	LT	---	1	---	---
	STH 23	5M03	---	ADOPT A HIGHWAY	---	---	X	---	---	---	---	345EB+00	LT	---	1	---	1
	STH 23	5P04	D1-61	FOREST RIDGE RD	---	90	X	24	15.00	---	---	341EB+50	RT	---	2	---	---
	STH 23	5P05	D1-61	FOREST RIDGE RD	---	90	X	24	15.00	---	---	341EB+50	RT	---	2	---	---
	STH 23	5P06	R2-1	SPEED LIMIT	55 MPH	24	X	30	5.00	---	---	352EB+00	RT	---	1	---	---
	STH 23	5P07	W14-3	NO PASSING ZONE	---	48	X	36	---	6.00	---	352EB+00	RT	5P06	1	---	---
	STH 23	6P01	W14-3	NO PASSING ZONE	---	48	X	36	---	6.00	---	355EB+50	LT	---	1	---	---
	STH 23	6P02	W2-1	CROSS ROAD	---	30	X	30	---	6.25	---	357EB+00	LT	---	1	---	---
	STH 23	6P03	W5-56	END OF ROAD MARKER	---	18	X	18	---	2.25	---	363EB+40	RT	---	1	---	---
	STH 23	6P04	W5-56	END OF ROAD MARKER	---	18	X	18	---	2.25	---	363EB+50	RT	---	1	---	---
	STH 23	6P05	W5-56	END OF ROAD MARKER	---	18	X	18	---	2.25	---	363EB+60	RT	---	1	---	---
	STH 23	6P06	D1-1	EASTWIND RD	---	84	X	15	8.75	---	---	372EB+75	RT	---	2	---	---
	STH 23	6P07	W1-7	DOUBLE NIGHT ARROW	---	48	X	24	---	8.00	---	378EB+65	LT	---	1	---	---
	EASTWIND RD	6P08	R1-1	STOP	---	30	X	30	6.25	---	---	9EW+40	RT	---	1	---	---
	EASTWIND RD	6P09	J12-2	ROUTE TURN WO CARDINAL	---	48	X	45	15.00	---	---	9EW+40	RT	---	1	---	---
	EASTWIND RD		M1-6	STATE ROUTE MARKER	23	24	X	24	---	---	---	9EW+40	RT	---	---	---	---
	EASTWIND RD		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	9EW+40	RT	---	---	---	---
	EASTWIND RD		M1-6	STATE ROUTE MARKER	49	24	X	24	---	---	---	9EW+40	RT	---	---	---	---
	EASTWIND RD		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	9EW+40	RT	---	---	---	---
	STH 23	7P01	D1-1	EASTWIND RD	---	84	X	15	8.75	---	---	384EB+00	LT	---	2	---	---
	STH 23	7P02	W14-3	NO PASSING ZONE	---	48	X	36	---	6.00	---	394EB+50	LT	---	1	---	---
	STH 23	7P03	D1-1	SUNNYSIDE RD	---	84	X	15	8.75	---	---	397EB+00	RT	---	2	---	---

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

(CONTINUED FROM PREVIOUS PAGE)

PERMANENT SIGNING

PROJECT I.D.	ROADWAY	SIGN NO.	CODE NO.	SIGN MESSAGE	COMMENTS	SIGN SIZE INCH	X	INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230* SIGNS TYPE II REFLECTIVE F SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	STATION	LOCATION	SAME POST AS SIGN NO.	634.0614* POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH
1430-00-74	SUNNYSIDE RD	7P04	R2-1	SPEED LIMIT	45 MPH	24	X	30	5.00	---	---	7SUN+95	LT	---	1	---	---
	SUNNYSIDE RD	7M05	---	WEIGHT LIMIT 10 TONS	---	---	X	---	---	---	---	7SUN+95	LT	7P04	---	---	1
	SUNNYSIDE RD	7P06	R1-1	STOP	---	30	X	30	6.25	---	---	9SUN+25	RT	---	1	---	---
	SUNNYSIDE RD	7P07	J12-2	ROUTE TURN WO CARDINAL	---	48	X	45	15.00	---	---	9SUN+25	RT	---	---	1	---
	SUNNYSIDE RD		M1-6	STATE ROUTE MARKER	---	24	X	24	---	---	---	9SUN+25	RT	---	---	---	---
	SUNNYSIDE RD		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	9SUN+25	RT	---	---	---	---
	SUNNYSIDE RD		M1-6	STATE ROUTE MARKER	---	24	X	24	---	---	---	9SUN+25	RT	---	---	---	---
	SUNNYSIDE RD		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	9SUN+25	RT	---	---	---	---
	STH 23	7P08	W1-7	DOUBLE NIGHT ARROW	---	48	X	24	---	8.00	---	402EB+10	LT	---	1	---	---
	STH 23	7P09	D1-1	SUNNYSIDE RD	---	84	X	15	8.75	---	---	408EB+00	LT	---	2	---	---
	STH 23	8P01	W14-3	NO PASSING ZONE	---	48	X	36	---	6.00	---	422EB+75	LT	---	1	---	---
	STH 23	8P02	W14-3	NO PASSING ZONE	---	48	X	36	---	6.00	---	424EB+75	RT	---	1	---	---
	STH 23	8P03	D1-1	BROOKLYN J RD	---	96	X	15	10.00	---	---	426EB+00	RT	---	2	---	---
	BROOKLYN J RD	8M04	---	WEIGHT LIMIT 10 TONS	---	---		---	---	---	---	11BR+50	RT	---	1	---	1
	BROOKLYN J RD	8P05	J12-2	ROUTE TURN WO CARDINAL	---	48	X	45	15.00	---	---	10BR+55	LT	---	---	1	---
	BROOKLYN J RD		M1-6	STATE ROUTE MARKER	---	24	X	24	---	---	---	10BR+55	LT	---	---	---	---
	BROOKLYN J RD		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	10BR+55	LT	---	---	---	---
	BROOKLYN J RD		M1-6	STATE ROUTE MARKER	---	24	X	24	---	---	---	10BR+55	LT	---	---	---	---
	BROOKLYN J RD		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	10BR+55	LT	---	---	---	---
	BROOKLYN J RD	8P06	R1-1	STOP	---	30	X	30	6.25	---	---	10BR+55	LT	---	1	---	---
	STH 23	8P07	W1-7	DOUBLE NIGHT ARROW	---	48	X	24	---	8.00	---	431EB+15	RT	---	1	---	---
	STH 23	8P08	D1-1	BROOKLYN J RD	---	96	X	15	10.00	---	---	437EB+00	LT	---	2	---	---
	STH 23	9P01	J1-1	JUNCTION ASSEMBLY	---	24	X	39	6.50	---	---	445EB+45	RT	---	1	---	---
	STH 23		M2-1	JCT	---	21	X	15	---	---	---	445EB+45	RT	---	---	---	---
	STH 23		M1-5A	COUNTY MARKER	PP	24	X	24	---	---	---	445EB+45	RT	---	---	---	---
	STH 23	9P02	W14-3	NO PASSING ZONE	---	48	X	36	---	6.00	---	451EB+05	LT	---	1	---	---
	STH 23	9P03	D1-1	DEAD END RD	---	84	X	15	8.75	---	---	451EB+00	RT	---	2	---	---
	STH 23	9M04	---	NO ENGINE BRAKING EXCEPT	---	---	X	---	---	---	---	451EB+50	LT	---	1	---	1
	STH 23	9P05	J4-2	REASSURANCE ASSEMBLY	---	48	X	36	12.00	---	---	453EB+20	LT	---	1	---	---
	STH 23		M3-4	WEST	---	24	X	12	---	---	---	453EB+20	LT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	23	24	X	24	---	---	---	453EB+20	LT	---	---	---	---
	STH 23		M3-1	NORTH	---	24	X	12	---	---	---	453EB+20	LT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	49	24	X	24	---	---	---	453EB+20	LT	---	---	---	---
	STH 23	9P06	I2-2	GREEN LAKE CO	---	78	X	15	8.13	---	---	455EB+20	LT	---	1	---	---
	STH 23	9P07	J12-1	ROUTE TURN WO CARDINAL	---	24	X	45	7.50	---	---	455EB+50	RT	---	---	1	---
	STH 23		M1-5A	COUNTY MARKER	PP	24	X	24	---	---	---	455EB+50	RT	---	---	---	---
	STH 23		M6-1	ARROW LT	---	21	X	21	---	---	---	455EB+50	RT	---	---	---	---
	CTH PP	9P08	J12-2	ROUTE TURN WO CARDINAL	---	48	X	45	15.00	---	---	10PP+90	LT	---	---	1	---
	CTH PP		M1-6	STATE ROUTE MARKER	23	24	X	24	---	---	---	10PP+90	LT	---	---	---	---
	CTH PP		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	10PP+90	LT	---	---	---	---
	CTH PP		M1-6	STATE ROUTE MARKER	49	24	X	24	---	---	---	10PP+90	LT	---	---	---	---
	CTH PP		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	10PP+90	LT	---	---	---	---
	CTH PP	9P09	R1-1	STOP	---	30	X	30	6.25	---	---	10PP+90	LT	---	1	---	---
	DEAD END RD	9P10	R1-1	STOP	---	30	X	30	6.25	---	---	9DD+75	RT	---	1	---	---
	STH 23	9P11	J12-1	ROUTE TURN WO CARDINAL	---	24	X	45	7.50	---	---	457EB+25	LT	---	---	1	---
	STH 23		M1-5A	COUNTY MARKER	PP	24	X	24	---	---	---	457EB+25	LT	---	---	---	---
	STH 23		M6-1	ARROW RT	---	21	X	21	---	---	---	457EB+25	LT	---	---	---	---
	STH 23	9P12	I2-2	FOND DU LAC CO	---	84	X	15	8.75	---	---	457EB+60	RT	---	2	---	---
	W JCT CTH A	10P01	R1-1	STOP	---	36	X	36	9.00	---	---	19N+75	RT	---	---	1	---
	W JCT CTH A	10P02	R6-3	DIVIDED HIGHWAY	---	30	X	24	5.00	---	---	19N+75	RT	10P01	---	---	---

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

(CONTINUED FROM PREVIOUS PAGE)

PERMANENT SIGNING

PROJECT I.D.	ROADWAY	SIGN NO.	CODE NO.	SIGN MESSAGE	COMMENTS	SIGN SIZE INCH X INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230* SIGNS TYPE II REFLECTIVE F SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	STATION	LOCATION	SAME POST AS SIGN NO.	634.0614* POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH
1430-00-74	W JCT CTH A	10P03	J13-1	DIRECTIONAL WO CARDINAL	---	24 X 45	7.50	---	---	19N+75	RT	1P17	---	---	---
	W JCT CTH A		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	19N+75	RT	---	---	---	---
	W JCT CTH A		M6-4	DIRECTIONAL ARROW LT/RT	---	21 X 21	---	---	---	19N+75	RT	---	---	---	---
	W JCT CTH A	10P04	R1-1	STOP	---	36 X 36	9.00	---	---	20N+00	LT	---	---	1	---
	W JCT CTH A	10P05	R6-3	DIVIDED HIGHWAY	---	30 X 24	5.00	---	---	20N+00	LT	12P04	---	---	---
	NORTH ST	10P06	R1-1	STOP	---	36 X 36	9.00	---	---	21N+00	RT	---	---	1	---
	NORTH ST	10P07	R6-3	DIVIDED HIGHWAY	---	30 X 24	5.00	---	---	21N+00	RT	10P06	---	---	---
	NORTH ST	10P08	R1-1	STOP	---	36 X 36	9.00	---	---	21N+00	LT	---	---	1	---
	NORTH ST	10P09	R6-3	DIVIDED HIGHWAY	---	30 X 24	5.00	---	---	21N+00	LT	10P08	---	---	---
	NORTH ST	10P10	J13-1	DIRECTIONAL WO CARDINAL	---	24 X 45	7.50	---	---	21N+00	LT	1P19	---	---	---
	NORTH ST		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	21N+00	LT	---	---	---	---
	NORTH ST		M6-4	DIRECTIONAL ARROW LT/RT	---	21 X 21	---	---	---	21N+00	LT	---	---	---	---
	NORTH ST	10P11	W11-1	BICYCLE SYMBOL	---	30 X 30	---	6.25	---	21N+50	RT	---	1	---	---
	NORTH ST	10P12	R1-1	STOP	---	18 X 18	2.25	---	---	22N+00	RT	---	1	---	---
	NORTH ST	10P13	W11-1	BICYCLE SYMBOL	---	30 X 30	---	6.25	---	24N+00	LT	---	1	---	---
	CTH A	11P01	R3-8W	LANE DESIGNATION LO SO RO	---	54 X 30	11.25	---	---	101AN+00	RT	---	2	---	---
	CTH A	11P02	R3-8W	LANE DESIGNATION LO SO RO	---	54 X 30	11.25	---	---	101AN+00	LT	---	2	---	---
	CTH A	11P03	R1-1	STOP	---	30 X 30	6.25	---	---	102AN+45	RT	---	1	---	---
	CTH A	11P04	W11-8	TIRE STATION TRUCK CROSSING	---	36 X 36	---	9.00	---	102AN+50	LT	---	1	---	---
	CTH A	11P05	R4-7	KEEP RIGHT	---	36 X 48	12.00	---	---	102AN+75	LT	---	1	---	---
	CTH A	11P06	W5-54	CLEARANCE MARKER YELLOW	---	18 X 18	---	2.25	---	102AN+75	LT	11P05	---	---	---
	CTH A	11P07	W3-3	SIGNAL AHEAD	---	36 X 36	---	9.00	---	100AN+00	RT	---	1	---	---
	CTH A	11P08	R3-7R	RIGHT LANE MUST TURN RIGHT	---	30 X 30	6.25	---	---	103AN+20	RT	---	1	---	---
	CTH A	11P09	R3-20L	BEGIN LEFT TURN LANE	---	24 X 36	6.00	---	---	103AN+15	LT	---	1	---	---
	CTH A	11P10	D1-4	ST BERLIN, LT GREEN LAKE, LT PRINCETON, RIPON RT	---	78 X 54	29.25	---	---	104AN+15	RT	---	---	2	---
	CTH A	11P11	R2-1	SPEED LIMIT	45 MPH	24 X 30	5.00	---	---	104AN+50	LT	---	1	---	---
	CTH A	11P12	M1-5A	COUNTY MARKER	A	24 X 24	4.00	---	---	105AN+30	LT	---	1	---	---
	CTH A	11P13	R1-1F	FOLDING STOP SIGN	---	36 X 36	---	---	9.00	106AN+20	LT	BAND TO POLE	---	---	---
	CTH A	11P14	R6-3	DIVIDED HIGHWAY	---	30 X 24	5.00	---	---	106AN+20	LT	BAND TO POLE	---	---	---
	CTH A	11P15	R4-7	KEEP RIGHT	---	24 X 30	5.00	---	---	106AN+20	LT	BAND TO POLE	---	---	---
	CTH A	11P16	R1-1F	FOLDING STOP SIGN	---	36 X 36	---	---	9.00	106AN+25	RT	BAND TO POLE	---	---	---
	CTH A	11P17	R6-3	DIVIDED HIGHWAY	---	30 X 24	5.00	---	---	106AN+25	RT	BAND TO POLE	---	---	---
	CTH A	11P18	W12-1D	DOUBLE DOWN ARROW	---	24 X 24	---	4.00	---	106AN+25	RT	BAND TO POLE	---	---	---
	CTH A	11P19	R1-1	STOP	---	36 X 36	9.00	---	---	106AN+10	RT	BAND TO POLE	---	---	---
	CTH A	11P20	R1-53	RIGHT TURN OBEY THIS SIGN	---	24 X 30	5.00	---	---	106AN+10	RT	BAND TO POLE	---	---	---
	CTH A	11P21	J12-1	STATE ROUTE MARKER	---	24 X 45	7.50	---	---	106AN+10	RT	---	---	1	---
	CTH A		M1-5A	COUNTY MARKER	A	24 X 24	---	---	---	106AN+10	RT	---	---	---	---
	CTH A		M6-1	ARROW LT	---	21 X 21	---	---	---	106AN+10	RT	---	---	---	---
	CTH A	11P22	J2-4	ROUTE TURN ASSEMBLY	---	96 X 57	38.00	---	---	106AN+10	RT	---	---	2	---
	CTH A		M3-4	WEST	---	24 X 12	---	---	---	106AN+10	RT	---	---	---	---
	CTH A		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	106AN+10	RT	---	---	---	---
	CTH A		M3-1	NORTH	---	24 X 12	---	---	---	106AN+10	RT	---	---	---	---
	CTH A		M1-6	STATE ROUTE MARKER	49	24 X 24	---	---	---	106AN+10	RT	---	---	---	---
	CTH A		M3-3	SOUTH	---	24 X 12	---	---	---	106AN+10	RT	---	---	---	---
	CTH A		M1-6	STATE ROUTE MARKER	49	24 X 24	---	---	---	106AN+10	RT	---	---	---	---
	CTH A		M3-2	EAST	---	24 X 12	---	---	---	106AN+10	RT	---	---	---	---
	CTH A		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	106AN+10	RT	---	---	---	---
	STH 49	11P23	R4-7	KEEP RIGHT	---	24 X 30	5.00	---	---	200"49N"+35	RT	BAND TO POLE	---	---	---
	STH 49	11P24	J2-4	ROUTE TURN ASSEMBLY	---	96 X 57	38.00	---	---	200"49N"+25	LT	---	---	2	---
	STH 49		M3-2	EAST	---	24 X 12	---	---	---	200"49N"+25	LT	---	---	---	---

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

(CONTINUED FROM PREVIOUS PAGE)

PERMANENT SIGNING

PROJECT I.D.	ROADWAY	SIGN NO.	CODE NO.	SIGN MESSAGE	COMMENTS	SIGN SIZE INCH	X	INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230* SIGNS TYPE II REFLECTIVE F SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	STATION	LOCATION	SAME POST AS SIGN NO.	634.0614* POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH
1430-00-74	STH 49		M1-6	STATE ROUTE MARKER	23	24	X	24	---	---	---	200"49N"+25	LT	---	---	---	---
	STH 49		M6-1	ARROW LT	---	21	X	21	---	---	---	200"49N"+25	LT	---	---	---	---
	STH 49		M3-3	SOUTH	---	24	X	12	---	---	---	200"49N"+25	LT	---	---	---	---
	STH 49		M1-6	STATE ROUTE MARKER	49	24	X	24	---	---	---	200"49N"+25	LT	---	---	---	---
	STH 49		M6-1	ARROW LT	---	21	X	21	---	---	---	200"49N"+25	LT	---	---	---	---
	STH 49		M1-5A	COUNTY MARKER	A	24	X	24	---	---	---	200"49N"+25	LT	---	---	---	---
	STH 49		M6-6	ADVANCE ARROW LAUA COMB	---	21	X	21	---	---	---	200"49N"+25	LT	---	---	---	---
	STH 49		M3-4	WEST	---	24	X	12	---	---	---	200"49N"+25	LT	---	---	---	---
	STH 49		M1-6	STATE ROUTE MARKER	23	24	X	24	---	---	---	200"49N"+25	LT	---	---	---	---
	STH 49		M6-1	ARROW RT	---	21	X	21	---	---	---	200"49N"+25	LT	---	---	---	---
	STH 49	11P25	R1-1	STOP	---	30	X	30	6.25	---	---	200"49N"+25	LT	BAND TO POLE	---	---	---
	STH 49	11P26	R1-53	RIGHT TURN OBEY THIS SIGN	---	24	X	30	5.00	---	---	200"49N"+25	LT	BAND TO POLE	---	---	---
	STH 49	11P27	R1-1F	FOLDING STOP SIGN	---	36	X	36	---	---	9.00	200"49N"+20	LT	BAND TO POLE	---	---	---
	STH 49	11M28	---	45 TON BRIDGE .2 MILES AHEAD	---	---	X	---	---	---	---	204"49N"+00	LT	---	1	---	1
	STH 49	11P29	R6-3	DIVIDED HIGHWAY	---	30	X	24	5.00	---	---	200"49N"+20	LT	BAND TO POLE	---	---	---
	STH 49	11P30	W12-1D	DOUBLE DOWN ARROW	---	24	X	24	---	4.00	---	200"49N"+20	LT	BAND TO POLE	---	---	---
	STH 49	11M31	---	ADOPT A HIGHWAY	---	---	X	---	---	---	---	204"49N"+50	RT	---	1	---	1
	STH 49	11P32	R1-1F	FOLDING STOP SIGN	---	36	X	36	---	---	9.00	200"49N"+40	LT	BAND TO POLE	---	---	---
	STH 49	11P33	R6-3	DIVIDED HIGHWAY	---	30	X	24	5.00	---	---	200"49N"+40	LT	BAND TO POLE	---	---	---
	STH 49	11P34	D1-3	LT RIPON GREEN LAKE/PRINCETON RT	---	78	X	36	19.50	---	---	202"49N"+25	LT	---	2	---	---
	STH 49	11P35	R3-20L	BEGIN LEFT TURN LANE	---	24	X	36	6.00	---	---	203"49N"+00	LT	---	1	---	---
	STH 49	11P36	R1-1	STOP	---	30	X	30	6.25	---	---	203"49N"+25	LT	---	1	---	---
	STH 49	11P37	R4-7	KEEP RIGHT	---	36	X	48	12.00	---	---	203"49N"+25	LT	---	1	---	---
	STH 49	11P38	W5-54	CLEARANCE MARKER YELLOW	---	18	X	18	---	2.25	---	203"49N"+25	LT	11P37	---	---	---
	STH 49	11P39	W3-3	SIGNAL AHEAD	---	36	X	36	---	9.00	---	205"49N"+50	LT	---	1	---	---
	STH 49	11P40	J1-1	JUNCTION ASSEMBLY	---	24	X	39	6.50	---	---	206"49N"+00	RT	---	1	---	---
	STH 49		M3-1	NORTH	---	24	X	12	---	---	---	206"49N"+00	RT	---	---	---	---
	STH 49		M1-6	STATE ROUTE MARKER	49	24	X	24	---	---	---	206"49N"+00	RT	---	---	---	---
	STH 49	11P41	R2-1	SPEED LIMIT	55 MPH	24	X	30	5.00	---	---	207"49N"+55	LT	---	1	---	---
	FOREST RIDGE RD	12P01	R2-1	SPEED LIMIT	40 MPH	24	X	30	5.00	---	---	7FRS+50	LT	---	1	---	---
	FOREST RIDGE RD	12M02	---	WEIGHT LIMIT 10 TONS	---	---	X	---	---	---	---	7FRS+50	LT	12P01	---	---	1
	FOREST RIDGE RD	12P03	R1-1	STOP	---	30	X	30	6.25	---	---	9FRS+50	RT	---	1	---	---
	FOREST RIDGE RD	12P04	J12-2	ROUTE TURN WO CARDINAL	---	48	X	45	15.00	---	---	9FRS+50	RT	---	1	---	---
	FOREST RIDGE RD		M1-6	STATE ROUTE MARKER	23	24	X	24	---	---	---	9FRS+50	RT	---	---	---	---
	FOREST RIDGE RD		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	9FRS+50	RT	---	---	---	---
	FOREST RIDGE RD		M1-6	STATE ROUTE MARKER	49	24	X	24	---	---	---	9FRS+50	RT	---	---	---	---
	FOREST RIDGE RD		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	9FRS+50	RT	---	---	---	---
	FOREST RIDGE RD	12P05	J12-2	ROUTE TURN WO CARDINAL	---	48	X	45	15.00	---	---	20FRN+50	LT	---	1	---	---
	FOREST RIDGE RD		M1-6	STATE ROUTE MARKER	23	24	X	24	---	---	---	20FRN+50	LT	---	---	---	---
	FOREST RIDGE RD		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	20FRN+50	LT	---	---	---	---
	FOREST RIDGE RD		M1-6	STATE ROUTE MARKER	49	24	X	24	---	---	---	20FRN+50	LT	---	---	---	---
	FOREST RIDGE RD		M6-4	DIRECTIONAL ARROW LT/RT	---	21	X	21	---	---	---	20FRN+50	LT	---	---	---	---
	FOREST RIDGE RD	12P06	R1-1	STOP	---	30	X	30	6.25	---	---	20FRN+50	LT	---	1	---	---
	FOREST RIDGE RD	12P07	W3-1	STOP AHEAD	---	36	X	36	---	9.00	---	26FRN+50	LT	---	1	---	---
PROJECT 1430-00-74 TOTALS									1358.63	341.75	72.00				191	19	10

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

(CONTINUED FROM PREVIOUS PAGE)

PERMANENT SIGNING

PROJECT I.D.	ROADWAY	SIGN NO.	CODE NO.	SIGN MESSAGE	COMMENTS	SIGN SIZE INCH X INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230* SIGNS TYPE II REFLECTIVE F SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	STATION	LOCATION	SAME POST AS SIGN NO.	634.0614* POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH
1431-02-72															
	STH 23	13M01	---	ADOPT A HIGHWAY	---	--- X ---	---	---	---	23EB+40	RT	---	1	---	1
	STH 23	13P02	J4-2	REASSURANCE ASSEMBLY	---	48 X 36	12.00	---	---	21EB+96	RT	---	1	---	---
	STH 23		M3-2	EAST	---	24 X 12	---	---	---	21EB+96	---	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	21EB+96	---	---	---	---	---
	STH 23		M3-3	SOUTH	---	24 X 12	---	---	---	21EB+96	---	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	49	24 X 12	---	---	---	21EB+96	---	---	---	---	---
	STH 23	13P03	D1-1	DEAD END RD	---	84 X 15	8.75	---	---	25EB+50	LT	---	2	---	---
	STH 23	13P04	W14-3	NO PASSING ZONE	---	48 X 36	---	6.00	---	26EB+60	RT	---	1	---	---
	STH 23	13P05	J1-1	JUNCTION ASSEMBLY	---	24 X 39	6.50	---	---	30EB+25	LT	---	1	---	---
	STH 23	13P06	M2-1	JCT	---	21 X 15	---	---	---	30EB+25	LT	---	---	---	---
	STH 23		M1-5A	COUNTY MARKER	PP	24 X 24	---	---	---	30EB+25	LT	---	---	---	---
	STH 23		W5-56	END OF ROAD MARKER	---	18 X 18	---	2.25	---	40EB+65	LT	---	1	---	---
	STH 23	13P07	W5-56	END OF ROAD MARKER	---	18 X 18	---	2.25	---	40EB+75	LT	---	1	---	---
	STH 23	13P08	W5-56	END OF ROAD MARKER	---	18 X 18	---	2.25	---	40EB+85	LT	---	1	---	---
	STH 23	13P09	R2-1	SPEED LIMIT	55 MPH	24 X 30	5.00	---	---	44EB+00	LT	---	1	---	---
	STH 23	13P10	W3-5	SPEED LIMIT AHEAD	45 MPH	36 X 36	---	9.00	---	44EB+50	RT	---	1	---	---
	STH 23	13P11	W6-1	DIVIDED HWY AHEAD	---	36 X 36	---	9.00	---	46EB+00	RT	---	1	---	---
	STH 23	13P12	J4-2	REASSURANCE ASSEMBLY	---	48 X 36	12.00	---	---	47EB+25	LT	---	1	---	---
	STH 23		M3-4	WEST	---	24 X 12	---	---	---	47EB+25	LT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	23	24 X 24	---	---	---	47EB+25	LT	---	---	---	---
	STH 23		M3-1	NORTH	---	24 X 12	---	---	---	47EB+25	LT	---	---	---	---
	STH 23		M1-6	STATE ROUTE MARKER	49	24 X 24	---	---	---	47EB+25	LT	---	---	---	---
	STH 23	14P01	W6-3	TWO WAY TRAFFIC WAY	---	36 X 36	---	9.00	---	49EB+00	LT	---	1	---	---
	STH 23	14P02	R2-1	SPEED LIMIT	35 MPH	24 X 30	5.00	---	---	50EB+00	RT	---	---	1	---
	STH 23	14P03	R3-20R	BEGIN RIGHT TURN LANE	---	24 X 36	6.00	---	---	50EB+00	RT	14P02	---	---	---
	STH 23	14P04	R4-7	KEEP RIGHT	---	36 X 48	12.00	---	---	50EB+50	RT	---	---	1	---
	STH 23	14P05	W6-2	DIVIDED HWY ENDS	---	36 X 36	---	9.00	---	51EB+00	LT	---	1	---	---
	STH 23	14P06	R5-1A	WRONG WAY	---	42 X 30	8.75	---	---	51EB+00	RT	---	1	---	---
	STH 23	14P07	R2-1	SPEED LIMIT	35 MPH	24 X 30	5.00	---	---	53EB+00	LT	---	1	---	---
	STH 23	14P08	R5-1	DO NOT ENTER	---	36 X 36	9.00	---	---	53EB+40	RT	---	1	---	---
	STH 23	14P09	R4-7	KEEP RIGHT	---	24 X 30	5.00	---	---	53EB+71	LT	---	1	---	---
	COMORN RD	14P10	R2-1	SPEED LIMIT	25MPH	24 X 30	5.00	---	---	9COM+00	LT	---	1	---	---
	COMORN RD	14M11	---	NO TRUCKS SYMBOL	---	--- X ---	---	---	---	8COM+50	LT	---	1	---	1
	COMORN RD	14M12	---	NO TRUCKS WORDS	---	--- X ---	---	---	---	8COM+50	LT	14M11	---	---	1
	STH 23	14P13	R6-2L	ONE WAY	---	24 X 30	5.00	---	---	54EB+35	LT	---	1	---	---
	COMORN RD	14P14	R1-1	STOP	---	36 X 36	9.00	---	---	9COM+35	RT	---	---	1	---
	COMORN RD	14P15	R6-3A	DIVIDED HIGHWAY	---	30 X 24	5.00	---	---	9COM+35	RT	14P14	---	---	---
	COMORN RD	14P16	J12-2	ROUTE TURN WO CARDINAL	---	48 X 45	15.00	---	---	9COM+35	RT	---	---	1	---
	COMORN RD		M1-6	STATE ROUTE MARKER	23	--- X ---	---	---	---	9COM+35	RT	---	---	---	---
	COMORN RD		M6-4	DOUBLE ARROW	---	21 X 21	---	---	---	9COM+35	RT	---	---	---	---
	COMORN RD		M1-6	STATE ROUTE MARKER	49	--- X ---	---	---	---	9COM+35	RT	---	---	---	---
	COMORN RD		M6-4	DOUBLE ARROW	---	21 X 21	---	---	---	9COM+35	RT	---	---	---	---
	STH 23	14P17	R4-7	KEEP RIGHT	---	24 X 30	5.00	---	---	54EB+80	LT	---	1	---	---
	STH 23	14P18	R5-1	DO NOT ENTER	---	36 X 36	9.00	---	---	54EB+85	LT	---	1	---	---
	STH 23	14P19	R3-20L	BEGIN LEFT TURN LANE	---	24 X 36	6.00	---	---	56EB+75	LT	---	1	---	---
	STH 23	14P20	R5-1A	WRONG WAY	---	42 X 30	8.75	---	---	57EB+45	LT	---	1	---	---
	STH 23	14P21	R2-1	SPEED LIMIT	35	24 X 30	5.00	---	---	58WB+20	RT	---	1	---	---
PROJECT 1431-02-72 TOTALS							167.75	48.75	0.00				27	4	3
TOTALS							1526.38	390.50	72.00				218	23	13

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

REMOVING SIGNS

PROJECT I.D.	ROADWAY	SIGN NO.	STATION	LOCATION	SAME POST AS SIGN NO.	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN MESSAGE
1430-00-74								
	STH 23	1R01	216EB+25	LT	---	1	1	NO PASSING ZONE
	STH 23	1R02	213EB+40	RT	---	1	1	JCT COUNTY A
	STH 23	1R03	617EB+50	RT	---	1	2	GREEN LAKE W/RT ARROW
	W JCT CTH A	1R04	19N+80	RT	1R05	1	-	SNOWMOBILE CROSSING SYMBOL
	W JCT CTH A	1R05	19N+80	RT	---	1	2	STH 23 W/ TWO WAY ARROW
	W JCT CTH A	1R06	19N+80	RT	---	1	1	STOP
	W JCT CTH A	1R07	19N+75	LT	---	1	1	STOP
	W JCT CTH A	1R08	19N+76	LT	---	1	1	SNOWMOBILE CROSSING SYMBOL
	STH 23	1R09	223EB+20	RT	---	1	1	COUNTY A W/ LT AND ST ARROW
	NORTH ST	1R10	20N+85	RT	---	1	1	STOP
	NORTH ST	1R11	20N+90	LT	---	1	1	STOP
	NORTH ST	1R12	20N+88	LT	---	1	1	STH 23 W/ TWO WAY ARROW
	STH 23	1R13	227EB+00	RT	---	1	1	EAST STH 23
	STH 23	2R01	254EB+46	RT	---	1	1	SPEED LIMIT 45 AHEAD W/ LIGHT
	STH 23	3R01	262EB+95	LT	---	1	1	SPEED LIMIT 55
	STH 23	3R02	267EB+98	LT	---	1	1	CROSSROAD
	STH 23	3R03	267EB+98	LT	3R02	1	-	LANE ENDS
	STH 23	3R04	274EB+15	LT	---	1	1	SPEED LIMIT 45
	STH 23	3R05	277EB+03	LT	---	1	1	WEST STH 23
	STH 23	3R06	273EB+03	LT	---	1	1	SLOWER TRAFFIC KEEP RIGHT
	STH 23	3R07	262EB+95	RT	---	1	1	ONCOMING TRAFFIC USES CENTER LANE
	STH 23	3R08	262EB+95	RT	---	1	1	SPEED LIMIT 45
	STH 23	3R09	267EB+95	RT	---	1	1	CROSSROAD
	STH 23	3R10	267EB+95	RT	3R10	1	-	LANE ENDS
	STH 23	3R11	271EB+30	RT	---	1	2	GREEN LAKE BUISNESS DISTRICT W/ RT ARROW
	STH 23	3R12	273EB+00	RT	---	1	1	SPEED LIMIT 45
	STH 23	3R13	277EB+05	RT	---	1	1	WEST BUISNESS STH 23 W/ RT ARROW
	STH 23	3R14	278EB+78	LT	---	1	1	STOP W/ LIGHT
	STH 23	3R15	279EB+95	LT	---	1	1	45 TON BRIDGE .3 MILES AHEAD
	STH 23	3R16	280EB+25	LT	---	1	1	BUISNESS STH 23 W/ LT ARROW
	STH 23	3R17	281EB+05	LT	---	1	1	WISCONSIN HERITAGE
	STH 23	3R18	281EB+05	LT	3R18	1	-	DARTFORD HISTORICAL SOCIETY # 256 W/ LT ARROW
	STH 23	3R19	281EB+05	LT	3R18	1	-	THRASHER'S OPERA HOUSE #282 W/ LT ARROW
	STH 23	3R20	281EB+95	LT	---	1	2	GREEN LAKE BUISNESS DISTRICT W/ LT ARROW
	STH 23	3R21	282EB+00	LT	---	1	1	OBJECT MARKER
	STH 23	3R22	283EB+88	RT	3R31	1	-	PUCHYAN RIVER
	STH 23	3R23	287EB+21	LT	3R25	1	-	PUCHYAN RIVER
	STH 23	3R24	287EB+21	LT	---	1	1	OBJECT MARKER
	STH 23	3R25	289EB+32	LT	---	1	1	BUISNESS STH 23 W/LT TURN ARROW, WEST STH 23 W/ ST ARROW
	STH 23	3R26	290EB+85	LT	---	1	1	NO PASSING ZONE
	STH 23	3R28	278EB+77	RT	---	1	1	STOP W/ LIGHT
	STH 23	3R29	280EB+00	RT	---	1	1	EAST STH 23
	STH 23	3R30	283EB+75	RT	---	1	1	OBJECT MARKER
	STH 23	3R31	286EB+60	RT	---	1	1	OBJECT MARKER
	STH 23	3R32	287EB+98	RT	---	1	1	SPEED LIMIT 45
	STH 23	3R33	287EB+98	RT	3R33	1	-	NO PASSING ZONE
	STH 23	3R34	291EB+00	RT	---	1	1	COUNTY A W/ RT TURN ARROW
	STH 23	3R35	291EB+00	RT	---	1	2	NORTH STH 49 W/ LT TURN ARROW, EAST STH 23 W/ ST ARROW, SOUTH STH 49 W/ ST ARRC
	STH 23	4R01	293EB+85	LT	---	1	1	JUNCTION BUISNESS STH 23
	STH 23	4R02	297EB+15	LT	---	1	1	SPEED LIMIT 45
	STH 23	4R03	297EB+50	LT	---	1	1	KEEP RIGHT
	STH 23	4R04	299EB+12	LT	---	1	1	PRINCETON 10
	STH 23	4R05	300EB+52	LT	---	1	1	WEST STH 23
	STH 23	4R06	304EB+00	LT	---	1	1	COUNTY A W/ LT TURN/ST ARROW, NORTH STH 49 W/ RT ARROW
	STH 23	4R08	304EB+00	LT	ON SIGNAL POLE	1	-	FOLDING STOP
	STH 23	4R09	303EB+85	LT	ON SIGNAL POLE	1	-	FOLDING STOP
	STH 23	4R10	306EB+50	LT	---	-	1	BARRICADE CUT AND ATTACHED TO SMALL SIGN POST
	STH 23	4R11	306EB+60	LT	---	-	1	BARRICADE CUT AND ATTACHED TO SMALL SIGN POST
	STH 23	4R12	306EB+70	LT	---	-	1	BARRICADE CUT AND ATTACHED TO SMALL SIGN POST
	STH 23	4R13	306EB+80	LT	---	-	1	BARRICADE CUT AND ATTACHED TO SMALL SIGN POST

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

(CONTINUED FROM PREVIOUS PAGE)

REMOVING SIGNS

PROJECT I.D.	ROADWAY	SIGN NO.	STATION	LOCATION	SAME POST AS SIGN NO.	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN MESSAGE
1430-00-74	STH 23	4R14	308EB+05	LT	---	1	2	PRINCETON W/ ST ARROW, BERLIN W/ RT ARROW
	STH 23	4R15	295EB+03	RT	---	1	1	HOSPITAL W/ LT TURN ARROW AND ST ARROW
	STH 23	4R16	295EB+03	RT	---	1	1	SPEED LIMIT 45
	STH 23	4R17	295EB+50	RT	---	1	1	STOP LIGHTS AHEAD
	STH 23	4R18	297EB+47	RT	---	1	1	RIPON W/ ST ARROW, BERLIN W/ LT ARROW
	STH 23	4R19	299EB+38	RT	---	1	1	RIGHT TURN LANE W/ LT DOWN DIAGONAL
	STH 23	4R20	302EB+05	RT	---	1	1	NORTH STH 49 W/ LT ARROW, SOUTH STH 49 W/ ST ARROW
	STH 23	4R21	302EB+05	RT	---	1	1	COUNTY A W/ RT ARROW
	STH 23	4R22	302EB+40	RT	---	1	1	KEEP RIGHT
	STH 23	4R23	305EB+97	RT	---	1	1	EAST STH 23, SOUTH STH 49
	STH 23	4R25	309EB+55	LT	---	1	1	WEST STH 23 W/ ST ARROW, NORTH STH 49 W/ RT TURN ARROW
	STH 23	4R26	311EB+52	LT	---	1	1	STOP LIGHT
	STH 23	4R27	313EB+55	LT	---	1	1	SPEED LIMIT 45
	STH 23	4R28	316EB+56	LT	---	1	1	JUNCTION COUNTY A
	STH 23	4R29	319EB+52	LT	---	1	1	SPEED LIMIT 45 AHEAD WITH LIGHT
	STH 23	4R30	308EB+75	LT	---	1	1	KEEP RIGHT
	STH 23	4R31	310EB+60	RT	---	1	1	RIPON 6
	STH 23	4R32	316EB+00	RT	---	1	1	SPEED LIMIT 55
	STH 23	4R33	316EB+00	RT	4R33	1	-	NO PASSING ZONE
	STH 23	4R34	303EB+15	LT	ON SIGNAL POLE	1	-	KEEP RIGHT
	STH 23	4R35	303EB+85	LT	ON SIGNAL POLE	1	-	KEEP RIGHT
	STH 23	5R01	336EB+48	RT	---	1	1	CROSSROAD
	STH 23	5R02	341EB+50	LT	---	1	1	NO PASSING ZONE
	STH 23	5R04	352EB+02	RT	---	1	1	NO PASSING ZONE
	STH 23	6R01	355EB+45	LT	---	1	1	NO PASSING ZONE
	STH 23	6R02	357EB+00	LT	---	1	1	CROSSROAD
	STH 23	6R03	364EB+00	RT	---	1	1	STOP
	EASTWIND RD	6R04	9EW+51	RT	---	1	1	STOP
	STH 23	7R01	390EB+97	RT	---	1	1	DEER CROSSING SYMBOL
	STH 23	7R02	390EB+97	RT	7R01	1	---	NEXT 1 MILE
	STH 23	7R03	390EB+97	RT	7R01	1	---	NO PASSING ZONE
	SUNNYSIDE RD	7R04	8SUN+00	LT	---	1	1	SPEED LIMIT 45
	SUNNYSIDE RD	7R06	9SUN+35	RT	---	1	1	STOP
	STH 23	7R07	410EB+50	RT	---	1	1	NO PASSING ZONE
	BROOKLYN J RD	8R01	10BR+45	LT	---	1	1	STH 23 W/ LT AND RT ARROWS
	BROOKLYN J RD	8R02	10BR+45	LT	---	1	1	STOP
	STH 23	8R03	431EB+40	RT	---	1	1	TWO DIRECTION LARGE ARROW
	STH 23	9R01	450EB+55	LT	---	1	1	NO PASSING ZONE
	STH 23	9R02	450EB+55	LT	9R01	1	---	DEER CROSSING SYMBOL
	STH 23	9R03	450EB+55	LT	9R01	1	---	NEXT 1 MILE
	STH 23	9R05	453EB+35	LT	---	1	1	WEST STH 23, NORTH STH 49
	STH 23	9R06	455EB+35	LT	---	1	2	GREEN LAKE CO
	CTH PP	9R07	10PP+90	LT	---	1	1	STOP
	CTH PP	9R08	10PP+75	LT	---	1	1	STOP
	STH 23	9R09	457EB+10	LT	---	1	1	COUNTY PP W/ RT ARROW
	STH 23	9R10	445EB+35	RT	---	1	1	JUNCTION COUNTY PP
	STH 23	9R11	455EB+55	RT	---	1	1	COUNTY PP W/ LT ARROW
	STH 23	9R12	457EB+60	RT	---	1	2	FOND DU LAC CO
	DEADEND RD	9R13	9DD+90	RT	---	1	1	STOP
	CTH A	11R01	101AN+30	LT	---	1	1	LT TURN ONLY, RT TURN ONLY, RT TURN ONLY
	CTH A	11R02	101AN+90	LT	---	1	1	FIRETRUCK
	CTH A	11R03	103AN+85	LT	---	1	1	KEEP RIGHT
	CTH A	11R04	104AN+45	LT	---	1	1	SPEED LIMIT 45
	CTH A	11R05	105AN+30	LT	---	1	1	COUNTY A
	CTH A	11R06	106AN+24	RT	ON SIGNAL POLE	1	-	FOLDING STOP

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

(CONTINUED FROM PREVIOUS PAGE)

REMOVING SIGNS

PROJECT I.D.	ROADWAY	SIGN NO.	STATION	LOCATION	SAME POST AS SIGN NO.	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN MESSAGE
1430-00-74	CTH A	11R07	106AN+25	LT	ON SIGNAL POLE	1	-	FOLDING STOP
	CTH A	11R08	106AN+42	LT	ON SIGNAL POLE	1	-	FOLDING STOP
	CTH A	11R09	106AN+25	LT	ON SIGNAL POLE	1	-	KEEP RIGHT
	CTH A	11R10	106AN+24	RT	10R06	1	-	ARROWS DIAGONAL DOWN LT AND RT
	STH 49	11R11	200"49N"+15	LT	---	1	1	ARROWS DIAGONAL DOWN LT AND RT
	STH 49	11R12	202"49N"+12	LT	---	1	2	RIPON LT ARROW, GREEN LAKE / PRINCETON RT ARROW
	CTH A	11R13	100AN+45	RT	---	1	1	RIGHT LANE MUST TURN RIGHT
	CTH A	11R14	103AN+60	RT	---	1	1	RIGHT LANE MUST TURN RIGHT
	CTH A	11R15	102AN+35	RT	---	1	1	STOP
	CTH A	11R16	102AN+83	RT	---	1	1	SIGNAL LIGHTS
	CTH A	11R17	104AN+52	RT	---	1	2	RIPON RT ARROW, PRINCETON LT ARROW, GREEN LAKE LT ARROW, BERLIN ST ARROW
	CTH A	11R18	105AN+90	RT	10R20	1	-	COUNTY A W/ LT ARROW
	CTH A	11R19	105AN+90	RT	10R20	1	-	WEST STH 23 W/ LT ARROW, NORTH STH 49 W/ ST ARROW
	CTH A	11R20	105AN+90	RT	---	1	2	SOUTH STH 49 W/ RT ARROW, EAST STH 23 W/ RT ARROW
	CTH A	11R21	106AN+12	RT	---	1	1	STOP
	CTH A	11R22	106AN+12	RT	10R21	1	-	RIGHT TURN OBEY THIS SIGN
	STH 49	11R23	200"49N"+45	LT	---	1	1	STOP
	STH 49	11R24	200"49N"+45	LT	10R23	1	-	RIGHT TURN OBEY THIS SIGN
	STH 49	11R25	200"49N"+75	LT	---	1	2	EAST STH 23 W/LT ARROW, SOUTH STH 49 W/ LT ARROW, WEST STH 23 W/RT ARROW
	STH 49	11R26	200"49N"+75	LT	---	1	1	COUNTY A W/ ST ARROW AND RT ARROW
	STH 49	11R27	203"49N"+12	LT	---	1	1	STOP
	STH 49	11R29	204"49N"+58	LT	---	1	1	SIGNAL LIGHTS
	STH 49	11R30	202"49N"+66	LT	---	1	1	KEEP RIGHT
	STH 49	11R32	204"49N"+33	RT	---	1	1	NORTH STH 49
	STH 49	11R33	206"49N"+04	RT	---	1	1	SPEED LIMIT 55
	STH 49	11R34	302EB+40	RT	ON SIGNAL POLE	1	-	FOLDING STOP
	STH 49	11R35	302EB+75	LT	ON SIGNAL POLE	1	-	FOLDING STOP
	STH 49	11R36	303EB+15	LT	ON SIGNAL POLE	1	-	FOLDING STOP
	FOREST RIDGE RD	12R01	8FRS+40	LT	---	1	1	SPEED LIMIT 40
	FOREST RIDGE RD	12R03	20FRN+75	LT	---	1	1	STOP
	FOREST RIDGE RD	12R04	26FRN+50	LT	---	1	1	STOP AHEAD
	FOREST RIDGE RD	12R05	9FRS+56	RT	---	1	1	STOP
PROJECT 1430-00-74 TOTALS						143	130	
1431-02-72								
	STH 23	13R02	30EB+25	LT	---	1	1	JUNCTION COUNTY PP
	STH 23	13R03	39EB+95	LT	---	1	1	STOP
	STH 23	14R01	53EB+25	LT	---	1	1	SPEED LIMIT 35
	STH 23	14R02	55EB+97	LT	---	1	1	KEEP RIGHT
	STH 23	14R03	57EB+08	LT	---	1	1	DO NOT ENTER
	STH 23	14R04	57EB+08	LT	2R03	1	-	DIVIDED HIGHWAY AHEAD
	STH 23	14R05	58EB+03	LT	---	1	1	WRONG WAY
	STH 23	14R06	47EB+97	RT	---	1	1	SPEED LIMIT 35 AHEAD
	STH 23	14R07	49EB+50	RT	---	1	1	SIDE ROAD AHEAD
	STH 23	14R08	51EB+00	RT	---	1	1	DIVIDED HIGHWAY AHEAD
	STH 23	14R09	52EB+50	RT	---	1	1	RIGHT TURN LANE W/ LT DOWN DIAGONAL ARROW
	STH 23	14R10	53EB+23	RT	---	1	1	SPEED LIMIT 35
	COMORN RD	14R13	8COM+80	LT	---	1	1	SPEED LIMIT 25
	COMORN RD	14R14	9COM+50	RT	---	1	1	STOP
	STH 23	14R15	58EB+20	RT	---	1	1	SPEED LIMIT 35
	STH 23	14R16	47EB+07	LT	---	1	1	WEST STH 23, NORTH STH 49
	STH 23	14R17	48EB+00	LT	---	1	1	TWO WAY TRAFFIC
PROJECT 1431-02-72 TOTALS						17	16	
TOTAL						160	146	

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

TRAFFIC CONTROL DEVICES

PROJECT I.D.	STAGE	STAGE DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 TRAFFIC CONTROL DRUMS DAYS	643.04100 TRAFFIC CONTROL BARRICADES TYPE II EACH	643.04100 TRAFFIC CONTROL BARRICADES TYPE II DAYS	643.04200 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.04200 TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 TRAFFIC CONTROL SIGNS DAYS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II SIGNS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II CYCLES	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1000 TRAFFIC CONTROLS FIXED MESSAGE SIGNS SF	643.1050 TRAFFIC CONTROL SIGNS PORTABLE CHANGEABLE MESSAGE EACH	643.1050 TRAFFIC CONTROL SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	643.3000 TRAFFIC CONTROL DETOUR SIGNS EACH	643.3000 TRAFFIC CONTROL DETOUR SIGNS DAYS
1430-00-74																									
	STAGE 1	70	---	---	---	---	28	1,960	---	---	50	3,500	---	---	37	2,590	11	1	11	---	4	56	115	8,050
	STAGE 1A	3	60	180	---	---	9	27	---	---	18	54	---	---	23	69	---	---	---	---	---	---	---	---
	STAGE 1B	45	101	4,545	---	---	16	720	43	43	32	1,440	---	---	32	1,440	1	1	1	---	3	21	---	---
	STAGE 2	56	---	---	1	56	36	2,016	---	---	54	3,024	---	---	33	1,848	9	1	9	41.00	4	56	153	8,568
	STAGE 2A	35	76	2,660	---	---	11	385	16	16	22	770	12	420	29	1,015	---	---	---	---	---	---	---	---
	STAGE 2B	5	106	530	---	---	14	70	---	---	28	140	42	210	40	200	---	---	---	---	---	---	---	---
	UNDISTRIBUTED			1,583		11		1,036	12	12		1,786		126		1,432			4	0		27		3,324
PROJECT 1430-00-74 TOTALS				9,498		67		6,214	71	71		10,714		756		8,594			25	41.00		160		19,942
1431-02-72																								
	STAGE 1	70	---	---	---	---	10	700	---	---	12	840	---	---	13	910	---	---	---	69.25	1	14	145	10,150
	UNDISTRIBUTED			0		0		140	0	0		168		0		182			0	---		3		2,030
PROJECT 1431-02-72 TOTALS				0		0		840	0	0		1,008		0		1,092			0	69.25		17		12,180
TOTALS				9,498		67		7,054	71	71		11,722		756		9,686			25	110.25		176		32,122

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

TRAFFIC CONTROL

PROJECT I.D.	ROADWAY	643.0200.01 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE I.D. 1430-00-74 DAYS	643.0200.02 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE I.D. 1431-02-72 DAYS	643.2000.01 TRAFFIC CONTROL DETOUR PROJECT I.D. 1430-00-74 EACH	643.2000.02 TRAFFIC CONTROL DETOUR PROJECT I.D. 1431-02-72 EACH
1430-00-74					
	STH 23	230	---	1	---
PROJECT 1430-00-74 TOTAL		230	---	1	---
1431-02-72					
	STH 23	---	230	---	1
PROJECT 1431-02-72 TOTAL		---	230	---	1
TOTAL		230	230	1	1

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

FIELD OFFICE

PROJECT I.D.	ROADWAY	642.5201 FIELD OFFICE TYPE C EACH
1430-00-74		
	STH 23	1
PROJECT 1430-00-74 TOTAL		1

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

						PAVEMENT MARKING								
						646.0106*		646.0126	647.0166	647.0356	647.0456	647.0566	647.0606	647.0726
						PAVEMENT MARKING EPOXY 4-INCH		PAVEMENT MARKING EPOXY 8-INCH	PAVEMENT MARKING ARROWS EPOXY TYPE 2	PAVEMENT MARKING WORDS (EPOXY)	PAVEMENT MARKING CURB EPOXY	PAVEMENT MARKING STOPLINE EPOXY 18-INCH	PAVEMENT MARKING ISLAND NOSE EPOXY	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH
PROJECT I.D.	STAGE	ROADWAY	STATION	TO	STATION	WHITE LF	YELLOW LF	WHITE LF	EACH	EACH	LF	LF	EACH	YELLOW LF
1430-00-74														
	STAGE 1													
		STH23	304+07	-	457+87	30,900	26,800	2,410	17	4	49	38	3	61
		FOREST RIDGE ROAD	5FRS+20	-	27FRN+00	2,080	2,250	---	---	---	---	55	---	---
		EASTWIND ROAD	7EW+24	-	9EW+98	415	490	---	---	---	---	27	---	---
		SUNNYSIDE ROAD	5SUN+70	-	9SUN+84	680	770	---	---	---	---	27	---	---
		BROOKLYN J ROAD	10BR+00	-	12BR+61	375	465	---	---	---	---	27	---	---
		CTH PP	10PP+30	-	12PP+87	330	460	---	---	---	---	40	---	---
		DEAD END ROAD	7DD+71	-	10DD+30	380	460	---	---	---	---	26	---	---
	STAGE 1 SUBTOTALS					35,160	31,695	2,410	17	4	49	240	3	61
	STAGE 2													
		STH 23	210+41	-	304+07	22,700	24,900	3,300	18	16	197	---	9	1,700
		WEST JUNCTION CTH A	13N+68	-	20N+02	1,190	1,320	---	---	---	---	33	---	---
		NORTH STREET	20N+75	-	25N+63	885	970	---	---	---	---	34	---	---
		STH 49	200"49N"+00	-	209"49N"+63	1,660	2,850	645	4	2	52	26	3	365
		CTH A	100AS+00	-	106AS+53	2,430	2,010	1,075	12	7	30	24	3	41
	STAGE 2 SUBTOTALS					28,865	32,050	5,020	34	25	279	117	15	2,106
PROJECT 1430-00-74 TOTALS						127,770		7,430	51	29	328	357	18	2,167
1431-02-72														
	STAGE 1													
		STH 23	21+48	-	58+50	8,110	8,150	375	3	---	66	---	3	145
		COMORN ROAD	8COM+65	-	9COM+70	100	200	---	---	---	---	29	---	---
	STAGE 1 SUBTOTALS					8,210	8,350	375	3	0	66	29	3	145
PROJECT 1431-02-72 TOTALS						16,560		375	3	0	66	29	3	145
TOTALS						144,330		7,805	54	29	394	386	21	2,312

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

DETOUR ROUTE PAVEMENT MARKING AND SIGNING NO PASSING ZONES

PROJECT I.D.	ROADWAY	646.0106* PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0106* PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	648.0100* LOCATING NO PASSING ZONES MI	637.2230* SIGNS TYPE II REFLECTIVE F ** SF	634.0614* POSTS WOOD 4X6-INCH X 14-FT EACH
1430-00-74						
	DETOUR ROUTE - UNDISTRIBUTED	110,900	55,450	--	--	--
PROJECT 1430-00-74 TOTALS		166,350		0	0	0
1431-02-72						
	DETOUR ROUTE - UNDISTRIBUTED	21,150	5,300	2.00	66.00	11
PROJECT 1431-02-72 TOTALS		26,450		2.00	66.00	11
TOTALS		192,800		2.00	66.00	11

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE
**SIGNS ARE W14-3 48"X36"- "NO PASSING ZONE"

TEMPORARY PAVEMENT MARKING

PROJECT I.D.	STAGE	646.0600 REMOVING PAVEMENT MARKING LF	647.0955 REMOVING PAVEMENT MARKING ARROWS EACH	647.0965 REMOVING PAVEMENT MARKING WORDS EACH	649.0200 TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH WHITE LF	649.0200 TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH YELLOW LF	649.0300 TEMPORARY PAVEMENT MARKING REFLECTIVE TAPE 4-INCH WHITE LF	649.0300 TEMPORARY PAVEMENT MARKING REFLECTIVE TAPE 4-INCH YELLOW LF	649.0900 TEMPORARY PAVEMENT MARKING STOP LINE 12-INCH LF	649.1800 TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE EACH
1430-00-74										
	STAGE 1A	---	---	---	---	---	350	---	30	2
	STAGE 1B	2,100	4	---	---	---	3,300	3,540	26	---
	STAGE 2A	450	3	3	---	---	2,655	3,600	22	---
	STAGE 2B	---	---	---	---	---	1,300	1,450	---	---
	UNDISTRIBUTED	---	---	---	500	500	---	---	---	---
PROJECT 1430-00-74 TOTALS		2,550	7	3	500	500	7,605	8,590	78	2
TOTALS		2,550	7	3	1,000		16,195		78	2

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

LOCATING NO PASSING ZONES

PROJECT I.D.	ROADWAY	BEGIN STATION	-	END STATION	OFFSET	648.0100* LOCATING NO PASSING ZONES MI
1430-00-74						
	STH 23	210EB+41	-	223EB+30	RT/LT	0.24
	STH 23	224EB+85	-	265EB+90	RT/LT	0.78
	STH 23	267EB+24	-	293EB+15	RT/LT	0.49
	STH 23	294EB+44	-	302EB+12	RT/LT	0.15
	STH 23	304EB+27	-	317EB+23	RT	0.25
	STH 23	304EB+24	-	322EB+10	LT	0.34
	STH 23	341EB+50	-	346EB+50	RT	0.09
	STH 23	347EB+00	-	352EB+00	LT	0.09
	STH 23	355EB+50	-	368EB+25	RT	0.24
	STH 23	368EB+25	-	377EB+50	RT/LT	0.18
	STH 23	377EB+50	-	394EB+50	LT	0.32
	STH 23	394EB+50	-	413EB+88	RT/LT	0.37
	STH 23	413EB+88	-	422EB+74	LT	0.17
	STH 23	422EB+74	-	424EB+75	RT/LT	0.04
	STH 23	424EB+75	-	431EB+26	RT	0.12
	STH 23	451EB+10	-	456EB+10	RT	0.09
	STH 23	456EB+65	-	457EB+87	LT	0.02
	CTH A	100AN+00	-	101AN+64	RT/LT	0.03
	CTH A	102AN+61	-	106AN+13	RT/LT	0.07
	STH 49	200"49N"+36	-	203"49N"+14	RT/LT	0.05
	STH 49	204"49N"+10	-	209"49N"+62	RT/LT	0.10
PROJECT 1430-00-74 TOTAL						4.24
1431-02-72						
	STH 23	21EB+48		26EB+62	RT/LT	0.10
	STH 23	26EB+62		44EB+50	RT	0.34
	STH 23	44EB+50		53EB+56	RT/LT	0.17
	STH 23	54EB+83		57EB+48	RT	0.05
	STH 23	54EB+87		58EB+50	LT	0.07
PROJECT 1431-02-72 TOTAL						0.73
TOTAL						4.96

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE
* ADDITIONAL QUANTITIES LISTED ELSEWHERE

SAWING PAVEMENT

PROJECT I.D.	STAGE	ROADWAY	BEGIN STATION	BEGIN OFFSET	END STATION	END OFFSET	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
1430-00-74								
	STAGE 1							
		STH 23	305WB+86	89' LT	305WB+97	107' LT	25	----
		STH 23	309WB+93	86' LT	309WB+94	112' LT	30	----
		STH 23	310WB+05	133' LT	310WB+27	131' LT	25	----
		STH 23	334EB+10	266' LT	334WB+08	285' LT	25	----
		STH 23	334EB+17	476' LT	334EB+17	497' LT	25	----
		STH 23	339EB+55	90' LT	339EB+74	90' LT	20	----
		FOREST RIDGE RD	23FRN+36	32' RT	23FRN+52	32' RT	20	----
		FOREST RIDGE RD	23FRN+98	38' LT	24FRN+28	37' LT	30	----
		FOREST RIDGE RD	26FRN+00	32' RT	26FRN+21	32' RT	25	----
		FOREST RIDGE RD	27FRN+00	10' LT	27FRN+00	10' RT	20	----
		FOREST RIDGE RD	5 FRS+20	11' LT	5FRS+20	11' RT	25	----
		STH 23	351EB+49	74' LT	351EB+59	74' LT	15	----
		STH 23	354EB+52	74' LT	354EB+64	74' LT	15	----
		STH 23	359EB+89	61' LT	359EB+99	61' LT	15	----
		STH 23	363EB+45	91' RT	363EB+65	97' RT	20	----
		STH 23	367EB+71	79' LT	367EB+82	79' LT	15	----
		STH 23	373EB+01	85' LT	373EB+40	109' LT	50	----
		STH 23	374EB+49	156' LT	374EB+63	144' LT	20	----
		EASTWIND RD	7EW+24	10' LT	7EW+24	10' RT	20	----
		STH 23	386EB+34	62' LT	386EB+45	65' LT	15	----
		STH 23	400EB+33	64' LT	400EB+44	61' LT	15	----
		SUNNYSIDE RD	5SUN+70	10' LT	5SUN+70	10' RT	20	----
		STH 23	403EB+12	92' LT	403EB+21	91' LT	10	----
		STH 23	403EB+68	91' LT	403EB+80	88' LT	15	----
		STH 23	429EB+80	119' RT	429EB+90	118' LT	10	----
		BROOKLYN J RD	12BR+61	12'LT	12BR+61	12' RT	25	----
		STH 23	452EB+90	51' RT	453EB+14	52' RT	25	----
		DEAD END RD	7DD+71	10' LT	7DD+71	10' RT	20	----
		DEAD END RD	8DD+83	62' RT	9DD+70	60'RT	90	----
		CTH PP	12PP+87	10' LT	12PP+87	10' RT	20	----
	STAGE 1 SUBTOTALS						705	0
	STAGE 2							
		STH 23	210EB+00	15' LT	210EB+00	15' RT	120	---
		W JCT CTH A	19N+61	205' LT	19N+77	194' LT	25	---
		NORTH ST	22N+34	192' RT	22N+42	189' RT	10	---
		NORTH ST	23N+22	33' RT	23N+37	33' RT	15	---
		NORTH ST	25N+19	49' RT	25N+35	50' RT	20	---
		NORTH ST	25N+63	11' LT	25N+63	11' RT	25	---
		W JCT CTH A	13N+68	12' LT	13N+68	12' RT	25	---
		STH 23	263WB+75	101' LT	264WB+00	101' LT	25	---
		STH 23	266EB+50	85' RT	266EB+82	84' RT	35	---
		STH 23	276EB+75	161' RT	277EB+12	185' RT	40	---
		STH 23	279WB+34	132' LT	279WB+93	130' LT	60	---
		STH 49	203"49S"+47	131' LT	203"49S"+75	138' LT	30	---
		STH 49	203"49S"+41	103' RT	203"49S"+60	116' RT	25	---
		STH 49	208"49S"+20	88' LT	208"49S"+41	88' LT	25	---
		STH 49	209"49S"+57	15' LT	209"49S"+20	15' RT	30	---
		CTH A	101AN+88	127' RT	102AN+08	125' RT	20	---
		CTH A	100AN+00	25' LT	100AN+00	25' RT	50	---
	STAGE 2 SUBTOTALS						580	0
PROJECT 1430-00-74 TOTALS							1285	0
1431-02-72								
		STH 23	58WB+49	LT	58WB+49	LT	30	---
		STH 23	58WB+49	RT	58WB+49	RT	---	3
		STH 23	57EB+48	RT	57EB+48	RT	25	---
		STH 24	57EB+48	LT	57EB+48	LT	---	3
		STH 23	57EB+54	RT	57EB+54	RT	---	3
		KORO RD	11+58	LT/RT	11+58	LT/RT	30	---
		COMORN RD	8COM+62	LT/RT	8COM+62	LT/RT	30	---
PROJECT 1431-02-72 TOTALS							115	9
TOTALS							1400	9

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

CONSTRUCTION STAKING

PROJECT I.D.	ROADWAY	STATION		STATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.8500.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (1430-00-74) LS	650.9910.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (1430-00-74) LS	650.9910.02 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (1431-02-74) LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
1430-00-74													
	STH 23	210EB+41	-	457EB+87	90	24,750	24,750	14,850	23	1	1	---	24,750
	W JCT CTH A/NORTH ST	13N+68	-	25N+63	5	1,200	1,200	1,080	---	---	---	---	1,200
	CTH A	100AS+00	-	106AS+54	10	655	655	1,430	3	---	---	---	655
	STH 49	200"49S"+00	-	209"49S"+57	3	960	960	1,040	---	---	---	---	960
	FOREST RIDGE RD	5FRS+20	-	10FRS+00	2	480	480	535	---	---	---	---	480
	FOREST RIDGE RD	20FRN+00	-	27FRN+00	---	700	700	140	---	---	---	---	700
	EASTWIND RD	7EW+24	-	10EW+00	---	280	280	140	1	---	---	---	280
	SUNNYSIDE RD	5SUN+70	-	9SUN+83	---	415	415	150	1	---	---	---	415
	BROOKLYN J RD	10BR+00	-	12BR+61	---	265	265	150	1	---	---	---	265
	DEAD END RD	7DD+71	-	10DD+30	---	260	260	145	1	---	---	---	260
	CTH PP	10PP+30	-	12PP+87	2	260	260	205	---	---	---	---	260
	LAWSON DR	---	-	---	--	---	---	260	---	---	---	---	---
PROJECT 1430-00-74 TOTALS					112	30,225	30,225	20,125	30	1	1	0	30,225
1431-02-72													
	STH 23	21EB+48	-	58EB+50	7	3,710	3,710	2,110	2	---	---	1	3,710
	COMORN RD	8COM+62	-	9COM+87	---	125	125	---	---	---	---	---	125
PROJECT 1431-02-72 TOTALS					7	3,835	3,835	2,110	2	0	0	1	3,835
TOTALS					119	34,060	34,060	22,235	32	1	1	1	34,060

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

FLASHING BEACON

PROJECT I.D.	ROADWAY	STATION	OFFSET	634.0612 POST WOOD 4X6-INCH X 12-FT EACH	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	653.0145 PULL BOX STEEL 24X48-INCH EACH	654.0101* CONCRETE BASES TYPE 1 EACH	655.0220 CABLE TRAFFIC SIGNAL 4-14 AWG LF	655.0515* ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (GREEN) LF	656.0200.02 ELECTRICAL SERVICE METER PEDESTAL (244EB+75) LS	656.0200.03 ELECTRICAL SERVICE METER PEDESTAL (321EB+50) LS	657.0100* PEDESTAL BASE TYPE 1 EACH	657.0420* TRAFFIC SIGNAL STANDARD ALUMINUM ** 13-FT EACH	SPV.0105.04 FLASHING LED BEACON STA. 244EB+75 LS	SPV.0105.05 FLASHING LED BEACON STA. 321EB+50 LS
1430-00-74															
	STH 23	244+75	LT	1	10	1	1	38	27	1	---	1	1	1	---
	STH 23	321+50	LT	1	10	1	1	38	27	---	1	1	1	---	1
PROJECT 1430-00-74 TOTALS				2	20	2	2	76	54	1	1	2	2	1	1
TOTALS				2	20	2	2	76	54	1	1	2	2	1	1

* ADDITIONAL QUANTITIES LISTED ELSEWHERE
ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

** FIELD VERIFY LENGTH BASED ON ROADWAY X-SECTION

3

NON-METALLIC CONDUIT

LOCATION	LOCATION	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.
STH 23 AT STH 49	CB1-PB1	-	15
	PB1-PB2	-	60
	PB2-SB1	2	-
	PB2-PB3	385	-
	PB2-PB5	-	120
	PB5-PB4	25	-
	PB4-SB2	10	-
	PB5-SB3	25	-
	PB5-PB6	120	-
	PB6-LB1	5	-
	LB1-PB7	140	-
	PB7-LB2	5	-
	LB2-PB8	145	-
	PB8-LB3	5	-
	LB3-PB9	145	-
	PB9-LB4	5	-
	PB5-PB10	-	80
	PB10-SB4	-	25
	PB10-PB11	-	110
	PB11-LB5	10	-
	PB11-PB12	195	-
	PB11-PB13	-	40
	PB13-SB5	5	-
	PB11-PB14	-	160
	PB14-SB6	10	-
	PB14-PB15	135	-
	PB15-LB6	5	-
	LB6-PB16	145	-
	PB16-LB7	5	-
	PB14-PB17	-	110
	PB17-SB7	-	10
	PB17-PB18	-	140
	PB18-SB8	20	-
	PB18-PB19	385	-
	PB18-PB20	-	70
	PB20-SB9	15	-
	PB20-PB21	-	50
	PB21-SB10	15	-
	PB21-PB22	130	-
	PB22-LB8	5	-
	LB8-PB23	145	-
	PB23-LB9	5	-
	LB9-PB24	145	-
	PB24-LB10	5	-
	LB10-PB25	145	-
	PB25-LB11	5	-
	PB21-PB26	-	80
	PB26-SB11	-	15
	PB26-PB27	-	90
	PB27-LB12	15	-
	PB27-PB28	185	-
	PB27-PB29	-	40
	PB29-SB12	5	-
	PB27-PB30	-	160
	PB30-SB13	10	-
	PB30-PB31	135	-
	PB31-LB13	5	-
	LB13-PB32	105	-
	PB32-LB14	5	-
	PB30-PB33	-	90
	PB33-SB14	-	5
	PB33-PB34	-	50
	PB34-CB1	-	15
TOTAL		3,012	1,535

PULL BOXES

LOCATION	PB NO.	(1) STATION	(1) OFFSET	653.0140 PULLBOXES STEEL 24X42-INCH EACH
STH 23 AT STH 49	PB1	303+97.3	80.8 LT	1
	PB2	304+46.1	65.8 LT	1
	PB3	308+29.6	61.9 LT	1
	PB4	304+34.4	30.9 LT	1
	PB5	304+46.1	6.0 LT	1
	PB6	305+66.5	6.0 LT	1
	PB7	307+16.3	6.0 LT	1
	PB8	308+66.0	16.0 LT	1
	PB9	310+15.7	27.0 LT	1
	PB10	304+46.1	31.7 RT	1
	PB11	303+96.8	56.9 RT	1
	PB12	104+17.8	31.0 RT	1
	PB13	303+67.0	31.3 RT	1
	PB14	303+16.4	66.4 RT	1
	PB15	104+68.4	26.0 LT	1
	PB16	103+20.0	7.6 LT	1
	PB17	302+60.8	73.3 RT	1
	PB18	302+06.8	30.3 RT	1
	PB19	298+22.3	26.2 RT	1
	PB20	302+06.8	5.0 LT	1
	PB21	302+06.8	30.2 LT	1
	PB22	300+78.4	30.1 LT	1
	PB23	299+28.2	30.0 LT	1
	PB24	297+77.8	20.3 LT	1
	PB25	296+29.3	7.1 LT	1
	PB26	302+06.8	70.8 LT	1
	PB27	302+43.3	98.0 LT	1
	PB28	202+32.0	61.1 LT	1
	PB29	302+69.3	67.0 LT	1
	PB30	200+47.9	6.0 LT	1
	PB31	201+80.7	14.4 LT	1
	PB32	202+91.0	21.1 LT	1
	PB33	200+42.3	35.5 RT	1
	PB34	303+80.9	91.8 LT	1
TOTAL				34

(1) STATION/OFFSET ARE APPROXIMATE

LIGHTING ELECTRICAL CABLE

LOCATION	LOCATION	655.0305 CABLE TYPE UF, 2-12 AWG GROUNDED L.F.
STH 23 AT STH 49	CB1-SB1	105
	SB1-SB3	155
	SB3-LB1	195
	LB1-LB2	190
	LB2-LB3	195
	LB3-LB4	195
	CB1-LB5	270
	LB5-SB6	145
	SB6-LB6	195
	LB6-LB7	195
	CB1-SB13	130
	SB13-LB13	195
	LB13-LB14	155
	CB1-LB12	215
	LB12-SB10	160
	SB10-SB8	195
	SB10-LB8	180
	LB8-LB9	195
	LB9-LB10	195
	LB10-LB11	195
TOTAL		3,655

LIGHTING ELECTRICAL WIRE

LOCATION	LOCATION	655.0610 ELECTRICAL WIRE, LIGHTING, 12 AWG L.F.
STH 23 AT STH 49	SB1-LUMINAIRE 1	120
	SB3-LUMINAIRE 1	120
	SB3-LUMINAIRE 2	120
	SB6-LUMINAIRE 1	120
	SB6-LUMINAIRE 2	120
	SB8-LUMINAIRE 1	120
	SB10-LUMINAIRE	120
	SB10-LUMINAIRE	120
	SB13-LUMINAIRE	120
	SB13-LUMINAIRE	120
	LB1-LUMINAIRE 1	120
	LB2-LUMINAIRE 1	120
	LB3-LUMINAIRE 1	120
	LB4-LUMINAIRE 1	120
	LB5-LUMINAIRE 1	120
	LB6-LUMINAIRE 1	120
	LB7-LUMINAIRE 1	120
	LB8-LUMINAIRE 1	120
	LB9-LUMINAIRE 1	120
	LB10-LUMINAIRE	120
	LB11-LUMINAIRE	120
	LB12-LUMINAIRE	120
	LB13-LUMINAIRE	120
	LB14-LUMINAIRE	120
TOTAL		2,880

CONCRETE BASES

LOCATION	SB NO.	(1) STATION	(1) OFFSET	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
STH 23 AT STH 49	CB1	303+87.2	84.1 LT	-	-	-	-	-	1
	SB1	304+22.5	65.9 LT	-	1	-	-	-	-
	SB2	304+22.5	31.1 LT	1	-	-	-	-	-
	SB3	304+22.5	6.0 LT	-	1	-	-	-	-
	SB4	304+22.5	36.6 RT	-	-	-	1	-	-
	SB5	303+63.9	33.3 RT	1	-	-	-	-	-
	SB6	303+15.4	57.2 RT	-	1	-	-	-	-
	SB7	302+58.9	63.3 RT	-	-	-	-	1	-
	SB8	302+26.3	31.5 RT	-	1	-	-	-	-
	SB9	302+22.5	5.1 LT	1	-	-	-	-	-
	SB10	302+21.9	29.6 LT	-	1	-	-	-	-
	SB11	302+22.3	75.8 LT	-	-	-	1	-	-
	SB12	302+72.3	68.8 LT	1	-	-	-	-	-
	SB13	303+21.1	95.4 LT	-	1	-	-	-	-
	SB14	200+36.8	34.8 RT	-	-	-	1	-	-
	LB1	305+72.4	6.0 LT	-	-	1	-	-	-
	LB2	307+22.4	6.0 LT	-	-	1	-	-	-
	LB3	308+72.4	15.8 LT	-	-	1	-	-	-
	LB4	310+22.4	24.0 LT	-	-	1	-	-	-
	LB5	304+02.5	48.2 RT	-	1	-	-	-	-
	LB6	104+62.2	32.4 LT	-	-	1	-	-	-
	LB7	103+13.7	7.3 LT	-	-	1	-	-	-
	LB8	300+75.6	30.0 LT	-	-	1	-	-	-
	LB9	299+21.6	30.0 LT	-	-	1	-	-	-
	LB10	297+71.6	20.0 LT	-	-	1	-	-	-
	LB11	296+21.6	6.5 LT	-	-	1	-	-	-
	LB12	302+33.5	84.0 LT	-	1	-	-	-	-
	LB13	201+87.0	14.6 LT	-	-	1	-	-	-
	LB14	202+97.0	21.8 LT	-	-	1	-	-	-
TOTAL				4	8	12	3	1	1

(1) STATION/OFFSET ARE APPROXIMATE

PULL BOX BONDING JUMPERS

LOCATION	LOCATION	655.0515 * ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (GREEN) L.F.
STH 23 AT STH 49	CB1-PB1	20
	SB1-PB2	40
	SB2-PB4	25
	SB3-PB5	40
	LB1-PB6	20
	LB2-PB7	20
	LB3-PB8	20
	LB4-PB9	20
	SB4-PB10	40
	LB5-PB11	25
	SB5-PB13	20
	SB6-PB14	25
	LB6-PB15	20
	LB7-PB16	20
	SB7-PB17	25
	SB8-PB18	35
	SB9-PB20	30
	SB10-PB21	30
	LB8-PB22	20
	LB9-PB23	20
	LB10-PB24	20
	LB11-PB25	20
	SB11-PB26	30
	LB12-PB27	30
	SB12-PB29	20
	SB13-PB30	25
	LB13-PB31	20
	LB14-PB32	20
	SB14-PB33	20
	CB1-PB34	20
TOTAL		740

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC DETECTOR LOOPS

LOCATION	LOOP NO.	HOME RUN PB	(1) STATION	(1) OFFSET	SIZE	NO. TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
STH 23 AT STH 49	11	PB21	302+02.2	17.0 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	255	227
	12	PB21	302+30.2	17.0 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	255	221
	21	PB3	308+29.5	41.5 LT	6 X 10	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	62	435	260
	41	PB28	202+31.8	40.7 LT	6 X 10	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	355	269
	42	PB29	200+51.0	42.0 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	128	210	403
	43	PB29	200+23.0	42.0 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	114	210	359
	FUT.44	PB27	302+55.7	70.5 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	88	170	277
	FUT.45	PB27	302+44.5	74.1 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	170	214
	46	PB30	200+51.5	17.5 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	90	214
	47	PB30	200+23.5	17.5 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	90	214
	51	PB5	304+49.9	18.6 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	110	221
	52	PB5	304+21.9	18.6 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	110	221
	61	PB19	298+22.2	6.0 RT	6 X 10	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	700	269
	81	PB12	104+17.5	6.0 RT	6 X 10	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	425	302
	82	PB13	105+98.4	6.3 RT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	122	270	384
	83	PB13	106+26.4	6.3 RT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	270	334
	FUT.84	PB11	303+80.7	35.5 RT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	230	290
	FUT.85	PB11	303+93.8	36.5 RT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	230	221
	86	PB14	105+98.4	18.0 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	310	214
	87	PB14	106+26.4	18.0 LT	6 X 20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	310	221
TOTAL									1,606	5,205	5,334

LOCATION IS TO FRONT CENTER OF DETECTOR LOOP
(1) FINAL LOCATION TO BE DETERMINED BY ENGINEER IN FIELD

ELECTRICAL SERVICE

	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS
STH 23 AT STH 49	1
TOTAL	1

SIGNAL CABINETS AND MONOTUBES

	SPV.0105.02 TRANSPORT DEPARTMENT FURNISHED TRAFFIC SIGNAL MONOTUBE MATERIALS LS
STH 23 AT STH 49	1
TOTAL	1

SIGNAL MOUNTING HARDWARE

	658.5069.01 SIGNAL MOUNTING HARDWARE LS
STH 23 AT STH 49	1
TOTAL	1

LUMP SUM SIGNAL ITEMS

	SPV.0105.01 REMOVE AND SALVAGE TRAFFIC SIGNALS LS
STH 23 AT STH 49	1
TOTAL	1

SIGNAL FACES

LOCATION	SB NO.	HEAD NO.	658.0110 TRAFFIC SIGNAL FACES 3-12 INCH VERTICAL R-Y-G EACH	658.0110 TRAFFIC SIGNAL FACES 3-12 INCH VERTICAL <-R<-Y<-FY EACH	658.0115 TRAFFIC SIGNAL FACES 4-12 INCH VERTICAL <-R<-Y<-FY<-G EACH	658.0215 BACKPLATES SIGNAL FACE 3-SECTION 12-INCH EACH	658.0220 BACKPLATES SIGNAL FACE 4-SECTION 12-INCH EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH	658.0615 LED MODULES 12-INCH RED ARROW EACH	658.0620 LED MODULES 12-INCH YELLOW ARROW EACH	658.0625 LED MODULES 12-INCH GREEN ARROW EACH
STH 23 AT STH 49	SB1	1C	-	-	1	-	1	-	-	-	1	2	1
		2A	1	-	-	1	-	1	1	1	-	-	-
	SB2	1B	-	-	1	-	1	-	-	-	1	2	1
	SB3	5A	-	-	1	-	1	-	-	-	1	2	1
	SB4	6C	1	-	-	1	-	1	1	1	-	-	-
	SB5	8A	1	-	-	1	-	1	1	1	-	-	-
		4F	-	1	-	1	-	-	-	-	1	2	-
		6B	1	-	-	1	-	1	1	1	-	-	-
	SB6	8D	-	1	-	1	-	-	-	-	1	2	-
		4E	-	1	-	1	-	-	-	-	1	2	-
	SB7	4B	1	-	-	1	-	1	1	1	-	-	-
		4C	1	-	-	1	-	1	1	1	-	-	-
	SB8	6A	1	-	-	1	-	1	1	1	-	-	-
		5C	-	-	1	-	1	-	-	-	1	2	1
	SB9	5B	-	-	1	-	1	-	-	-	1	2	1
	SB10	1A	-	-	1	-	1	-	-	-	1	2	1
	SB11	2C	1	-	-	1	-	1	1	1	-	-	-
	SB12	8F	-	1	-	1	-	-	-	-	1	2	-
		4A	1	-	-	1	-	1	1	1	-	-	-
		2B	1	-	-	1	-	1	1	1	-	-	-
	SB13	8E	-	1	-	1	-	-	-	-	1	2	-
		4D	-	1	-	1	-	-	-	-	1	2	-
	SB14	8B	1	-	-	1	-	1	1	1	-	-	-
		8C	1	-	-	1	-	1	1	1	-	-	-
TOTAL			12	6	6	18	6	12	12	12	12	24	6

TRAFFIC SIGNAL CABLE

LOCATION	LOCATION	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.
STH 23 AT STH 49	CB1-SB1	-	-	105
	CB1-SB2	-	175	-
	CB1-SB3	-	165	-
	CB1-SB4	-	-	230
	CB1-SB5	-	-	305
	CB1-SB6	-	-	350
	CB1-SB7	-	405	-
	CB1-SB8	-	-	365
	CB1-SB9	-	325	-
	CB1-SB10	-	300	-
	CB1-SB11	-	260	-
	CB1-SB12	-	-	245
	CB1-SB13	-	-	130
	CB1-SB14	-	85	-
	SB1-HEAD 1C	-	20	-
	SB1-HEAD 2A	20	-	-
	SB2-HEAD 1B	-	20	-
	SB3-HEAD 5A	-	20	-
	SB4-HEAD 6C	50	-	-
	SB5-HEAD 4F	20	-	-
	SB5-HEAD 6B	20	-	-
	SB5-HEAD 8A	20	-	-
	SB6-HEAD 4E	20	-	-
	SB6-HEAD 8D	20	-	-
	SB7-HEAD 4B	55	-	-
	SB7-HEAD 4C	65	-	-
	SB8-HEAD 5C	-	20	-
	SB8-HEAD 6A	20	-	-
	SB9-HEAD 5B	-	20	-
	SB10-HEAD 1A	-	20	-
	SB11-HEAD 2C	50	-	-
	SB12-HEAD 2B	20	-	-
	SB12-HEAD 4A	20	-	-
	SB12-HEAD 8F	20	-	-
	SB13-HEAD 4D	20		
	SB13-HEAD 8E	20		
	SB14-HEAD 8B	20	-	-
	SB14-HEAD 8C	50	-	-
TOTAL		530	1,835	1,730

EQUIPMENT GROUNDING CONDUCTORS

LOCATION	LOCATION	655.0515 * ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (GREEN) L.F.
STH 23 AT STH 49	CB1-SB1	75
	SB1-SB2	135
	SB2-LB4	620
	LB4-LB3	165
	LB3-LB2	165
	LB2-LB1	160
	LB1-SB3	165
	SB3-SB4	105
	SB4-LB5	105
	LB5-SB5	70
	SB5-LB7	430
	LB7-LB6	165
	LB6-SB6	165
	SB6-SB7	90
	SB7-SB8	115
	SB8-SB9	85
	SB9-LB11	640
	LB11-LB10	165
	LB10-LB9	165
	LB9-LB8	165
	LB8-SB10	165
	SB10-SB11	85
	SB11-LB12	90
	LB12-SB12	75
	SB12-LB14	390
	LB14-LB13	125
	LB13-SB13	165
	SB13-SB14	75
	SB14-CB1	50
TOTAL		5,170

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

SIGNAL BASES, POLES, ARMS, AND LUMINAIRES

LOCATION	SB NO.	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0315 POLES TYPE 4 EACH	657.0322 POLES, TYPE 5 ALUMINUM EACH	657.1345 INSTALL POLES TYPE 9 EACH	657.1355 INSTALL POLES TYPE 12 EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	657.1545 INSTALL MONOTUBE ARMS 45-FT EACH	SPV.0060.25 LED LUMINAIRE CATEGORY C EACH	657.0614 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 8-FOOT EACH
STH 23 AT STH 49	SB1	-	1	1	-	-	-	-	-	-	-	1	1
	SB2	1	-	-	-	-	-	-	1	-	-	-	-
	SB3	-	1	1	-	-	-	-	-	-	-	2	2
	SB4	-	-	-	-	1	-	-	-	1	-	-	-
	SB5	1	-	-	-	-	-	1	-	-	-	-	-
	SB6	-	1	1	-	-	-	-	-	-	-	2	2
	SB7	-	-	-	-	-	1	-	-	-	1	-	-
	SB8	-	1	1	-	-	-	-	-	-	-	1	1
	SB9	1	-	-	-	-	-	-	1	-	-	-	-
	SB10	-	1	1	-	-	-	-	-	-	-	2	2
	SB11	-	-	-	-	1	-	-	-	1	-	-	-
	SB12	1	-	-	-	-	-	1	-	-	-	-	-
	SB13	-	1	1	-	-	-	-	-	-	-	2	2
	SB14	-	-	-	-	-	1	-	-	1	-	-	-
	LB1	-	1	-	1	-	-	-	-	-	-	1	1
	LB2	-	1	-	1	-	-	-	-	-	-	1	1
	LB3	-	1	-	1	-	-	-	-	-	-	1	1
	LB4	-	1	-	1	-	-	-	-	-	-	1	1
	LB5	-	1	1	-	-	-	-	-	-	-	1	1
	LB6	-	1	-	1	-	-	-	-	-	-	1	1
	LB7	-	1	-	1	-	-	-	-	-	-	1	1
	LB8	-	1	-	1	-	-	-	-	-	-	1	1
	LB9	-	1	-	1	-	-	-	-	-	-	1	1
	LB10	-	1	-	1	-	-	-	-	-	-	1	1
	LB11	-	1	-	1	-	-	-	-	-	-	1	1
	LB12	-	1	1	-	-	-	-	-	-	-	1	1
	LB13	-	1	-	1	-	-	-	-	-	-	1	1
	LB14	-	1	-	1	-	-	-	-	-	-	1	1
TOTAL		4	20	8	12	2	2	2	2	3	1	24	24

3

ADJUSTING EXISTING SANITARY AND WATER

PROJECT I.D.	LOCATION			SPV.0060.26 ADJUST EXISTING SANITARY MANHOLE AND BARREL EACH	SPV.0060.27 WATER VALVE BOX ADJUSTMENT EACH	SPV.0060.28 SALVAGE AND REINSTALL HYDRANT EACH
1430-00-74						
	CTH A	101AN+98	RT	---	1	---
	CTH A	102AN+04	RT	---	1	---
	CTH A	102AN+13	RT	1	---	---
	CTH A	102AN+13	LT	1	---	---
	CTH A	102AN+20	LT	---	---	1
	CTH A	102AN+40	RT	---	---	1
PROJECT 1430-00-74 TOTAL				2	2	2
TOTAL				2	2	2

ALL ITEMS CATEGORY 0010 UNLESS NOTED OTHERWISE

3

CLEARING AND GRUBBING

CATEGORY	STATION TO STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010	15+00 - 26+00	N LAWSON DR	11	11
		TOTAL	11	11

REMOVING CURB AND GUTTER

CATEGORY	STATION TO STATION	LOCATION	204.0150 LF
0010	12+50 - 14+31	N LAWSON DR	190
		TOTAL	190

REMOVING CONCRETE SIDEWALK

CATEGORY	FROM	TO	LOCATION	204.0155 SY
0010	12+50	NORTH ST	LT	80
			TOTAL	80

REMOVING MANHOLES AND CATCH BASINS

CATEGORY	STATION	LOCATION	204.0210 REMOVING MANHOLES EA	204.0215 REMOVING CATCHBASINS EA
0010	14+02.1	15 RT	-	1
0020	14+51.4	28 RT	1	-
0020	15+10	4 RT	1	-
		TOTAL	2	1

EXCAVATION ROCK

CATEGORY	STATION TO STATION	205.0200 (CY)	COMMENT
0020	15+50 - 19+05	190	SANITARY SEWER
0020	17+00 - 19+10	35	WATER MAIN
0010	17+75 - 18+75	5	STORM SEWER
	TOTAL	230	

WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE WIS.
PROFESSIONAL ENGINEER
JULY 30, 2013
EXP. JULY 31, 2014

EARTHWORK SUMMARY

CATEGORY	LOCATION	205.0100 EXCAVATION COMMON (CY)	EXPANDED FILL (CY)	WASTE (CY)
0010	PROJECT	8700	570	8130
0010	EBS (UNDISTRIBUTED)	1600	-	1600
0010	STORM WATER FILTERING BASIN	1000	2	998
	TOTAL	11300	572	10728

(1) FROM EARTH WORK DATA SHEET
(2) 25% EXPANSION FACTOR HAS BEEN APPLIED TO FILL VOLUMES
(3) WASTE = COMMON EXCAVATION - EXPANDED FILL

BASE AGGREGATE

CATEGORY	STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4 INCH TON	305.0120 BASE AGGREGATE DENSE 1-1/4 INCH TON	312.0110 SELECT CRUSHED MATERIAL TON
0010	12+50 - 26+00	MAINLINE	-	3050	-
0010	12+50 - 26+00	UNDISTRIBUTED	-	-	2650
0010	40+75 - 45+13	NORTH ST	56	700	550
0010	12+50 - 12+87.2	DRIVEWAY	15	-	-
0010	12+55.7 - 12+72.8	DRIVEWAY	10	-	-
0010	13+88.2 - 14+11.5	DRIVEWAY	40	-	-
0010	40+75 - 42+09.5	DRIVEWAY	40	-	-
0010	43+34.4 - 43+51.4	DRIVEWAY	25	-	-
0010	43+64.5 - 43+77.4	DRIVEWAY	5	-	-
0010	44+38.8 - 44+63.2	DRIVEWAY	5	-	-
0010	12+50 - 13+80	SIDEWALK	10	-	-
0010	14+96.7 - 26+00	MULTI-USE PATH	-	317	-
		TOTAL	206	4067	3190

FINISHING ROADWAY

CATEGORY	STATION TO STATION	LOCATION	213.0100 FINISHING ROADWAY (1430-00-84) EA
0010	12+50 - 26+00	MAINLINE	1
		TOTAL	1

3

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	MISCELLANEOUS QUANTITIES - NORTH LAWSON DRIVE	SHEET 271	E

FILE NAME : S:\TOWNS\GREEN LAKE CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\MQSHEETS-BASE.DGN PLOT DATE : 07-30-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE :

ASPHALTIC ITEMS

CATEGORY	TATION - STATIO	LOCATION	455.0120 ASPHALTIC MAT PG-64-28 (TON)	460.1101 HMA PAVEMENT TYPE E-1 (TON)	455.0605 TACK COAT (GAL)
0010	12+50 - 26+00	MAINLINE	84	1610	150
0010	40+75 -45+14.6	NORTH ST	20	385	30
		TOTAL	104	1995	180

WISCONSIN
GREGORY E. MITCHELL
E-46290
MILWAUKEE WIS.
PROFESSIONAL ENGINEER
JULY 29, 2013 EXP. JULY 31, 2014

ASPHALTIC SURFACE

CATEGORY	STATION - STATION	LOCATION	465.0105 ASPHALTIC SURFACE (TON)	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (TON)	465.0315 ASPHALTIC FLUMES (SY)
0010	12+50 -12+87.2	DRIVEWAY	-	1	-
0010	12+55.7 -12+72.8	DRIVEWAY	-	1	-
0010	13+88.2 - 14+11.5	DRIVEWAY	-	8	-
0010	43+34.4 -43+51.4	DRIVEWAY	-	5	-
0010	44+38.8 -44+63.2	DRIVEWAY	-	2	-
0010	14+96.7 - 26+00	MULTI-USE PATH	76	-	-
0010	43+92.9 - 43+97.8	15 LT	-	-	4
		TOTAL	76	17	4

CONCRETE DRIVEWAY

CATEGORY	STATION - STATION	LOCATION	416.0160 6-INCH (SY)
0010	12+50 -12+87.2	N LAWSON DR	20
0010	12+55.7 -12+72.8	N LAWSON DR	20
0010	13+88.2 - 14+11.5	N LAWSON DR	12
0010	43+34.4 -43+51.4	NORTH ST	9
		TOTAL	61

CONCRETE SIDEWALK 4-INCH

CATEGORY	STATION TO STATION	LOCATION	602.0405 SF
0010	12+50 -13+80	LT	480
		TOTAL	480

CURB RAMP DETECTABLE WARNING FIELD

CATEGORY	STATION	LOCATION	602.0505 (YELLOW) SF
0010	13+80	LT	8
		TOTAL	8

CONCRETE SAFETY ISLANDS

CATEGORY	STATION	LOCATION	602.2400 SF
0010	14+22	21.6 LT	170
		TOTAL	170

GEOTEXTILE FABRIC TYPE SAS

CATEGORY	LOCATION	645.0140 SY
0010	EBS (UNDISTRIBUTED)	4800
	TOTAL	4800

CONSTRUCTION STAKING

CATEGORY	LOCATION	650.4000 STORM SEWER EA	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB GUTTER AND CURB & GUTTER LF
0010	12+50 - 26+00	55	1380	1380	2600
0010	40+75 -45+13	3	440	440	320
	TOTAL	58	1820	1820	2920

CONCRETE CURB AND GUTTER 30 INCH TYPE D

CATEGORY	STATION - STATION	LOCATION	601.0411 LF
0010	12+50 - 26+00	MAINLINE RT	1250
0010	12+50 - 26+00	MAINLINE LT	1350
0010	42+21 - 43+95	NORTH ST RT	220
0010	42+46 - 44+32	NORTH ST LT	100
		TOTAL	2920

ROCK BAGS

CATEGORY	STA - STA	LOCATION	628.7570 ROCK BAGS EA
0010	41+50 - 42+25	LT	40
		TOTAL	40

TRAFFIC CONTROL BARRICADES TYPE III

CATEGORY	STA - STA	643.0420 T.C. BARRICADES TY. III DAY
0010	12+00 - 26+00	1080
	TOTAL	1080

WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE WIS.
PROFESSIONAL ENGINEER
July 30, 2013
EXP. July 31, 2014

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE

CATEGORY	STATION	LOCATION	INVERT ELEVATION	STRUCTURE NUMBER	522.1012 12-INCH EA	522.1018 18-INCH EA
0010	42+31.2	21.5 LT	809.97	ENDWALL	-	1
0010	15+74.7	52 RT	813.54	ENDWALL	1	-
0010	16+27.3	54.2 RT	816	ENDWALL	-	1
				TOTALS	1	2

STORM SEWER PIPE REINFORCED CONCRETE

CATEGORY	FROM DOWNSTREAM	TO UPSTREAM	608.0312 CLASS III 12 INCH LF	608.0315 CLASS III 15 INCH LF	608.0318 CLASS III 18 INCH LF	608.0324 CLASS III 24 INCH LF
0010	EXISTING PIPE	1	-	-	-	46
0010	1	1.1	30	-	-	-
0010	1	2	-	-	-	94
0010	2	2.1	16	-	-	-
0010	2	2.1	26	-	-	-
0010	3.1	3.2	-	-	38	-
0010	2	3.1	-	-	50	-
0010	3.2	ENDWALL	-	-	16	-
0010	2	4	-	-	132	-
0010	4	4.1	-	18	-	-
0010	4	4.2	28	-	-	-
0010	4	4.4	-	-	52	-
0010	4.1	4.5	40	-	-	-
0010	4.2	4.3	36	-	-	-
0010	0.1	0.2	36	-	-	-
0010	ENDWALL	0.1	40	-	-	-
0010	ENDWALL	5	-	-	20	-
0010	5	6.1	-	-	36	-
0010	6.1	6.2	6	-	-	-
0010	6.1	6	-	-	10	-
0010	6	6.3	26	-	-	-
0010	6.3	6.4	6	-	-	-
0010	6	7	-	-	182	-
0010	7	8	-	166	-	-
0010	8	9	250	-	-	-
0010	8	8.1	10	-	-	-
0010	8	8.2	26	-	-	-
0010	9	10	100	-	-	-
0010	10	10.1	26	-	-	-
0010	10	10.2	10	-	-	-
		TOTAL	712	184	536	140

STORM SEWER STRUCTURES

CATEGORY	STATION	LOCATION	T/C /RIM ELEVATION	INVERT ELEVATION	STRUCTURE NUMBER	611.2004 MANHOLES 4-FT DIA. EA	611.1230 CATCH BASINS 2x3 FT EA	SPV.0060.22 STORM SEWER FILTERING BASIN OUTLETS EA	611.0639 INLET COVERS TYPE HS EA	611.0530 MANHOLE COVERS TYPE J EA	611.0624 INLET COVERS TYPE H EA
0010	12+99.9	15.5 LT	805.86	801.6	1	1	-	-	-	-	1
0010	12+99.9	15.8 RT	805.9	803.07	1.1	-	1	-	-	-	1
0010	13+96.8	6.6' LT	808.52	803.34	2	1	-	-	-	1	-
0010	13+83.7	15.8 RT	808.21	804.21	2.1	-	1	-	-	-	1
0010	14+48.6	36.1RT	812.18	808.18	4.5	-	1	-	-	-	1
0010	14+12.5	55.1LT	810.47	806.74	3.1	-	1	-	-	-	1
0010	14+59.3	53.7 LT	811.87	807.87	3.2	-	1	-	-	-	1
0010	15+11.7	45.2RT	813.9	806.5	4	1	-	-	-	1	-
0010	44+00.2	23.3 LT	809.58	807.36	4.1	-	1	-	1	-	-
0010	15+14.4	17.3 RT	814.03	809.07	4.2	-	1	-	-	-	1
0010	14+14.6	17.3 LT	814.07	810.07	4.3	-	1	-	-	-	1
0010	15+54.1	59.9 RT	815.5	811.16	4.4	-	-	1	-	-	-
0010	15+74.7	17.3 RT	817.94	813.77	0.1	-	1	-	-	-	1
0010	15+74.7	17.3 LT	817.94	813.94	0.2	-	1	-	-	-	1
0010	16+50	53.3 RT	821.9	816.63	5	1	-	-	-	1	-
0010	16+50	17.3 RT	823.26	817.76	6.1	-	1	-	-	-	1
0010	16+56	17.3 RT	823.68	817.86	6.2	-	1	-	-	-	1
0010	16+50	8 RT	823.04	818.04	6	1	-	-	-	1	-
0010	16+50	17.3 LT	823.26	819.16	6.3	-	1	-	-	-	1
0010	16+56	17.3 LT	823.68	819.26	6.4	-	1	-	-	-	1
0010	18+33.1	8.7 RT	834.8	829.55	7	1	-	-	-	1	-
0010	20+00	17.3 RT	840.65	836.65	8.1	-	1	-	-	-	1
0010	20+00	8 RT	840.44	835.19	8	1	-	-	-	1	-
0010	20+00	17.3 LT	840.65	836.65	8.2	-	1	-	-	-	1
0010	22+50	8 RT	845.15	840.9	9	1	-	-	-	1	-
0010	23+50	17.3 RT	848.91	844.91	10.1	-	1	-	-	-	1
0010	23+50	8 RT	848.69	844.44	10	1	-	-	-	1	-
0010	23+50	17.3 LT	848.91	844.91	10.2	-	1	-	-	-	1
					TOTALS	9	18	1	1	8	18

MOBILIZATION

CATEGORY	STATION - STATION	LOCATION	628.1905 MOBILIZATION EROSION CONTROL EA	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EA
0010	12+50 - 26+00	N LAWSON DR	1	1
		TOTAL	1	1

SILT FENCE

CATEGORY	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
0010	UNDISTRIBUTED	2800	2800
	TOTALS	2800	2800

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	MISCELLANEOUS QUANTITIES - NORTH LAWSON DRIVE	SHEET 274	E

FILE NAME : S:\TOWNS\GREEN LAKE CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\MQSHEETS-BASE.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE :

EROSION MAT

CATEGORY	STA - STA	LOCATION	URBAN CL ITY B 628.2008 SY	CL ITY A 628.2002 SY	CL II TY B 628.2023 SY
0010	15+52.6 - 16+27.5	RT	50		
0010	15+52.6 - 16+27.5	RT		310	
0010	40+75 - 42+30	LT			90
		TOTAL	50	310	90

CONNECT TO EXISTING WATERMAIN

CATEGORY	STATION	LOCATION	SPV.0060.01 EA
0020	12+50	18.9 RT	1
0020	40+714	11RT	1
		TOTAL	2

SAWING PAVEMENT

CATEGORY	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	12+50	LT (CURB & GUTTER)	-	3
0010	12+50	LT (SIDEWALK)	-	4
0010	12+50	MAINLINE	29	-
0010	12+50 - 12+87.2	RT (DRIVEWAY)	13	-
0010	12+55.7 - 12+72.8	LT (DRIVEWAY)	27	-
0010	13+88.2 - 14+11.5	RT (DRIVEWAY)	18	-
0010	43+42.5 - 43+52.8	RT (DRIVEWAY)	17	-
0010	43+66.2 - 43+76.7	RT (DRIVEWAY)	9	-
0010	44+38.8 - 44+63.2	RT (DRIVEWAY)	20	-
0010	40+75	NORTH ST	22	-
0010	45+14.6	NORTH ST	25	-
		TOTAL	180	7

GATE VALVE AND BOX

CATEGORY	STATION	LOCATION	SPV.0060.03 10-INCH EA	SPV.0060.04 8-INCH EA	SPV.0060.05 6-INCH EA
0020	13+05	11RT	-	-	1
0020	13+10	8.17 RT	-	1	-
0020	15+32.8	21.5LT	-	-	1
0020	15+43.1	23.8RT	1	-	-
0020	19+08	21.5LT	-	-	1
0020	43+38.2	5.8LT	-	1	-
		TOTAL	1	2	3

REMOVE EXISTING HYDRANT

CATEGORY	STATION	LOCATION	SPV.0060.02 EA
0020	13+24.5	27.7 RT	1
		TOTAL	1

INLET PROTECTION

CATEGORY	STRUCTURE NUMBER	STA	LOCATION	628.7005 INLET PROTECTION TYPE A EA	628.7015 INLET PROTECTION TYPE C EA
0010	1	12+99.9	15.5 LT	-	1
0010	1.1	12+99.9	15.8 RT	-	1
0010	EXISTING	14+02.1	15 RT	-	1
0010	2.1	14+19	15.8 RT	-	1
0010	2.2	14+48.6	36.1RT	-	1
0010	3	14+30.1	23.7 LT	-	1
0010	3.1	14+12.5	55.1LT	-	1
0010	3.2	14+59.3	53.7 LT	-	1
0010	4.1	44+00.2	23.3LT	-	1
0010	4.2	15+14.4	17.3 RT	-	1
0010	4.3	14+14.6	17.3 LT	-	1
0010	4.4	15+54.1	59.9 RT	1	-
0010	0.1	15+74.7	17.3 RT	-	1
0010	0.2	15+74.7	17.3 LT	-	1
0010	6.1	16+50	17.3 RT	-	1
0010	6.2	16+56	17.3 RT	-	1
0010	6.3	16+50	17.3 LT	-	1
0010	6.4	16+56	17.3 LT	-	1
0010	8.1	20+00	17.3 RT	-	1
0010	8.2	20+00	17.3 LT	-	1
0010	10.1	23+50	17.3 RT	-	1
0010	10.2	23+50	17.3 LT	-	1
			TOTALS	1	21

SEEDING NURSE CROP

CATEGORY	STA - STA	LOCATION	630.0400 SEEDING NURSE CROP LB
0010	15+52.6 - 16+27.5	RT	4
		TOTALS	4

TOPSOIL, MULCH, FERTILIZER AND SEED

CATEGORY	STATION - STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIX NO. 30 LB	630.0175 SEEDING MIX NO. 75 LB
0010	12+50 - 26+00	N LAWSON DR	7500	7500	5	135	-
0010	15+52.6 - 16+27.5	RT	430	430	1	-	3
0010	40+75 - 45+14.6	NORTH ST	810	810	1	15	-
		TOTALS	8740	8740	7	150	3

WATERMAIN FITTINGS

CATEGORY	STATION	LOCATION	SPV.0060.06 REDUCER FITTING 10-INCH X 8 INCH EA	SPV.0060.07 REDUCER FITTING 8-INCH X 6 INCH EA	SPV.0060.08 11.25 DEGREE BEND FITTING 10-INCH EA	SPV.0060.09 45 DEGREE BEND FITTING 8-INCH EA	SPV.0060.10 TEE FITTING 8-INCH X 6 INCH EA	SPV.0060.11 TEE FITTING 10-INCH X 6 INCH EA	SPV.0060.12 CROSS FITTING 8-INCH X 8 INCH EA	SPV.0060.13 CAP FITTING 10-INCH EA	SPV.0060.14 CAP FITTING 8-INCH EA
0020	12+50	18.9 RT	-	1	-	-	-	-	-	-	-
0020	12+54.1	18.9 RT	-	-	-	1	-	-	-	-	-
0020	12+65	8 RT	-	-	-	1	-	-	-	-	-
0020	13+05	8RT	-	-	-	-	1	-	-	-	-
0020	14+41.2	45.7RT	-	-	-	1	-	-	-	-	-
0020	14+70.2	38.1RT	-	-	-	-	-	-	1	-	1
0020	14+74.6	37.3 RT	1	-	-	-	-	-	-	-	-
0020	14+94.6	33.4RT	-	-	1	-	-	-	-	-	-
0020	15+32.8	21.5 LT	-	-	-	-	-	1	-	-	-
0020	17+94.6	20.2RT	-	-	1	-	-	-	-	-	-
0020	19+00	22RT	-	-	1	-	-	-	-	-	-
0020	19+08	21.5LT	-	-	-	-	-	1	-	1	-
0020	40+71.4	11RT	-	1	-	-	-	-	-	-	-
0020	40+76.4	11RT	-	-	-	1	-	-	-	-	-
0020	40+95.5	8LT	-	-	-	1	-	-	-	-	-
		TOTAL	1	2	3	5	1	2	1	1	1

WISCONSIN
GREGORY E. MITCHELL
E-46290
MILWAUKEE
WIS.
PROFESSIONAL ENGINEER
JULY 24, 2013
EXP. JULY 31, 2014

HYDRANT

CATEGORY	STATION	LOCATION	SPV.0060.15 EA
0020	13+05	20.04 RT	1
0020	15+32.8	21.5 LT	1
0020	19+08	21.5 LT	1
		TOTAL	3

WATERMAIN

CATEGORY	STATION - STATION	LOCATION	SPV.0090.01 WATERMAIN 10-INCH LF	SPV.0090.02 WATERMAIN 8-INCH LF	SPV.0090.03 WATERMAIN 6-INCH LF	SPV.0035.01 TRENCH BACKFILL WATER AND SANITARY * CY
0020	12+50 - 14+70.2	18.9 RT -38.1RT	-	250	-	140
0020	13+05	20.04 RT	-	-	12	7
0020	14+70.2-15+32.8	38.1RT - 21.5LT	72	-	-	45
0020	15+32.8	21.5 LT	-	-	46	30
0020	15+32.8 -17+94.6	21.5LT - 20.2RT	260	-	-	150
0020	17+94.6 - 19+00	20.2 RT - 22 RT	100	-	-	60
0020	19+08	21.5 LT	-	-	44	25
0020	40+71.4 - 14+70.2	11RT-38.1RT	-	270	-	160
		TOTAL	432	520	102	617

*ADDITIONAL QUANTITIES FOUND ELSEWHERE IN THE PLAN

SANITARY SEWER PIPE SCHEDULE

CATEGORY	STATION	LOCATION	MH TO MH	SPV.0090.05 SANITARY SEWER 8-INCH LF	SPV.0035.01 TRENCH BACKFILL WATER AND SANITARY * CY
0020	12+55 - 12+60	10.8LT - C/L	1 - 2	12	5
0020	12+60 - 14+65.6	C/L - 52.4RT	2 - 3	225	145
0020	14+70.2 -17+76.5	52.4RT - 29.3RT	3 - 4	325	350
0020	17+76.5 - 19+00	29.3RT - 30RT	4 - 5	120	150
0020	40+92.9 - 14+65.1	7.1RT - C/L	3 - 6	12	225
			TOTAL	694	875

*ADDITIONAL QUANTITIES FOUND ELSEWHERE IN THE PLAN

WATER SERVICE SCHEDULE

CATEGORY	STATION	LOCATION	SPV.0090.04 WATER SERVICE LATERAL 1 1/4-INCH LF	SPV.0060.16 CORPORATION STOP 1 1/4-INCH EA	SPV.0060.17 CURB STOP AND BOX 1 1/4-INCH EA	SPV.0060.18 CONNECT TO EXISTING WATER SERVICE EA	SPV.0035.01 TRENCH BACKFILL WATER AND SANITARY * CY	COMMENTS
0020	13+10	RT	30	1	1	1	15	FIELD VERIFY LOCATION OF EXISTING LATERAL
0020	13+30	LT	39	1	1	1	20	FIELD VERIFY LOCATION OF EXISTING LATERAL
0020	13+70	RT	30	1	1	1	15	FIELD VERIFY LOCATION OF EXISTING LATERAL
0020	16+93	RT	32	1	1	1	15	FIELD VERIFY LOCATION OF EXISTING LATERAL
0020	43+40	RT	44	1	1	1	20	FIELD VERIFY LOCATION OF EXISTING LATERAL
		TOTAL	175	5	5	5	85	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE IN THE PLAN

WISCONSIN
GREGORY E. MITCHELL
E-46290
MILWAUKEE
WIS.
PROFESSIONAL ENGINEER
JULY 29, 2013
EXP. JULY 31, 2014

SANITARY SERVICE SCHEDULE

CATEGORY	STATION	LOCATION	SPV.0090.06 SANITARY SERVICE LATERAL 6-INCH LF	SPV.0060.20 SANITARY SERVICE WYE 8-INCH X 6-INCH EA	SPV.0060.21 CONNECT TO EXISTING SANITARY SERVICE EA	SPV.0035.01 TRENCH BACKFILL WATER AND SANITARY * CY	COMMENTS
0020	13+12	RT	39	1	1	30	FIELD VERIFY LOC. OF EXISTING LATERAL
0020	43+45	RT	36	1	1	30	FIELD VERIFY LOC. OF EXISTING LATERAL
		TOTAL	75	2	2	60	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE IN THE PLAN

CONNECT TO EXISTING SANITARY SEWER

CATEGORY	STATION	LOCATION	SPV.0060.19 EA
0020	12+55	10.8 LT	1
0020	40+92.9	7.1RT	1
		TOTAL	2

WATERMAIN TOP INSULATION

CATEGORY	STATION	LOCATION	SPV.0165.01 SF
0020	14+94.6	33.4RT	32
0020	15+13	28.5RT	32
0020	15+74.7	22RT	32
0020	16+50	22RT	32
0020	43+21.3	8.4LT	32
		TOTALS	160

SANITARY SEWER MANHOLE, 48-INCH

CATEGORY	STATION	LOCATION	RIM ELEVATION	INVERT ELEVATION	STRUCTURE NUMBER	SPV.0200.01 VF
0020	12+55	10.8 LT	804.71	798.77	1	6
0020	12+60	C/L	805.12	798.97	2	6
0020	14+65.6	52.4RT	810.97	800.73	3	10
0020	17+76.5	29.3RT	834.35	819.55	4	15
0020	19+00	30RT	838.17	823.51	5	15
0020	40+92.9	7.1RT	815.07	804.5	6	11
					TOTAL	63

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

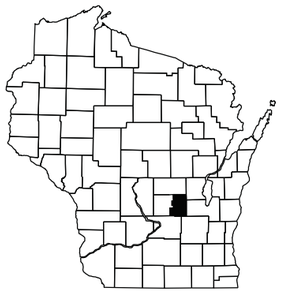
TRANSPORTATION PROJECT PLAT TITLE SHEET

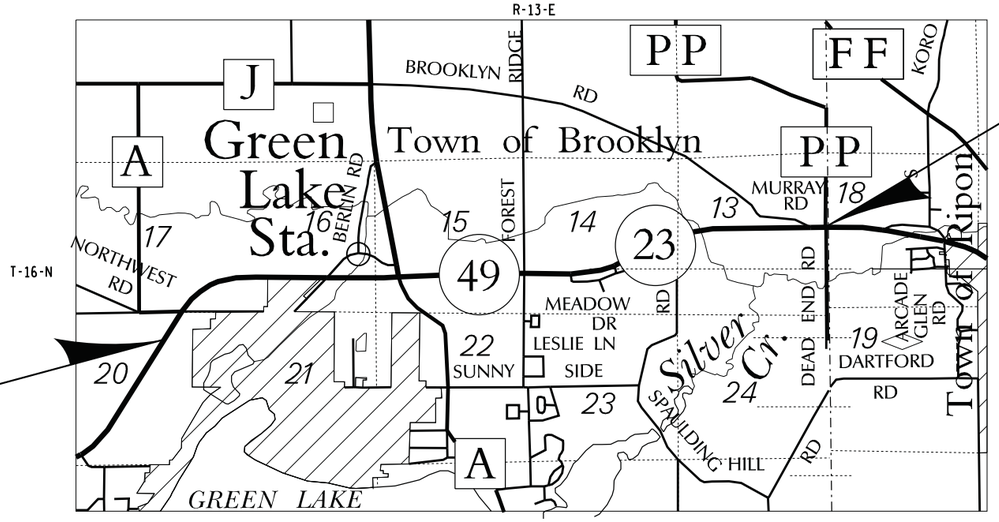
PROJECT NO. 1430-00-24

GREEN LAKE - FOND DU LAC COUNTY LINE
(WEST JUNCTION CTH A - CTH PP)

STH 23

GREEN LAKE COUNTY





END PROJECT 1430-00-24

BEGIN PROJECT 1430-00-24

N

LAYOUT
SCALE 0 0.5 MI.

NOTES:

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION. AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

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

A **TEMPORARY LIMITED EASEMENT (T.L.E.)** FOR DRAINAGE, DRIVEWAYS AND GRADING, INCLUDING FOR SUCH PURPOSE THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE TO PREVENT EROSION OF THE SOIL. ALL TLEs EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTURMENT IS GIVEN.

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, GREEN LAKE COUNTY, NAD83/91 ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4" x 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT OF WAY LINES DEPICTED IN NON-AQUISITION AREAS ARE INTENDED TO REESTABLISH EXISTING RIGHT OF WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS. OTHER RECORDED DOCUMENTS OR FROM CENTERLINE OF EXISTING PAVEMENTS.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT OF WAY FOR S.T.H. 23 ESTABLISHED FROM PREVIOUS PROJECT T 026-1(15). EXISTING HIGHWAY RIGHT OF WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENT, SECTION/QUARTER LINE OR FOUND PROPERTY IRONS.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

EXISTING ACCESS CONTROL FOR S.T.H. 23 ACQUIRED BY PREVIOUS PROJECT T 026-1(15).

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTAION REGION OFFICE IN WISCONSIN RAPIDS.

DISTANCES SHOWN TO BUILDINGS ARE APPROXIMATE.

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	●I.P. "I" UNLESS NOTED	PROPOSED R/W LINE	
R/W MONUMENT	○ ●(SET)	EXISTING H.E. LINE	
R/W STANDARD	△ ▲(SET)	PROPERTY LINE	
SIGN	| SIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT	27 1 2 29 28 32 33 4 5 7	SLOPE INTERCEPTS	
		CORPORATE LIMITS	
		ACCESS RESTRICTION (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTION (BY ACQUISTION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	100	QUARTER LINE	
TLE BOUNDARY POINT	6009	SIXTEENTH LINE	
PARCEL NUMBER	102	EXISTING CENTERLINE	
UTILITY PARCEL NUMBER	92	PROPOSED REFERENCE LINE	
SIGN NUMBER (OFF PREMISE)	21-1	PARALLEL OFFSET	
BUILDING			

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE	○	●
TELEPHONE POLE	⌀	⌀
TELEPHONE PEDESTAL	⌧	⌧
ELECTRIC TOWER	⊠	
LIGHT POLE	☼	✶
HYDRANT	♉	●

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	POINT OF REVERSE CURVATURE	PRC
ACCESS RIGHTS	AR	PRIVATE DRIVEWAY	P.D.
ACRES	AC.	POINT ON TANGENT	POT
AGRICULTURAL P.D.	AGRI. PD.	PROPERTY LINE	P.L.
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM.	REFERENCE LINE	R/L
AND OTHERS	ET.AL.	REMAINING	REM.
BACK	BK	RIGHT	RT.
BLOCK	BLK	RIGHT OF WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	C.S.M.	SEPTIC VENT	SEPV.
CONCRETE	CONC.	SQUARE FEET	S.F.
CORNER	COR.	STATE TRUNK HIGHWAY	STH
COUNTY	CO.	STATION	STA.
COUNTY TRUNK HIGHWAY	CTH	SUBDIVISION	SUBD.
DISTANCE	DIST.	TANGENT	TAN.
DOCUMENT NUMBER	DOC.	TELEPHONE PEDESTAL	T.P.
EASEMENT	EASE.	TEMPORARY LIMITED EASEMENT	TLE OR T.L.E.
EXISTING	EX.	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	G.V.	UNITED STATES HIGHWAY	USH
GOVERNMENT	GOV'T	VOLUME	VOL.
GRID NORTH	GN	FORMALLY KNOW AS	F/K/A
HIGHWAY EASEMENT	H.E.		
INDENTIFICATION	ID.		
LAND CONTRACT	LC		
LEFT	LT.		
MONUMENT	MON.		
NOT TO SCALE	NTS		
NUMBER	NO.		
OUTLOT	O.L.		
PAGE	PG.		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	P.O.B.		
POINT OF COMPOUND CURVE	PCC		
POINT OF CURVATURE	PC		
POINT OF INTERSECTION	PI		

CURVE DATA

LONG CHORD	L.C.
LONG CHORD BEARING	L.C.B.
RADIUS	R.
DEGREE OF CURVE	D.
CENTRAL ANGLE OR DELTA	Δ.
LENGTH OF CURVE	L.
TANGENT	T.
DIRECTION AHEAD	DA.
DIRECTION BACK	DB.

GENERAL NOTES:

1. WISCONSIN TELEPHONE COMPANY AND NORTH-WEST TELEPHONE COMPANY ARE NOW KNOW AS CENTURYLINK.
2. WISCONSIN POWER AND LIGHT COMPANY IS NOW KNOW AS ALLIANT ENERGY.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24 - 4.01
SHEET 2 OF 2
AMENDMENT NO: 1

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.01 AMENDMENT NO: 1

AMENDS PARCEL 2 OF TRANSPORTATION PROJECT PLAT NO. 1430-00-24-4.01, RECORDED AS DOCUMENT NO. 377408 AND FILED IN VOLUME 7, PAGE 163, AND ALSO AMENDED TO INCLUDE PARCEL 93 AND UTILITY PARCEL 200

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOT 1 OF CSM 2294, PART OF LOTS 2, 3 AND 4 OF CSM 136A, PART OF PLAT OF HERITAGE VILLAGE, PART OF THE NE 1/4 OF THE NE 1/4 AND PART OF THE NW 1/4 OF THE NE 1/4, SECTION 20, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

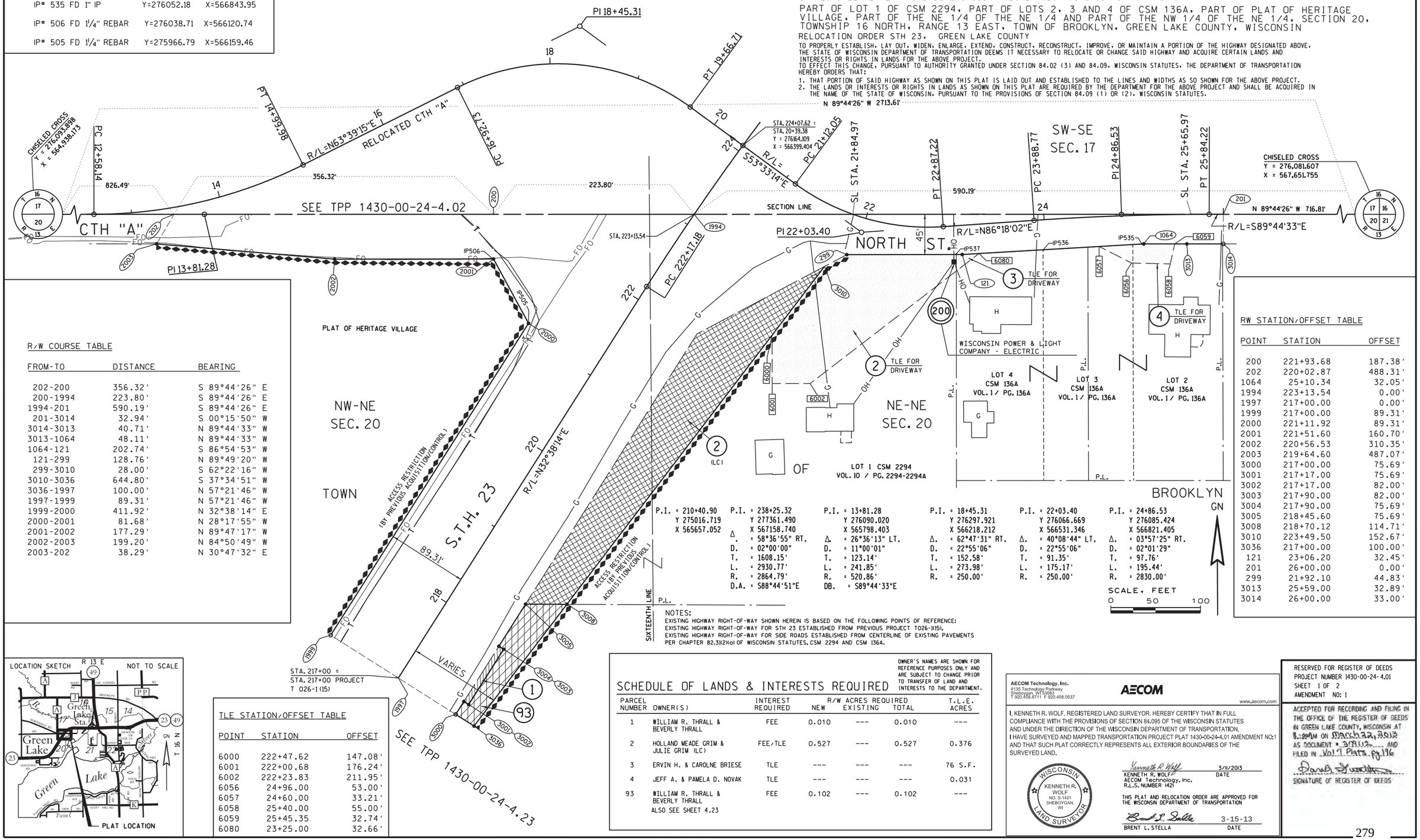
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE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

FOUND MONUMENTS

IP= 537 FD 1" IP	Y=276042.09	X=566637.00
IP= 536 FD 1" IP	Y=276046.27	X=566733.92
IP= 535 FD 1" IP	Y=276052.18	X=566843.95
IP= 506 FD 1¼" REBAR	Y=276038.71	X=566120.74
IP= 505 FD 1¼" REBAR	Y=275966.79	X=566159.46

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	WISCONSIN POWER & LIGHT COMPANY - ELECTRIC	RELEASE OF RIGHTS



P.I. = 210+40.90 Y 275016.719 X 565657.052 Δ = 58°36'55" RT. D. = 02°00'00" T. = 1608.15' L. = 2930.77' R. = 2864.79' D.A. = S88°44'51"E

P.I. = 238+25.32 Y 277361.490 X 567158.740 Δ = 26°36'13" LT. D. = 11°00'01" T. = 123.14' L. = 241.85' R. = 520.86' DB. = S89°44'33"E

P.I. = 13+81.28 Y 276090.020 X 565798.403 Δ = 62°47'31" RT. D. = 22°55'06" T. = 152.58' L. = 273.98' R. = 250.00'

P.I. = 18+45.31 Y 276297.921 X 566218.212 Δ = 40°08'44" LT. D. = 22°55'06" T. = 91.35' L. = 175.17' R. = 250.00'

P.I. = 22+03.40 Y 276066.669 X 566531.346 Δ = 03°57'25" RT. D. = 02°01'29" T. = 97.76' L. = 195.44' R. = 2830.00'

P.I. = 24+86.53 Y 276085.424 X 566821.405

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
202-200	356.32'	S 89°44'26" E
200-1994	223.80'	S 89°44'26" E
1994-201	590.19'	S 89°44'26" E
201-3014	32.94'	S 00°15'50" W
3014-3013	40.71'	N 89°44'33" W
3013-1064	48.11'	N 89°44'33" W
1064-121	202.74'	S 86°54'53" W
121-299	128.76'	N 89°49'20" W
299-3010	28.00'	S 62°22'16" W
3010-3036	644.80'	S 37°34'51" W
3036-1997	100.00'	N 57°21'46" W
1997-1999	89.31'	N 57°21'46" W
1999-2000	411.92'	N 32°38'14" E
2000-2001	81.68'	N 28°17'55" W
2001-2002	177.29'	N 89°47'17" W
2002-2003	199.20'	N 84°50'49" W
2003-202	38.29'	N 30°47'32" E

RW STATION/OFFSET TABLE

POINT	STATION	OFFSET
200	221+93.68	187.38'
202	220+02.87	488.31'
1064	25+10.34	32.05'
1994	223+13.54	0.00'
1997	217+00.00	0.00'
1999	217+00.00	89.31'
2000	221+11.92	89.31'
2001	221+51.60	160.70'
2002	220+56.53	310.35'
2003	219+64.60	487.07'
3000	217+00.00	75.69'
3001	217+17.00	75.69'
3002	217+17.00	82.00'
3003	217+90.00	82.00'
3004	217+90.00	75.69'
3005	218+45.60	75.69'
3008	218+70.12	114.71'
3010	223+49.50	152.67'
3036	217+00.00	100.00'
121	23+06.20	32.45'
201	26+00.00	0.00'
299	21+92.10	44.83'
3013	25+59.00	32.89'
3014	26+00.00	33.00'

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-1(15),
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 2294 AND CSM 136A.

LOCATION SKETCH — R 13 E — NOT TO SCALE

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
6000	222+47.62	147.08'
6001	222+00.68	176.24'
6002	222+23.83	211.95'
6056	24+96.00	53.00'
6057	24+60.00	33.21'
6058	25+40.00	55.00'
6059	25+45.35	32.74'
6080	23+25.00	32.66'

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
1	WILLIAM R. THRALL & BEVERLY THRALL	FEE	0.010	---	0.010	---
2	HOLLAND MEADE GRIM & JULIE GRIM (LC)	FEE/TLE	0.527	---	0.527	0.376
3	ERVIN H. & CAROLNE BRIESE	TLE	---	---	---	76 S.F.
4	JEFF A. & PAMELA D. NOVAK	TLE	---	---	---	0.031
93	WILLIAM R. THRALL & BEVERLY THRALL ALSO SEE SHEET 4.23	FEE	0.102	---	0.102	---

AECOM Technology, Inc.
4135 Technology Parkway
Sheboygan, WI 53083
T 920.458.8711 F 920.458.0537
www.aecom.com

I, KENNETH R. WOLF, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.01 AMENDMENT NO:1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KENNETH R. WOLF NO. S-1421 SHEBOYGAN, WI LAND SURVEYOR

Kenneth R. Wolf 3/11/2013
KENNETH R. WOLF DATE
AECOM Technology, Inc.
R.L.S. NUMBER 1421

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

Brent L. Stella 3-15-13
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24- 4.01
SHEET 1 OF 2
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 8:30AM ON March 22, 2013 AS DOCUMENT # 378112 AND FILED IN Vol 7 Plats pg 196

Donna Brunette
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : L:\work\60198142\000_CADD\SURVEY\REV 2 TPP SHEETS\23Detail_4-1 ADD 1.dgn PLOT DATE : 3/14/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:50

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.02

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOT 1 OF CSM 1755, PART OF LOT 1 OF CSM 2713, PART OF LOT 1 OF CSM 2714, PART OF SW 1/4 OF THE SE 1/4 AND PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 17, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN.

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDER THAT:

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

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-15), XXXX-X
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 365, CSM 1755, CSM 2713 AND CSM 2714.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
7	MICHAEL J. JANKOWSKI & MICHAEL D. BROOKS	FEE	0.002	---	0.002	---
8	GLEN G., MARIAN L., JEFF N. AND DAN J. SOMMERFELDT	FEE/TLE	0.717	---	0.717	0.038
9	HOWIE'S LANES, INC., A WISCONSIN CORPORATION ALSO SEE SHEET 4.03	TLE	---	---	---	0.012

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	WISCONSIN POWER & LIGHT COMPANY - ELECTRIC	RELEASE OF RIGHTS
202	CENTURYLINK F/K/A WISCONSIN TELEPHONE COMPANY	RELEASE OF RIGHTS

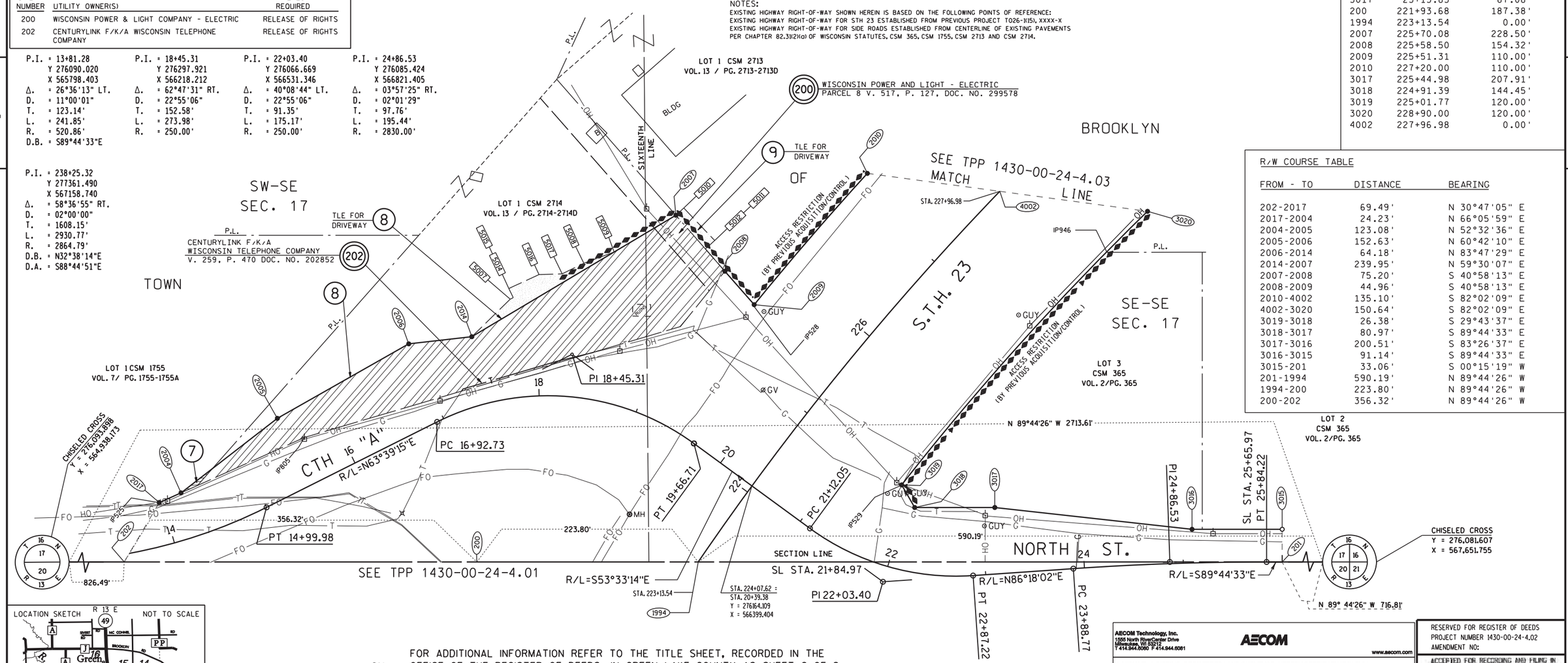
P.I. = 13+81.28
Y 276090.020
X 565798.403
Δ. = 26°36'13" LT.
D. = 11°00'01"
T. = 123.14'
L. = 241.85'
R. = 520.86'
D.B. = S89°44'33"E

P.I. = 18+45.31
Y 276297.921
X 566218.212
Δ. = 62°47'31" RT.
D. = 22°55'06"
T. = 152.58'
L. = 273.98'
R. = 250.00'

P.I. = 22+03.40
Y 276066.669
X 566531.346
Δ. = 40°08'44" LT.
D. = 22°55'06"
T. = 91.35'
L. = 175.17'
R. = 250.00'

P.I. = 24+86.53
Y 276085.424
X 566821.405
Δ. = 03°57'25" RT.
D. = 02°01'29"
T. = 97.76'
L. = 195.44'
R. = 2830.00'

P.I. = 238+25.32
Y 277361.490
X 567158.740
Δ. = 58°36'55" RT.
D. = 02°00'00"
T. = 1608.15'
L. = 2930.77'
R. = 2864.79'
D.B. = N32°38'14"E
D.A. = S88°44'51"E



TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
5007	17+81.55	99.62'
5008	18+32.41	135.57'
5009	18+50.76	150.83'
5010	225+80.00	227.00'
5011	225+75.00	182.00'
5012	225+63.18	183.87'
5014	17+83.88	100.81'
5015	17+81.39	110.53'
5016	18+02.80	122.50'
5017	18+18.48	123.45'

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
200	16+65.24	144.48'
201	26+00.00	0.06'
202	13+46.66	7.63'
2004	14+22.00	46.47'
2005	15+50.00	75.50'
2006	17+00.00	83.50'
2014	17+48.00	69.03'
2017	13+95.72	43.28'
3015	26+00.00	33.00'
3016	25+09.75	33.99'
3017	23+13.85	67.08'
200	221+93.68	187.38'
1994	223+13.54	0.00'
2007	225+70.08	228.50'
2008	225+58.50	154.32'
2009	225+51.31	110.00'
2010	227+20.00	110.00'
3017	225+44.98	207.91'
3018	224+91.39	144.45'
3019	225+01.77	120.00'
3020	228+90.00	120.00'
4002	227+96.98	0.00'

R/W COURSE TABLE

FROM - TO	DISTANCE	BEARING
202-2017	69.49'	N 30°47'05" E
2017-2004	24.23'	N 66°05'59" E
2004-2005	123.08'	N 52°32'36" E
2005-2006	152.63'	N 60°42'10" E
2006-2014	64.18'	N 83°47'29" E
2014-2007	239.95'	N 59°30'07" E
2007-2008	75.20'	S 40°58'13" E
2008-2009	44.96'	S 40°58'13" E
2010-4002	135.10'	S 82°02'09" E
4002-3020	150.64'	S 82°02'09" E
3019-3018	26.38'	S 29°43'37" E
3018-3017	80.97'	S 89°44'33" E
3017-3016	200.51'	S 83°26'37" E
3016-3015	91.14'	S 89°44'33" E
3015-201	33.06'	S 00°15'19" W
201-1994	590.19'	N 89°44'26" W
1994-200	223.80'	N 89°44'26" W
200-202	356.32'	N 89°44'26" W

LOCATION SKETCH
R 13 E
NOT TO SCALE
PLAT LOCATION
T 16 N

GN

SCALE. FEET
0 50 100

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
2009-2010	2974.79'	175.17'	175.14'	87.61'	N 41°00'24" E
3020-3019	2744.79'	371.97'	371.68'	186.27'	S 42°12'41" W

FOUND MONUMENTS

IP# 525 FD 1" IP	Y=276149.72	X=565800.29
IP# 528 FD 1" IP	Y=276345.28	X=566402.47
IP# 529 FD 1" IP	Y=276164.13	X=566551.16
IP# 805 FD WisDOT IP	Y=276215.04	X=565947.40

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6060 F 414.944.6081
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4. 02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

MICHAEL J. PIERING — 11/16/2012 DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

BRENT L. STELLA — 12-11-12 DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.02
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:58AM ON December 12, 2012 AS DOCUMENT # 377861 AND FILED IN Volume 7, Page 178

Sharon Seeman
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : X:\projects\587708_2010\Submital\final dgn submittal\11-19-2012\1430-00-24_4-02.dgn PLOT DATE : 12/11/2012 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:50

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.03

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOT 1 CSM 904, PART OF LOT 1 CSM 2713, PART OF SE 1/4 OF SE 1/4, SECTION 17, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN.

RELOCATION ORDER STH 23, GREEN COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

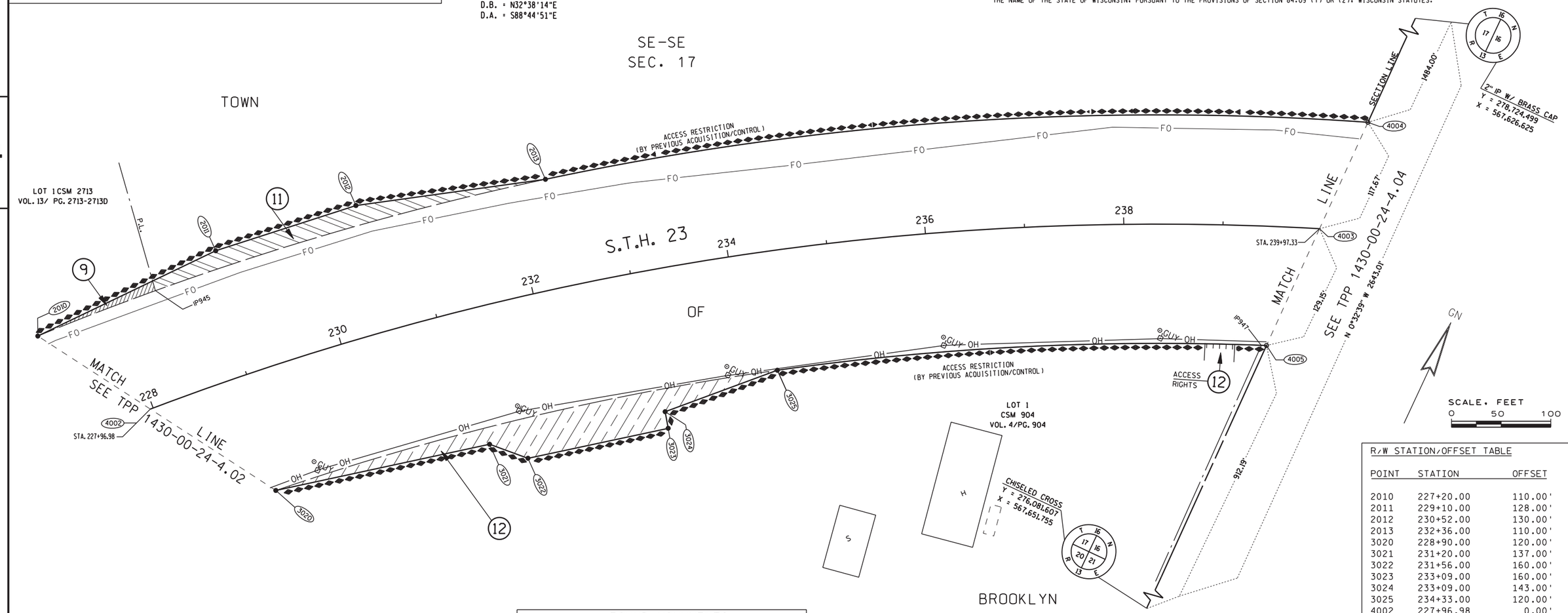
SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
9	HOWIE'S LANES, INC. A WISCONSIN CORPORATION (ALSO SEE SHEET 4.02)	FEE	0.014	---	0.014	---
11	RICHARD, A. BOND AND KARI L. BOND	FEE	0.124	---	0.124	---
12	AEC ISLAND, LLC	FEE/ ACCESS RIGHTS	0.241	---	0.241	---

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-15), EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES. CSM 904 AND CSM 2713.

P.I. = 238+25.32
Y 277361.490
X 567158.740
Δ. = 58°36'55" RT.
D. = 02°00'00"
T. = 1608.15'
L. = 2930.77'
R. = 2864.79'
D.B. = N32°38'14"E
D.A. = S88°44'51"E



R/W STATION/OFFSET TABLE

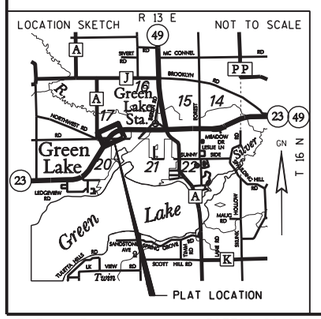
POINT	STATION	OFFSET
2010	227+20.00	110.00'
2011	229+10.00	128.00'
2012	230+52.00	130.00'
2013	232+36.00	110.00'
3020	228+90.00	120.00'
3021	231+20.00	137.00'
3022	231+56.00	160.00'
3023	233+09.00	160.00'
3024	233+09.00	143.00'
3025	234+33.00	120.00'
4002	227+96.98	0.00'
4003	239+97.33	0.00'
4004	240+38.34	110.00'
4005	239+48.55	120.00'

FOUND MONUMENTS

IP# 945 FD 1" IP	Y=276570.84	X=566605.46
IP# 947 FD 2" IP	Y=276991.69	X=567638.40

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

LOCATION SKETCH R 13 E NOT TO SCALE



R/W COURSE TABLE

FROM - TO	DISTANCE	BEARING
4004 - 4003	117.67'	S 0°32'39" E
4003 - 4005	129.15'	S 0°32'39" E
3025 - 3024	120.51'	S 44°42'53" W
3024 - 3023	17.00'	S 35°31'35" E
3023 - 3022	144.44'	S 52°56'37" W
3022 - 3021	41.16'	S 85°01'34" W
3021 - 3020	220.28'	S 52°48'57" W
3020 - 4002	150.64'	N 82°02'09" W
4002 - 2010	135.10'	N 82°02'09" W
2010 - 2011	198.67'	N 39°23'51" E
2011 - 2012	148.39'	N 47°08'30" E
2012 - 2013	192.71'	N 57°07'41" E

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
4005 - 3025	2744.79'	493.95'	493.29'	247.65'	S 62°06'33" W
2013 - 4004	2974.79'	833.15'	830.43'	419.32'	N 61°02'13" E

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.8080 F 414.944.8081
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

11/16/2012
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

12-07-12
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.03
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:59 AM ON December 13, 2012 AS DOCUMENT # 377847 AND FILED IN Volume 7, Page 164

Deane Seeman
SIGNATURE OF REGISTER OF DEEDS

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.04

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF THE SW 1/4 OF THE SW 1/4 AND PART OF THE NW 1/4 OF THE SW 1/4, SECTION 16, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

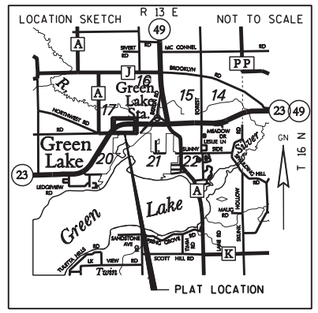
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE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

UTILITY INTERESTS REQUIRED

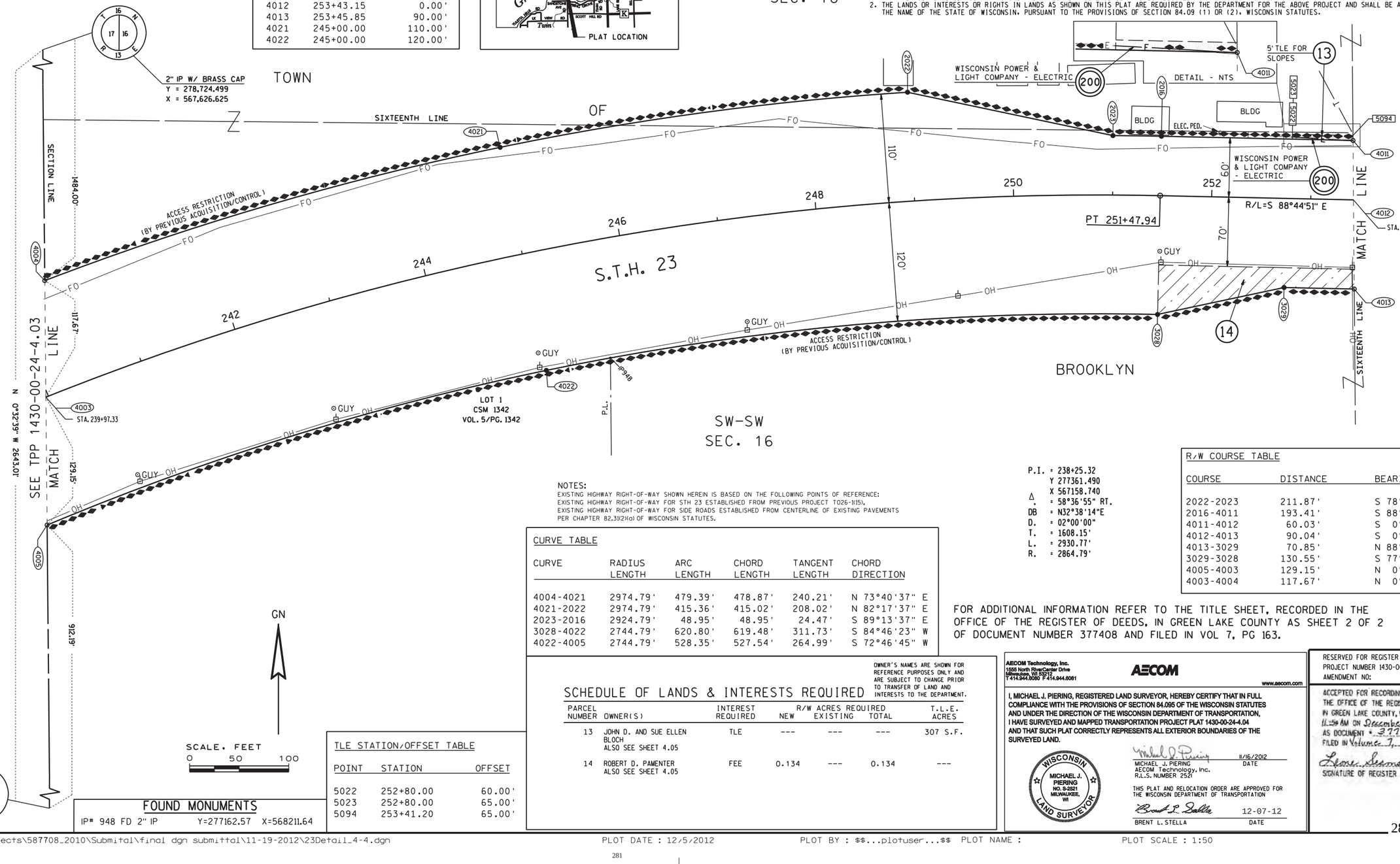
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	WISCONSIN POWER & LIGHT COMPANY - ELECTRIC	RELEASE OF RIGHTS

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
2016	251+47.94	60.00'
2022	249+00.00	110.00'
2023	251+00.00	60.00'
3028	251+47.94	120.00'
3029	252+75.00	90.00'
4003	239+97.33	0.00'
4004	240+38.34	110.00'
4005	239+48.55	120.00'
4011	253+41.35	60.00'
4012	253+43.15	0.00'
4013	253+45.85	90.00'
4021	245+00.00	110.00'
4022	245+00.00	120.00'



NW-SW
SEC. 16



NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-15),
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES.

P.I. = 238+25.32
Y 277361.490
X 567158.740
Δ = 58°36'55" RT.
DB = N32°38'14"E
D. = 02°00'00"
T. = 1608.15'
L. = 2930.77'
R. = 2864.79'

R/W COURSE TABLE

COURSE	DISTANCE	BEARING
2022-2023	211.87'	S 78°03'53" E
2016-4011	193.41'	S 88°44'51" E
4011-4012	60.03'	S 0°27'58" E
4012-4013	90.04'	S 0°27'58" E
4013-3029	70.85'	N 88°44'50" W
3029-3028	130.55'	S 77°58'03" W
4005-4003	129.15'	N 0°32'39" W
4003-4004	117.67'	N 0°32'39" W

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
4004-4021	2974.79'	479.39'	478.87'	240.21'	N 73°40'37" E
4021-2022	2974.79'	415.36'	415.02'	208.02'	N 82°17'37" E
2023-2016	2924.79'	48.95'	48.95'	24.47'	S 89°13'37" E
3028-4022	2744.79'	620.80'	619.48'	311.73'	S 84°46'23" W
4022-4005	2744.79'	528.35'	527.54'	264.99'	S 72°46'45" W

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

GN

SCALE: FEET
0 50 100

CHISELED CROSS
Y = 276,081.607
X = 567,651.755

FOUND MONUMENTS
IP# 948 FD 2" IP Y=277162.57 X=568211.64

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
5022	252+80.00	60.00'
5023	252+80.00	65.00'
5094	253+41.20	65.00'

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
13	JOHN D. AND SUE ELLEN BLOCH ALSO SEE SHEET 4.05	TLE	---	---	---	307 S.F.
14	ROBERT D. PAMENTER ALSO SEE SHEET 4.05	FEE	0.134	---	0.134	---

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6080 F 414.944.6081
AECOM
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

11/16/2012
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

12-07-12
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.04
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:59 AM ON December 13 2012 AS DOCUMENT # 377848 AND FILED IN Volume 7, Page 165

SIGNATURE OF REGISTER OF DEEDS

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.05 AMENDMENT NO. 1

AMENDS TRANSPORTATION PROJECT PLAT NO. 1430-00-24-4.05, RECORDED AS DOCUMENT NO. 377849 IN VOLUME 7, PAGE 166, TO DELETE PARCEL 19 AND REVISE ACCESS CONTROL SYMBOL FROM "NO ACCESS BY ACQUISITION" TO "NO ACCESS BY PREVIOUS ACQUISITION / CONTROL".

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOT 1, CSM 528, PART OF LOT 1, CSM 1890, PART OF THE NE 1/4 OF THE SW 1/4 AND PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 16, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 16, TOWNSHIP 16 NORTH, RANGE 13 EAST, CITY OF GREEN LAKE, ALL IN GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

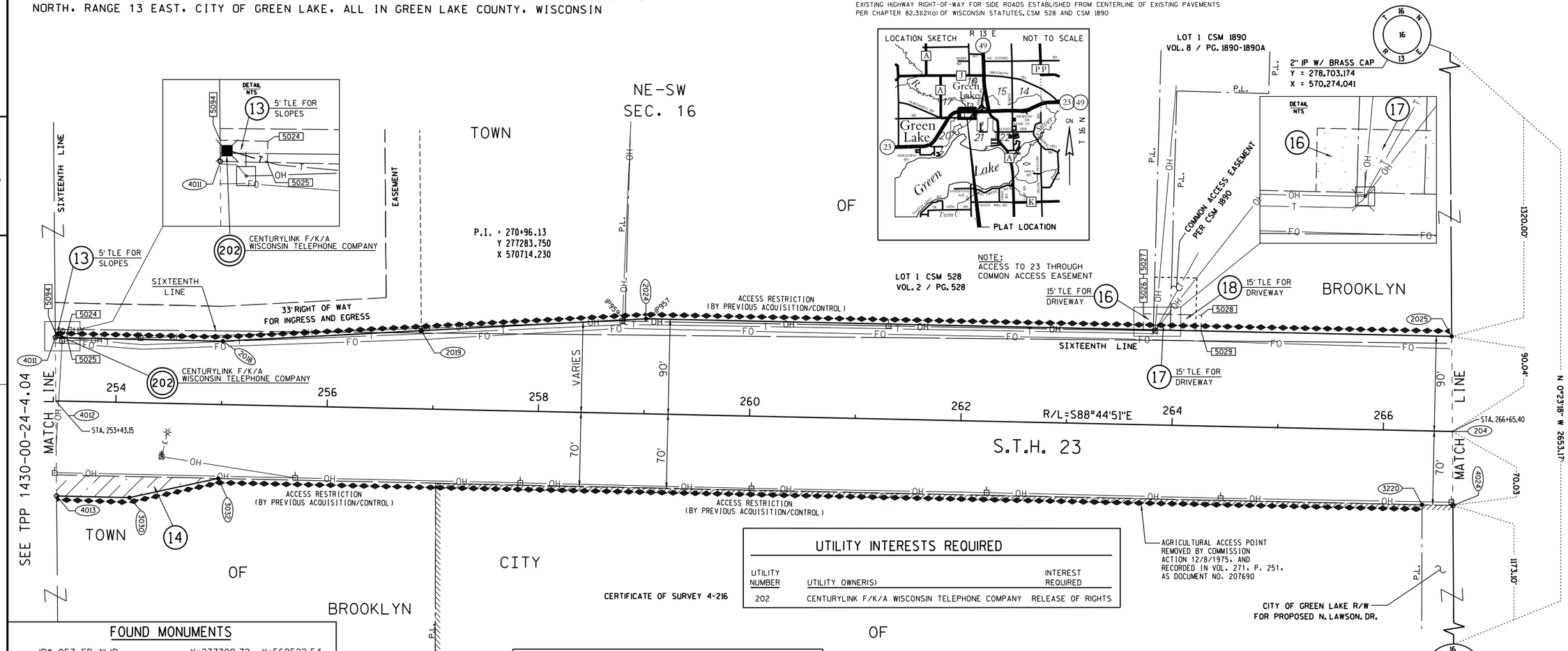
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE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

NOTES:

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-1(15),
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 528 AND CSM 1890

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
5024	253+52.50	65.00'
5025	253+52.50	60.00'
5094	253+41.20	65.00'
5026	263+70.55	90.00'
5028	264+25.50	105.00'
5029	264+25.50	90.00'



FOUND MONUMENTS

IP# 957 FD 1" IP	Y=277399.72	X=569522.54
IP# 959 FD 1" IP	Y=277398.68	X=569500.54

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
13	JOHN D. AND SUE ELLEN BLOCH ALSO SEE SHEET 4.04	TLE	---	---	---	56 S.F.
14	ROBERT D.PAMENTER ALSO SEE SHEET 4.04	FEE	0.051	---	0.051	---
16	OSWALD R. KINAS	TLE	---	---	---	146 S.F.
17	DENNIS L. & LYNNE A. HARTMAN	TLE	---	---	---	240 S.F.
18	LONE OAK ACRES, LLP	TLE	---	---	---	439 S.F.
19	DELETED	---	---	---	---	---

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	CENTURYLINK F/K/A WISCONSIN TELEPHONE COMPANY	RELEASE OF RIGHTS

CERTIFICATE OF SURVEY 4-216

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
4024-3220	29.20'	N 88°44'51" W
3220-3032	1139.82'	N 88°44'51" W
3032-3030	85.95'	S 77°47'47" W
3030-4013	68.94'	N 88°44'51" W
4013-4012	90.04'	N 0°27'58" W
4012-4011	60.03'	N 0°27'58" W
4011-2018	158.65'	S 88°44'51" E
2018-2019	188.12'	N 86°57'48" E
2019-2024	213.01'	N 86°57'48" E
2024-2025	762.82'	S 88°44'51" E
2025-204	90.04'	S 0°23'18" E
204-4024	70.03'	S 0°23'18" E

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
204	266+65.40	0.00'
2018	255+00.00	60.00'
2019	256+87.59	74.07'
2024	259+00.00	90.00'
2025	266+62.82	90.00'
3030	254+14.80	90.00'
3032	254+89.39	70.00'
3220	266+38.20	70.00'
4011	253+41.35	60.00'
4012	253+43.15	0.00'
4013	253+45.85	90.00'
4024	266+67.41	70.00'

AECOM Technology, Inc.
4135 Technology Parkway
Sheboygan, WI 53083
T 920.458.8711 F 920.458.0537
www.aecom.com

I, KENNETH R. WOLF, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.05 AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KENNETH R. WOLF NO. S-1421 SHEBOYGAN, WI LAND SURVEYOR

Kenneth R. Wolf 8/12/2013
KENNETH R. WOLF / DATE
AECOM Technology, Inc.
R.L.S. NUMBER 1421

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

Brent L. Stella 8-14-13
BRENT L. STELLA / DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.05
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 10:20 AM ON August 15, 2013 AS DOCUMENT #. 381032 AND FILED IN Vol 7 Plat Page 208

Sara Stuenke
SIGNATURE OF REGISTER OF DEEDS

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.06

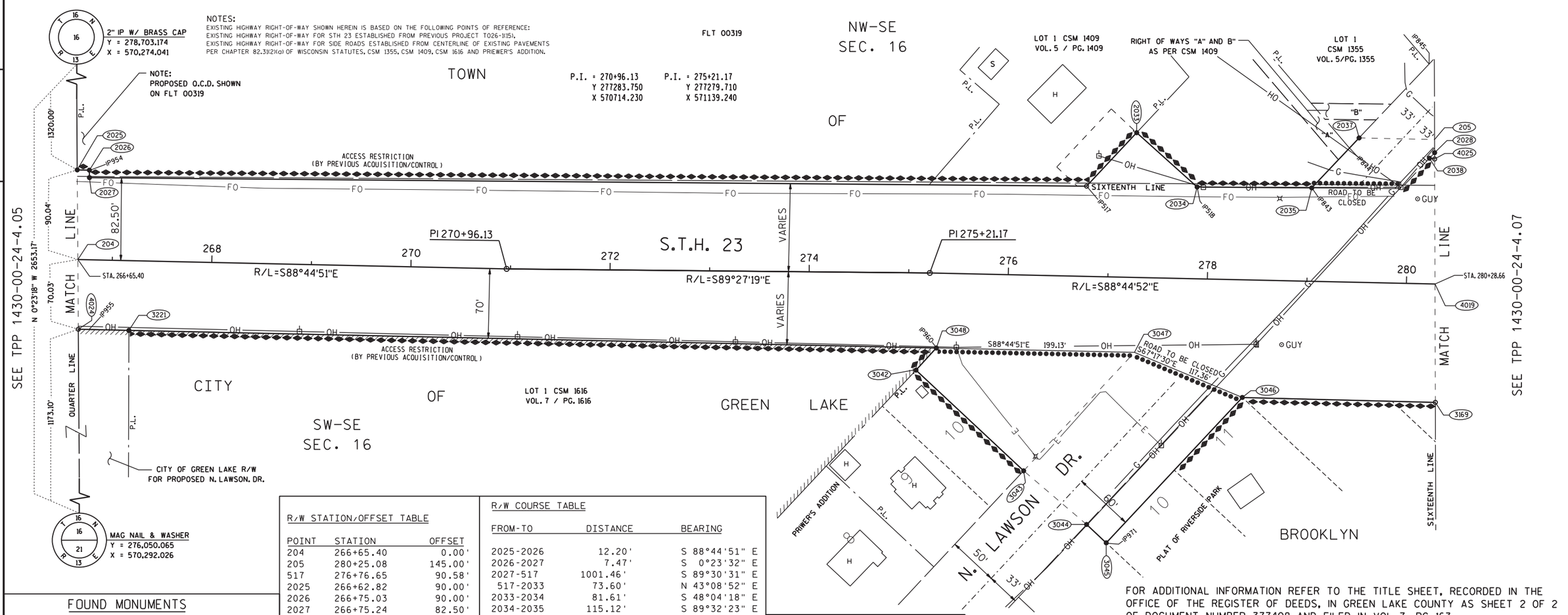
STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF THE NW 1/4 OF THE SE 1/4 AND PART OF THE SW 1/4 OF THE SE 1/4, SECTION 16, TOWN OF BROOKLYN, PART OF THE SW 1/4 OF THE SE 1/4, SECTION 16, CITY OF GREEN LAKE, ALL IN TOWNSHIP 16 NORTH, RANGE 13 EAST, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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



FOUND MONUMENTS

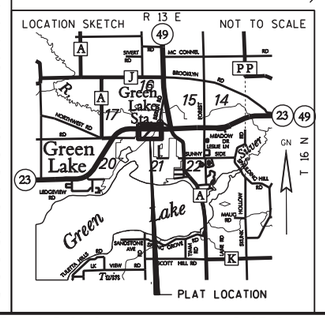
IP# 517 FD 1" IP	Y=277366.88	X=571296.67
IP# 518 FD 1" IP	Y=277366.04	X=571407.71
IP# 843 FD 1" IP	Y=277365.15	X=571522.87
IP# 844 FD 1" IP	Y=277405.11	X=571560.72
IP# 845 FD RR SPIKE	Y=277489.49	X=571640.66
IP# 954 FD 2" IP W/ CAP	Y=277382.64	X=570295.19
IP# 955 FD 1" IP	Y=277222.78	X=570294.85
IP# 960 FD 1" IP	Y=277204.22	X=571146.06
IP# 971 FD 1" IP	Y=277008.10	X=571316.99

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
204	266+65.40	0.00'
205	280+25.08	145.00'
517	276+76.65	90.58'
2025	266+62.82	90.00'
2026	266+75.03	90.00'
2027	266+75.24	82.50'
2028	280+25.40	131.87'
2033	277+25.79	145.37'
2034	277+87.69	92.18'
2035	279+02.80	93.77'
2037	279+49.25	145.00'
2038	280+20.27	126.13'
3042	275+08.24	97.76'
3043	276+19.69	196.67'
3044	276+84.12	249.14'
3045	277+04.23	267.15'
3046	278+37.67	118.18'
3047	277+28.45	75.25'
3048	275+29.32	75.25'
3169	280+31.62	118.89'
4019	280+28.66	0.00'
4024	266+67.41	70.00'
4025	280+25.55	125.47'

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
2025-2026	12.20'	S 88°44'51" E
2026-2027	7.47'	S 0°23'32" E
2027-517	1001.46'	S 89°30'31" E
517-2033	73.60'	N 43°08'52" E
2033-2034	81.61'	S 48°04'18" E
2034-2035	115.12'	S 89°32'23" E
2035-2037	69.15'	N 43°26'36" E
2037-205	75.82'	S 88°44'52" E
205-2028	13.15'	S 0°10'15" E
2028-2038	7.68'	S 43°06'17" W
2038-4025	5.32'	S 81°32'48" E
4025-4019	125.51'	S 0°10'15" E
4019-3169	118.97'	S 0°10'15" E
3169-3046	193.95'	N 88°32'11" W
3046-3045	200.00'	S 43°06'17" W
3045-3044	27.00'	N 46°53'43" W
3044-3043	83.12'	N 49°34'05" W
3043-3042	148.00'	N 46°53'43" W
3042-3048	30.15'	N 42°29'33" E
3048-3221	811.10'	N 88°44'51" W
3221-4024	50.79'	N 88°44'51" W
4024-204	70.03'	N 0°23'18" W
204-2025	90.04'	N 0°23'18" W



SCALE, FEET
0 50 100

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6000 F 414.944.6081
AECOM
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

11/16/2012
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

12-07-12
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.06
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:59 AM ON December 13, 2012 AS DOCUMENT # 377850 AND FILED IN Volume 7, Page 167

Elaine Seaman
SIGNATURE OF REGISTER OF DEEDS

S GNATURE OF REGISTER OF DEEDS

FILE NAME : X:\projects\587708_2010\Submital\final dgn submittal\11-19-2012\23Detail_4-6.dgn PLOT DATE : 12/5/2012 PLOT BY : $$...plotuser...$$ PLOT NAME : 1:50

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.07

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

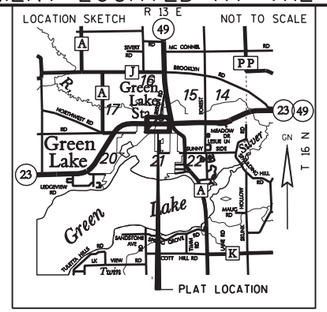
PART OF LOT 2, CSM 2750, PART OF THE NE 1/4 OF THE SE 1/4 AND PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 16, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

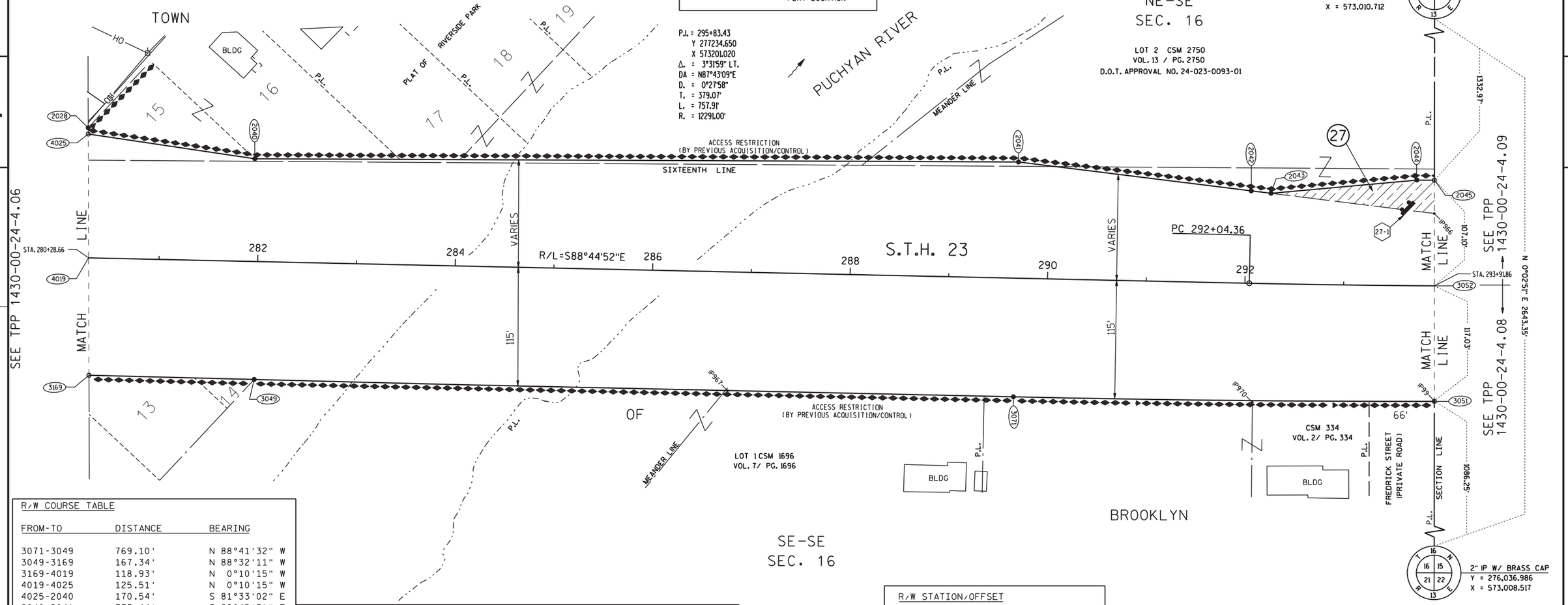
LOCATION SKETCH — NOT TO SCALE — R 13 E — T 16 N



FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-15),
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, PLAT OF RIVERSIDE PARK, CSM 334, CSM 1696 AND CSM 2750.

SIGN NUMBER	SIGN OWNER
27-1	BLOCH'S FARM



R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3071-3049	769.10'	N 88°41'32" W
3049-3169	167.34'	N 88°32'11" W
3169-4019	118.93'	N 0°10'15" W
4019-4025	125.51'	N 0°10'15" W
4025-2040	170.54'	S 81°33'02" E
2040-2041	773.44'	S 89°45'31" E
2041-2042	237.53'	S 82°55'57" E
2042-2043	20.15'	S 82°55'57" E
2043-2044	148.05'	N 84°50'49" E
2044-2045	18.08'	S 89°53'34" E
2045-3052	107.10'	S 0°02'51" W
3052-3051	117.03'	S 0°02'51" W

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
3051-3071	17303.73'	426.30'	426.29'	213.16'	N 89°22'38" W

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
27	ELEANOR A. GALLUP	FEE	0.067	---	0.067	---

FOUND MONUMENTS

IP# 99 FD 1" IP	Y=277123.23	X=573009.19
IP# 966 FD 1" IP	Y=277313.61	X=573009.37
IP# 967 FD 1" IP	Y=277134.04	X=572293.63
IP# 970 FD 2" IP	Y=277122.22	X=572825.19

GN

SCALE, FEET
0 50 100

R/W STATION/OFFSET

POINT	STATION	OFFSET
2028	280+25.40	131.87'
2040	281+94.74	104.10'
2041	289+68.06	117.74'
2042	292+04.36	93.67'
2043	292+24.56	91.61'
2044	293+73.00	107.00'
2045	293+91.24	107.10'
3049	281+98.96	119.51'
3051	293+92.53	117.03'
3052	293+91.86	0.00'
3071	289+68.05	120.26'
3169	280+31.62	118.89'
4019	280+28.66	0.00'
4025	280+25.55	125.47'

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6080 F 414.944.6081
AECOM
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE WI LAND SURVEYOR

Michael J. Piering 11/16/2012
MICHAEL J. PIERING — DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

Brent L. Stella 12-07-12
BRENT L. STELLA — DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.07
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:50AM ON December 13, 2012 AS DOCUMENT # 377851 AND FILED IN Volume 7, Page 168

Steve Seemont
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : X:\projects\587708_2010\Submittal\final dgn submittal\11-19-2012\23Detail_4-7.dgn
PLOT DATE : 12/5/2012
PLOT BY : $$...plotuser...$$ PLOT NAME :
1:50
APPRAISAL PLAT DATE : 12-28-2011

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.08 AMENDMENT NO: 1

AMENDS PARCEL 28 ACCESS RIGHTS OF TRANSPORTATION PROJECT PLAT NO. 1430-00-24-4.08, RECORDED AS DOCUMENT NO. 377852 AND FILED IN VOLUME 7, PAGE 169

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOTS 1 & 2, CSM 3092, PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 15, TOWNSHIP 16 NORTH, RANGE 13 EAST, CITY OF GREEN LAKE, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

FOUND MONUMENTS

IP# 819 FD1/2" REBAR	Y=276934.14	X=574046.83
IP# 830 FD3/4" REBAR	Y=276693.53	X=574128.36
IP# 831 FD3/4" REBAR	Y=276826.60	X=574075.58
IP# 832 FD3/4" REBAR	Y=276978.83	X=574035.03
IP# 820 FD1/2" REBAR	Y=277201.35	X=574259.68
IP# 569 FD3/8" REBAR	Y=277201.27	X=574259.71

2" IP W/ BRASS CAP
Y = 278,680.334
X = 573,010.712

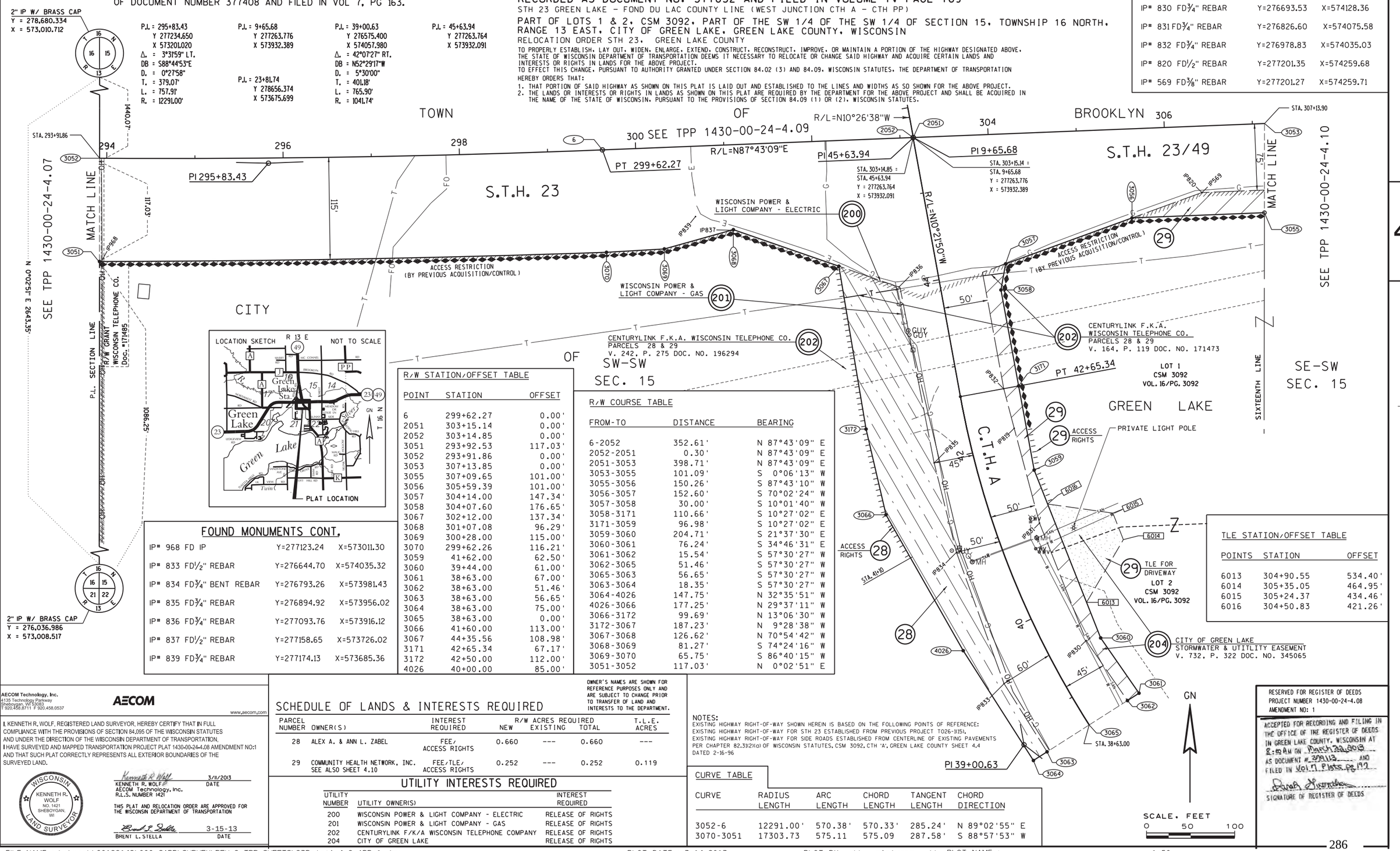
P.I. = 295+83.43
Y 277234.650
X 573201.020
Δ. = 3°31'59" LT.
DB = S88°44'53"E
D. = 0°27'58"
T. = 379.07'
L. = 757.91'
R. = 1229L00'

P.I. = 9+65.68
Y 277263.776
X 573932.389

P.I. = 23+81.74
Y 278656.374
X 573675.699

P.I. = 39+00.63
Y 276575.400
X 574057.980
Δ. = 42°07'27" RT.
DB = N52°29'17"W
D. = 5°30'00"
T. = 401.18'
L. = 765.90'
R. = 1041.74'

P.I. = 45+63.94
Y 277263.764
X 573932.091



LOCATION SKETCH — R 13 E — NOT TO SCALE

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
6	299+62.27	0.00'
2051	303+15.14	0.00'
2052	303+14.85	0.00'
3051	293+92.53	117.03'
3052	293+91.86	0.00'
3053	307+13.85	0.00'
3055	307+09.65	101.00'
3056	305+59.39	101.00'
3057	304+14.00	147.34'
3058	304+07.60	176.65'
3067	302+12.00	137.34'
3068	301+07.08	96.29'
3069	300+28.00	115.00'
3070	299+62.26	116.21'
3059	41+62.00	62.50'
3060	39+44.00	61.00'
3061	38+63.00	67.00'
3062	38+63.00	51.46'
3063	38+63.00	56.65'
3064	38+63.00	75.00'
3065	38+63.00	0.00'
3066	41+60.00	113.00'
3067	44+35.56	108.98'
3171	42+65.34	67.17'
3172	42+50.00	112.00'
4026	40+00.00	85.00'

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
6-2052	352.61'	N 87°43'09" E
2052-2051	0.30'	N 87°43'09" E
2051-3053	398.71'	N 87°43'09" E
3053-3055	101.09'	S 0°06'13" W
3055-3056	150.26'	S 87°43'10" W
3056-3057	152.60'	S 70°02'24" W
3057-3058	30.00'	S 10°01'40" W
3058-3171	110.66'	S 10°27'02" E
3171-3059	96.98'	S 10°27'02" E
3059-3060	204.71'	S 21°37'30" E
3060-3061	76.24'	S 34°46'31" E
3061-3062	15.54'	S 57°30'27" W
3062-3065	51.46'	S 57°30'27" W
3065-3063	56.65'	S 57°30'27" W
3063-3064	18.35'	S 57°30'27" W
3064-4026	147.75'	N 32°35'51" W
4026-3066	177.25'	N 29°37'11" W
3066-3172	99.69'	N 13°06'30" W
3172-3067	187.23'	N 9°28'38" W
3067-3068	126.62'	N 70°54'42" W
3068-3069	81.27'	S 74°24'16" W
3069-3070	65.75'	S 86°40'15" W
3051-3052	117.03'	N 0°02'51" E

FOUND MONUMENTS CONT.

IP# 968 FD IP	Y=277123.24	X=573011.30
IP# 833 FD1/2" REBAR	Y=276644.70	X=574035.32
IP# 834 FD3/4" BENT REBAR	Y=276793.26	X=573981.43
IP# 835 FD3/4" REBAR	Y=276894.92	X=573956.02
IP# 836 FD3/4" REBAR	Y=277093.76	X=573916.12
IP# 837 FD1/2" REBAR	Y=277158.65	X=573726.02
IP# 839 FD3/4" REBAR	Y=277174.13	X=573685.36

2" IP W/ BRASS CAP
Y = 276,036.986
X = 573,008.517

TLE STATION/OFFSET TABLE

POINTS	STATION	OFFSET
6013	304+90.55	534.40'
6014	305+35.05	464.95'
6015	305+24.37	434.46'
6016	304+50.83	421.26'

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
3052-6	12291.00'	570.38'	570.33'	285.24'	N 89°02'55" E
3070-3051	17303.73	575.11	575.09	287.58'	S 88°57'53" W

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
28	ALEX A. & ANN L. ZABEL	FEE/ ACCESS RIGHTS	0.660	---	0.660	---
29	COMMUNITY HEALTH NETWORK, INC. SEE ALSO SHEET 4.10	FEE/TLE/ ACCESS RIGHTS	0.252	---	0.252	0.119

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	WISCONSIN POWER & LIGHT COMPANY - ELECTRIC	RELEASE OF RIGHTS
201	WISCONSIN POWER & LIGHT COMPANY - GAS	RELEASE OF RIGHTS
202	CENTURYLINK F/K/A WISCONSIN TELEPHONE COMPANY	RELEASE OF RIGHTS
204	CITY OF GREEN LAKE	RELEASE OF RIGHTS

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-1(15), EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 3092, CTH 'A', GREEN LAKE COUNTY SHEET 4.4 DATED 2-16-96

AECOM Technology, Inc.
4135 Technology Parkway
Sheboygan, WI 53083
T 920.458.8711 F 920.458.0537
AECOM
www.aecom.com

I, KENNETH R. WOLF, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.08 AMENDMENT NO:1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KENNETH R. WOLF NO. 1421 SHEBOYGAN, WI LAND SURVEYOR

Kenneth R Wolf — 3/11/2013
KENNETH R. WOLF — DATE
AECOM Technology, Inc.
R.L.S. NUMBER 1421

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

Brent L Stella — 3-15-13
BRENT L. STELLA — DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.08
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 8:45 AM ON March 29, 2013 AS DOCUMENT # 378113 AND FILED IN Vol 7 Plats Pg 172

Sarah Swenson
SIGNATURE OF REGISTER OF DEEDS

SCALE: FEET
0 50 100

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.09 AMENDMENT NO: 1

AMENDS PARCEL NO 31 OF TRANSPORTATION PROJECT PLAT 1430-00-24-4.09 RECORDED AS DOCUMENT NO: 377853 AND FILED IN VOLUME 7, PAGE 170. ALSO AMENDED TO INCLUDE PARCELS 91 AND 92

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOTS 2, 3 AND 4, CSM 1277, PART OF LOT 3, CSM 1141, PART OF THE NW 1/4 OF THE SW 1/4 OF SECTION 15, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

4

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
31	MARIE A. BUSSE	FEE	0.281	---	0.281	---
32	KOPPLIN & KINAS CO., INC	TLE	---	---	---	191 S.F.
33	FIRST NATIONAL BANK OF BERLIN	TLE	---	---	---	0.017
91	ANN B. MATTISON	FEE	0.170	---	0.170	---
92	JAMES A. BUSSE	FEE/ ACCESS RIGHTS	0.075	---	0.075	---

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
5042	13+90.00	99.99'
5043	13+90.00	115.00'
5044	13+40.00	115.00'
5045	13+40.00	99.99'
5058	18+14.00	87.17'
5059	18+14.00	92.00'
5060	18+53.50	92.00'
5061	18+53.50	87.17'

SIGN NUMBER	SIGN OWNER
31-1	CONDON OIL CO.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	WISCONSIN POWER & LIGHT COMPANY - ELECTRIC	RELEASE OF RIGHTS
202	CENTURYLINK F/K/A WISCONSIN TELEPHONE COMPANY	RELEASE OF RIGHTS

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
6-3052	12291.00'	570.38'	570.33'	285.24'	S 89°02'55" W

P.I. = 9+65.68
Y 277263.776
X 573932.389

P.I. = 23+81.74
Y 278656.374
X 573675.699

P.I. = 39+00.63
Y 276575.400
X 574057.980
Δ = 42°07'27" RT.
DB = N52°29'17"W
D. = 5°30'00"
T. = 401.18'
L. = 765.90'
R. = 1041.74'

P.I. = 45+63.94
Y 277263.764
X 573932.091

P.I. = 295+83.44
Y 277234.650
X 573201.020
Δ = 3°31'59" LT.
DB = S88°44'53"E
D. = 0°27'58"
T. = 379.07'
L. = 757.91'
R. = 12291.00'

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
6	299+62.24	0.00'
2045	293+91.24	107.10'
2046	300+43.20	93.27'
2047	299+62.27	96.65'
2049	11+67.86	100.00'
2050	12+41.87	87.16'
2051	303+15.14	0.00'
2052	303+14.85	0.00'
2053	307+18.20	103.09'
2061	13+04.79	121.34'
2062	14+18.42	87.16'
2063	18+75.00	87.17'
2064	18+75.00	99.99'
2065	18+75.00	0.00'
3052	293+91.86	0.00'
3053	307+13.85	0.00'

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
2045-2047	566.34'	S 89°53'34" E
2047-2046	81.00'	S 89°53'34" E
2046-2050	222.68'	N 38°50'33" E
2050-2061	71.60'	N 38°57'34" W
2061-2062	118.66'	N 6°17'51" E
2062-2063	456.58'	N 10°26'39" W
2063-2065	87.17'	N 79°33'22" E
2065-2064	99.99'	N 79°33'22" E
2064-2049	707.14'	S 10°26'39" E
2049-2053	350.87'	S 73°47'55" E
2053-3053	103.19'	S 0 °07'54" W
3053-2051	398.71'	S 87°43'07" W
2051-2052	0.30'	S 87°43'24" W
2052-6	352.61'	S 87°43'11" W
3052-2045	107.10'	N 0°02'51" E

LOCATION SKETCH — NOT TO SCALE

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6080 F 414.944.6081
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.09 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

1/29/2013
MICHAEL J. PIERING — DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

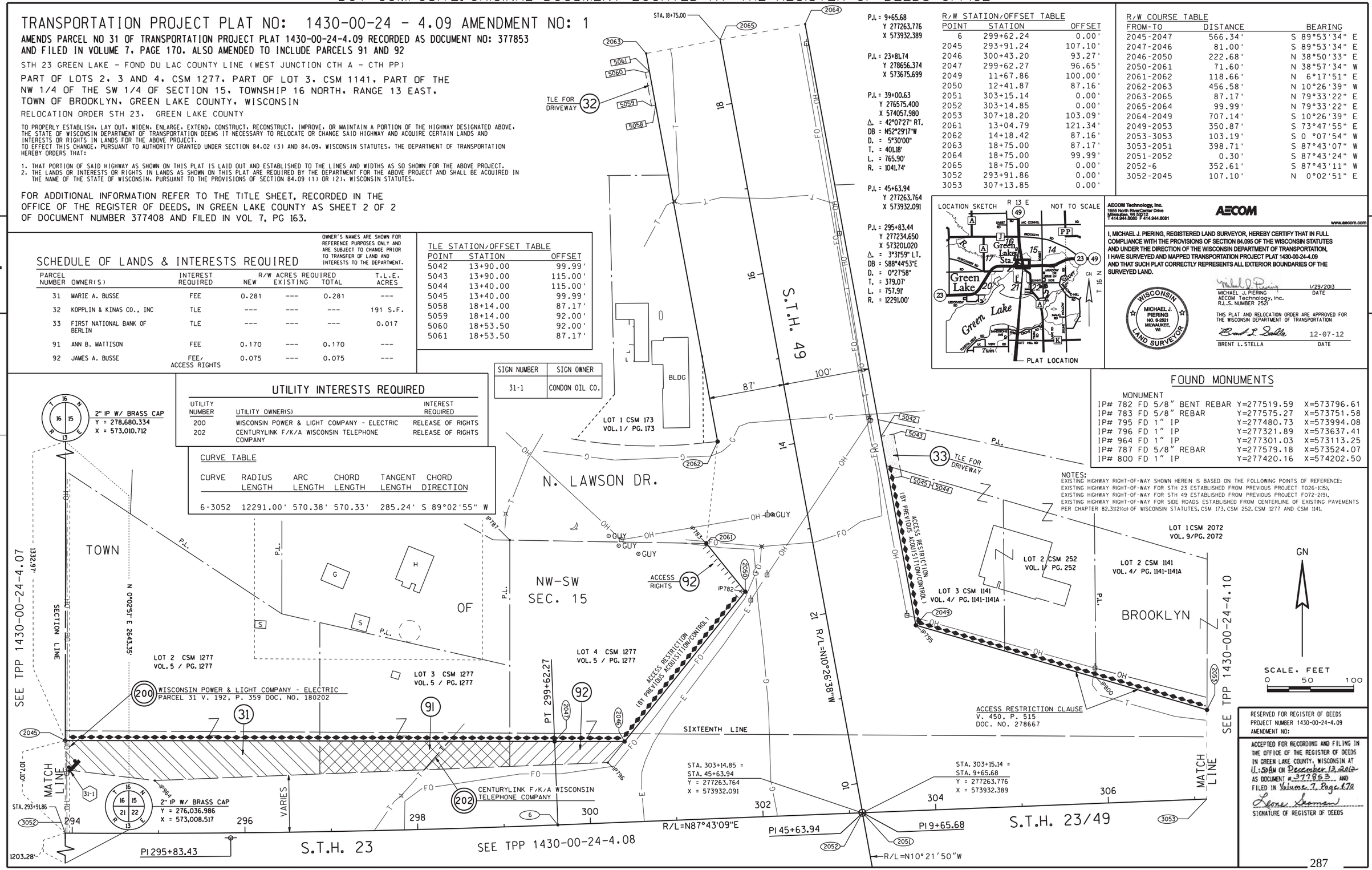
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

12-07-12
BRENT L. STELLA — DATE

FOUND MONUMENTS

MONUMENT		
IP# 782 FD 5/8" BENT REBAR	Y=277519.59	X=573796.61
IP# 783 FD 5/8" REBAR	Y=277575.27	X=573751.58
IP# 795 FD 1" IP	Y=277480.73	X=573994.08
IP# 796 FD 1" IP	Y=277321.89	X=573637.41
IP# 964 FD 1" IP	Y=277301.03	X=573113.25
IP# 787 FD 5/8" REBAR	Y=277579.18	X=573524.07
IP# 800 FD 1" IP	Y=277420.16	X=574202.50

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-1(15),
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 49 ESTABLISHED FROM PREVIOUS PROJECT F072-2(9),
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 173, CSM 252, CSM 1277 AND CSM 1141.



RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.09
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:50AM ON December 13, 2012 AS DOCUMENT # 377853 AND FILED IN Volume 7, Page 170

Leone Sherman
SIGNATURE OF REGISTER OF DEEDS

4

FILE NAME : X:\projects\587708_2010\Submital\final dgn submittal\11-19-2012\23Detail_4-9rv1-18-13.dgn PLOT DATE : 1/29/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : 1:50

4.09

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.10 AMENDMENT NO. 1

AMENDS PARCEL 29 AREA OF TRANSPORTATION PROJECT PLAT NO. 1430-00-24-4.10, RECORDED AS DOCUMENT NO. 377854 AND FILED IN VOLUME 7, PAGE 171, AND ALSO AMENDED TO INCLUDE PARCEL 94 AND UTILITY PARCEL 200

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOT 1 OF CSM 3284, PART OF LOT 1, OUTLOTS 1 & 2 OF CSM 1202, PART OF THE NE 1/4 OF THE SW 1/4, PART OF THE SE 1/4 OF THE SW 1/4 IN SECTION 15, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN AND PART OF LOT 1, C.S.M. 3092, PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 15, TOWNSHIP 16 NORTH, RANGE 13 EAST, CITY OF GREEN LAKE, ALL IN GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

SCHEDULE OF LANDS & INTERESTS REQUIRED

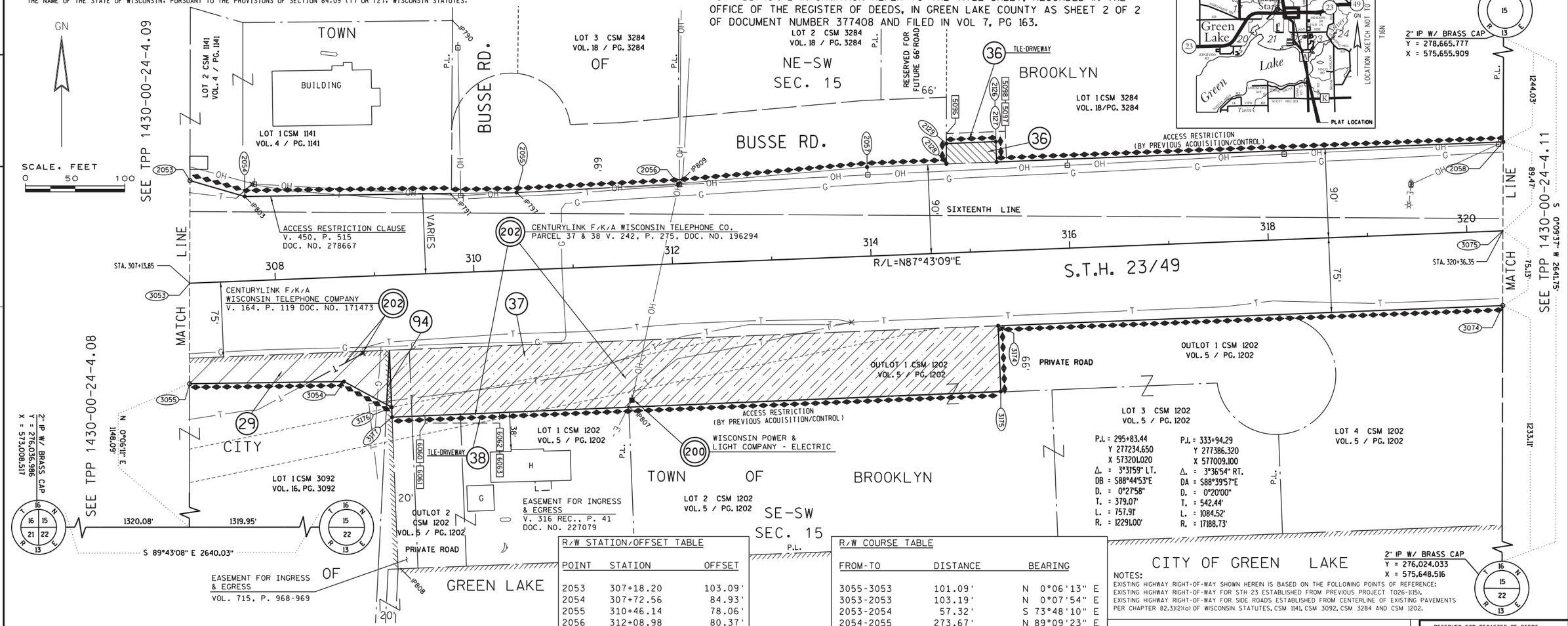
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
29	COMMUNITY HEALTH NETWORK, INC. ALSO SEE SHEET 4.08	FEE	0.143	---	0.143	---
36	EGBERT EXCAVATING INC.	FEE/TLE	0.024	---	0.024	0.018
37	OSWALD R. KINAS (PARTY OF INTREST: PHASE FIVE OF GREEN LAKE LLC)	FEE	0.941	---	0.941	---
38	JOHN R. & PEGGY A. WALKER	TLE	---	---	---	0.015
94	PHASE FIVE OF GREEN LAKE LLC	FEE	144 S.F.	---	144 S.F.	---

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	CENTURYLINK F/K/A WISCONSIN TELEPHONE COMPANY	RELEASE OF RIGHTS
200	WISCONSIN POWER & LIGHT COMPANY - ELECTRIC	RELEASE OF RIGHTS

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.



TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
5096	314+80.65	120.00'
5097	315+40.00	89.50'
5098	315+40.00	120.00'
6060	309+45.00	142.65'
6061	309+45.00	150.00'
6062	310+20.00	142.46'
6063	310+20.00	153.00'

FOUND MONUMENTS

IP# 790 FD 1" IP	Y=277543.70	X=574595.19
IP# 791 FD 1" IP	Y=277368.78	X=574593.76
IP# 797 FD 2" IP	Y=277370.87	X=574659.70
IP# 803 FD 2" IP/BRASS CAP	Y=277366.84	X=574386.06
IP# 807 FD 1" IP	Y=277155.71	X=574772.55
IP# 808 FD 1/2" IP	Y=276992.44	X=574543.21
IP# 809 FD IP	Y=277379.66	X=574822.32

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
2053	307+18.20	103.09'
2054	307+72.56	84.93'
2055	310+46.14	78.06'
2056	312+08.98	80.37'
2057	313+99.52	89.53'
2058	320+40.11	89.39'
2126	315+30.00	110.00'
2127	315+30.00	89.50'
2128	314+79.35	89.51'
2129	314+80.22	110.00'
3053	307+13.85	0.00'
3054	308+65.00	105.00'
3055	307+09.65	101.00'
3074	320+33.10	75.07'
3075	320+36.35	0.00'
3174	315+25.00	75.19'
3175	315+25.00	141.21'
3176	309+11.89	132.73'
3177	309+11.91	142.73'

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3055-3053	101.09'	N 0°06'13" E
3053-2053	103.19'	N 0°07'54" E
2053-2054	57.32'	S 73°48'10" E
2054-2055	273.67'	N 89°09'23" E
2055-2056	162.85'	N 86°54'23" E
2056-2057	190.76'	N 84°58'09" E
2057-2128	79.82'	N 87°43'52" E
2128-2129	20.52'	N 0°09'38" E
2129-2126	49.78'	N 87°43'52" E
2126-2127	20.50'	S 2°16'51" E
2127-2058	510.11'	N 87°43'53" E
2058-3075	89.47'	S 0°09'37" W
3075-3074	75.13'	S 0°09'37" W
3074-3174	508.10'	S 87°42'19" W
3714-3175	66.02'	S 2°16'51" E
3175-3177	613.09'	S 87°34'38" W
3177-3176	10.00'	N 2°25'19" W
3176-3054	54.48'	N 61°40'51" W
3054-3055	155.40'	S 89°11'38" W

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-151,
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 1141, CSM 3092, CSM 3284 AND CSM 1202.

AECOM Technology, Inc.
4135 Technology Parkway
Sheboygan, WI 53083
T 920.458.8711 F 920.458.0537
www.aecom.com

I, KENNETH R. WOLF, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.10 AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KENNETH R. WOLF NO. S-1421 SHEBOYGAN, WI LAND SURVEYOR

Kenneth R. Wolf 3/12/2013
KENNETH R. WOLF DATE
AECOM Technology, Inc.
R.L.S. NUMBER 1421

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

Brent L. Stella 3-15-13
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.10
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 8:00AM ON March 27, 2013 AS DOCUMENT # 378114 AND FILED IN Vol 7 plats pg 198

Dana B. Zwerdt
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : L:\work\60198142\000_CADD\SURVEY\REV 2 TPP SHEETS\23Detail_4-10 ADD 1.dgn PLOT DATE : 3/14/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : 1:50

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.11 AMENDMENT NO: 1

AMENDS THE FEE TOTAL OF PARCEL NO 39 OF TRANSPORTATION PROJECT PLAT 1430-00-24-4.11 RECORDED AS DOCUMENT NO: 377855 AND FILED IN VOLUME 7, PAGE 172.

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF THE NW 1/4 OF THE SE 1/4 AND PART OF THE SW 1/4 OF THE SE 1/4 OF SECTION 15, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

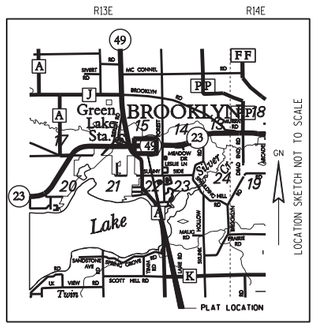
RELOCATION ORDER STH 23, GREEN LAKE COUNTY

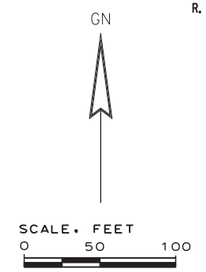
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDER THAT:

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

P.I. = 333+94.29
Y 277386.320
X 577009.100
Δ. = 3°36'54" RT.
DA = S88°39'57"E
D. = 0°20'00"
T. = 542.44'
L. = 1084.52'
R. = 17188.73'

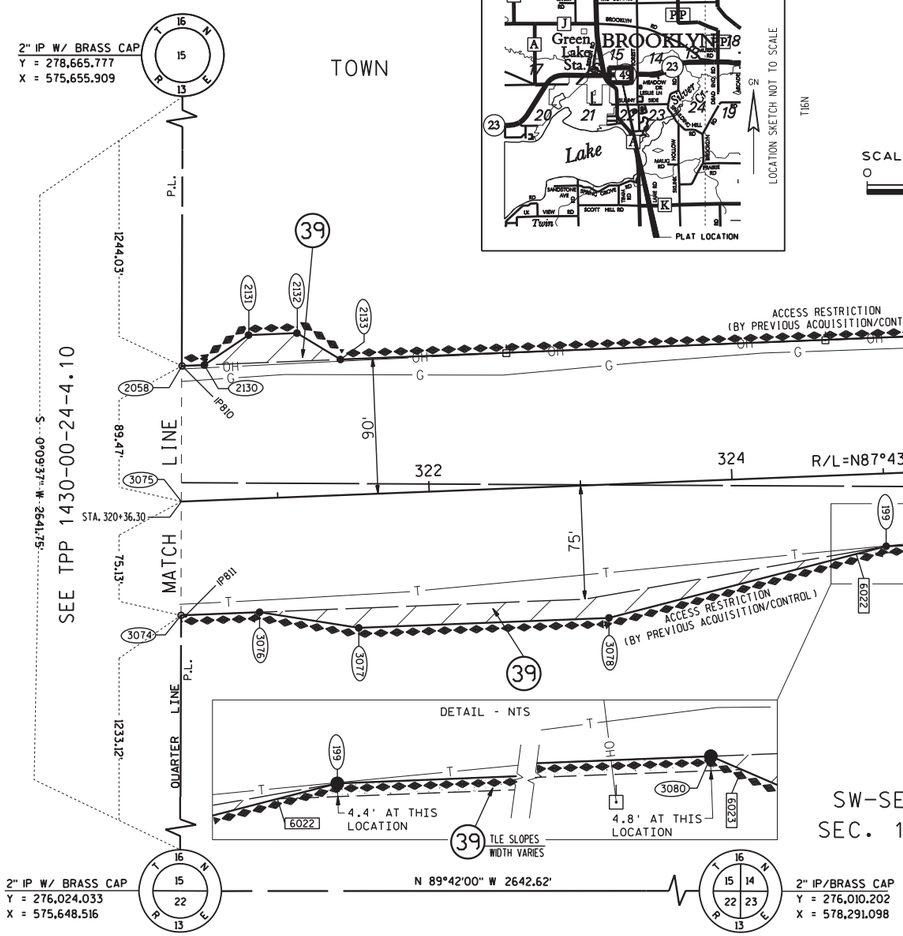
NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-31(5).
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES.





2" IP W/ BRASS CAP
Y = 278,665.777
X = 575,655.909

TOWN OF NW-SE SEC. 15



FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
199	324+99.97	48.00
2058	320+40.11	89.39'
2059	328+51.86	90.00'
2060	333+60.68	90.00'
2130	320+55.00	89.40'
2131	320+85.00	108.00'
2132	321+17.00	108.00'
2133	321+45.00	89.47'
2134	331+20.00	90.00'
2135	331+40.00	104.00'
2136	332+75.00	104.00'
2137	332+75.00	520.00'
2138	333+66.40	520.62'
3074	320+33.10	75.07'
3075	320+36.30	0.00'
3076	320+85.00	75.05'
3077	321+50.00	88.00'
3078	323+15.00	88.00'
3080	327+25.00	48.00'
3081	327+50.00	60.00'
3082	329+45.00	52.00'
3083	330+50.00	57.00'
3084	331+49.20	80.34'
3085	331+82.01	71.33'
3086	333+58.66	58.00'
3088	328+51.86	55.00'
3089	333+59.45	0.00'

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
2058-2130	14.89'	N 87°40'33" E
2130-2131	35.30'	N 55°55'31" E
2131-2132	32.00'	N 87°43'09" E
2132-2133	33.58'	S 58°47'10" E
2133-2059	706.86'	N 87°40'36" E
2134-2135	24.51'	N 53°47'49" E
2135-2136	135.82'	N 88°54'17" E
2136-2137	416.00'	N 0°52'13" W
2137-2138	94.16'	N 88°54'17" E
2138-2060	430.66'	S 0°11'54" W
2060-3089	90.01'	S 0°11'54" W
3089-3086	58.00'	S 0°11'54" W
3086-3085	176.48'	S 84°46'49" W
3085-3084	33.89'	S 73°20'55" W
3084-3083	101.52'	N 78°09'45" W
3083-3082	104.79'	N 89°03'37" W
3082-3088	92.90'	S 86°01'26" W
3088-3081	101.98'	S 84°54'32" W
3081-3080	27.73'	N 66°38'26" W
3080-199	225.03'	S 87°43'09" W
199-3078	189.24'	S 75°31'00" W
3078-3077	165.00'	S 87°43'10" W
3077-3076	66.28'	N 81°01'00" W
3076-3074	51.90'	S 87°42'20" W
3074-3075	75.13'	N 0°09'37" E
3075-2058	89.47'	N 0°09'37" E

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
2059-2134	17278.73'	269.54'	269.54'	134.77'	N 88°09'58" E

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
6022	324+80.00	52.32'
6023	327+35.00	52.80'

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
39	RADENE M. ABEL & GARY W. BENZ	FEE/TLE/ ACCESS RTS	1.243	---	1.243	0.025

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	CENTURYLINK F/K/A WISCONSIN TELEPHONE COMPANY	RELEASE OF RIGHTS

FOUND MONUMENTS

IP# 810 FD 2" IP/BRASS CAP	Y=277421.76	X=575652.65
IP# 811 FD 2" IP/BRASS CAP	Y=277256.88	X=575654.88

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6080 F 414.944.6081
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.11 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

Michael J. Piering 1/29/2013
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

Brent L. Stella 12-07-12
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.11
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:56 AM ON December 13, 2012 AS DOCUMENT # 377855 AND FILED IN Volume 7, Page 172

Steve Seaman
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : X:\projects\587708_2010\Submital\final dgn submittal\11-19-2012\23Detail_4-11Am1_1-28-2013.dgn PLOT DATE : 1/29/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : 1:50

4.11

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.12

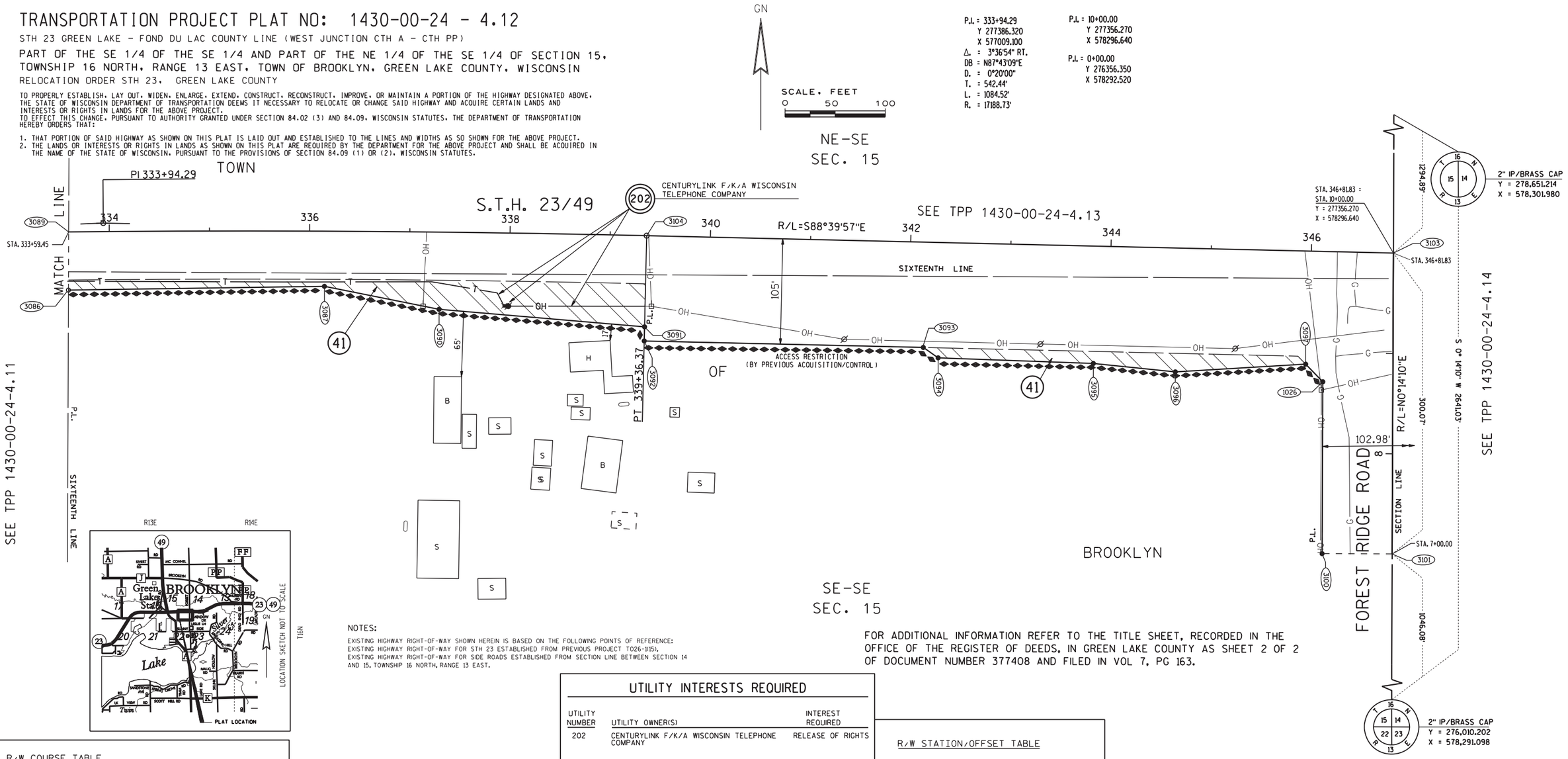
STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF THE SE 1/4 OF THE SE 1/4 AND PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 15, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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



NOTES:

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-1(15).
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM SECTION LINE BETWEEN SECTION 14 AND 15, TOWNSHIP 16 NORTH, RANGE 13 EAST.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3101-3100	69.95'	N 89°45'51" W
3100-1026	171.39'	N 0°14'09" E
1026-3097	24.50'	N 44°13'19" W
3097-3096	130.31'	S 86°36'52" W
3096-3095	82.26'	N 84°08'01" W
3095-3094	155.01'	N 87°55'36" W
3094-3093	18.03'	N 54°58'19" W
3093-3092	278.63'	N 88°39'57" W
3092-3091	14.08'	N 1°20'43" E
3091-3090	205.84'	N 85°07'56" W
3090-3087	116.65'	N 78°40'28" W
3087-3086	255.52'	S 89°09'51" W
3086-3089	58.00'	N 0°11'54" E
3104-3103	745.47'	S 88°39'57" E
3103-3101	300.00'	S 0°14'09" W

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	CENTURYLINK F/K/A WISCONSIN TELEPHONE COMPANY	RELEASE OF RIGHTS

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
3089-3104	17188.73'	576.91'	576.88'	288.48'	S 89°37'39" E

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
41	NOLAN FRANCIS WALLENFANG REVOCABLE INTERVIVOS TRUST	FEE	0.378	---	0.378	---

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
1026	346+14.35	129.93'
3086	333+58.66	58.00'
3087	336+15.00	73.55'
3089	333+59.45	0.00'
3090	337+73.30	77.00'
3091	339+36.38	90.92'
3092	339+36.37	105.00'
3093	342+15.00	115.00'
3094	342+10.00	117.00'
3095	343+85.00	117.00'
3096	344+67.00	123.50'
3097	345+96.86	112.78'
3100	7+00.00	69.95'
3101	7+00.00	0.00'
3103	346+81.83	0.00'
3104	339+36.36	0.00'

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6580 F 414.944.6081
AECOM
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.12 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

MICHAEL J. PIERING — 11/16/2012
AECOM Technology, Inc.
R.L.S. NUMBER 2521 — DATE

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

BRENT L. STELLA — 12-07-12
DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.12
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:50 AM ON December 13, 2012 AS DOCUMENT # 377856 AND FILED IN Volume 7, Page 173

SIGNATURE OF REGISTER OF DEEDS

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.13 AMENDMENT NO. 1

AMENDS TRANSPORTATION PROJECT PLAT NO. 1430-00-24-4.13, RECORDED AS DOCUMENT NO. 377857 AND FILED IN VOLUME 7, PAGE 174, TO ADD UTILITY PARCEL 200

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOT 1, CSM 1688, PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 15, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

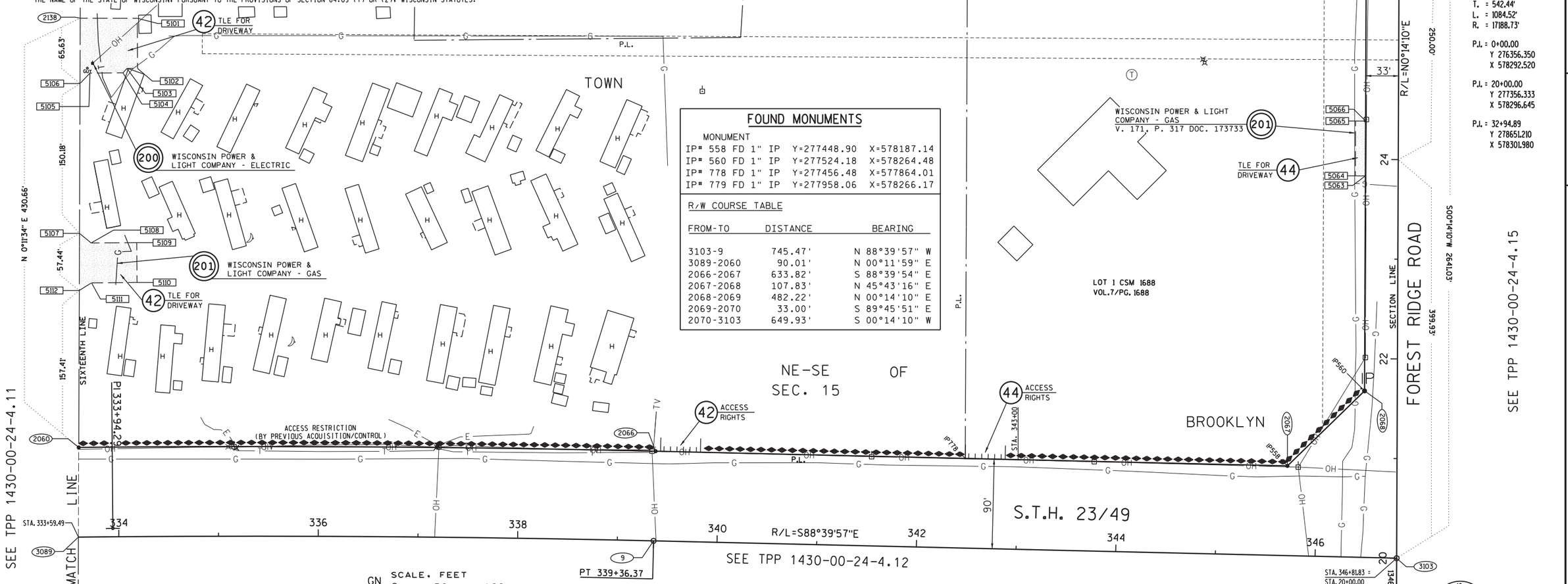
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN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

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

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

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
201	WISCONSIN POWER & LIGHT COMPANY - GAS	RELEASE OF RIGHTS
200	WISCONSIN POWER & LIGHT COMPANY - ELECTRIC	RELEASE OF RIGHTS



FOUND MONUMENTS

MONUMENT		
IP# 558 FD 1" IP	Y=277448.90	X=578187.14
IP# 560 FD 1" IP	Y=277524.18	X=578264.48
IP# 778 FD 1" IP	Y=277456.48	X=577864.01
IP# 779 FD 1" IP	Y=277958.06	X=578266.17

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3103-9	745.47'	N 88°39'57" W
3089-2060	90.01'	N 00°11'59" E
2066-2067	633.82'	S 88°39'54" E
2067-2068	107.83'	N 45°43'16" E
2068-2069	482.22'	N 00°14'10" E
2069-2070	33.00'	S 89°45'51" E
2070-3103	649.93'	S 00°14'10" W

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-15), EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM SECTION LINE PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 1688 AND THE SECTION LINE BETWEEN SECTIONS 14 AND 15.

GN

SCALE, FEET
0 50 100

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
9-3089	17188.73'	576.87'	576.84'	288.46'	N 89°37'38" W
2060-2066	17278.73'	578.66'	578.64'	289.36'	S 89°37'31" E

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
42	KAPING HOLDINGS LLC	TLE/ ACCESS RIGHTS	---	---	---	0.128
44	THE RIPON CONGREGATION OF JEHOVAH'S WITNESSES, INC.	TLE ACCESS RIGHTS	---	---	---	0.013

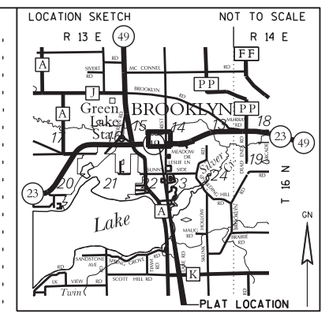
R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
9	339+36.36	0.00'
2060	333+60.72	90.00'
2066	339+36.37	90.00'
2067	345+70.19	89.99'
2068	346+45.62	167.05'
2069	26+49.93	33.00'
2070	26+49.93	0.00'
3089	333+59.49	0.00'
3103	346+81.83	0.00'

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
5063	23+83.43	32.91'
5064	23+83.43	43.00'
5065	24+38.43	43.00'
5066	24+38.43	32.92'
5101	334+21.95	520.06'
5102	334+21.93	469.79'
5103	334+11.56	469.78'
5104	334+07.68	465.45'
5105	333+75.44	465.47'
5106	333+65.54	454.99'
5107	333+63.57	304.84'
5108	333+75.00	295.00'
5109	334+20.00	295.00'
5110	334+20.00	255.00'
5111	333+75.00	255.00'
5112	333+62.81	247.40'

LOCATION SKETCH NOT TO SCALE



AECOM Technology, Inc.
4135 Technology Parkway
Sheboygan, WI 53083
T 920.458.8711 F 920.458.0537
www.aecom.com

I, KENNETH R. WOLF, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.13 AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KENNETH R. WOLF NO. S-1421 SHEBOYGAN WI LAND SURVEYOR

Kenneth R. Wolf 3/13/2012
KENNETH R. WOLF DATE
AECOM Technology, Inc.
R.L.S. NUMBER 1421

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

Brent L. Stella 3-15-13
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.13
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 8:00AM ON March 22, 2013 AS DOCUMENT # 309115 AND FILED IN Vol 7 Plats pg 199

Donna Svendsen
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : L:\work\60198142\000_CADD\SURVEY\REV 2 TPP SHEETS\23Detail_4-13 ADD 1.dgn PLOT DATE : 3/14/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : 1:50

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.14

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOT 1, CSM 1424, PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 14, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-15),
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM WEST LINE OF THE SW 1/4, SECTION 14, TOWNSHIP 16 NORTH, RANGE 13 EAST, PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 1424.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

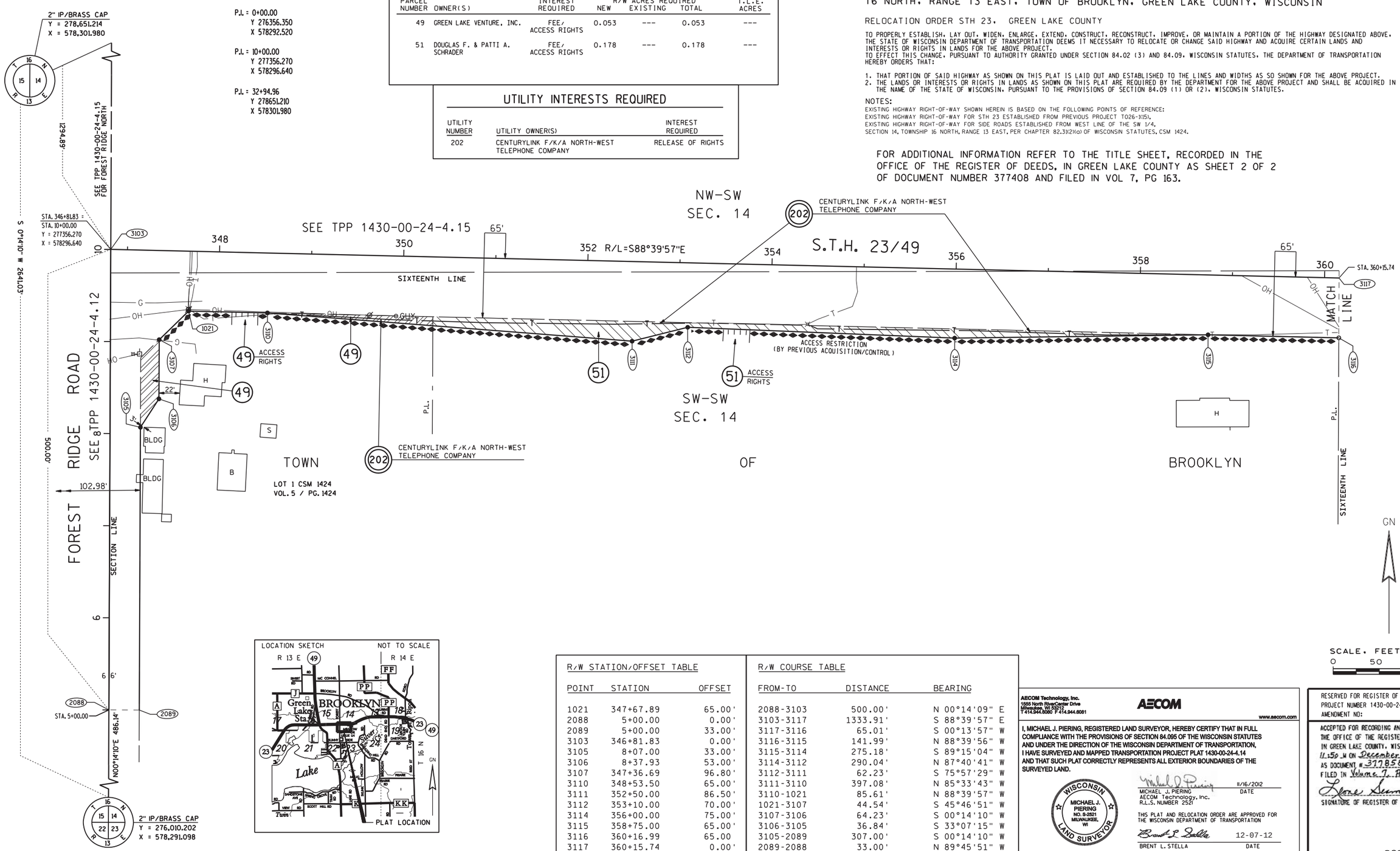
SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
49	GREEN LAKE VENTURE, INC.	FEE/ ACCESS RIGHTS	0.053	---	0.053	---
51	DOUGLAS F. & PATTI A. SCHRADER	FEE/ ACCESS RIGHTS	0.178	---	0.178	---

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY	RELEASE OF RIGHTS



LOCATION SKETCH NOT TO SCALE

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
1021	347+67.89	65.00'
2088	5+00.00	0.00'
2089	5+00.00	33.00'
3103	346+81.83	0.00'
3105	8+07.00	33.00'
3106	8+37.93	53.00'
3107	347+36.69	96.80'
3110	348+53.50	65.00'
3111	352+50.00	86.50'
3112	353+10.00	70.00'
3114	356+00.00	75.00'
3115	358+75.00	65.00'
3116	360+16.99	65.00
3117	360+15.74	0.00'

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
2088-3103	500.00'	N 00°14'09" E
3103-3117	1333.91'	S 88°39'57" E
3117-3116	65.01'	S 00°13'57" W
3116-3115	141.99'	N 88°39'56" W
3115-3114	275.18'	S 89°15'04" W
3114-3112	290.04'	N 87°40'41" W
3112-3111	62.23'	S 75°57'29" W
3111-3110	397.08'	N 85°33'43" W
3110-1021	85.61'	N 88°39'57" W
1021-3107	44.54'	S 45°46'51" W
3107-3106	64.23'	S 00°14'10" W
3106-3105	36.84'	S 33°07'15" W
3105-2089	307.00'	S 00°14'10" W
2089-2088	33.00'	N 89°45'51" W

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6000 F 414.944.6081
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.14 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

MICHAEL J. PIERING — 11/16/2012 DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

BRENT L. STELLA — 12-07-12 DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.14
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:50 A.M. ON December 13, 2012 AS DOCUMENT # 377858 AND FILED IN Volume 7, Page 175

SIGNATURE OF REGISTER OF DEEDS

FILE NAME : X:\projects\587708_2010\Submittal\final dgn submittal\11-19-2012\23Detail_4-14.dgn PLOT DATE : 12/5/2012 PLOT BY : $$...plotuser...$$ PLOT NAME : 1:50

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.15

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOTS 1 & 2, CSM 1225, PART OF LOT 1, CSM 50A, AND PART OF THE NW 1/4 OF THE SW 1/4 OF SECTION 14, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-15),
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM WEST LINE OF THE SW 1/4, TOWNSHIP 16 NORTH, RANGE 13 EAST PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 50A AND CSM 1225.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

P.I. = 0+00.00
Y 276356.350
X 578292.530

P.I. = 20+00.00
Y 277356.333
X 578296.645

P.I. = 32+94.96
Y 278651.210
X 578301.980

P.I. = 333+94.29
Y 277386.320
X 577009.100
Δ. = 3°36'54" RT.
DB = N87°43'09"E
D. = 0°20'00"
T. = 542.44'
L. = 1084.52'
R. = 17188.73'

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3103-2070	649.93'	N 0°14'10" E
2070-2071	33.00'	S 89°45'50" E
2071-2072	420.00'	S 0°14'02" W
2072-2074	112.40'	S 20°40'02" E
2074-2075	37.47'	S 44°03'29" E
2075-2077	178.79'	S 88°39'57" E
2077-2078	130.86'	S 82°05'02" E
2078-2079	511.97'	S 88°39'57" E
2079-2086	134.00'	S 83°54'08" E
2086-2087	135.56'	S 87°01'42" E
2087-2143	145.44'	S 87°52'41" E
2143-3117	68.01'	S 0°13'57" W
3117-3103	1333.91'	N 88°39'57" W

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
2070	26+49.93	0.00'
2071	26+49.93	33.00'
2072	22+29.93	33.02'
2074	347+52.54	126.31'
2075	347+79.21	100.00'
2076	347+94.42	85.00'
2077	349+58.00	100.00'
2078	350+88.00	85.00'
2079	355+99.97	85.00'
2086	357+33.50	73.87'
2087	358+69.00	70.00'
2143	360+14.43	68.00'
3103	346+81.83	0.00'
3117	360+15.74	0.00'

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
5079	26+35.73	33.00'
5080	26+35.73	38.00'
5081	25+86.93	38.00'
5082	25+86.93	33.00'
5083	23+69.93	33.00'
5084	23+69.93	38.00'
5085	23+25.00	38.00'
5339	352+38.00	85.00'
5340	352+38.00	95.00'
5341	352+83.00	95.00'
5342	352+83.00	85.00'
5343	23+25.00	33.00'

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
46	EUGENE N. AND NANA L. BOGEL, VENDORS & GLENN H. JENNIE L. SCHROEDER, VENDEE	TLE	---	---	---	0.006
47	JAMES E. & MARY E. CHIVAS	FEE/TLE/ ACCESS RIGHTS	0.099	---	0.099	0.017
48	BARBARA J. ROST	FEE/TLE	0.011	---	0.011	0.010
52	GLENN C. & MARY J. DREGER	FEE/ ACCESS RIGHTS	0.041	---	0.041	---

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
201	WISCONSIN POWER & LIGHT COMPANY - GAS	RELEASE OF RIGHTS
202	CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY	RELEASE OF RIGHTS

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6300 F 414.944.6081

AECOM
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.15 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

11/16/2012
MICHAEL J. PIERING — DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

12-07-12
BRENT L. STELLA — DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.15
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:50 AM ON December 13, 2012 AS DOCUMENT # 377859 AND FILED IN Volume 7, Page 176

Signature of Register of Deeds

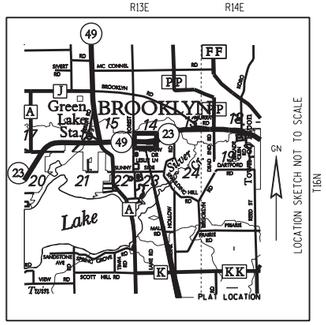
FILE NAME : X:\projects\587708_2010\Submital\final dgn submittal\11-19-2012\23Detail_4-15.dgn
PLOT DATE : 12/5/2012
PLOT BY : $$...plotuser...$$ PLOT NAME :
1:50

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

NOTES:

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT T026-1(15), EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 399, CSM 1032, CSM 1712, CSM 2089, CSM 2671, CSM 292A AND RIDGEVIEW ESTATES.



R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3124-3123	0.46'	S 85°42'11" W
3122-3121	33.14'	S 73°18'54" W
3121-3120	66.42'	S 81°33'21" W
3120-3181	41.81'	N 31°03'00" W
3181-3180	60.84'	N 79°09'03" W
3180-3118	99.00'	N 88°53'37" W
3118-3128	122.93'	N 88°53'37" W
3128-3127	14.18'	S 0°09'07" W
3127-3116	1.37'	N 88°39'57" W
3116-3117	65.01'	N 0°13'57" E
3117-2081	60.01'	N 0°13'57" E
2081-2090	3.38'	S 88°39'35" E
2090-2091	15.00'	N 1°20'03" E
2091-2092	304.16'	S 88°39'56" E
2093-2094	2.15'	N 0°19'59" W
2094-2095	496.95'	N 85°56'35" E
2096-3126	77.51'	S 0°13'43" W
3126-3125	114.46'	S 0°13'43" W

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
2081	360+14.58	60.00'
2090	360+17.97	60.00'
2091	360+17.97	75.00'
2092	363+22.13	75.00'
2093	364+44.11	75.00'
2094	364+44.12	77.15'
2095	369+51.53	75.00'
2096	373+79.41	75.00'
3116	360+16.99	65.00'
3117	360+15.74	0.00'
3118	361+41.00	50.34'
3120	363+22.38	95.31'
3121	363+86.43	84.59'
3122	364+17.50	75.00'
3123	370+72.75	75.00'
3124	370+73.20	75.04'
3125	373+31.89	110.94'
3126	373+59.67	0.00'
3127	360+18.36	65.00'
3128	360+18.07	50.83'
3180	362+40.00	49.94'
3181	363+00.00	60.00'

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.16

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOT 2, CSM 292A, PART OF LOT 3, CSM 1032, PART OF LOT 1, CSM 2089, PART OF LOT 1, CSM 1712, PART OF LOTS 1 & 2, CSM 399, PART OF LOT 1, CSM 2671, PART OF LOT 1, RIDGEVIEW ESTATES, PART OF THE NE 1/4 OF THE SW 1/4 AND PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 14, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

GN

SCALE, FEET
0 50 100

P.I. = 372+70.88
Y 277296.050
X 580884.990
Δ. = 27°54'13" LT.
DA = N63°25'50"E
D. = 1°30'00"
T. = 948.95'
L. = 1860.24'
R. = 3819.72'

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	WISCONSIN POWER & LIGHT COMPANY - ELECTRIC	RELEASE OF RIGHTS
202	CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY	RELEASE OF RIGHTS

2" IP/BRASS CAP
Y = 278,660.339
X = 580,969.199

LOT 1 CSM 1712
VOL. 7 / PG. 1712

SHARED DRIVEWAY & MAINTENANCE AGREEMENT V. 796 REC., P. 542 DOC. NO. 361453

NE-SW SEC. 14

EASEMENT INGRESS & EGRESS v.373, P. 471 DOC. 251068

LOT 1 CSM 2089

SEE TPP 1430-00-24-4.15

SEE TPP 1430-00-24-4.17

SEE TPP 1430-00-24-4.14

LOT 4 CSM 292A VOL.1/ PG. 292A

LOT 3 CSM 292A VOL.1/ PG. 292A

LOT 2 CSM 292A VOL.1/ PG. 292A

LOT 3 CSM 1032 VOL.4/ PG. 1032

LOT 2 CSM 399 VOL. 2 / PG. 399

LOT 1CSM 399 VOL. 2 / PG. 399

PRIVATE DRIVE

PC 363+21.92

ACCESS RIGHTS 66'

ACCESS RESTRICTION (BY PREVIOUS ACQUISITION/CONTROL)

CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY

WISCONSIN POWER & LIGHT COMPANY - ELECTRIC

SIXTEENTH LINE

MATCH LINE

QUARTER LINE

R/L=S88°39'57"E

STA. 360+15.74

STA. 373+59.67

ROAD TO BE CLOSED

CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY V. 278, P. 212, DOC. NO. 211016

CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY V. 278, P. 210, DOC. NO. 211015

LOT 1 CSM 2671 VOL. 13 / PG. 2671 D.O.T. APPROVAL NO. 24-023-0178-99

WISCONSIN POWER & LIGHT COMPANY - ELECTRIC PARCEL 62 V. 247, P. 227, DOC. 198178

S.T.H. 23/49

WESTWIND RD.

RIDGEVIEW ESTATES

LOT 1 LOT 2 LOT 3 LOT 4 LOT 5 LOT 6 LOT 7 LOT 8 LOT 9 LOT 10

BROOKLYN

SE-SW SEC. 14

PI 372+10.87

2" IP/BRASS CAP
Y = 276,010.992
X = 580,958.625

FOUND MONUMENTS

IP# 567 FD 1" IP	Y=277393.12	X=579938.24	IP# 744	Y=277392.16	X=580057.81
IP# 719 FD 2" IP	Y=277242.97	X=579934.69	IP# 2733	Y=277408.94	X=580357.69
IP# 737 FD 1" IP	Y=277393.29	X=579991.86	IP# 2734	Y=277414.63	X=580416.38
IP# 2892	Y=277398.03	X=579735.31	IP# 2747	Y=277456.66	X=580715.94
IP# 2893	Y=277393.13	X=579938.13	IP# 2748	Y=277509.31	X=580939.50
IP# 2895	Y=277395.06	X=579855.13	IP# 2894	Y=277391.91	X=579991.75

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
3125-3124	779.72'	268.68'	267.36'	135.69'	S 85°50'11" W
3123-3122	3894.71'	668.11'	667.30'	334.88'	S 84°59'10" W
2092-2093	3744.71'	119.59'	119.58'	59.80'	S 89°35'01" E
2095-2096	3744.71'	419.48'	419.26'	209.96'	N 78°40'51" E

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
54	MARK D. WHITE & FAITH M. SMIT	FEE	0.051	---	0.051	---
55	SILVER CREEK VENTURES, LLC.	ACCESS RIGHTS	---	---	---	---
56	GORDON STIBB	FEE	0.011	---	0.011	---
57	GREFORY A. WOYAK	FEE/TLE	0.013	---	0.013	0.004
58	DAVID W. LONG	TLE	---	---	---	0.021
59	VIRGINIA S. KING	TLE	---	---	---	0.064
61	DONALD M. & LUANNE C. RAATZ	FEE	0.021	---	0.021	---
62	ALOYSIUS P. & BARBARA A. HERMES	FEE	0.003	---	0.003	---
63	SUNDAY PROPERTIES, LLC. ALSO SEE SHEET 4.17	TLE	---	---	---	0.025

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
5086	368+79.00	80.00'
5087	372+85.00	80.00'
5088	373+50.00	120.00'
5113	373+85.00	115.00'
5092	373+91.59	119.75'

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6080 F 414.944.6081
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.16 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

11/16/2012
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

12-07-12
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.16
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:59 AM ON December 13, 2012 AS DOCUMENT # 377860 AND FILED IN Volume 7, Page 177

SIGNATURE OF REGISTER OF DEEDS

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.17

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOT 1, CSM 2089, PART OF LOTS 15 & 16, RIDGEVIEW ESTATES, PART OF LOT 1, CSM 370, PART OF LOTS 1 & 2, CSM 1481, PART OF THE NW 1/4 OF THE SE 1/4 AND PART OF THE SW 1/4 OF THE SE 1/4 OF SECTION 14, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
63	SUNDAY PROPERTIES, LLC ALSO SEE SHEET 4.16	TLE/ ACCESS RIGHTS	---	---	---	0.112
64	ROBERT H. SWEENEY TRUSTS	FEE	0.038	---	0.038	---
66	AARON R. & MAGGIE M. JACOBY	FEE	0.104	---	0.104	---
67	KLINGBEIL LIVING TRUST	TLE	---	---	---	0.042
68	DAVID D. & ROSALIE M. POLCYN	TLE/ ACCESS RIGHTS	---	---	---	0.019
69	RICKY C. & CAROL J. MITTELSTAEDT HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY	TLE	---	---	---	0.010

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	WISCONSIN POWER & LIGHT COMPANY - ELECTRIC	RELEASE OF RIGHTS
201	WISCONSIN POWER & LIGHT COMPANY - GAS	RELEASE OF RIGHTS
202	CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY	RELEASE OF RIGHTS

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT TO26-1(15).
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM370, CSM 1481, CSM 2089 AND RIDGEVIEW ESTATES.

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3125-3126	114.46'	N 0°13'43" E
3126-2096	77.51'	N 0°13'43" E
2097-2098	9.00'	N 25°30'43" W
2098-2099	68.62'	N 63°57'24" E
2099-2101	147.84'	N 63°25'51" E
2101-2100	4.72'	S 26°34'10" E
2100-2102	370.12'	N 61°46'16" E
2102-2103	170.90'	N 63°34'27" E
2103-3150	100.57'	S 0°28'26" W
3150-3149	71.24'	S 0°28'26" W
3149-3148	91.97'	S 68°33'32" W
3148-3147	413.15'	S 63°27'22" W
3147-3182	105.83'	S 63°27'22" W

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
5092	373+91.59	119.75'
5114	374+50.00	167.00'
5115	374+80.00	140.00'
5116	374+25.00	75.00'
5117	374+20.00	140.00'
5122	374+50.00	95.00'
6035	379+00.48	60.00'
6036	381+37.00	60.00'
6038	383+88.00	60.00'
6039	384+13.00	55.10'
6081	382+25.00	55.02'
6082	382+38.00	61.00'
6083	382+58.00	61.00'
6085	7+24.00	33.26'
6091	380+52.24	58.29'
6092	383+11.22	60.09'

P.I. = 8+36.91
Y 277435.017
X 581489.876
Δ. = 7°21'48" LT.
D. = 5°43'47"
T. = 64.35'
L. = 128.51'
R. = 1000.00'

P.I. = 9+98.04
Y 277585.030
X 581430.560

P.I. = 7+24.00
Y 277325.571
X 581517.615

P.I. = 372+70.88
Y 277296.050
X 580884.990
Δ. = 27°54'13" LT.
DB = S88°39'57"E
D. = 1°30'00"
T. = 948.95'
L. = 1860.24'
R. = 3819.72'

2" IP/BRASS CAP
Y = 278,660.339
X = 580,969.119

TOWN

EASEMENT INGRESS & EGRESS V.373, P. 471 DOC. 251068

LOT 1 CSM 2089 VOL. 9 / PG. 2089

QUARTER LINE — 1184.50'

N 0°13'43" E 2649.37'

SEE TPP 1430-00-24-4.16

MATCH LINE

STA. 373+59.67

N 0°13'43" E 77.51'

N 0°13'43" E 114.46'

N 0°13'43" E 1308.90'

2" IP/BRASS CAP
Y = 276,010.992
X = 580,958.625

STH 23/49

NW-SE SEC. 14

SW-SE SEC. 14

PT 381+82.16

R/L=N63°25'50"E

20' EASEMENT TO LOT 3

R/L=N21°35'10"W

EASTWIND DR.

PI 8+36.91

PC 7+72.56

PT 9+01.07

PI 7+24.00

R/L=N14°13'20"W

ACCESS RESTRICTION BY PREVIOUS ACQUISITION/CONTROL

CENTURYLINK F/K/A NORTH WEST TELEPHONE COMPANY V.278, P. 216, DOC. 211016

CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPNAY

CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPNAY V. 278 P. 214, DOC. NO. 211017

WISCONSIN POWER & LIGHT COMPANY - GAS

WISCONSIN POWER & LIGHT COMPANY - ELECTRIC

WISCONSIN POWER & LIGHT COMPANY - ELECTRIC 10' EASEMENT PARCEL 66 V. 247, P. 227, DOC. 198178

STA. 378+50.00 = STA. 9+98.04
Y = 277585.030
X = 581430.560

STA. 388+25.15

SEE TPP 1430-00-24-4.18

SIXTEENTH LINE

LOT 1 CSM 1481 VOL. 6 / PG. 1481

LOT 2 CSM 1481 VOL. 6 / PG. 1481

LOT 3 CSM 1481 VOL. 6 / PG. 1481

LOT 1 CSM 370 VOL. 2 / PG. 370

LOT 16

LOT 15

LOT 14

LOT 13

LOT 12

RIDGEVIEW ESTATES

TLE-SLOPES

TLE-DRIVEWAY

ACCESS RIGHTS

5'TLE-SLOPES/DRIVEWAY

1 A.P.

LOCATION SKETCH NOT TO SCALE

PLAT LOCATION

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
2096-2097	3744.71'	718.20'	717.10'	360.21'	N 69°58'39" E
3182-3141	3874.71'	289.99'	289.93'	145.07'	S 65°34'28" W
3129-3125	779.72'	174.97'	174.60'	87.85'	S 69°32'09" W

FOUND MONUMENTS

IP# 730 FD 2" IP	Y=277285.91	X=581487.90
IP# 731 FD BENT 2" IP	Y=277317.17	X=581548.25
IP# 732 FD BENT 2" IP	Y=277526.68	X=581432.17
IP# 733 FD 2" IP	Y=277550.83	X=581494.49
IP# 2752	Y=277657.16	X=581395.00

R/W COURSE TABLE CONT.

FROM-TO	DISTANCE	BEARING
3141-3142	42.73'	S 13°01'52" E
3142-3138	133.40'	S 13°01'52" E
3138-3188	48.57'	S 13°01'52" E
3188-3190	28.26'	S 75°46'41" W
3190-3187	37.75'	S 75°46'41" W
3187-3137	48.57'	N 13°01'52" W
3137-3133	43.85'	N 13°01'52" W
3133-3143	81.39'	N 31°50'15" W
3143-3132	3.38'	N 31°50'15" W
3132-3131	46.01'	N 86°06'39" W
3131-3130	86.28'	S 78°02'33" W
3130-3129	178.07'	S 62°20'17" W

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
2096	373+79.41	75.00'
2097	381+12.00	75.00'
2098	381+12.00	84.00'
2099	381+82.16	84.00'
2100	383+30.00	79.28'
2101	383+30.00	84.00'
2102	386+99.97	90.00'
2103	388+70.87	89.57'
3125	373+31.89	110.94'
3126	373+59.67	0.00'
3129	375+01.19	94.57'
3130	376+73.00	63.58'
3131	377+57.00	75.00'
3132	377+98.00	94.00'
3137	378+07.72	220.66'

R/W STATION/OFFSET TABLE CONT.

POINT	STATION	OFFSET
3138	7+72.56	29.27'
3141	378+96.29	55.00'
3142	9+01.08	40.63'
3143	377+97.55	299.49'
3147	382+88.00	55.05'
3148	387+01.15	55.23'
3149	387+92.76	63.45'
3150	388+25.15	0.00'
3182	381+82.17	55.00'
3133	8+18.00	34.83'
3187	7+24.00	37.75'
3188	7+24.00	28.26'
3190	7+24.00	0.00'

SCALE: FEET
0 50 100

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6080 F 414.944.6081
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.17 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2021 MILWAUKEE, WI LAND SURVEYOR

11/16/2012
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

12-07-12
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.17
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:50AM ON December 13, 2012 AS DOCUMENT # 377862 AND FILED IN Volume 7, Page 199

SIGNATURE OF REGISTER OF DEEDS

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.18 AMENDMENT NO: 1

DELETES PARCEL 75 OF TRANSPORTATION PROJECT PLAT NO. 1430-00-24-4.18, RECORDED AS DOCUMENT NO. 377863 AND FILED IN VOLUME 7, PAGE 180.

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF LOT 1, CSM 2404, PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 14, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
71	ROBERT & BONNIE SHRADER	FEE/TLE	0.137	---	0.137	0.031
74	PHILLIP P. & LYNETTE D. PRIEBE, AS SURVIVORSHIP MARITAL PROPERTY	FEE	0.119	---	0.119	---

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-51.
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES, CSM 170, CSM 938, CSM 1332, CSM 1364, CSM 1715, CSM 2194 AND CSM 2404.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

R/W STATION/OFFSET TABLE

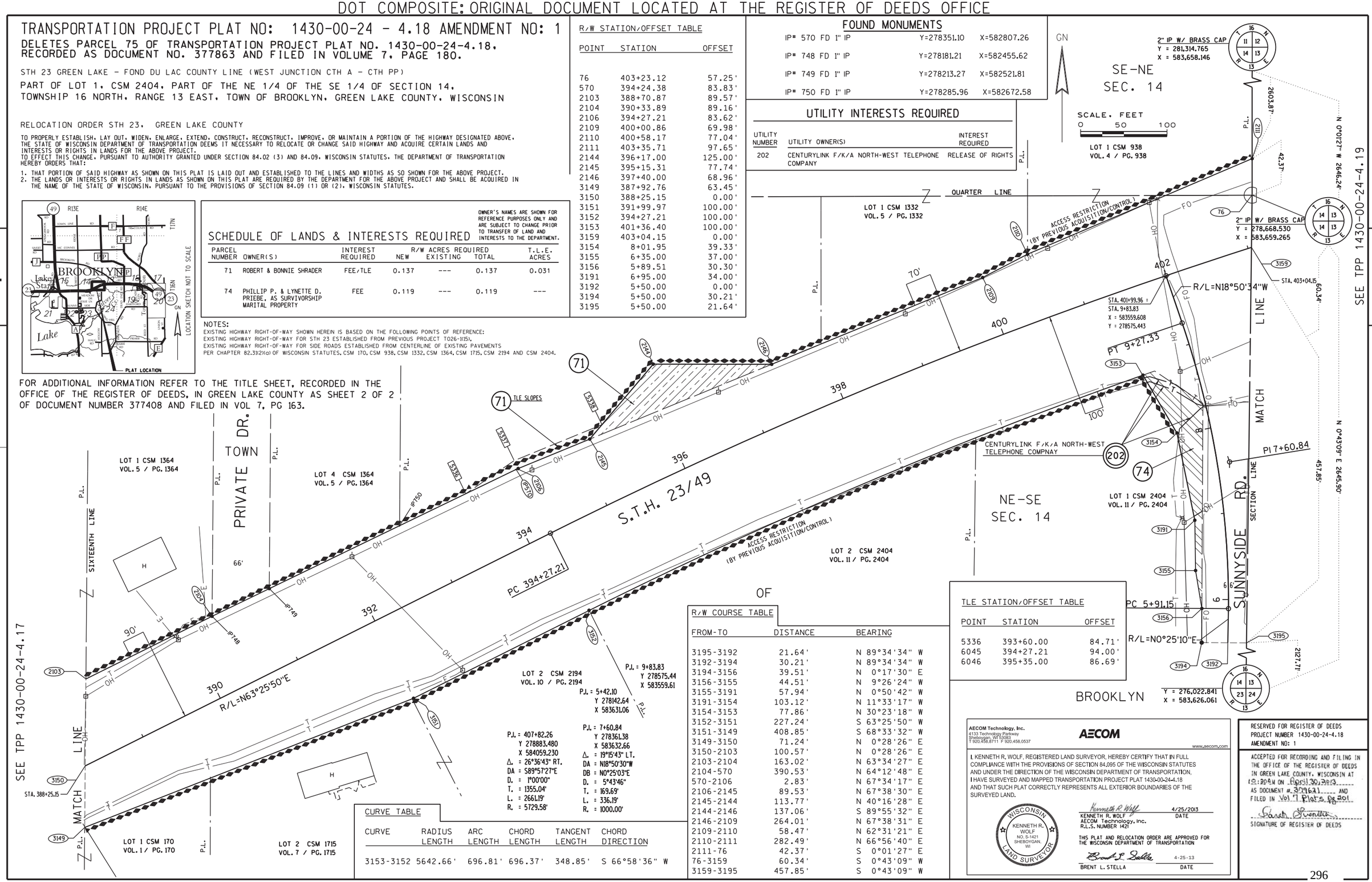
POINT	STATION	OFFSET
76	403+23.12	57.25'
570	394+24.38	83.83'
2103	388+70.87	89.57'
2104	390+33.89	89.16'
2106	394+27.21	83.62'
2109	400+00.86	69.98'
2110	400+58.17	77.04'
2111	403+35.71	97.65'
2144	396+17.00	125.00'
2145	395+15.31	77.74'
2146	397+40.00	68.96'
3149	387+92.76	63.45'
3150	388+25.15	0.00'
3151	391+99.97	100.00'
3152	394+27.21	100.00'
3153	401+36.40	100.00'
3159	403+04.15	0.00'
3154	8+01.95	39.33'
3155	6+35.00	37.00'
3156	5+89.51	30.30'
3191	6+95.00	34.00'
3192	5+50.00	0.00'
3194	5+50.00	30.21'
3195	5+50.00	21.64'

FOUND MONUMENTS

IP# 570 FD 1" IP	Y=278351.10	X=582807.26
IP# 748 FD 1" IP	Y=278181.21	X=582455.62
IP# 749 FD 1" IP	Y=278213.27	X=582521.81
IP# 750 FD 1" IP	Y=278285.96	X=582672.58

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY	RELEASE OF RIGHTS



R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3195-3192	21.64'	N 89°34'34" W
3192-3194	30.21'	N 89°34'34" W
3194-3156	39.51'	N 0°17'30" E
3156-3155	44.51'	N 9°26'24" W
3155-3191	57.94'	N 0°50'42" W
3191-3154	103.12'	N 11°33'17" W
3154-3153	77.86'	N 30°23'18" W
3152-3151	227.24'	S 63°25'50" W
3151-3149	408.85'	S 68°33'32" W
3149-3150	71.24'	N 0°28'26" E
3150-2103	100.57'	N 0°28'26" E
2103-2104	163.02'	N 63°34'27" E
2104-570	390.53'	N 64°12'48" E
570-2106	2.83'	N 67°34'17" E
2106-2145	89.53'	N 67°38'30" E
2145-2144	113.77'	N 40°16'28" E
2144-2146	137.06'	S 89°55'32" E
2146-2109	264.01'	N 67°38'31" E
2109-2110	58.47'	N 62°31'21" E
2110-2111	282.49'	N 66°56'40" E
2111-76	42.37'	S 0°01'27" E
76-3159	60.34'	S 0°43'09" W
3159-3195	457.85'	S 0°43'09" W

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
5336	393+60.00	84.71'
6045	394+27.21	94.00'
6046	395+35.00	86.69'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
3153-3152	5642.66'	696.81'	696.37'	348.85'	S 66°58'36" W

AECOM Technology, Inc.
4133 Technology Parkway
Sheboygan, WI 53083
T 920.458.8711 F 920.458.0537
www.aecom.com

I, KENNETH R. WOLF, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.18 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KENNETH R. WOLF NO. S-1421 SHEBOYGAN, WI LAND SURVEYOR

Kenneth R. Wolf 4/25/2013
KENNETH R. WOLF DATE
AECOM Technology, Inc.
R.L.S. NUMBER 1421

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

Brent L. Stella 4-25-13
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.18
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 12:30PM ON April 30, 2013 AS DOCUMENT # 379631 AND FILED IN Vol 7 Plats Pg 201

Sarah Stevens
SIGNATURE OF REGISTER OF DEEDS

SEE TPP 1430-00-24-4.17
SEE TPP 1430-00-24-4.19

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.19

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

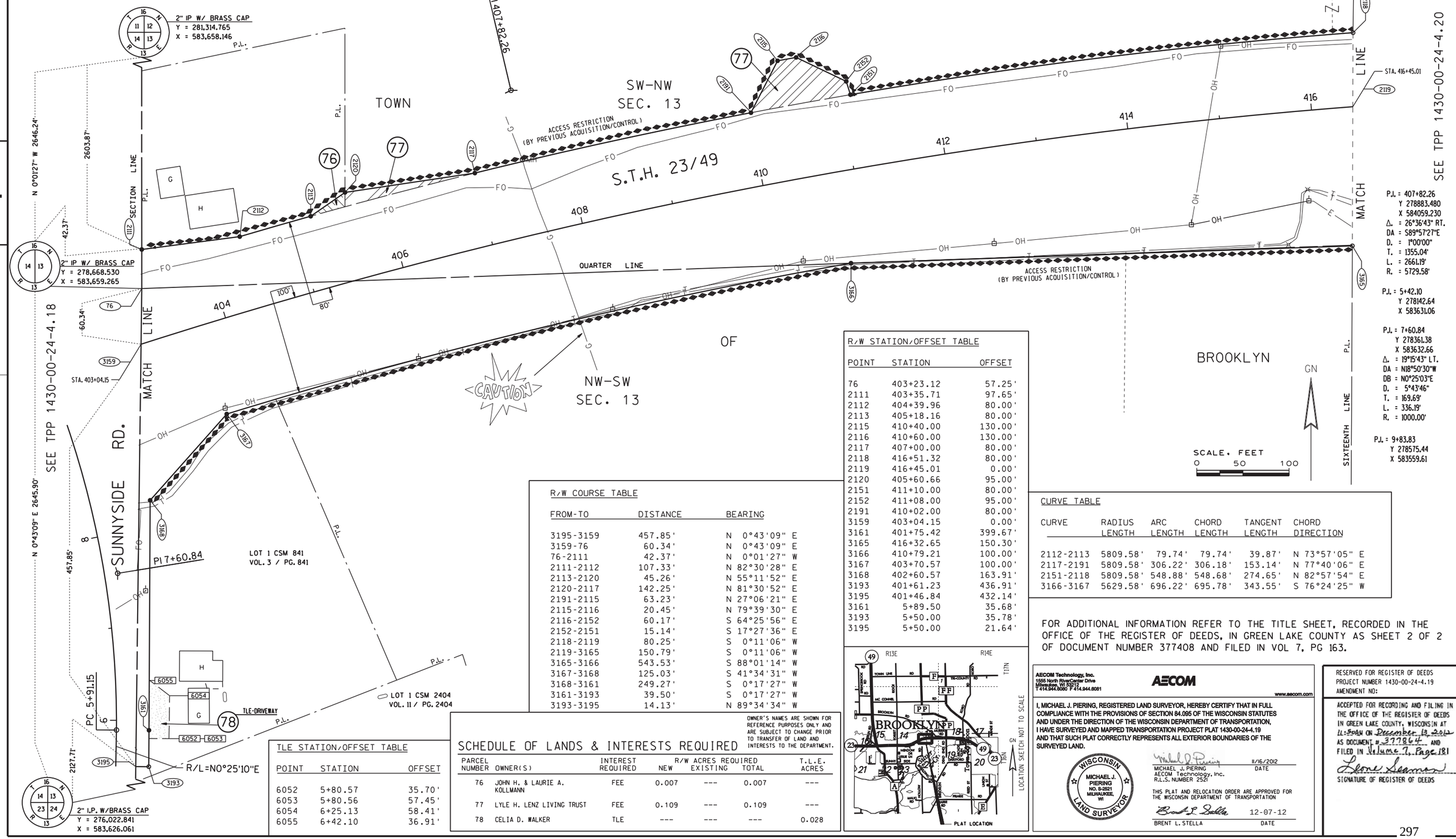
PART OF LOT 1, CSM 841, PART OF THE SW 1/4 OF THE NW 1/4 AND PART OF THE NW 1/4 OF THE SW 1/4 OF SECTION 13, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT T026-1(15), F.A.P. 3518, DIVISION J-6 NO. 4936
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES AND CSM 841.



R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
76	403+23.12	57.25'
2111	403+35.71	97.65'
2112	404+39.96	80.00'
2113	405+18.16	80.00'
2115	410+40.00	130.00'
2116	410+60.00	130.00'
2117	407+00.00	80.00'
2118	416+51.32	80.00'
2119	416+45.01	0.00'
2120	405+60.66	95.00'
2151	411+10.00	80.00'
2152	411+08.00	95.00'
2191	410+02.00	80.00'
3159	403+04.15	0.00'
3161	401+75.42	399.67'
3165	416+32.65	150.30'
3166	410+79.21	100.00'
3167	403+70.57	100.00'
3168	402+60.57	163.91'
3193	401+61.23	436.91'
3195	401+46.84	432.14'
3161	5+89.50	35.68'
3193	5+50.00	35.78'
3195	5+50.00	21.64'

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3195-3159	457.85'	N 0°43'09" E
3159-76	60.34'	N 0°43'09" E
76-2111	42.37'	N 0°01'27" W
2111-2112	107.33'	N 82°30'28" E
2113-2120	45.26'	N 55°11'52" E
2120-2117	142.25'	N 81°30'52" E
2191-2115	63.23'	N 27°06'21" E
2115-2116	20.45'	N 79°39'30" E
2116-2152	60.17'	S 64°25'56" E
2152-2151	15.14'	S 17°27'36" E
2118-2119	80.25'	S 0°11'06" W
2119-3165	150.79'	S 0°11'06" W
3165-3166	543.53'	S 88°01'14" W
3167-3168	125.03'	S 41°34'31" W
3168-3161	249.27'	S 0°17'27" W
3161-3193	39.50'	S 0°17'27" W
3193-3195	14.13'	N 89°34'34" W

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
2112-2113	5809.58'	79.74'	79.74'	39.87'	N 73°57'05" E
2117-2191	5809.58'	306.22'	306.18'	153.14'	N 77°40'06" E
2151-2118	5809.58'	548.88'	548.68'	274.65'	N 82°57'54" E
3166-3167	5629.58'	696.22'	695.78'	343.55'	S 76°24'25" W

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
6052	5+80.57	35.70'
6053	5+80.56	57.45'
6054	6+25.13	58.41'
6055	6+42.10	36.91'

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
76	JOHN H. & LAURIE A. KOLLMANN	FEE	0.007	---	0.007	---
77	LYLE H. LENZ LIVING TRUST	FEE	0.109	---	0.109	---
78	CELIA D. WALKER	TLE	---	---	---	0.028

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6080 F 414.944.6081
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.19 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

MICHAEL J. PIERING — 11/16/2012
AECOM Technology, Inc. — DATE
R.L.S. NUMBER 2521

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

BRENT L. STELLA — 12-07-12
DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.19
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:50AM ON December 13, 2012 AS DOCUMENT # 377864 AND FILED IN Volume 7, Page 181

SIGNATURE OF REGISTER OF DEEDS

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.20 AMENDMENT NO: 1

REMOVES PARCEL NO 81 AND UTILITY NO 202 OF TRANSPORTATION PROJECT PLAT 1430-00-24-4.20 RECORDED AS DOCUMENT NO: 377865 AND FILED IN VOLUME 7, PAGE 182.

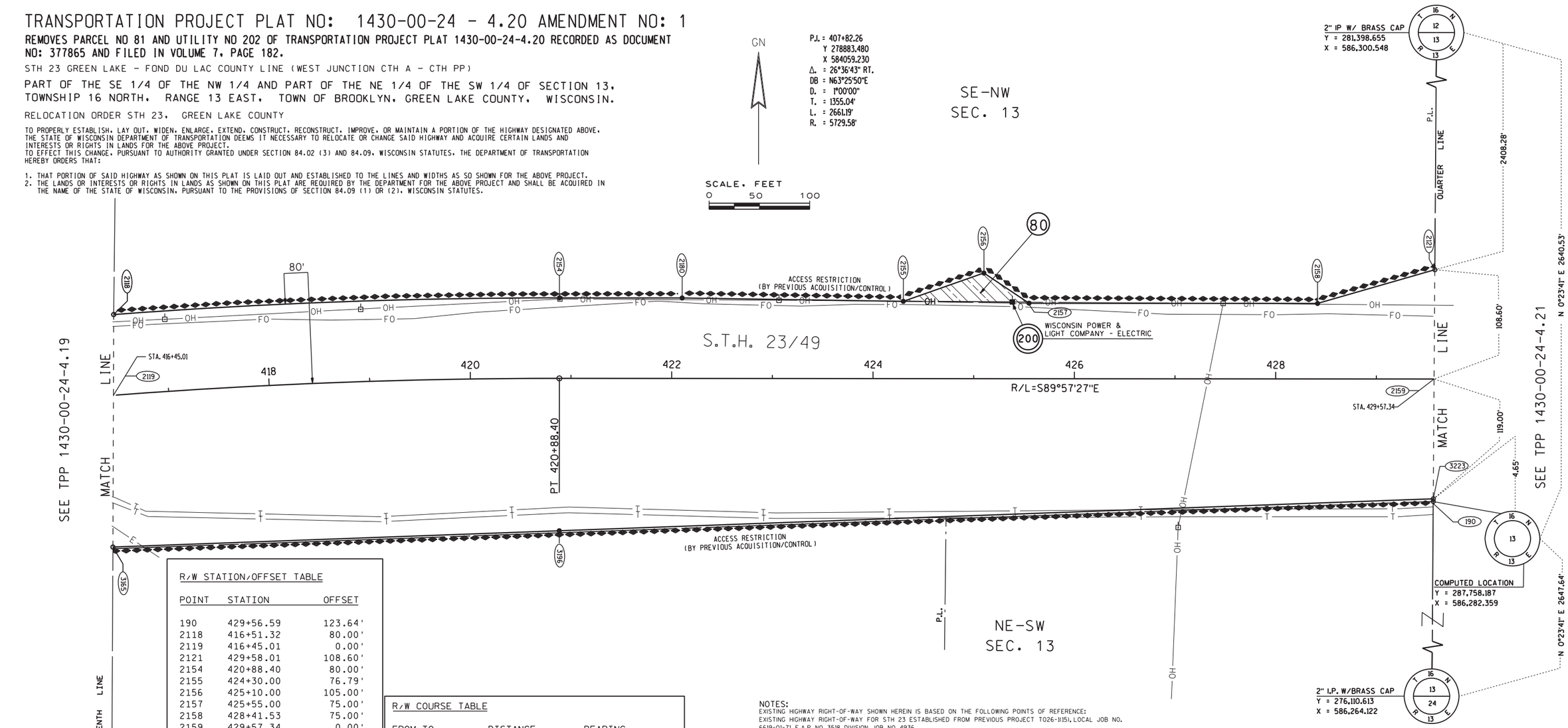
STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF THE SE 1/4 OF THE NW 1/4 AND PART OF THE NE 1/4 OF THE SW 1/4 OF SECTION 13, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN.

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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



R/W STATION/OFFSET TABLE

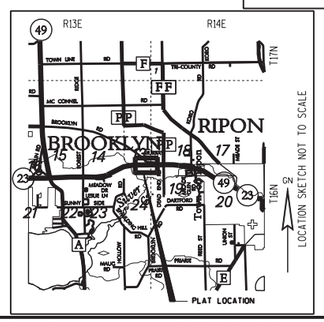
POINT	STATION	OFFSET
190	429+56.59	123.64'
2118	416+51.32	80.00'
2119	416+45.01	0.00'
2121	429+58.01	108.60'
2154	420+88.40	80.00'
2155	424+30.00	76.79'
2156	425+10.00	105.00'
2157	425+55.00	75.00'
2158	428+41.53	75.00'
2159	429+57.34	0.00'
2180	422+10.34	80.00'
3165	416+32.65	150.30'
3196	420+88.40	151.40'
3223	429+56.61	119.00'

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3223-3196	868.82'	S 87°54'20" W
3196-3165	443.63'	S 87°54'20" W
3165-2119	150.79'	N 0°11'06" E
2119-2118	80.25'	N 0°11'06" E
2154-2180	121.94'	S 89°57'31" E
2180-2155	219.68'	S 89°07'10" E
2155-2156	84.83'	N 70°37'00" E
2156-2157	54.09'	S 56°15'53" E
2157-2158	286.53'	S 89°57'27" E
2158-2121	121.23'	N 73°57'02" E
2121-2159	108.60'	S 0°23'41" W
2159-3223	119.00'	S 0°23'41" W

CURVE TABLE

CURVE	RADIUS LENGTH	ARC LENGTH	CHORD LENGTH	TANGENT LENGTH	CHORD DIRECTION
2118-2154	5809.58'	443.18'	443.07'	221.70'	N 87°51'25" E



NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-1(15), LOCAL JOB NO. 6619-01-71, F.A.P. NO. 3518 DIVISION JOB NO. 4936,
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	WISCONSIN POWER & LIGHT COMPANY - ELECTRIC	RELEASE OF RIGHTS
202	ELIMINATED	

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
80	LYLE H. LENZ, LIVING TRUST	FEE	0.042	---	0.042	---
81	ELIMINATED ALSO SEE SHEET 4.21	---	---	---	---	---

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6080 F 414.944.6081
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4. 20 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN LAND SURVEYOR — MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI

1/29/2013
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

12-07-12
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.20
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:50 AM ON December 13, 2012 AS DOCUMENT # 377865 AND FILED IN Volume 7, Page 182

SIGNATURE OF REGISTER OF DEEDS

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-15, LOCAL JOB NO. 6619-01-71, F.A.P. 3518, DIVISION JOB. NO. 4936.
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
79	DANIEL W. & LYNETTE J. MURRAY ALSO SEE SHEET 4.22	FEE	0.099	---	0.099	0.003
81	ELIMINATED ALSO SEE SHEET 4.20	---	---	---	---	---
82	EDWIN C. PRIEBE ALSO SEE SHEET 4.22	FEE	0.012	---	0.012	---

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	ELIMINATED	

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.21 AMENDMENT NO: 1

REMOVES PARCEL NO 81 AND UTILITY NO 202. ALSO AMENDS FEE TOTAL OF PARCEL 82 OF TRANSPORTATION PROJECT PLAT 1430-00-24-4.21 RECORDED AS DOCUMENT NO: 377866 AND FILED IN VOLUME 7, PAGE 183.

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

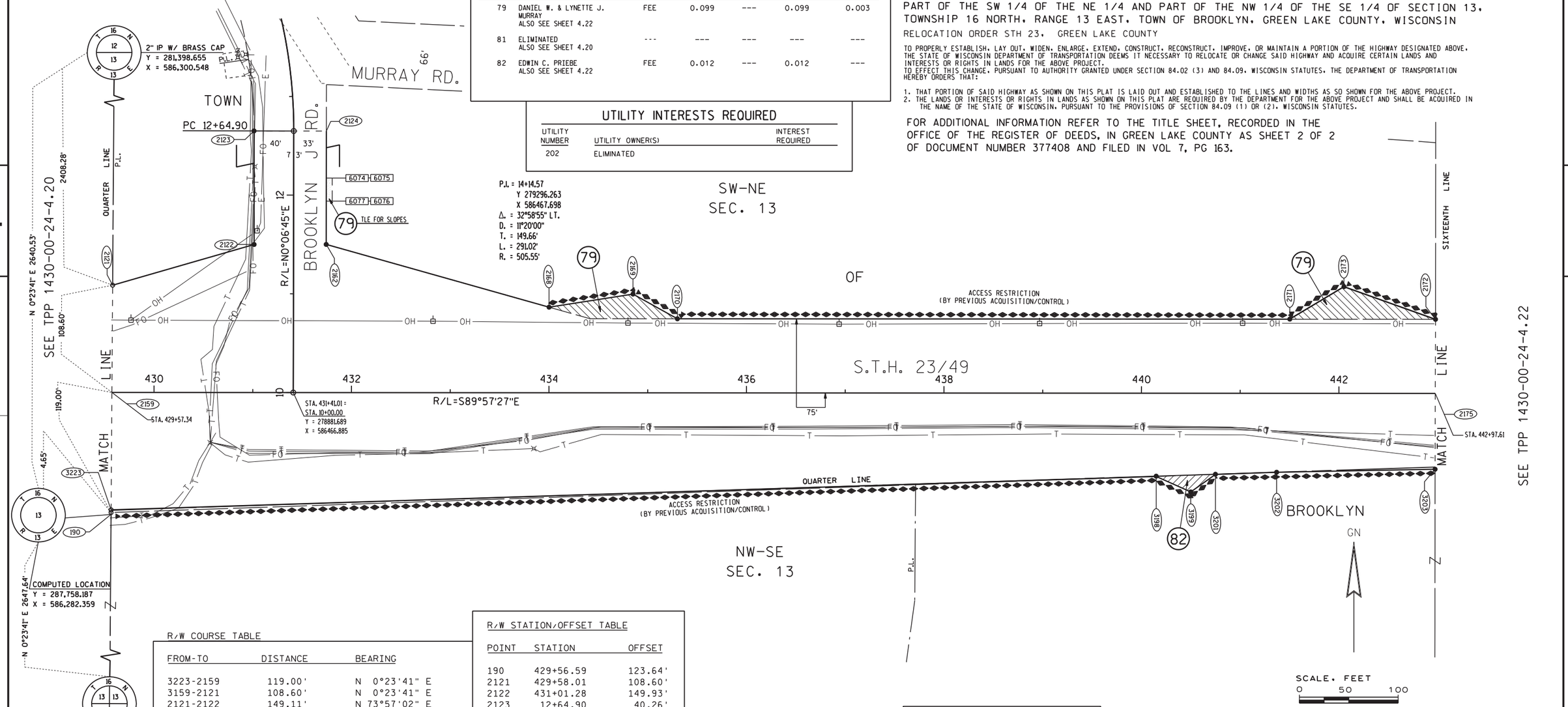
PART OF THE SW 1/4 OF THE NE 1/4 AND PART OF THE NW 1/4 OF THE SE 1/4 OF SECTION 13, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.



R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3223-2159	119.00'	N 0°23'41" E
3159-2121	108.60'	N 0°23'41" E
2121-2122	149.11'	N 73°57'02" E
2122-2123	115.02'	N 0°03'16" W
2123-2124	73.26'	S 89°53'15" E
2124-2162	114.81'	S 0°04'34" W
2162-2168	234.46'	S 74°16'14" E
2168-2169	86.04'	N 81°07'14" E
2169-2170	51.48'	S 60°54'00" E
2170-2171	620.00'	S 89°57'24" E
2171-2173	64.14'	N 59°04'36" E
2173-2172	98.46'	S 70°22'27" E
2172-2175	75.00'	S 0°09'54" W
2175-3203	76.83'	S 0°09'54" W
3203-3202	160.51'	S 88°54'40" W
3202-3201	62.00'	S 88°01'17" W
3201-3199	30.70'	S 54°34'32" W
3199-3198	38.36'	N 65°48'25" W
3198-3223	1058.95'	S 88°09'55" W

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
190	429+56.59	123.64'
2121	429+58.01	108.60'
2122	431+01.28	149.93'
2123	12+64.90	40.26'
2124	12+64.90	33.00'
2159	429+57.34	0.00'
2162	431+74.28	150.05'
2168	434+00.00	86.66'
2169	434+85.00	100.00'
2170	435+30.00	75.00'
2171	441+50.00	75.00'
2172	442+97.77	75.00'
2173	442+05.00	108.00'
2175	442+97.61	0.00'
3198	440+15.00	84.31'
3199	440+15.00	100.00'
3201	440+75.00	82.19'
3202	441+36.96	80.00'
3203	442+97.44	76.83'
3223	429+56.61	119.99'

TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
6074	12+17.32	33.04'
6075	12+17.32	39.04'
6076	11+93.96	39.03'
6077	11+93.96	33.03'

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6080 F 414.944.6081
AECOM
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.21 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

Michael J. Piering 1/29/2013
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

Brent L. Stella 12-07-12
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.21
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:30 AM ON December 13, 2012 AS DOCUMENT # 377866 AND FILED IN Volume 7, Page 183

Lynne Sherman
SIGNATURE OF REGISTER OF DEEDS

SEE TPP 1430-00-24-4.22

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.22

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF THE SE 1/4 OF THE NE 1/4 AND PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 13, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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

SCHEDULE OF LANDS & INTERESTS REQUIRED

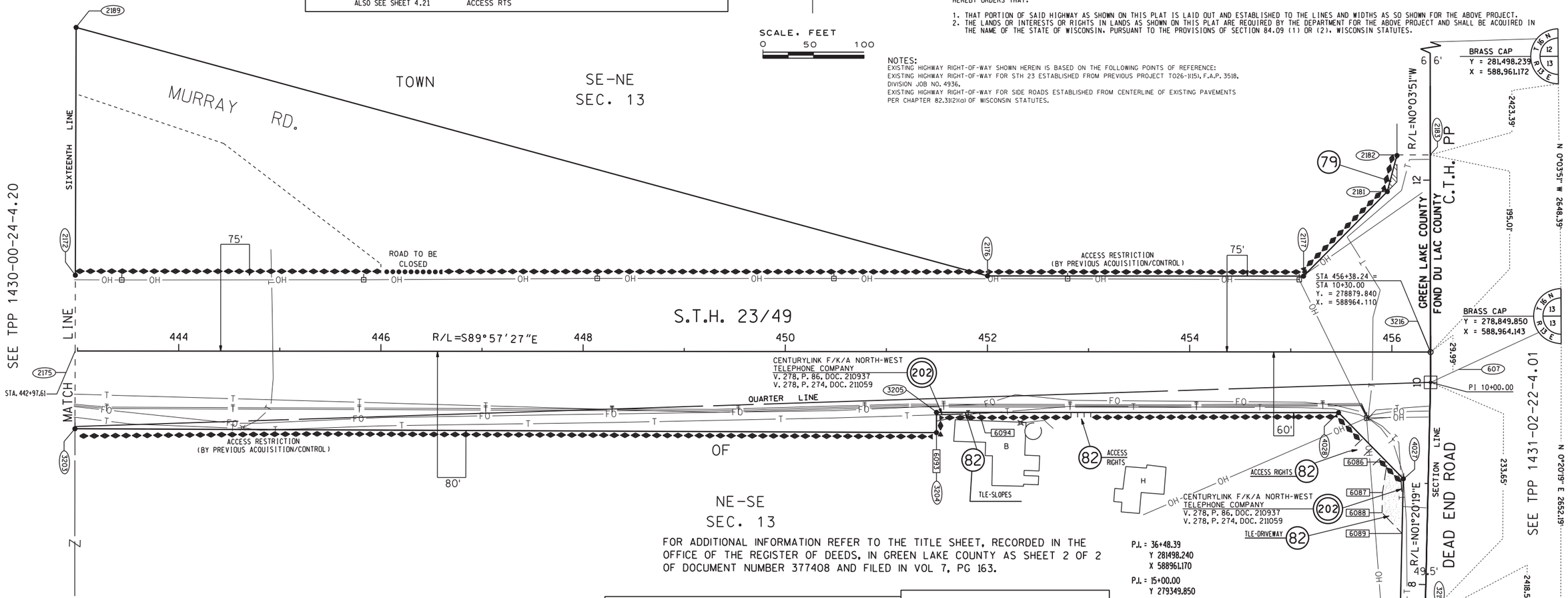
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
79	DANIEL W. & LYNETTE J. MURRAY ALSO SEE SHEET 4.21	FEE	0.003	---	0.003	---
82	EDWIN C. PRIEBE ALSO SEE SHEET 4.21	TLE/ ACCESS RTS	---	---	---	0.028

GN

SCALE, FEET
0 50 100

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-(15), F.A.P. 3518, DIVISION JOB NO. 4936,
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES.



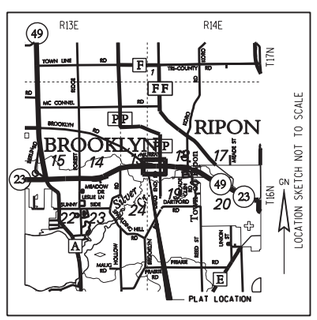
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 377408 AND FILED IN VOL 7, PG 163.

P.I. = 36+48.39
Y 281498.240
X 588961.170

P.I. = 15+00.00
Y 279349.850
X 588963.580

P.I. = 10+00.00
Y 278849.850
X 588964.140

P.I. = 0+00.00
Y 277850.130
X 588940.780



TLE STATION/OFFSET TABLE

POINT	STATION	OFFSET
6086	9+20.00	41.12'
6087	8+90.00	45.00'
6088	8+70.00	45.00'
6089	8+50.00	24.75'
6093	451+49.64	68.68'
6094	451+92.00	60.00'

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
202	CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY	RELEASE OF RIGHTS

R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
3215-3212	24.67'	N 88°39'40" W
3212-4027	137.71'	N 1°20'20" E
4027-4028	91.60'	N 44°26'59" W
4028-3205	397.64'	N 89°57'27" W
3205-3204	20.00'	S 0°02'33" W
3204-3203	852.20'	N 89°44'40" W
3203-2175	76.83'	N 0°09'54" E
2175-2172	75.00'	N 0°09'54" E
2172-2189	245.00'	N 0°09'54" E
2189-2176	934.38'	S 74°45'23" E
2176-2177	312.62'	S 89°57'27" E
2177-2181	117.68'	N 44°45'44" E
2181-2182	37.57'	N 14°46'32" E
2182-2183	32.93'	N 89°56'02" E
2183-3216	195.01'	S 0°03'51" E
3216-607	29.99'	S 0°03'51" E
607-3215	233.65'	S 1°20'19" W

R/W STATION/OFFSET TABLE

POINT	STATION	OFFSET
607	456+38.30	29.99'
2172	442+97.77	75.00'
2175	442+97.61	0.00'
2176	451+99.97	75.00'
2177	455+12.60	75.00'
2181	455+95.40	158.62'
2182	456+04.96	194.95'
2183	456+37.96	195.01'
2189	442+98.29	320.00'
3203	442+97.44	76.83'
3204	451+49.64	80.00'
3205	451+49.64	60.00'
3212	456+08.36	263.02'
315	456+33.01	263.58'
3216	456+38.24	0.00'
4027	9+04.07	24.75'
4028	455+47.27	60.00'

AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6080 F 414.944.6081
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.22 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

Michael J. Piering 11/16/2012
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

Brent L. Stella 12-07-12
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.22
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 11:30 AM ON December 13, 2012 AS DOCUMENT # 377867 AND FILED IN Volume 7, Page 184

Sharon Seemann
SIGNATURE OF REGISTER OF DEEDS

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1430-00-24 - 4.23

STH 23 GREEN LAKE - FOND DU LAC COUNTY LINE (WEST JUNCTION CTH A - CTH PP)

PART OF THE NW 1/4 OF THE NE 1/4, SECTION 20, TOWNSHIP 16 NORTH, RANGE 13 EAST, TOWN OF BROOKLYN, GREEN LAKE COUNTY, WISCONSIN

RELOCATION ORDER STH 23, GREEN LAKE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

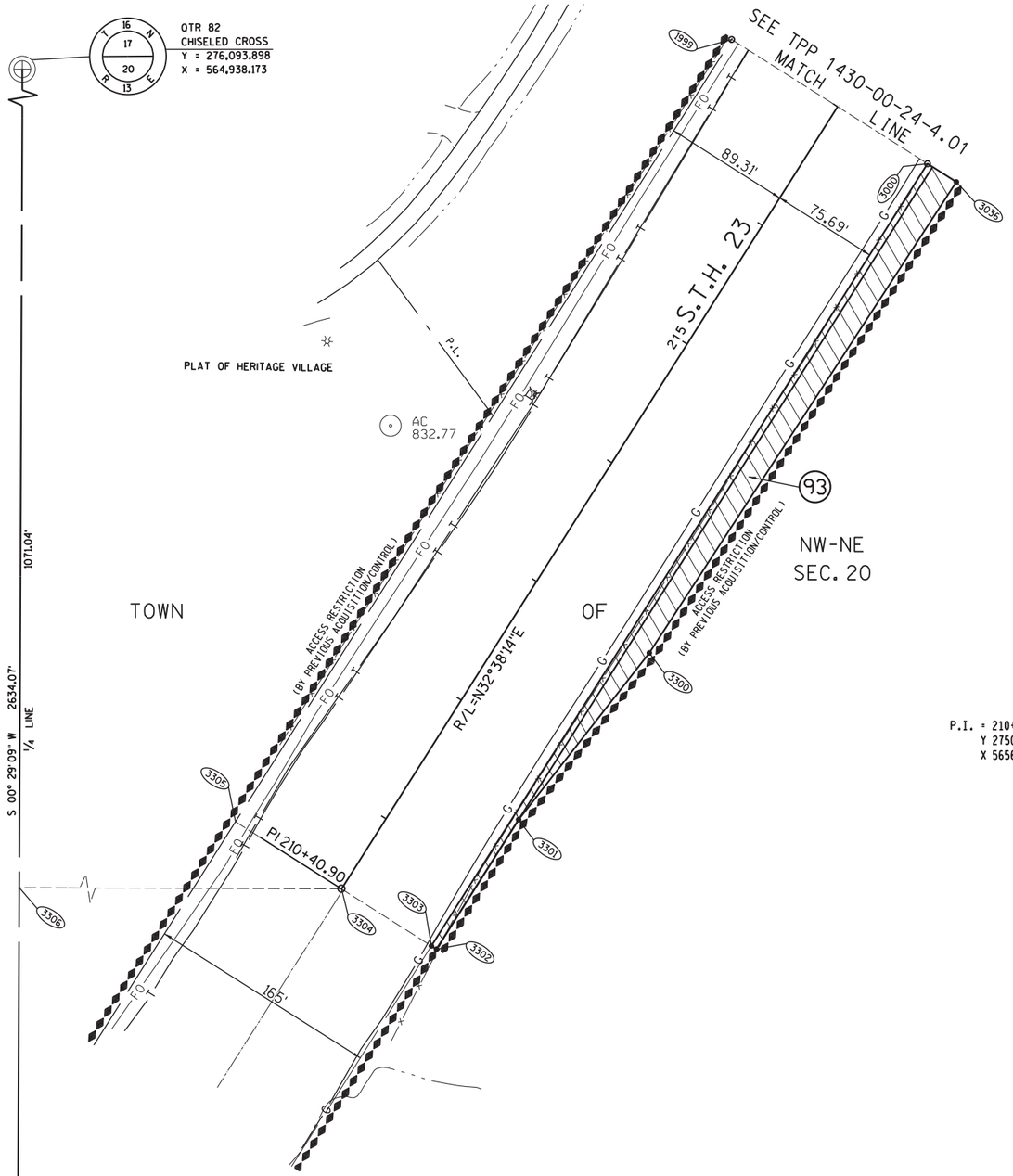
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE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

NOTES:
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 23 ESTABLISHED FROM PREVIOUS PROJECT 1026-11-51,
EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS PER CHAPTER 82.31(2)(a) OF WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
93	WILLIAM R. THRALL & BEVERLY THRALL ALSO SEE SHEET 4.01	FEE	0.252	---	0.252	---

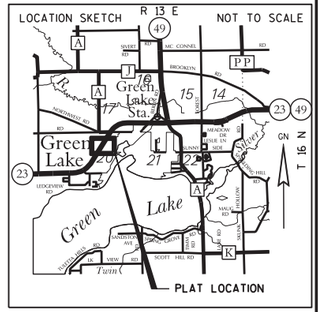


P.I. = 210+40.90
Y 275016.719
X 565657.052

P.I. = 238+25.32
Y 277361.490
X 567158.740
Δ. = 58°36'55" RT.
D. = 02°00'00"
T. = 1608.15'
L. = 2930.77'
R. = 2864.79'
D.A. = S88°44'51"E

NE-NE SEC. 20

SCALE, FEET
0 50 100



R/W COURSE TABLE

FROM-TO	DISTANCE	BEARING
QTR 82-3306	1071.04'	S 00°29'09" W
3306-3304	727.99'	S 89°30'51" E
3304-3305	89.31'	N 57°21'46" W
3305-1999	659.10'	N 32°38'14" E
1999-3036	189.31'	S 57°21'46" E
3036-3300	400.03'	S 33°21'12" W
3300-3301	150.75'	S 38°20'52" W
3301-3302	109.10'	S 32°38'14" W
3302-3304	80.00'	N 57°21'46" W

RW STATION/OFFSET TABLE

POINT	STATION	OFFSET
1999	217+00.00	89.31'
3000	217+00.00	75.69'
3036	217+00.00	100.00'
3300	213+00.00	95.00'
3301	211+50.00	80.00'
3302	210+40.90	80.00'
3303	210+40.90	75.69'
3304	210+40.90	0.00
3305	210+40.90	89.31'

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN GREEN LAKE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 309112 AND FILED IN Vol.7 Plats pg.196

AECOM Technology, Inc.
4135 Technology Parkway
Sheboygan, WI 53083
T 920.458.8711 F 920.458.0537
AECOM
www.aecom.com

I, KENNETH R. WOLF, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-00-24-4.23 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KENNETH R. WOLF NO. S-1421 SHEBOYGAN, WI LAND SURVEYOR

Kenneth R. Wolf 3/6/2013
KENNETH R. WOLF DATE
AECOM Technology, Inc.
R.L.S. NUMBER 1421

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

Brent L. Stella 3-15-13
BRENT L. STELLA DATE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-00-24-4.23
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN GREEN LAKE COUNTY, WISCONSIN AT 8:00AM ON March 26, 2013 AS DOCUMENT # 309116 AND FILED IN Vol.7 Plats Pg.200

Rhonda S. Hunter
SIGNATURE OF REGISTER OF DEEDS

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 1431-02-22

GREEN LAKE COUNTY LINE - CITY OF RIPON
(CTH PP - ARCADE GLEN ROAD)
STH 23
FOND DU LAC COUNTY

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	POINT OF REVERSE CURVATURE	PRC
ACCESS RIGHTS	AR	PRIVATE DRIVEWAY	P.D.
ACRES	AC.	POINT ON TANGENT	POT
AGRICULTURAL P.D.	AGRI. PD.	PROPERTY LINE	P.L.
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM.	REFERENCE LINE	R/L
AND OTHERS	ET.AL.	REMAINING	REM.
BACK	BK	RIGHT	RT.
BLOCK	BLK	RIGHT OF WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	C.S.M.	SEPTIC VENT	SEPV.
CONCRETE	CONC.	SQUARE FEET	S.F.
CORNER	COR.	STATE TRUNK HIGHWAY	STH
COUNTY	CO.	STATION	STA.
COUNTY TRUNK HIGHWAY	CTH	SUBDIVISION	SUBD.
DISTANCE	DIST.	TANGENT	TAN.
DOCUMENT NUMBER	DOC.	TELEPHONE PEDESTAL	T.P.
EASEMENT	EASE.	TEMPORARY LIMITED EASEMENT	TLE OR T.L.E.
EXISTING	EX.	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	G.V.	UNITED STATES HIGHWAY	USH
GOVERNMENT	GOV'T	VOLUME	VOL.
GRID NORTH	GN	F/K/A	FORMALLY KNOWN AS
HIGHWAY EASEMENT	H.E.		
INDENTIFICATION	ID.		
LAND CONTRACT	LC		
LEFT	LT.		
MONUMENT	MON.	LONG CHORD	L.C.
NUMBER	NO.	LONG CHORD BEARING	L.C.B.
OUTLOT	O.L.	RADIUS	R.
PAGE	PG.	DEGREE OF CURVE	D.
PERMANENT LIMITED EASEMENT	P.L.E.	CENTRAL ANGLE OR DELTA	Δ.
POINT OF BEGINNING	P.O.B.	LENGTH OF CURVE	L.
POINT OF COMPOUND CURVE	PCC	TANGENT	T.
POINT OF CURVATURE	PC	DIRECTION AHEAD	DA.
POINT OF INTERSECTION	PI	DIRECTION BACK	DB.

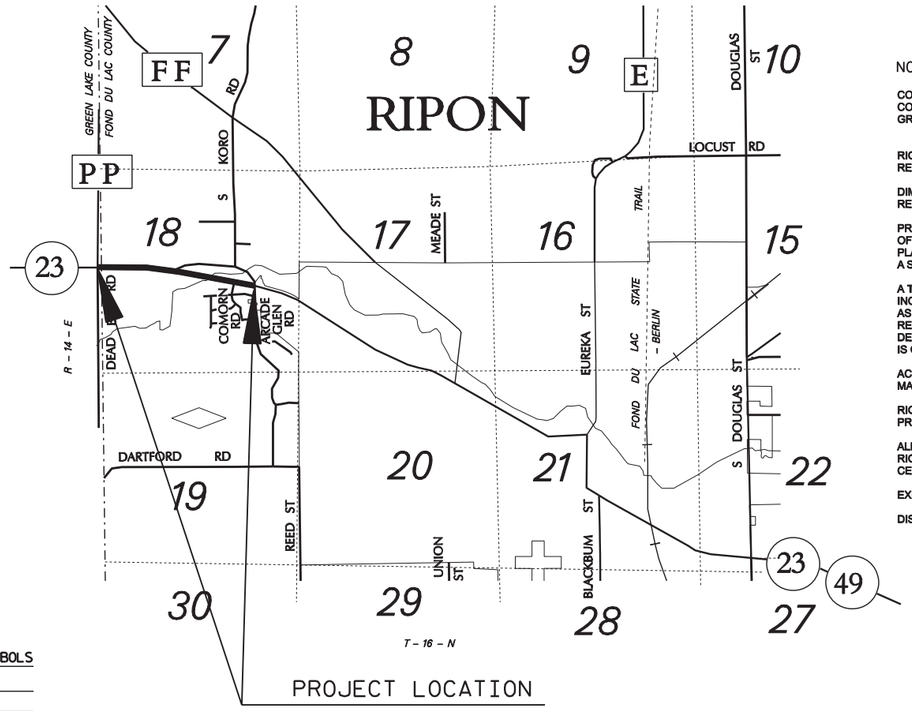
CURVE DATA

CONVENTIONAL SYMBOLS

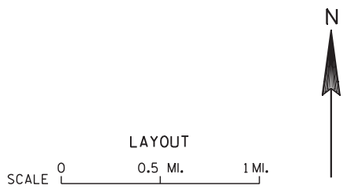
FOUND IRON PIPE/PIN	I.P. ●(1" UNLESS NOTED)
R/W MONUMENT	○ ●(SET)
R/W STANDARD	△ ▲(SET)
SIGN	| SIGN
SECTION CORNER MONUMENT	
FEE (HATCH VARIES)	
TEMPORARY LIMITED EASEMENT	
PERMANENT LIMITED EASEMENT	
R/W BOUNDARY POINT	100
PARCEL NUMBER	102
SIGN NUMBER (OFF PREMISE)	21-1
UTILITY NUMBER	202
PROPOSED R/W LINE	
EXISTING H.E. LINE	
PROPERTY LINE	
LOT & TIE LINES	
SLOPE INTERCEPTS	
CORPORATE LIMITS	
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)	
ACCESS RESTRICTED (BY ACQUISITION)	
NO ACCESS (BY STATUTORY AUTHORITY)	
SECTION LINE	
QUARTER LINE	
SIXTEENTH LINE	
EXISTING CENTERLINE	
PROPOSED REFERENCE LINE	
PARALLEL OFFSET	
BUILDING	

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
SANITARY FORCE MAIN	FM	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		
LIGHT POLE		



PROJECT LOCATION



NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, FOND DU LAC COUNTY, NAD83/91 ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

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

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

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

A **TEMPORARY LIMITED EASEMENT (T.L.E.)** IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLE'S EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

ACCESS CONTROLS ARE CURRENT AS OF THE ORIGINAL FILING DATE OF THIS PLAT. ADDITIONAL RESEARCH MAY BE NECESSARY TO DETERMINE CONTROLS PUT IN PLACE AFTER THE DATE OF FILING.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 3/4" x 24" REBARS) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT OF WAY LINES DEPICTED IN NON-AQUISITION AREAS ARE INTENDED TO REESTABLISH EXISTING RIGHT OF WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS OR FROM CENTERLINE OF EXISTING PAVEMENTS.

EXISTING ACCESS CONTROL FOR S.T.H. 23 ACQUIRED BY PREVIOUS PROJECT T 026-1(17).

DISTANCES SHOWN TO BUILDINGS ARE APPROXIMATE.

GENERAL NOTES:

1. WISCONSIN POWER & LIGHT COMPANY IS NOW KNOW AS ALLIANT ENERGY.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1431-02-22 - 4.01
SHEET 2 OF 2
AMENDMENT NO: 302

FILE NAME : X:\projects\587708_2010\Submital\Fond du Lac dgn\6-7-2012\23Title_4-0F.dgn PLOT DATE : 10/5/2012 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:100

4.00

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1431-02-22 - 4.01

GREEN LAKE COUNTY LINE - CITY OF RIPON

(CTH PP - ARCADE GLEN ROAD)

THAT PART OF LOT ONE CSM NO. 3163 V. 17, P. 49 ALSO THAT PART OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 AND THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 18, T16N, R14E, TOWN OF RIPON, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 23, FOND DU LAC COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION

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

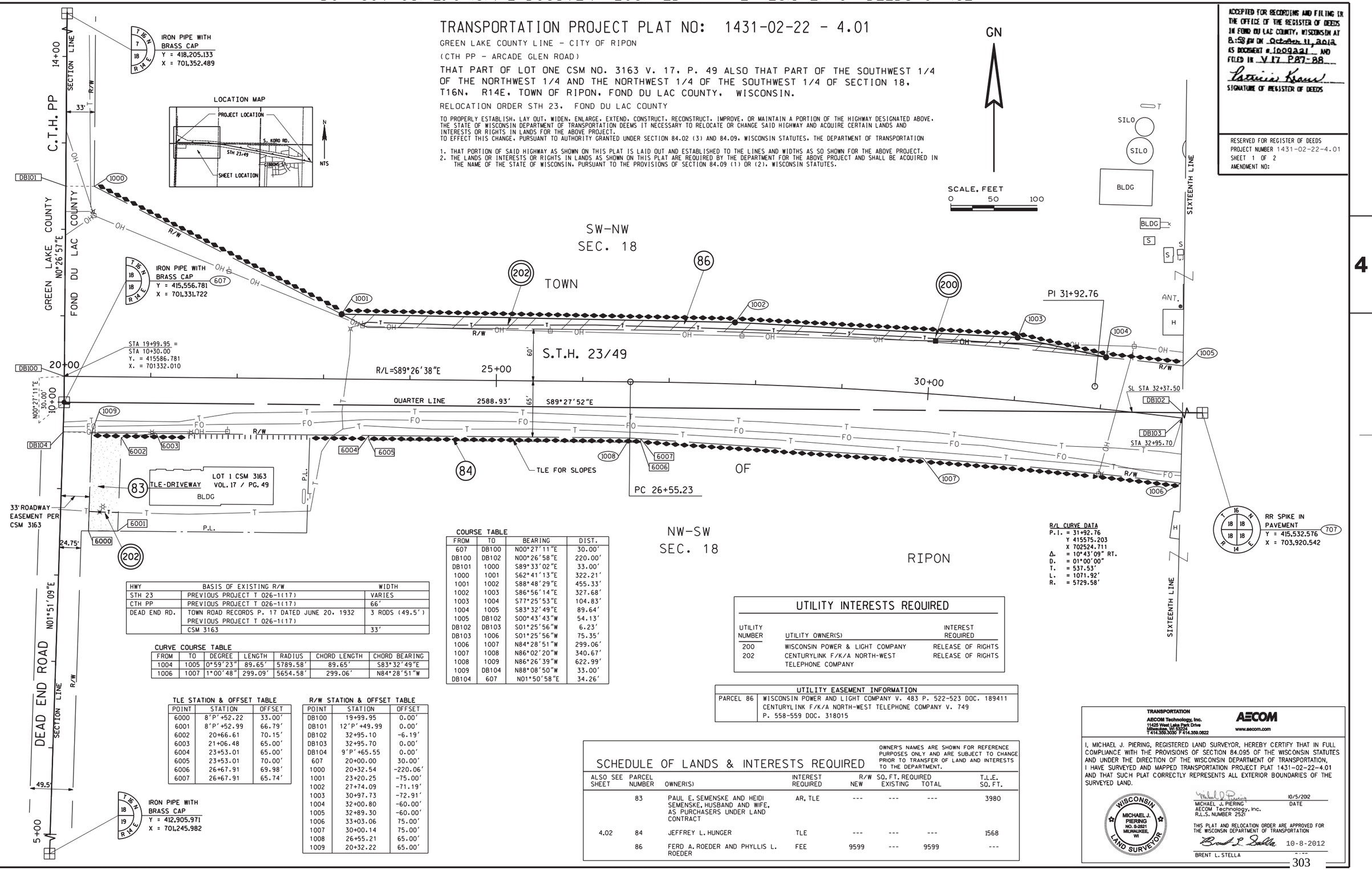
ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN FOND DU LAC COUNTY, WISCONSIN AT 8:53 AM ON October 11, 2012 AS DOCUMENT # 1009221 AND FILED IN V 17 P87-88
Patricia Krause
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1431-02-22-4.01
SHEET 1 OF 2
AMENDMENT NO:

LOCATION MAP

GN

SCALE, FEET
0 50 100



R/L CURVE DATA
P.I. = 31+92.76
Y 415575.203
X 702524.711
Δ. = 10°43'09" RT.
D. = 01°00'00"
T. = 537.53'
L. = 1071.92'
R. = 5729.58'

HWY	BASIS OF EXISTING R/W	WIDTH
STH 23	PREVIOUS PROJECT T 026-1(17)	VARIES
CTH PP	PREVIOUS PROJECT T 026-1(17)	66'
DEAD END RD.	TOWN ROAD RECORDS P. 17 DATED JUNE 20, 1932 PREVIOUS PROJECT T 026-1(17)	3 RODS (49.5')
	CSM 3163	33'

CURVE COURSE TABLE

FROM	TO	DEGREE	LENGTH	RADIUS	CHORD LENGTH	CHORD BEARING
1004	1005	0°59'23"	89.65'	5789.58'	89.65'	S83°32'49"E
1006	1007	1°00'48"	299.09'	5654.58'	299.06'	N84°28'51"W

TLE STATION & OFFSET TABLE

POINT	STATION	OFFSET
6000	8'P'+52.22	33.00'
6001	8'P'+52.99	66.79'
6002	20+66.61	70.15'
6003	21+06.48	65.00'
6004	23+53.01	65.00'
6005	23+53.01	70.00'
6006	26+67.91	69.98'
6007	26+67.91	65.74'

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
DB100	19+99.95	0.00'
DB101	12'P'+49.99	0.00'
DB102	32+95.10	-6.19'
DB103	32+95.70	0.00'
DB104	9'P'+65.55	0.00'
607	20+00.00	30.00'
1000	20+32.54	-220.06'
1001	23+20.25	-75.00'
1002	27+74.09	-71.19'
1003	30+97.73	-72.91'
1004	32+00.80	-60.00'
1005	32+89.30	-60.00'
1006	33+03.06	75.00'
1007	30+00.14	75.00'
1008	26+55.21	65.00'
1009	20+32.22	65.00'

COURSE TABLE

FROM	TO	BEARING	DIST.
607	DB100	N00°27'11"E	30.00'
DB100	DB102	N00°26'58"E	220.00'
DB101	1000	S89°33'02"E	33.00'
1000	1001	S62°41'13"E	322.21'
1001	1002	S88°48'29"E	455.33'
1002	1003	S86°56'14"E	327.68'
1003	1004	S77°25'53"E	104.83'
1004	1005	S83°32'49"E	89.64'
1005	DB102	S00°43'43"W	54.13'
DB102	DB103	S01°25'56"W	6.23'
DB103	1006	S01°25'56"W	75.35'
1006	1007	N84°28'51"W	299.06'
1007	1008	N86°02'20"W	340.67'
1008	1009	N86°26'39"W	622.99'
1009	DB104	N88°08'50"W	33.00'
DB104	607	N01°50'58"E	34.26'

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
200	WISCONSIN POWER & LIGHT COMPANY	RELEASE OF RIGHTS
202	CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY	RELEASE OF RIGHTS

UTILITY EASEMENT INFORMATION

PARCEL 86	WISCONSIN POWER AND LIGHT COMPANY V. 483 P. 522-523 DOC. 189411 CENTURYLINK F/K/A NORTH-WEST TELEPHONE COMPANY V. 749 P. 558-559 DOC. 318015

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

ALSO SEE SHEET	PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ. FT. REQUIRED NEW	EXISTING	TOTAL	T.L.E. SQ. FT.
	83	PAUL E. SEMENSKE AND HEIDI SEMENSKE, HUSBAND AND WIFE, AS PURCHASERS UNDER LAND CONTRACT	AR, TLE	---	---	---	3980
4.02	84	JEFFREY L. HUNGER	TLE	---	---	---	1568
	86	FERD A. ROEDER AND PHYLLIS L. ROEDER	FEE	9599	---	9599	---

TRANSPORTATION
AECOM Technology, Inc.
11425 West Lake Park Drive
Milwaukee, WI 53224
T 414.359.3030 F 414.359.0822
AECOM
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1431-02-22-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

Michael J. Piering 10/5/2012
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
Brent L. Stella 10-8-2012
BRENT L. STELLA

FILE NAME : X:\projects\587708_2010\Submital\Fond du Lac dgn\6-7-2012\23Detail_4-1F.dgn
APPRAISAL PLAT DATE : 8-19-09
PLOT DATE : 10/5/2012 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:50

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 1431-02-22 - 4.02

GREEN LAKE COUNTY LINE - CITY OF RIPON
(CTH PP - ARCADE GLEN ROAD)

THAT PART OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 AND THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 18, T16N, R14E, ALL IN THE TOWN OF RIPON, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 23, FOND DU LAC COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION

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

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN FOND DU LAC COUNTY, WISCONSIN AT 2:29 PM ON 10/29/2012 AS DOCUMENT # 1010365 AND FILED IN VOL. 17 Page 89
Patricia Krenzke
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1431-02-22-4.02
AMENDMENT NO:

GN

SCALE, FEET
0 50 100

SE-NW
SEC. 18

TOWN

RIPON

NE-SW
SEC. 18

SIXTEENTH LINE

QUARTER LINE

P.I.

BLDG
SILO
BLDG
RUINS
BLDG
H
G

1005 1006 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 DB102 DB103 DB201 DB202 2028 3020

R/W
OH
T
FO
SIREN

2588.93' S89°27'52"E QUARTER LINE

66'
75'
65'
60'

35+00 40+00 45+00

S.T.H. 23/49

S. KORO RD.

R/L=S78°43'29"E

PT 37+27.15

STA 32+95.70

STA 46+08.70
Y= 415297.726
X= 703916.399

IP 921
Y = 415499.920
X = 703919.420

IP 935
Y = 415228.430
X = 703913.150

RR SPIKE IN PAVEMENT 707
Y = 415,532.576
X = 703,920.542

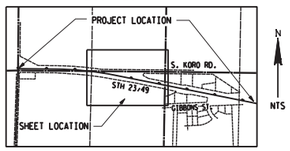
IRON PIPE WITH BRASS CAP 607
Y = 415,556.781
X = 701,331.722

84

S 01°00'36" W 150.98'
S 01°00'36" W 22.92'
S 01°00'36" W 83.91'
S 01°00'36" W 66.05'
S 01°00'36" W 69.80'
60.99'
3.75'

R/L CURVE DATA
P.I. = 31+92.76
Y 415575.203
X 702524.711
Δ = 10°43'09" RT.
D. = 01°00'00"
T. = 537.53'
L. = 1071.92'
R. = 5729.58'

LOCATION MAP



R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
707	45+66.84	-231.12'
DB102	32+95.10	-6.19'
DB103	32+95.70	0.00'
DB201	46+08.70	0.00'
DB202	41+93.46	-160.29'
1005	32+89.30	-60.00'
1006	33+03.06	75.00
2000	34+56.20	-60.00
2001	41+87.31	-192.71'
2002	41+99.61	-127.87'
2003	41+99.61	-90.00'
2004	42+99.61	-60.00'
2005	43+56.26	-60.00'
2006	43+79.36	-69.70'
2007	45+93.75	-82.55'
2008	46+20.47	65.00'
2009	40+32.62	65.00'
2010	37+27.06	75.00'

COURSE TABLE

FROM	TO	BEARING	DIST.
707	2007	S01°00'36"W	150.98'
2007	DB201	S01°00'36"W	83.91'
DB201	2008	S01°00'36"W	66.05'
2008	2009	N78°43'29"W	587.85'
2009	2010	N80°35'56"W	305.72'
2010	1006	N80°50'43"W	418.36'
1006	DB103	N01°25'56"E	75.35'
DB103	DB102	N01°25'56"E	6.23'
DB102	1005	N00°43'43"E	54.13'
1005	2000	S82°16'07"E	168.65'
2000	2001	S89°27'51"E	746.93'
2001	DB202	S00°32'09"W	33.00'
DB202	2002	S00°32'09"W	33.00'
2002	2003	S11°16'11"W	37.87'
2003	2004	S62°01'33"E	104.41'
2004	2005	S78°43'29"E	56.64'
2005	2006	N78°29'00"E	25.06'
2006	2007	S82°09'11"E	214.77'

CURVE COURSE TABLE

FROM	TO	DEGREE	LENGTH	RADIUS	CHORD LENGTH	CHORD BEARING
2010	1006	1°00'48"	418.45'	5654.58'	418.36'	N80°50'43"W
1005	2000	0°59'23"	168.65'	5789.58'	168.65'	S82°16'07"E

HWY	BASIS OF EXISTING R/W	WIDTH
STH 23	PREVIOUS PROJECT T 026-1(17)	VARIES
S. KORO RD.	PREVIOUS PROJECT T 026-1(17)	66'

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

ALSO SEE SHEET	PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ. FT. REQUIRED NEW	EXISTING	TOTAL	T.L.E. SQ. FT.
4.01	84	JEFFREY L. HUNGER	FEE	3617	---	3617	

FOR ADDITIONALINFORMATION REFER TO THE TITLE SHEET. RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN FOND DU LAC COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1009221 AND FILED IN V.17, PG. 88

TRANSPORTATION
AECOM Technology, Inc.
1555 North RiverCenter Drive
Milwaukee, WI 53212
T 414.944.6050 F 414.944.6081
AECOM
www.aecom.com

I, MICHAEL J. PIERING, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1431-02-22-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN MICHAEL J. PIERING NO. S-2521 MILWAUKEE, WI LAND SURVEYOR

Michael J. Piering 10/23/2012
MICHAEL J. PIERING DATE
AECOM Technology, Inc.
R.L.S. NUMBER 2521

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

Brent L. Stella 10-24-12
BRENT L. STELLA DATE

FILE NAME : X:\projects\587708_2010\Submital\Fond du Lac dgn\6-7-2012\23Detail_4-2F.dgn
APPRAISAL PLAT DATE : 8-19-09
PLOT DATE : 10/23/2012 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:50

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

HWY	BASIS OF EXISTING R/W	WIDTH
STH 23	AWARD OF DAMAGES DOC. 214380, CSM 63, CSM 67, CSM 4294, PREVIOUS PROJECT T 026-1(17), WARRANTY DEED 598948	VARIES
S. KORO RD.	CSM 63, CSM 67, PREVIOUS PROJECT T 026-1(17)	66'
COMORN RD.	WARRANTY DEED V. 1276 P. 702-703, WARRANTY DEED 598948	VARIES

TRANSPORTATION PROJECT PLAT NO: 1431-02-22 - 4.03 AMENDMENT NO: 2

ADDS PARCEL 96 TO TRANSPORTATION PROJECT PLAT NO. 1431-02-22-4.03, RECORDED AS DOCUMENT NO. 1010366 AND FILED IN VOLUME 17, PAGE 90, FOR A TEMPORARY LIMITED EASEMENT FOR CULVERT CONSTRUCTION.

GREEN LAKE COUNTY LINE - CITY OF RIPON
(CTH PP - ARCADE GLEN ROAD)

PART OF PARCELS A AND B OF CSM 63, PART OF CSM 67, PART OF LOTS 1 AND 2 OF CSM 4294 AND PART OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 18, T16N, R14E, TOWN OF RIPON, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER STH 23, FOND DU LAC COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION

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

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN FOND DU LAC COUNTY, WISCONSIN AT 9:06 A.M. ON 7-1-2013 AS DOCUMENT # 1024551 AND FILED IN Vol. 17 Pg. 109
James M. Krebs
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1431-02-22-4.03
AMENDMENT NO: 2

GN

SCALE, FEET
0 50 100

RR SPIKE IN PAVEMENT
Y = 415,532.576
X = 703,920.542
707

IP 921
Y = 415499.920
X = 703919.420

QUARTER LINE

TOWN
SW-NE
SEC. 18

SIGN
R/W
OH
2622.57'
S89°14'56"E
66'
QUARTER LINE

S. KORO RD.

IP 922
Y = 415495.160
X = 704202.210

PARCEL A CSM 63
VOL. 1 / PG. 63

PARCEL B CSM 63
VOL. 1 / PG. 63

150.98'
S 01°00'36" W 173.90'
22.92'
66'
80'
60.99'
N 01°00'36" E
60'
69.80'
N 01°00'36" E
66.05'
3.75'
S 01°00'36" W 2643.02'
2643.02' S01°00'36"W QUARTER LINE

87
88
89
91
92
96 TLE FOR CULVERT CONSTRUCTION

2007
2028
3001
3000
3002
3003
3004
6100
6101
6102
3005
3006
3007
3008
3009
3010
3011
3012
3013
3014
3015
3016
3017
3018
3019
3020
2008
DB201
DB300
DB301

STA 46+08.70
Y= 415297.726
X= 703916.399

R/L =S78°43'29"E
VARIES
50+00
S.T.H. 23/49
55+00
9+00
N11°16'17"E
COMORN RD.

STA 54+22.78 =
STA 10+00.00
Y. = 415138.569
X. = 704714.769

IP 704
Y = 415076.760
X = 704667.780

IP 935
Y = 415228.430
X = 703913.150

CSM 67
VOL. 1 / PG. 67

IP 933
Y = 415194.290
X = 704084.730

LOT 1 CSM 4294
VOL. 24 / PG. 67

IP 937
Y = 415133.920
X = 704300.320

IP 938
Y = 415135.180
X = 704330.480

LOT 2 CSM 4294
VOL. 24 / PG. 67

NW-SE
SEC. 18

RIPON

GIBBONS ST.

SIXTEENTH LINE

1 1/4" IRON PIPE
Y = 412,889.966
X = 703,873.948
80

LOCATION MAP
PROJECT LOCATION
SHEET LOCATION
N
NTS

COMPUTED LOCATION
Y = 415,498.188
X = 706,542.875

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
DB201	46+08.70	0.00'
DB300	57+19.10	0.00'
DB301	53+88.77	0.00'
2028	45+97.84	-60.00'
3000	46+46.61	-60.00
3001	46+97.18	-69.72'
3002	48+20.39	-73.70'
3003	49+29.60	-98.57'
3004	49+58.15	-98.57'
3005	49+58.15	-78.20'
3006	50+09.60	-78.20'
3007	50+18.70	-71.20'
3008	53+90.24	-71.20'
3009	54+64.50	-80.02'
3010	56+07.96	-86.19'
3011	57+71.80	-86.19'
3012	57+19.10	-71.20'
3013	53+88.77	69.54'
3014	53+89.56	116.11'
3015	53+51.49	78.49'
3016	49+99.89	89.11'
3017	48+06.99	88.90'
3018	47+82.71	88.87'
3019	47+74.02	68.86'
3020	46+21.14	68.69'

COURSE TABLE

FROM	TO	BEARING	DIST.
707	2028	S01°00'36"W	173.90'
2028	3000	S78°43'29"E	48.78'
3000	3001	S89°36'32"E	51.49'
3001	3002	S80°34'28"E	123.27'
3002	3003	N88°26'48"E	112.02'
3003	3004	S78°43'29"E	28.55'
3004	3005	S11°16'31"W	20.37'
3005	3006	S78°43'29"E	51.44'
3006	3007	S41°10'10"E	11.48'
3007	3008	S78°43'29"E	371.53'
3008	3009	S85°29'52"E	74.79'
3009	3010	S81°11'24"E	143.59'
3010	3011	S78°43'29"E	163.84
3011	3012	S85°23'27"W	54.79'
3012	DB300	S11°16'31"W	71.21'
DB300	DB301	N78°43'29"W	330.33'
DB301	3013	S11°16'31"W	69.53'
3013	3014	S10°17'42"W	46.57'
3014	3015	N34°03'36"W	53.52'
3015	3016	N80°27'22"W	351.76'
3016	3017	N78°39'41"W	192.91'
3017	3018	N78°39'41"W	24.27'
3018	3019	N12°13'04"W	21.82'
3019	3020	N78°39'41"W	152.88'
3020	DB201	N01°00'36"E	69.80'
DB201	2028	N01°00'36"E	60.99'

TLE STATION & OFFSET TABLE

POINT	STATION	OFFSET
6100	50+05.00	132.00'
6101	50+75.00	132.00'
6102	50+85.00	71.20'

DOC# 1024551
Recorded
July 02, 2013 9:06 AM
James M. Krebs
JAMES M KREBS
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET. RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN FOND DU LAC COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1009221 AND FILED IN V. 17, PG. 88

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ. FT. REQUIRED NEW	EXISTING	TOTAL	T.L.E. SQ. FT.
87	ROBERT J. KOLBEK	FEE, AR	2972	---	2972	---
88	DOLORES M. HOFFMAN	FEE	2838	---	2838	---
89	CITY OF RIPON, WISCONSIN	FEE	4098	---	4098	---
91	RONALD G. GUELL AND SUSAN K. GUELL	FEE	771	---	771	---
92	LEE A. PETERS AND SHERID. PETERS, HUSBAND AND WIFE	FEE	5134	---	5134	---
96	DOLORES M. HOFFMAN	TLE	---	---	---	6233

TRANSPORTATION
AECOM Technology, Inc.
4135 Technology Parkway
Sheboygan, WI 53083
T 920.458.8711 F 920.458.0537
AECOM
www.aecom.com

I, KENNETH R. WOLF, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION. I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1431-02-22-4.03 AMENDMENT NO:2 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

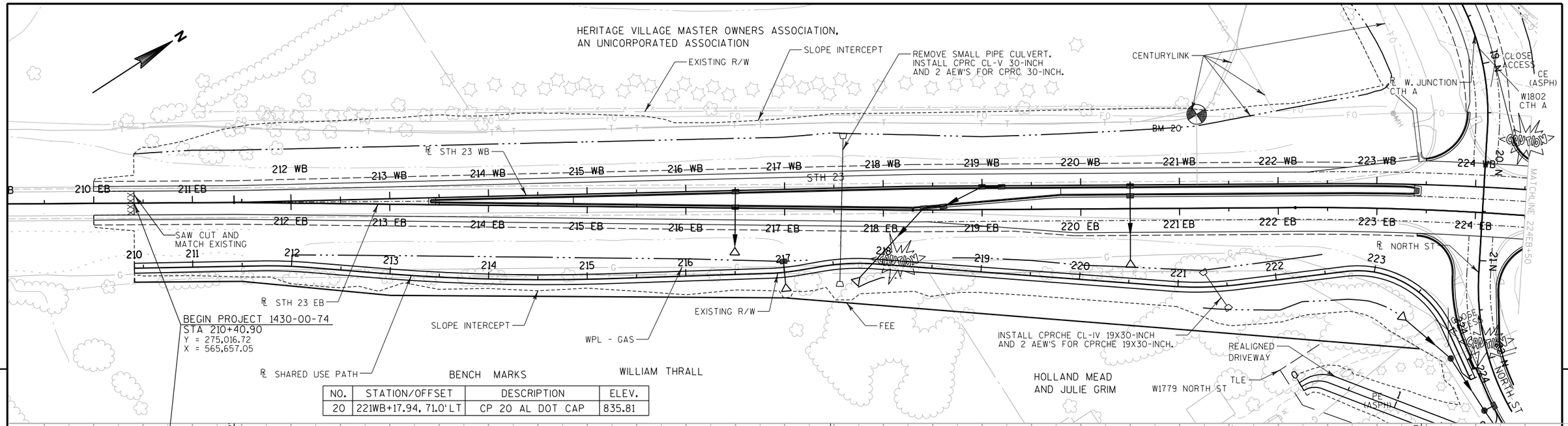
WISCONSIN
KENNETH R. WOLF
NO. S-1421
SHEBOYGAN, WI
LAND SURVEYOR

Kenneth R. Wolf 6/24/2013
KENNETH R. WOLF DATE
AECOM Technology, Inc.
R.L.S. NUMBER 1421

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

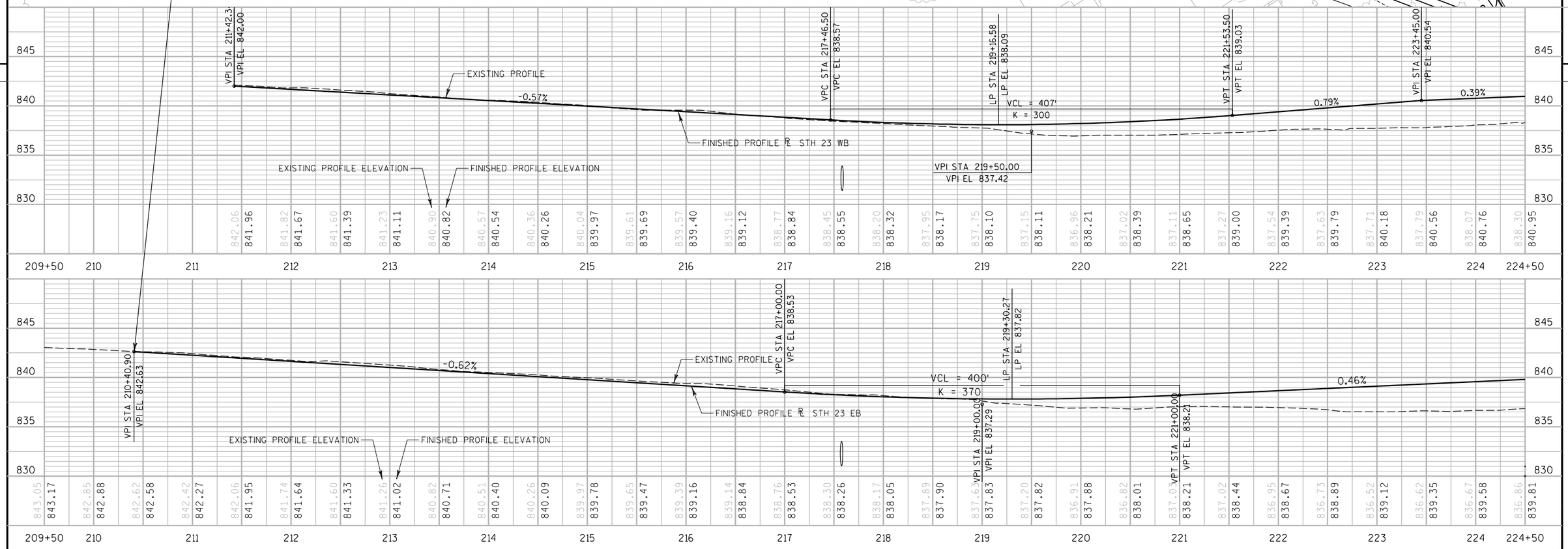
Brent L. Stella 6-24-13
BRENT L. STELLA DATE

FILE NAME : L:\work\60198142\000_CADD\SURVEY\REV-2 TPP FOND DU LAC\23Detail_4-3F -ADD 2.dgn
PLOT DATE : 6/24/2013
PLOT BY : $$...plotuser...$$
PLOT NAME :
PLOT SCALE : 1:100
APPRAISAL PLAT DATE : 8-19-09

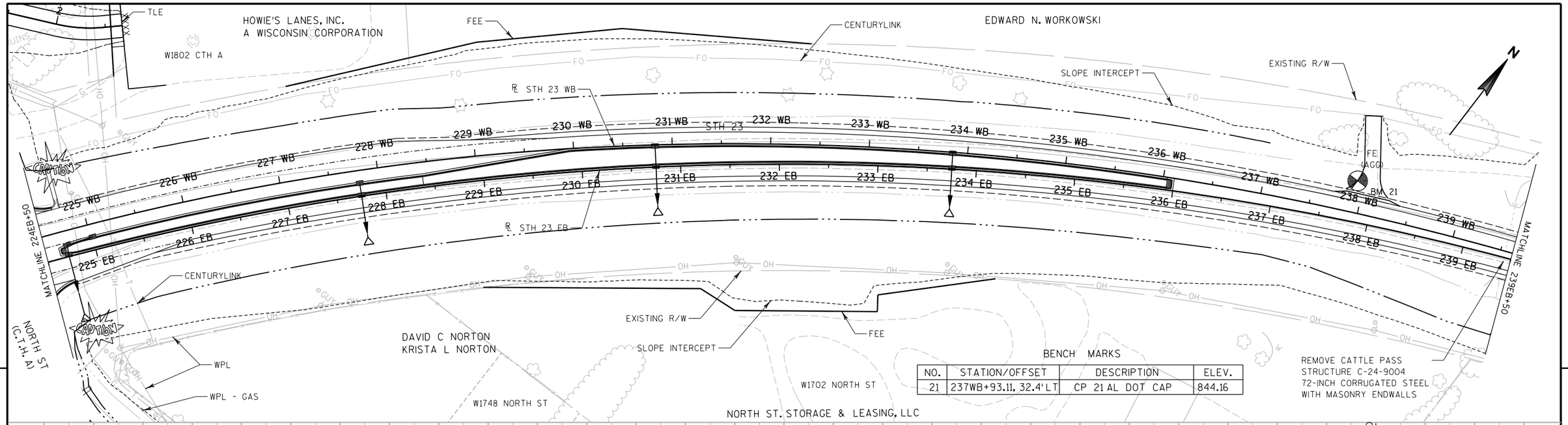


BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
20	221WB+17.94, 71.0' LT	CP 20 AL DOT CAP	835.81

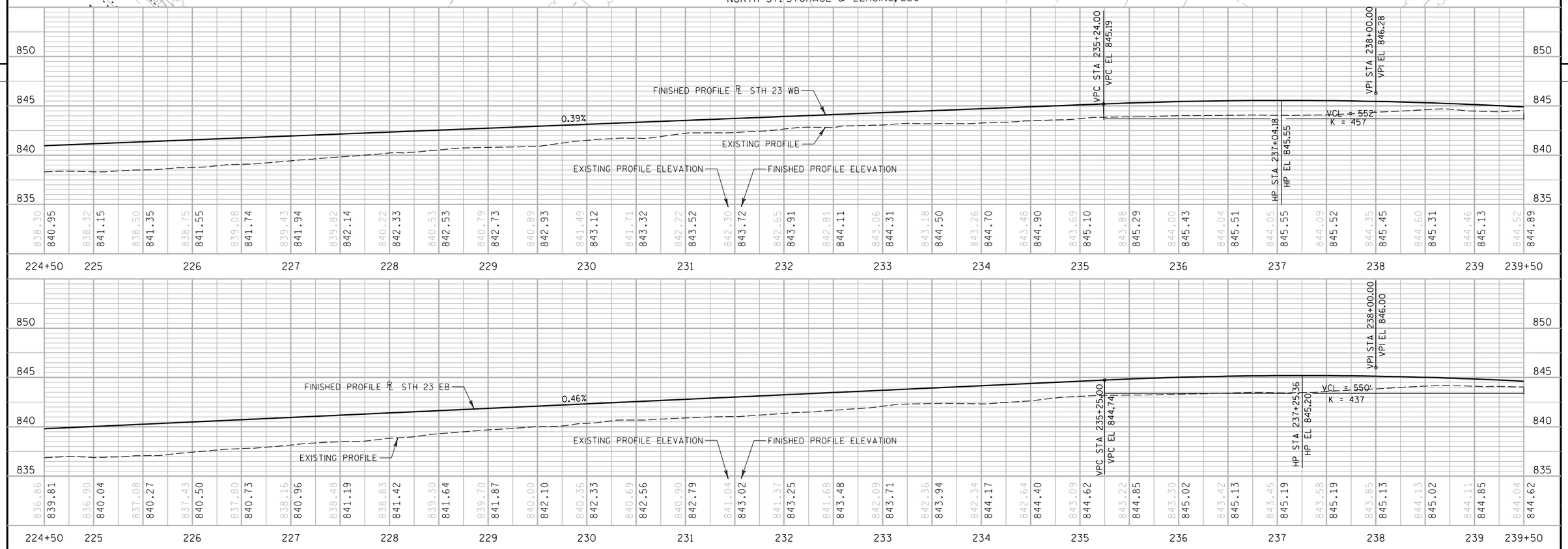


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 306	E

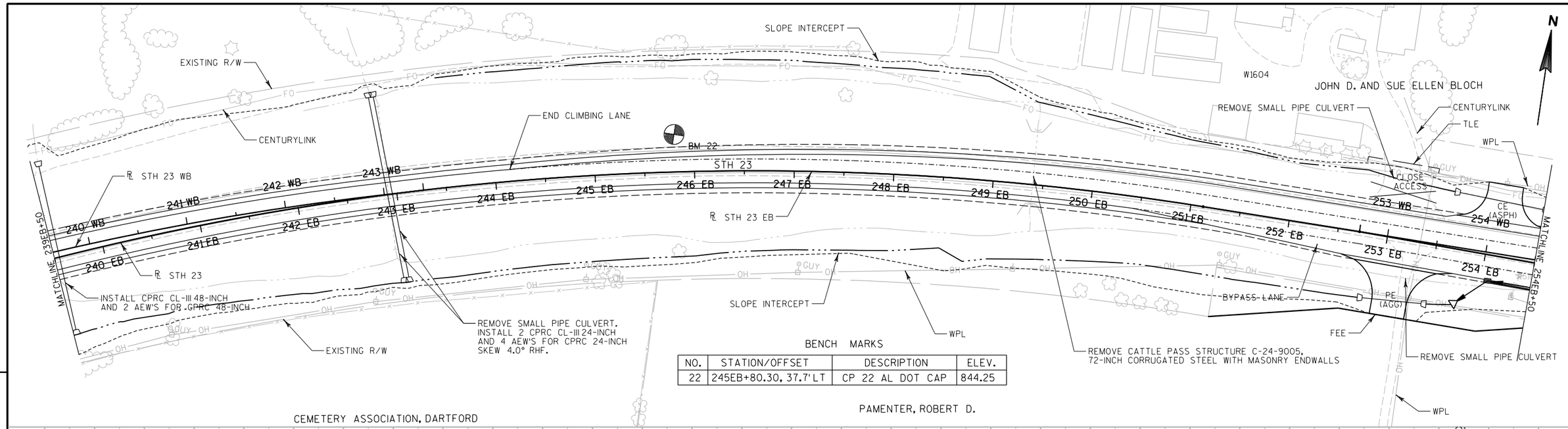


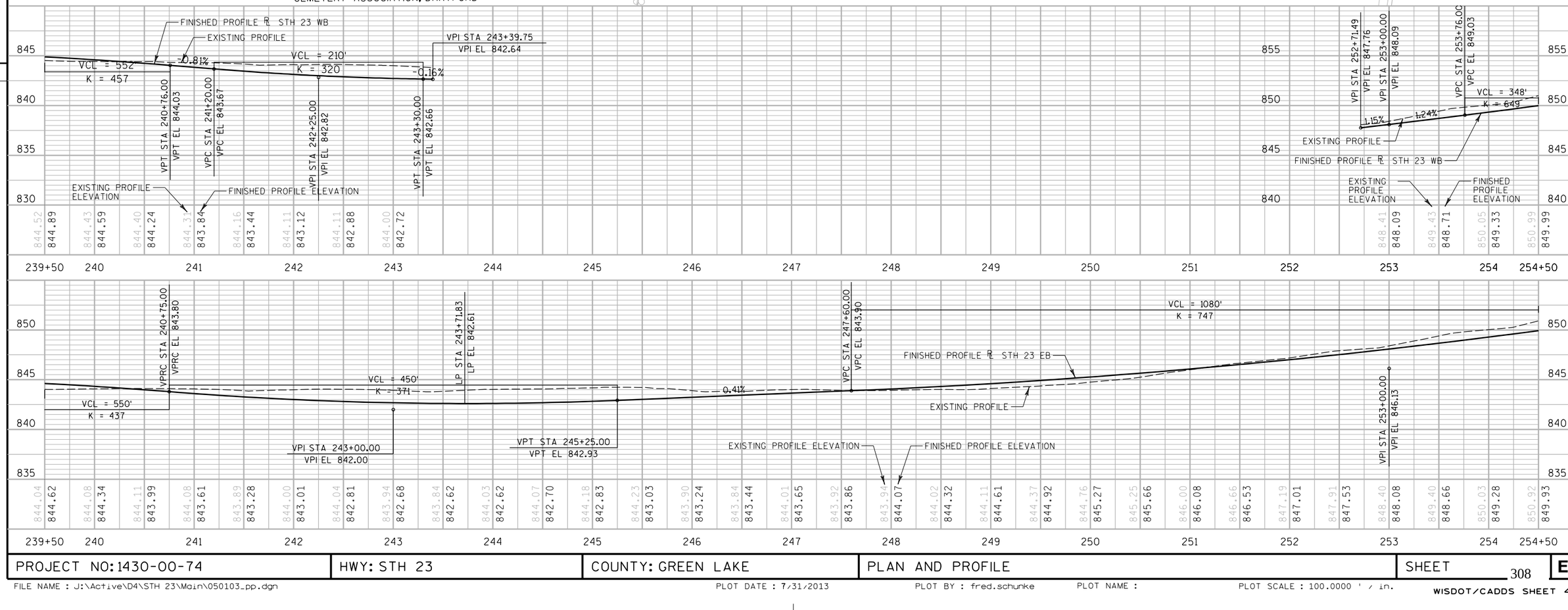
BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
21	237WB+93.11, 32.4' LT	CP 21 AL DOT CAP	844.16

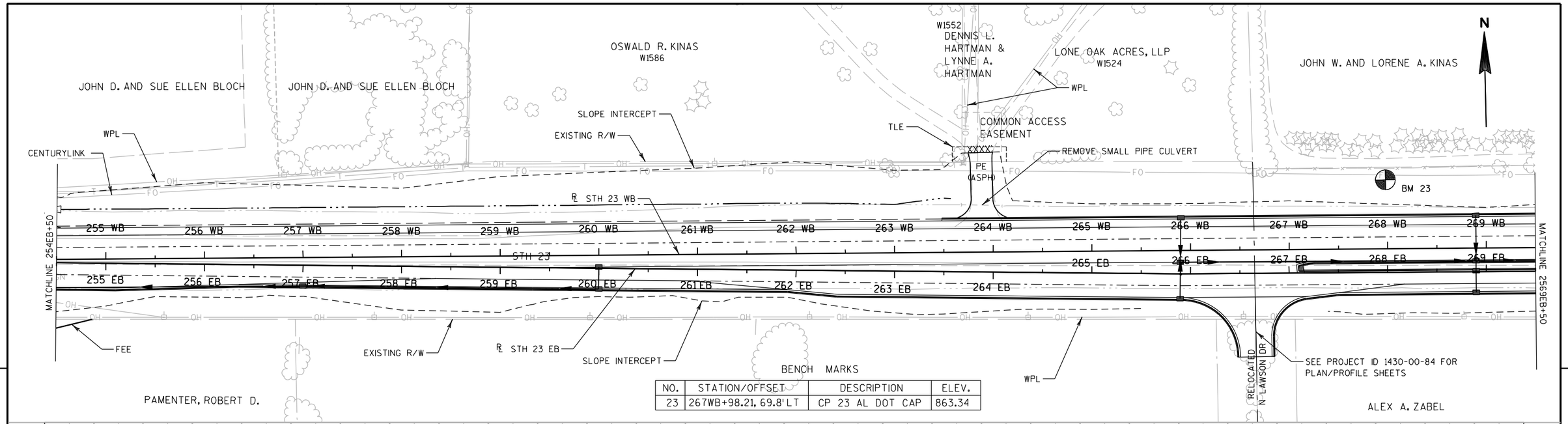


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 307 E



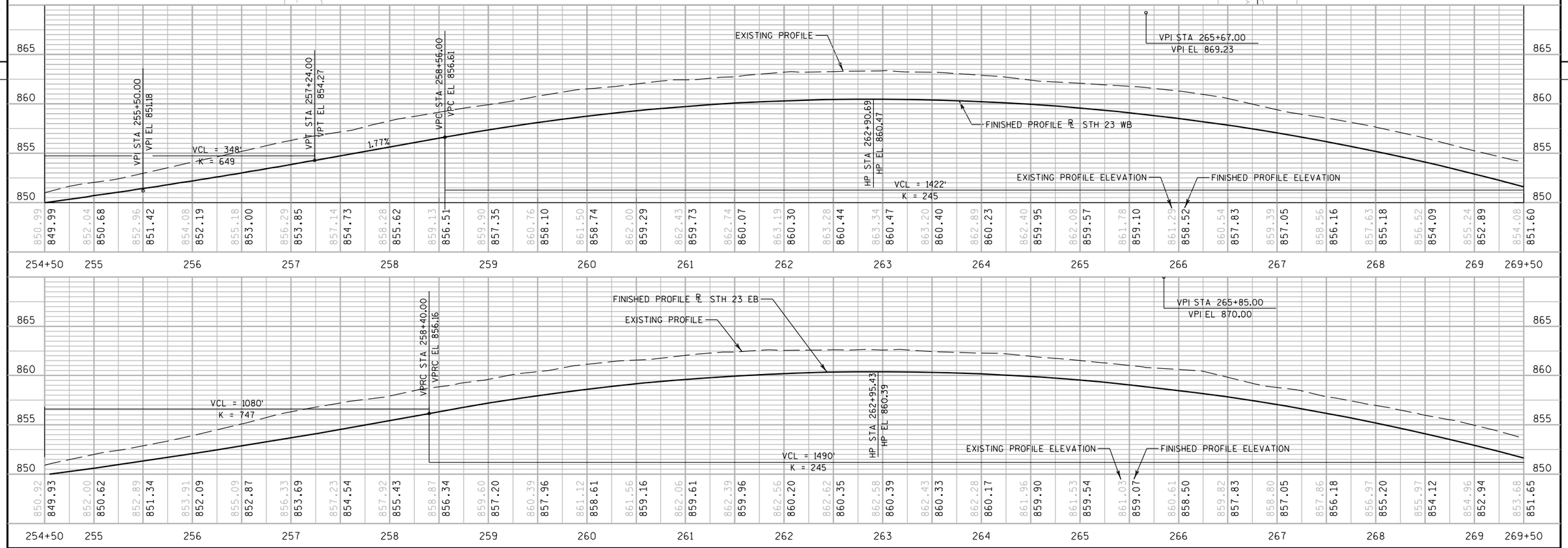


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 308	E

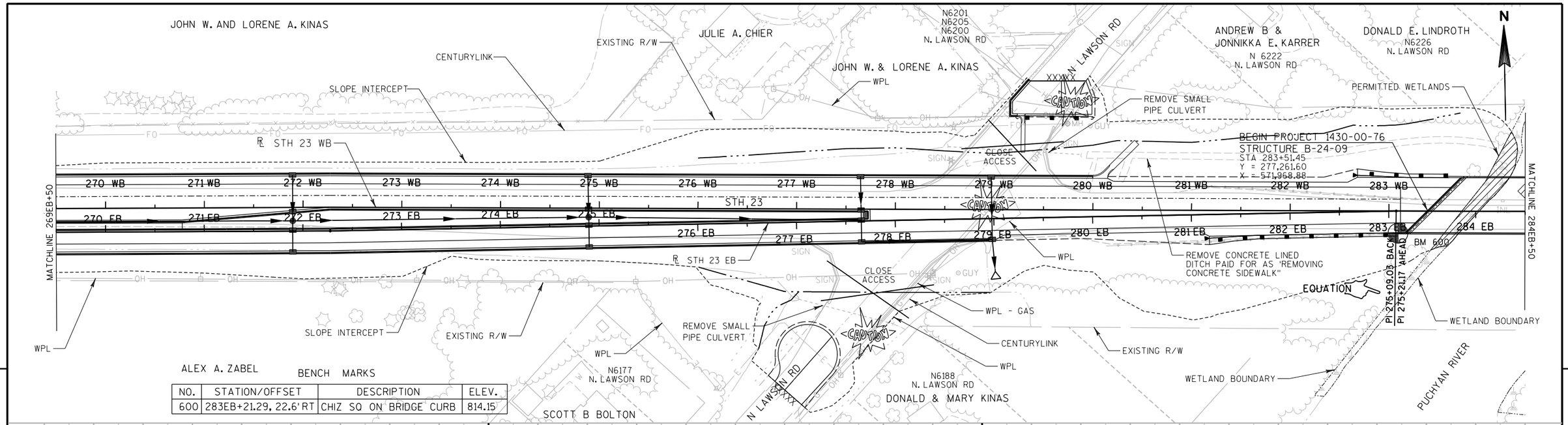


BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
23	267WB+98.21, 69.8' LT	CP 23 AL DOT CAP	863.34

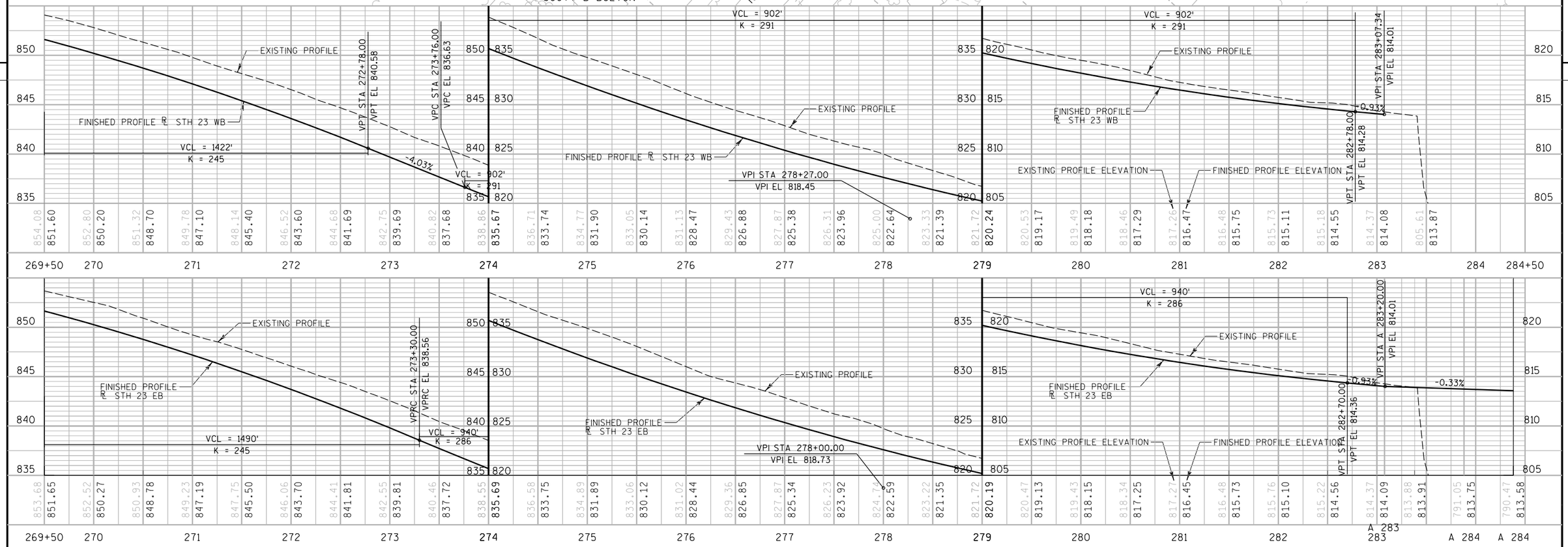


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 309	E

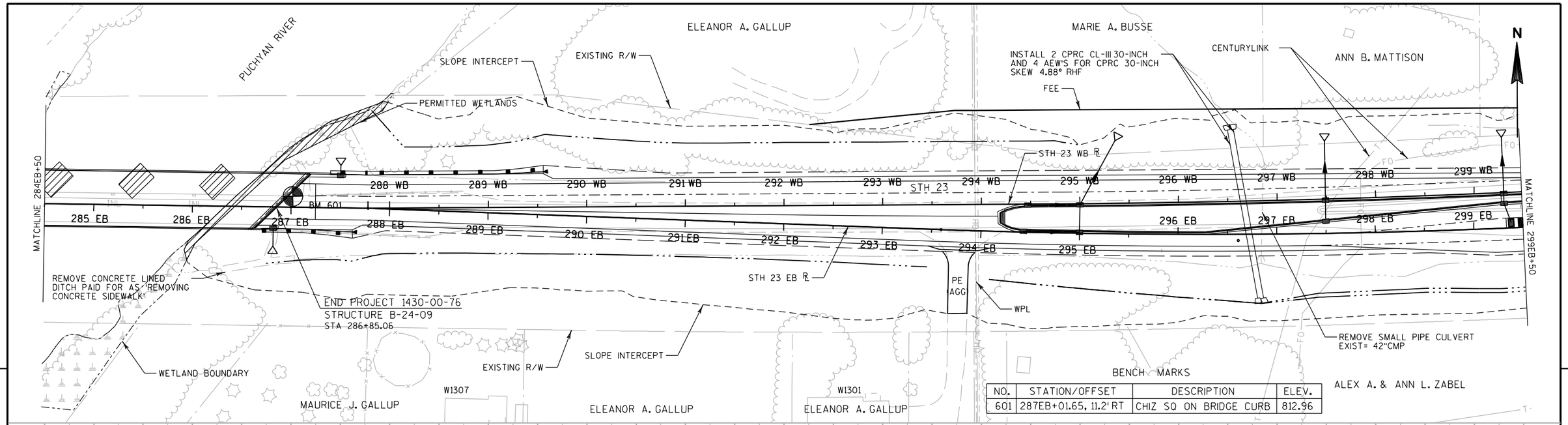


BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
600	283EB+21.29, 22.6'RT	CHIZ SQ ON BRIDGE CURB	814.15

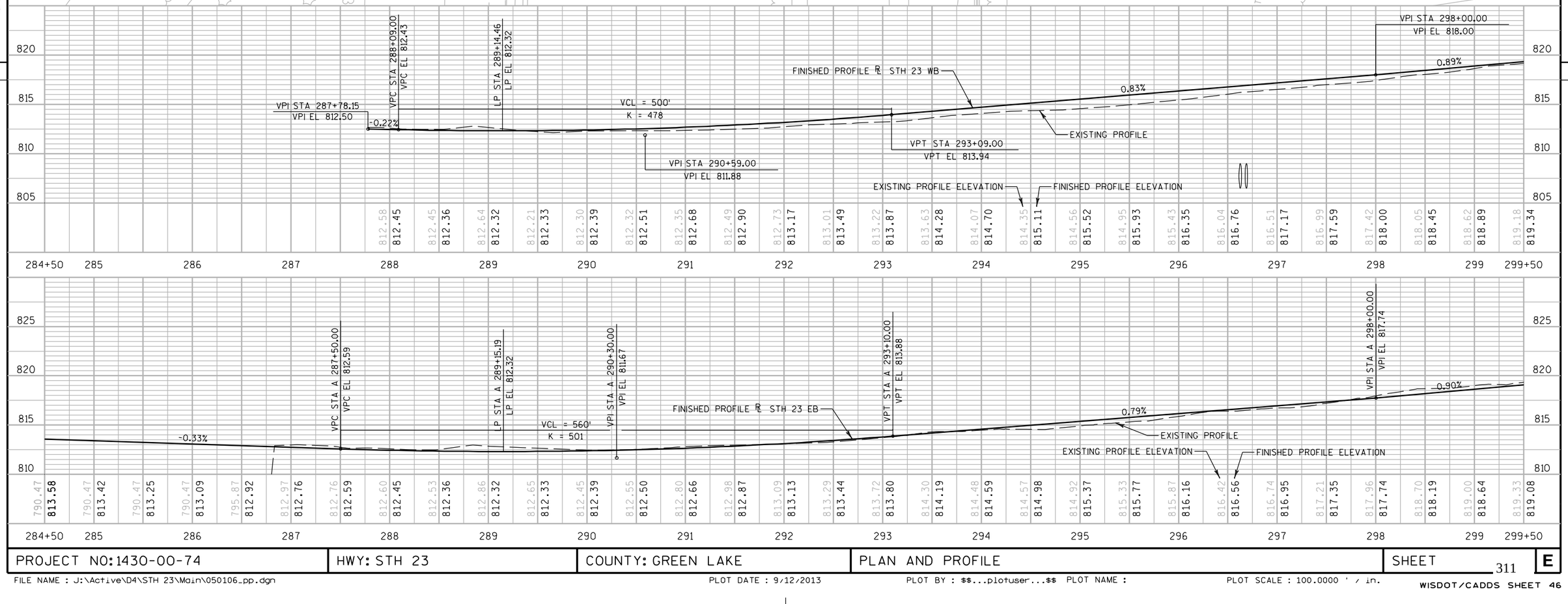


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 310	E

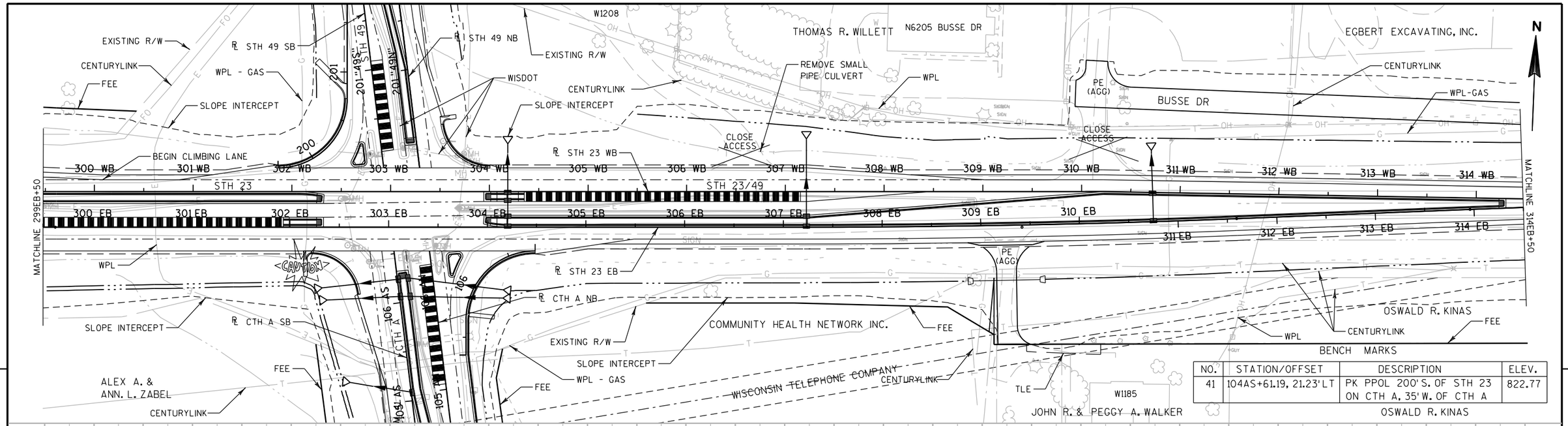


BENCH MARKS

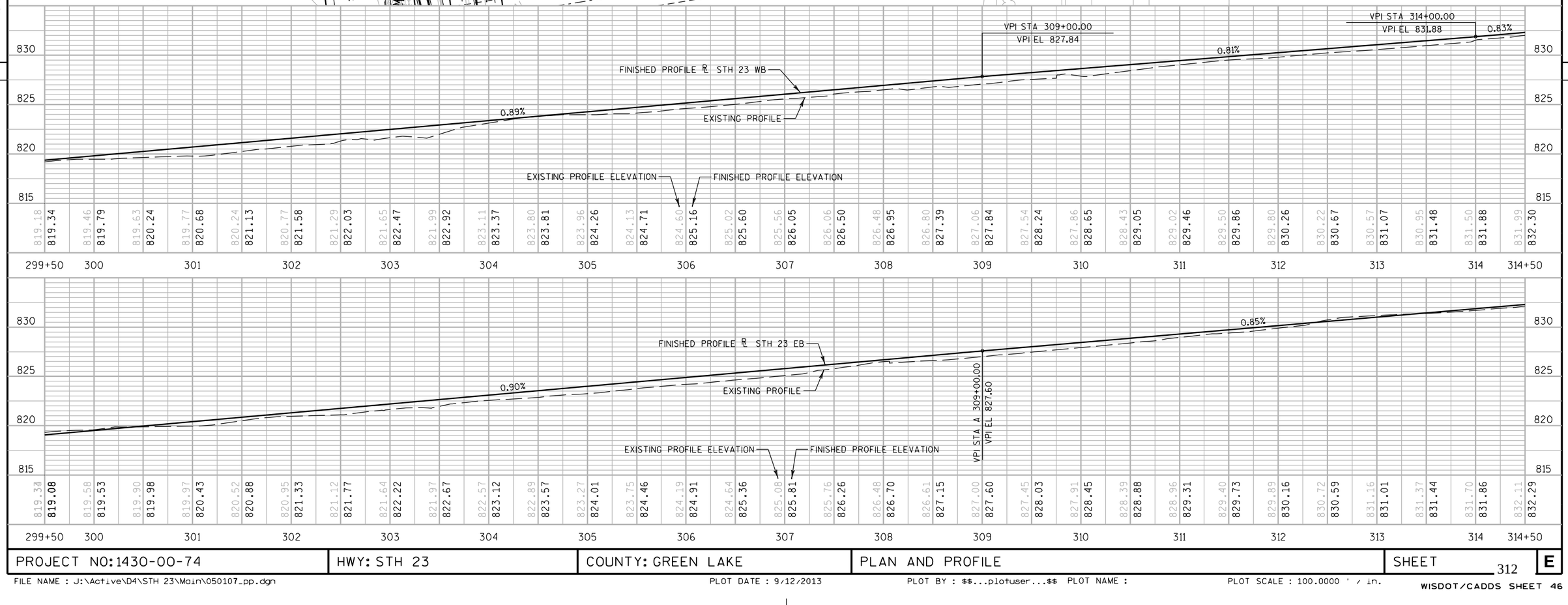
NO.	STATION/OFFSET	DESCRIPTION	ELEV.
601	287EB+01.65, 11.2' RT	CHIZ SQ ON BRIDGE CURB	812.96



PROJECT NO:1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 311	E



NO.	STATION/OFFSET	DESCRIPTION	ELEV.
41	104AS+61.19, 21.23'LT	PK PPOL 200'S. OF STH 23 ON CTH A, 35'W. OF CTH A	822.77

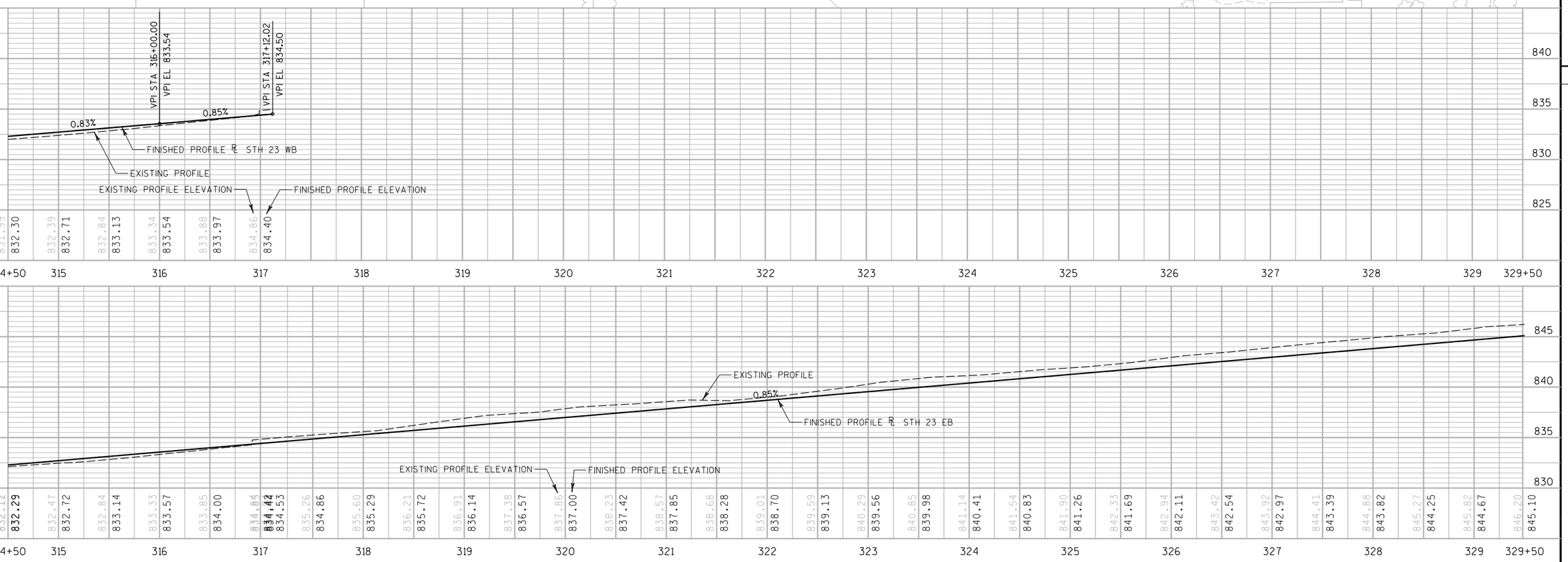


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 312	E

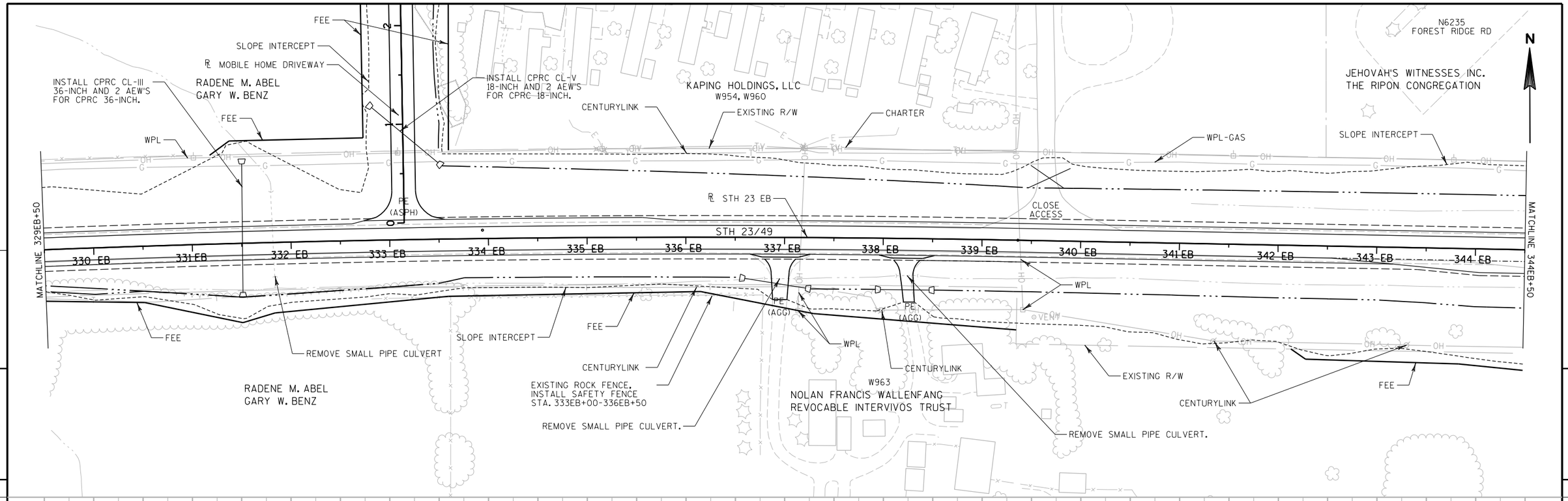
EGBERT EXCAVATING, INC.

RADENE M. ABEL
GARY W. BENZ

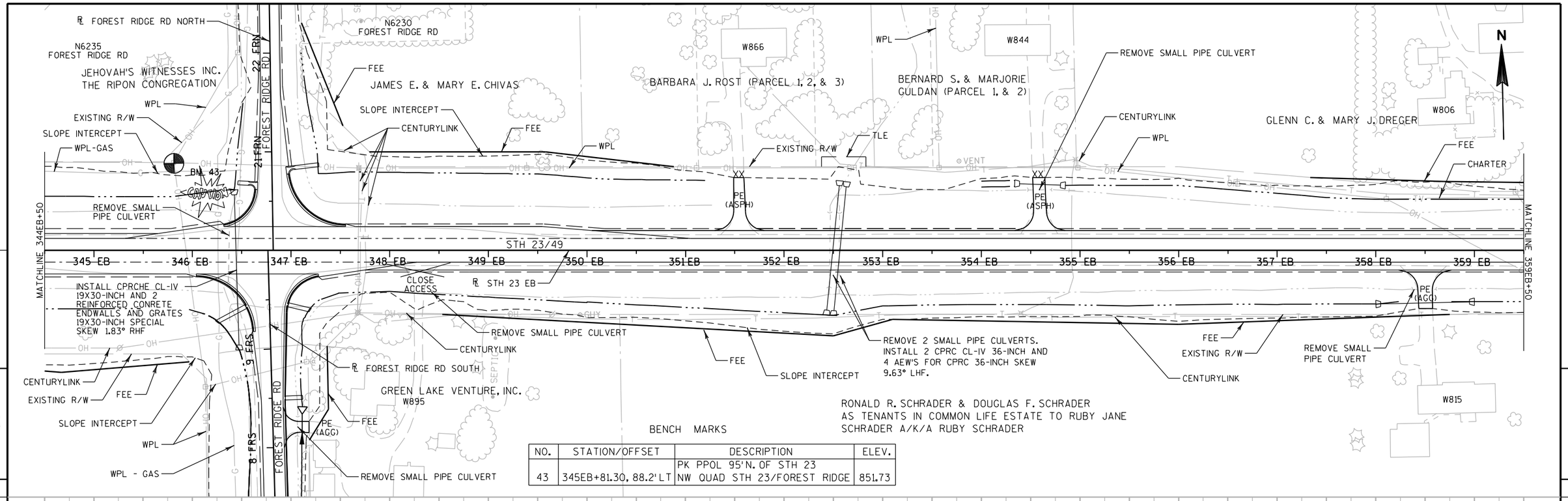
TLE
FEE
SLOPE INTERCEPT
FEE
EXISTING R/W
WPL-GAS
WPL
N
PE (AGG)
CE (ASPH)
BEGIN CENTERLINE RUMBLE STRIPS STA 317+35
FE (AGG)
MATCHLINE 314EB+50
℄ STH 23 WB
315 WB
316 WB
317 WB
STH 23/49
MATCHLINE 329EB+50
315 EB
316 EB
317 EB
318 EB
319 EB
320 EB
321 EB
322 EB
323 EB
324 EB
325 EB
326 EB
327 EB
328 EB
329 EB
PE (AGG)
℄ STH 23 EB
PE (AGG)
PE (AGG)
EQUATION
PT 317+12.02 BACK
PT 317+10.21 AHEAD
EXISTING R/W
℄ STH 23 EB
FEE
TLE
CENTURYLINK
SLOPE INTERCEPT
W1049
FEE
REMOVE SMALL PIPE CULVERTS. INSTALL CPRC CL-III 36-INCH AND 2 AEW'S FOR CPRC 36-INCH.
RADENE M. ABEL
GARY W. BENZ
OSWALD R. KINAS
OSWALD R. KINAS



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 313	E

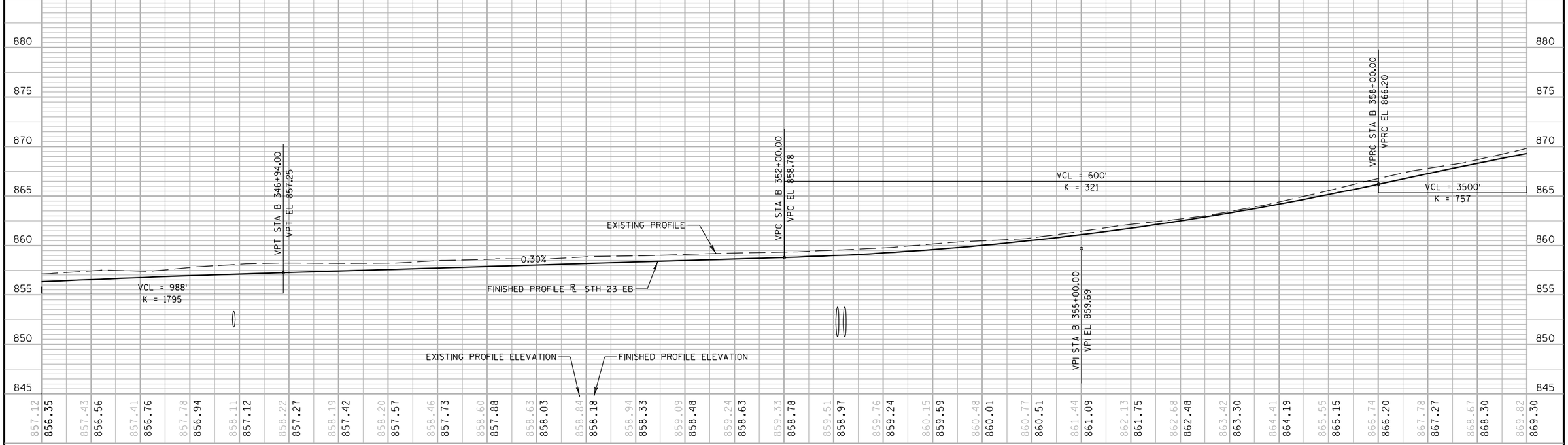


PROJECT NO:1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 314	E



BENCH MARKS

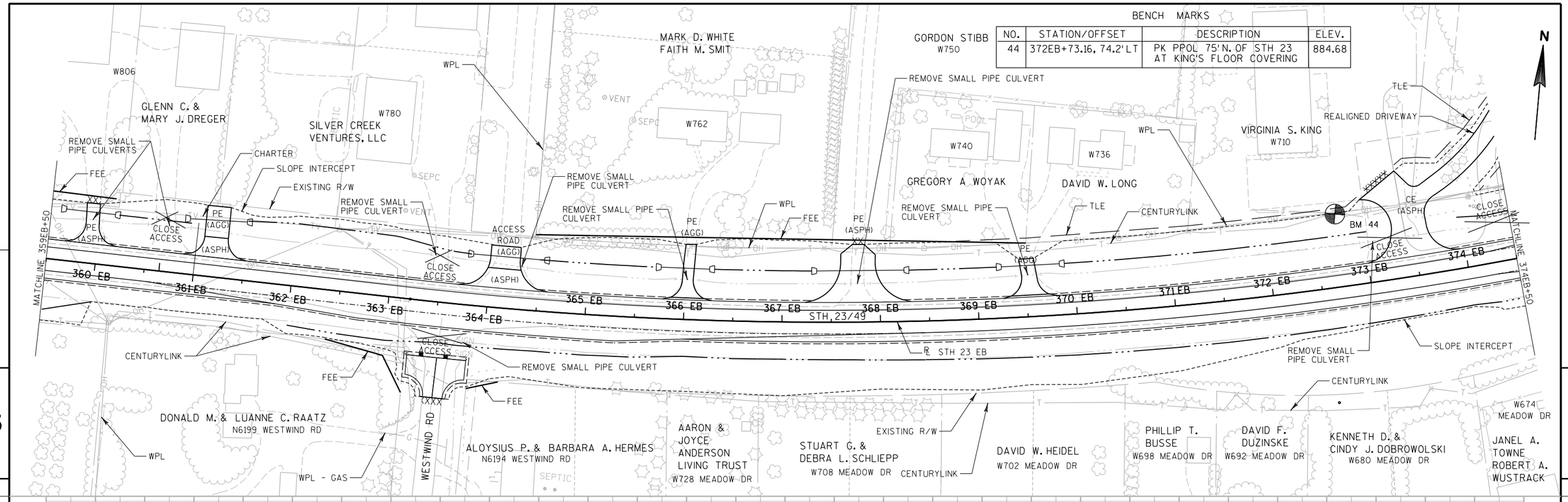
NO.	STATION/OFFSET	DESCRIPTION	ELEV.
43	345EB+81.30, 88.2' LT	PK PPOL 95' N. OF STH 23 NW QUAD STH 23/FOREST RIDGE	851.73

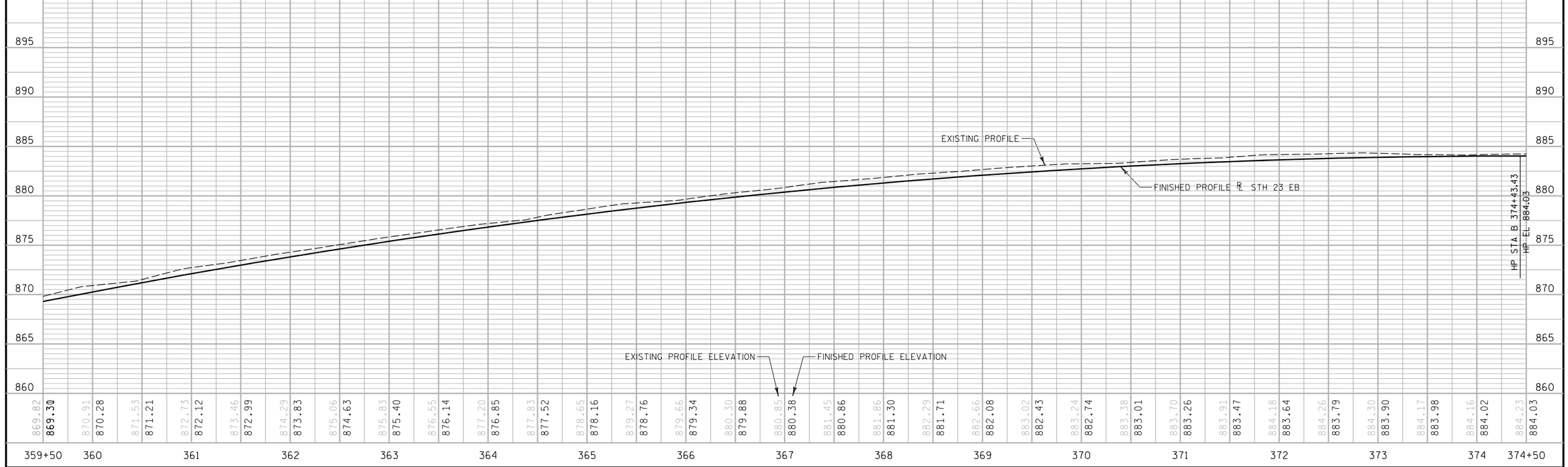


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 315	E

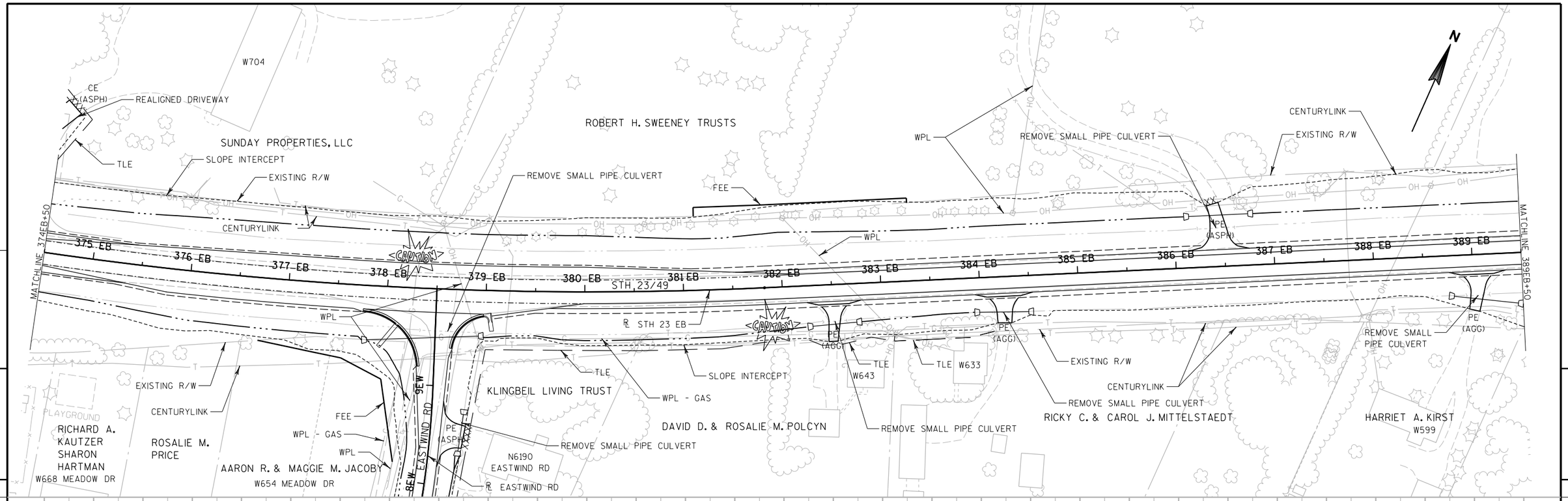
BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
44	372EB+73.16, 74.2'LT	PK PPOL 75'N. OF STH 23 AT KING'S FLOOR COVERING	884.68

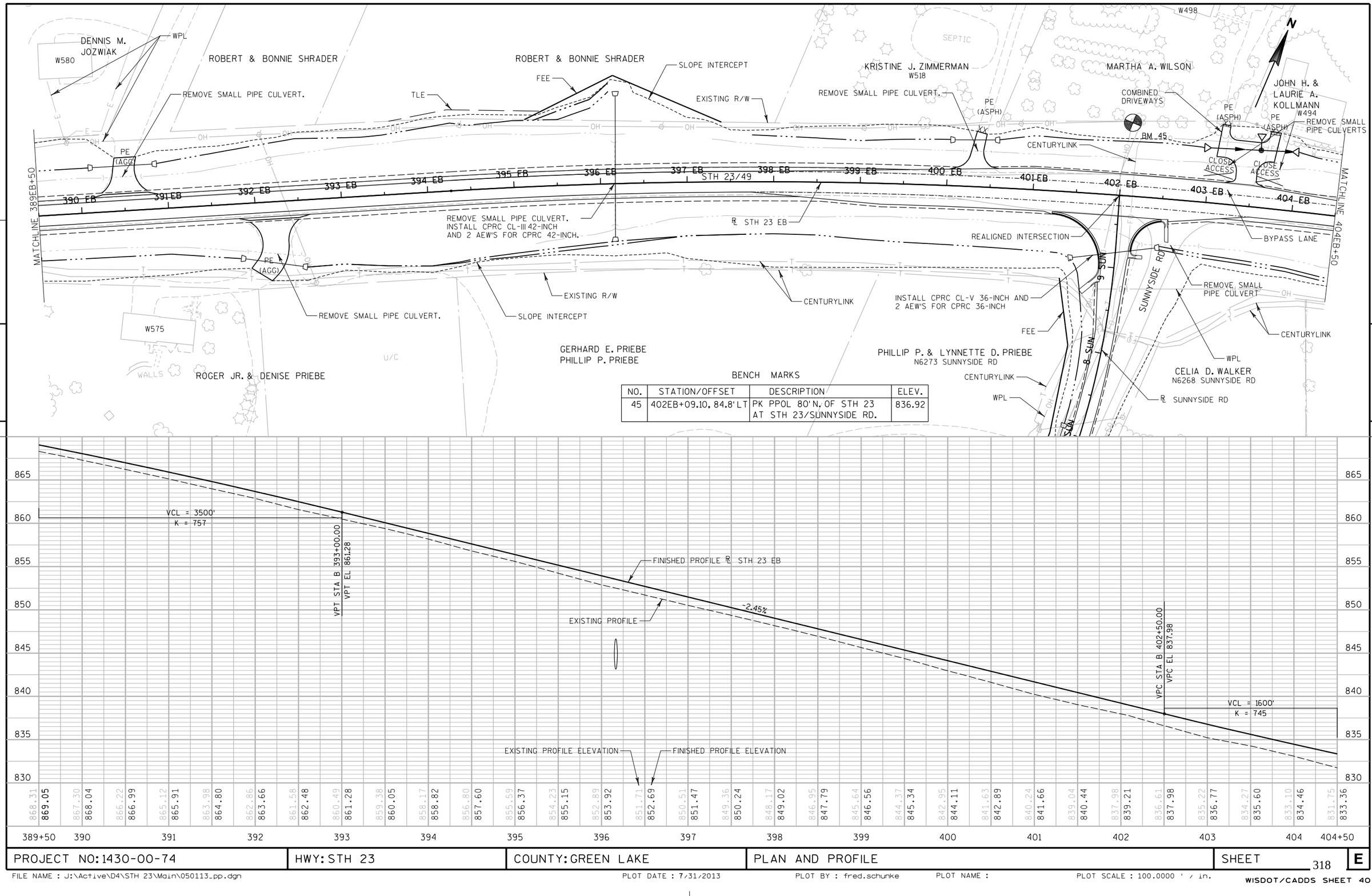




PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 316 E



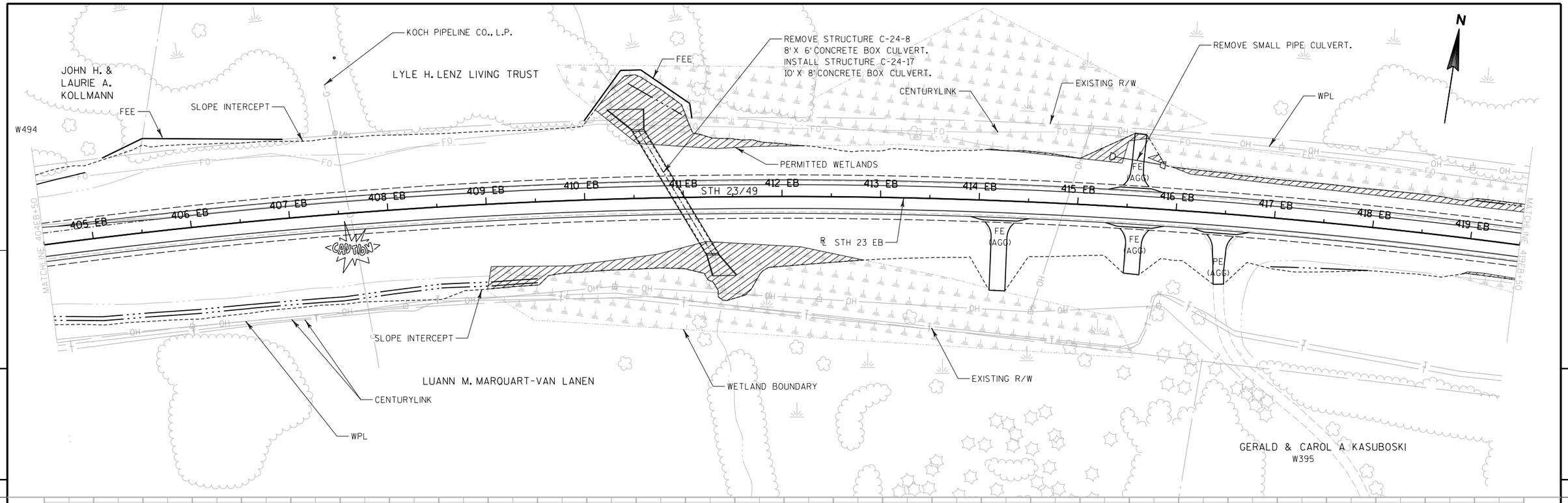
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 317	E

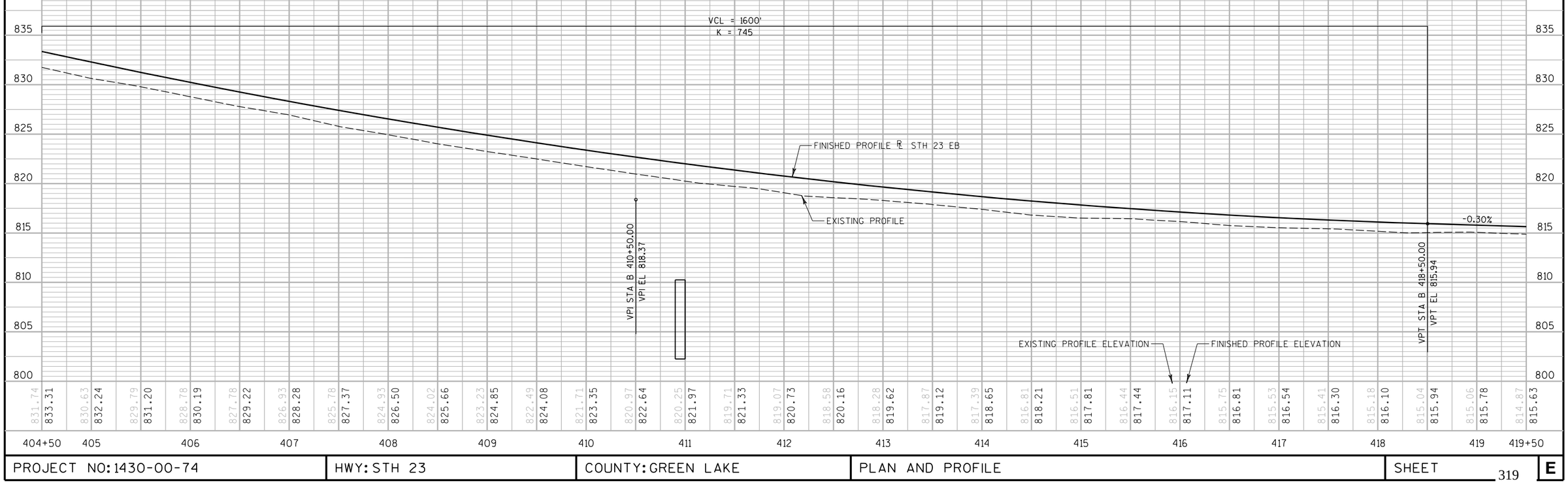


BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
45	402EB+09.10, 84.8' LT	PK PPOL 80' N. OF STH 23 AT STH 23/SUNNYSIDE RD.	836.92

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 318	E

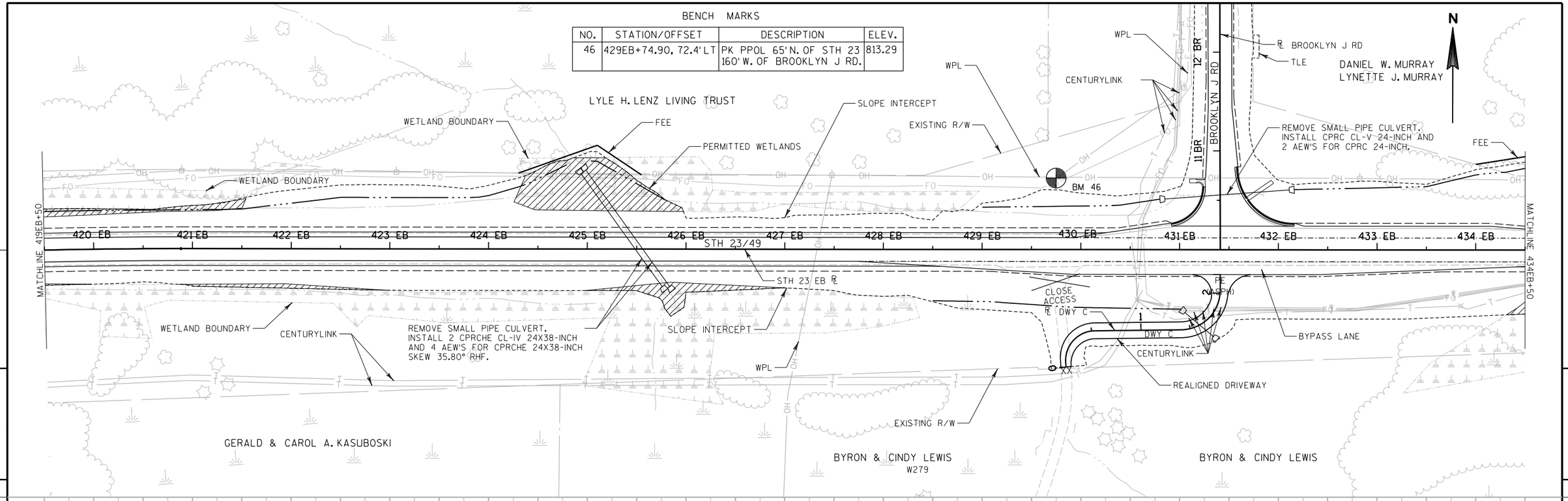


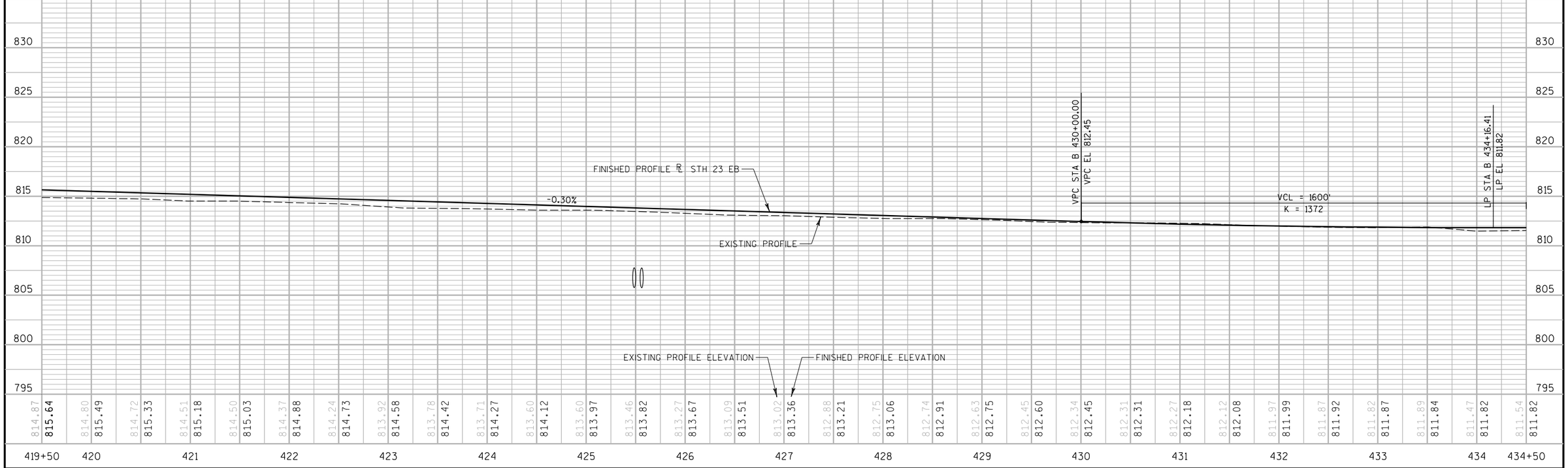


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 319	E

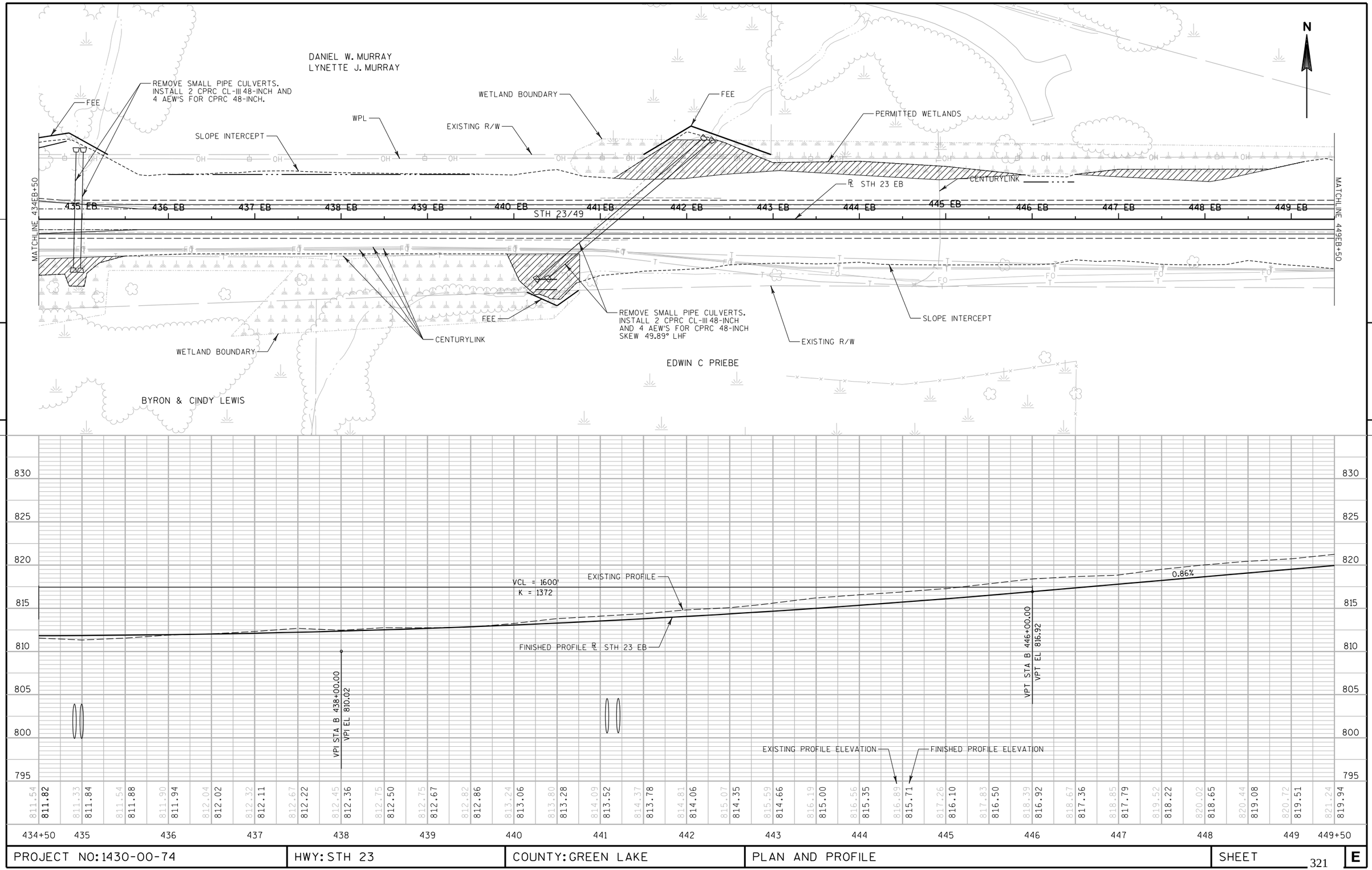
BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
46	429EB+74.90, 72.4' LT	PK PPOL 65' N. OF STH 23 160' W. OF BROOKLYN J RD.	813.29





PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 320	E



5

5

PROJECT NO:1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE	SHEET 321	E

DANIEL W. MURRAY
LYNETTE J. MURRAY

GREEN LAKE COUNTY

FOND DU LAC COUNTY

CENTURYLINK

FEE

EXISTING R/W

WPL

SLOPE INTERCEPT

REMOVE SMALL PIPE CULVERT

WETLAND BOUNDARY

12 PP

11 PP

CTH PP

℄ CTH PP

℄ STH 23 EB

450 EB | 451 EB | 452 EB | 453 EB | 454 EB | 455 EB | 456 EB | 457 EB | 457 EB

STH 23/49

MATCHLINE 449EB+50

CE (ASPH)

10 DD

BM 607

TLE

SLOPE INTERCEPT

CENTURYLINK

REMOVE SMALL PIPE CULVERT.

W121

EDWIN C PRIEBE

TANKS

EXISTING R/W

PE (AG) CLOSE ACCESS

9 DD

WPL

TLE

CENTURYLINK

℄ DEAD END RD

8 DD

DEAD END RD

CE (ASPH)

REMOVE SMALL PIPE CULVERTS

W14480

INSTALL CPRCHE CL-IV 19X30-INCH AND 2 AEW'S FOR CPRCHE 19X30-INCH

SLOPE INTERCEPT

CENTURYLINK

CENTURYLINK

END PROJECT 1430-00-74
STA 457+86.84

BEGIN PROJECT 1431-02-72
STA 21+48.47

BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
607	456EB+38.42, 30.0' RT	SEC607 BRASS CAP	825.12

N

5

5

840
835
830
825
820
815
810
805

VPI STA B 455+00.00
VPI EL 824.69

VPI STA B 457+86.84
VPI EL 826.53

EXISTING PROFILE

0.86%

0.64%

FINISHED PROFILE ℄ STH 23 EB

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

| | | |

GLEN G., MARIAN L., JEFF N., & DAN J. SOMMERFELDT

MICHAEL J. JANKOWSKI
MICHAEL D. BROOKS
W1814

W1802

TLE

FEE

℄ DWY A

DWY A

TLE

PE (ACC)

REMOVE SMALL PIPE CULVERT

WPL

REALIGNED DRIVEWAY

SLOPE INTERCEPT

FEE

WPL-GAS

EXISTING R/W

SAW CUT AND MATCH EXISTING

CAUTION

CLOSE ACCESS

℄ W JUNCTION CTH A

W JUNCTION CTH A

REMOVE SMALL PIPE CULVERT

CENTURYLINK

SLOPE INTERCEPT

EXISTING R/W

℄ STH 23 WB

STH 23

WPL-GAS

℄ STH 23 EB

BEGIN CONSTRUCTION
STA 13+67.82

6 N 7 N 8 N 9 N 10 N 11 N 12 N 13 N 14 N 15 N 16 N 17 N 18 N 19 N

22 WB 223 WB 223 EB 224 WB 224 EB 225 WB

5

5

VPI STA 17+75.00
VPI EL 846.42

FINISHED PROFILE

VPT STA 19+82.00
VPT EL 842.33
VPI STA 20+01.47
VPI EL 841.94
VPI STA 20+25.47
VPI EL 840.79
VPI STA 20+37.47
VPI EL 840.24

1.98%
4.80%
4.58%
4.51%

VPI STA 13+67.82
VPI EL 829.57
VPC STA 13+68.00
VPC EL 829.57

VCL = 200'
K = 92

VPRC STA 15+68.00
VPRC EL 836.74

HP STA 18+58.93
HP EL 843.54

VCL = 414'
K = 62

2.50%

EXISTING PROFILE

VPI STA 14+68.00
VPI EL 832.07

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

829.13	830.37	831.58	832.80	833.98
830.43	831.99	833.82	835.92	838.16
836.12	835.38	832.57	834.78	835.69
840.04	841.51	842.59	843.26	843.54
839.98	835.86	838.52	836.75	
843.41	842.88	841.97	839.67	

855 850 845 840 835 830 825 820

5+50 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE, WEST JUNCTION CTH A	SHEET 323 E

FILE NAME : J:\Active\D4\STH 23\Main\050118_pp.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 100.0000 ' / in.

CENTURYLINK
SLOPE INTERCEPT
℄ STH 23 WB
WPL
℄ STH 23 EB
CENTURYLINK
WPL-GAS
ASPHALTIC FLUME
EXISTING R/W
℄ NORTH ST
SAW CUT AND MATCH EXISTING
W1748
DAVID C. NORTON
KRISTA L. NORTON
W1740
CEMETERY
N
NORTH ST
CLOSE ACCESS
REMOVE SMALL PIPE CULVERT
REMOVE SMALL PIPE CULVERT
TLE
REMOVE SMALL PIPE CULVERT
SLOPE INTERCEPT
EXISTING R/W
END CONSTRUCTION
STA 25+63.03
W1767
W1753
WPL-GAS
REALIGNED DRIVEWAY
TLE
℄ DWY B
ERVIN H. & CAROLINE BRIESE
JEFF A. & PAMELA D. NOVAK
HOLLAND MEAD AND JULIE GRIM
W1779
SEPTIC
5
5

VPC STA 20+79.00
VPC EL 838.37
4.51%
VCL = 202'
K = 51
EXISTING PROFILE
-0.51%
VPI STA 25+63.03
VPI EL 831.84
VPI STA 21+80.00
VPI EL 833.81
VPT STA 22+81.00
VPT EL 833.29
FINISHED PROFILE
EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

| | | |

REMOVE 3 SMALL PIPE CULVERTS. INSTALL 3 CPRCHE CL-IV 24X38-INCH AND 6 AEW'S FOR CPRCHE 24X38-INCH SKEW 46.69° LHF.

REMOVE 2 SMALL PIPE CULVERTS. INSTALL 2 CPRCHE CL-III 19X30-INCH AND 4 AEW'S FOR CPRCHE 19X30-INCH.

ALEX A. & ANN L. ZABEL

SLOPE INTERCEPT

FEE

EXISTING R/W

℄ STH 23 EB

WPL

WPL - GAS

℄ CTH A SB

FE (AGG)

101 AS

101 AN

102 AS

102 AN

103 AS

103 AN

104 AS

104 AN

105 AS

105 AN

106 AS

106 AN

CAUTION

BM

WPL

EXISTING R/W

WPL - GAS

SAWCUT AND MATCH EXISTING

CITY OF GREEN LAKE SAN.

CITY OF GREEN LAKE WATER

TLE

SAW CUT AND MATCH EXISTING

EXISTING R/W

FEE

℄ CTH A NB

SLOPE INTERCEPT

REMOVE SMALL PIPE CULVERTS

CENTURYLINK

EXISTING R/W

CTH A

STH 23

101 EB

101 WB

102 EB

102 WB

103 EB

103 WB

104 EB

104 WB

105 EB

105 WB

106 EB

106 WB

SLOPE INTERCEPT

WPL

CENTURYLINK

℄ STH 23 WB

EXISTING R/W

JAMES A. BUSSE

℄ STH 49 SB

SAW CUT AND MATCH EXISTING

EXISTING R/W

W1238 N. LAWSON DR

GERALD W. & GLORIA A. NORRIS REVOCABLE TRUST

N. LAWSON DR.

200

201

201 "49S"

STH 49

202

202 "49S"

203 "49S"

204 "49S"

205 "49S"

206 "49S"

201 "49N"

202 "49N"

203 "49N"

204 "49N"

205 "49N"

206 "49N"

WPL-GAS

℄ STH 49 NB

CE (ASPH)

PERMITTED WETLANDS

REMOVE SMALL PIPE CULVERT

WPL

SLOPE INTERCEPT

EXISTING R/W

TLE

WETLAND BOUNDARY

FIRST NATIONAL BANK OF BERLIN

W1208 STH 23

WISDOT SIGNALS

COMMUNITY HEALTH NETWORK INC.

670

BEGIN CONSTRUCTION
STA 100+00.00

BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
41	104AS+61.19, 21.2'LT	PK PPOL 200'S. OF STH 23 ON CTH A, 35'W. OF CTH A	822.77

FINISHED PROFILE ℄ CTH A SB

-2.50%

VPI STA 100+00.00
VPI EL 832.56

VPC STA 100+07.50
VPC EL 832.37

VPI STA 101+00.00
VPI EL 830.06

VCL = 185'
K = 182

VCL = 215'
K = 213

VPI STA 103+00.00
VPI EL 827.09

VPRC STA 104+07.50
VPRC EL 824.41

VPI STA 105+28.00
VPI EL 821.40

EXISTING PROFILE

VCL = 241'
K = 79

LP STA 106+04.95
LP EL 821.95

VPT STA 106+48.50
VPT EL 822.07

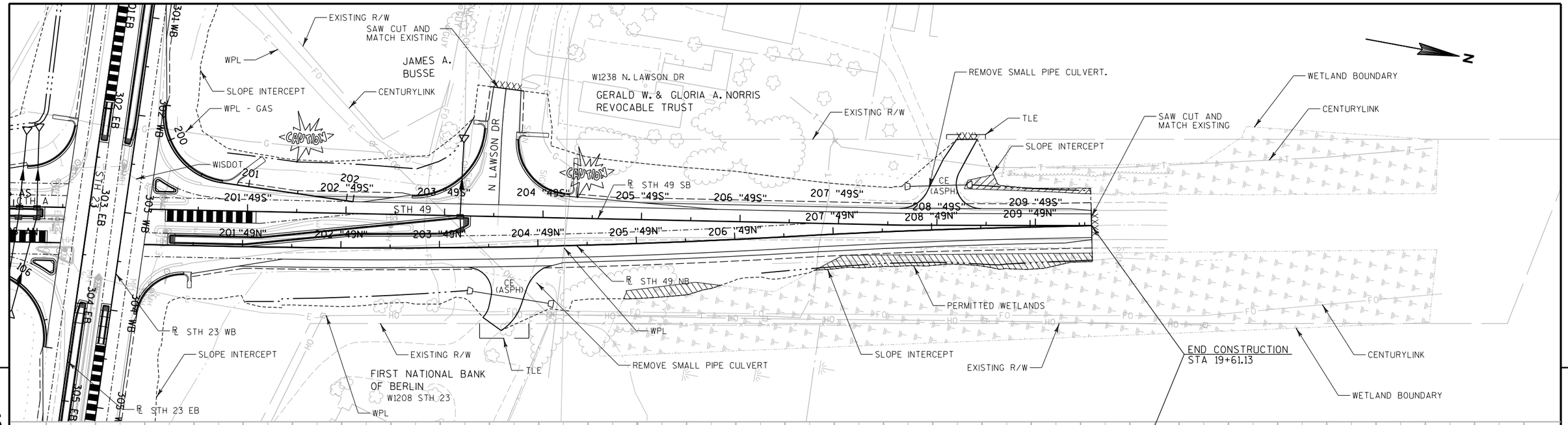
VPI STA 106+52.97
VPI EL 822.09

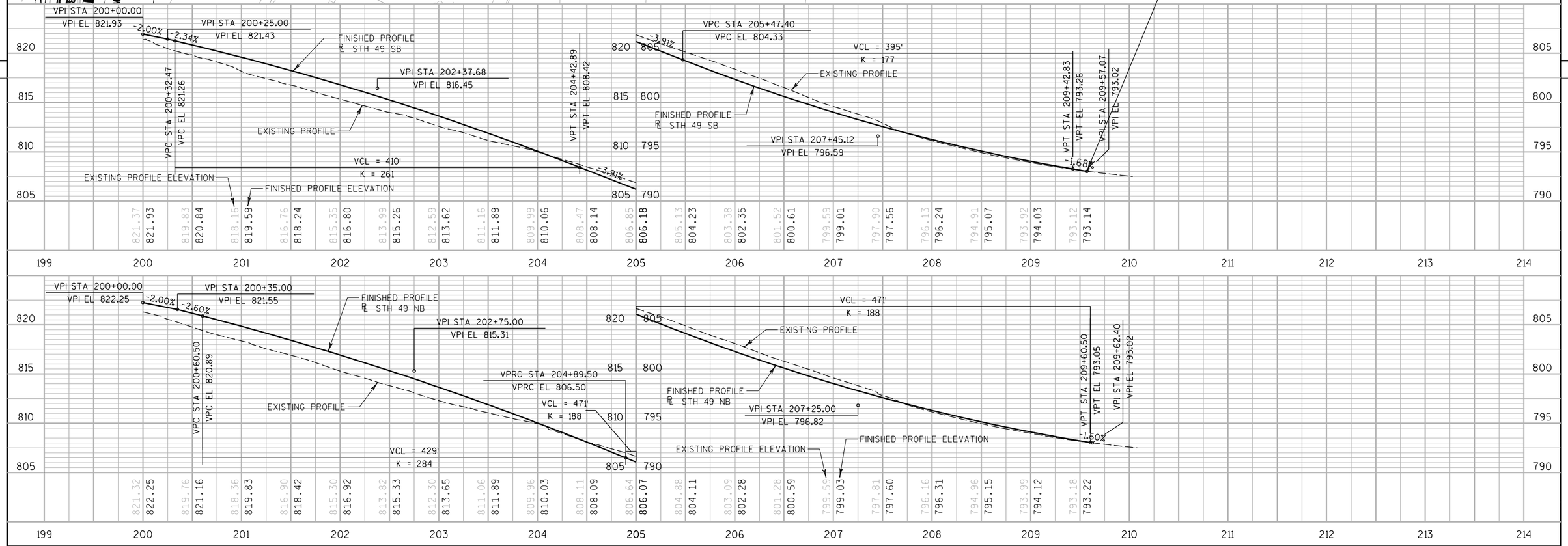
0.55%

EXISTING PROFILE ELEVATION

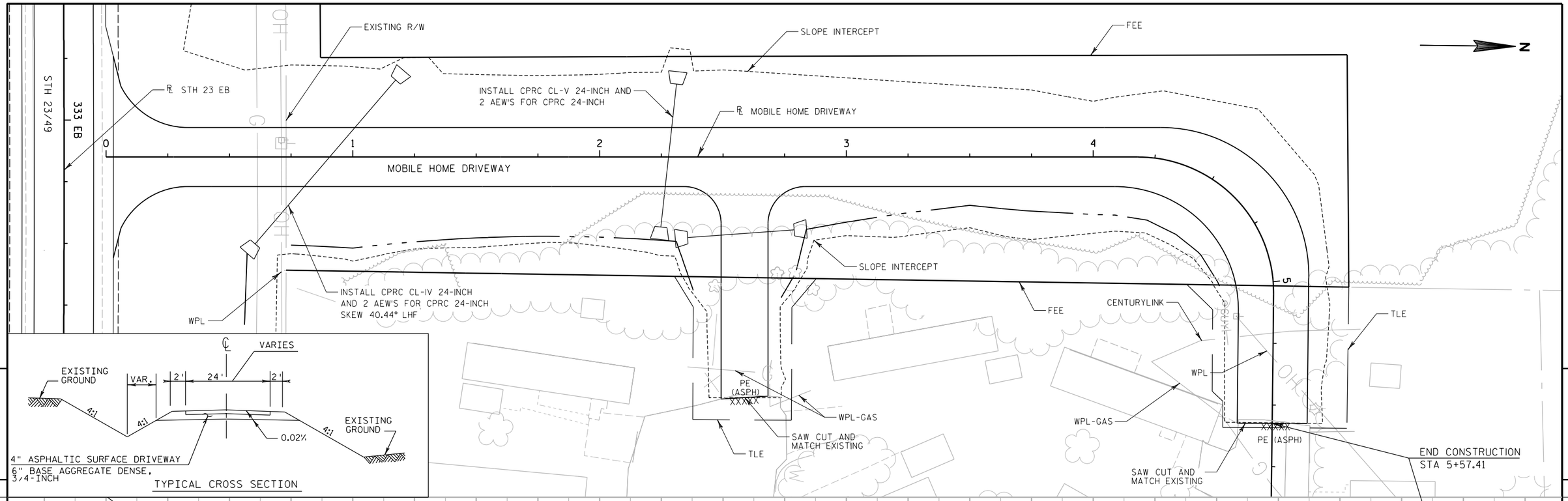
FINISHED PROFILE ELEVATION

| | | |





PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE, STH 49	SHEET 326	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE, MOBILE HOME DRIVEWAY	SHEET 327 E

FILE NAME : J:\Active\D4\STH 23\Main\050129_DW_pp.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 30

EXISTING R/W
WPL
FEE
REMOVE SMALL PIPE CULVERT
ASPHALTIC FLUME
SLOPE INTERCEPT
WPL - GAS
INSTALL CPRCHE CL-IV 19X30-INCH AND 2 AEW'S FOR CPRCHE 19X30-INCH
CAUTION
REMOVE CONCRETE LINED DITCH PAID FOR AS 'REMOVING CONCRETE SIDEWALK'
℄ FOREST RIDGE RD SOUTH
SAW CUT AND MATCH EXISTING
5 FRS
6 FRS
7 FRS
FOREST RIDGE RD
8 FRS
9 FRS
346 EB
347 EB
℄ STH 23 EB
STH 23/49
N
PE (AGG)
ASPHALTIC FLUME
BEGIN CONSTRUCTION
STA 5+20.00
EXISTING R/W
SLOPE INTERCEPT
FEE
WPL - GAS
WPL
W895 STH 23

5

-6.52%
VPI STA 5+20.00
VPI EL 888.63
VPC STA 5+30.00
VPC EL 887.98
EXISTING PROFILE
VPI STA 6+50.00
VPI EL 880.15
FINISHED PROFILE
EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION
VCL = 240'
K = 70
888.31
886.65
884.90
883.06
881.14
879.12
877.01
874.81
872.53
870.15
867.69
865.19
862.70
860.47
858.74
857.49
856.74
856.49
856.72

VPT STA 7+70.00
VPT STA 868.18
VCL = 240'
K = 70
-9.97%
VPC STA 8+24.00
VPC EL 862.80
EXISTING PROFILE
FINISHED PROFILE
VCL = 152'
K = 13
LP STA 9+50.62
LP EL 856.49
VPT STA 9+76.00
VPT STA 856.74
VPI STA 9+76.06
VPI EL 856.74
2.00%
EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION
VPI STA 9+00.00
VPI EL 855.22
872.53
870.15
867.69
865.19
862.70
860.47
858.74
857.49
856.74
856.49
856.72

888 886 884 882 880 878 876 874 872
872 870 868 866 864 862 860 858 856

4+50 5 6 7 7+25 8 9 10 10+50

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE, FOREST RIDGE ROAD SOUTH	SHEET 328 E

FILE NAME : J:\Active\D4\STH 23\Main\050122_pp.dgn
PLOT DATE : 7/31/2013
PLOT BY : fred.schunke
PLOT NAME :
PLOT SCALE : 40.0000 ' / in.

REMOVE SMALL PIPE CULVERT

STH 23/49

346 EB

INSTALL CPRCHE CL-IV 19X30-INCH AND 2 AEW'S FOR CPRCHE 19X30-INCH

CHARTER

CAUTION

SLOPE INTERCEPT

WPL-GAS

EXISTING R/W

WPL

N6235

N

REMOVE SMALL PIPE CULVERT.

TLE

CAUTION

XXXXX

XXX

CE (ASPH)

℄ STH 23 EB

9 FRS

WPL-GAS

℄ FOREST RIDGE RD NORTH

21 FRN

22 FRN

FOREST RIDGE RD

23 FRN

24 FRN

25

MATCHLINE 25FRN+00

347 EB

WPL

PE (ASPH)

XXXXX

SLOPE INTERCEPT

REMOVE SMALL PIPE CULVERT.

TLE

EXISTING R/W

FEE

N6230

SEPTIC

CENTURYLINK

5

5

860
858
856
854
852
850
848
846

VPI STA 20+24.00
VPI EL 856.73
-2.67%
VPC STA 20+55.00
VPC EL 855.91
VPI STA 21+25.00
VPI EL 854.04
EXISTING PROFILE
FINISHED PROFILE
VPT STA 21+95.00
VPT STA 852.02
VCL = 140'
K = 642
-2.89%

860
858
856
854
852
850
848
846
844
842
840

FINISHED PROFILE
-2.89%
EXISTING PROFILE

EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

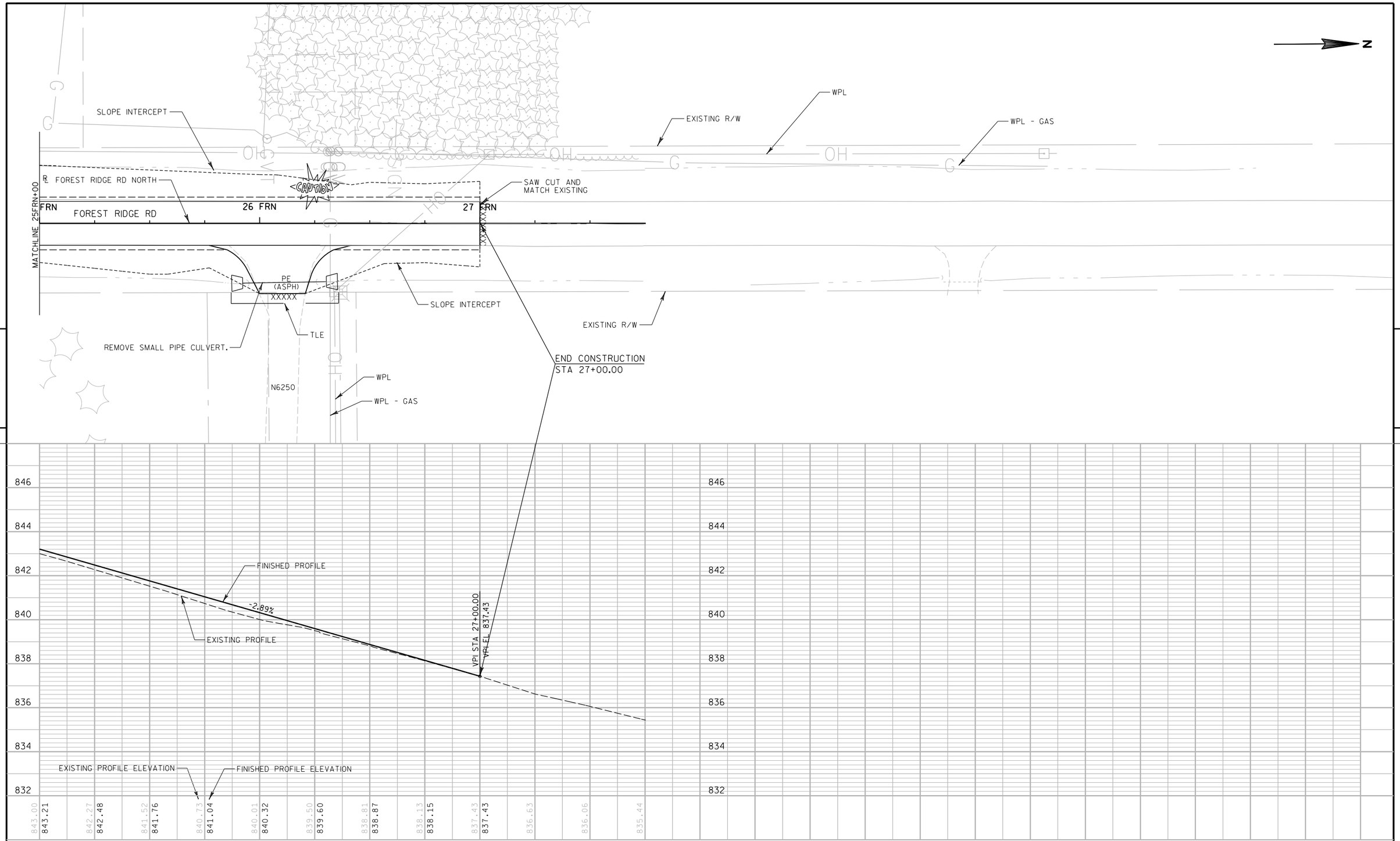
858.20
857.01 856.71
856.57 856.04
856.04 855.37
855.34 854.69
854.15 854.00
852.99 853.30
851.91 852.59
851.03 851.87

EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

850.15 851.15
849.30 850.43
848.57 849.71
847.91 848.98
847.10 848.26
846.47 847.54
845.88 846.82
845.34 846.10
844.80 845.37
844.27 844.65
843.70 843.93
843.00 843.21

19 20 21 22 23 24 25

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE, FOREST RIDGE ROAD NORTH	SHEET 329	E



PROJECT NO:1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE, FOREST RIDGE ROAD NORTH	SHEET 330	E

W654 MEADOW DR

W635 MEADOW DR

N6190 EASTWIND RD

INSTALL CPRC CL-IV 24-INCH AND
2 AEW'S FOR CPRC 24-INCH
SKEW 4.14° RHF

℄ STH 23 EB

STH 23/49

378 EB

379 EB

CENTURYLINK

WPL

WPL - GAS

FEE

EXISTING R/W

PROPERTY LINE

SLOPE INTERCEPT

SAW CUT AND
MATCH EXISTING

℄ EASTWIND RD

CAUTION

8EW

9EW

EASTWIND RD

PE
(ASPH)

REMOVE SMALL PIPE CULVERT

TLE

BEGIN CONSTRUCTION
STA 7+24.00

REMOVE SMALL PIPE CULVERT

EIXSTING R/W

VPI STA 7+24.00
VPI EL 890.69

VPC STA 7+65.71
VPC EL 888.67

-4.84%

VCL = 141'
K = 37

VPI STA 8+36.00
VPI EL 885.27

FINISHED PROFILE

-1.04%

VPI STA 9+74.06
VPI EL 883.83

EXISTING PROFILE

VPT STA 9+06.29
VPT STA 884.54

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

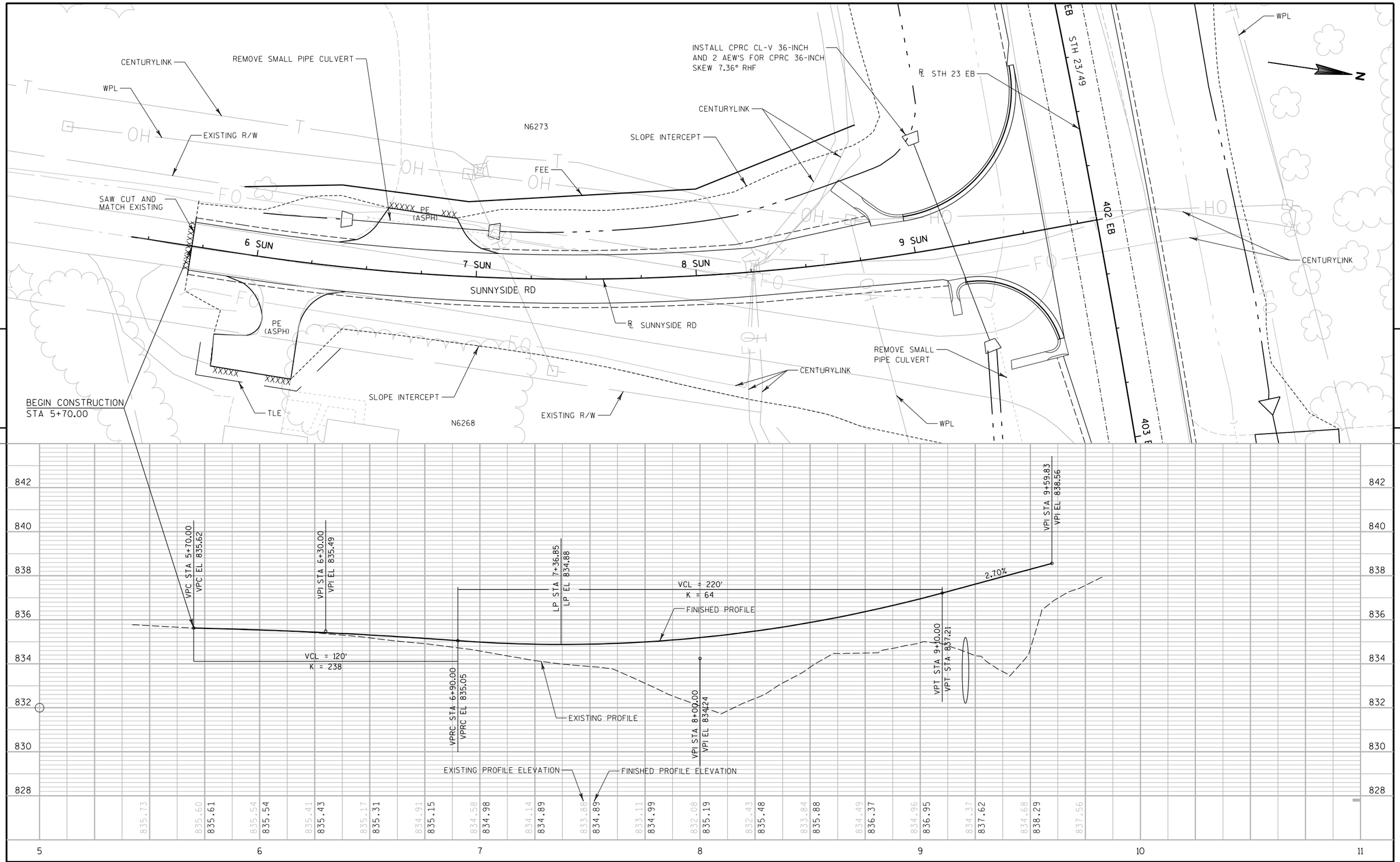
	7	8	9	10
EXISTING PROFILE ELEVATION	890.64	889.50	888.36	887.31	886.24	885.29	884.43	883.66	883.09	882.80	883.08
FINISHED PROFILE ELEVATION	890.64	889.43	888.24	887.17	886.28	885.55	885.00	884.61	884.34	884.08	

892 890 888 886 884 882 880 878

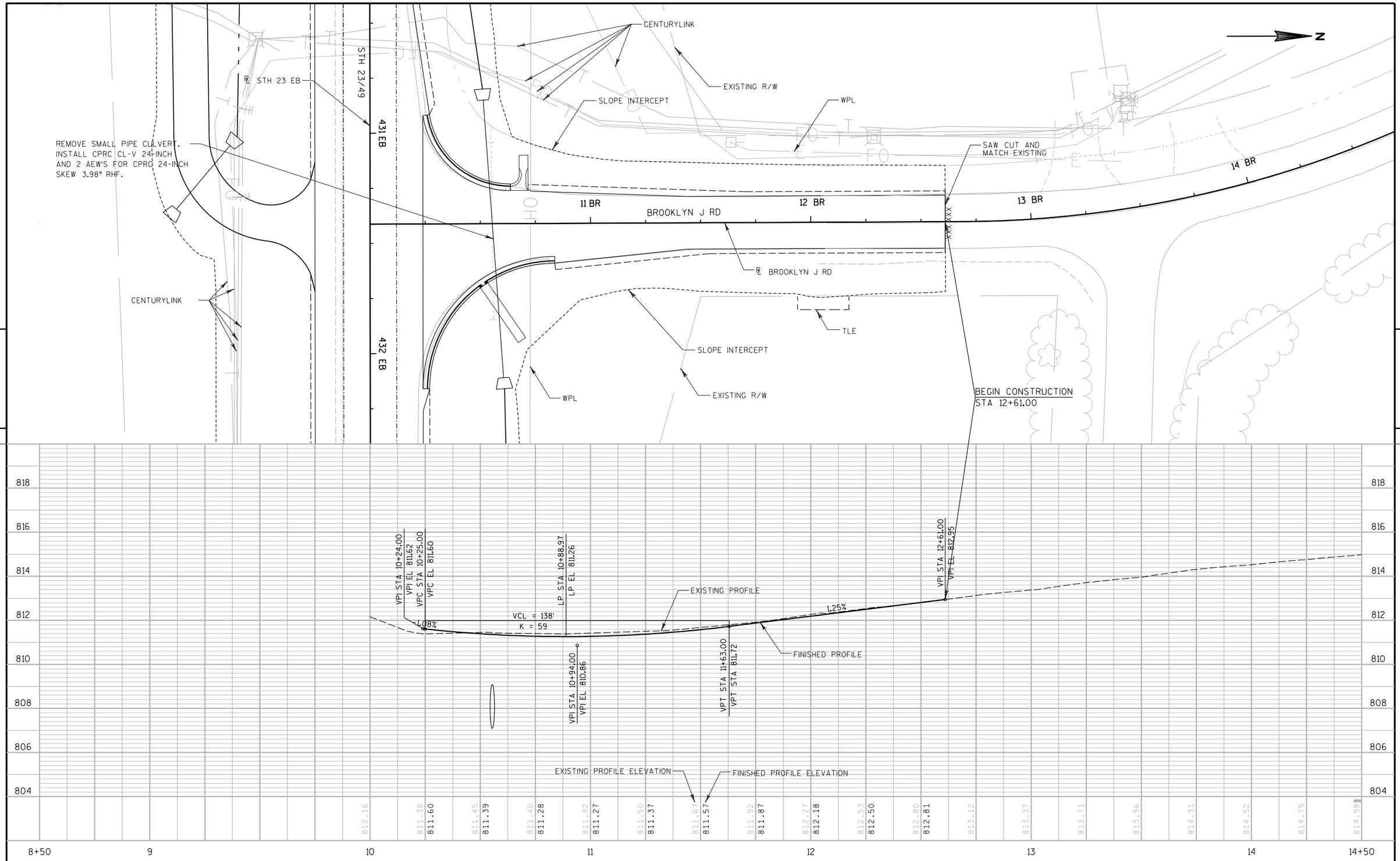
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE, EASTWIND ROAD	SHEET 331	E

FILE NAME : J:\Active\D4\STH 23\Main\050125_pp.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 40.0000 ' / in.

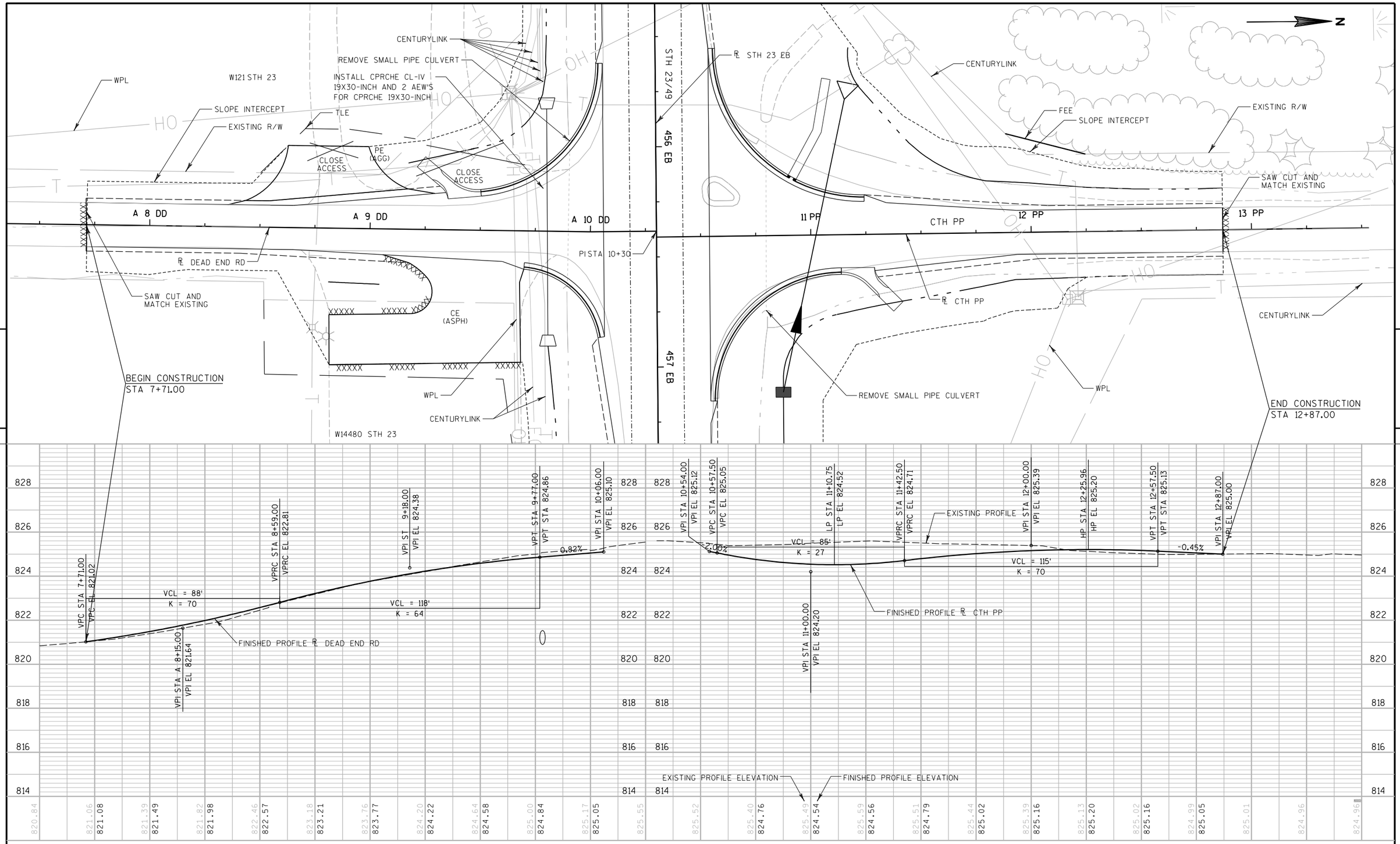
WISDOT/CADDS SHEET 30



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE, SUNNYSIDE ROAD	SHEET 332	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE, BROOKLYN J ROAD	SHEET 333	E



5

5

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE, CTH PP	SHEET 334	E

GLEN G.,MARIAN L., JEFF N., & DAN J. SOMMERFELDT

W1802

TLE

SLOPE INTERCEPT

FEE

REMOVE SMALL PIPE CULVERT

EXISTING R/W

WPL-GAS

WPL

℄ W JUNCTION CTH A

W. JUNCTION CTH A

16 N

17 N

18 N

CENTURYLINK

PE (AGG)

℄ DWY A

DWY A

1

2

CF (ASPH)

SAW CUT AND MATCH EXISTING

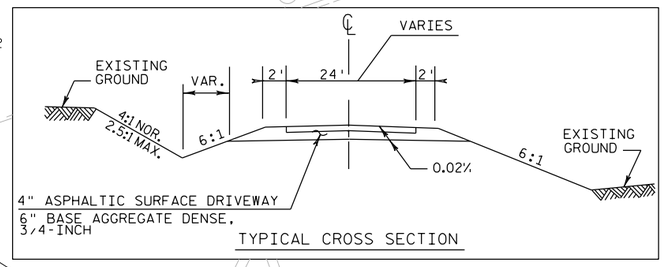
TLE

EXISTING R/W

END CONSTRUCTION
STA 2+67.10

WPL-GAS

CAUTION



TYPICAL CROSS SECTION

VPI STA 0+00.00
VPI EL 843.55

VPC STA 0+01.10
VPC EL 843.60

HP STA 0+11.97
HP EL 843.81

VPI STA 0+16.10
VPI EL 844.19

VPT STA 0+31.10
VPT STA 843.14

VPC STA 0+36.33
VPC EL 842.78

VCL = 30'
K = 3

VCL = 80'
K = 7

LP STA 0+85.33
LP EL 841.06

VPI STA 0+76.54
VPI EL 839.96

VPT STA 1+16.76
VPT STA 841.77

VPI STA 2+67.10
VPI EL 848.52

3.00%

2.00%

4.49%

EXISTING PROFILE

FINISHED PROFILE

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

836.78 843.55

837.18 841.95

841.02 841.22

843.05 843.26

846.14 845.51

847.78 847.75

850 848 846 844 842 840 838 836 835

-2 -1 0 1 2 3 4

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE: W CTH A DRIVEWAY	SHEET 335	E

221 EB
STH 23
℄ STH 23 EB
EXISTING R/W
WPL-GAS
SLOPE INTERCEPT
FEE
CAUTION
REMOVE SMALL PIPE CULVERT
CLOSE ACCESS
WPL-GAS
1 DWY B
℄ DWY B
TLE
SAW CUT AND MATCH EXISTING
HOLLAND MEAD AND JULIE GRIM
W1779
WPL
SLOPE INTERCEPT
W1767
ERVIN H. & CAROLINE BRIESE
WPL
CENTURYLINK
22 N
23 N
24 N
WPL-GAS
SLOPE INTERCEPT
END CONSTRUCTION
STA 2+21.42
NORTH ST
PE (ASPH)
℄ NORTH ST
N

℄
VARIES
EXISTING GROUND
VAR.
2'
16'
2'
4:1 NOR.
2.5:1 MAX.
6:1
6:1
0.02%
EXISTING GROUND
4" ASPHALTIC SURFACE DRIVEWAY
6" BASE AGGREGATE DENSE, 3/4-INCH
TYPICAL CROSS SECTION

VPI STA 00+-0.00
VPI EL 834.03
0.63%
VPC STA 0+02.98
VPC EL 834.05
VCL = 34'
K = 25
HP STA 0+17.68, HP EL 834.10
VPI STA 0+20.00, VPI EL 834.16
VPT STA 0+37.02
VPT STA 834.02
FINISHED PROFILE
-0.83%
EXISTING PROFILE
VPC STA 1+23.50
VPC EL 833.30
LP STA 1+44.46
LP EL 833.21
VCL = 75'
K = 25
VPI STA 1+61.00
VPI EL 832.99
VPI STA 1+98.50
VPT STA 835.79
2.14%
VPI STA 2+11.42
VPI EL 834.07
-2.00%
4.00%
VPI STA 2+16.42
VPI EL 833.97
VPI STA 2+20.92
VPI EL 833.79
EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION
834.03 / 834.03
832.64 / 833.91
831.81 / 833.49
830.78 / 833.22
832.07 / 833.82
840
838
836
834
832
830
828
826
825
-2
-1
0
1
2
3
4

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE: DRIVEWAY B	SHEET 336	E

FILE NAME : J:\Active\D4\STH 23\Main\050131_DW_pp.dgn
PLOT DATE : 7/31/2013
PLOT BY : fred.schunke
PLOT NAME :
PLOT SCALE : 40.0000 ' / in.
WISDOT/CADDS SHEET 30

SLOPE INTERCEPT

WETLAND BOUNDARY

℄ STH 23 EB

BROOKLYN J RD

DANIEL W. MURRAY
LYNETTE J. MURRAY

N

428 EB | 429 EB | 430 EB | 431 EB | 432 EB | 433 EB

STH 23/49

SLOPE INTERCEPT

CLOSE ACCESS

PE (ASPH)

2

WETLAND BOUNDARY

END CONSTRUCTION
STA 2+19.13

1

DWY C

CENTURYLINK

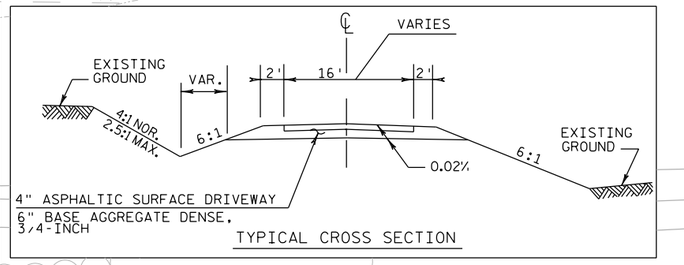
CENTURYLINK

℄ DWY C

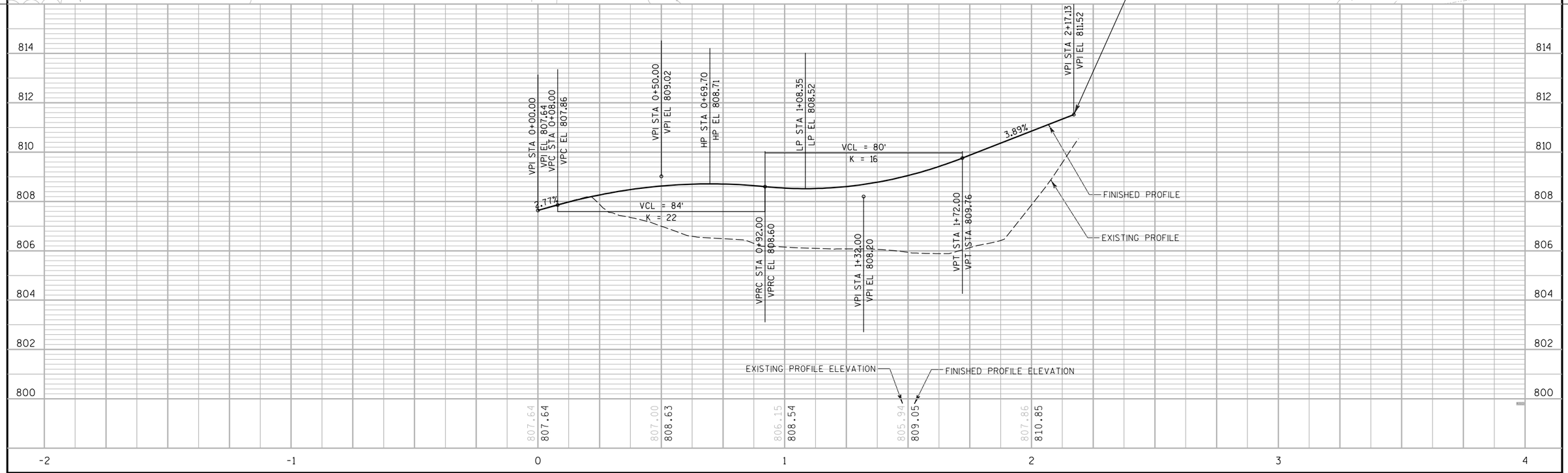
WETLAND BOUNDARY

BYRON & CINDY LEWIS

EXISTING R/W



TYPICAL CROSS SECTION



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	PLAN AND PROFILE: DRIVEWAY C	SHEET 337	E

HERITAGE VILLAGE MASTER OWNERS ASSOCIATION,
AN UNICORPORATED ASSOCIATION

EXISTING R/W

SLOPE INTERCEPT

REMOVE SMALL PIPE CULVERT.
INSTALL CPRC CL-V 30-INCH
AND 2 AEW'S FOR CPRC 30-INCH.

CENTURYLINK

℄ W. JUNCTION CTH A

CLOSE ACCESS

CE (ASPH)

W1802 CTH A

(C.T.H. A)

BM 20

℄ STH 23 WB

STH 23

SAW CUT AND MATCH EXISTING

℄ STH 23 EB

℄ SHARED USE PATH

SLOPE INTERCEPT

WPL - GAS

EXISTING R/W

FEE

℄ NORTH ST

REALIGNED DRIVEWAY

TLE

PE (ASPH)

CLOSE ACCESS

W1779 NORTH ST

HOLLAND MEAD
AND JULIE GRIM

WILLIAM THRALL

RUINS

BEGIN PROJECT 1430-08-86
STA 210+40.90
Y = 274,981.14
X = 565,712.60

END PROJECT 1430-08-86
STA 224+54.07

BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
20	221WB+17.94, 71.0'LT	CP 20 AL DOT CAP	835.81

VPI STA 210+40.90
VPI EL 834.60
VPC STA 210+47.50
VPC EL 834.56
LP STA 210+63.46
LP EL 834.51
VPI STA 210+85.00
VPI EL 834.33
VPT STA 211+22.50
VPT EL 835.17
VPC STA 212+04.98
VPC EL 837.01
VPI STA 213+87.48
VPI EL 841.09
HP STA 213+85.42
HP EL 839.03
VPT STA 215+69.98
VPT EL 836.92
VPC STA 217+10.43
VPC EL 833.71
VPI STA 217+85.43
VPI EL 832.00
LP STA 217+93.84
LP EL 832.76
VPT STA 218+60.43
VPT EL 833.37
VPC STA 219+00.00
VPC EL 834.09
VPI STA 219+50.00
VPI EL 835.00
HP STA 219+67.89
HP EL 834.71
VPT STA 220+00.00
VPT EL 834.57
VPC STA 220+50.00
VPC EL 834.14
LP STA 220+81.05
LP EL 834.00
VPI STA 221+00.00
VPI EL 833.71
VPT STA 221+50.00
VPT EL 834.66
VPC STA 222+60.00
VPC EL 836.77
HP STA 223+18.18
HP EL 837.33
VPI STA 223+35.00
VPI EL 838.21
VPRC STA 224+10.00
VPRC EL 835.94
VPI STA 224+30.00
VPI EL 835.34
VPT STA 224+50.00
VPT EL 835.06
VPI STA 224+54.07
VPI EL 835.00

VCL = 75'
K = 26
-0.60%
2.23%
VCL = 365'
K = 81
-2.28%
VCL = 150'
K = 37
1.82%
VCL = 100'
K = 37
-0.86%
VCL = 100'
K = 36
1.91%
VCL = 150'
K = 30
VCL = 40'
K = 25

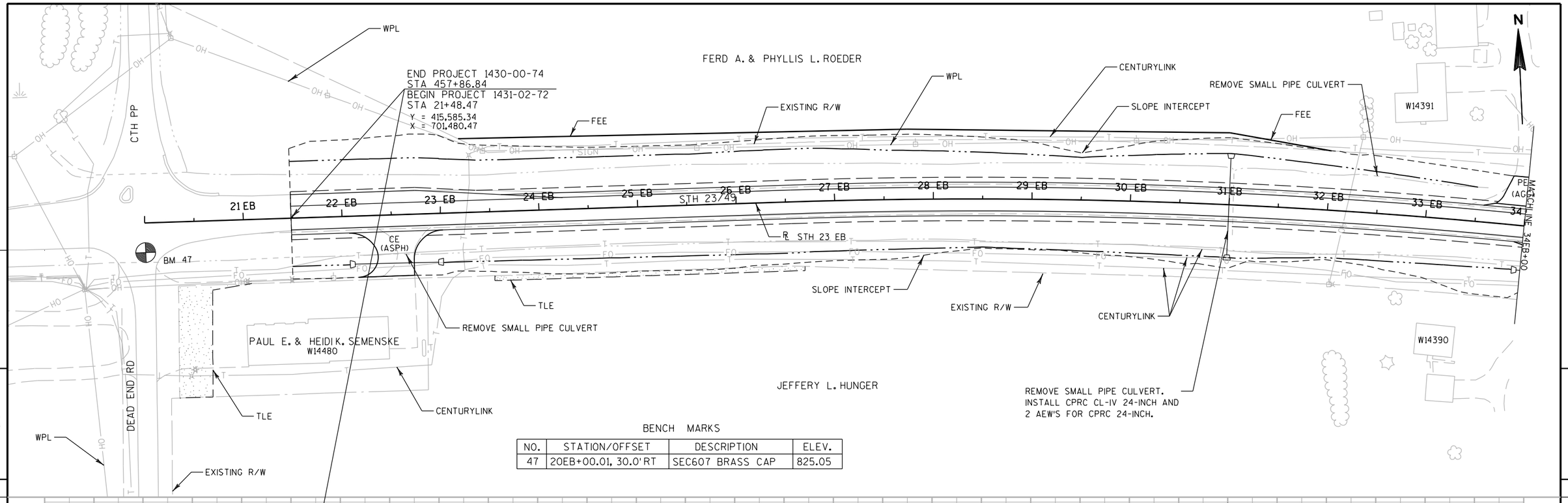
℄ FINISHED PROFILE ℄ SHARED USE PATH

EXISTING PROFILE

EXISTING PROFILE ELEVATION

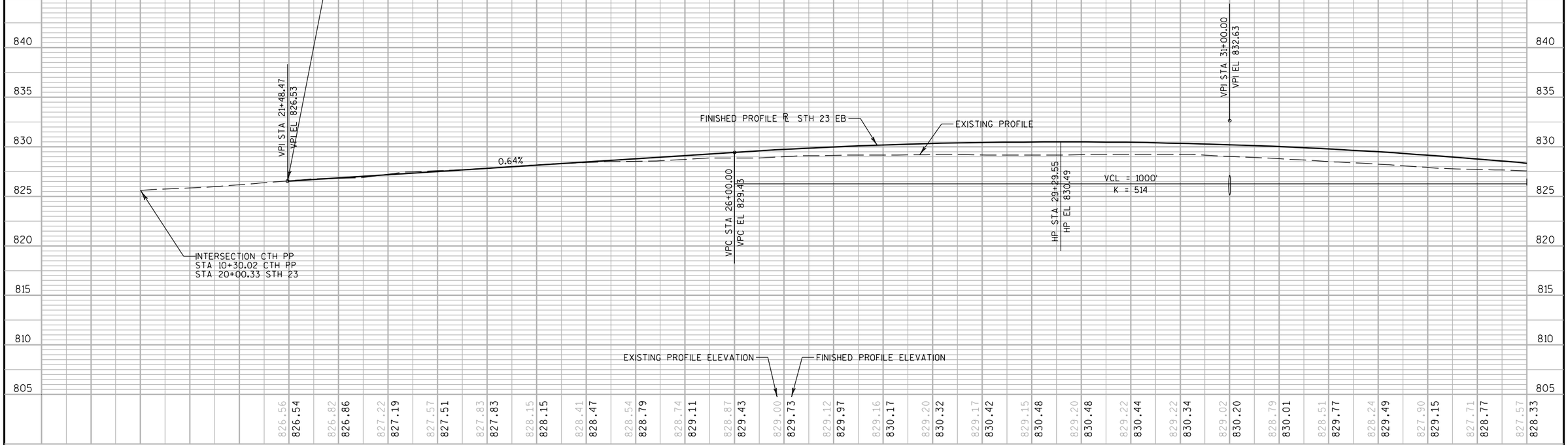
FINISHED PROFILE ELEVATION

| | | |

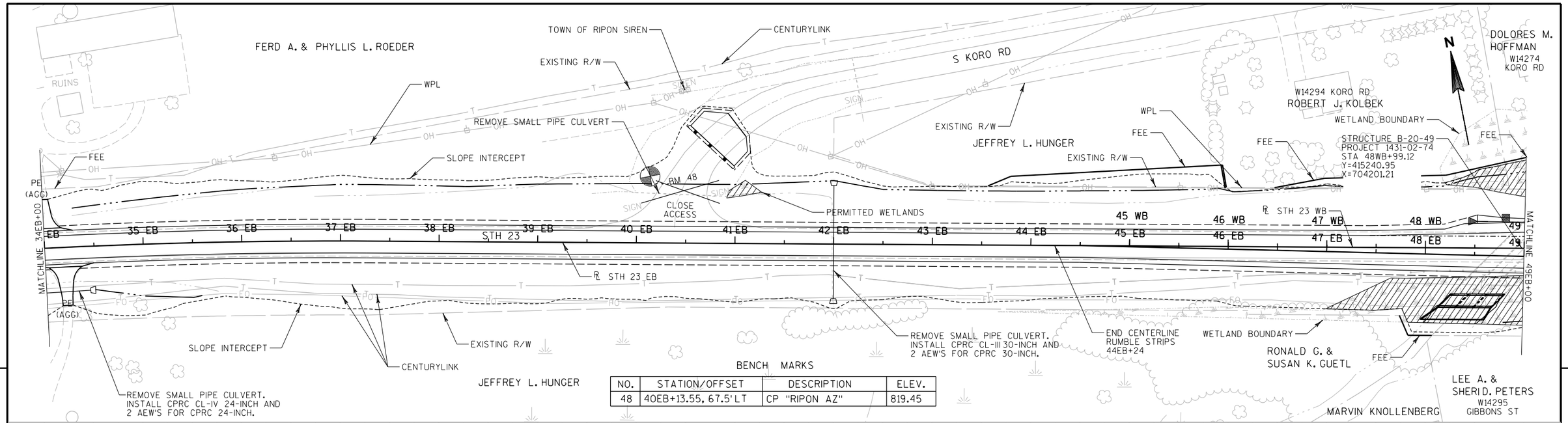


BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
47	20EB+00.01, 30.0'RT	SEC607 BRASS CAP	825.05

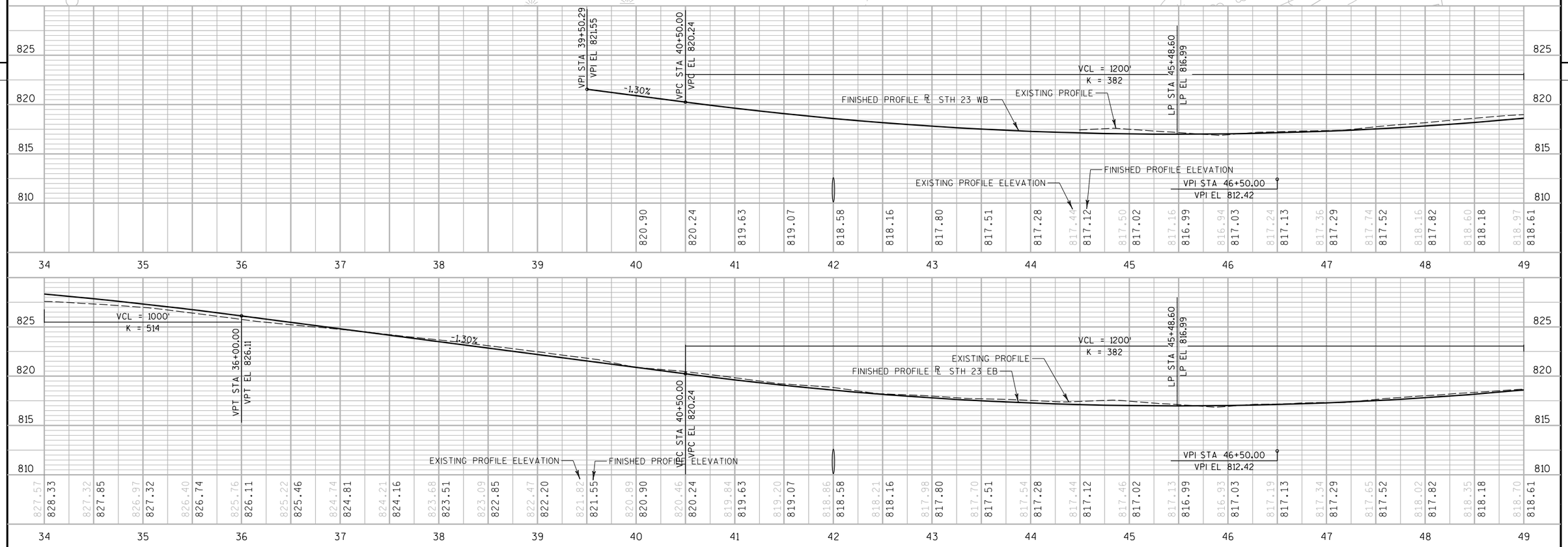


PROJECT NO:1431-02-72	HWY: STH 23	COUNTY:FOND DU LAC	PLAN AND PROFILE	SHEET 339	E

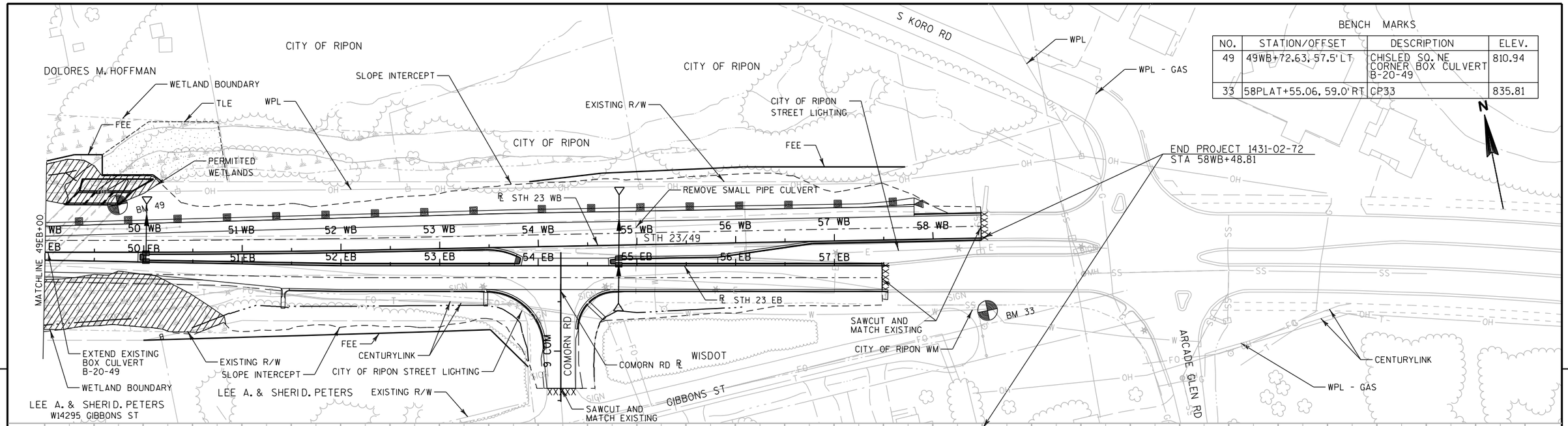


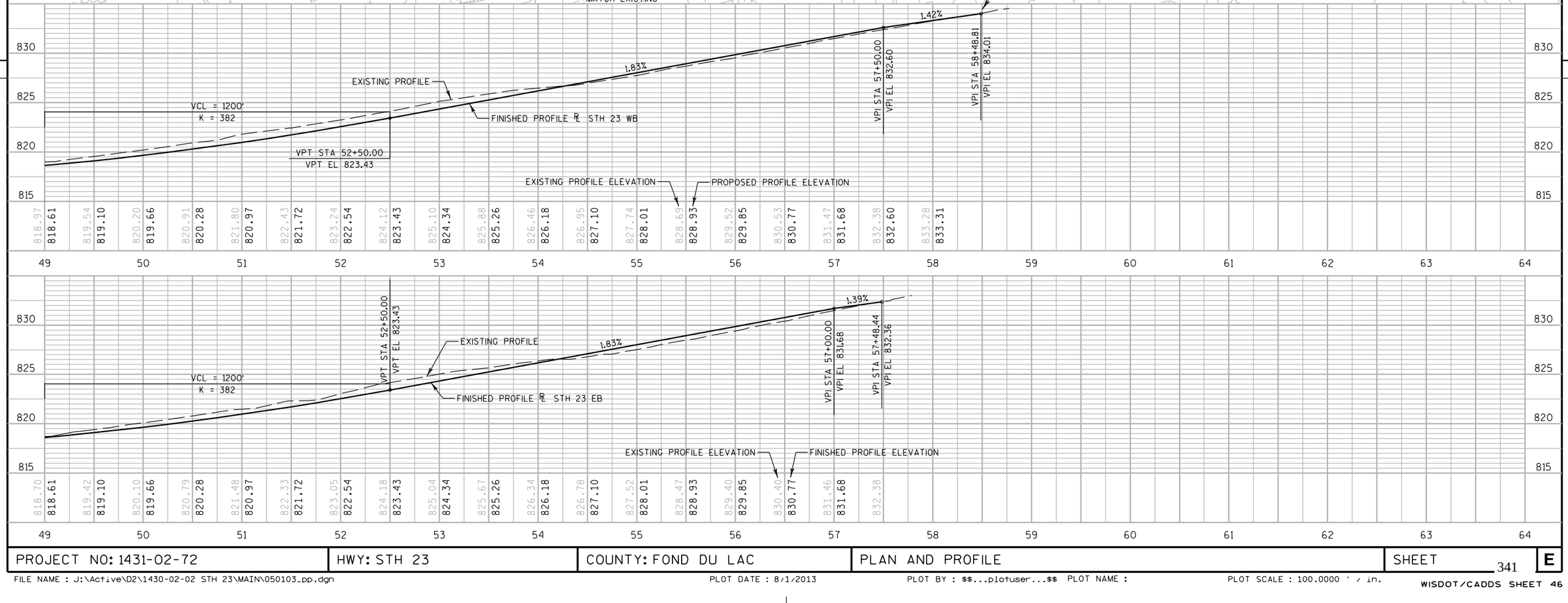
BENCH MARKS

NO.	STATION/OFFSET	DESCRIPTION	ELEV.
48	40EB+13.55, 67.5' LT	CP "RIPON AZ"	819.45



PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	PLAN AND PROFILE	SHEET 340	E





PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	PLAN AND PROFILE	SHEET 341	E

EXISTING R/W
FEE
SLOPE INTERCEPT
CENTURYLINK
℄ COMMON RD.
GIBBONS ST
℄ STH 23 WB
℄ STH 23 EB
FEE
SLOPE INTERCEPT
WPL
REMOVE SMALL PIPE CULVERT
9 COM
COMORN RD
SAW CUT AND MATCH EXISTING
CITY OF RIPON STREET LIGHTING
SLOPE INTERCEPT
CITY OF RIPON WM
BEGIN CONSTRUCTION
STA 8+62.29
54 EB
54
54 WB
55 EB
55
55 WB
STH 23/49
N

VPI STA 8+62.29
VPI EL 829.56
VPC STA 8+63.27
VPC EL 829.53
-0.31%
VPI STA 8+80.00
VPI EL 829.15
VPT STA 8+96.73
VPT STA 828.35
VCL = 33'
K = 14
FINISHED PROFILE
EXISTING PROFILE
VPC STA 9+29.89
VPC EL 826.78
-4.14%
VCL = 30'
K = 6
LP STA 9+58.31
LP EL 826.11
-0.30%
VPI STA 9+62.31
VPI EL 826.12
VPI STA 9+45.00
VPI EL 826.07
VPT STA 9+60.11
VPT STA 826.11

EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

829.61	829.05	829.05	828.28	828.20	827.40	827.25	826.48	826.39	826.19	826.11	826.51						

834 832 830 828 826 824 822 820 818

6 7 8 9 10 11 12

PROJECT NO:1431-02-72	HWY: STH 23	COUNTY:FOND DU LAC	PLAN AND PROFILE - COMORN ROAD	SHEET 342	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\050104_pp.dgn PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 30

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
129	12+36.37	SE CORNER FIRST STEP (621)	806.68
150	13+24.51	TOP OF HYDRANT	808.16
84	14+54.33	SECTION CORNER	810.65

STA 14+53.92
STA 43+00.48 N
STA 15+05.56'LT
42+00
NORTH ST
R 40
R/L LAWSON DRIVE
STA 15+13.02 43'RT
15+00
4' METER BOX
43+00
PC STA 43+11.54
R 26.7'
PT STA 43+92.93
44+00
45+00
STA 13+65.05 54.29'LT
DELTA = 52°12'08"
D = 19°05'55"
T = 146.98'
L = 273.33'
R = 300.00'
SE = NONE
R 40'
PC STA 12+99.89
STA 12+55.7 -12+72.8 16.7'LT
CONCRETE DRIVEWAY
STA 12+50
BEGIN CONSTRUCTION
SAW CUT REOD
STA 12+50 -13+80 19.6'LT
REMOVE AND REPLACE SIDEWALK
TYPE 2 RAMP
STA 12+50 14.1'LT
START CURB & CUTTER
CONC.
BM 129
BM 84
BM 150
14+00
11+00
NORTH LAWSON DRIVE 12+00
13+00
CONC.
CONC.
R 40'
DELTA = 40°35'05"
D = 43°20'
R = 132.39'
T = 98.00'
SE = NONE
ASPH.
ASPH.
STA 13+88.2 -14+11.5 17'RT
CONCRETE DRIVEWAY
ASPHALTIC SURFACE DRIVEWAY
BEGIN PROJECT
STA 12+50.00
Y=277,234.05
X=569,518.43
STA 12+50 -12+87.2 14.6'RT
CONCRETE DRIVEWAY
ASPHALTIC SURFACE DRIVEWAY
SAW CUT REOD
STA 12+90.4 -12+95.4 14.6'RT
TAPER ASPHALT
EX. R/W
STA 13+88.5 50.7'RT -14+03.5 57.2'RT
SAW CUT REOD
STA 14+19.02 54.54'RT
R/L NORTH STREET
STA 45+13
END CONSTRUCTION

5 5

280'VC
K=53.18
FINISHED PROFILE
PI 14+35
(808.16)
BEGIN PROJECT
STA 12+50
PC 12+95
805.73
+1.73%
EXISTING PROFILE

EXISTING PROFILE ELEVATION FINISHED PROFILE ELEVATION

804.95	804.95	805.66	805.82	806.60	806.97	807.64	808.59	810.78	810.68	813.40	813.24	817.21

837 829 821 813 805 797 789 781

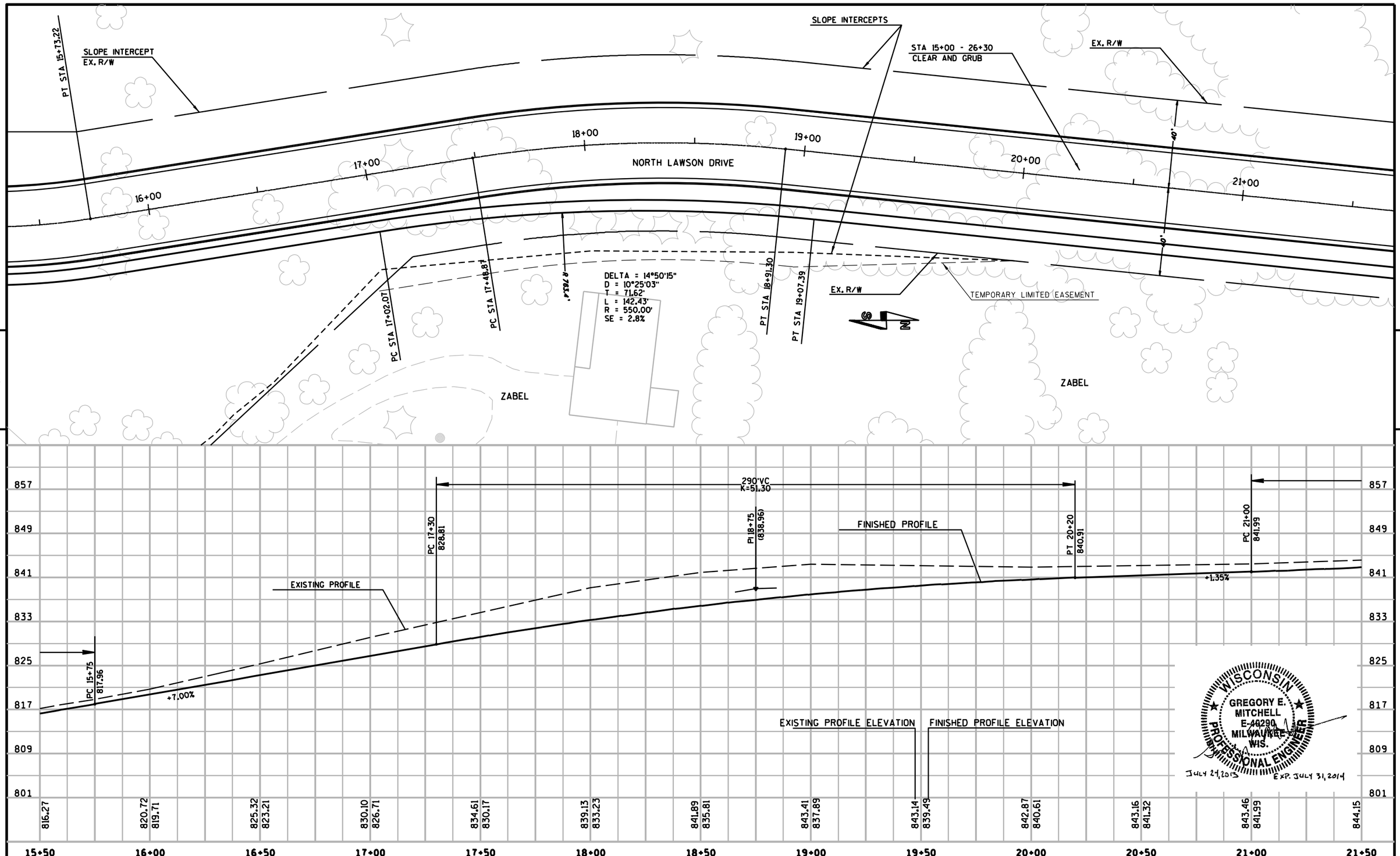
11+50 12+00 12+50 13+00 13+50 14+00 14+50 15+00 15+50

WISCONSIN
GREGORY E. MITCHELL
E-46290
MILWAUKEE WIS.
PROFESSIONAL ENGINEER
JULY 24, 2013
EXP. JULY 31, 2014

PROJECT NO:1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	PLAN & PROFILE - NORTH LAWSON DRIVE	SHEET E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-PP01.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=40'

WISDOT/CADDS SHEET 30



WISCONSIN
GREGORY E. MITCHELL
E-46290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER
JULY 24, 2013
EXP. JULY 31, 2014

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	PLAN & PROFILE - NORTH LAWSON DRIVE	SHEET 344 E

FILE NAME : S:\TOWNS\GREENLAKE\NLAWSONDRIVE\DGN\N-LAWSON-PP02 PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 30

DELTA = 5°47'44"
D = 7°9'43"
T = 40.50'
L = 80.92'
R = 800.00'
SE = 2.5%

PC STA 22+19.08

PT STA 23+00

WALLENFANG

SLOPE INTERCEPTS
EX. R/W

40'

40'

22+00

23+00

24+00

25+00

26+00

NORTH LAWSON DRIVE

END PROJECT 1430-00-84
STA 25+92.60

STH 23

SIGN

ZABEL

5

5

873
865
857
849
841
833
825
817

200'VC
K=88.90

PI 22+00
(843.34)

PC 23+00
846.94

FINISHED PROFILE

EXISTING PROFILE

+3.60%

PC 24+44.8
852.15

PI 24+94.8
(853.95)

PT 25+44.8
854.95

100'VC
K=62.50

+2.0%

PROP STH 23
GRADE 857.60

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

842.81	844.84	846.75	848.65	849.95	851.25	852.73	854.21	855.84	857.46	858.22		
	843.90	845.28	846.94	848.73	850.53	852.34	853.89	855.06	856.06	857.06		
21+50	22+00	22+50	23+00	23+50	24+00	24+50	25+00	25+50	26+00	26+50	27+00	

WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER

JULY 24, 2013

EXP. JULY 31, 2014

PROJECT NO:1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	PLAN & PROFILE - NORTH LAWSON DRIVE	SHEET	E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-PP03.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=40'

WISDOT/CADDS SHEET 30

R/L NORTH STREET

STA 40+75 -41+75 15'LT
TAPER ASPHALT

STA 42+41 -42+46 15'RT
TAPER ASPHALT

SLOPE INTERCEPT
EX. R/W

R/L LAWSON DRIVE

SLOPE INTERCEPT

EX. R/W

STA 44+50 -45+13 15'LT
TAPER ASPHALT

STA 43+92.9 -43+97.8 15'LT
ASPHALT FLUME

STA 40+75
BEGIN CONSTRUCTION
SAW CUT REOD

XXXXX TO BE DEAD END
NO ACCESS TO STH 23

STA 45+13
END CONSTRUCTION
SAW CUT REOD

STA 40+75 -42+09.5
GRAVEL DRIVEWAY RESTORATION

STA 40+75 -41+75 15'RT
TAPER ASPHALT

STA 42+15.8 -42+20.8 15'RT
TAPER ASPHALT

UTILITY POLE RELOCATED
BY OTHERS

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
129	12+36.37	SE CORNER FIRST STEP (621)	806.68
150	13+24.51	TOP OF HYDRANT	808.16
84	14+54.33	SECTION CORNER	810.65

NORTH ST

PC STA 43+11.54

BM 840

CONC.
DELTA = 47°35'05"
D = 58°27'54"
T = 43.20'
L = 81.39'
R = 98.00'
SE = NONE

STA 44+38.8 - 44+63.2 15'RT
ASPHALTIC SURFACE DRIVEWAY
SAW CUT REOD

STA 44+32.1 -44+38.3 17.5'RT
TAPER ASPHALT

STA 43+33.6 - 43+50.7 17.5'RT
CONCRETE DRIVEWAY
ASPHALTIC SURFACE DRIVEWAY

STA 43+66.2 47'RT - 43+76.7 43'RT
REMOVE ASPHALT DRIVEWAY
RESORATION REOD

STA 43+66.2 47'RT - 43+76.7 43'RT
SAW CUT REOD

STA 43+42.5 53'RT - 43+52.8 46'RT

250'VC
K=37.72

EXISTING PROFILE

FINISHED PROFILE

-2.75%

+3.88%

R/L LAWSON DR

BEGIN CONSTRUCTION
STA 40+75
815.72

PC 42+00
812.29

PI 43+25
(808.85)

PT 44+50
813.70

END CONSTRUCTION
816.22

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

815.27	814.31	813.26	812.15	810.93	810.08	811.79	813.68	815.61
815.03	813.65	812.29	811.24	810.86	811.15	812.09	813.70	815.64

820 816 812 808 804 800 796 792

40+00 41+00 42+00 43+00 44+00 45+00 46+00

WISCONSIN
GREGORY E. MITCHELL
E-46290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER
JULY 24, 2013
EXP. JULY 31, 2014

PROJECT NO:1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	PLAN & PROFILE - NORTH LAWSON DRIVE - NORTH STREET	SHEET E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-PP04.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=40'

WISDOT/CADDS SHEET 30

Standard Detail Drawing ListStandard Detail Drawing List

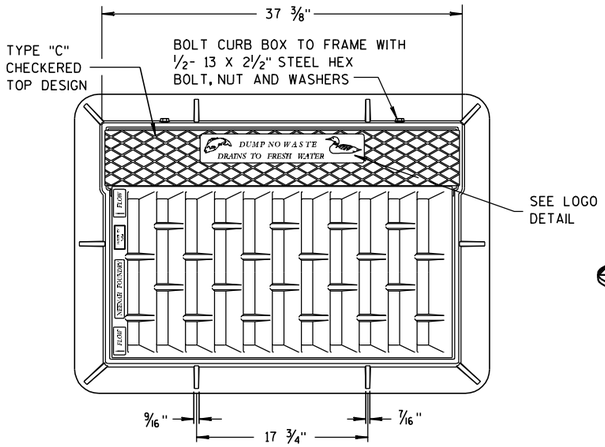
08A05-18A	INLET COVERS TYPE A, H, A-S, & H-S
08A05-18B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-18C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-18D	INLET COVER, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M
08A09-01	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D03-06	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
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
08D15-04A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-07	CONDUIT
09B04-10	PULL BOX
09C02-06	CONCRETE BASES, TYPES 1, 2 & 5
09C03-03	TRANSFORMER/PEDESTAL BASES
09C06-05	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-03	CONCRETE BASE TYPE 10
09C12-03A	CONCRETE BASE TYPE 13
09C12-03B	CONCRETE BASE TYPE 13
09D01-04	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-02	SIGNAL OR LIGHTING CONTROL CABINET
09E01-12C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-12D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-12G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-04	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E08-04A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-04C	TYPE 12 POLE 35'-55' MONOTUBE ARM
09E08-04E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F15-03B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
13A10-01A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13B02-06	CONCRETE PAVEMENT APPROACH SLAB
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

6

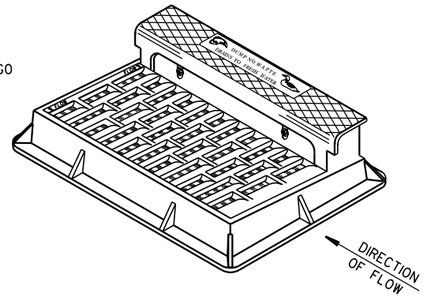
Standard Detail Drawing ListStandard Detail Drawing List

14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-01A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-01B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-01C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-01	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)
15C08-16C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-16D	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C21-05	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C26-02	END-OF-ROADWAY SIGNING
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15D06-02	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D12-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D20-01	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

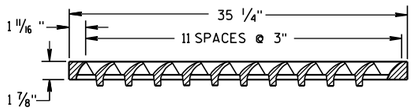
6

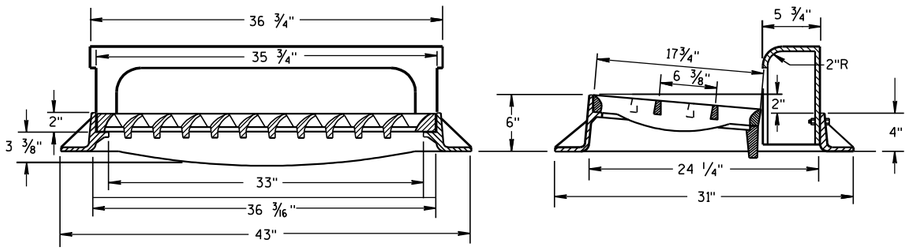


NOTE:
GRATE IS REVERSIBLE.



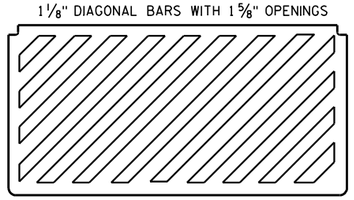
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"





TYPE "H"

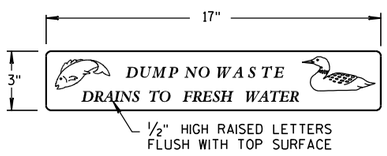
(APPROXIMATE WEIGHT 441 LBS.)
FRAME..... 181 LBS.
GRATE..... 146 LBS.
CURB BOX..... 114 LBS.



SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL

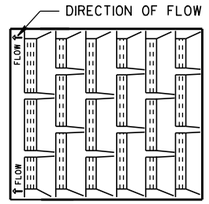
GENERAL NOTES

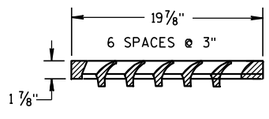
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

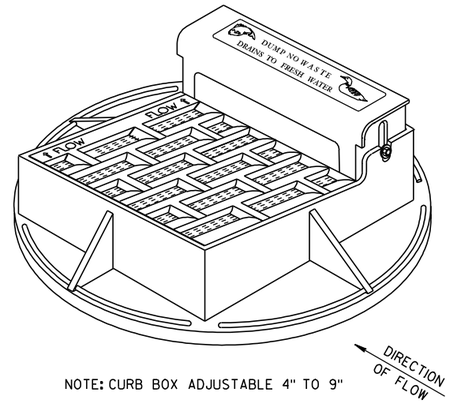
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

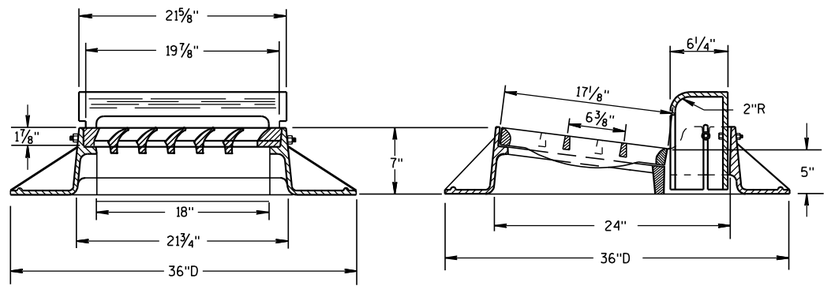
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





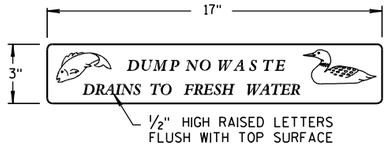


NOTE: CURB BOX ADJUSTABLE 4" TO 9"



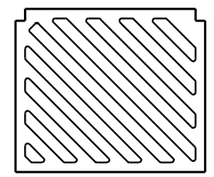
TYPE "A"

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



LOGO DETAIL

NOTE:
GRATE IS REVERSIBLE.



SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8"
GRATE..... 84 LBS.

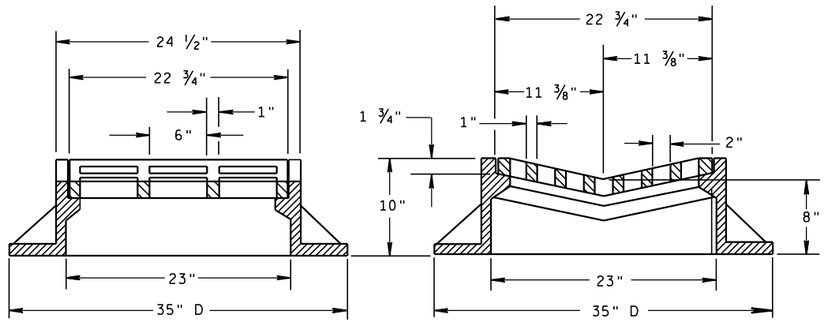
(NOTED AS TYPE A-S ON DRAINAGE TABLE)

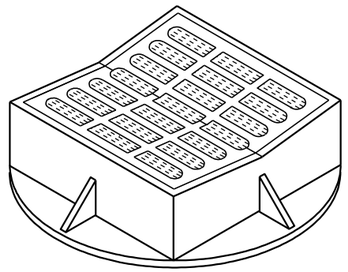
INLET COVERS
TYPE A, H, A-S, & H-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 8 A 5-18a

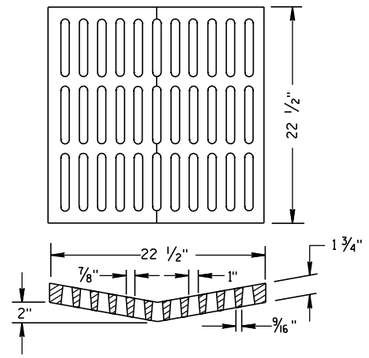




TYPE "B"

(APPROXIMATE WEIGHT 405 LBS.)

FRAME..... 294 LBS.
GRATE..... 111 LBS.

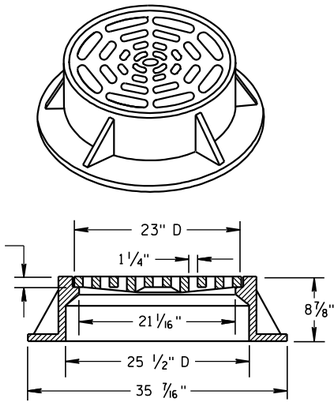


ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 134 LBS.)

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

(APPROXIMATE WEIGHT 259 LBS.)

FRAME..... 152 LBS.
GRATE..... 107 LBS.

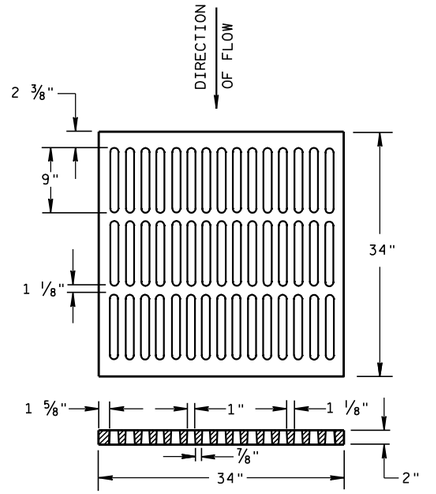
GENERAL NOTES

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

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

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

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

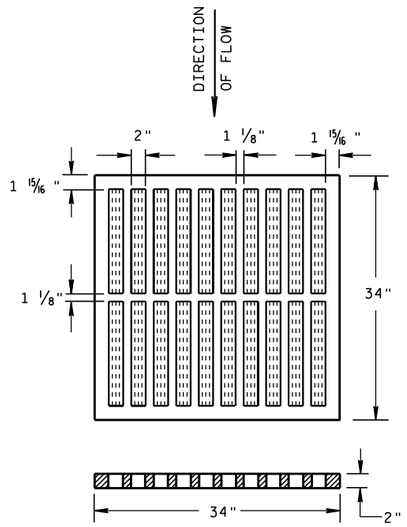


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 329 LBS.)

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

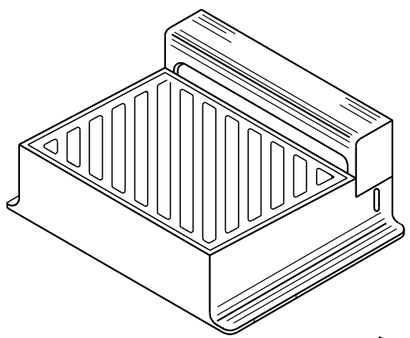


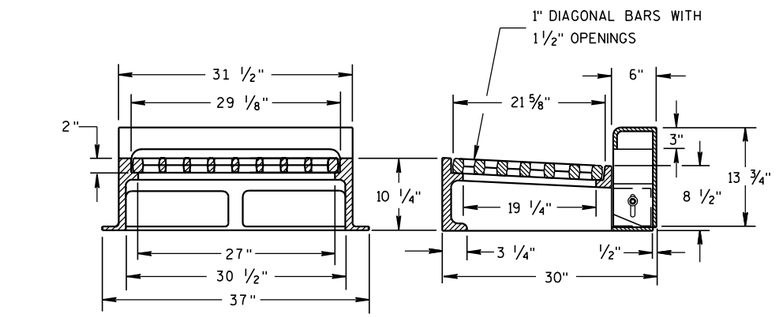
TYPE "MS"

(APPROXIMATE GRATE WEIGHT 268 LBS.)

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE





NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

DIRECTION OF FLOW

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

TYPE "WM"

(APPROXIMATE WEIGHT 648 LBS.)

FRAME..... 355 LBS.
GRATE..... 156 LBS.
CURB BOX..... 137 LBS.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012 DATE

/S/ Jerry H. Zaas
ROADWAY STANDARDS ENGINEER

350 ENT

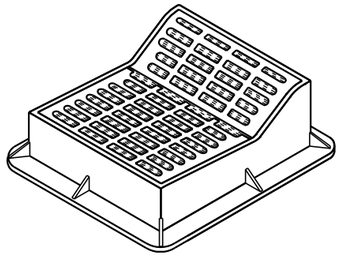
FHWA

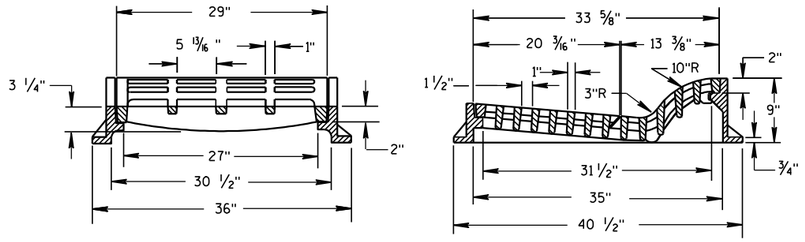
6

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

6

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



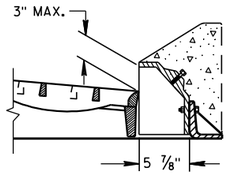


TYPE "F"

(APPROXIMATE WEIGHT 644 LBS.)

FRAME.....302 LBS.
GRATE.....160 LBS.
GRATE.....182 LBS.

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



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

(APPROXIMATE WEIGHT CURB BOX 68 LBS.)

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

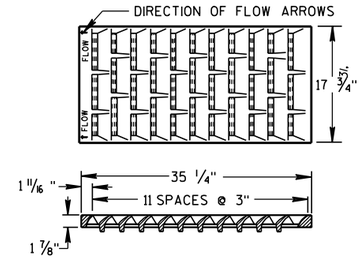
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

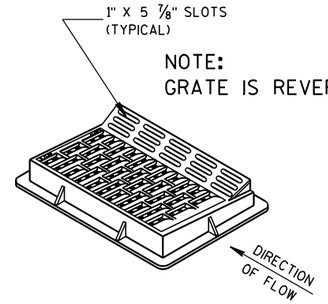
GENERAL NOTES

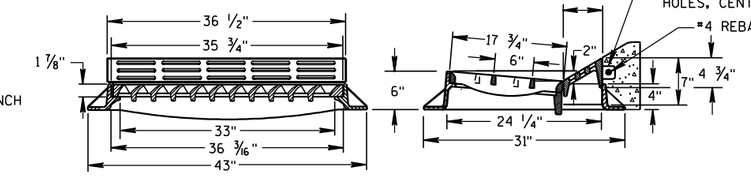
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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





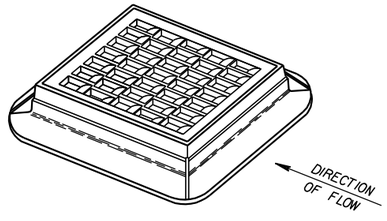


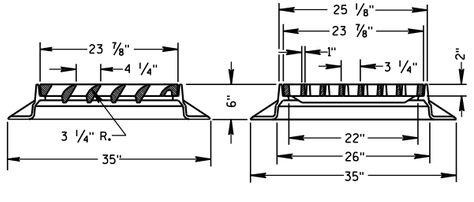
TYPE "HM"

(APPROXIMATE WEIGHT 414 LBS.)
FRAME..... 181 LBS.
GRATE..... 159 LBS.
CURB BOX..... 74 LBS.

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

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

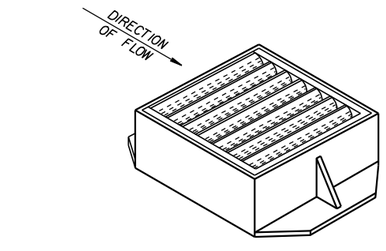


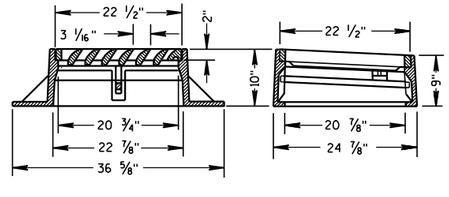


TYPE "S"

(APPROXIMATE WEIGHT 333 LBS.)

FRAME.....164 LBS.
GRATE..... 169 LBS.

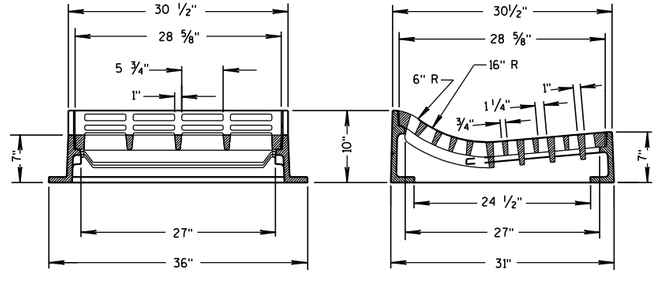




TYPE "V"

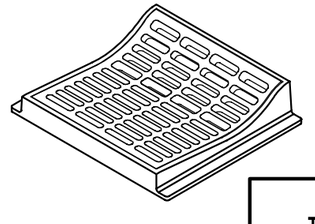
(APPROXIMATE WEIGHT 410 LBS.)

FRAME..... 269 LBS.
GRATE..... 136 LBS.
SAFETY BAR..... 5 LBS.



TYPE "T"

(APPROXIMATE WEIGHT 530 LBS.)
FRAME.....270 LBS.
GRATE.....260 LBS.
USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

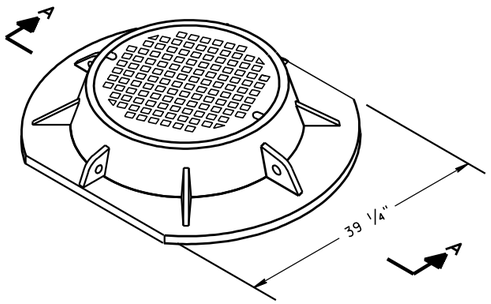
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

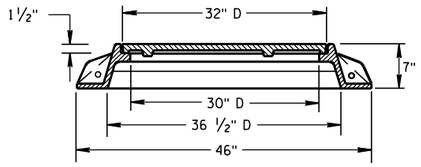
6

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

6

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



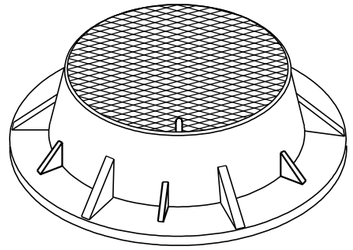


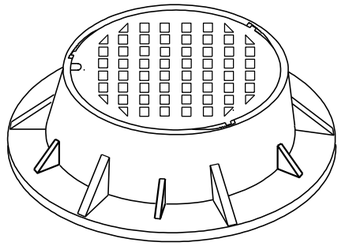
SECTION A-A

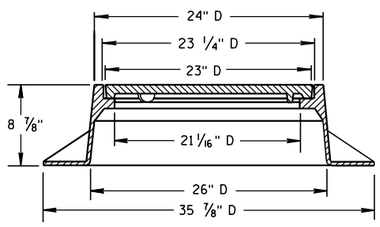
TYPE "K"

(APPROXIMATE WEIGHT 439 LBS.)

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



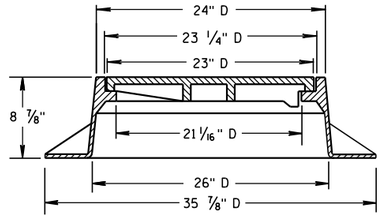




TYPE "J"

(APPROXIMATE WEIGHT 267 LBS.)

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



TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 267 LBS.)

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

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

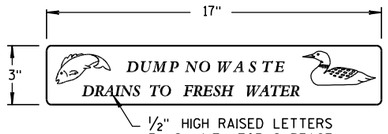
GENERAL NOTES

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

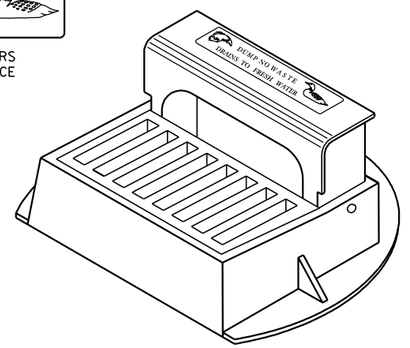
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

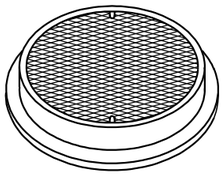
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

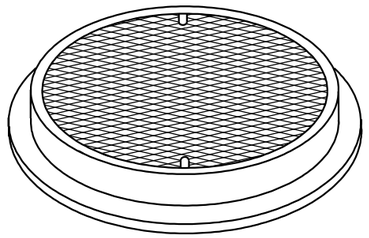
THE ACTUAL WEIGHT OF COVERS MAY VARY WITH 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

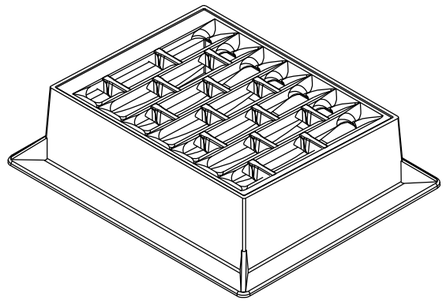


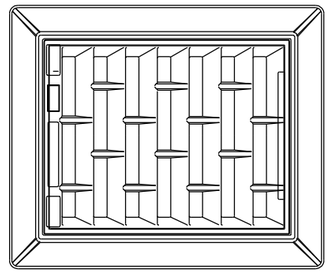
LOGO DETAIL

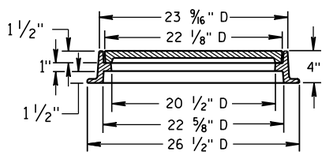








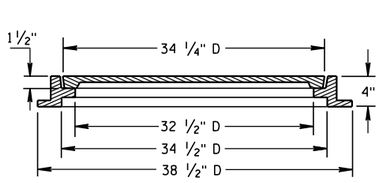




TYPE "L"

(APPROXIMATE WEIGHT 158 LBS.)

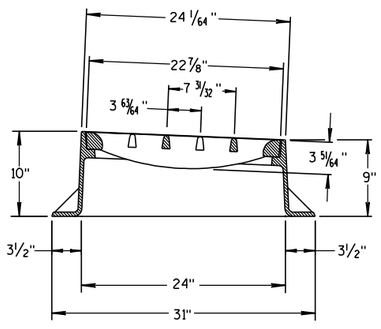
FRAME.....81 LBS.
LID.....77 LBS.

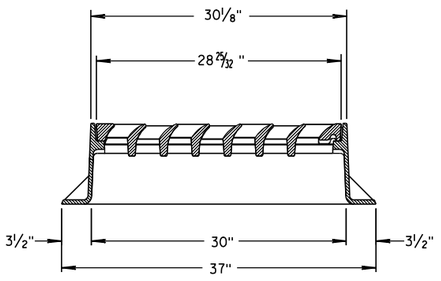


TYPE "M"

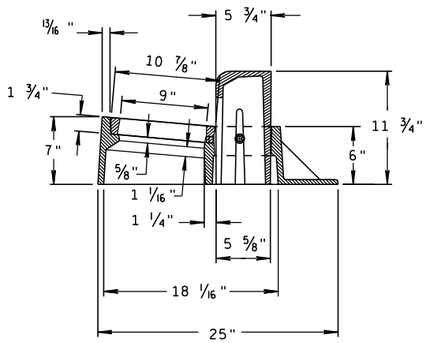
(APPROXIMATE WEIGHT 377 LBS.)

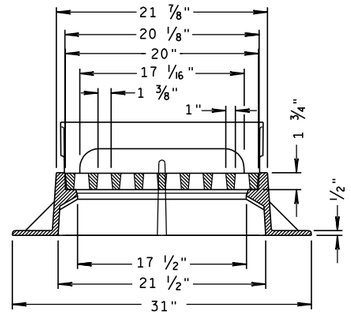
FRAME..... 125 LBS.
LID..... 252 LBS.





INLET COVER TYPE "BW"





INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 344 LBS.)

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

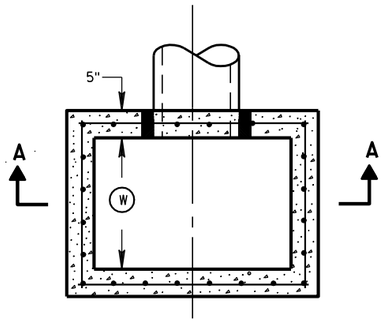
NT

6

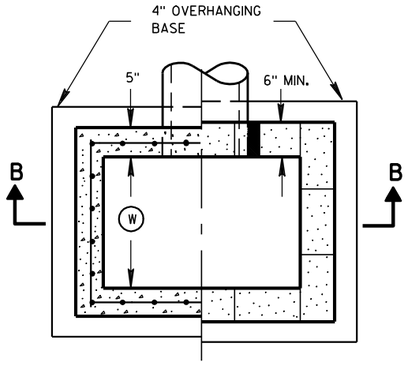
S.D.D. 8 A 5-18d

6

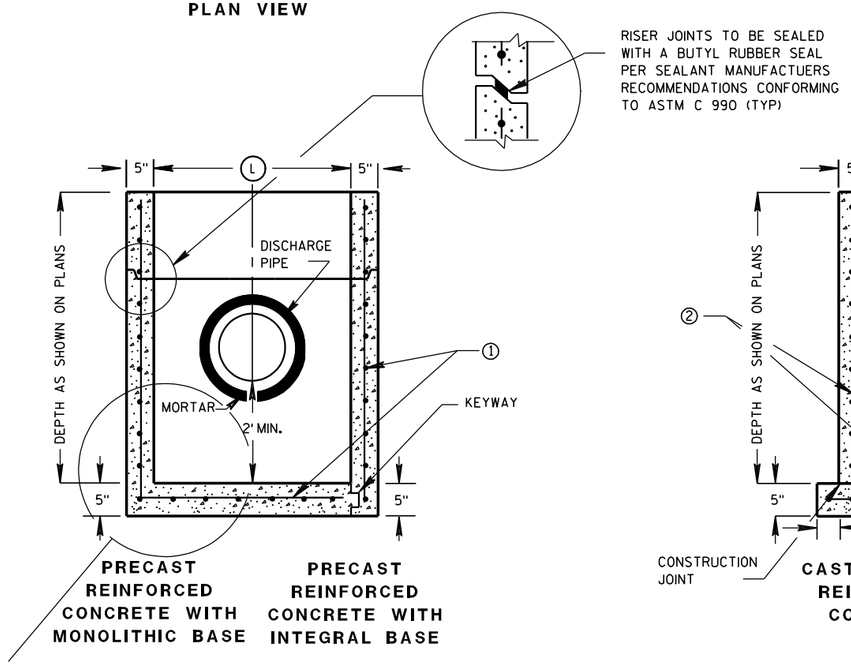
S.D.D. 8 A 5-18d



PLAN VIEW



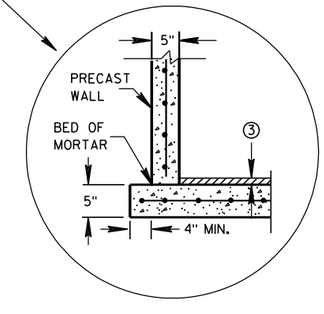
PLAN VIEW



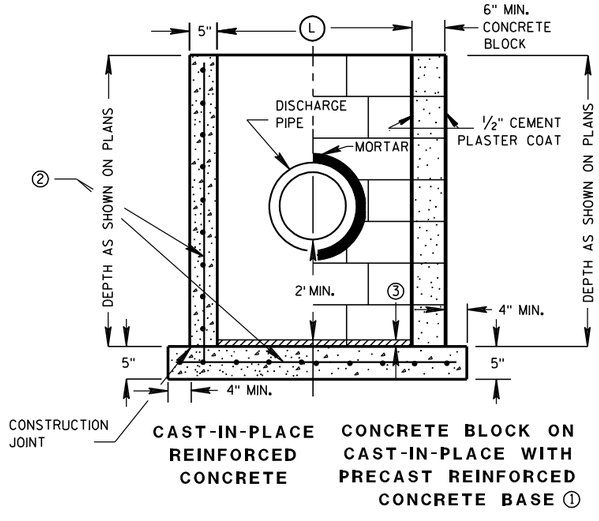
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

SECTION A-A



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION



CAST-IN-PLACE REINFORCED CONCRETE

CONCRETE BLOCK ON CAST-IN-PLACE WITH PRECAST REINFORCED CONCRETE BASE ①

SECTION B-B

GENERAL NOTES

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

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

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

ALL PRECAST CATCH BASIN 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 SEPERATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

① FOR PRECAST CATCH BASINS 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.

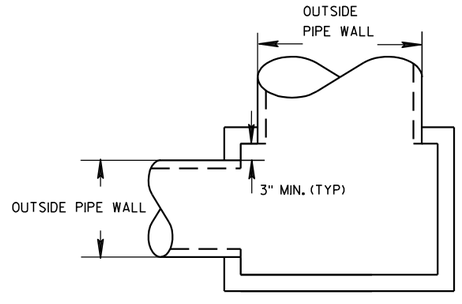
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

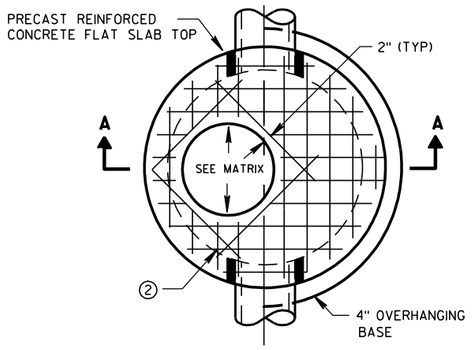
353

6

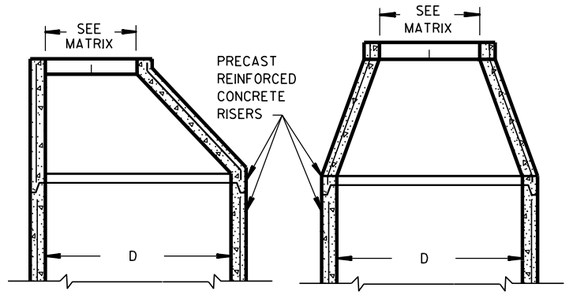
S.D.D. 8 A 9-1

6

S.D.D. 8 A 9-1

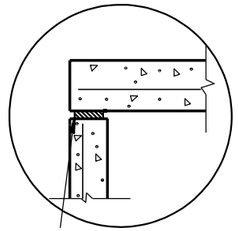


PLAN VIEW CIRCULAR OPENING

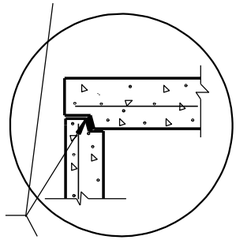


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

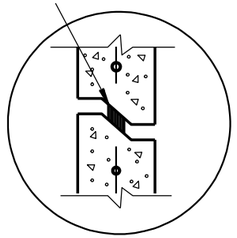


TOP WITH PLAIN END JOINT



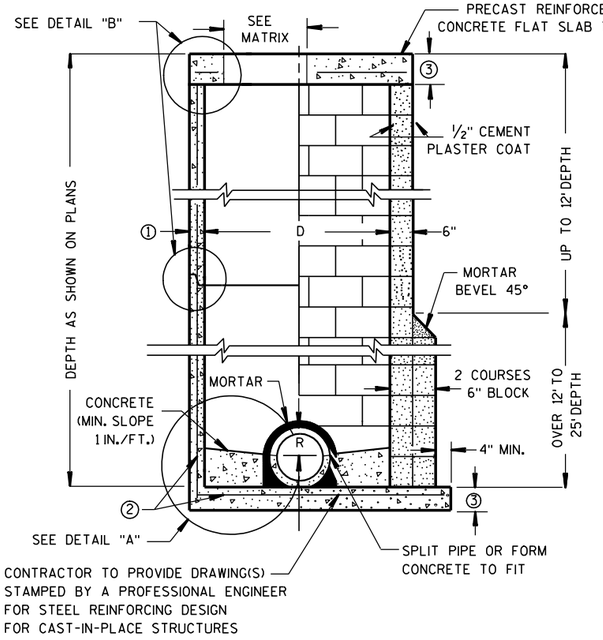
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



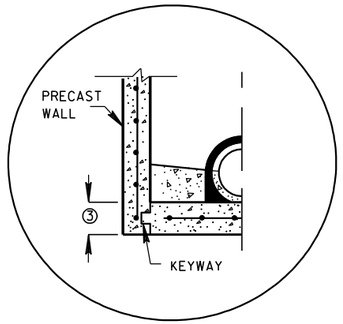
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

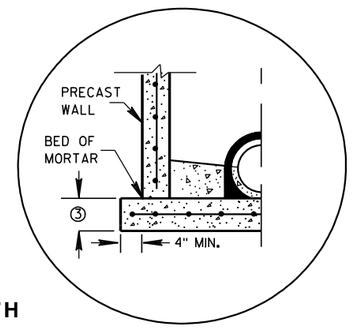


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

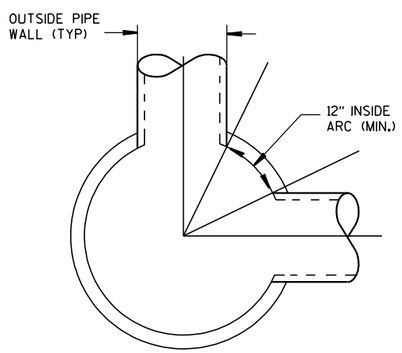


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

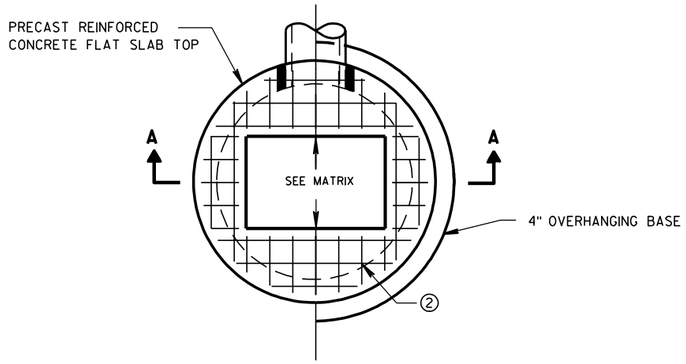
APPROVED

6/5/2012
DATE

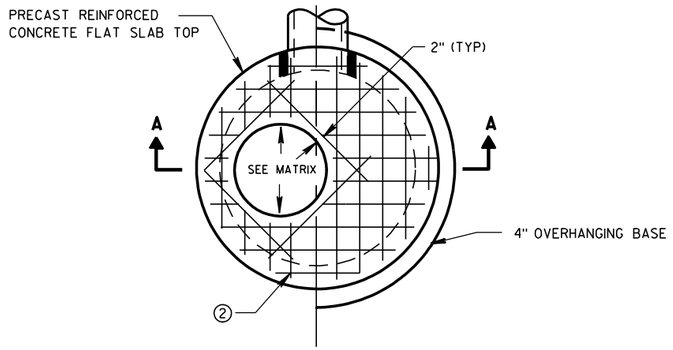
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

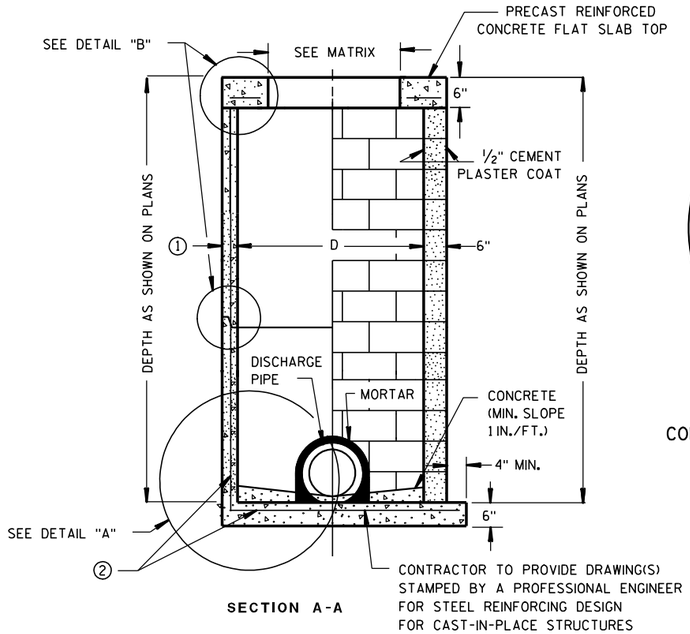
6
S.D.D. 8 B 9-1



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

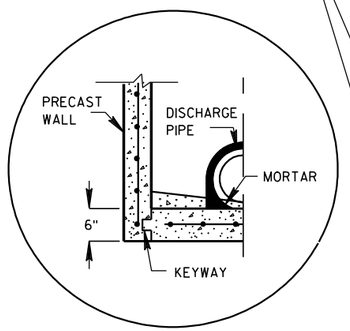


SECTION A-A

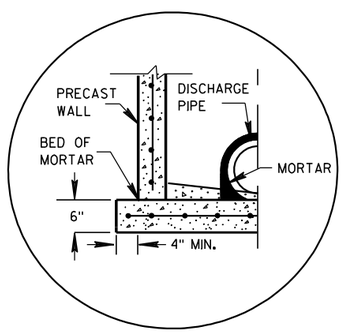
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

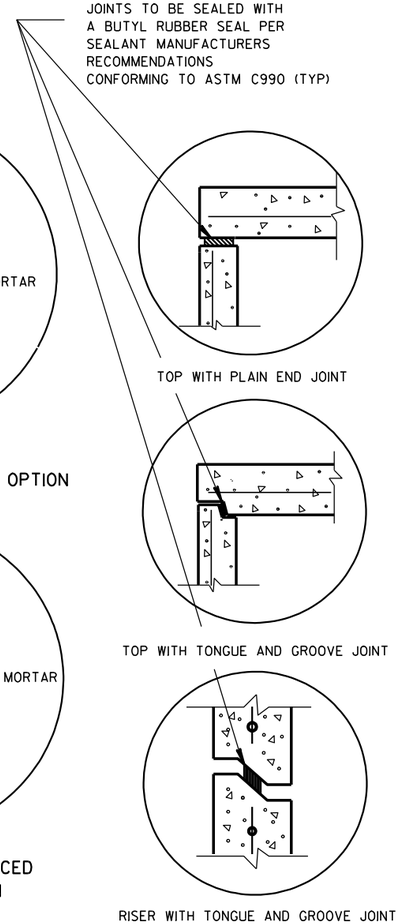


PRECAST REINFORCED
CONCRETE WITH INTEGRAL BASE OPTION



SEPERATE PRECAST REINFORCED
CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

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

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

ALL 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.

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 SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

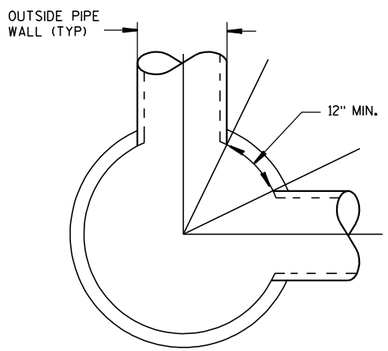
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

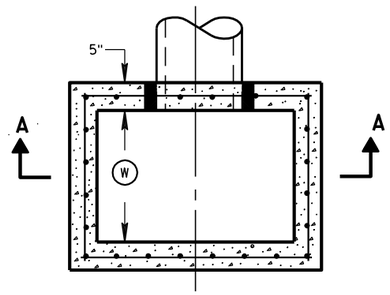
INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

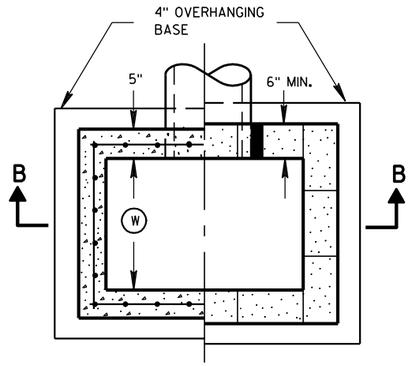
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

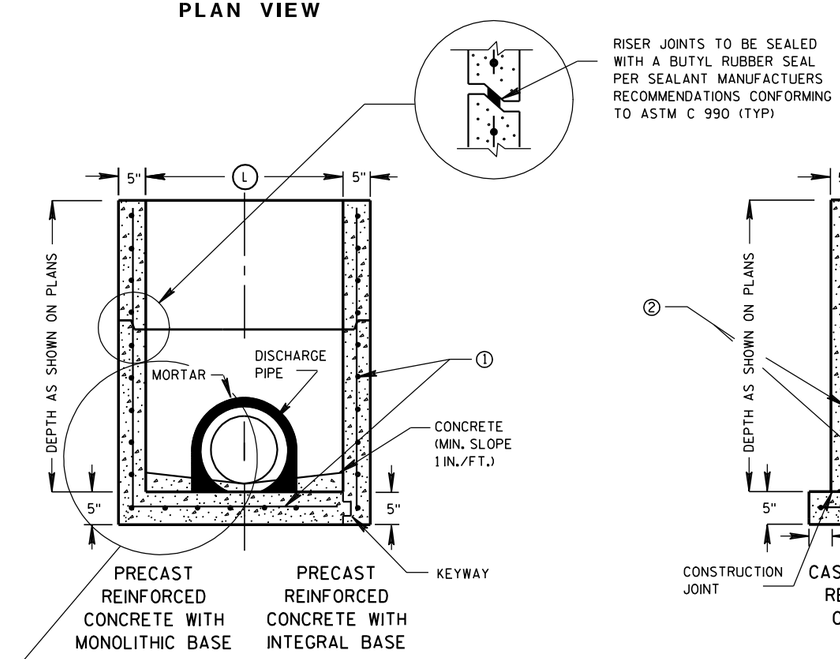
6
S.D.D. 8 C 6-1



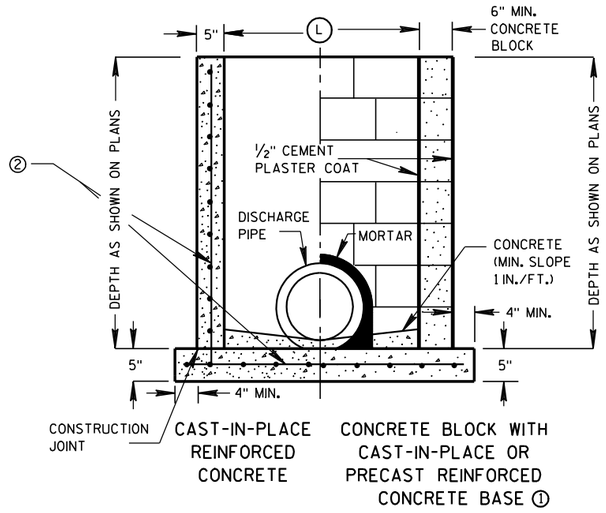
PLAN VIEW



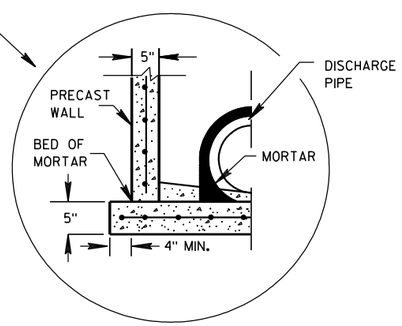
PLAN VIEW



SECTION A-A



SECTION B-B



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

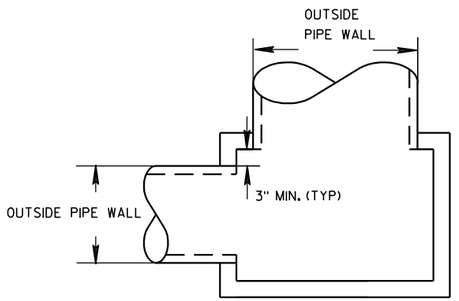
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



DETAIL "A"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

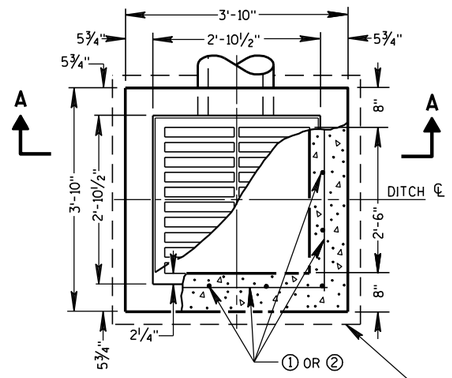
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS D 356 ENGINEER
IT
FHWA

6

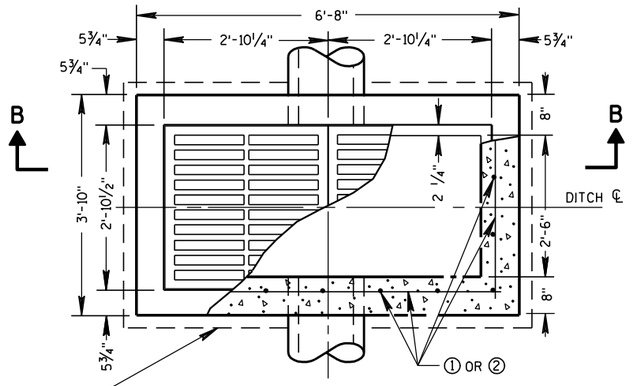
S.D.D. 8 C 7-1

6

S.D.D. 8 C 7-1

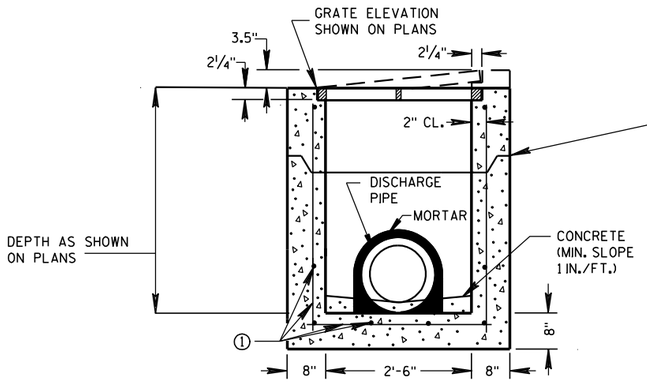


PLAN VIEW

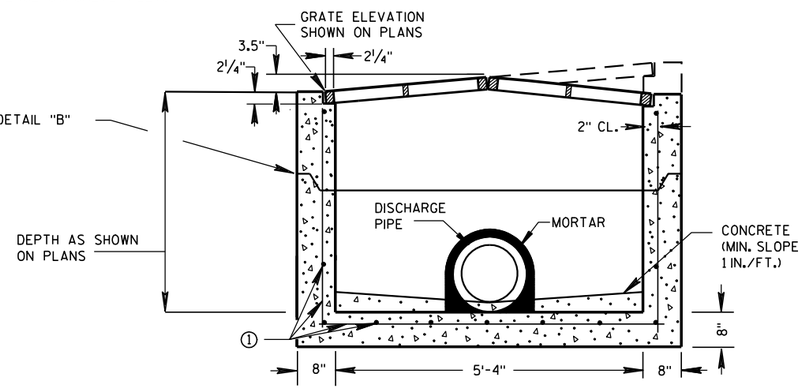


PLAN VIEW

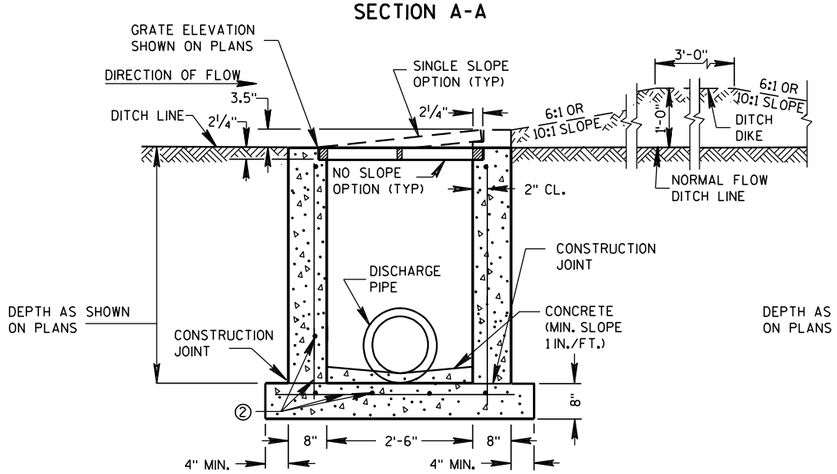
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



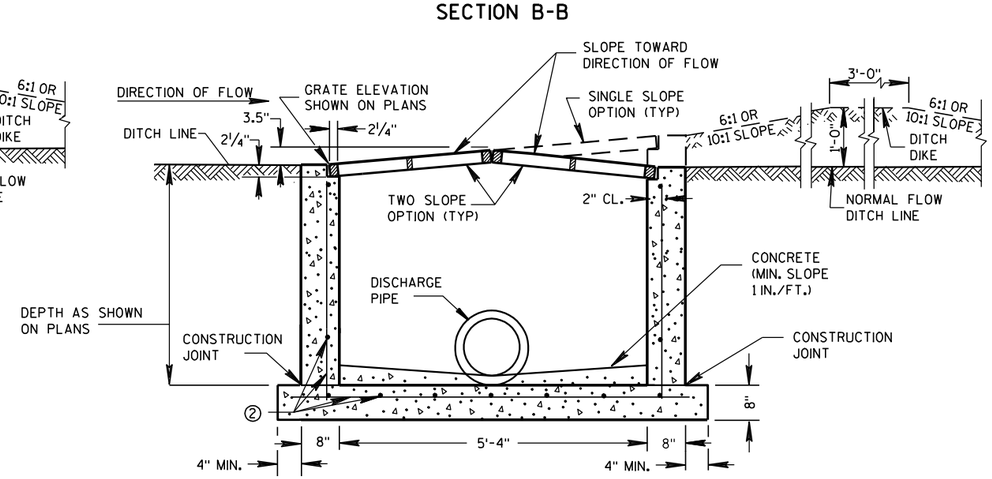
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

GENERAL NOTES

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

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

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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.

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

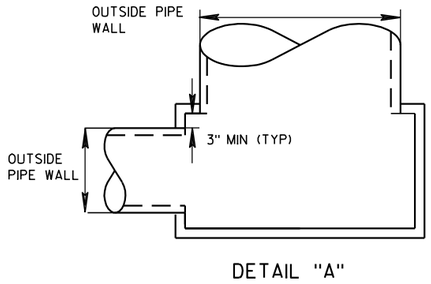
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

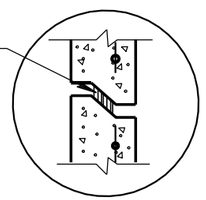
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

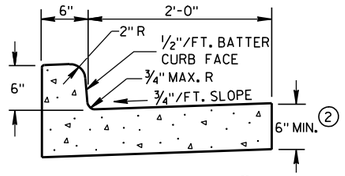
INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

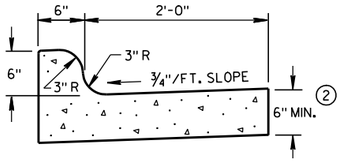
INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

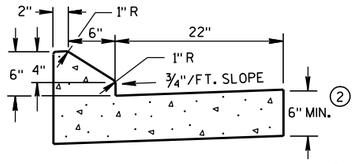
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



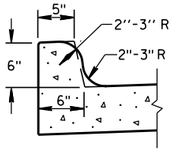
TYPES A & D (1)



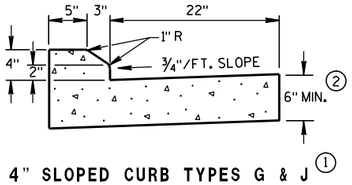
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

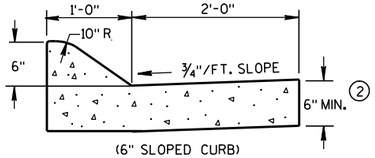


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

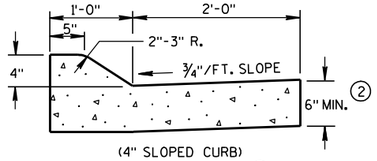


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

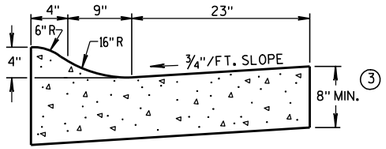


(6" SLOPED CURB)



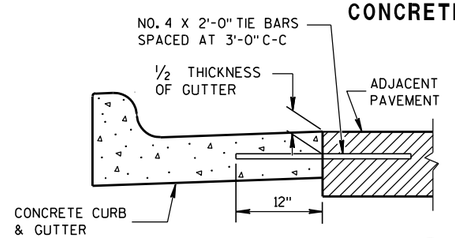
(4" SLOPED CURB)

TYPES A & D (1)

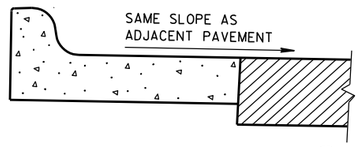


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION (1)



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

GENERAL NOTES

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

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

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

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

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

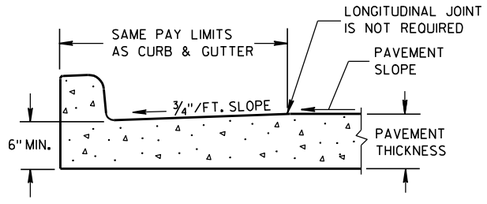
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

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

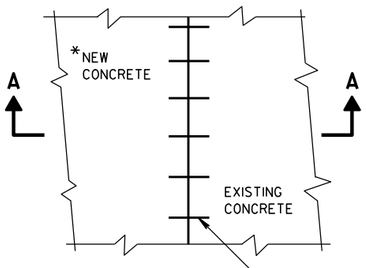
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

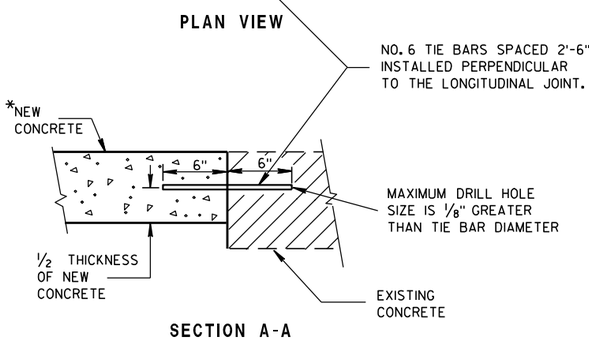


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



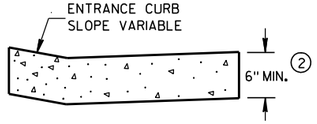
PLAN VIEW

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

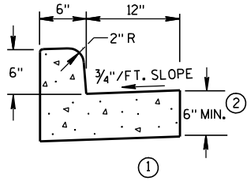


SECTION A-A

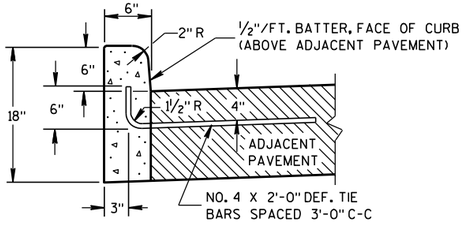
TIE BARS DRILLED INTO EXISTING PAVEMENT



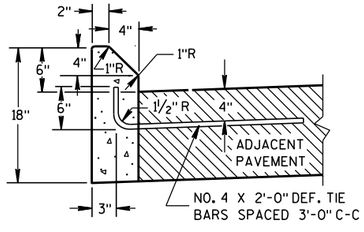
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



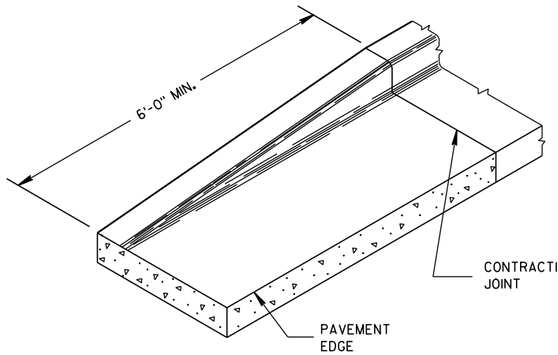
(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES A & D



(1)
TYPES G & J



END SECTION CURB & GUTTER

CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

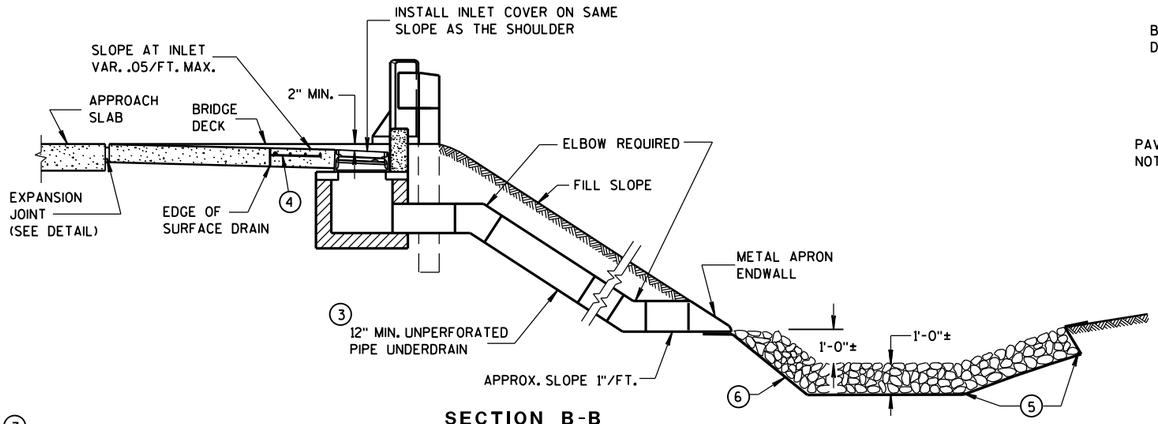
APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
358
FHWA
ENT

6

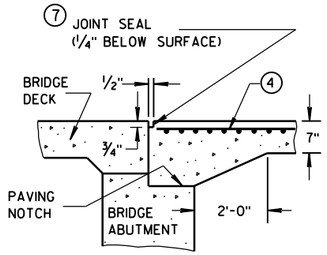
S.D.D. 8 D 1-17

6

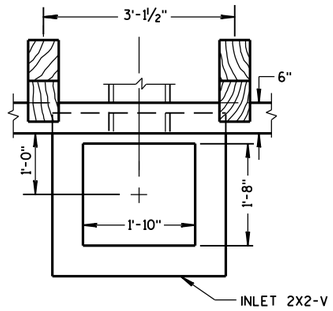
S.D.D. 8 D 1-17



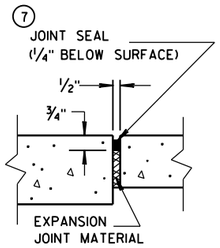
SECTION B-B



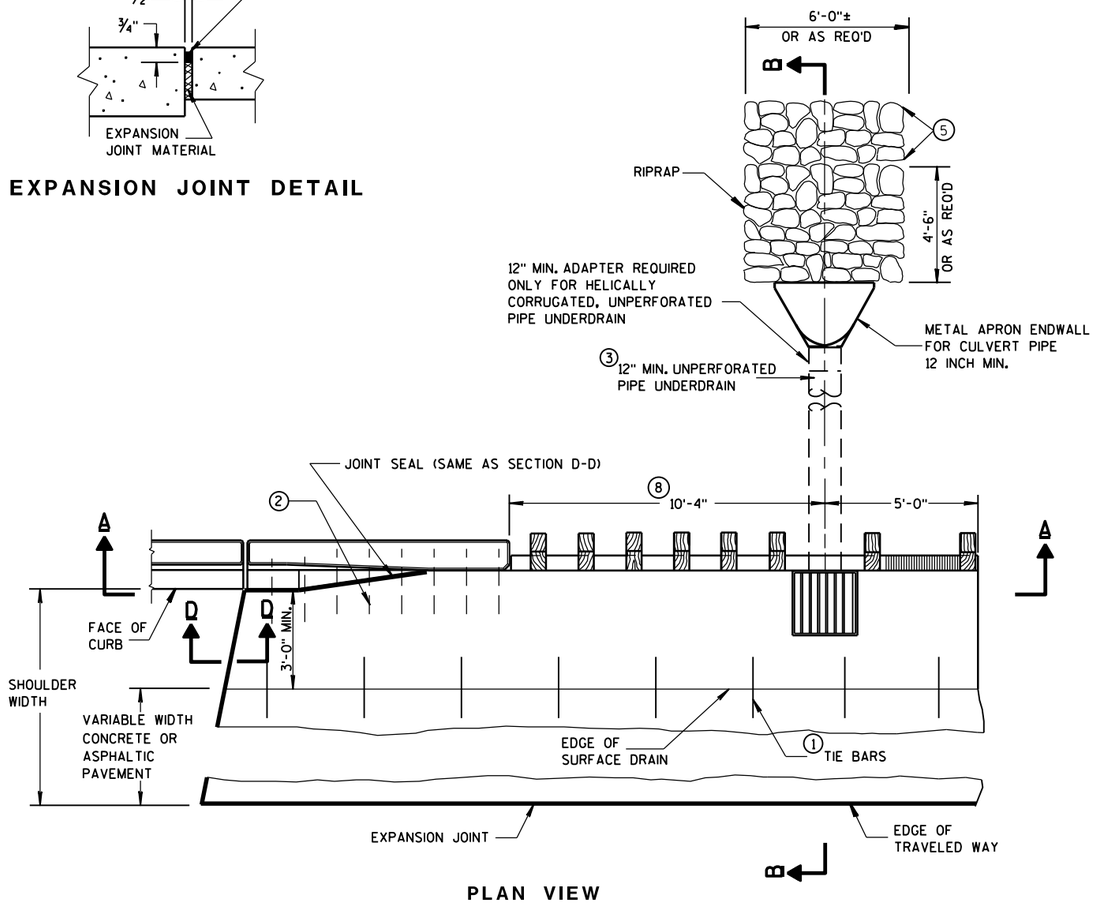
SECTION D-D



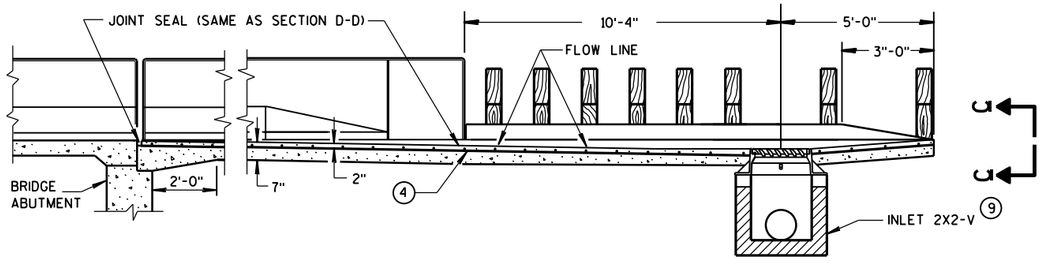
PLAN VIEW



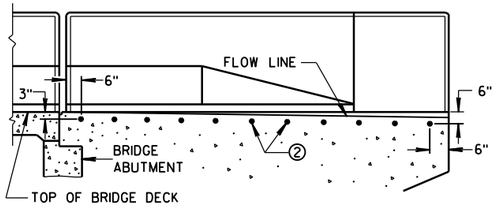
EXPANSION JOINT DETAIL



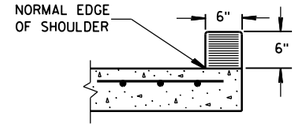
PLAN VIEW



SECTION A-A



LOCATION OF TIE BARS IN WINGWALL



SECTION C-C

GENERAL NOTES

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

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

(1) NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.

(2) NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) THE PIPE UNDERDRAIN MAY BE ANY ONE OF THE SIX MATERIALS LISTED IN THE STANDARD SPECIFICATIONS SECTION 612.2 EXCEPT DRAIN TILE.

(4) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

(5) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(6) GEOTEXTILE FABRIC, TYPE 'R'

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½".

(9) SEE CURRENT STANDARD DETAIL DRAWINGS 8A5 AND 8C7 FOR DETAILS.

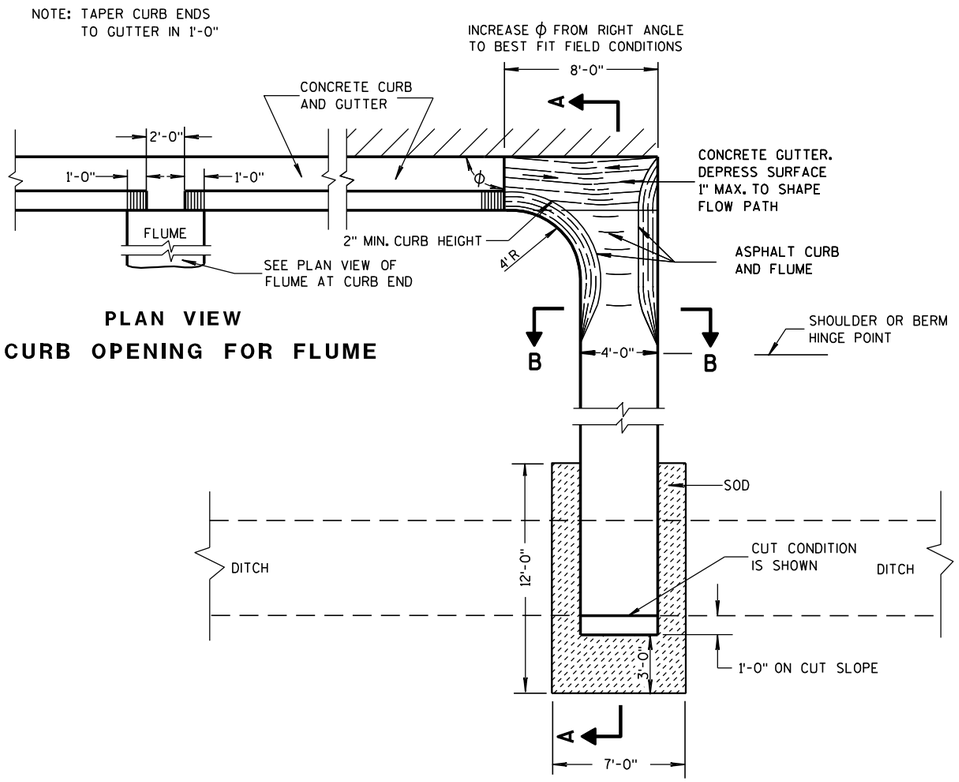
CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

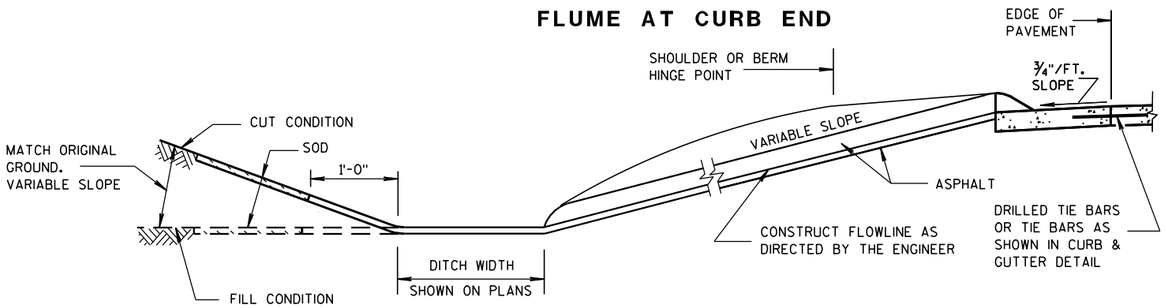
6
S.D.D. 8 D 3-6

ASPHALTIC FLUME

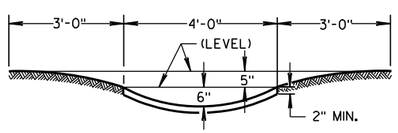


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

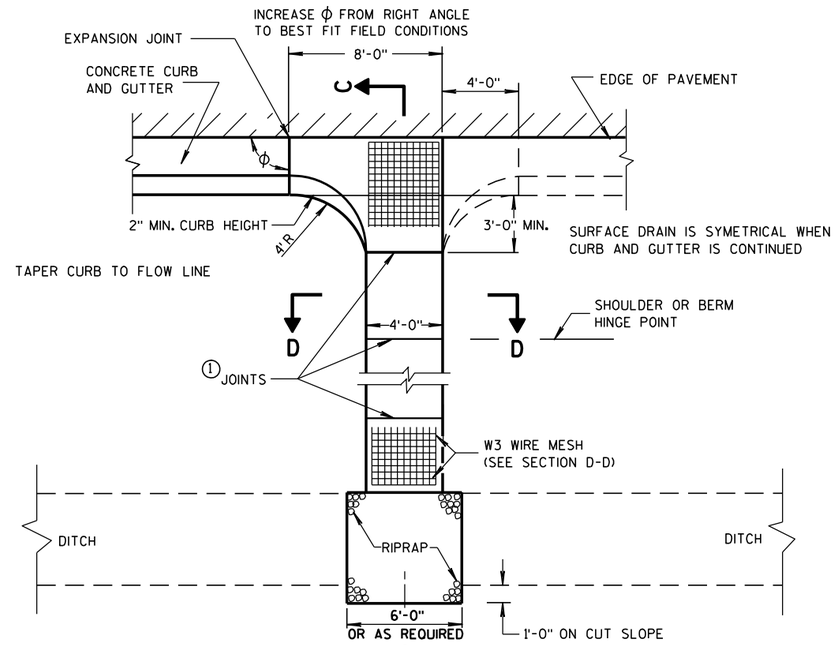
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

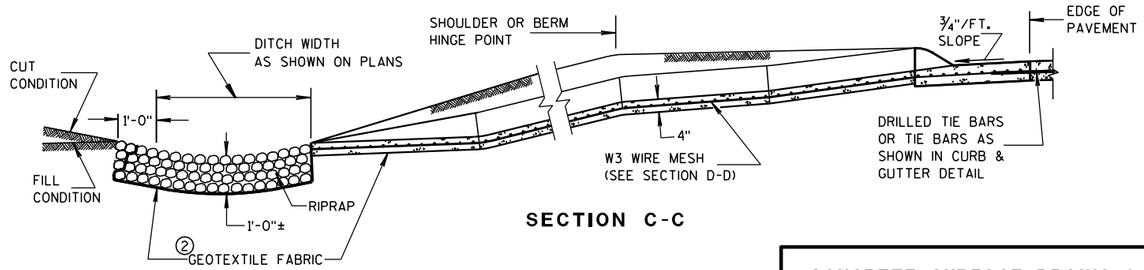
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

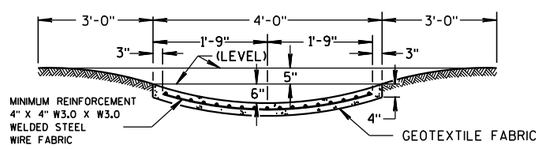
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



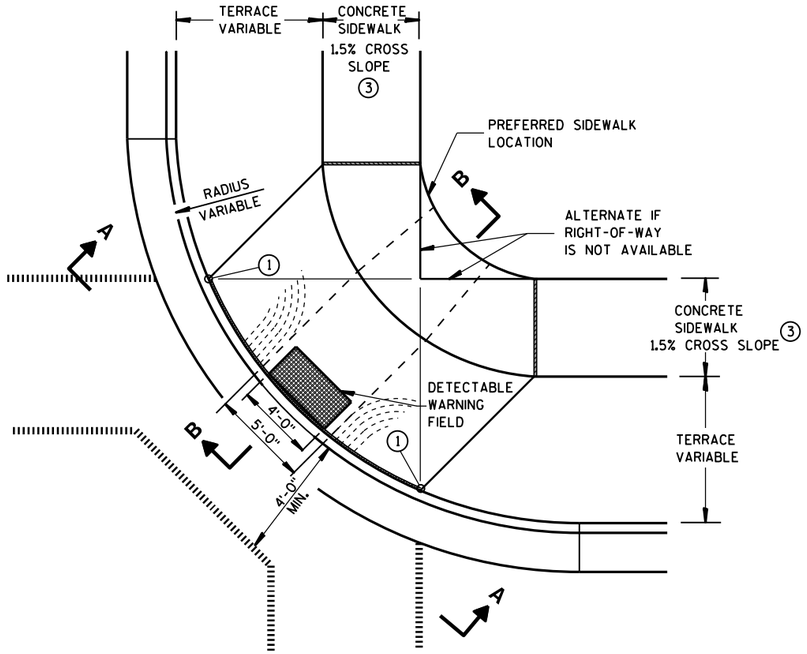
SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

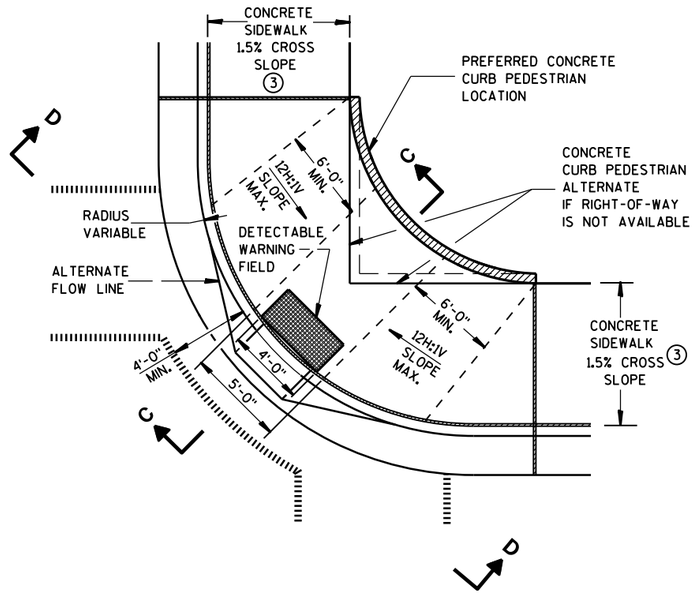
6
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

GENERAL NOTES

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

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

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

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

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

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

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

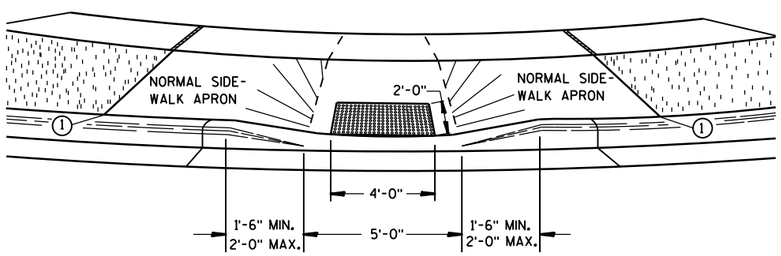
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

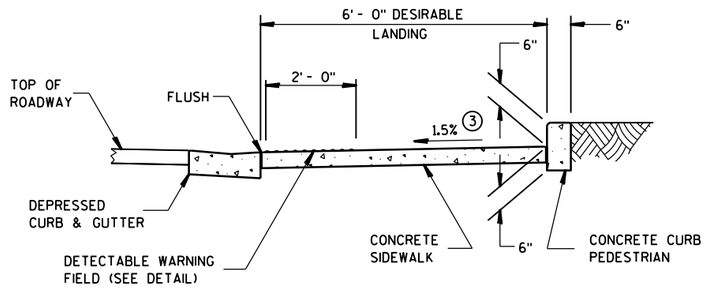
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

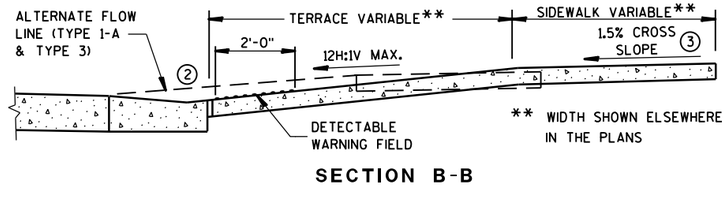
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



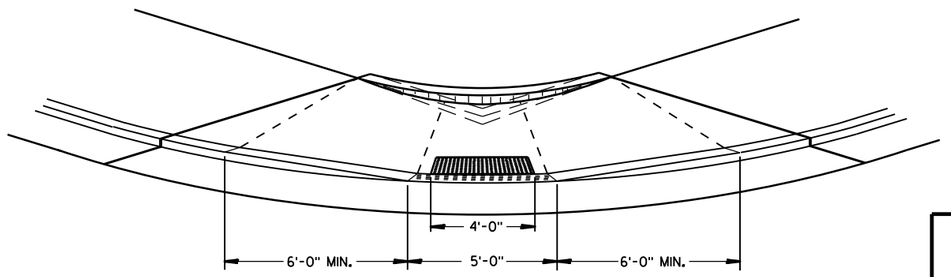
VIEW A-A



SECTION C-C



SECTION B-B



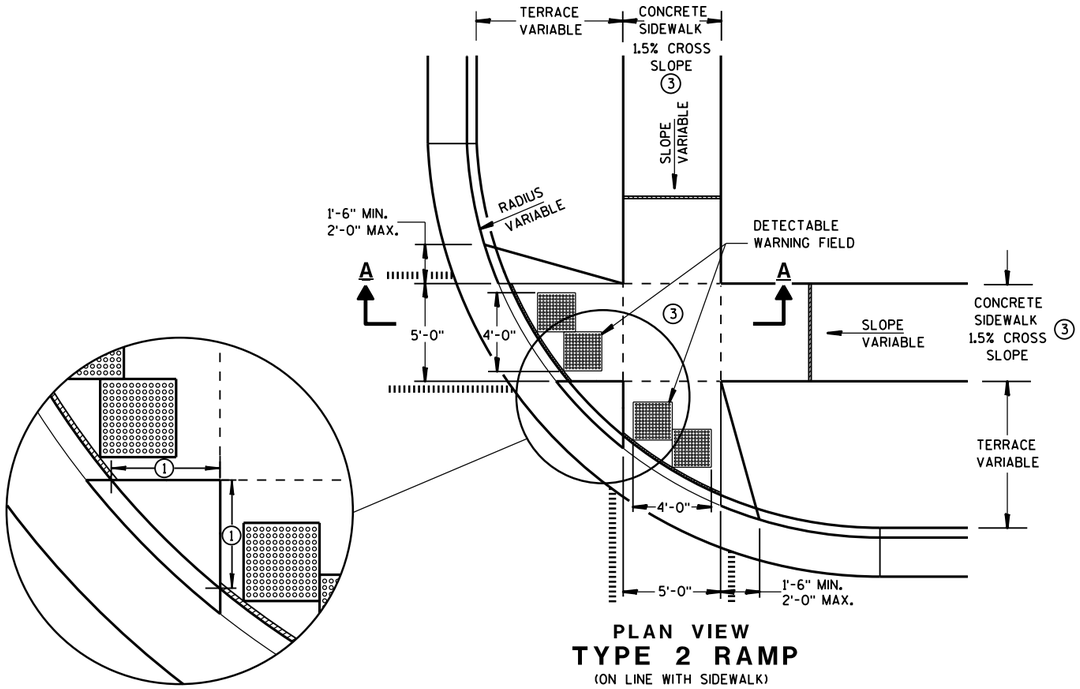
VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

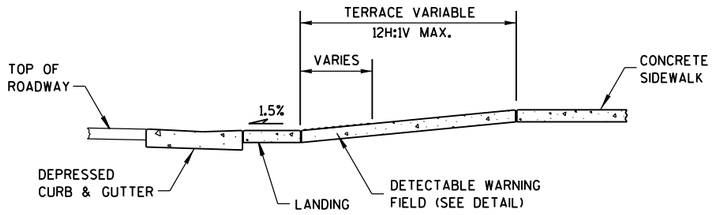
S.D.D. 8 D 5-15a



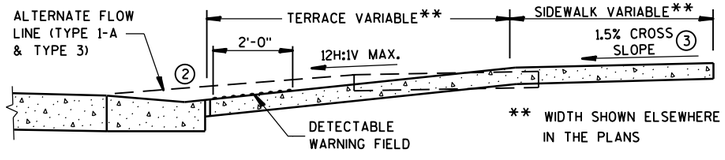
PLAN VIEW

TYPE 2 RAMP

(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

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

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

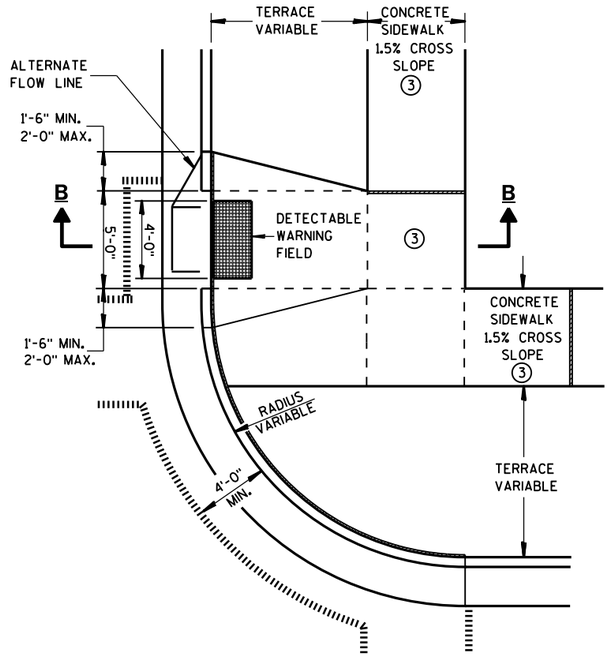
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

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

LEGEND

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



PLAN VIEW

TYPE 3 RAMP

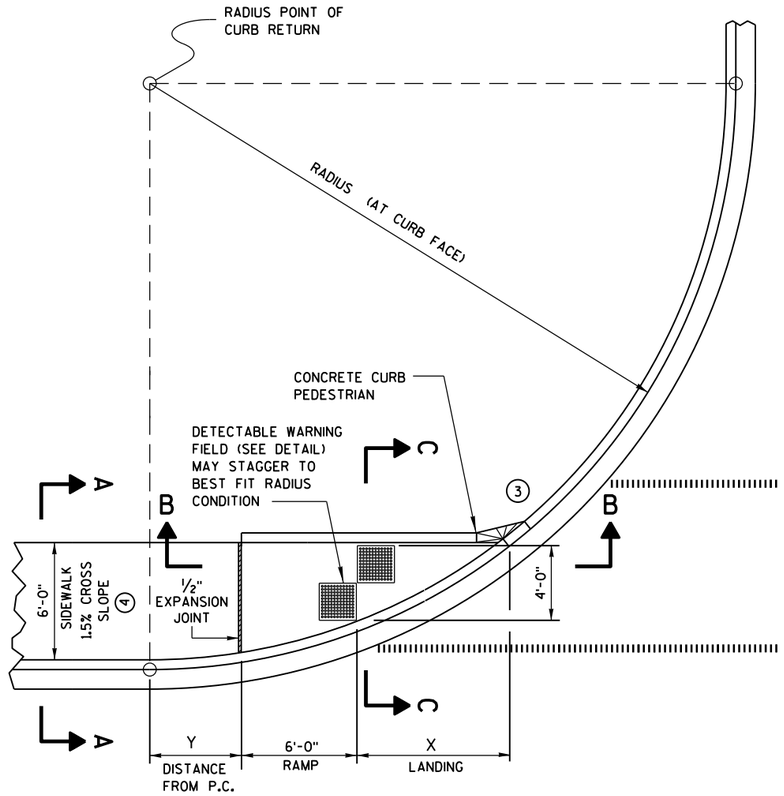
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS
TYPES 2 AND 3

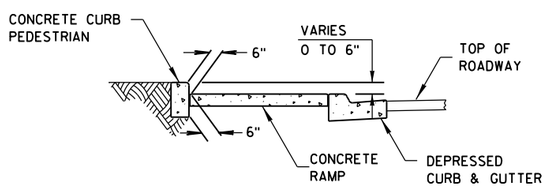
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

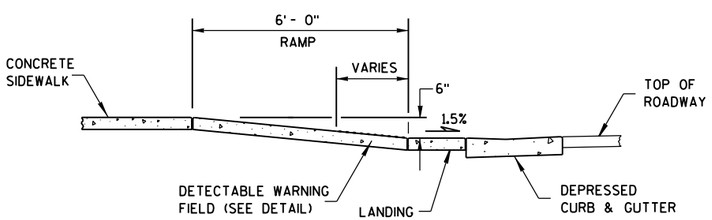
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



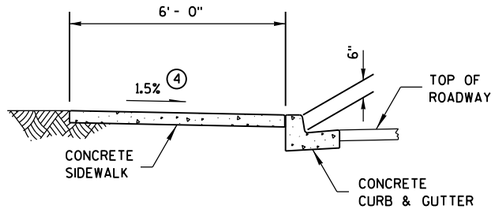
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

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

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

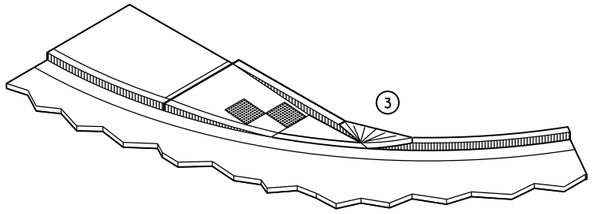
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

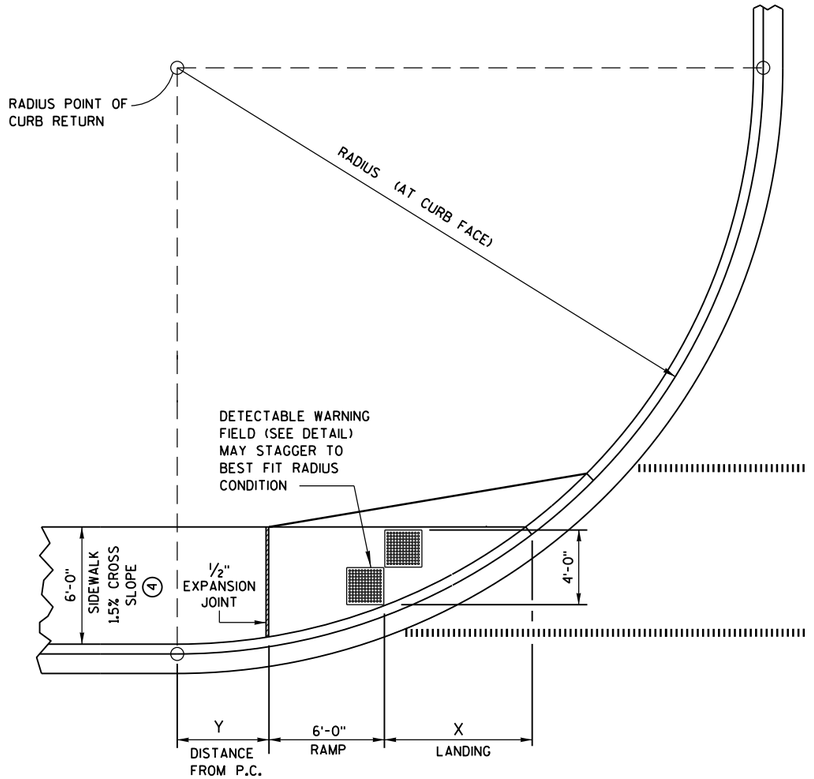
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

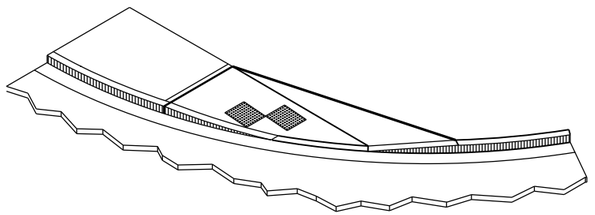
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

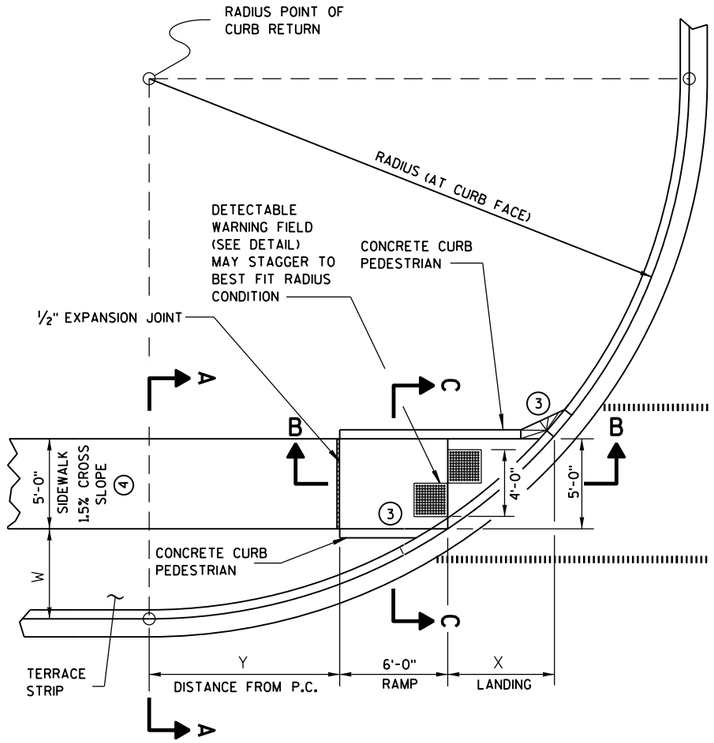
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

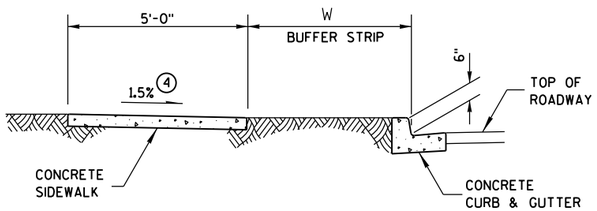
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

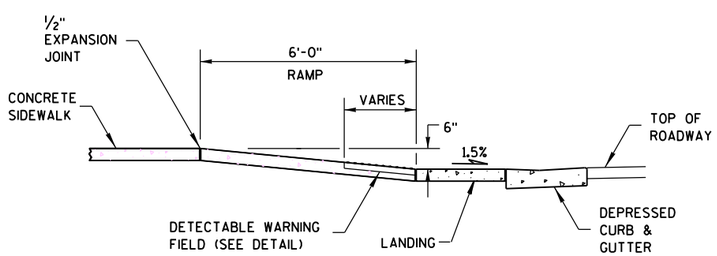
S.D.D. 8 D 5-15c



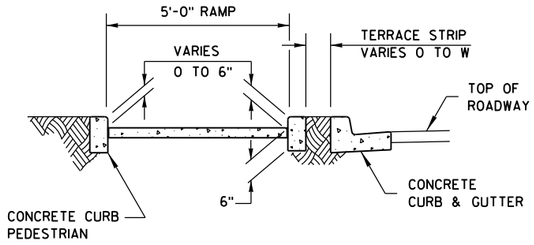
CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



SECTION B-B FOR TYPE 4B



SECTION C-C FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

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

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

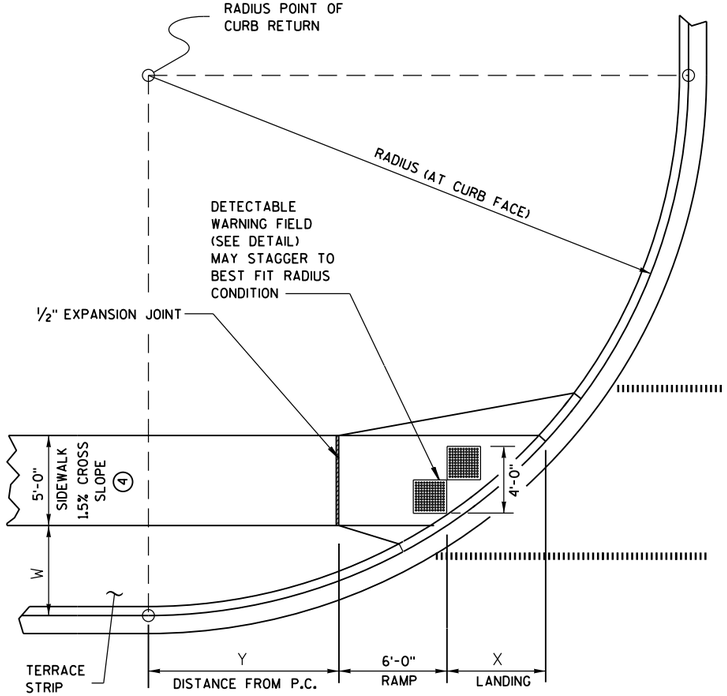
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

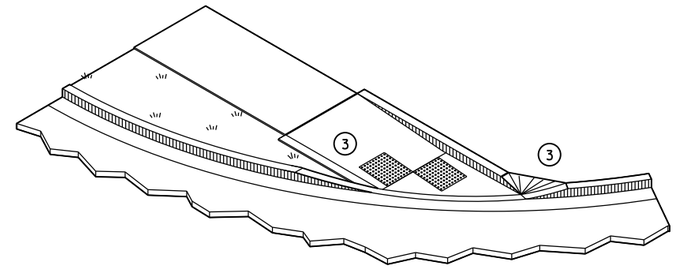
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

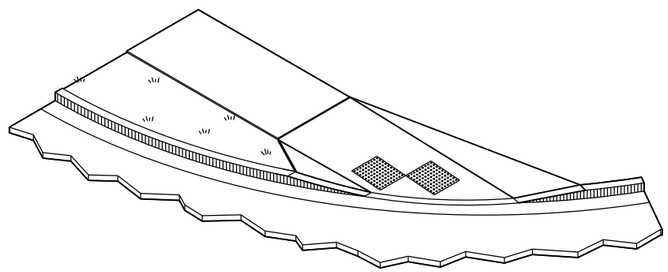
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



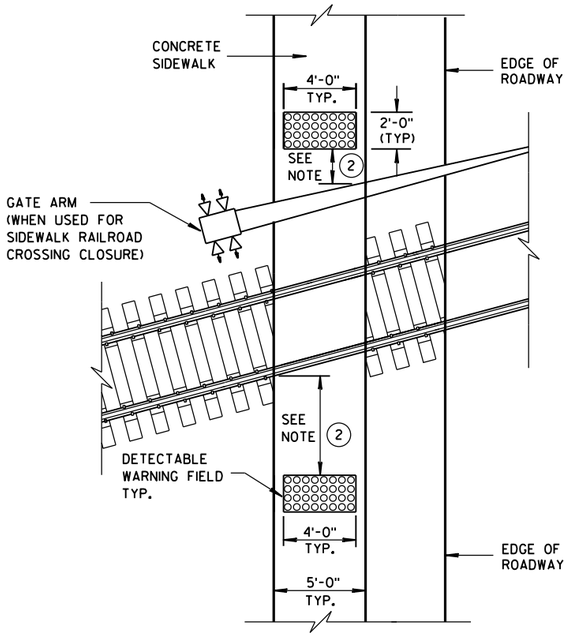
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

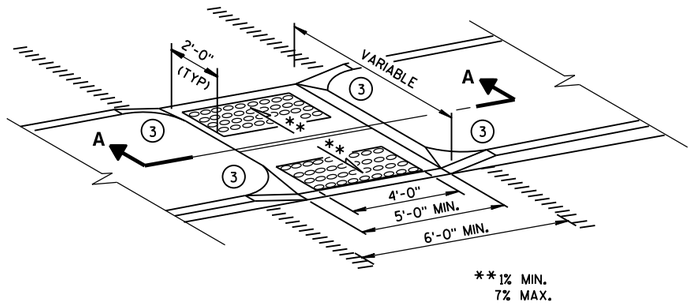
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

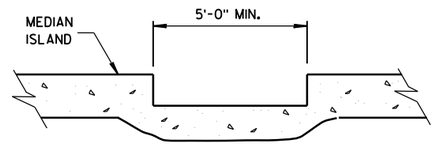
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

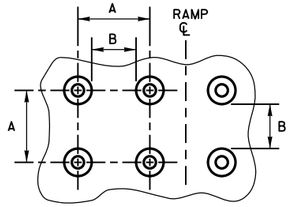
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET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

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

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



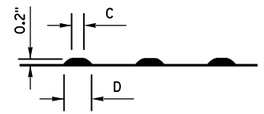
SECTION A-A



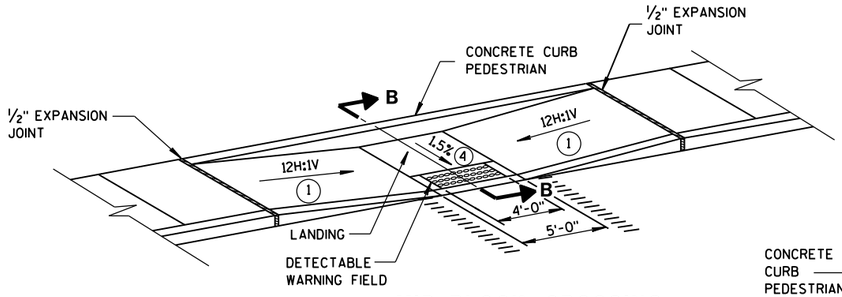
PLAN VIEW

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

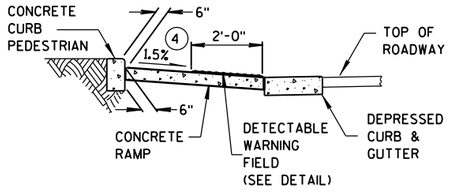
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

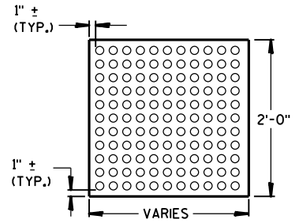


MID-BLOCK CROSSING
TYPE 7A



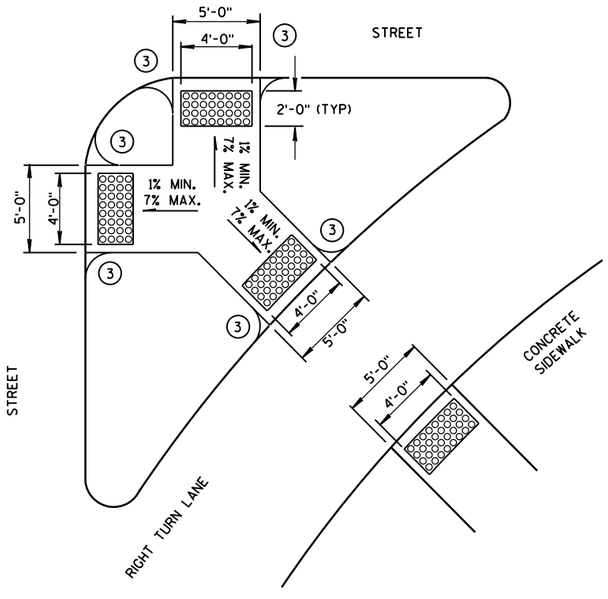
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

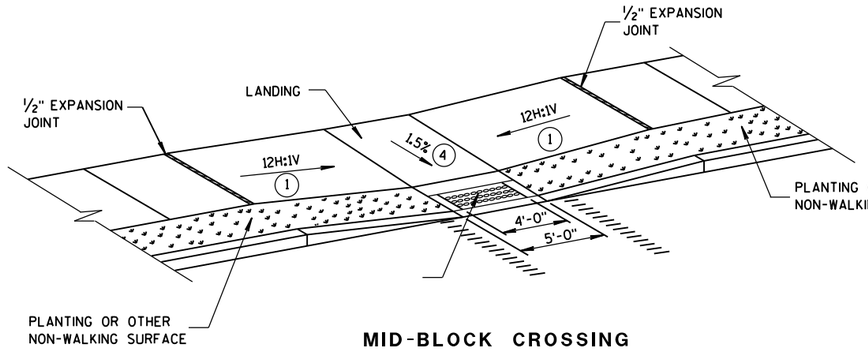


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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

6

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

GENERAL NOTES

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

(1) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

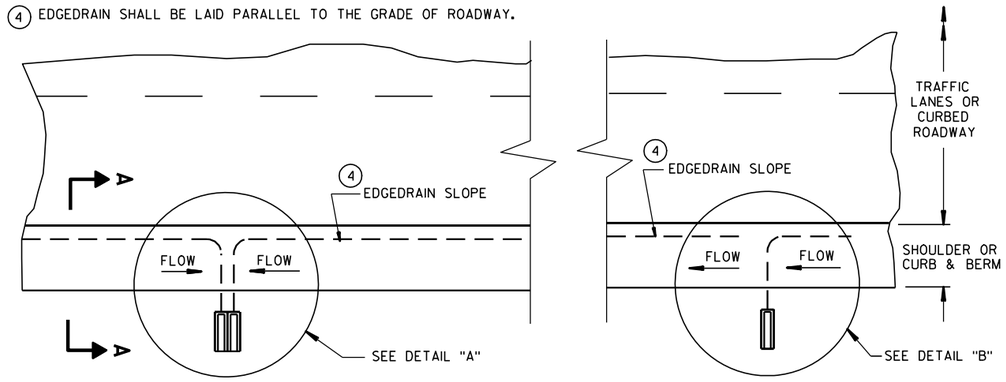
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

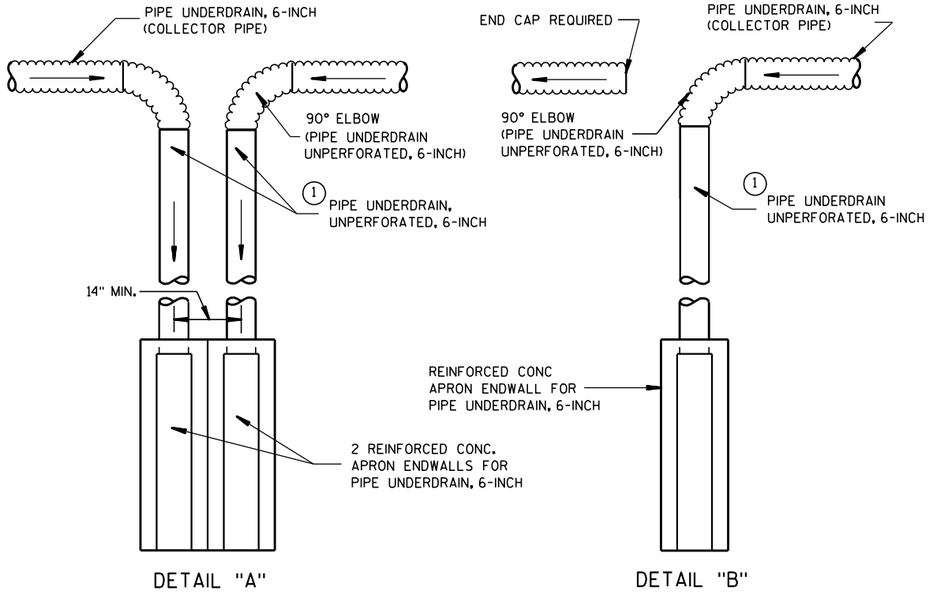
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS

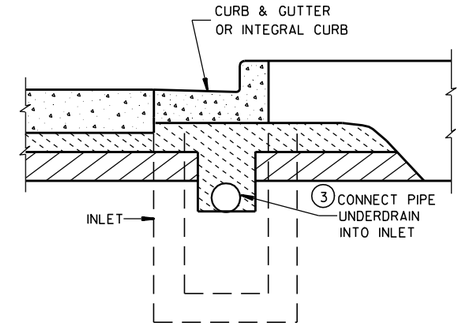
(EDGEDRAIN OUTLETS TO ROADSIDE) (2)



DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

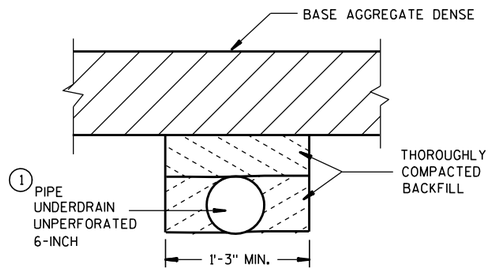
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



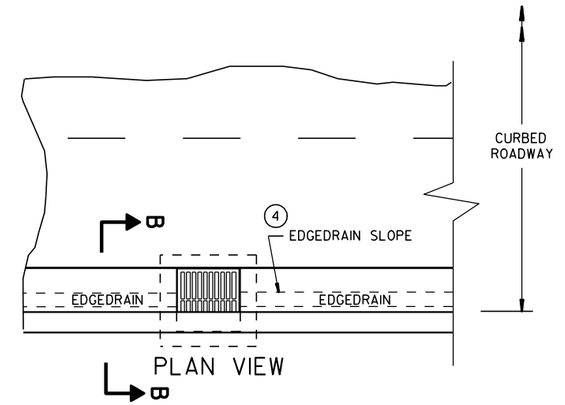
SECTION B-B

URBAN CROSS SECTION



SECTION C-C

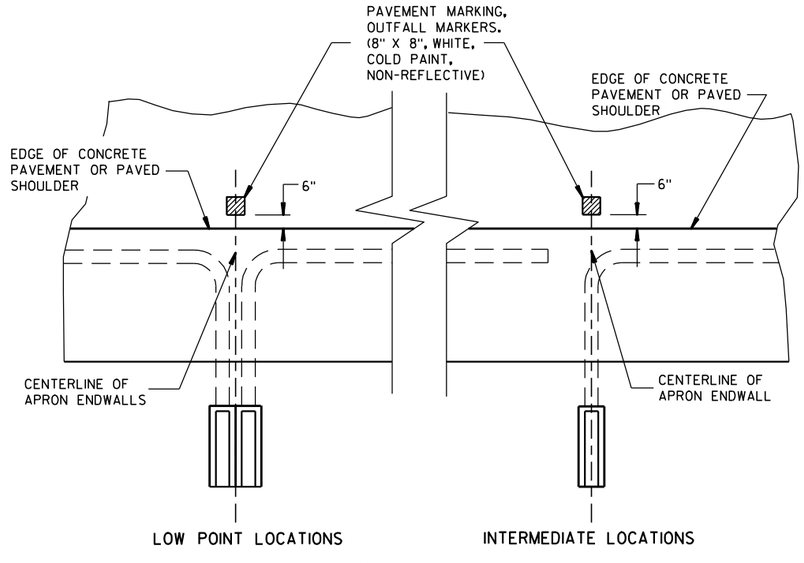
(TRENCH FOR OUTFALL PIPE)



PLAN VIEW

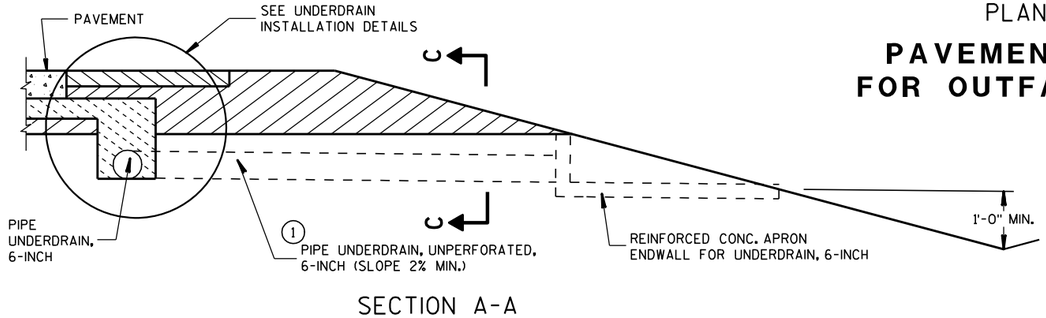
ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



PLAN VIEW

PAVEMENT MARKING FOR OUTFALL MARKERS



SECTION A-A

RURAL CROSS SECTION

EDGEDRAIN OUTLET AND OUTFALL MARKERS

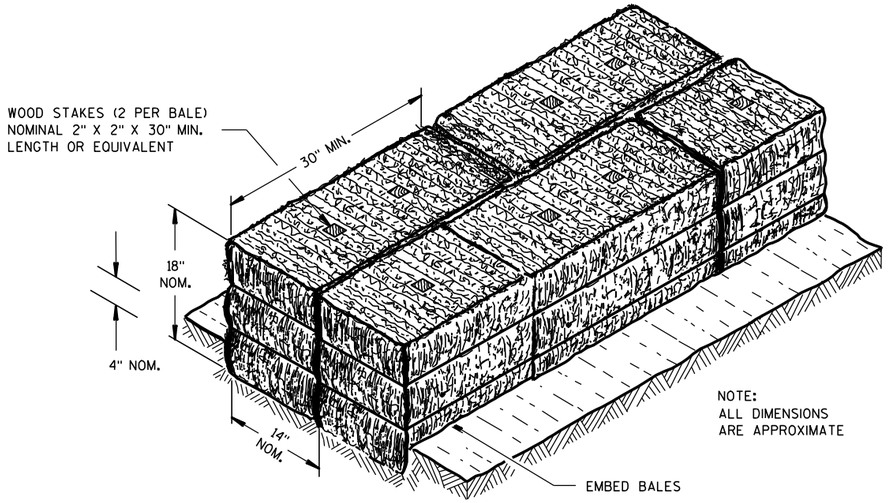
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

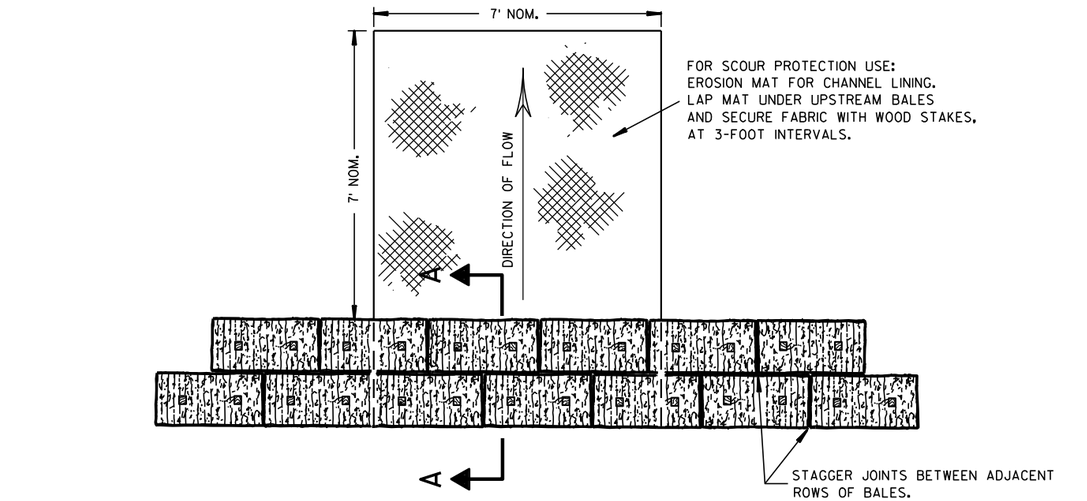
S.D.D. 8 D 15-4a

6

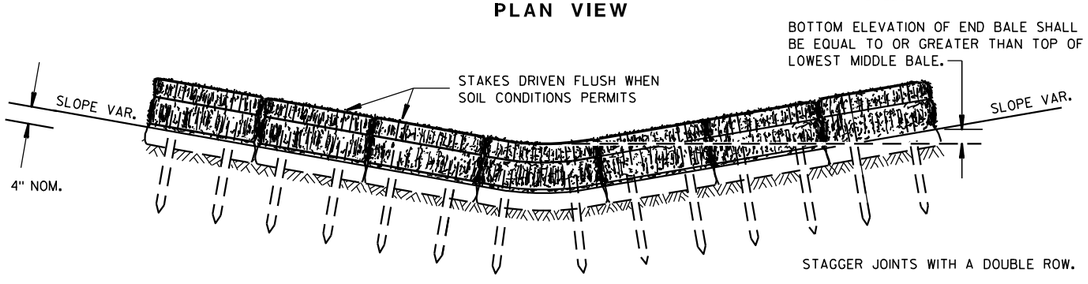
S.D.D. 8 D 15-4a



SECTION A-A



PLAN VIEW



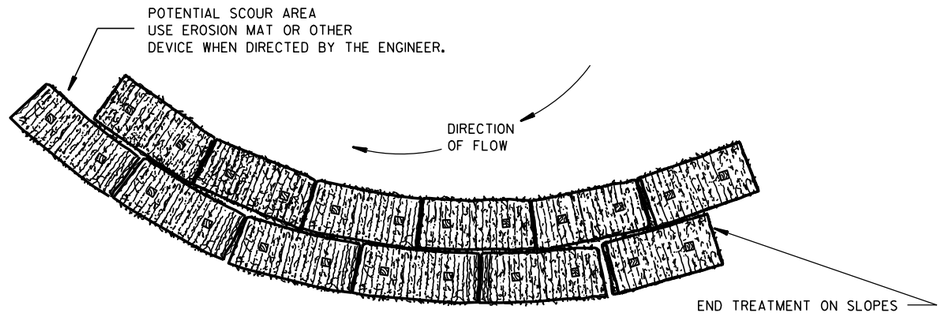
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

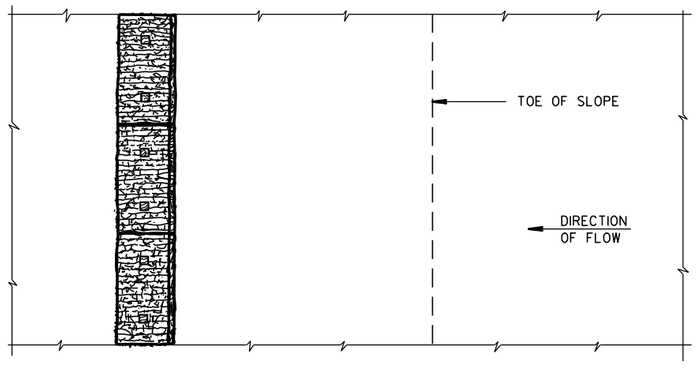
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

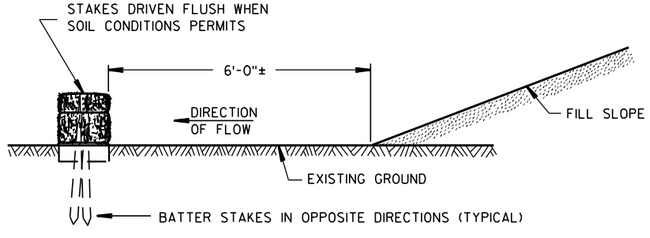


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

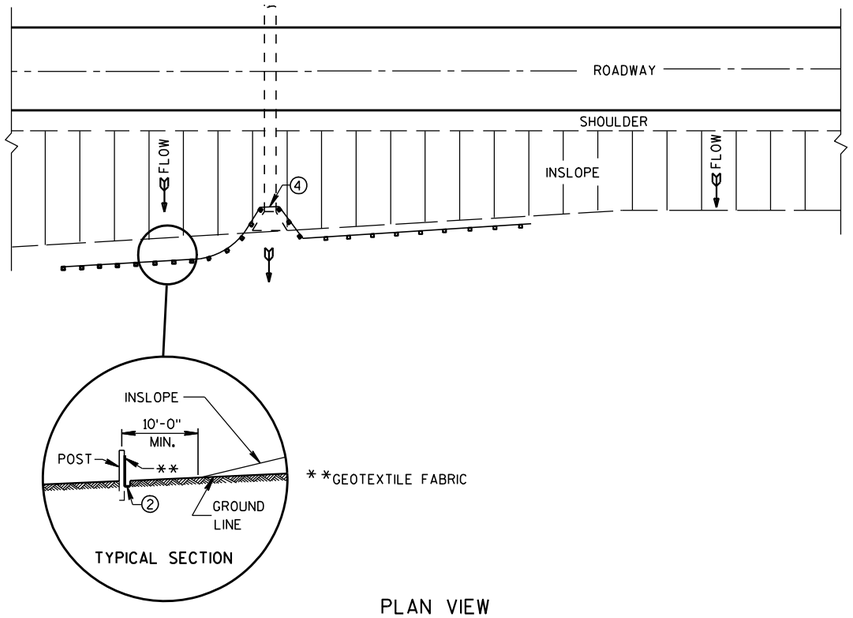
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

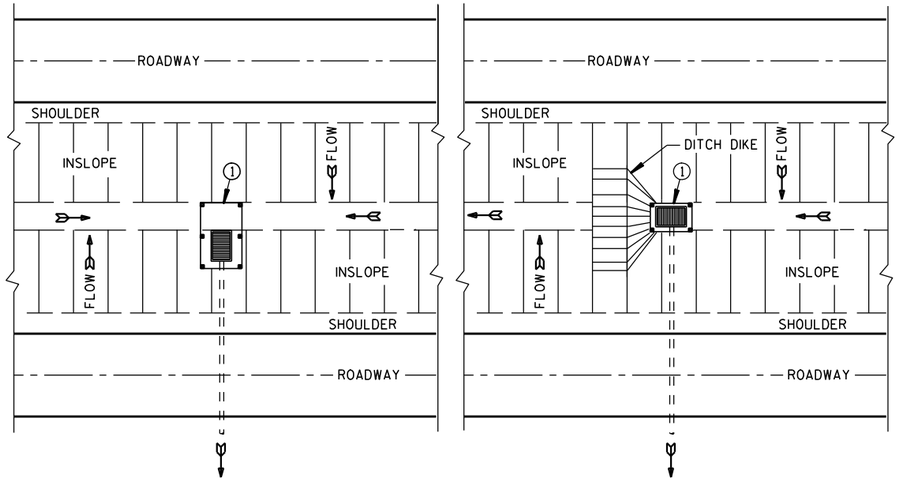
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



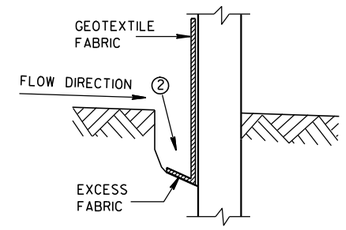
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

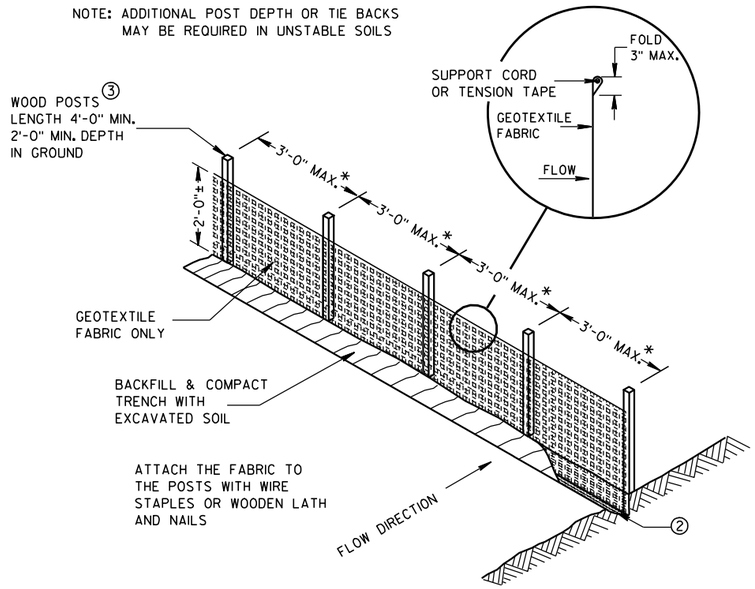
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

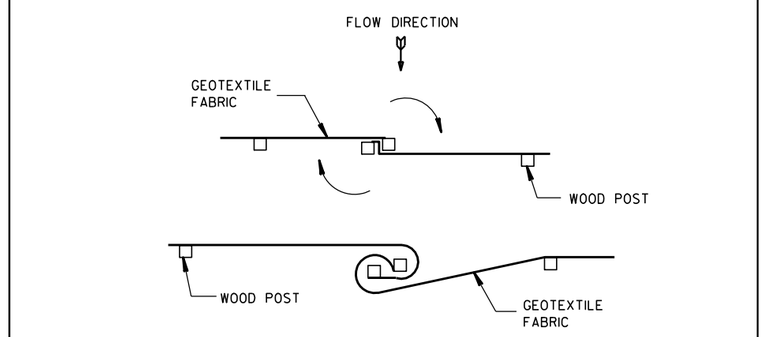


TRENCH DETAIL

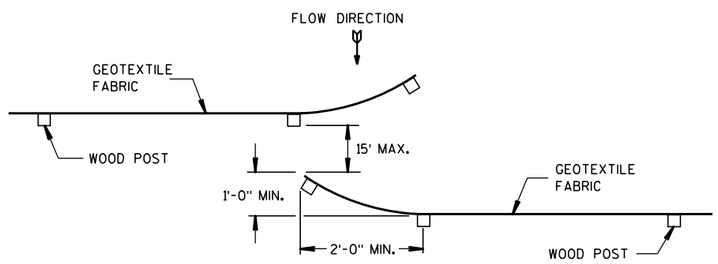


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

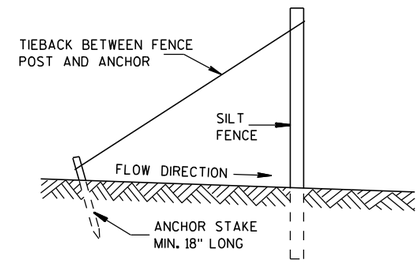


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

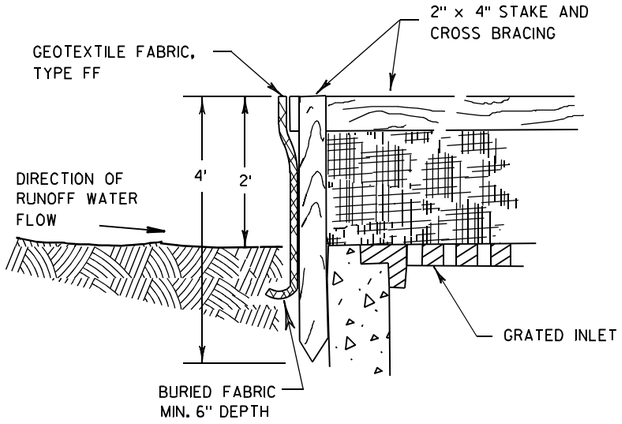
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

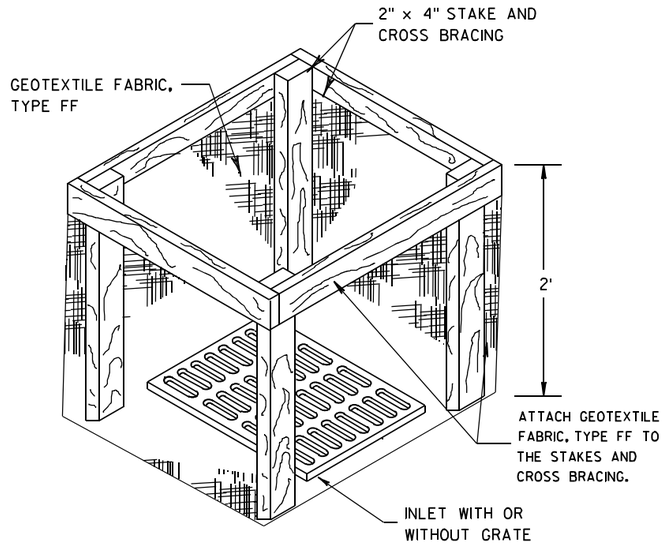
6

S.D.D. 8 E 9-6

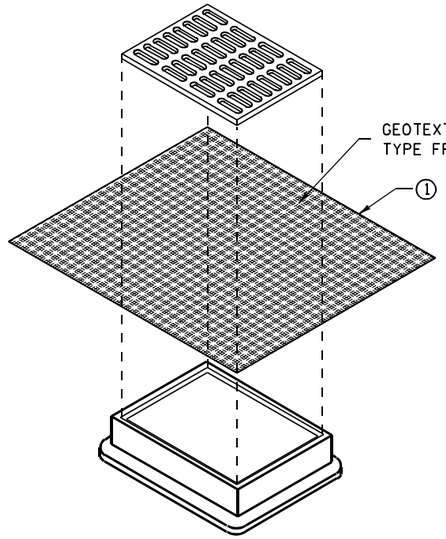
6

S.D.D. 8 E 9-6



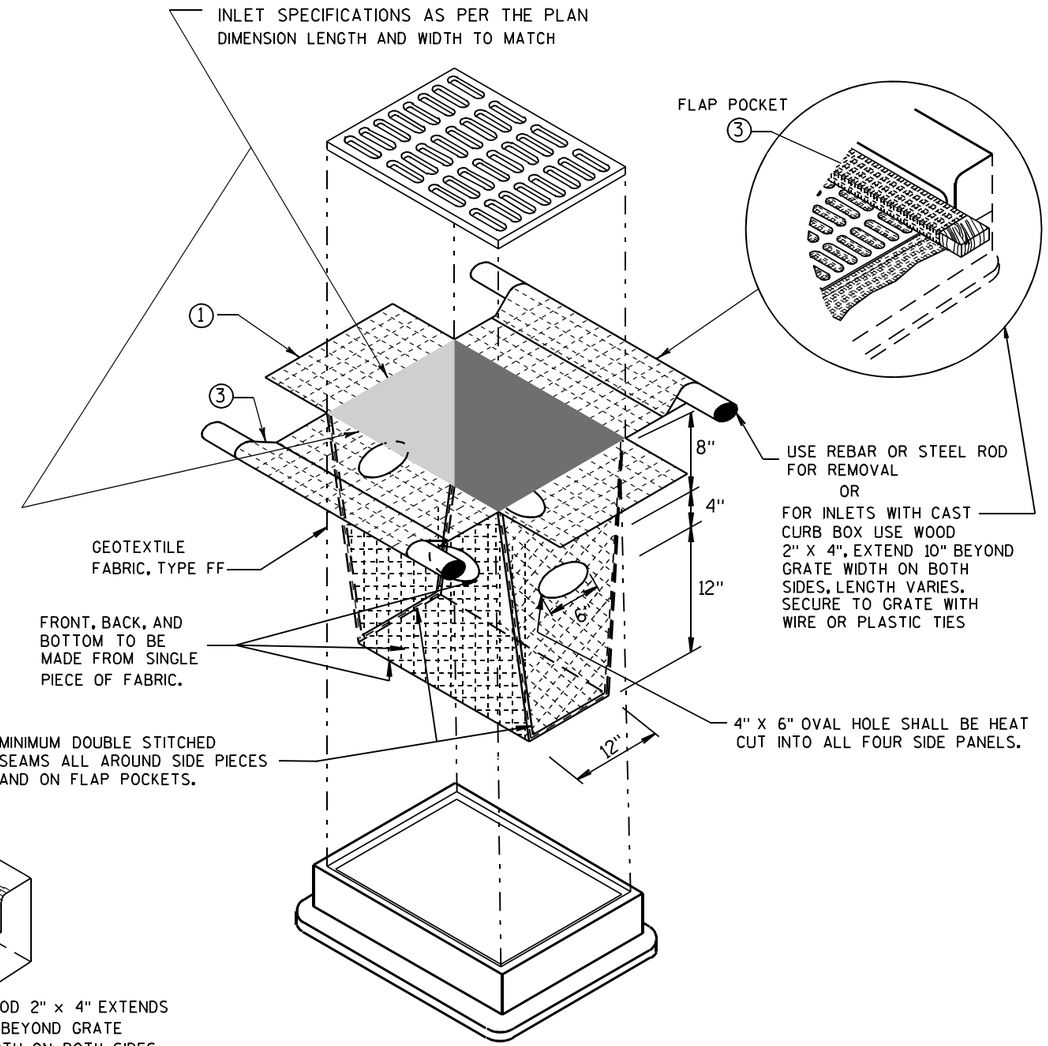


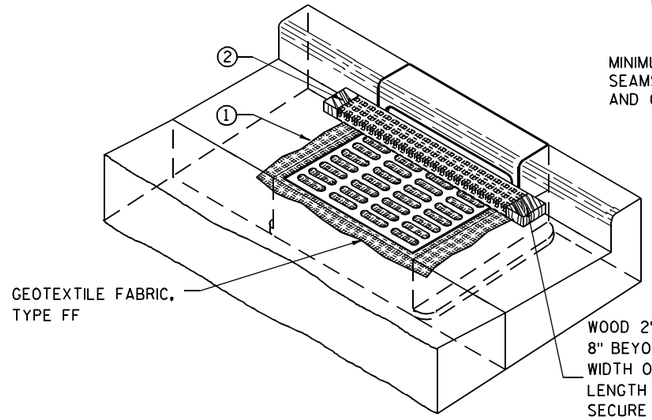
INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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





INLET PROTECTION, TYPE C (WITH CURB BOX)

INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

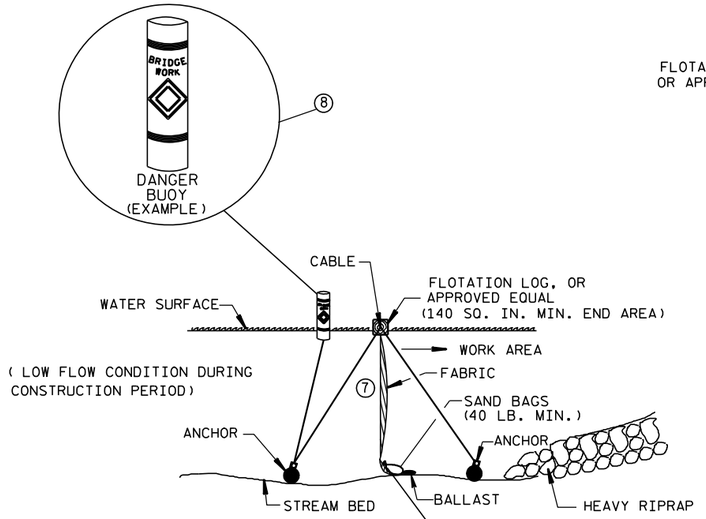
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

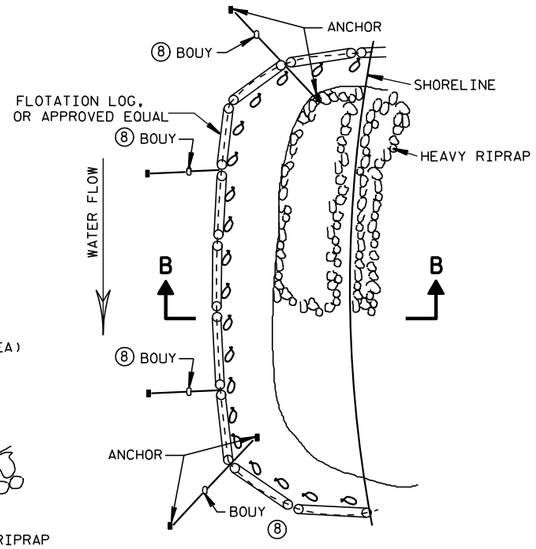
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

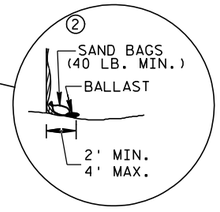
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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

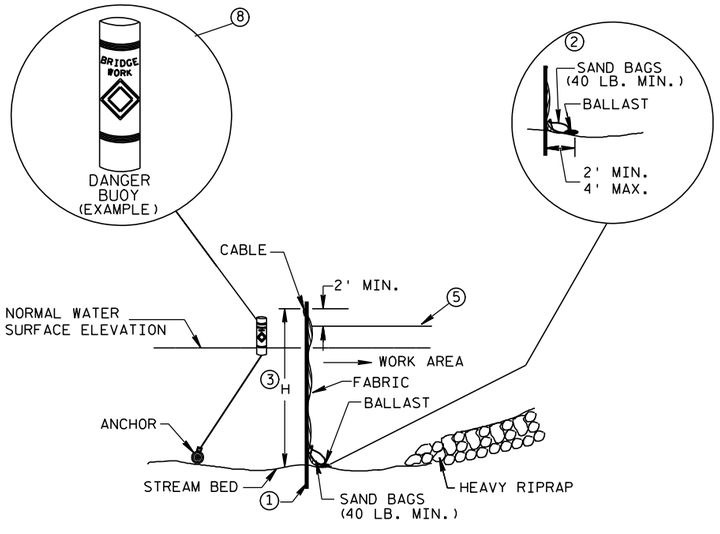


SECTION B-B

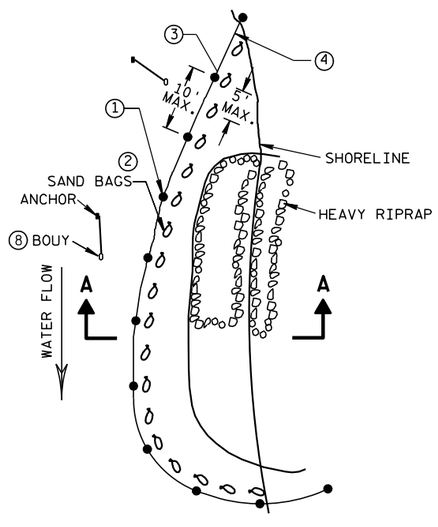




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT 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.

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.

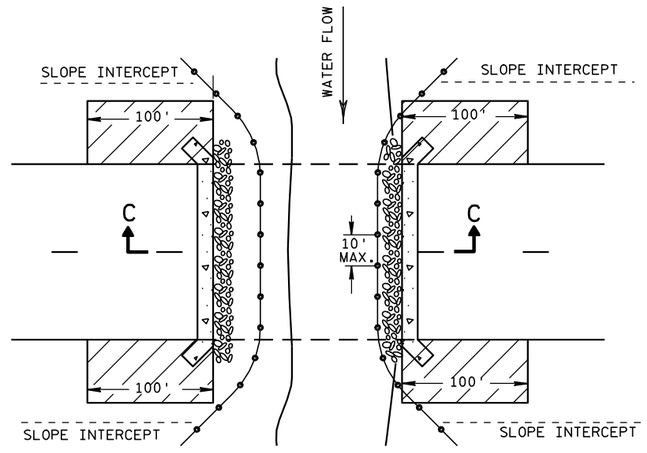
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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.

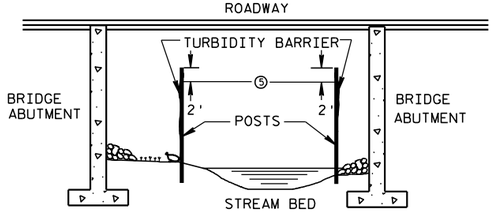
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

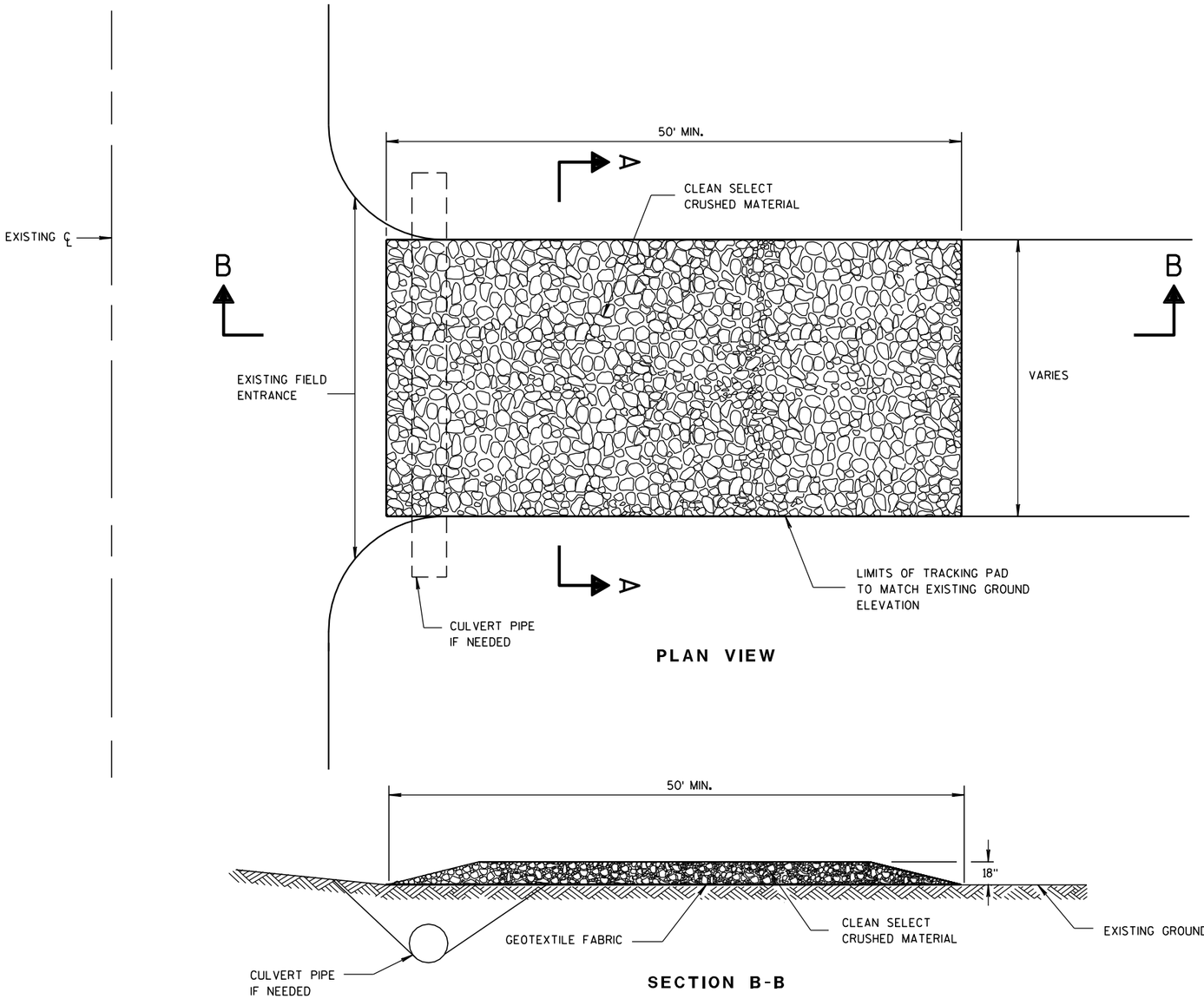
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 11-2

6

S.D.D. 8 E 11-2



PLAN VIEW

SECTION B-B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

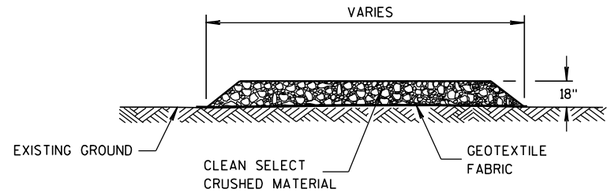
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/24/2011 DATE FHWA	/S/ Jerry H. Zoda ROADWAY STANDARDS ENGINEER 371 ENT

6

S.D.D. 8 E 14-1

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

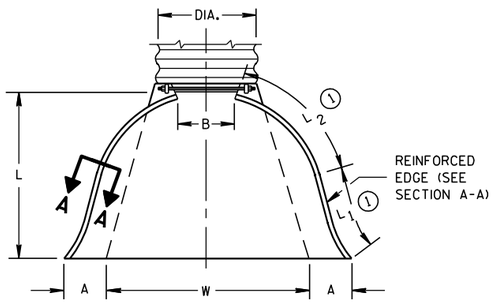
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

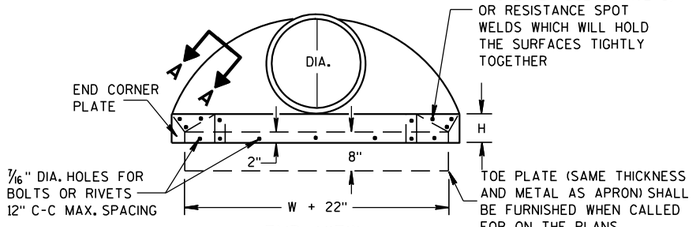
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

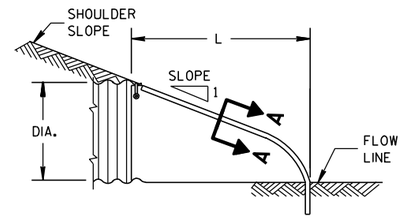
*MINIMUM
**MAXIMUM



PLAN VIEW

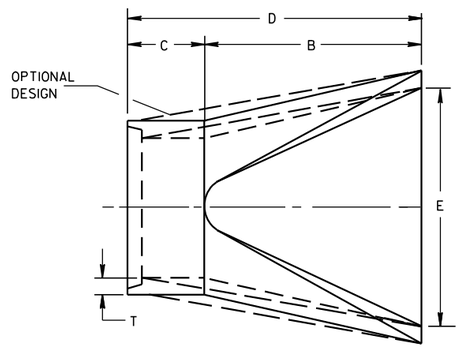


END VIEW

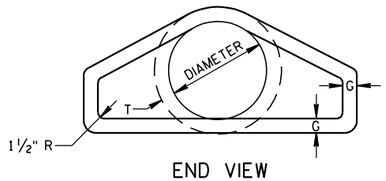


SIDE ELEVATION

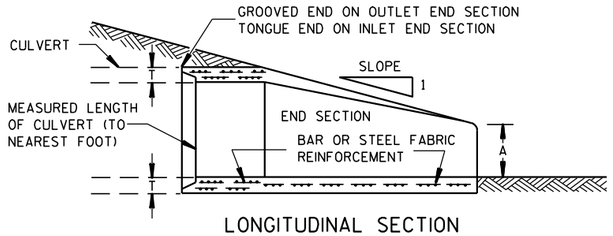
METAL ENDWALLS



PLAN

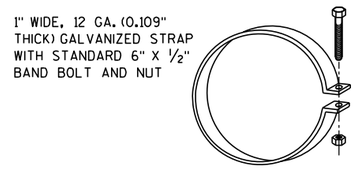


END VIEW



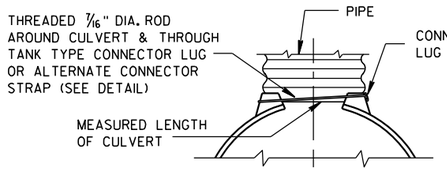
LONGITUDINAL SECTION

CONCRETE ENDWALLS

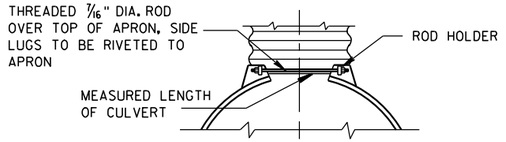


ALTERNATE FOR TYPE 1 CONNECTION

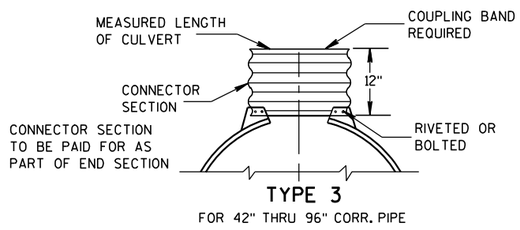
END SECTION CONNECTOR STRAP



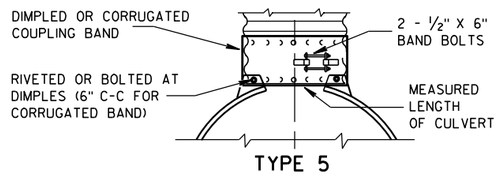
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

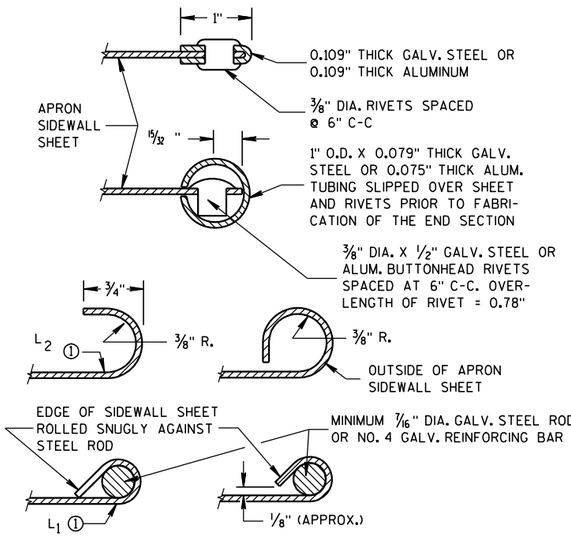
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

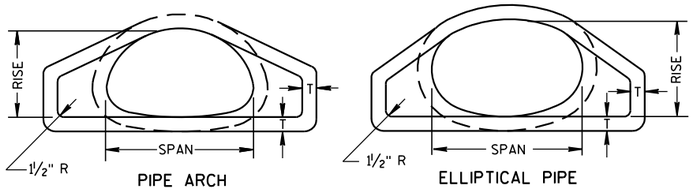
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

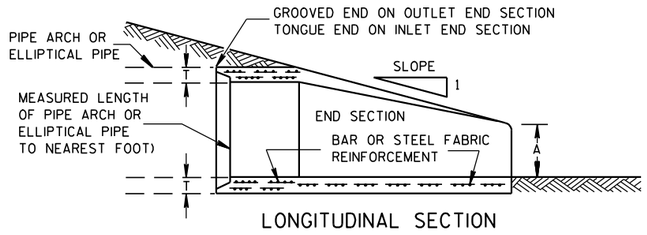
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

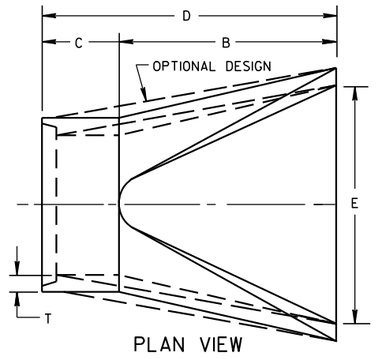
6
S.D.D. 8 F 1-11



END VIEW

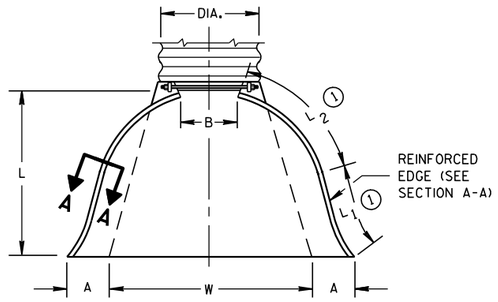


LONGITUDINAL SECTION

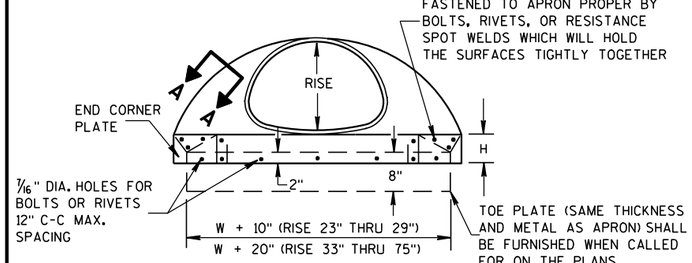


PLAN VIEW

CONCRETE ENDWALLS

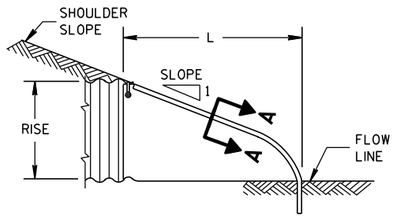


PLAN VIEW



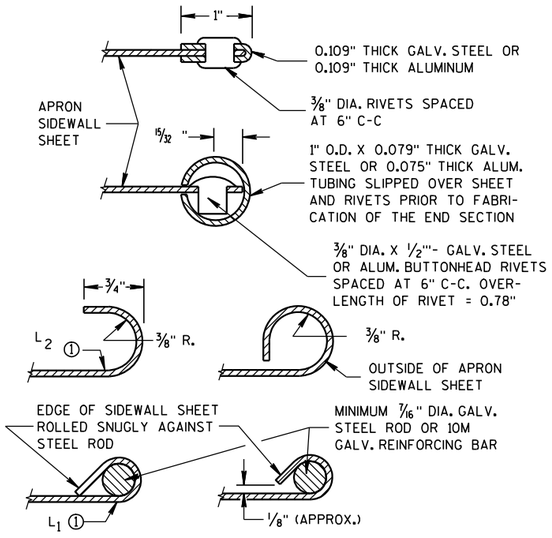
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

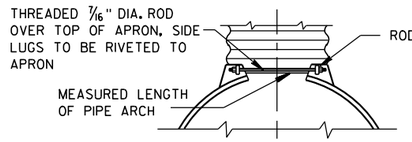
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

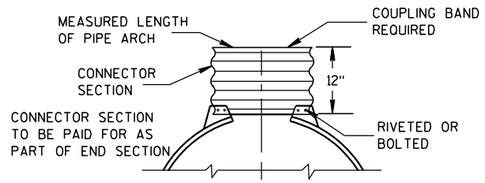
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



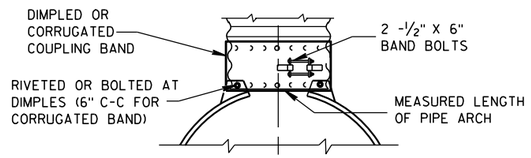
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

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

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

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

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

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

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

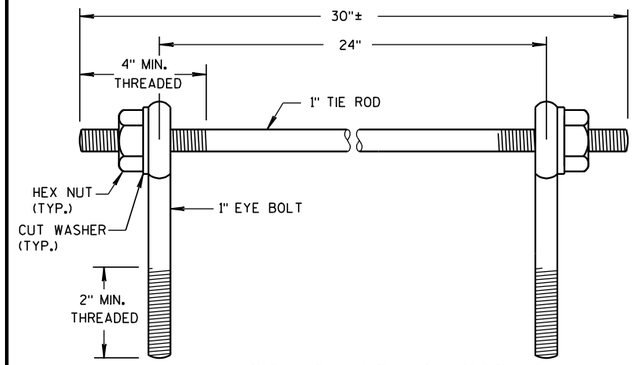
FHWA

6

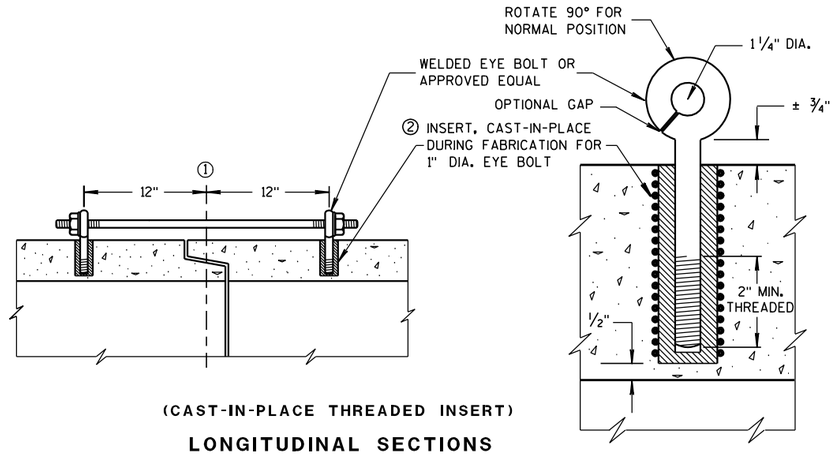
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

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

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

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

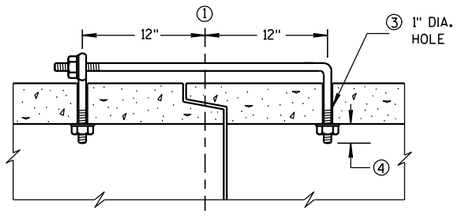
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

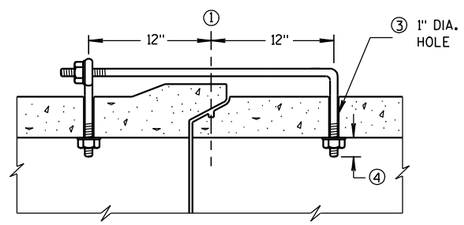
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

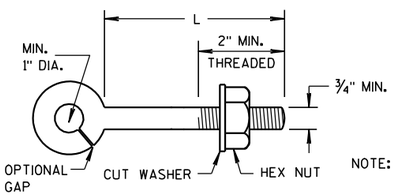


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

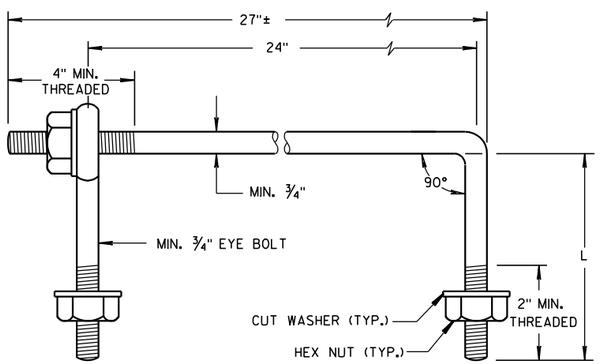
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

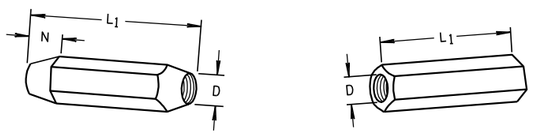
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 7/16

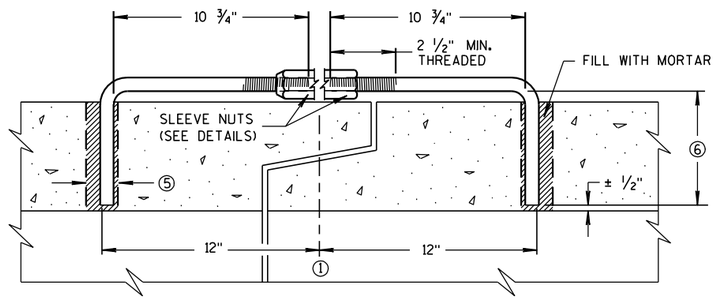
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

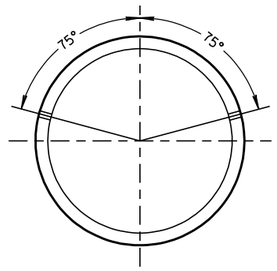
SLEEVE NUTS



LONGITUDINAL SECTION

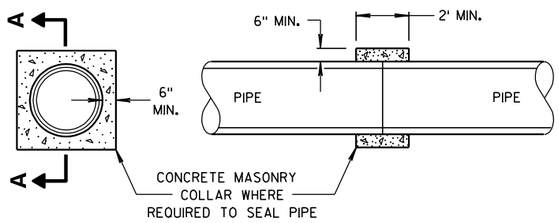
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

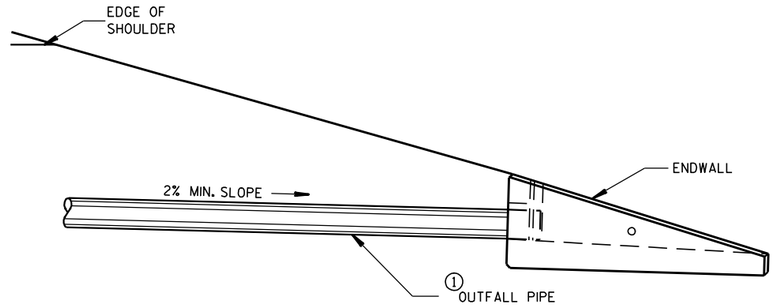
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
374
FHWA

6

S.D.D. 8 F 4-7

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

GENERAL NOTES

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

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

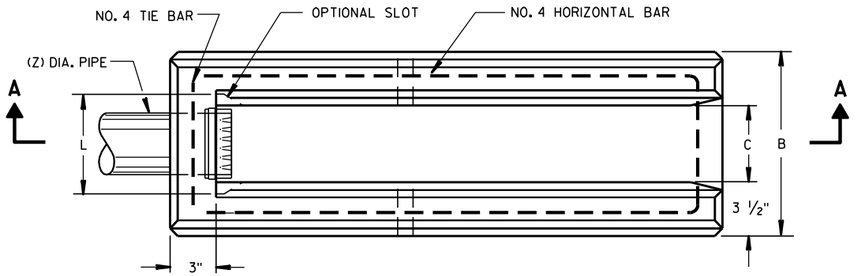
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

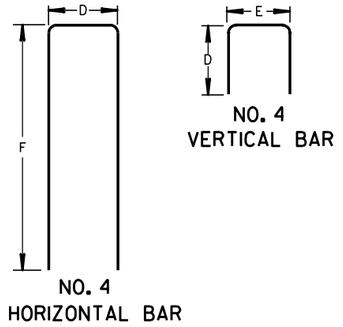
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

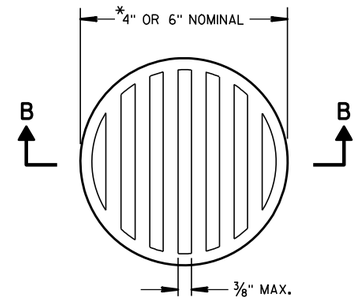
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



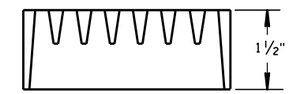
PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS



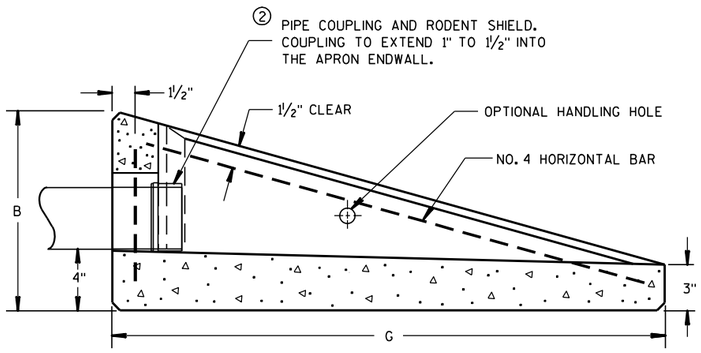
NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.



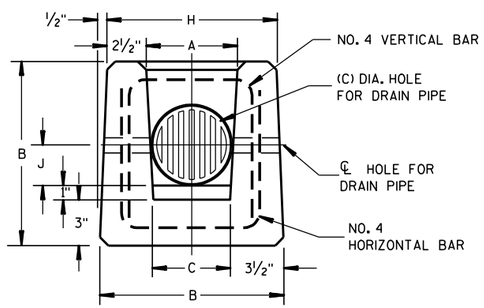
SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

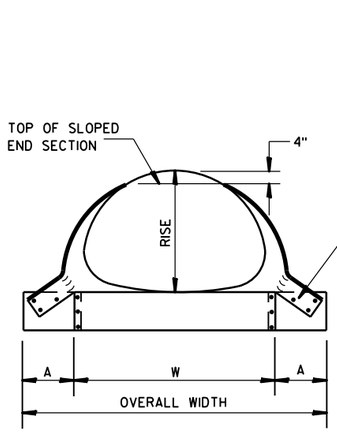
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

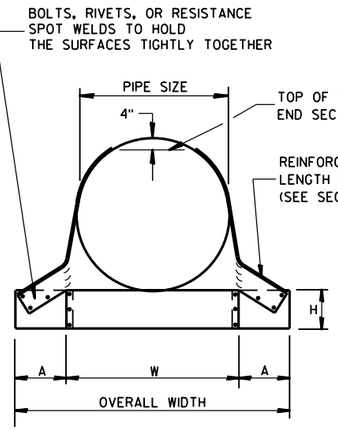
APPROVED
3/10/98 DATE
/S/ Rory L. Rhinearson
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

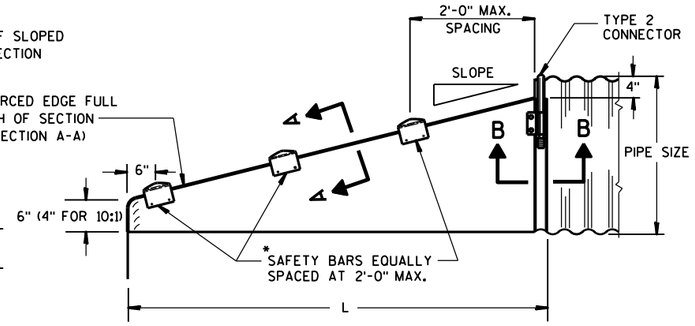
S.D.D. 8 F 6-4



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

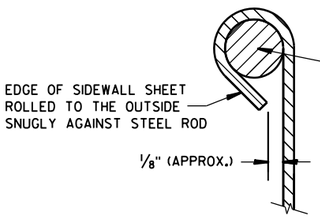
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

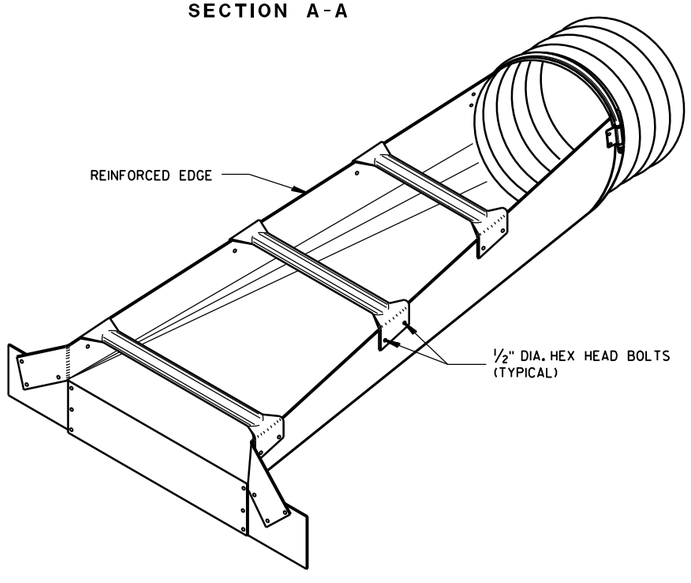
3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

DETAIL OF SAFETY BAR

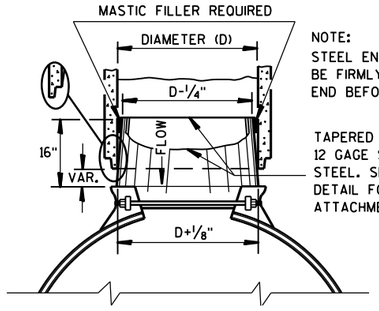
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

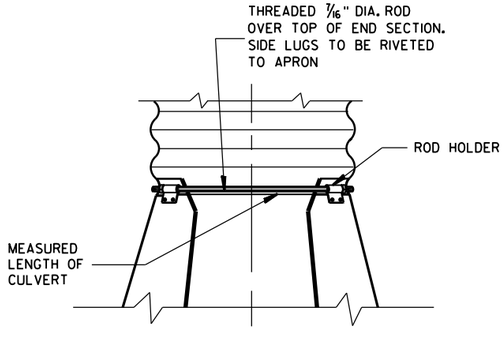
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



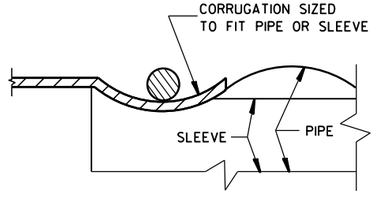
ISOMETRIC VIEW



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

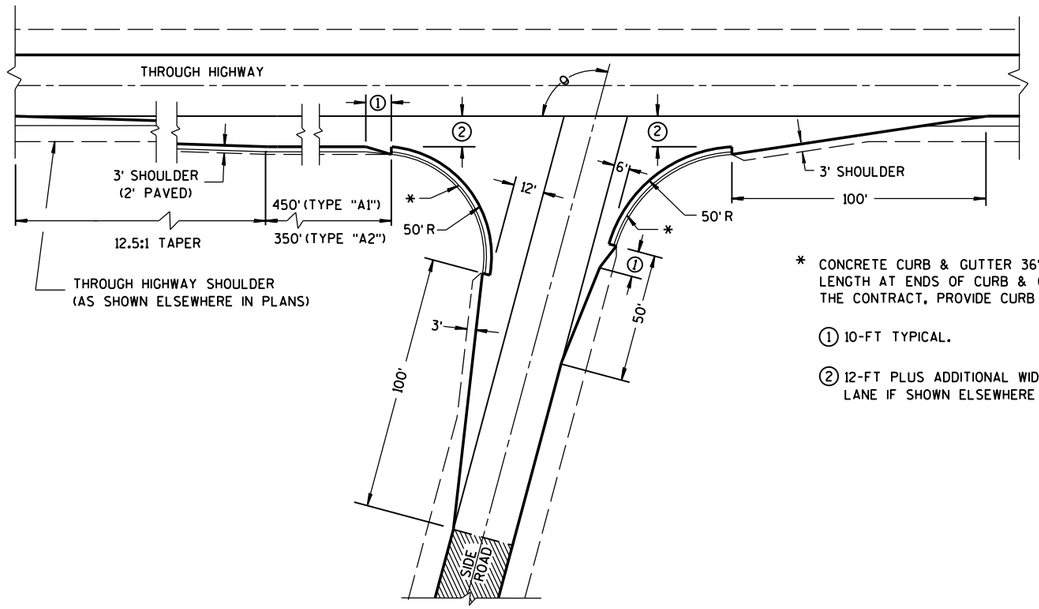
APPROVED
9/14/2012 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 7-5

6

S.D.D. 8 F 7-5



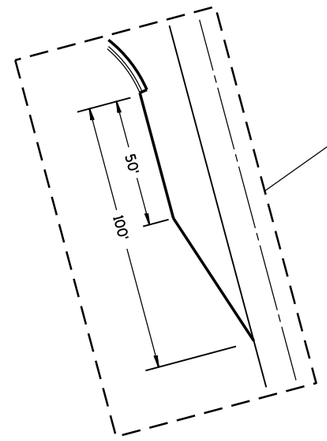
θ = MORE THAN 80°

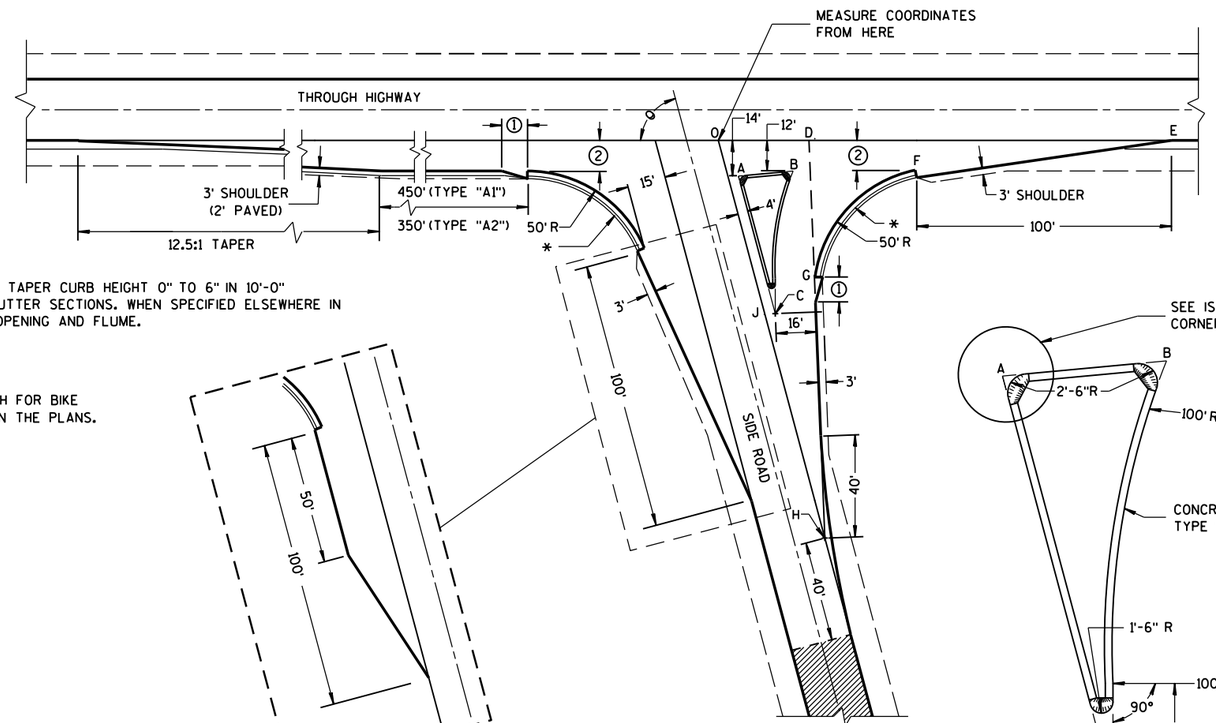
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

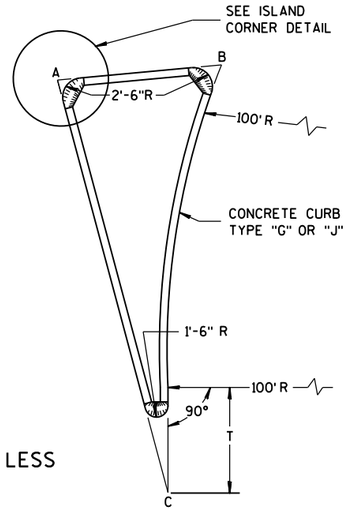
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

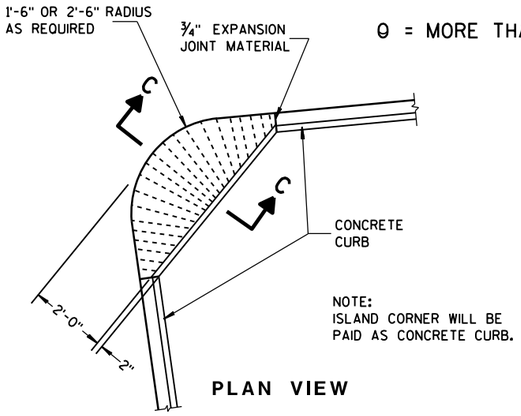




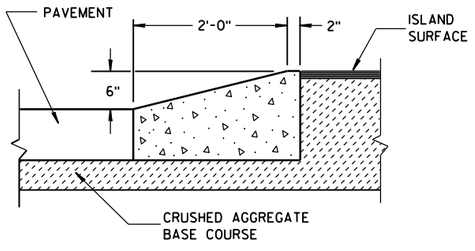
θ = ACUTE ANGLES 80° OR LESS



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X/Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

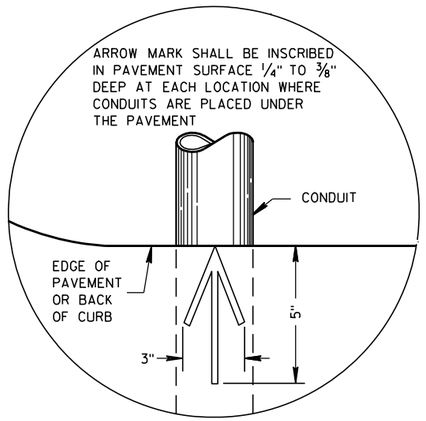
AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

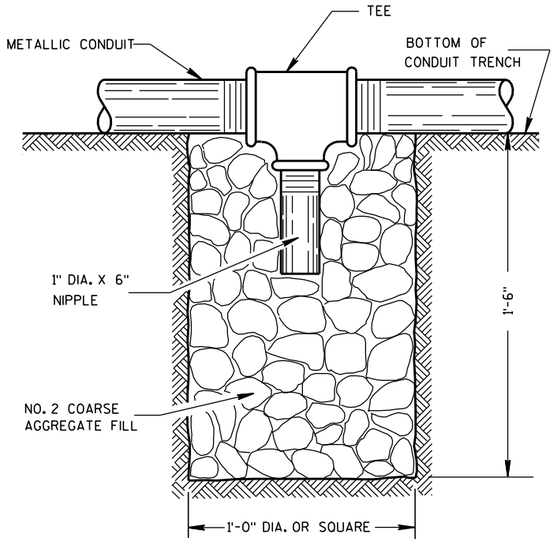
S.D.D. 9 A 1-13b

6



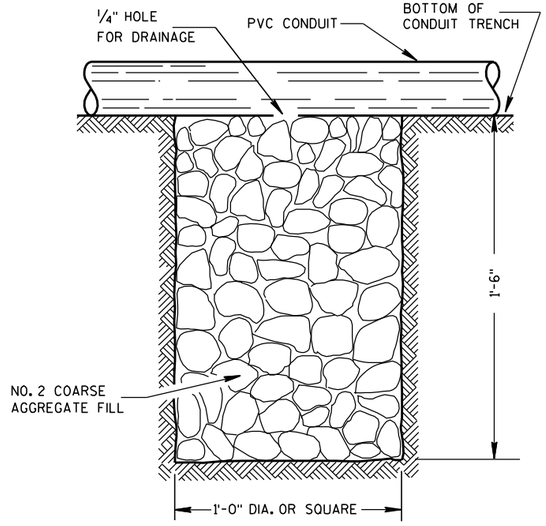
PLAN VIEW

ARROW MARK



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

DRAIN SUMP FOR METALLIC CONDUIT



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

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

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

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

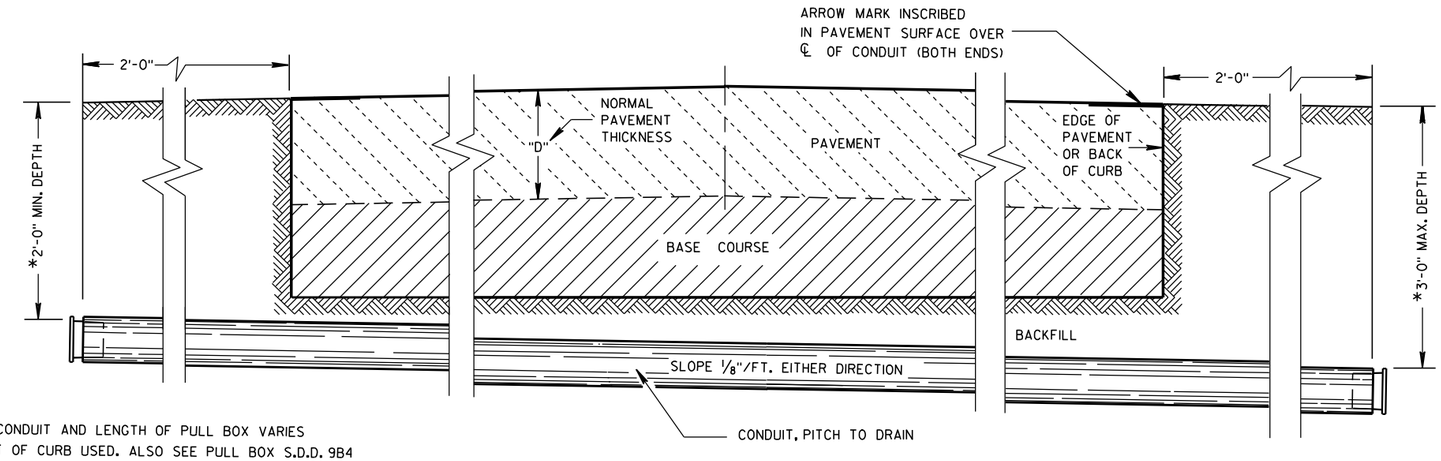
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

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

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

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



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

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/23/03 — DATE

/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI

FHWA

6

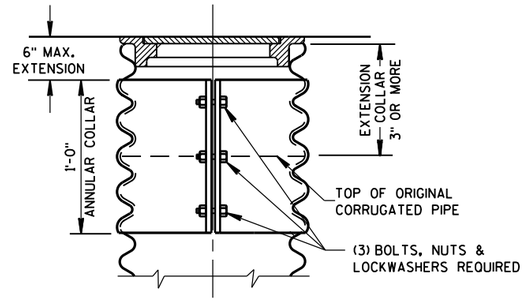
S.D.D. 9 B 2-7

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

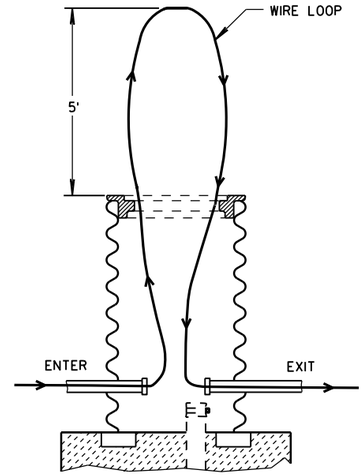
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2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

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

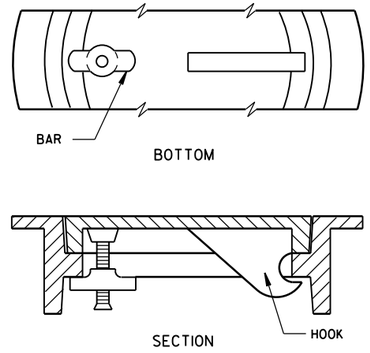
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

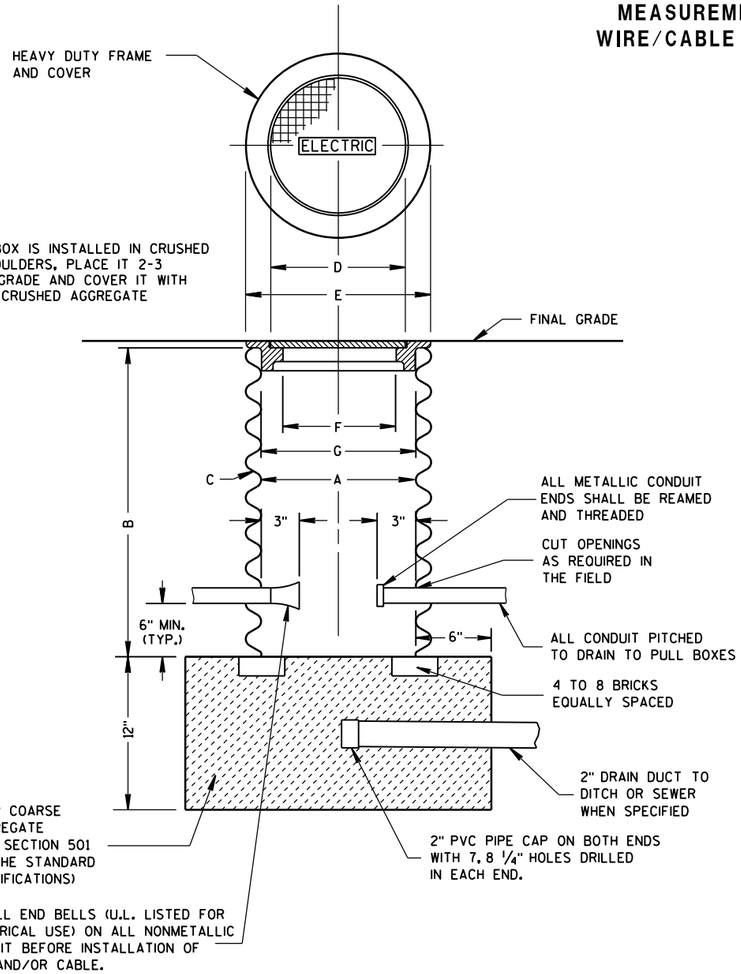


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



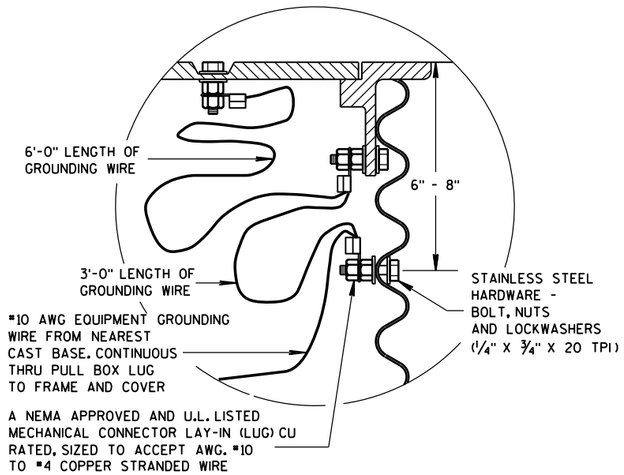
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

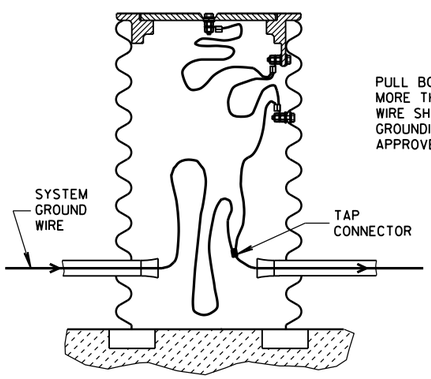


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



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

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

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

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

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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

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

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

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

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

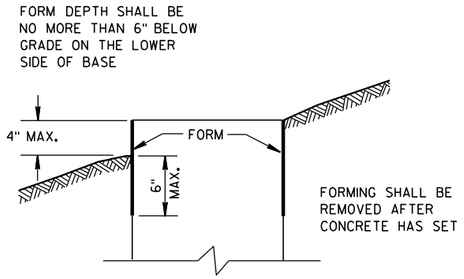
2-7-2013
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

6

S.D.D. 9 B 4-10



FORMING DETAIL

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

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

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

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

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

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

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

GENERAL NOTES (CONTINUED)

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

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

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

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

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

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

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

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

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

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

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

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

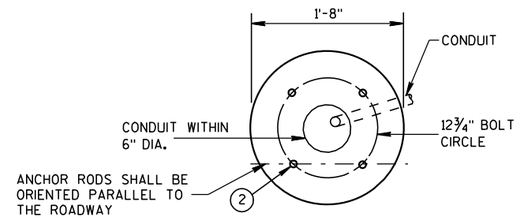
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

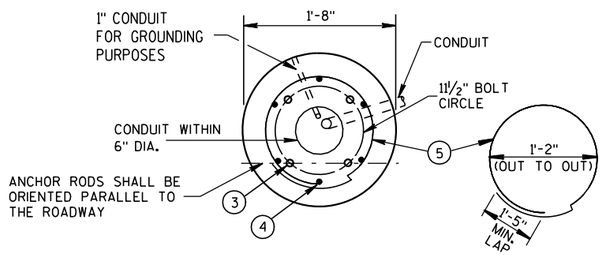
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

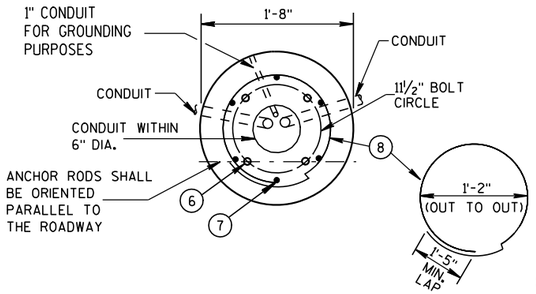
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

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

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

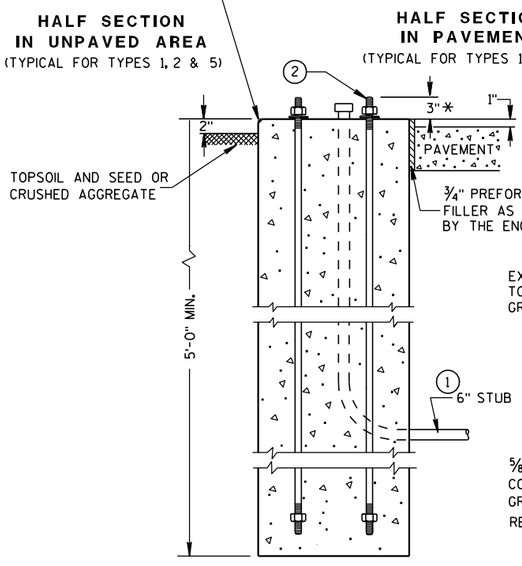






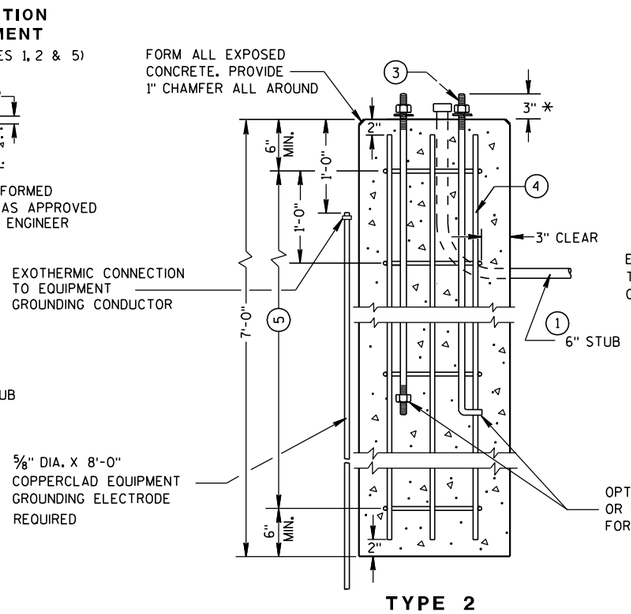
FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

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

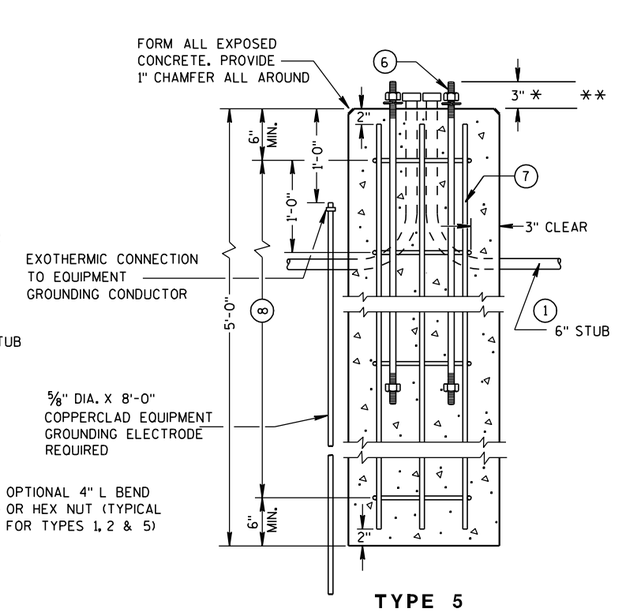


HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2 & 5)

TYPE 1



TYPE 2



TYPE 5

CONCRETE BASES

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

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

CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 9 C 2-6

6

S.D.D. 9 C 2-6

GENERAL NOTES

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

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

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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

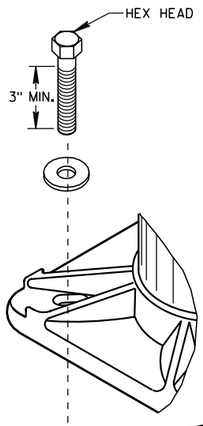
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

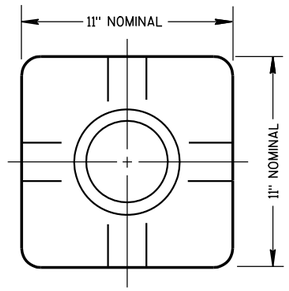
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

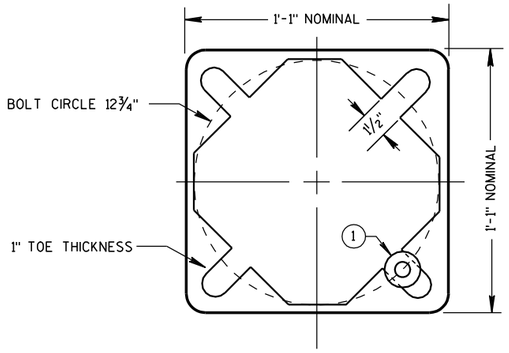
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1½", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

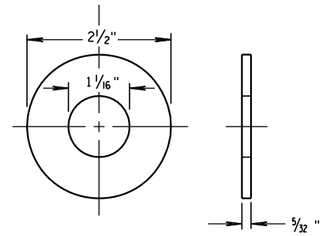




TOP VIEW
(PEDESTAL BASE)

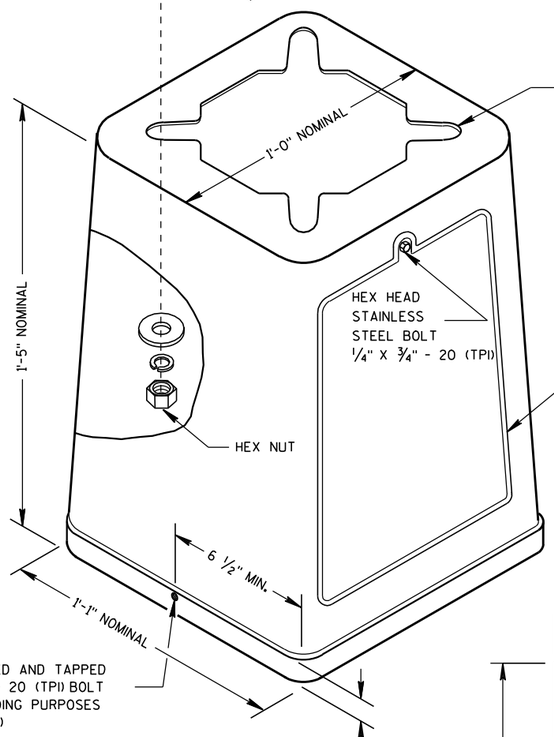


BOTTOM VIEW
(PEDESTAL BASE)

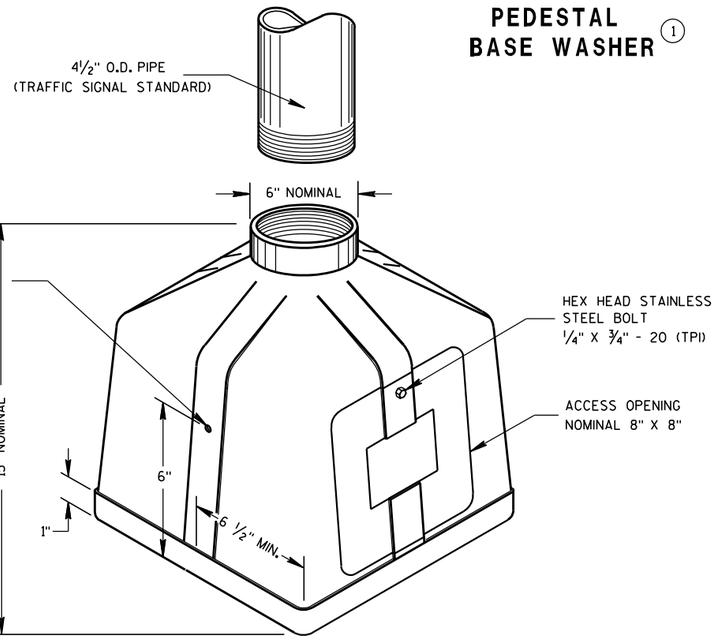


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

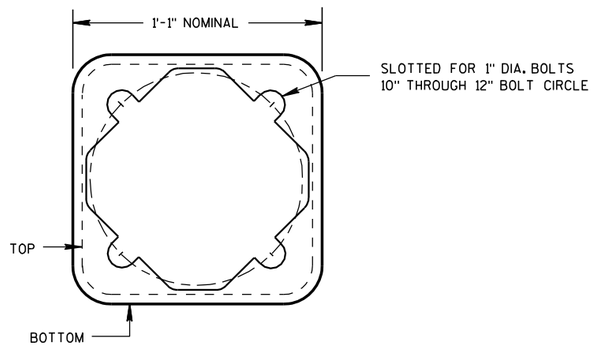


ISOMETRIC VIEW

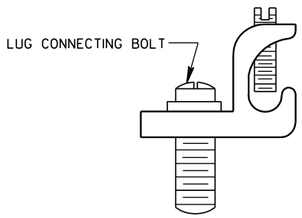


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

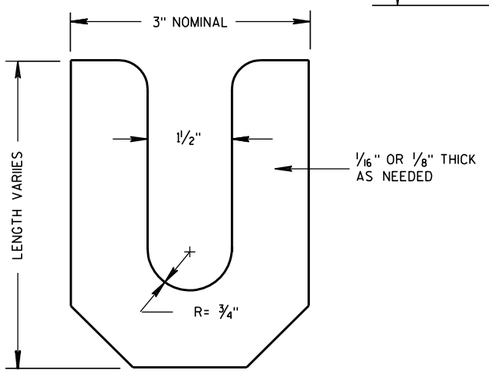


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

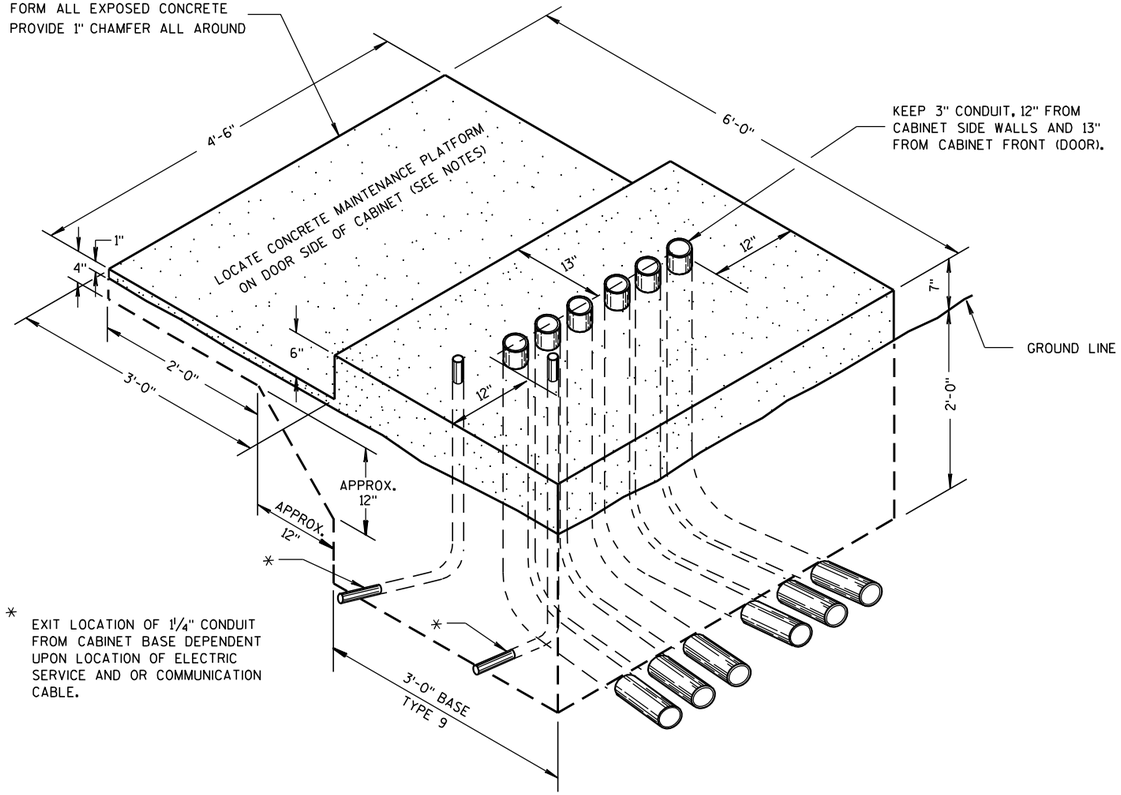
APPROVED
10/27/09 — DATE
/S/ Joanna L. Rich — STATE ELECTRICAL ENGI
381
HWYS
FHWA

6

S.D.D. 9 C 3-3

6

S.D.D. 9 C 3-3

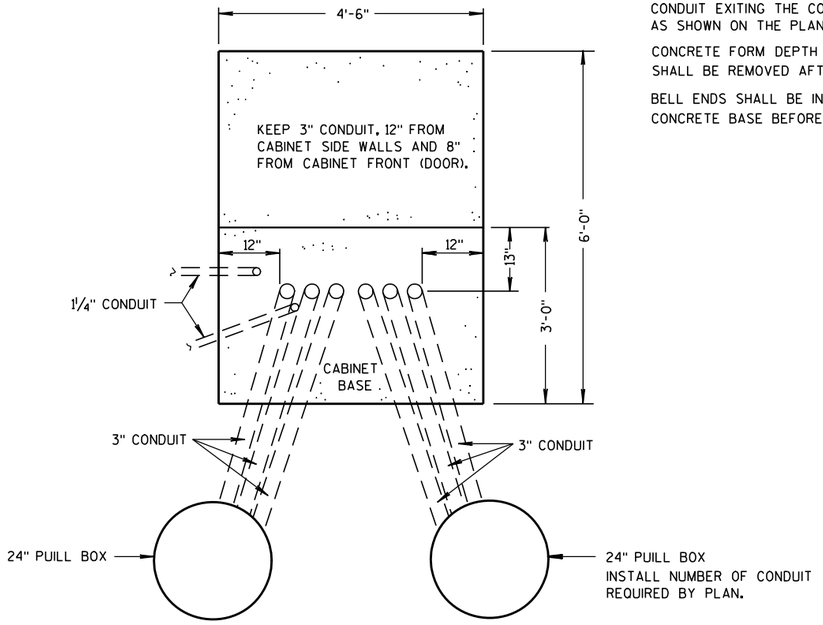


* EXIT LOCATION OF 1¼" CONDUIT FROM CABINET BASE DEPENDENT UPON LOCATION OF ELECTRIC SERVICE AND OR COMMUNICATION CABLE.

ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

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

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

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

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

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/27/07 — DATE

/S/ Balu Ananthapadmanabhan — STATE ELECTRICAL ENGI

382

HWYS

FHWA

6

S.D.D. 9 C 6-5

6

S.D.D. 9 C 6-5

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

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

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

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 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 (LATEST EDITION).

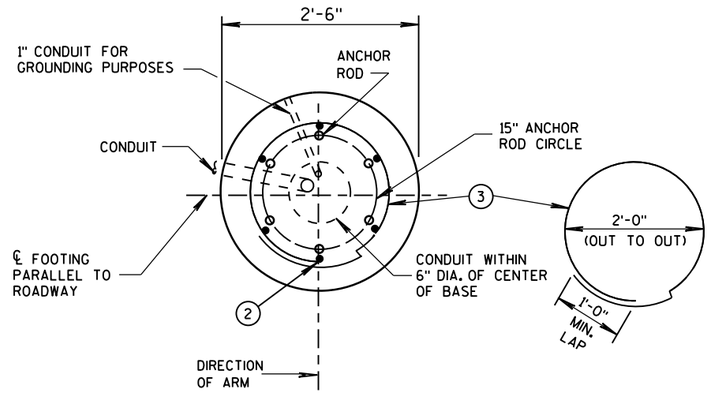
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

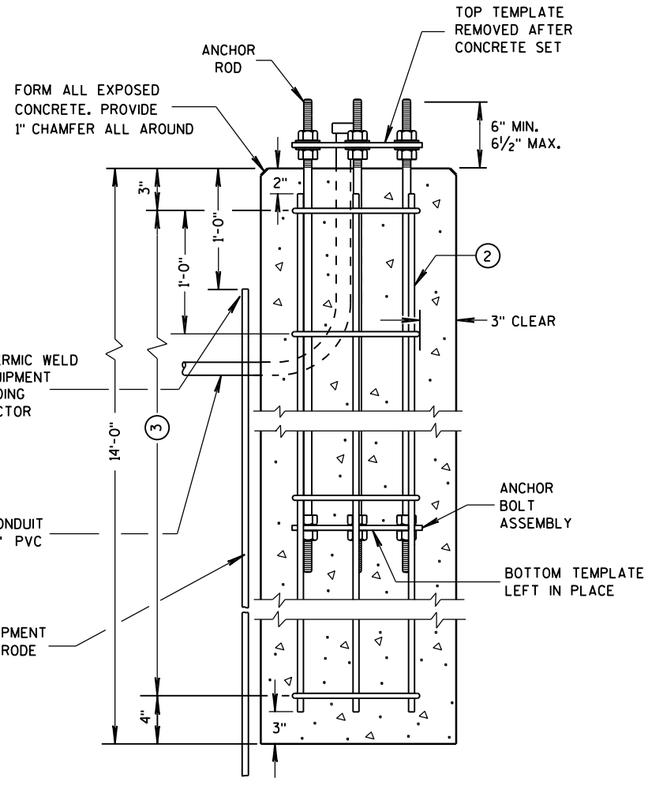
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 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.

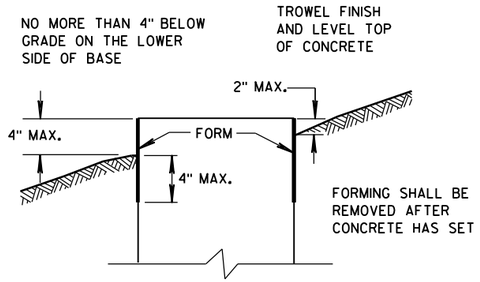
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, AASHTO M314 GRADE 55	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



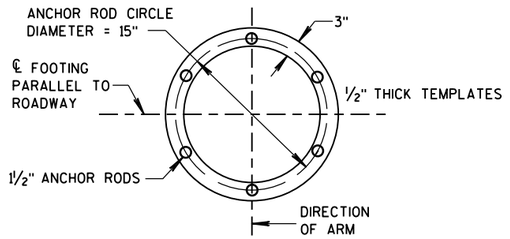


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 POLES)

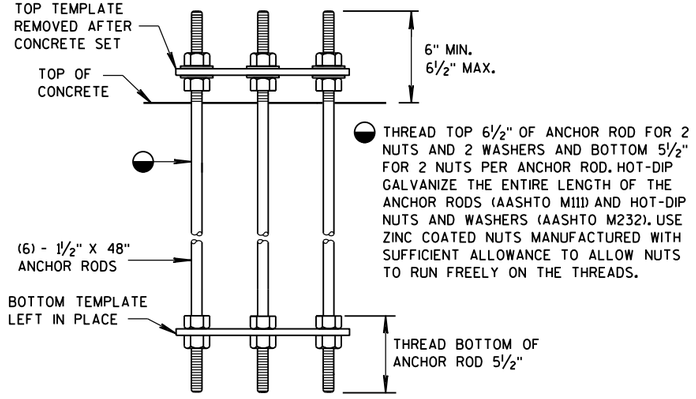
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-1 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

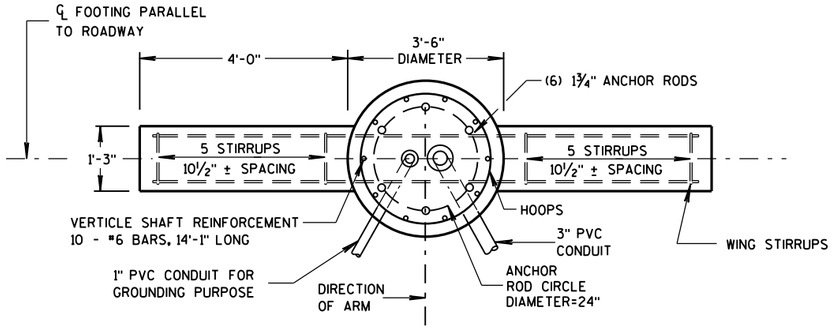
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	69
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

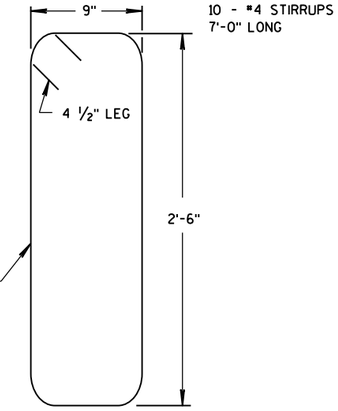
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1-16-2013 DATE
/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA

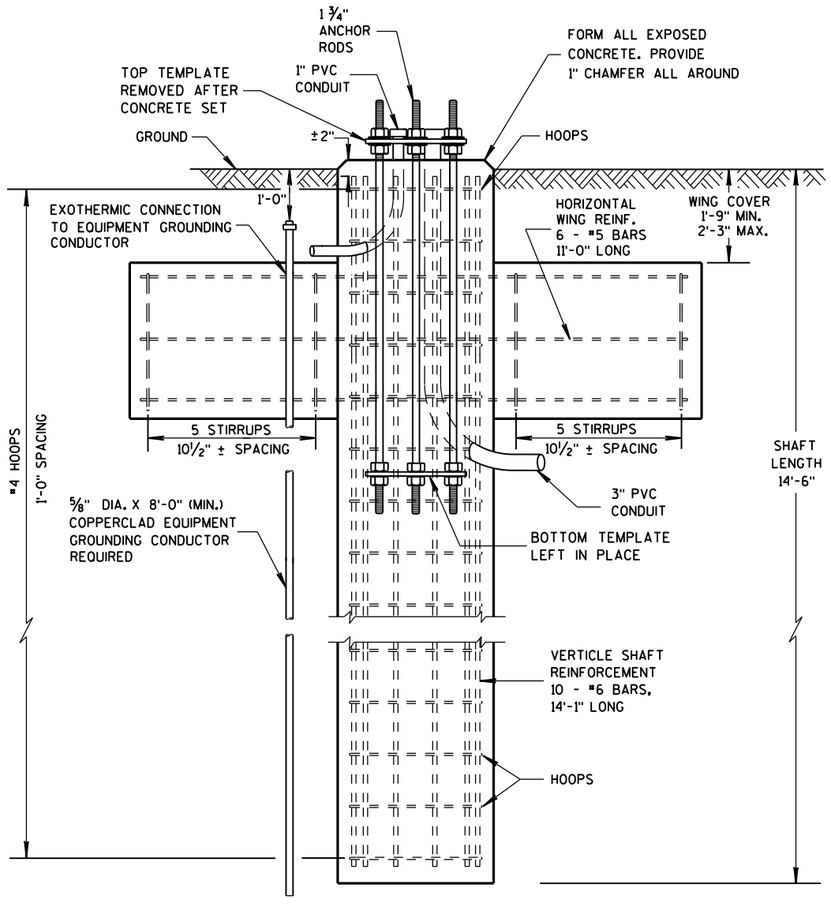
6
S.D.D. 9 C 11-3



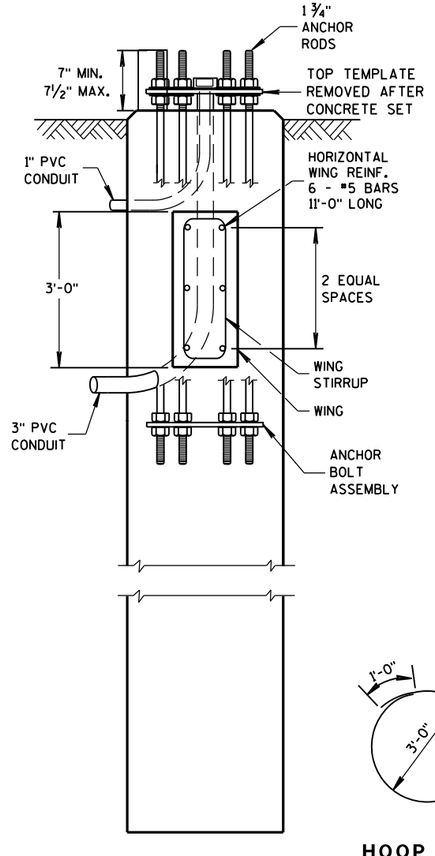
PLAN VIEW



WING STIRRUP

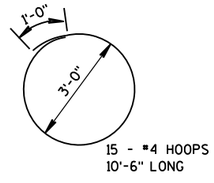


ELEVATION VIEW



SIDE VIEW

DOES NOT SHOW HOOPS OR VERTICAL SHAFT REINFORCEMENT



15 - #4 HOOPS 10'-6" LONG

HOOP DETAIL

GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

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

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

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

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

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

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 BE FURNISHED AND INSTALLED TO 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.

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

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL 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 THE WRITTEN APPROVAL OF THE ENGINEER.

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

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.

(FOR TYPE 12 & 13 POLES)

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 433 LBS.

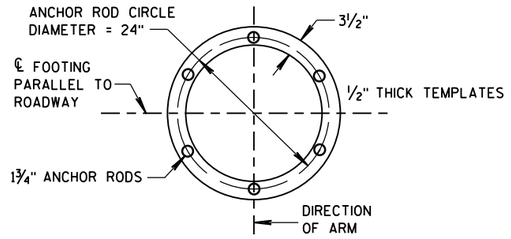
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-1 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 13

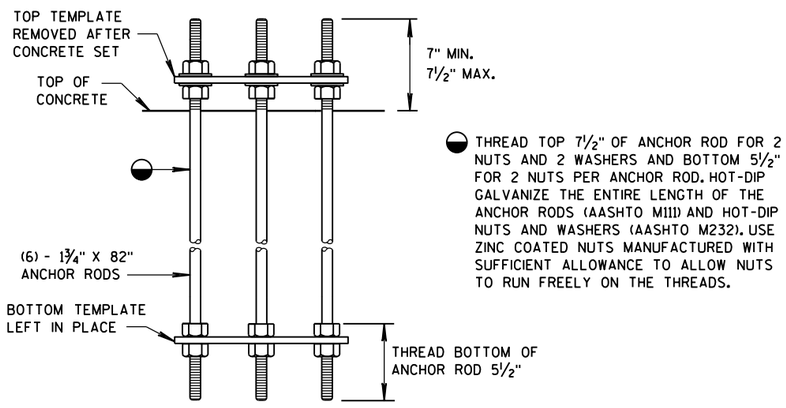
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 9 C 12-3a

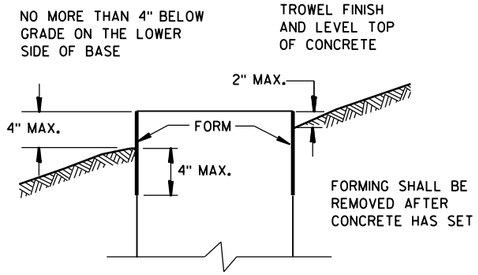


TOP AND BOTTOM TEMPLATES



◒ THREAD TOP 7½" OF ANCHOR ROD FOR 2 NUTS AND 2 WASHERS AND BOTTOM 5½" 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 SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

ANCHOR BOLT ASSEMBLY DETAIL



FORMING DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY

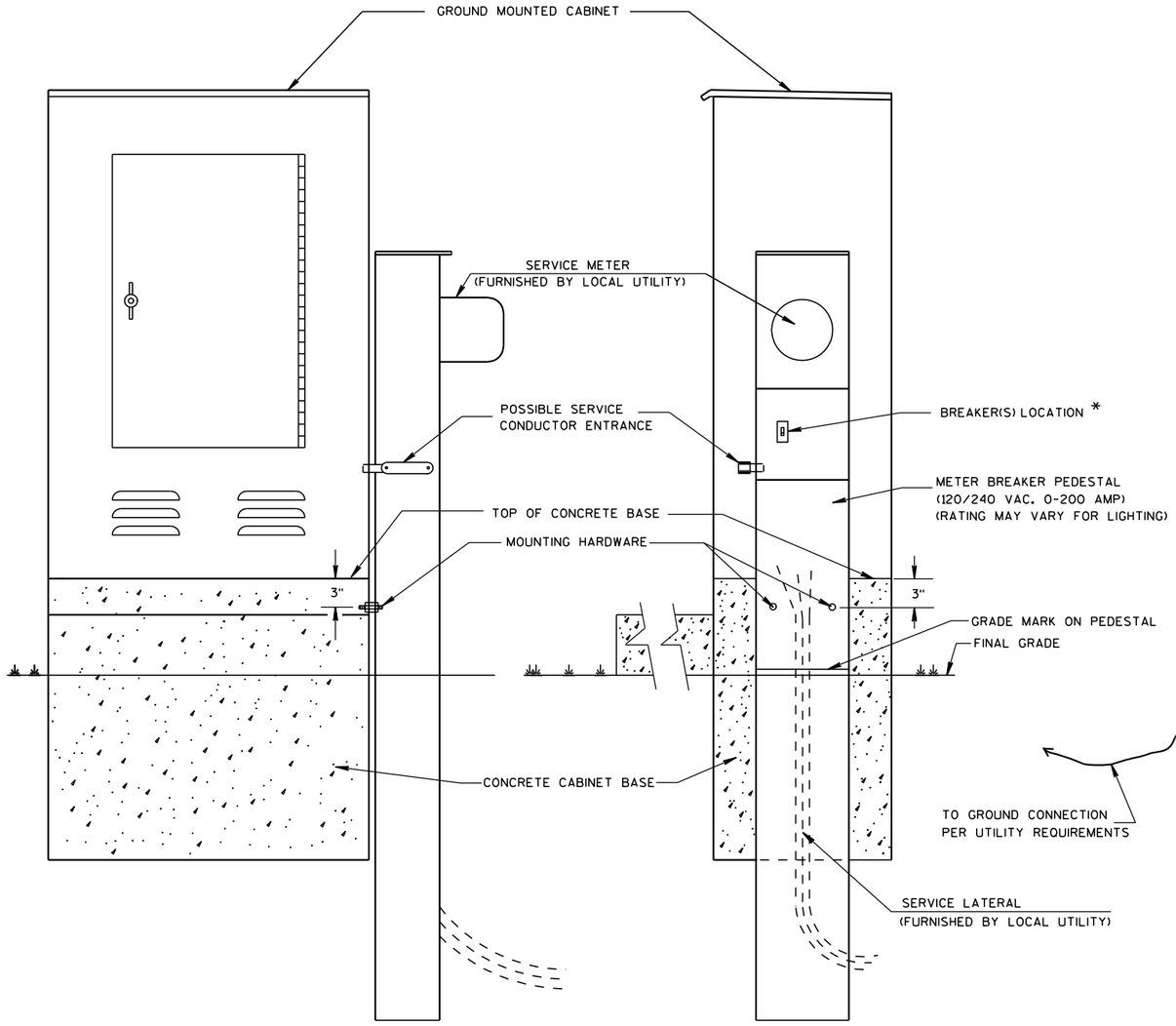
CONCRETE BASE TYPE 13	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
1-16-2013 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	

6

S.D.D. 9 C 12-3b

6

S.D.D. 9 C 12-3b



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

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

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

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

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

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

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

6

S.D.D. 9 D 1-4

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/27/09 DATE

/S/ Joanna L. Bush
STATE ELECTRICAL ENGI

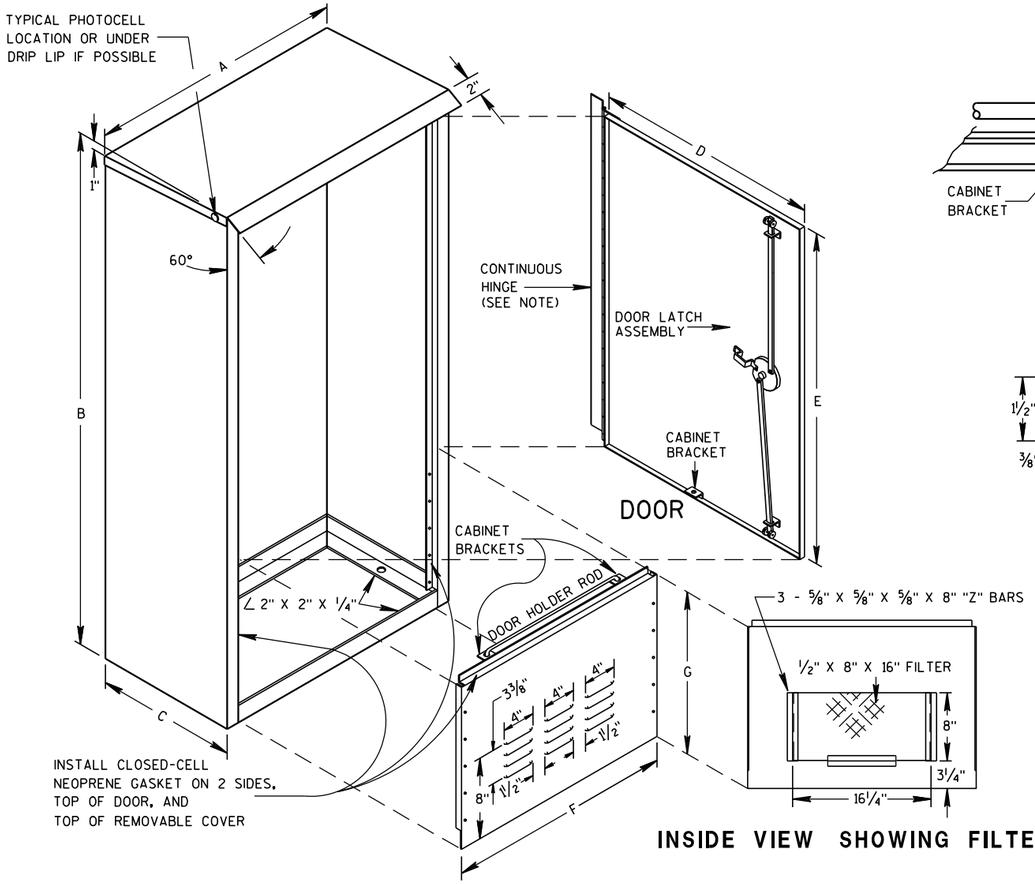
386

HWYS

FHWA

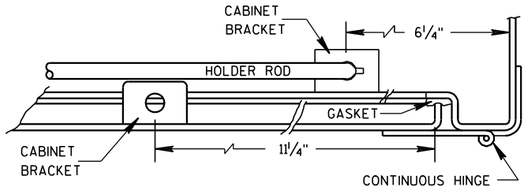
6

S.D.D. 9 D 1-4

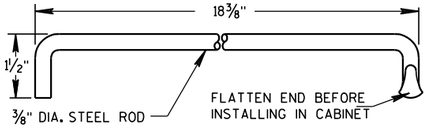


REMOVABLE COVER

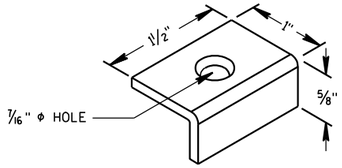
INSIDE VIEW SHOWING FILTER



HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET

MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

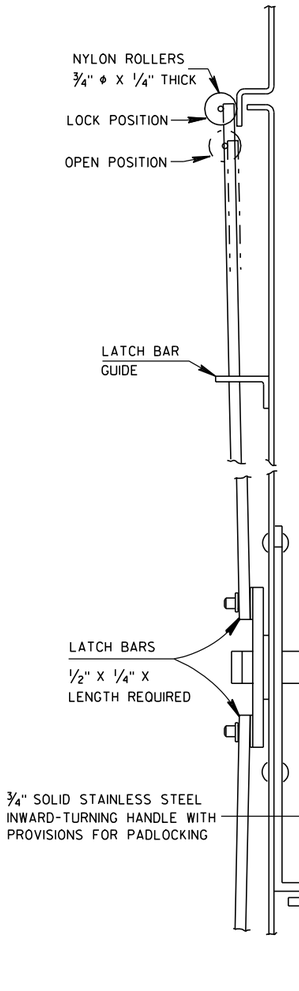
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

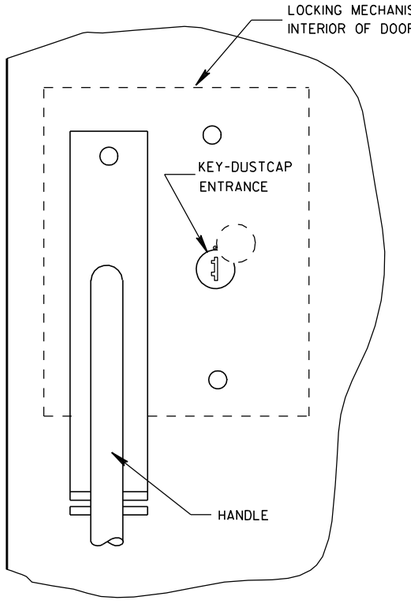
CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE AN APPROVED TYPE.

DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.

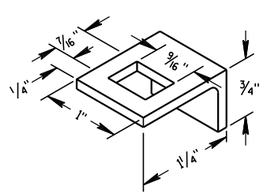


SIDE VIEW



FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL OR LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

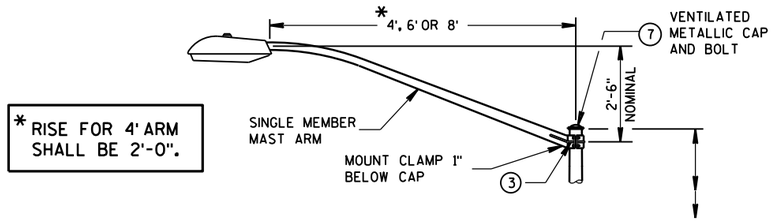
APPROVED
10/21/96 DATE
/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI
FHWA

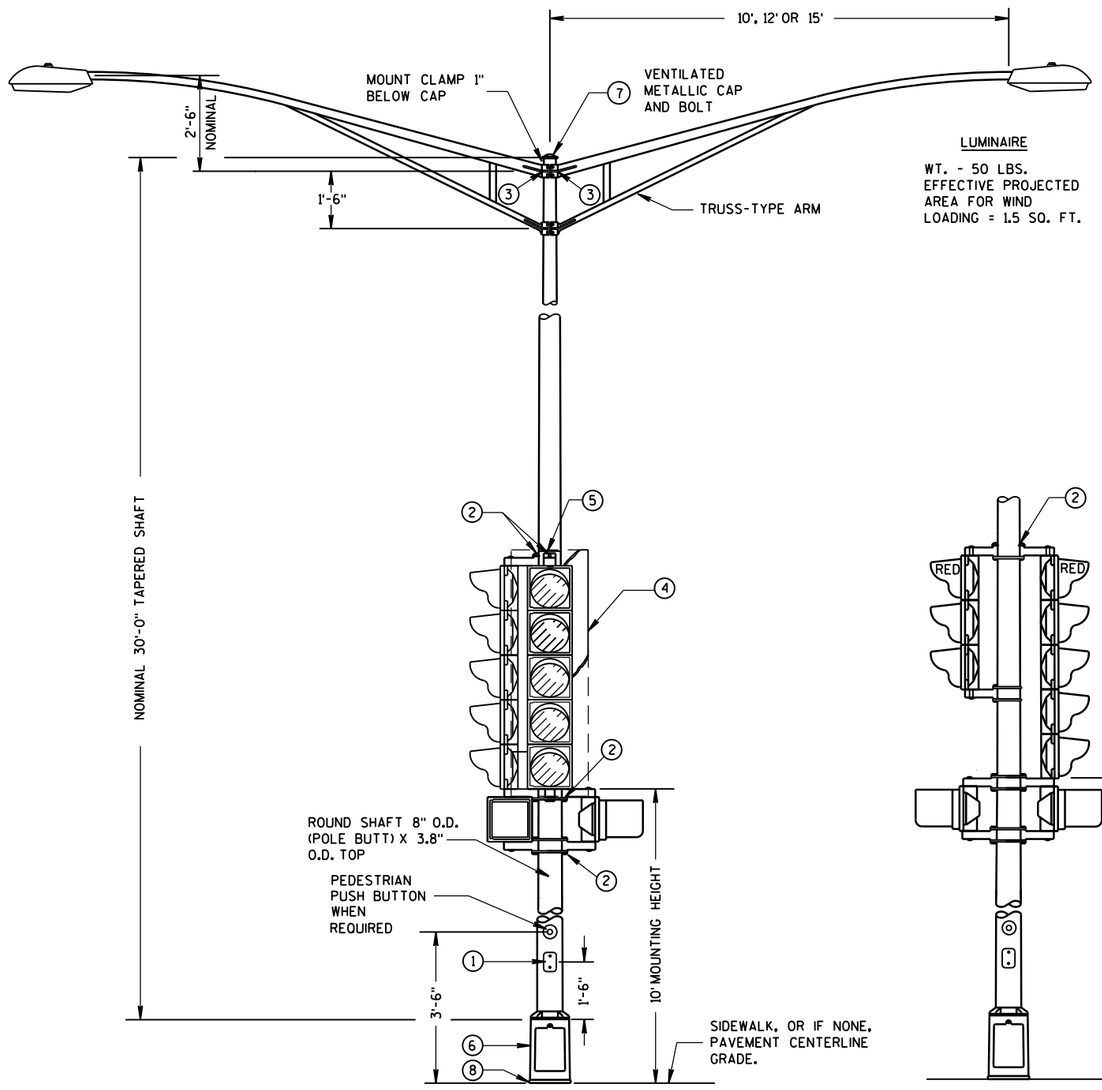
6

S.D.D. 9 D 2-2

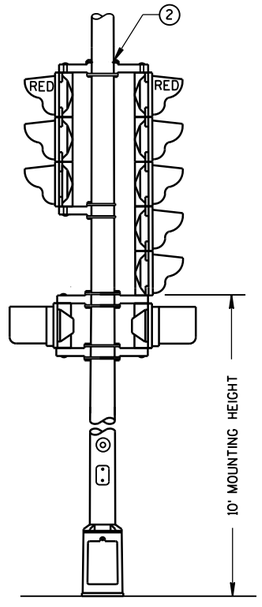
6

S.D.D. 9 D 2-2

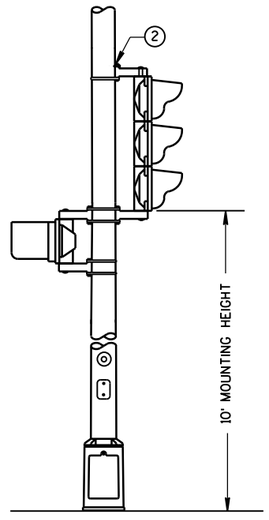




(MAXIMUM LOAD)

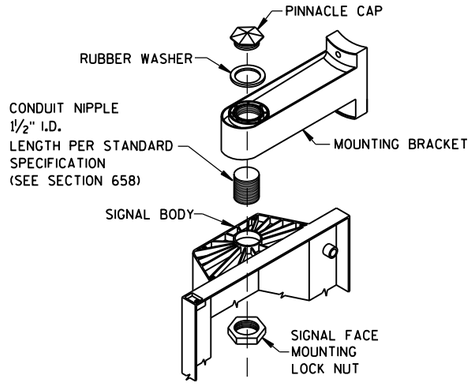


TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 4 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

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

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658).

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

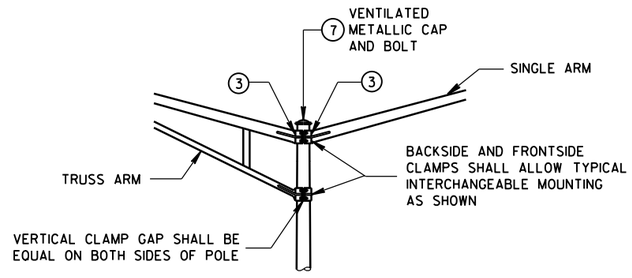
(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(7) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

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



INTERCHANGEABLE MOUNTING DETAIL

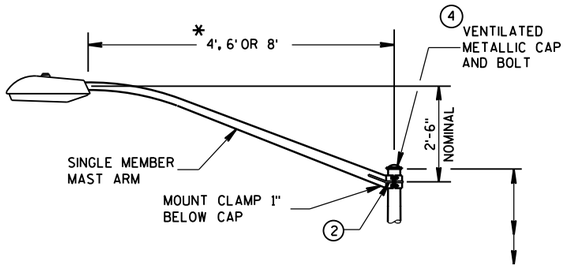
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

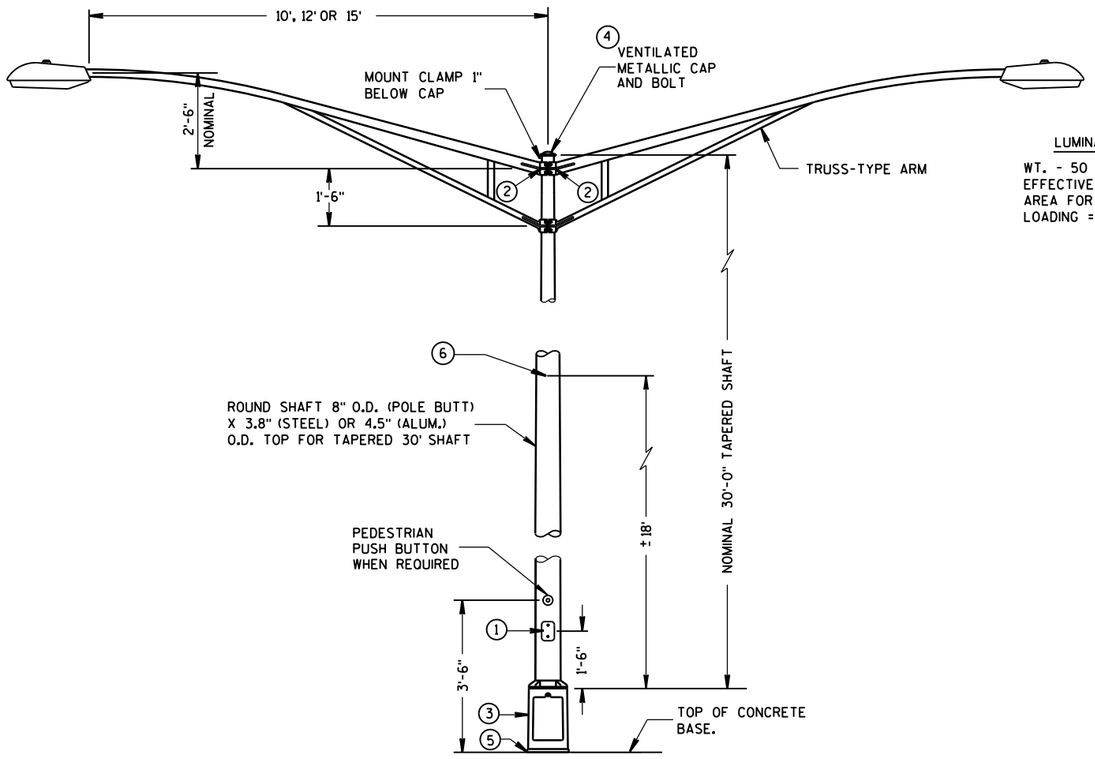
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

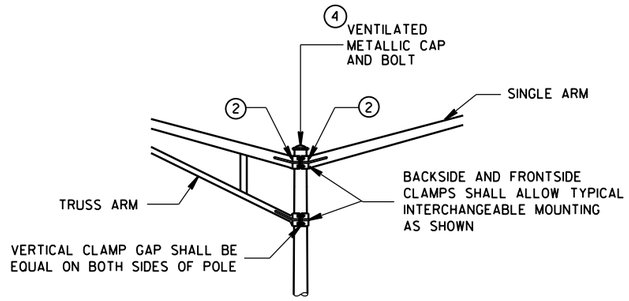
S.D.D. 9 E 1-12c

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

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

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

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

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

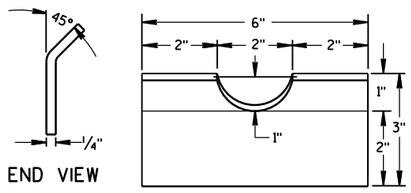
S.D.D. 9 E 1-12d

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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

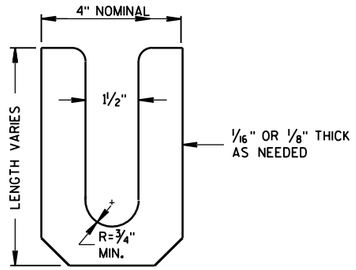


END VIEW

FRONT VIEW

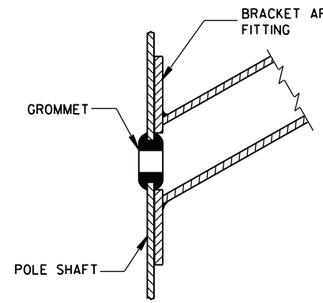
RECTANGULAR CLAMP SHIM

(4 TO A SET)

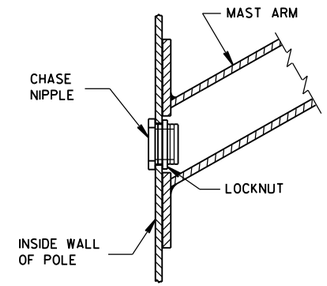


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

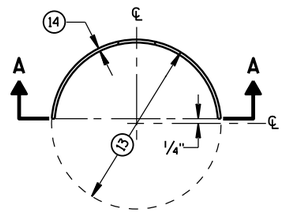
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

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

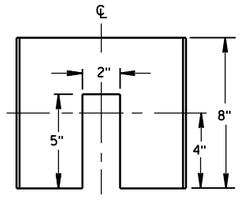
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

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



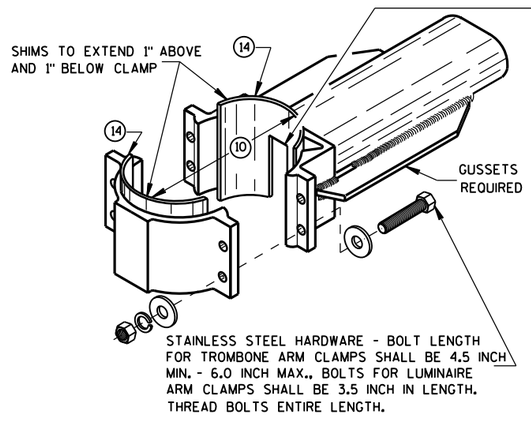
PLAN VIEW



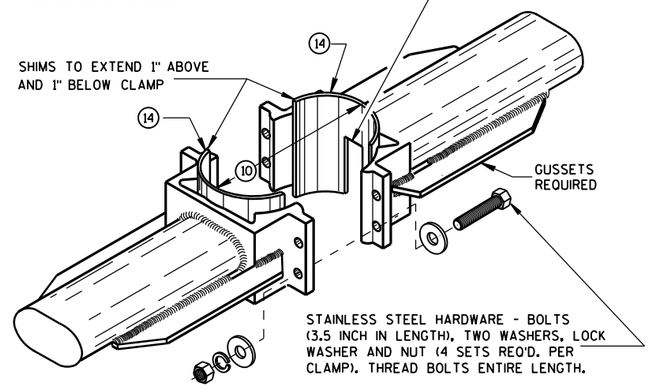
SECTION A-A

CIRCULAR CLAMP SHIM

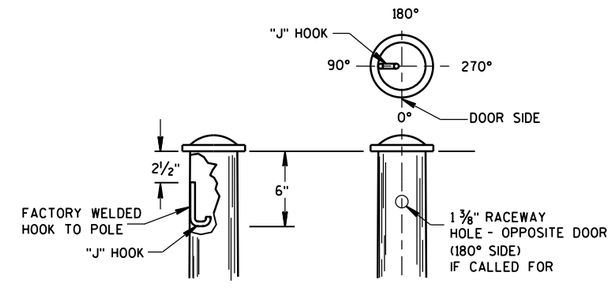
(2 TO A SET)



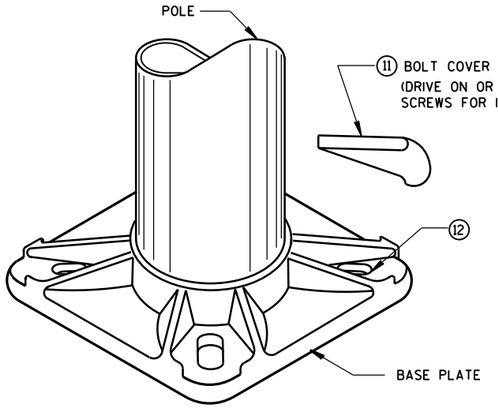
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



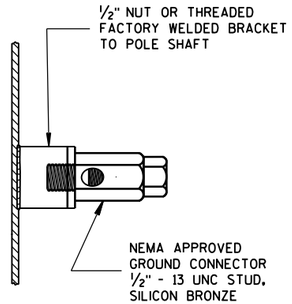
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

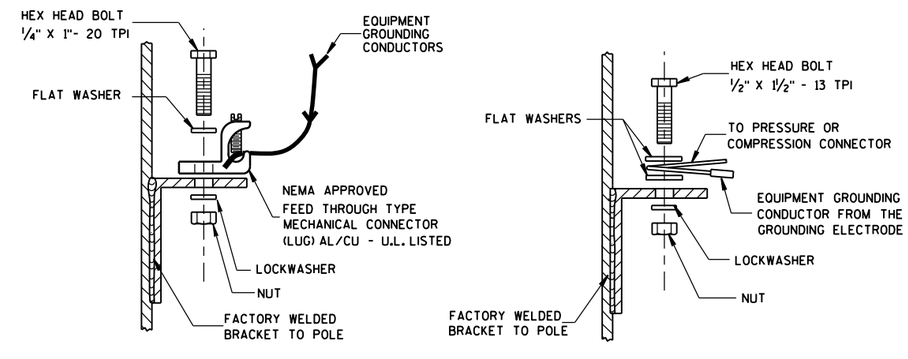


TYPICAL "J" HOOK LOCATION



BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

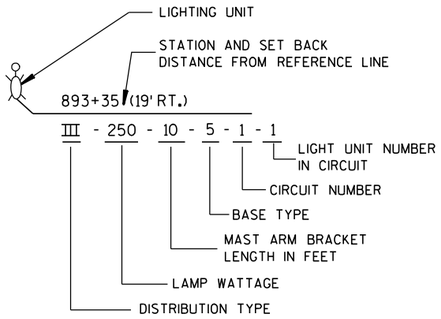
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

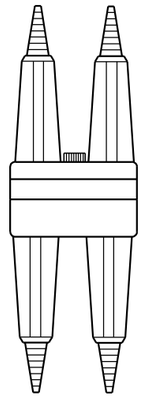
APPROVED
2/7/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

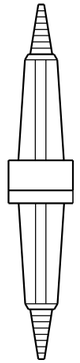
S.D.D. 9 E 1-12g



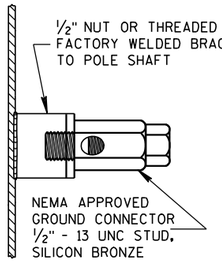
LIGHTING UNIT CODE
(TYPICAL)

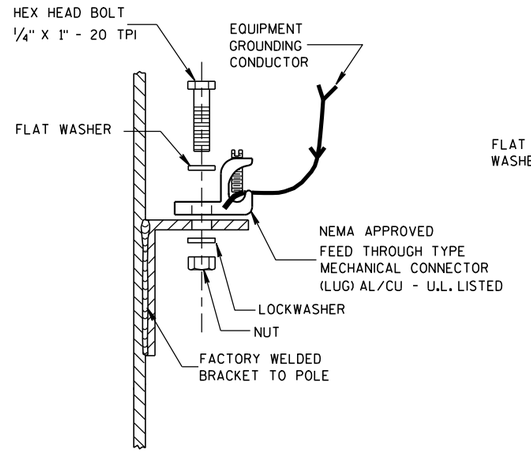


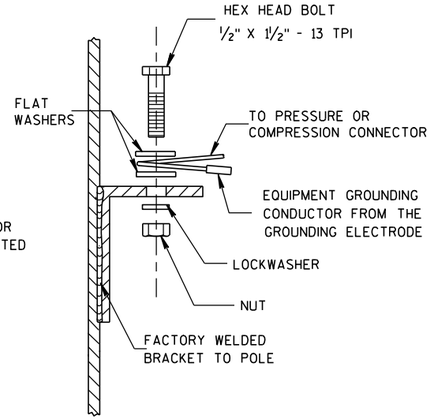
DETAIL "A"
BREAKAWAY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



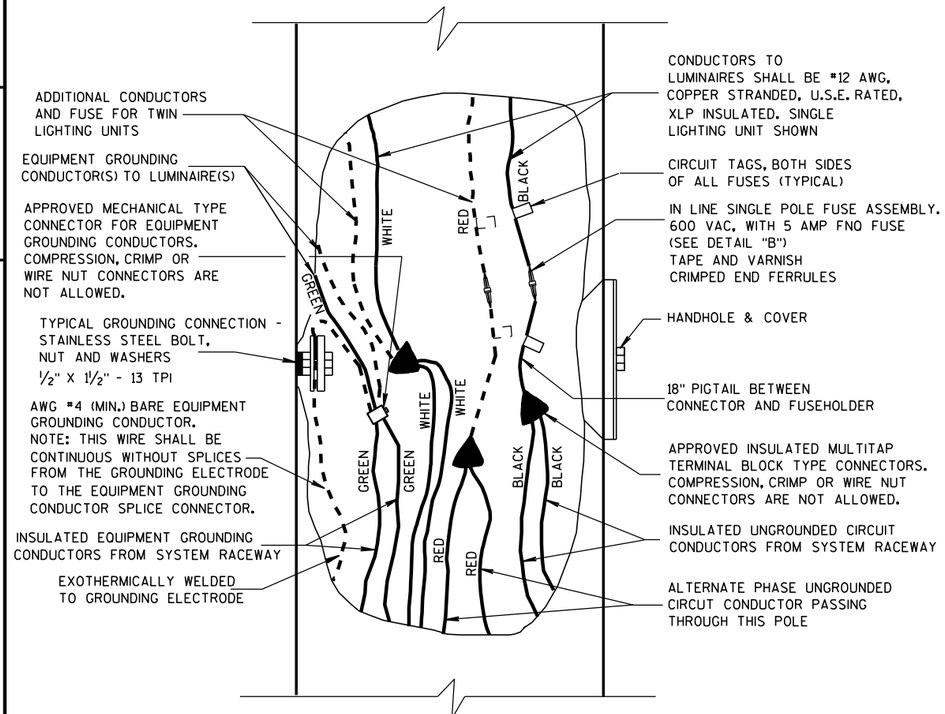
DETAIL "B"
BREAKAWAY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



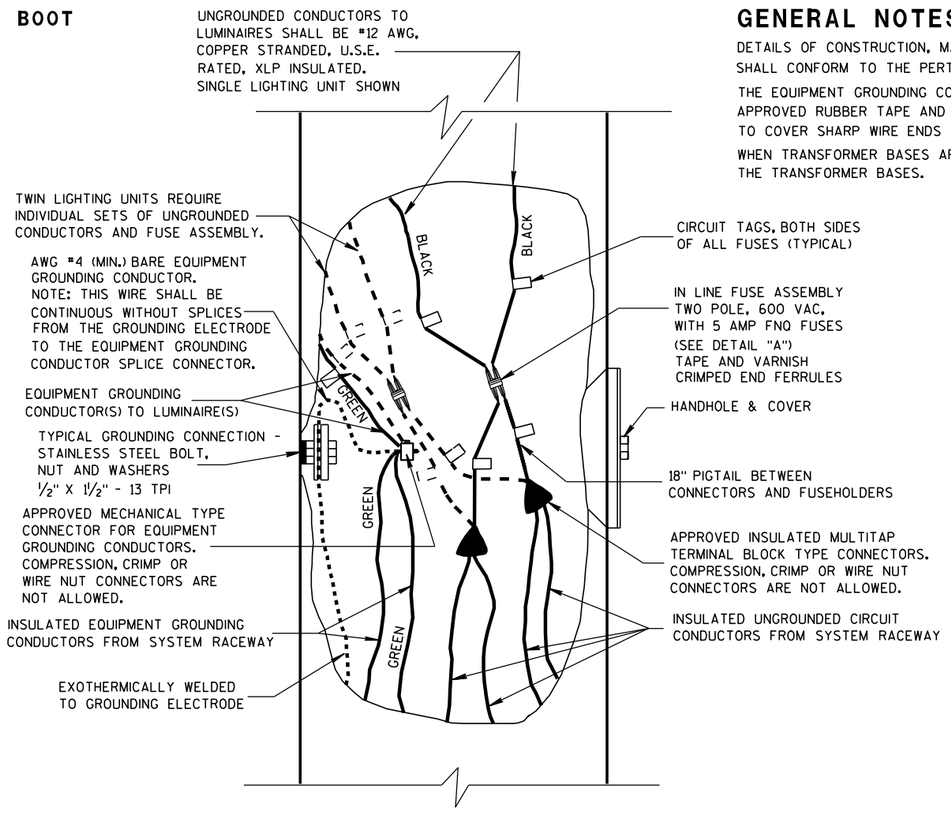




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



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



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

GENERAL NOTES

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

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

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

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 — DATE

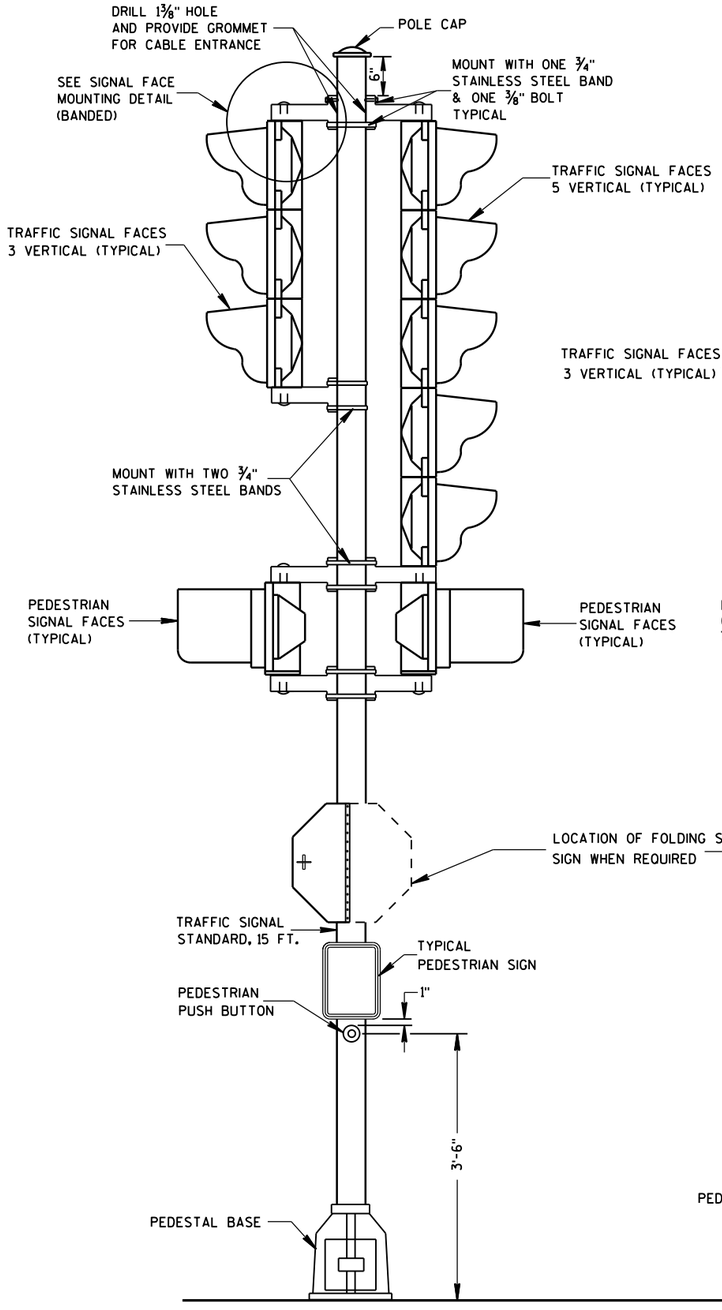
/S/ Thomas J. Gosnell — STATE ELECTRICAL ENGI

391

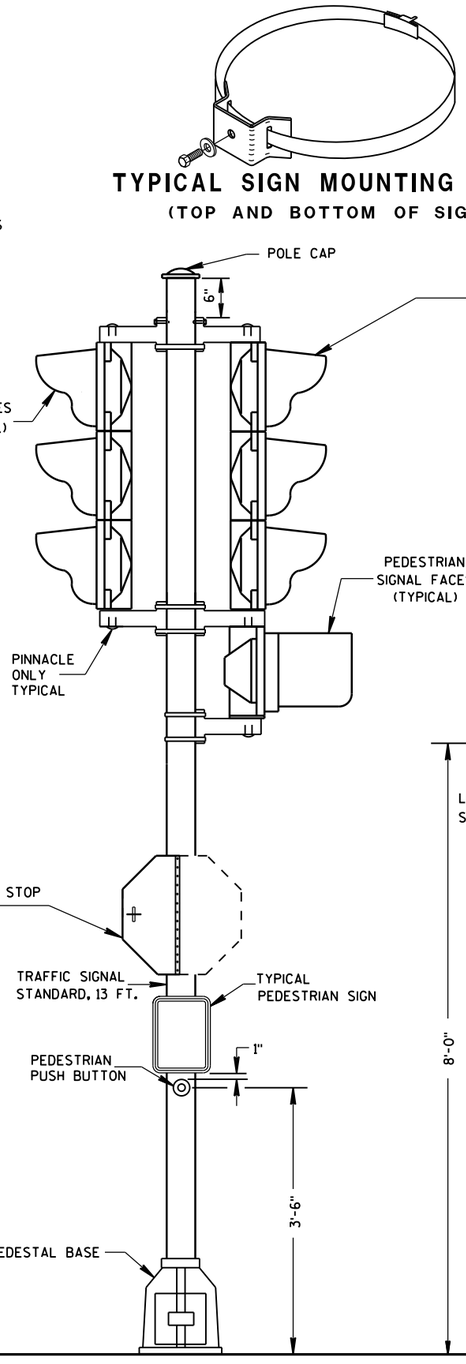
HWYS

FHWA

6
S.D.D. 9 E 3-4

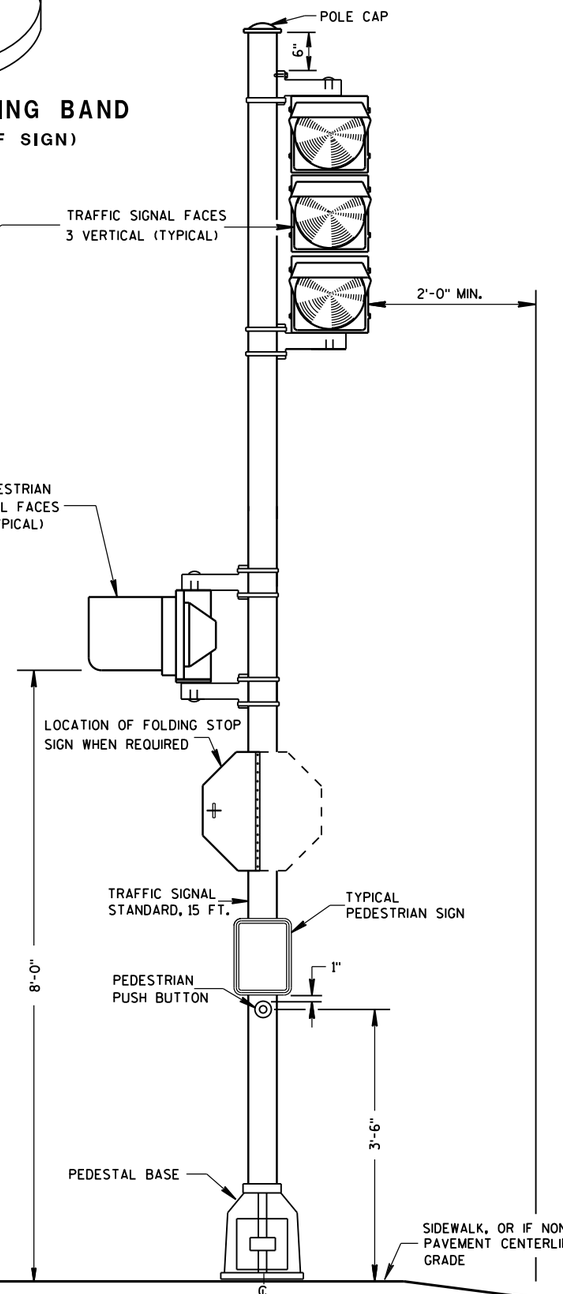


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

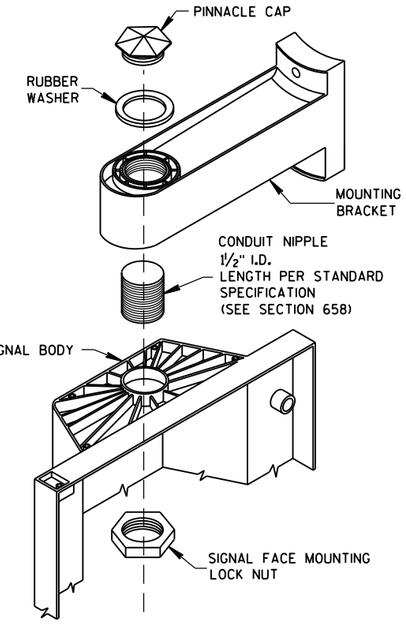
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

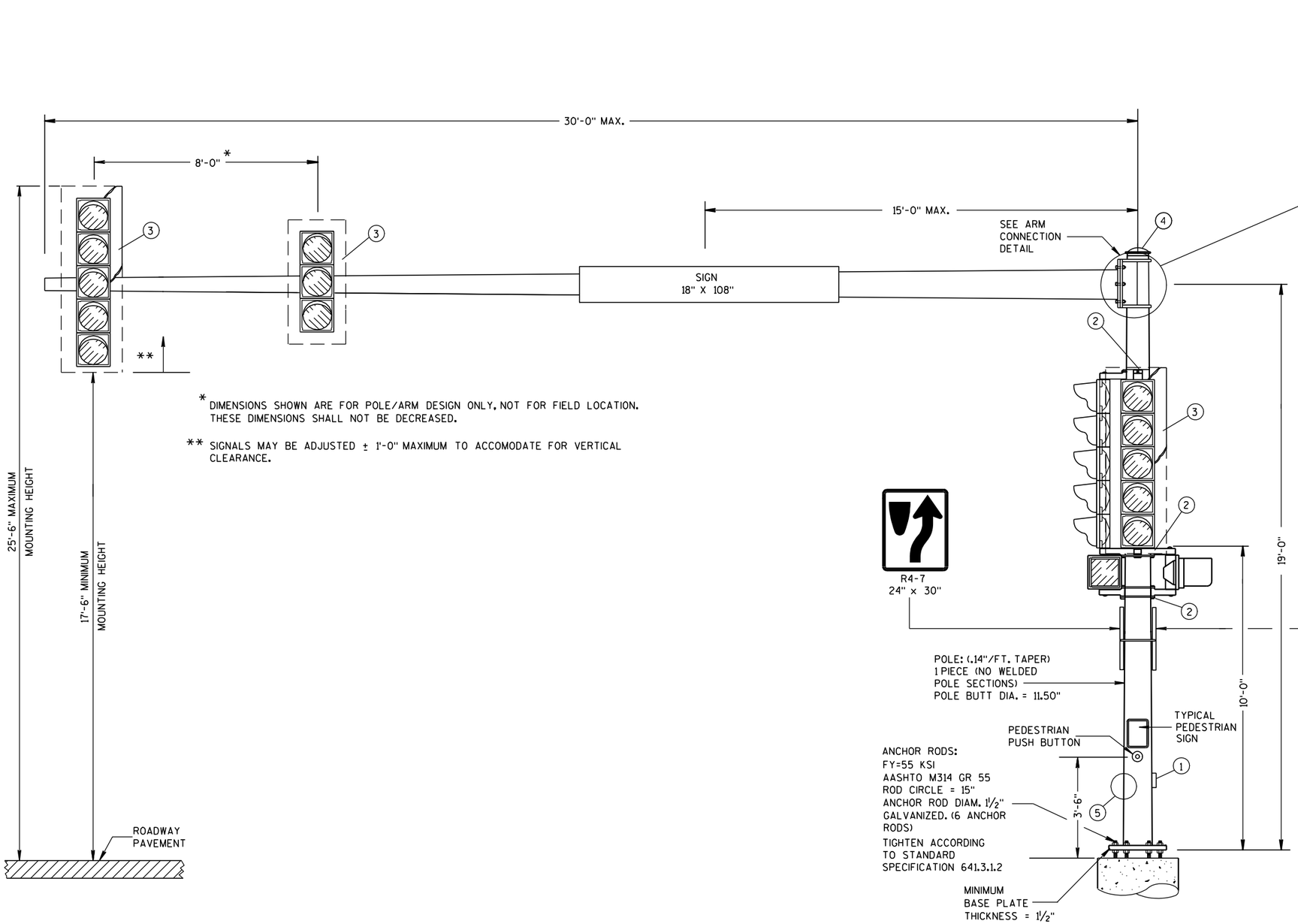
TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

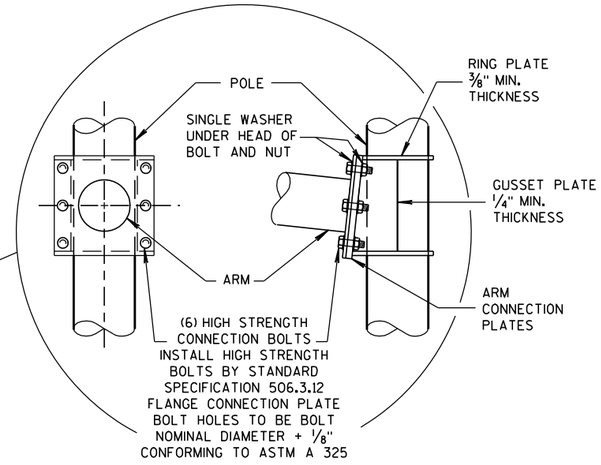
6

S.D.D. 9 E 6-5



* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY. NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



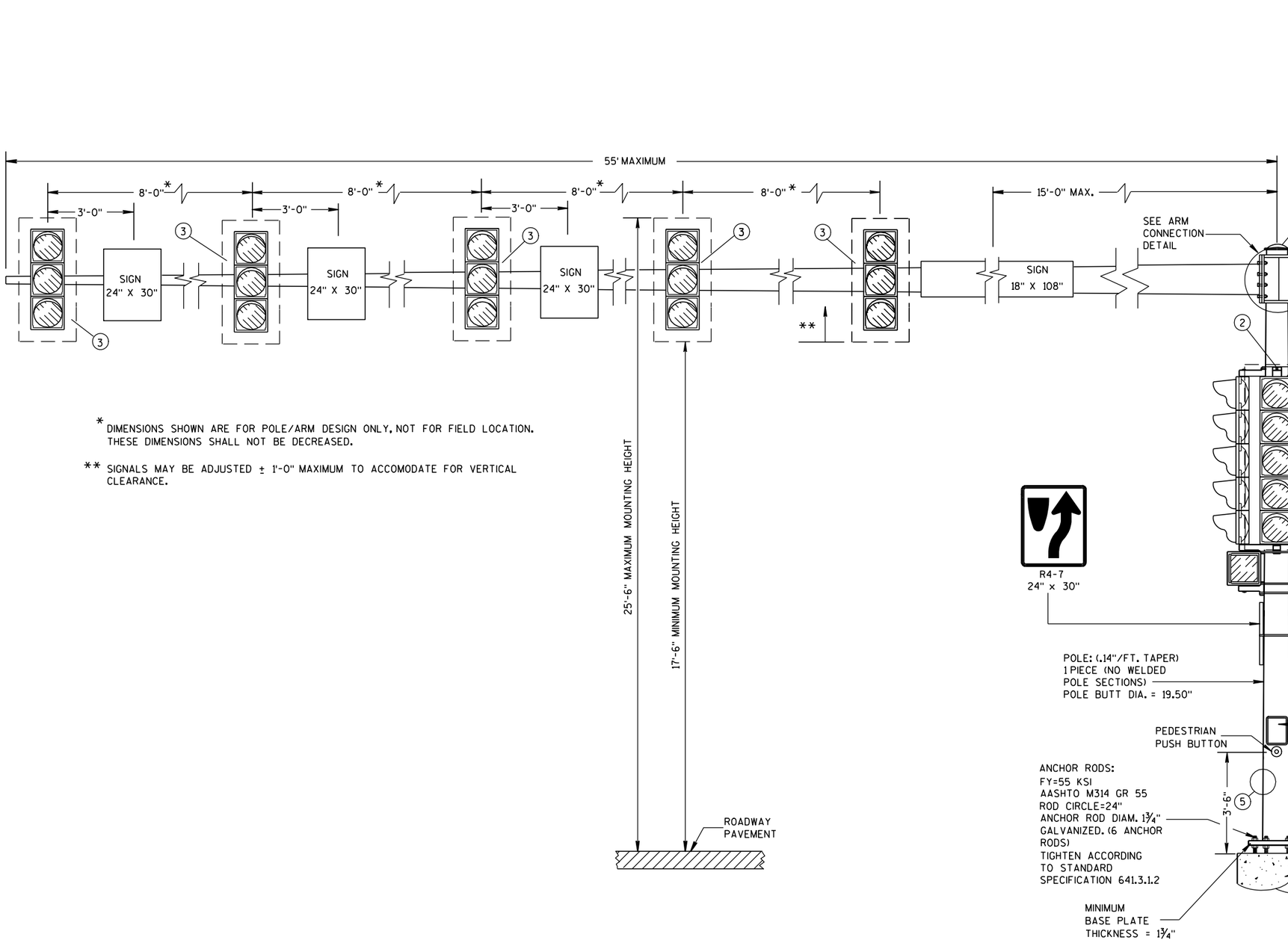
6 BOLT ARM CONNECTION DETAIL

ANCHOR ROD LOCATION

(MAXIMUM LOAD)

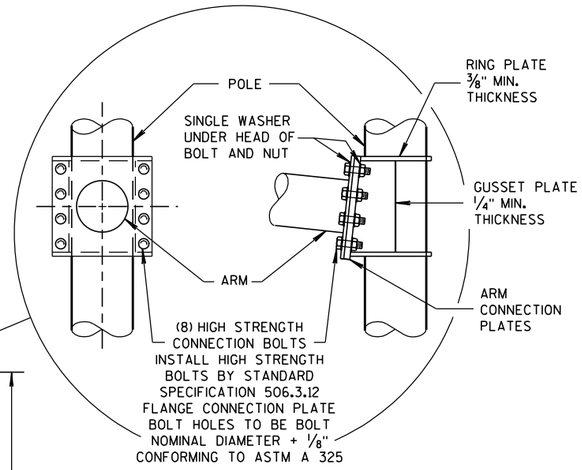
TYPE 9 POLE 15'- 30' MONOTUBE ARM

TYPE 9 POLE 15' - 30' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/2/2011 DATE	/S/ Thomas J. Corrigan STATE ELECTRICAL ENGI 393 HWYS
FHWA	

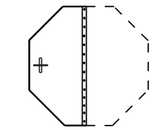


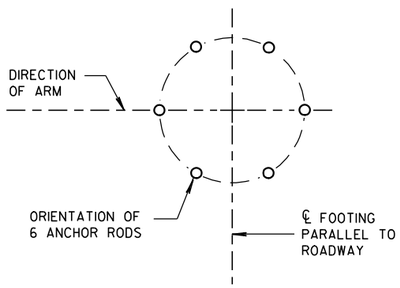
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



8 BOLT ARM CONNECTION DETAIL





ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 12 POLE 35'- 55' MONOTUBE ARM

TYPE 12 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/2/2011 — DATE
/S/ Thomas J. Gorring — STATE ELECTRICAL ENGI
394 — HWYS
FHWA

6
S.D.D. 9 E 8-4c

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE LATEST AASHTO AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

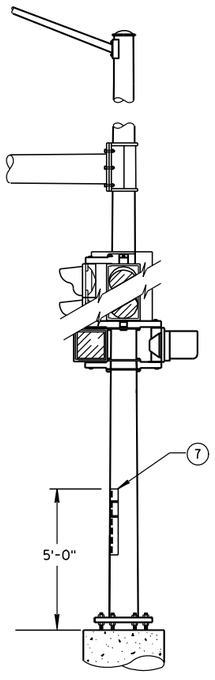
(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

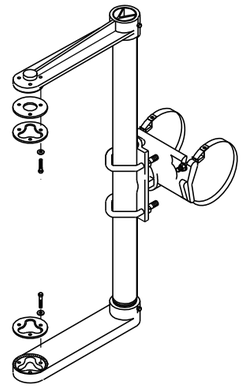
(7) INSTALL DEPARTMENT PROVIDED STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 5'-0" ABOVE THE CURB OR SHOULDER . ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

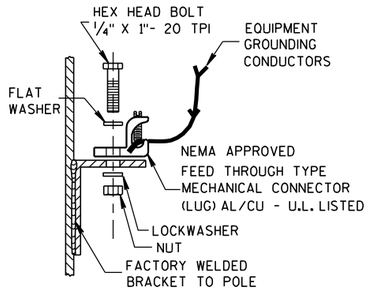


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



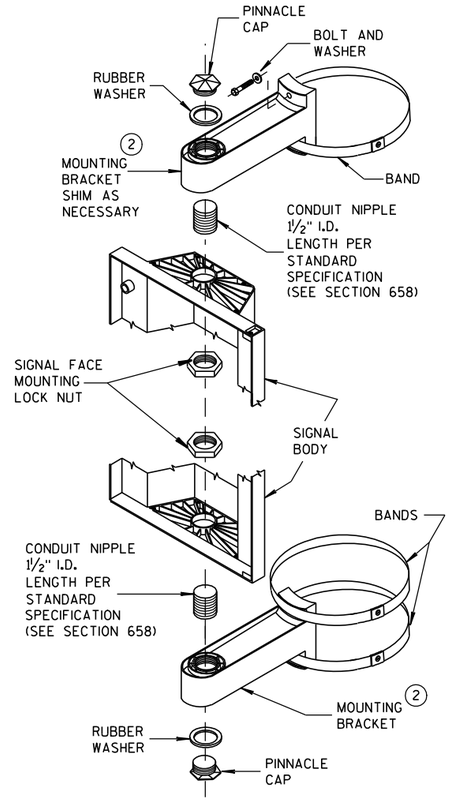
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

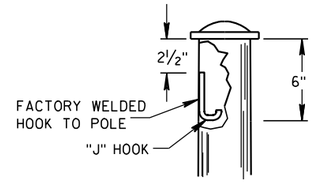


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

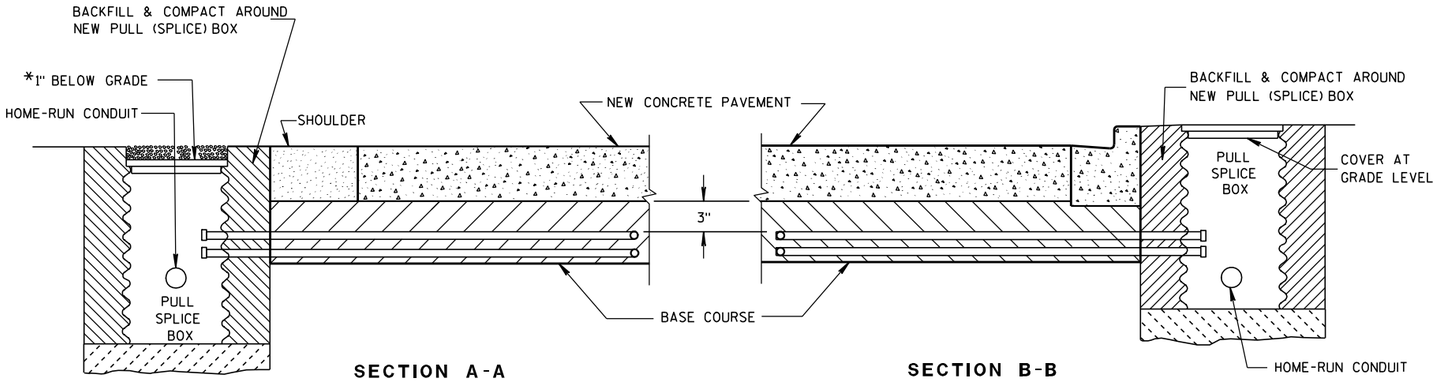
3/2/2011 DATE

/S/ Thomas J. Corrigan
STATE ELECTRICAL ENGI 395 HWYS

FHWA

6

S.D.D. 9 E 8-4e



SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

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

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

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

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

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

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

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

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

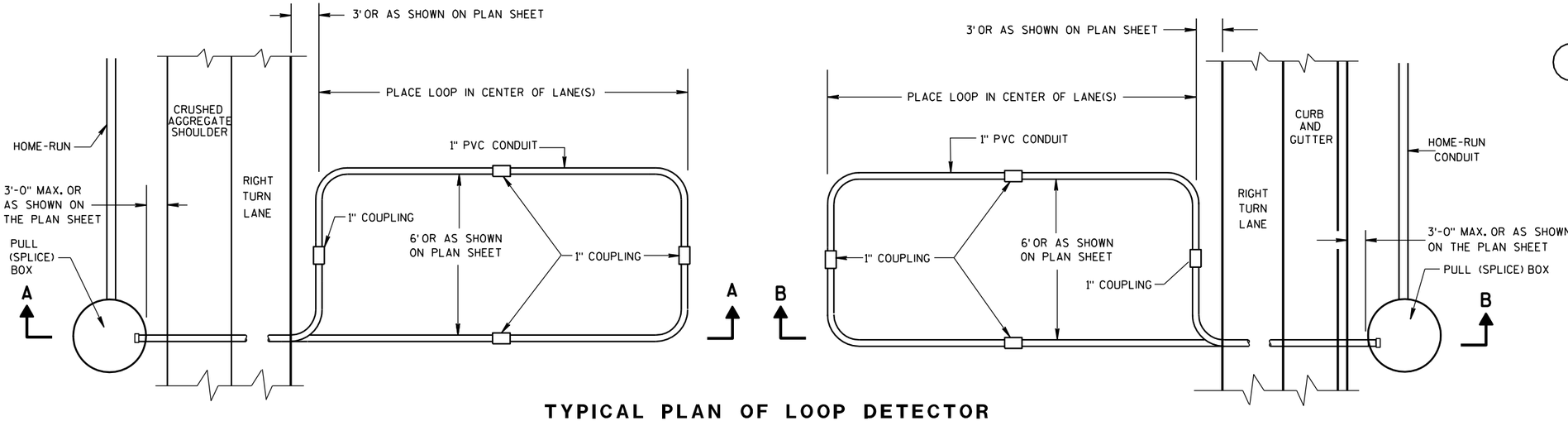
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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

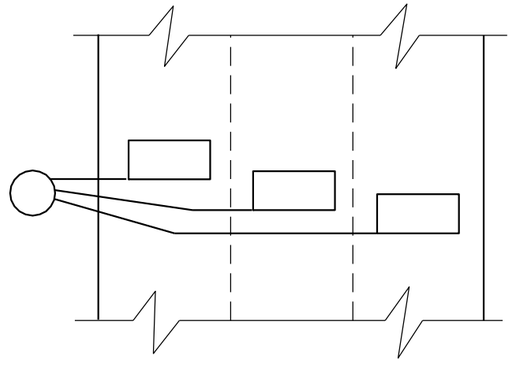
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

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

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



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



MULTI-LANE INSTALLATION

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

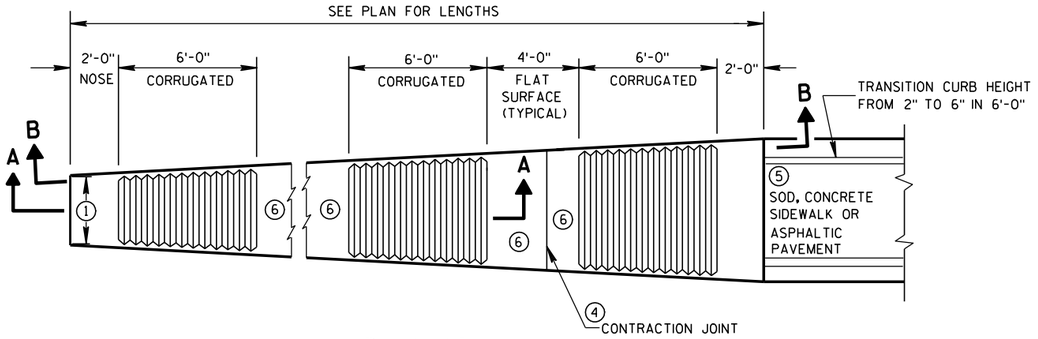
APPROVED
6/7/06 DATE
/S/ Balu Anantharaman
STATE ELECTRICAL ENGI
FHWA

6

S.D.D. 9 F 15-3b

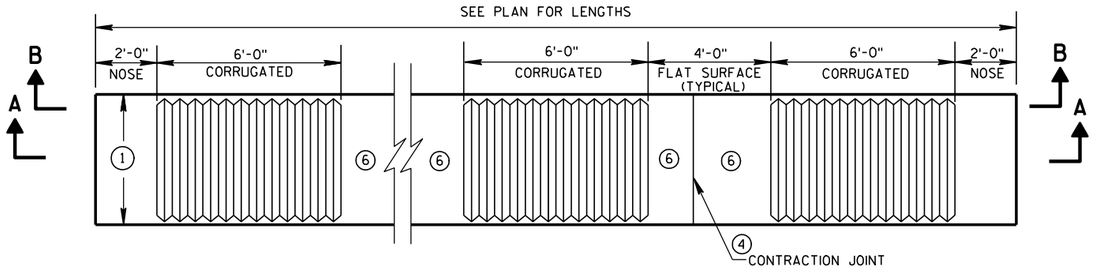
6

S.D.D. 9 F 15-3b



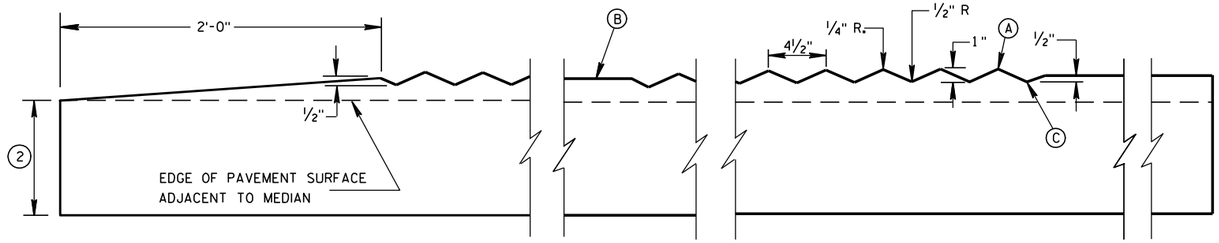
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

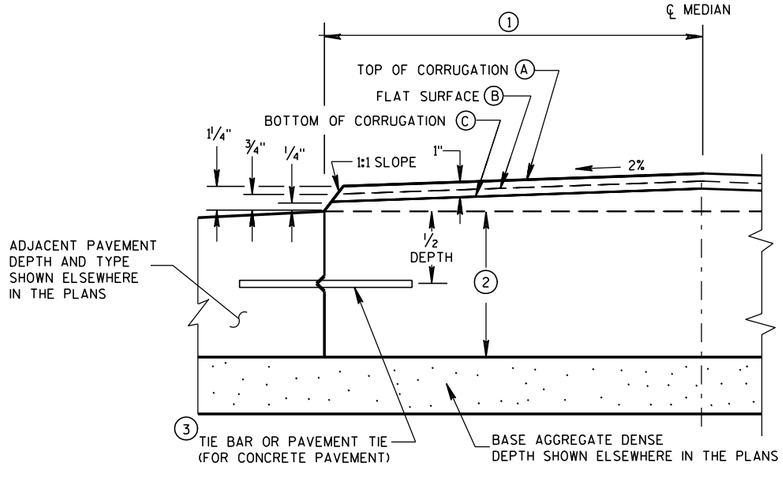
(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.
ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:
(1) NEW OR EXISTING CONCRETE PAVEMENT.
(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.
(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

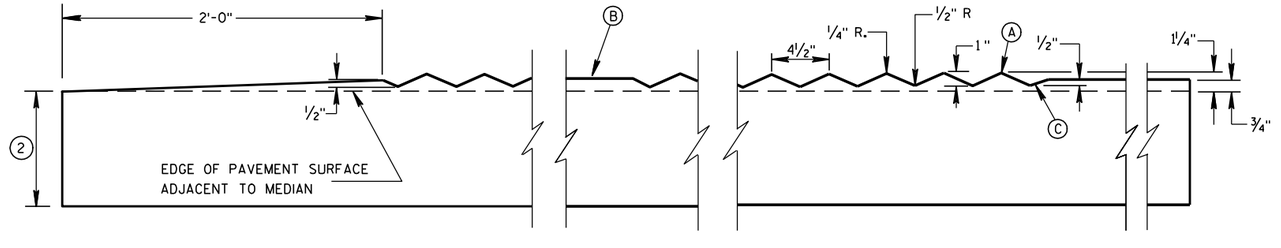
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/07
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

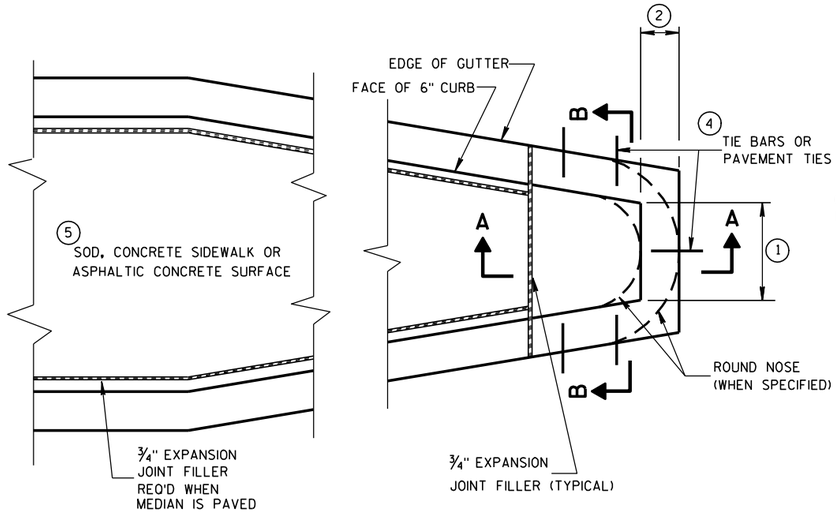
397

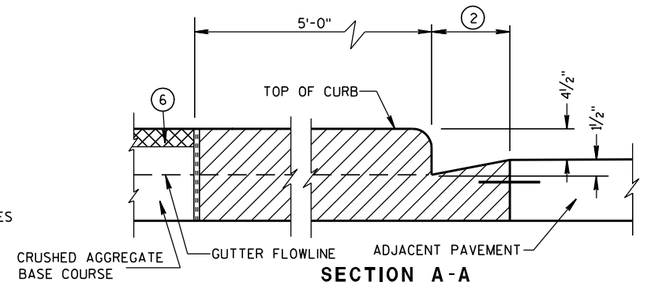
6

S.D.D. 11 B 1-5

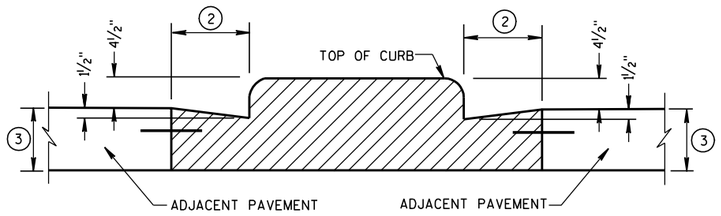
6

S.D.D. 11 B 1-5





SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

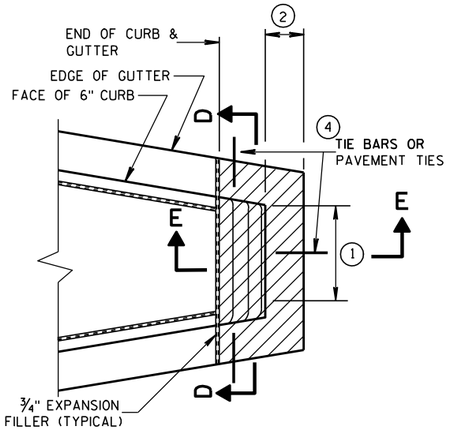
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

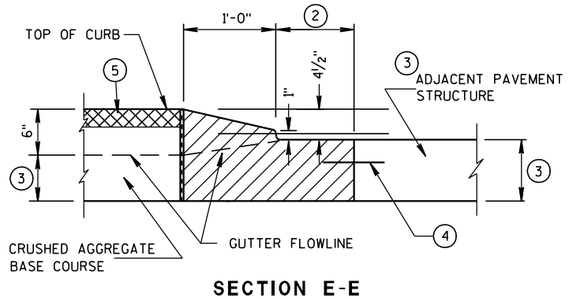
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

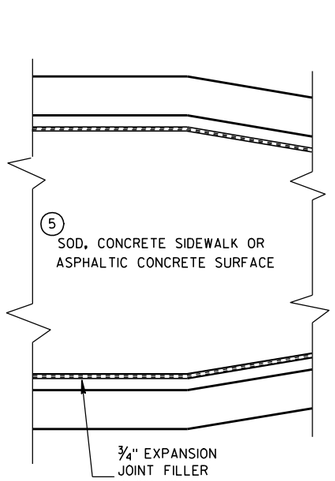
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

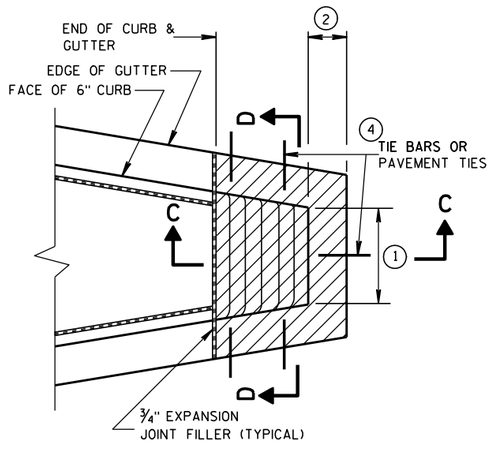




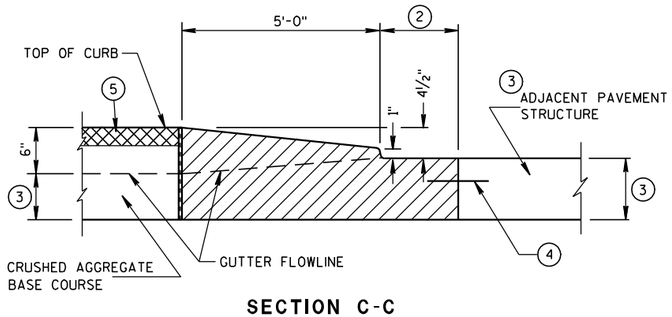
SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2

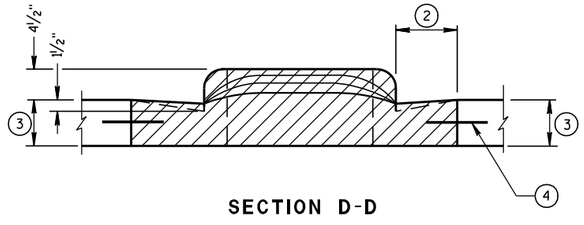




CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION C-C



SECTION D-D

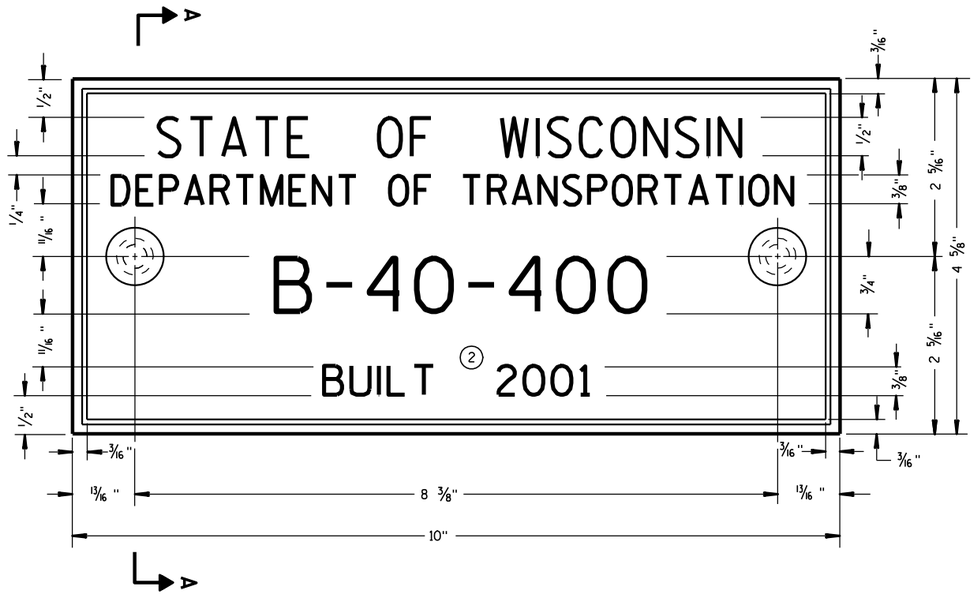
CONCRETE MEDIAN NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/8/2006 DATE	/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
FHWA	398 NT

6

S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

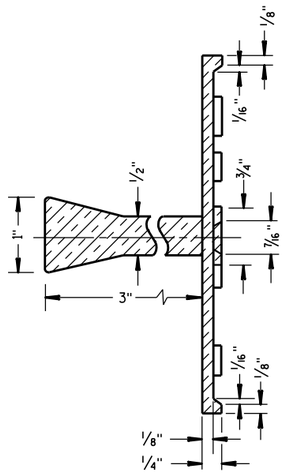
GENERAL NOTES

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.

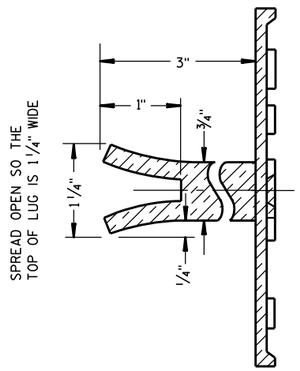
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

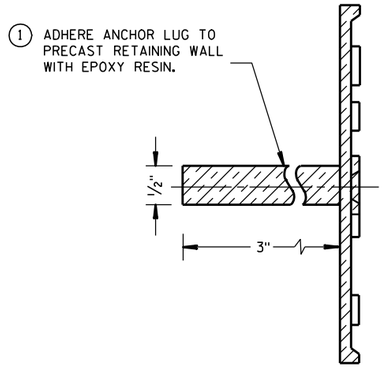
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



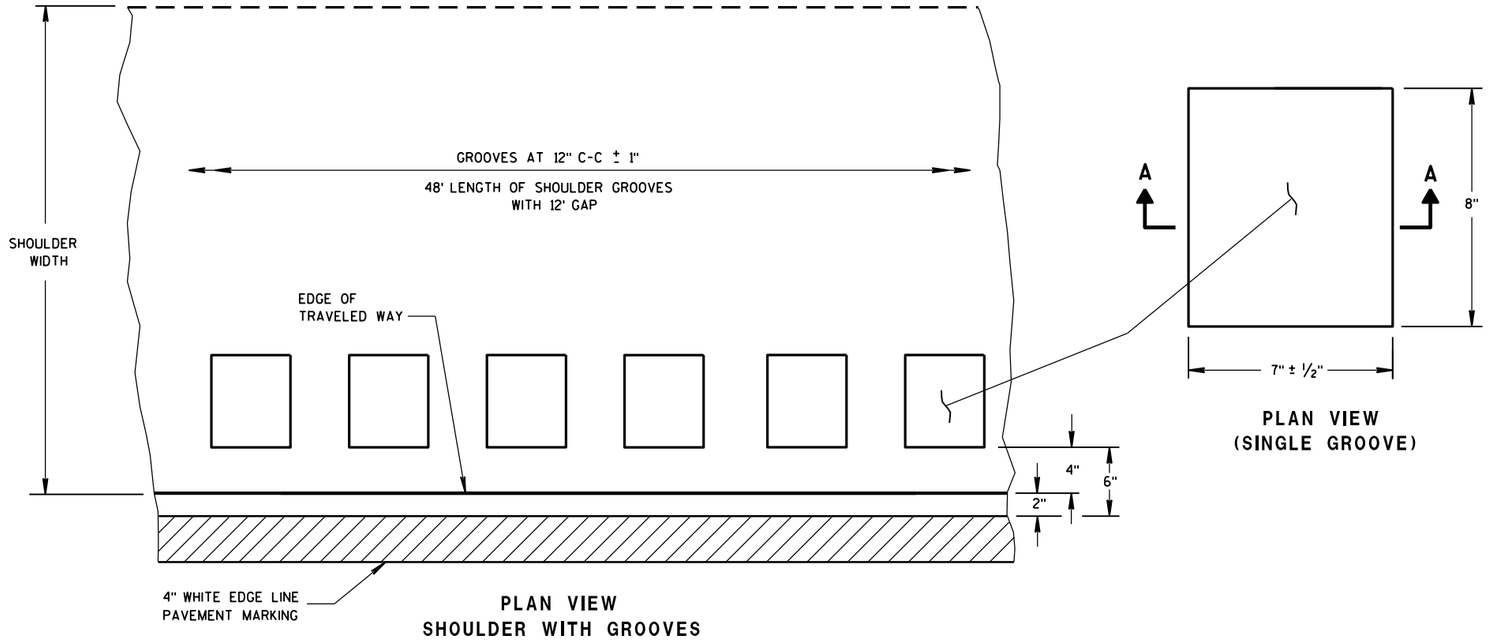
ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
3/26/10 DATE	/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER
FHWA	

6

S.D.D. 12 A 3-10



PLAN VIEW
SHOULDER WITH GROOVES

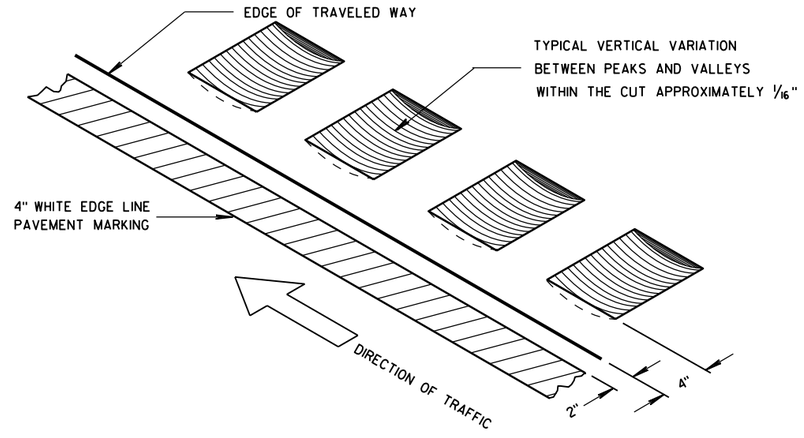
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

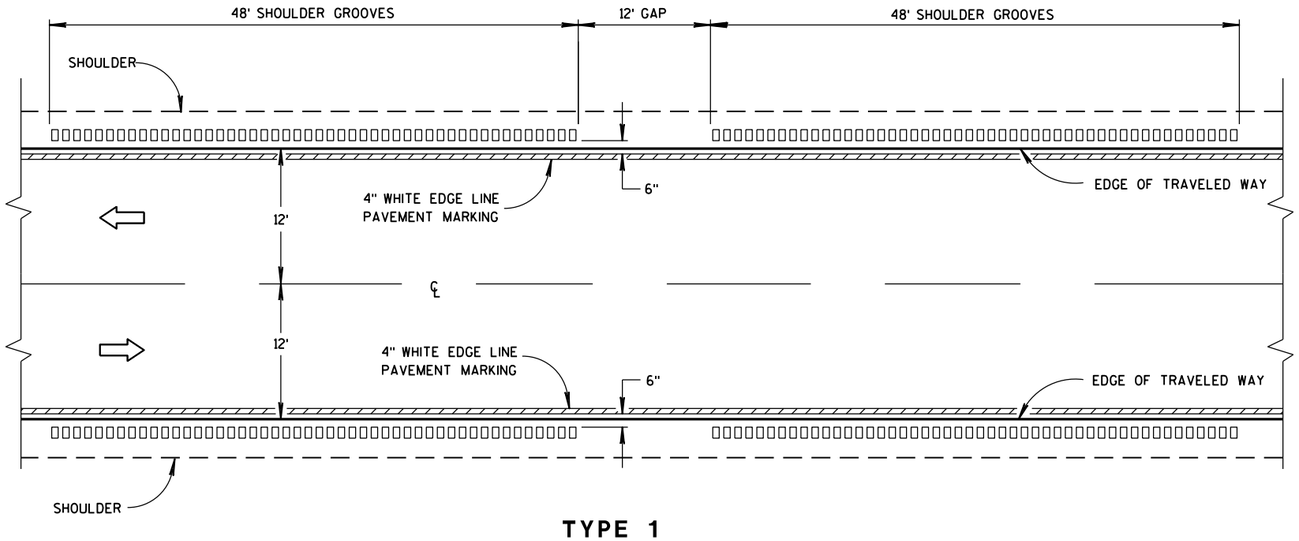
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.

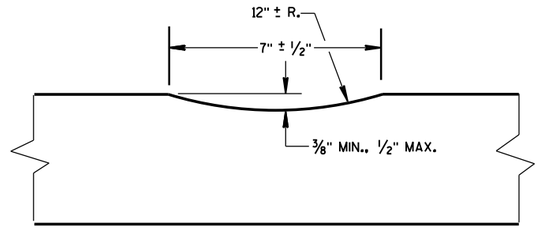


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



TYPE 1
2-LANE SHOULDER RUMBLE STRIP



SECTION A-A

6

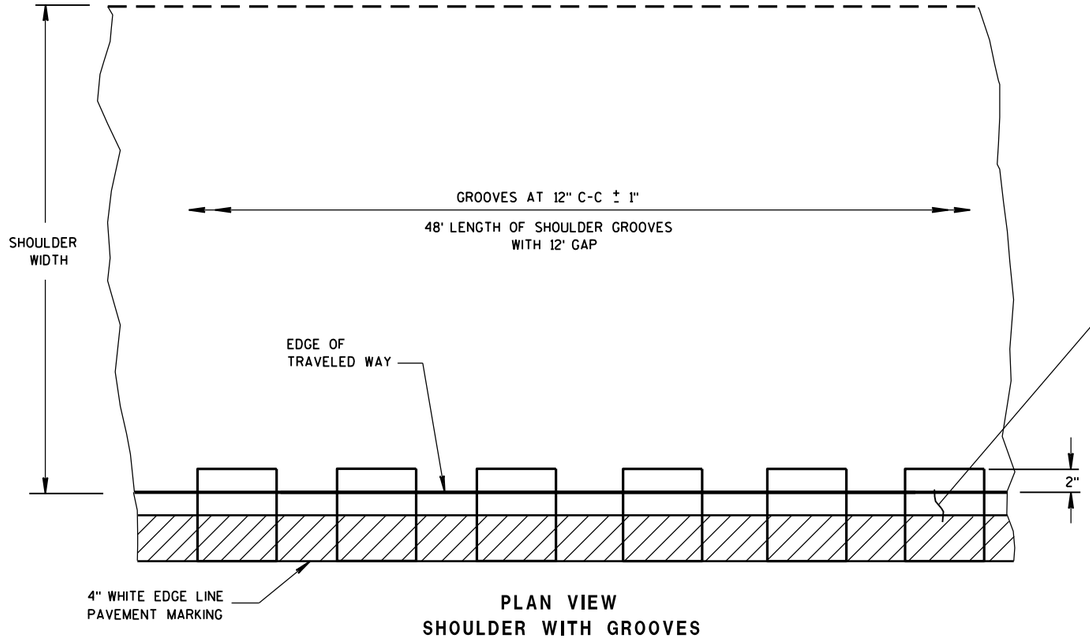
S.D.D. 13 A 10-1a

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

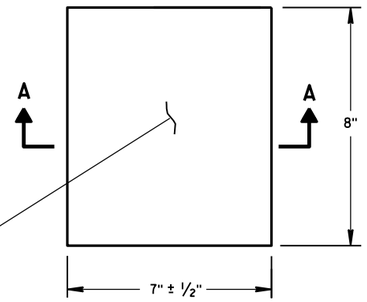
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO 400

6

S.D.D. 13 A 10-1a



PLAN VIEW
SHOULDER WITH GROOVES



PLAN VIEW
(SINGLE GROOVE)

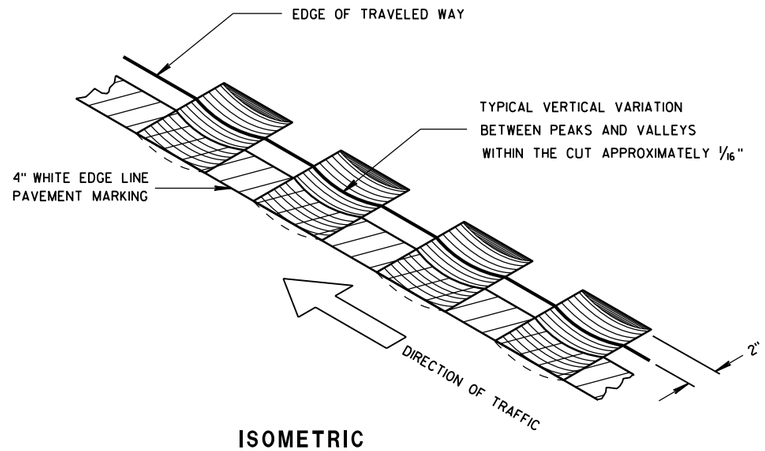
PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP

GENERAL NOTES

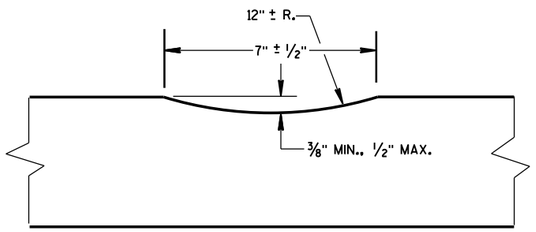
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

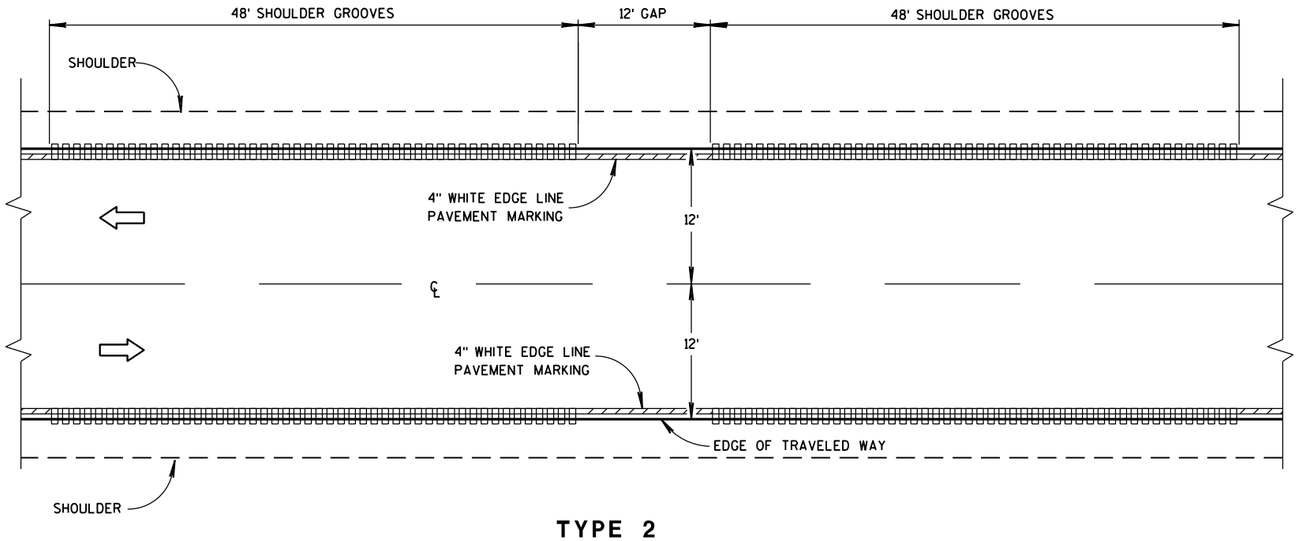
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



SECTION A-A



TYPE 2
2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

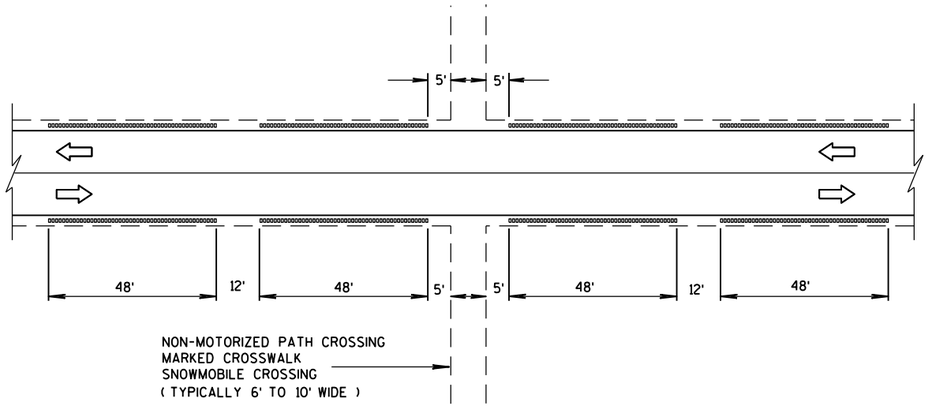
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

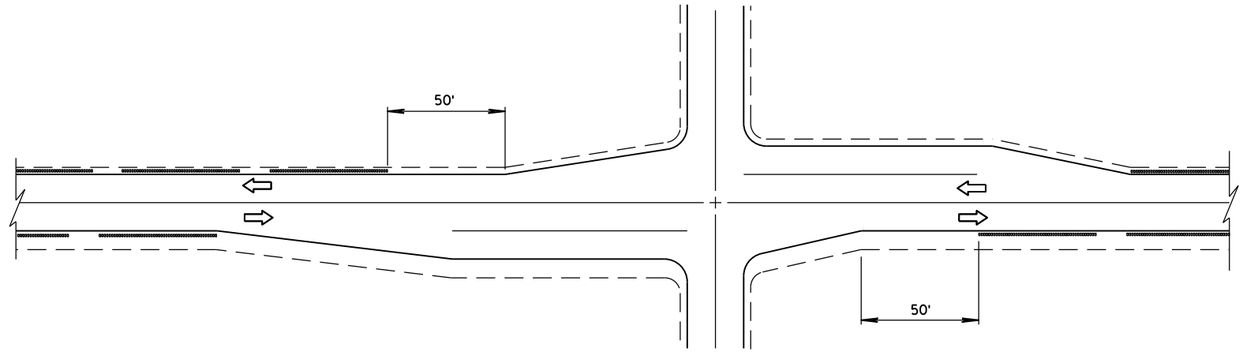
S.D.D. 13 A 10-1b

6

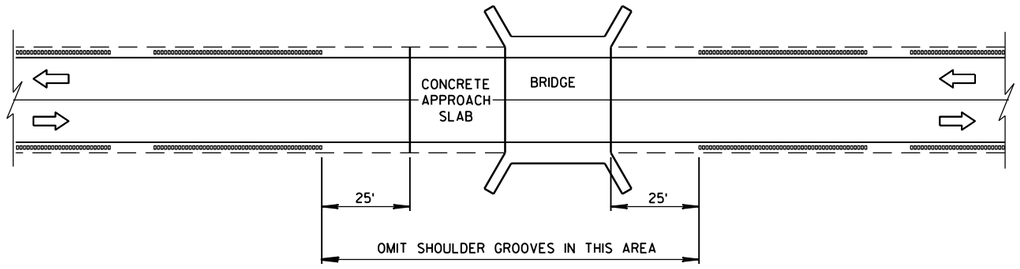
S.D.D. 13 A 10-1b



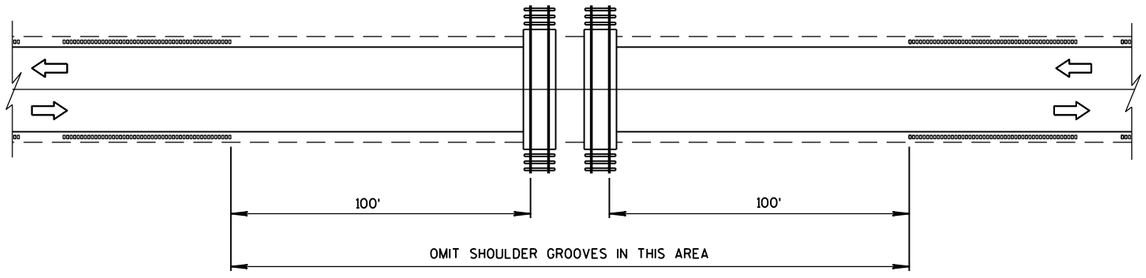
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



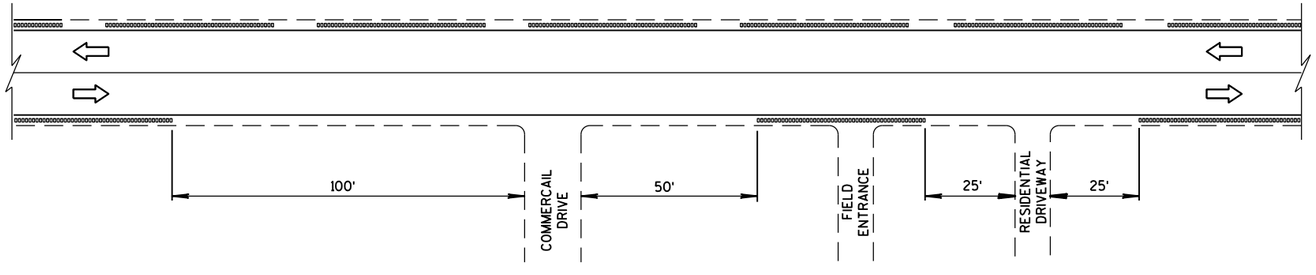
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT DRIVEWAYS (1)

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

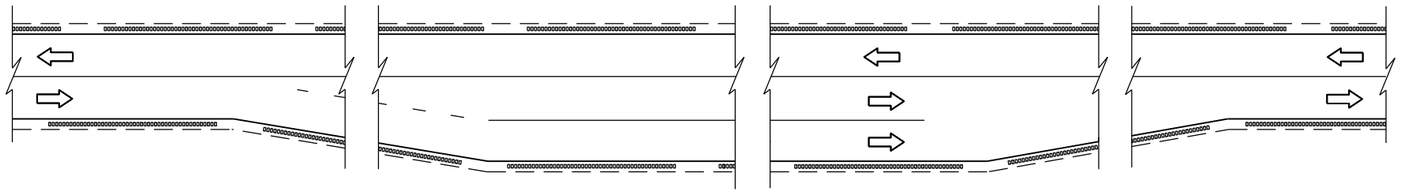
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

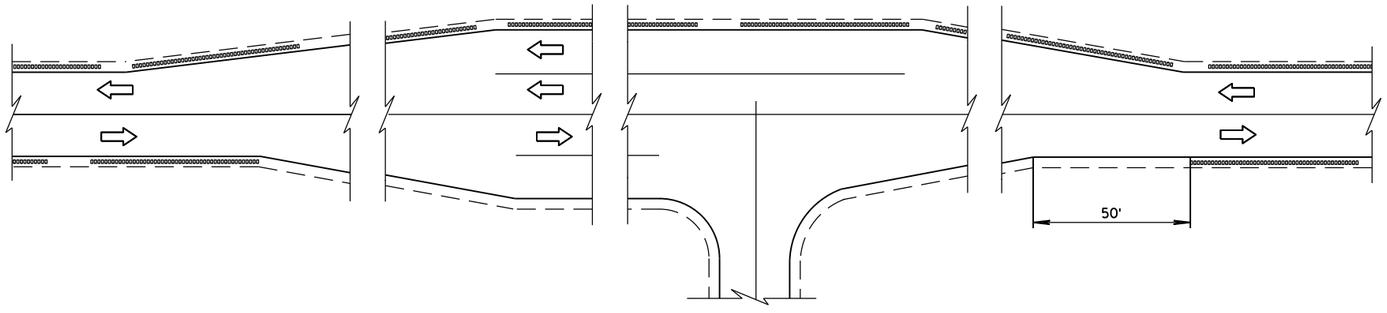
S.D.D. 13 A 10-1c

6

S.D.D. 13 A 10-1c



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

6

S.D.D. 13 A 10-1d

S.D.D. 13 A 10-1d

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

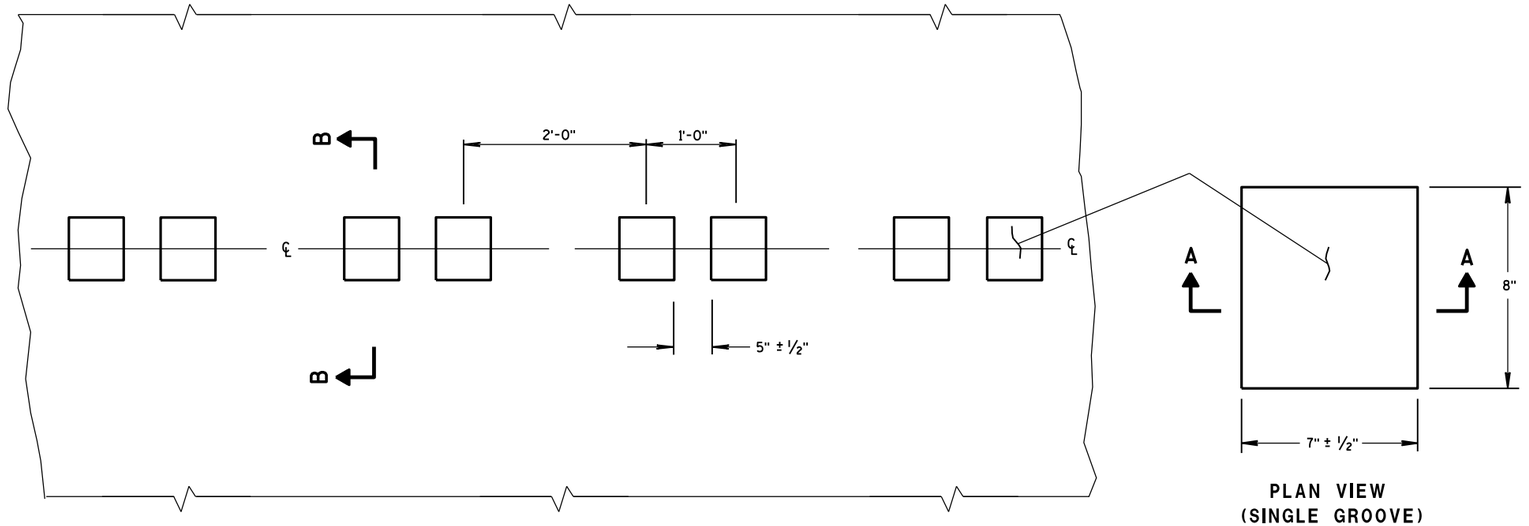
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

FHWA



PLAN VIEW
CENTER LINE WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

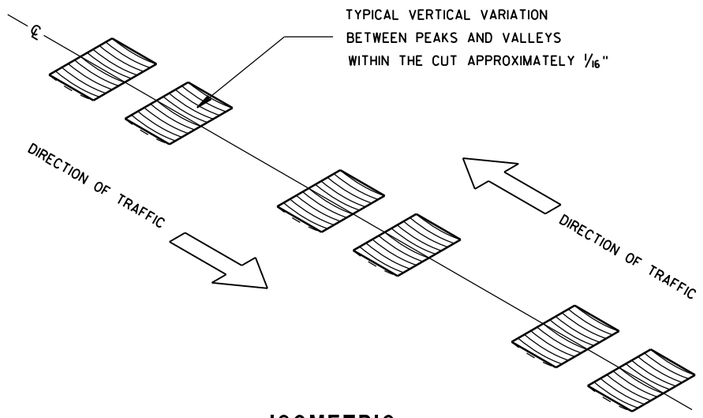
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

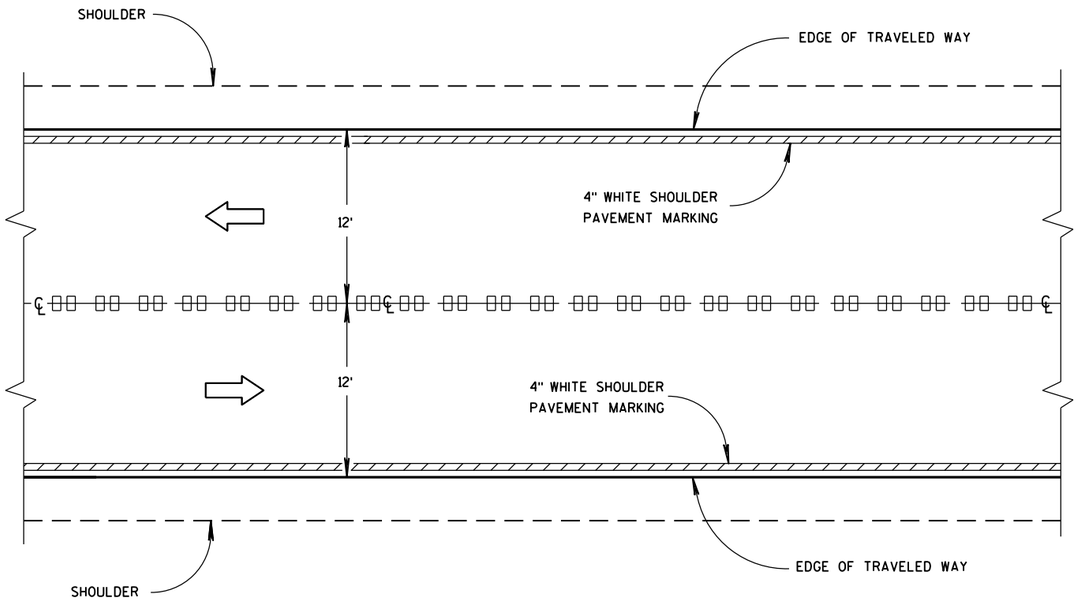
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

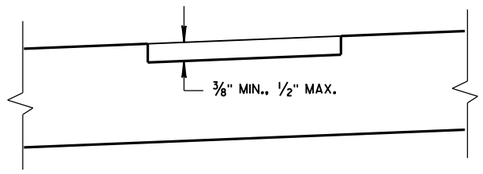
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



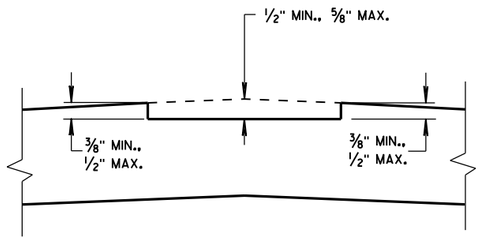
ISOMETRIC



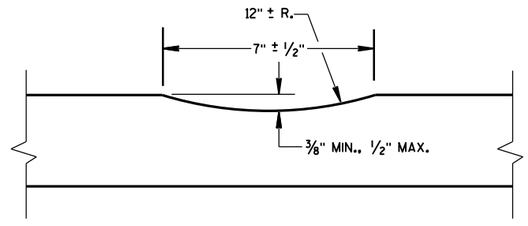
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



SECTION A-A

6

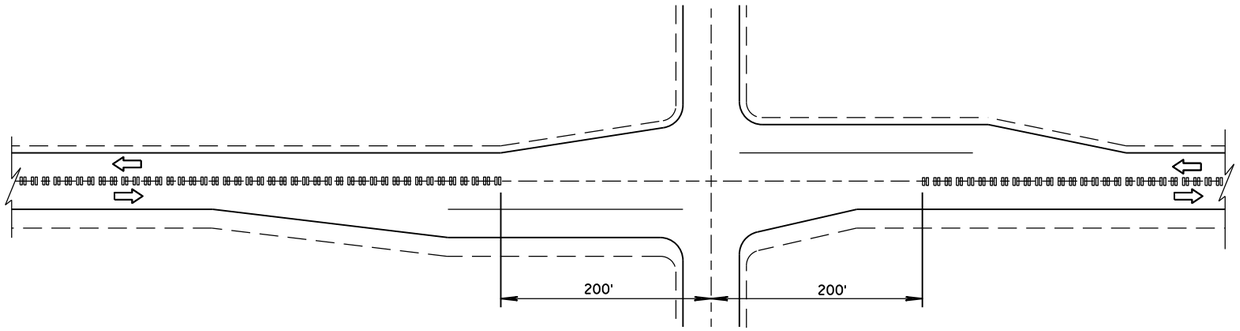
S.D.D. 13 A 11-2a

6

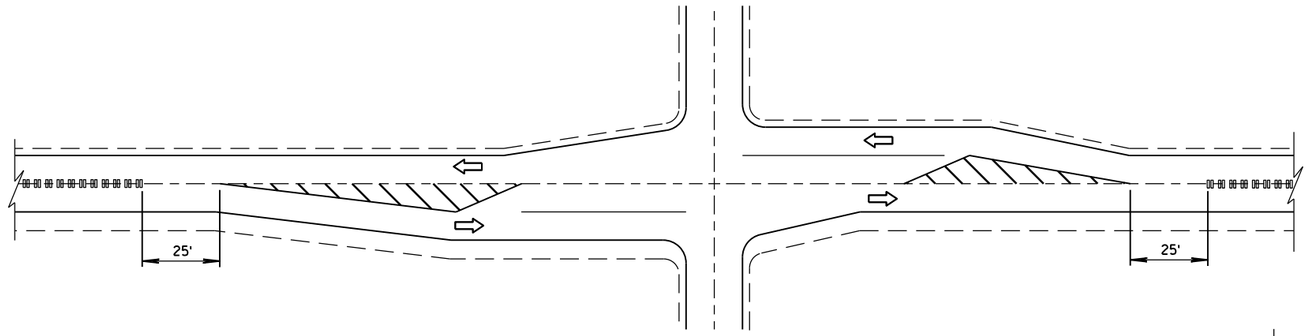
S.D.D. 13 A 11-2a

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

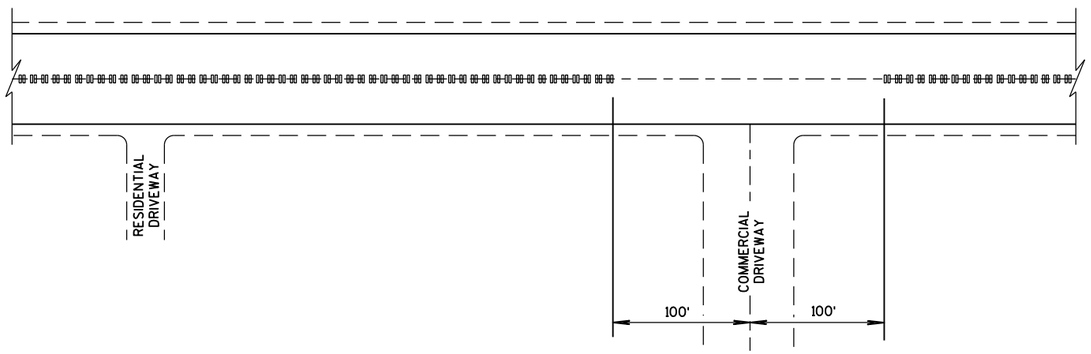
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



CENTER LINE GROOVES AT INTERSECTIONS

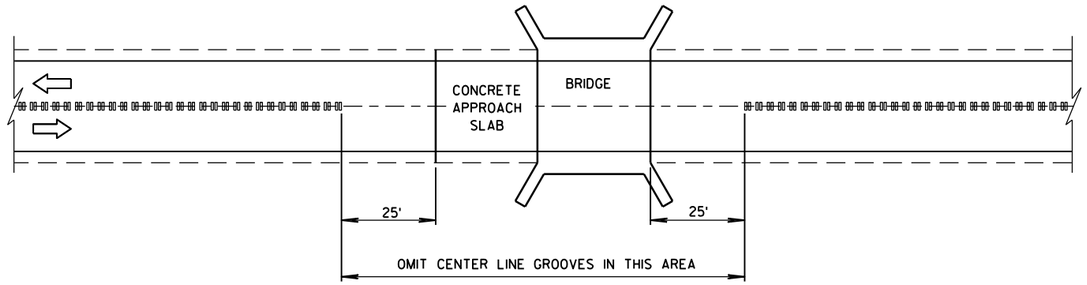


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

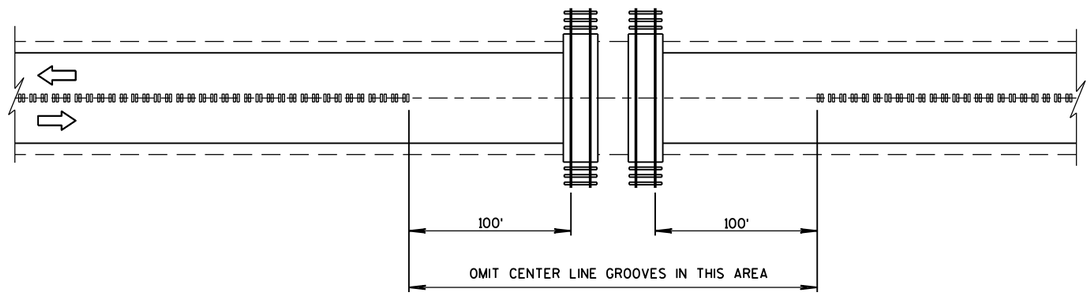


CENTER LINE GROOVES AT DRIVEWAYS (1)

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

6

S.D.D. 13 A 11-2b

6

S.D.D. 13 A 11-2b

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

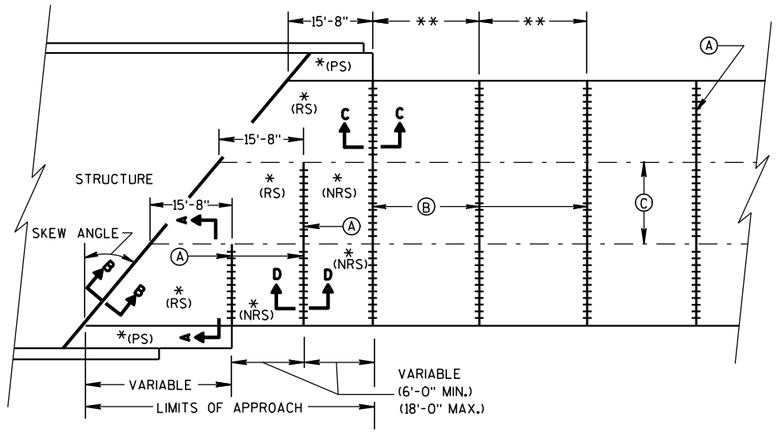
5/15/2013
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

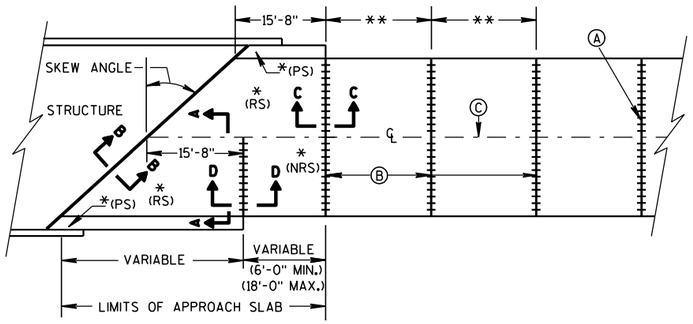
405

NT

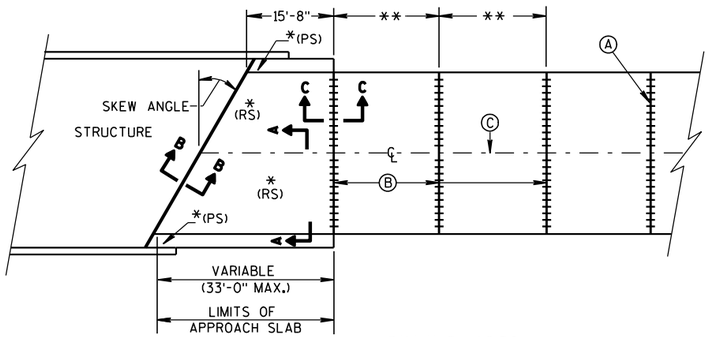
FHWA



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



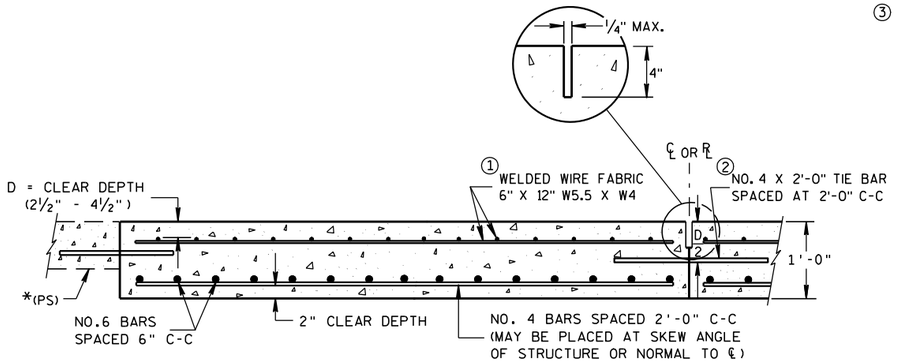
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

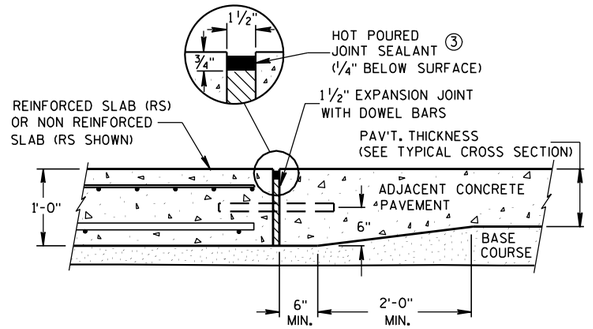
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING
(SEE SDD 13C4, SDD 13C11, & SDD 13C13)

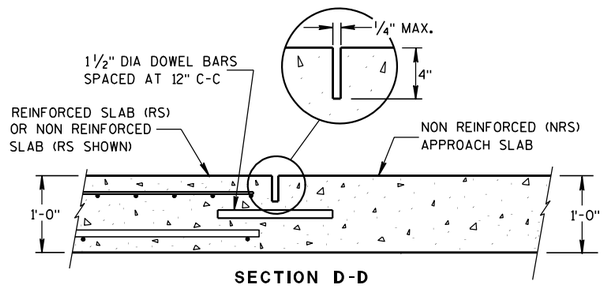
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
(B) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄
(C) STANDARD LONGITUDINAL JOINT AND TIE BARS.



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



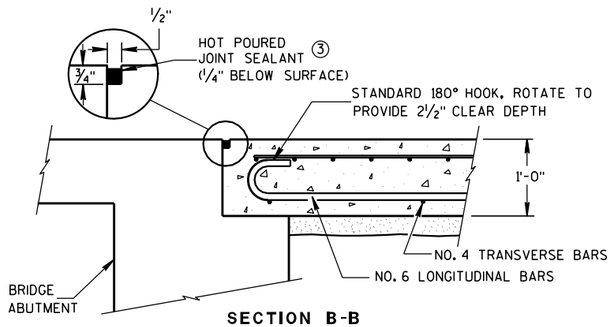
SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

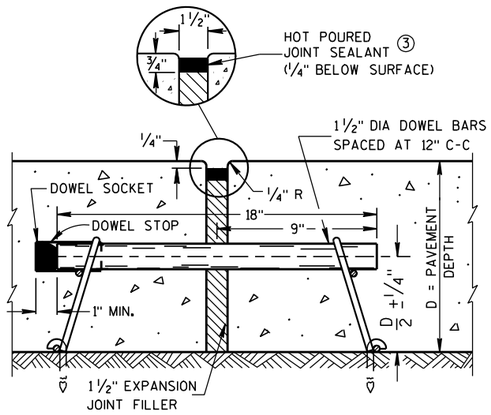
APPROACH SLABS ABUTTING AN HMA PAVEMENT OVER BASE COURSE DO NOT NEED TO BE DOWELED.

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

1. THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
2. THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
3. USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/11/2009 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DESIGN ENGINEER
FHWA

6
S.D.D. 13 B 2-6

GENERAL NOTES

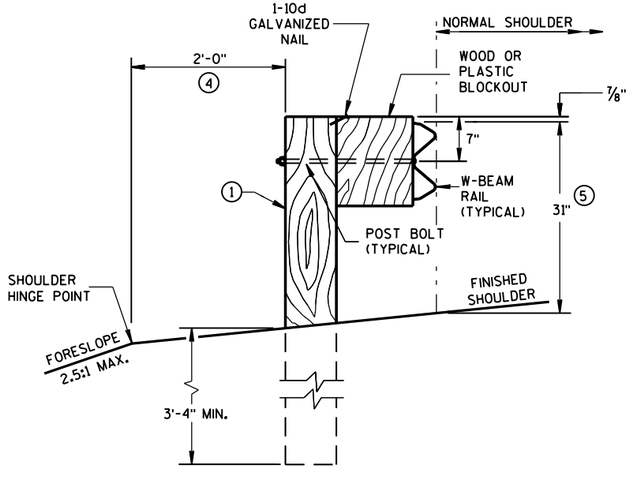
1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

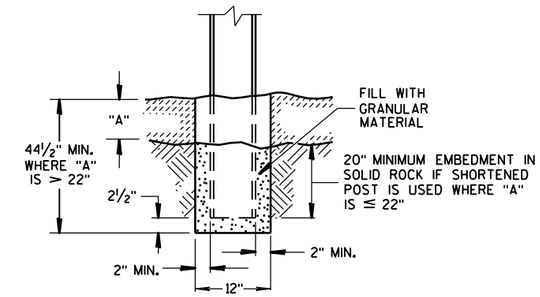
4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".



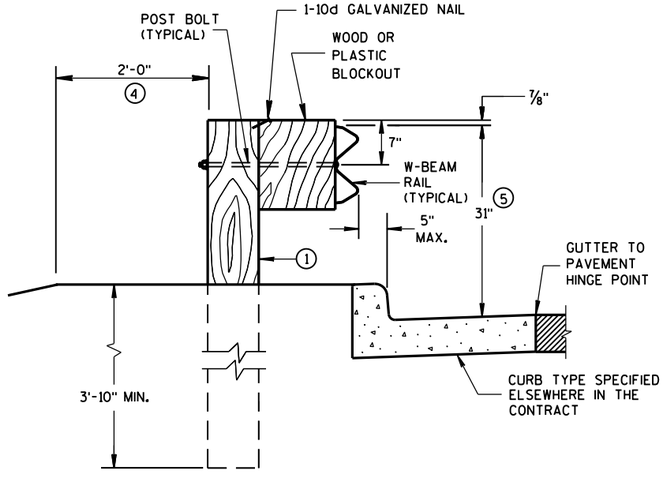
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



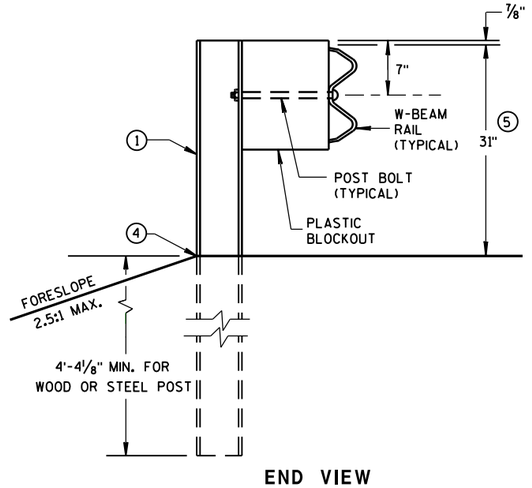
END VIEW

SETTING STEEL OR WOOD POST IN ROCK ③



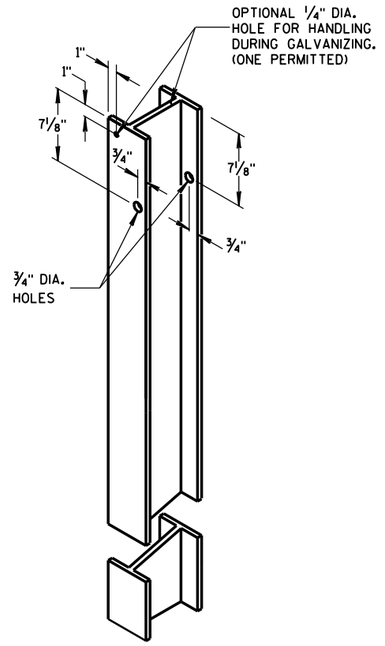
END VIEW

LOCATED ALONG A CURBED ROADWAY

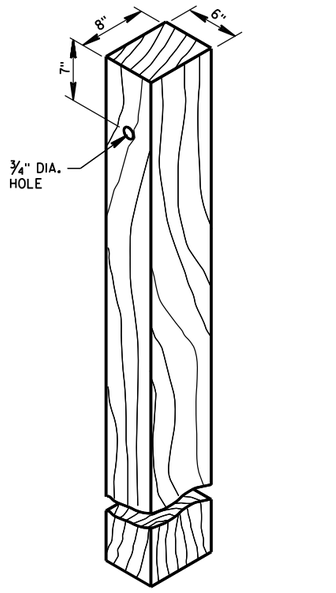


END VIEW

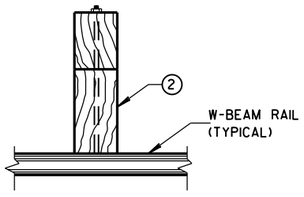
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



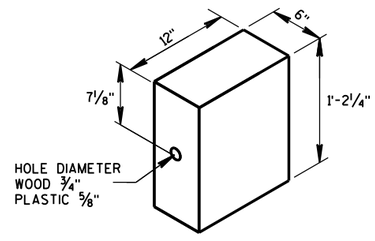
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



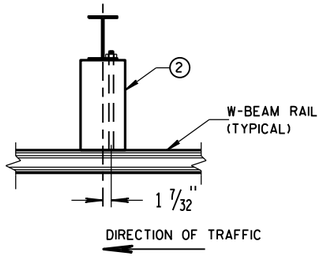
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

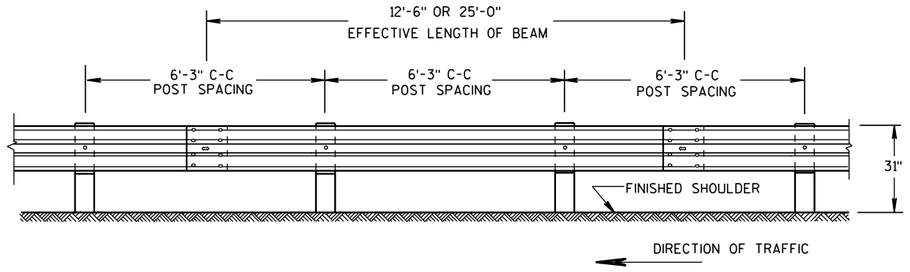


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

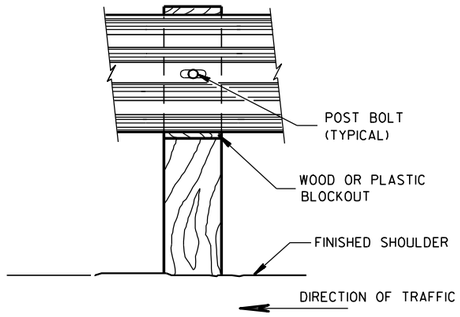
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 42-2a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



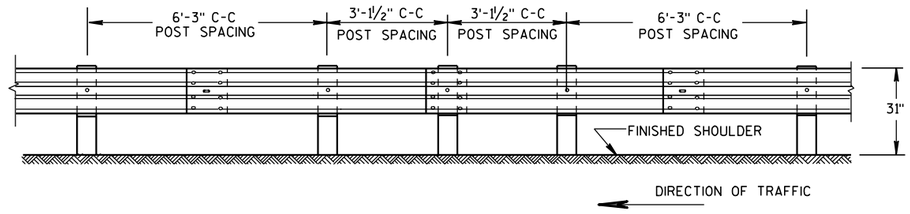
FRONT VIEW AT WOOD POST

GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

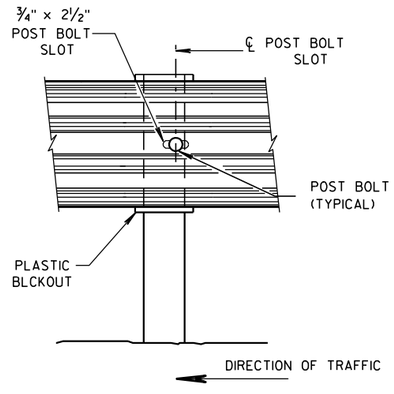
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

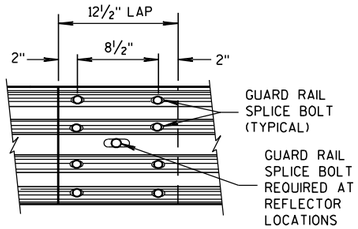


FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

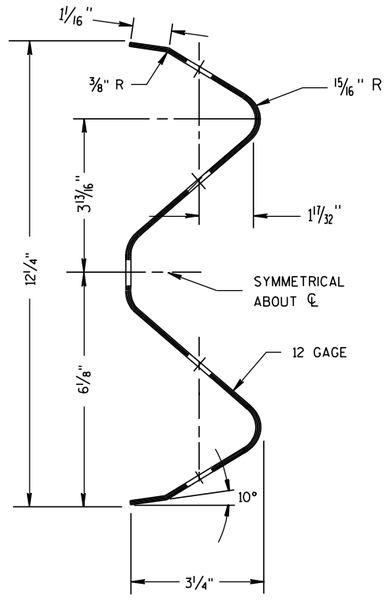


FRONT VIEW AT STEEL POST

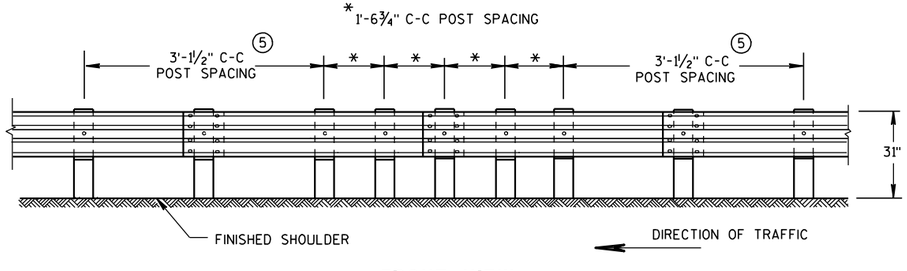


FRONT VIEW

MID-SPAN BEAM SPLICE

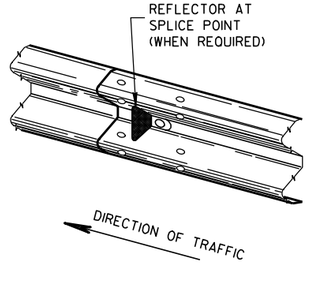


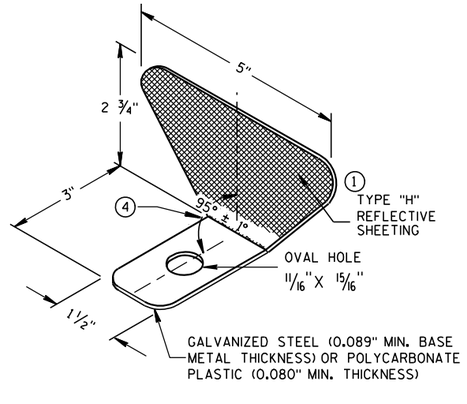
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①

REFLECTOR SPACING ②

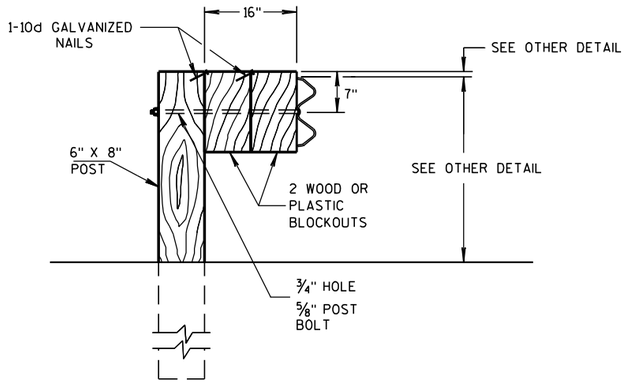
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 ③ 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 ④ 2	3

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

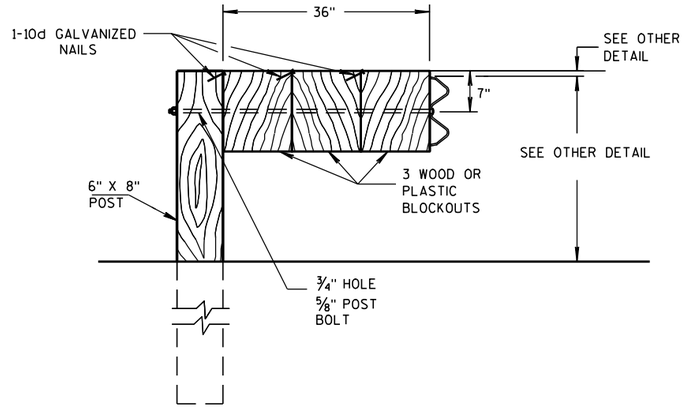
S.D.D. 14 B 42-2b

S.D.D. 14 B 42-2b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

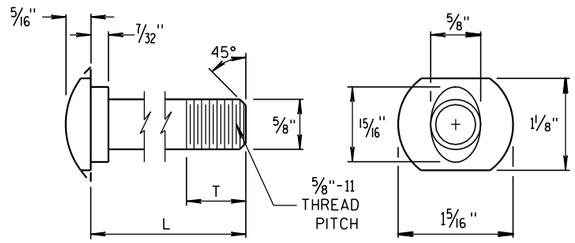


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

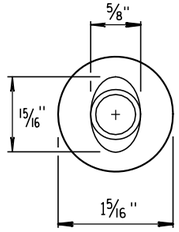
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

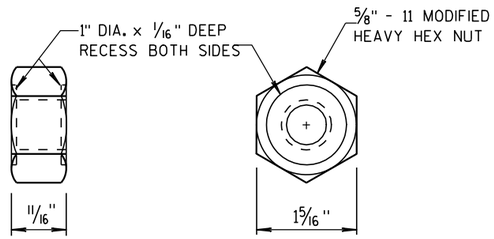


POST BOLT TABLE

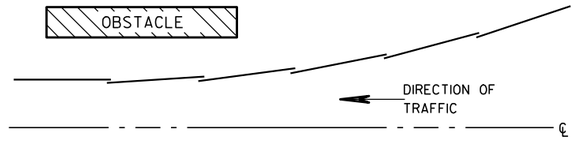
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

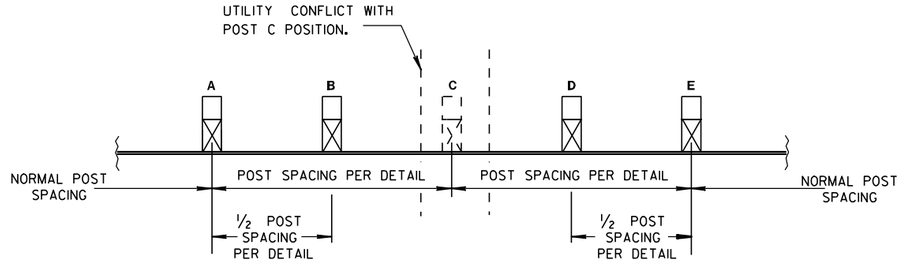


POST BOLT AND RECESS NUT

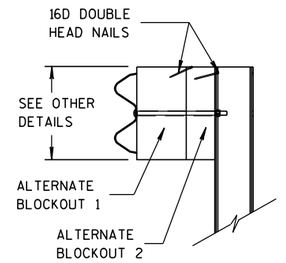


PLAN VIEW

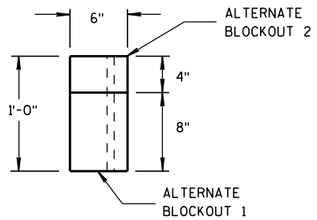
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/15/2011
DATE

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

FHWA

ENT

6

S.D.D. 14 B 42-2c

6

S.D.D. 14 B 42-2c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL),AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

SEE SDD 14B42 FOR MORE INFORMATION.

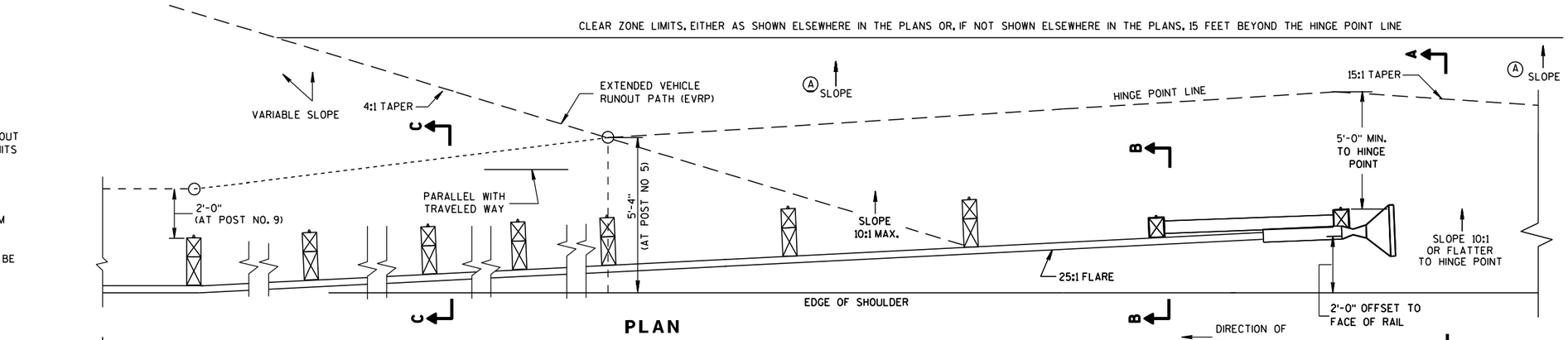
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

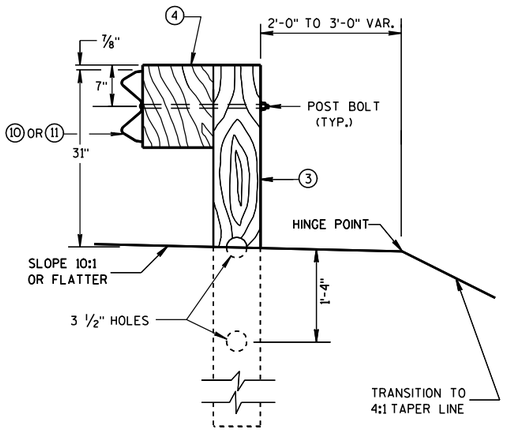
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

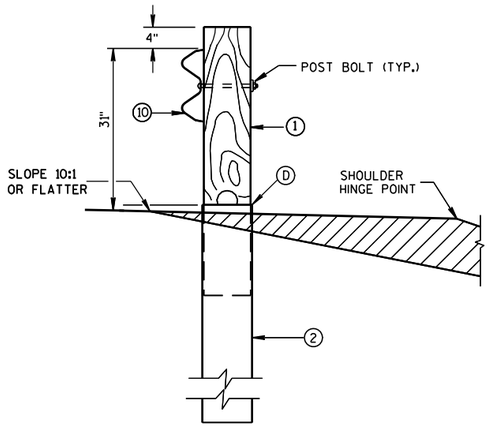
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE (± ¾")

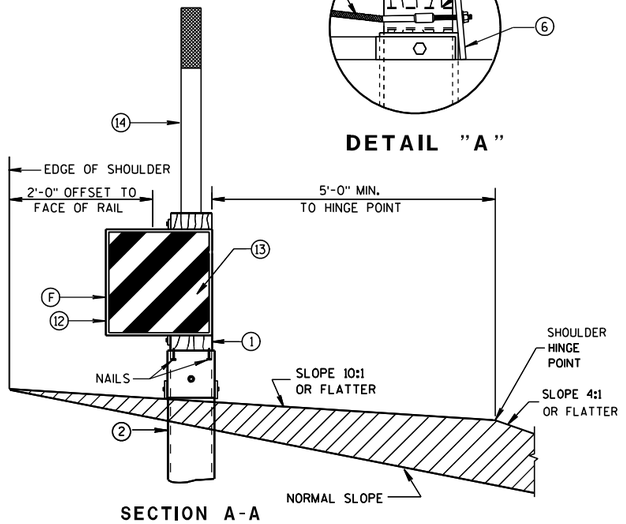




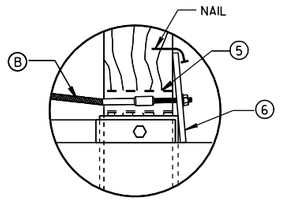
SECTION C-C
TYPICAL AT POST NOS. 3-9



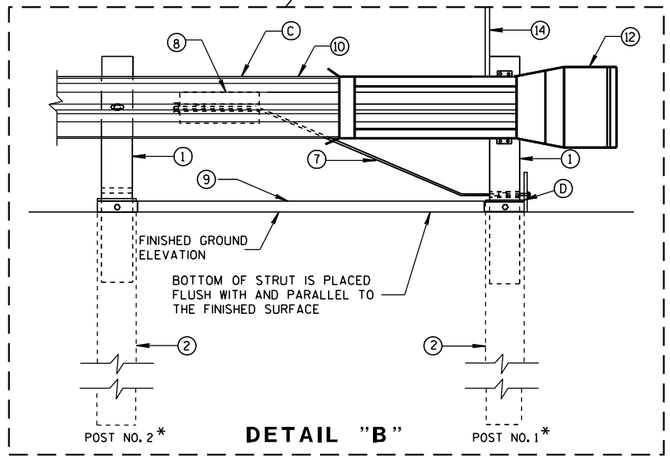
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



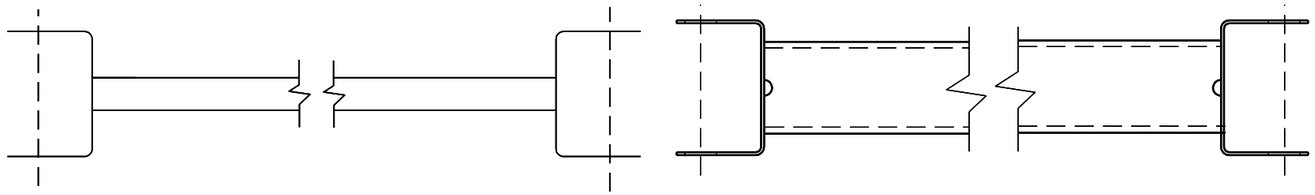
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

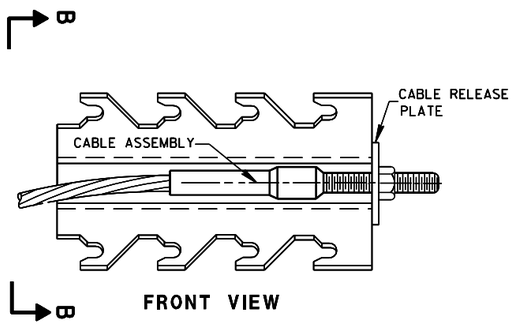
S.D.D. 14 B 44-1a



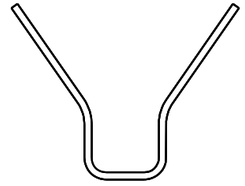
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

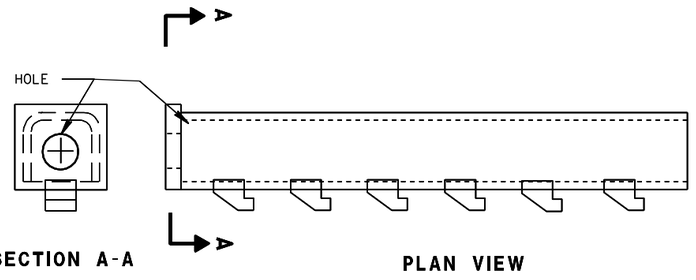
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE H (ONLY THE SHEETING IS SUPPLIED BY THE MANUFACTURER)
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



FRONT VIEW



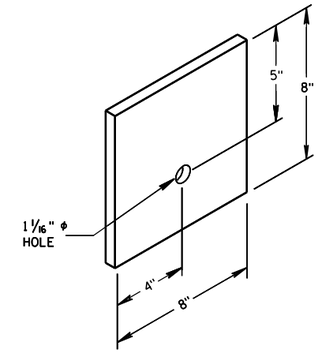
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



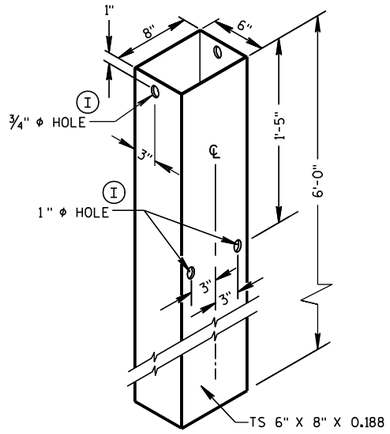
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

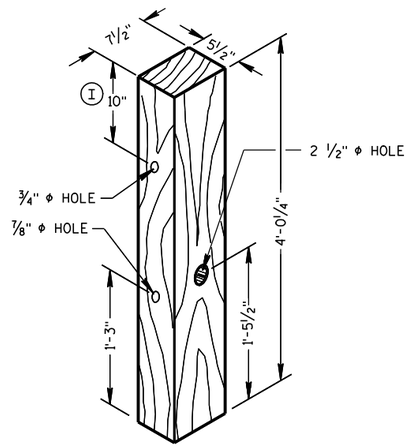
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 44-1b

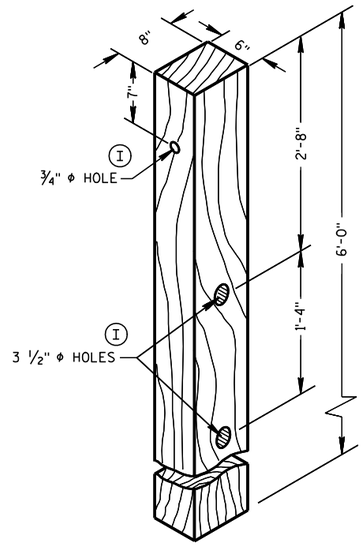


FOUNDATION TUBE (2)



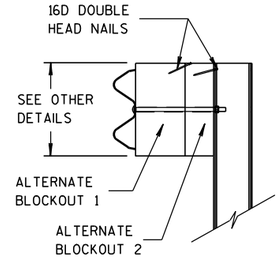
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

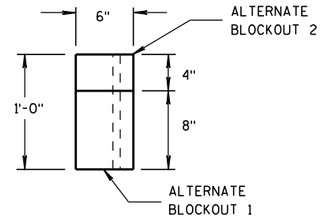


POSTS NUMBER 3-9

WOOD CRT POST (3)

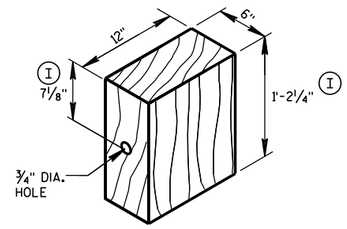


SIDE VIEW



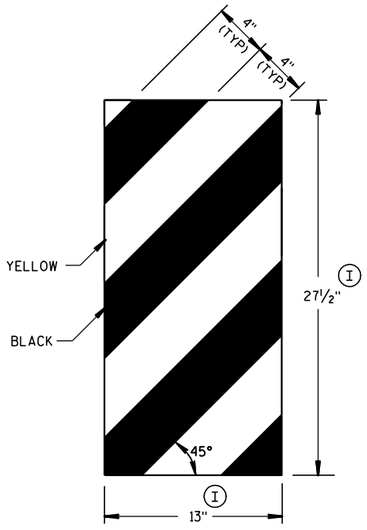
TOP VIEW

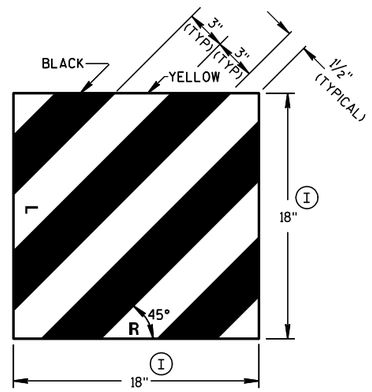
ALTERNATE WOOD BLOCKOUT DETAIL



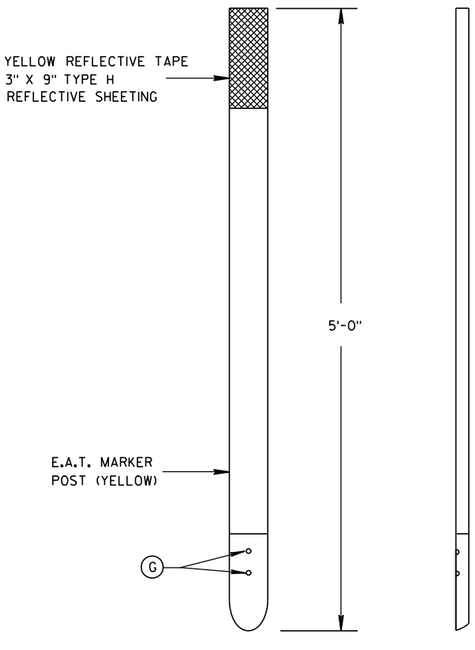
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



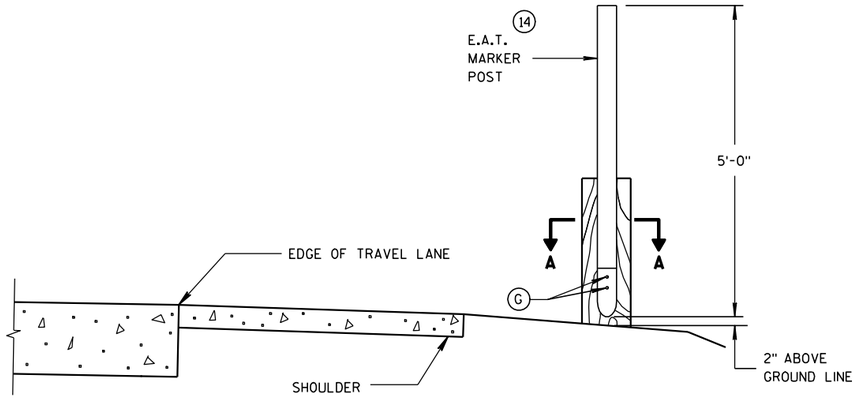


GENERIC REFLECTIVE SHEETING (13) (H)



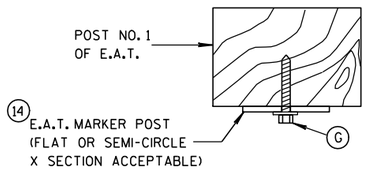
FRONT VIEW **SIDE VIEW**

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

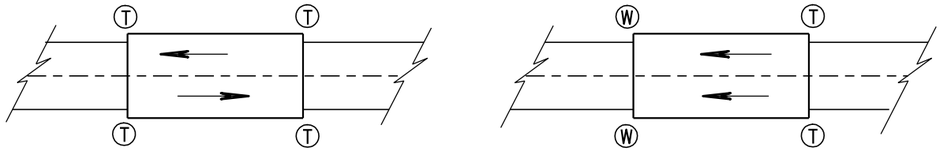
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2011 — DATE
/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 14 B 44-1c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

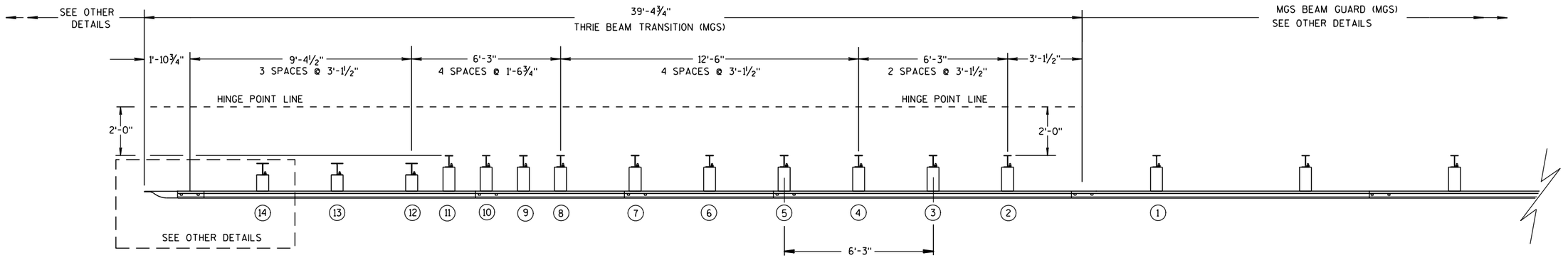
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

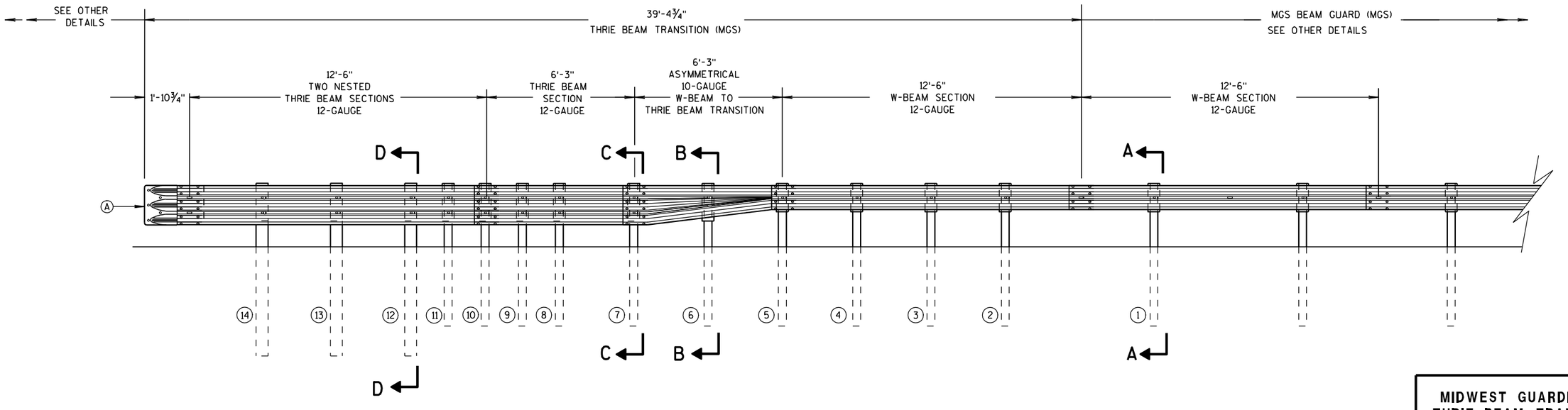
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

Ⓐ BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

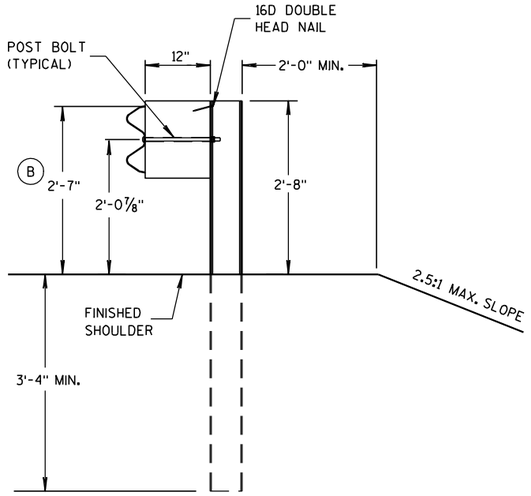
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3a

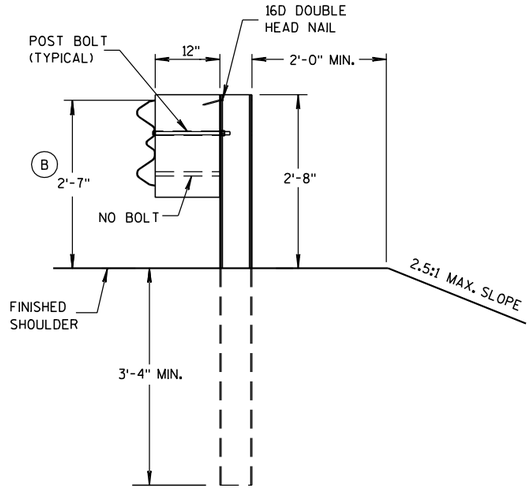
GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



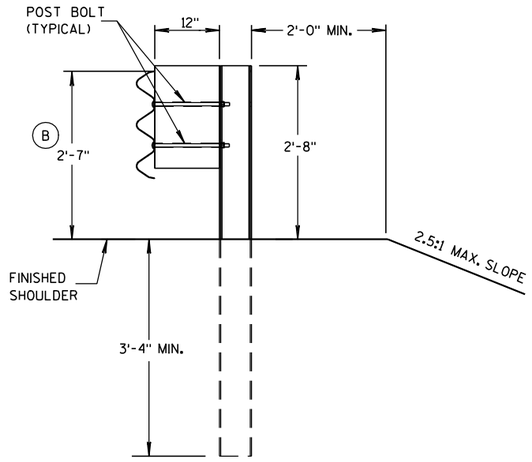
SECTION A-A

POSTS 1-5



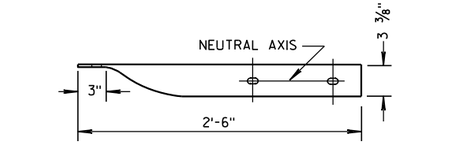
SECTION B-B

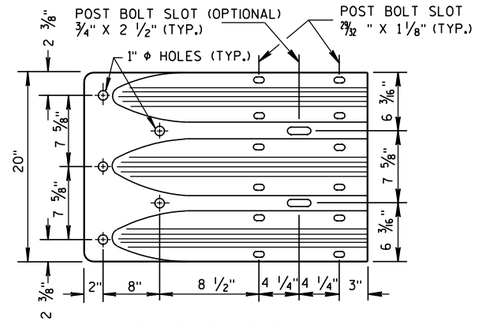
POST 6



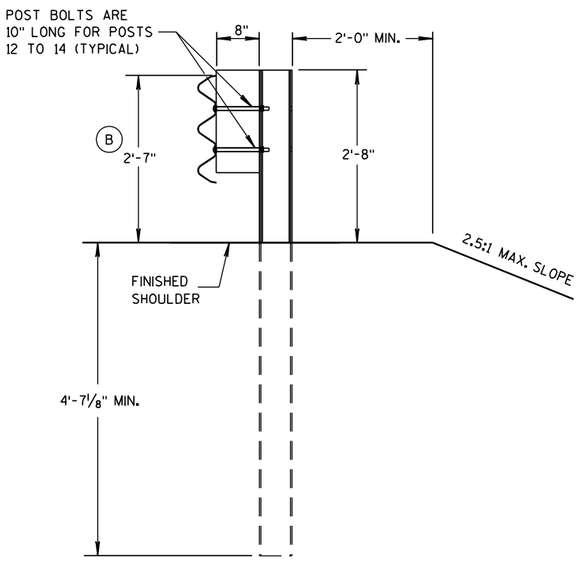
SECTION C-C

POSTS 7-11





THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-14

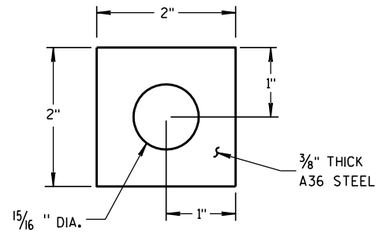
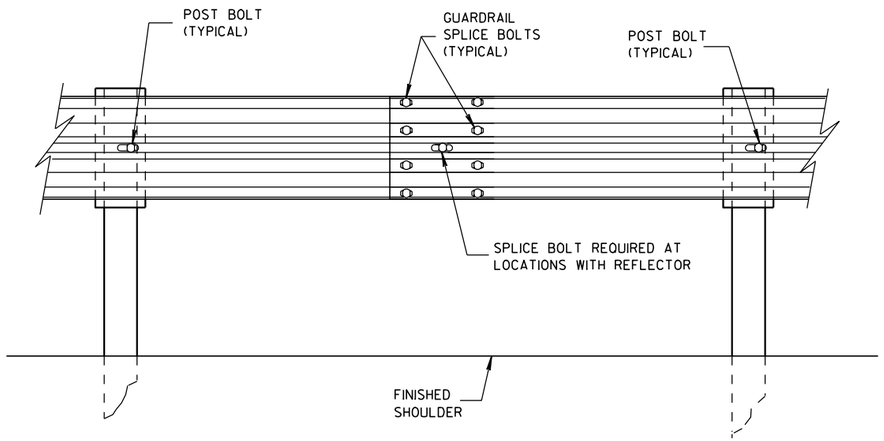
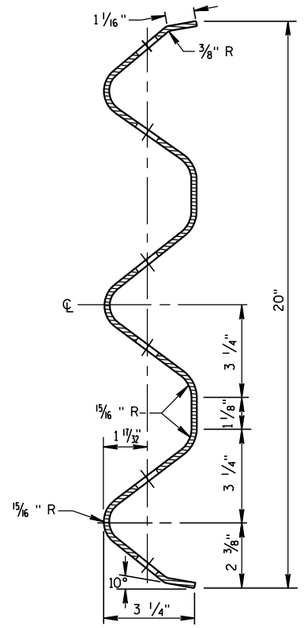


PLATE WASHER DETAIL



SPLICE DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

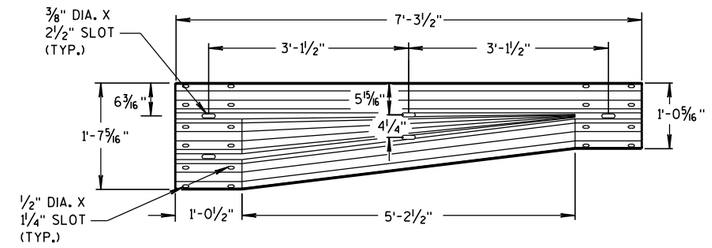
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

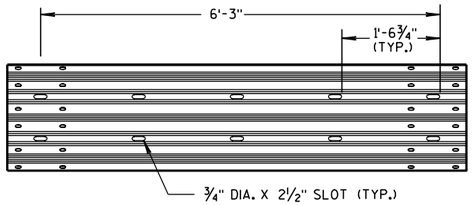
S.D.D. 14 B 45-3b

6

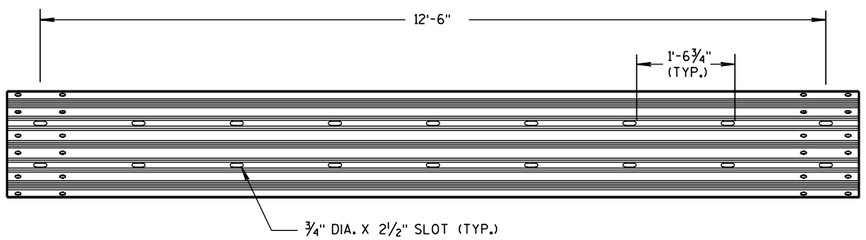
S.D.D. 14 B 45-3b



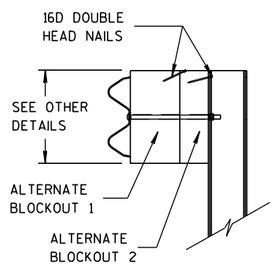
W-BEAM TO THRIE BEAM TRANSITION SECTION



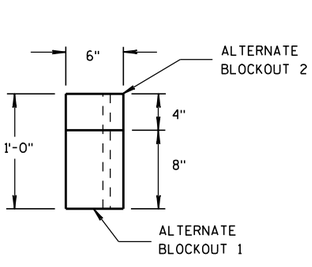
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

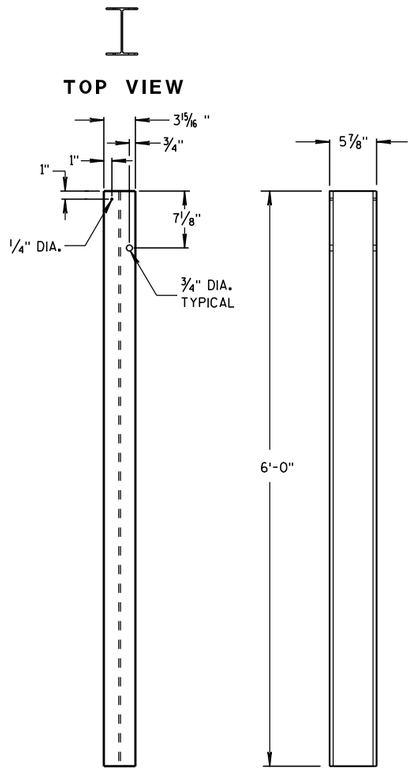


SIDE VIEW

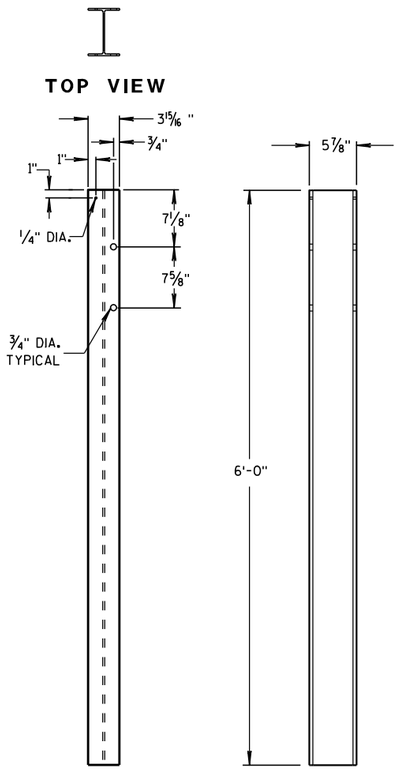


TOP VIEW

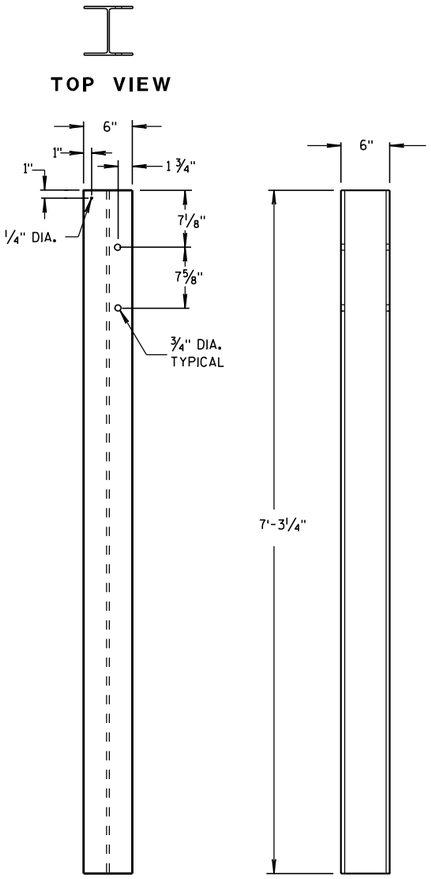
ALTERNATE WOOD BLOCKOUT DETAIL



STEEL POSTS 1-5

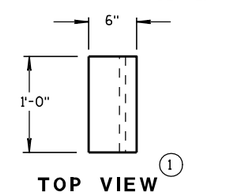


STEEL POSTS 6-11

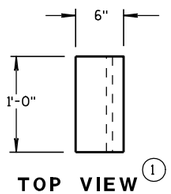


STEEL POSTS 12-14

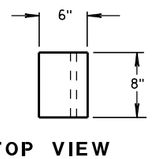
① WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



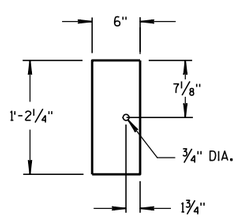
TOP VIEW ①



TOP VIEW ①

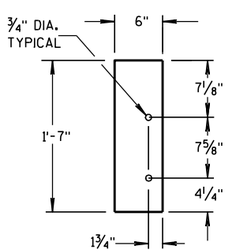


TOP VIEW



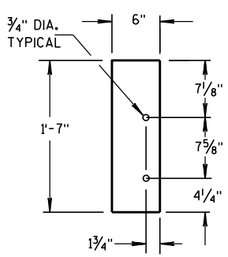
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

STEEL POST SIZES

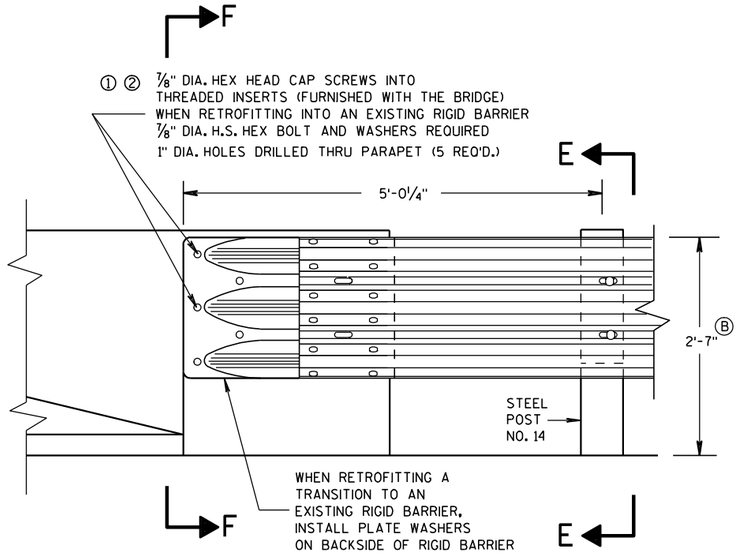
POST NUMBER	SECTION TYPE	LENGTH
①	W6x9	72"
②	W6x9	72"
③	W6x9	72"
④	W6x9	72"
⑤	W6x9	72"
⑥	W6x9	72"
⑦	W6x9	72"
⑧	W6x9	72"
⑨	W6x9	72"
⑩	W6x9	72"
⑪	W6x9	72"
⑫	W6x15	87 1/8"
⑬	W6x15	87 1/8"
⑭	W6x15	87 1/8"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

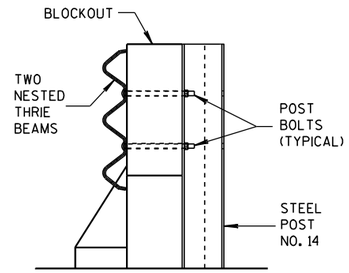
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 45-3c



FRONT VIEW



SECTION E-E

GENERAL NOTES

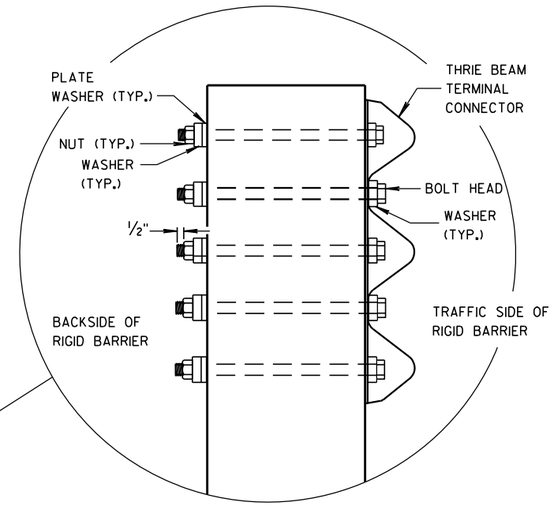
THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

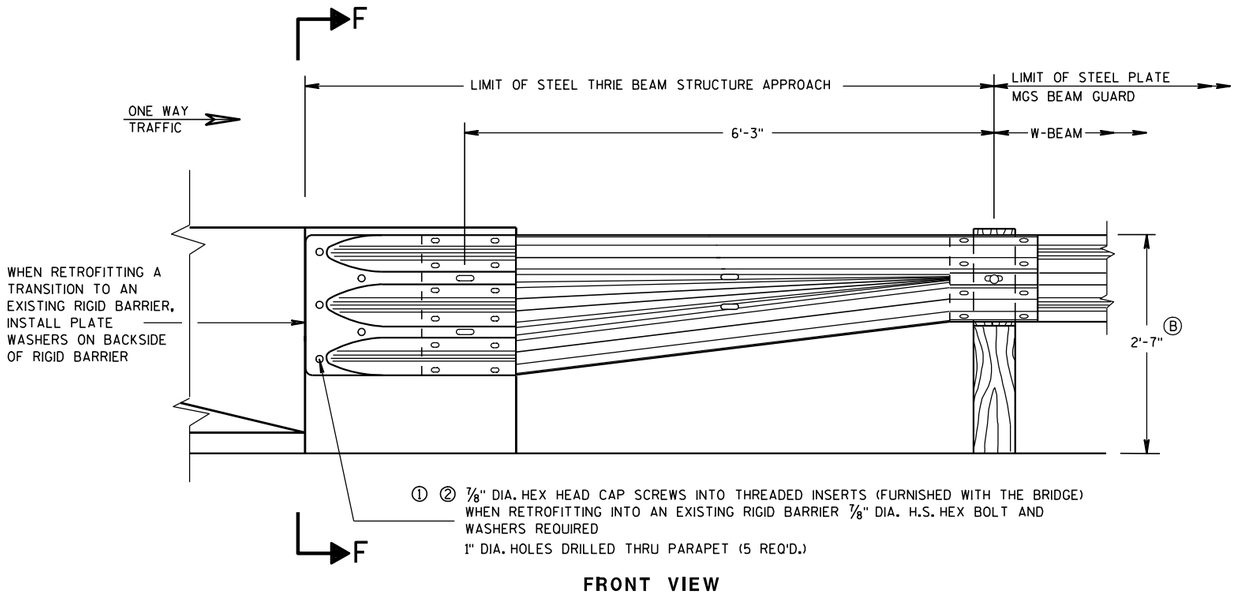
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

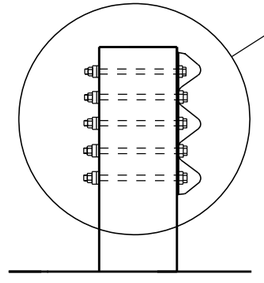
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



FRONT VIEW



SECTION F-F

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

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

FHWA

6
S.D.D. 14 B 45-3d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

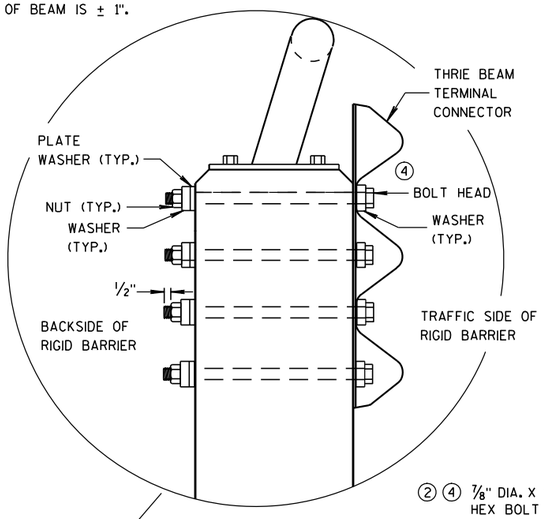
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

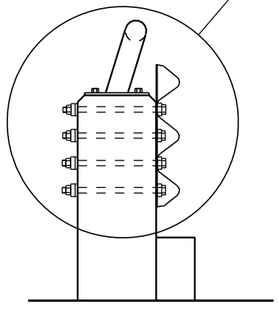
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2". BLOCK IS INCIDENTAL TO THE CONTRACT.

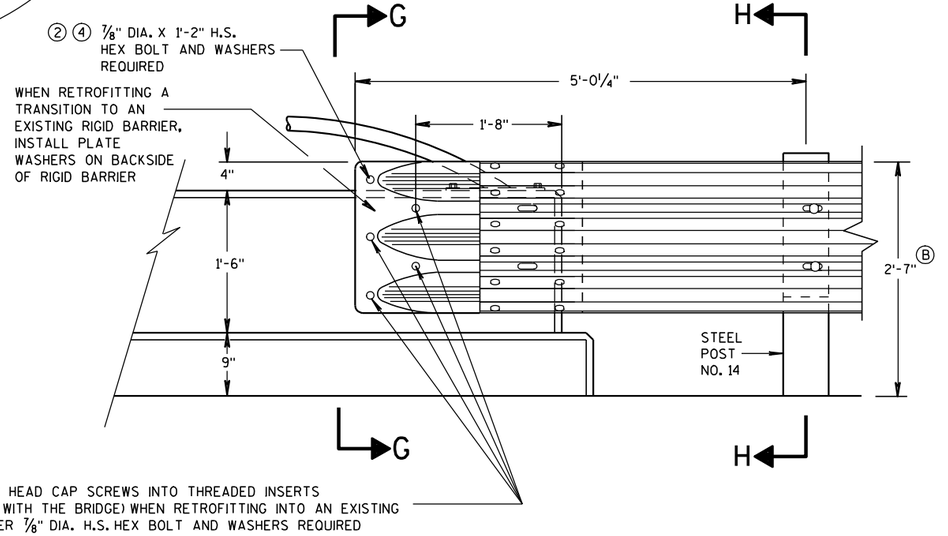
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

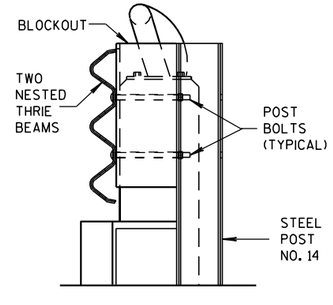




SECTION G-G

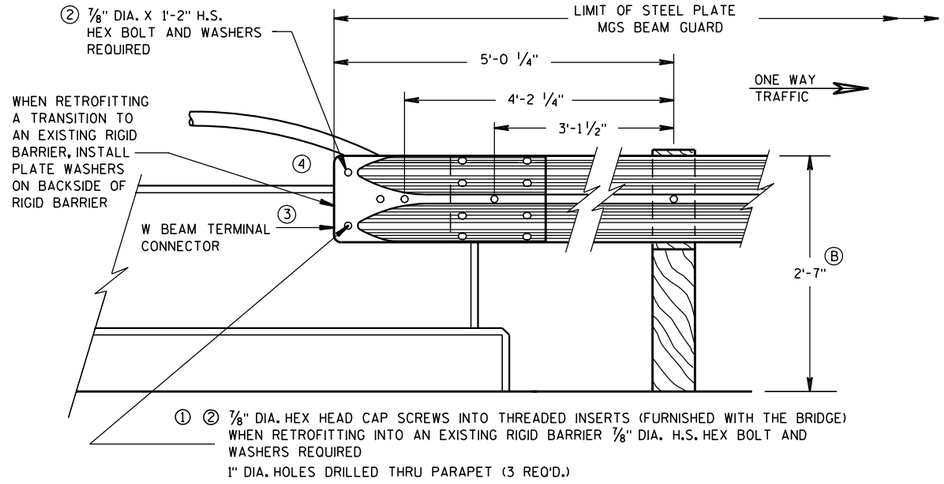


FRONT VIEW



SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

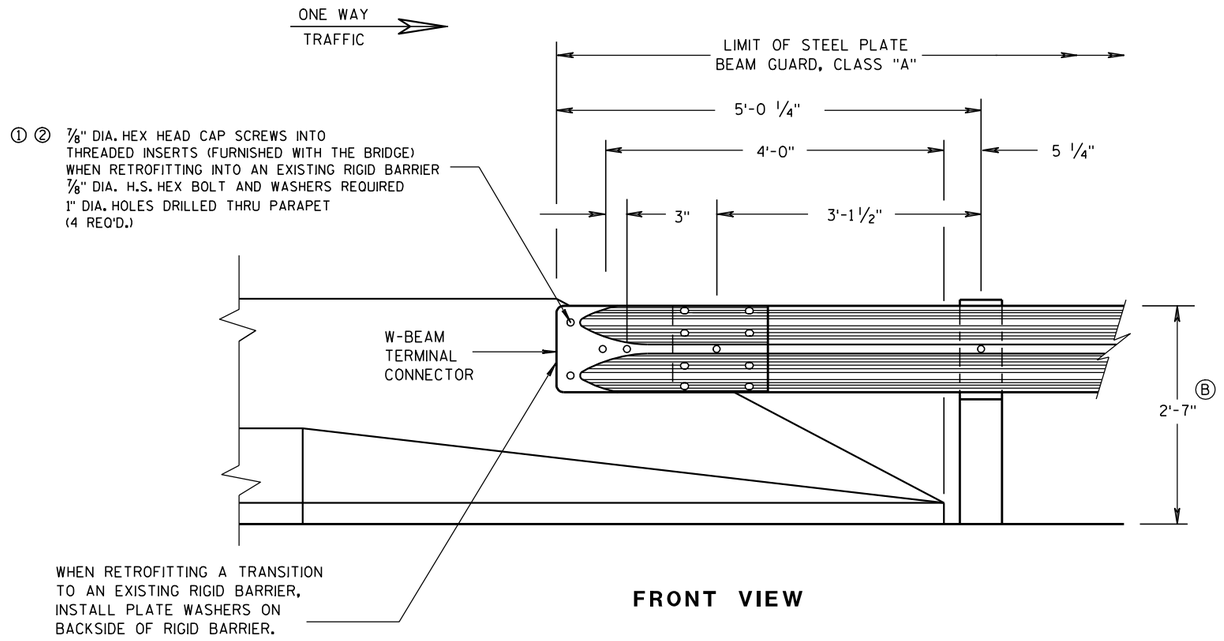
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-31-2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

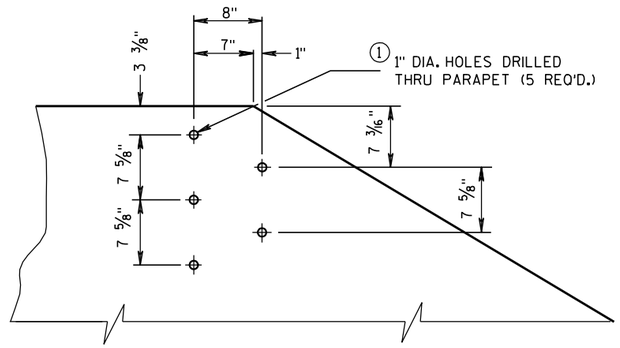
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

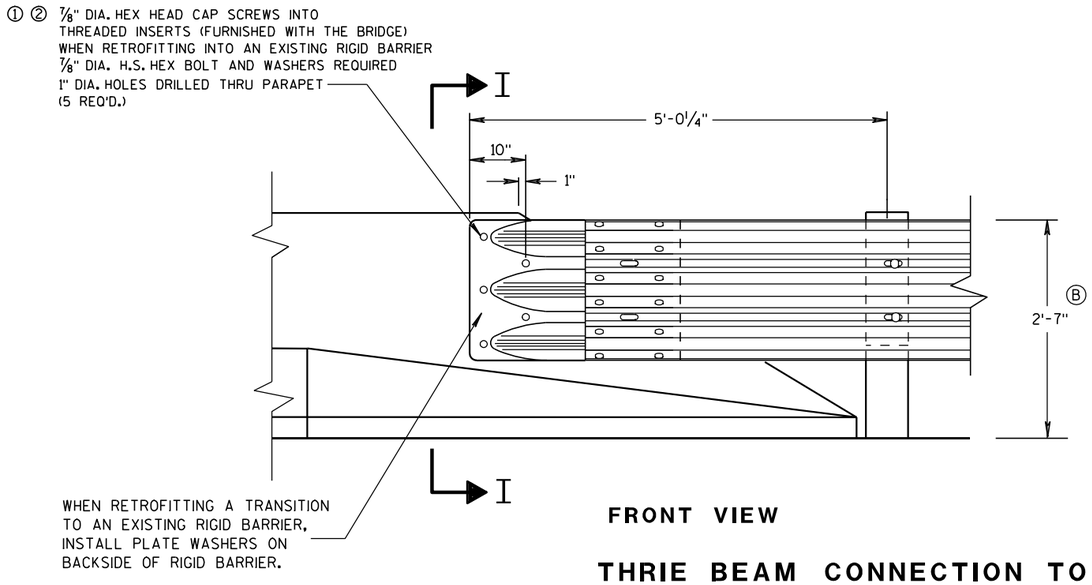
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

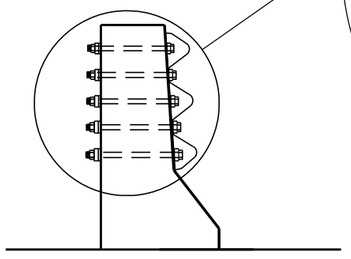
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



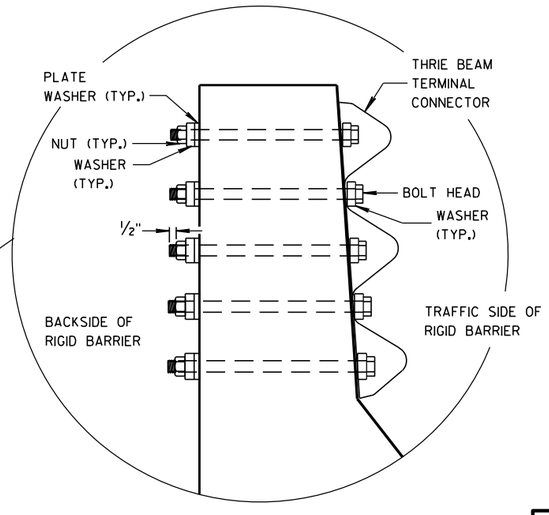
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

418

ENT

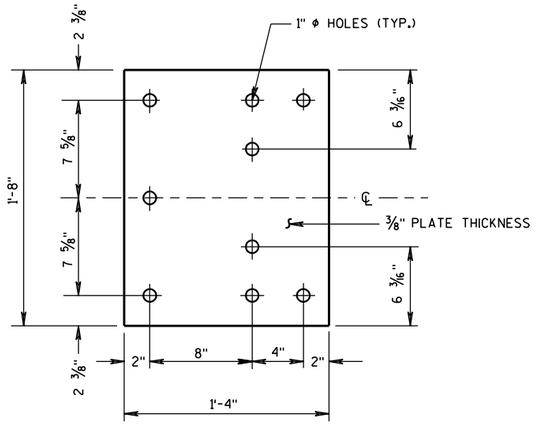
FHWA

6

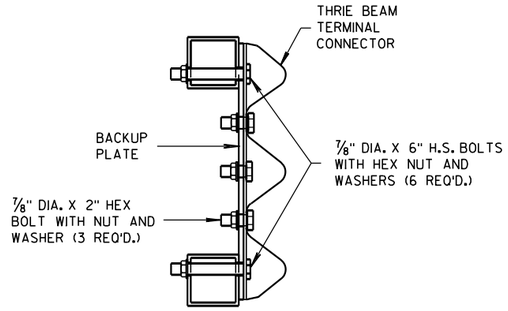
S.D.D. 14 B 45-3f

6

S.D.D. 14 B 45-3f



BACK-UP PLATE DETAIL

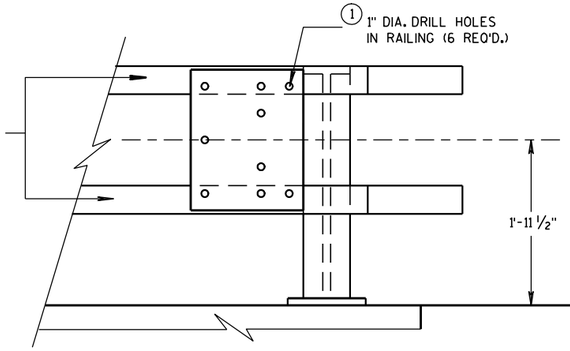


SECTION J-J

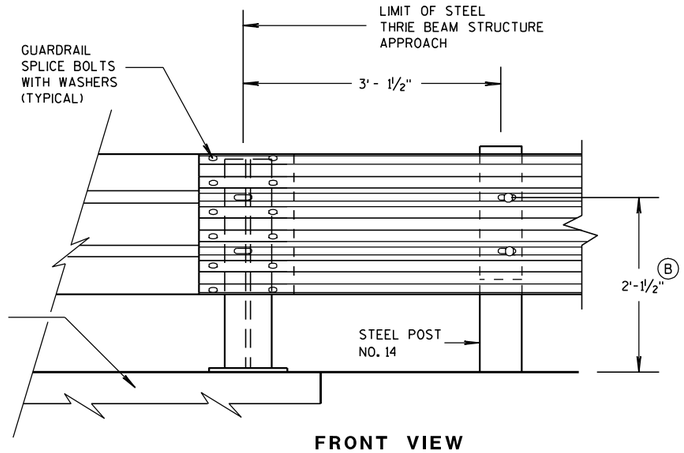
GENERAL NOTES

(1) DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(B) TOLERANCE FOR TOP OF BEAM IS ± 1".

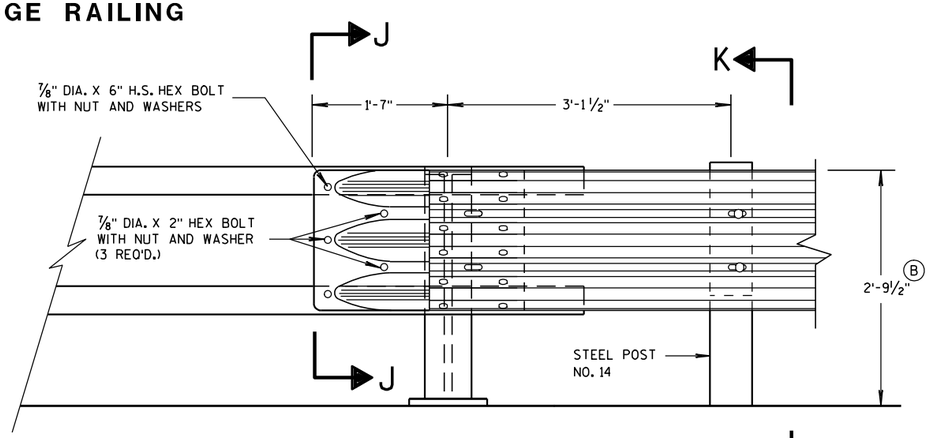


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

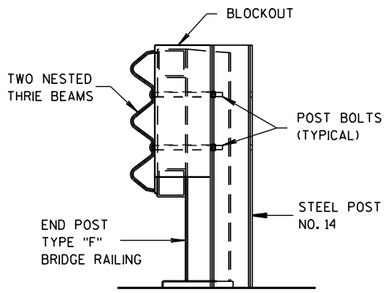


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

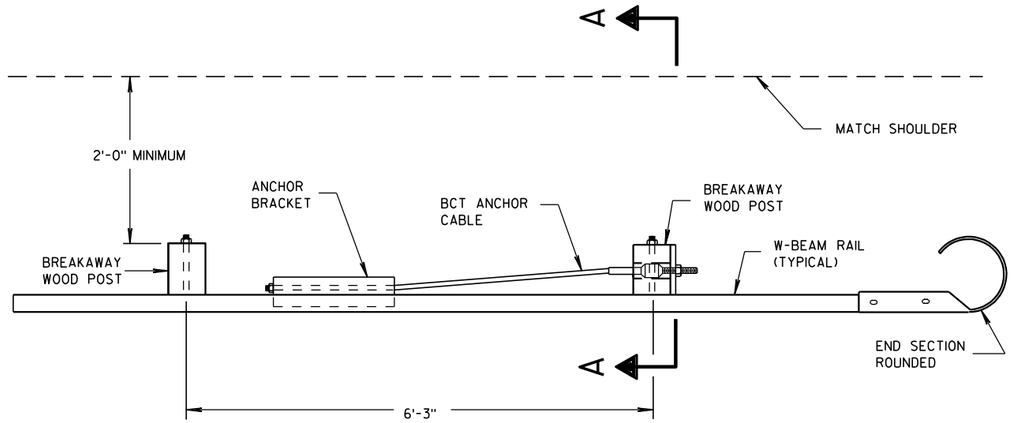
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
8/31/2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

6

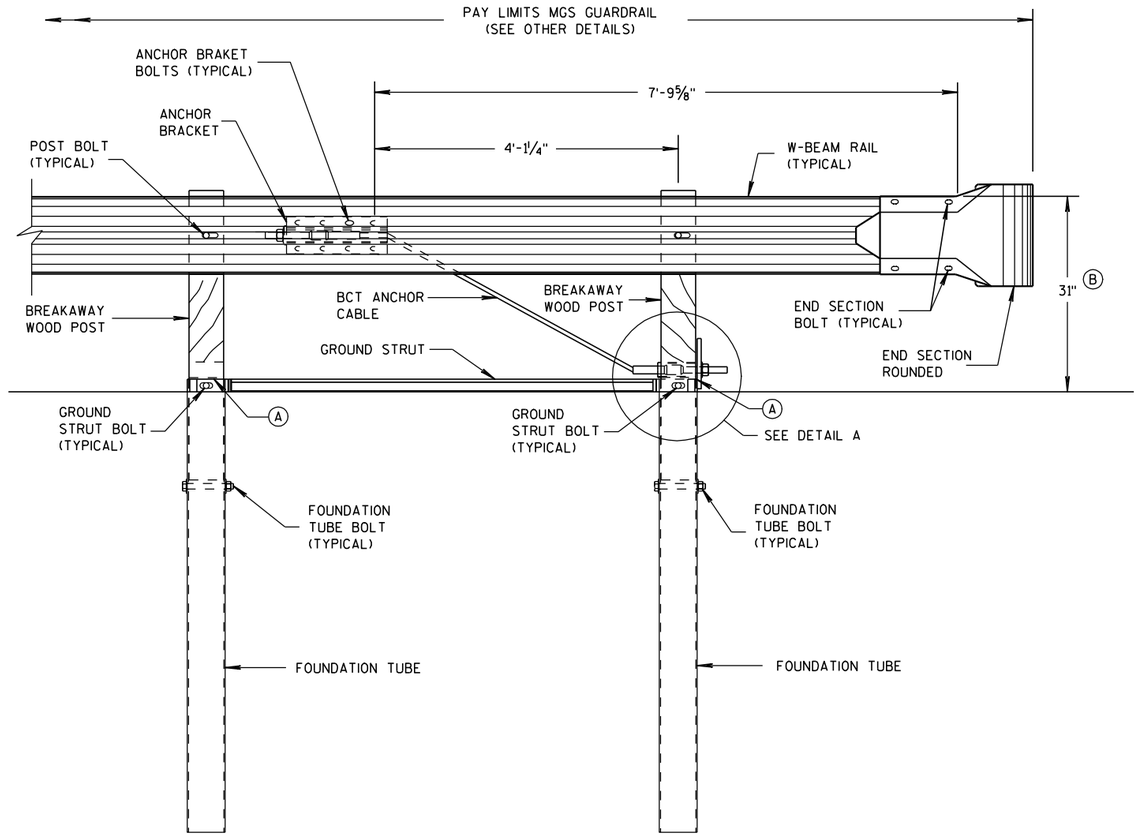
S.D.D. 14 B 45-3g

6

S.D.D. 14 B 45-3g

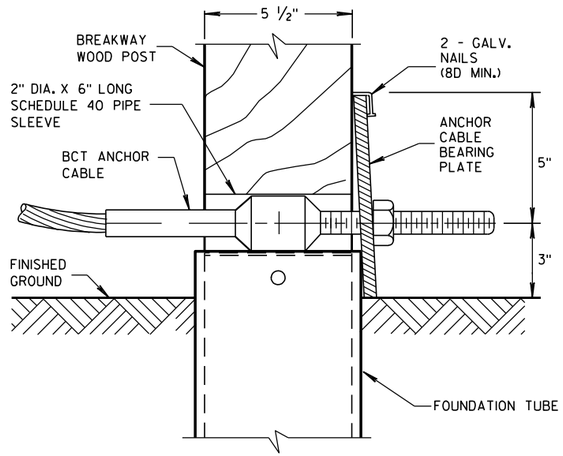


PLAN VIEW



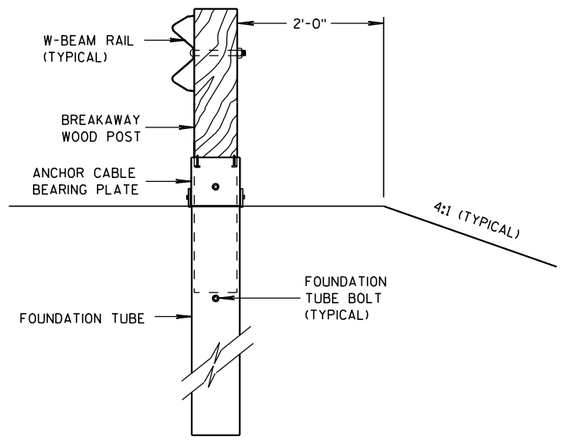
FRONT VIEW

END RAIL DETAIL



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.



SECTION A-A

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

POST BOLTS ARE A ⅝" DIAMETER X 10" LONG GUARDRAIL BOLT. A POST BOLT REQUIRES A ⅝" DIAMETER DH MODIFIED (RECESSED) HEAVY HEX NUT AND ⅝" DIAMETER FLAT WASHER.

FOUNDATION TUBE BOLTS ARE A ⅞" DIAMETER X 7½" LONG HEAVY HEX HEAD BOLT. A FOUNDATION TUBE BOLT REQUIRES A ⅞" DIAMETER DH HEAVY HEX NUT AND A ⅝" DIAMETER FLAT WASHER.

GROUND STRUT BOLTS ARE A ⅝" DIAMETER X 10" LONG HEAVY HEX HEAD BOLT. A GROUND STRUT BOLT REQUIRES A ⅝" DIAMETER DH HEAVY HEX NUT AND A ⅝" DIAMETER FLAT WASHER.

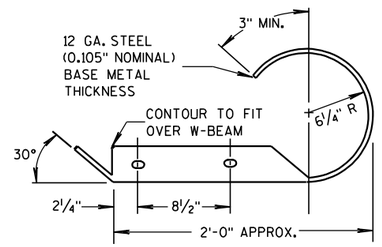
ANCHOR BRAKET BOLTS ARE A ⅝" DIAMETER X 1½" LONG HEAVY HEX HEAD BOLT. AN ANCHOR BRAKET BOLT REQUIRES A ⅝" DIAMETER DH HEAVY HEX NUT AND A FLAT WASHER.

END SECTION BOLTS ARE A ⅝" DIAMETER X 1½" HEAVY HEX HEAD BOLT. AN END SECTION BOLT REQUIRES ⅝" DIAMETER DH HEAVY HEX NUT AND A ⅝" DIAMETER FLAT WASHER.

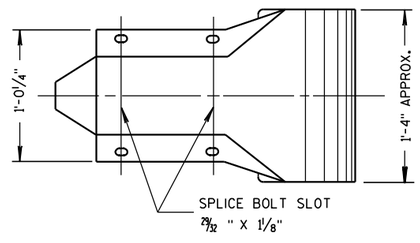
W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".



PLAN VIEW



FRONT VIEW

W BEAM END SECTION ROUNDED

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

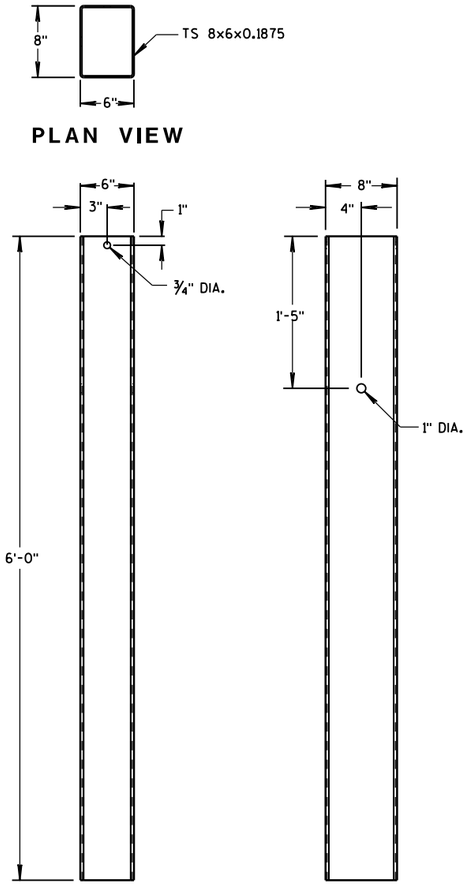
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

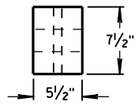
S.D.D. 14 B 47-1a

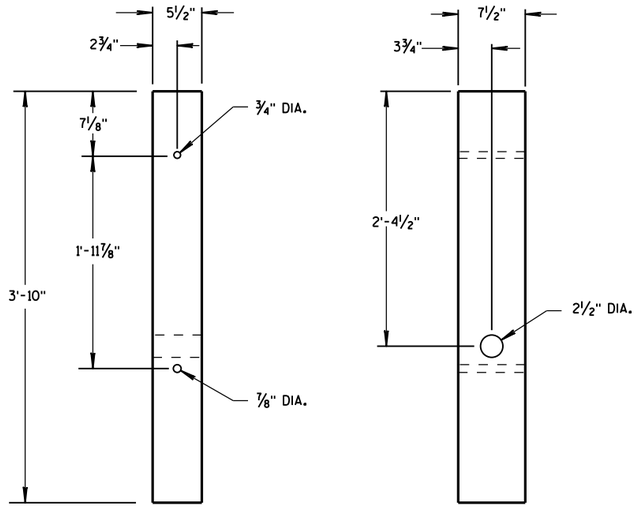
6

S.D.D. 14 B 47-1a



FOUNDATION TUBE



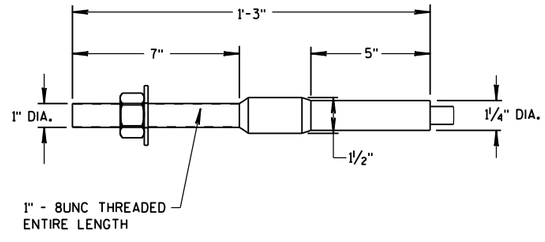


BREAKAWAY WOOD POST

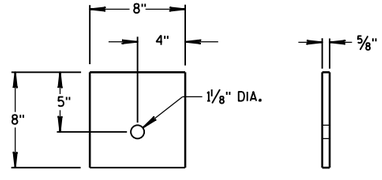
GENERAL NOTES

BCT ANCHOR CABLE IS A ⅜" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. THE END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. THE TREADED STUD SHOULD CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.

BCT ANCHOR CABLE



DETAIL B



ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

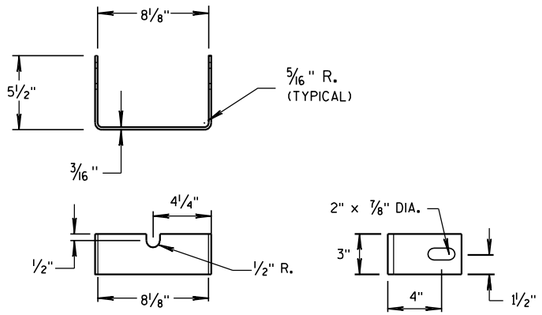
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

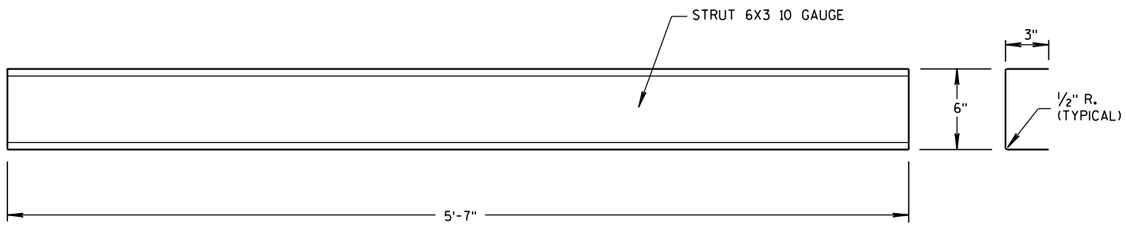
S.D.D. 14 B 47-1b

6

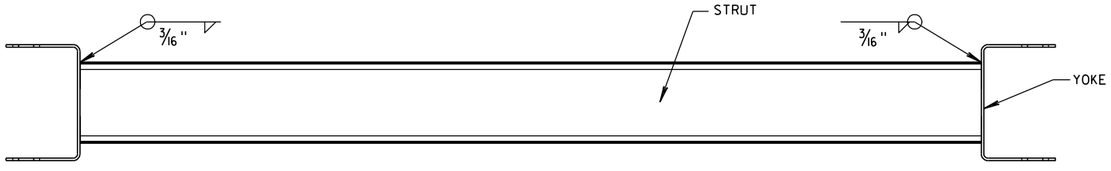
S.D.D. 14 B 47-1b



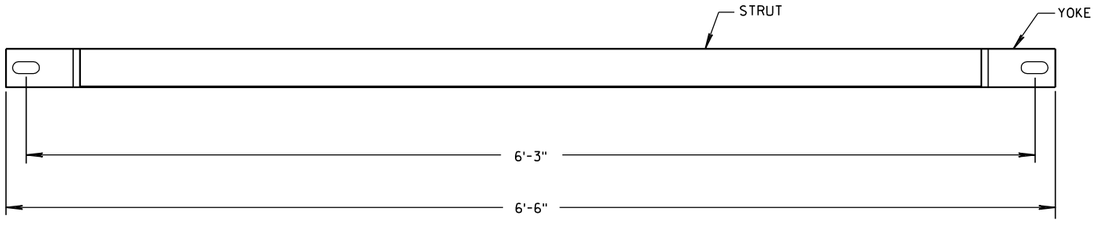
YOKE DETAIL



STRUT DETAIL

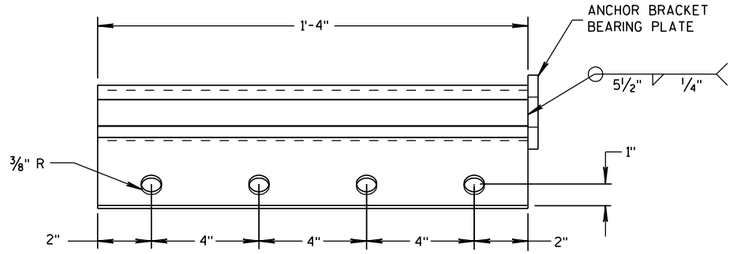


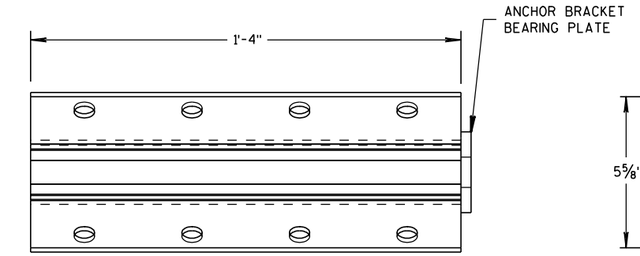
PLAN VIEW

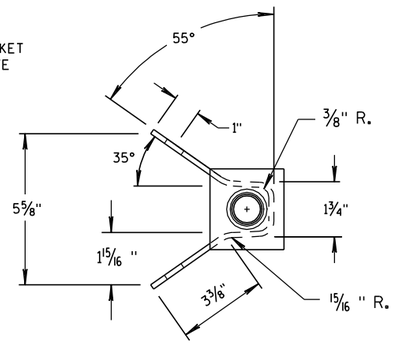


FRONT VIEW

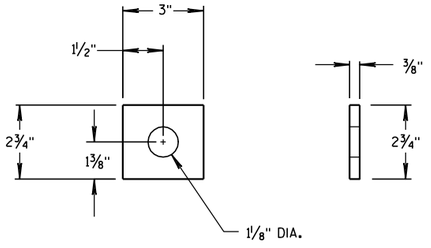
GROUND STRUT DETAIL







ANCHOR BRACKET



ANCHOR BRACKET BEARING PLATE

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/2011
DATE

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

422

FHWA

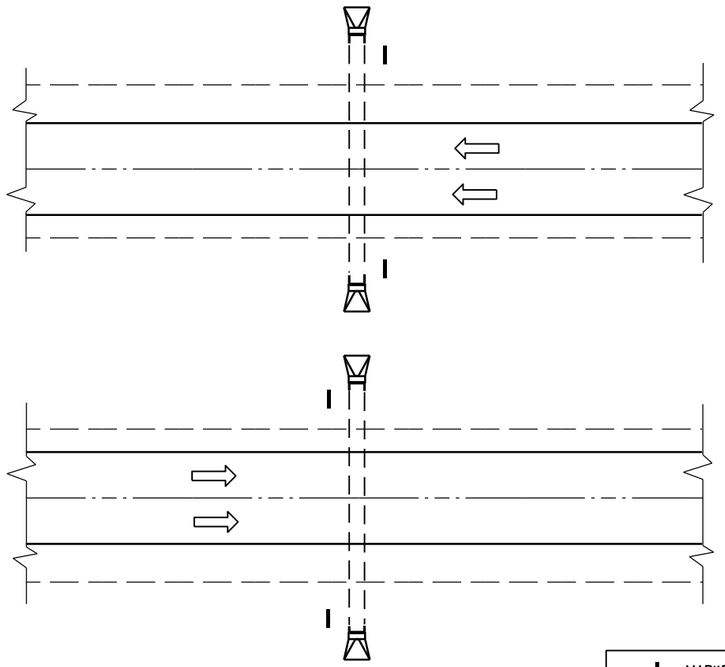
[illegible]

6

S.D.D. 14 B 47-1c

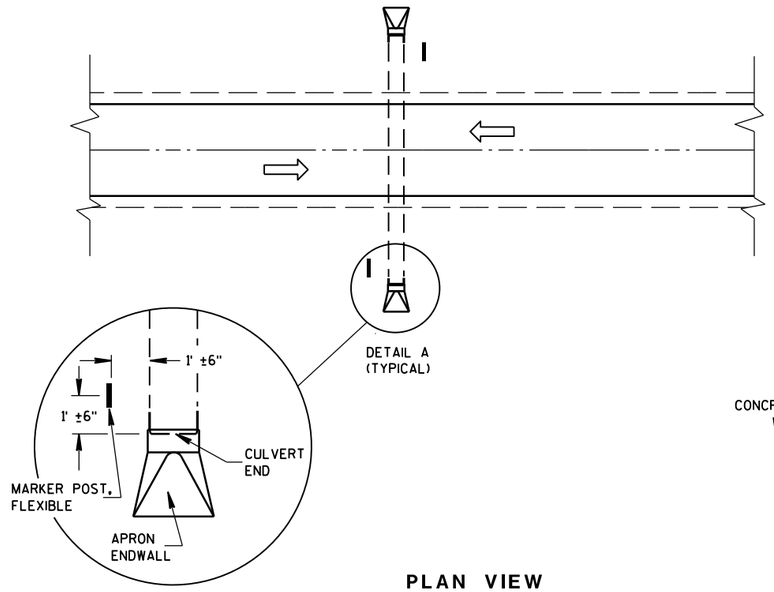
6

S.D.D. 14 B 47-1c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

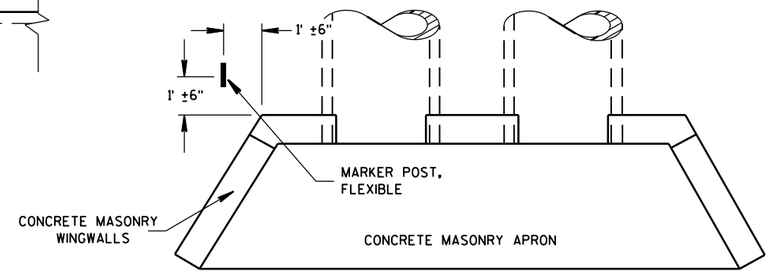
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

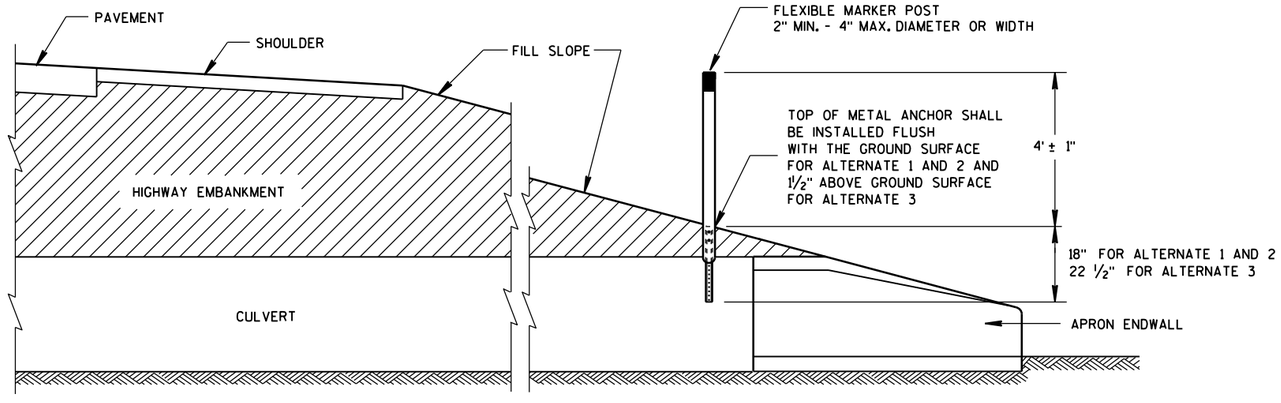
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

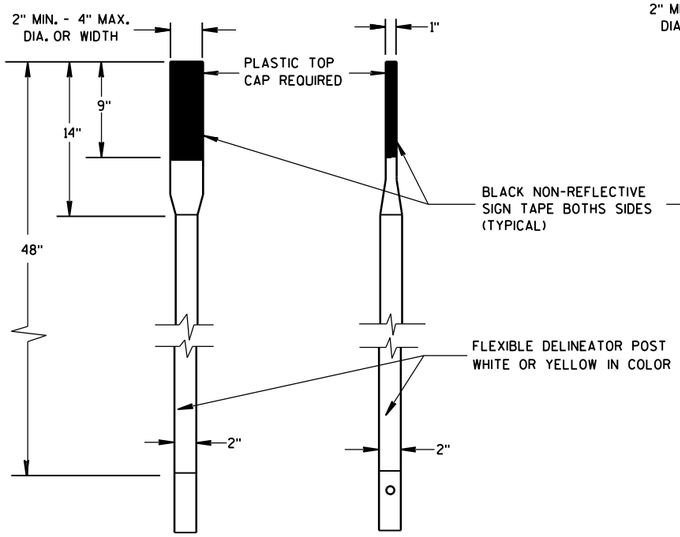
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

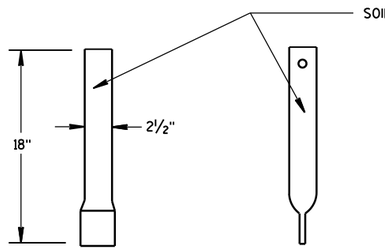
6

S.D.D. 15 A 3-2a

6

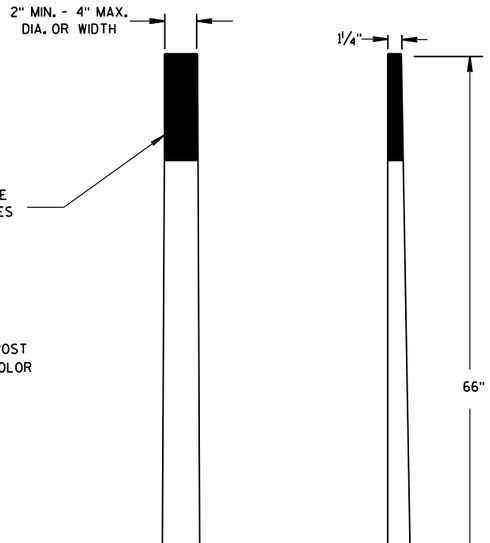
S.D.D. 15 A 3-2a





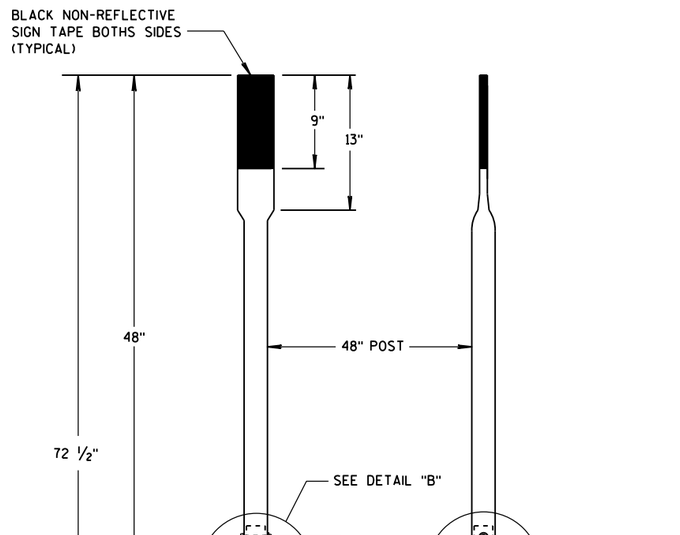
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

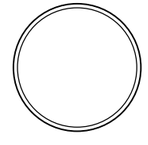
ALTERNATE 2



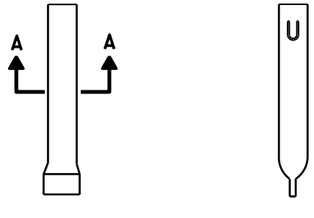
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

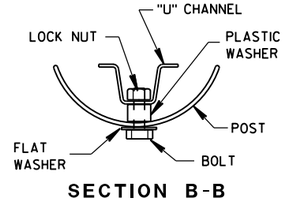


SECTION A-A

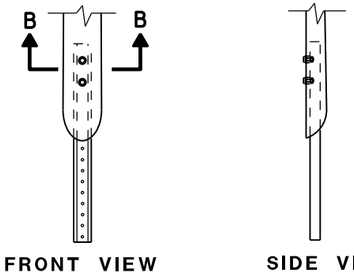


FRONT VIEW SIDE VIEW

ALTERNATE 1

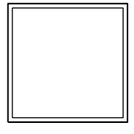


SECTION B-B

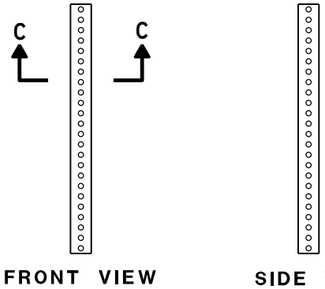


FRONT VIEW SIDE VIEW

ALTERNATE 2



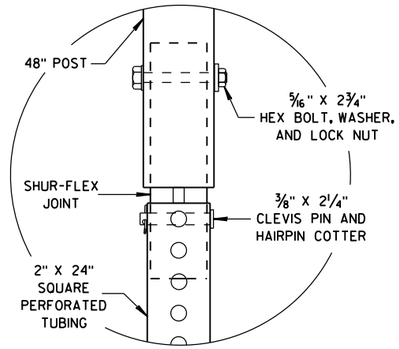
SECTION C-C



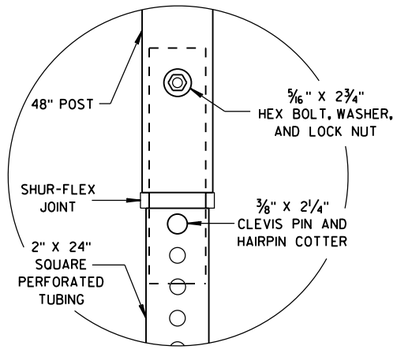
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

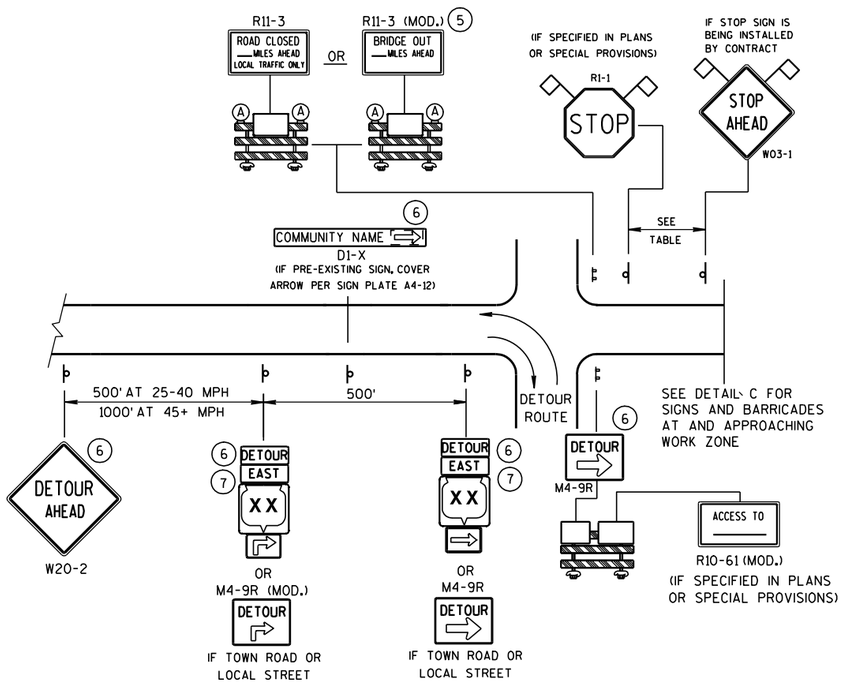
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

6

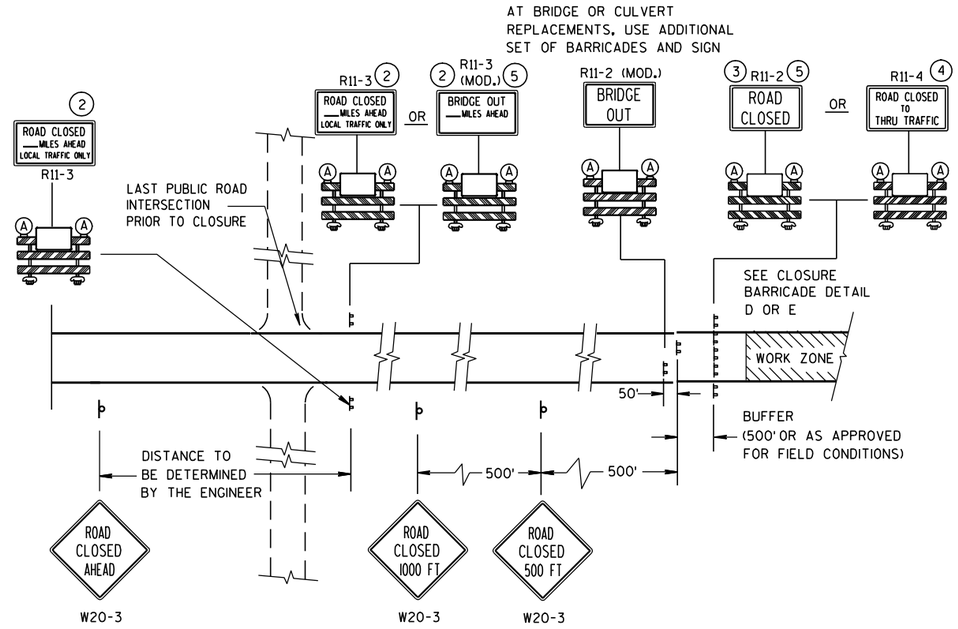
S.D.D. 15 A 3-2b



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

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

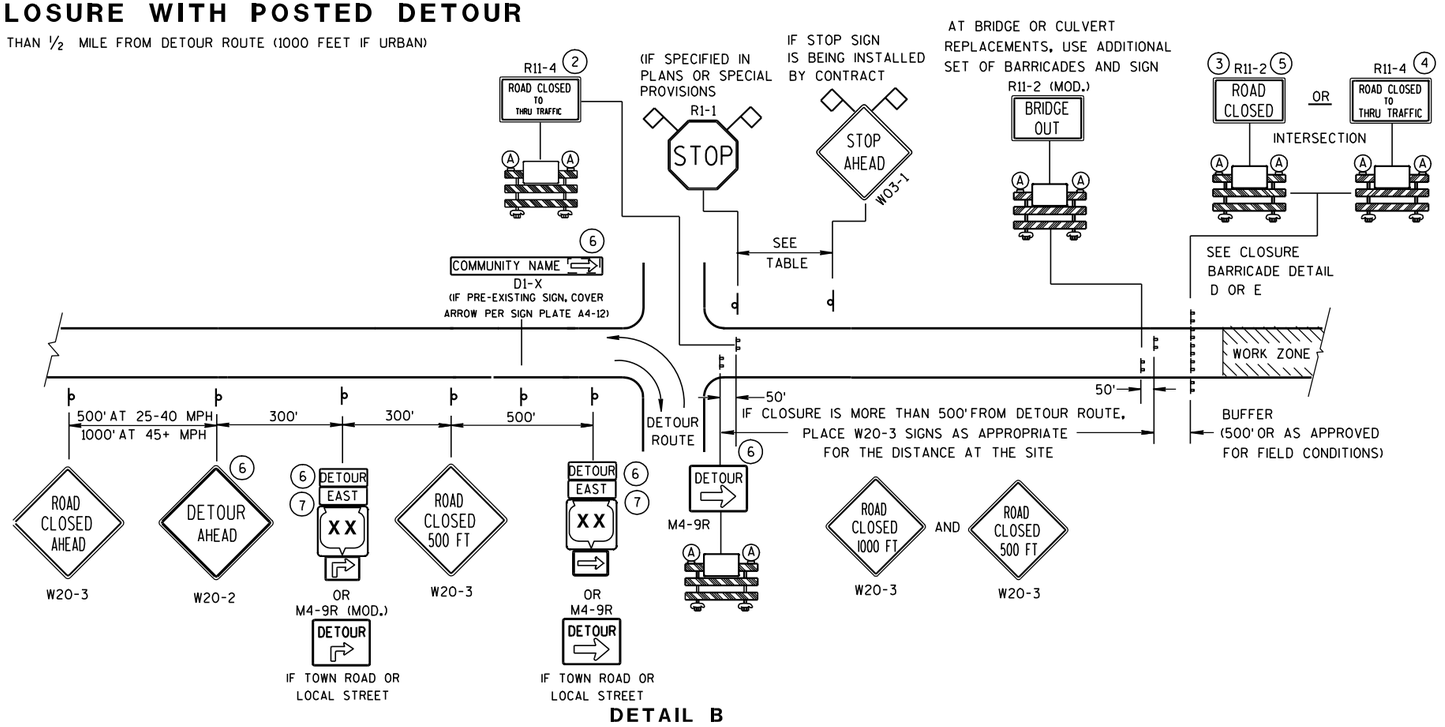


DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

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

LEGEND

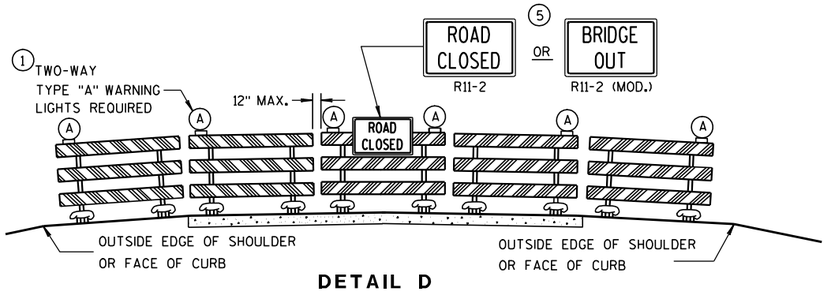
- POST MOUNTED SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1; M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

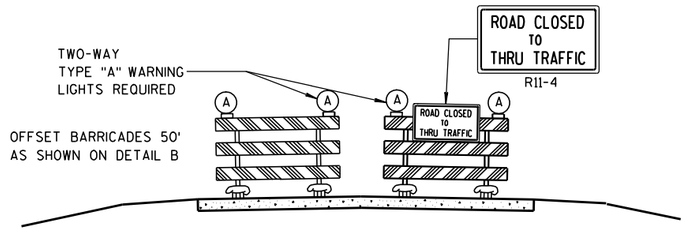
S.D.D. 15 C 2-4a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/16/03
DATE

/S/ Thomas N. N[illegible]
CHIEF SIGNS AND MARKINGS ENGINEER

FHWA

6

S.D.D. 15 C 2-4b

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

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

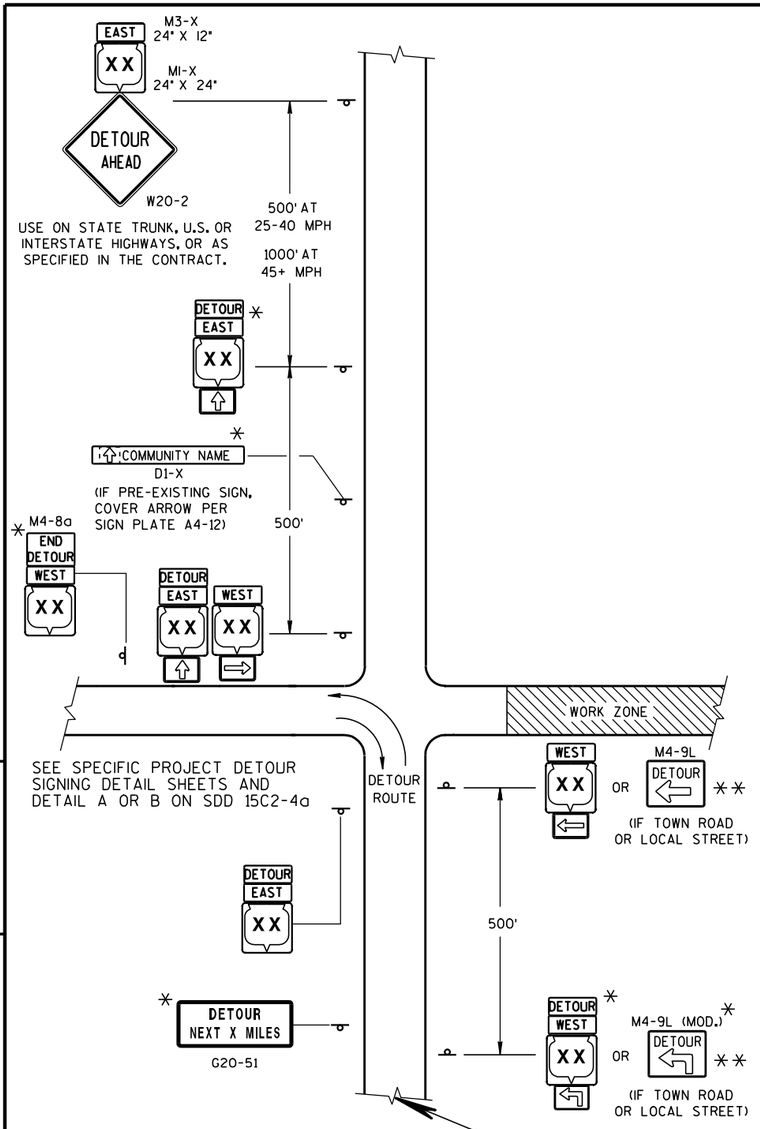
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

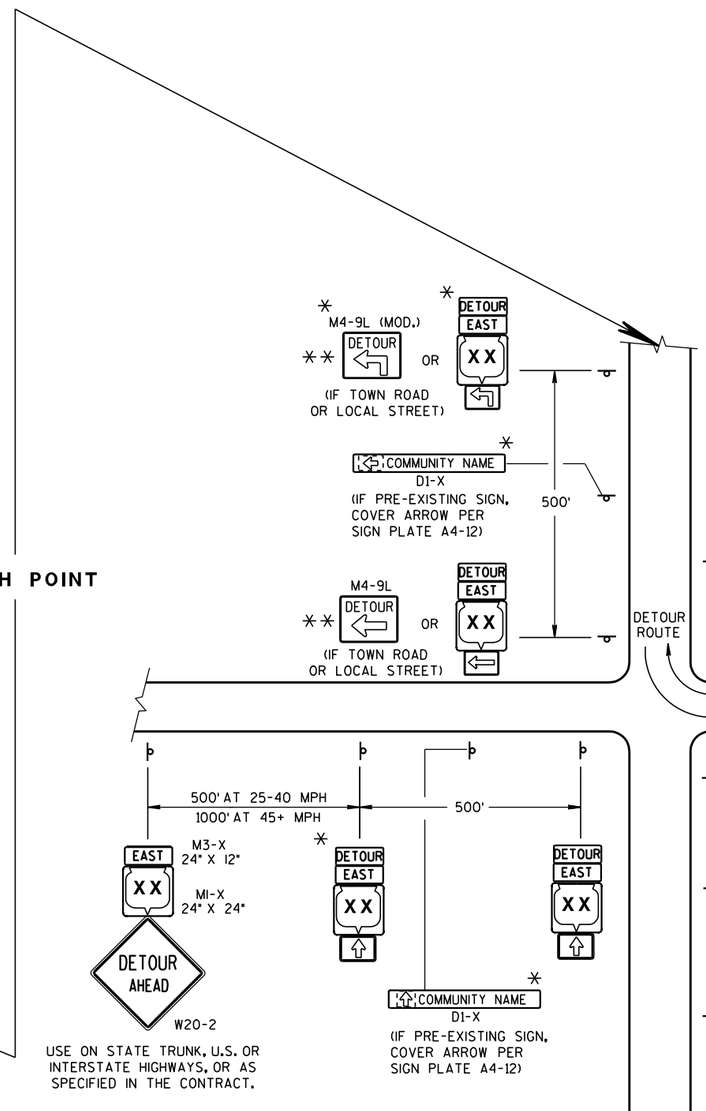
SIGN SIZES SHALL BE AS FOLLOWS:

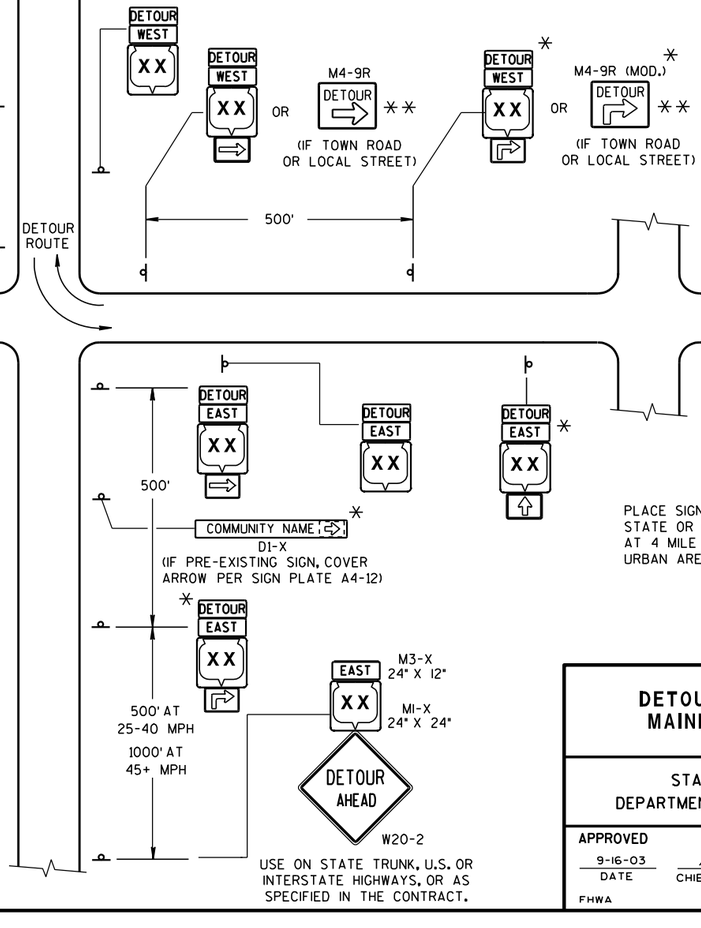
M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
M4-9 SHALL BE 30" X 24".
M4-8a SHALL BE 24" X 18".
G20-51 SHALL BE 60" X 24".
W20-2 SHALL BE 48" X 48".
D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

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

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







LEGEND

- POST MOUNTED SIGN
- WORK ZONE
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- MO5-1 OR MO6-1 OR MO6-1

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

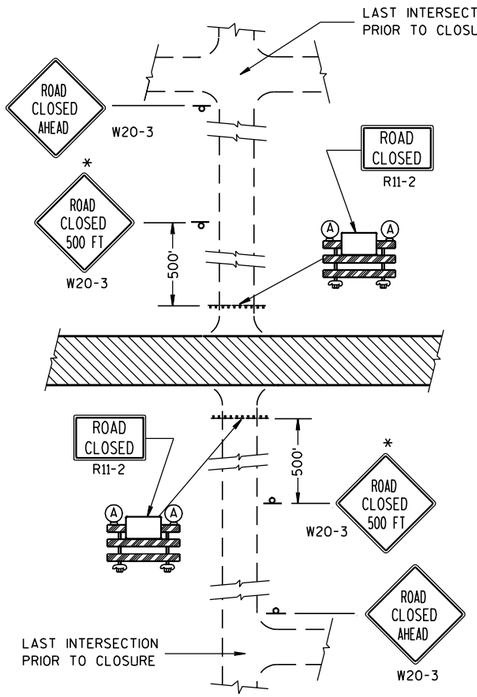
APPROVED
9-16-03 DATE
/S/ Thomas N. [illegible] CHIEF SIGNS AND MAR 427 INEER
FHWA

6

S.D.D. 15 C 2-4c

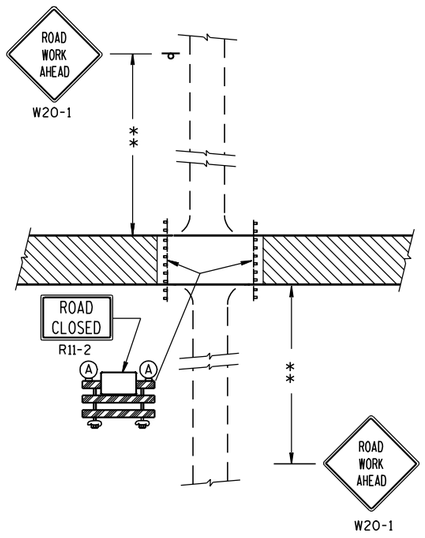
6

S.D.D. 15 C 2-4c



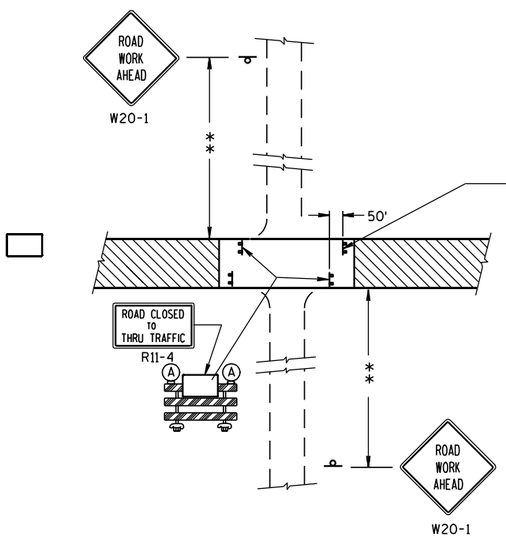
DETAIL 1

(NO ACCESS TO PROJECT)



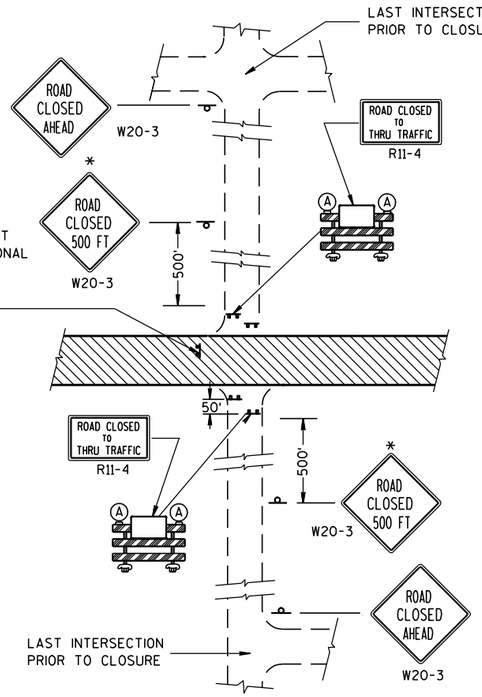
DETAIL 2

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



DETAIL 3

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



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- POST MOUNTED WARNING SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

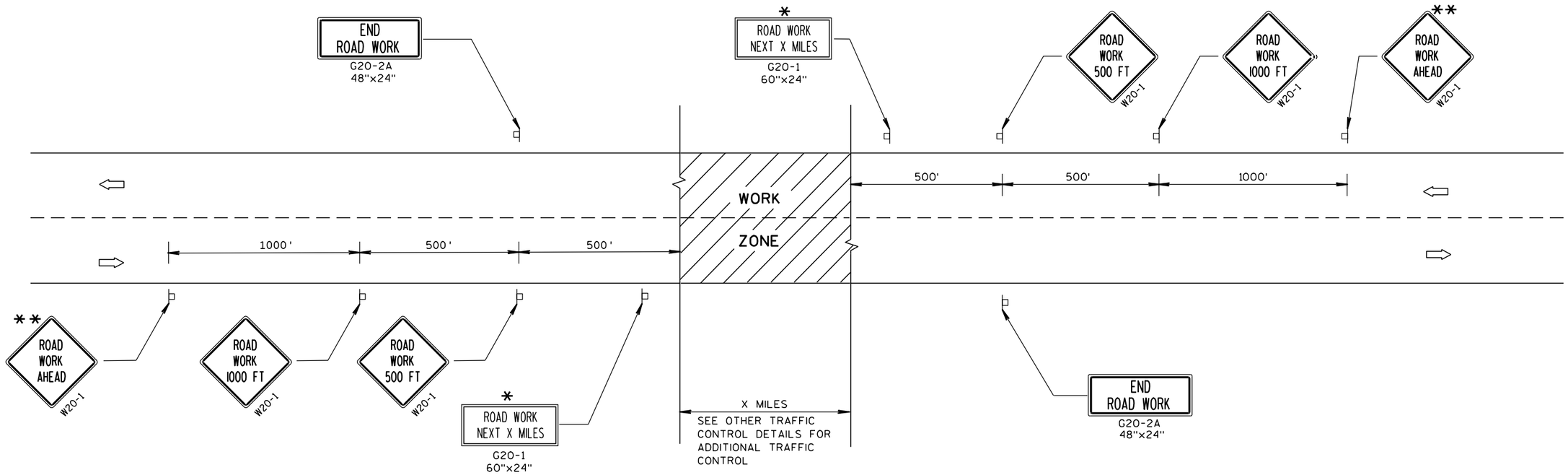
9-16-03 DATE

/S/ Thomas N. N[illegible] CHIEF SIGNS AND MAR[illegible] INEER

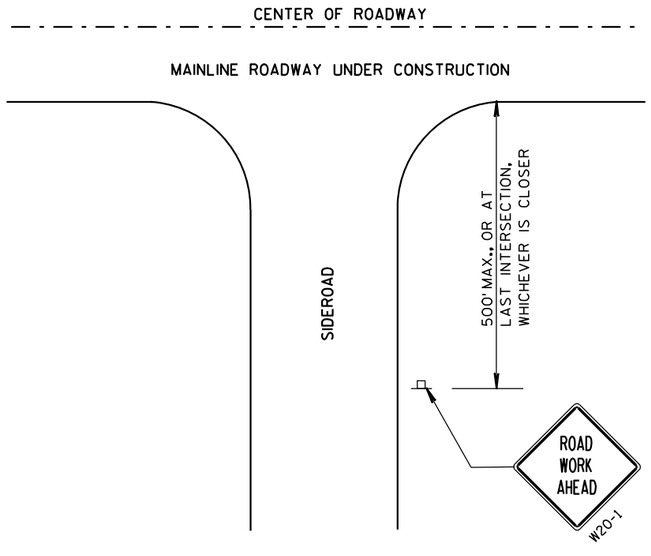
FHWA

6

S.D.D. 15 C 3-1



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING.

LEGEND

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

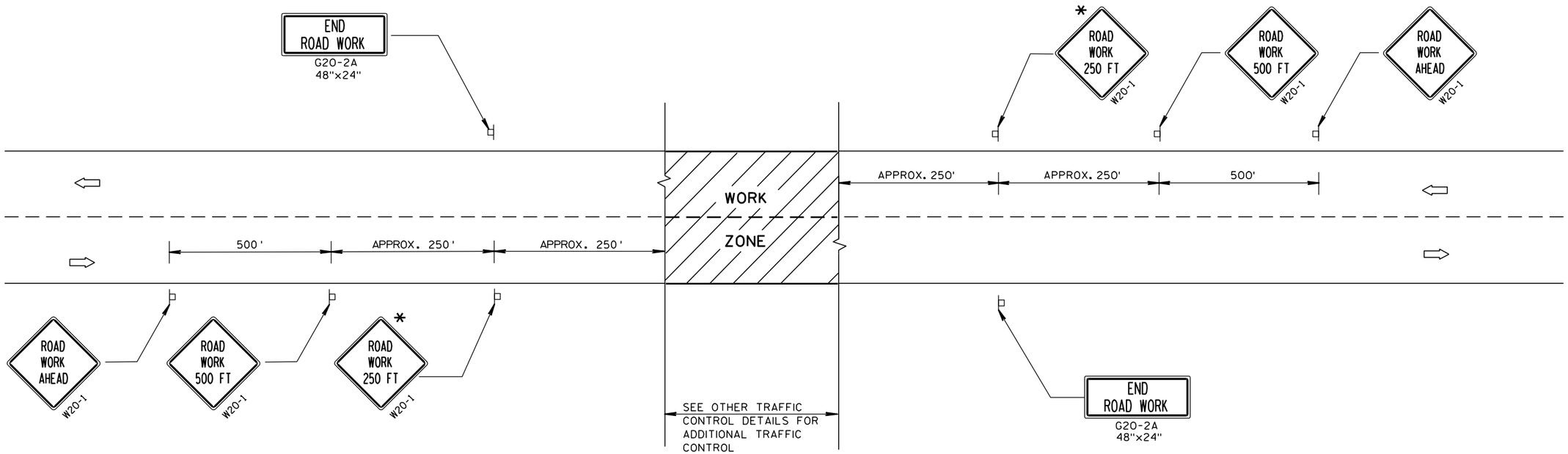
5/23/00 DATE

/S/ Chester J. [illegible] NEER
CHIEF SIGNS AND MARK

FHWA

6

S.D.D. 15 C 4-1



GENERAL NOTES

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

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

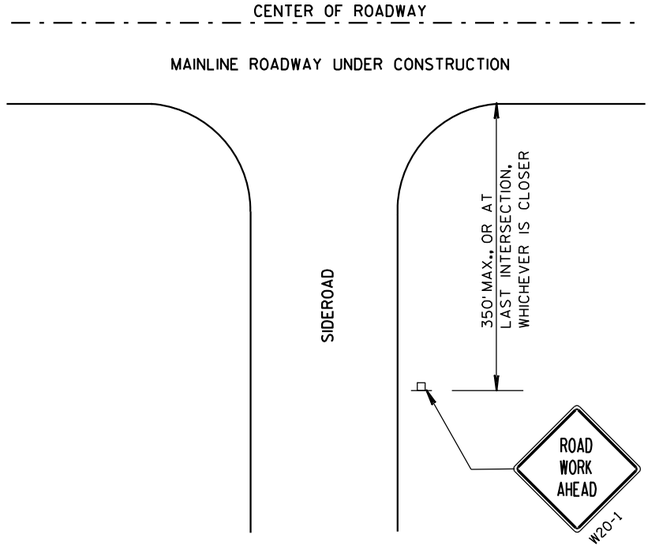
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



LEGEND

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/00
DATE

/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 5-1

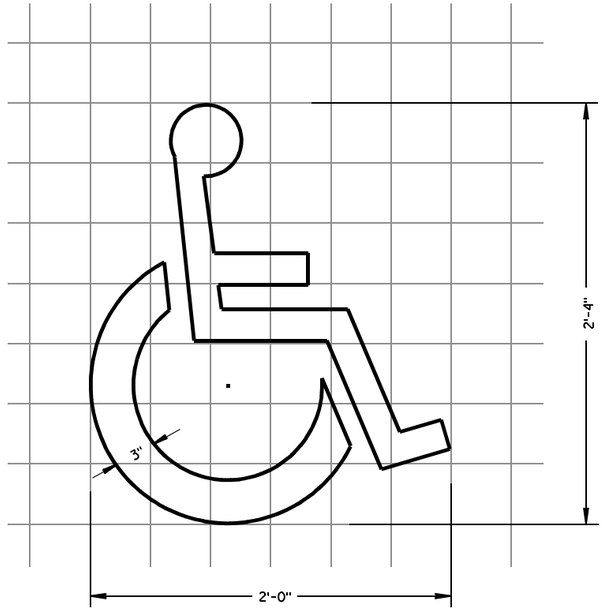
S.D.D. 15 C 5-1

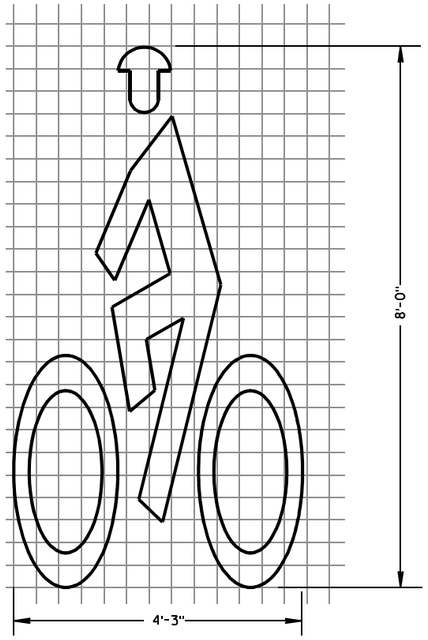
GENERAL NOTES

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

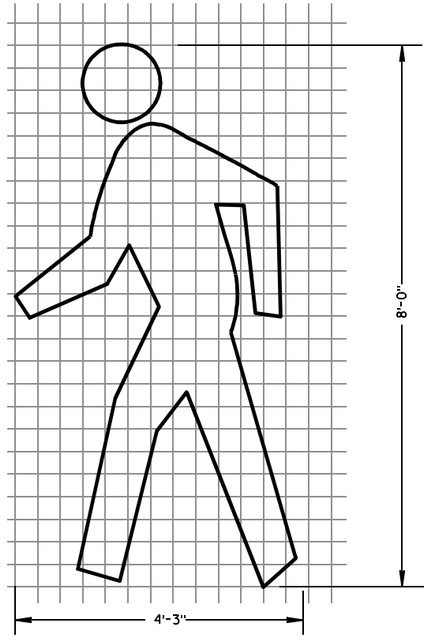
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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

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

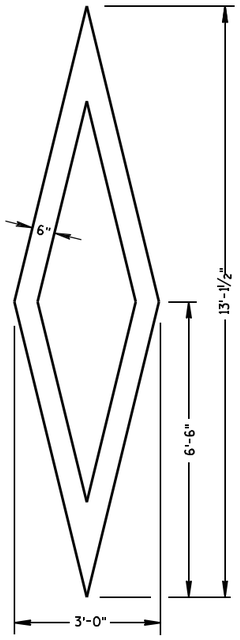




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 DATE

/S/ Thomas N Nathan
STATE TRAFFIC ENGINEER

FHWA

6

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

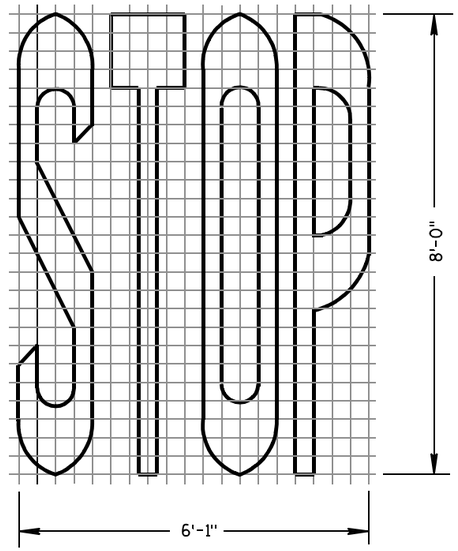
6

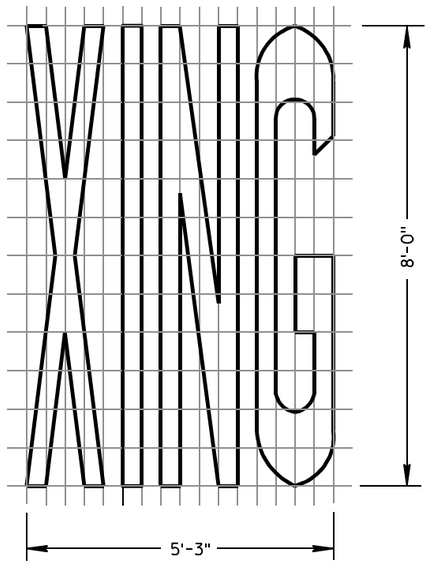
S.D.D. 15 C 7-12a

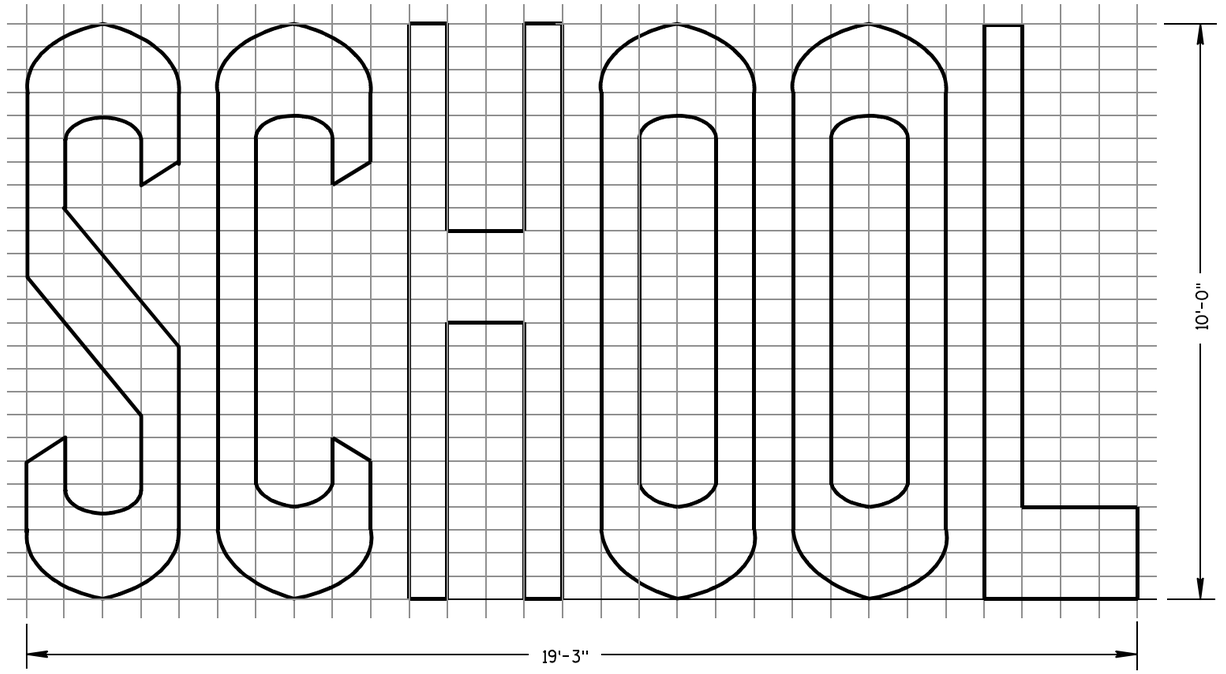
GENERAL NOTES

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

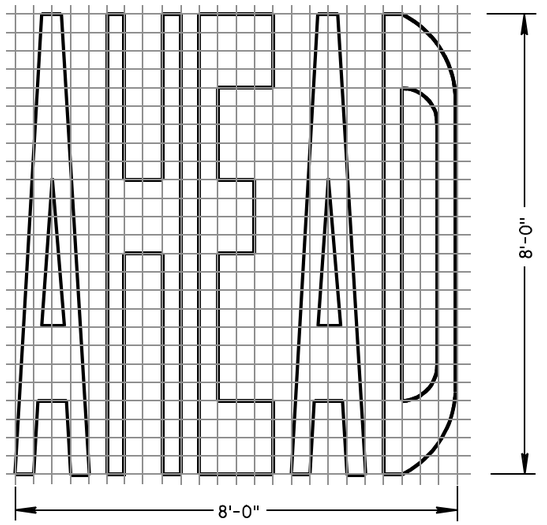
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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

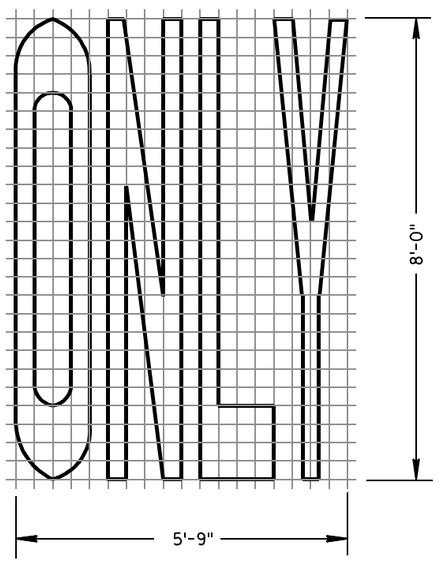


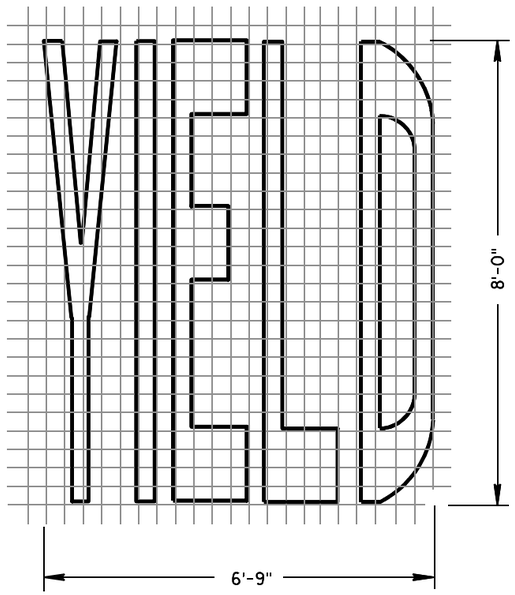


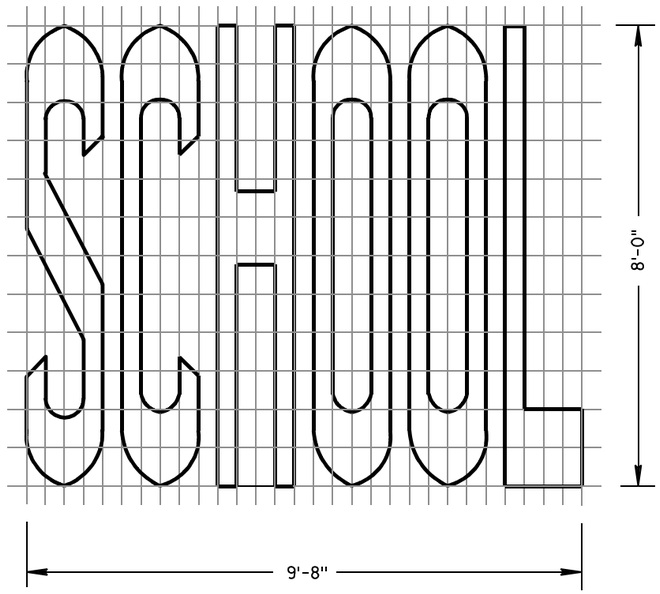


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE — /S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER

FHWA

6

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

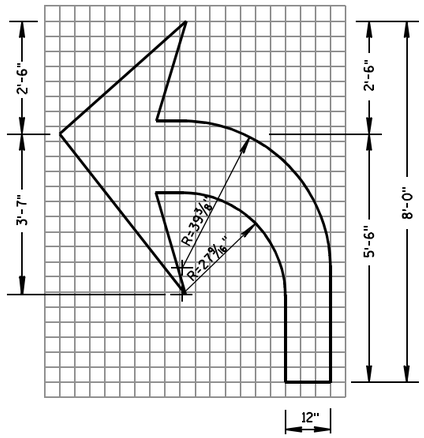
6

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

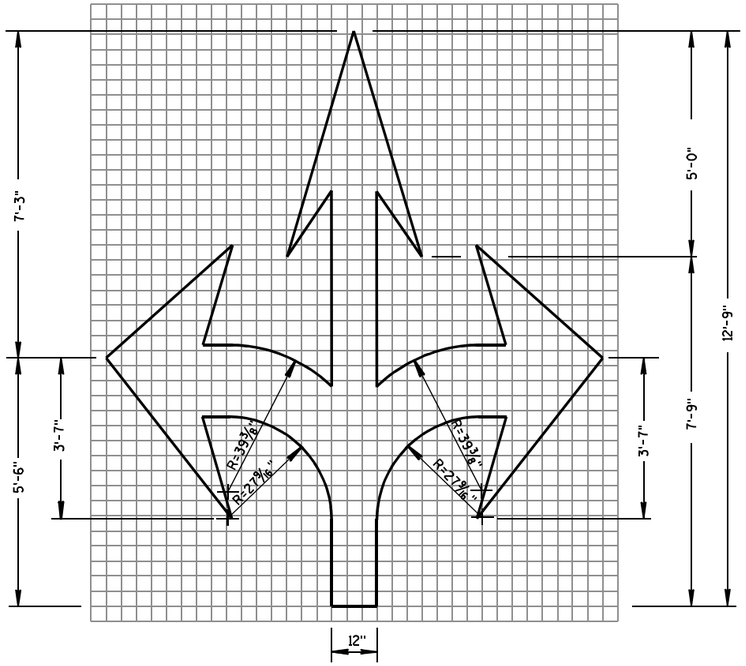
GENERAL NOTES

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

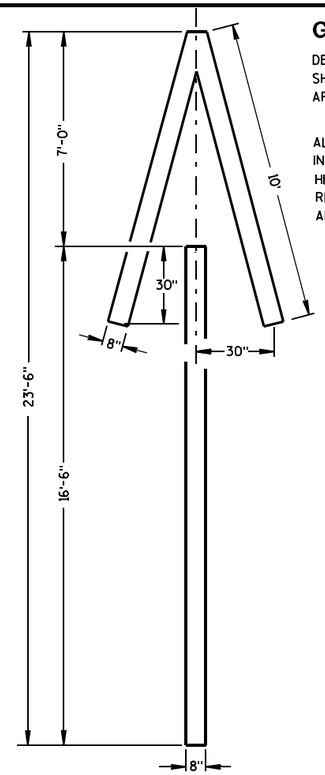
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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



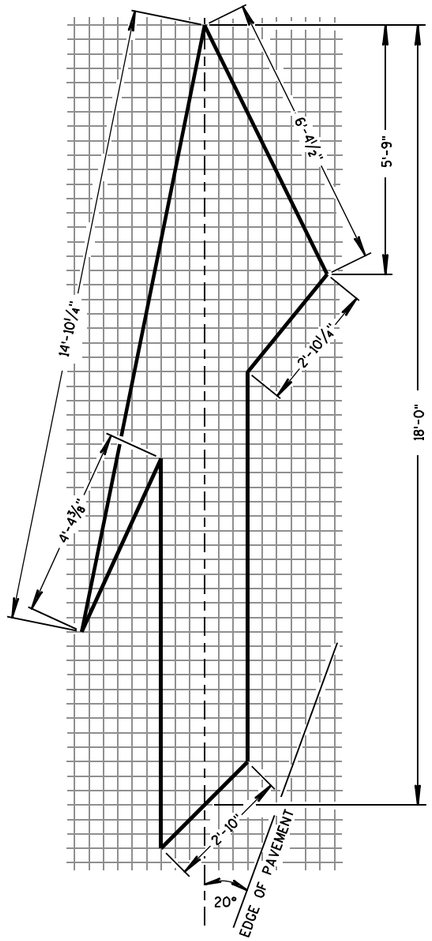
TYPE 2



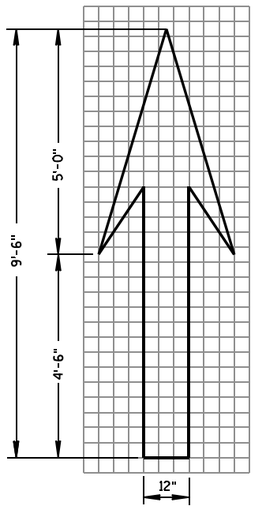
TYPE 6



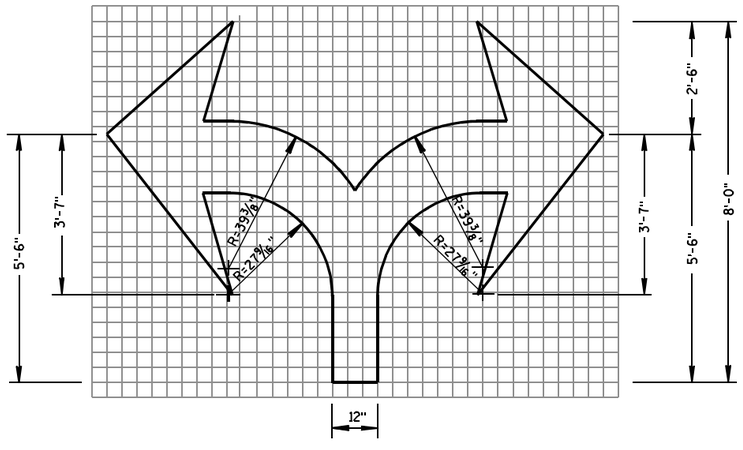
TYPE 4



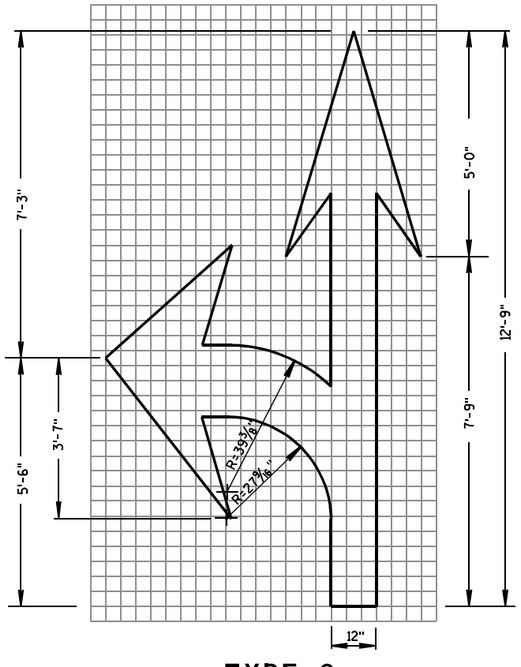
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

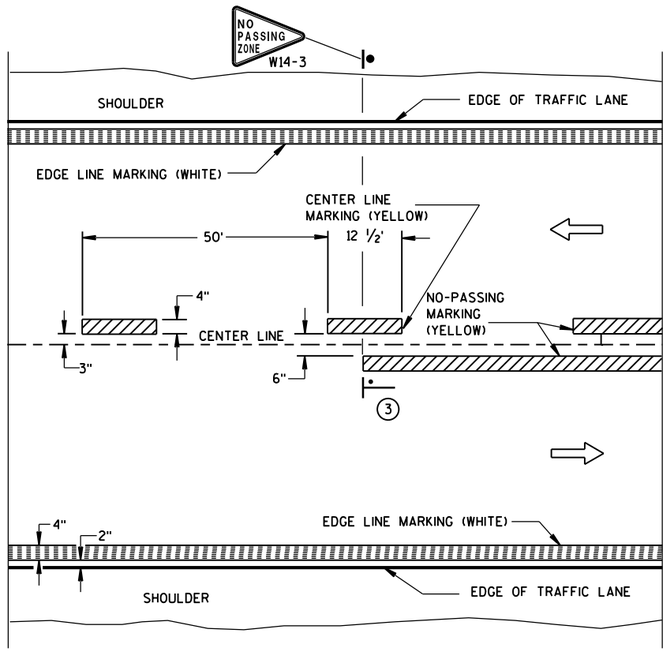
FHWA

6

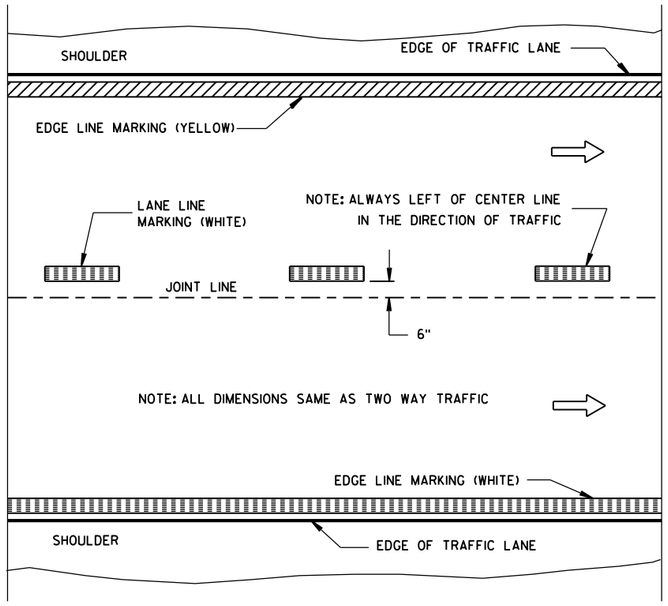
S.D.D. 15 C 7-12c

6

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

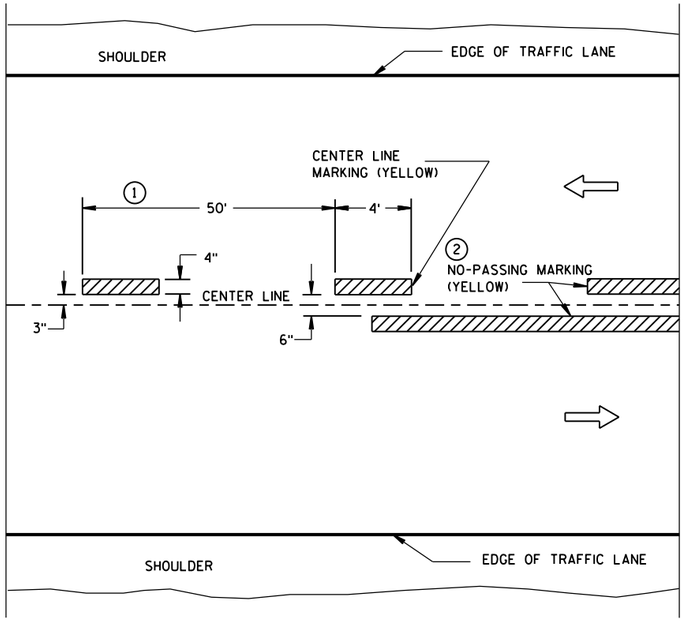


TWO WAY TRAFFIC

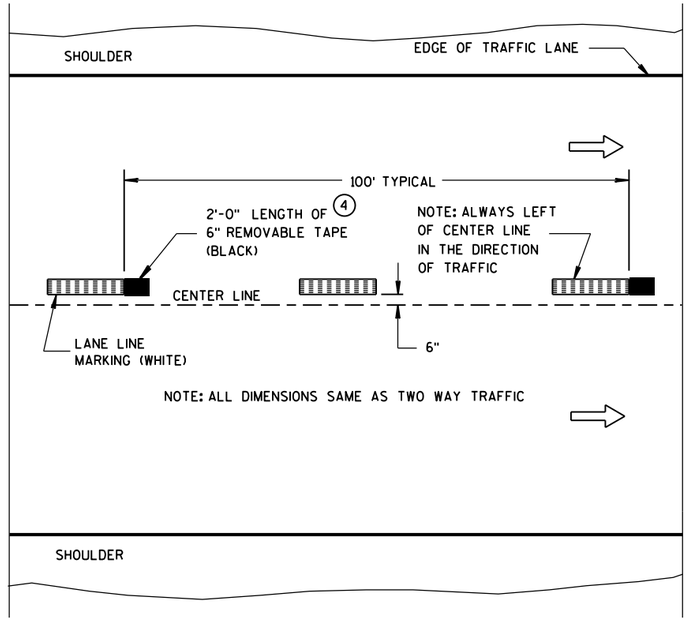


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

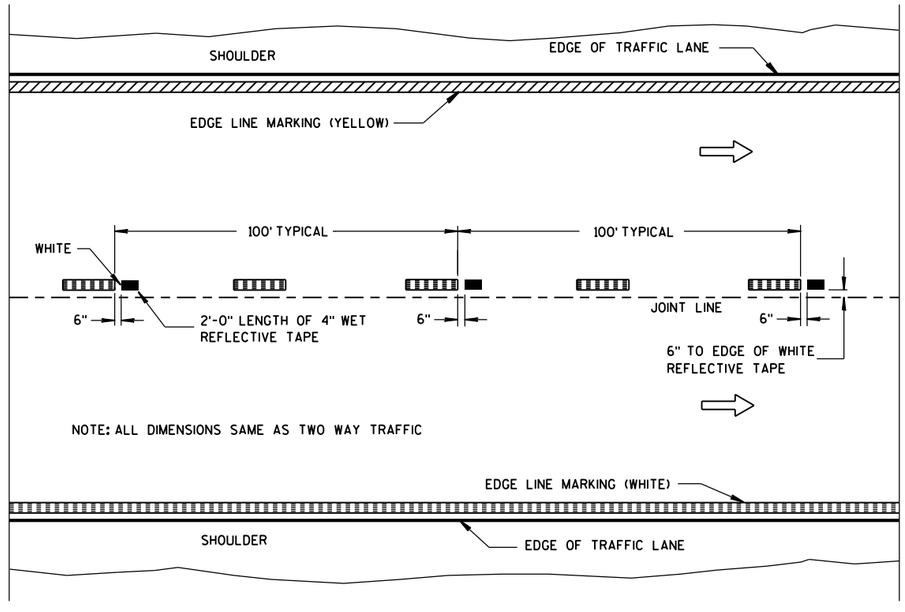
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

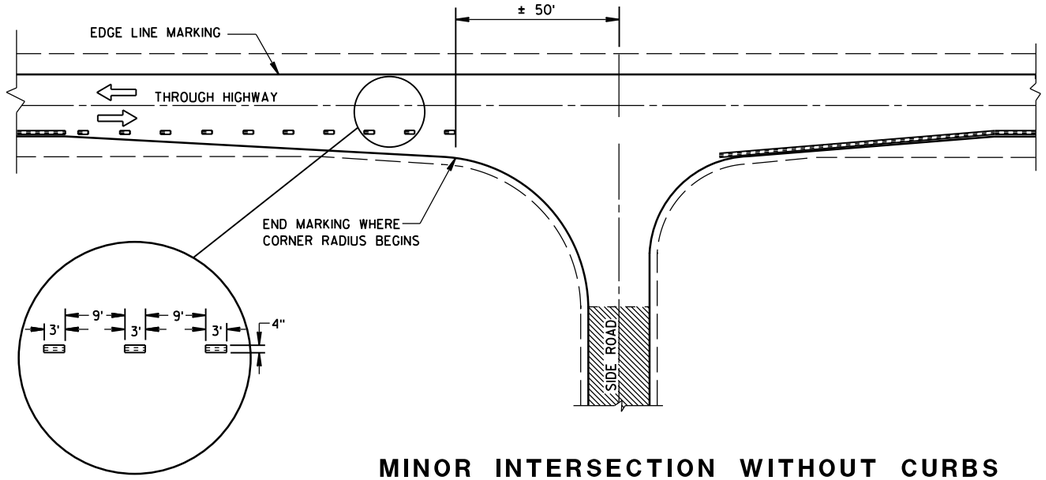
APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

6

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

6

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



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

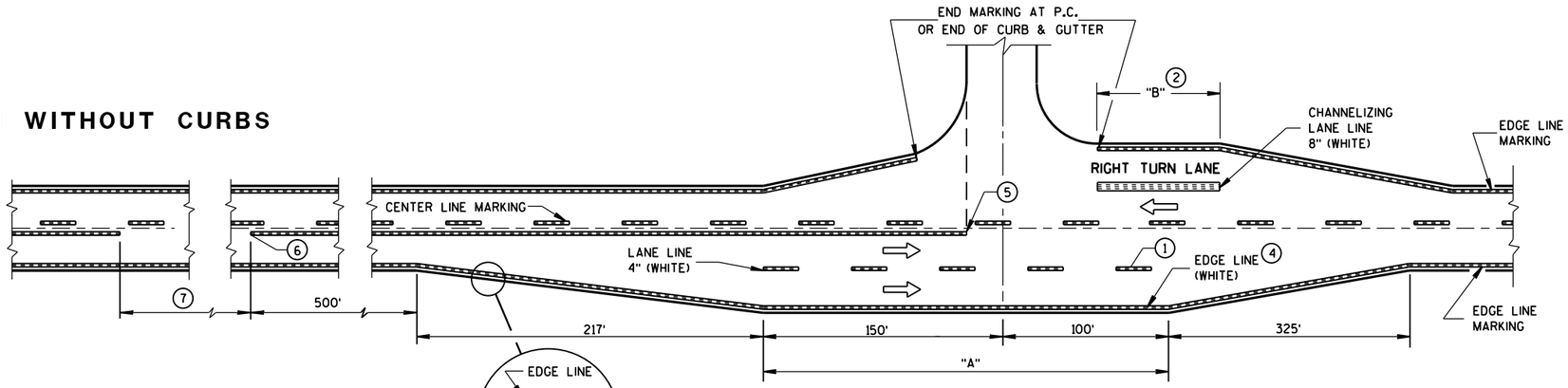
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

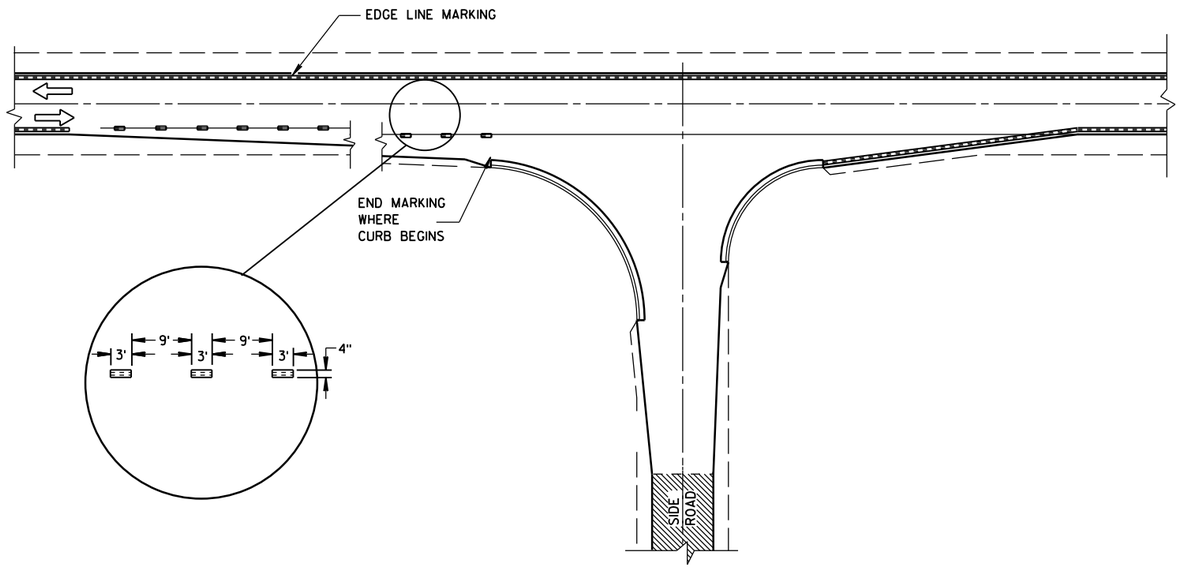
(7)

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



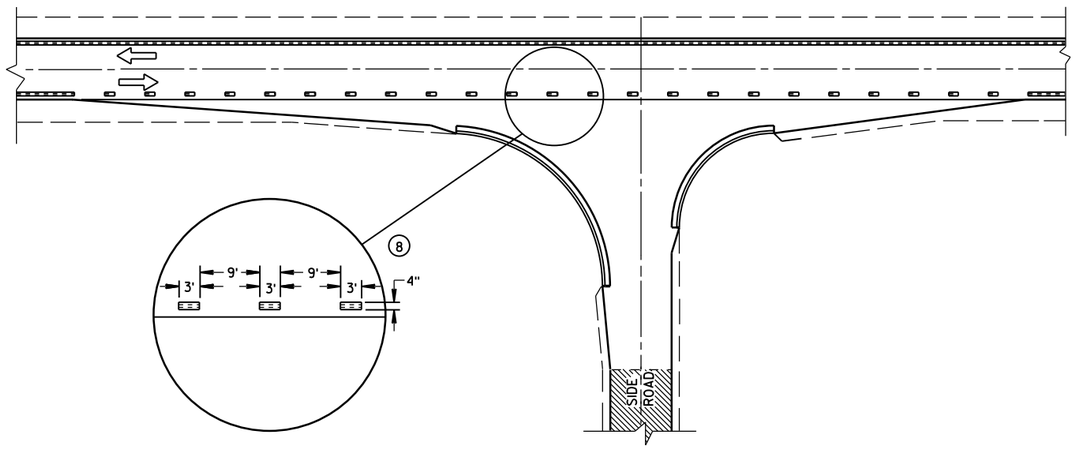
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

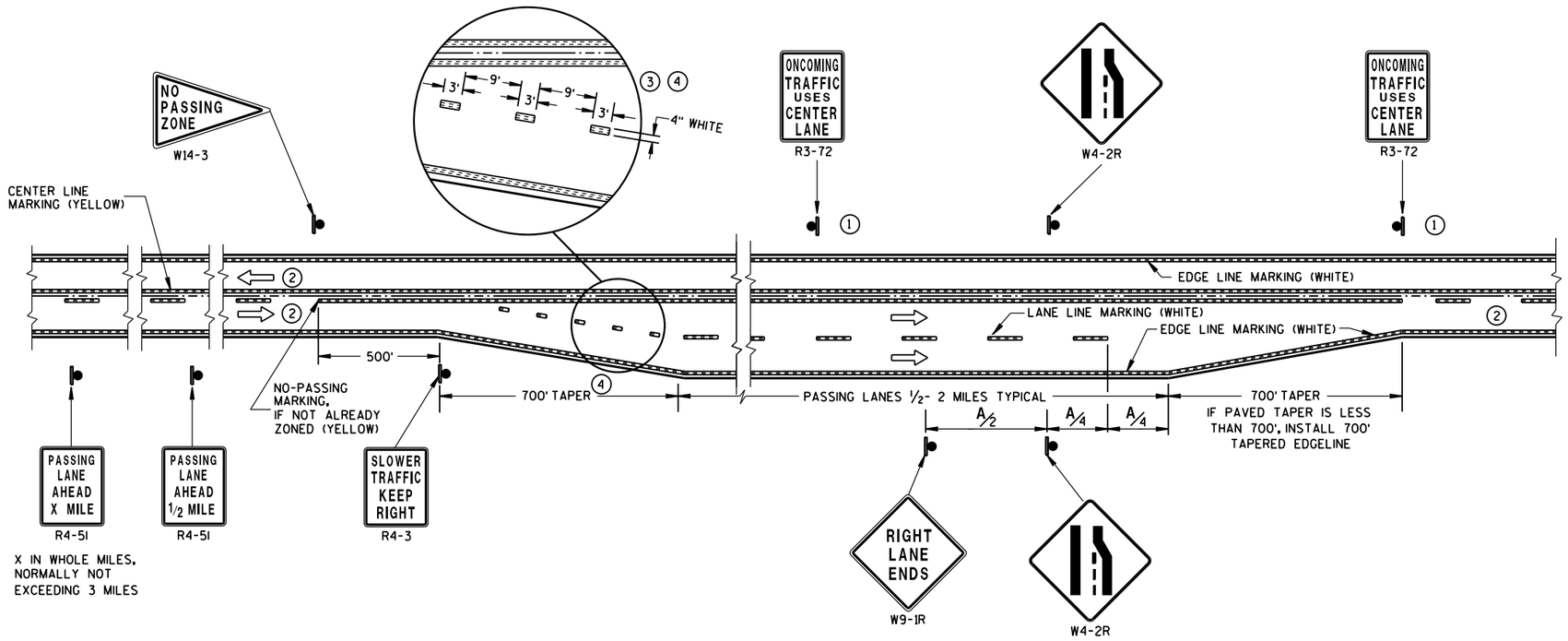
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 435

6

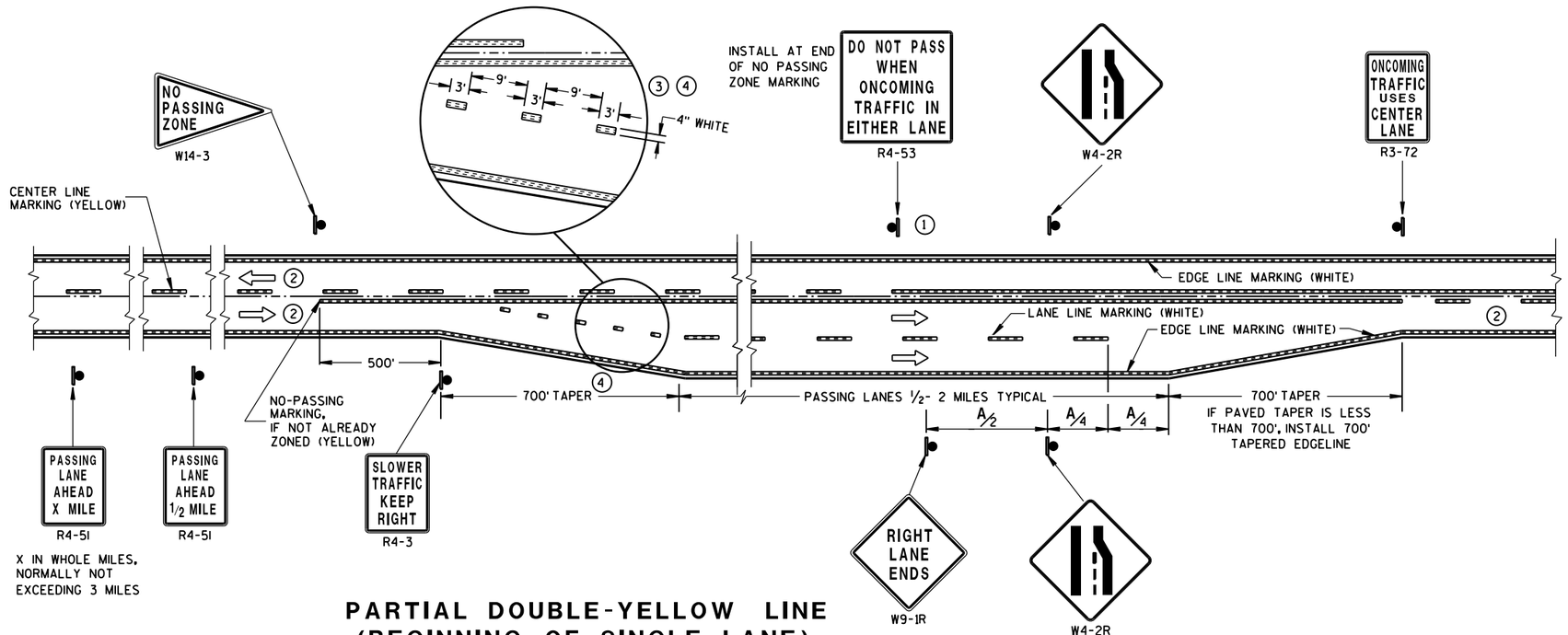
S.D.D. 15 C 8-16b

6

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



SOLID DOUBLE-YELLOW LINE
(THROUGHOUT ENTIRE PASSING/CLIMBING LANE)



PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3'LINE 9'GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

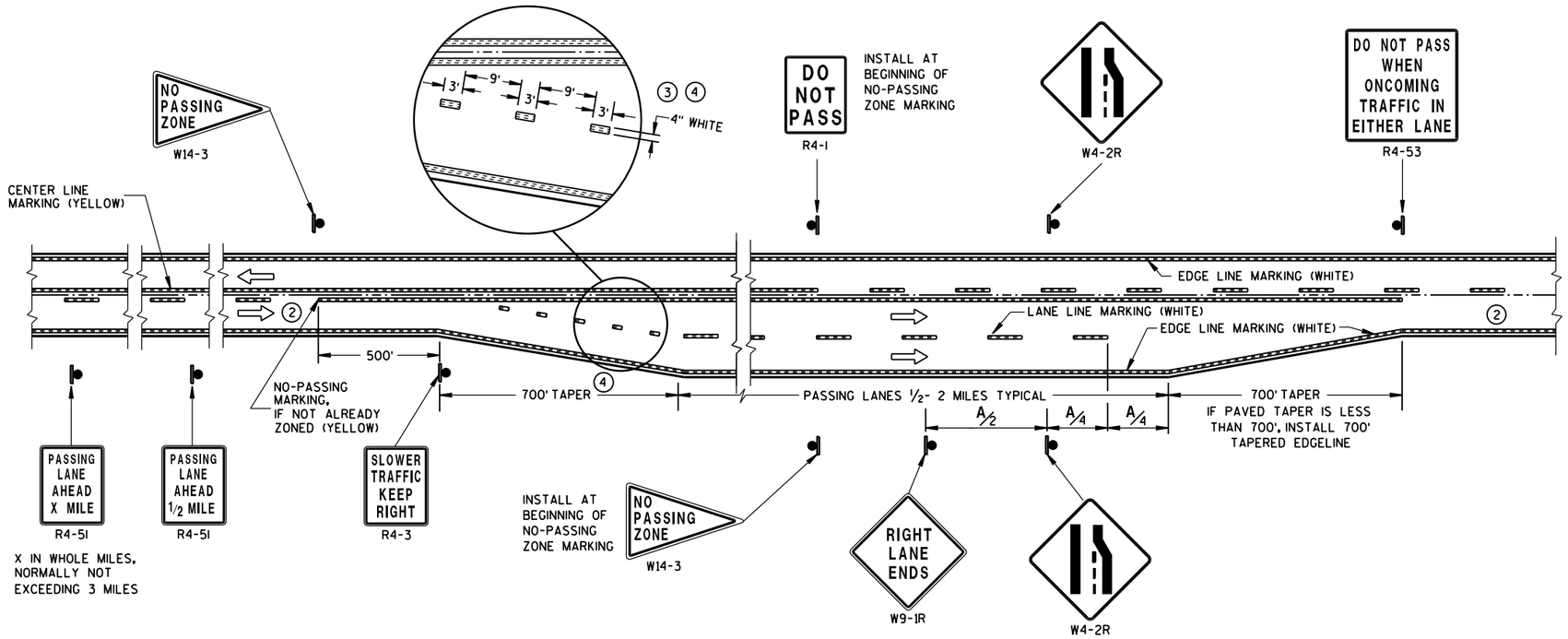
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

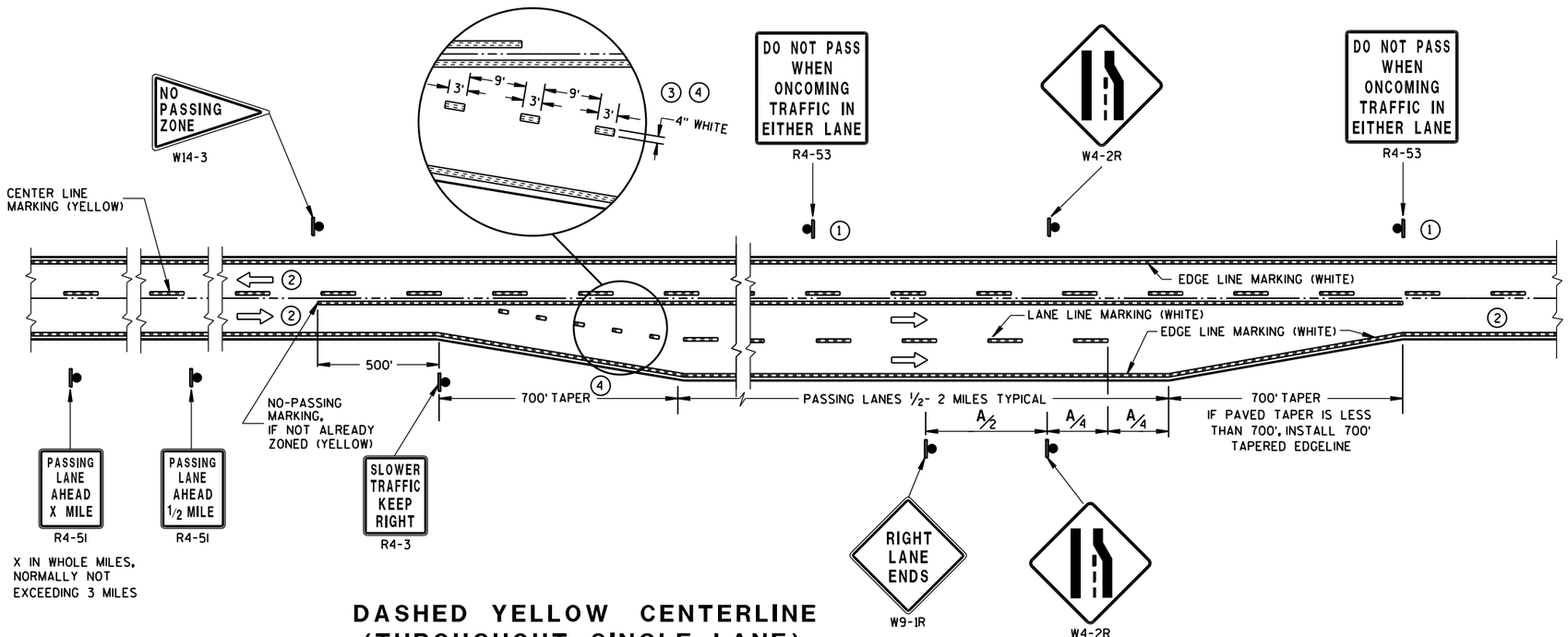
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



SOLID DOUBLE-YELLOW LINE (END OF SINGLE LANE)



DASHED YELLOW CENTERLINE (THROUGHOUT SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1/2 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3'LINE 9'GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

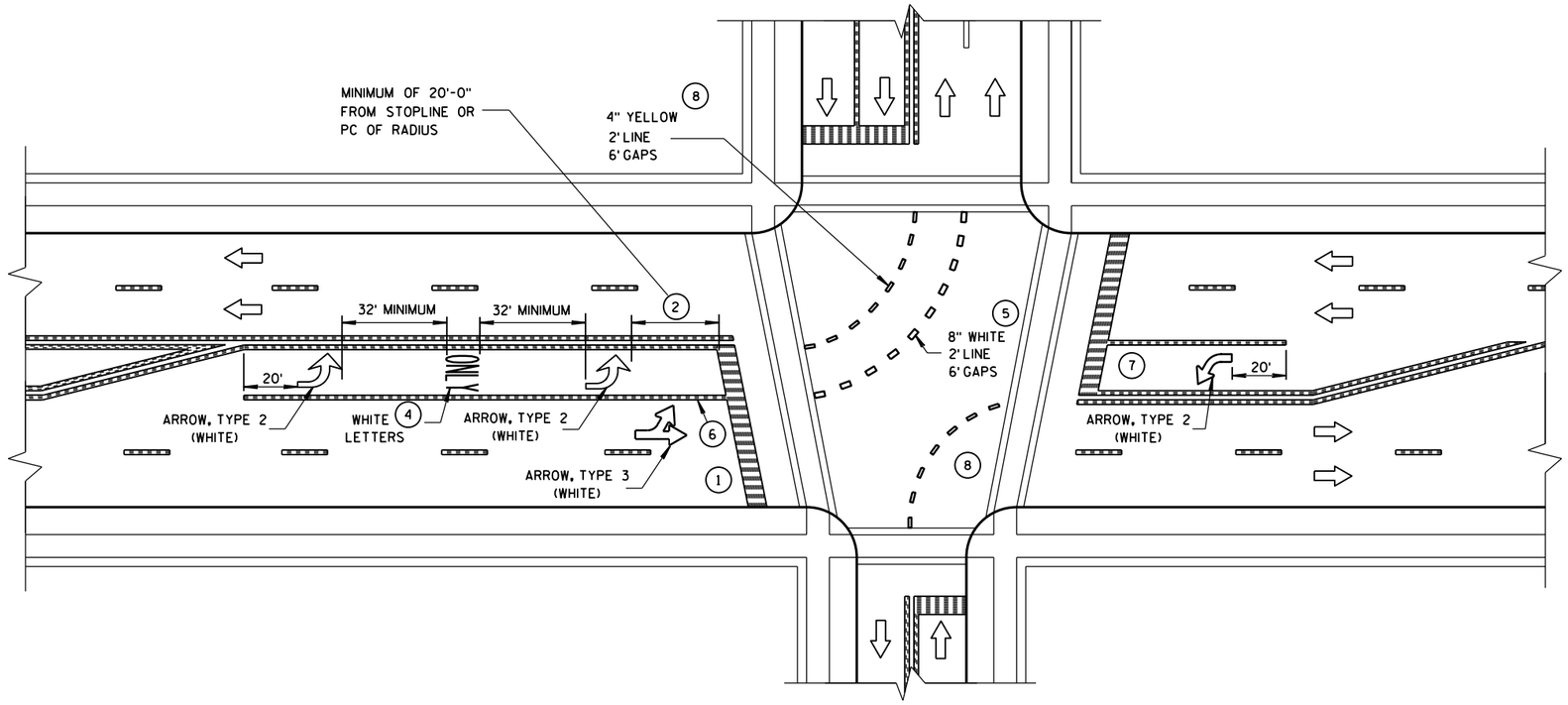
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

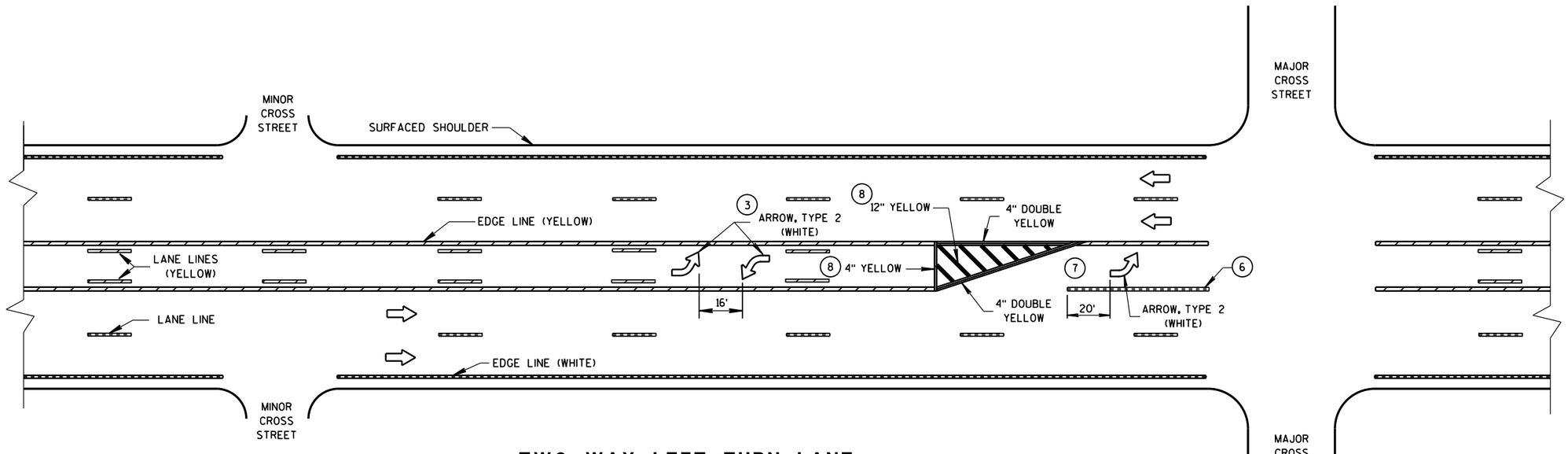
S.D.D. 15 C 8-16d



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

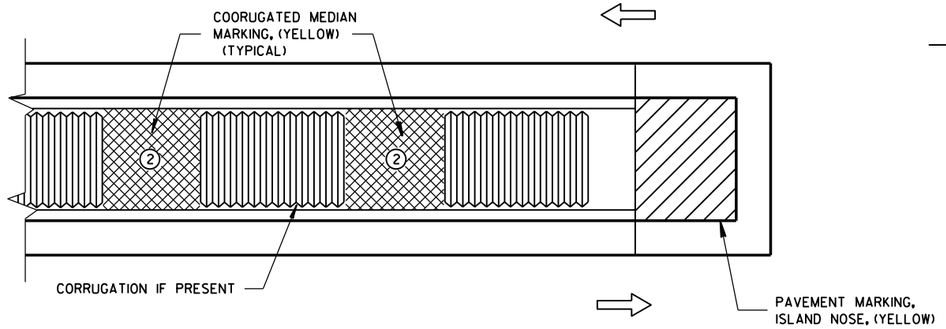
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

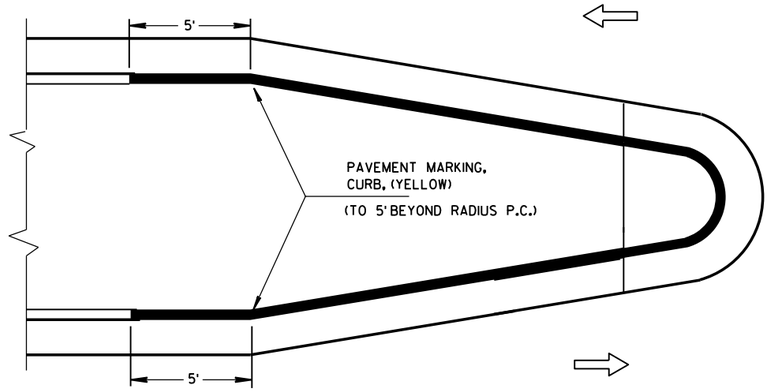
S.D.D. 15 C 8-16e

6

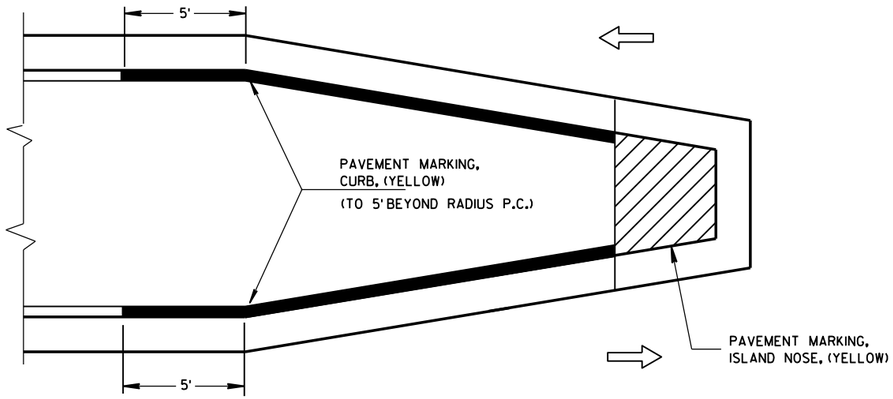
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

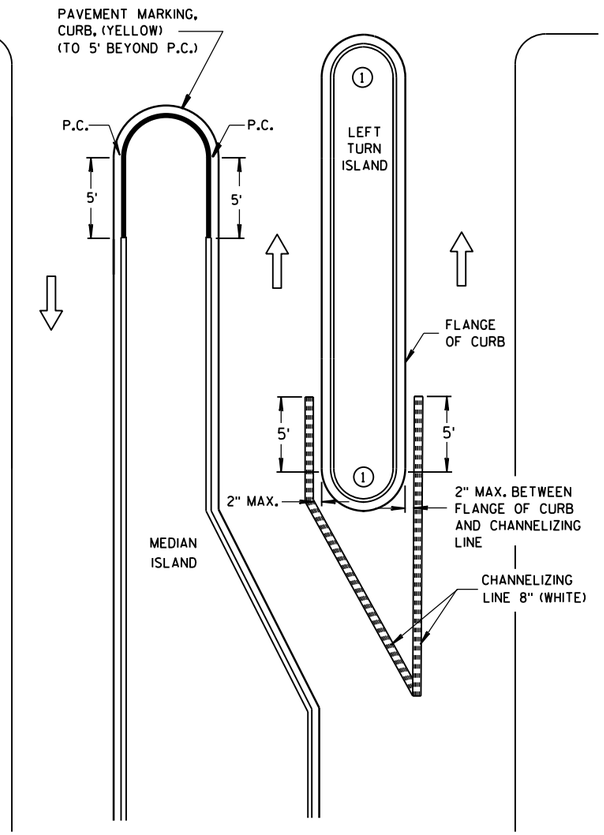


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

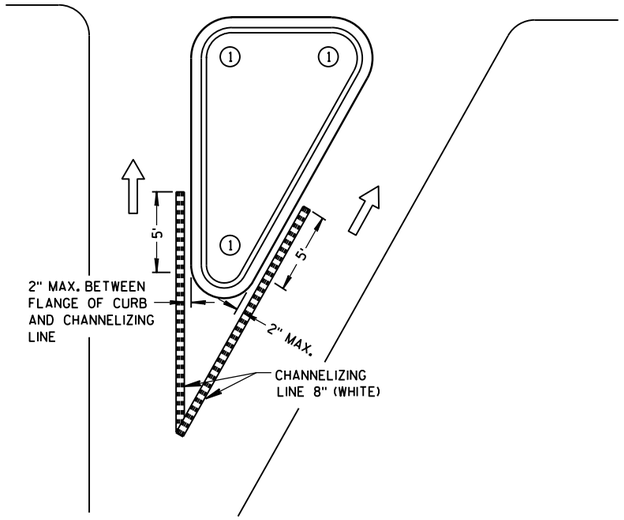


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

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

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

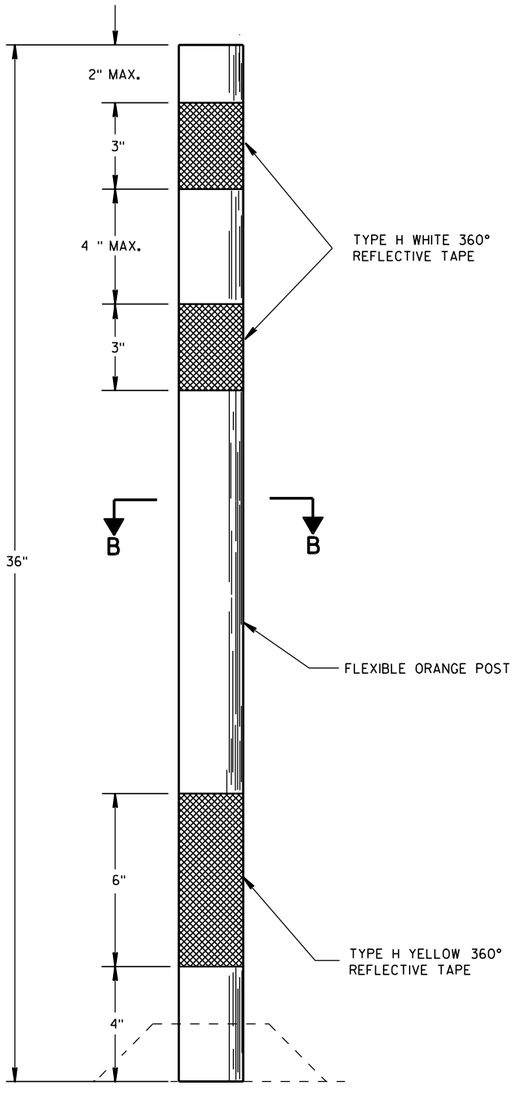
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

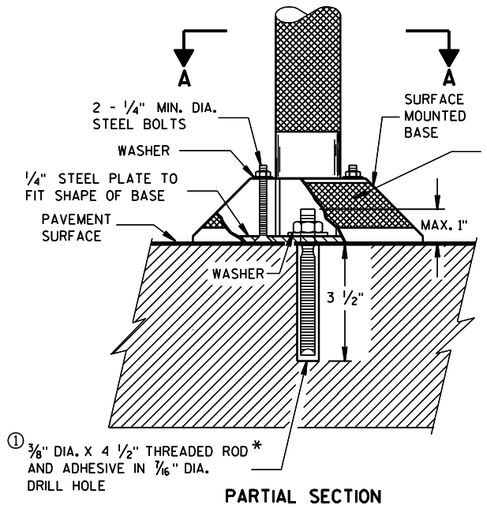
S.D.D. 15 C 8-16f

6

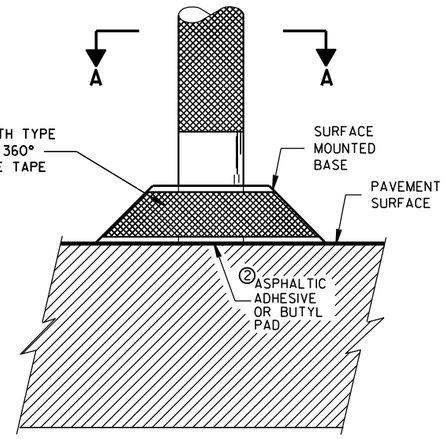
S.D.D. 15 C 8-16f



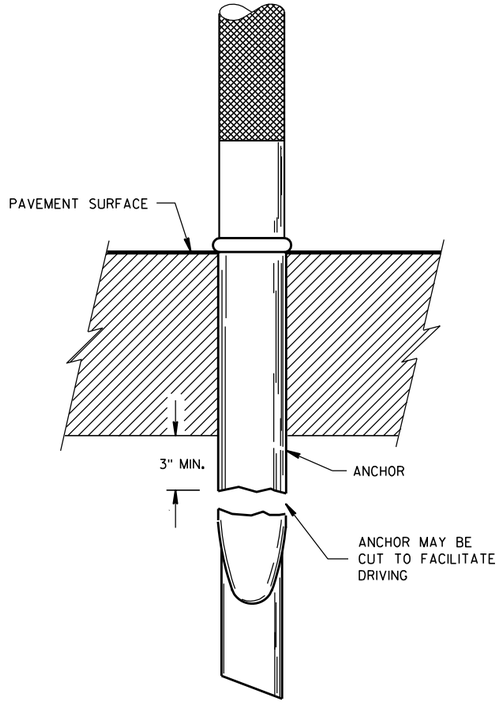
FLEXIBLE TUBULAR MARKER POST

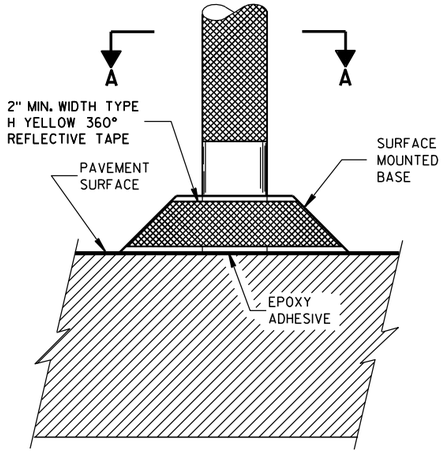


PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

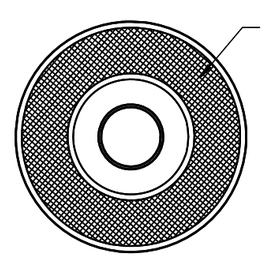
GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

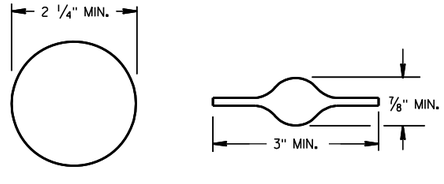
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



SECTION A-A

SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

FHWA

6

S.D.D. 15 C 11-5

TWO-LANE ROADWAY

SYMBOLS

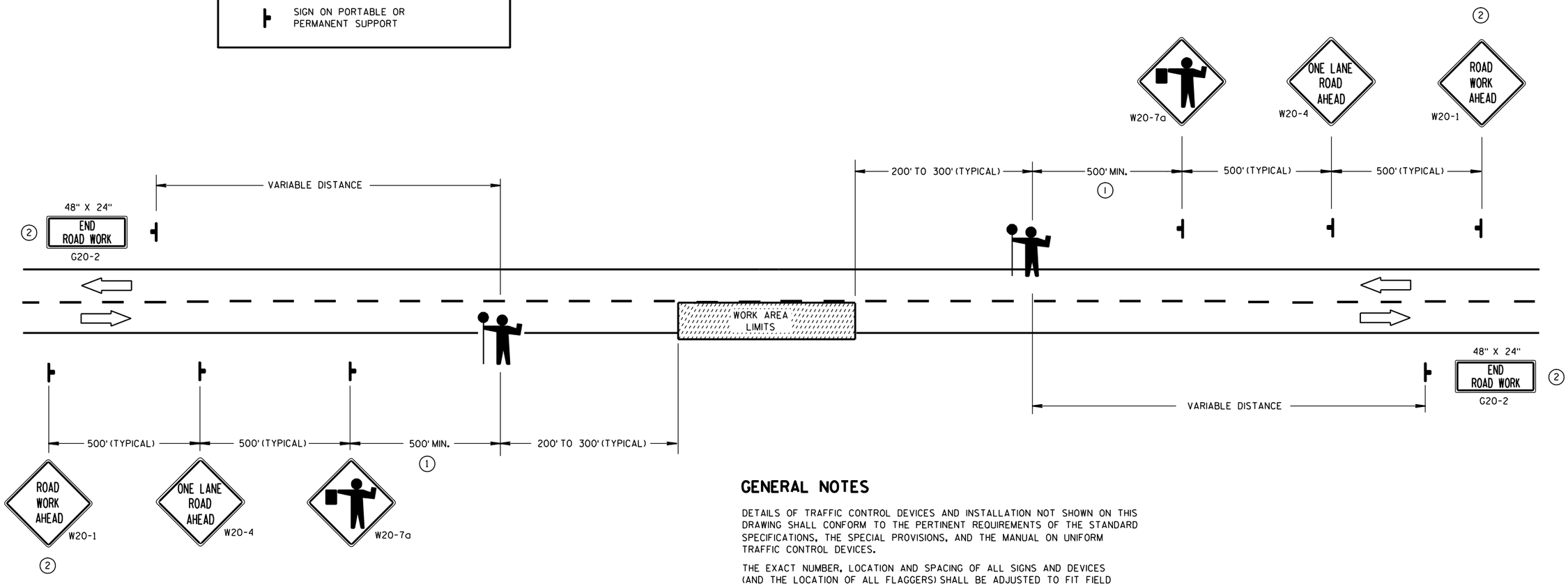
WORK AREA

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

SIGN ON PORTABLE OR PERMANENT SUPPORT

W3-4

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



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

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

GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/5/06 — DATE

/S/ Thomas N. Nathaam — STATE TRAFFIC ENGINEER

441

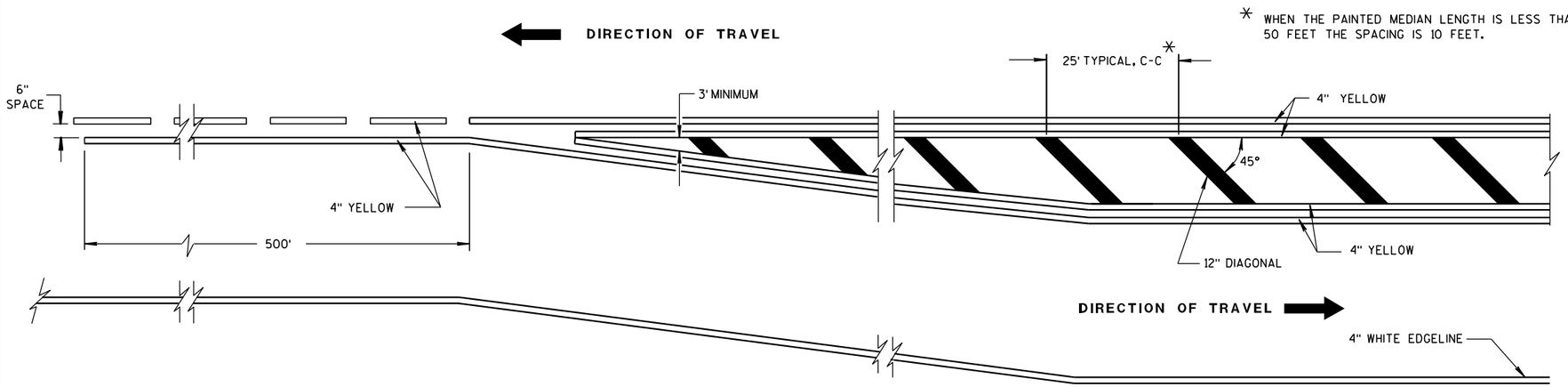
FHWA

6

S.D.D. 15 C 12-3

6

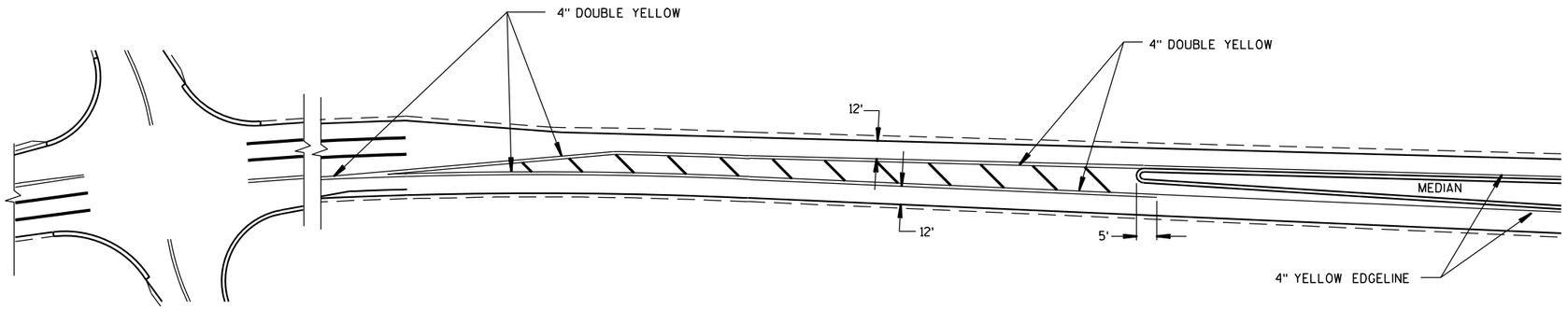
S.D.D. 15 C 12-3



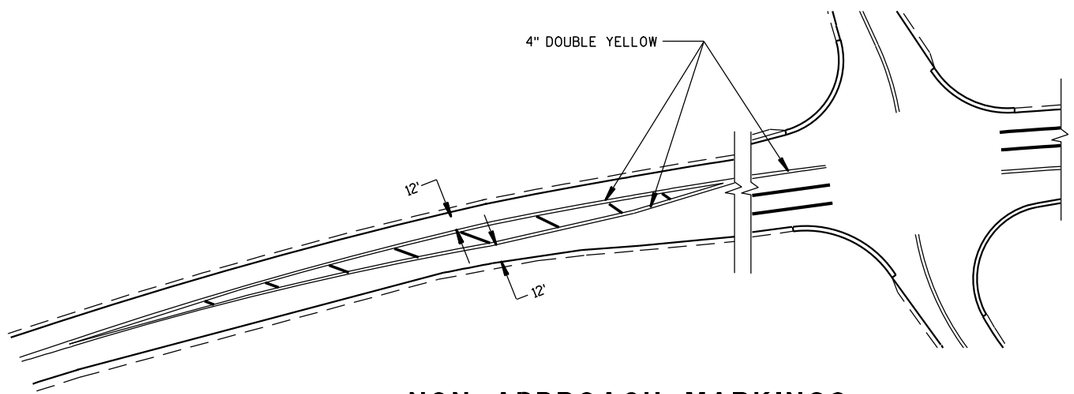
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER
FHWA	442 IGN

6

6

S.D.D. 15 C 18-3

S.D.D. 15 C 18-3

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

(1) WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12

(2) REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT

SYMBOLS

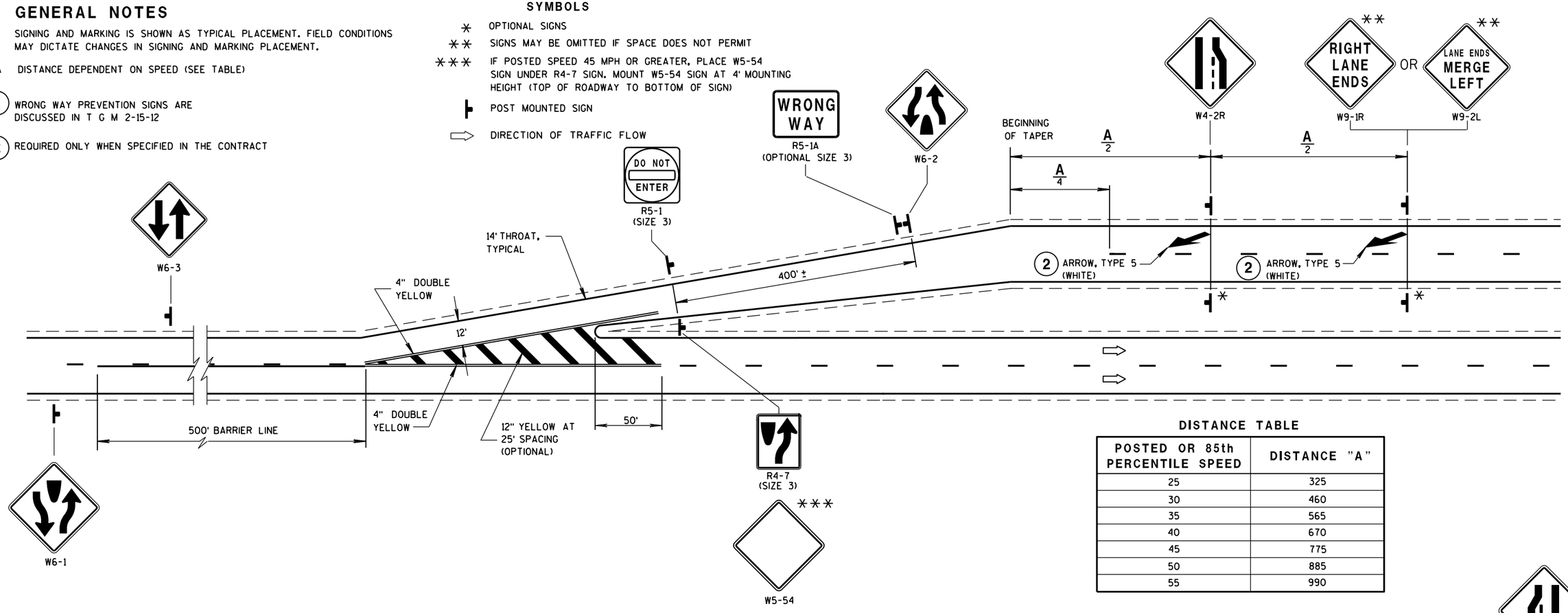
* OPTIONAL SIGNS

** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT

*** IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW



DISTANCE TABLE

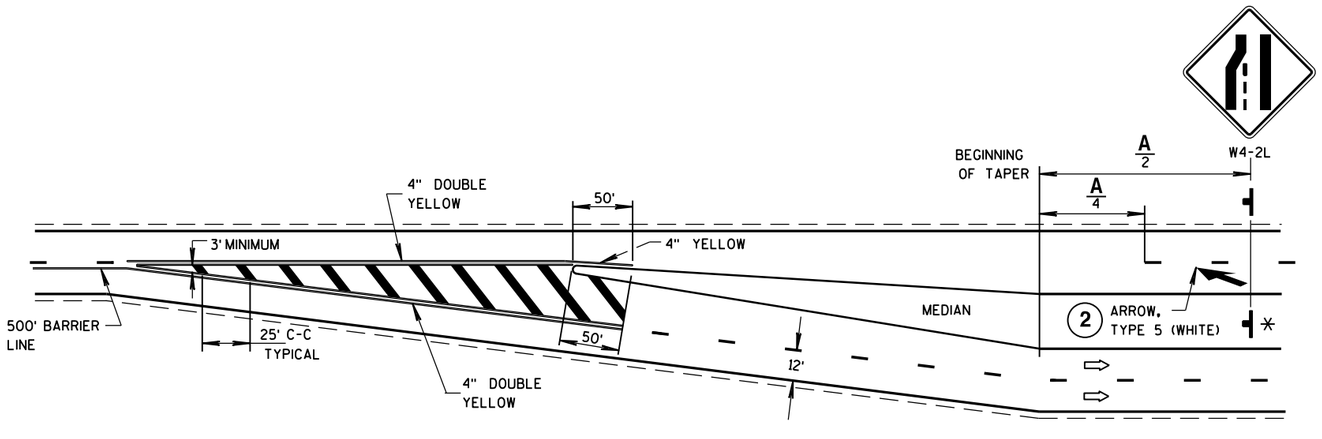
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	325
30	460
35	565
40	670
45	775
50	885
55	990

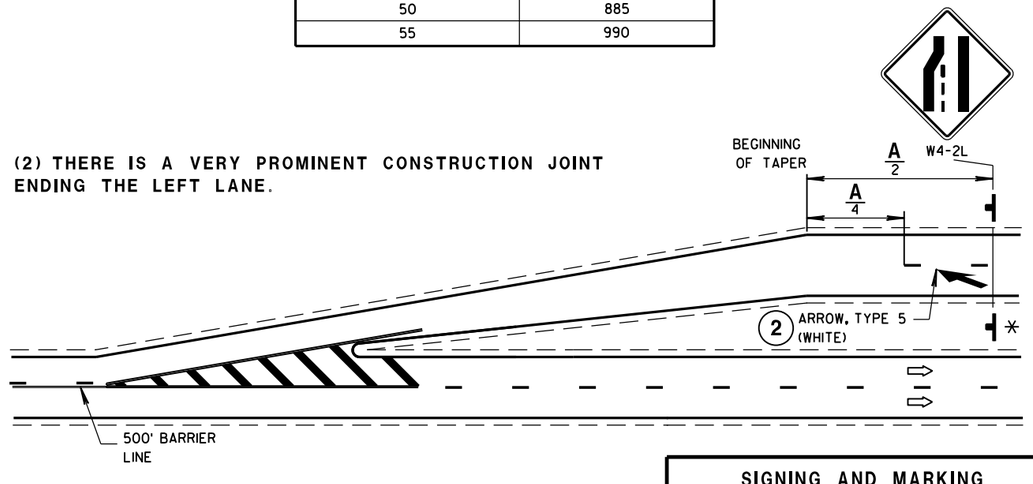
USE W4-2L IF :

(1) THE LEFT LANE IS PUSHED TO THE RIGHT:

OR

(2) THERE IS A VERY PROMINENT CONSTRUCTION JOINT ENDING THE LEFT LANE.





SIGNING AND MARKING
TWO LANE TO FOUR LANE
DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC EN

FHWA

6

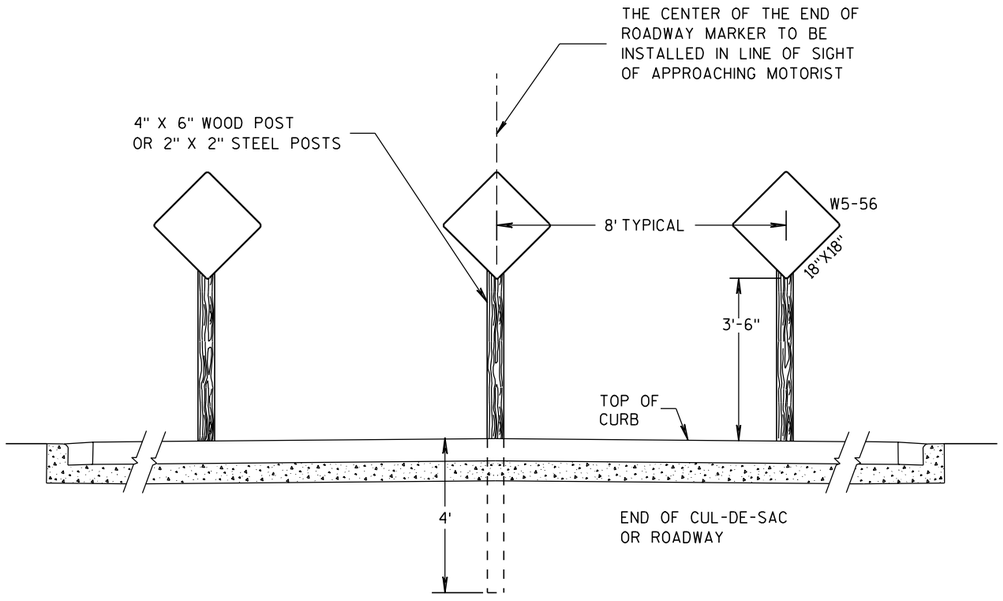
S.D.D. 15 C 21-5

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

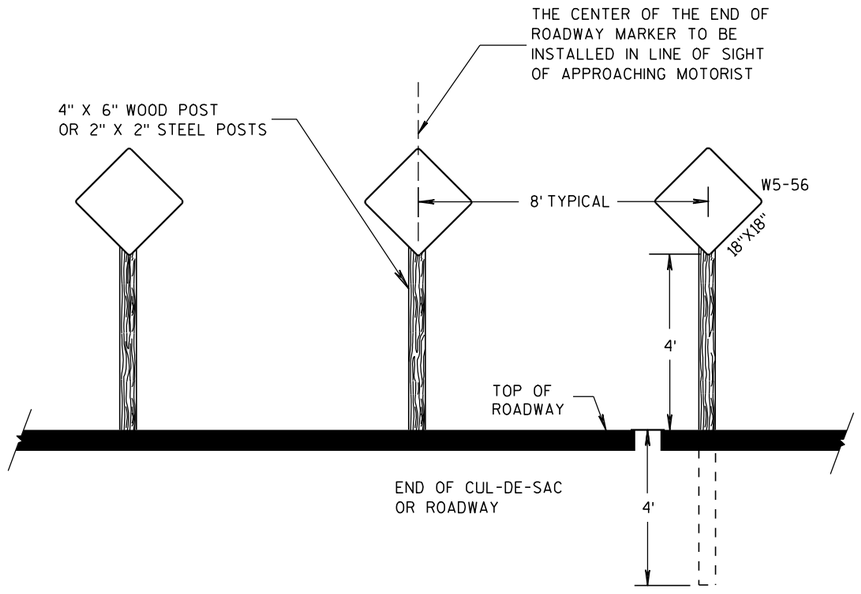
THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL URBAN SIGN INSTALLATION

(WITH CURB & GUTTER)



TYPICAL RURAL SIGN INSTALLATION

(WITHOUT CURB & GUTTER)

END-OF-ROADWAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/1/2011
DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 26-2

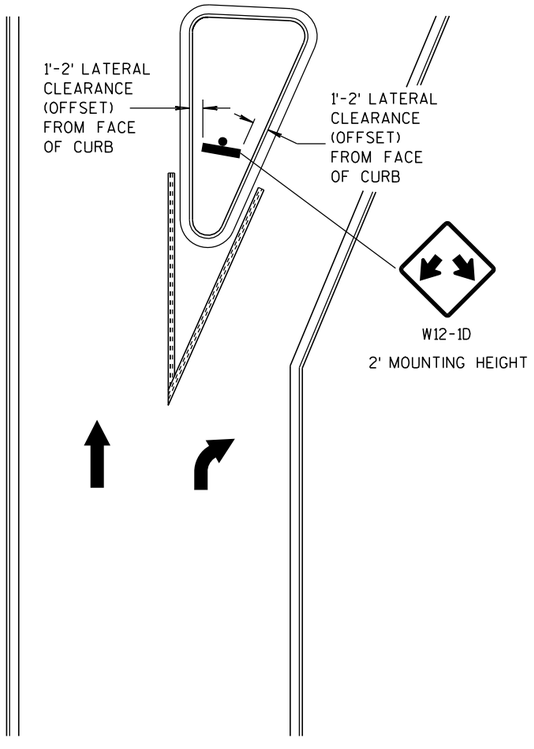
6

S.D.D. 15 C 26-2

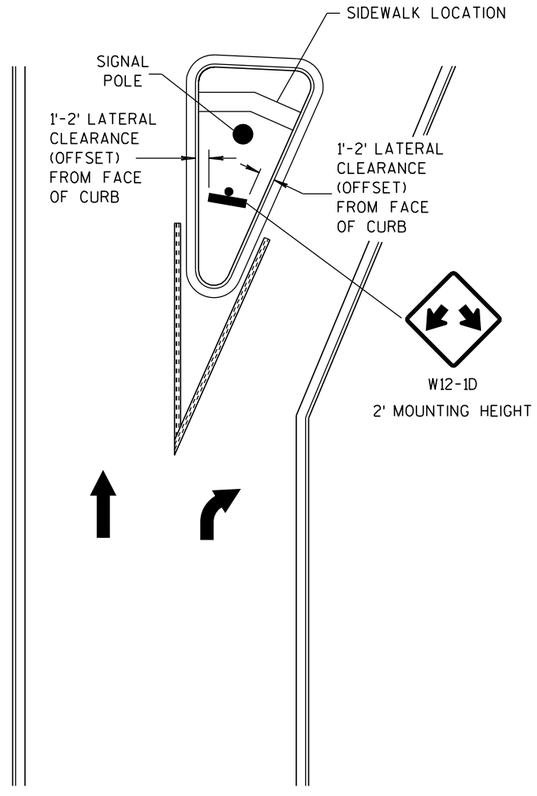
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

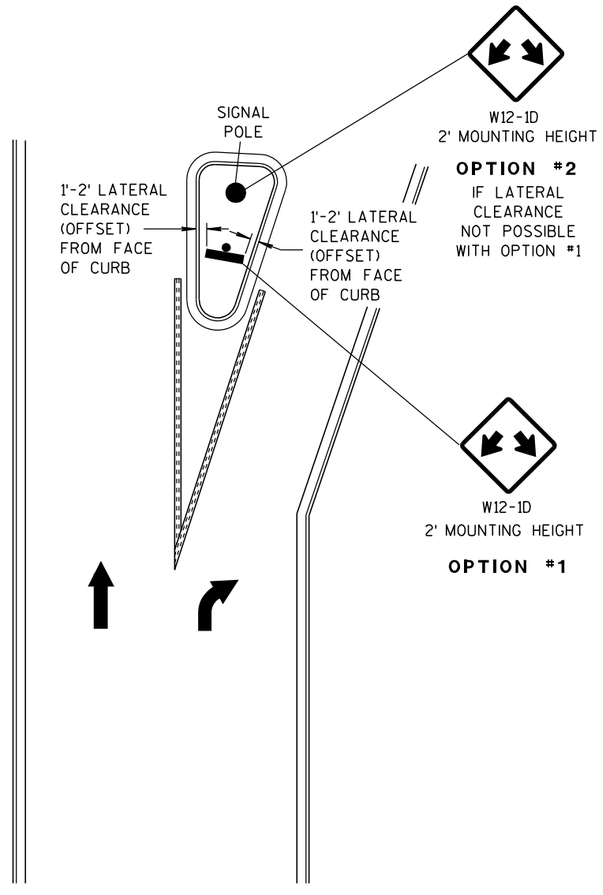
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



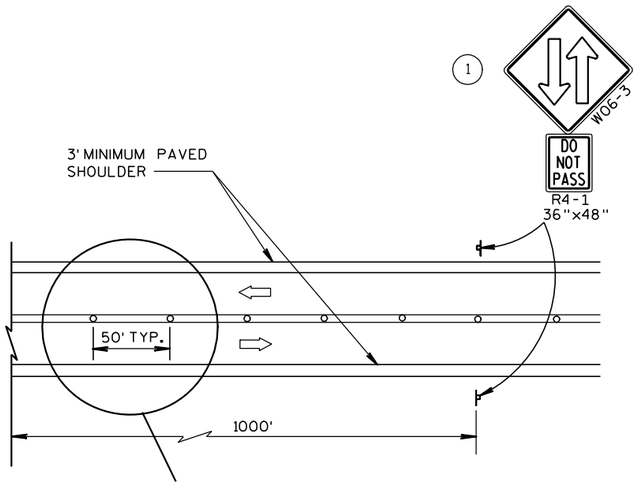
LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



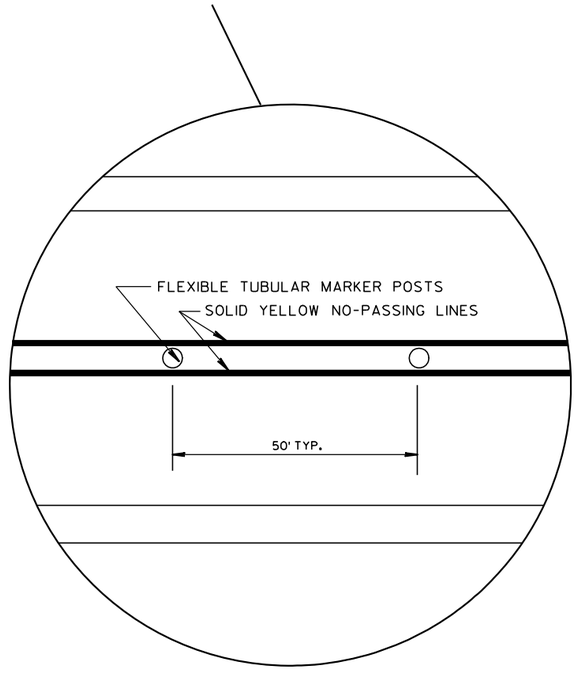
SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothem STATE TRAFFIC ENGINEER
FHWA	445 IGN



TWO LANE, TWO WAY OPERATION



GENERAL NOTES :

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

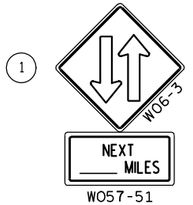
THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC @ 50' SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.

R2-1
48"x60"
(BLACK AND WHITE)

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD **BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY** 2 OR 3 MILES.



W057-51
48"x24"

R4-1
36"x48"

THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200' BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500' BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000' BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

LEGEND

- POST WITH ATTACHED SIGN
- FLEXIBLE TUBULAR MARKER AND BASE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12-4-95
DATE

/S/ Chester J. [illegible]
DIRECTOR, OFFICE OF

FHWA

6

S.D.D. 15 D 6-2

LEGEND

- POST WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN IN DRUM
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- 8' TYPE III BARRICADE
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

GENERAL NOTES :

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

(1) CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

GENERAL NOTES CONTINUED:

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

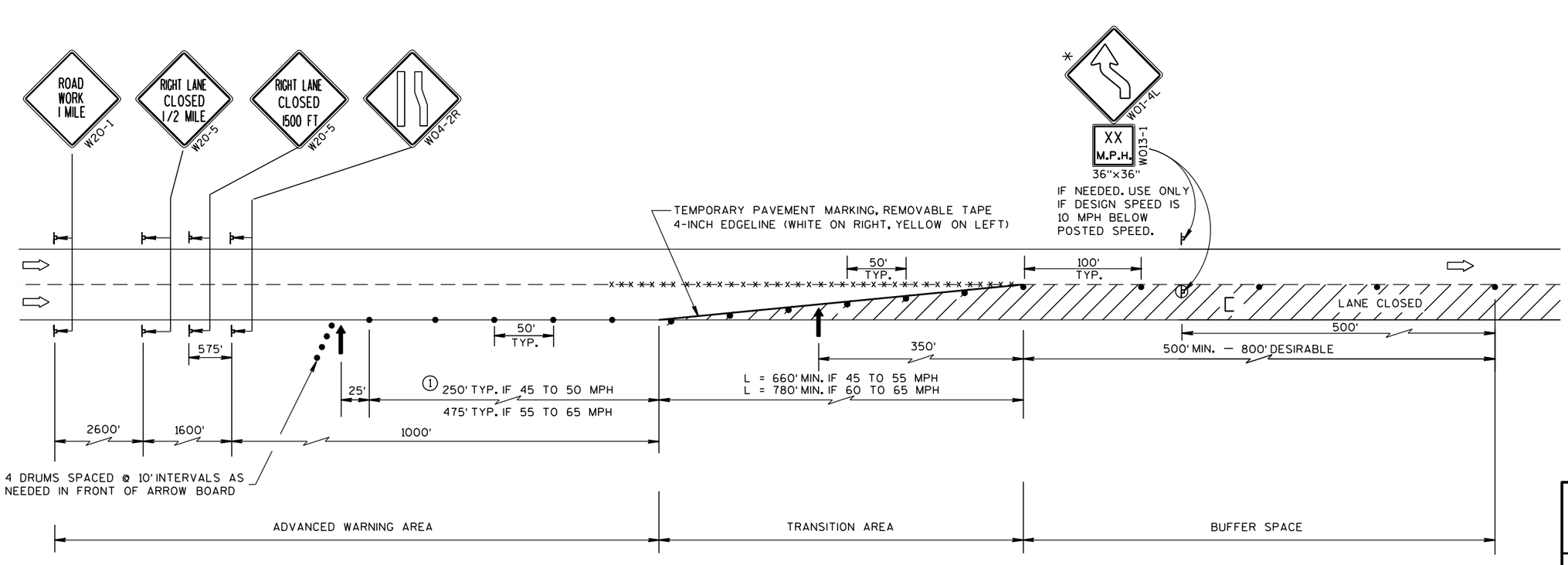
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

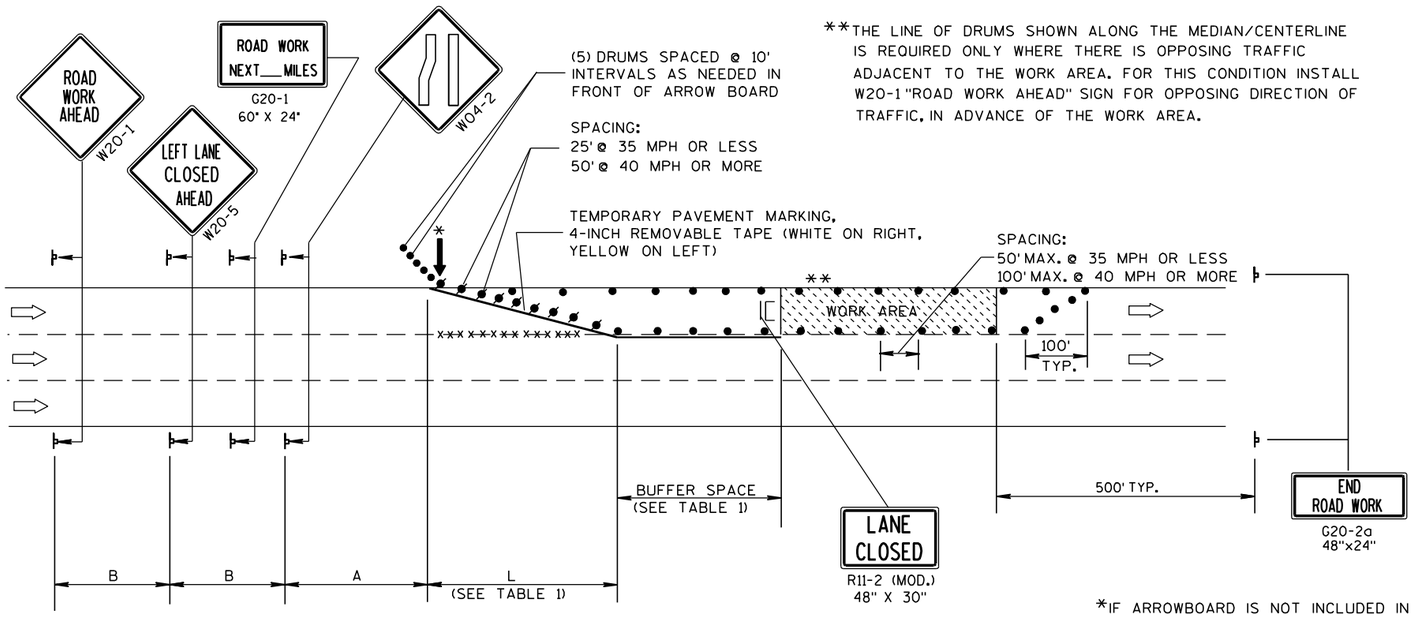
APPROVED
8-7-95 DATE
/S/ Chester J. [illegible] DIRECTOR, OFFICE O 447 C
FHWA

6

S.D.D. 15 D 12-2

6

S.D.D. 15 D 12-2



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

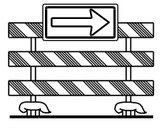


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- POST MOUNTED SIGN
- ARROW BOARD
- TYPE III BARRICADE (8' EQUIVALENT) AND WARNING LIGHTS, TYPE A (FLASHING) WITH/WITHOUT SIGN
- DIRECTION OF TRAFFIC FLOW
- xxxx REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKINGS ENGINEER
FHWA

6

S.D.D. 15 D 20-1

GENERAL NOTES

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

ALL SIGNS ARE 48" X 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 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.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

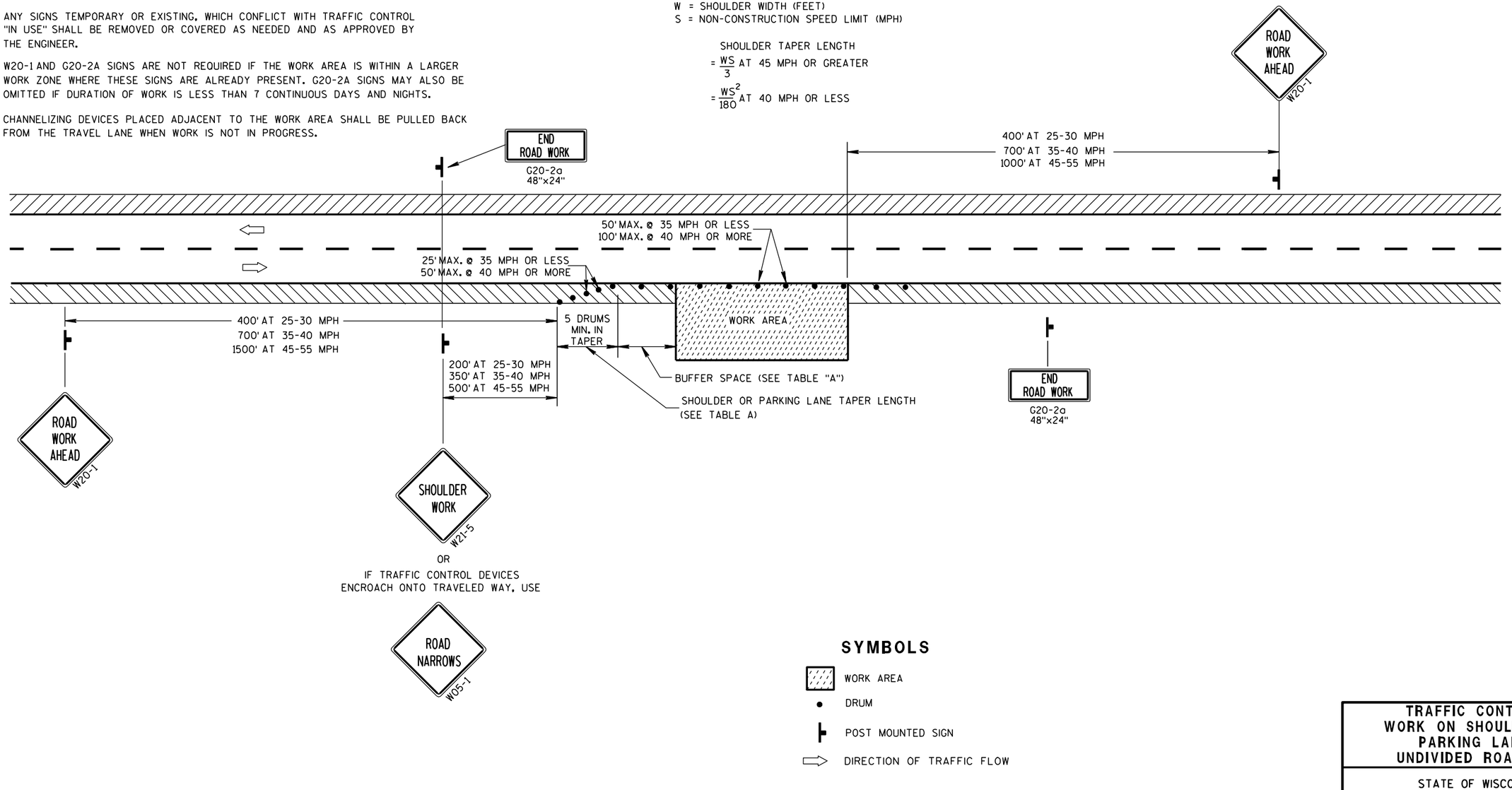
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
$= \frac{WS}{3}$ AT 45 MPH OR GREATER
$= \frac{WS^2}{180}$ AT 40 MPH OR LESS



SYMBOLS

- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

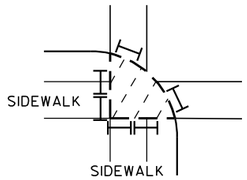
TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

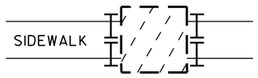
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

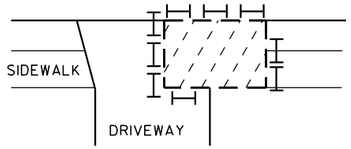
APPROVED
5/23/00 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK[illegible] ENGINEER
FHWA

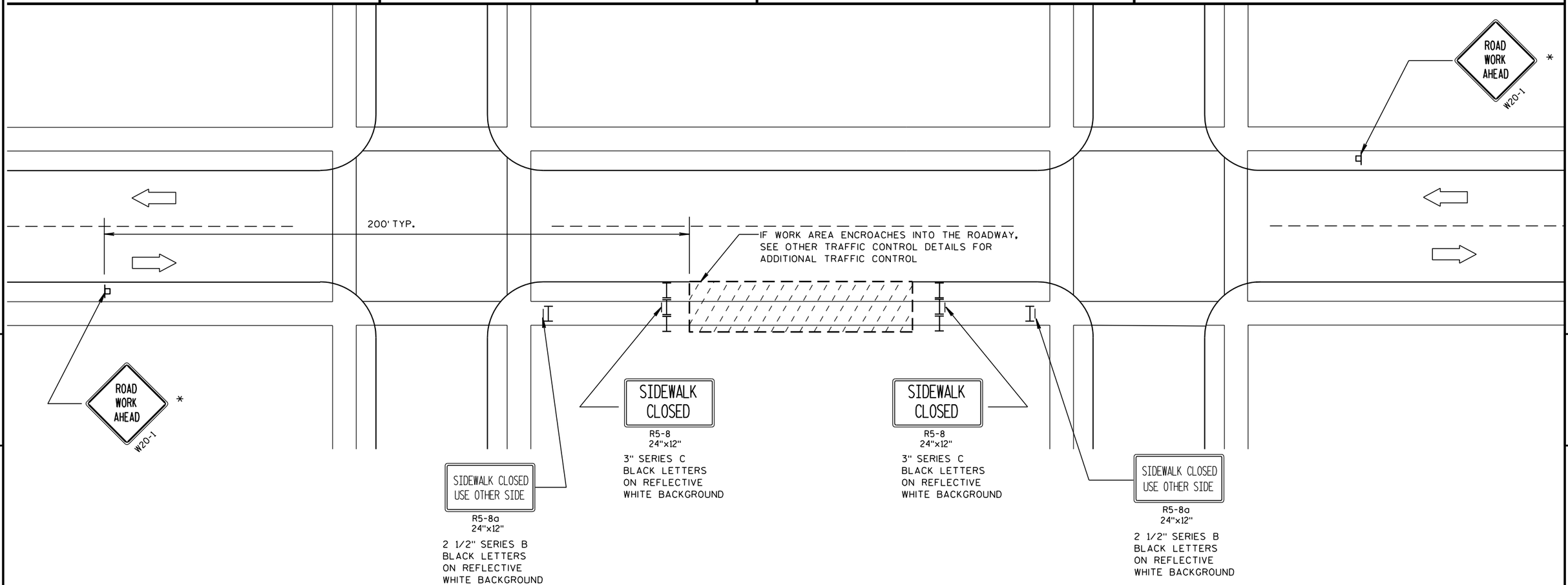
6
S.D.D. 15 D 28-1

WARNING OF LOCALIZED SIDEWALK WORK AREAS









LEGEND

- POST MOUNTED SIGN
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- WORK AREA
- DIRECTION OF TRAFFIC FLOW

GENERAL NOTES :

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

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

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

* "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

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

TRAFFIC CONTROL, SIDEWALK CLOSURE

TRAFFIC CONTROL, SIDEWALK CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

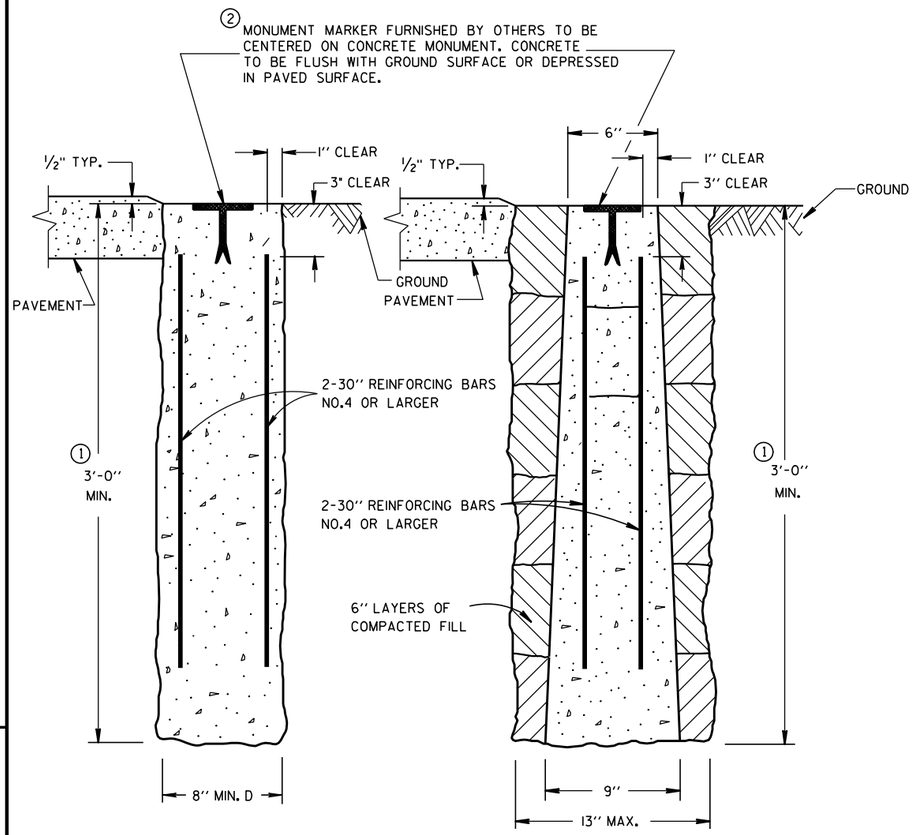
APPROVED
5/23/2000 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK 450 NEER
FHWA

6

S.D.D. 15 D 30-1

6

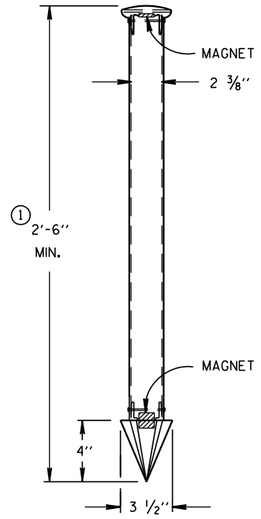
S.D.D. 15 D 30-1



CAST-IN-PLACE PRECAST

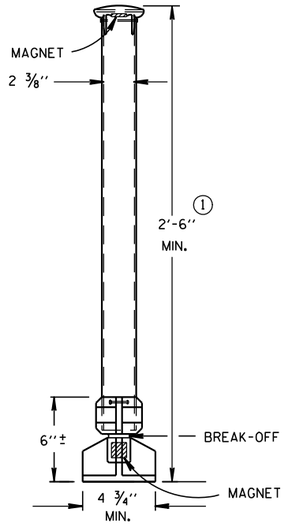
CONCRETE MONUMENTS

TYPE A



TYPE C

DRIVE-IN MONUMENT



TYPE D

BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

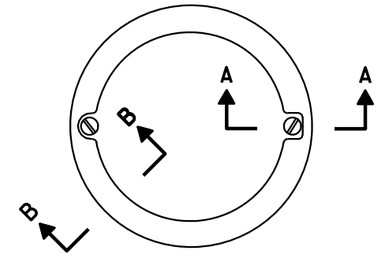
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

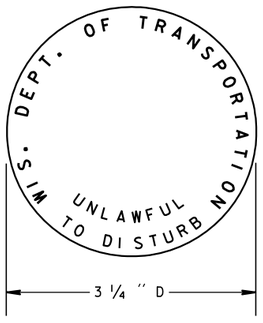
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

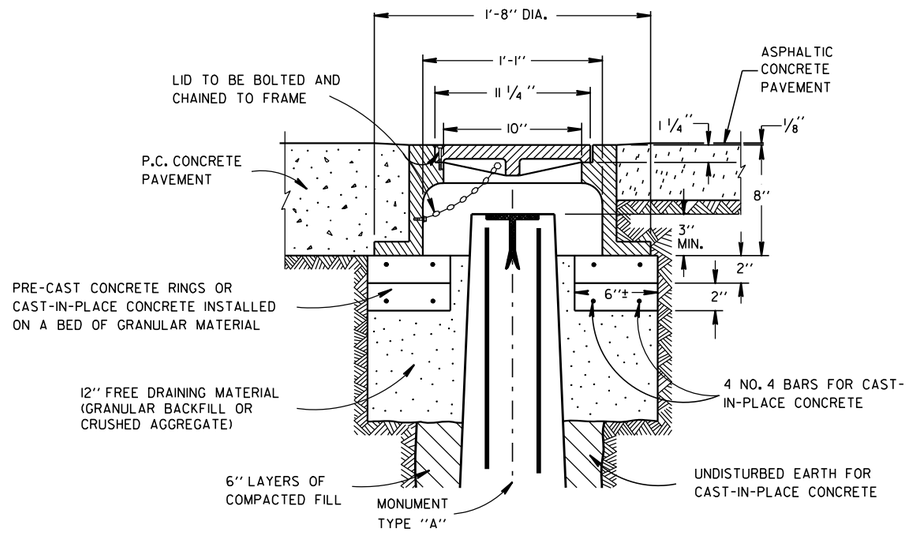


TOP VIEW



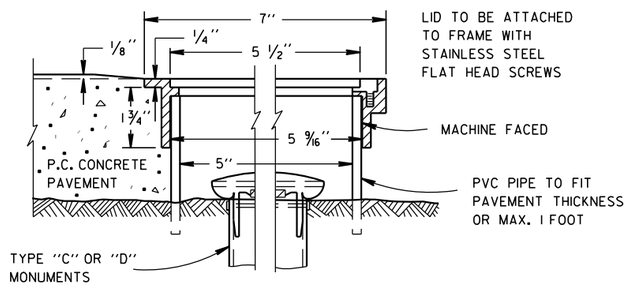
② WIS DOT MONUMENT MARKER LOGO

FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

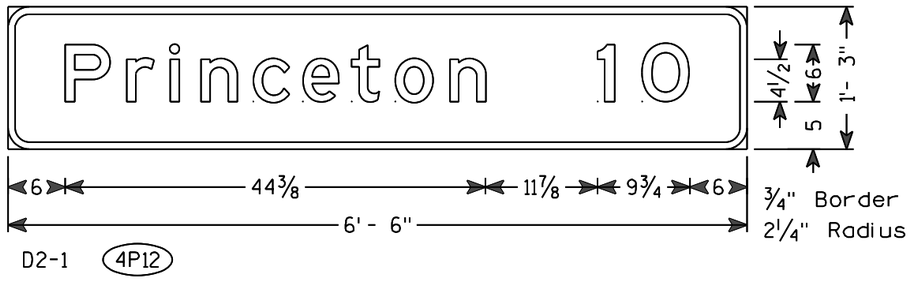
APPROVED

9/22/1999 DATE

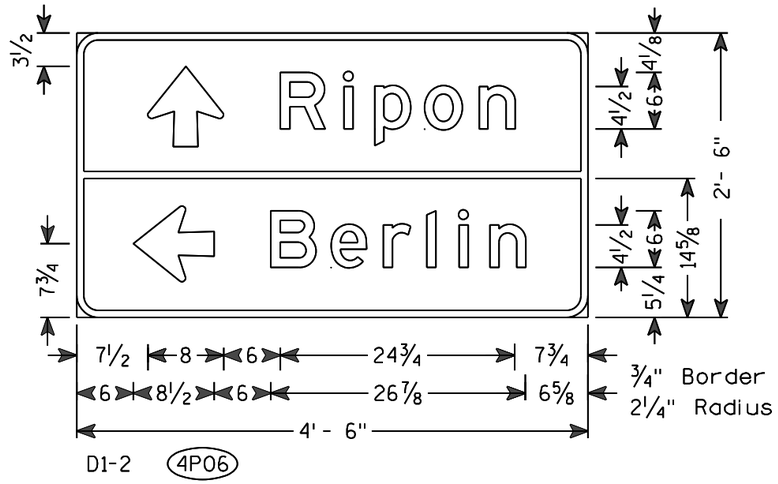
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

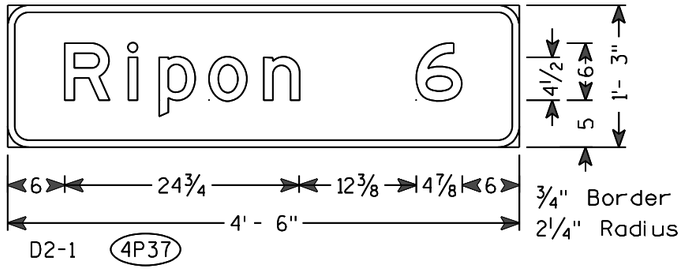
6
S.D.D. 16 A 1-6



D2-1 (4P12)



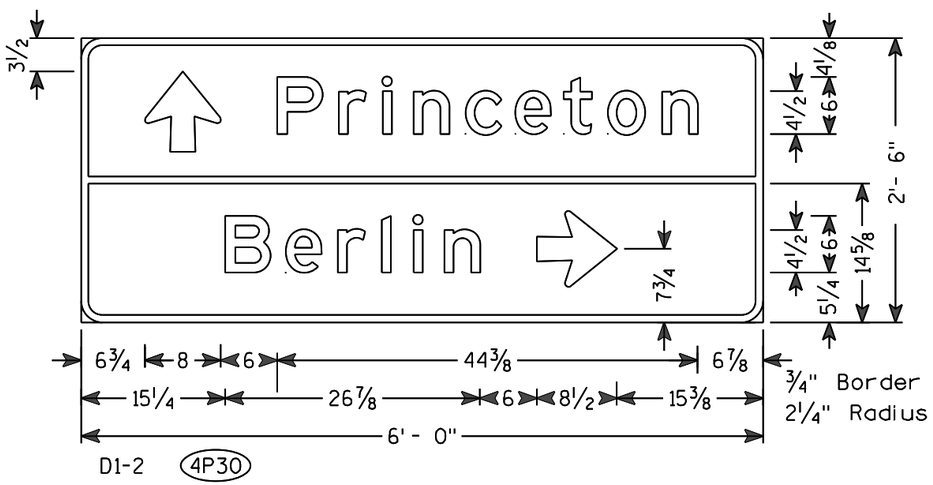
D1-2 (4P06)



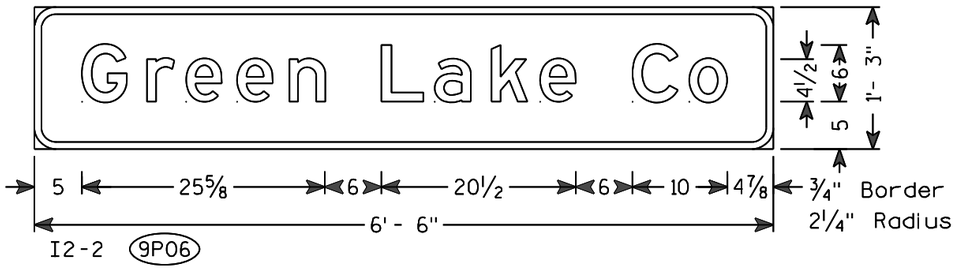
D2-1 (4P37)

NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



D1-2 (4P30)



I2-2 (9P06)

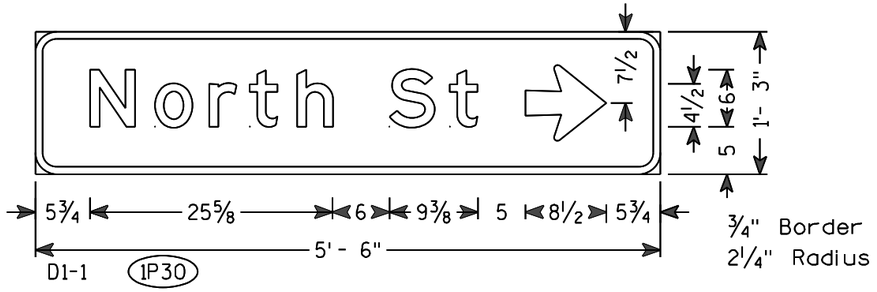
7

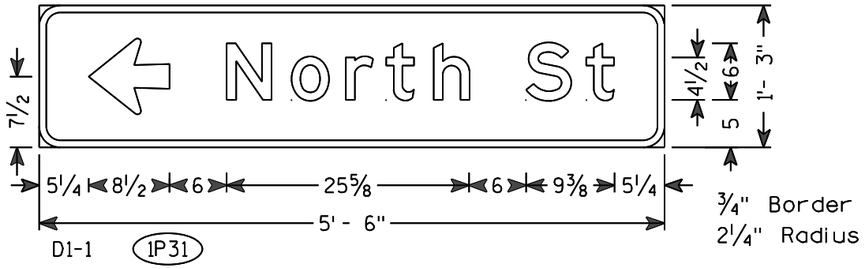
7

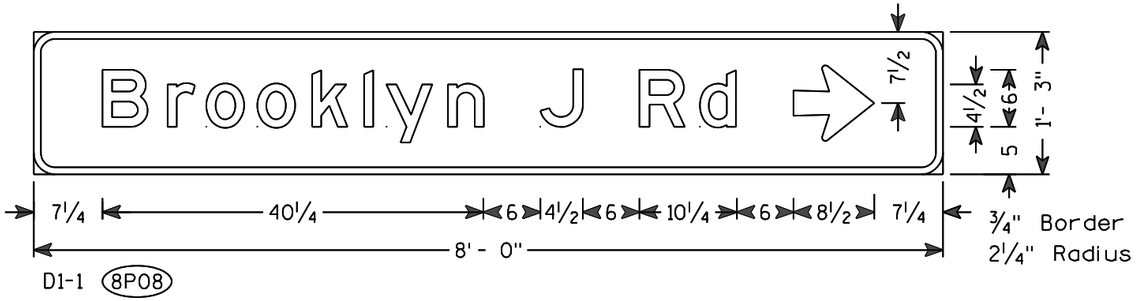
PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET NO: 452	E

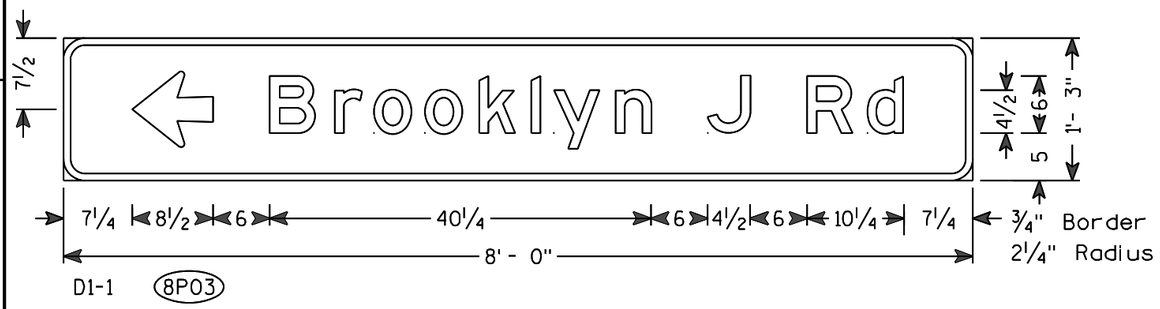
NOTES

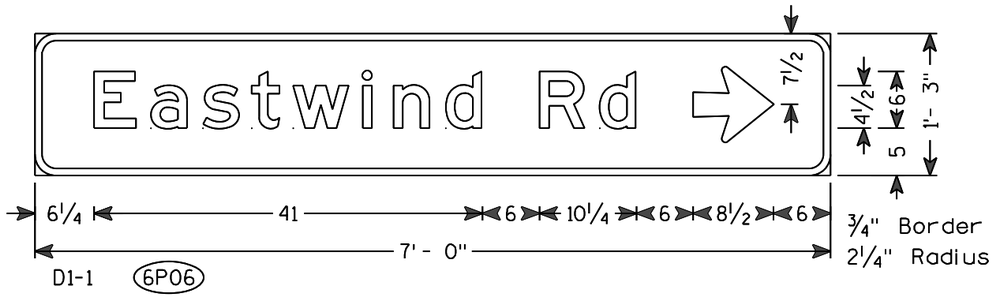
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E

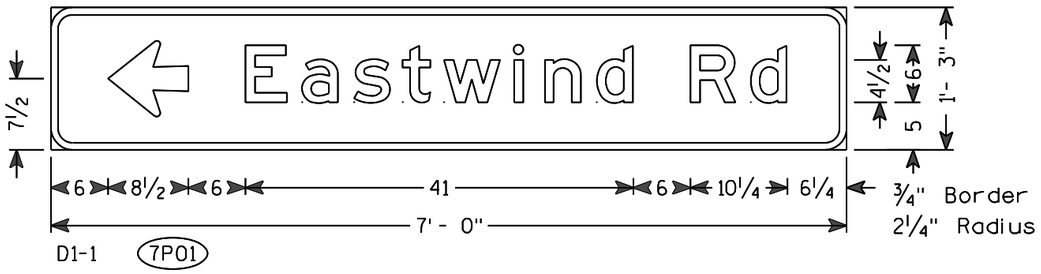


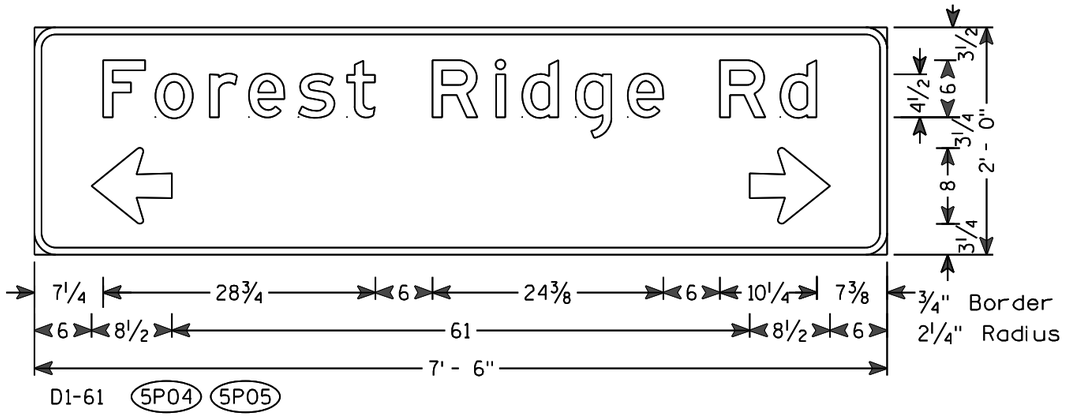








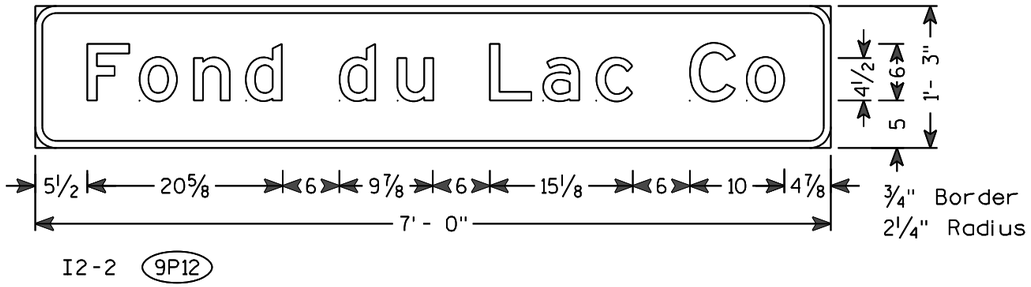




7

7

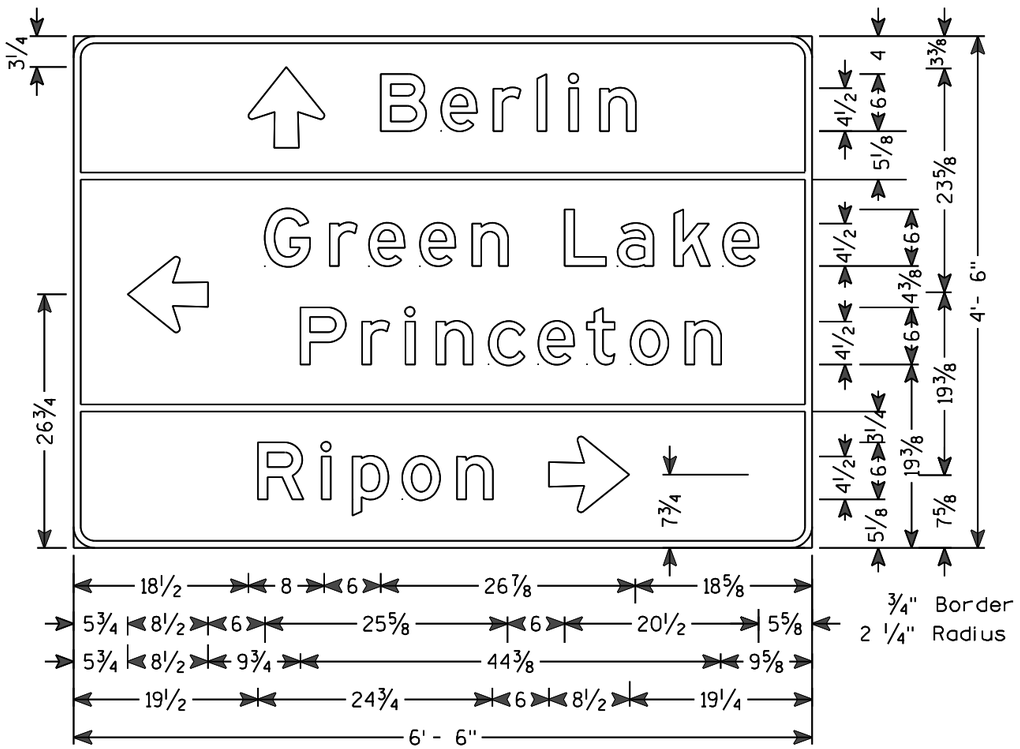
PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET NO: 453	E



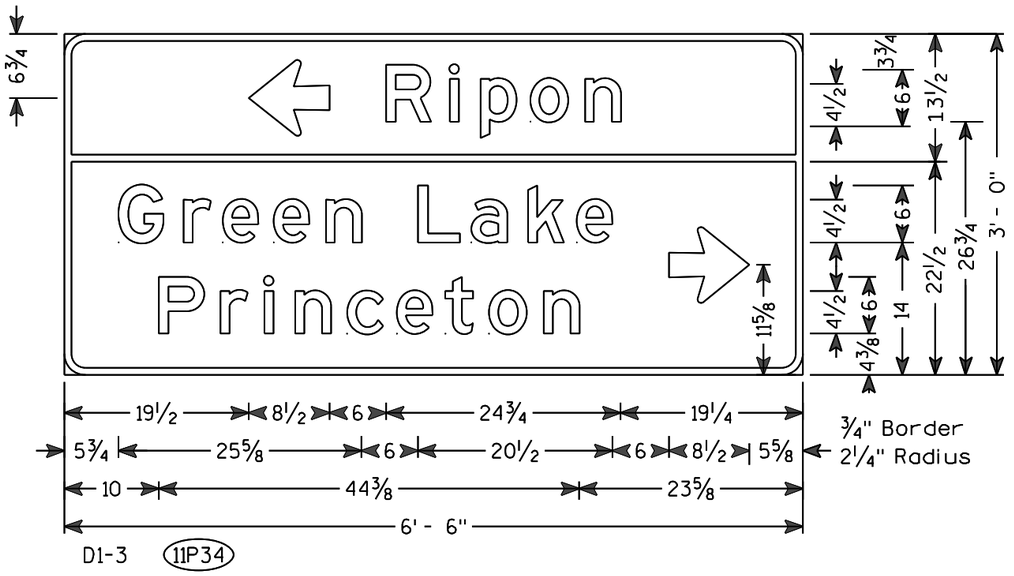
I2-2 (9P12)

NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



D1-4 (11P10)

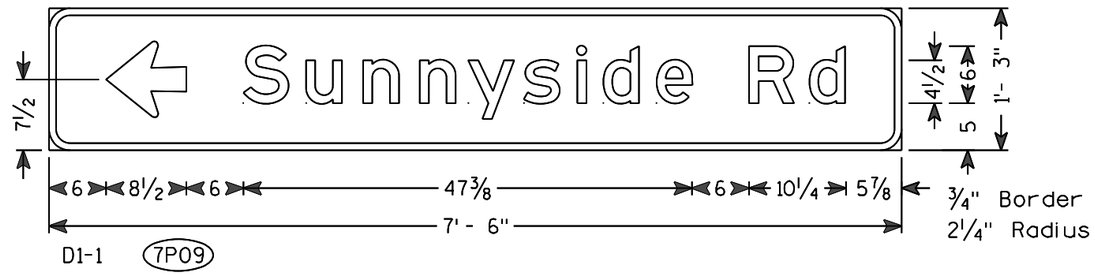


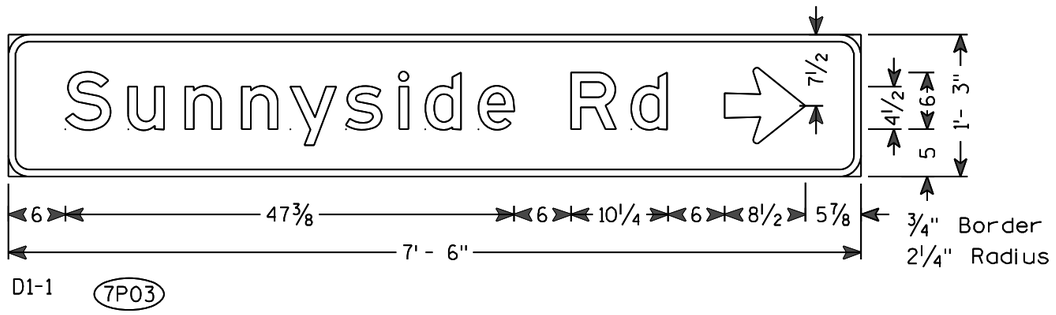
D1-3 (11P34)

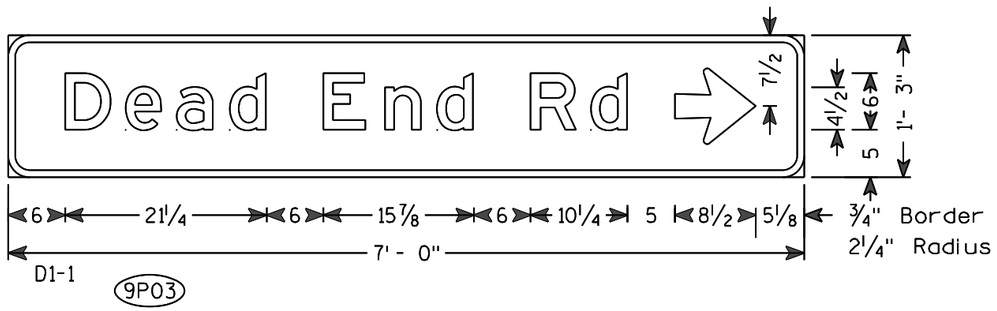
7

7

PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET NO: 454	E

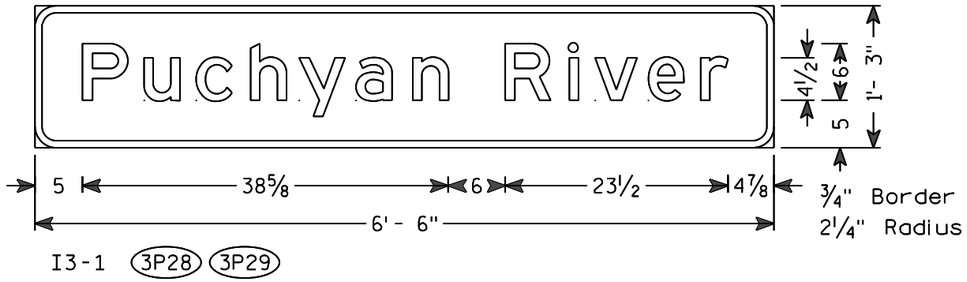


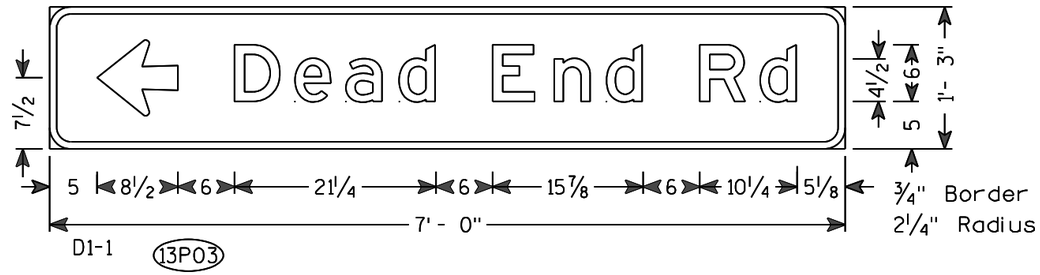




NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E





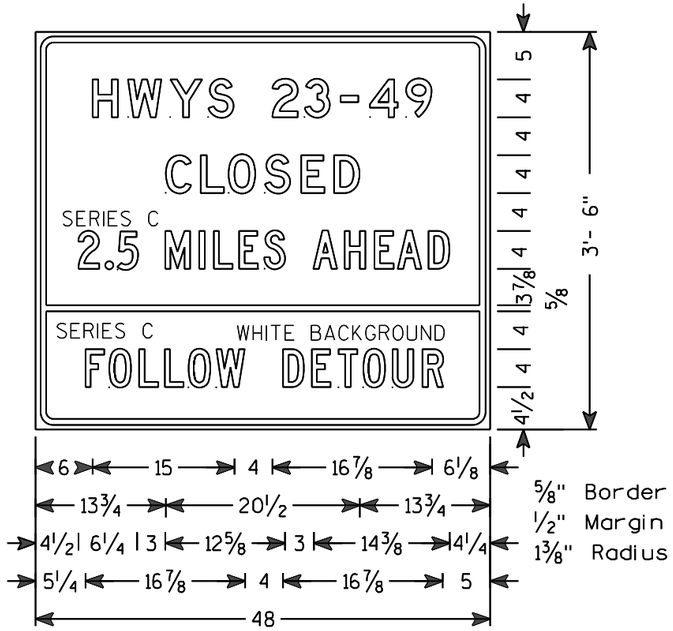
7

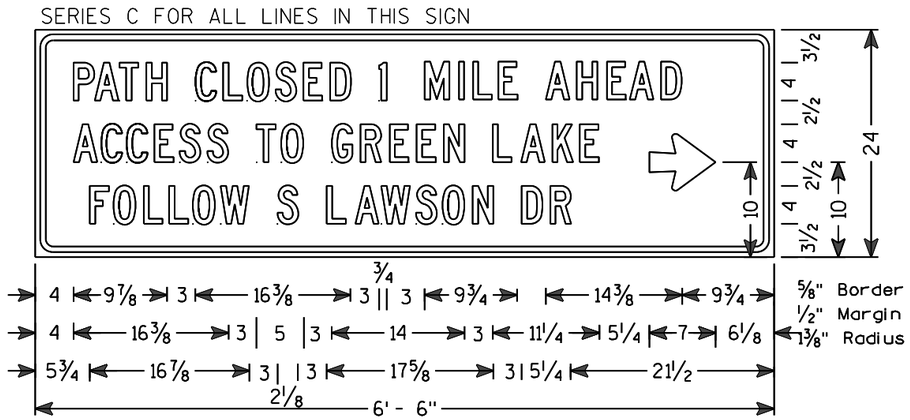
7

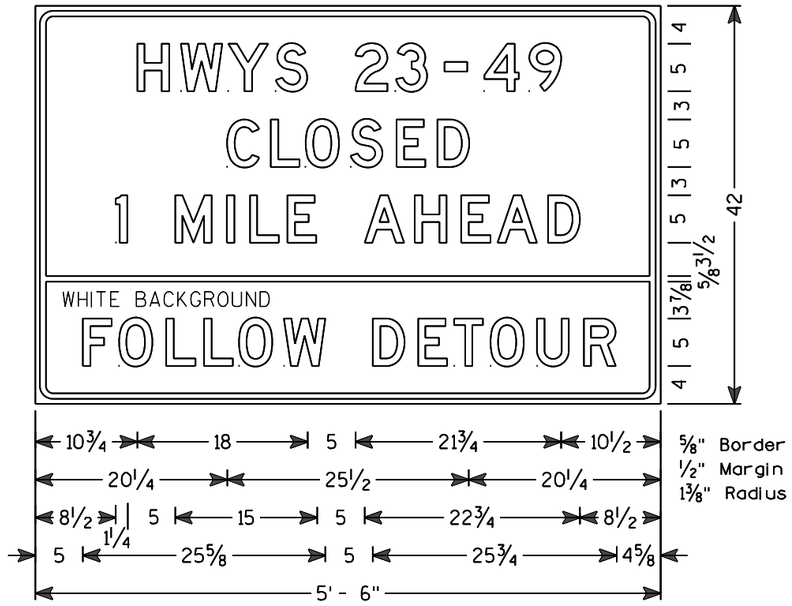
PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE	PERMANENT SIGNING	SHEET NO: 455	E

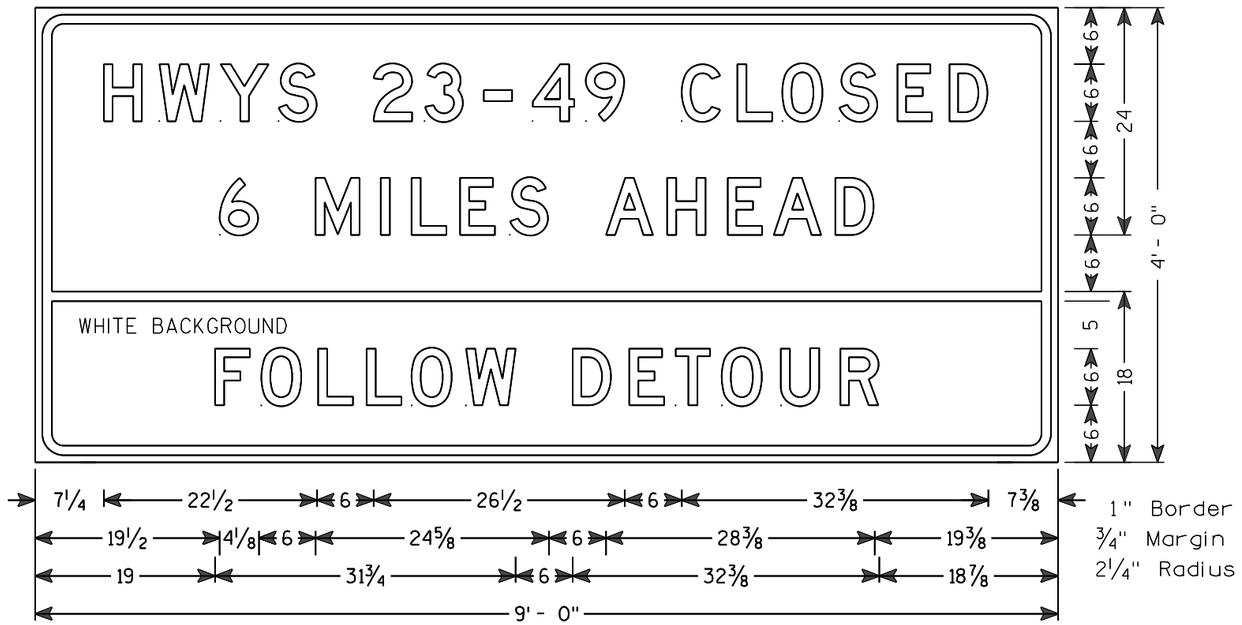
NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE except as Shown
   Message - BLACK
3. Message Series - D except as Shown



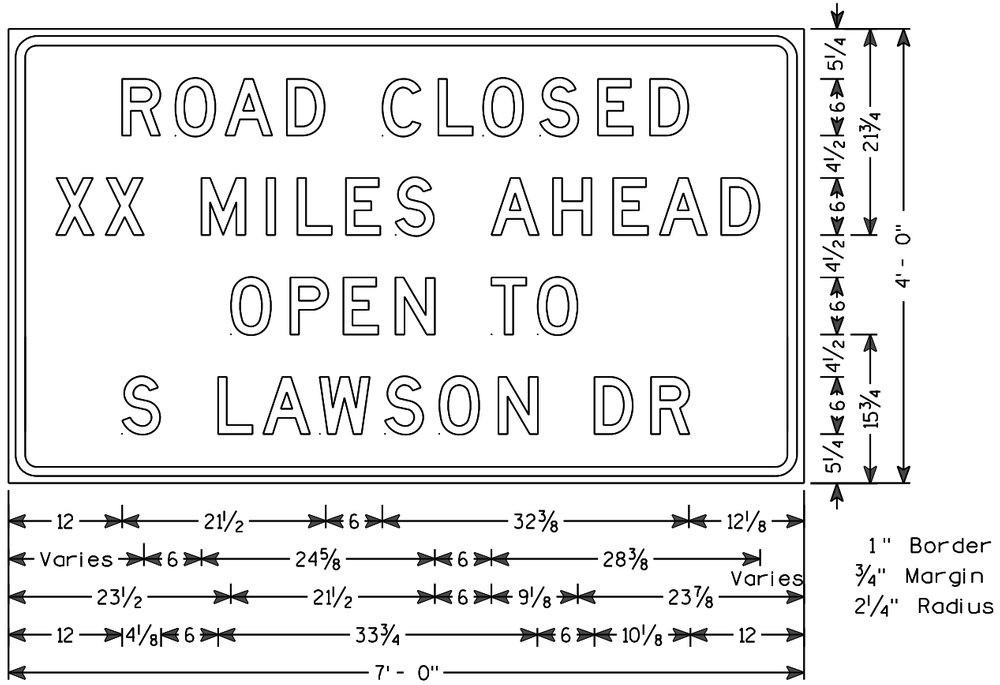






PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE	FIXED MESSAGE SIGN DETAILS	SHEET NO: 456	E

FILE NAME : T:\Design\01 Projects\WisDOT NC Region (Rapids)\1430-00-04_STH 23\PS&E\PS&E Plan\Sign Details\Received on 7.31.2013\424102403.DGN DATE : 8/1/2013 PLOT BY : tammy.tucker PLOT NAME : PLOT SCALE : 15:15 7/8 IN:SX / in.
WISDOT/CADDS SHEET 42



1" Border
¾" Margin
2¼" Radius

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Message - BLACK
3. Message Series - D

7

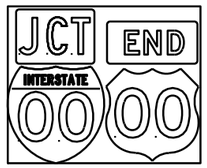
7

PROJECT NO: 1430-00-74/1431-02-72	HWY: STH 23	COUNTY: GREEN LAKE	FIXED MESSAGE SIGN DETAILS	SHEET NO: 457	E

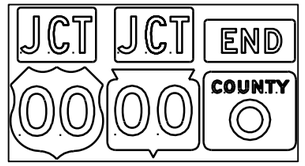
FILE NAME : T:\Design\01 Projects\WisDOT NC Region (Rapids)\1430-00-04_STH 23\PS&E\PS&E Plan\Sign Details\Received on 7.31.2013\424102403.DGN DATE : 8/1/2013 PLOT BY : tammy.tucker PLOT NAME : PLOT SCALE : 15:15 7/8 IN:SX / in.

TYPICAL ASSEMBLIES

J1-1

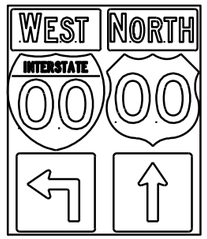


J1-2

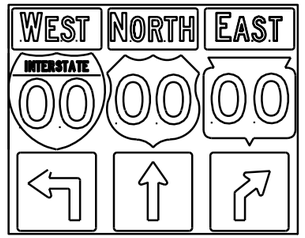


J1-3

J2-1



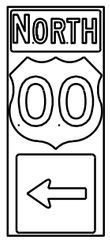
J2-2



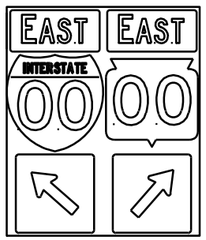
J2-3

JV

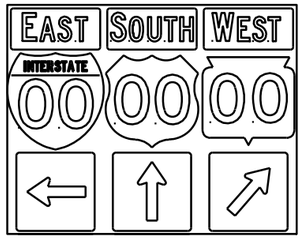
(Typical Vertical J-Assembly
See Note 10 and 11)



J3-1

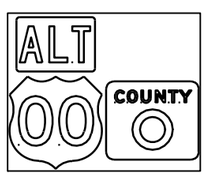


J3-2

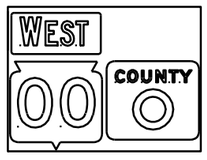


J3-3

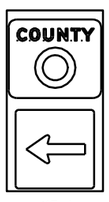
J4-1



J4-2



J4-2



J13-1

J12-1

J32-1

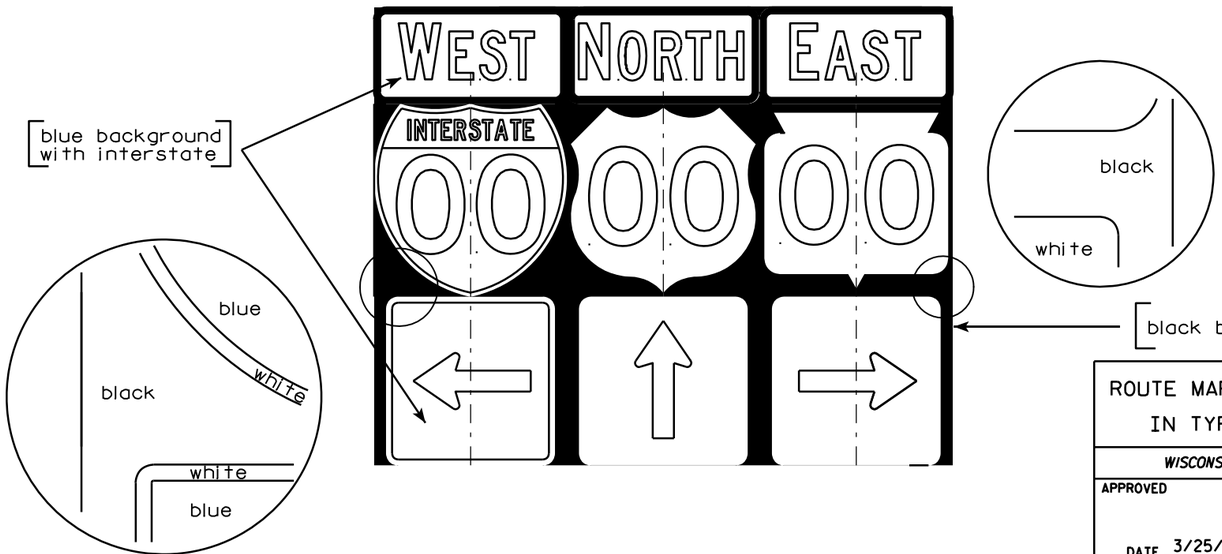
J33-1

J23-1

J22-1

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of interstate and non interstate shields, arrows and cardinals shall be white on blue.



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/13 PLATE NO. A2-1S.7

PROJECT NO:

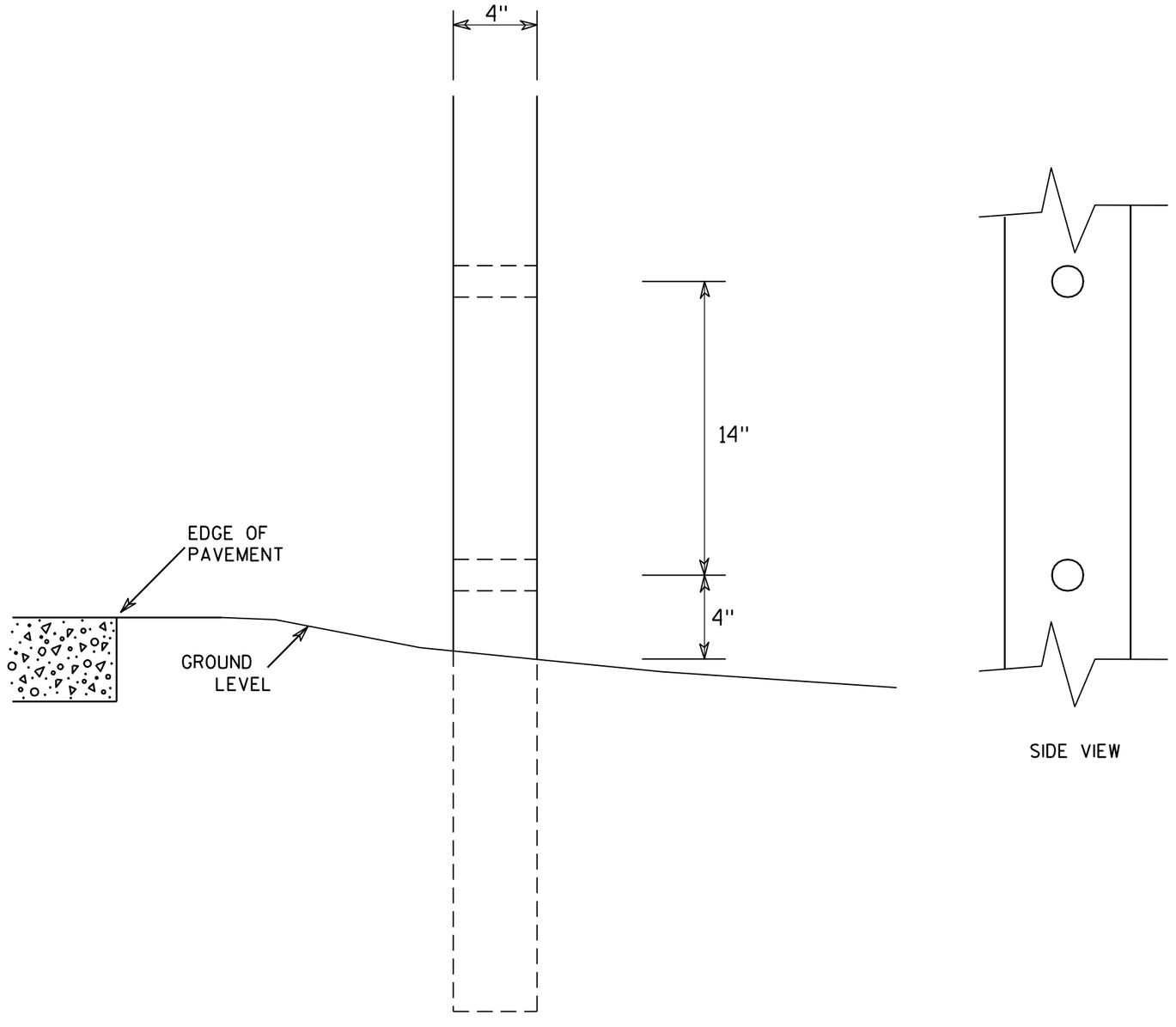
SHEET NO: 458 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 25-MAR-2013 11:33 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42

7

7



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

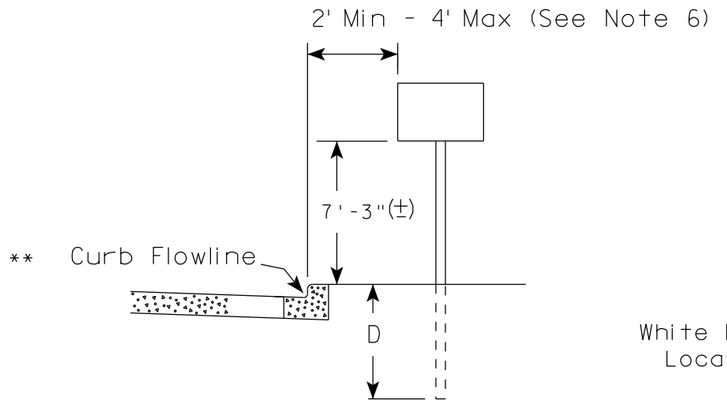
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

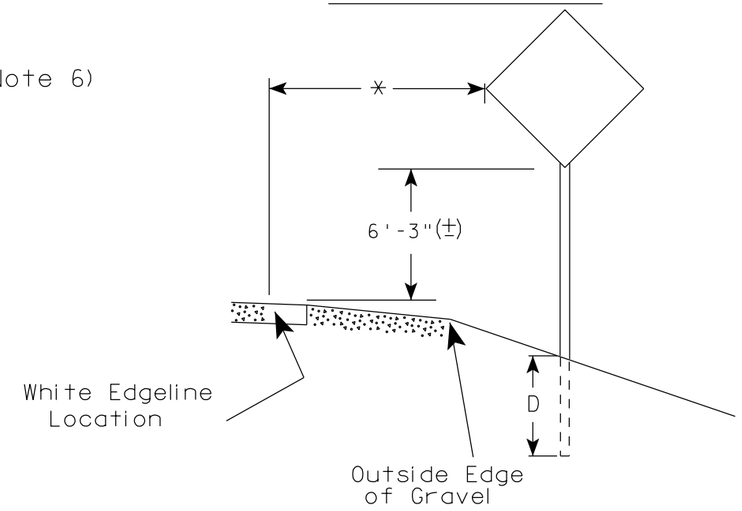
DATE 3/27/97 PLATE NO. A4-11.2

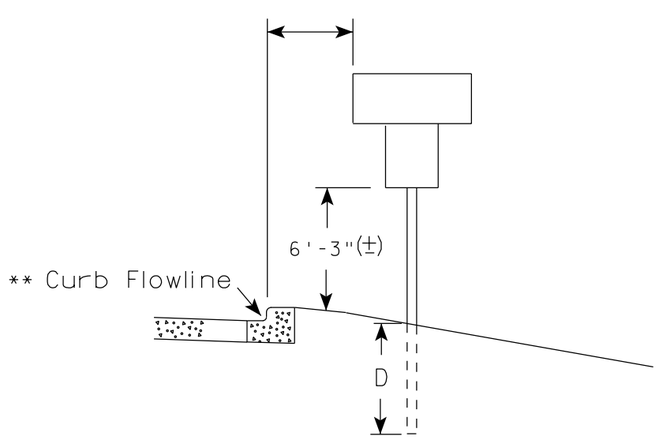
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 459	E

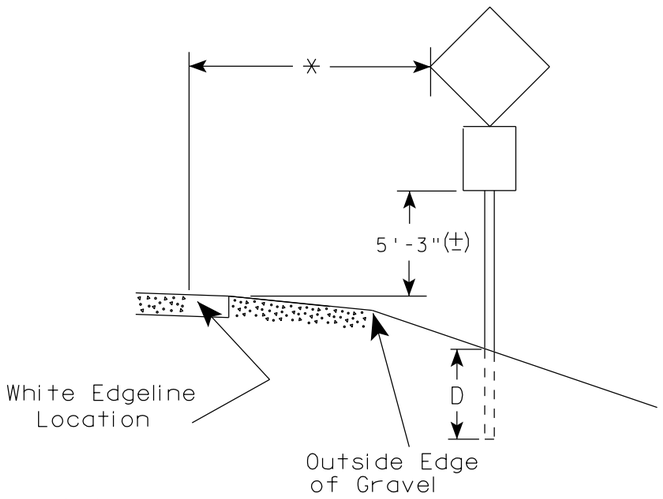
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

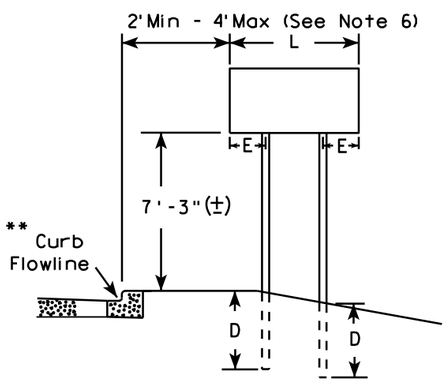
APPROVED Matthew R Rauch
for State Traffic Engineer

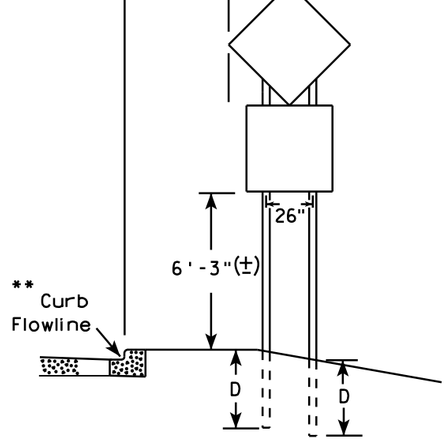
DATE 9/30/13 PLATE NO. A4-3.18

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

7

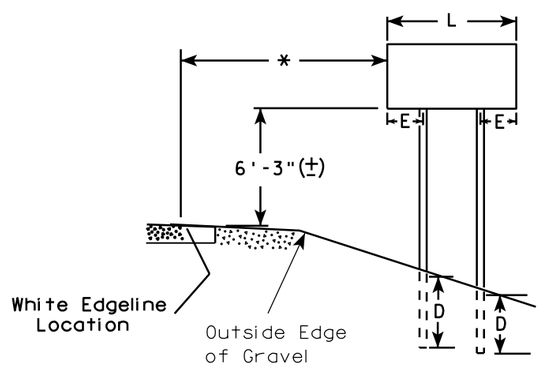
URBAN AREA

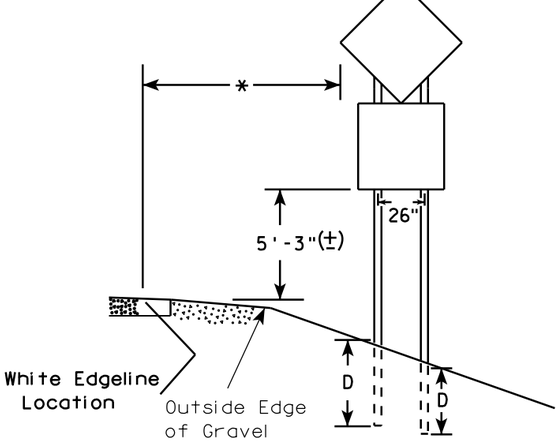




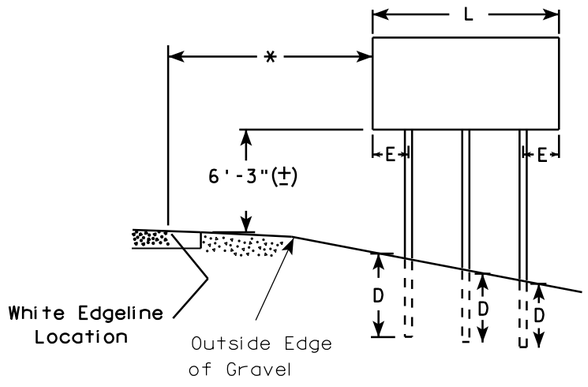
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
*** Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

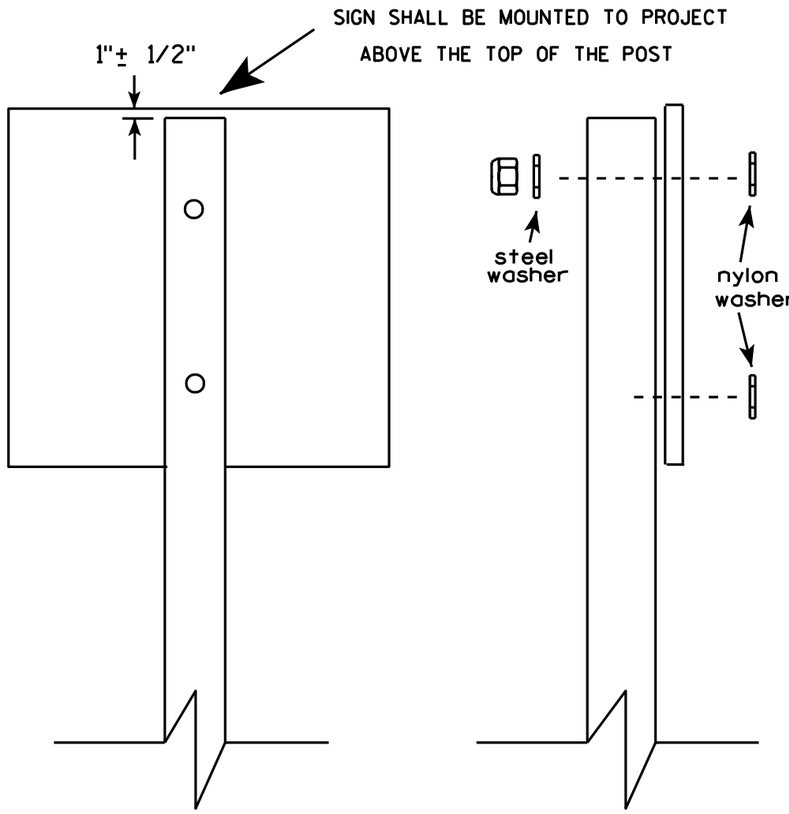
WISCONSIN DEPT OF TRANSPORTATION

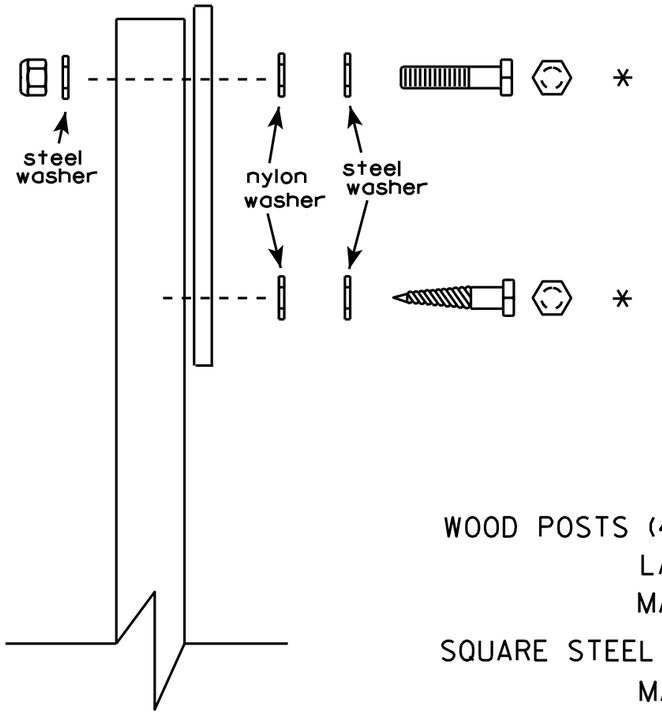
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-4 12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 30-SEP-2013 13:27 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

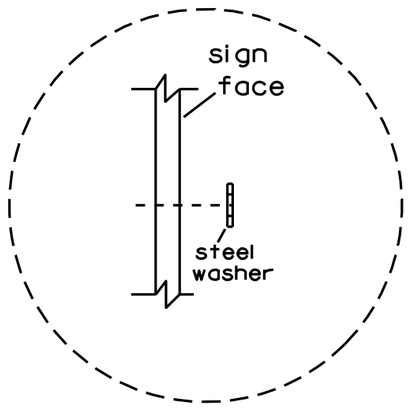
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

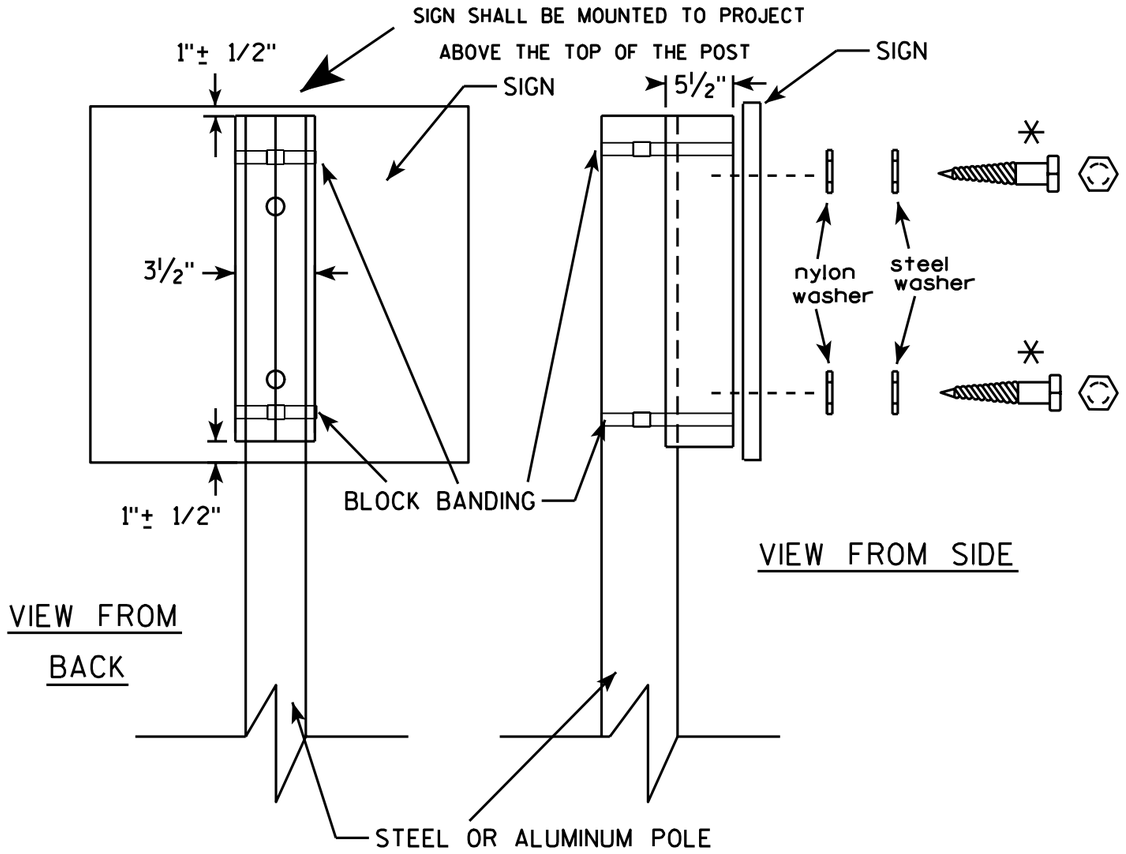
DATE 3/23/10 PLATE NO. A4-8.7

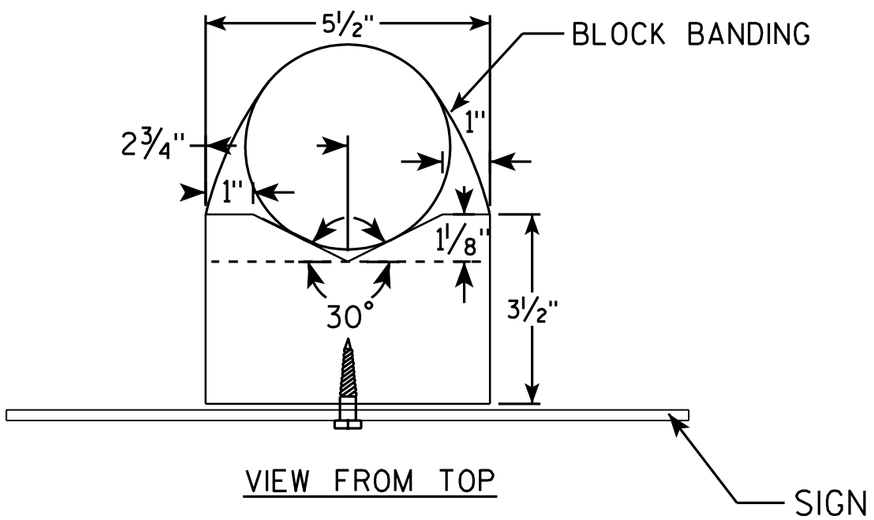
7

7

PROJECT NO:

SHEET NO: 462 E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

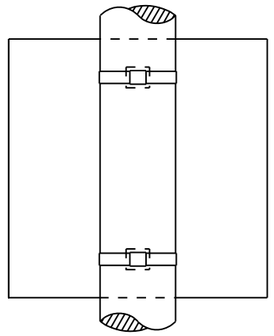
DATE 7/12/07 PLATE NO. A5-10.1

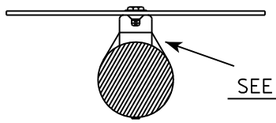
PROJECT NO:

SHEET NO: 463 E

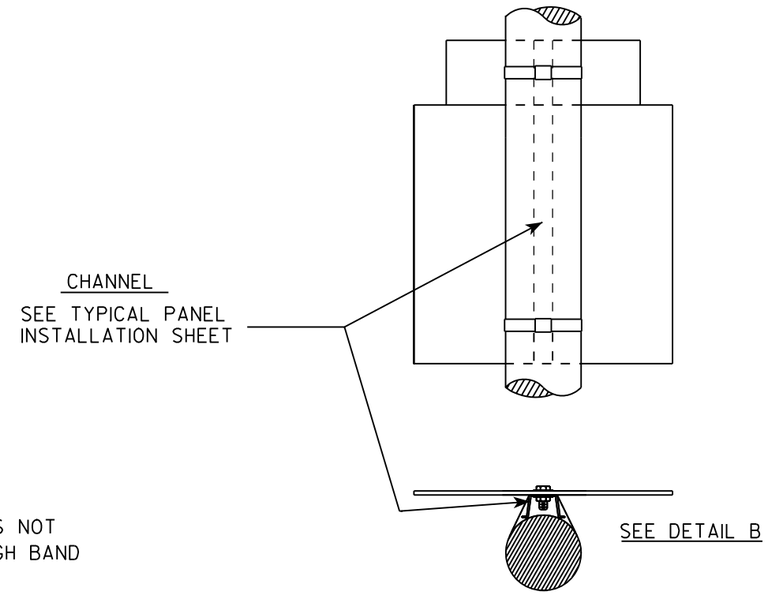
BANDING

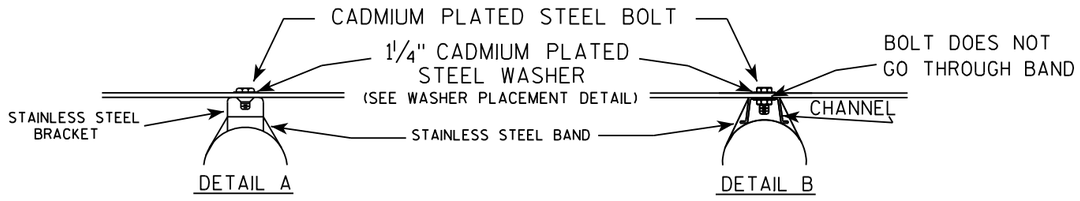
SINGLE SIGN



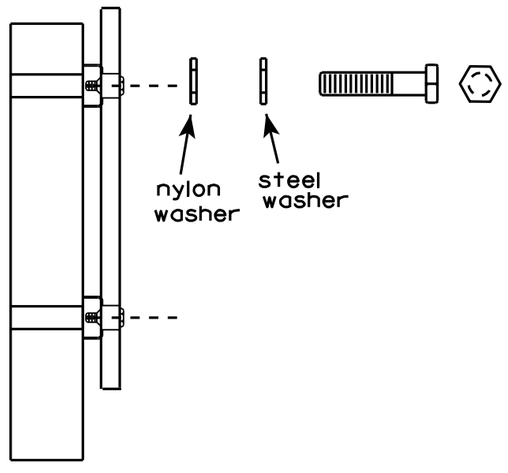


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

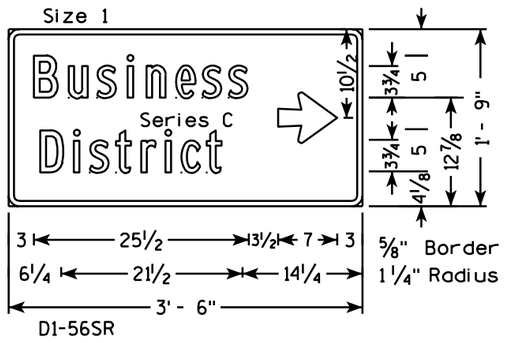
STANDARD SIGN
SIGN BANDING DETAILS

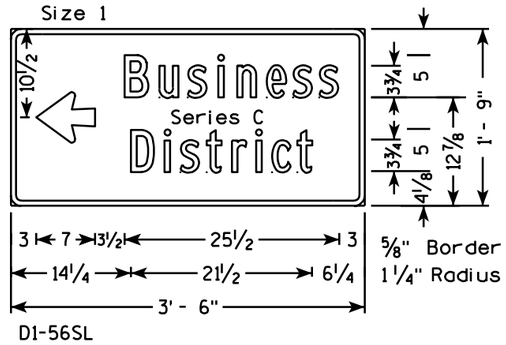
WISCONSIN DEPT OF TRANSPORTATION

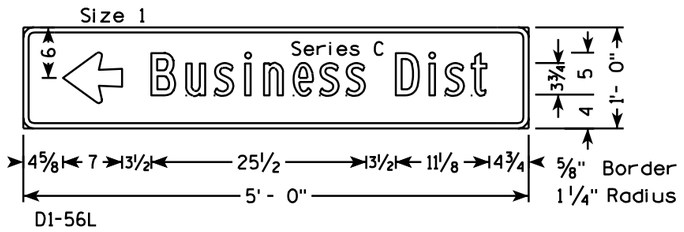
APPROVED Matthew R Rauch
for State Traffic Engineer

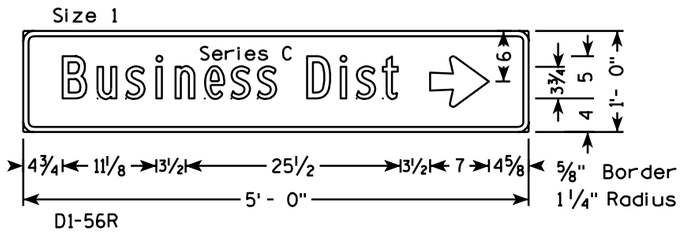
DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 464	E



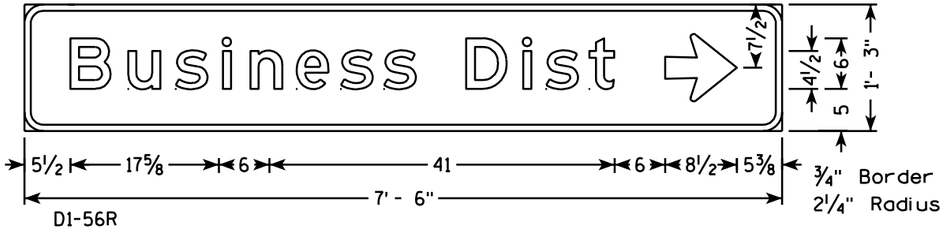


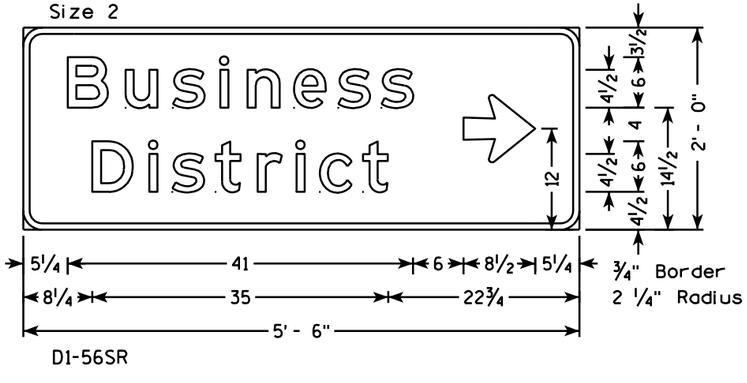


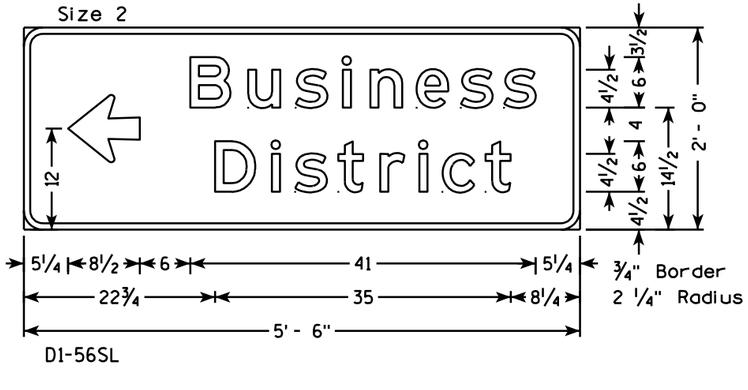


NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

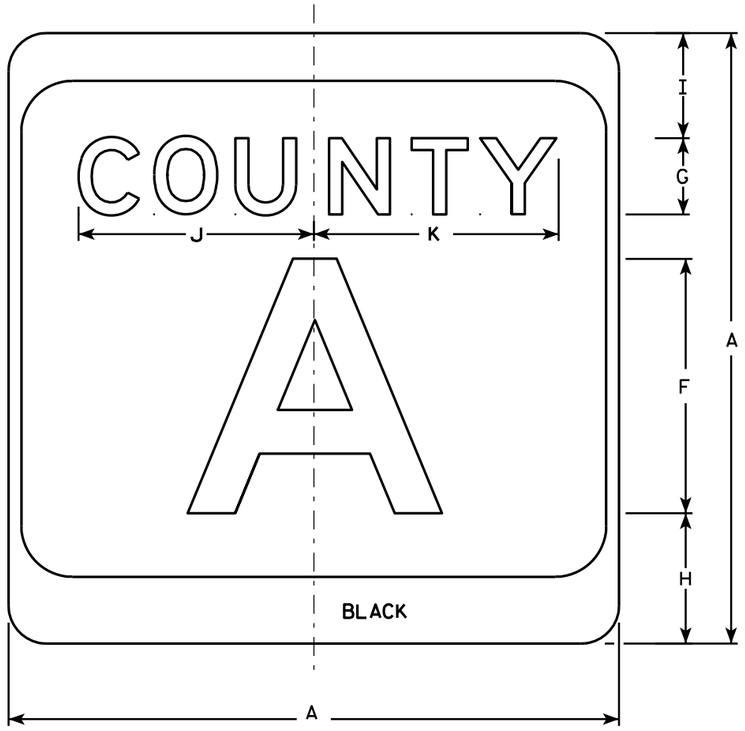




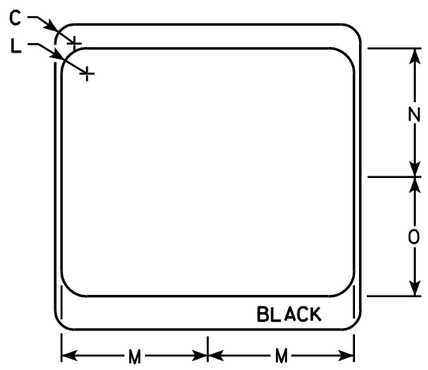


TYPICAL STANDARD D1-56L & R	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED Matthew R Rauch for State Traffic Engineer	
DATE 11/19/08	PLATE NO. D1-56.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 465	E

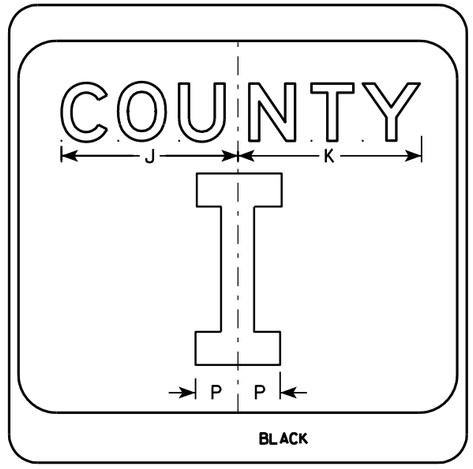


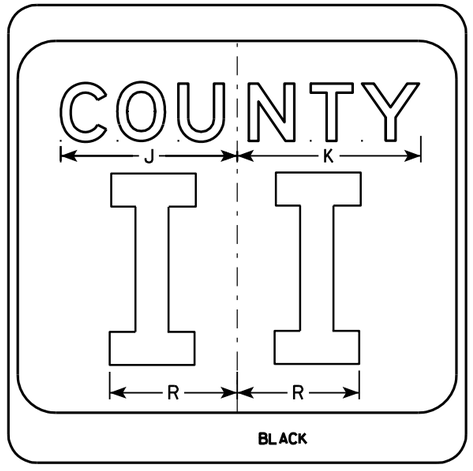
M1-5A



NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective





SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

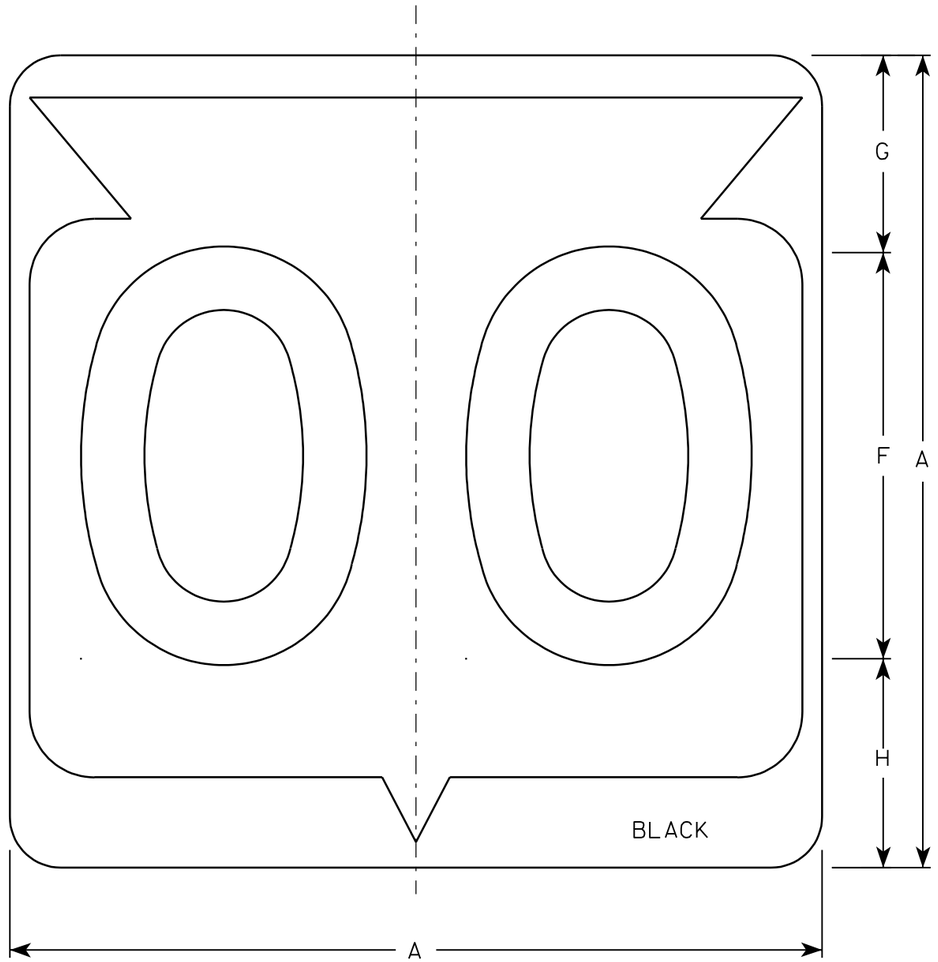
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

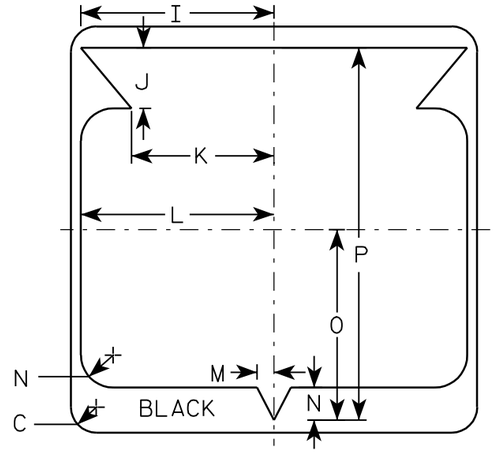
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 466	E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

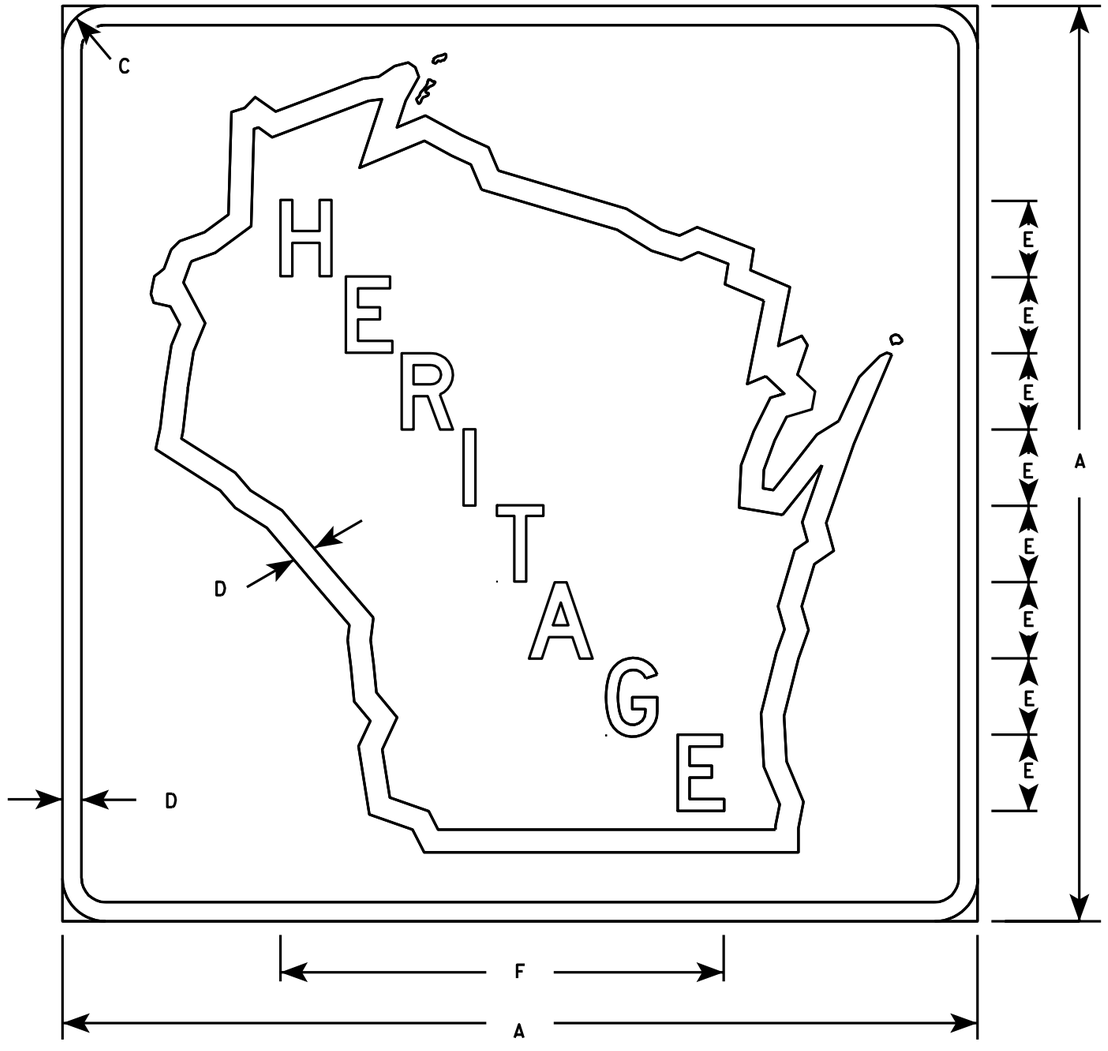
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 467	E



M1-85

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Brown
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm x 600 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/8	1/2	2	11 3/4																					4.0	0.36
3																												
4																												
5																												

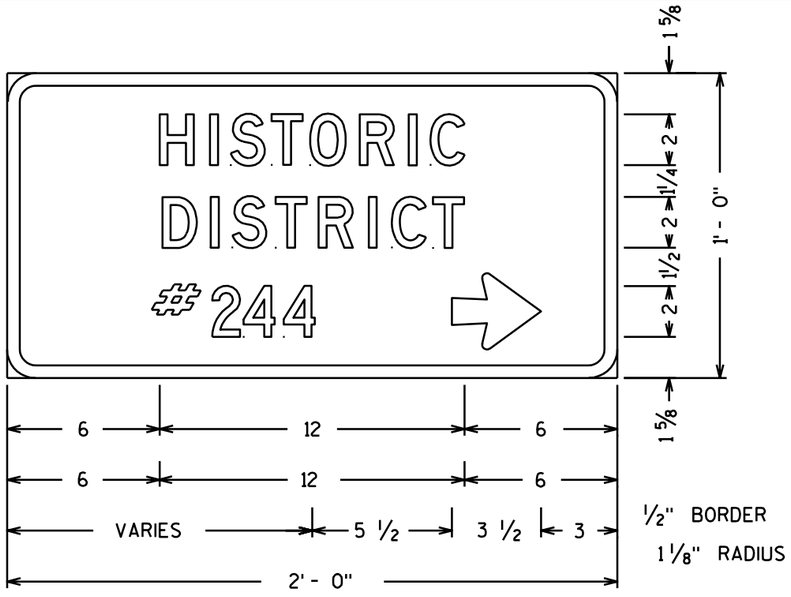
STANDARD SIGN
M1-85

WISCONSIN DEPT OF TRANSPORTATION

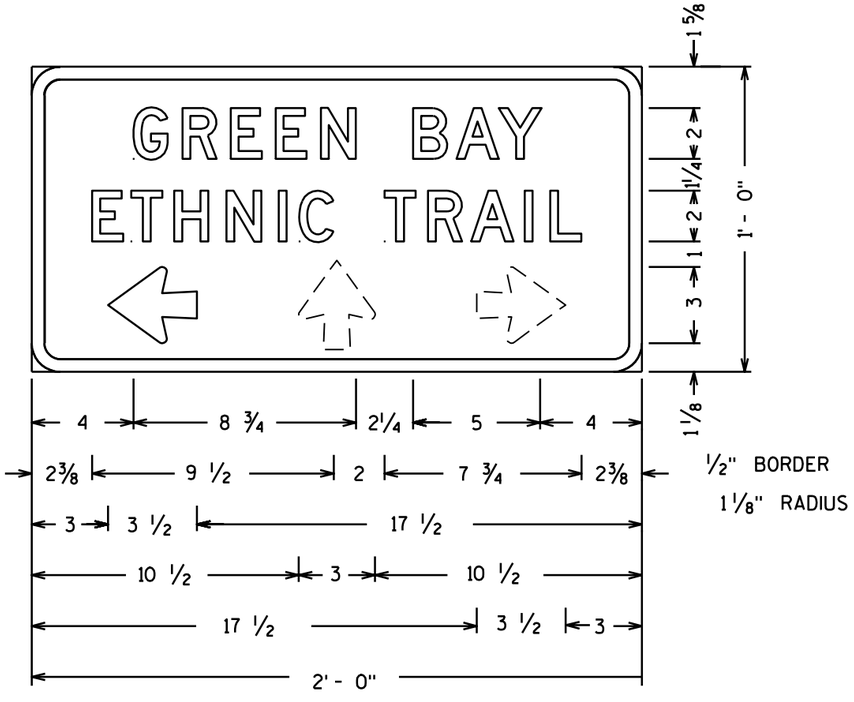
APPROVED Chester J Spang for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-85.2

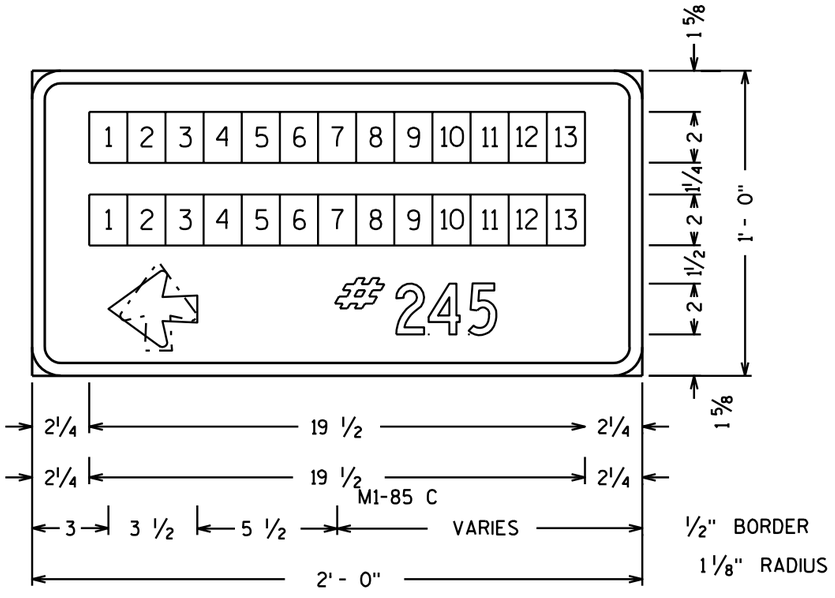
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 468	E



M1-85 D



M1-85 B



M1-85 C

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Brown
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

300 mm x 150 mm

For good legibility, 2" Series D copy will allow approximately 13 letters/characters per message line. The message shall be opitically balanced about the centerline of the sign.

STANDARD SIGN
M1-85 B, C & D

WISCONSIN DEPT OF TRANSPORTATION

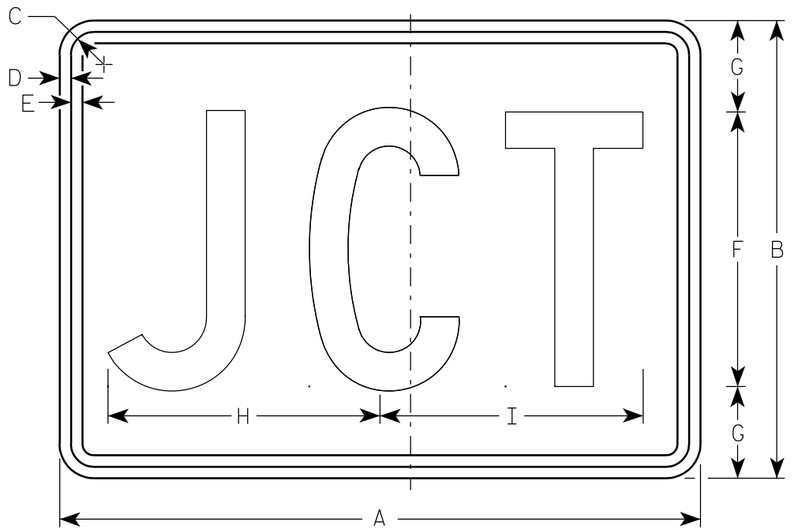
APPROVED Chester J Spang for State Traffic Engineer

DATE 1/30/02 PLATE NO. M1-85B.2

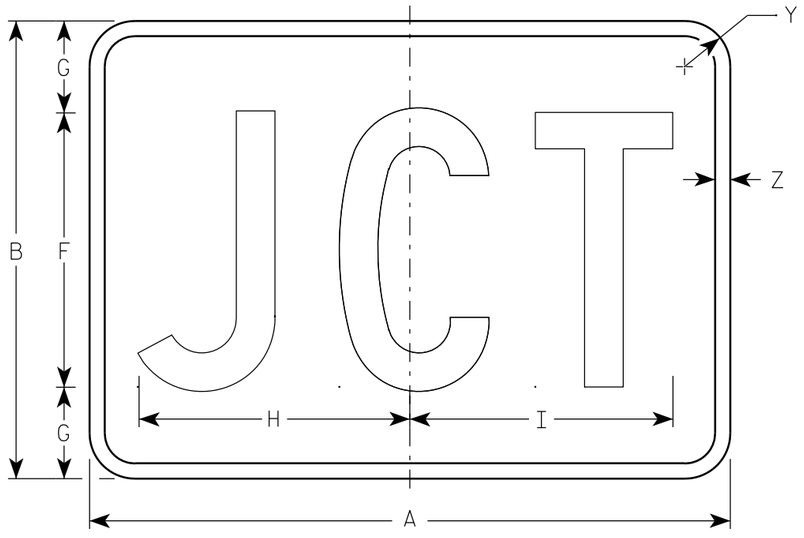
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 469	E

7

FILE NAME : C:\Users\Projects\tr_stdplate\M185B.DGN PLOT DATE : 13-OCT-2005 15:26 PLOT BY : DITJPH PLOT NAME : PLOT SCALE : 5.960833:1.000000 WISDOT/CADDS SHEET 42



M2-1
MK2-1
MM2-1
MR2-1



MB2-1
MG2-1
MN2-1

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB2-1 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG2-1 Background - Green
   Message - White - Type H Reflective
   MK2-1 Background - Green
   Message - White - Type H Reflective
   MM2-1 Background - White - Type H Reflective
   Message - Green
   MN2-1 Background - Brown
   Message - White - Type H Reflective
   MR2-1 Background - Brown
   Message - Yellow - Type H Reflective

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

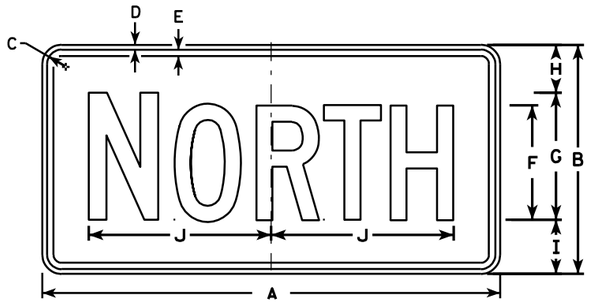
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

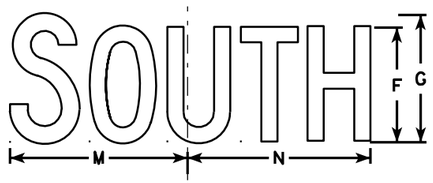
DATE 3/16/10 PLATE NO. M2-1.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 470	E

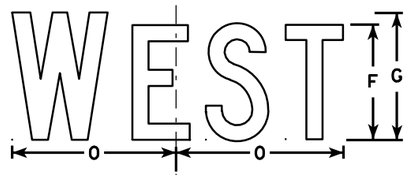


M3-1
MK3-1
MO3-1

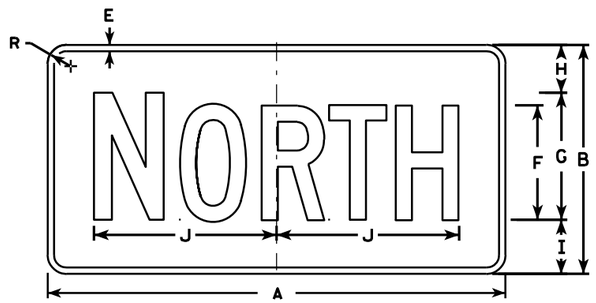
M3-2
MK3-2
MO3-2



M3-3
MK3-3
MO3-3

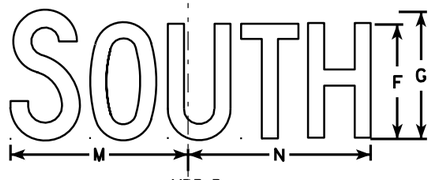


M3-4
MK3-4
MO3-4

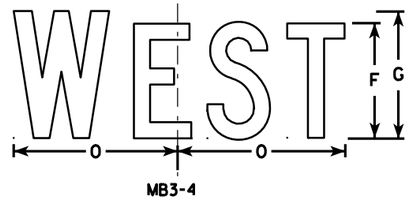


MB3-1
MG3-1
MM3-1
MN3-1

MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective) Message - Black
   MB3-1 thru MB3-4 Background - Blue Message - White - Type H Reflective (Detour or temporary signs - Reflective)
   MG3-1 thru MG3-4 Background - Green Message - White - Type H Reflective
   MK3-1 thru MK3-4 Background - Green Message - White - Type H Reflective
   MM3-1 thru MM3-4 Background - White - Type H Reflective Message - Green
   MN3-1 thru MN3-4 Background - Brown Message - White - Type H Reflective
   M03-1 thru M03-4 Background - Orange - Reflective Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

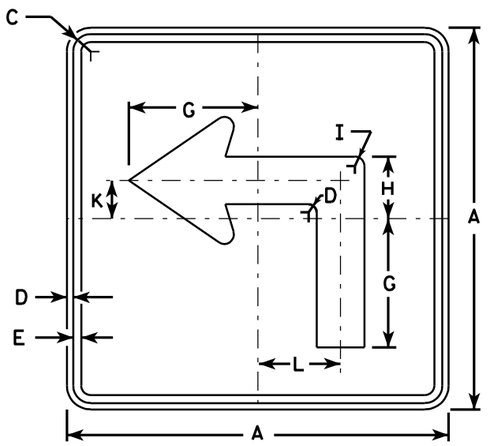
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

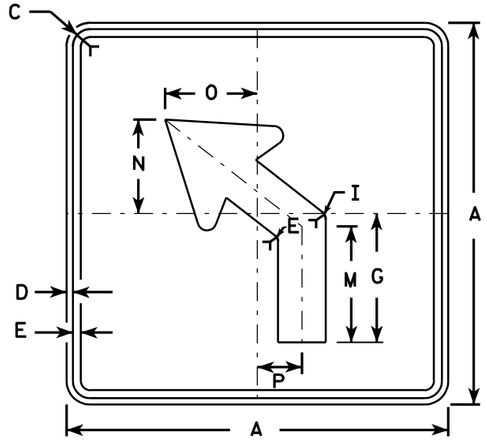
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12

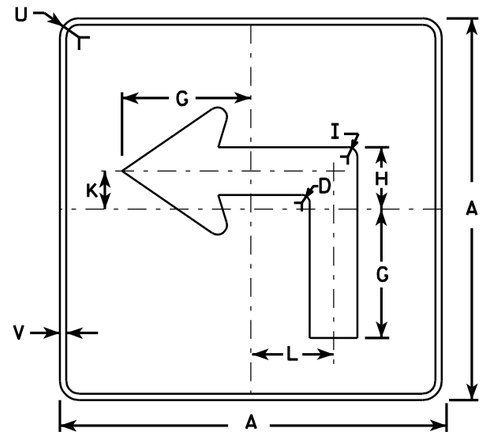
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 471	E



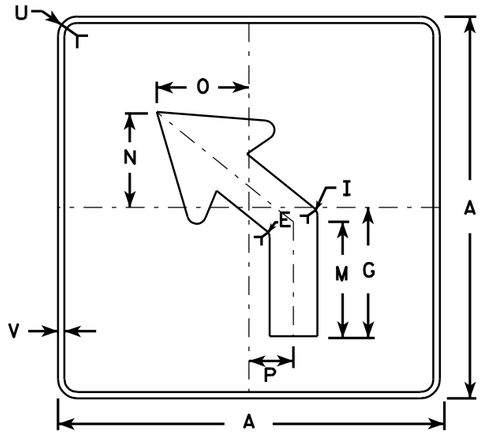
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



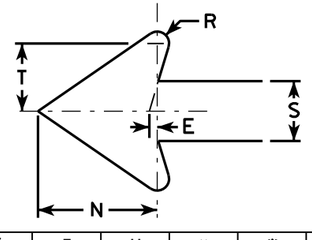
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

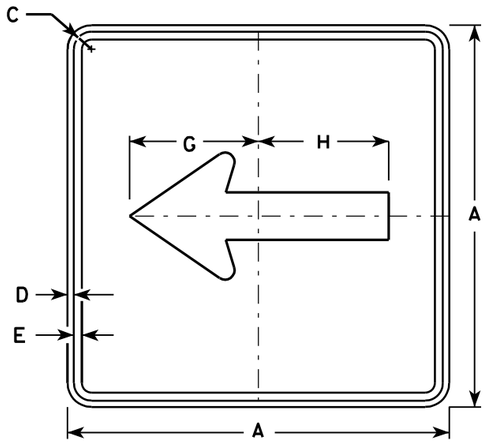
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

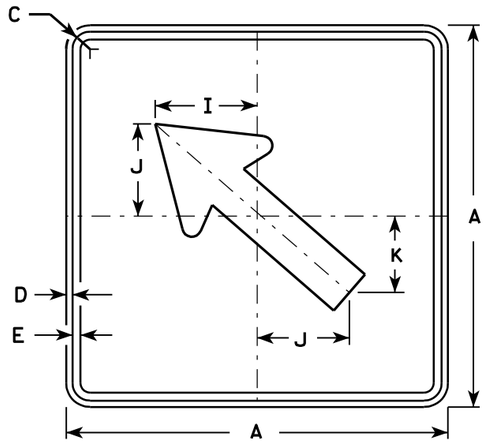
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 472 | E

7

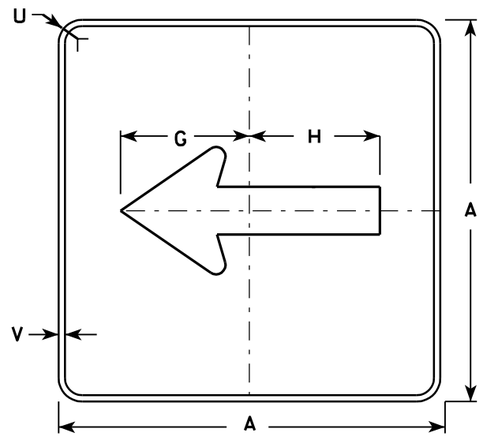
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 29-JUL-2013 13:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.908552:1.000000



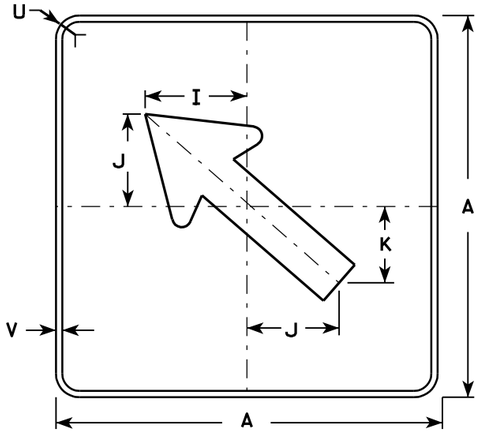
M6-1
MK6-1
MM6-1
MO6-1
MP6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MP6-2
MR6-2



MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White - Type H Reflective
   Message - Black

   MB6-1 and MB6-2 Background - Blue
   Message - White - Type H Reflective

   MG6-1 and MG6-2 Background - Green
   Message - White - Type H Reflective

   MK6-1 and MK6-2 Background - Green
   Message - White - Type H Reflective

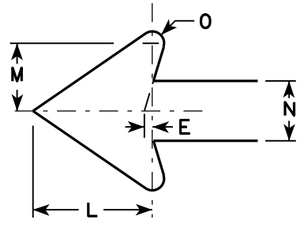
   MM6-1 and MM6-2 Background - White - Type H Reflective
   Message - Green

   MN6-1 and MN6-2 Background - Brown
   Message - White - Type H Reflective

   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black

   MP6-1 and MP6-2 Background - White - Type H Reflective
   Message - Blue

   MR6-1 and MR6-2 Background - Brown
   Message - Yellow - Type H Reflective



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN M6-1 & M6-2 SERIES

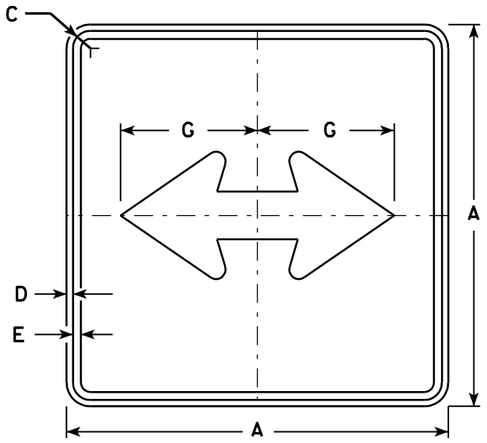
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

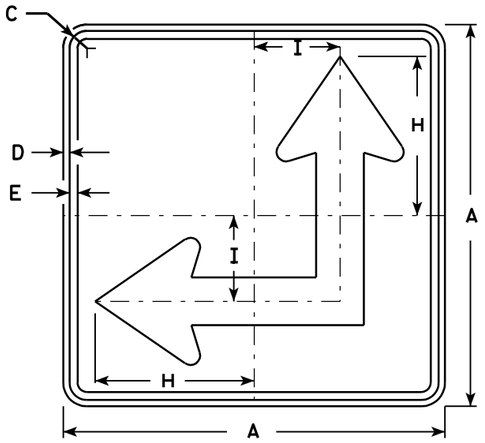
DATE 7/29/13 PLATE NO. M6-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 473 | E

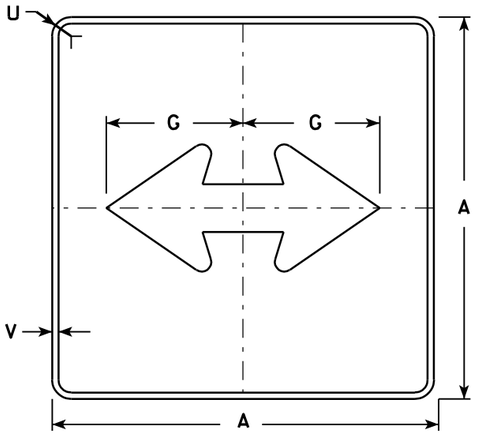
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 29-JUL-2013 13:57 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.908552:1.000000 WISDOT/CADDS SHEET 42



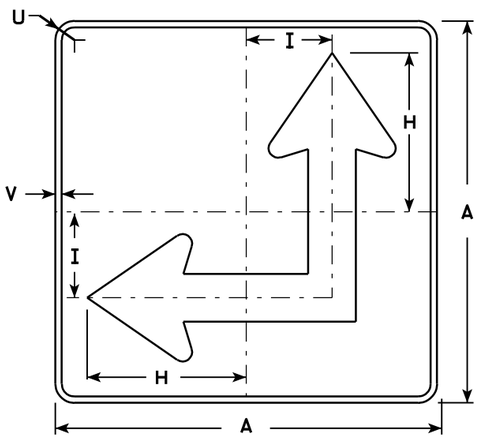
M6-4
MK6-4
MM6-4
MO6-4
MP6-4
MR6-4



M6-6
MK6-6
MM6-6
MO6-6
MP6-6
MR6-6



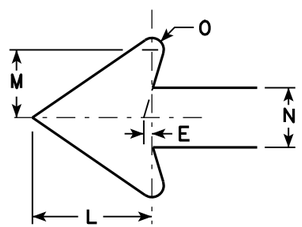
MB6-4
MG6-4
MN6-4



MB6-6
MG6-6
MN6-6

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White - Type H Reflective
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White - Type H Reflective
   MG6-4 and MG6-6 Background - Green
   Message - White - Type H Reflective
   MK6-4 and MK6-6 Background - Green
   Message - White - Type H Reflective
   MM6-4 and MM6-6 Background - White - Type H Reflective
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White - Type H Reflective
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White - Type H Reflective
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow - Type H Reflective
5. M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

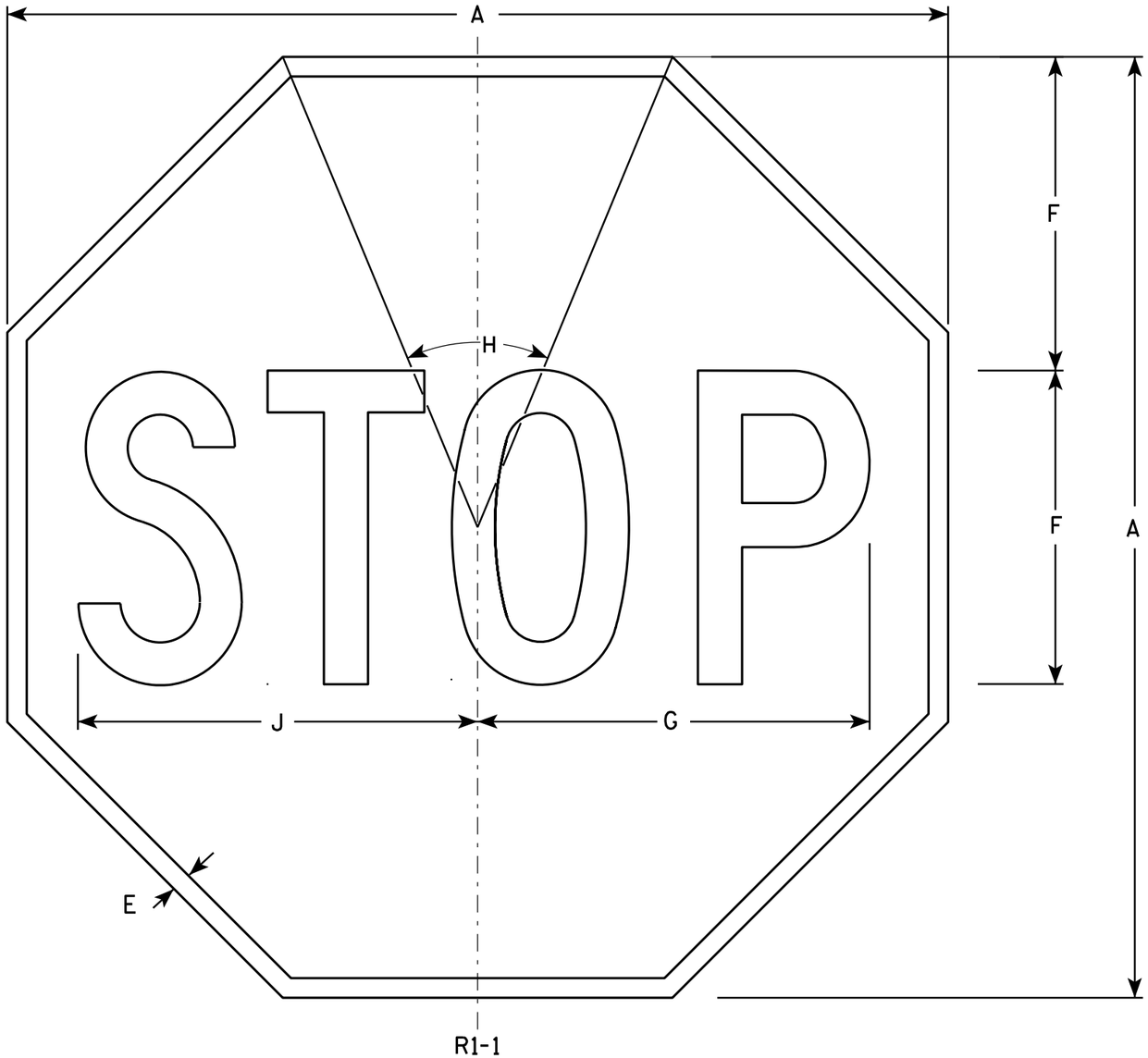
STANDARD SIGN M6-4 & M6-6 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 7/29/13 PLATE NO. M6-4.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 474 | E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

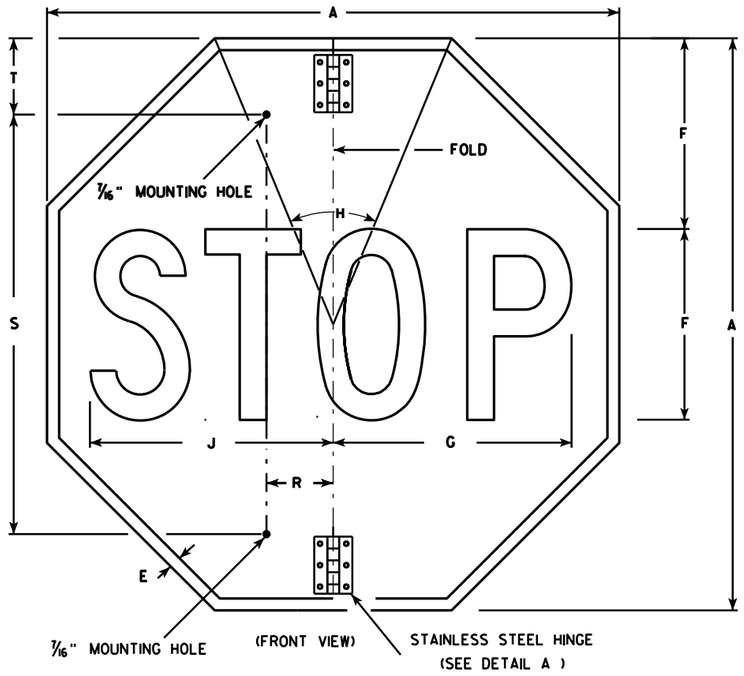
STANDARD SIGN
R1-1

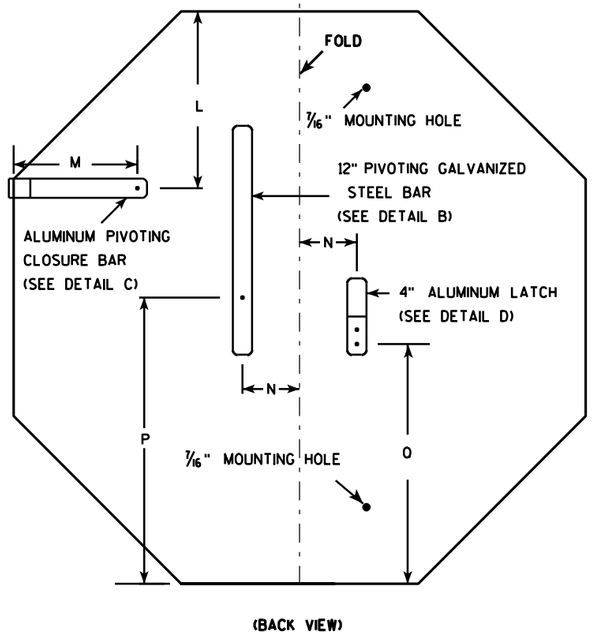
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

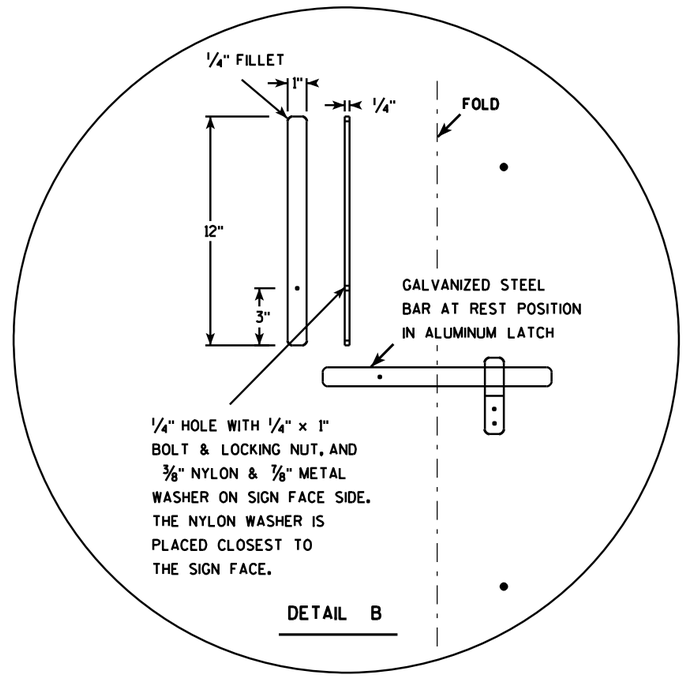
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 475	E



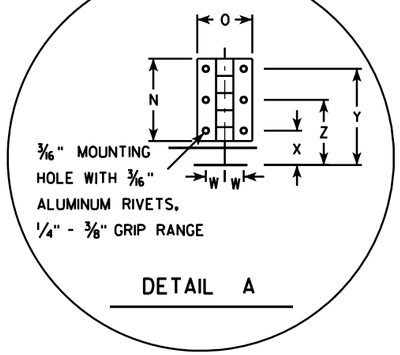


NOTES

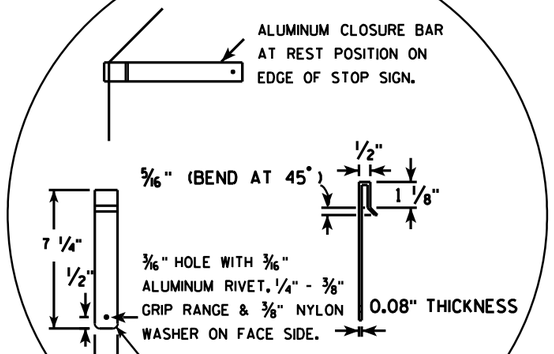
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



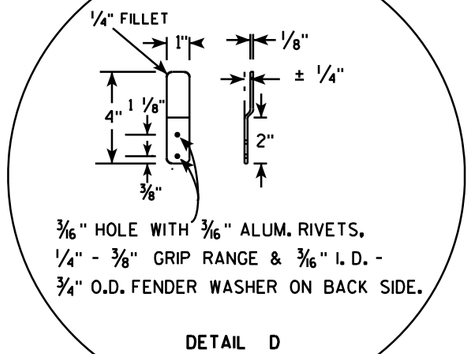
DETAIL B



DETAIL A



DETAIL C



DETAIL D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

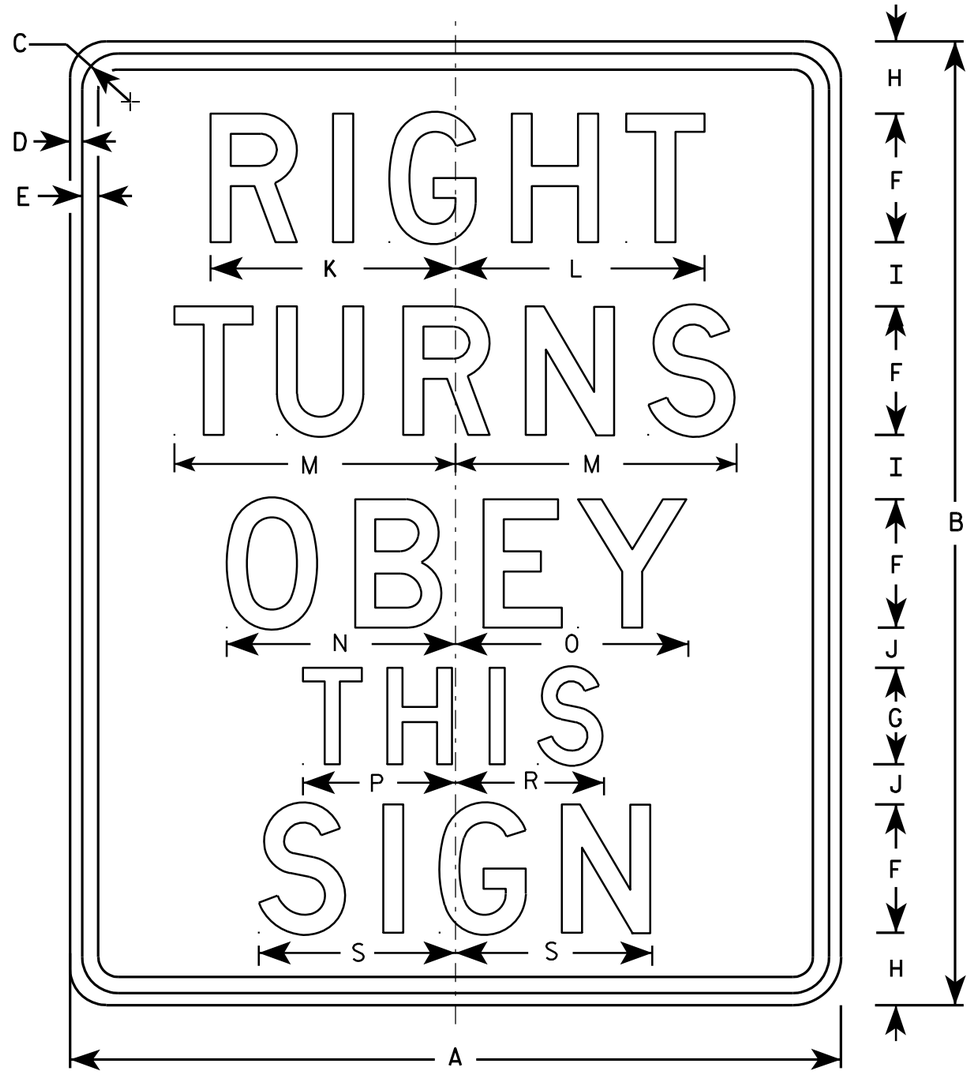
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 476 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11F.DGN PLOT DATE : 02-DEC-2010 15:26 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42

7

7



R1-53

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	4	3	2 1/4	2	1 1/4	7 5/8	7 3/4	8 3/4	7 1/8	7 1/4	4 3/4		4 5/8	6 1/8								5.0
2M	24	30	1 1/8	3/8	1/2	4	3	2 1/4	2	1 1/4	7 5/8	7 3/4	8 3/4	7 1/8	7 1/4	4 3/4		4 5/8	6 1/8								5.0
3																											
4																											
5																											

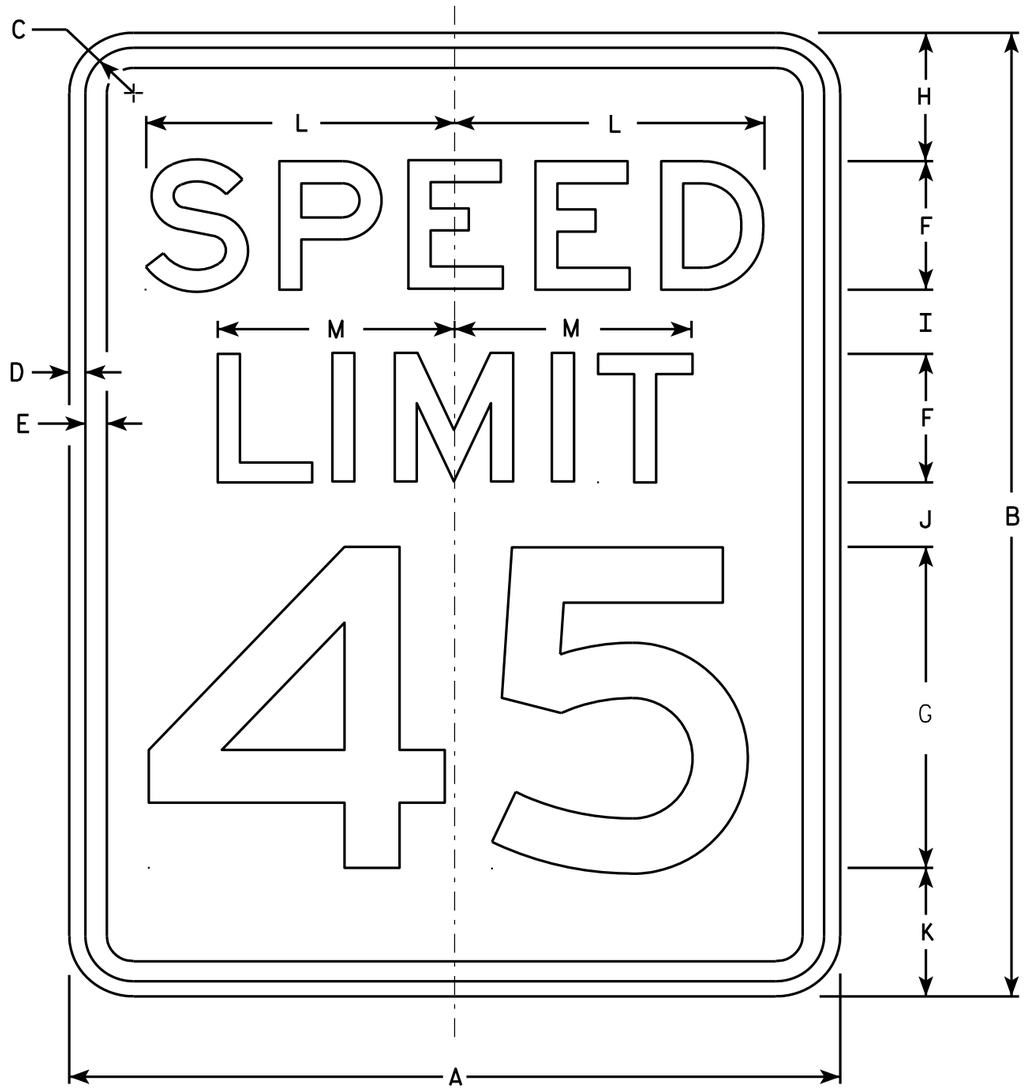
STANDARD SIGN
R1-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-53.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 477	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

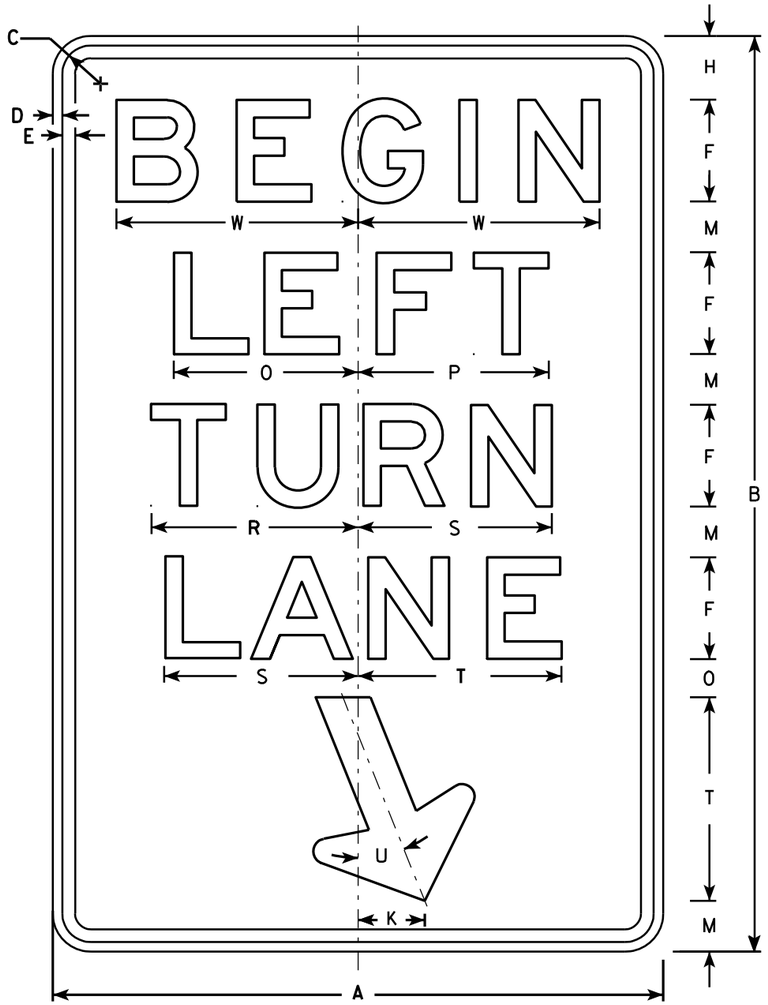
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 478 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

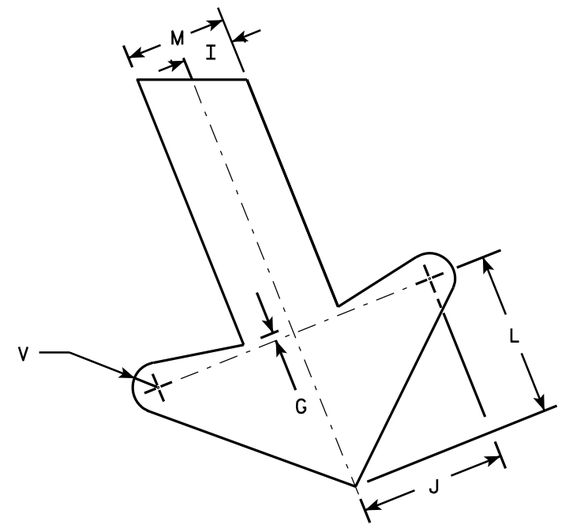
WISDOT/CADDS SHEET 42



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

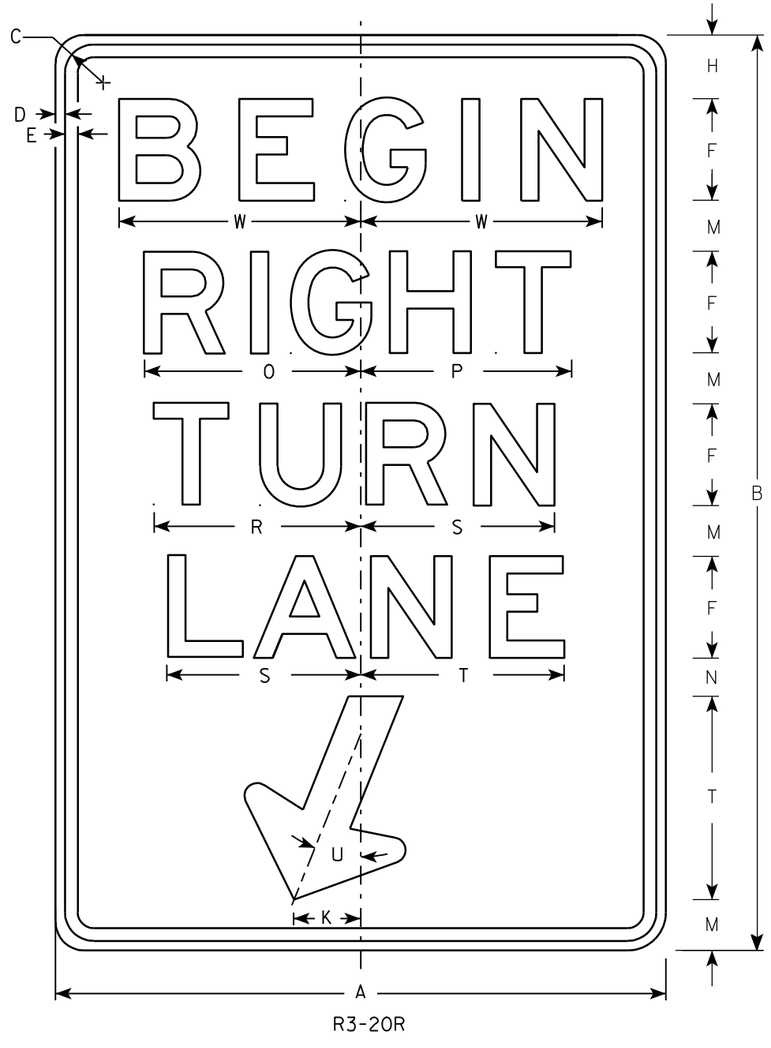
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

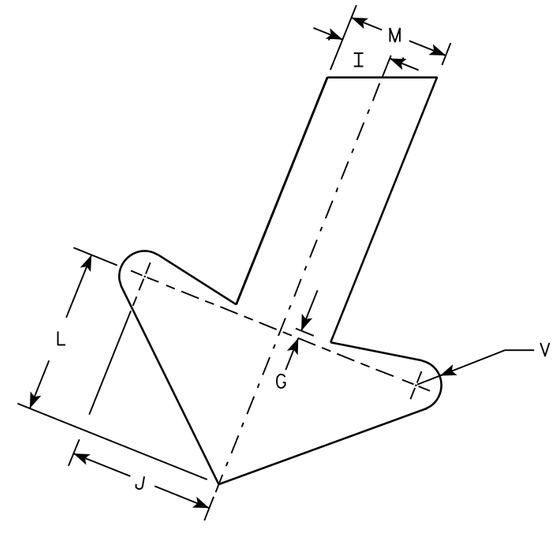
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 479 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

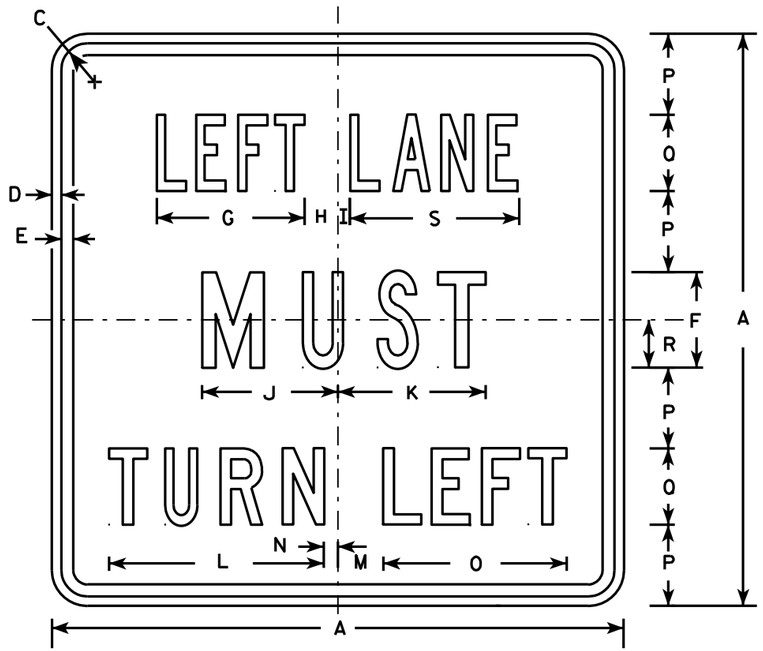
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

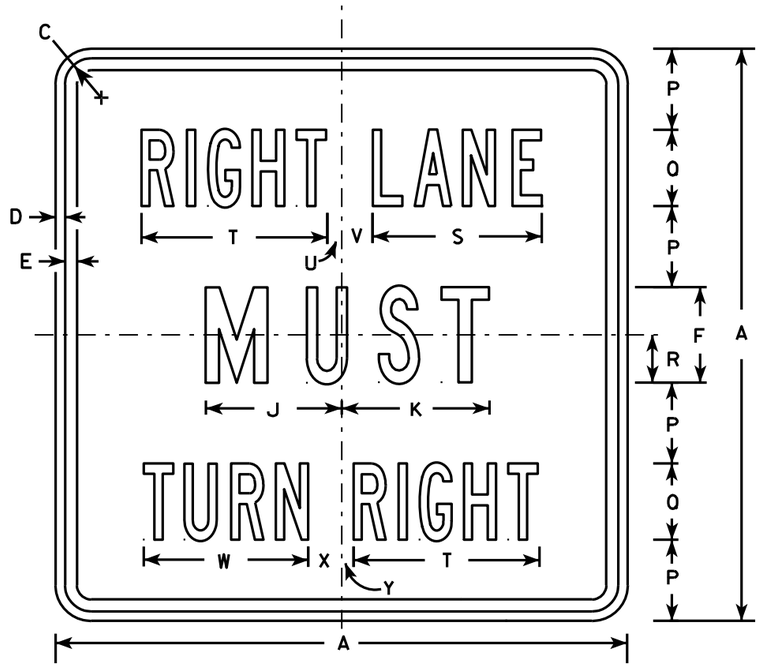
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 480 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320R.DGN PLOT DATE : 15-OCT-2010 14:59 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42



R3-7L



R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

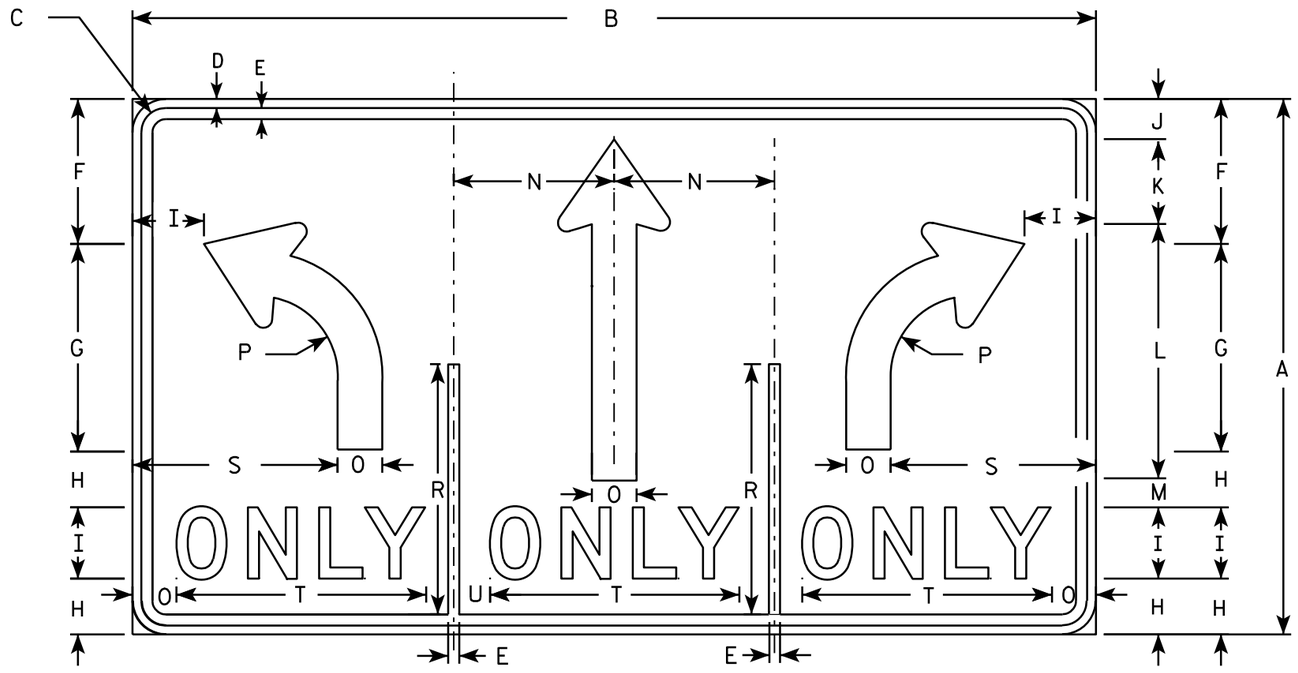
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

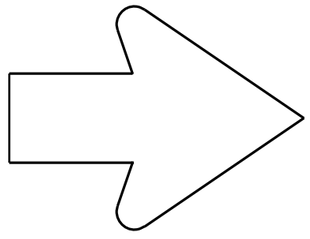
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 481 | E



R3-8W

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

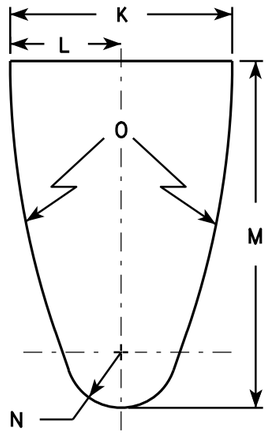
WISCONSIN DEPT OF TRANSPORTATION

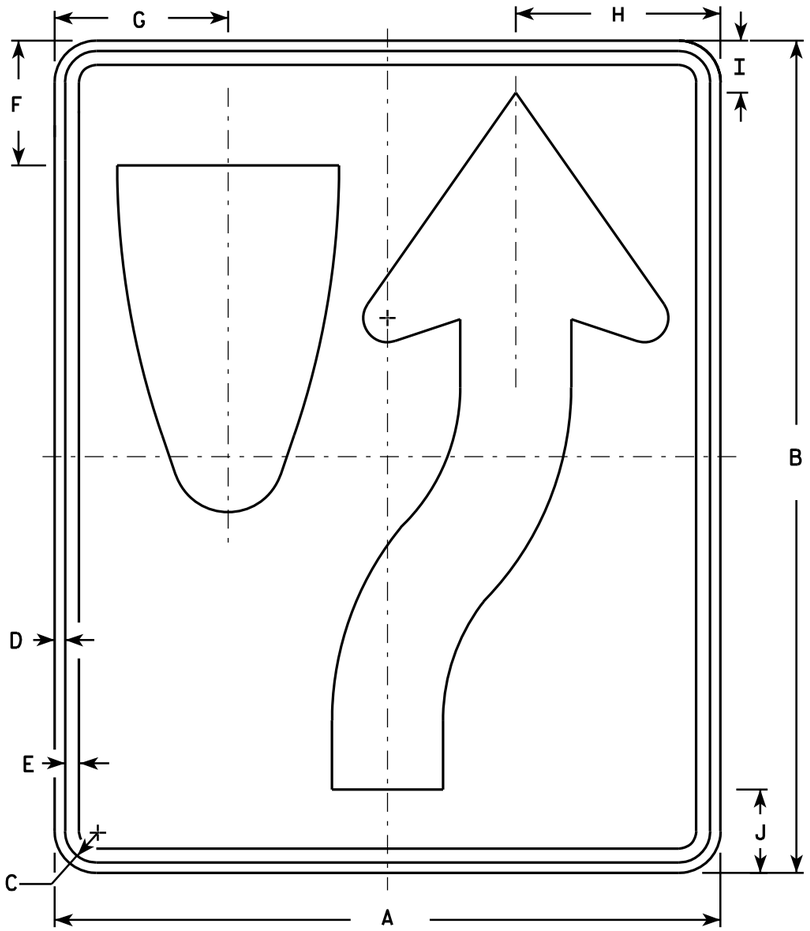
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

PROJECT NO:

SHEET NO: 482 E

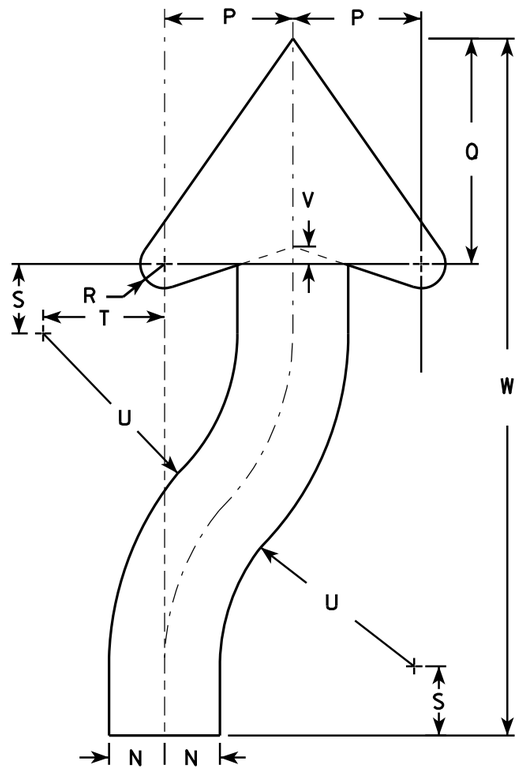




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

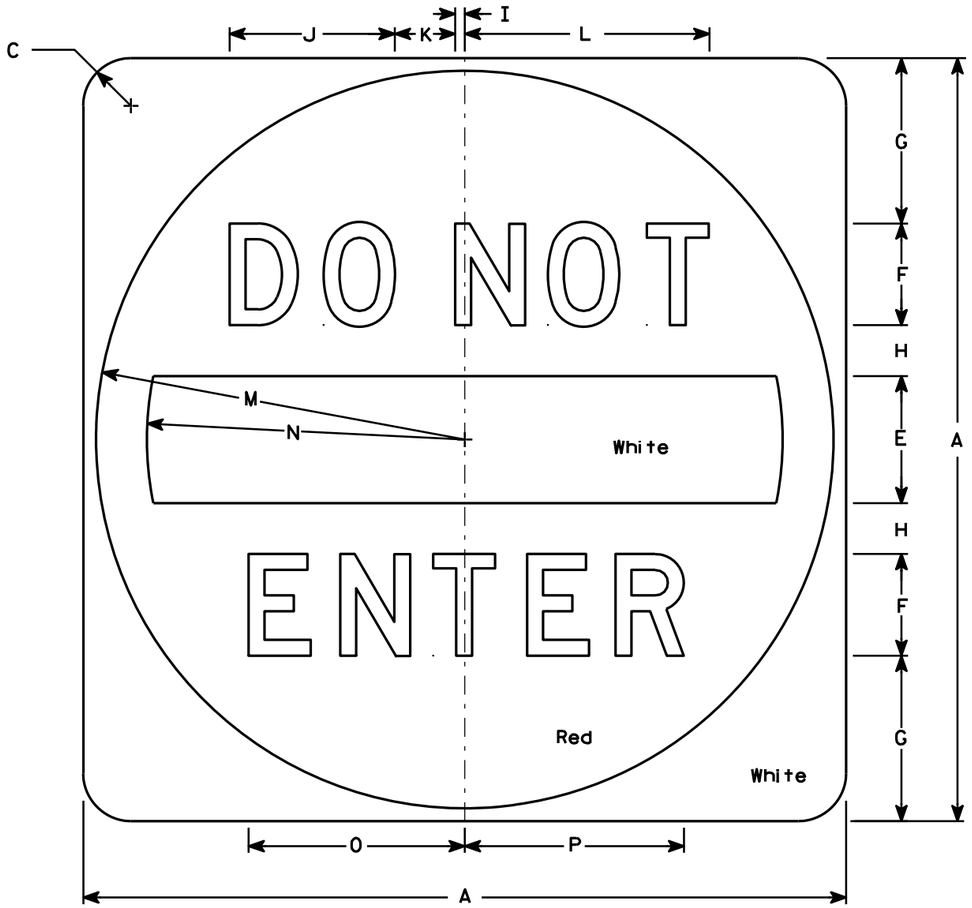
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 483	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

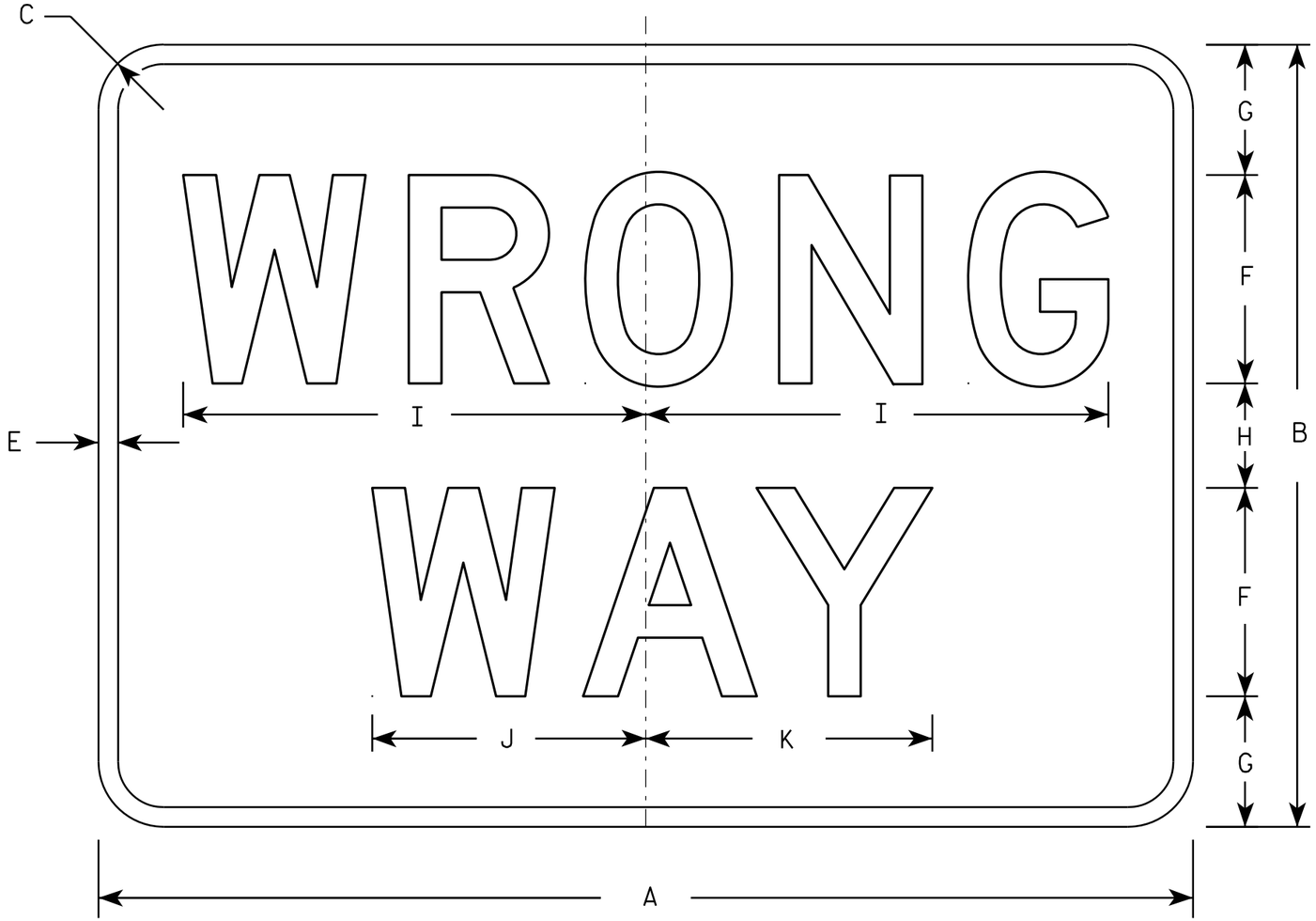
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 484 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

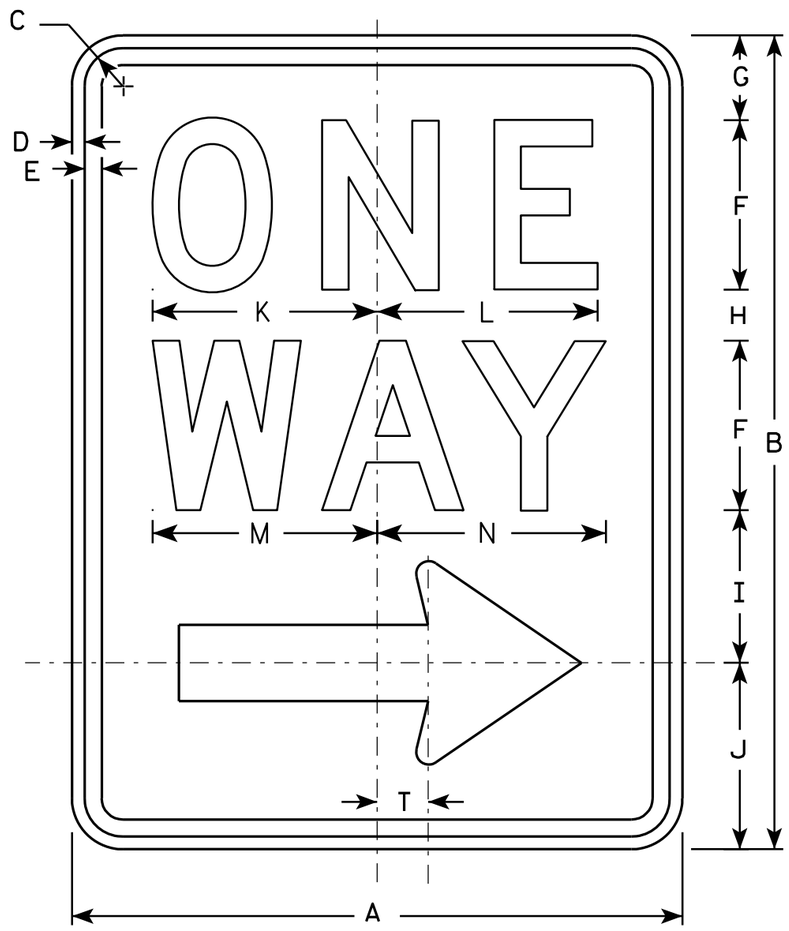
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

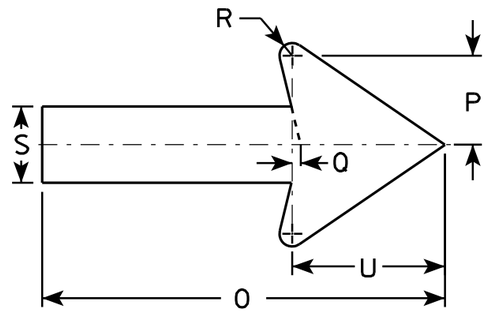
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 485	E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

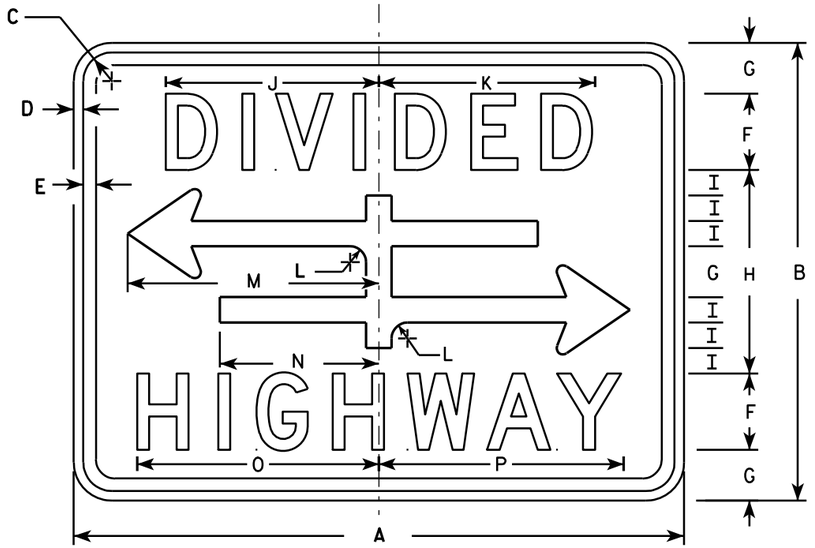
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

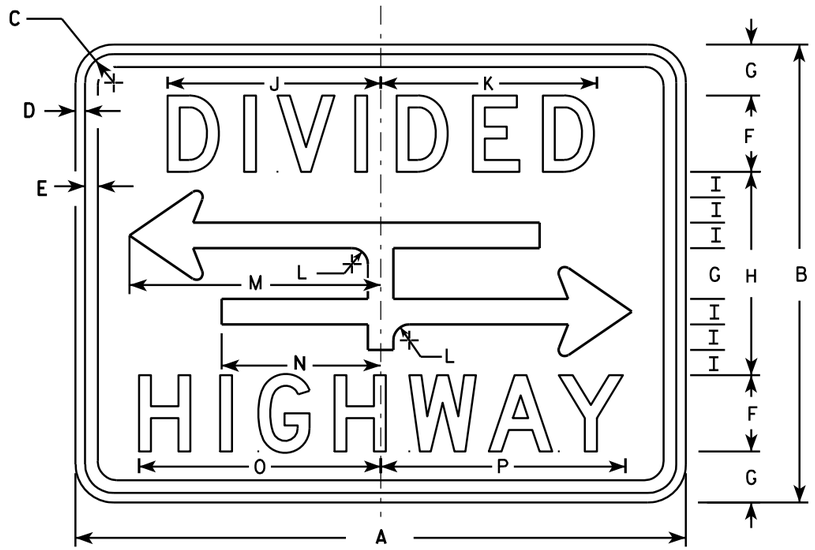
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 486	E



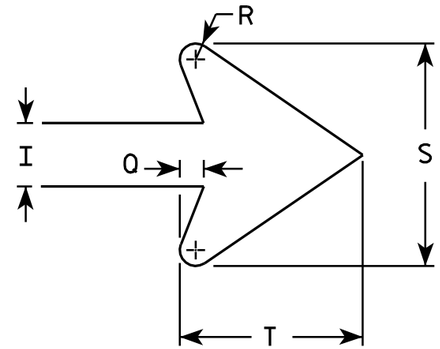
R6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-3A



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

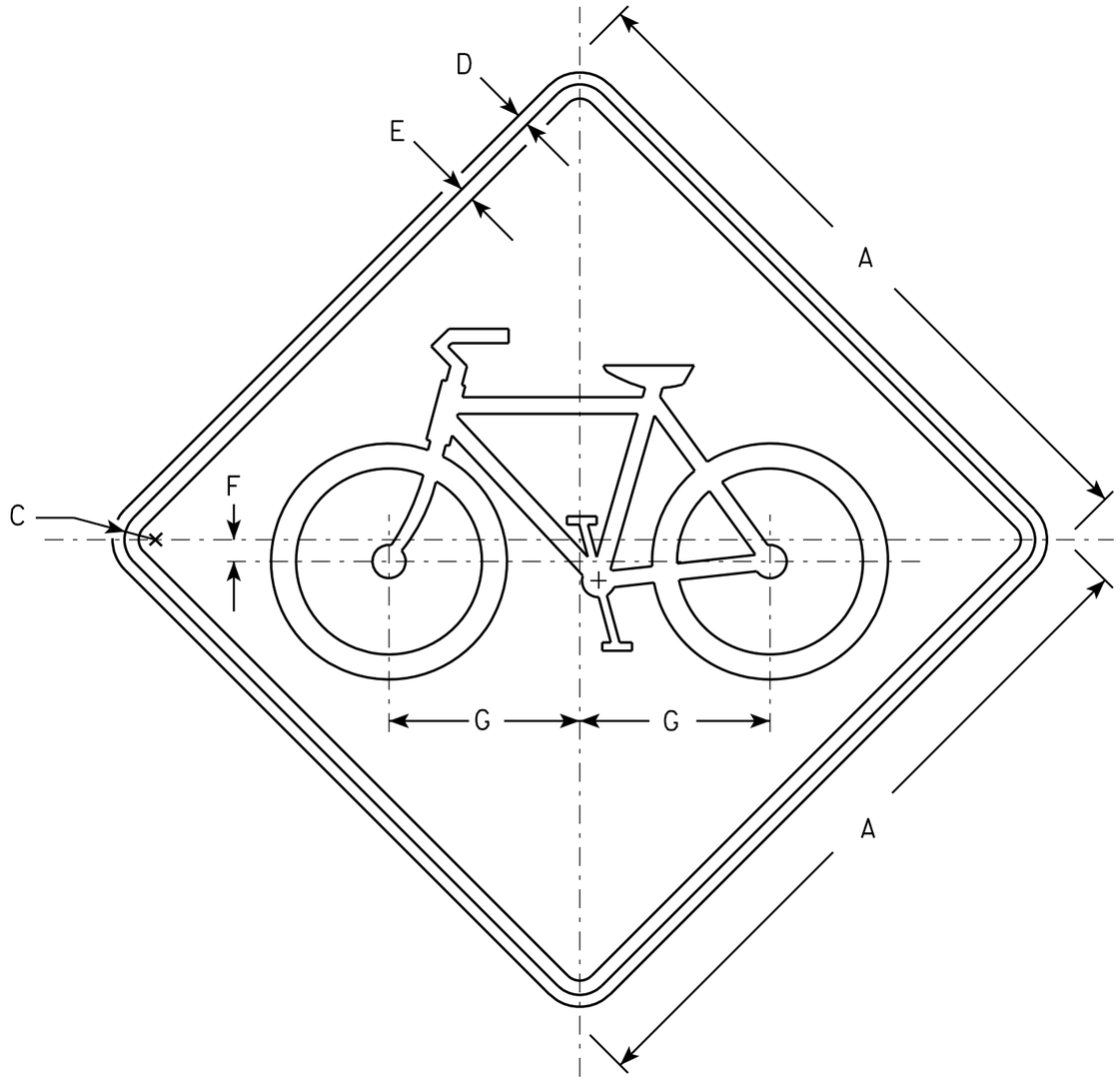
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 487 E



W11-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/4	1/2	3/4	6 5/8																				4.0
2S	30		1 3/8	1/2	5/8	1	8 1/2																				6.25
2M	36		1 5/8	5/8	3/4	1 1/4	10																				9.0
3	36		1 5/8	5/8	3/4	1 1/4	10																				9.0
4	48		2 1/4	3/4	1	1 5/8	13 3/8																				16.0
5																											16.0

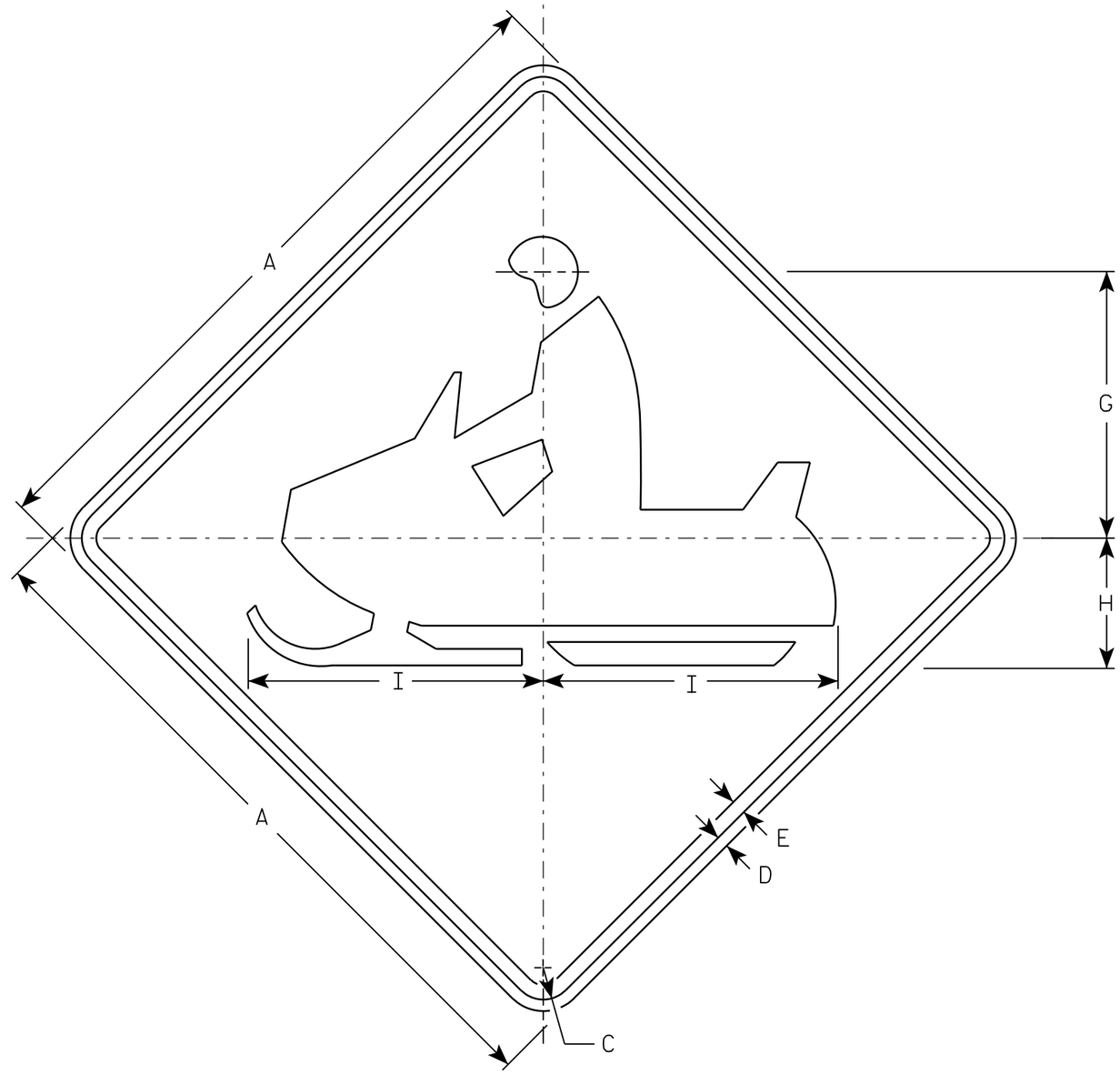
STANDARD SIGN
W11-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/21/10 PLATE NO. W11-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 488 | E



W11-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		9 1/2	4 1/2	10 1/4																		4.0
2S	30		1 3/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
2M	30		1 3/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
3	36		1 5/8	5/8	3/4		14 1/8	6 3/4	15 1/4																		9.0
4	48		2 1/4	3/4	1		19	9	20 1/2																		16.0
5																											

STANDARD SIGN
W11-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-6.8

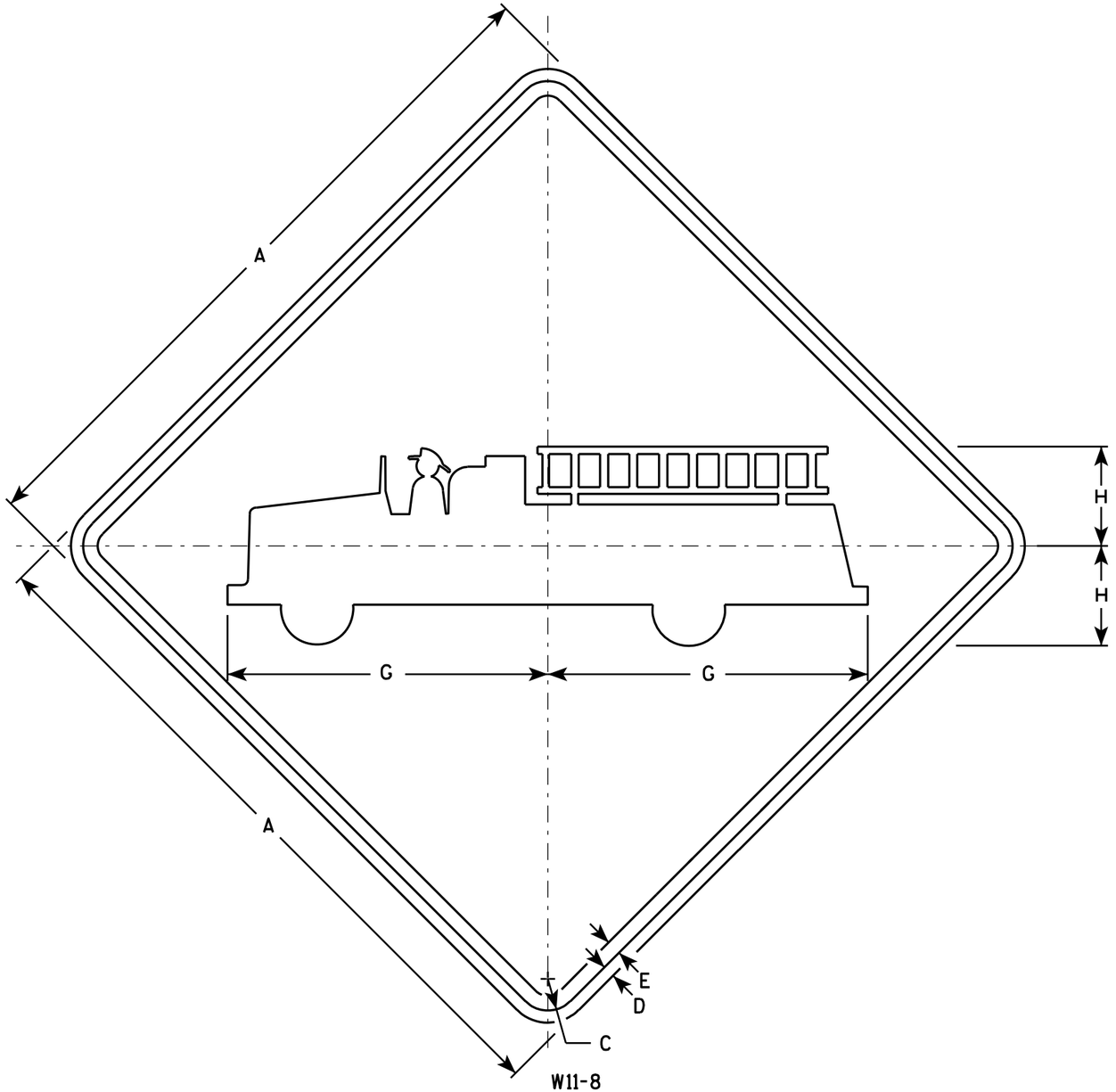
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 489 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W116.DGN PLOT DATE : 13-MAR-2013 12:57 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.954276:1.000000

WISDOT/CADDS SHEET 42

7

7



W11-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2 1/4	3/4	1		22	7																			16.0
5																											

STANDARD SIGN
W11-8

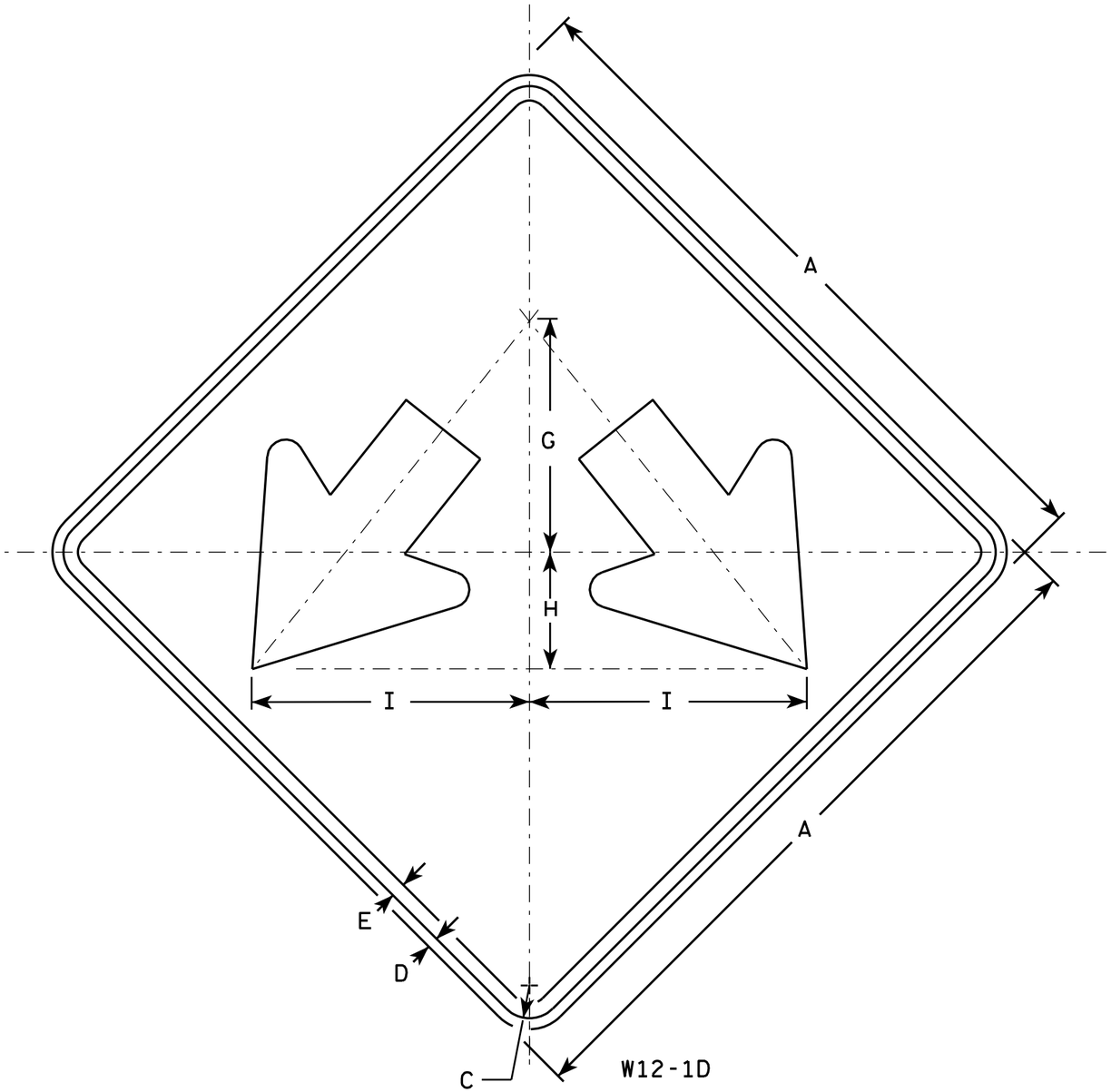
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-8.7

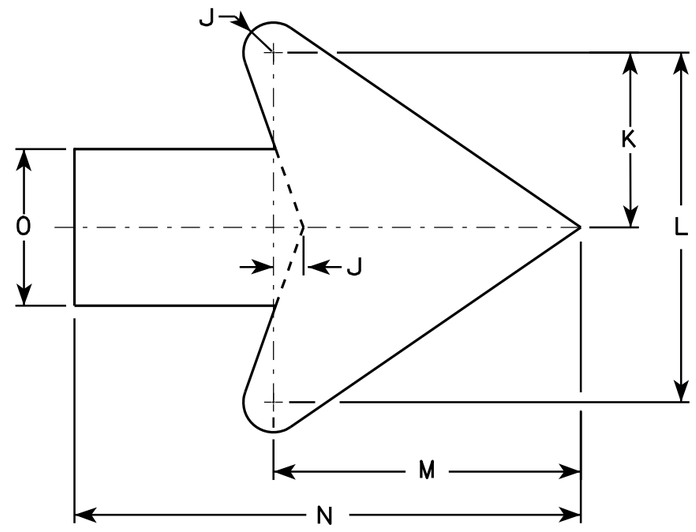
PROJECT NO:

SHEET NO: 490 E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

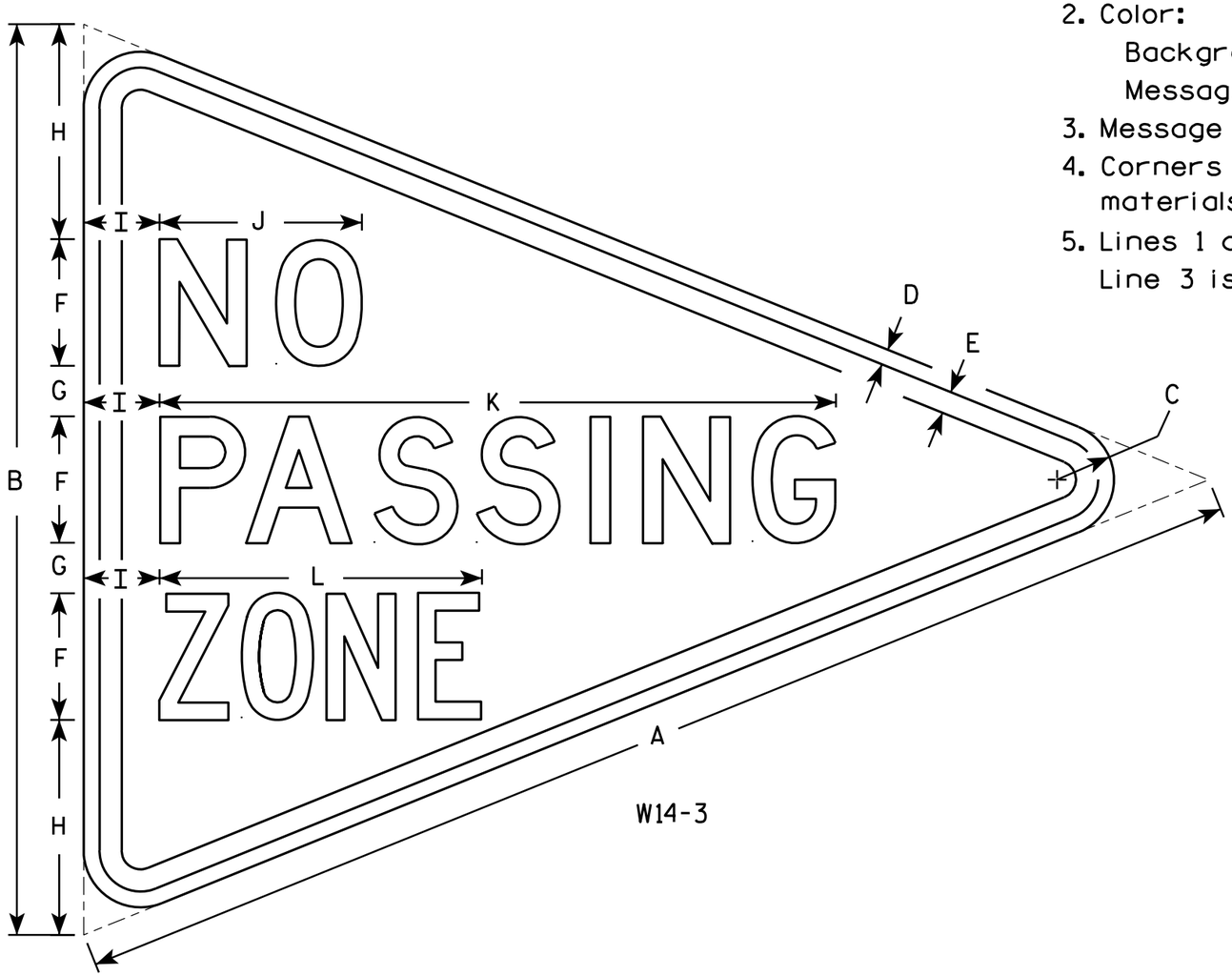
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 491	E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

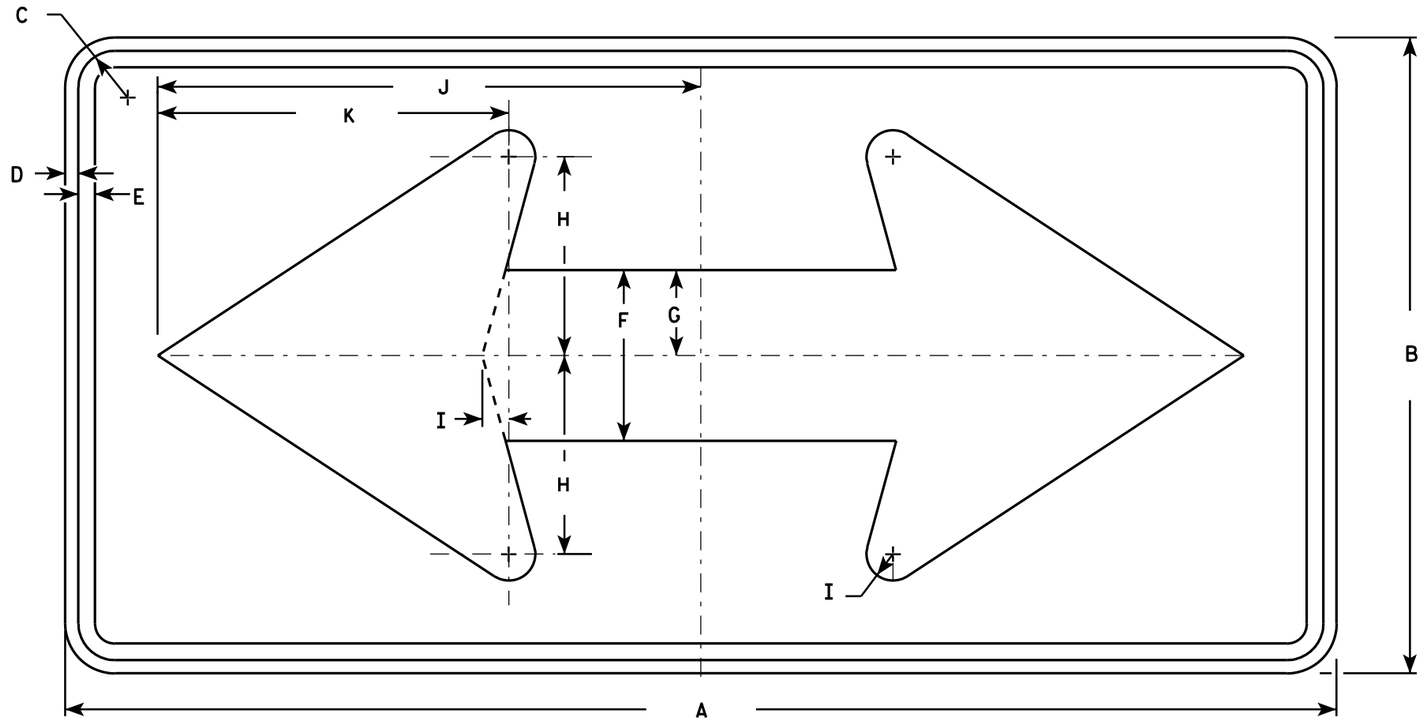
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 492	E



W1-7

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

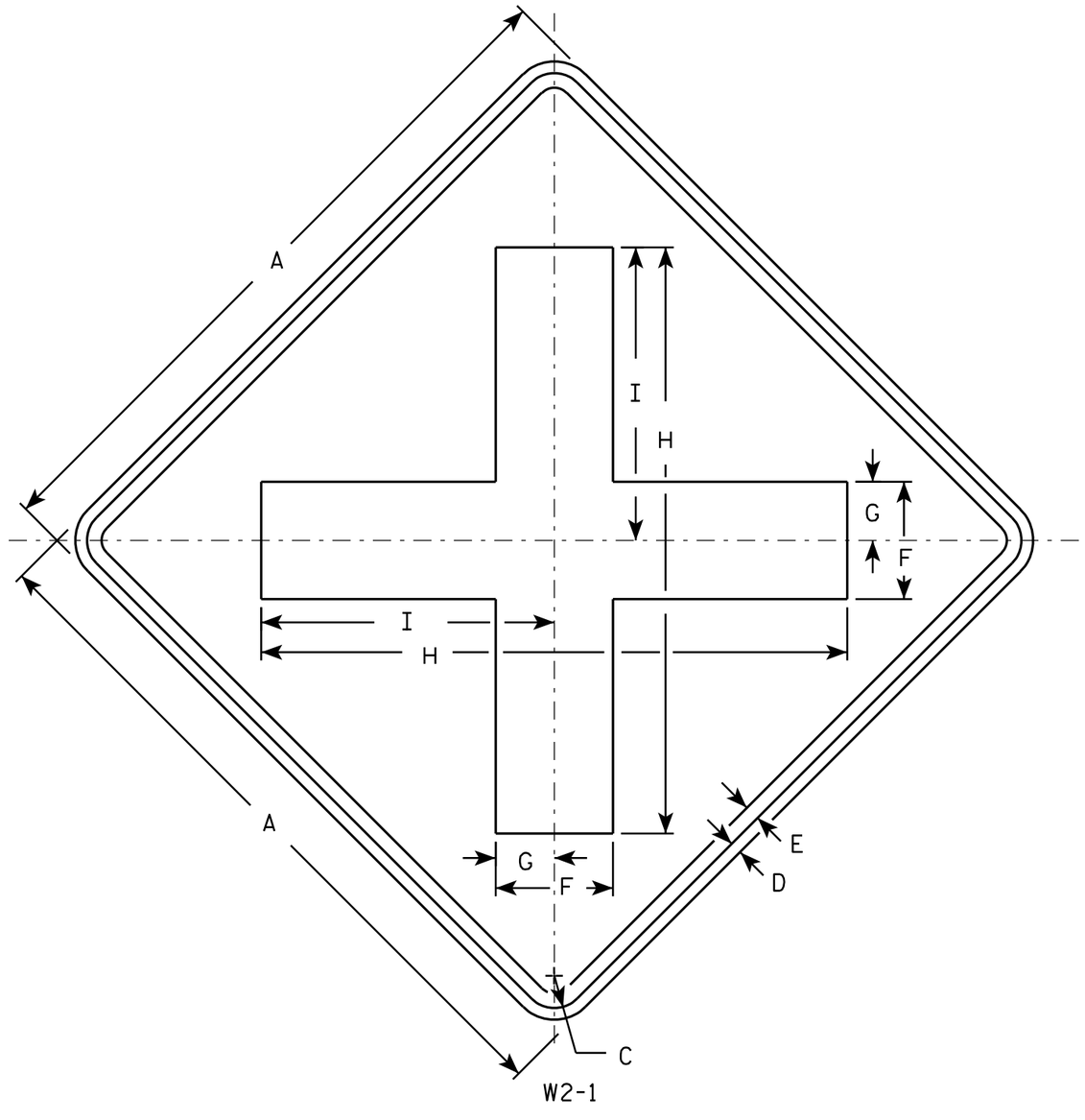
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 493 | E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2	20	10																		4.0
2S	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3	30	15																		9.0
4	48		2 1/4	3/4	1	8	4	40	20																		16.0
5																											

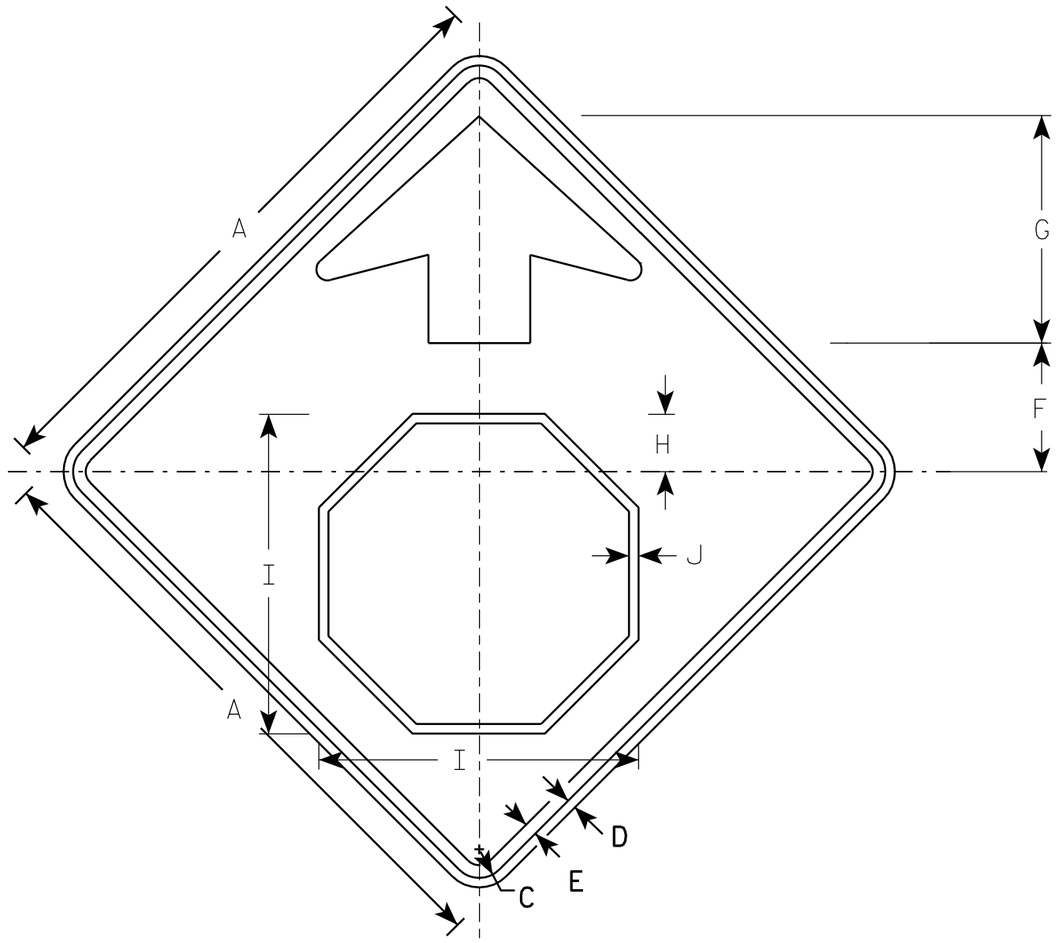
STANDARD SIGN
W2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-1.9

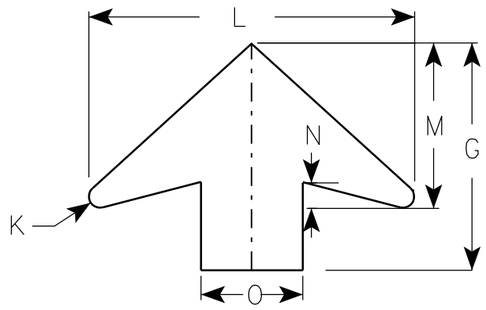
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 494	E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

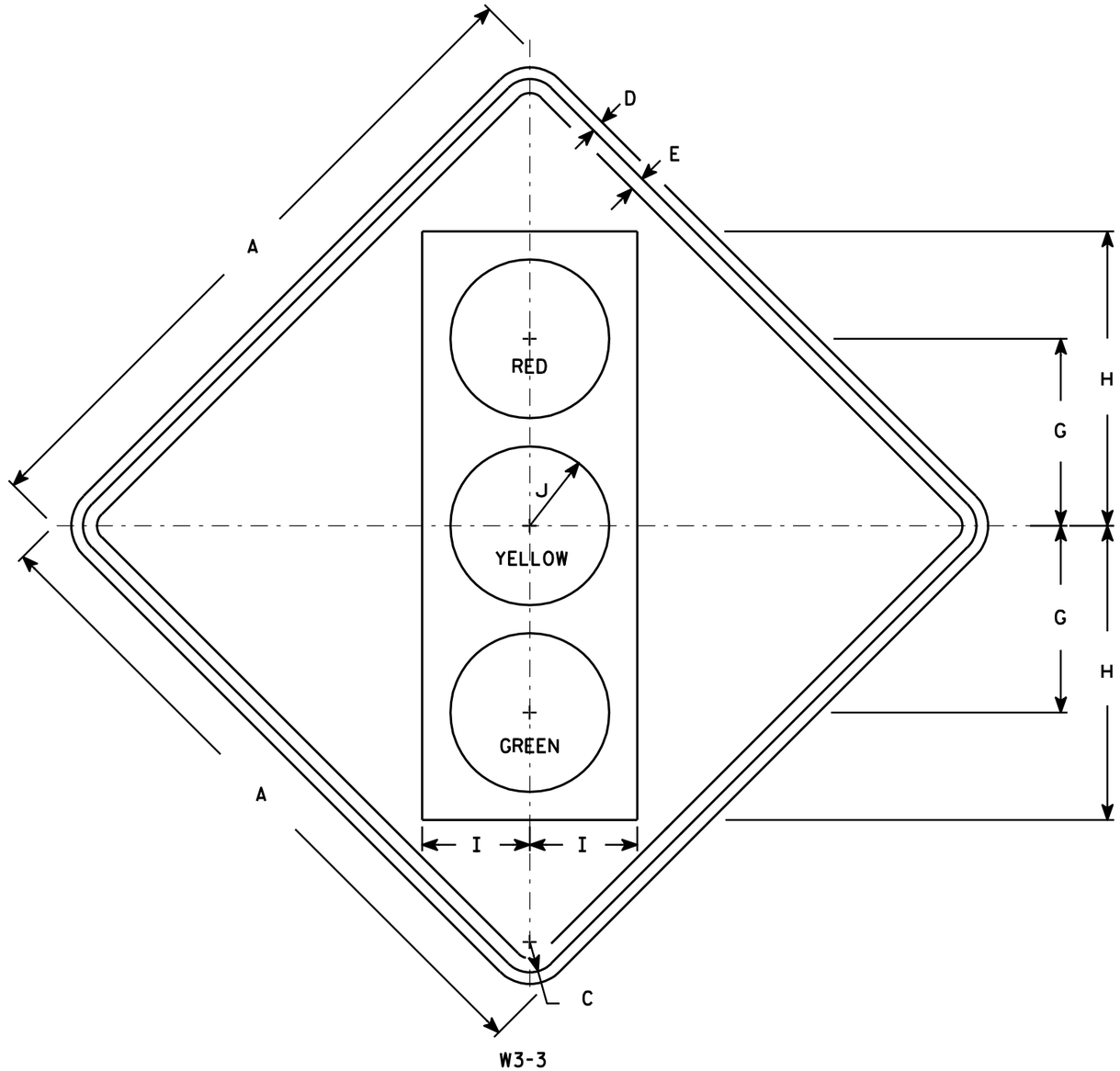
SHEET NO: 495 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W31.DGN PLOT DATE : 07-JUN-2010 12:59 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

7

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

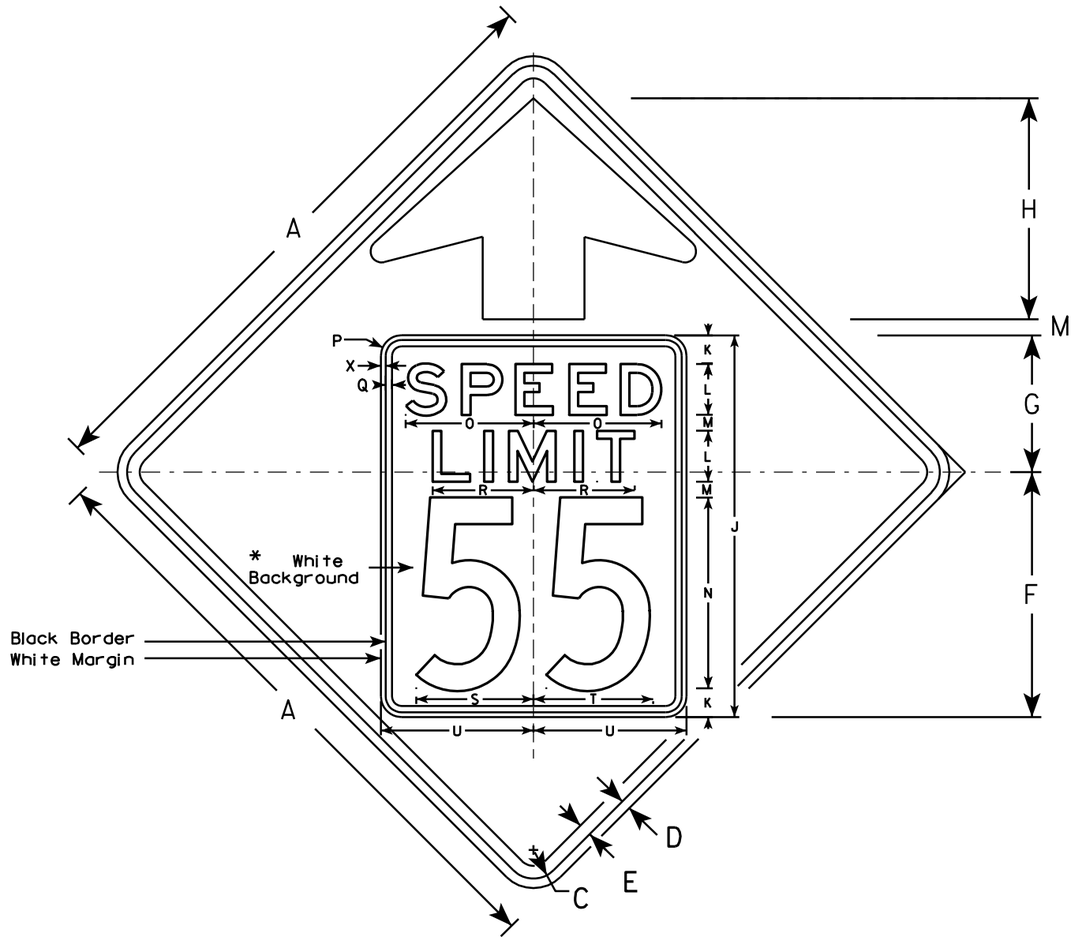
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 496 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W33.DGN PLOT DATE : 07-JUN-2010 13:07 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 7.448805:1.000000

WISDOT/CADDS SHEET 42

7

7

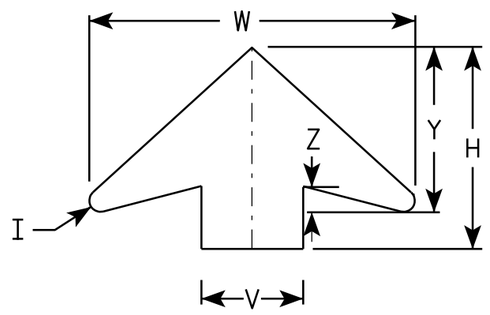


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

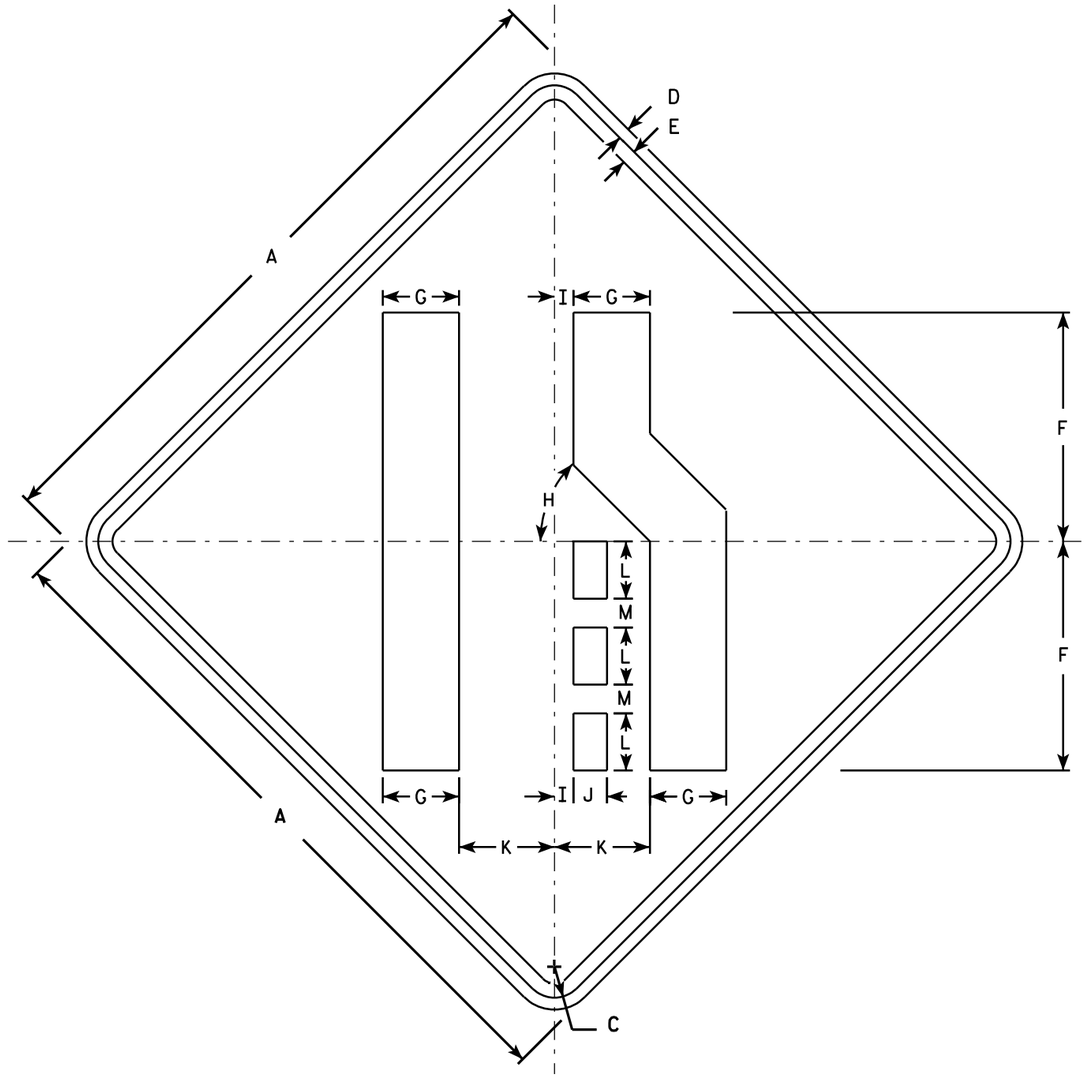
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 497 E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

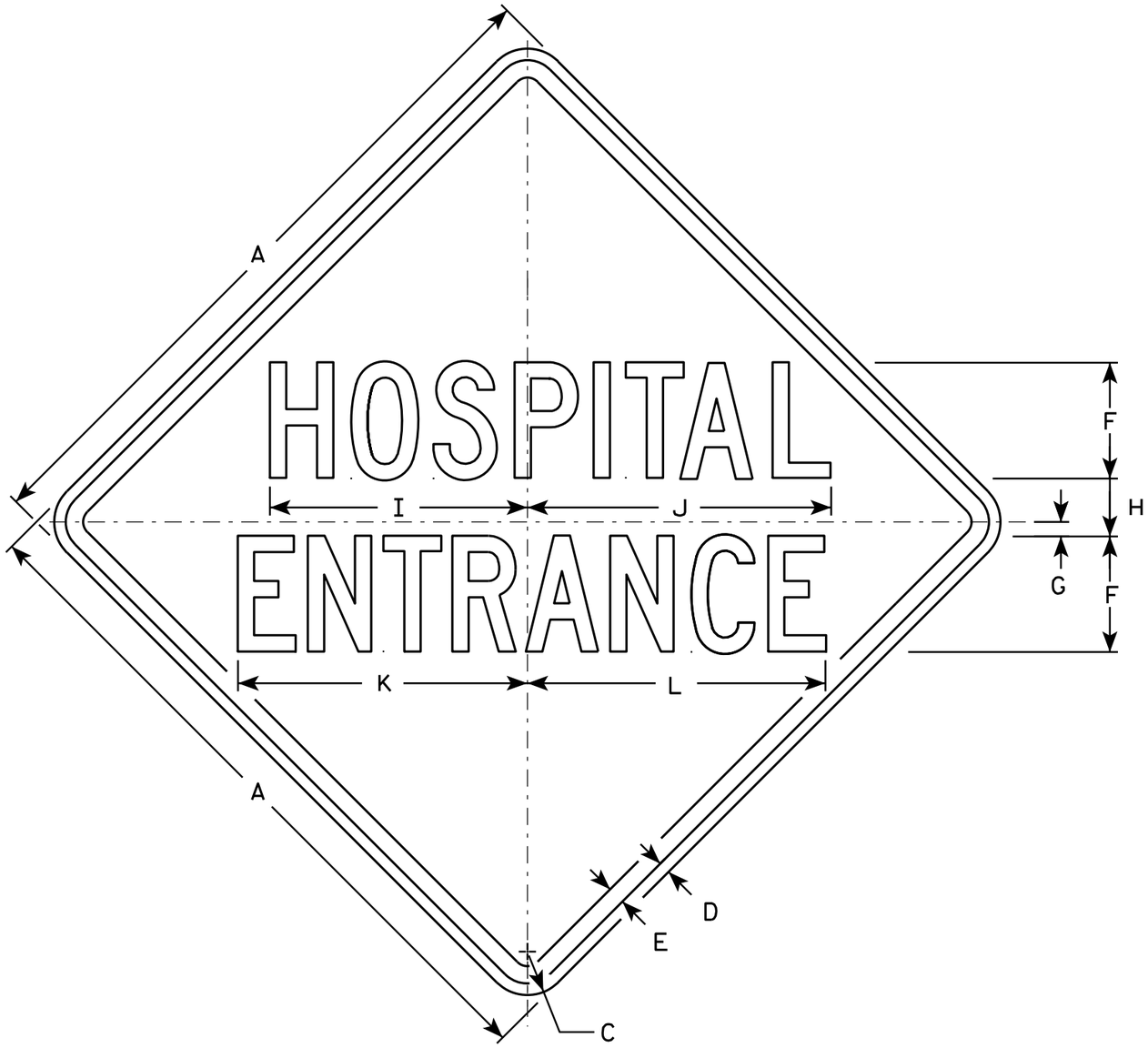
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 498 E



W54-59

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 3/8	1/2	5/8	5	5/8	2 1/2	11 1/8	13 1/8	12 1/2	12 7/8															6.25
2M	36		1 5/8	5/8	3/4	6	3/4	3	13 3/8	15 3/4	15	15 3/8															9.00
3	36		1 5/8	5/8	3/4	6	3/4	3	13 3/8	15 3/4	15	15 3/8															9.00
4																											
5																											

STANDARD SIGN
W54-59

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W54-59.8

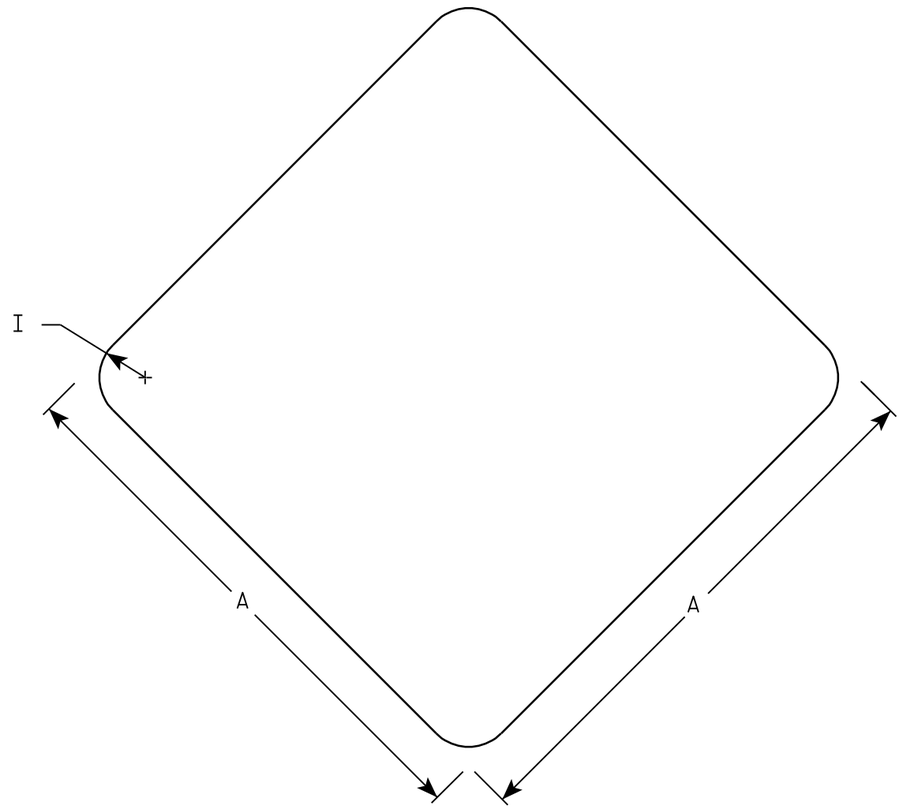
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 499	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W5459.DGN PLOT DATE : 13-MAR-2013 14:06 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.954276:1.000000

WISDOT/CADDS SHEET 42

7

7



W5-54

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

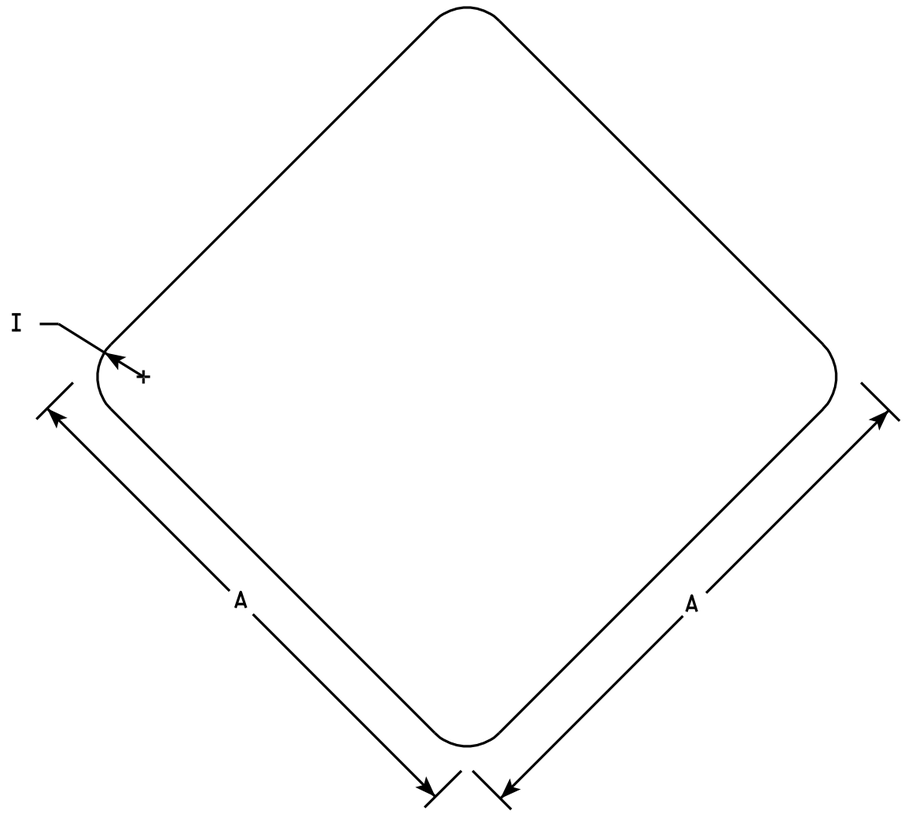
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 500	E



W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

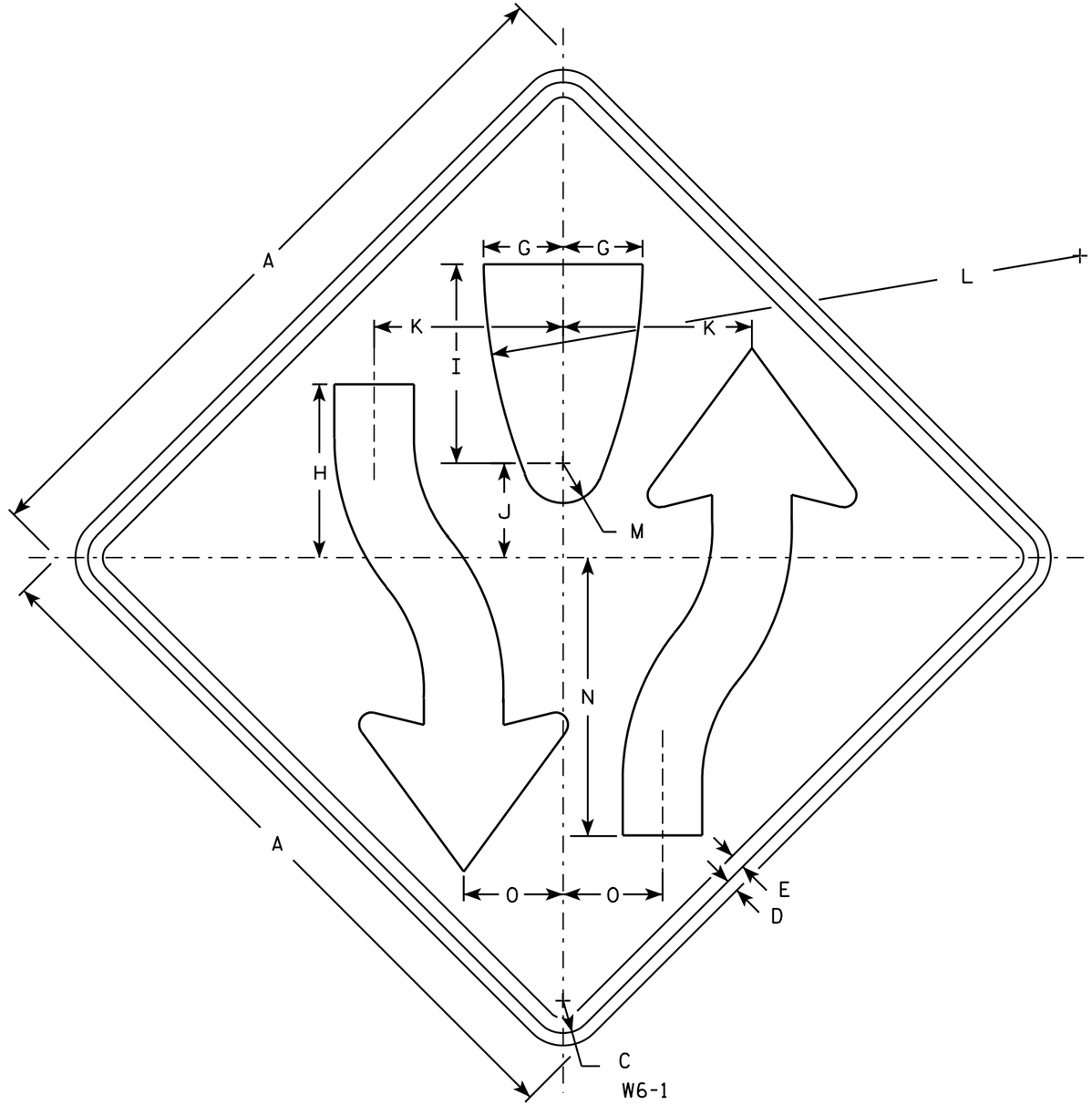
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

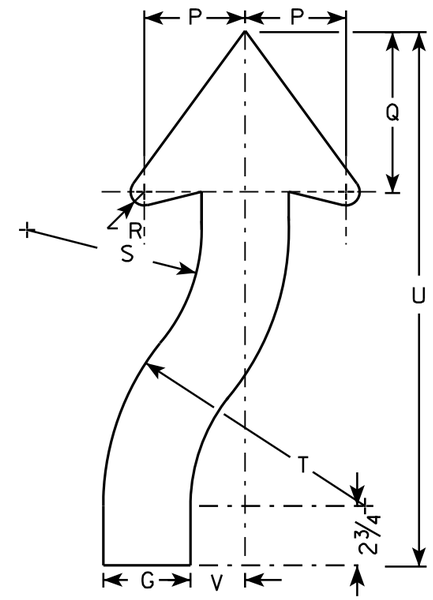
DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 501	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

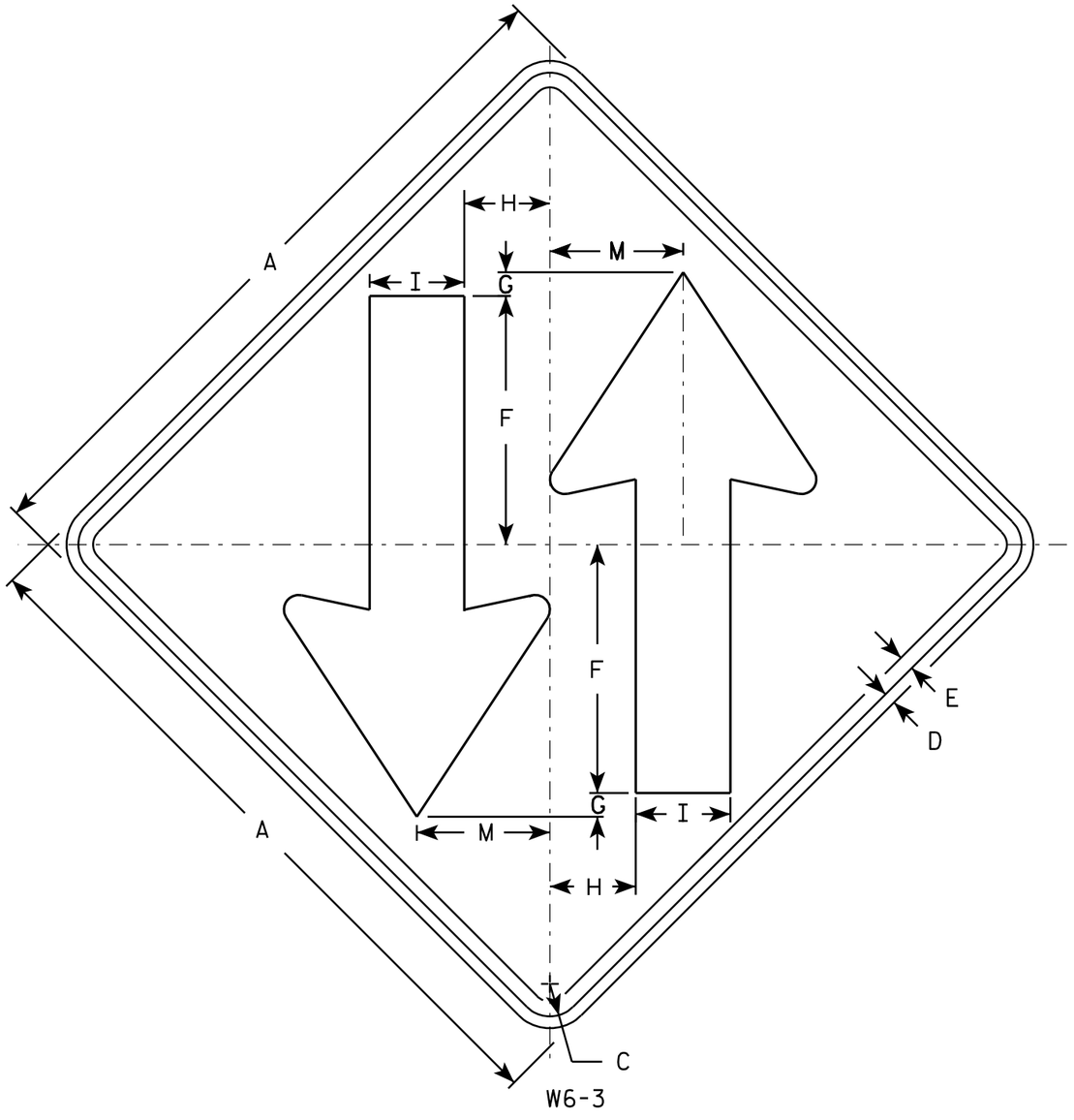
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 502	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000

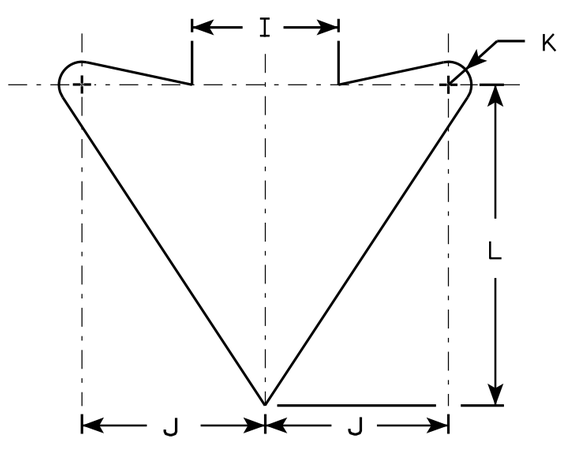
WISDOT/CADDS SHEET 42



W6-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25
2S	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2M	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
3																											
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

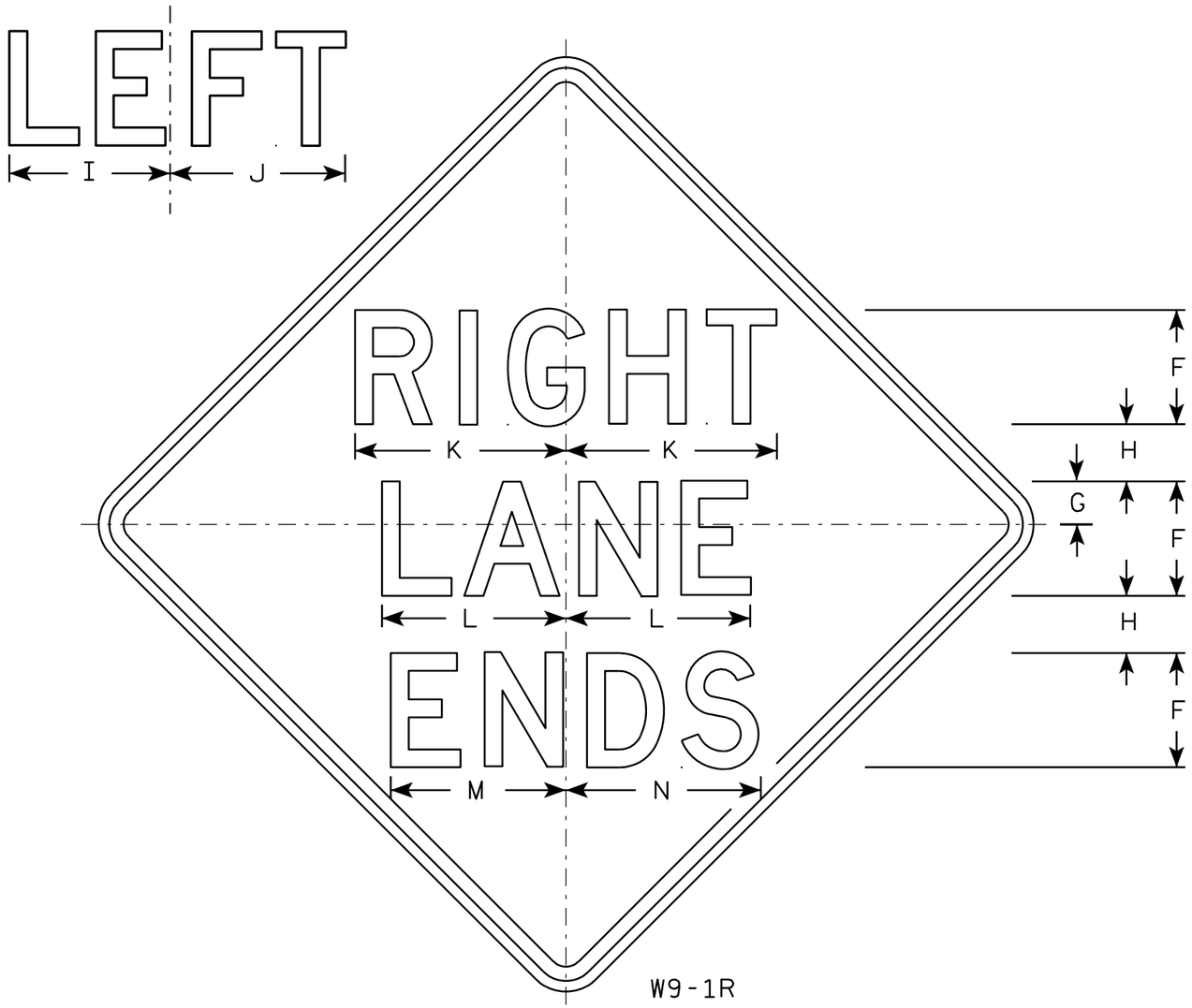
STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-3.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 503	E



W9-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W9-1L same as W9-1R except the word Left replaces Right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25
2S	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2M	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
4	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

SHEET NO: 504 E

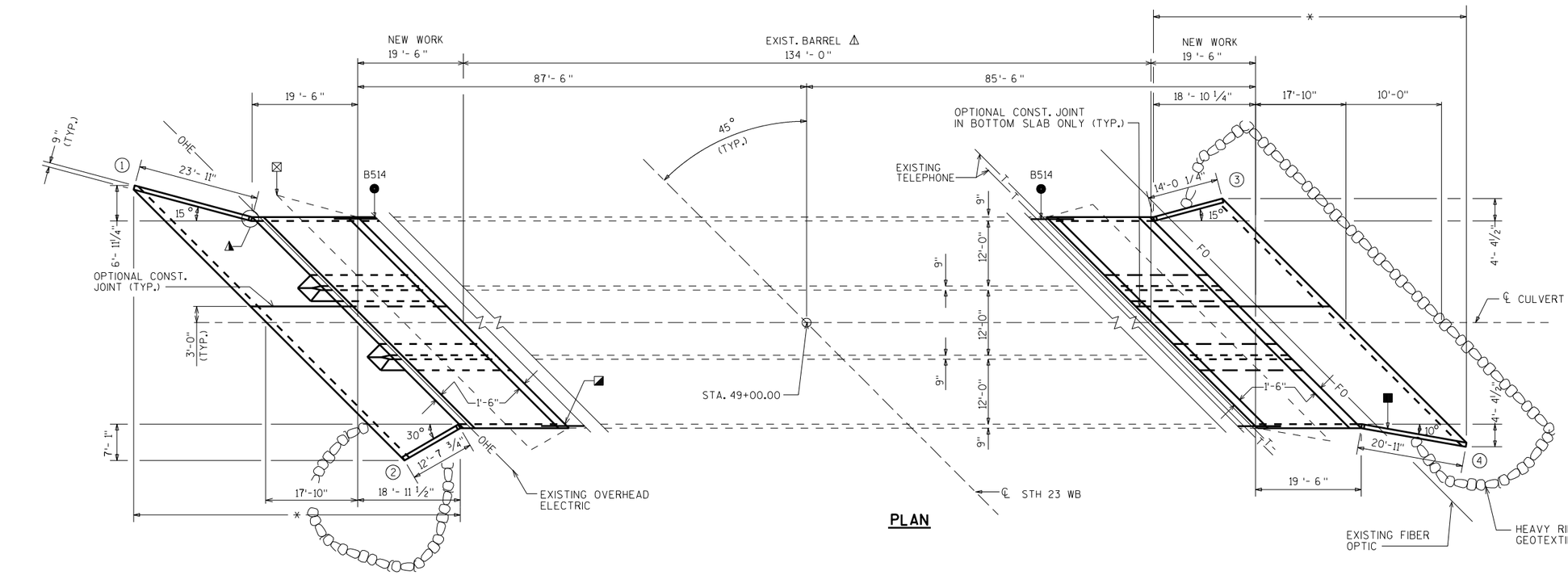
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W91.DGN PLOT DATE : 18-MAR-2013 11:42 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

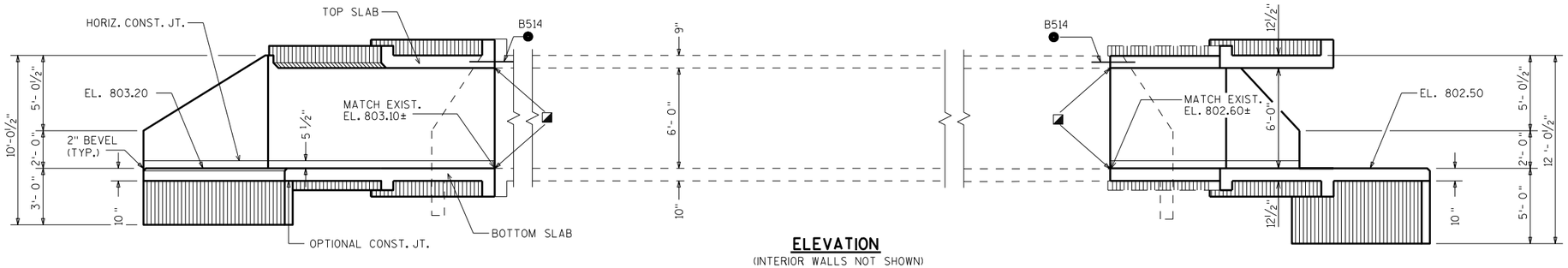
7

7

NOTE: STRUCTURE BACKFILL REQUIRED BEHIND ALL WING WALLS.



PLAN



ELEVATION
(INTERIOR WALLS NOT SHOWN)

INLET **OUTLET**

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF=1.05
OPERATING RATING FACTOR: RF=1.35
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 255 (KIPS)

EARTHLOAD: DESIGNED FOR 10.0 FT. OF FILL.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY, GRADE A-FA ——— f'_c = 3500 P.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT — f_y = 60000 P.S.I.

TRAFFIC VOLUME

STH 23 WB
A.D.T. = 20930 (2030)
R.D.S. = 60 M.P.H.

TOTAL ESTIMATED QUANTITIES

BID ITEMS

203.0200	REMOVING OLD STRUCTURE STA. 49+00.00	1	LS
206.2000	EXCAVATION FOR STRUCTURES CULVERTS B-20-49	1	LS
210.0100	BACKFILL STRUCTURE	400	CY
502.6105	MASONRY ANCHORS TYPE S 5/8-INCH	158	EACH
504.0100	CONCRETE MASONRY CULVERTS	242	CY
505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	34795	LB
505.0610	BAR STEEL REINFORCEMENT HS COATED CULVERTS	1710	LB
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	40	SY
606.0300	RIPRAP HEAVY	80	CY
645.0120	GEOTEXTILE FABRIC TYPE HR	120	SY

NON-BID ITEMS

FILLER	3/4"	SIZE

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE TOP OF THE BOX WITHIN THE LENGTH OF THE CULVERT.

THE CONCRETE IN THE CUTOFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

PLACE A 18" (MIN.) WIDE SHEET OF 'RUBBERIZED MEMBRANE WATERPROOFING' ON TOP SLAB OVER ALL CONSTRUCTION JOINTS AND EXTEND DOWN TO BOTTOM OF OUTSIDE WALLS.

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DEVELOPMENT SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS ON CHAPTER 36 STANDARDS OF THE CURRENT WISC. DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".

STATE PROJECT NUMBER

1431-02-74

⚠ SEE CORNER DETAILS (SHT 4)
■ NAME PLATE LOCATION (SEE SHT 4)

⚠ EXIST. BARREL TO REMAIN IN PLACE
* BUILD APRON AND END OF BOX LEVEL
◪ INSIDE WALLS TO MATCH EXISTING (TYP.)

⊠ REMOVE EXISTING APRON AND WINGS. EXTEND EXISTING BAR STEEL REINFORCEMENT IN BOTTOM SLAB 2'-0" INTO NEW WORK. (TYP. BOTH SIDES)

◯ INDICATES WING NUMBER

● CONCRETE MASONRY ANCHORS, TYPE S (EPOXY ANCHORED), 5/8-INCH , EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS AND TOP SLAB).

LIST OF DRAWINGS

1. LAYOUT
2. EXTENSION DETAILS
3. APRON DETAILS
4. DETAILS

STRUCTURE DESIGN CONTACT:
NICK RICE (608) 266-5092
DAVE KIEKBUSCH (608) 266-5084

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES
ACCEPTED William C. Dreher DJK 5/2/13
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-20-49

STH 23 WB OVER SILVER CREEK

COUNTY: FOND DU LAC — TOWN/~~CITY/VILLAGE~~: RIPON
DESIGN SPEC.: AASHTO LRFD DESIGN SPEC.
DESIGNED BY: NAR — DESIGN CK'D.: DFD — DRAWN BY: NAR/RIES — PLANS CK'D.: DFD

LAYOUT — SHEET 1 OF 4 — 505

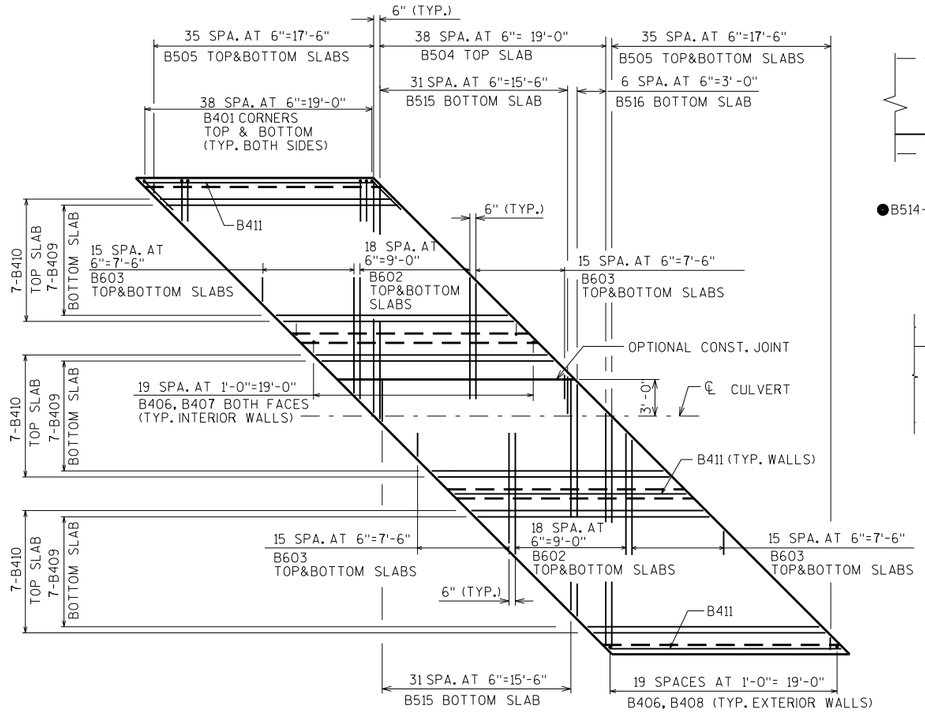
I.D. 1431-02-03 DATE: JAN. 2013

SCALE = 4

8 8

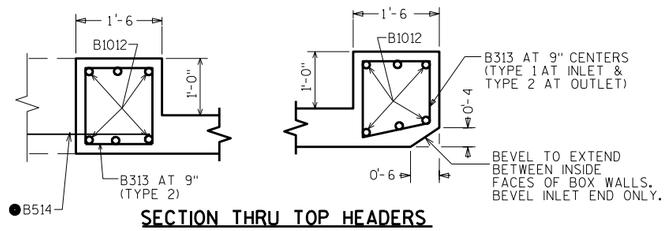
STATE PROJECT NUMBER

1431-02-74

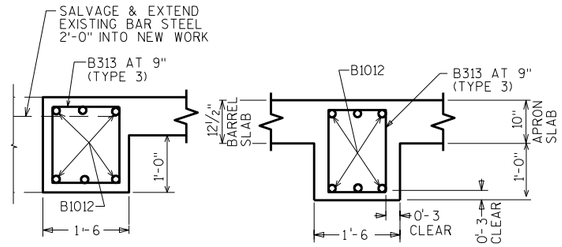


PLAN

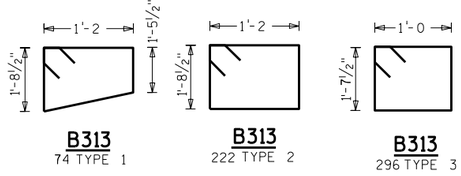
HEADER NOT SHOWN. SEE SHEET 4 FOR CORNER DETAILS
TYP. INLET & OUTLET EXTENSION



SECTION THRU TOP HEADERS



SECTION THRU BOTTOM HEADERS



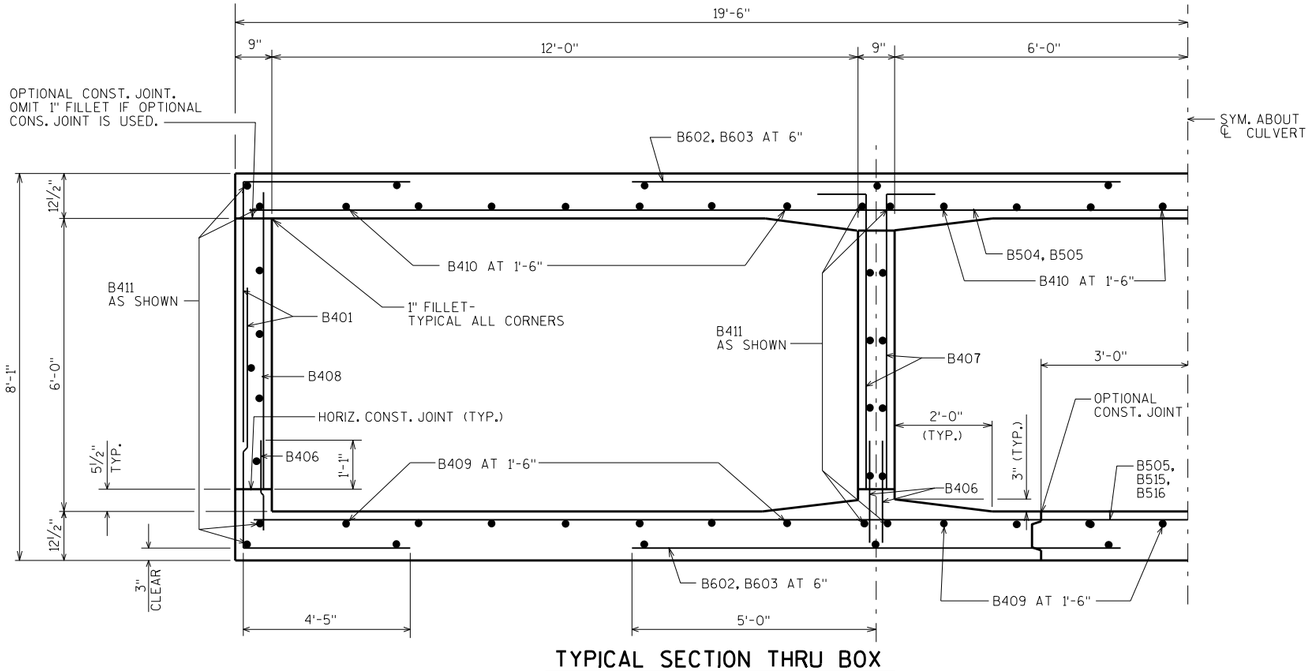
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401		312	9-0	X		CORNERS
B602		152	10-0			TOP&BOTTOM SLAB-TRANS.
B603		256	5-9		⚠	TOP&BOTTOM SLAB-TRANS.
B504		78	19-0			TOP SLAB-TRANS.
B505		288	10-0		⚠	TOP&BOTTOM SLAB-TRANS.
B406		240	2-4			WALLS-DOWELS-VERT.
B407		160	7-4	X		WALLS-INTERIOR-VERT.
B408		80	6-5			WALLS-EXTERIOR-VERT.
B409		42	19-0			BOTTOM SLAB-LONGIT.
B410		42	19-0			TOP SLAB-LONGIT.
B411		116	19-0			TOP&BOTTOM SLAB&WALLS-LONGIT.
B1012		96	31-5			HEADER-HORIZ.
B313		592	5-11	X		HEADER-STIRRUP
●B514		158	2-6			MASONRY ANCHORS
B515		128	10-9		⚠	BOTTOM SLAB-TRANS.
B516		14	19-0			BOTTOM SLAB-TRANS.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

NOTE: BILL OF BARS NUMBER REQUIRED INCLUDES BOTH THE INLET AND THE OUTLET EXTENSIONS.



TYPICAL SECTION THRU BOX

ALL LONGITUDINAL BARS NOT IDENTIFIED ARE B411 BARS AS SHOWN

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
B603	16 SERIES OF 16	2'-0" TO 9'-6"
B505	8 SERIES OF 36	1'-3" TO 18'-9"
B515	4 SERIES OF 32	3'-0" TO 18'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY.

● CONCRETE MASONRY ANCHORS, TYPE S (EPOXY ANCHORED), 5/8-INCH , EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS AND TOP SLAB).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-49

DRAWN BY NAR/RIES | PLANS CK'D. DFD

EXTENSION DETAILS

SHEET 2

506

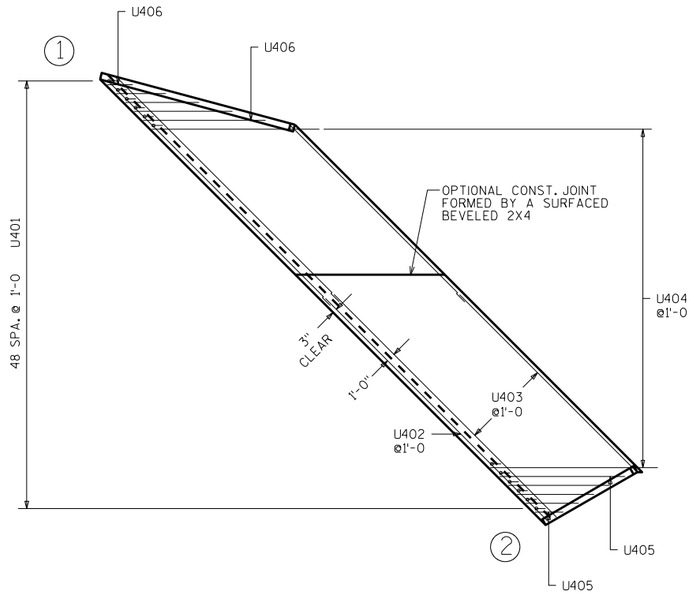
8

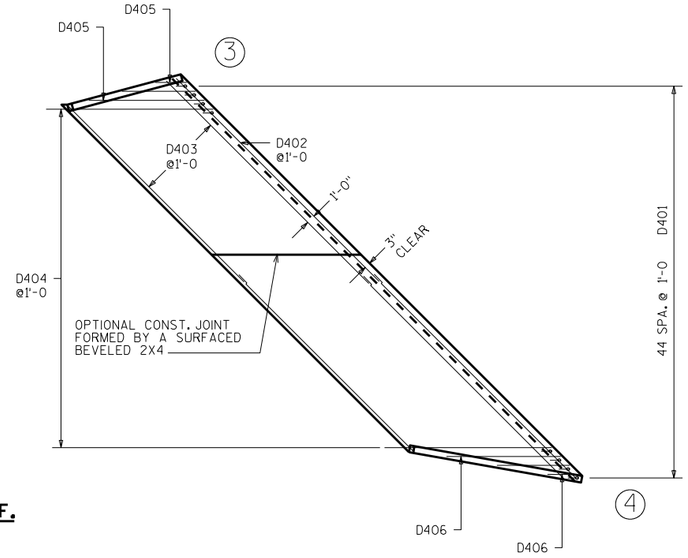
8

SCALE = 4

STATE PROJECT NUMBER

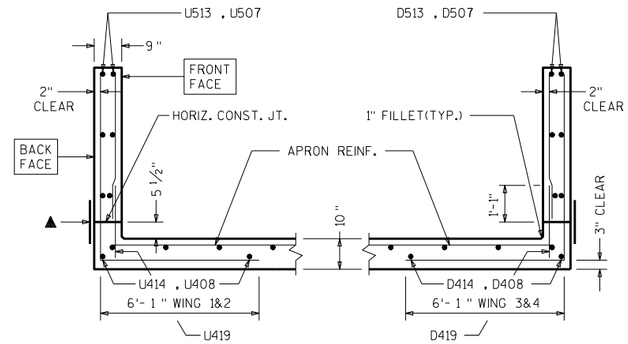
1431-02-74





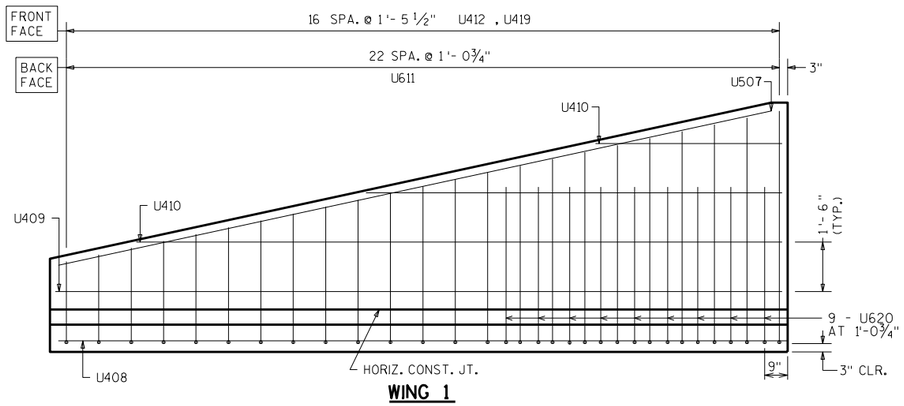
APRON REINF.

▲ 18" RUBBERIZED MEMBRANE WATER-PROOFING. PLACE ALONG HORIZ. CONST. JT. FOR ENTIRE WING LENGTH (TYP.).



SECTION THRU WINGS

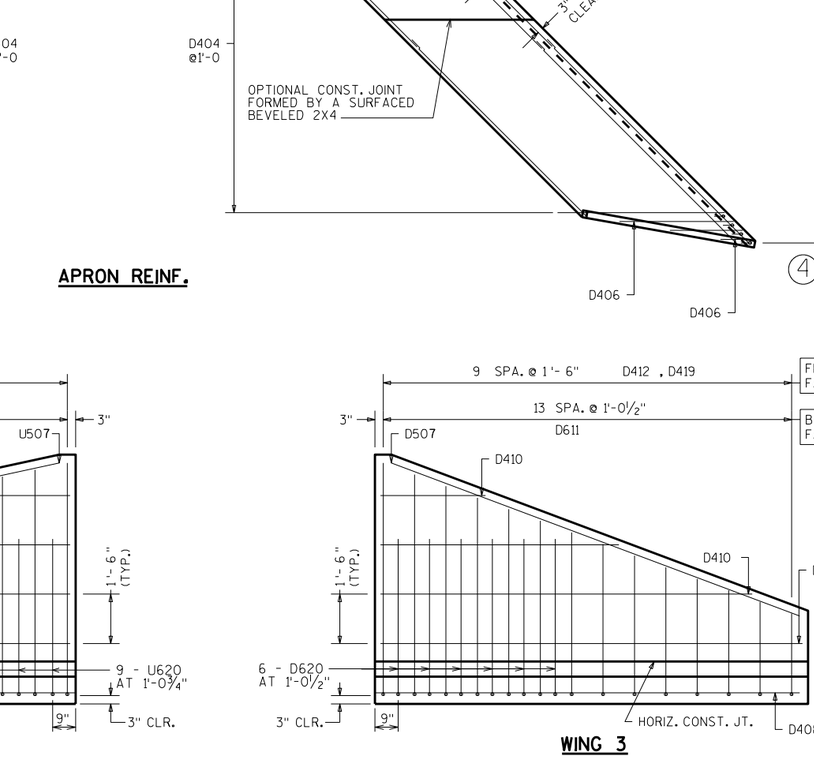
AT RIGHT ANGLES TO WING WALLS



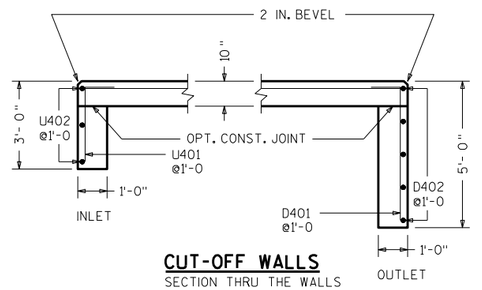
WING 1

WING 3

WING 2

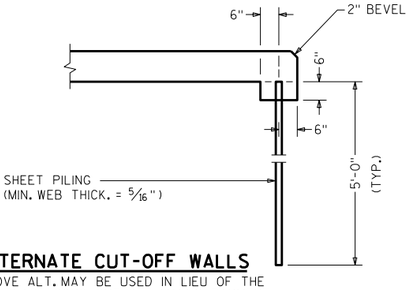


WING 4



CUT-OFF WALLS

SECTION THRU THE WALLS



ALTERNATE CUT-OFF WALLS

THE ABOVE ALT. MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONC. CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONC. CUT-OFF WALLS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-49

DRAWN BY RIES | PLANS CK'D. DFD

APRON DETAILS

SHEET 3

507

SCALE = 4

8

8

STATE PROJECT NUMBER

1431-02-74

BILL OF BARS

THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.
THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF AN L - SHAPED BAR.

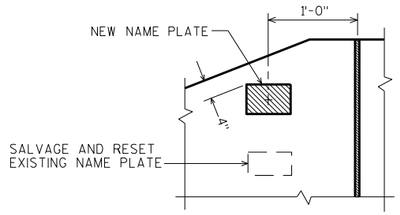
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
U401		49	3 - 6	1 - 0		INLET APRON AND CUTOFF WALL
U402		6	36 - 4			INLET APRON AND CUTOFF WALL
U403		24	32 - 0		*	" APRON
U404		39	19 - 9			" APRON
U405		5	9 - 9		*	" APRON
U406		5	10 - 0		*	" APRON
U507		2	23 - 9			WING 1 -HORIZONTAL - BOTH FACES
U408		2	23 - 7			WING "-HORIZONTAL -APRON BOTT. SLAB
U409		2	23 - 7			WING "-HORIZONTAL - BOTH FACES
U410		6	14 - 1		*	WING "-HORIZONTAL - BOTH FACES
U611	X	23	10 - 10	6 - 1	*	WING "-VERTICAL - BACK FACE
U412		17	3 - 11		*	WING "-VERTICAL - FRONT FACE
U513		2	13 - 0			WING 2 -HORIZONTAL - BOTH FACES
U414		2	12 - 3			WING "-HORIZONTAL -APRON BOTT. SLAB
U415		2	12 - 3			WING "-HORIZONTAL - BOTH FACES
U416		6	7 - 5		*	WING "-HORIZONTAL - BOTH FACES
U617	X	13	10 - 10	6 - 1	*	WING "-VERTICAL - BACK FACE
U418		9	4 - 0		*	WING "-VERTICAL - FRONT FACE
U419	X	26	2 - 2			WINGS 1 AND 2 - DOWELS - FRONT FACE
U620	X	9	11 - 0	6 - 1		WING 1-VERTICAL-BACK FACE
U621	X	5	11 - 0	6 - 1		WING 2-VERTICAL-BACK FACE
D401		45	5 - 6	1 - 0		OUTLET APRON AND CUTOFF WALL
D402		10	32 - 8			OUTLET APRON AND CUTOFF WALL
D403		24	30 - 3		*	" APRON
D404		39	19 - 9			" APRON
D405		3	9 - 1		*	" APRON
D406		3	9 - 6		*	" APRON
D507		2	14 - 3			WING 3 -HORIZONTAL - BOTH FACES
D408		2	13 - 8			WING "-HORIZONTAL -APRON BOTT. SLAB
D409		2	13 - 8			WING "-HORIZONTAL - BOTH FACES
D410		6	8 - 3		*	WING "-HORIZONTAL - BOTH FACES
D611	X	14	10 - 10	6 - 1	*	WING "-VERTICAL - BACK FACE
D412		10	4 - 0		*	WING "-VERTICAL - FRONT FACE
D513		2	20 - 10			WING 4 -HORIZONTAL - BOTH FACES
D414		2	20 - 7			WING "-HORIZONTAL -APRON BOTT. SLAB
D415		2	20 - 7			WING "-HORIZONTAL - BOTH FACES
D416		6	12 - 3		*	WING "-HORIZONTAL - BOTH FACES
D617	X	21	10 - 10	6 - 1	*	WING "-VERTICAL - BACK FACE
D418		15	4 - 0		*	WING "-VERTICAL - FRONT FACE
D419	X	25	2 - 2			WINGS 3 AND 4 - DOWELS - FRONT FACE
D620	X	6	11 - 0	6 - 1		WING 3-VERTICAL-BACK FACE
D621	X	9	11 - 0	6 - 1		WING 4-VERTICAL-BACK FACE

* LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

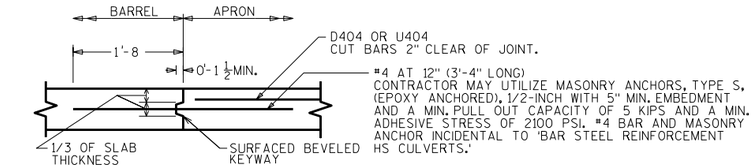
--- BUNDLE AND TAG EACH SERIES SEPARATELY

BAR MARK	NO. REQ'D.	LENGTHS FOR EACH SERIES
U403	2 SERIES OF 12	27 - 11 TO 36 - 0
U405	1 SERIES OF 5	4 - 3 TO 15 - 2
U406	1 SERIES OF 5	4 - 6 TO 15 - 5
U410	2 SERIES OF 3	7 - 1 TO 21 - 0
U611	1 SERIES OF 23	8 - 4 TO 13 - 4
U412	1 SERIES OF 17	1 - 5 TO 6 - 5
U416	2 SERIES OF 3	3 - 9 TO 11 - 0
U617	1 SERIES OF 13	8 - 4 TO 13 - 4
U418	1 SERIES OF 9	1 - 6 TO 6 - 5
D403	2 SERIES OF 12	27 - 11 TO 32 - 7
D405	1 SERIES OF 3	4 - 4 TO 13 - 10
D406	1 SERIES OF 3	4 - 10 TO 14 - 2
D410	2 SERIES OF 3	4 - 2 TO 12 - 3
D611	1 SERIES OF 14	8 - 4 TO 13 - 4
D412	1 SERIES OF 10	1 - 5 TO 6 - 5
D416	2 SERIES OF 3	6 - 2 TO 18 - 4
D617	1 SERIES OF 21	8 - 4 TO 13 - 4
D418	1 SERIES OF 15	1 - 5 TO 6 - 5



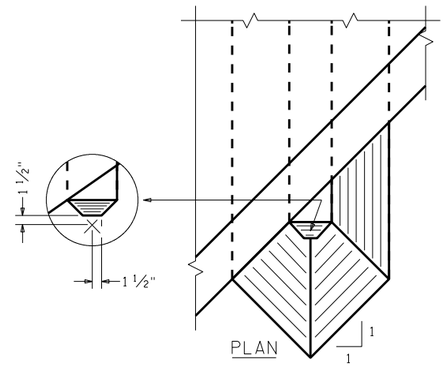
NAME PLATE LOCATION

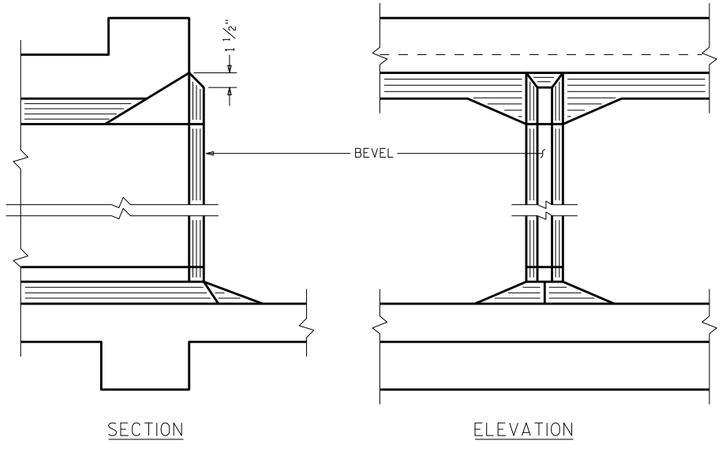
WING 4



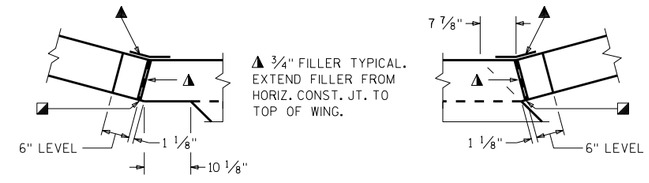
OPTIONAL CONSTRUCTION JOINT

2" DEEP SAW CUT WITHIN 12 HOURS AFTER POURING MAY BE USED IN LIEU OF CONST. JT. IN BOTTOM SLAB.





INLET NOSE DETAILS



CORNER DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-49

DRAWN BY NAR/RIES | PLANS CK'D. DFD

DETAILS

SHEET 4

508

SCALE = 4

8

8

STATE PROJECT NUMBER
1430-00-76

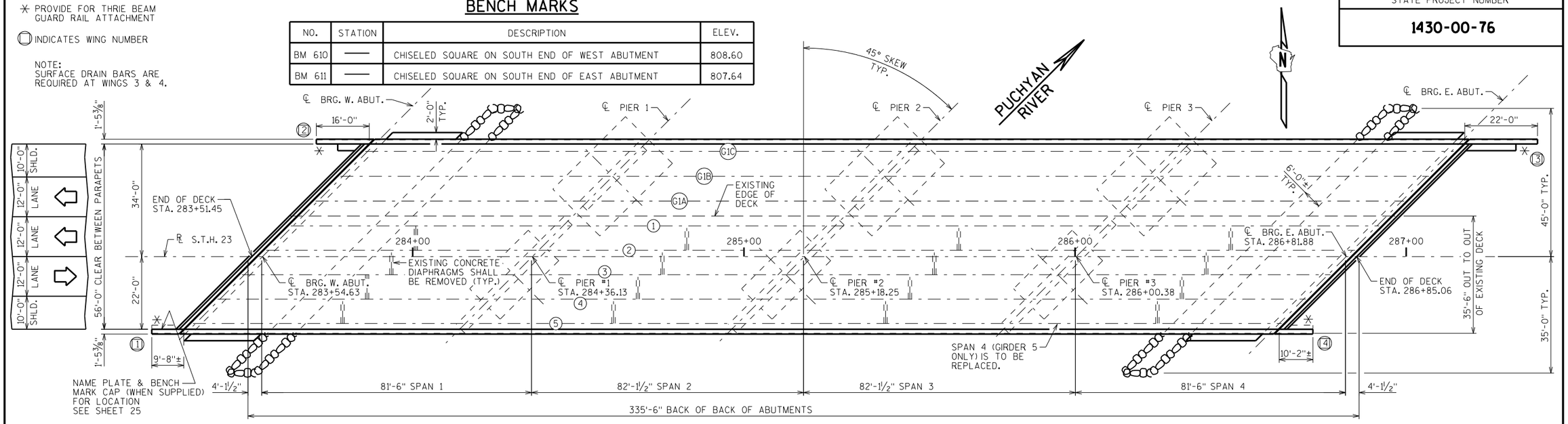
✳ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

⬡ INDICATES WING NUMBER

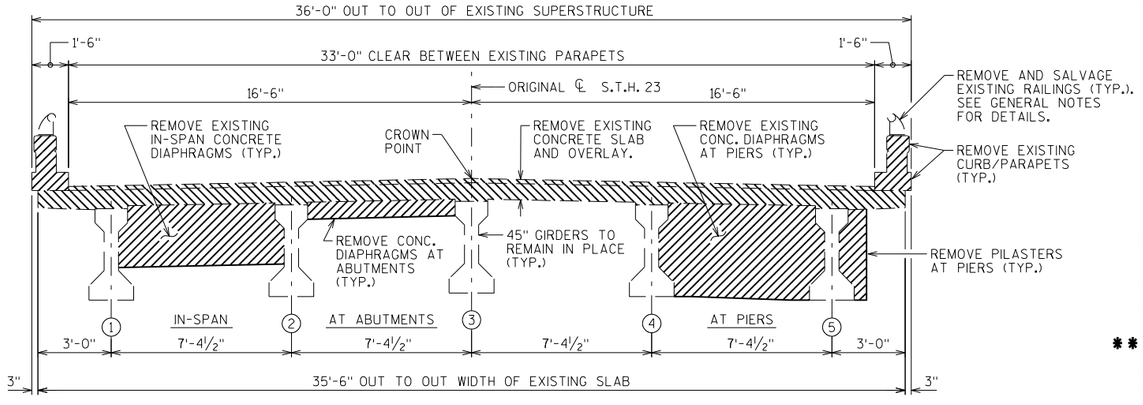
NOTE:
SURFACE DRAIN BARS ARE REQUIRED AT WINGS 3 & 4.

BENCH MARKS

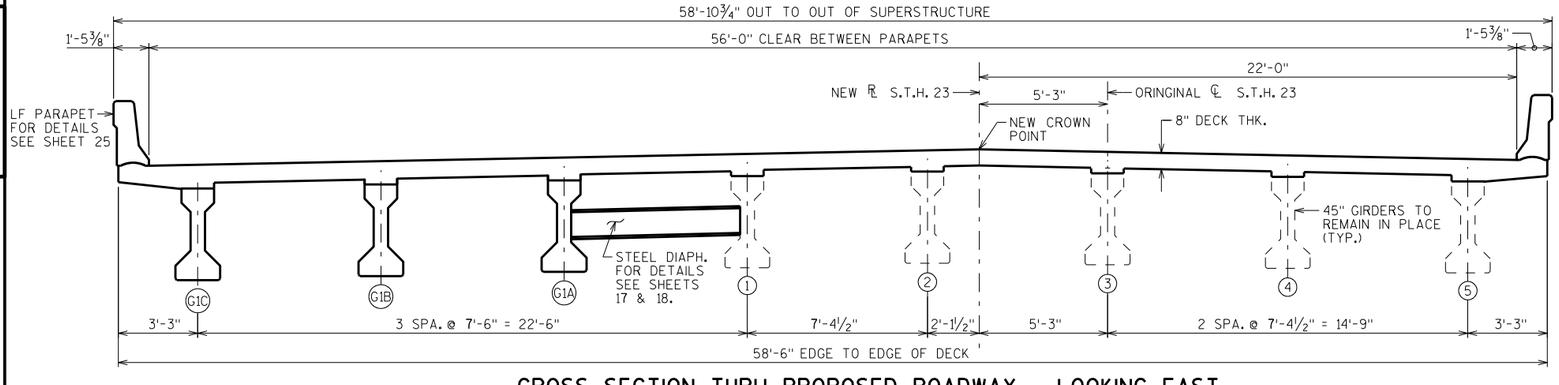
NO.	STATION	DESCRIPTION	ELEV.
BM 610	—	CHISELED SQUARE ON SOUTH END OF WEST ABUTMENT	808.60
BM 611	—	CHISELED SQUARE ON SOUTH END OF EAST ABUTMENT	807.64



PLAN



CROSS SECTION THRU EXISTING ROADWAY - LOOKING EAST



CROSS SECTION THRU PROPOSED ROADWAY - LOOKING EAST

DESIGN DATA

LIVE LOAD:
INVENTORY RATING; HS-19
OPERATIONAL RATING; HS-48
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS.

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.
45" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS-0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10X42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ✱✱ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 35'-0" LONG.

✱✱ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

FOUNDATION DATA

PIERS WITH SPREAD FOOTINGS TO BE SUPPORTED BY UNDER LYING NATIVE SOILS WITH A REQUIRED FACTORED BEARING RESISTANCE OF 5000 PSF ✱✱✱. A GEOTECHNICAL ENGINEER WILL DETERMINE THE FACTORED BEARING RESISTANCE BY VISUAL INSPECTION PRIOR TO CONSTRUCTION OF THE PIER FOOTING.

✱✱✱ THE FACTORED BEARING RESISTANCE IS THE VALUE USED FOR DESIGN.

LIST OF DRAWINGS

1. NEW DECK & WIDENING
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. W. ABUT. REMOVAL DETAILS
6. WEST ABUTMENT DETAILS
7. EAST ABUTMENT
8. E. ABUT. REMOVAL DETAILS
9. EAST ABUTMENT DETAILS
10. PIER 1
11. PIER 1 DETAILS
12. PIER 2
13. PIER 2 DETAILS
14. PIER 3
15. PIER 3 DETAILS
16. 45" PRESTRESSED GIRDER DETAILS
17. STEEL DIAPHRAGM
18. STEEL DIAPHRAGM
19. PRESTRESSED GIRDER STEEL BEARINGS
20. EXPANSION DEVICE
21. COVER PLATES DETAILS
22. SUPERSTRUCTURE CROSS SECTION
23. SUPERSTRUCTURE
24. SUPERSTRUCTURE DETAILS
25. SLOPED FACE PARAPET LF
26. SLOPED PAVING (CRUSHED AGG./HEAVY RIPRAP)
27. ALTERNATE CONSTRUCTION JOINT

STRUCTURE DESIGN CONTACTS:
MATT COUPAR (608) 266-5083
KENT BAHLER (608) 266-8490

NO.	DATE	REVISION	BY

Plans Prepared By WISDOT
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher DJK 9/17/13
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-24-09

S.T.H. 23 OVER PUCHYAN RIVER

COUNTY	TOWN/~~CITY/VILLAGE~~
GREEN LAKE	BROOKLYN

DESIGN SPEC.					
REHABILITATION		N/A			
DESIGNED BY	MSC	DESIGN CK'D.	MWL	DRAWN BY	DDS	PLANS CK'D.	MSC

NEW DECK & WIDENING

SHEET 1 OF 27

509

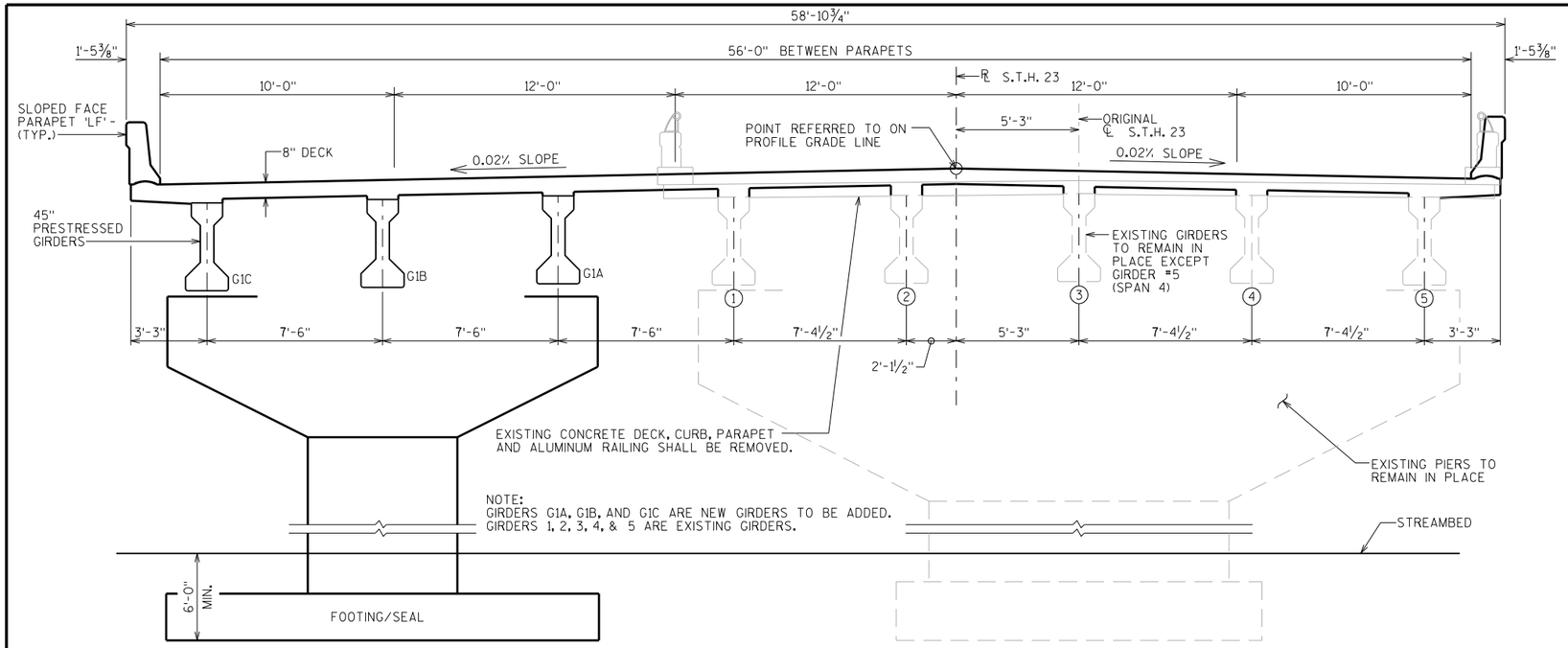
I.D. 1430-00-04

DATE: DEC. 2011

SCALE = 15.0

8

8



CROSS SECTION THRU ROADWAY LOOKING EAST

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST ABUT.	EAST ABUT.	PIER 1	PIER 2	PIER 3	TOTALS
203.0210.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-24-09	LS	———	———	———	———	———	———	1
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 285+18.25	LS	———	———	———	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-24-09	LS	———	———	———	———	———	———	1
206.1050.S	UNDERWATER FOUNDATION INSPECTION AT PIERS 1-3	EACH	———	———	———	1	1	1	3
206.5000	COFFERDAMS B-24-09	LS	———	———	———	———	———	———	1
210.0100	BACKFILL STRUCTURE	CY	———	312	311	———	———	———	623
502.0100	CONCRETE MASONRY BRIDGES	CY	663	79	86	41	41	40	950
502.1100	CONCRETE MASONRY SEAL	CY	———	———	———	104	104	104	312
502.3100	EXPANSION DEVICE B-24-09	LS	———	———	———	———	———	———	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	2348	———	———	———	———	———	2348
502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	———	116	120	60	52	52	400
502.5010	MASONRY ANCHORS TYPE L NO. 6 BARS	EACH	———	6	6	———	———	———	12
502.5020	MASONRY ANCHORS TYPE L NO. 8 BARS	EACH	———	5	———	———	———	———	5
502.5025	MASONRY ANCHORS TYPE L NO. 9 BARS	EACH	———	———	9	———	———	———	9
503.0145	PRESTRESSED GIRDER TYPE I 45-INCH	LF	1065	———	———	———	———	———	1065
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	———	2415	3360	13215	13125	13090	45205
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	160680	4105	4865	———	———	———	169650
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	———	———	———	16	16	16	48
506.4000	STEEL DIAPHRAGMS B-24-09	EACH	28	———	———	———	———	———	28
506.6000	BEARING ASSEMBLIES EXPANSION B-24-09	EACH	———	8	8	———	———	———	16
506.7050.S	REMOVING BEARINGS B-24-09	EACH	———	5	5	5	5	5	25
509.1500	CONCRETE SURFACE REPAIR	SF	15	5	5	———	———	———	25
509.9020.S	EPOXY CRACK SEALING	LF	10	16	16	———	———	———	42
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	19	20	———	———	———	39
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	385	385	———	———	———	770
604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	———	172	161	———	———	———	333
606.0300	RIPRAP HEAVY	CY	———	80	80	———	———	———	160
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	115	120	———	———	———	235
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4	———	———	———	———	———	4
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	———	190	190	———	———	———	380
	NON-BID ITEMS								
	BRIDGE SEAT PROTECTION	L.S.	———	———	———	———	———	———	1
	FILLER	SIZE	———	———	———	———	———	———	½" & ¾"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACE AND THE FRONT FACE AND THE TOP OF THE PARAPET, INCLUDING PARAPETS ON ABUTMENT WINGS.

THE EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE FABRIC TYPE 'HR' TO THE EXTENT SHOWN ON SHEETS 1 & 26 AND IN THE ABUTMENT DETAILS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEETS 1 & 26 AND IN THE ABUTMENT DETAILS.

AT ABUTMENTS, HP 12X53 STEEL PILING MAY BE USED IN LIEU OF HP 10X42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10X42 STEEL PILING.

APPLY BRIDGE SEAT PROTECTION, AS PER SECTION 502.3.12 OF THE STANDARD SPECIFICATIONS, TO THE TOP SURFACES OF ALL ABUTMENTS AND PIERS BELOW EXPANSION DEVICES.

DIMENSIONS SHOWN ARE BASED ON THE EXISTING ORIGINAL STRUCTURE PLANS.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR 1966.

REMOVE AND SALVAGE THE EXISTING RAILINGS (INCLUDES RAILS, POSTS AND ALL ASSOCIATED HARDWARE). AFTER REMOVAL, THE RAILINGS ARE TO BE SET ASIDE AND SHALL REMAIN THE PROPERTY OF THE STATE OF WISCONSIN. THE CONTRACTOR WILL COORDINATE WITH GREEN LAKE COUNTY HIGHWAY DEPT., AS TO WHEN THE RAILINGS ARE READY TO BE PICKED UP. THIS SHALL BE INCIDENTAL TO "REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 285+18.25".

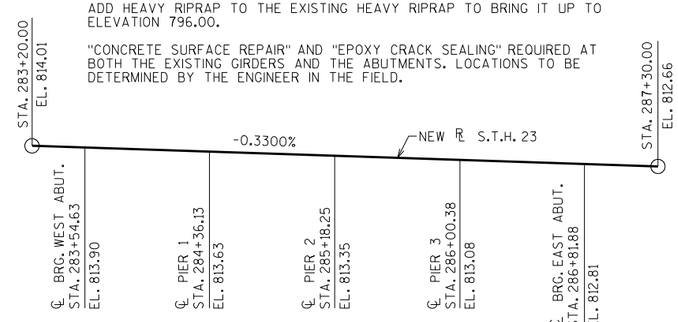
REMOVE EXISTING GIRDER #5 (SPAN 4 ONLY). THIS SHALL BE CONSIDERED INCIDENTAL TO "REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 285+18.25". THEN REPLACE WITH NEW GIRDER.

REMOVE EXISTING BEARINGS AT ABUTMENTS AND PIERS.

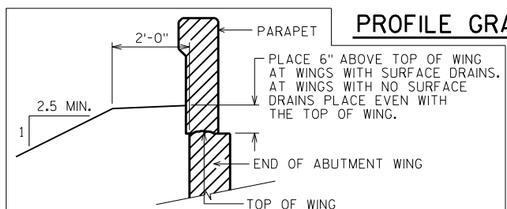
REMOVE EXISTING IN-SPAN CONCRETE DIAPHRAGMS AND REPLACE WITH STEEL DIAPHRAGMS. SEE SUPERSTRUCTURE FOR NEW DIAPHRAGM LAYOUT.

ADD HEAVY RIPRAP TO THE EXISTING HEAVY RIPRAP TO BRING IT UP TO ELEVATION 796.00.

"CONCRETE SURFACE REPAIR" AND "EPOXY CRACK SEALING" REQUIRED AT BOTH THE EXISTING GIRDERS AND THE ABUTMENTS. LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.



PROFILE GRADE LINE S.T.H. 23



TYPICAL FILL SECTION AT WING TIPS

STATE PROJECT NUMBER

1430-00-76

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY JPH/DDS | PLANS CK'D. MSC

CROSS SECTION & QUANTITIES

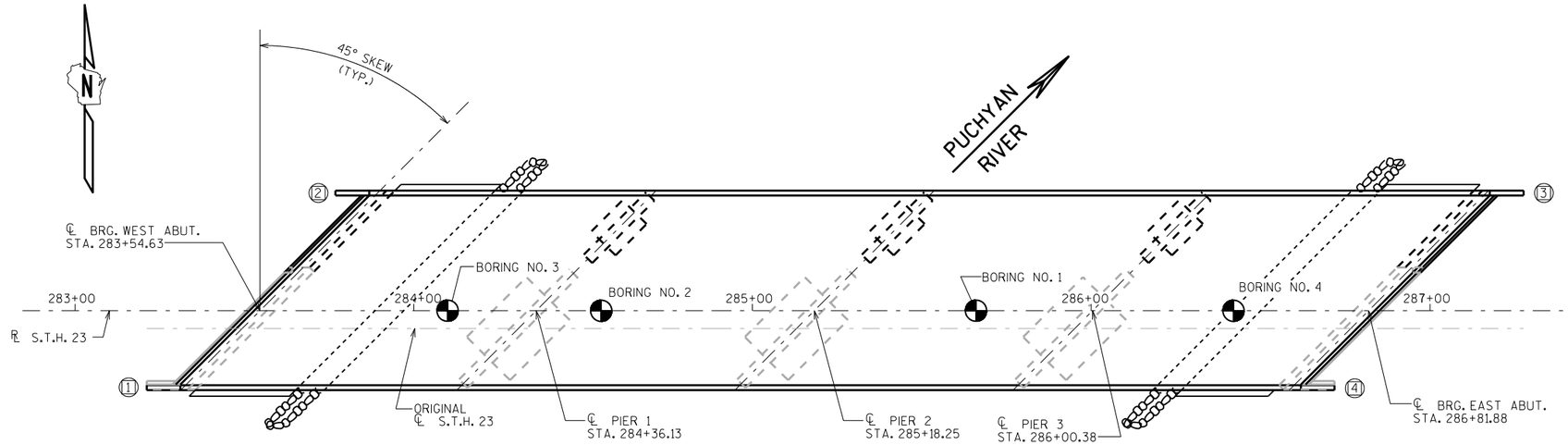
SHEET 2

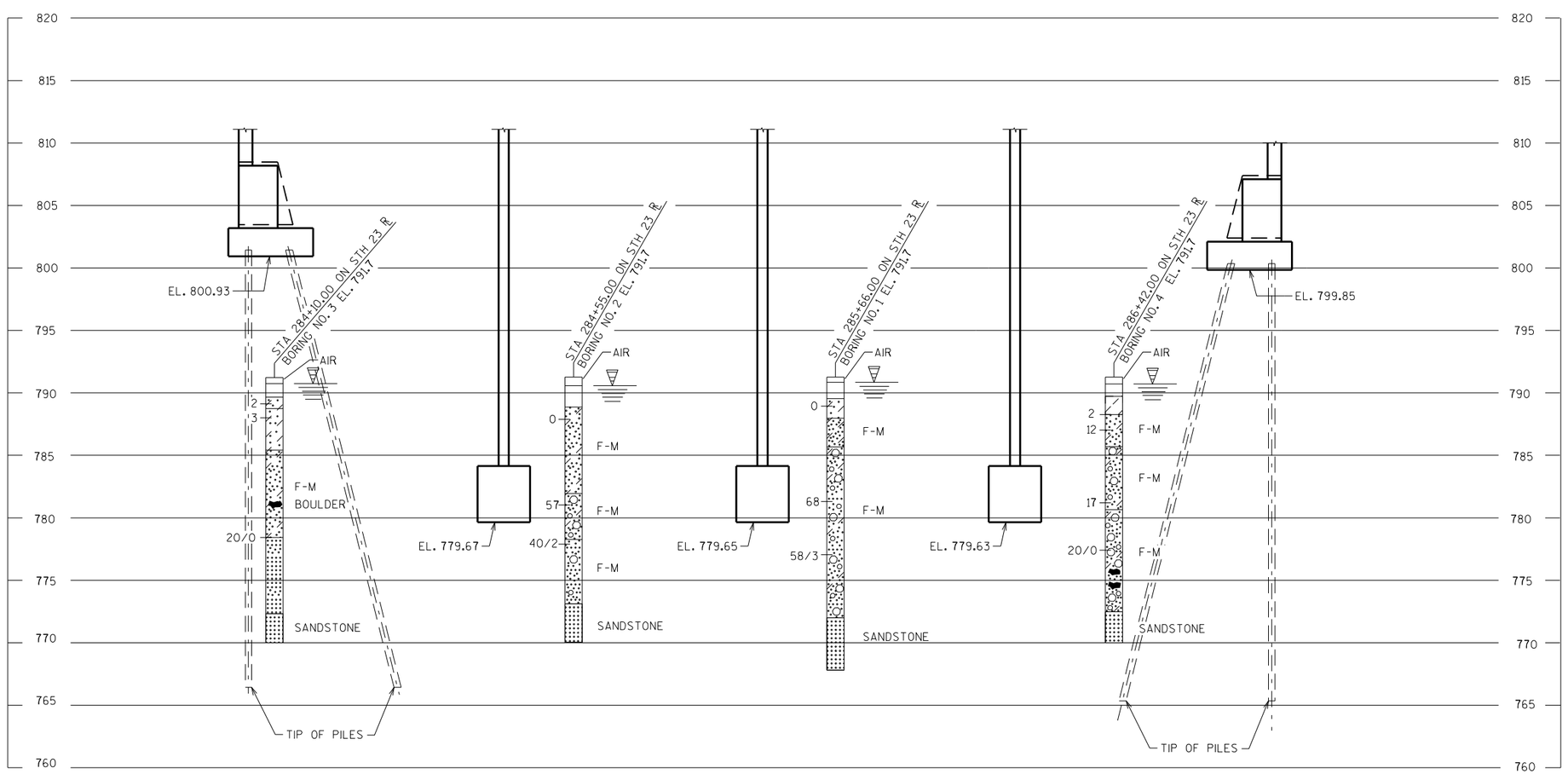
510

8

8

SCALE = 3





STATE PROJECT NUMBER

1430-00-76

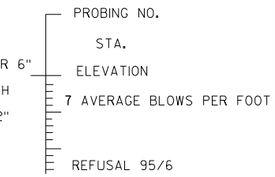
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

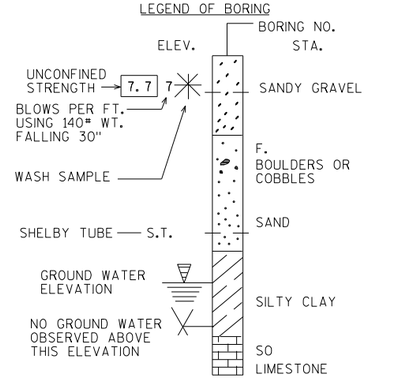
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

SUBSURFACE EXPLORATION

SHEET 3

511

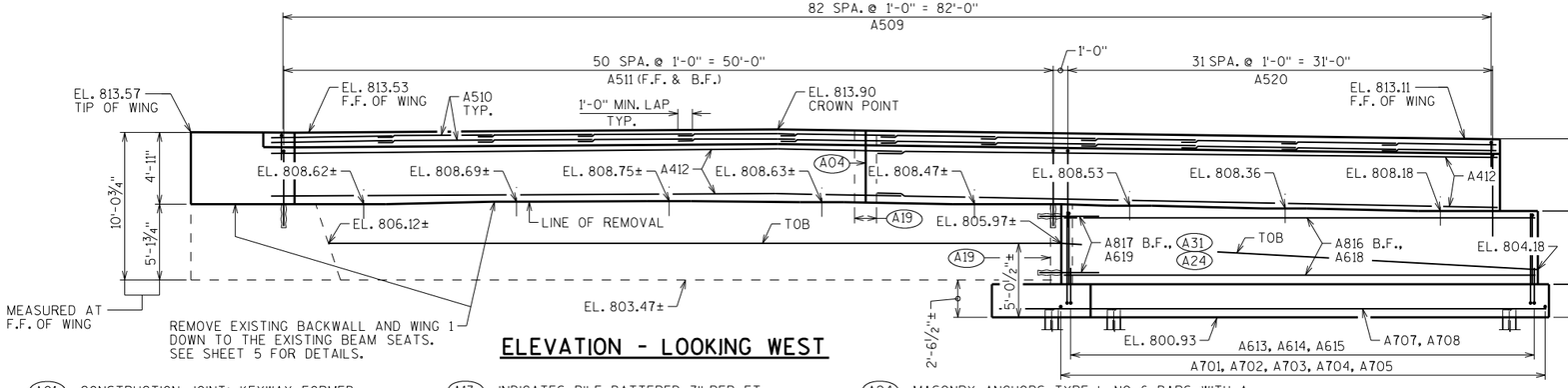
8

8

SCALE = 20

STATE PROJECT NUMBER

1430-00-76



ELEVATION - LOOKING WEST

(A01) CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.

(A02) CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A13) INDICATES PILE BATTERED 3" PER FT. IN DIRECTION OF ARROW.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED (SEE SHEET 5).

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

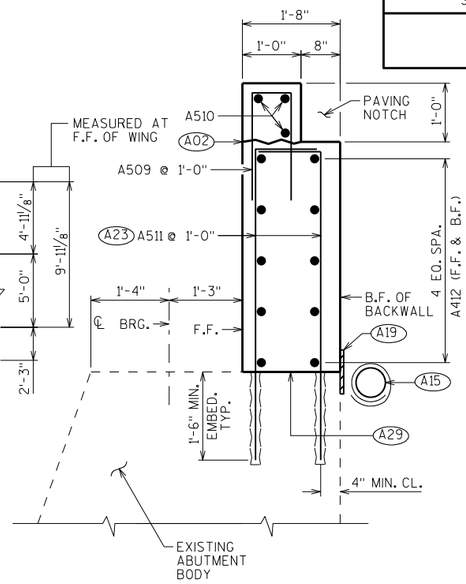
(A23) MASONRY ANCHORS TYPE L NO. 5 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 19 KIPS. EMBEDDED A MINIMUM OF 1'-6" INTO EXIST. CONCRETE. EPOXY ANCHORED.

(A24) MASONRY ANCHORS TYPE L NO. 6 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 26 KIPS. EMBEDDED A MINIMUM OF 1'-10" INTO EXIST. CONCRETE. EPOXY ANCHORED.

(A29) ROUGHEN SURFACE OF CONCRETE 1/4" DEEP MINIMUM ALL AREAS OF NEW TO EXISTING CONCRETE CONTACT.

(A31) MASONRY ANCHORS TYPE L NO. 8 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 47 KIPS. EMBEDDED A MINIMUM OF 3'-3" INTO EXIST. CONCRETE. EPOXY ANCHORED.

TOB = TOP OF BERM

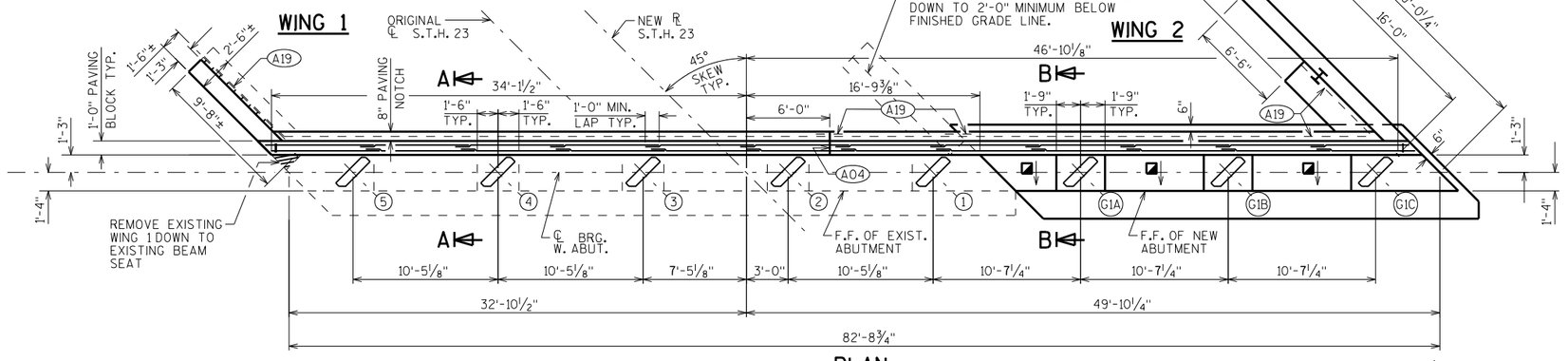


SECTION A-A

THRU EXISTING ABUTMENT BODY

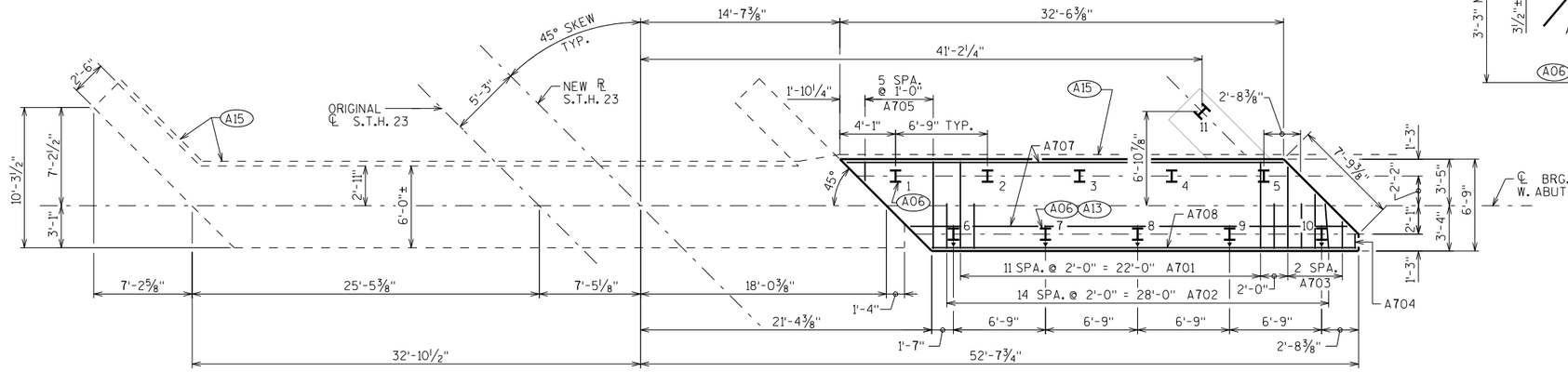
WING 1

WING 2

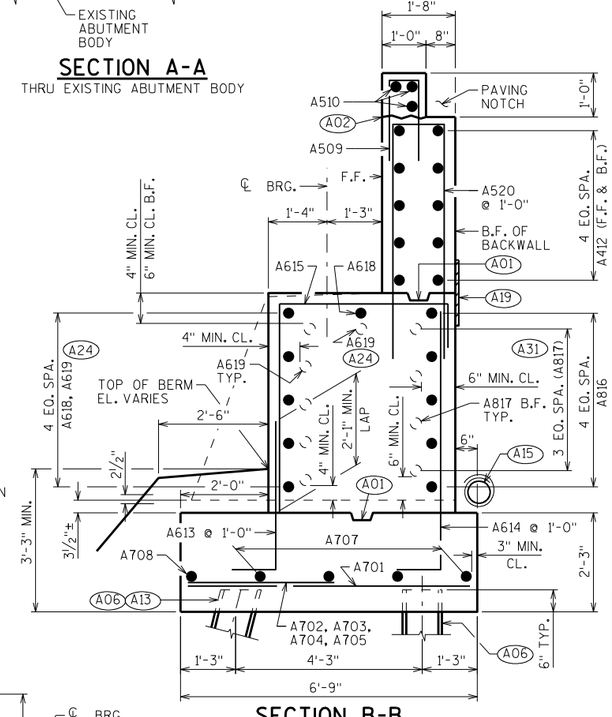


PLAN

= SLOPE 1" BETWEEN BEAM SEATS



FOOTING/PILE PLAN



SECTION B-B

THRU ABUTMENT BODY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

WEST ABUTMENT

SHEET 4

512

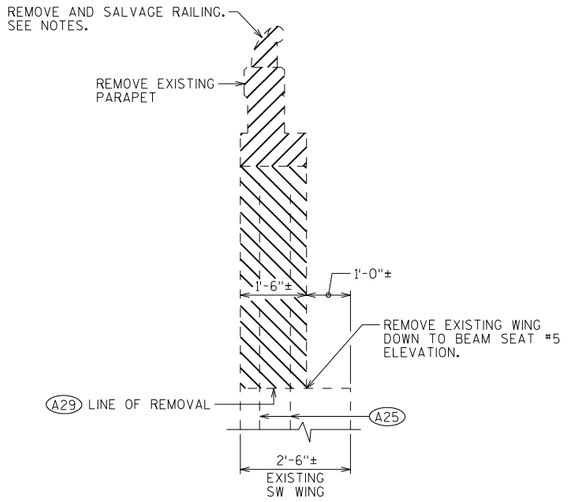
SCALE = 5.0

8

8

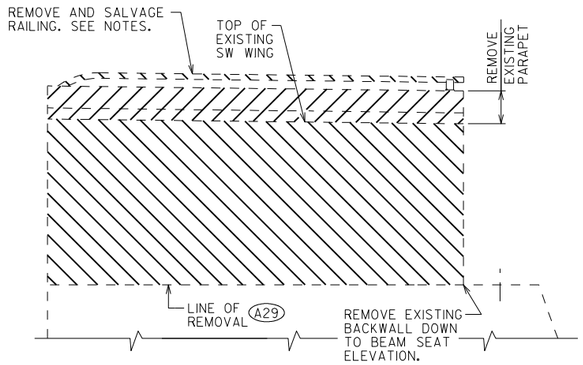
STATE PROJECT NUMBER

1430-00-76



SECTION THRU WING

SHOWING REMOVAL AT ORIGINAL SW WING



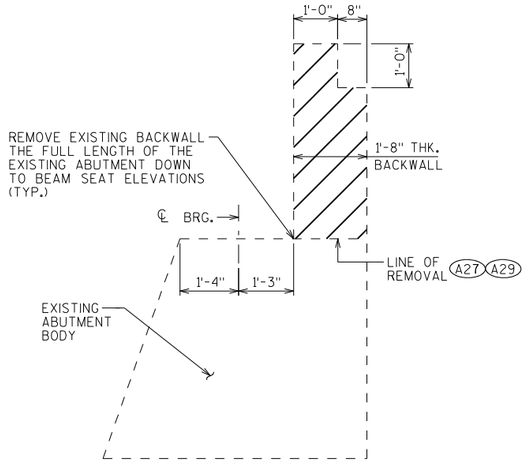
OUTSIDE ELEVATION - ORIGINAL SW WING

SHOWING REMOVAL AT ORIGINAL SOUTHWEST WING

NOTES

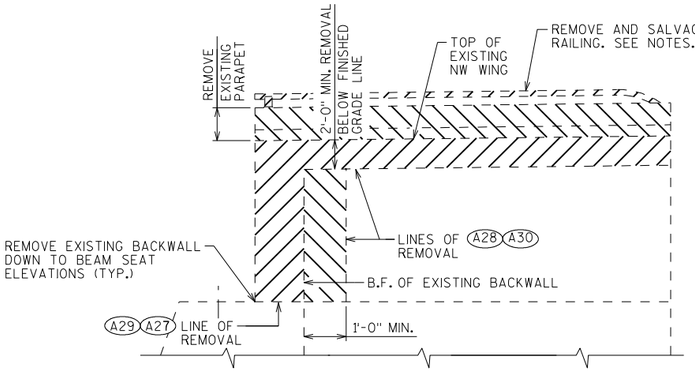
REMOVE AND SALVAGE THE EXISTING RAILINGS (INCLUDES RAILS, POSTS AND ALL ASSOCIATED HARDWARE). AFTER REMOVAL, THE RAILINGS ARE TO BE SET ASIDE AND SHALL REMAIN THE PROPERTY OF THE STATE OF WISCONSIN. THE CONTRACTOR WILL COORDINATE WITH GREEN LAKE COUNTY HIGHWAY DEPT., AS TO WHEN THE RAILINGS ARE READY TO BE PICKED UP. THIS SHALL BE INCIDENTAL TO "REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 285+18.25".

ALL LINES OF REMOVAL SHALL BE DEFINED WITH A 1" DEEP MIN. SAW CUT.



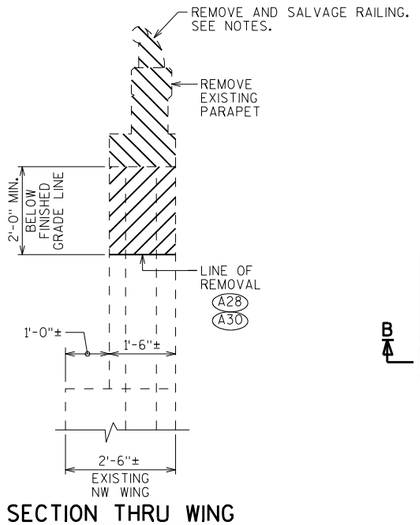
SECTION THRU ABUT. BODY

SHOWING BACKWALL REMOVAL



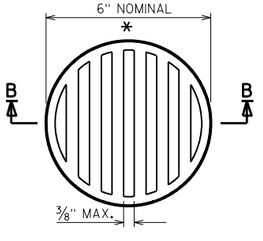
OUTSIDE ELEVATION - ORIGINAL NW WING

SHOWING REMOVAL AT ORIGINAL NORTHWEST WING

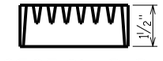


SECTION THRU WING

SHOWING REMOVAL AT ORIGINAL NW WING



RODENT SCREEN DETAIL



SECTION B-B

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN 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 ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

A25 SALVAGE EXIST. REINF. & EXTEND FULL LENGTH INTO NEW WORK, WHILE MAINTAINING 2" MIN. CLEAR.

A27 LINE OF BACKWALL REMOVAL

A28 EXIST. WINGS. REMOVE A MIN. OF 2'-0" BELOW FINISHED GRADE.

A29 ROUGHEN SURFACE OF CONCRETE 1/4" DEEP MINIMUM ALL AREAS OF NEW TO EXISTING CONCRETE CONTACT.

A30 CUT OFF BAR STEEL REINFORCEMENT FLUSH WITH LINE OF REMOVAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

W. ABUT. REMOVAL DETAILS

SHEET 5

513

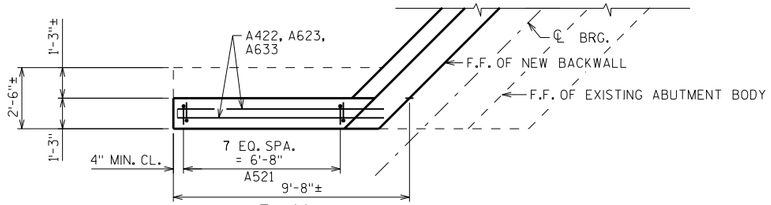
8

8

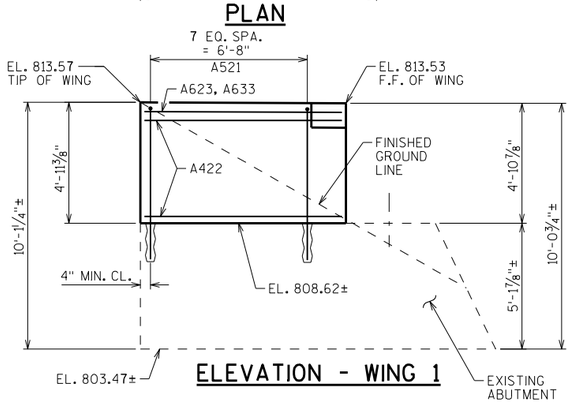
SCALE = 5.0

STATE PROJECT NUMBER

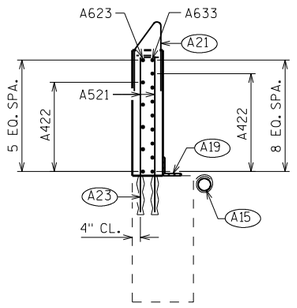
1430-00-76



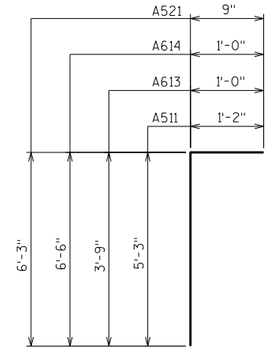
PLAN



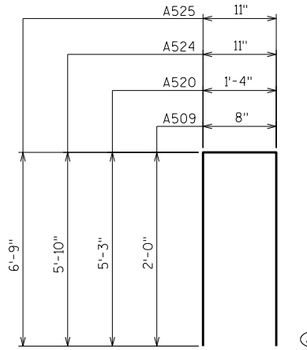
ELEVATION - WING 1



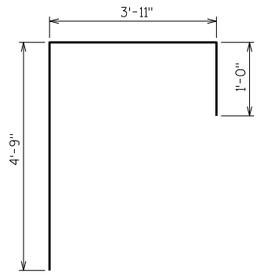
SECTION THRU WING 1



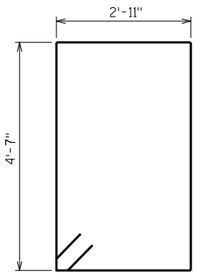
A511, A613, A614, A521



A509, A520, A524, A525

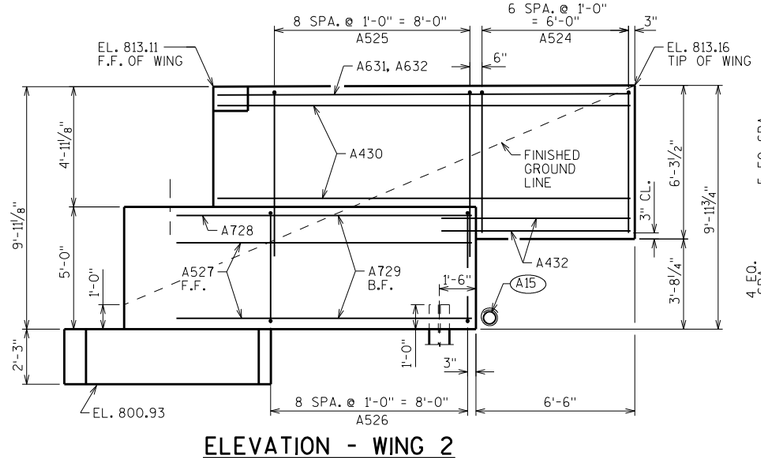


A615

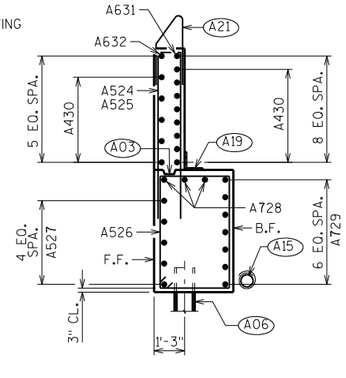


A526

PLAN



ELEVATION - WING 2



SECTION THRU WING 2

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

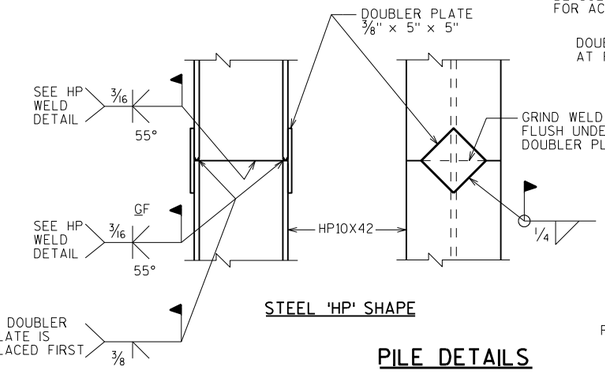
	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	A701		12	6'-5"			FOOTING - HORIZ.
	A702		15	3'-4"			FOOTING - HORIZ.
	A703		3	4'-0"		⚠	FOOTING - HORIZ.
	A704		1	1'-1"			FOOTING - HORIZ.
	A705		6	3'-11"		⚠	FOOTING - HORIZ.
	A706		NOT	USED			
	A707		4	32'-0"			FOOTING - HORIZ.
	A708		1	31'-1"			FOOTING - HORIZ.
	A509	X	83	4'-5"	X		PAVING BLOCK - VERT.
	A510	X	36	7'-10"			PAVING BLOCK - HORIZ.
(A23)	A511	X	102	6'-3"	X		BACKWALL - VERT. - CONC. MASONRY ANCHORS
	A412	X	20	42'-4"			BACKWALL - HORIZ.
	A613		33	4'-7"	X		FOOTING/BODY - VERT. - F.F.
	A614		33	7'-4"	X		FOOTING/BODY - VERT. - B.F.
	A615		33	9'-4"	X		BODY - VERT.
	A816		5	31'-4"			BODY - HORIZ. - B.F.
(A31)	A817	X	4	8'-4"			BODY - HORIZ. - B.F. - CONC. MASONRY ANCHORS
	A618		6	31'-4"			BODY - F.F. & TOP
(A24)	A619	X	6	4'-9"			BODY - HORIZ. - CONC. MASONRY ANCHORS
	A520	X	32	11'-7"	X		BACKWALL - VERT.
(A23)	A521	X	16	6'-11"	X		WING 1 - VERT. - CONC. MASONRY ANCHORS
	A422	X	13	8'-6"			WING 1 - HORIZ.
	A623	X	1	8'-6"			WING 1 - HORIZ.
	A524	X	7	12'-4"	X		WING 2 - VERT.
	A525	X	9	14'-2"	X		WING 2 - VERT.
	A526	X	9	15'-8"	X		WING 2 - STIRRUP
	A527	X	5	13'-10"			WING 2 - HORIZ. - F.F.
	A728	X	3	10'-3"			WING 2 - HORIZ.
	A729	X	7	7'-11"			WING 2 - HORIZ. - B.F.
	A430	X	13	15'-9"			WING 2 - HORIZ. - F.F. & B.F.
	A631	X	1	15'-9"			WING 2 - HORIZ. - TOP
	A632	X	1	16'-8"			WING 2 - HORIZ. - TOP
	A633	X	1	9'-5"			WING 1 - HORIZ. - TOP

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

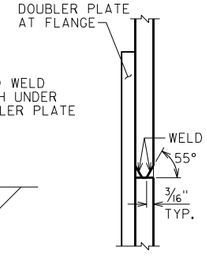
BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
A703	1 SERIES OF 3	2'-0" TO 6'-0"
A705	1 SERIES OF 6	1'-5" TO 6'-5"

BUNDLE AND TAG EACH SERIES SEPARATELY.



STEEL 'HP' SHAPE



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING. ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSION SEE PARAPET SHT.

(A23) MASONRY ANCHORS TYPE L NO. 5 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 19 KIPS. EMBEDDED A MINIMUM OF 1'-6" INTO EXIST. CONCRETE. EPOXY ANCHORED.

(A24) MASONRY ANCHORS TYPE L NO. 6 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 27 KIPS. EMBEDDED A MINIMUM OF 1'-10" INTO EXIST. CONCRETE. EPOXY ANCHORED.

(A25) SALVAGE EXIST. REINF. & EXTEND FULL LENGTH INTO NEW WORK.

(A31) MASONRY ANCHORS TYPE L NO. 8 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 47 KIPS. EMBEDDED A MINIMUM OF 3'-3" INTO EXIST. CONCRETE. EPOXY ANCHORED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

WEST ABUTMENT DETAILS

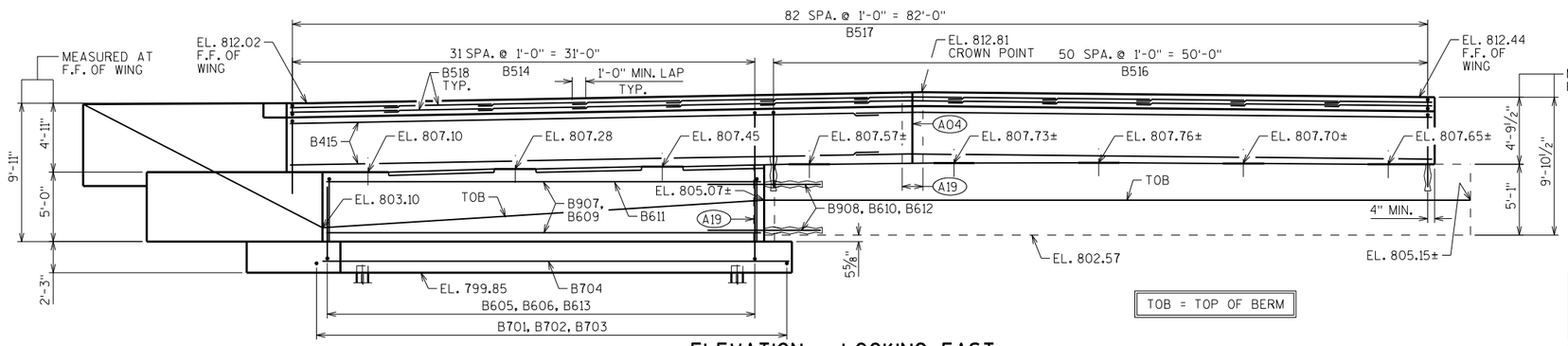
SHEET 6

514

SCALE = 3.00

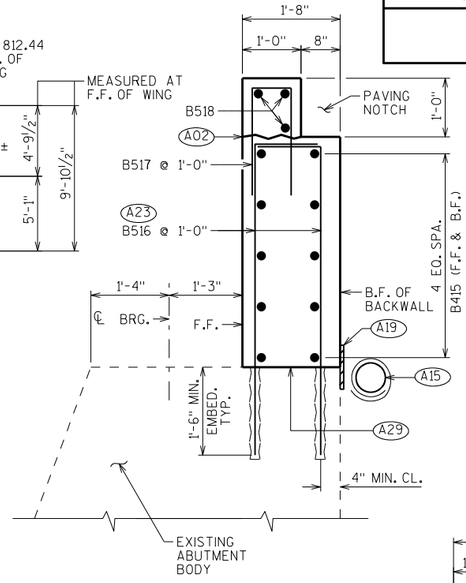
STATE PROJECT NUMBER

1430-00-76



TOB = TOP OF BERM

ELEVATION - LOOKING EAST



SECTION A-A

THRU EXISTING ABUTMENT BODY

(A01) CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 × 6.

(A02) CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 × 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE.

(A06) SUPPORT ABUTMENT ON HP 10 × 42 STEEL PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A13) INDICATES PILE BATTERED 3" PER FT. IN DIRECTION OF ARROW.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED (SEE SHEET 8).

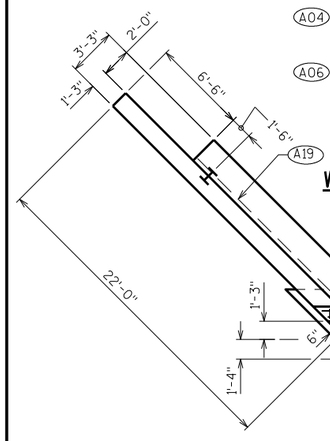
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A23) MASONRY ANCHORS TYPE L NO. 5 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 19 KIPS. EMBEDDED A MINIMUM OF 1'-6" INTO EXIST. CONCRETE. EPOXY ANCHORED.

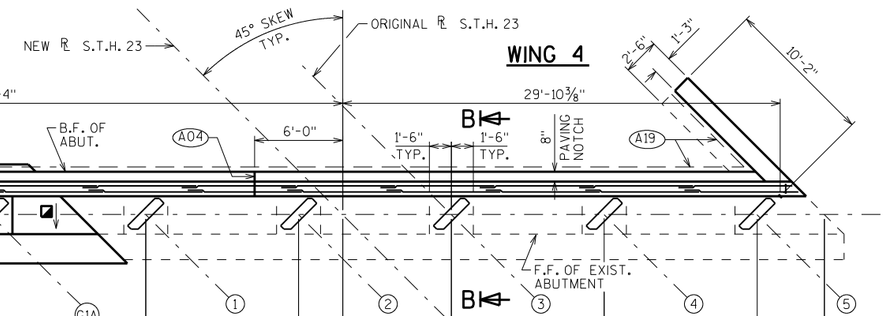
(A24) MASONRY ANCHORS TYPE L NO. 6 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 27 KIPS. EMBEDDED A MINIMUM OF 1'-10" INTO EXIST. CONCRETE. EPOXY ANCHORED.

(A29) ROUGHEN SURFACE OF CONCRETE 1/4" DEEP MINIMUM ALL AREAS OF NEW TO EXISTING CONCRETE CONTACT.

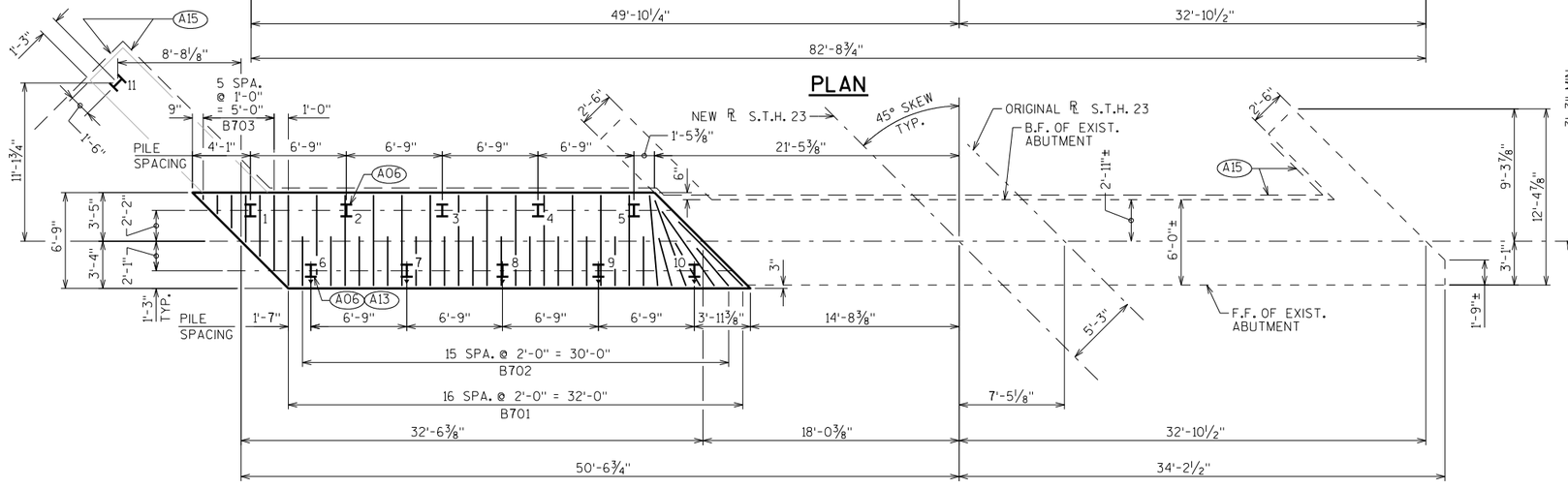
(A32) MASONRY ANCHORS TYPE L NO. 9 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 60 KIPS. EMBEDDED A MINIMUM OF 4'-1" INTO EXIST. CONCRETE. EPOXY ANCHORED.



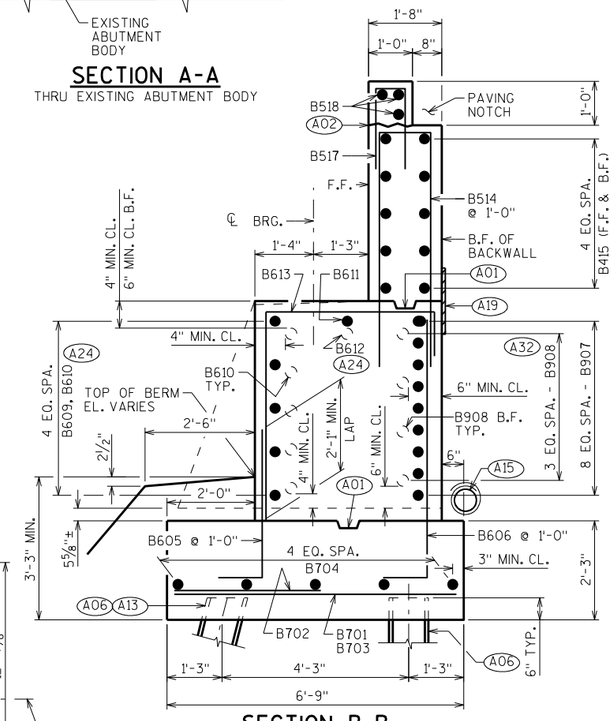
= SLOPE 1" BETWEEN BEAM SEATS



PLAN



FOOTING/PILE PLAN



SECTION B-B

THRU ABUTMENT BODY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

EAST ABUTMENT

SHEET 7

515

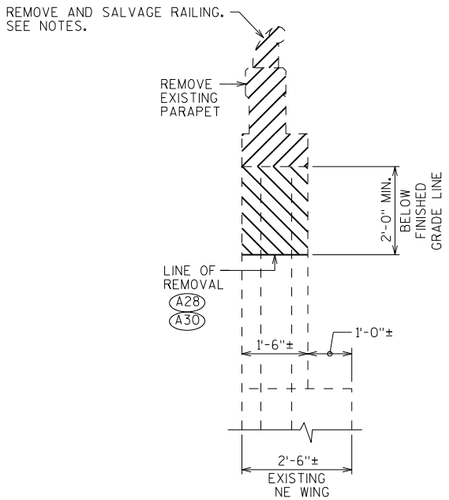
SCALE = 5.0

8

8

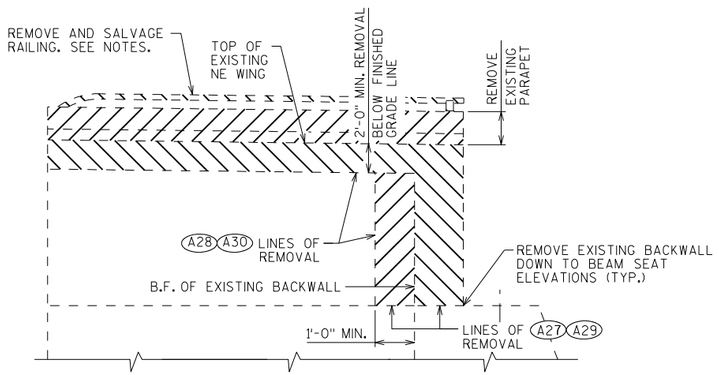
STATE PROJECT NUMBER

1430-00-76



SECTION THRU WING

SHOWING REMOVAL AT ORIGINAL NE WING



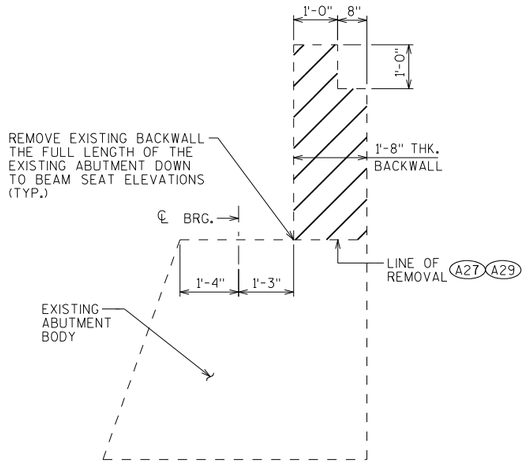
OUTSIDE ELEVATION - ORIGINAL NE WING

SHOWING REMOVAL AT NORTHEAST WING

NOTES

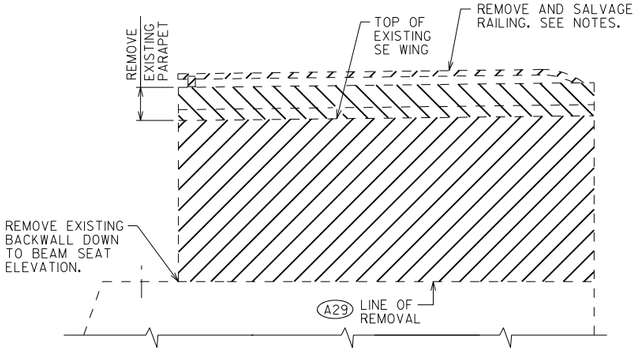
REMOVE AND SALVAGE THE EXISTING RAILINGS (INCLUDES RAILS, POSTS AND ALL ASSOCIATED HARDWARE). AFTER REMOVAL, THE RAILINGS ARE TO BE SET ASIDE AND SHALL REMAIN THE PROPERTY OF THE STATE OF WISCONSIN. THE CONTRACTOR WILL COORDINATE WITH GREEN LAKE COUNTY HIGHWAY DEPT., AS TO WHEN THE RAILINGS ARE READY TO BE PICKED UP. THIS SHALL BE INCIDENTAL TO "REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 285+18.25".

ALL LINES OF REMOVAL SHALL BE DEFINED WITH A 1" DEEP MIN. SAW CUT.



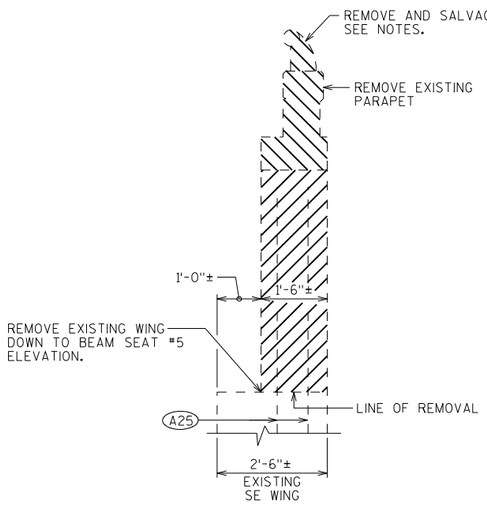
SECTION THRU ABUT. BODY

SHOWING BACKWALL REMOVAL



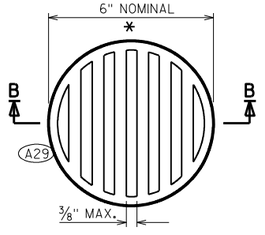
OUTSIDE ELEVATION - ORIGINAL SE WING

SHOWING REMOVAL AT SOUTHEAST WING

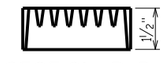


SECTION THRU WING

SHOWING REMOVAL AT ORIGINAL SE WING



RODENT SCREEN DETAIL



SECTION B-B

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN 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 ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

(A25) SALVAGE EXIST. REINF. & EXTEND FULL LENGTH INTO NEW WORK, WHILE MAINTAINING 2" MIN. CLEAR.

(A27) LINE OF BACKWALL REMOVAL

(A28) EXIST. WINGS. REMOVE A MIN. OF 2'-0" BELOW FINISHED GRADE.

(A29) ROUGHEN SURFACE OF CONCRETE 1/4" DEEP MINIMUM ALL AREAS OF NEW TO EXISTING CONCRETE CONTACT.

(A30) CUT OFF BAR STEEL REINFORCEMENT FLUSH WITH LINE OF REMOVAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

E. ABUT. REMOVAL DETAILS

SHEET 8

516

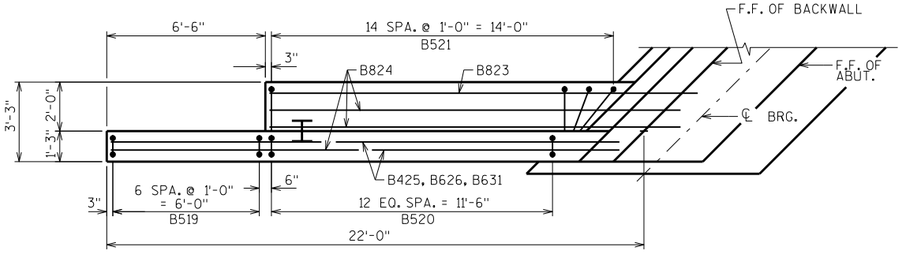
8

8

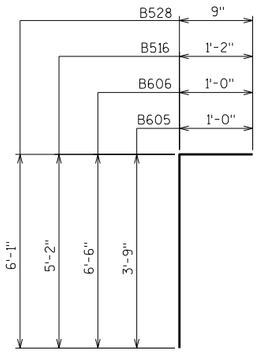
SCALE = 5.0

STATE PROJECT NUMBER

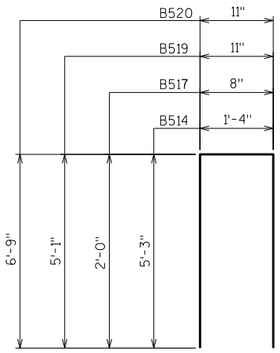
1430-00-76



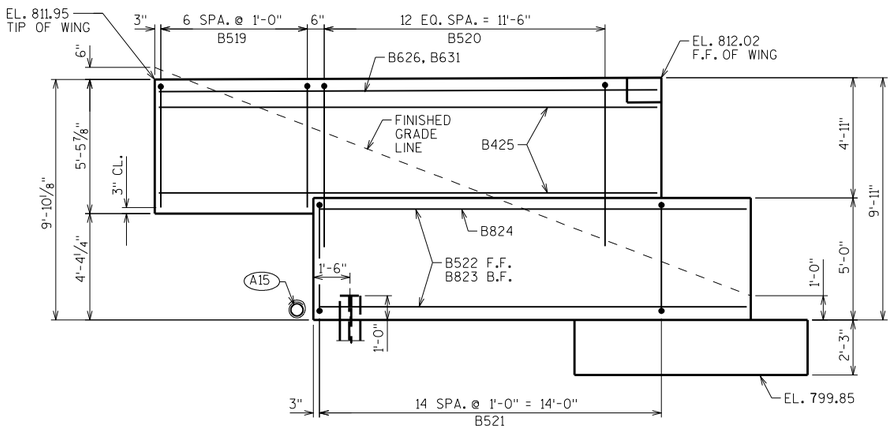
PLAN



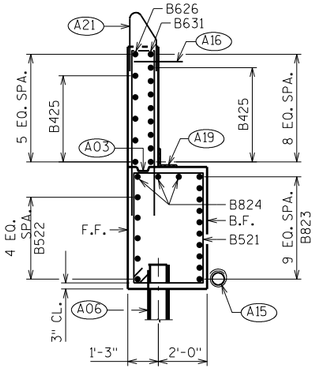
B605, B606, B516, B528



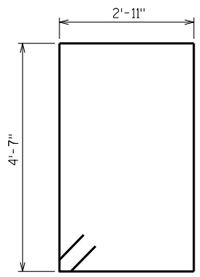
B514, B517, B519, B520



ELEVATION - WING 3



SECTION THRU WING 3



B521

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

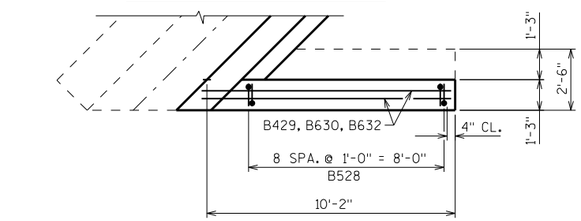
	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	B701		17	6'-5"			FOOTING - HORIZ.
	B702		16	3'-4"			FOOTING - HORIZ.
◭	B703		6	2'-10"		◭	FOOTING - HORIZ.
	B704		5	32'-2"			FOOTING - HORIZ.
	B605		33	4'-7"	X		FOOTING/BODY - VERT. - F.F.
	B606		33	7'-4"	X		FOOTING/BODY - VERT. - B.F.
	B907		9	31'-6"			BODY - HORIZ. - B.F.
(A32)	B908		9	10'-6"			BODY - CONCRETE MASONRY ANCHORS
	B609		5	31'-6"			BODY - HORIZ. - F.F.
(A24)	B610		5	4'-9"			BODY - CONCRETE MASONRY ANCHORS
	B611		1	31'-6"			BODY - HORIZ. - TOP
(A24)	B612		1	4'-9"			BODY - CONCRETE MASONRY ANCHORS
	B613		33	9'-4"	X		BODY - VERT.
	B514	X	32	11'-7"	X		BACKWALL - VERT.
	B415	X	20	42'-4"			BACKWALL - HORIZ.
(A23)	B516	X	102	6'-3"	X		BACKWALL - CONCRETE MASONRY ANCHORS
	B517	X	83	4'-5"	X		PAVING BLOCK - VERT.
	B518	X	36	7'-10"			PAVING BLOCK - HORIZ.
	B519	X	7	10'-10"	X		WING 3 - VERT.
	B520	X	13	14'-2"	X		WING 3 - VERT.
	B521	X	15	15'-8"	X		WING 3 - STIRRUPS
	B522	X	5	13'-11"			WING 3 - HORIZ. - F.F.
	B823	X	10	18'-7"			WING 3 - HORIZ. - B.F.
	B824	X	3	18'-5"			WING 3 - HORIZ.
	B425	X	13	20'-7"			WING 3 - HORIZ. - TOP
	B626	X	1	20'-7"			WING 3 - HORIZ. - TOP
	B427	X	32	2'-0"			SURFACE DRAIN ANCHORS
(A23)	B528	X	18	6'-8"	X		WING 4 - CONCRETE MASONRY ANCHORS
	B429	X	18	9'-10"			WING 4 - HORIZ.
	B630	X	1	9'-10"			WING 4 - HORIZ. - TOP
	B631	X	1	21'-6"			WING 3 - HORIZ. - TOP
	B632	X	1	10'-8"			WING 4 - HORIZ. - TOP

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

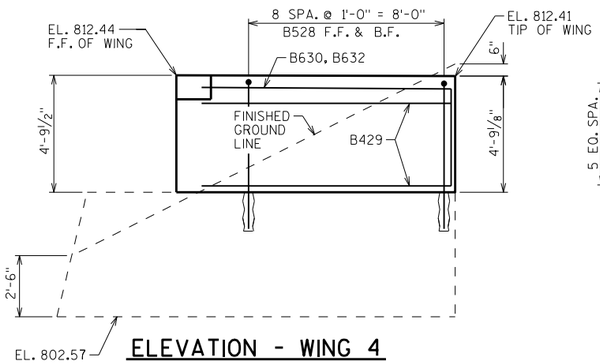
BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
B703	1 SERIES OF 6	0'-4" TO 5'-4"

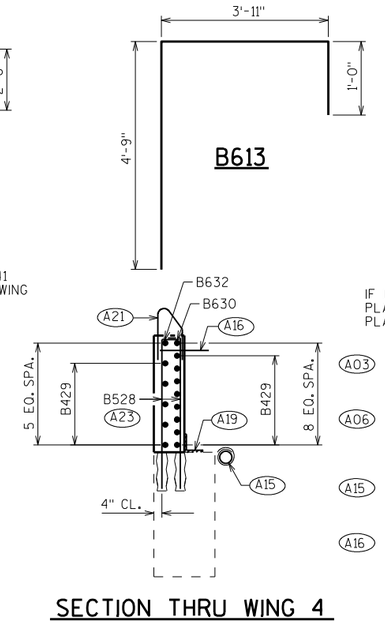
BUNDLE AND TAG EACH SERIES SEPARATELY.



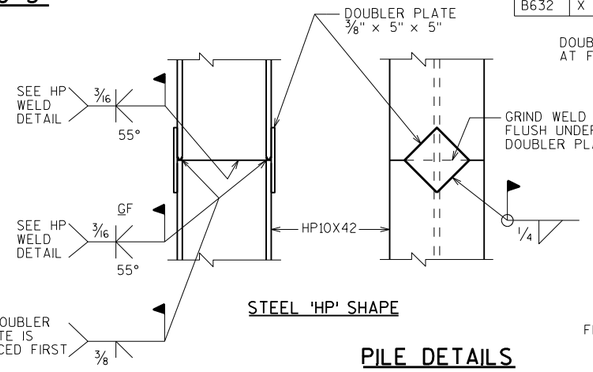
PLAN



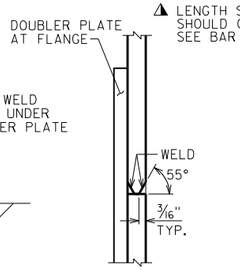
ELEVATION - WING 4



SECTION THRU WING 4



STEEL 'HP' SHAPE



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 × 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 × 42 STEEL PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A16) B427 BARS SPACED @ 1'-0" CTRS. EMBED 1'-0" INTO WING CONC. LOCATE 3" DOWN FROM TOP OF WING @ F.F. OF WING TO 6" DOWN @ WING TIP. (DRILLED IN EPOXY ANCHORED #4 BARS 2'-0" LONG MAY BE USED.) COST INCIDENTAL TO BID ITEM "BAR STEEL REINFORCEMENT HS COATED BRIDGES".

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSION SEE PARAPET SHT.

(A23) MASONRY ANCHORS TYPE L NO. 5 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 19 KIPS. EMBEDDED A MINIMUM OF 1'-6" INTO EXIST. CONCRETE. EPOXY ANCHORED.

(A24) MASONRY ANCHORS TYPE L NO. 6 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 27 KIPS. EMBEDDED A MINIMUM OF 1'-10" INTO EXIST. CONCRETE. EPOXY ANCHORED.

(A32) MASONRY ANCHORS TYPE L NO. 9 BARS, WITH A MINIMUM PULLOUT CAPACITY OF 60 KIPS. EMBEDDED A MINIMUM OF 4'-1" INTO EXIST. CONCRETE. EPOXY ANCHORED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

EAST ABUTMENT DETAILS

SHEET 9

517

SCALE = 3.00

8

8

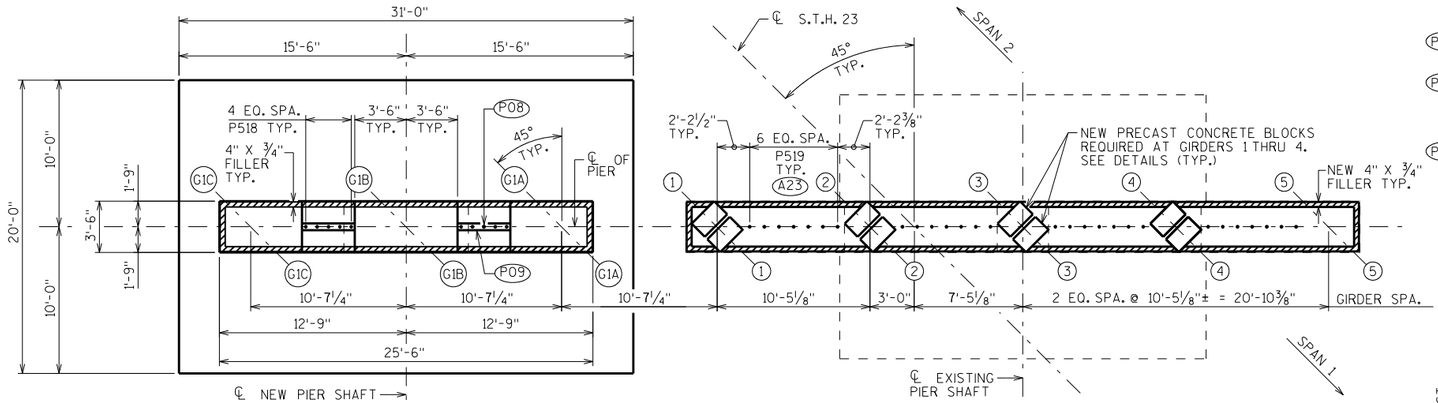
STATE PROJECT NUMBER
1430-00-76

(A23) MASONRY ANCHORS TYPE L NO. 5 BARS, EMBED 1'-6" INTO EXIST. CONCRETE. EPOXY ANCHORED.

(P01) 4'-6" X 1'-2" X 4" DEEP CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

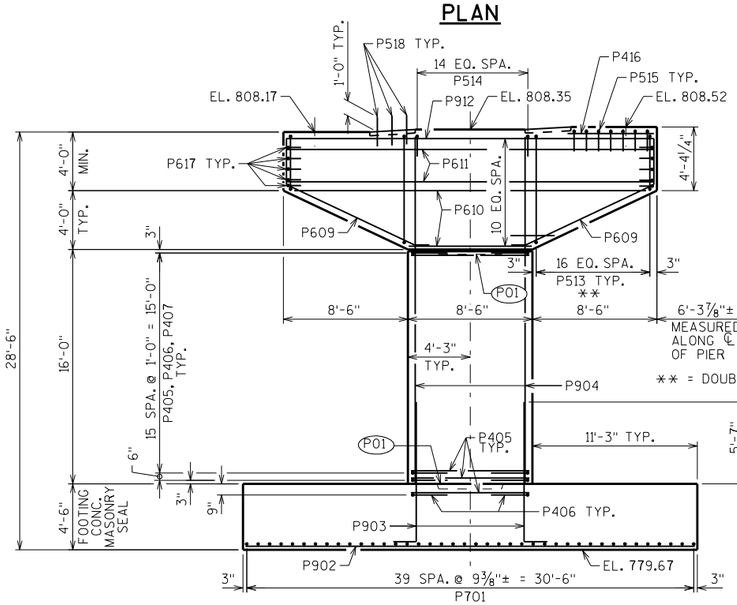
(P08) P518 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.



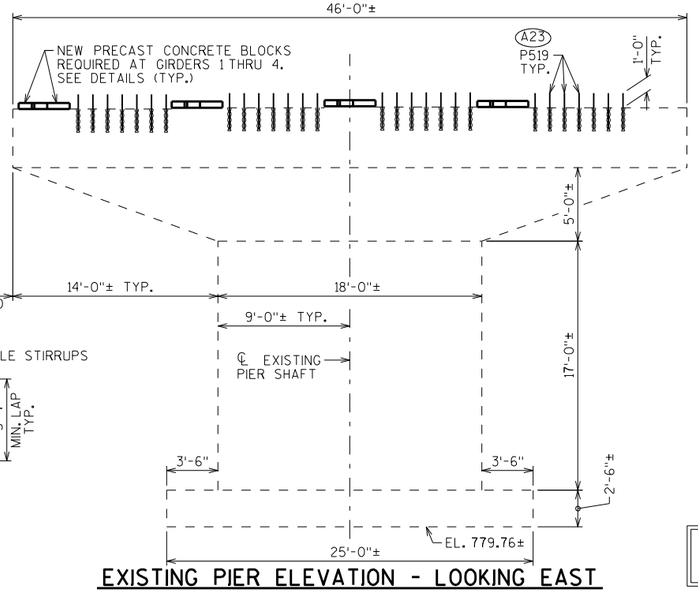
PLAN

PLAN - EXISTING PIER

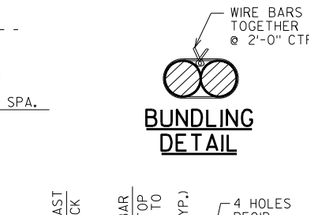


** = DOUBLE STIRRUPS

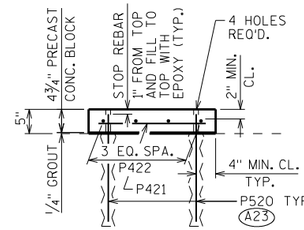
ELEVATION - LOOKING EAST



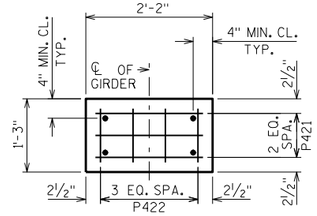
EXISTING PIER ELEVATION - LOOKING EAST



BUNDLING DETAIL



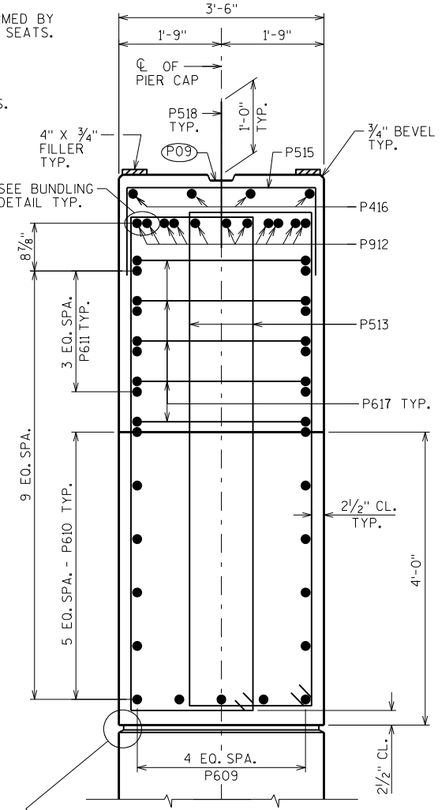
NEW PRECAST CONCRETE BLOCK DETAIL



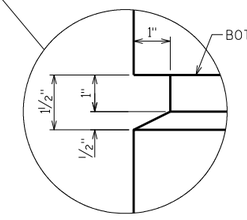
PLAN

NEW PRECAST CONCRETE BLOCK

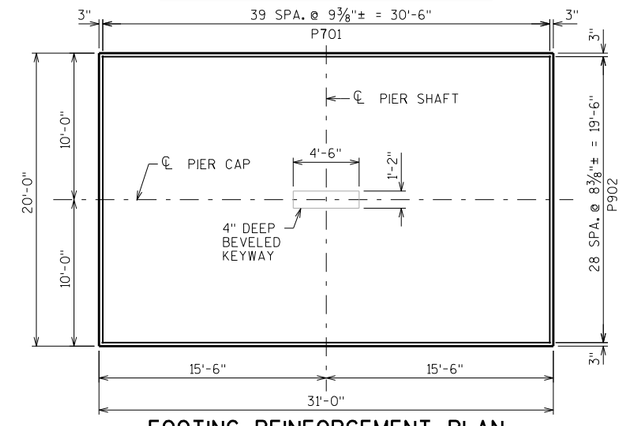
CONCRETE USED IN PRECAST CONCRETE BLOCK SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES".



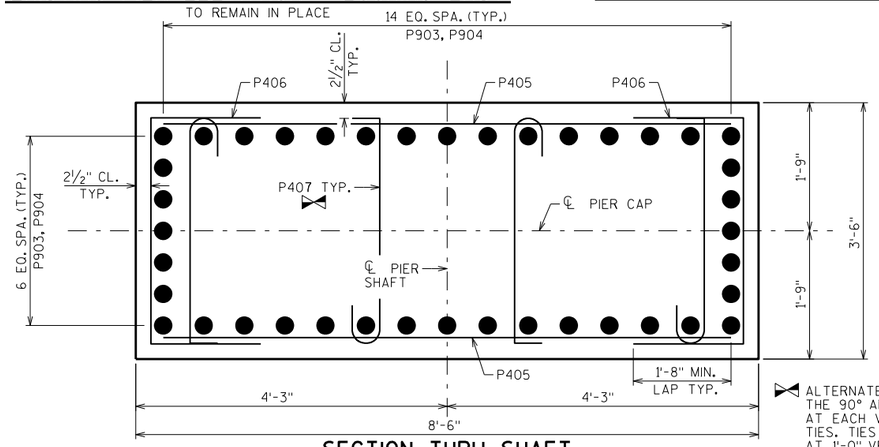
SECTION THRU NEW PIER CAP



CONST. JOINT DETAIL TYP.



FOOTING REINFORCEMENT PLAN



SECTION THRU SHAFT

ALTERNATE THE POSITION OF THE 90° AND THE 180° HOOKS AT EACH VERTICAL LAYER OF TIES. TIES ARE TO BE SPACED AT 1'-0" VERTICALLY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

PIER 1

SHEET 10

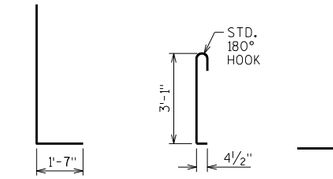
518

SCALE = 5.00

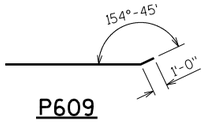
8

8

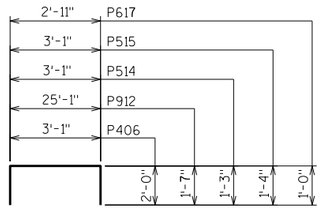
STATE PROJECT NUMBER
1430-00-76



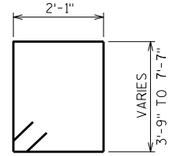
P903 P407



P609



P406, P912, P514, P515, P617



P513

(A23) MASONRY ANCHORS TYPE L NO. 5 BARS, EMBED 1'-6" INTO EXIST. CONCRETE. EPOXY ANCHORED.

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	P701		40	19'-8"			FOOTING - HORIZ.
	P902		29	30'-8"			FOOTING - HORIZ.
	P903		40	11'-0"	X		FOOTING/SHAFT - VERT.
	P904		40	23'-6"			SHAFT/CAP - VERT.
	P405		36	7'-8"			SHAFT - HORIZ.
	P406		36	6'-11"	X		SHAFT - HORIZ.
	P407		72	3'-11"	X		SHAFT - TIE BARS - HORIZ.
	P608		NOT	USED			
	P609		10	10'-5"	X		NEW PIER CAP - HORIZ.
◭	P610		12	16'-7"		◭	NEW PIER CAP - HORIZ. - F.F. & B.F.
	P611		8	25'-0"			NEW PIER CAP - HORIZ. - F.F. & B.F.
	P912		11	27'-9"	X		NEW PIER CAP - HORIZ. - TOP
◭	P513		68	16'-2"	X	◭	NEW PIER CAP - STIRRUPS
	P514		15	5'-4"	X		NEW PIER CAP - VERT. - TOP
	P515		7	5'-6"	X		NEW PIER CAP - VERT. - TOP
	P416		4	5'-6"			NEW PIER CAP - HORIZ. - TOP
	P617		10	4'-7"	X		NEW PIER CAP - ENDS - HORIZ.
	P518		10	2'-0"			NEW PIER CAP - VERT.
(A23)	P519		28	2'-6"			EXISTING PIER CAP - CONC. MASONRY ANCHORS
(A23)	P520		32	1'-10"			PRECAST CONCRETE BLOCK - CONC. MASONRY ANCHORS
	P421		24	1'-10"			PRECAST CONCRETE BLOCK - HORIZ.
	P422		32	0'-11"			PRECAST CONCRETE BLOCK - HORIZ.

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
P610	2 SERIES OF 6	8'-9" TO 24'-5"
P513	4 SERIES OF 17	12'-4" TO 20'-0"

BUNDLE AND TAG EACH SERIES SEPARATELY.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

PIER 1 DETAILS

SHEET 11

519

SCALE = 5.00

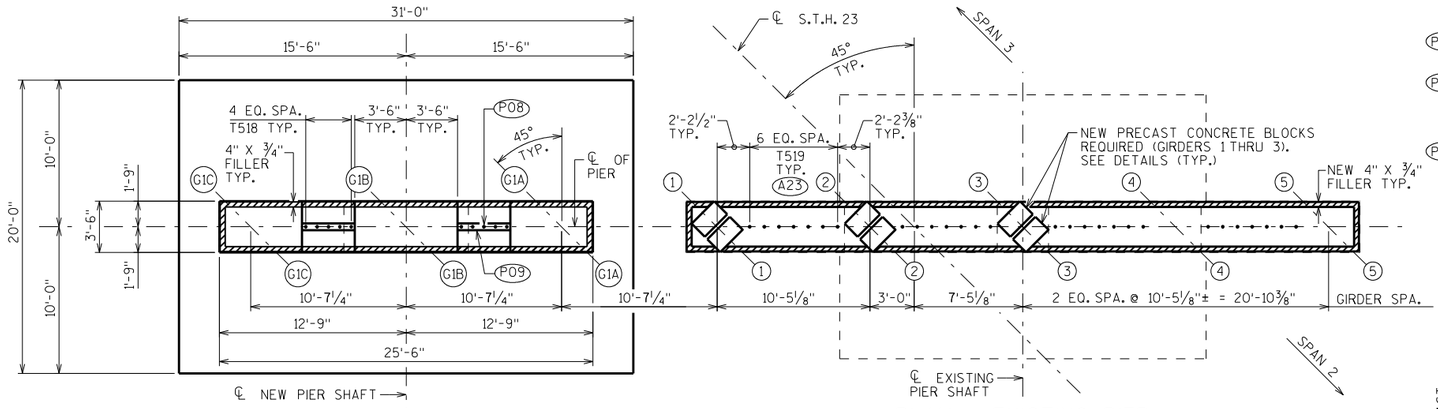
STATE PROJECT NUMBER
1430-00-76

(A23) MASONRY ANCHORS TYPE L NO. 5 BARS, EMBED 1'-6" INTO EXIST. CONCRETE. EPOXY ANCHORED.

(P01) 4'-6" X 1'-2" X 4" DEEP CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

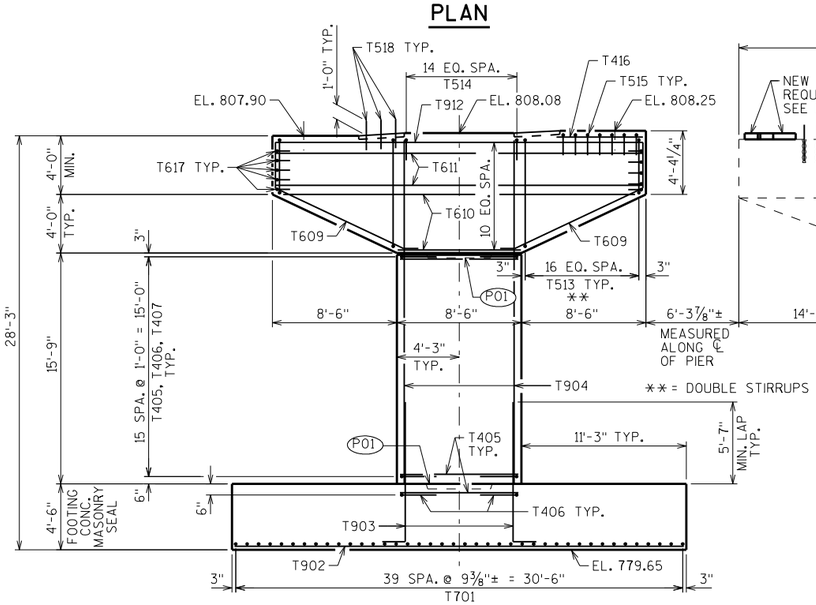
(P08) T518 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

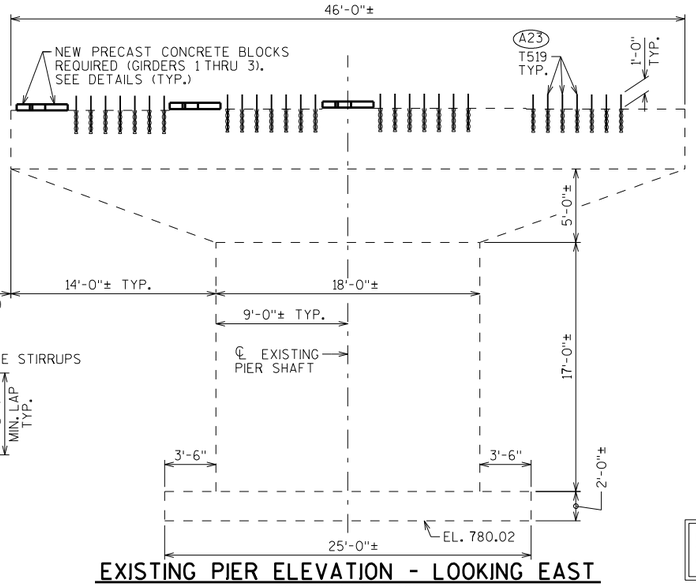


PLAN

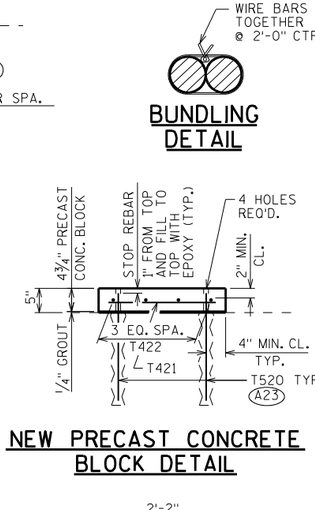
PLAN - EXISTING PIER



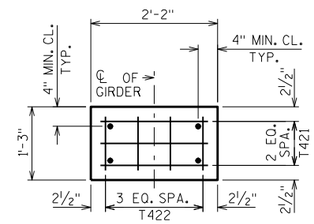
ELEVATION - LOOKING EAST



EXISTING PIER ELEVATION - LOOKING EAST



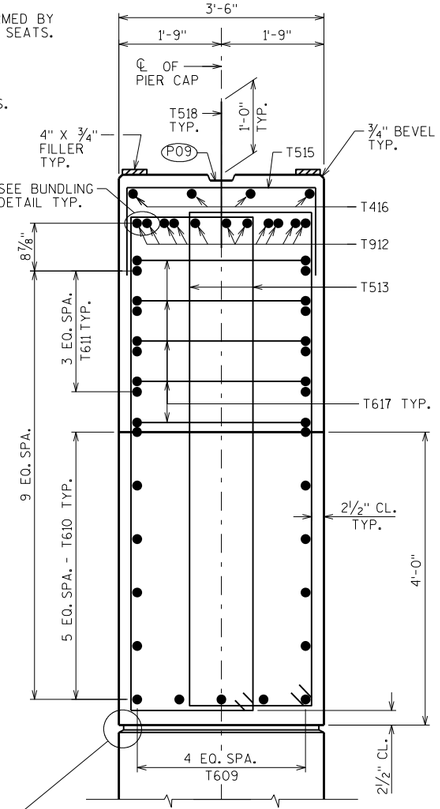
NEW PRECAST CONCRETE BLOCK DETAIL



PLAN

NEW PRECAST CONCRETE BLOCK

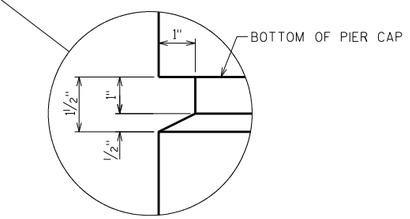
CONCRETE USED IN PRECAST CONCRETE BLOCK SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES".



SECTION THRU NEW PIER CAP

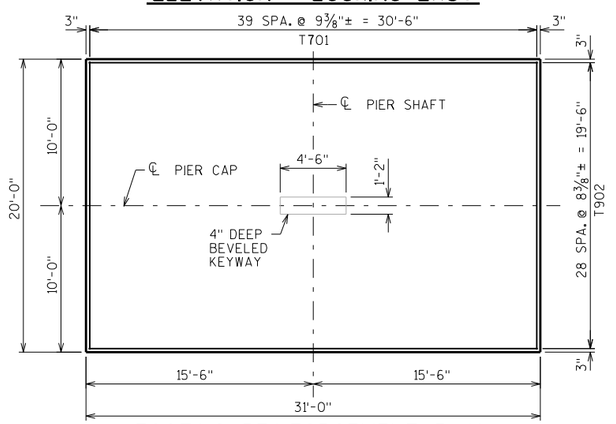
WIRE BARS TOGETHER @ 2'-0" CTR'S.

BUNDLING DETAIL

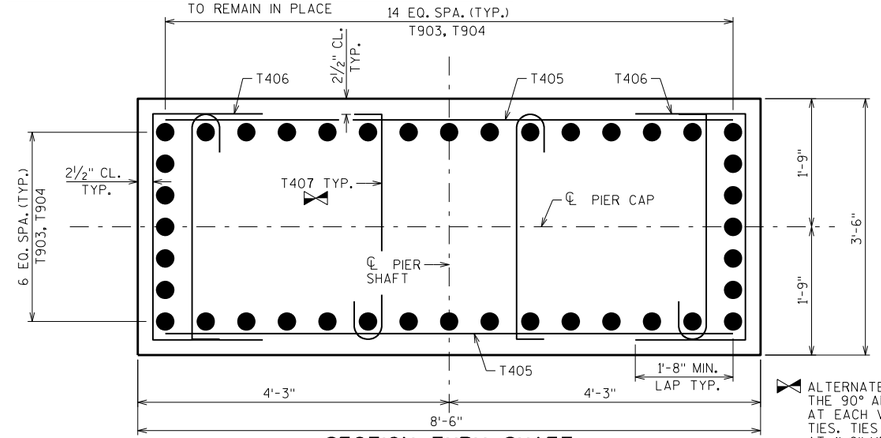


CONST. JOINT DETAIL

TYP.



FOOTING REINFORCEMENT PLAN



SECTION THRU SHAFT

ALTERNATE THE POSITION OF THE 90° AND THE 180° HOOKS AT EACH VERTICAL LAYER OF TIES. TIES ARE TO BE SPACED AT 1'-0" VERTICALLY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

PIER 2

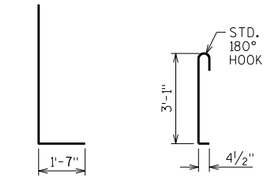
SHEET 12

520

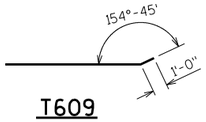
SCALE = 5.00

STATE PROJECT NUMBER

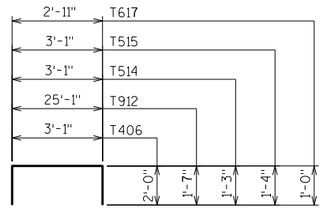
1430-00-76



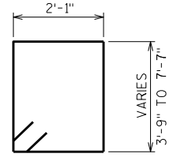
T903 T407



T609



T406, T912, T514, T515, T617



T513

(A23) MASONRY ANCHORS TYPE L NO. 5 BARS, EMBED 1'-6" INTO EXIST. CONCRETE. EPOXY ANCHORED.

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	T701		40	19'-8"			FOOTING - HORIZ.
	T902		29	30'-8"			FOOTING - HORIZ.
	T903		40	11'-0"	X		FOOTING/SHAFT - VERT.
	T904		40	23'-3"			SHAFT/CAP - VERT.
	T405		34	7'-8"			SHAFT - HORIZ.
	T406		34	6'-11"	X		SHAFT - HORIZ.
	T407		68	3'-11"	X		SHAFT - TIE BARS - HORIZ.
	T608		NOT	USED			———
	T609		10	10'-5"	X		NEW PIER CAP - HORIZ.
◭	T610		12	16'-7"		◭	NEW PIER CAP - HORIZ. - F.F. & B.F.
	T611		8	25'-0"			NEW PIER CAP - HORIZ. - F.F. & B.F.
	T912		11	27'-9"	X		NEW PIER CAP - HORIZ. - TOP
◭	T513		68	16'-2"	X	◭	NEW PIER CAP - STIRRUPS
	T514		15	5'-4"	X		NEW PIER CAP - VERT. - TOP
	T515		7	5'-6"	X		NEW PIER CAP - VERT. - TOP
	T416		4	5'-6"			NEW PIER CAP - HORIZ. - TOP
	T617		10	4'-7"	X		NEW PIER CAP - ENDS - HORIZ.
	T518		10	2'-0"			NEW PIER CAP - VERT.
(A23)	T519		28	2'-6"			EXISTING PIER CAP - CONC. MASONRY ANCHORS
(A23)	T520		24	1'-10"			PRECAST CONCRETE BLOCK - CONC. MASONRY ANCHORS
	T421		18	1'-10"			PRECAST CONCRETE BLOCK - HORIZ.
	T422		24	0'-11"			PRECAST CONCRETE BLOCK - HORIZ.

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
T610	2 SERIES OF 6	8'-9" TO 24'-5"
T513	4 SERIES OF 17	12'-4" TO 20'-0"

BUNDLE AND TAG EACH SERIES SEPARATELY.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

PIER 2 DETAILS

SHEET 13

521

SCALE = 5.00

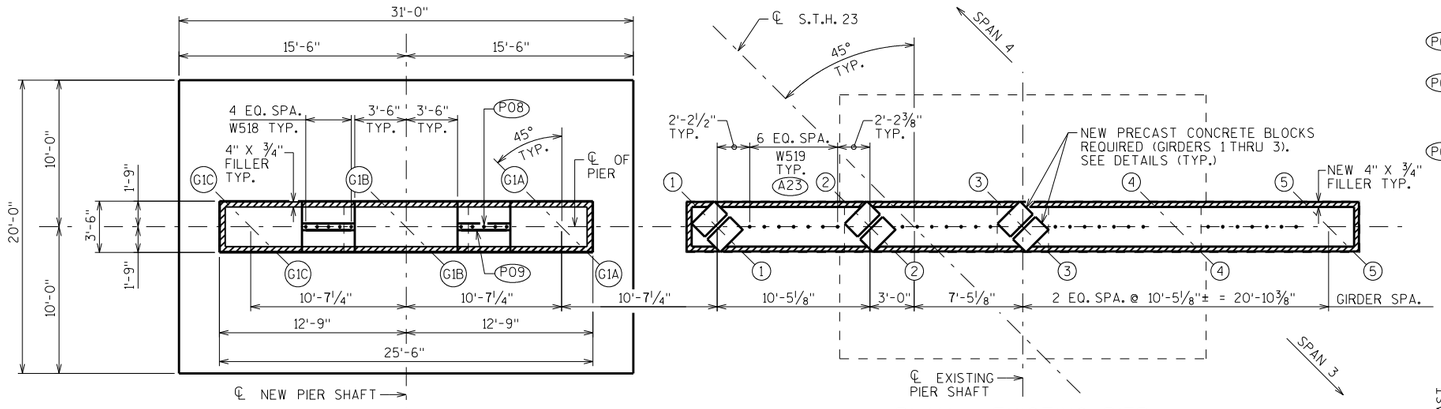
STATE PROJECT NUMBER
1430-00-76

(A23) MASONRY ANCHORS TYPE L NO. 5 BARS, EMBED 1'-6" INTO EXIST. CONCRETE. EPOXY ANCHORED.

(P01) 4'-6" X 1'-2" X 4" DEEP CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

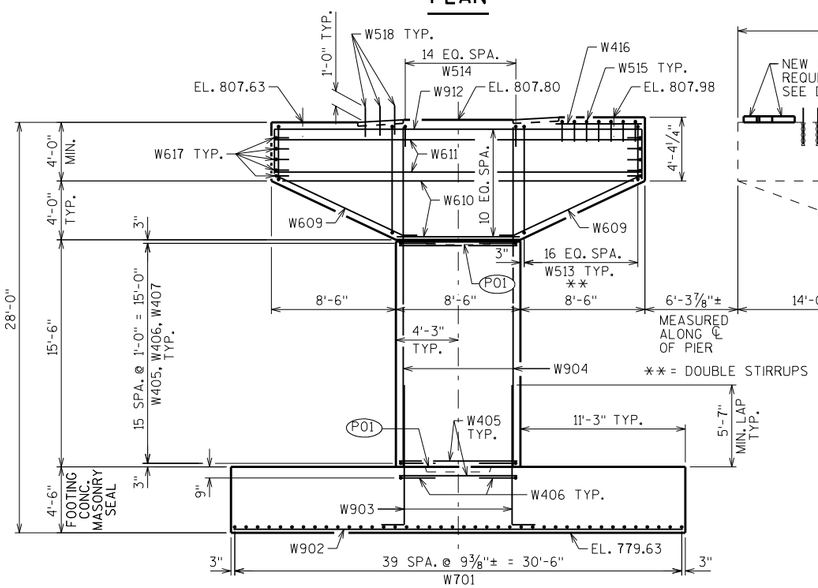
(P08) W518 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

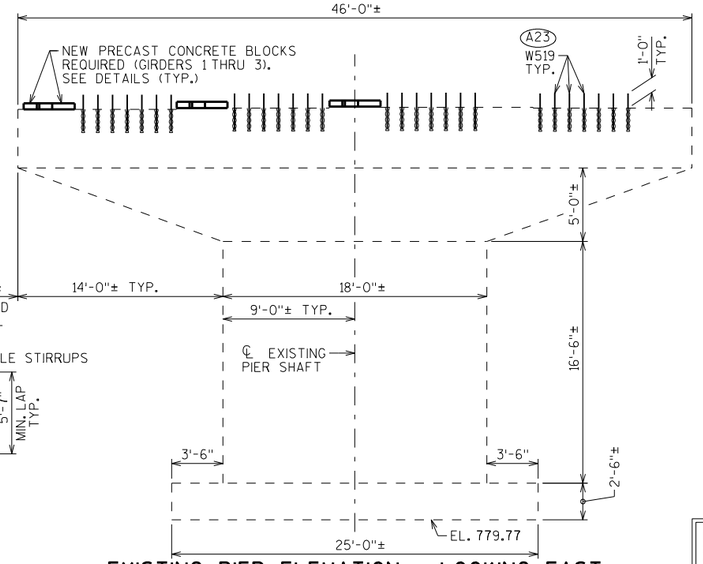


PLAN

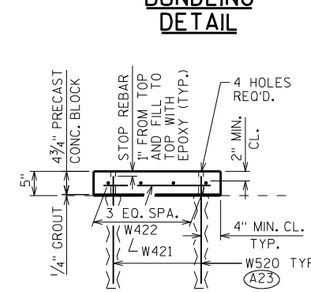
PLAN - EXISTING PIER



ELEVATION - LOOKING EAST

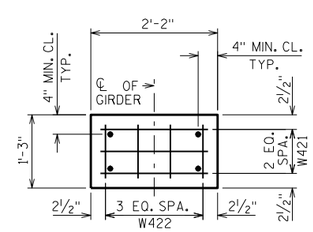


EXISTING PIER ELEVATION - LOOKING EAST



BUNDLING DETAIL

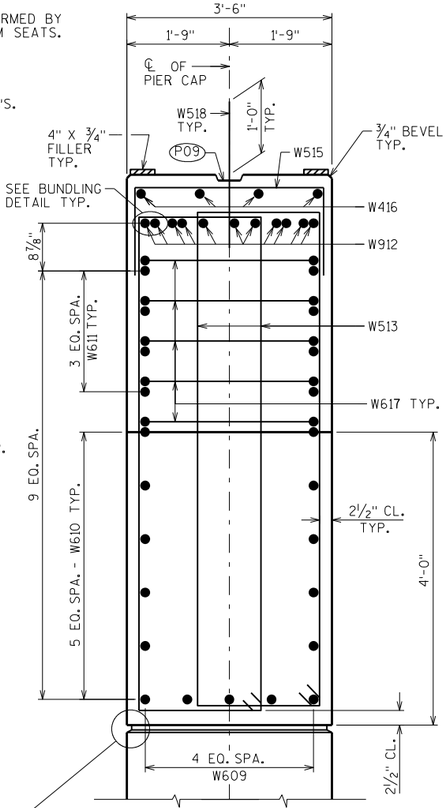
NEW PRECAST CONCRETE BLOCK DETAIL



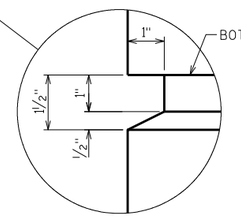
PLAN

NEW PRECAST CONCRETE BLOCK

CONCRETE USED IN PRECAST CONCRETE BLOCK SHALL BE CONSIDERED INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES".

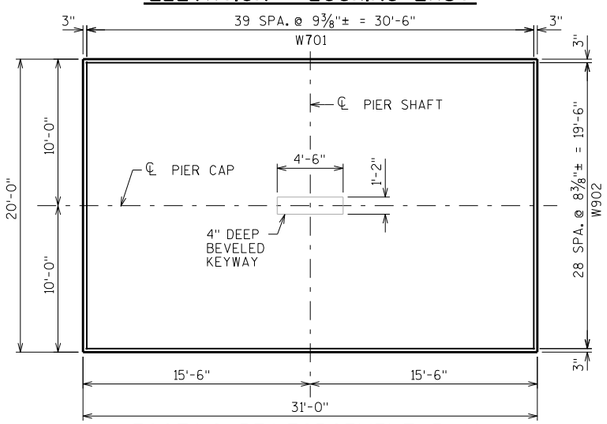


SECTION THRU NEW PIER CAP

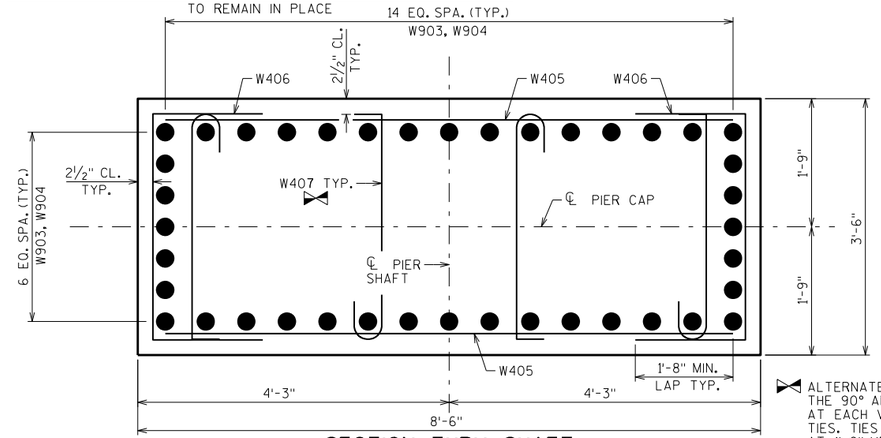


CONST. JOINT DETAIL

TYP.



FOOTING REINFORCEMENT PLAN



SECTION THRU SHAFT

ALTERNATE THE POSITION OF THE 90° AND THE 180° HOOKS AT EACH VERTICAL LAYER OF TIES. TIES ARE TO BE SPACED AT 1'-0" VERTICALLY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

PIER 3

SHEET 14

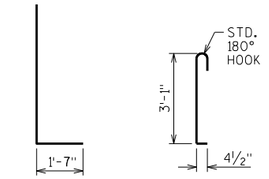
522

SCALE = 5.00

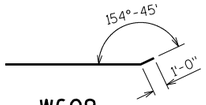
8

8

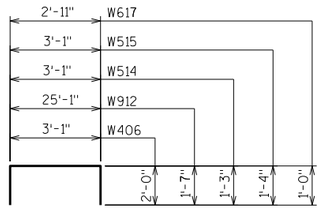
STATE PROJECT NUMBER
1430-00-76



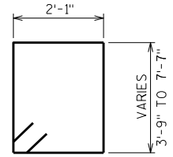
W903 W407



W609



W406, W912, W514, W515, W617



W513

(A23) MASONRY ANCHORS TYPE L NO. 5 BARS, EMBED 1'-6" INTO EXIST. CONCRETE. EPOXY ANCHORED.

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	W701		40	19'-8"			FOOTING - HORIZ.
	W902		29	30'-8"			FOOTING - HORIZ.
	W903		40	11'-0"	X		FOOTING/SHAFT - VERT.
	W904		40	23'-0"			SHAFT/CAP - VERT.
	W405		34	7'-8"			SHAFT - HORIZ.
	W406		34	6'-11"	X		SHAFT - HORIZ.
	W407		68	3'-11"	X		SHAFT - TIE BARS - HORIZ.
	W608		NOT	USED			
	W609		10	10'-5"	X		NEW PIER CAP - HORIZ.
◭	W610		12	16'-7"		◭	NEW PIER CAP - HORIZ. - F.F. & B.F.
	W611		8	25'-0"			NEW PIER CAP - HORIZ. - F.F. & B.F.
	W912		11	27'-9"	X		NEW PIER CAP - HORIZ. - TOP
◭	W513		68	16'-2"	X	◭	NEW PIER CAP - STIRRUPS
	W514		15	5'-4"	X		NEW PIER CAP - VERT. - TOP
	W515		7	5'-6"	X		NEW PIER CAP - VERT. - TOP
	W416		4	5'-6"			NEW PIER CAP - HORIZ. - TOP
	W617		10	4'-7"	X		NEW PIER CAP - ENDS - HORIZ.
	W518		10	2'-0"			NEW PIER CAP - VERT.
(A23)	W519		28	2'-6"			EXISTING PIER CAP - CONC. MASONRY ANCHORS
(A23)	W520		24	1'-10"			PRECAST CONCRETE BLOCK - CONC. MASONRY ANCHORS
	W421		18	1'-10"			PRECAST CONCRETE BLOCK - HORIZ.
	W422		24	0'-11"			PRECAST CONCRETE BLOCK - HORIZ.

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
W610	2 SERIES OF 6	8'-9" TO 24'-5"
W513	4 SERIES OF 17	12'-4" TO 20'-0"

BUNDLE AND TAG EACH SERIES SEPARATELY.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

PIER 3 DETAILS

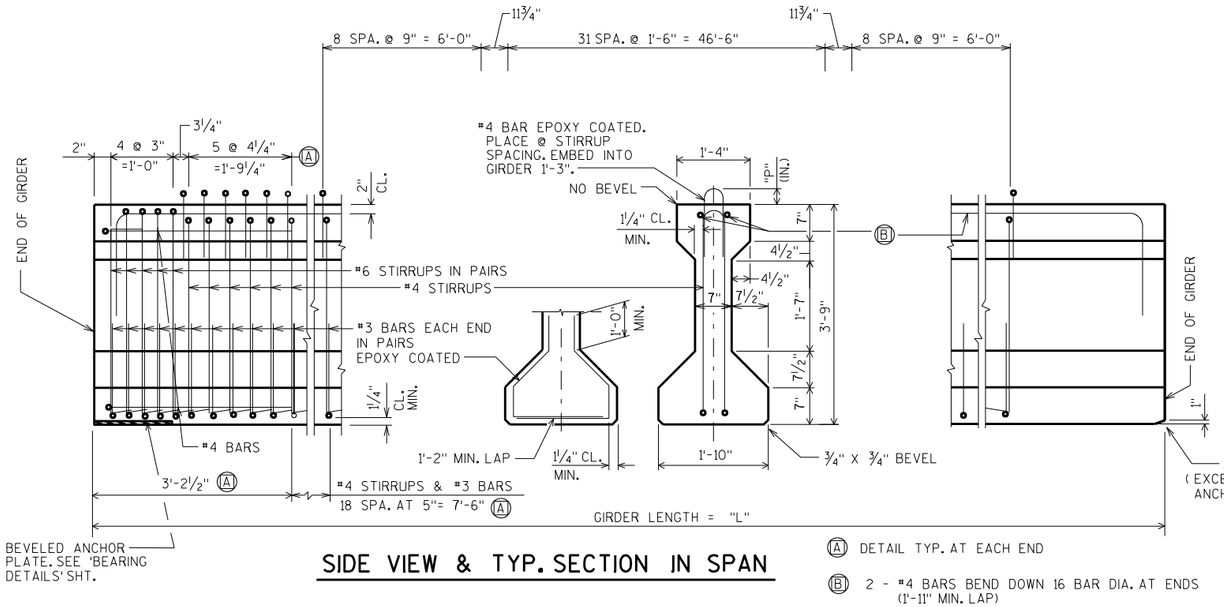
SHEET 15

523

SCALE = 5.00

STATE PROJECT NUMBER

1430-00-76



SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 2 - #4 BARS BEND DOWN 16 BAR DIA. AT ENDS (1'-11" MIN. LAP)

* THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1&4	1.92
2&3	1.92

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'. USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

GIRDER NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 2" OF GIRDER, WHICH SHALL BE TROWEL FINISHED.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

STRANDS SHALL BE FLUSH WITH ENDS OF GIRDER FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE. ENDS OF STRANDS SHALL BE PAINTED WITH NON-BITUMINOUS JOINT SEALER FOR GIRDER ENDS THAT ARE FINALLY EXPOSED. COAT THE GIRDER ENDS, EXPOSED STRANDS ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE M, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, TWO OPTIONS ARE AVAILABLE:

1. USE ASTM A706, GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.
2. USE ASTM A615, GRADE 40 REINFORCEMENT AND A MODIFIED STIRRUP SPACING SUBMITTED TO AND APPROVED BY THE STRUCTURES DEVELOPMENT SECTION.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION

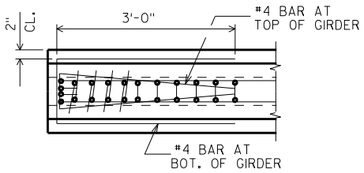
PRESTRESSING STRANDS SHALL BE 0.6" DIA.-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi AND SHALL BE FLUSH WITH THE ENDS OF THE GIRDER.

BEND EACH END OF #4 STIRRUPS 4½" AND #6 STIRRUPS 6½".

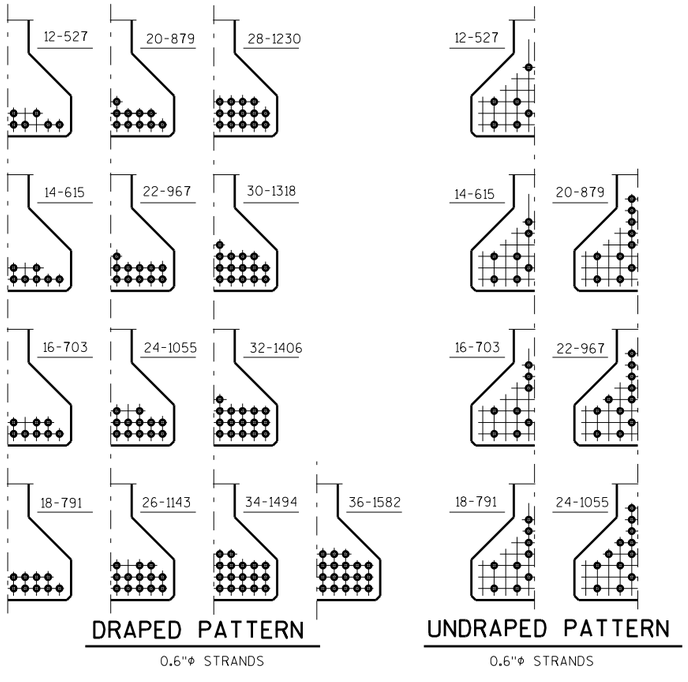
FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

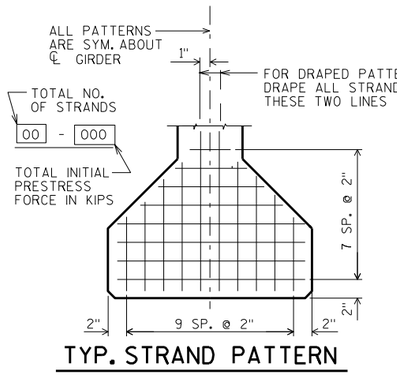
WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ASTM A497.

ENDS OF STRANDS SHALL BE PAINTED WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (THIS APPLIES ONLY TO THOSE ENDS OF GIRDERS THAT ARE FINALLY EXPOSED.)

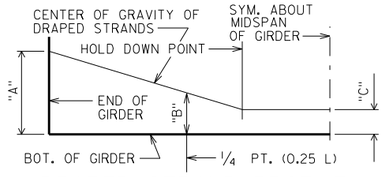


TOP VIEW OF GIRDER ENDS

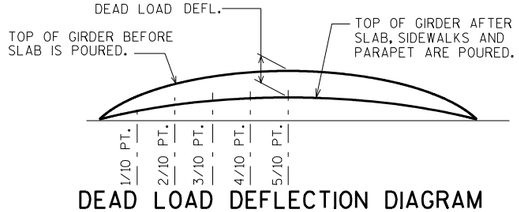




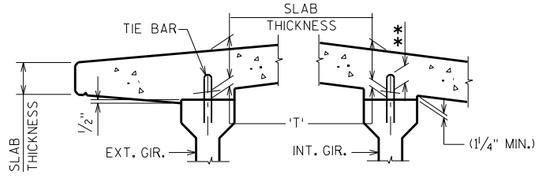
TYP. STRAND PATTERN



DRAPED STRAND PROFILE



DEAD LOAD DEFLECTION DIAGRAM



SLAB HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
\- TOP OF GIRDER ELEVATION
\+ DEAD LOAD DEFLECTION
\- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3⅜" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER NO.	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	CONC. STRGTH. f'c (P.S.I.)	"P" (IN.) 1st 1/3	MID 1/3	3rd 1/3	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) *	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) *
1&4	G1A, G1B & G1C	81.875	0.3	0.6	0.8	1.0	1.0	8000	7	6	7	0.6	18	6400	42	12.75	15.75	3		
2&3	G1A, G1B & G1C	81.875	0.3	0.6	0.9	1.0	1.0	8000	7	6	7	0.6	18	6400	42	12.75	15.75	3		
4	5	81.875	0.3	0.6	0.8	1.0	1.0	8000	9	7	6	0.6	18	6400	42	12.75	15.75	3		

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

45" PRESTRESSED GIRDER DETAILS

SHEET 16

524

8

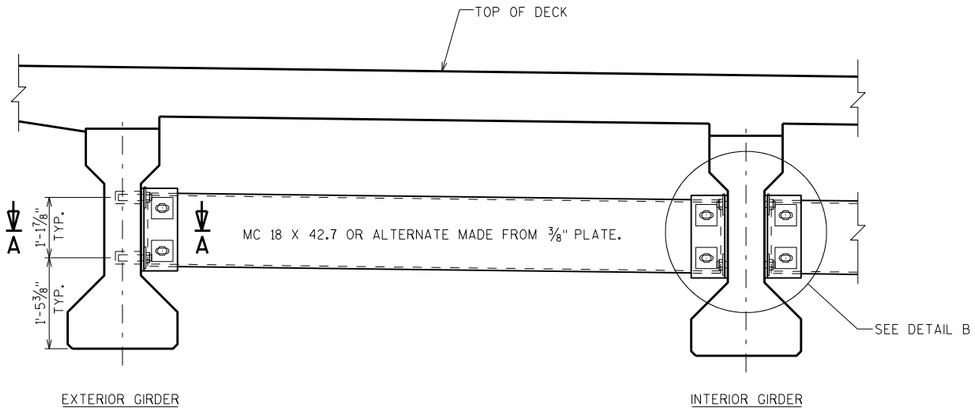
LV = 123 6 9

SCALE = 2.667

G45
5-11

STATE PROJECT NUMBER

1430-00-76



PART TRANSVERSE SECTION AT DIAPHRAGM

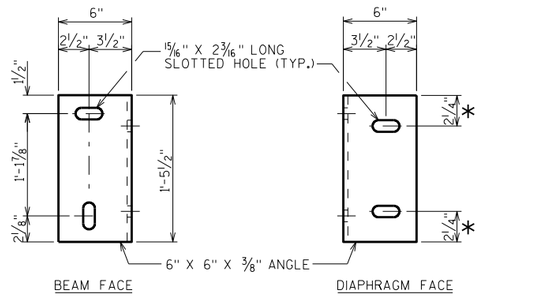
FOR GIRDERS G1A, G1B, G1C & G5 IN SPAN 4

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-24-09", EACH.

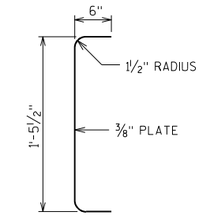
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT. ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

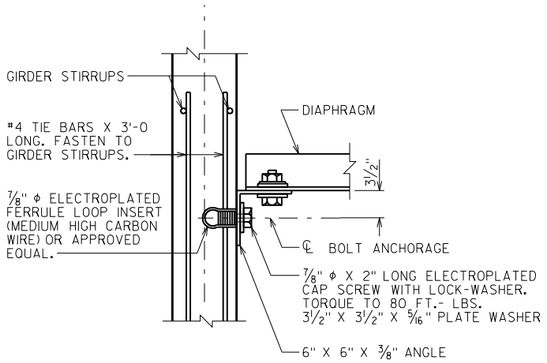


DIAPHRAGM SUPPORT

* 2½" FOR ALTERNATE PLATE DIAPHRAGM

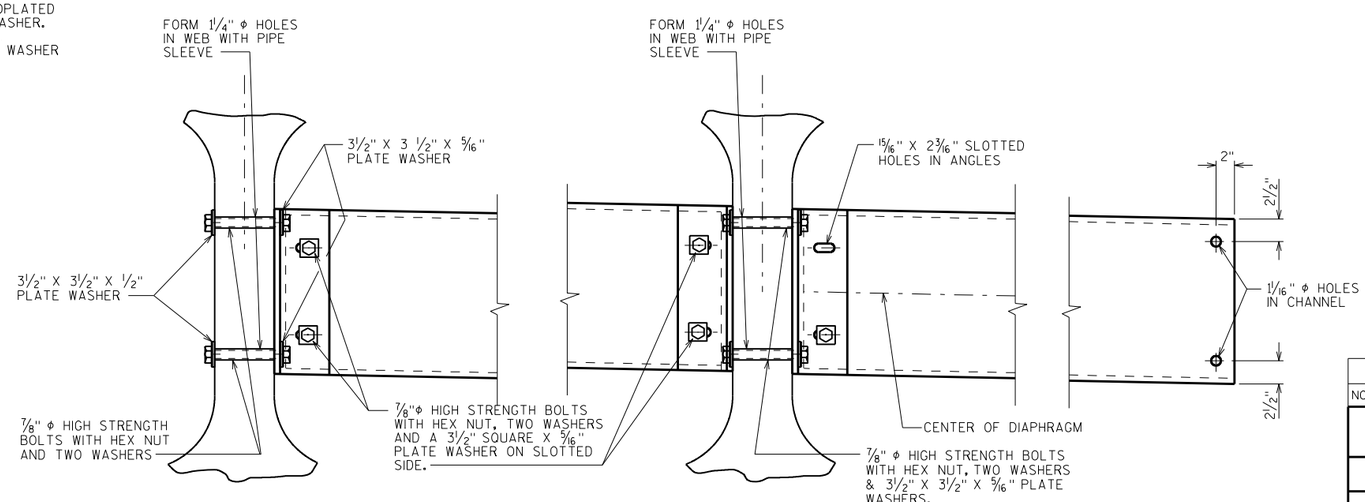


SECTION THRU ALTERNATE DIAPHRAGM



SECTION A-A

(FOR EXTERIOR ATTACHMENT)



DETAIL B

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

STEEL DIAPHRAGM

SHEET 17

525

GSTDIA
7-09

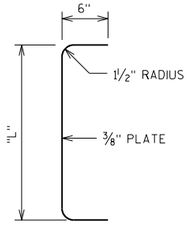
SCALE =

STATE PROJECT NUMBER

1430-00-76

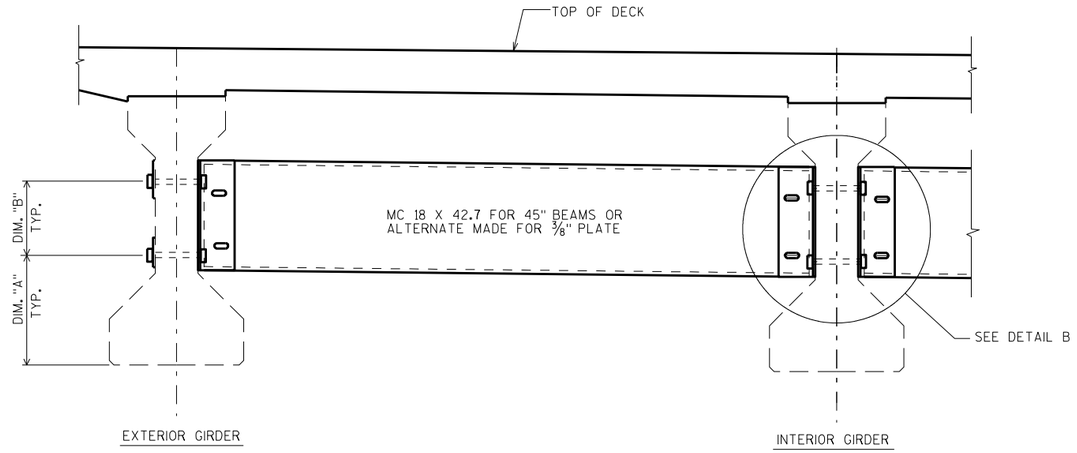
TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	* DIM. "X"
~~28"~~	~~1'-0 7/8"~~	~~5 7/8"~~	~~9 1/2"~~	~~2 1/4"~~
~~36"~~	~~1'-2 7/8"~~	~~9 7/8"~~	~~1'-1 1/2"~~	~~3 1/4"~~
45"	1'-5 3/8"	1'-1 7/8"	1'-5 1/2"	2 1/4"
~~45W"~~	~~1'-9 1/8"~~	~~8 7/8"~~	~~1'-0 1/2"~~	~~2 3/4"~~
~~54"~~	~~1'-7 7/8"~~	~~1'-5 7/8"~~	~~1'-9 1/2"~~	~~4 1/4"~~
~~54W"~~	~~1'-9 1/8"~~	~~1'-5 7/8"~~	~~1'-9 1/2"~~	~~4 1/4"~~



SECTION THRU ALTERNATE DIAPHRAGM

*DIM "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM



PART TRANSVERSE SECTION AT DIAPHRAGM

FOR ORIGINAL GIRDERS 1 THRU 5

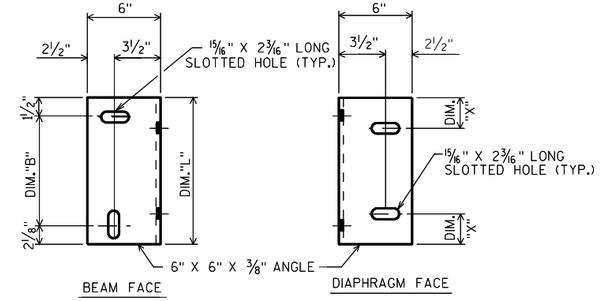
NOTES

ALL DIAPHRAGM MATERIAL AND CORED HOLES SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-24-09", EACH.

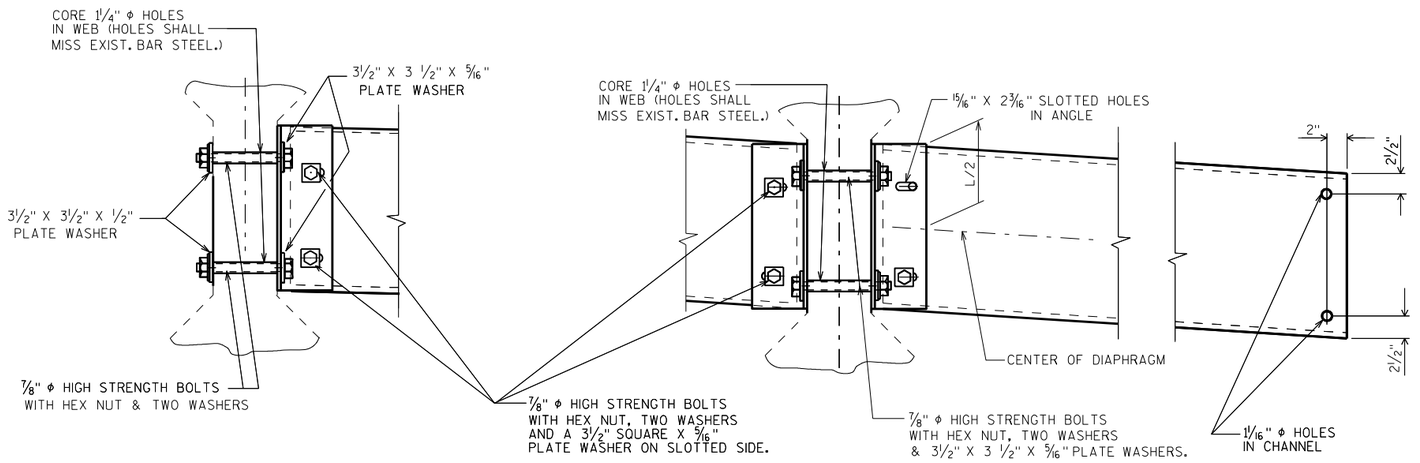
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



DIAPHRAGM SUPPORT



(FOR EXTERIOR GIRS. & STAGGERED DIAPHRAGMS)

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

DETAIL B

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

STEEL DIAPHRAGM

SHEET 18

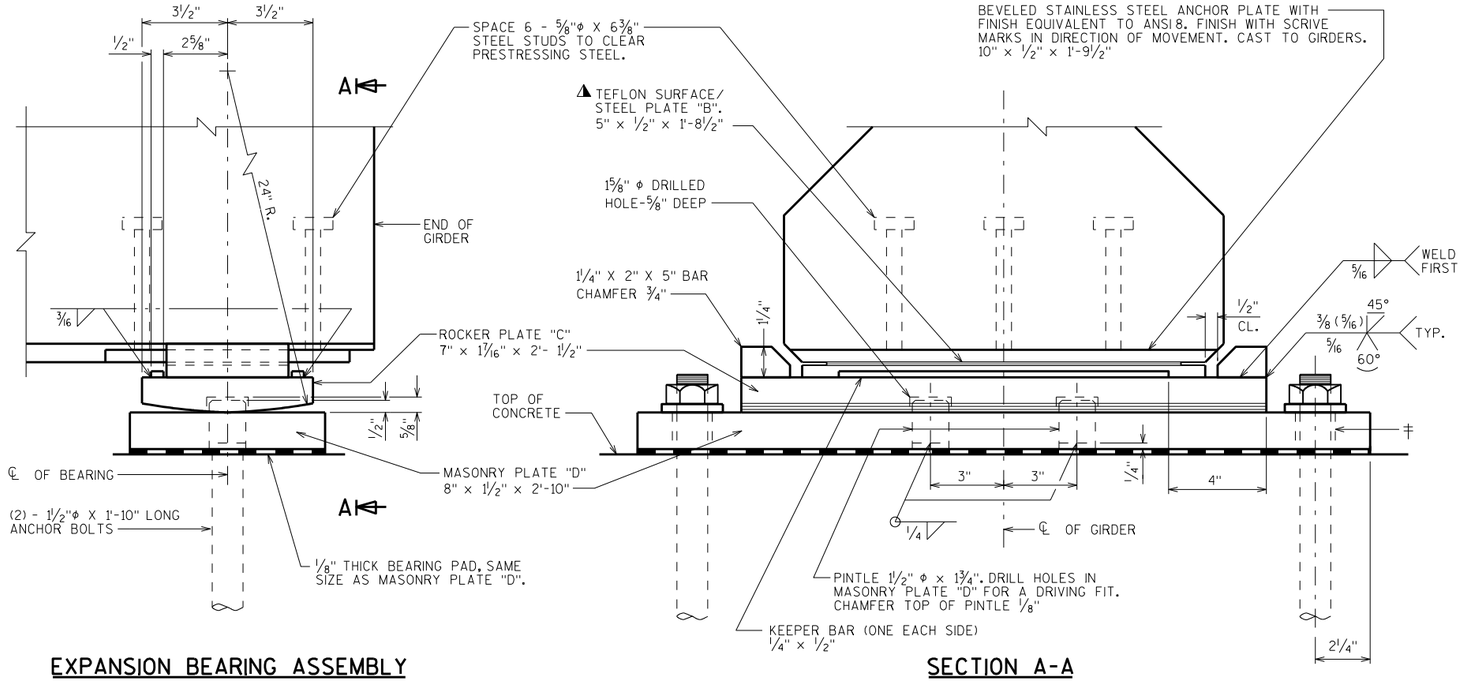
526

SCALE =

GSTDIAMT
7-10

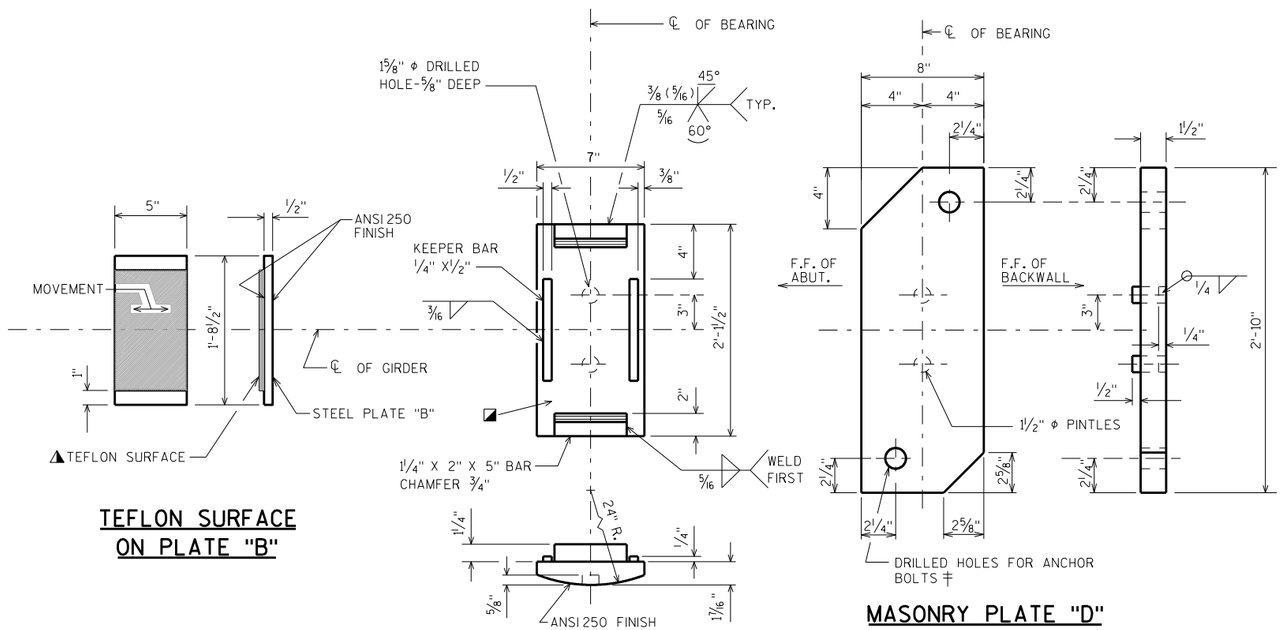
STATE PROJECT NUMBER

1430-00-76



EXPANSION BEARING ASSEMBLY

SECTION A-A



TEFLON SURFACE ON PLATE "B"

ROCKER PLATE "C"

MASONRY PLATE "D"

EXPANSION BEARING
AT ABUTMENTS

BEARING NOTES

ALL BEARINGS ARE SYMMETRICAL ABOUT ℄ OF GIRDER AND ℄ OF BEARING.

ALL MATERIAL IN BEARINGS, BUT EXCLUDING STAINLESS STEEL PLATE, TEFLON SURFACE, PINTLES, ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A709 GRADE 50W.

STAINLESS STEEL PLATE SHALL CONFORM TO ASTM A240, TYPE 304.

STEEL PINTLES SHALL CONFORM TO ASTM A449 OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A709 GRADE 36, OR MATERIAL OF EQUIVALENT YIELD STRENGTH AND ELONGATION.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL FINISHED SURFACES SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE STANDARD WROUGHT WASHER AND ONE HEX NUT PER BOLT. PROJECT ANCHOR BOLTS, MASONRY PLATE "D" THICKNESS + 2¼", ABOVE TOP OF CONCRETE.

CHAMFER ANCHOR BOLTS PRIOR TO THREADING.

MASONRY PLATE "D", ROCKER PLATE "C", ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153, CLASS "C". STEEL PLATE "B" SHALL BE SHOP PAINTED. DO NOT PAINT TEFLON SURFACE.

ALL MATERIAL IN "STEEL BEARINGS FOR PRESTRESSED CONCRETE GIRDERS", INCLUDING BEARING PADS, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING ASSEMBLIES EXPANSION B-24-09", EACH.

‡ DRILLED HOLES FOR ANCHOR BOLTS IN MASONRY PLATE "D" SHALL HAVE A DIAMETER ⅜" LARGER THAN ANCHOR BOLT.

▲ TEFLON SURFACE, USE UNFILLED WITH MINIMUM 1/16" THICKNESS. PLACE WITH SCRIVE MARKS IN DIRECTION OF MOVEMENT. BOND STEEL PLATE "B" AND TEFLON WITH ADHESIVE MATERIAL MEETING FEDERAL SPECIFICATION MMM-A-134, FEP FILM OR EQUAL.

◪ PROVIDE A METHOD FOR HANDLING ROCKER PLATE "C" DURING GALVANIZING.

AT INSTALLATION, ENSURE STAINLESS STEEL SLIDING FACE OF THE UPPER ELEMENT AND THE TFE SLIDING FACE OF THE LOWER ELEMENT HAVE THE SURFACE FINISH SPECIFIED AND ARE CLEAN AND FREE OF ALL DUST, MOISTURE, AND OTHER FOREIGN MATTER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

PRESTRESSED GIRDER STEEL BEARINGS

SHEET 19

527

BRGPCG 7-10

8

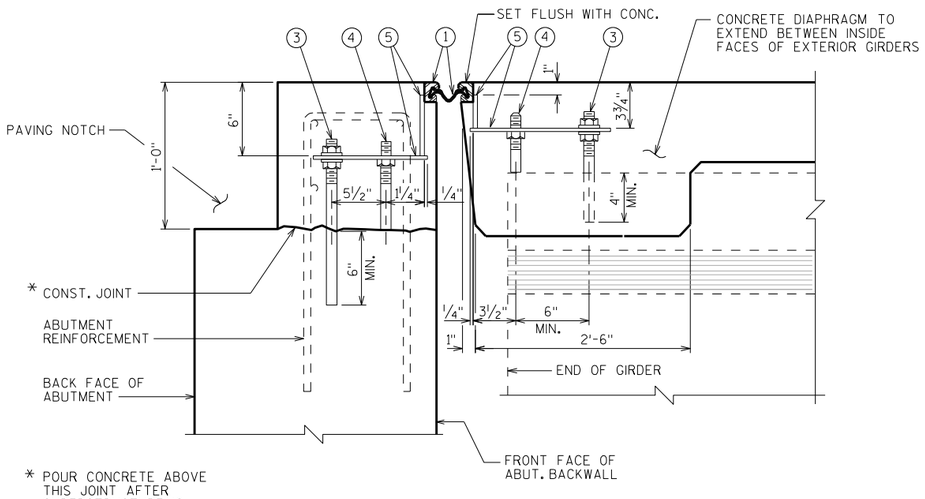
8

12345 7

SCALE =

STATE PROJECT NUMBER

1430-00-76



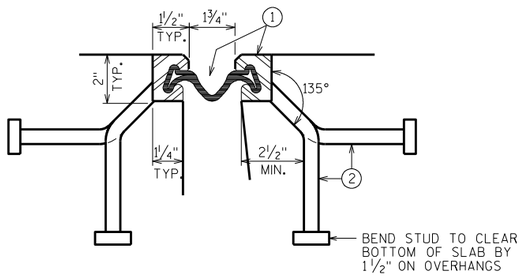
* POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

SECTION THRU JOINT AT ABUTMENT

NORMAL TO ℄ SUBSTRUCTURE

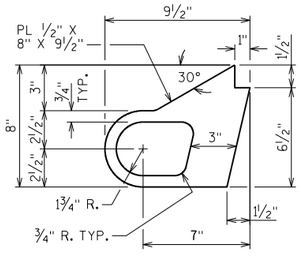
LEGEND

1. NEOPRENE STRIP SEAL (4-INCH) & STEEL EXTRUSIONS.
2. STUDS $\frac{5}{8}$"ϕ X 6$\frac{3}{8}$" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.
2A. $\frac{1}{2}$" THICK ANCHOR PLATE WITH $\frac{5}{8}$"ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
3. $\frac{3}{4}$" ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES ON ℄ OF GIRDER AND AS SHOWN IN ABUTMENT BACKWALL.
4. $\frac{3}{4}$"ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X $\frac{1}{2}$" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. FIELD OR SHOP WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1$\frac{1}{2}$" ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.
6. GALVANIZED PLATE $\frac{3}{8}$" X LIMITS SHOWN WITH HOLES FOR NO. 7. BEND AS SHOWN.
7. $\frac{3}{4}$"ϕ X 1$\frac{1}{2}$" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. RECESS $\frac{1}{16}$" BELOW PLATE SURFACE.
8. $\frac{3}{4}$"ϕ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
9. $\frac{3}{4}$"ϕ X 2$\frac{1}{4}$" GALVANIZED THREADED COUPLING.
10. 1" X 5" SLOTTED CSK. HOLE FOR NO. 7. SLOT PARALLEL TO DIRECTION OF MOVEMENT.

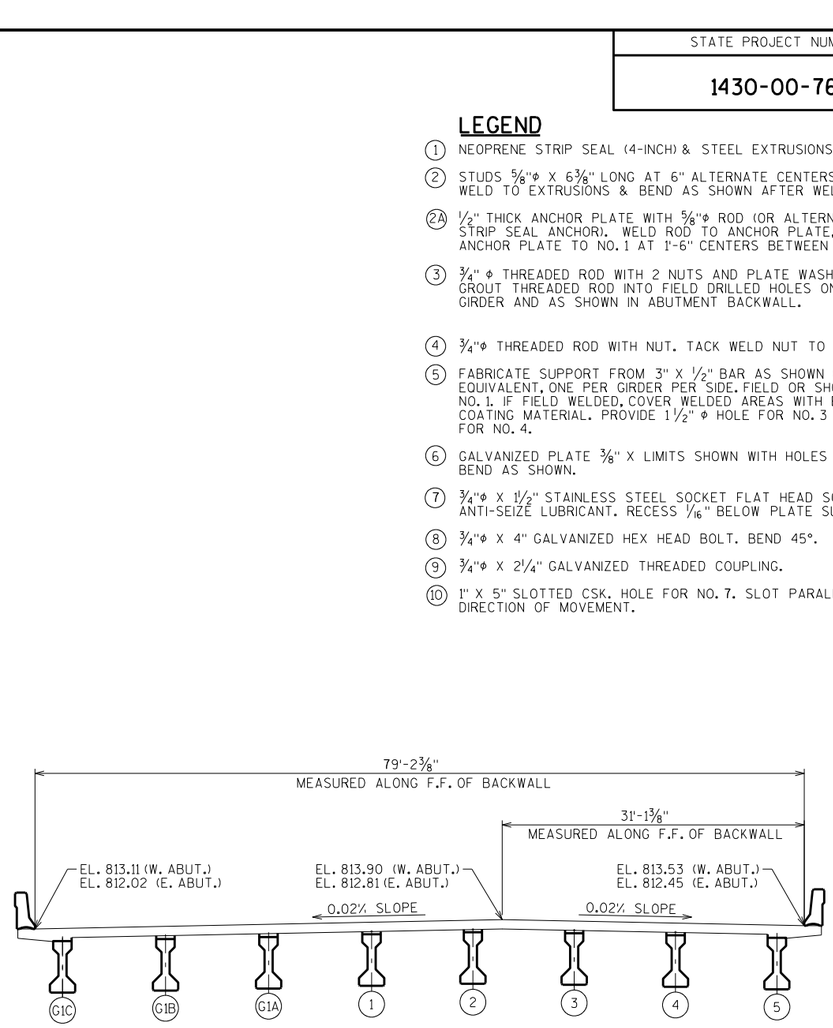


SECTION THRU JOINT

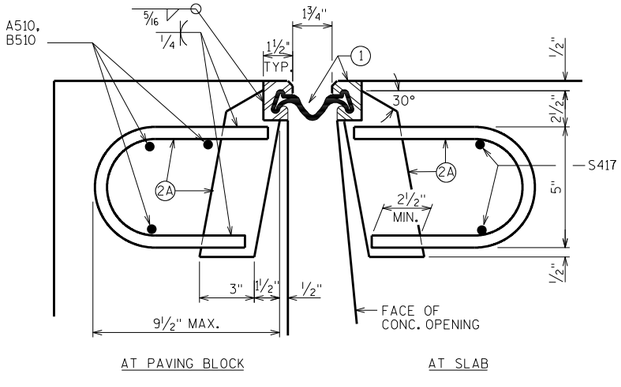
EXTERIOR GIRDER TO EDGE OF SLAB & AT PARAPETS, MEDIANS & SIDEWALKS



ALTERNATE STRIP SEAL ANCHOR

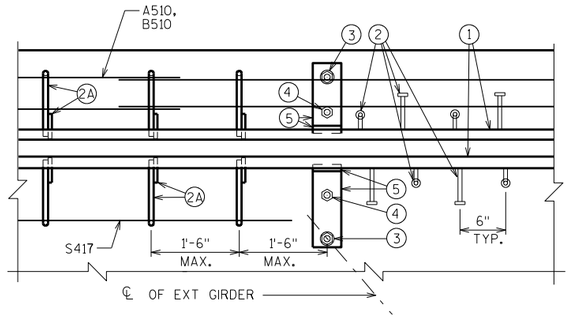


CROSS SECTION AT EXPANSION DEVICE - LOOKING EAST



SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.



PART PLAN

GENERAL NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. *6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING THE PLATES & EXTRUSIONS SHALL BE HOT DIPPEDGALVANIZED. SLIP-RESISTANT SURFACE IS APPLIED TO SIDEWALK COVER PLATES BY THE MANUFACTURER AND THEN HOT DIPPED GALVANIZED TO THEIR RECOMMENDATIONS TO MAINTAIN THE INTEGRITY OF THIS SURFACE.

ANCHOR SYSTEM NO. 8 & NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C & D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-24-09".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

EXPANSION DEVICE

SHEET 20

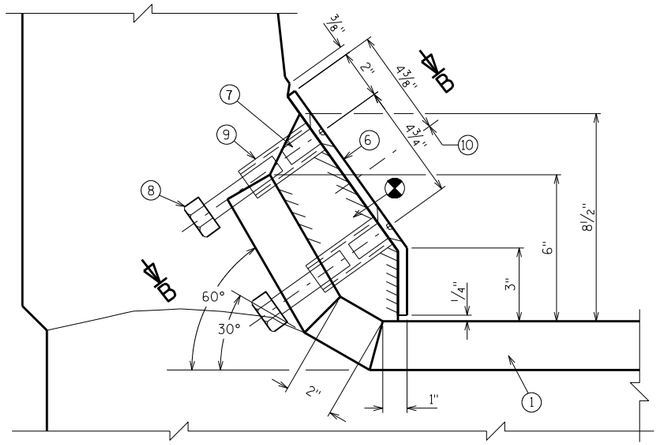
528

JT400SS
7-10

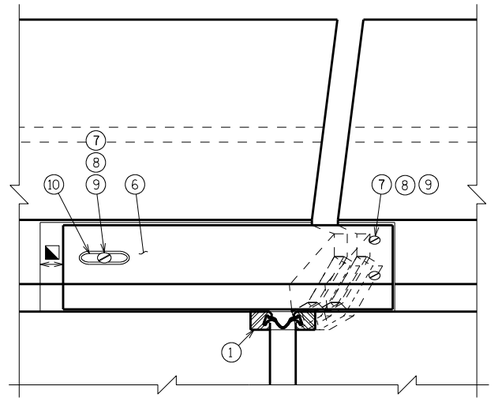
SCALE =

STATE PROJECT NUMBER

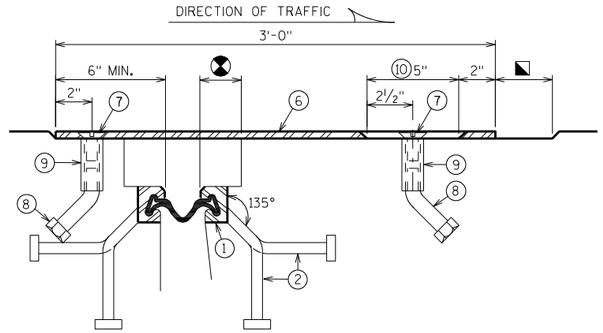
1430-00-76



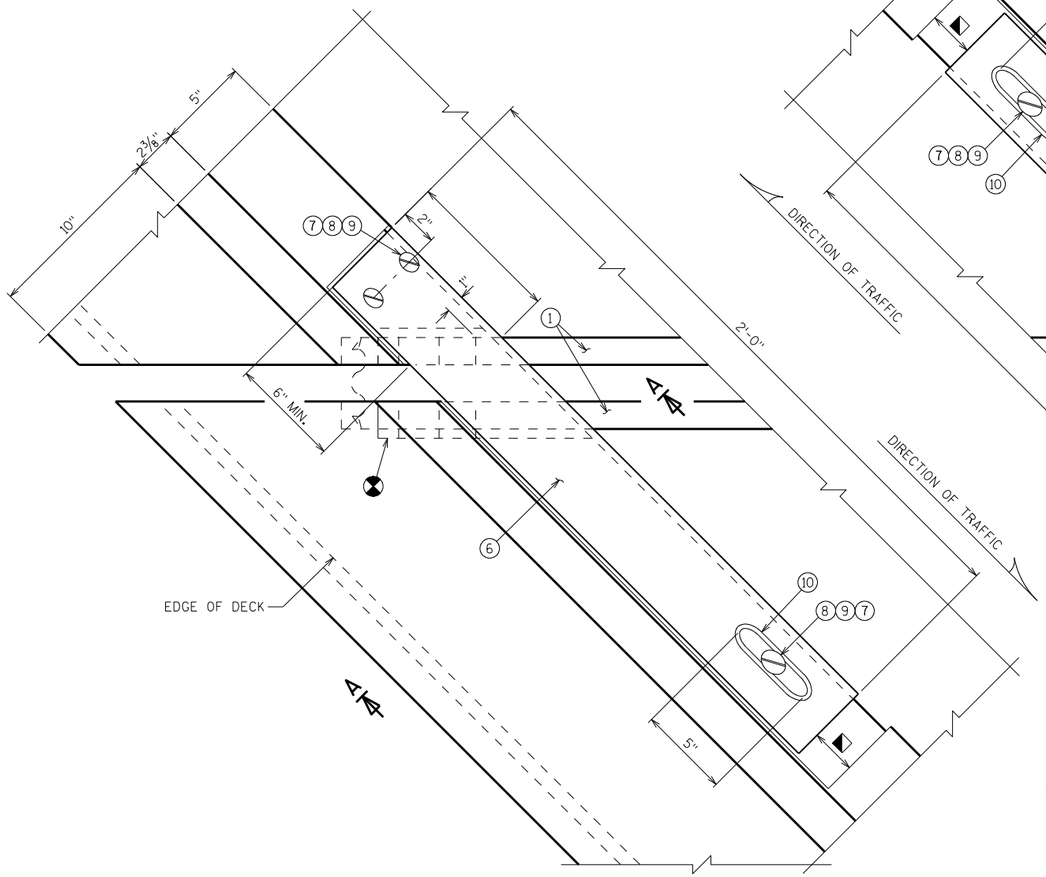
SECTION A-A

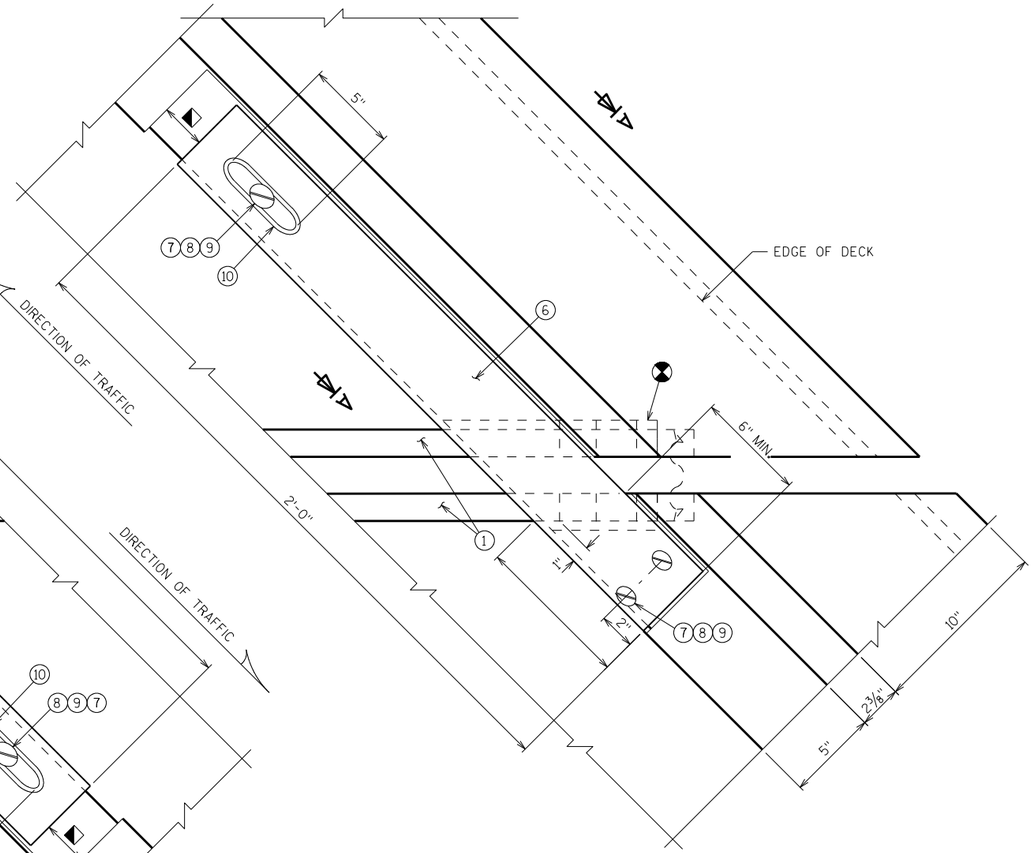


VIEW OF PARAPET PLATE FROM ROADWAY



SECTION B-B





PLAN

BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

JOINT OPENING DIM. ALONG SKEW PLUS 1/2".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

COVER PLATE DETAILS

SHEET 21

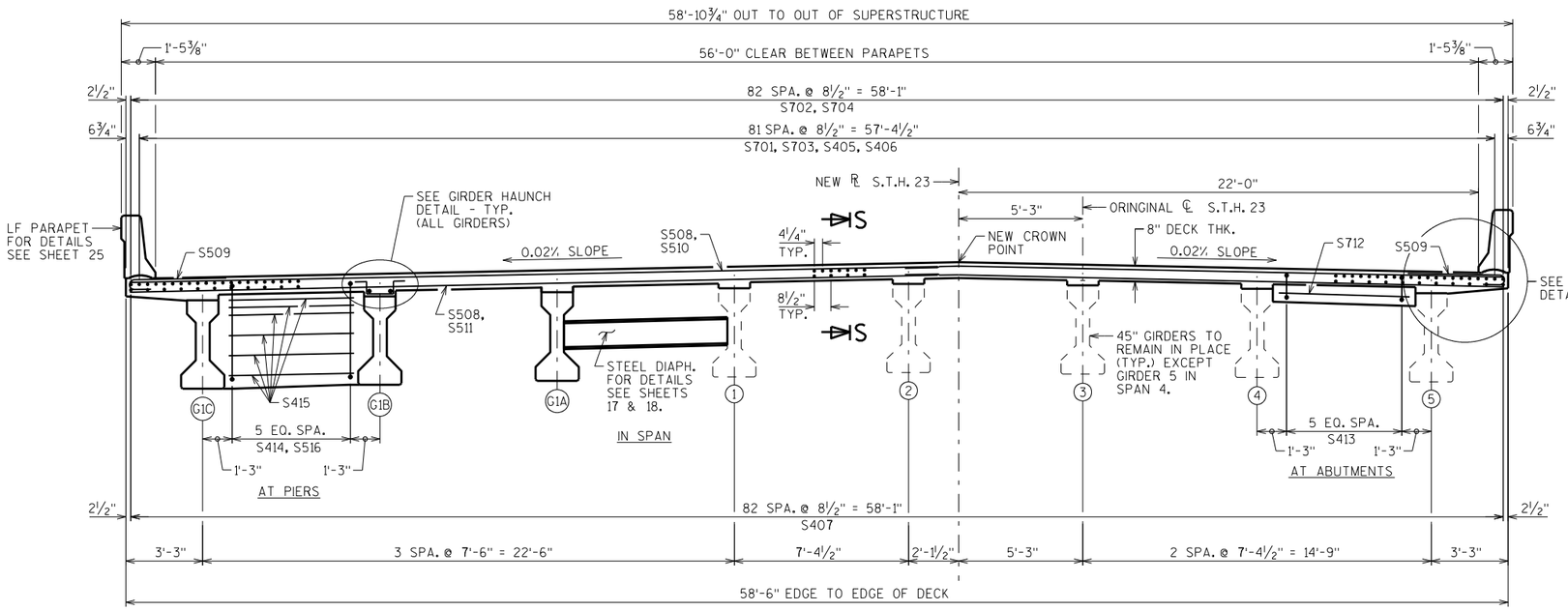
529

7-10
IT400SS

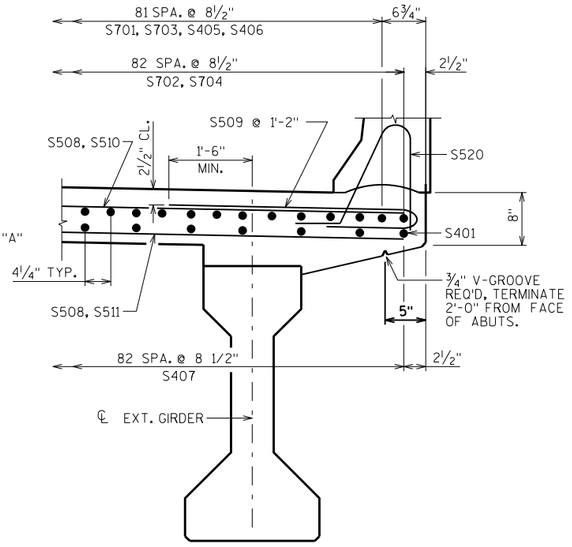
SCALE =

STATE PROJECT NUMBER

1430-00-76

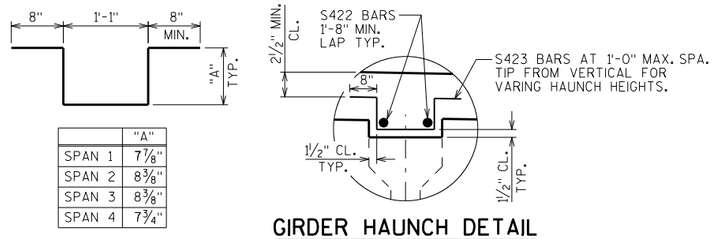


CROSS SECTION THRU PROPOSED ROADWAY - LOOKING EAST



DETAIL A

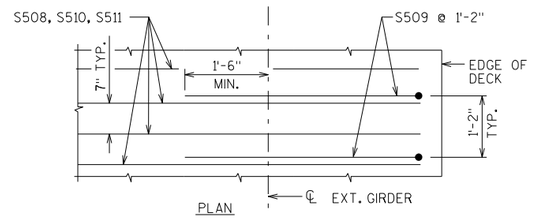
NOTE: NEW DRIP GROOVE LOCATION



	"A"
SPAN 1	7⅞"
SPAN 2	8⅜"
SPAN 3	8⅜"
SPAN 4	7¾"

GIRDER HAUNCH DETAIL

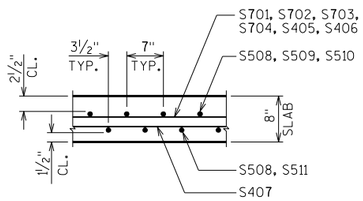
AT EXISTING GIRDERS G1 THRU G5 (EXCEPT G5 IN SPAN 4)



PLAN

ADDITIONAL REINF. DETAIL

TYP.



SECTION S

TOP OF DECK ELEVATIONS

	℄ BRG. W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 2
LEFT EDGE OF DECK	813.10	813.07	813.05	813.02	812.99	812.97	812.94	812.91	812.88	812.86	812.83	812.80	812.78	812.75	812.72	812.70	812.67	812.64	812.61	812.59	812.56
GIRDER G1C	813.15	813.12	813.10	813.07	813.04	813.02	812.99	812.96	812.94	812.91	812.88	812.85	812.83	812.80	812.77	812.75	812.72	812.69	812.66	812.64	812.61
GIRDER G1B	813.33	813.30	813.27	813.24	813.22	813.19	813.16	813.14	813.11	813.08	813.06	813.03	813.00	812.98	812.95	812.92	812.89	812.87	812.84	812.81	812.79
GIRDER G1A	813.50	813.47	813.45	813.42	813.39	813.37	813.34	813.31	813.28	813.26	813.23	813.20	813.18	813.15	813.12	813.10	813.07	813.04	813.01	812.99	812.96
GIRDER 1	813.67	813.65	813.62	813.59	813.57	813.54	813.51	813.49	813.46	813.43	813.41	813.38	813.35	813.32	813.30	813.27	813.24	813.22	813.19	813.16	813.13
GIRDER 2	813.85	813.82	813.79	813.77	813.74	813.71	813.69	813.66	813.63	813.60	813.58	813.55	813.52	813.50	813.47	813.44	813.41	813.39	813.36	813.33	813.31
GIRDER 3	813.81	813.78	813.75	813.73	813.70	813.67	813.65	813.62	813.59	813.57	813.54	813.51	813.49	813.46	813.43	813.40	813.38	813.35	813.32	813.30	813.27
GIRDER 4	813.69	813.66	813.63	813.60	813.58	813.55	813.52	813.50	813.47	813.44	813.42	813.39	813.36	813.34	813.31	813.28	813.25	813.23	813.20	813.17	813.15
GIRDER 5	813.56	813.54	813.51	813.48	813.45	813.43	813.40	813.37	813.35	813.32	813.29	813.27	813.24	813.21	813.18	813.16	813.13	813.10	813.08	813.05	813.02
RIGHT EDGE OF DECK	813.53	813.51	813.48	813.45	813.43	813.40	813.37	813.34	813.32	813.29	813.26	813.24	813.21	813.18	813.16	813.13	813.10	813.07	813.05	813.02	812.99

TOP OF DECK ELEVATIONS

	℄ PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 3	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. E. BUT.
LEFT EDGE OF DECK	812.56	812.53	812.51	812.48	812.45	812.42	812.40	812.37	812.34	812.32	812.29	812.26	812.24	812.21	812.18	812.15	812.13	812.10	812.07	812.05	812.02
GIRDER G1C	812.61	812.58	812.56	812.53	812.50	812.48	812.45	812.42	812.39	812.37	812.34	812.31	812.29	812.26	812.23	812.20	812.18	812.15	812.12	812.10	812.07
GIRDER G1B	812.79	812.76	812.73	812.70	812.68	812.65	812.62	812.60	812.57	812.54	812.51	812.49	812.46	812.43	812.41	812.38	812.35	812.33	812.30	812.27	812.24
GIRDER G1A	812.96	812.93	812.91	812.88	812.85	812.82	812.80	812.77	812.74	812.72	812.69	812.66	812.64	812.61	812.58	812.55	812.53	812.50	812.47	812.45	812.42
GIRDER 1	813.13	813.11	813.08	813.05	813.03	813.00	812.97	812.95	812.92	812.89	812.86	812.84	812.81	812.78	812.76	812.73	812.70	812.68	812.65	812.62	812.59
GIRDER 2	813.31	813.28	813.25	813.23	813.20	813.17	813.14	813.12	813.09	813.06	813.04	813.01	812.98	812.96	812.93	812.90	812.87	812.85	812.82	812.79	812.77
GIRDER 3	813.27	813.24	813.21	813.19	813.16	813.13	813.11	813.08	813.05	813.02	813.00	812.97	812.94	812.92	812.89	812.86	812.84	812.81	812.78	812.76	812.73
GIRDER 4	813.15	813.12	813.09	813.06	813.04	813.01	812.98	812.96	812.93	812.90	812.87	812.85	812.82	812.79	812.77	812.74	812.71	812.69	812.66	812.63	812.60
GIRDER 5	813.02	813.00	812.97	812.94	812.91	812.89	812.86	812.83	812.81	812.78	812.75	812.72	812.70	812.67	812.64	812.62	812.59	812.56	812.54	812.51	812.48
RIGHT EDGE OF DECK	812.99	812.97	812.94	812.91	812.88	812.86	812.83	812.80	812.78	812.75	812.72	812.70	812.67	812.64	812.61	812.59	812.56	812.53	812.51	812.48	812.45

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

SUPERSTRUCTURE CROSS SECTION

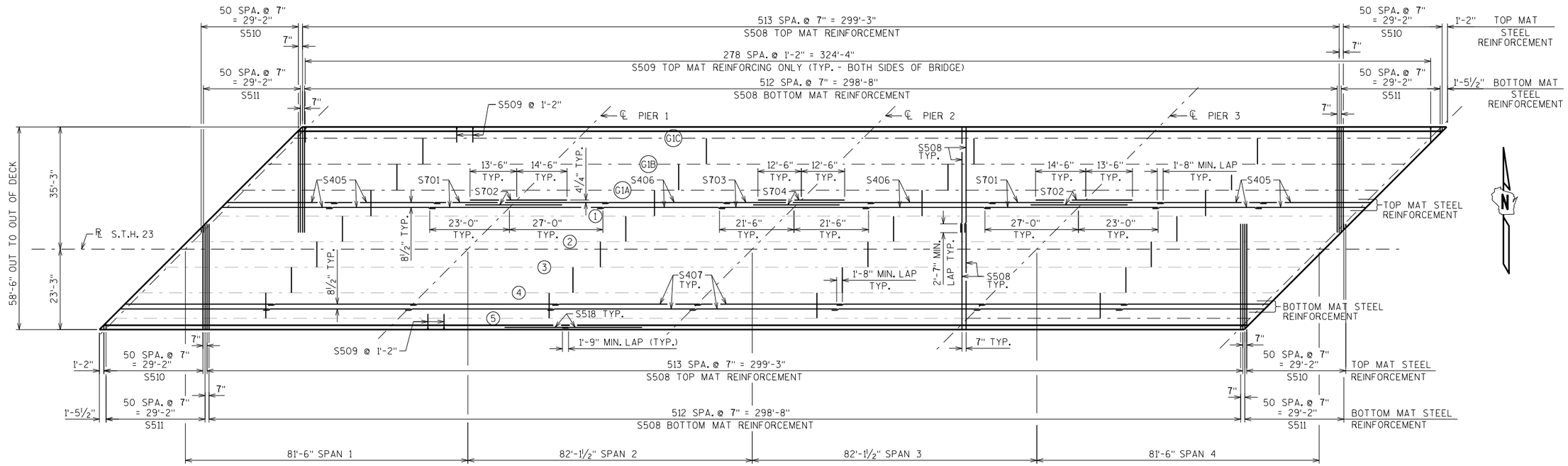
SHEET 22

530

SCALE = 15.00

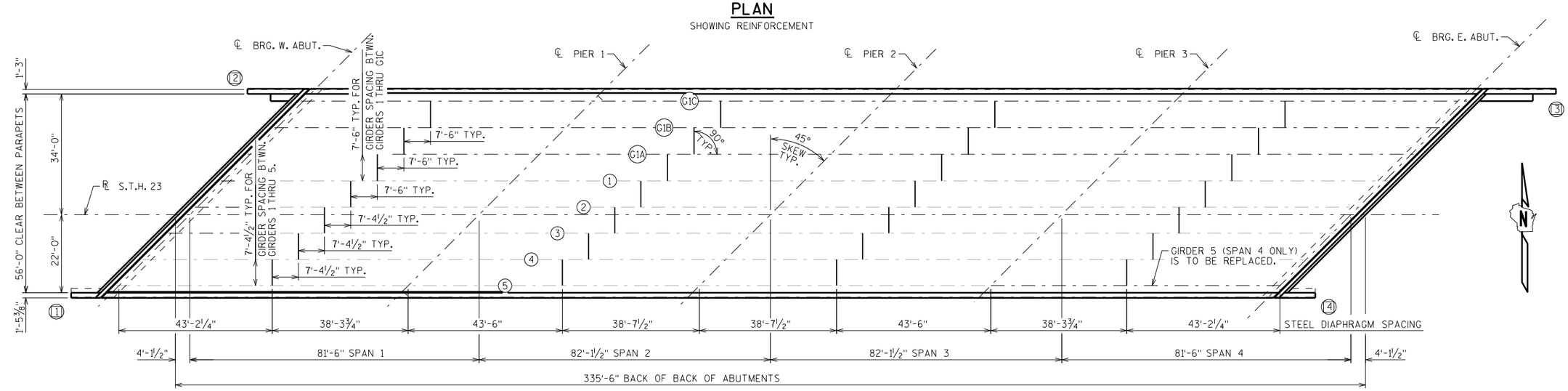
STATE PROJECT NUMBER

1430-00-76



PLAN

SHOWING REINFORCEMENT



FRAMING PLAN

SHOWING NEW STEEL DIAPHRAGM AND NEW GIRDER LAYOUTS

NEW GIRDERS:
GIRDER #5 (SPAN 4 ONLY)
GIRDERS G1A, G1B, & G1C (SPANS 1 THRU 4)

FOR GIRDER DETAILS SEE SHEET 16

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

SUPERSTRUCTURE

SHEET 23

531

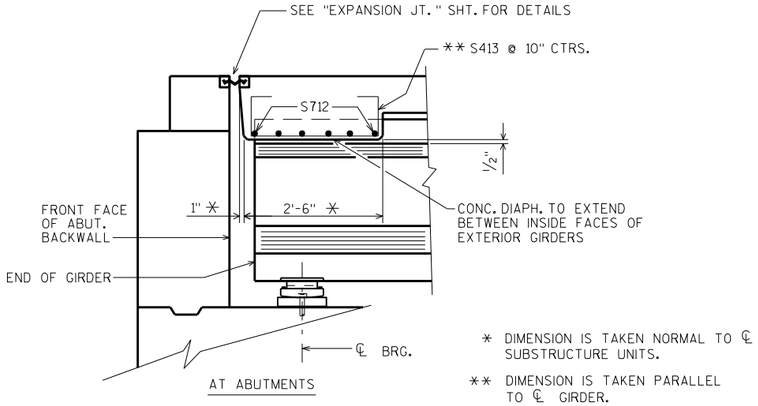
SCALE = 15.00

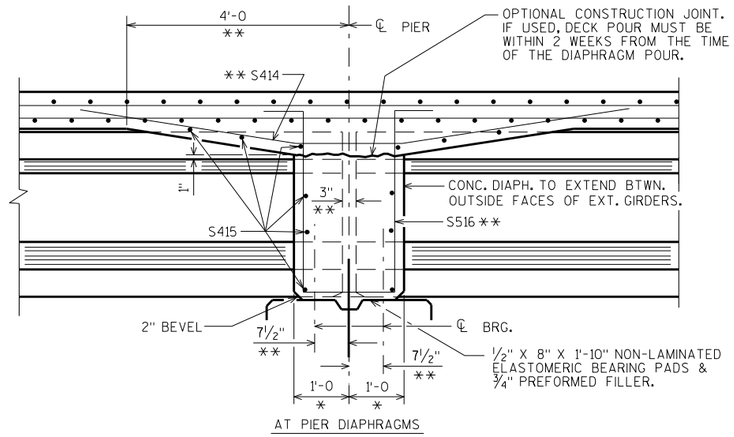
8

8

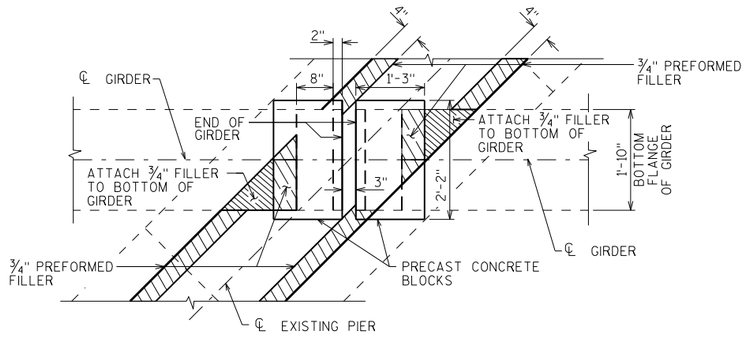
STATE PROJECT NUMBER

1430-00-76

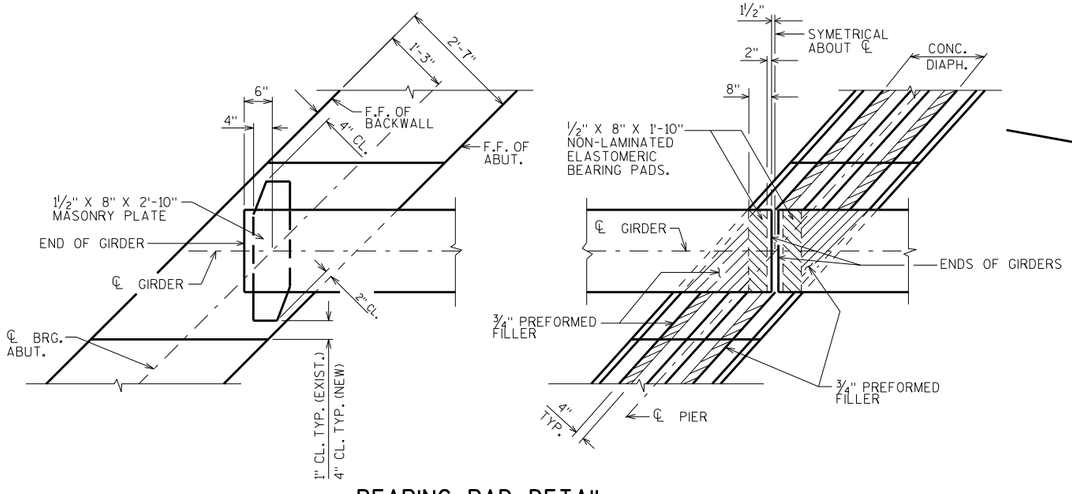




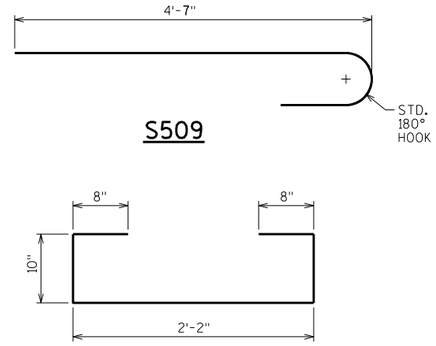
PART LONGIT. SECTION



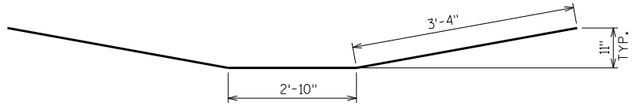
BEARING PADS ON PEDESTAL DETAIL



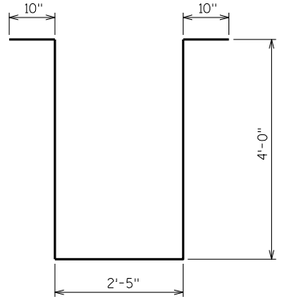
BEARING PAD DETAIL



S413



S414



S516

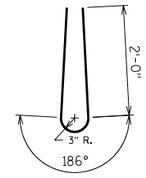
S509

BILL OF BARS

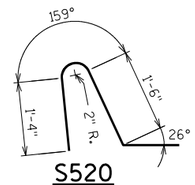
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S701	X	164	50'-0"			SLAB - CONTINUITY STEEL OVER PIER
S702	X	166	28'-0"			SLAB - CONTINUITY STEEL OVER PIER
S703	X	82	43'-0"			SLAB - CONTINUITY STEEL OVER PIER
S704	X	83	25'-0"			SLAB - CONTINUITY STEEL OVER PIER
S405	X	328	31'-7"			SLAB - LONGITUDINAL - TOP
S406	X	164	37'-0"			SLAB - LONGITUDINAL - TOP
S407	X	664	42'-9"			SLAB - LONGITUDINAL - BOTTOM
S508	X	2054	30'-5"			SLAB - TRANSVERSE
S509	X	558	5'-2"	X		EDGE OF SLAB - TRANSVERSE
S510	X	204	15'-4"		▲	SLAB - TRANSVERSE - TOP
S511	X	204	15'-8"		▲	SLAB - TRANVERSE - BOTTOM
S712	X	84	8'-1"			ABUT. DIAPH. - HORIZ. - BETWEEN GIRDERS
S413	X	84	4'-10"	X		ABUT. DIAPH. - VERT.
S414	X	126	9'-6"	X		PIER DIAPH. - VERT.
S415	X	252	7'-4"			PIER DIAPH. - HORIZ.
S516	X	126	11'-7"	X		PIER DIAPH. - VERT.
S417	X	28	9'-3"			EXPANSION DEVICE - HORIZ. - BETWEEN GIRDERS
S518	X	80	42'-9"			PARAPET - HORIZ.
S519	X	992	4'-10"	X		PARAPET - VERT.
S520	X	992	4'-2"	X		PARAPET - VERT.

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



S519



S520

BAR SERIES TABLE

MARK	NO. REQD.	LENGTH
S510	4 SERIES OF 51	0'-9" TO 29'-11"
S511	4 SERIES OF 51	1'-1" TO 30'-3"

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

SUPERSTRUCTURE DETAILS

SHEET 24

532

SCALE =

G45DET 7-11

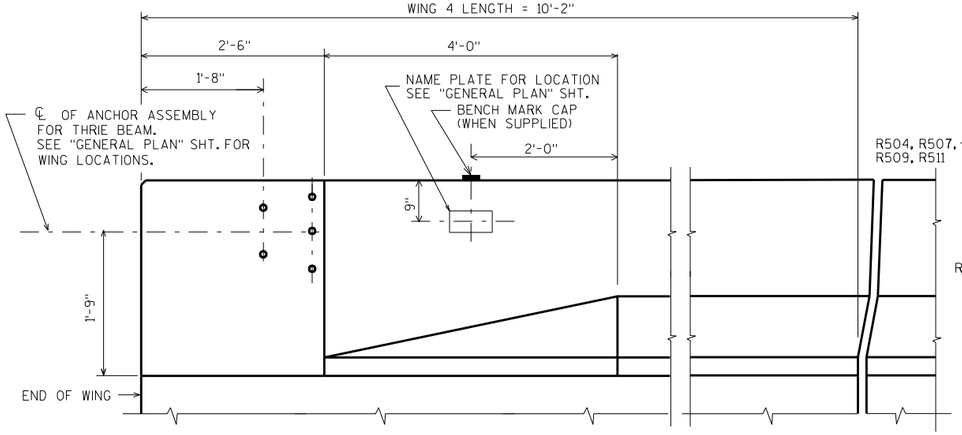
8 15 11 7 5 2

8

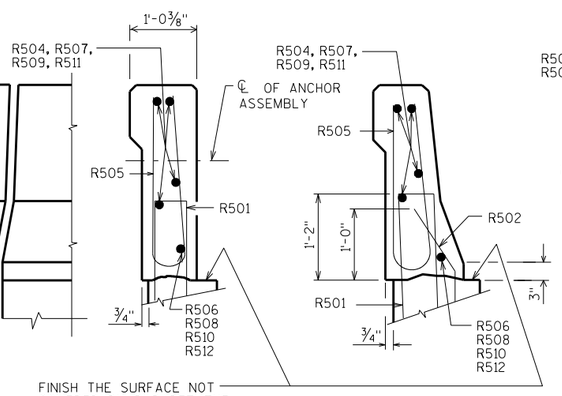
STATE PROJECT NUMBER

1430-00-76

WING 1 LENGTH = 9'-8"
WING 2 LENGTH = 16'-0"
WING 3 LENGTH = 22'-0"
WING 4 LENGTH = 10'-2"

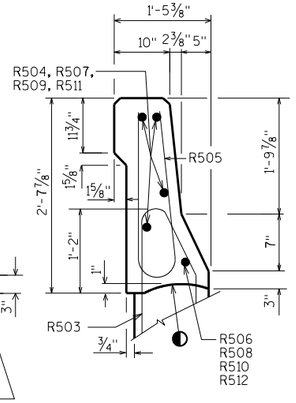


INSIDE ELEVATION

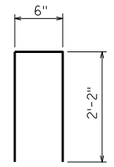


SECTION A

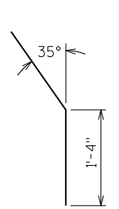
SECTION B



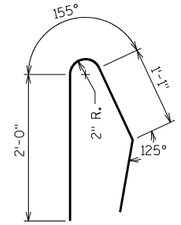
SECTION C



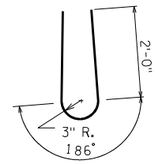
R501



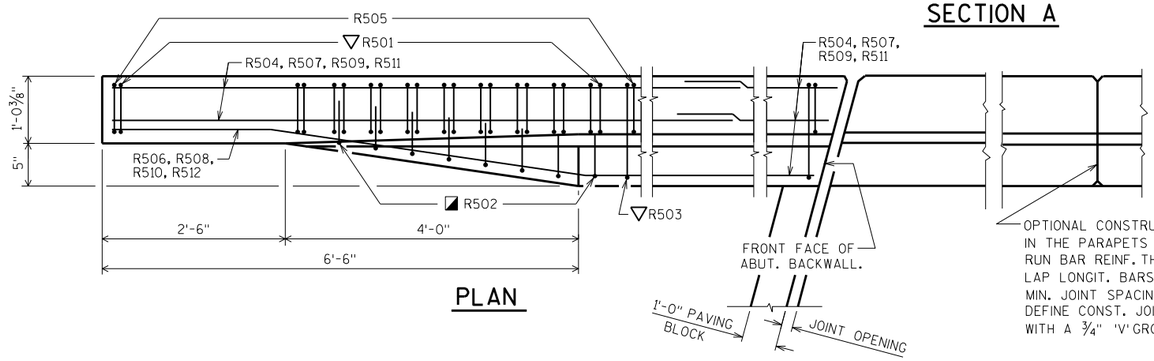
R502



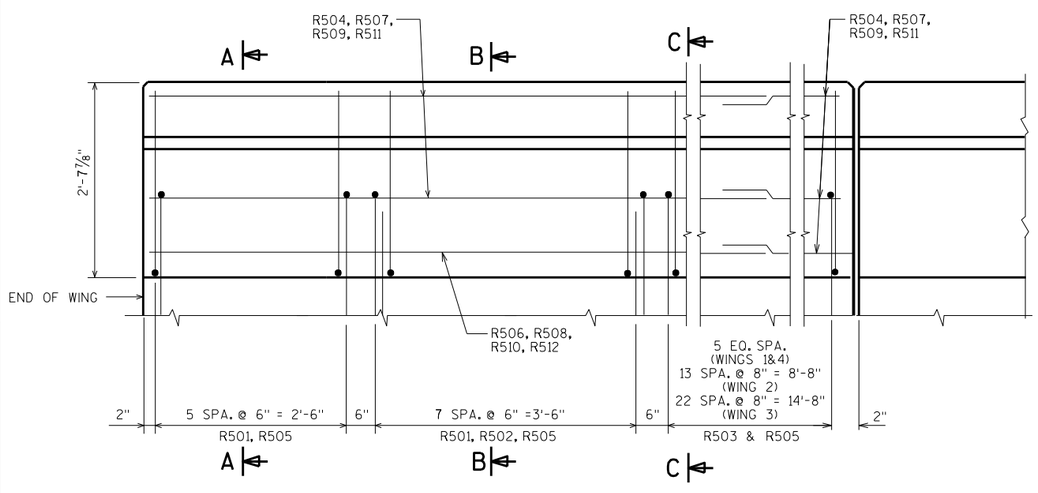
R503



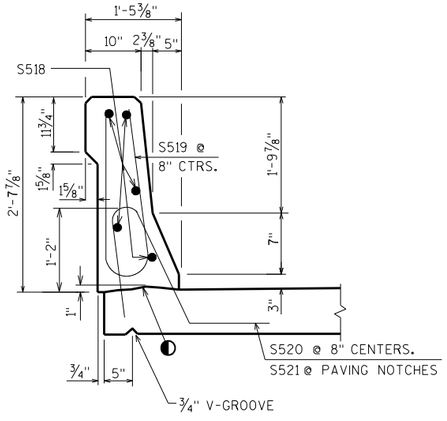
R505



PLAN



OUTSIDE ELEVATION

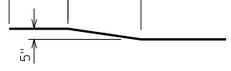


SECTION THRU PARAPET ON BRIDGE

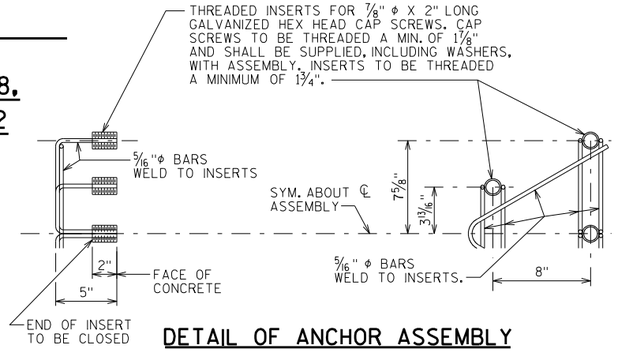
BILL OF BARS

FOR ABUTMENT PARAPETS

BAR MARK	COAT	WEST ABUT.	EAST ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	28	28	4-7	X		PARAPET VERT.
R502	X	16	16	2-4	X		PARAPET VERT.
R503	X	20	29	4-7	X		PARAPET VERT.
R504	X	8	—	5-7			PARAPET - HORIZ. - WING 1
R505	X	48	57	4-10	X		PARAPET VERT.
R506	X	1	—	8-4	X		PARAPET - HORIZ. - WING 1
R507	X	8	—	9-3			PARAPET - HORIZ. - WING 2
R508	X	1	—	15-10	X		PARAPET - HORIZ. - WING 2
R509	X	—	8	11-7			PARAPET - HORIZ. - WING 3
R510	X	—	1	21-4	X		PARAPET - HORIZ. - WING 3
R511	X	—	8	6-4			PARAPET - HORIZ. - WING 4
R512	X	—	1	10-0	X		PARAPET - HORIZ. - WING 4



R506, R508, R510, R512



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◪ R502 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R502 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R503 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

SLOPED FACE PARAPET LF

SHEET 25

533

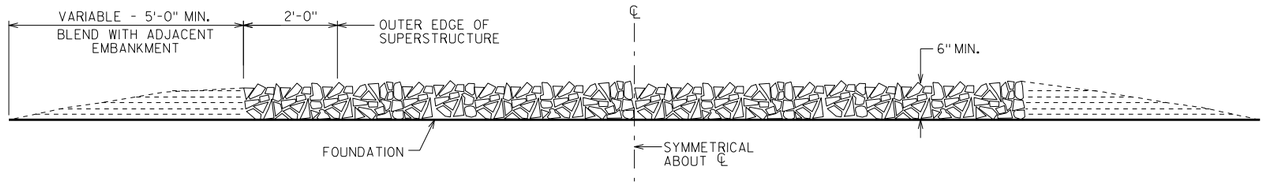
SCALE =

LFWIN
7-11

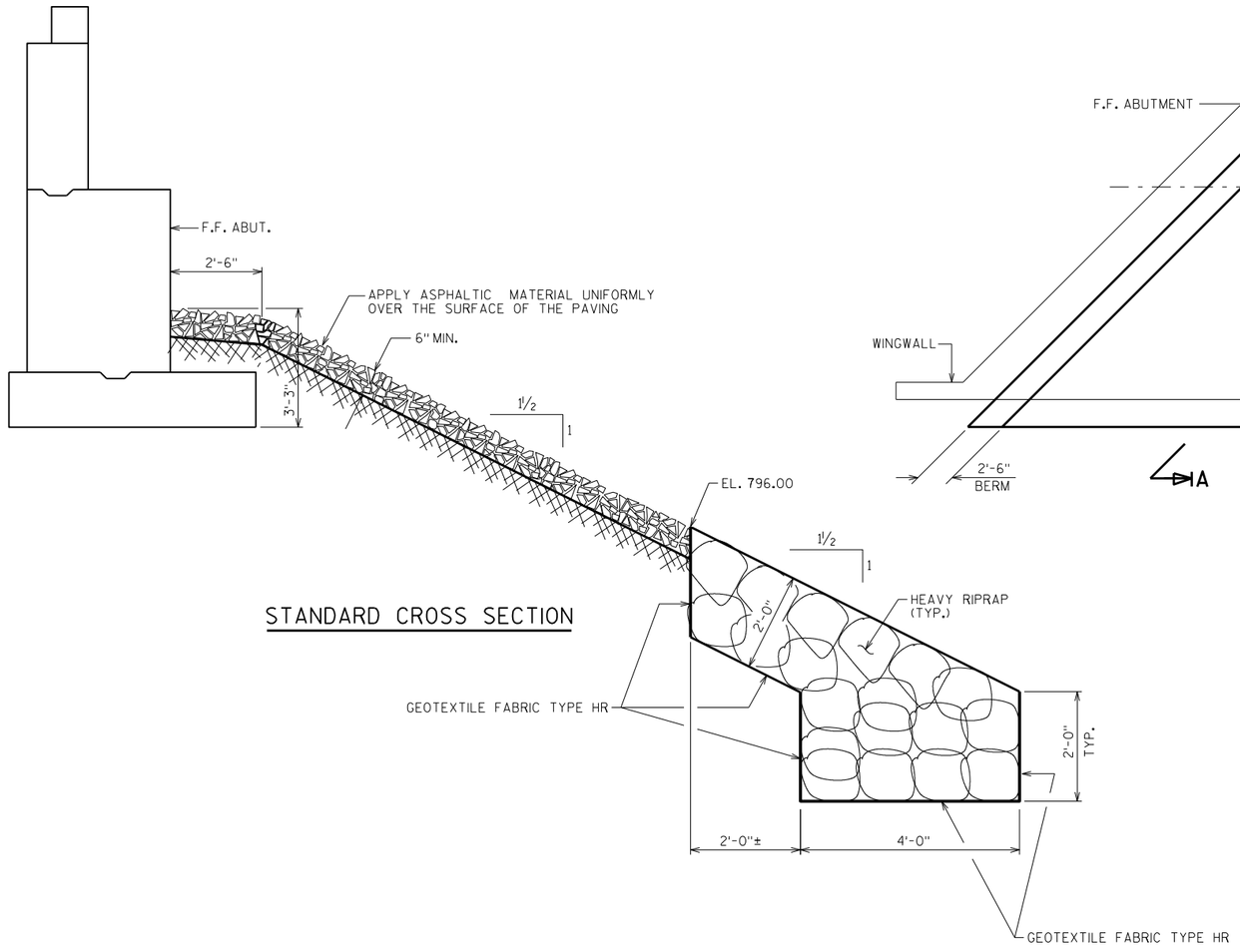
8

15 7 9 12

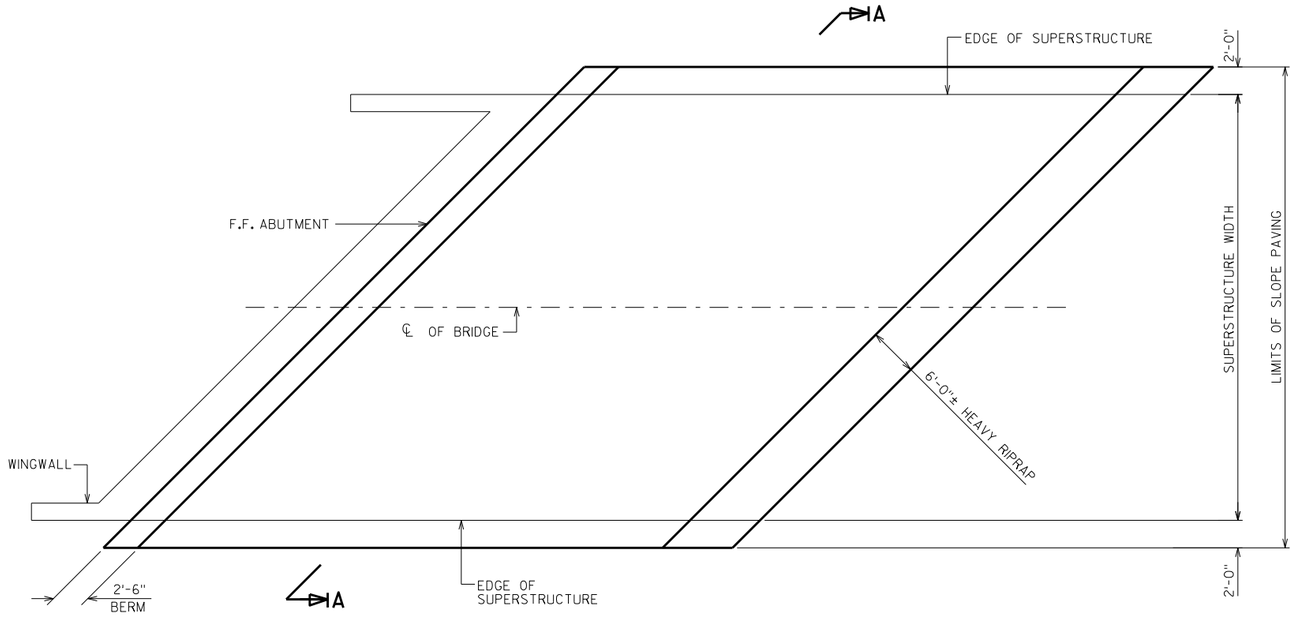
STATE PROJECT NUMBER
1430-00-76



SECTION A-A



STANDARD CROSS SECTION



PLAN

GENERAL NOTES

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

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

SLOPE PAVING (CRUSHED AGG./ HEAVY RIPRAP)

SHEET 26

534

SCALE = 1.00

SLPPAVCRAG

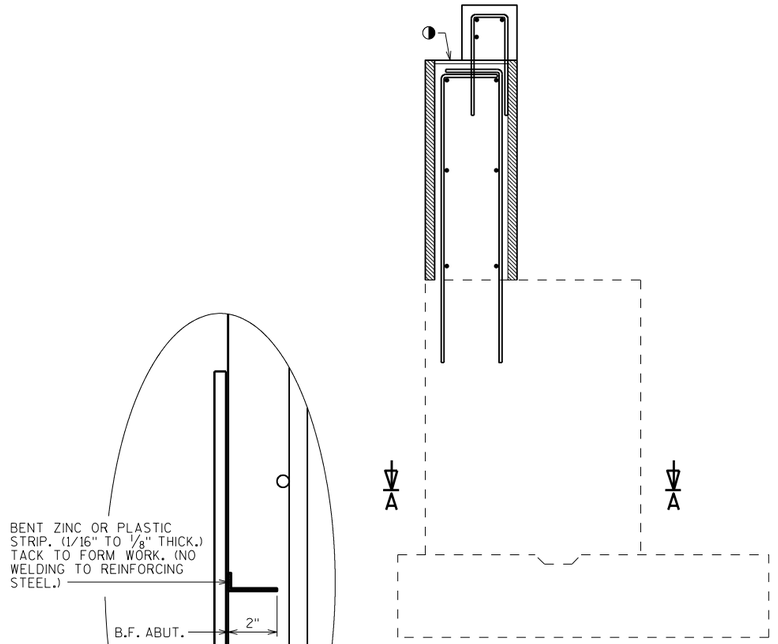
8

1 2 5 9

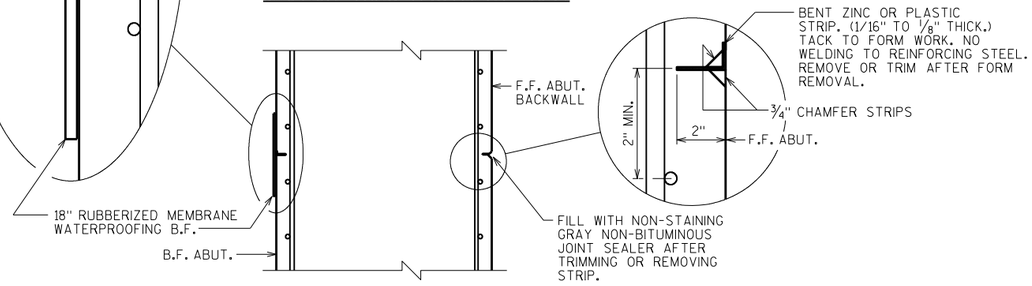
8

STATE PROJECT NUMBER

1430-00-76



SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-24-09

DRAWN BY DDS | PLANS CK'D. MSC

ALTERNATE CONSTRUCTION JOINT

SHEET 27

535

8

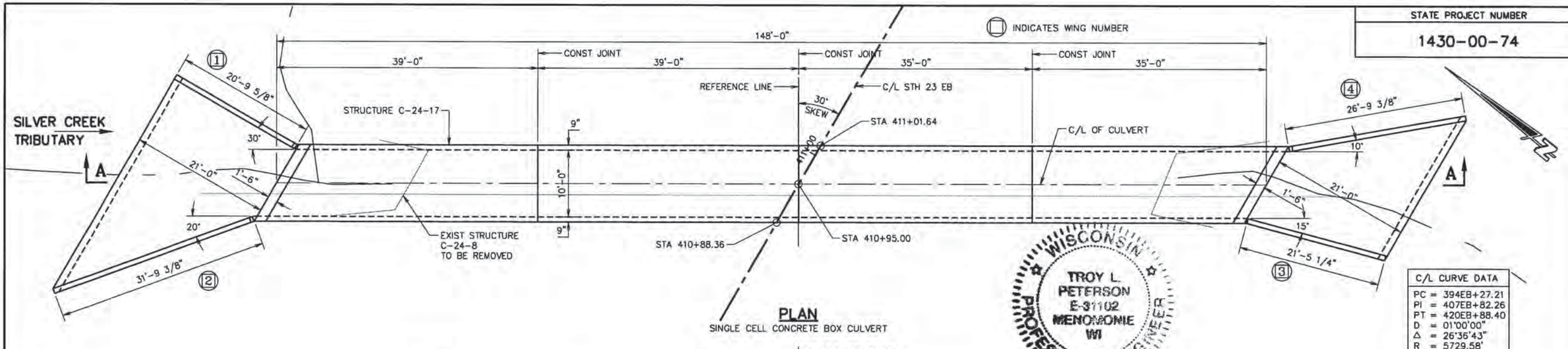
8

1 2 4

SCALE =

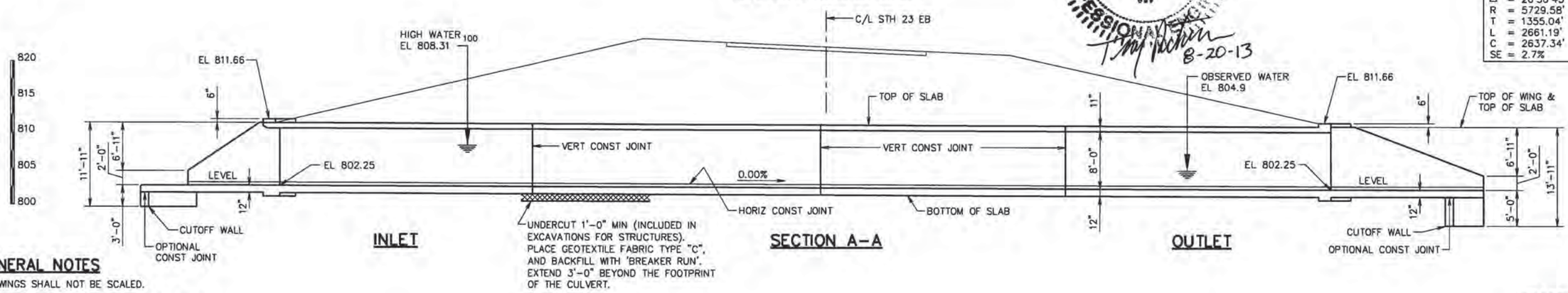
ALTJOINT
10-08

STATE PROJECT NUMBER
1430-00-74



PLAN
SINGLE CELL CONCRETE BOX CULVERT

C/L CURVE DATA
PC = 394EB+27.21
PI = 407EB+82.26
PT = 420EB+88.40
D = 01°00'00"
Δ = 26°36'43"
R = 5729.58'
T = 1355.04'
L = 2661.19'
C = 2637.34'
SE = 2.7%



INLET

SECTION A-A

UNDERCUT 1'-0" MIN (INCLUDED IN EXCAVATIONS FOR STRUCTURES). PLACE GEOTEXTILE FABRIC TYPE "C", AND BACKFILL WITH 'BREAKER RUN'. EXTEND 3'-0" BEYOND THE FOOTPRINT OF THE CULVERT.

OUTLET

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

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

ALL REINFORCING BARS ARE ENGLISH. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE EXISTING STRUCTURE (C-24-8) IS A 112.0' LONG SINGLE CELL BOX CULVERT.

STRUCTURE BACKFILL IS REQUIRED BEHIND ALL WINGWALLS.

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

THE CONCRETE IN THE CUTOFF WALL MAY BE PLACED UNDER WATER IF THE EXCAVATION CANNOT BE DEWATERED.

RUBBERIZED MEMBRANE WATERPROOFING SHALL BE PLACED OVER VERTICAL CONSTRUCTION JOINTS, ACROSS THE TOP OF THE BOX, AND ON THE WALLS FROM THE HORIZONTAL CONSTRUCTION JOINT TO THE TOP OF THE BOX.

WHEN STRUCTURE BACKFILL IS REQUIRED: ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE ELEVATION AND SECTION EXISTING PRIOR TO EXCAVATION WITHIN THE LENGTH OF BOX.

THE ALTERNATE CUTOFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALLS.

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DESIGN SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".

IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM, THE CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COURSE AGGREGATE, SELECT CRUSHED MATERIAL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR THE BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAY BE CONTACTED TO DETERMINE IS "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.

HYDRAULIC DATA

100 YEAR FREQUENCY

DRAINAGE AREA	2.43 SQ MI
Q_{100} TOTAL	130 CFS
THRU STRUCTURE	130 CFS
OVERTOPPING ROADWAY	N/A
VELOCITY THRU STRUCTURE	3.83 FPS
WATERWAY AREA THRU STRUCTURE	34.0 SQ FT
HIGH WATER$_{100}$ ELEVATION	808.31
Q_5 TOTAL	70 CFS
VELOCITY THRU STRUCTURE	3.7 FPS
WATERWAY AREA THRU STRUCTURE	25.1 SQ FT
HIGH WATER$_5$ ELEVATION	807.80
Q_2 TOTAL	40 CFS
HIGH WATER$_5$ ELEVATION	806.29

DESIGN DATA

LIVE LOAD:

DESIGN RATING	HL-93
INVENTORY RATING	1.05
OPERATING RATING	1.35
WIS-SPV	255 KIPS

EARTHLOAD DESIGNED FOR 12' OF OVERFILL

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY CULVERT	f'c = 3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT, (GRADE 60)	Fy = 60,000 psi

TOTAL ESTIMATED QUANTITIES

	BID ITEMS	UNITS	AMOUNT
203.0500.S	REMOVING OLD STRUCTURE OVER WATERWAY STA 410+95	LS	1
206.2000	EXCAVATION FOR STRUCTURES CULVERTS C-24-0017	LS	1
210.0100	BACKFILL STRUCTURE	CY	4690
311.0115	BREAKER RUN	CY	185
504.0100	CONCRETE MASONRY CULVERTS	CY	242
505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	LB	29260
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	20
645.0105	GEOTEXTILE FABRIC TYPE C	SY	430

NON-BID ITEMS

FILLER	3/4" SIZE	

LIST OF DRAWINGS

1. GENERAL PLAN
2. SUBSURFACE EXPLORATION
3. BOX DETAILS
4. BILL OF BARS & BOX DETAILS SEGMENT A
5. BOX DETAILS SEGMENT B
6. BOX DETAILS SEGMENT C
7. BOX DETAILS SEGMENT D
8. APRON DETAILS
9. WING DETAILS
10. BILL OF BARS & DETAILS

BENCHMARK (NGVD 1929)

PK PPOL 80' N. OF STH 23 AT STH 23/SUNNYSIDE ROAD STA 402EB+09.10, 84.8' LT ELEV = 836.92

DESIGN CONTACT:
TROY L. PETERSON
(715) 235-9081

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608) 266-8489

TRAFFIC DATA

AADT = 16800 (2014)
AADT = 19430 (2034)
RDS = 60 MPH

WISCONSIN
TROY L. PETERSON
E-31102
MENOMONIE
WI
PROFESSIONAL ENGINEER
8-20-13

NO.	DATE	REVISION	BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-2372
FAX 715-235-2727
www.cedarcorp.com
engineers · architects · planners · environmental specialists
land surveyors · landscape architects · building inspectors

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher — 9/3/13
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-24-17

STH 23 EB OVER SILVER CREEK TRIBUTARY

COUNTY	TOWN
GREEN LAKE	BROOKLYN

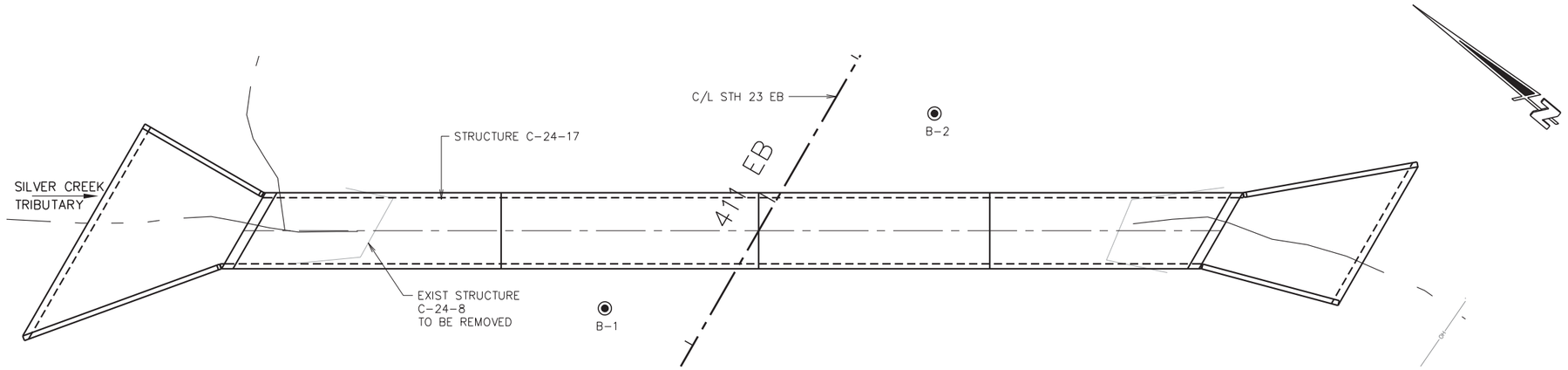
DESIGN SPEC
AASHTO LRFD DESIGN SPEC. 5TH EDITION

DESIGNED BY	DESIGN CK'D	DRAWN BY	PLANS CK'D
TLP	GMW	PKF	TLP

GENERAL PLAN

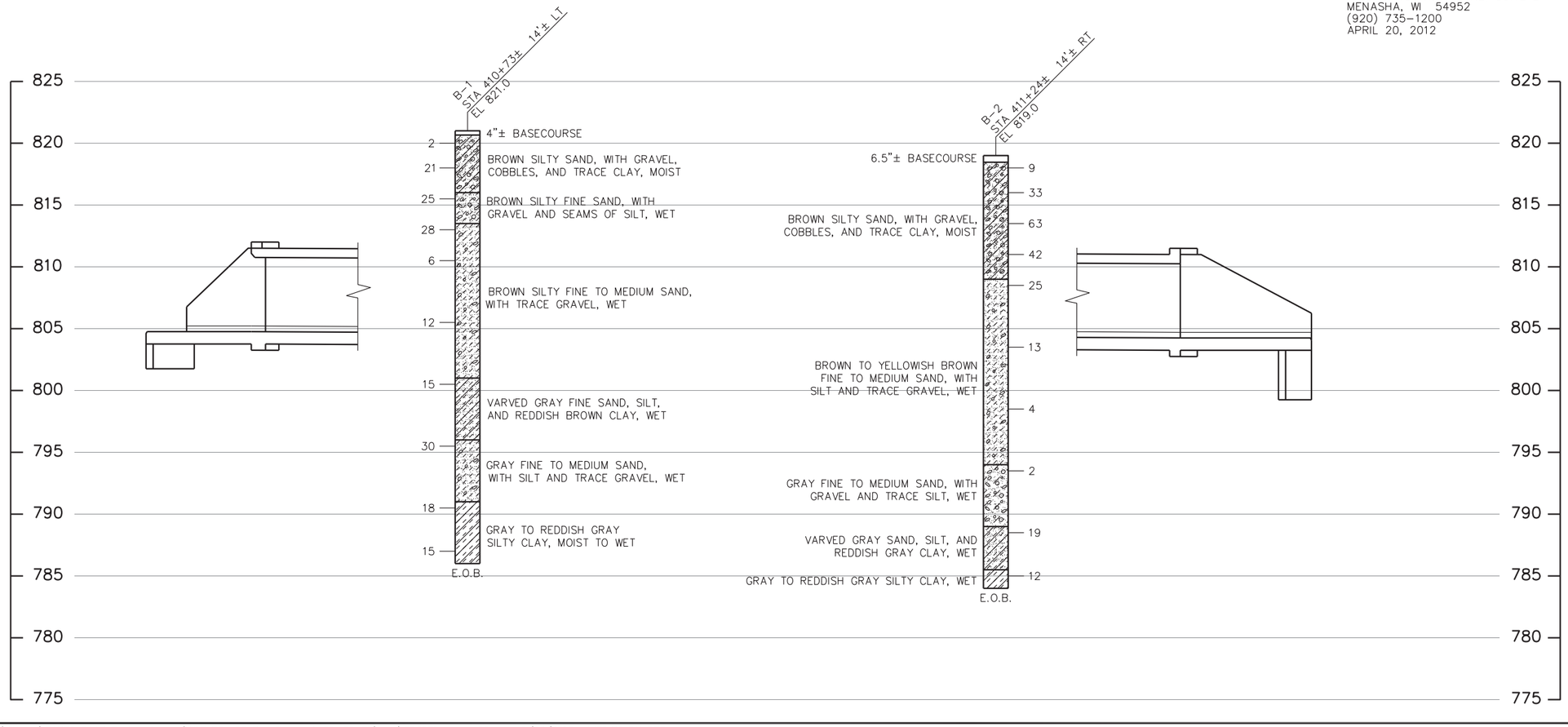
SHEET 1 OF 10

i:\Clients\D4036 DAAR Engineering Inc\018 STH 23 Box Culvert 1430-00-05\dwg\080101_gp_sth23.dwg 8/20/2013 9:16:40 AM CDT



BORINGS TAKEN BY:

MIDWEST ENGINEERING SERVICES, INC.
1125 W. TUCKWAY LANE, SUITE B
MENASHA, WI 54952
(920) 735-1200
APRIL 20, 2012



STATE PROJECT NO.

1430-00-74

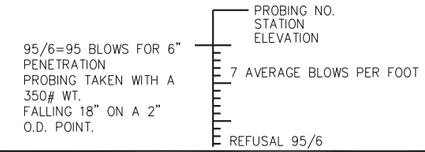
ABBREVIATIONS

F---FINE	VF---VERY FINE	M---MEDIUM
C---COARSE	WS---WEATHERED	SO---SOUND

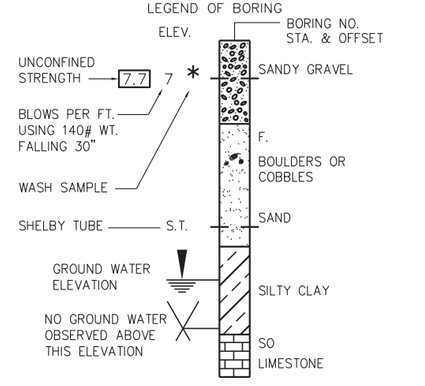
MATERIAL SYMBOLS

TOPSOIL	SILT	SANDSTONE
SAND	PEAT	LIMESTONE
GRAVEL	CLAY	IGNEOUS ROCK

LEGEND OF BORING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROX. AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-7372
FAX 715-235-2727
www.cedarcorp.com
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • building inspectors

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-24-17

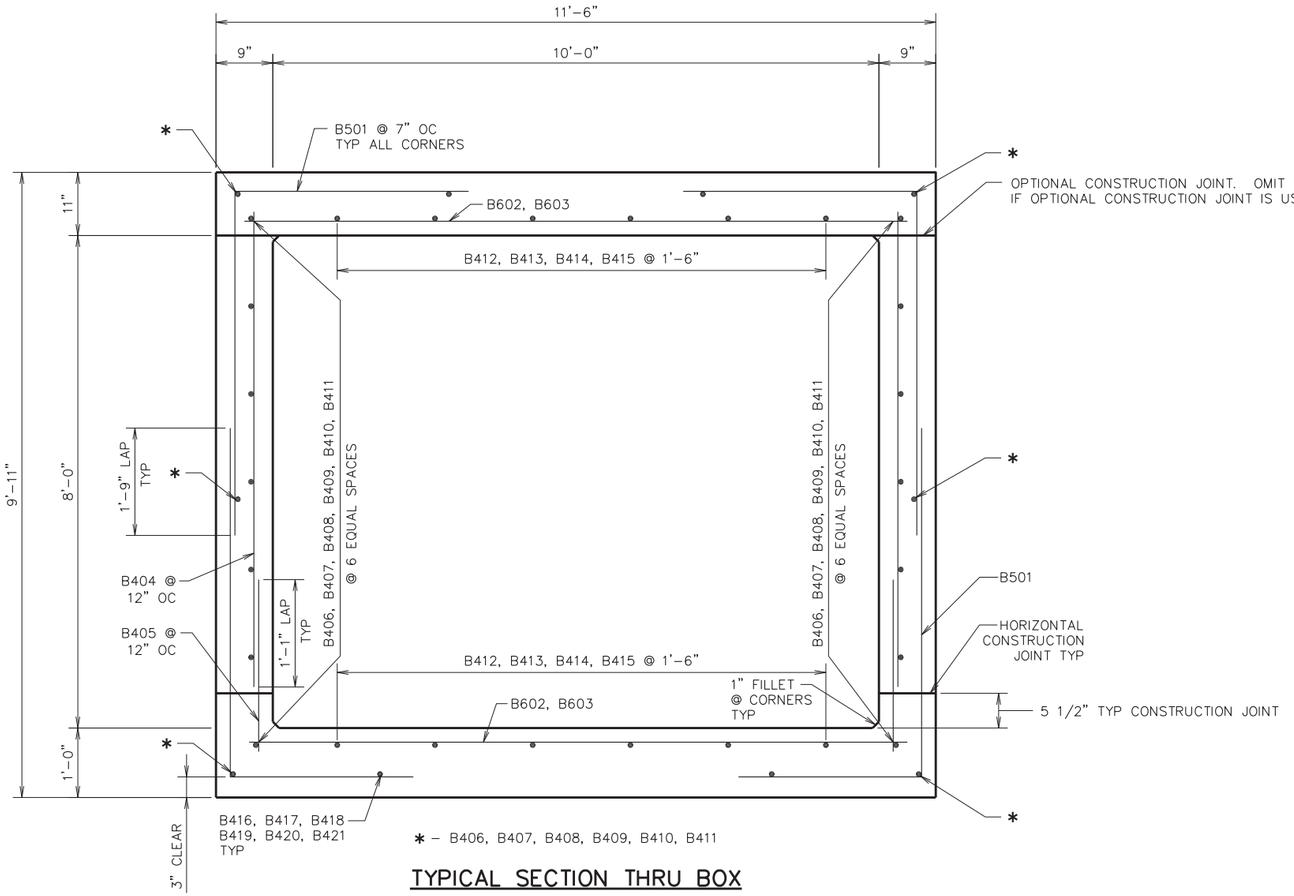
CONST. SPEC.	DRAWN BY	PLANS CHECKED
2014	PKF	TLP

SUBSURFACE EXPLORATION

SHEET 2 OF 10

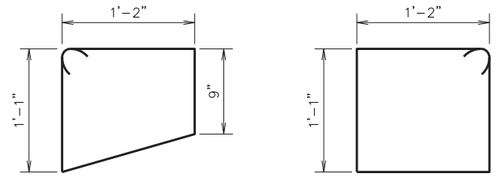
I:\Clients\D4036 DAAR Engineering Inc\018 STH 23 Box Culvert 1430-00-05\dwg\080201_sx_sth23.dwg 5/30/2013 4:02:26 PM CDT

STATE PROJECT NUMBER
1430-00-74



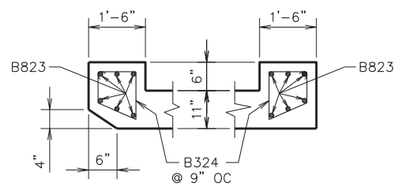
TYPICAL SECTION THRU BOX

(LOOKING UPSTREAM)

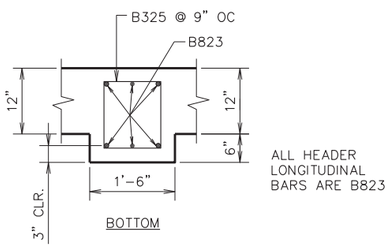


B324

B325

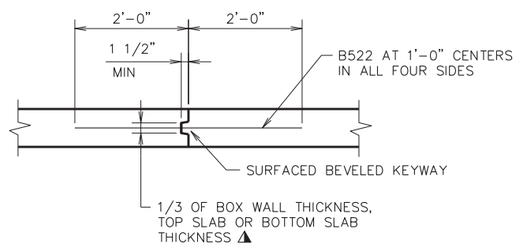


BEVEL TO EXTEND
BETWEEN INSIDE FACE
OF BOX WALLS



ALL HEADER
LONGITUDINAL
BARS ARE B823

HEADER DETAILS



VERTICAL CONSTRUCTION JOINT

⚠ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAWCUTS WITHIN 12 HOURS AFTER POURING.

NO.	DATE	REVISION	BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-7372
FAX 715-235-2727
www.cedarcorp.com
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-24-17

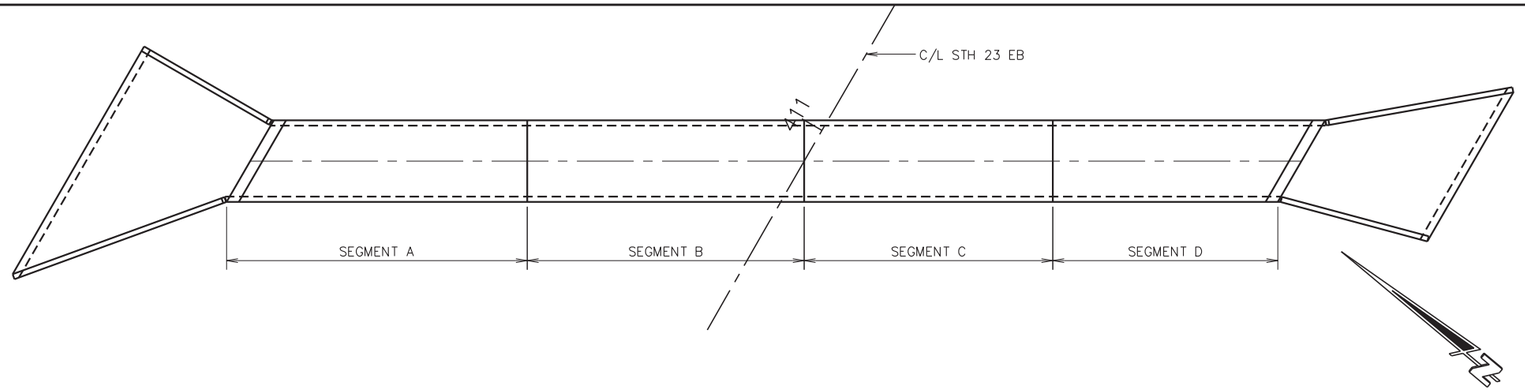
CONST SPEC	2014	DRAWN BY	PKF	PLANS CK'D	TLP

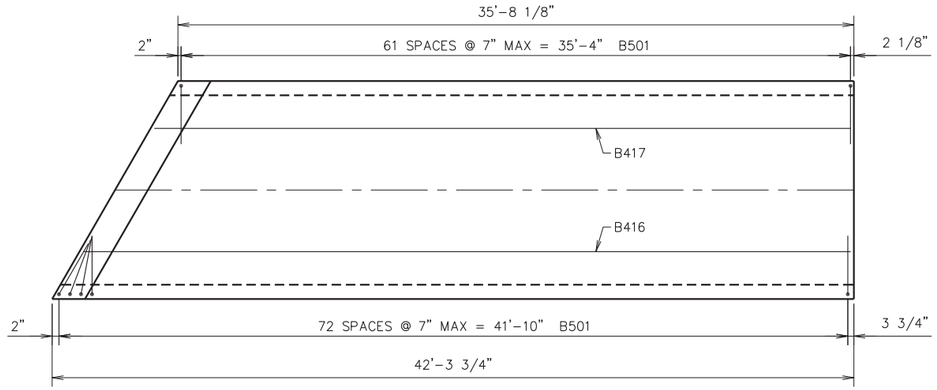
BOX DETAILS

SHEET 3 OF 10

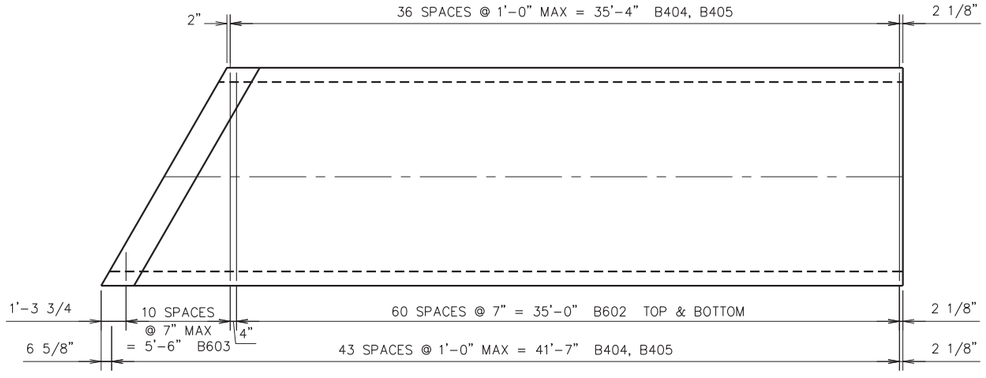
I:\Clients\D4036 DAAR Engineering Inc\018 STH 23 Box Culvert 1430-00-05\dwg\080401_bd_sth23.dwg 8/15/2013 4:32:11 PM CDT

STATE PROJECT NUMBER
1430-00-74





PLAN VIEW OUTSIDE FACE REINFORCEMENT
SEGMENT A



PLAN VIEW INSIDE FACE REINFORCEMENT
SEGMENT A

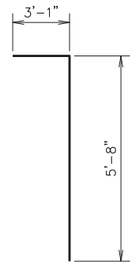
BILL OF BARS

24320# UNCOATED

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQUIRED	LENGTH	BENT	BAR SERIES	LOCATION
B501		1028	8-8	X		BOX CORNER
B602		488	10-6			BOX TOP & BOTTOM SLAB TRANS
B603		44	6-3		⊠	BOX TOP & BOTTOM SLAB TRANS
B404		305	7-9			BOX WALLS VERT
B405		305	1-10			BOX WALLS VERT DOWELLS
B406		10	35-4			BOX WALLS LONGIT SEGMENT A
B407		10	41-7			BOX WALLS LONGIT SEGMENT A
B408		20	38-8			BOX WALLS LONGIT SEGMENT B
B409		20	34-8			BOX WALLS LONGIT SEGMENT C
B410		10	37-7			BOX WALLS LONGIT SEGMENT D
B411		10	31-4			BOX WALLS LONGIT SEGMENT D
B412		12	38-7		⊠	BOX TOP & BOTTOM SLAB LONGIT SEGMENT A
B413		12	38-8			BOX TOP & BOTTOM SLAB LONGIT SEGMENT B
B414		12	34-8			BOX TOP & BOTTOM SLAB LONGIT SEGMENT C
B415		12	34-8		⊠	BOX TOP & BOTTOM SLAB LONGIT SEGMENT D
B416		2	40-2			BOX TOP & BOTTOM SLAB LONGIT SEGMENT A
B417		2	37-1			BOX TOP & BOTTOM SLAB SEGMENT A
B418		4	38-8			BOX TOP & BOTTOM SLAB SEGMENT B
B419		4	34-8			BOX TOP & BOTTOM SLAB SEGMENT C
B420		2	36-2			BOX TOP & BOTTOM SLAB LONGIT SEGMENT D
B421		2	33-1			BOX TOP & BOTTOM SLAB LONGIT SEGMENT D
B522		120	4-0			CONSTRUCTION JOINT DOWELL
B823		24	12-10			BOX HEADERS TOP & BOTTOM SEGMENTS A & D
B324		34	4-7			BOX HEADERS TOP & BOTTOM SEGMENTS A & D
B325		34	4-11			BOX HEADERS TOP & BOTTOM SEGMENTS A & D

⊠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



B501

NO.	DATE	REVISION	BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-7372
FAX 715-235-2727
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers
www.cedarcorp.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

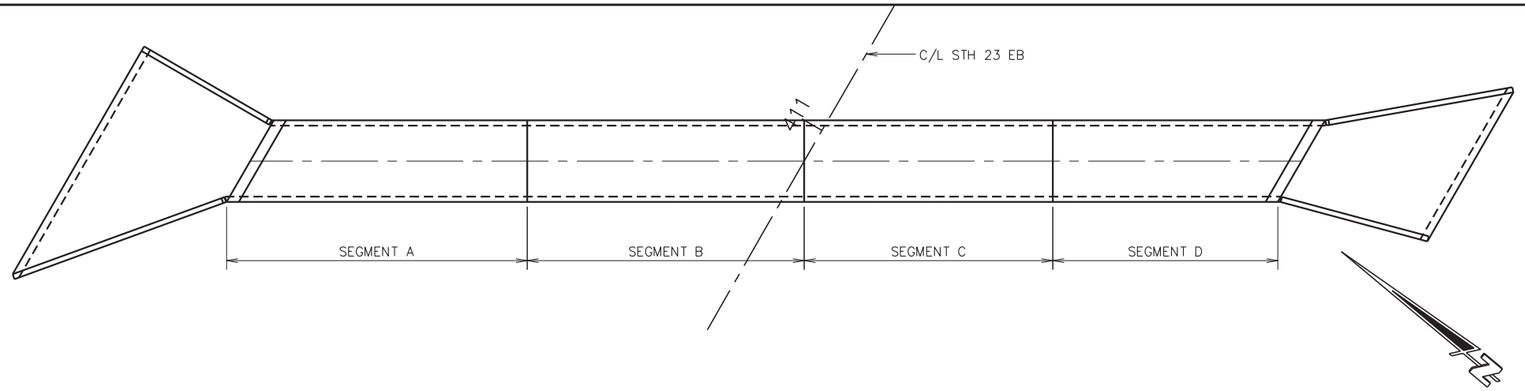
STRUCTURE C-24-17

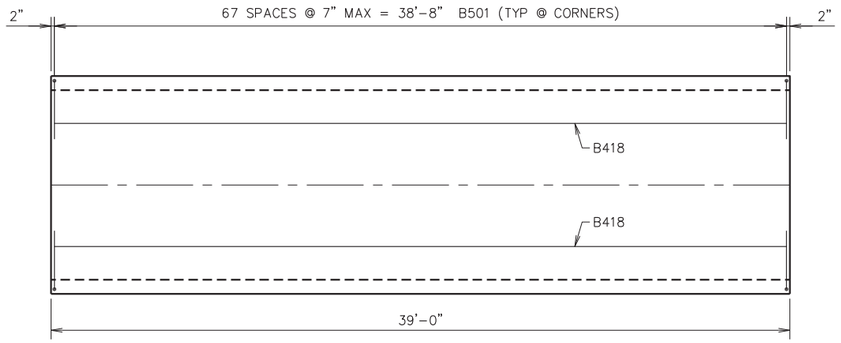
CONST. SPEC.	2014	DRAWN BY	PKF	PLANS CK'D	TLP

BILL OF BARS & BOX DETAILS SEGMENT A

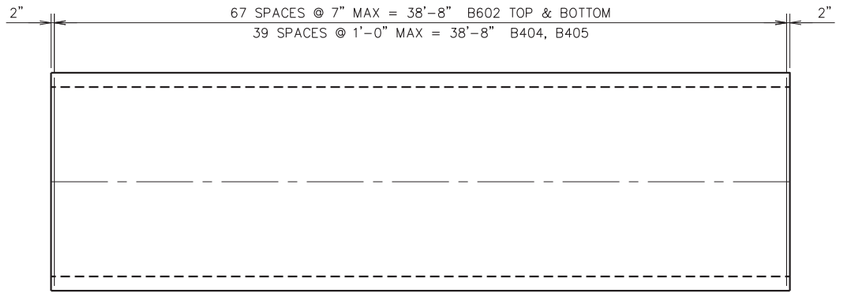
SHEET 4 OF 10

STATE PROJECT NUMBER
1430-00-74





PLAN VIEW OUTSIDE FACE REINFORCEMENT
SEGMENT B



PLAN VIEW INSIDE FACE REINFORCEMENT
SEGMENT B

8

8

NO.	DATE	REVISION	BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-7372
FAX 715-235-2727
www.cedarcorp.com
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-24-17

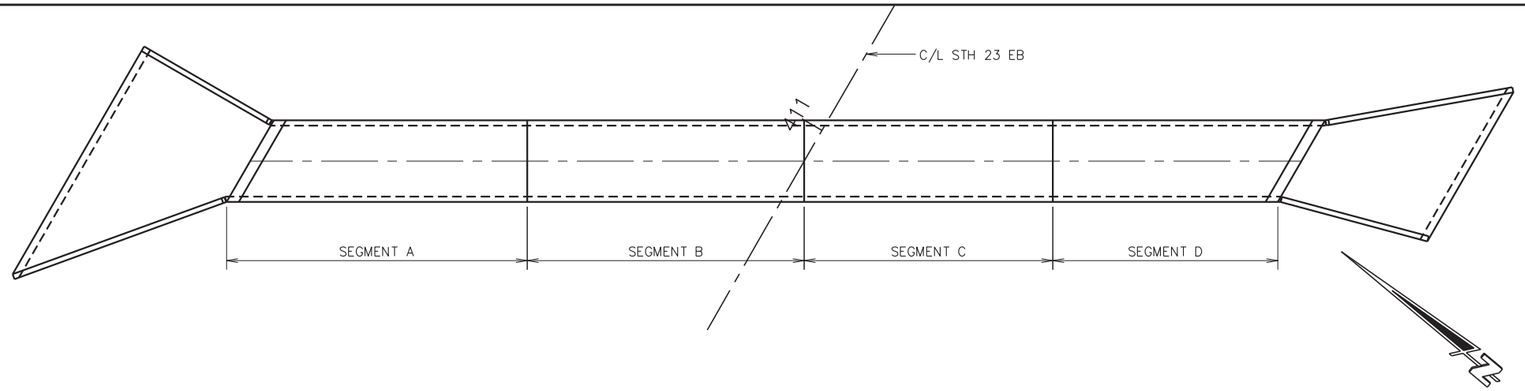
CONST. SPEC.	2014	DRAWN BY	PKF	PLANS CK'D	TLP

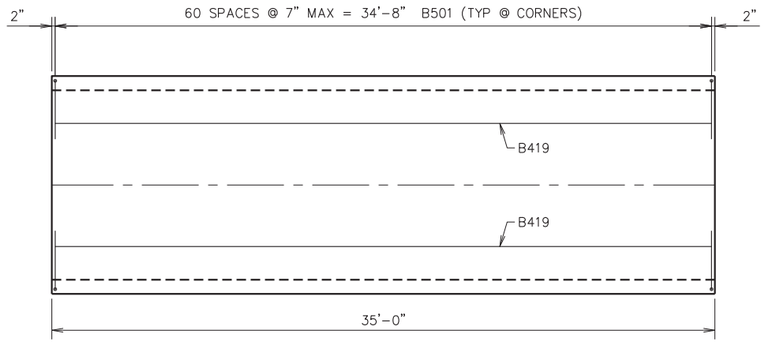
BOX DETAILS
SEGMENT B

SHEET 5 OF 10

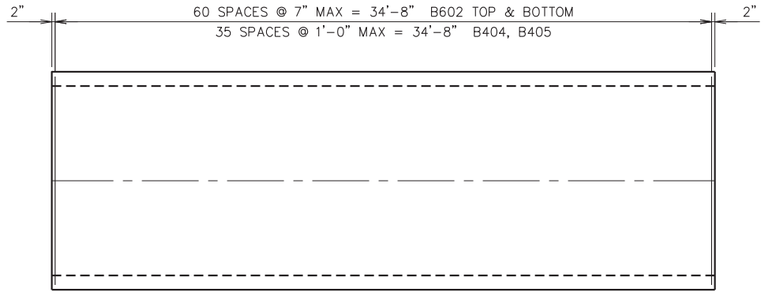
I:\Clients\D4036 DAAR Engineering Inc\018 STH 23 Box Culvert 1430-00-05\dwg\080402_bd_sth23.dwg 5/30/2013 3:53:54 PM CDT

STATE PROJECT NUMBER
1430-00-74





PLAN VIEW OUTSIDE FACE REINFORCEMENT
SEGMENT C



PLAN VIEW INSIDE FACE REINFORCEMENT
SEGMENT C

NO.	DATE	REVISION	BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-7372
FAX 715-235-2727
www.cedarcorp.com
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-24-17

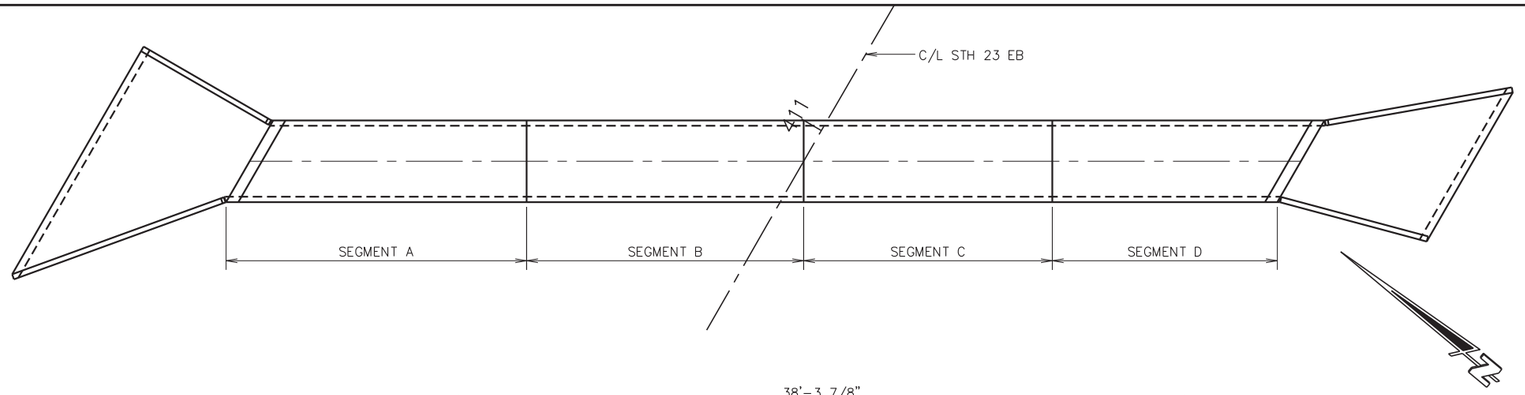
CONST. SPEC.	2014	DRAWN BY	PKF	PLANS CK'D	TLP

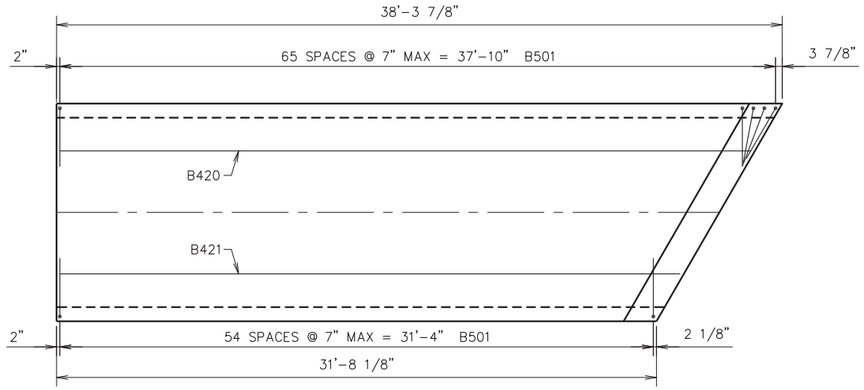
BOX DETAILS
SEGMENT C

SHEET 6 OF 10

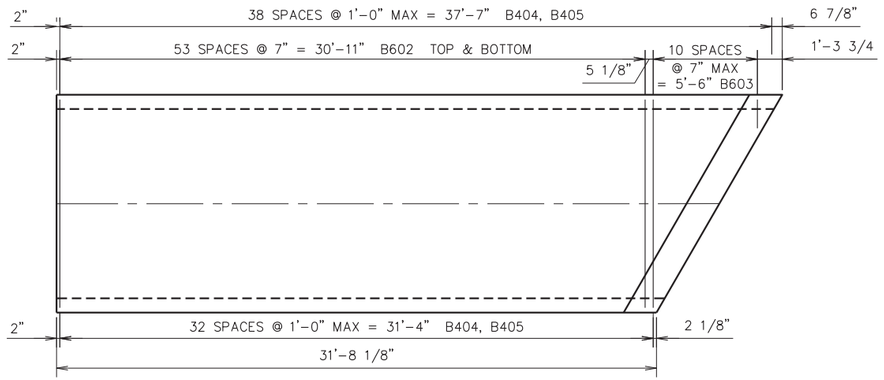
I:\Clients\D4036 DAAR Engineering Inc\018 STH 23 Box Culvert 1430-00-05\dwg\080402_bd_sth23.dwg 5/30/2013 3:53:54 PM CDT

STATE PROJECT NUMBER
1430-00-74





PLAN VIEW OUTSIDE FACE REINFORCEMENT
SEGMENT D



PLAN VIEW INSIDE FACE REINFORCEMENT
SEGMENT D

NO.	DATE	REVISION	BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-7372
FAX 715-235-2727
www.cedarcorp.com
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-24-17

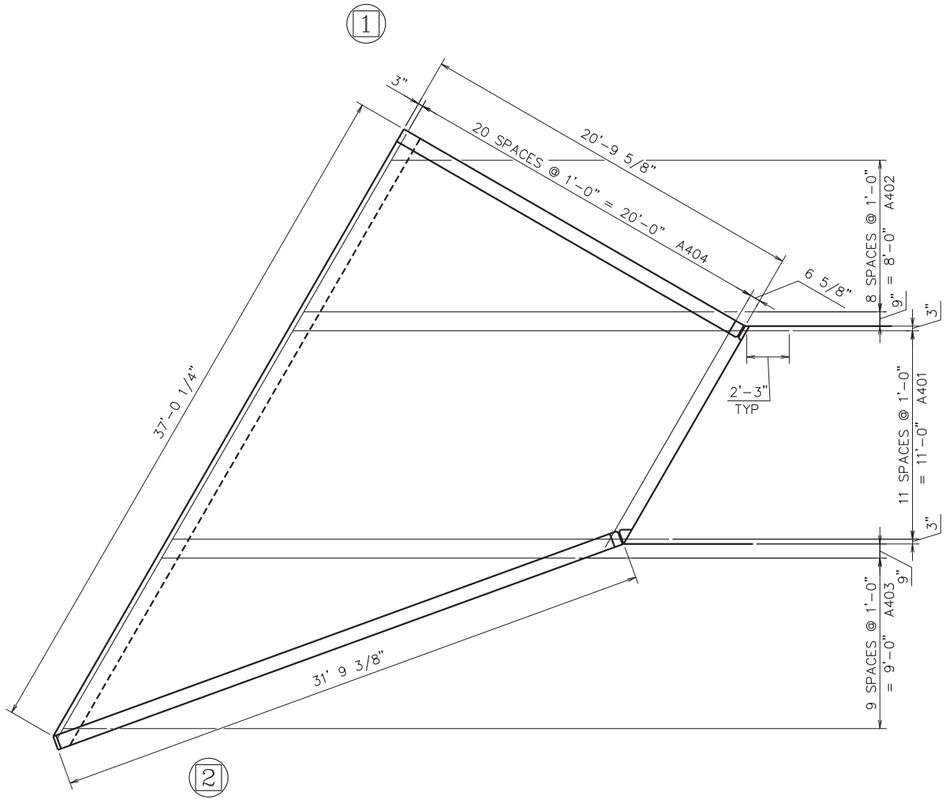
CONST. SPEC.	2014	DRAWN BY	PKF	PLANS CK'D	TLP

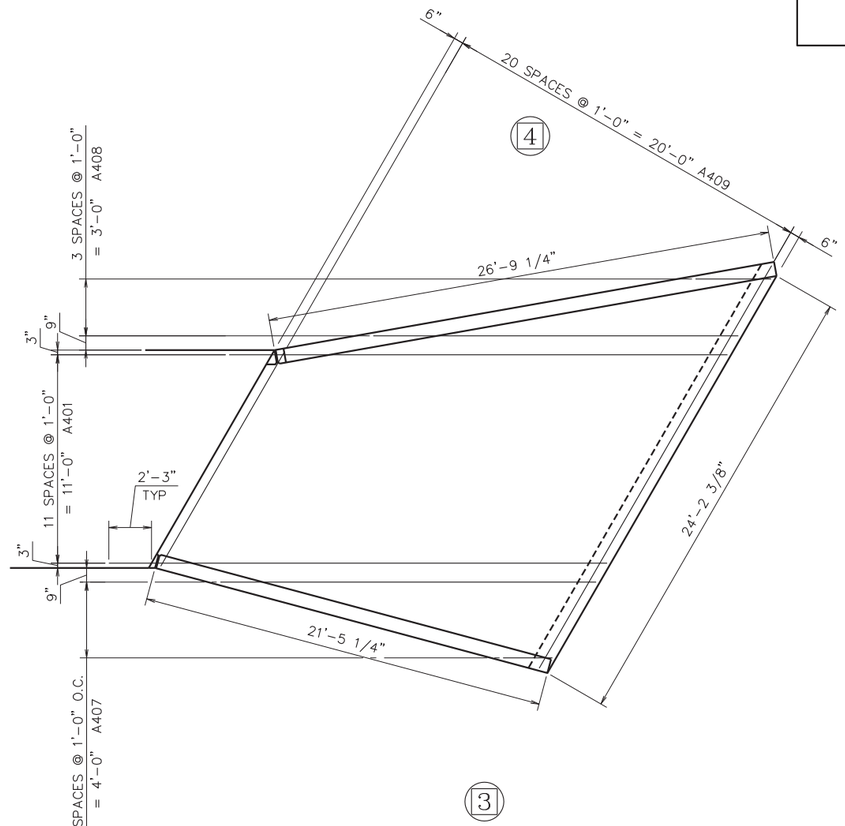
BOX DETAILS
SEGMENT D

SHEET 7 OF 10

I:\Clients\D4036 DAAR Engineering Inc\018 STH 23 Box Culvert 1430-00-05\dwg\080402_bd_sth23.dwg 5/31/2013 12:34:33 PM CDT

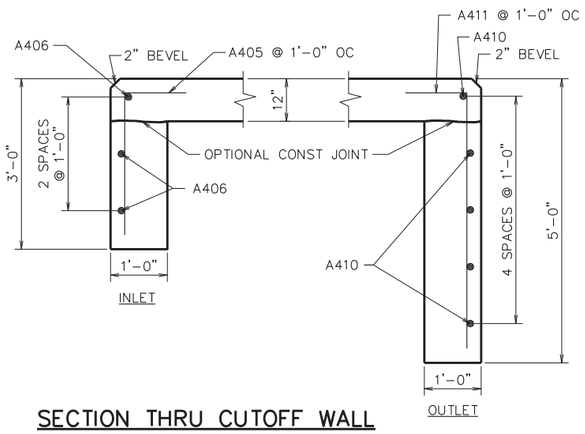
STATE PROJECT NUMBER
1430-00-74



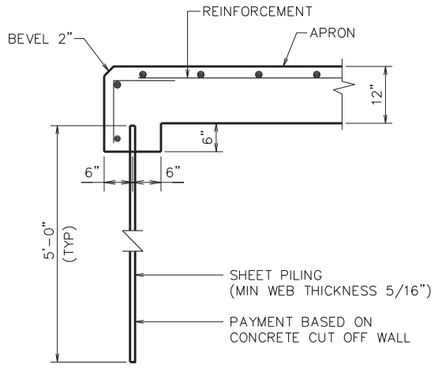


APRON REINFORCEMENT

INDICATES WING NUMBER



SECTION THRU CUTOFF WALL



ALTERNATE CUTOFF WALL

NO.	DATE	REVISION	BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-7372
FAX 715-235-2727
www.cedarcorp.com
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE C-24-17

CONST. SPEC.	2014	DRAWN BY	PKF	PLANS CK'D	TLP

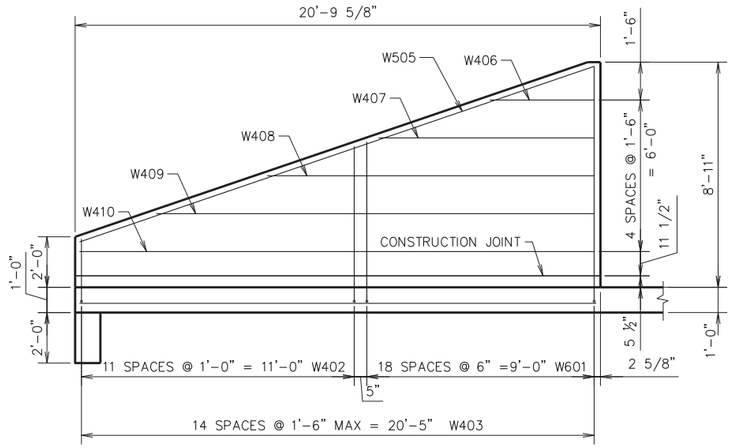
APRON DETAILS

SHEET 8 OF 10

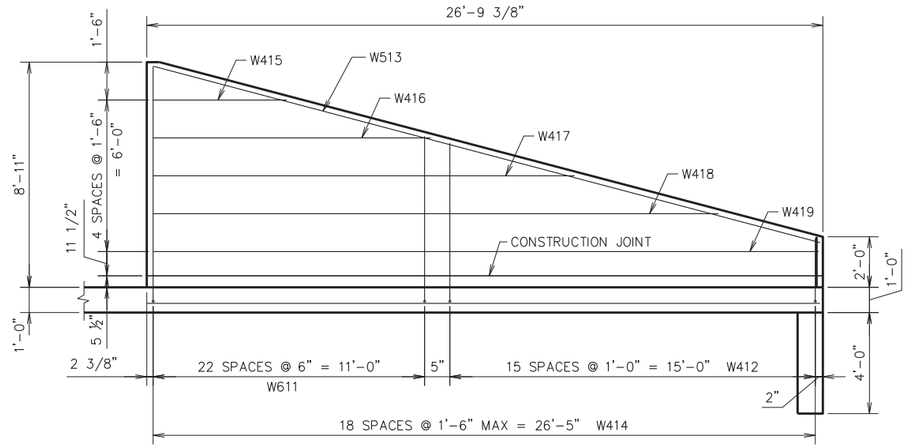
I:\Clients\D4036 DAAR Engineering Inc\018 STH 23 Box Culvert 1430-00-05\dwg\080403_wd_sth23.dwg 5/30/2013 3:55:29 PM CDT

STATE PROJECT NUMBER

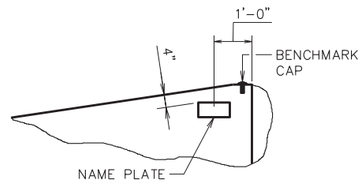
1430-00-74



WING 1

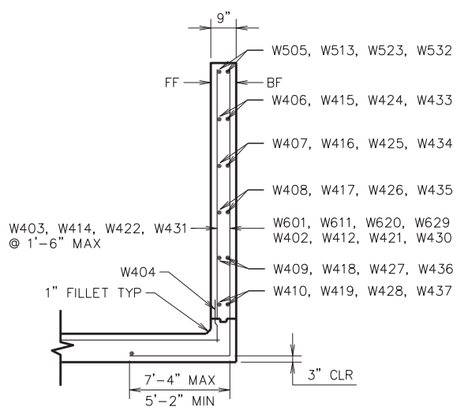


WING 4

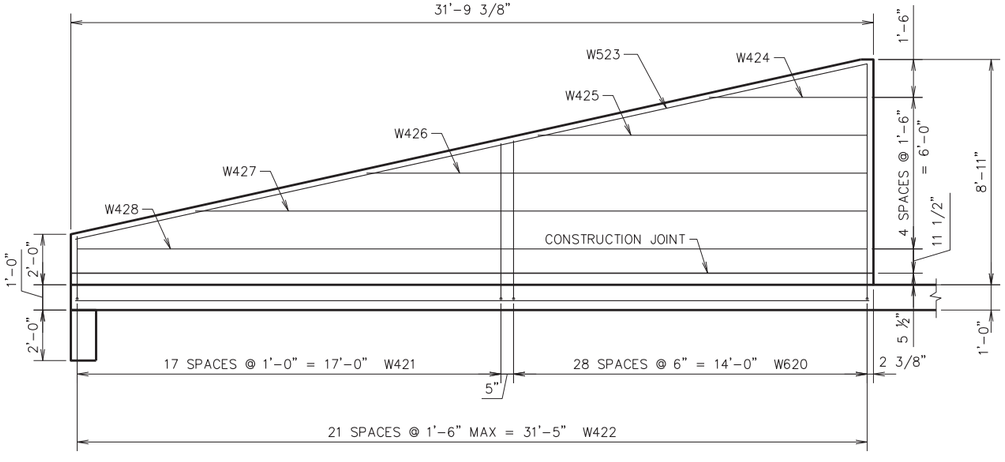


NAME PLATE LOCATION

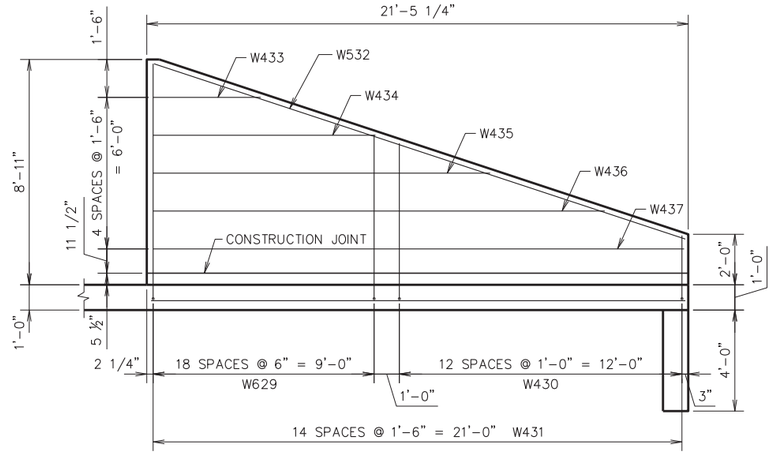
(ON FRONT FACE OF WING 3)



TYPICAL WINGWALL SECTION



WING 2



WING 3

NO.	DATE	REVISION	BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-7372
FAX 715-235-2727
www.cedarcorp.com
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-24-17

CONST. SPEC.	2014	DRAWN BY	PKF	PLANS CK'D	TLP

WING DETAILS

SHEET 9 OF 10

I:\Clients\D4036 DAAR Engineering Inc\018 STH 23 Box Culvert 1430-00-05\dwg\080404_ad_sth23.dwg 8/15/2013 4:33:51 PM CDT

STATE PROJECT NUMBER
1430-00-74

BILL OF BARS

4940# UNCOATED

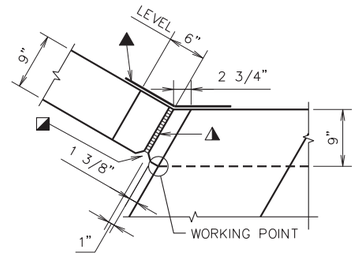
NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQUIRED	LENGTH	BENT	BAR SERIES	LOCATION
A401		24	26-4			INLET & OUTLET APRON LONGIT
A402		9	12-5		⊠	INLET APRON LONGIT
A403		10	12-3		⊠	INLET APRON LONGIT
A404		21	25-0		⊠	INLET APRON TRANS
A405		37	3-6	X		INLET CUTOFF WALL VERT
A406		3	36-6			APRON INLET CUTOFF WALL LONGIT
A407		5	11-0		⊠	OUTLET APRON LONGIT
A408		4	11-4		⊠	OUTLET APRON LONGIT
A409		21	18-4		⊠	OUTLET APRON TRANS
A410		5	23-10			OUTLET CUTOFF WALL LONGIT
A411		25	5-6	X		OUTLET CUTOFF WALL VERT
W601		19	15-0	X	⊠	WING 1 VERT
W402		12	9-5	X	⊠	WING 1 VERT
W403		15	4-9		⊠	WING 1 VERT
W404		71	1-10			WING 1 THRU 4 VERT DOWELS
W505		2	21-6			WING 1 HORIZ TOP
W406		2	4-2			WING 1 HORIZ
W407		2	8-8			WING 1 HORIZ
W408		2	13-2			WING 1 HORIZ
W409		2	17-8			WING 1 HORIZ
W410		2	20-5			WING 1 HORIZ
W611		23	15-2	X	⊠	WING 4 VERT
W412		16	9-5	X	⊠	WING 4 VERT
W513		2	27-3			WING 4 HORIZ TOP
W414		19	4-9		⊠	WING 4 VERT
W415		2	5-5			WING 4 HORIZ
W416		2	11-3			WING 4 HORIZ
W417		2	17-1			WING 4 HORIZ
W418		2	22-10			WING 4 HORIZ
W419		2	26-5			WING 4 HORIZ
W620		29	15-1	X	⊠	WING 2 VERT
W421		18	9-5	X	⊠	WING 2 VERT
W422		22	4-9		⊠	WING 2 VERT
W523		2	32-2			WING 2 HORIZ TOP
W424		2	6-6			WING 2 HORIZ
W425		2	13-5			WING 2 HORIZ
W426		2	20-3			WING 2 HORIZ
W427		2	27-2			WING 2 HORIZ
W428		2	31-5			WING 2 HORIZ
W629		19	15-2	X	⊠	WING 3 VERT
W430		13	9-4	X	⊠	WING 3 VERT
W431		15	4-9		⊠	WING 3 VERT
W532		2	22-2			WING 3 HORIZ TOP
W433		2	4-2			WING 3 HORIZ
W434		2	8-9			WING 3 HORIZ
W435		2	13-6			WING 3 HORIZ
W436		2	18-3			WING 3 HORIZ
W437		2	21-0			WING 3 HORIZ

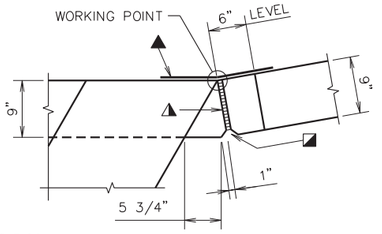
⊠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

MARK	NO. REQUIRED	LENGTH
B603	4 SERIES OF 11	1'-11" TO 10'-6"
B412	2 SERIES OF 6	36'-6" TO 40'-8"
B415	2 SERIES OF 6	32'-6" TO 36'-10"
A402	1 SERIES OF 9	3'-2" TO 21'-7"
A403	1 SERIES OF 10	2'-6" TO 22'-0"
A404	1 SERIES OF 21	13'-6" TO 36'-6"
A407	1 SERIES OF 5	2'-4" TO 19'-8"
A408	1 SERIES OF 4	3'-8" TO 19'-0"
A409	1 SERIES OF 21	13'-0" TO 23'-8"
W601	1 SERIES OF 19	13'-4" TO 16'-8"
W402	1 SERIES OF 12	7'-6" TO 11'-0"
W403	1 SERIES OF 15	1'-4" TO 8'-2"
W611	1 SERIES OF 23	13'-8" TO 16'-8"
W412	1 SERIES OF 16	7'-6" TO 11'-6"
W414	1 SERIES OF 19	1'-4" TO 8'-2"
W620	1 SERIES OF 29	13'-6" TO 16'-8"
W421	1 SERIES OF 18	7'-6" TO 11'-4"
W422	1 SERIES OF 22	1'-4" TO 8'-2"
W629	1 SERIES OF 19	13'-8" TO 16'-8"
W430	1 SERIES OF 13	7'-6" TO 11'-3"
W431	1 SERIES OF 15	1'-4" TO 8'-2"



CORNER 1

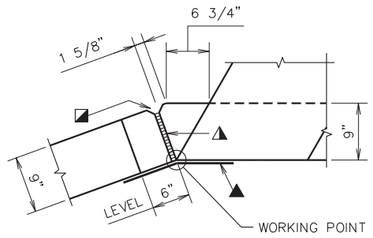


CORNER 4

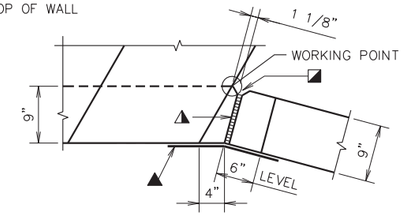
△ 3/4" FILLER TYPICAL EXTEND FILLER FROM HORIZONTAL CONST JOINT TO TOP OF WING

◪ 1" BEVEL TYPICAL

▲ 18" RUBBERIZED MEMBRANE WATER-PROOFING. EXTEND FROM HORIZ CONST JOINT TO TOP OF WALL



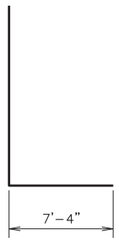
CORNER 2



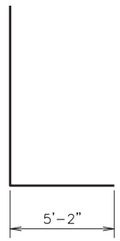
CORNER 3

CORNER DETAILS

A405, A411



W601, W611, W620, W629



W402, W412, W421, W430

NO.	DATE	REVISION	BY

Cedar corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751
715-235-9081
800-472-7372
FAX 715-235-2727
www.cedarcorp.com
engineers • architects • planners • environmental specialists
land surveyors • landscape architects • interior designers

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-24-17

CONST. SPEC.	2014	DRAWN BY	PKF	PLANS CK'D	TLP

BILL OF BARS AND DETAILS

SHEET 10 OF 10

I:\Clients\D4036 DAAR Engineering Inc\018 STH 23 Box Culvert 1430-00-05\dwg\080405_ad_sth23.dwg 5/31/2013 12:33:33 PM CDT

DIVISION 1 – STH 23 (PAGE 1 OF 6)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
303+00.00	30300		246.95	38.84	0	0	0	0	0	0	0
304+00.00	30400	100	267.68	34.42	0	953	136	0	953	0	817
305+00.00	30500	100	388.17	30.74	19.97	1215	121	37	2168	46	1865
306+00.00	30600	100	401.90	25.88	43.20	1463	105	117	3631	192	3077
307+00.00	30700	100	405.09	24.70	12.66	1494	94	103	5125	322	4348
308+00.00	30800	100	458.07	21.45	3.15	1598	85	29	6724	358	5825
309+00.00	30900	100	230.60	23.12	21.50	1275	83	46	7999	415	6961
310+00.00	31000	100	665.09	21.85	20.00	1659	83	77	9658	511	8440
311+00.00	31100	100	610.70	24.45	10.31	2363	86	56	12020	582	10647
312+00.00	31200	100	512.75	19.25	12.00	2080	81	41	14101	633	12594
313+00.00	31300	100	470.13	18.26	10.00	1820	69	41	15921	684	14294
314+00.00	31400	100	412.92	12.69	4.00	1635	57	26	17556	717	15840
315+00.00	31500	100	137.17	14.50	0	1019	50	7	18575	726	16799
316+00.00	31600	100	324.9	16.21	0.7	856	57	1	19430	727	17596
317+00.00	31700	100	333.57	16.52	1.67	1219	61	4	20650	733	18749
318+00.00	31800	100	294.46	16.34	17.09	1091	61	63	21740	812	19700
319+00.00	31900	100	251.33	16.32	42.06	1011	60	110	22751	949	20513
320+00.00	32000	100	256.05	16.43	77.16	940	61	221	23691	1225	21116
321+00.00	32100	100	242.97	16.31	135.73	924	61	394	24615	1718	21487
322+00.00	32200	100	254.31	16.29	108.29	921	60	452	25536	2283	21783
323+00.00	32300	100	263.79	16.32	91.48	959	60	370	26495	2745	22219
324+00.00	32400	100	220.96	16.33	31.37	898	60	228	27393	3029	22772
325+00.00	32500	100	238.4	16.50	0	851	61	58	28243	3102	23489
326+00.00	32600	100	210.51	16.59	5.18	831	61	10	29075	3114	24247
327+00.00	32700	100	153.66	16.53	0	674	61	10	29749	3126	24848
328+00.00	32800	100	278.5	16.46	5.34	800	61	10	30549	3138	25575
329+00.00	32900	100	258.14	16.41	7.81	994	61	24	31543	3169	26478
330+00.00	33000	100	278.12	16.64	0.04	993	61	15	32536	3187	27391
331+00.00	33100	100	295.26	16.52	18.41	1062	61	34	33598	3230	28349
332+00.00	33200	100	279.3	16.36	40.94	1064	61	110	34662	3367	29215

Notes:

1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 1 – STH 23 (PAGE 2 OF 6)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
333+00.00	33300	100	197.31	16.35	0	883	61	76	35545	3462	29942
334+00.00	33400	100	347.9	16.43	0	1010	61	0	36554	3462	30891
335+00.00	33500	100	349.4	16.40	0	1291	61	0	37846	3462	32122
336+00.00	33600	100	345.27	16.39	0	1286	61	0	39132	3462	33347
337+00.00	33700	100	294.8	16.44	0	1185	61	0	40317	3462	34472
338+00.00	33800	100	282.8	16.55	0	1070	61	0	41387	3462	35480
339+00.00	33900	100	545.23	16.39	0	1533	61	0	42920	3462	36953
340+00.00	34000	100	630.83	15.30	0	2178	59	0	45098	3462	39072
341+00.00	34100	100	644.35	16.46	0	2361	59	0	47460	3462	41375
342+00.00	34200	100	636.82	16.42	0	2373	61	0	49832	3462	43686
343+00.00	34300	100	732.85	16.51	0	2536	61	0	52369	3462	46162
344+00.00	34400	100	858.55	16.88	0	2947	62	0	55316	3462	49047
345+00.00	34500	100	470.34	20.00	0	2461	68	0	57777	3462	51439
346+00.00	34600	100	668.24	24.39	0	2108	82	0	59885	3462	53466
347+00.00	34700	100	211.3	27.79	0	1629	97	0	61514	3462	54998
348+00.00	34800	100	309.44	22.22	4.68	964	93	9	62478	3473	55859
349+00.00	34900	100	292.65	19.47	17.78	1115	77	42	63593	3525	56845
350+00.00	35000	100	321.95	16.50	20.32	1138	67	71	64731	3613	57828
351+00.00	35100	100	303.05	16.39	15.42	1157	61	66	65889	3696	58842
352+00.00	35200	100	312.17	16.48	59.44	1139	61	139	67028	3869	59747
353+00.00	35300	100	276.68	16.54	41.04	1090	61	186	68119	4102	60544
354+00.00	35400	100	259.99	16.56	27.66	994	61	127	69112	4261	61317
355+00.00	35500	100	274.11	16.51	23.29	989	61	94	70101	4378	62127
356+00.00	35600	100	301.85	16.42	28.78	1067	61	96	71168	4499	63012
357+00.00	35700	100	317.44	16.47	5.28	1147	61	63	72315	4578	64019
358+00.00	35800	100	359.19	16.42	0	1253	61	10	73568	4590	65199
359+00.00	35900	100	314.34	16.46	0.02	1247	61	0	74815	4590	66385
360+00.00	36000	100	160.86	16.58	1.78	880	61	3	75695	4594	67200
361+00.00	36100	100	249.32	16.56	15.1	760	61	31	76455	4633	67859
362+00.00	36200	100	232.16	16.93	18.86	892	62	63	77346	4712	68610

Notes:

1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 1 – STH 23 (PAGE 3 OF 6)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
363+00.00	36300	100	231.89	21.36	22.59	859	71	77	78206	4808	69303
364+00.00	36400	100	210.26	22.13	6.6	819	81	54	79025	4875	69973
365+00.00	36500	100	399.74	19.00	6.84	1130	76	25	80154	4907	70996
366+00.00	36600	100	200.75	16.65	1.21	1112	66	15	81266	4925	72023
367+00.00	36700	100	411.85	16.48	0	1134	61	2	82401	4928	73093
368+00.00	36800	100	169.68	16.88	0.61	1077	62	1	83478	4929	74107
369+00.00	36900	100	342.55	16.72	0.04	949	62	1	84426	4931	74992
370+00.00	37000	100	342.49	16.61	2.47	1269	62	5	85695	4937	76193
371+00.00	37100	100	311.55	17.39	1.96	1211	63	8	86906	4947	77331
372+00.00	37200	100	298.24	19.36	0.4	1129	68	4	88035	4952	78387
373+00.00	37300	100	370.61	19.64	1	1239	72	3	89274	4956	79550
374+00.00	37400	100	261.4	19.82	0	1170	73	2	90444	4958	80645
375+00.00	37500	100	283.15	18.00	0.7	1008	70	1	91453	4960	81582
376+00.00	37600	100	291.88	17.46	12.24	1065	66	24	92517	4990	82551
377+00.00	37700	100	282.01	17.06	18.12	1063	64	56	93580	5060	83479
378+00.00	37800	100	250.49	20.83	0	986	70	34	94566	5102	84353
379+00.00	37900	100	241.25	21.73	20	911	79	37	95477	5148	85139
380+00.00	38000	100	240.43	16.40	8.1	892	71	52	96369	5213	85895
381+00.00	38100	100	247.25	16.63	14.19	903	61	41	97272	5265	86686
382+00.00	38200	100	291.1	16.58	9.43	997	62	44	98269	5319	87566
383+00.00	38300	100	296.36	16.49	0.46	1088	61	18	99357	5342	88570
384+00.00	38400	100	304.23	16.62	0	1112	61	1	100469	5343	89620
385+00.00	38500	100	304.95	16.00	2.97	1128	60	6	101597	5350	90681
386+00.00	38600	100	274.22	15.67	4.43	1073	59	14	102670	5367	91678
387+00.00	38700	100	282.01	17.14	7.03	1030	61	21	103700	5394	92620
388+00.00	38800	100	304	16.78	0.7	1085	63	14	104785	5412	93625
389+00.00	38900	100	283.62	16.80	0	1088	62	1	105873	5413	94649
390+00.00	39000	100	390.79	16.77	0	1249	62	0	107122	5413	95836
391+00.00	39100	100	249.89	16.67	3.79	1186	62	7	108309	5422	96952
392+00.00	39200	100	152.83	16.59	16.53	746	62	38	109054	5469	97589

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 1 – STH 23 (PAGE 4 OF 6)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
393+00.00	39300	100	186.56	16.70	109.04	629	62	233	109683	5760	97865
394+00.00	39400	100	178.84	16.69	187.61	677	62	549	110359	6447	97793
395+00.00	39500	100	147.2	16.60	203.04	604	62	723	110963	7351	97431
396+00.00	39600	100	167.92	16.59	259.85	584	61	857	111547	8422	96882
397+00.00	39700	100	285.64	16.44	114.56	840	61	693	112387	9289	96794
398+00.00	39800	100	404.7	16.51	10.01	1278	61	231	113665	9577	97723
399+00.00	39900	100	453.81	16.51	2.12	1590	61	22	115255	9606	99223
400+00.00	40000	100	408.25	16.80	12.07	1596	62	26	116851	9638	100725
401+00.00	40100	100	332.66	23.67	20.77	1372	75	61	118223	9714	101946
402+00.00	40200	100	118.02	27.21	33.69	835	94	101	119058	9840	102561
403+00.00	40300	100	133.24	28.04	13.5	465	102	87	119523	9950	102814
404+00.00	40400	100	145.85	21.39	81.28	517	92	176	120040	10169	103020
405+00.00	40500	100	116.41	16.56	167.6	486	70	461	120526	10745	102859
406+00.00	40600	100	108.7	16.56	325.5	417	61	913	120943	11887	102074
407+00.00	40700	100	100.66	16.56	349.64	388	61	1250	121330	13449	100837
408+00.00	40800	100	92.14	16.50	328.67	357	61	1256	121687	15020	99563
409+00.00	40900	100	95.01	16.44	244.23	347	61	1061	122034	16346	98522
410+00.00	41000	100	87.92	16.49	133.45	339	61	699	122373	17220	97926
411+00.00	41100	100	85.72	16.44	121.07	322	61	471	122694	17809	97597
412+00.00	41200	100	83.71	16.49	77.16	314	61	367	123008	18268	97391
413+00.00	41300	100	99.11	16.48	69.12	339	61	271	123347	18607	97330
414+00.00	41400	100	97.17	16.41	45.01	363	61	211	123710	18871	97368
415+00.00	41500	100	106.23	16.40	26.87	377	61	133	124087	19037	97518
416+00.00	41600	100	130.27	16.33	36.64	438	61	118	124525	19184	97748
417+00.00	41700	100	108.45	16.43	44.4	442	61	150	124967	19372	97942
418+00.00	41800	100	106.58	16.51	23.33	398	61	125	125365	19529	98122
419+00.00	41900	100	118.18	16.47	14.26	416	61	70	125781	19616	98391
420+00.00	42000	100	108.96	16.41	5.95	421	61	37	126202	19662	98703
421+00.00	42100	100	155.81	16.33	0.27	490	61	12	126692	19677	99119
422+00.00	42200	100	197.61	16.57	2.06	654	61	4	127347	19682	99707

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 1 – STH 23 (PAGE 5 OF 6)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
423+00.00	42300	100	207.97	16.40	0	751	61	4	128098	19687	100392
424+00.00	42400	100	183.77	16.46	0	725	61	0	128823	19687	101057
425+00.00	42500	100	179.91	16.40	28.24	673	61	52	129497	19752	101604
426+00.00	42600	100	183.11	16.36	0.58	672	61	53	130169	19819	102149
427+00.00	42700	100	143.88	16.41	7.13	606	61	14	130774	19837	102676
428+00.00	42800	100	143.69	16.44	14.28	533	61	40	131307	19887	103098
429+00.00	42900	100	167.38	16.42	1.18	576	61	29	131883	19922	103577
430+00.00	43000	100	214.13	16.98	0	707	62	2	132590	19925	104219
431+00.00	43100	100	189.74	21.14	2.73	748	71	5	133337	19931	104890
432+00.00	43200	100	202.42	21.09	1.05	726	78	7	134064	19940	105530
433+00.00	43300	100	271.63	20.70	0.2	878	77	2	134942	19943	106327
434+00.00	43400	100	217.53	20.69	11.84	906	77	22	135847	19971	107129
435+00.00	43500	100	179.78	18.00	88.65	736	72	186	136583	20203	107560
436+00.00	43600	100	209.26	16.51	0.7	720	64	165	137304	20410	108010
437+00.00	43700	100	230.77	16.37	0	815	61	1	138118	20412	108762
438+00.00	43800	100	227.12	16.41	0.16	848	61	0	138966	20412	109549
439+00.00	43900	100	217.39	16.34	0.42	823	61	1	139790	20414	110310
440+00.00	44000	100	228.73	15.24	4.34	826	58	9	140616	20425	111067
441+00.00	44100	100	234.28	15.25	18.18	857	56	42	141473	20477	111816
442+00.00	44200	100	240.6	15.38	217.62	879	57	437	142353	21023	112093
443+00.00	44300	100	268.32	16.43	69.27	942	59	531	143295	21687	112312
444+00.00	44400	100	287.28	16.38	62.81	1029	61	245	144324	21992	112974
445+00.00	44500	100	302.45	16.38	41.87	1092	61	194	145416	22235	113763
446+00.00	44600	100	354.24	16.45	0	1216	61	78	146632	22332	114822
447+00.00	44700	100	330.37	16.41	10.48	1268	61	19	147900	22356	116005
448+00.00	44800	100	344.53	16.42	21.58	1250	61	59	149150	22430	117119
449+00.00	44900	100	312.16	16.49	37.86	1216	61	110	150366	22568	118137
450+00.00	45000	100	301.47	16.51	16.49	1136	61	101	151502	22694	119086
451+00.00	45100	100	303.29	16.47	0	1120	61	31	152622	22732	120107
452+00.00	45200	100	306.1	16.41	2.31	1129	61	4	153751	22737	121169

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 1 – STH 23 (PAGE 6 OF 6)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
453+00.00	45300	100	286.06	16.38	0.33	1097	61	5	154847	22743	122199
454+00.00	45400	100	264.14	17.46	9.79	1019	63	19	155866	22767	123132
455+00.00	45500	100	237.09	24.64	39.1	928	78	91	156794	22880	123869
456+00.00	45600	100	179.61	27.40	0	772	96	72	157566	22970	124454
457+00.00	45700	100	208.93	25.04	9.7	720	97	18	158285	22993	125054
457+86.84	45787	87	0	25.00	0	336	80	16	158621	23012	125290
					Column Totals	158621	10320	18410			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9

9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EARTHWORK	SHEET 551	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 1 – CTH A NB

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
100+00.00	10000		51.83	14.46	9.44	0	0	0	0	0	0
101+00.00	10100	100	75.46	17.16	0.35	236	59	18	236	23	155
102+00.00	10200	100	72.7	16.48	0	274	62	1	510	23	366
103+00.00	10300	100	67.79	12.52	2.32	260	54	4	770	29	567
104+00.00	10400	100	103.94	13.93	4.64	318	49	13	1088	45	820
105+00.00	10500	100	155.65	16.34	3.13	481	56	14	1569	63	1226
106+00.00	10600	100	201.27	24.36	37	661	75	74	2230	156	1719
106+57.00	10657	57	90.98	58.00	89.96	308	87	134	2538	323	1773
					Column totals	2538	442	259			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9

9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EARTHWORK	SHEET 552	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 1 – STH 49 NB

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
200+00.00	20000		56.48	29.18	0	0	0	0	0	0	0
201+00.00	20100	100	10.69	15.53	57.12	124	83	106	124	132	-91
202+00.00	20200	100	43.87	7.22	43.67	101	42	187	225	366	-265
203+00.00	20300	100	66.21	12.31	17.57	204	36	113	429	507	-239
204+00.00	20400	100	54.63	7.02	0	224	36	33	653	548	-92
205+00.00	20500	100	53.96	6.03	127.52	201	24	236	854	843	-210
206+00.00	20600	100	69.77	5.91	39.17	229	22	309	1083	1229	-389
206+54.49	20654	54	83.93	0.00	3.25	155	6	43	1238	1283	-293
206+91.56	20692	37	157.75	0.00	8.13	166	0	8	1404	1292	-137
207+00.00	20700	8	153.47	0.00	3.67	49	0	2	1453	1295	-91
208+00.00	20800	100	82.69	0.00	1.84	437	0	10	1890	1307	334
209+00.00	20900	100	107.85	0.00	0.74	353	0	5	2243	1313	681
209+61.90	20962	62	113.54	0.00	0	254	0	1	2497	1314	933
					Column totals	2497	249	1051			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9

9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EARTHWORK	SHEET 553	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 1– FOREST RIDGE S

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
5+19.82	520		0	9.15	0	0	0	0	0	0	0
6+00.00	600	80	78.02	9.39	1.88	116	28	3	116	3	85
7+00.00	700	100	237.84	9.39	1.81	585	35	7	701	12	626
8+00.00	800	100	331.28	9.39	0	1054	35	3	1755	16	1641
9+00.00	900	100	395.39	9.53	0	1346	35	0	3100	16	2952
9+75.99	976	76	0	31.79	0	556	58	0	3657	16	3450
					Column totals	3657	190	13			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9

9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EARTHWORK	SHEET 554	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 1– FOREST RIDGE N

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
20+24.00	2024		0	31.44	0	0	0	0	0	0	0
21+00.00	2100	76	106.3	8.79	19.7	150	57	28	150	35	58
22+00.00	2200	100	7.31	8.36	23.09	210	32	79	360	134	138
23+00.00	2300	100	0.64	8.46	23.41	15	31	86	375	241	14
24+00.00	2400	100	11.33	8.62	4.26	22	32	51	397	305	-60
25+00.00	2500	100	27.25	8.58	0.73	71	32	9	468	317	-32
26+00.00	2600	100	24.26	8.39	1.35	95	31	4	564	322	28
27+00.00	2700	100	30.05	8.48	0.09	101	31	3	664	325	94
					Column totals	664	246	260			

Notes:

1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9 9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EARTHWORK	SHEET 555	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 1– EASTWIND

Station	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate
7+24.00	724		51.26	8.61	0	0	0	0	0	0	0
8+00.00	800	76	54.1	8.66	0.32	148	24	0	148	1	123
9+00.00	900	100	20.18	9.78	12.16	138	34	23	286	29	198
9+73.55	974	74	18.56	28.00	7.65	53	51	27	339	63	166
					Column totals	339	110	51			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9

9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EARTHWORK	SHEET 556	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 1 – SUNNYSIDE

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
5+70.06	570		40.81	8.63	0.13	0	0	0	0	0	0
6+00.00	600	30	31.76	8.61	0	40	10	0	40	0	31
7+00.00	700	100	20.71	9.00	0.9	97	33	2	137	2	93
8+00.00	800	100	28.74	9.59	39.31	92	34	74	229	95	57
9+00.00	900	100	135.33	10.09	116.68	304	36	289	533	456	-37
9+59.83	960	60	0	32.71	0	150	47	129	683	618	-96
					Column totals	683	160	494			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 1 – BROOKLYN J

			AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		
Station	Real 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		
10+24.00	1024		0	41.22	0	0	0	0	0	0	0
11+00.00	1100	76	63.47	12.34	0.07	89	75	0	89	0	14
12+00.00	1200	100	56.33	9.99	0	222	41	0	311	0	194
12+60.94	1261	61	56.22	10.44	0.03	127	23	0	438	0	298
						438	140	0			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 1– DEAD END RD

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
7+72.00	772		34.63	8.35	0.1	0	0	0	0	0	0
8+00.00	800	28	28.51	8.29	0	33	9	0	33	0	24
9+00.00	900	100	58.3	8.71	0	161	31	0	193	0	153
10+00.00	1000	100	112.67	26.03	24.55	317	64	45	510	57	349
10+05.00	1005	5	139.26	34.59	0.34	23	6	2	533	60	364
					Column totals	533	110	48			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9 9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EARTHWORK	SHEET 559	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 1 – CTH PP

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
10+55.19	1055		190.82	50.04	0.13	0	0	0	0	0	0
11+00.00	1100	45	163.6	21.39	0.23	294	59	0	294	0	234
12+00.00	1200	100	84.69	9.24	0	460	57	0	754	1	637
12+86.95	1287	87	31.62	8.46	0.3	187	29	0	941	2	795
					Column totals	941	144	1			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 2 – STH 23 (PAGE 1 OF 3)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
210+40.90	21041		236.15	15.50	42.03	0	0	0	0	0	0
211+00.00	21100	59	273.43	16.11	16.00	558	35	64	558	79	444
212+00.00	21200	100	421.73	16.01	0.00	1287	59	30	1845	116	1635
213+00.00	21300	100	486.26	16.02	0.00	1681	59	0	3527	116	3257
214+00.00	21400	100	509.96	16.01	1.23	1845	59	2	5371	119	5039
215+00.00	21500	100	489.35	15.97	0.90	1851	59	4	7222	124	6826
216+00.00	21600	100	333.25	16.07	1.90	1523	59	5	8745	131	8283
217+00.00	21700	100	267.95	16.08	5.50	1113	60	14	9859	148	9320
218+00.00	21800	100	348.39	16.12	38.27	1141	60	81	11000	249	10300
219+00.00	21900	100	438.4	17.58	9.19	1457	62	88	12457	359	11585
220+00.00	22000	100	303	19.89	12.00	1373	69	39	13830	408	12840
221+00.00	22100	100	233.11	21.59	52.50	993	77	119	14823	557	13606
222+00.00	22200	100	115.27	21.89	145.50	645	81	367	15468	1016	13713
223+00.00	22300	100	68.23	27.12	230.64	340	91	697	15808	1886	13091
224+00.00	22400	100	62.83	29.13	0.00	243	104	427	16050	2420	12696
225+00.00	22500	100	109.12	27.32	99.26	404	105	368	16455	2880	12536
226+00.00	22600	100	295.78	22.73	75.00	750	93	323	17204	3283	12789
227+00.00	22700	100	586.6	21.11	47.23	1634	81	226	18838	3566	14059
228+00.00	22800	100	777.33	18.25	34.26	2526	73	151	21364	3755	16324
229+00.00	22900	100	745.15	15.68	34.27	2819	63	127	24184	3913	18922
230+00.00	23000	100	824.31	14.94	43.25	2906	57	144	27090	4093	21592
231+00.00	23100	100	922.31	16.00	34.02	3234	57	143	30325	4272	24590
232+00.00	23200	100	1180.09	15.97	28.90	3893	59	117	34218	4417	28279
233+00.00	23300	100	1060.12	15.90	20.89	4149	59	92	38366	4533	32253
234+00.00	23400	100	801.74	16.00	17.50	3448	59	71	41814	4621	35553
235+00.00	23500	100	675.75	15.87	13.00	2736	59	56	44550	4692	38159
236+00.00	23600	100	536.78	15.79	10.19	2245	59	43	46796	4746	40292
237+00.00	23700	100	319.49	15.79	9.05	1586	58	36	48381	4790	41775
238+00.00	23800	100	347+00	15.86	4.65	1183	59	25	49565	4822	42868
239+00.00	23900	100	286.49	15.92	140.76	1061	59	269	50626	5159	43534
240+00.00	24000	100	256.74	15.91	250.72	1006	59	725	51632	6065	43575

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9

9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EARTHWORK	SHEET	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 2 – STH 23 (PAGE 2 OF 3)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
241+00.00	24100	100	268.17	15.91	254.09	972	59	935	52604	7233	43319
242+00.00	24200	100	302.71	15.94	302.88	1057	59	1031	53661	8523	43028
243+00.00	24300	100	323.36	16.02	329.03	1159	59	1170	54820	9985	42666
244+00.00	24400	100	348.23	15.99	249.54	1244	59	1071	56064	11325	42511
245+00.00	24500	100	333.25	15.80	303.82	1262	59	1025	57326	12606	42433
246+00.00	24600	100	282.4	15.79	356.79	1140	59	1223	58466	14135	41985
247+00.00	24700	100	265.46	15.75	334.96	1015	58	1281	59481	15736	41340
248+00.00	24800	100	236.14	15.74	283.78	929	58	1146	60410	17168	40778
249+00.00	24900	100	232.45	15.82	140.17	868	58	785	61277	18150	40606
250+00.00	25000	100	266.25	15.72	41.39	924	58	336	62201	18570	41051
251+00.00	25100	100	380.66	15.86	10.03	1198	58	95	63399	18689	42072
252+00.00	25200	100	320.05	16.00	2.83	1298	59	24	64697	18719	43281
253+00.00	25300	100	257.73	15.83	8.65	1070	59	21	65767	18745	44265
254+00.00	25400	100	315.6	15.74	0.00	1062	58	16	66828	18765	45248
255+00.00	25500	100	351.31	15.70	12.94	1235	58	24	68063	18795	46395
256+00.00	25600	100	427.61	15.67	8.78	1442	58	40	69506	18846	47729
257+00.00	25700	100	460.94	15.68	3.64	1645	58	23	71151	18874	49288
258+00.00	25800	100	463.74	15.75	14.20	1712	58	33	72864	18916	50901
259+00.00	25900	100	517.64	16.05	8.63	1817	59	42	74681	18968	52606
260+00.00	26000	100	549.97	18.28	2.54	1977	64	21	76658	18994	54494
261+00.00	26100	100	547.75	20.90	0.06	2033	73	5	78691	19000	56448
262+00.00	26200	100	575.57	21.84	0.18	2080	79	0	80771	19001	58449
263+00.00	26300	100	594.01	21.71	0.00	2166	81	0	82937	19001	60534
264+00.00	26400	100	448.12	21.83	0.00	1930	81	0	84867	19001	62383
265+00.00	26500	100	508.61	21.80	1.11	1772	81	2	86638	19004	64071
266+00.00	26600	100	492.22	21.77	0.76	1853	81	3	88492	19008	65839
267+00.00	26700	100	463.61	21.80	3.50	1770	81	8	90262	19018	67519
268+00.00	26800	100	530.06	21.76	0.00	1840	81	6	92102	19026	69270
269+00.00	26900	100	532.61	21.78	0.00	1968	81	0	94070	19026	71158
270+00.00	27000	100	552.70	21.21	0.00	2010	80	0	96080	19026	73088
271+00.00	27100	100	561.81	21.89	0.00	2064	80	0	98144	19026	75072

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 2 – STH 23 (PAGE 3 OF 3)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
272+00.00	27200	100	556.00	21.59	0.00	2070	81	0	100214	19026	77061
273+00.00	27300	100	527.27	23.97	0.00	2006	84	0	102220	19026	78983
274+00.00	27400	100	501.20	26.09	6.09	1905	93	11	104124	19040	80781
275+00.00	27500	100	492.28	27.64	7.41	1840	100	25	105964	19072	82490
276+00.00	27600	100	484.06	27.89	15.54	1808	103	43	107772	19125	84142
277+00.00	27700	100	445.76	27.46	39.12	1722	103	101	109494	19251	85635
278+00.00	27800	100	666.76	26.86	57.81	2060	101	180	111554	19476	87370
279+00.00	27900	100	471.41	26.97	0.00	2108	100	107	113662	19609	89244
280+00.00	28000	100	348.97	25.69	83.88	1519	98	155	115181	19804	90472
281+00.00	28100	100	333.1	25.99	157.58	1263	96	447	116444	20362	91080
282+00.00	28200	100	271.46	23.41	142.09	1120	91	555	117564	21056	91415
283+00.00	28300	100	227.85	18.68	210.86	925	78	654	118489	21873	91444
283+28.00	28328	28	181.24	16.57	273.30	212	18	251	118701	22187	91324
287+20.06	28720	392	222.26	19.00	111.99	2930	258	2797	121630	25684	90499
288+00.00	28800	80	276.27	19.45	4.79	738	57	173	122368	25900	90964
289+00.00	28900	100	805.77	16.78	0	2004	67	9	124372	25911	92890
290+00.00	29000	100	554.47	15.68	0.03	2519	60	0	126891	25911	95348
291+00.00	29100	100	568.94	15.71	0	2080	58	0	128971	25911	97371
292+00.00	29200	100	620.63	15.58	0	2203	58	0	131174	25911	99516
293+00.00	29300	100	499.35	15.66	0	2074	58	0	133248	25911	101532
294+00.00	29400	100	572.7	15.78	0	1985	58	0	135234	25911	103459
295+00.00	29500	100	552.18	15.81	4.95	2083	59	9	137317	25922	105472
296+00.00	29600	100	311.89	15.96	214.01	1600	59	405	138917	26429	106506
297+00.00	29700	100	253.03	17.85	251.44	1046	63	862	139963	27507	106413
298+00.00	29800	100	276.35	17.42	229.47	980	65	891	140943	28620	106214
299+00.00	29900	100	350.79	21.28	182.12	1161	72	762	142105	29573	106351
300+00.00	30000	100	304.20	21.90	152.49	1213	80	620	143318	30347	106710
301+00.00	30100	100	247.25	27.59	68.16	1021	92	409	144339	30858	107128
302+00.00	30200	100	325.16	32.97	10.19	1060	112	145	145399	31039	107895
303+00.00	30300	100	246.95	38.84	0	1059	133	19	146458	31063	108798
					Column totals	146458	6597	24850			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 2 – W CTH A

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
13+68.24	1368		59.27	10.10	0.12	0	0	0	0	0	0
14+00.00	1400	32	55.94	10.19	14.71	68	12	9	68	11	45
15+00.00	1500	100	23.63	10.36	78.62	147	38	173	215	227	-62
16+00.00	1600	100	17.23	10.45	274.23	76	39	653	291	1044	-841
17+00.00	1700	100	64.82	10.83	445.04	152	39	1332	443	2709	-2394
18+00.00	1800	100	207.57	10.23	266.82	504	39	1318	947	4357	-3576
19+00.00	1900	100	241.73	13.08	122.79	832	43	722	1779	5258	-3689
20+00.00	2000	100	0	50.40	194.45	448	118	587	2227	5993	-4094
					Column totals	2227	328	4794			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9

9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EARTHWORK	SHEET 564	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 2 – NORTH STREET

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
20+80.00	2080		27.77	26.81	163.53	0	0	0	0	0	0
21+00.00	2100	20	18.52	16.11	179.24	17	16	127	17	159	-157
22+00.00	2200	100	101.28	10.55	30.96	222	49	389	239	645	-472
23+00.00	2300	100	92.62	10.22	51.19	359	38	152	598	835	-341
24+00.00	2400	100	74.81	10.05	28.72	310	38	148	908	1020	-254
25+00.00	2500	100	52.84	9.39	36.93	236	36	122	1145	1172	-205
25+63.00	2563	63	47.88	9.23	0.65	118	22	44	1262	1227	-164
					Column totals	1262	199	982			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 2 – CTH A SB

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
100+00.00	10000		64.01	14.29	2.7	0	0	0	0	0	0
101+00.00	10100	100	101.27	11.45	12.26	306	48	28	306	35	224
102+00.00	10200	100	59.69	13.82	138.36	298	47	279	604	383	126
103+00.00	10300	100	90.08	13.60	190.67	277	51	609	882	1145	-409
104+00.00	10400	100	88.62	10.55	158.24	331	45	646	1212	1953	-930
105+00.00	10500	100	76.19	11.61	54.98	305	41	395	1518	2446	-1160
106+00.00	10600	200	102.59	14.79	94.41	660	98	553	2178	3138	-1287
106+57.00	10657	57	28.23	27.26	109.44	138	44	215	2316	3407	-1462
					Column totals	2316	373	2725			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9

9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	EARTHWORK	SHEET 566	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 2 – STH 49

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
200+13.78	20014		117.62	18.55	48.65	0	0	0	0	0	0
201+00.00	20100	86	41.51	18.88	35.12	254	60	134	254	167	27
202+00.00	20200	100	34.47	11.56	25.68	141	56	113	395	308	-29
203+00.00	20300	100	18.07	15.24	0	97	50	48	492	367	-41
204+00.00	20400	100	56.74	24.21	0	139	73	0	631	367	24
205+00.00	20500	100	105.32	15.10	5.81	300	73	11	931	381	238
206+00.00	20600	200	102.43	15.14	0.09	769	112	22	1700	408	868
207+00.00	20700	100	153.47	19.14	3.67	474	63	7	2174	417	1270
208+00.00	20800	100	82.69	18.47	1.84	437	70	10	2611	430	1625
209+00.00	20900	100	107.85	17.28	0.74	353	66	5	2964	436	1906
209+62.00	20962	62	113.54	17.25	0	254	40	1	3218	437	2119
					Column totals	3218	663	349			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 2 – SHARED USE PATH

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
210+40.90	21041		8.54	0.00	0.32	0	0	0	0	0	0
211+00.00	21100	59	6.48	0.00	0.7	16	0	1	16	1	15
212+00.00	21200	100	1.13	0.00	18.32	14	0	35	31	45	-15
213+00.00	21300	100	41.32	0.00	3.52	79	0	40	109	96	13
214+00.00	21400	100	58.05	0.00	0	184	0	7	293	104	189
215+00.00	21500	100	48.97	0.00	0	198	0	0	491	104	387
216+00.00	21600	100	7.59	0.00	46.83	105	0	87	596	213	384
217+00.00	21700	100	0.24	0.00	36.22	15	0	154	611	405	206
218+00.00	21800	100	0.07	0.00	15.92	1	0	97	611	525	86
219+00.00	21900	100	91.08	0.00	0	169	0	29	780	562	218
220+00.00	22000	100	15.58	0.00	3.7	198	0	7	977	571	407
221+00.00	22100	100	6.42	0.00	2.59	41	0	12	1018	585	433
222+00.00	22200	100	42.61	0.00	14.36	91	0	31	1109	625	484
223+00.00	22300	100	22.01	0.00	157.03	120	0	317	1229	1021	207
224+00.00	22400	100	0	0.00	28.63	41	0	344	1269	1451	-182
224+54.07	22454	54	0	0.00	46.15	0	0	75	1269	1545	-275
					Column totals	1269	0	1236			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 1 – STH 23 (PAGE 1 OF 2)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
21+49.00	2149		340.23	21.71	0	0	0	0	0	0	0
22+00.00	2200	51	305.68	21.34	3.65	610	41	3	610	4	565
23+00.00	2300	100	372.93	21.04	0	1257	78	7	1867	13	1735
24+00.00	2400	100	349.78	18.66	0	1338	74	0	3205	13	3000
25+00.00	2500	100	316.15	16.27	0	1233	65	0	4438	13	4168
26+00.00	2600	100	271.85	16.26	0	1089	60	0	5527	13	5197
27+00.00	2700	100	218.06	16.23	1.57	907	60	3	6434	16	6040
28+00.00	2800	100	196.47	16.17	1.76	768	60	6	7202	24	6740
29+00.00	2900	100	136.98	16.12	10.95	618	60	24	7820	54	7268
30+00.00	3000	100	134.39	16.06	13.6	503	60	45	8322	110	7655
31+00.00	3100	100	165.22	16.14	22.78	555	60	67	8877	195	8066
32+00.00	3200	100	64.64	16.08	26.76	426	60	92	9303	309	8317
33+00.00	3300	100	84.94	16.23	19.25	277	60	85	9580	416	8428
34+00.00	3400	100	99.07	16.10	0	341	60	36	9920	460	8664
35+00.00	3500	100	200.15	16.13	8.19	554	60	15	10474	479	9139
36+00.00	3600	100	200.29	16.14	17.11	742	60	63	11216	558	9742
37+00.00	3700	100	217.81	16.19	46.71	774	60	118	11991	706	10309
38+00.00	3800	100	252.15	16.19	11.69	870	60	108	12861	841	10984
39+00.00	3900	100	287.69	16.10	7.61	1000	60	36	13861	886	11879
40+00.00	4000	100	299.73	24.84	7.8	1088	76	29	14948	922	12856
41+00.00	4100	100	298.15	19.56	7.91	1107	82	29	16056	958	13844

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9

9

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	EARTHWORK	SHEET 569	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 1 – STH 23 (PAGE 2 OF 2)

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
42+00.00	4200	100	259.15	15.76	47.62	1032	65	103	17088	1087	14682
43+00.00	4300	100	235.57	15.85	13.11	916	59	112	18004	1227	15399
44+00.00	4400	100	249.53	15.85	14.42	898	59	51	18902	1291	16175
45+00.00	4500	100	299.28	15.81	6	1016	59	38	19918	1338	17086
46+00.00	4600	100	230.65	15.69	16.26	981	58	41	20900	1390	17957
47+00.00	4700	100	243.84	15.74	32.51	879	58	90	21778	1503	18665
48+00.00	4800	100	254.68	15.87	17.7	923	59	93	22702	1619	19413
49+00.00	4900	100	265.1	15.91	100.62	963	59	219	23664	1893	20043
50+00.00	5000	100	286.04	17.51	62.79	1021	62	303	24685	2271	20623
51+00.00	5100	100	315.08	19.37	37.85	1113	68	186	25798	2504	21435
52+00.00	5200	100	350.00	20.58	8.31	1232	74	85	27030	2611	22486
53+00.00	5300	100	395.94	22.15	17.41	1381	79	48	28411	2670	23729
54+00.00	5400	100	282.18	31.95	34.16	1256	100	96	29667	2790	24765
55+00.00	5500	100	262.09	31.69	112.06	1008	118	271	30675	3128	25317
56+00.00	5600	100	275.44	31.69	78.59	995	117	353	31670	3570	25753
57+00.00	5700	100	272.20	31.69	37.89	1014	117	216	32684	3839	26381
57+55.63	5756	56	326.80	17.14	13.42	617	50	53	33301	3905	26881
					Column totals	33301	2515	3124			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

DIVISION 1 – COMORN ROAD

Station	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut	Salvaged/Unusable Pavement Material	Fill	Cut 1.00	Expanded Fill 1.25	
						Note 1	Note 2	Note 3	Note 1		
8+63.00	863		54.19	12.10	0.03	0	0	0	0	0	0
9+00.00	900	37	48.69	11.78	0.92	70	16	1	70	1	53
9+62.00	962	62	108.04	23.24	0.92	180	40	2	250	3	190
					Column totals	250	57	3			

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume

9

9

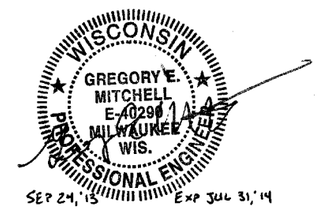
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	EARTHWORK	SHEET 571	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 1 - 1430-00-84

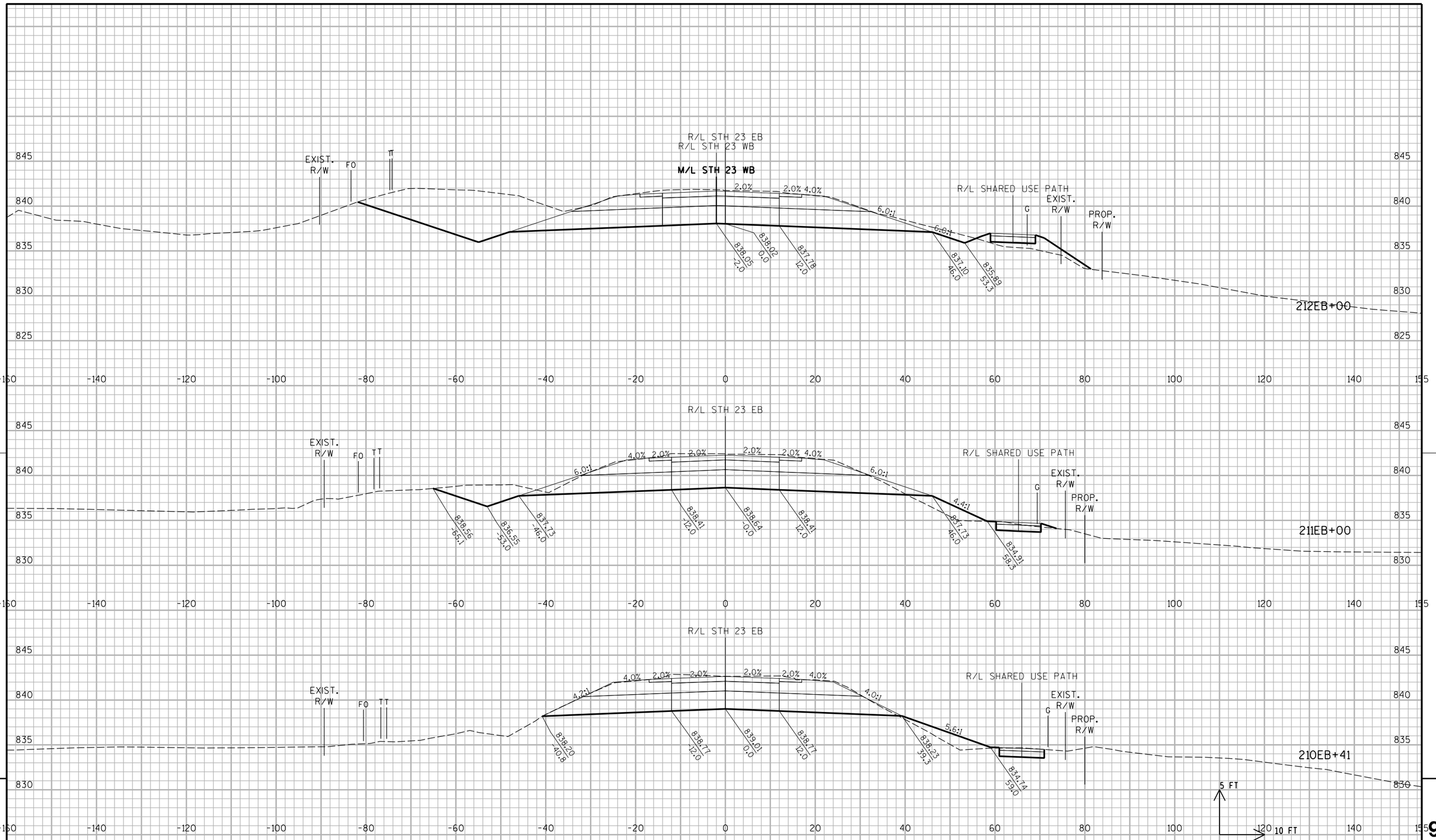
STATION	DISTANCE	AREA (SF) CUT	AREA (SF) SALVAGED/UNUSABLE PAV'T MAT'L	AREA (SF) FILL	INCREMENTAL VOLUME (CY) (UNADJUSTED) CUT *	INCREMENTAL VOLUME (CY) (UNADJUSTED) SALVAGED/UNUSABLE PAV'T MAT'L **	INCREMENTAL VOLUME (CY) (UNADJUSTED) FILL ***	CUMULATIVE VOLUME (CY) CUT 1.00 *	CUMULATIVE VOLUME (CY) EXPANDED FILL 1.25	MASS ORDINATE
NORTH LAWSON DRIVE										
12+50		0.00	11.55	0.00	0	0	0	0	0	0
13+00	50	32.76	11.55	14.09	30	21	13	30	16	14
14+00	100	11.32	13.36	67.52	82	46	151	112	205	-93
15+00	100	154.82	0.00	0.00	308	25	125	420	361	59
16+00	100	114.06		0.00	498	0	0	918	361	557
17+00	100	273.22		0.00	717	0	0	1635	361	1274
18+00	100	411.38		0.00	1268	0	0	2903	361	2542
19+00	100	390.26		0.00	1485	0	0	4388	361	4027
20+00	100	230.35		0.00	1149	0	0	5537	361	5176
21+00	100	118.37		0.00	646	0	0	6183	361	5822
22+00	100	97.47		0.00	400	0	0	6583	361	6222
23+00	100	100.62		0.00	367	0	0	6950	361	6589
24+00	100	52.44		23.78	283	0	44	7233	416	6817
25+00	100	22.56		65.78	139	0	166	7372	624	6748
26+00	100	37.93		35.46	112	0	187	7484	858	6626
NORTH STREET										
40+75		0.00	7.92	0.00	0	0	0	0	0	0
41+00	25	66.39	8.05	0.00	31	7	0	31	0	31
42+00	100	95.76	8.58	0.00	300	31	0	331	0	331
43+00	100	0.00	10.89	0.00	177	36	0	508	0	508
44+00	100	38.88	7.92	7.87	72	35	15	580	19	561
45+00	100	57.14	8.02	0.00	178	30	15	758	38	720
45+15	15	45.00		0.00	28	2	0	786	38	748
STORM WATER FILTERING BASIN										
15+00		0.00		0.00	0	0	0	0	0	0
15+25	25	0.00		0.98	0	0	0	0	0	0
15+50	25	113.88		1.79	53	0	1	53	1	52
15+75	25	305.37		0.00	194	0	1	247	2	245
16+00	25	292.12		0.00	277	0	0	524	2	522
16+25	25	284.56		0.00	267	0	0	791	2	789
16+50	25	121.66		0.00	188	0	0	979	2	977
16+65	15	0.00		0.00	34	0	0	1013	2	1011
PROJECT TOTALS					9283	233	718	9283	898	8385

* Cut includes Salvaged/Unusable Pavement material
** Not identified in cross sections
*** Does not include Unusable Pavement Excavation volume



9 9

PROJECT NO:1430-00-84 | HWY: STH 23 | COUNTY: GREEN LAKE | EARTHWORK | SHEET 572 | E



STA 210EB+41 TO 212EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 573	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

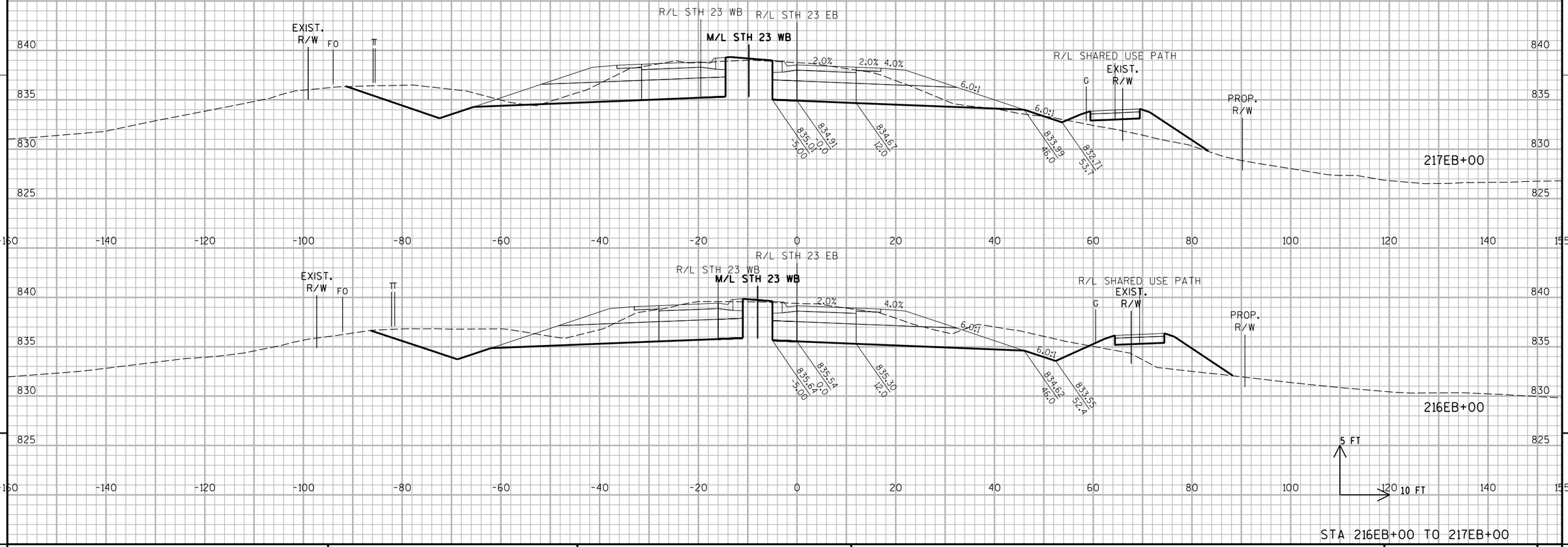
WISDOT/CADDS SHEET 21

STA 213EB+00 TO 215EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 574	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



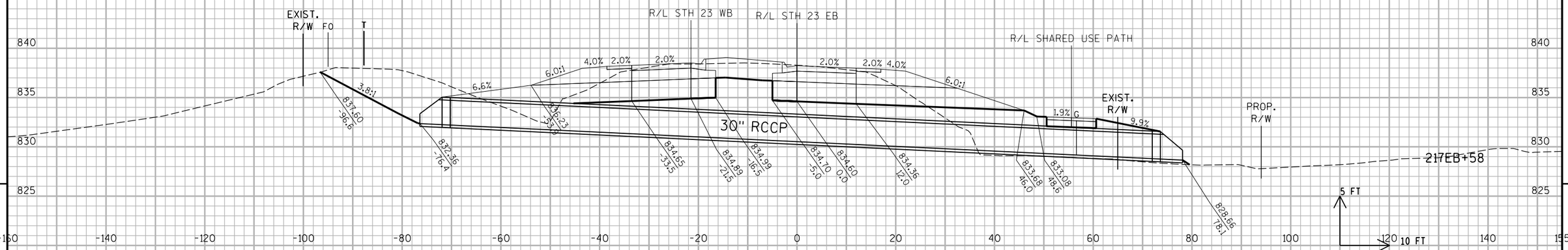
STA 216EB+00 TO 217EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 575	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 0°34'32" LHF
FOR INFORMATION PURPOSES ONLY

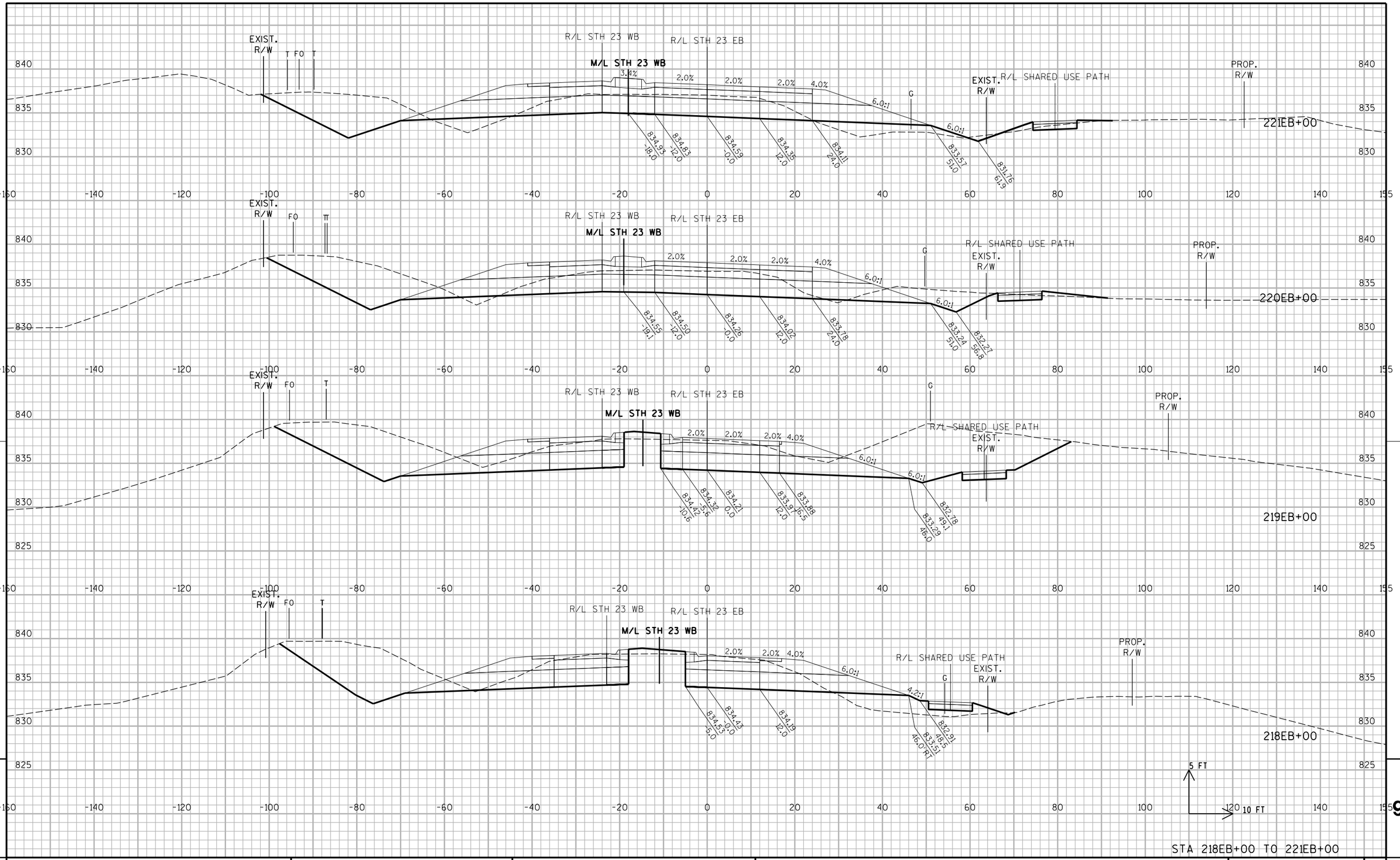


STA 217EB+58 TO 217EB+58

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 576	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

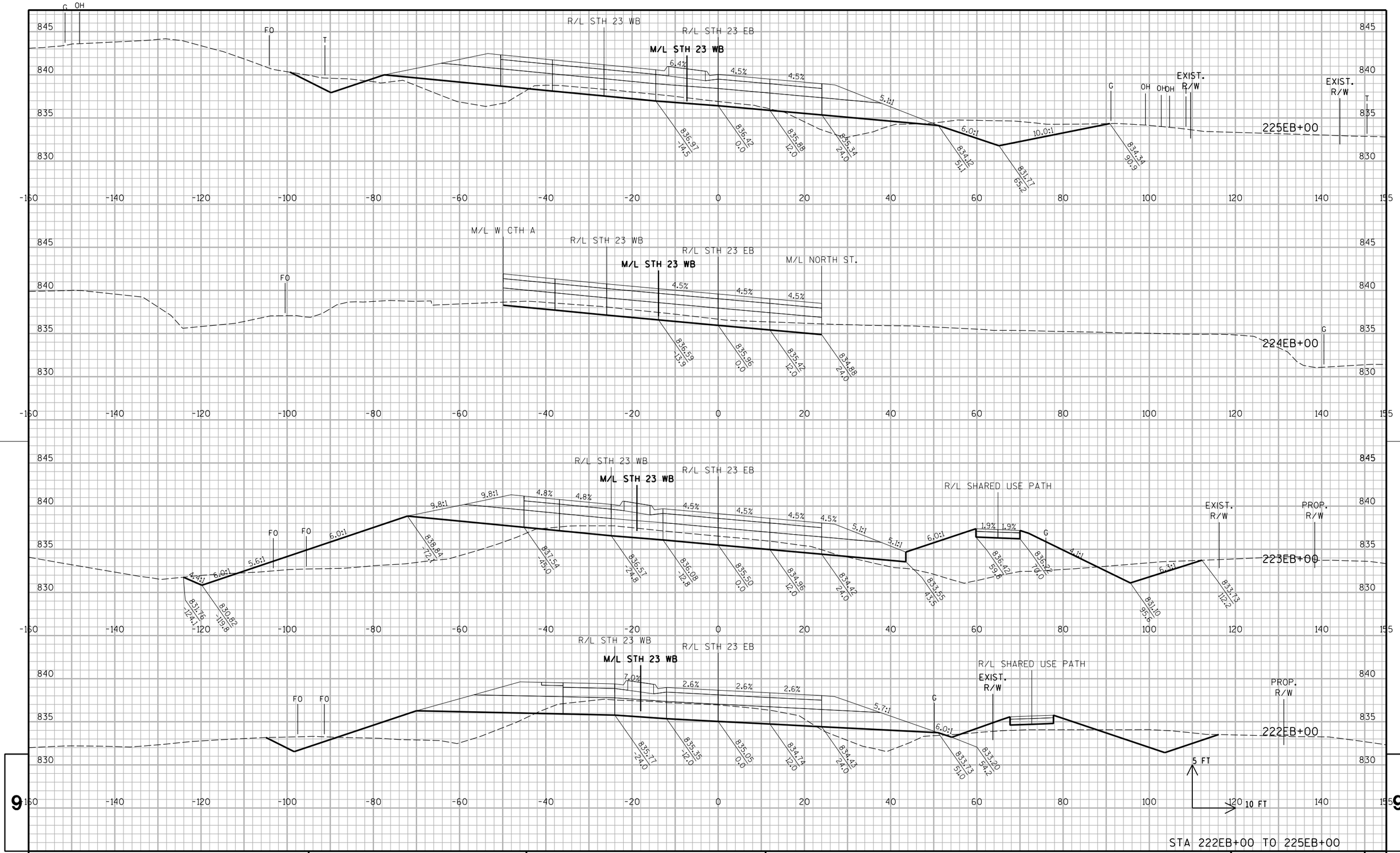


STA 218EB+00 TO 221EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 577	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

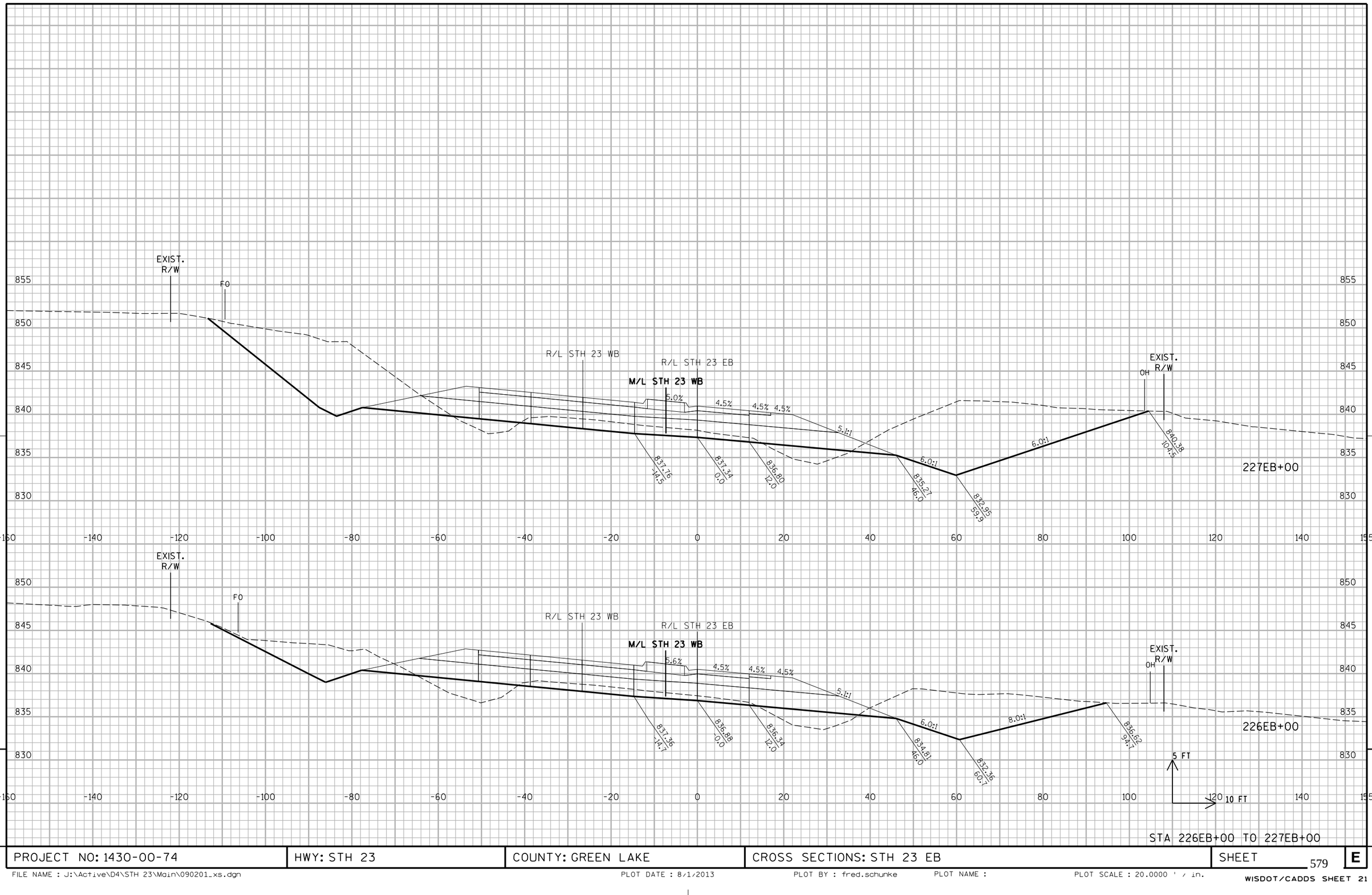
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 578	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

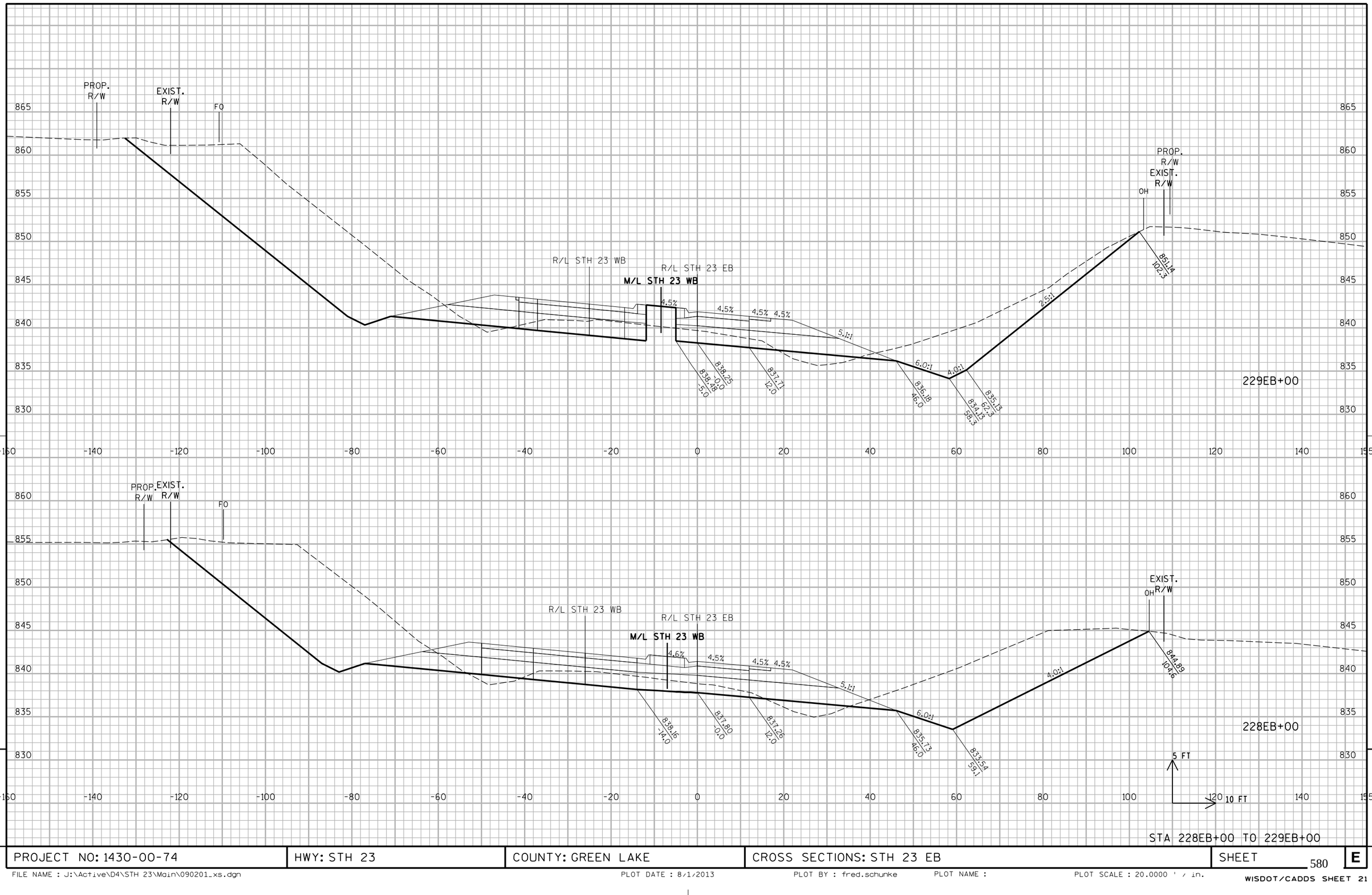
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 579	E

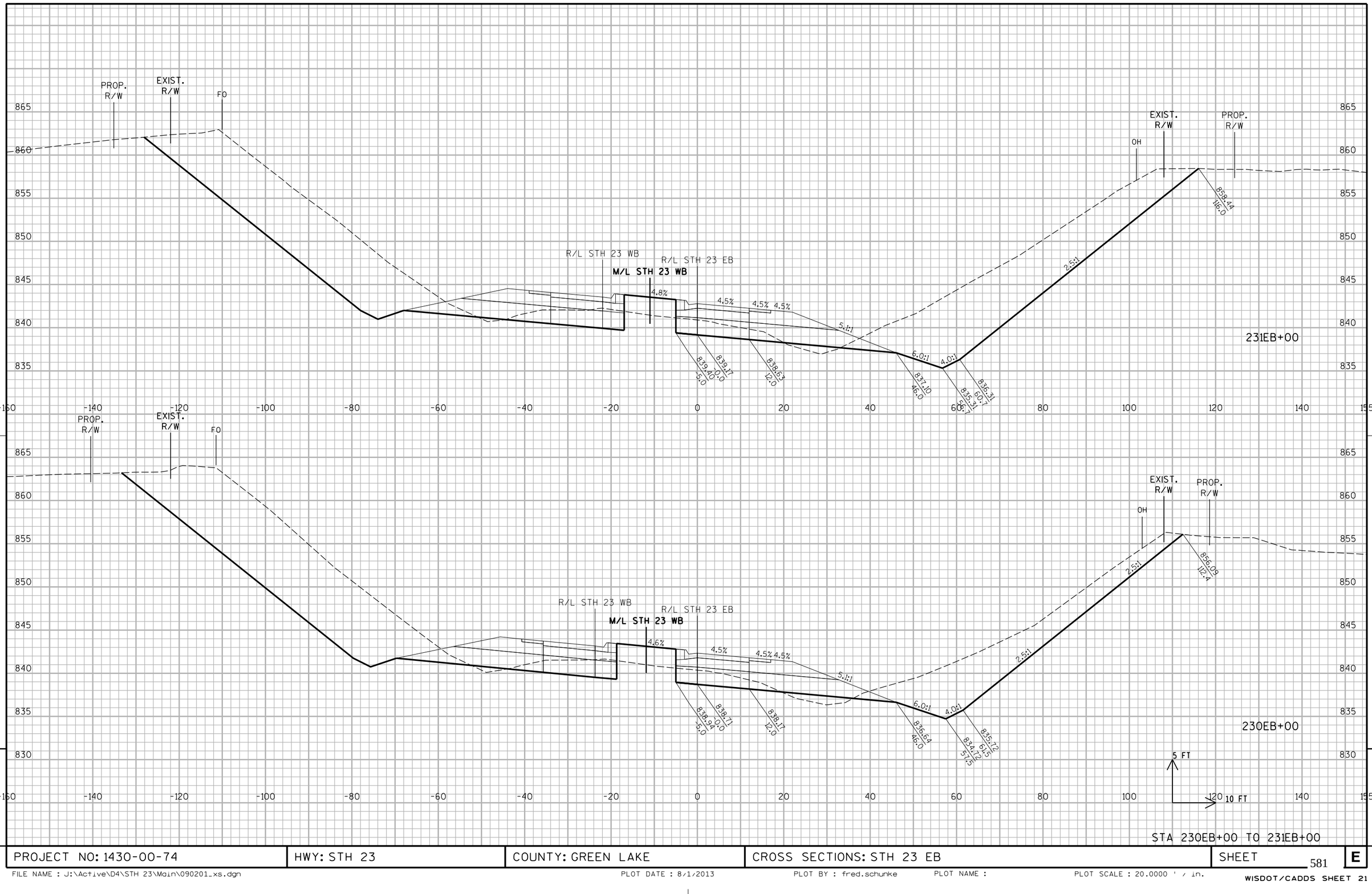
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 228EB+00 TO 229EB+00

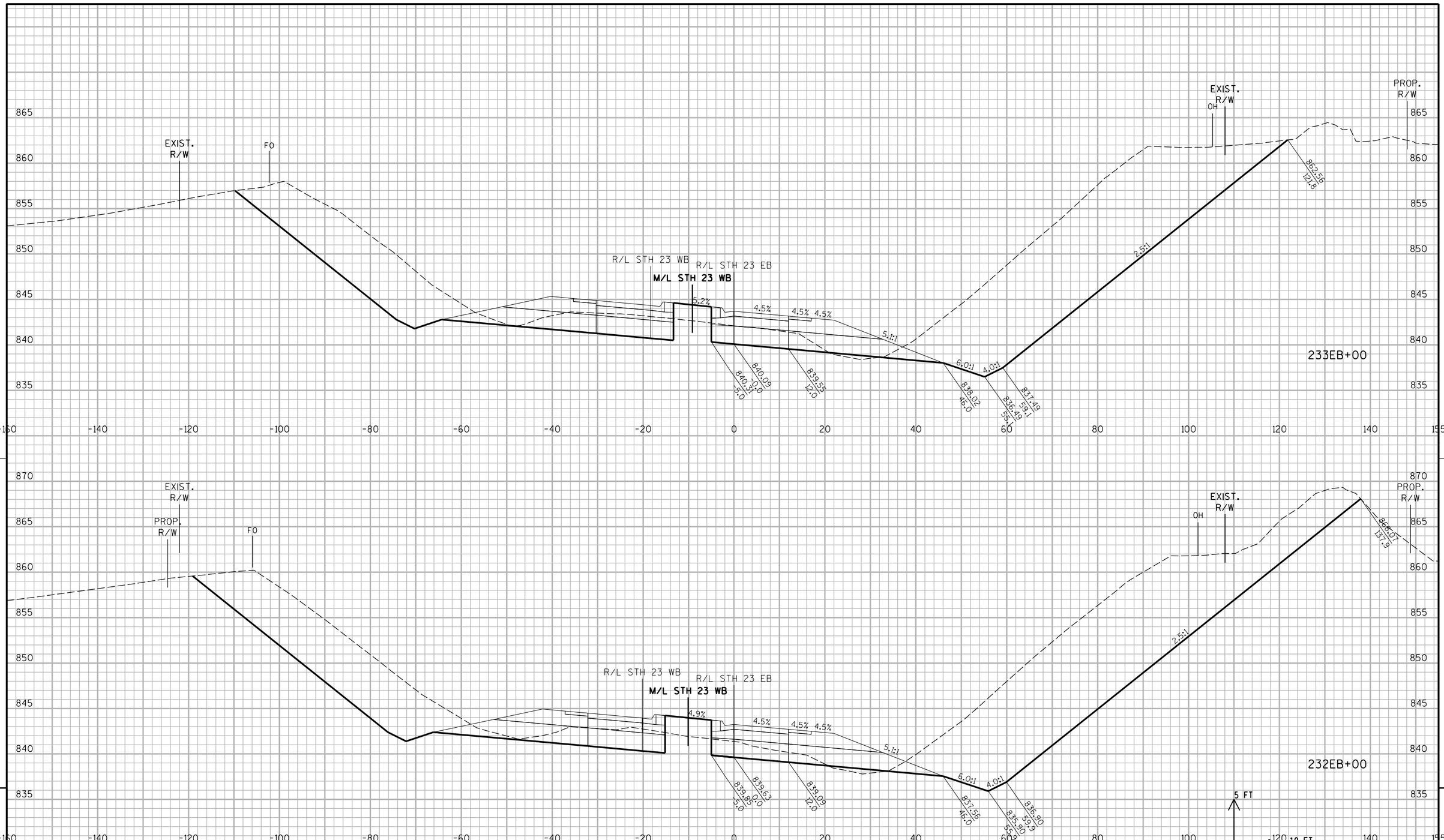
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 580	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 581	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

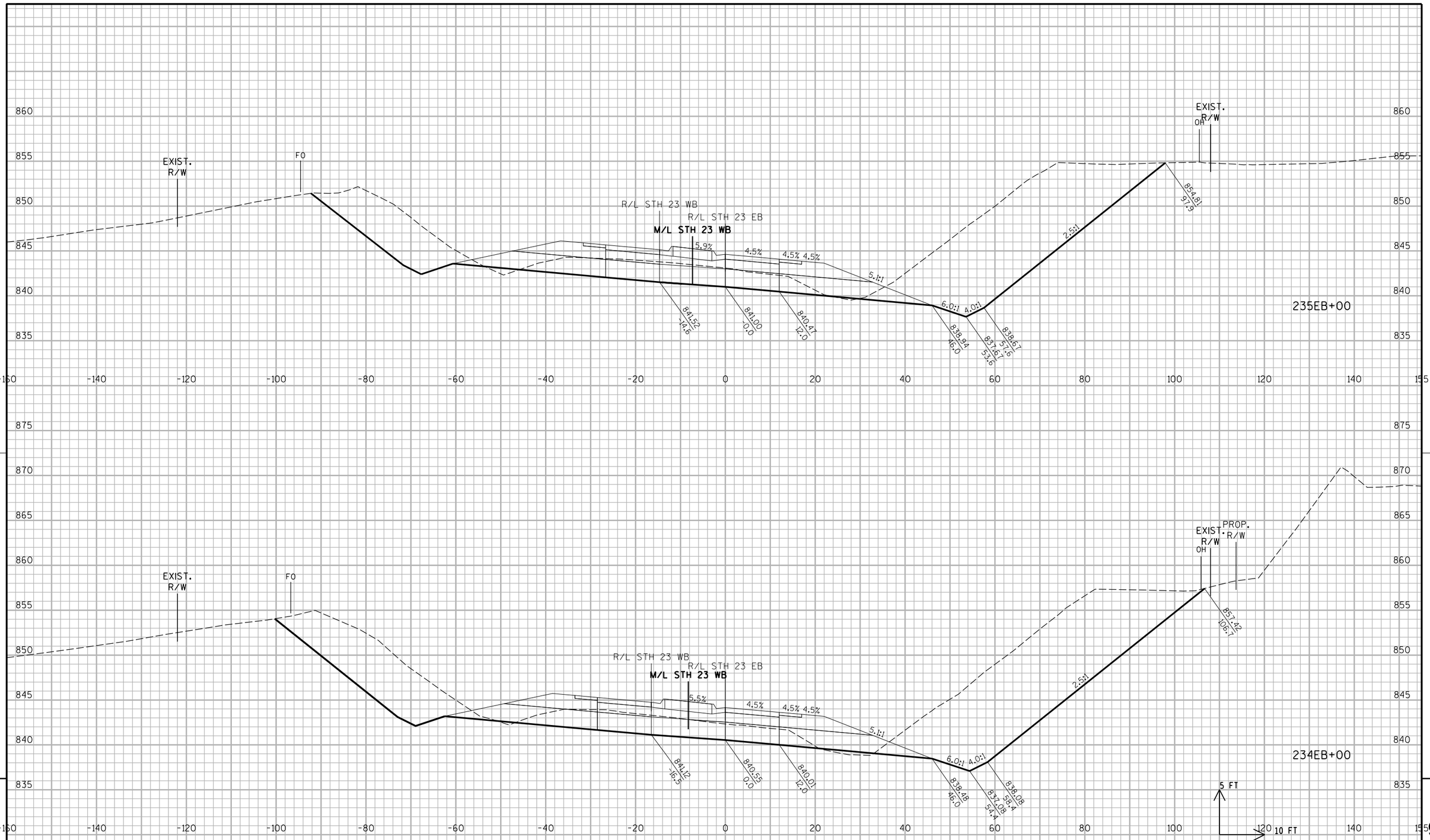


STA 232EB+00 TO 233EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 582	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

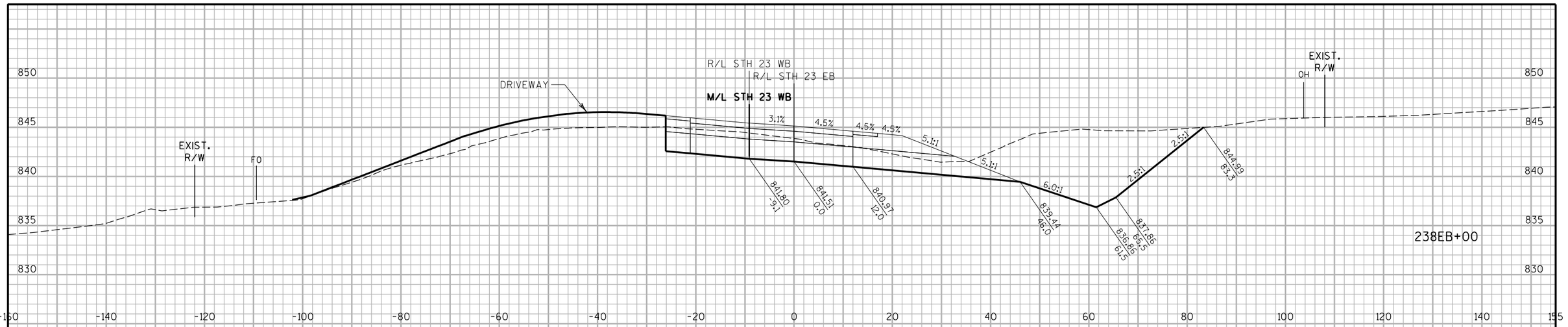


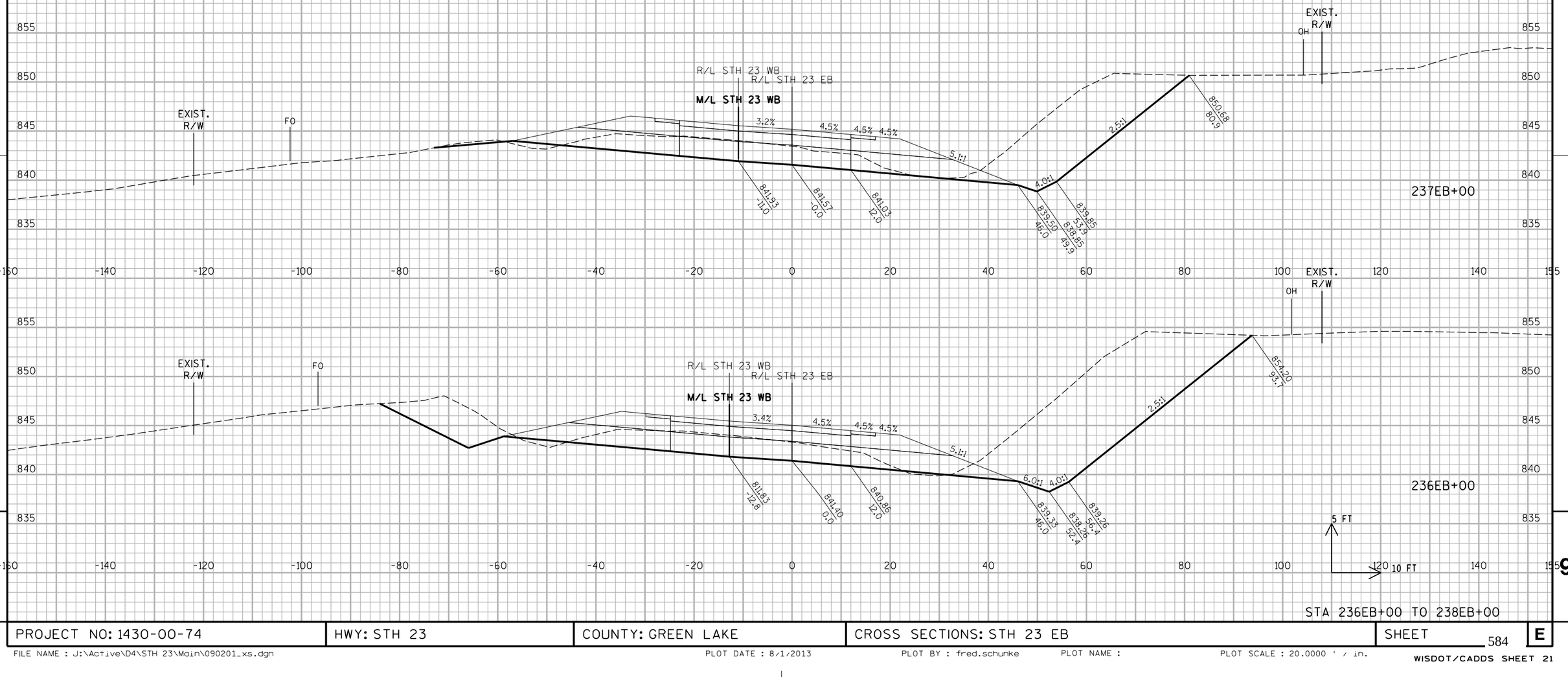
STA 234EB+00 TO 235EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 583	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

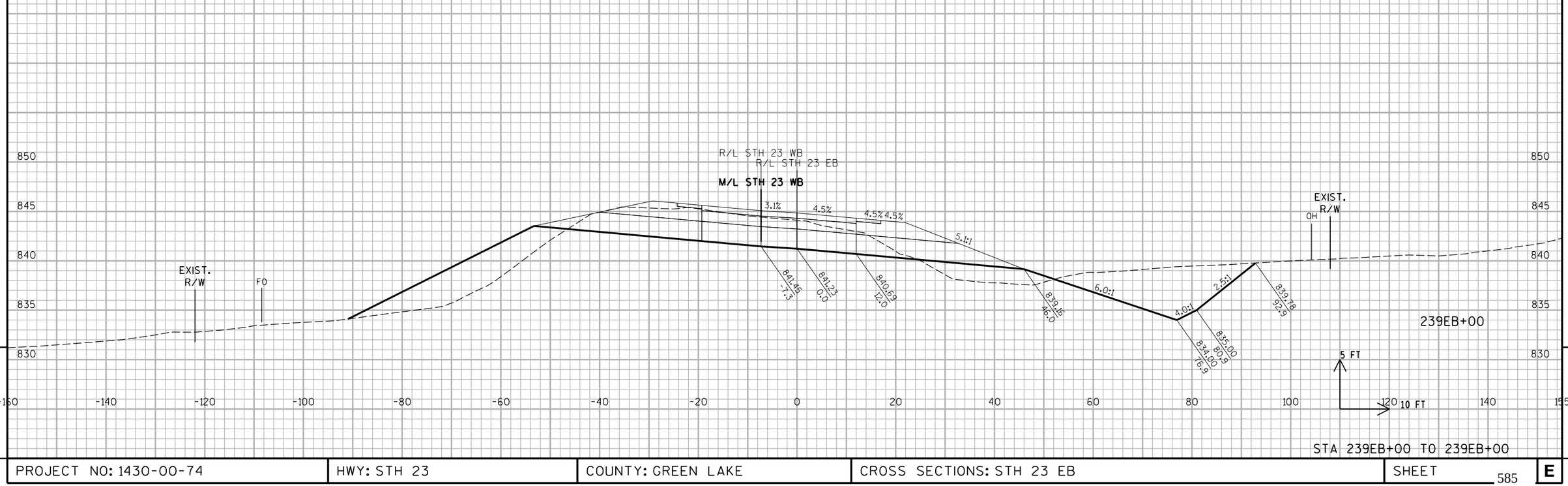




PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 584	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



9 9

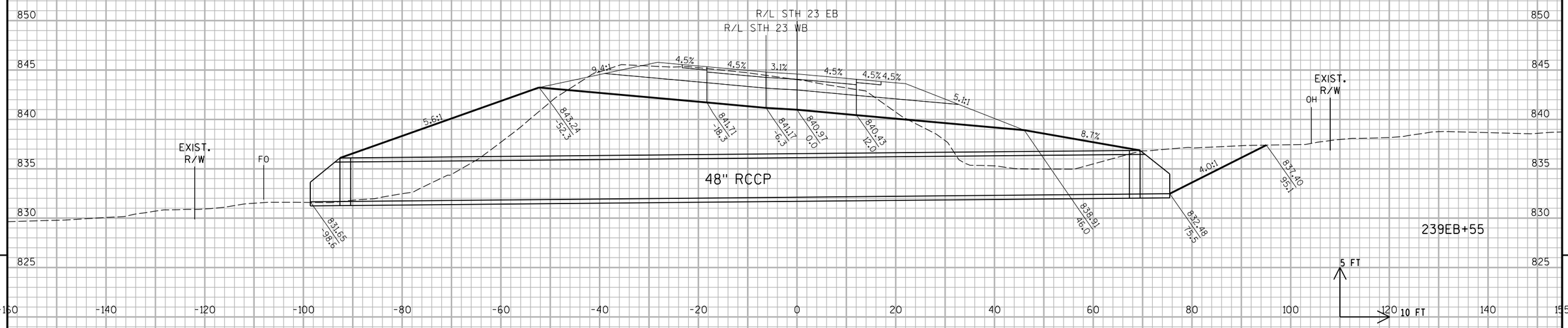
STA 239EB+00 TO 239EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 585	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

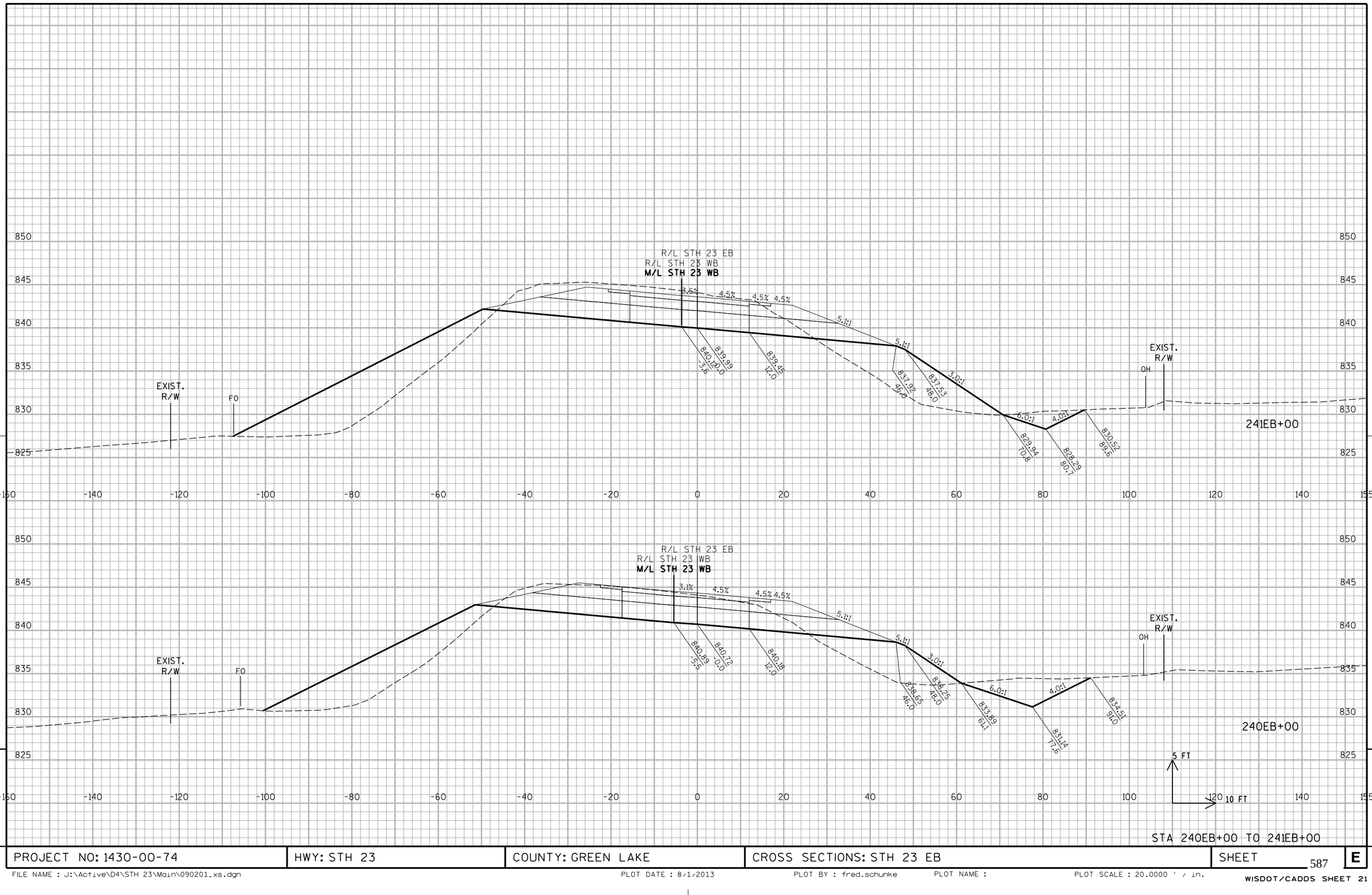
WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 01°20'06" LHF
FOR INFORMATION PURPOSES ONLY



STA 239EB+55 TO 239EB+55

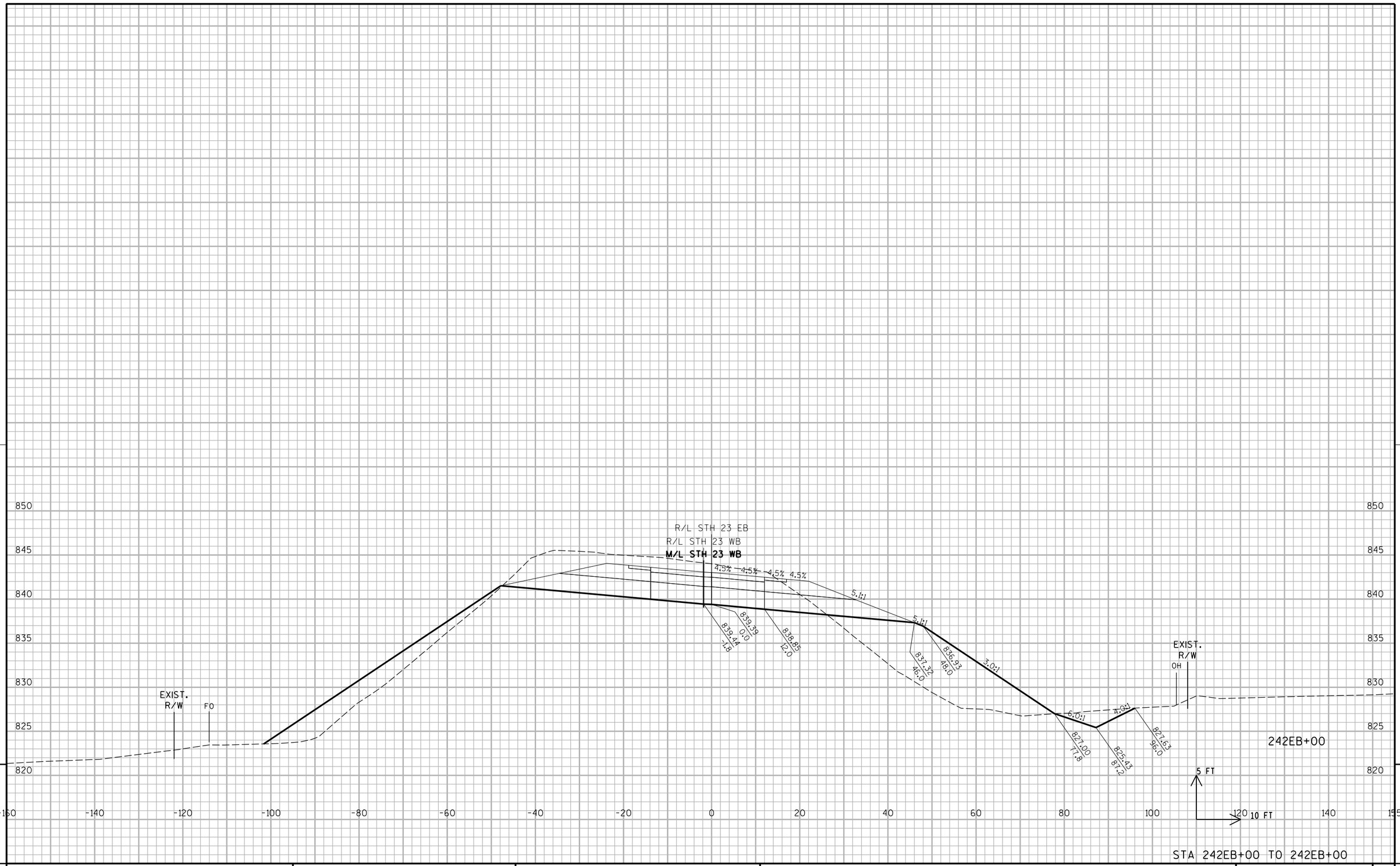
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 586	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 587	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



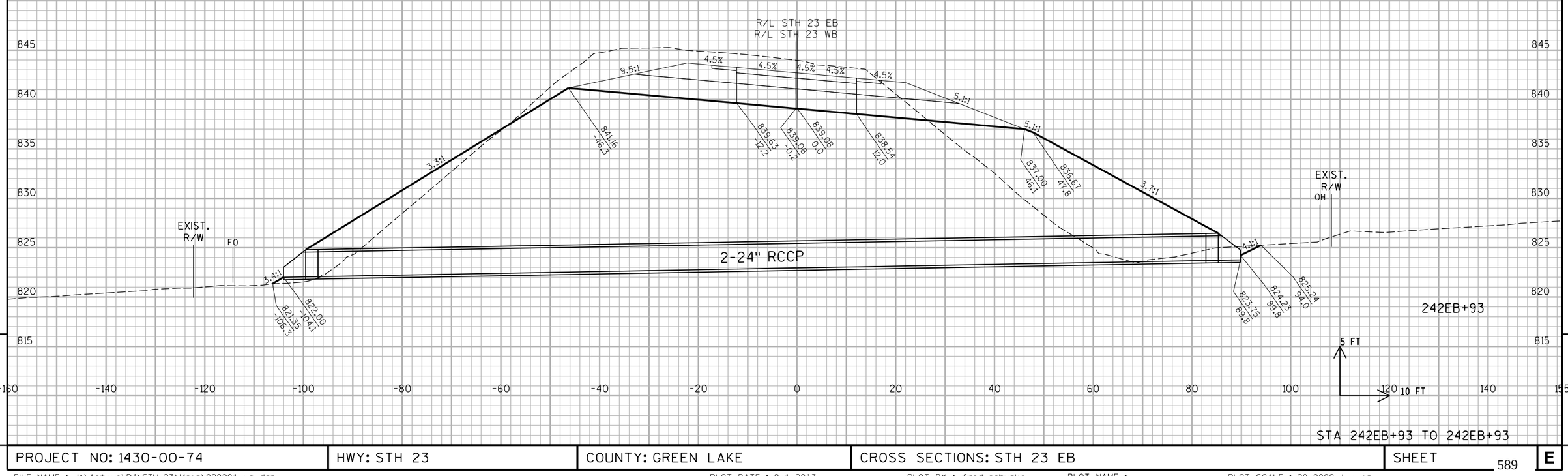
STA 242EB+00 TO 242EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 588	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

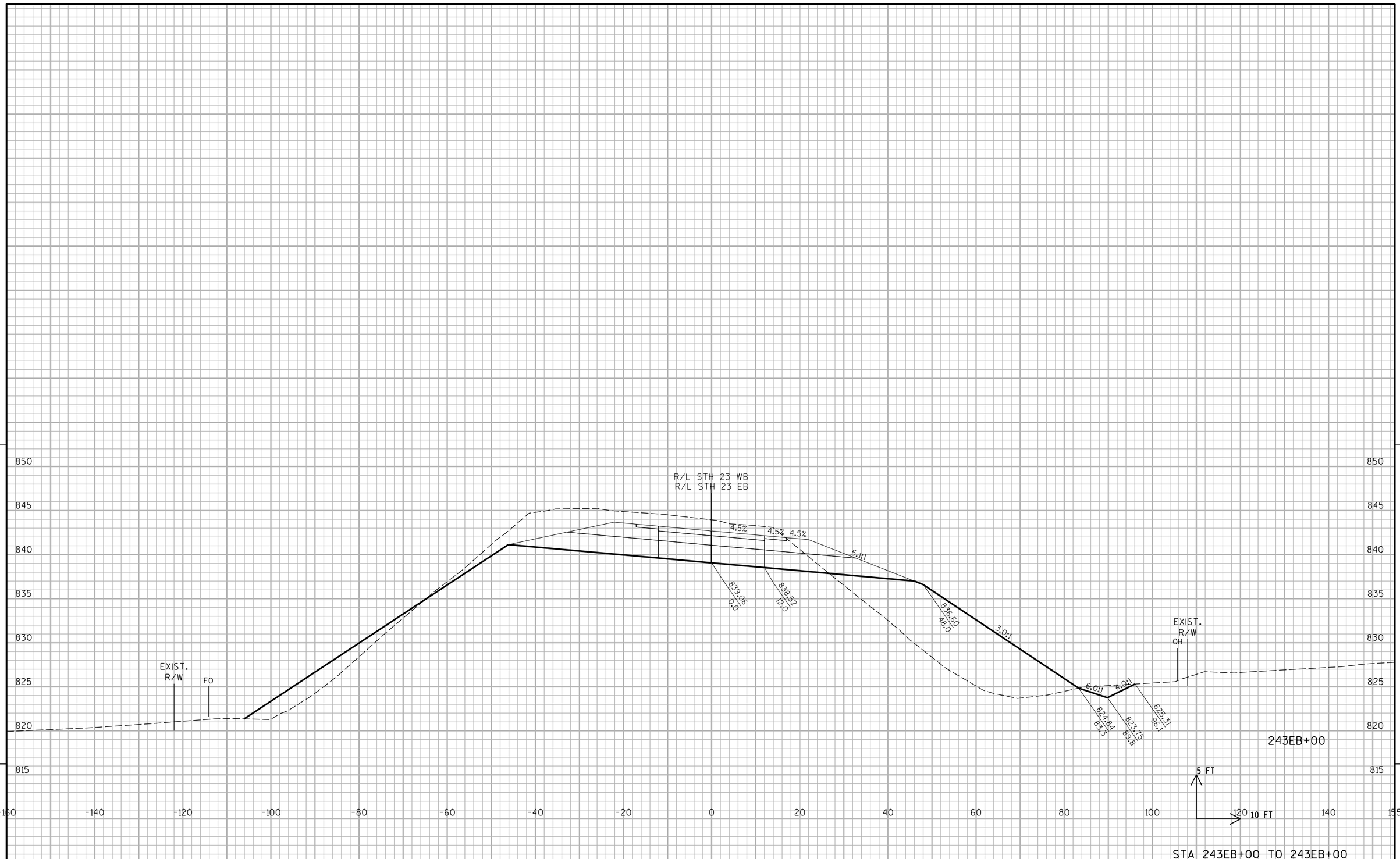
WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 03°47'02" LHF
FOR INFORMATION PURPOSES ONLY



STA 242EB+93 TO 242EB+93

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 589	E

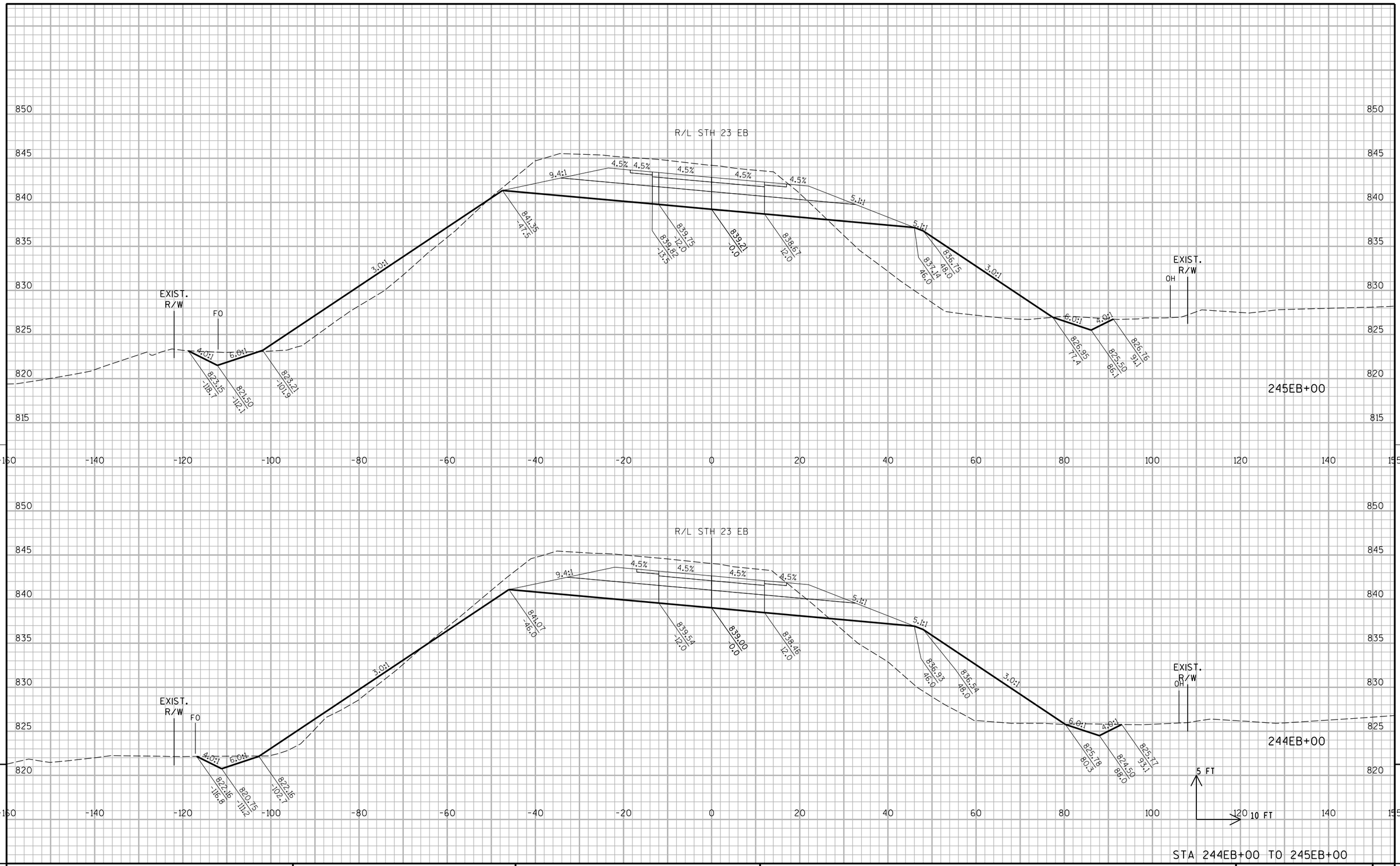


STA 243EB+00 TO 243EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 590	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

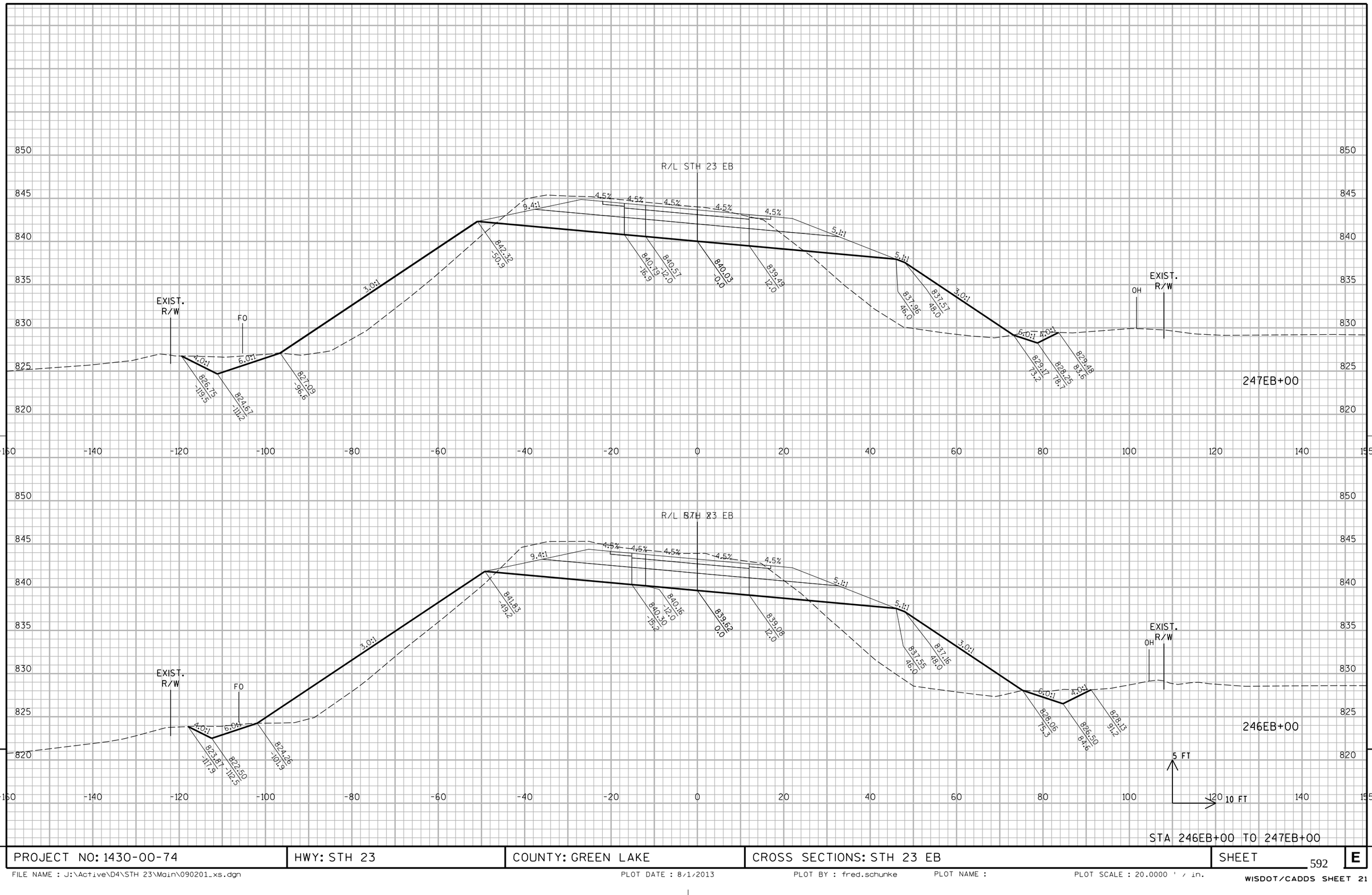
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 591	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

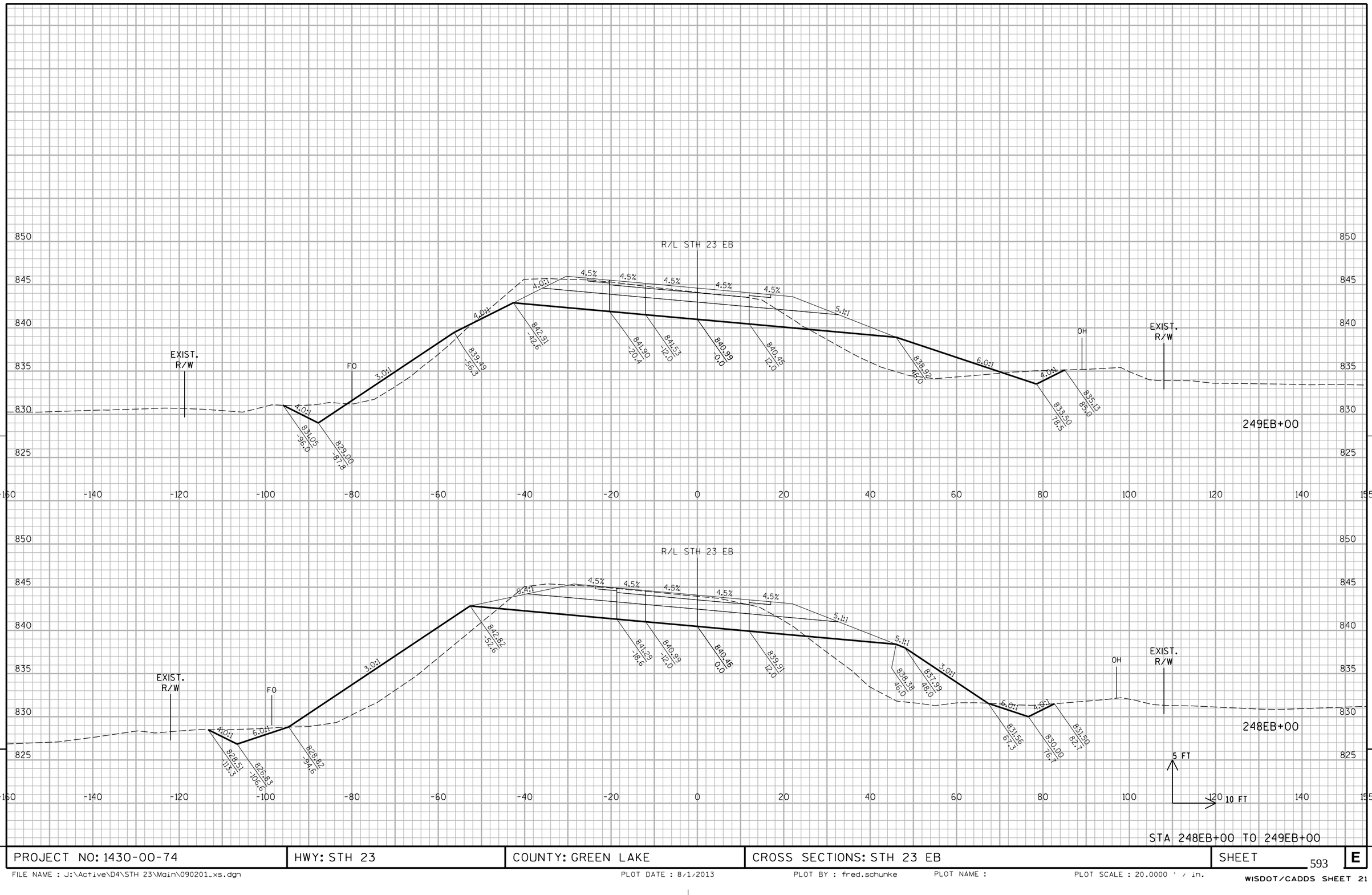
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 592	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

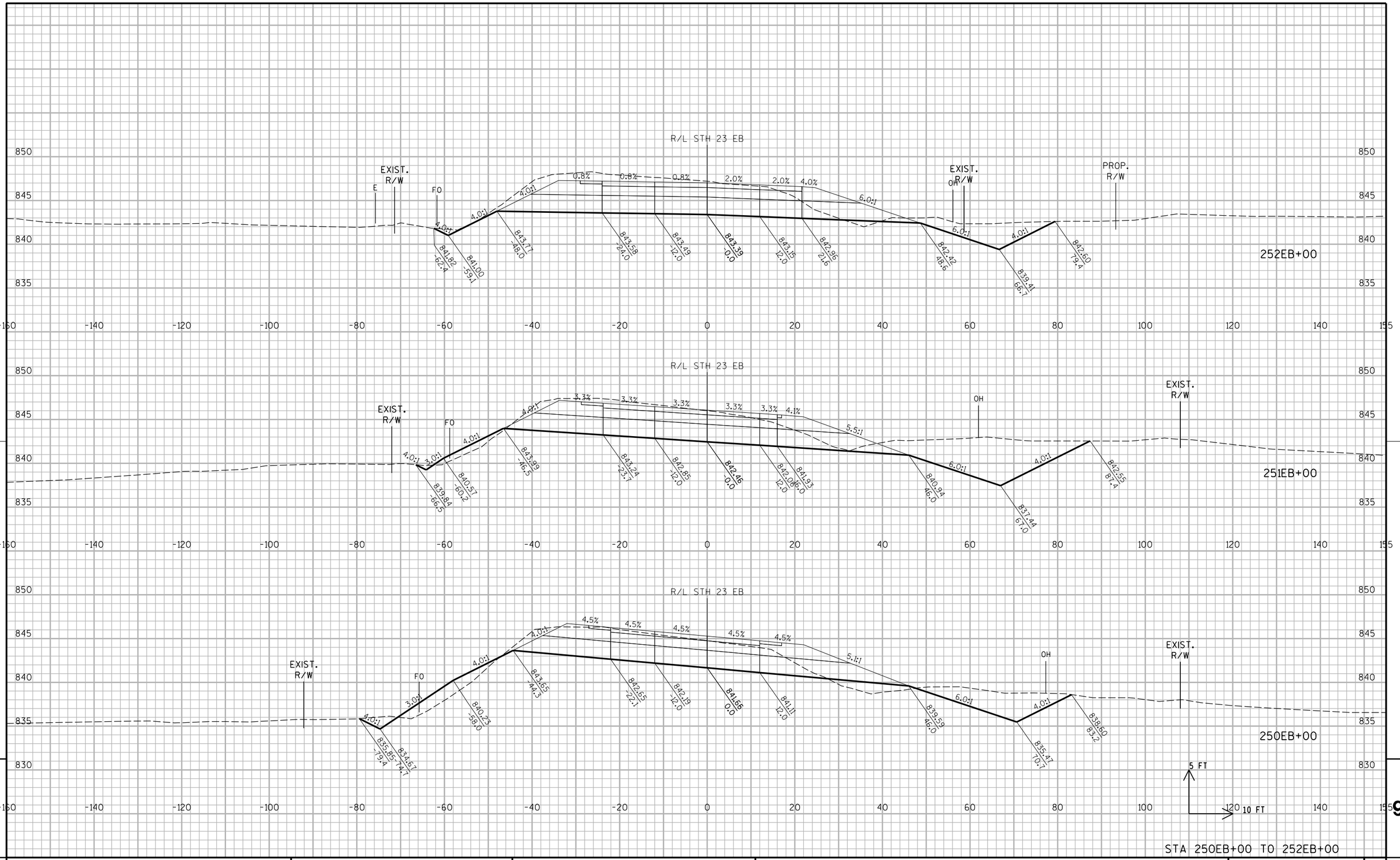
WISDOT/CADDS SHEET 21



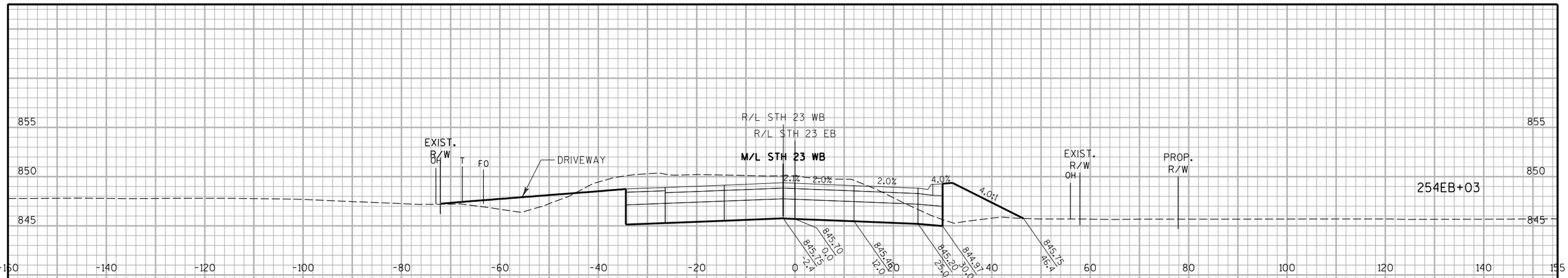
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 593	E

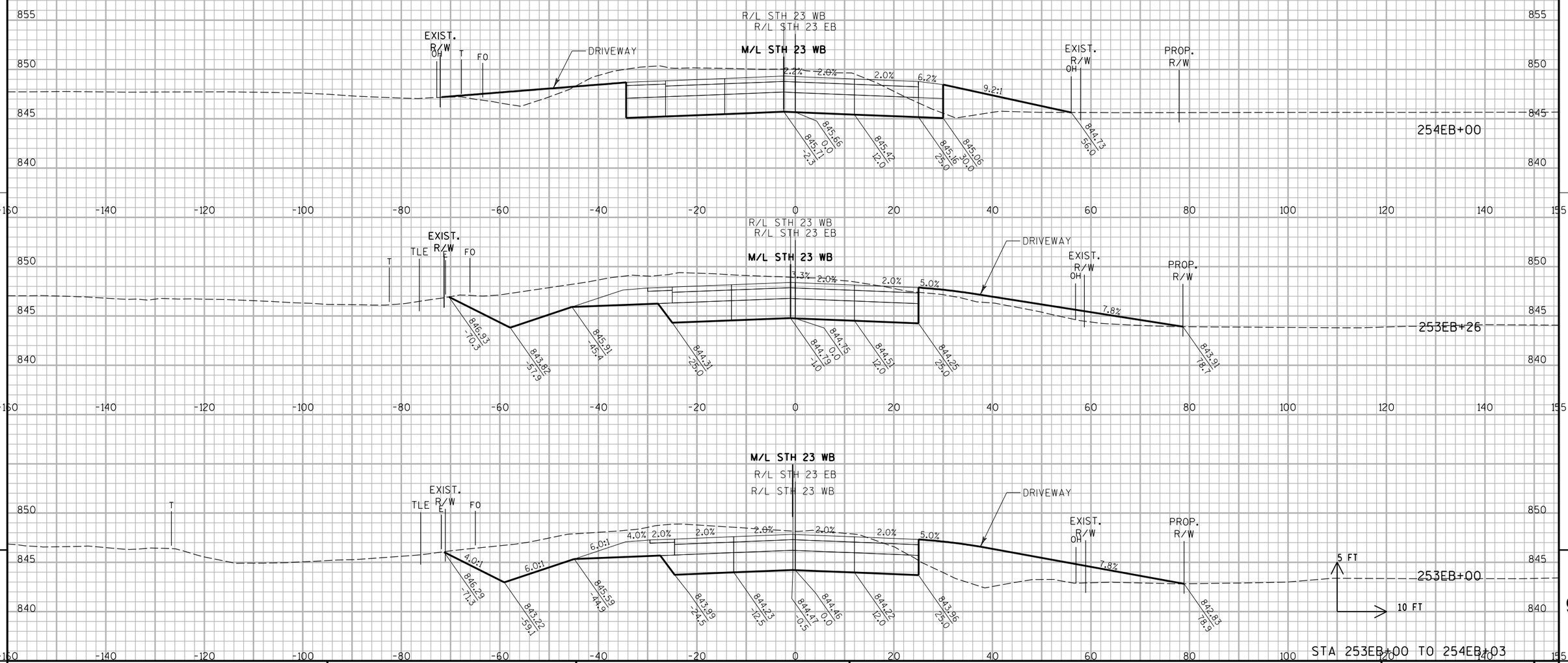
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



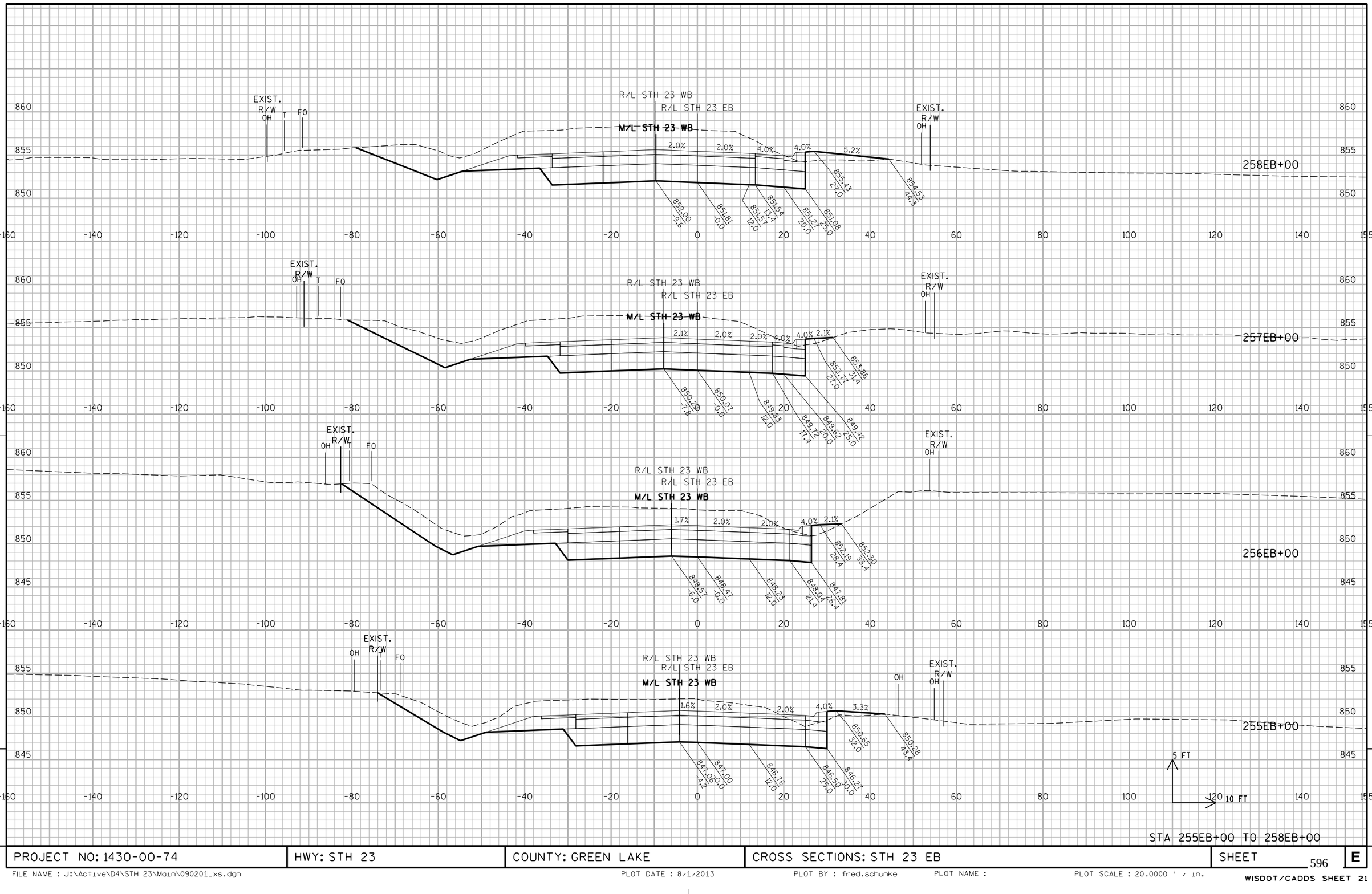
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 594	E





STA 253EB+00 TO 254EB+03

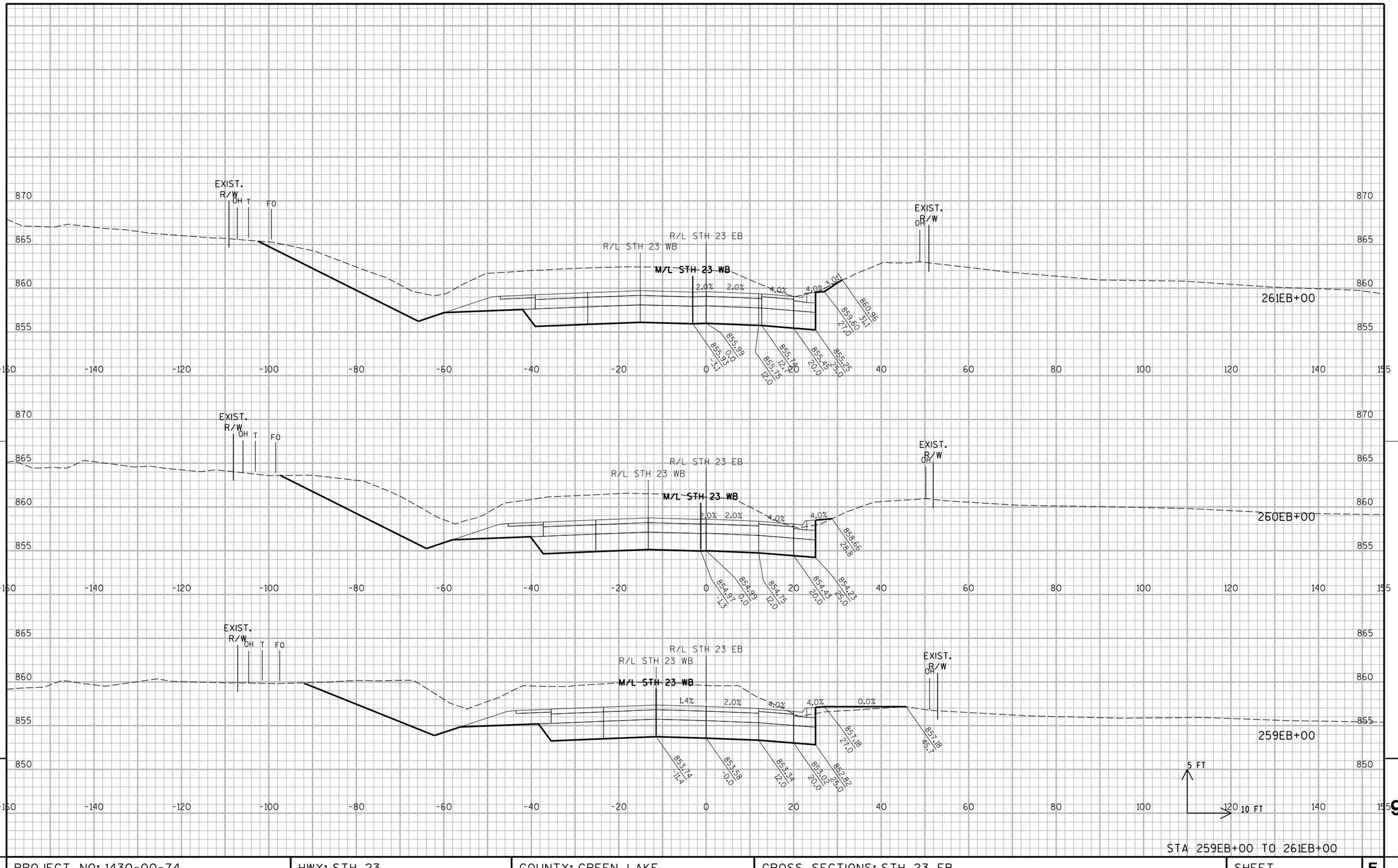
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 595 E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 596	E

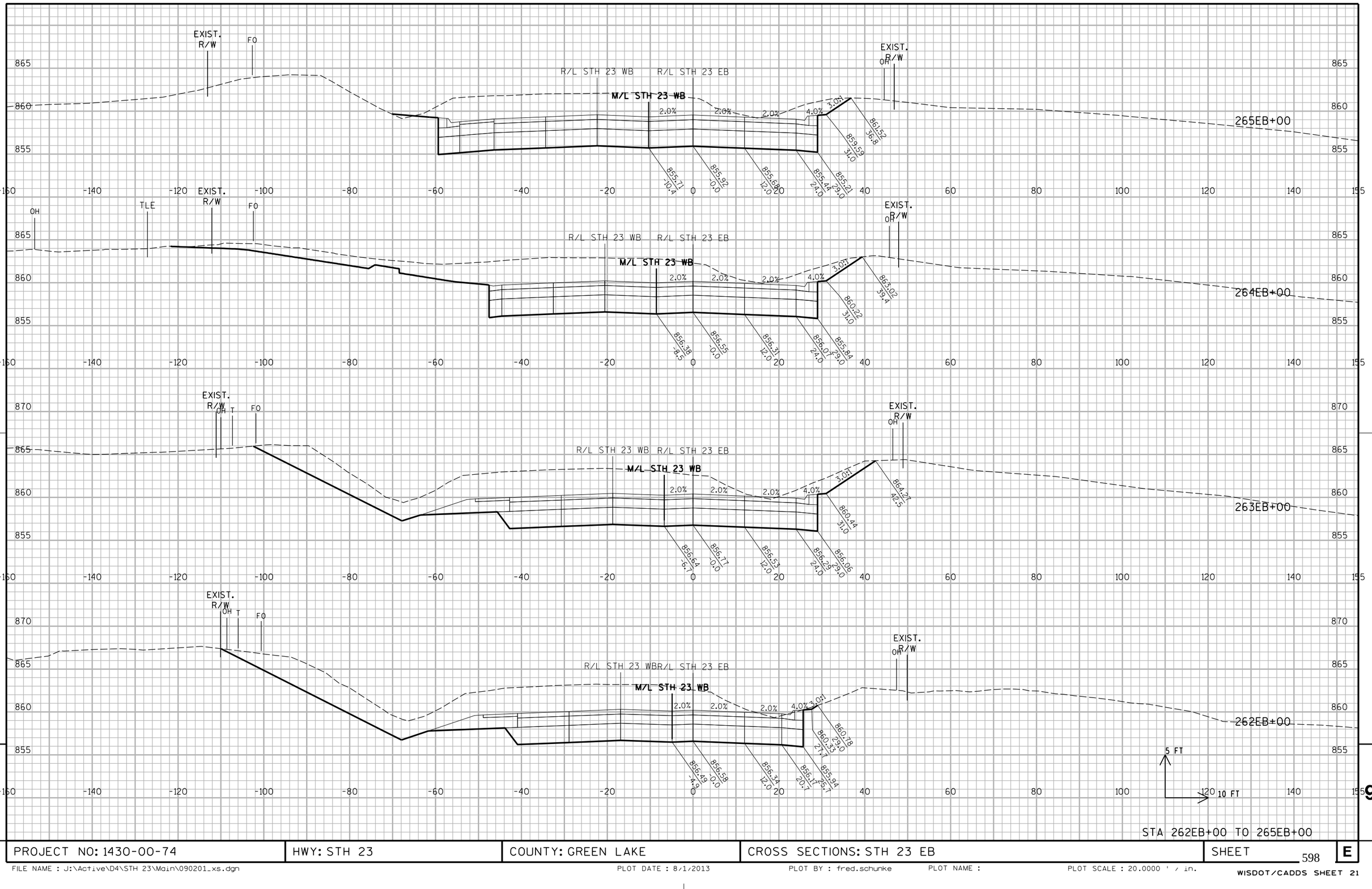
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 259EB+00 TO 261EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 597	E



STA 262EB+00 TO 265EB+00

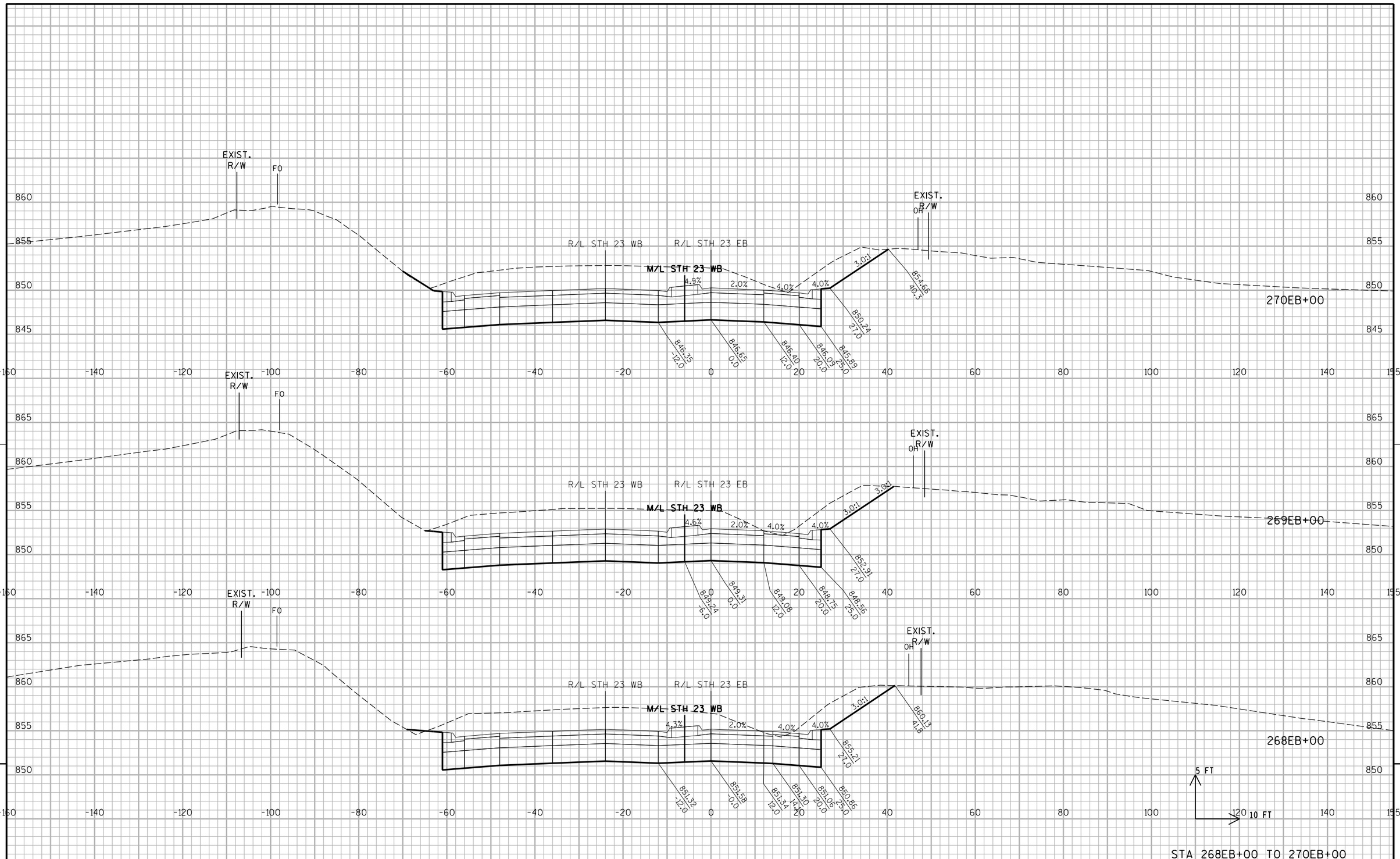
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 598	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 266EB+00 TO 267EB+00

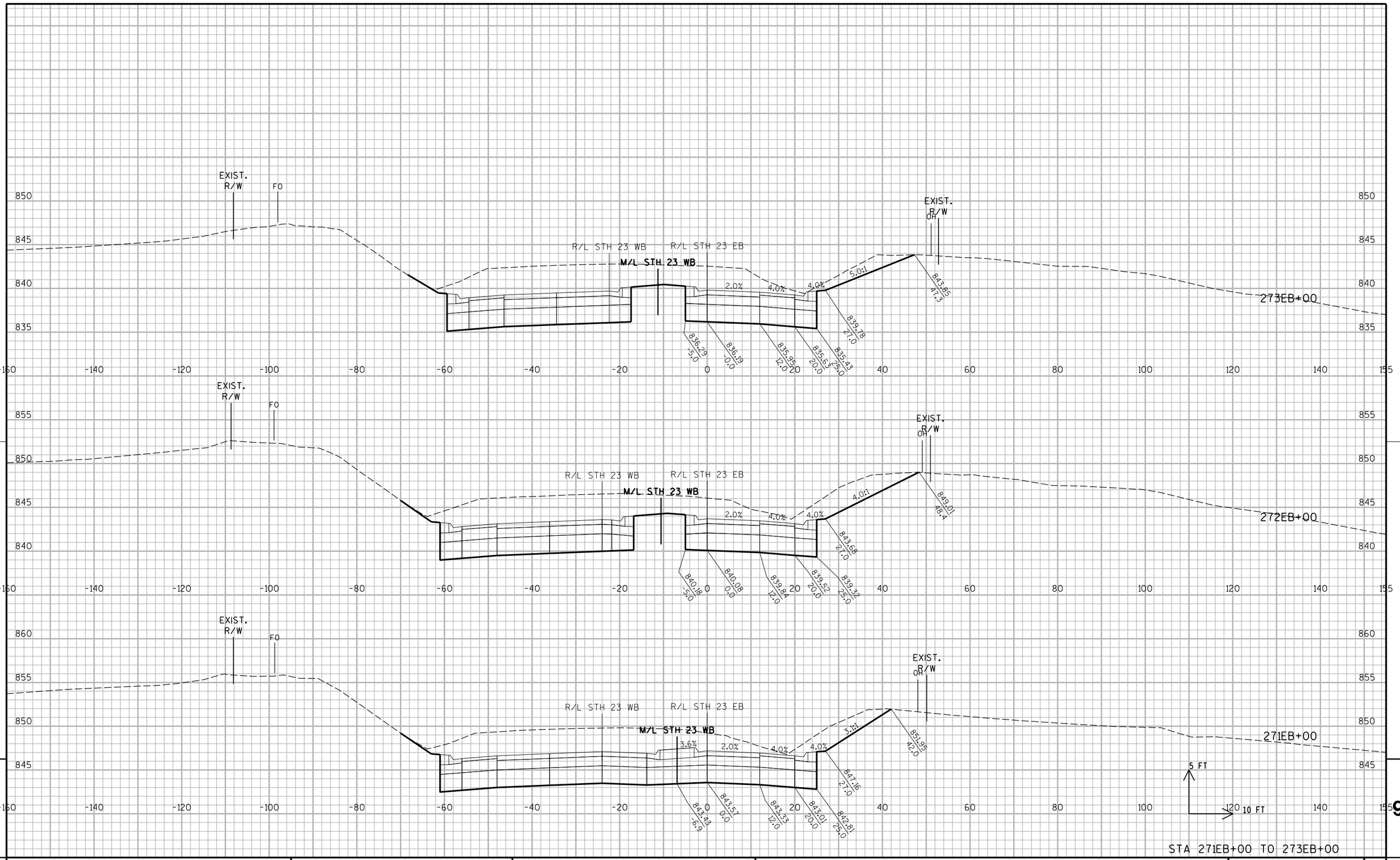
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 599	E



STA 268EB+00 TO 270EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 600	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.
WISDOT/CADDS SHEET 21

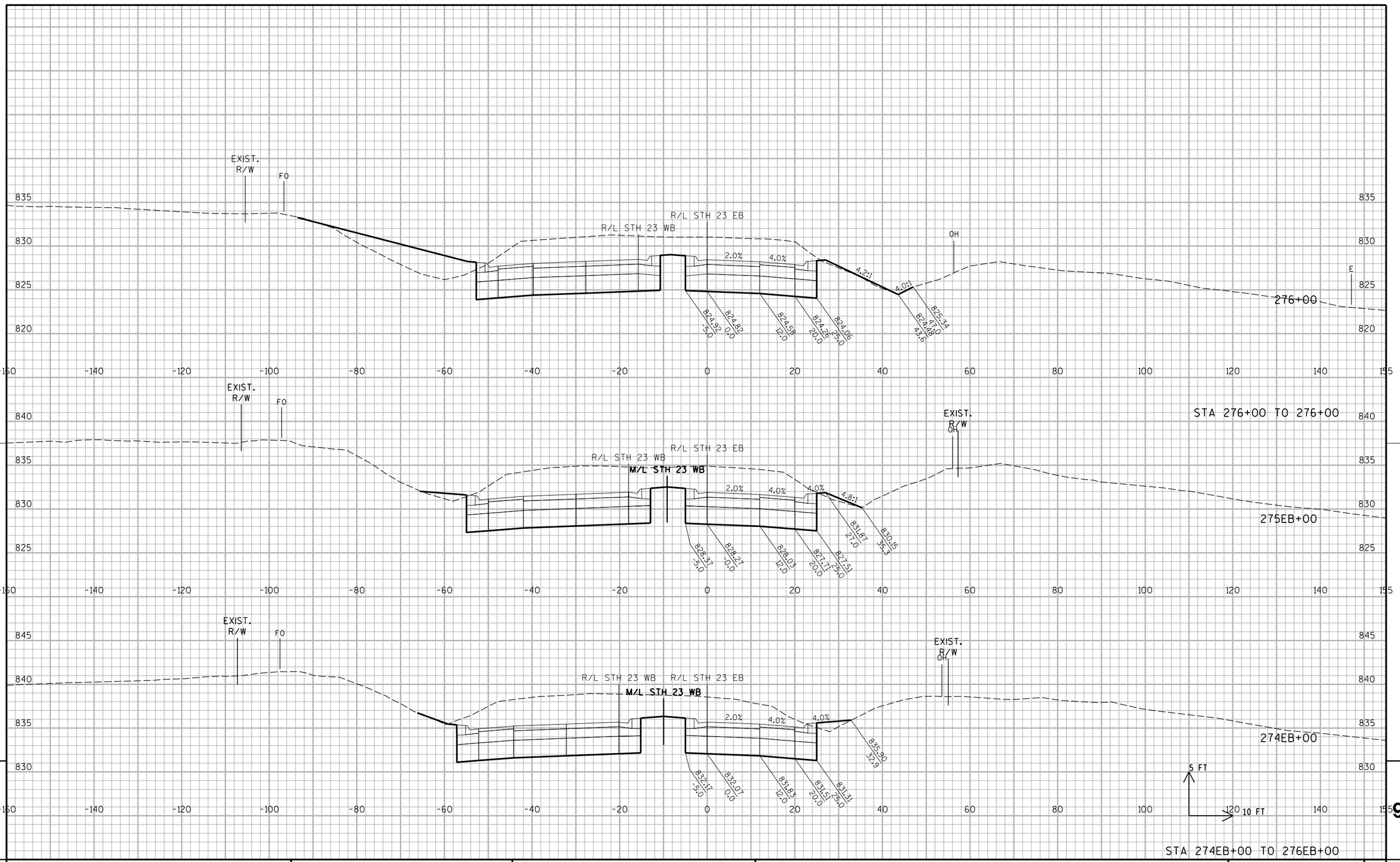


STA 271EB+00 TO 273EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 601	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



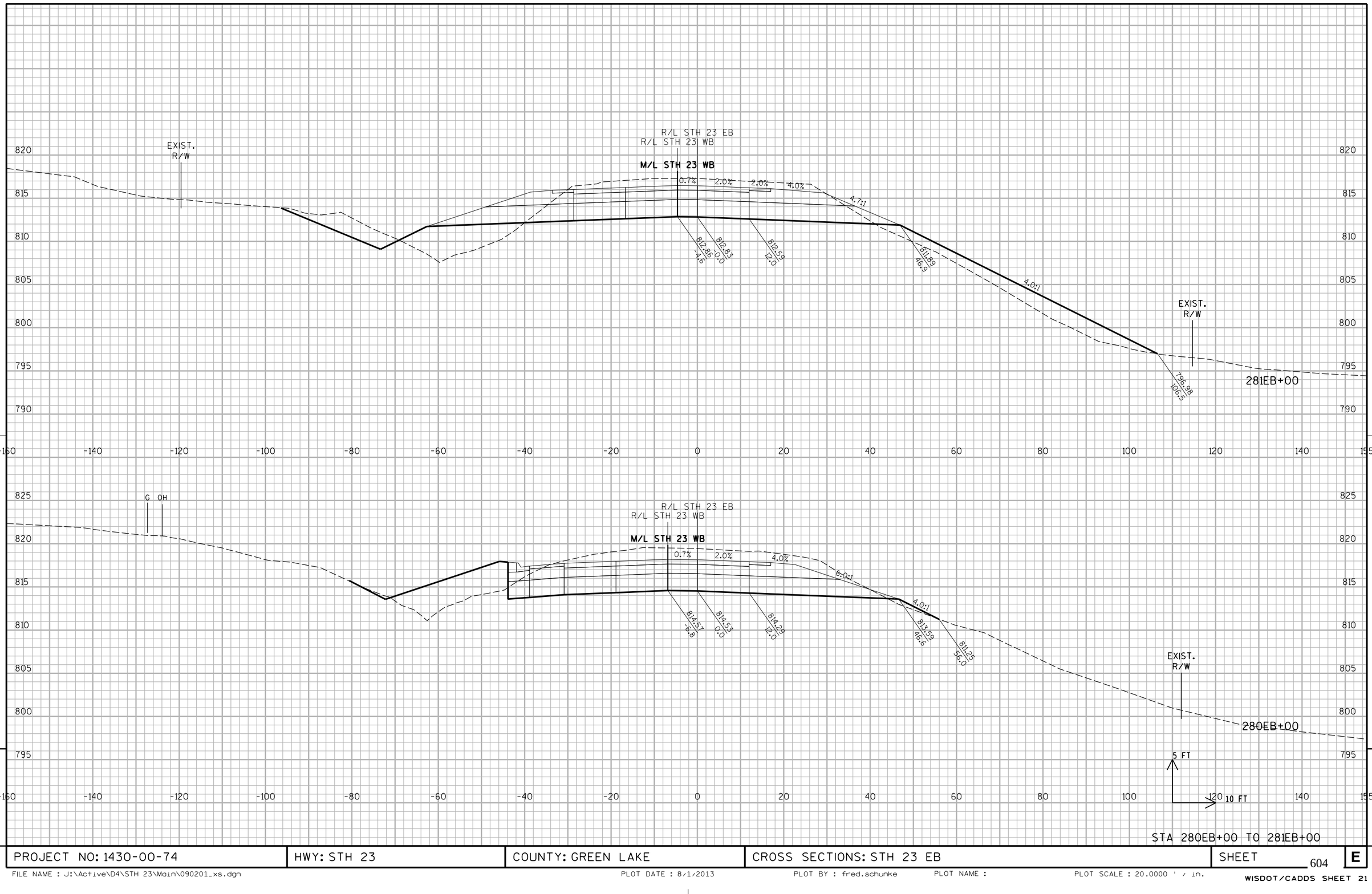
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 602	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 277EB+00 TO 279EB+00

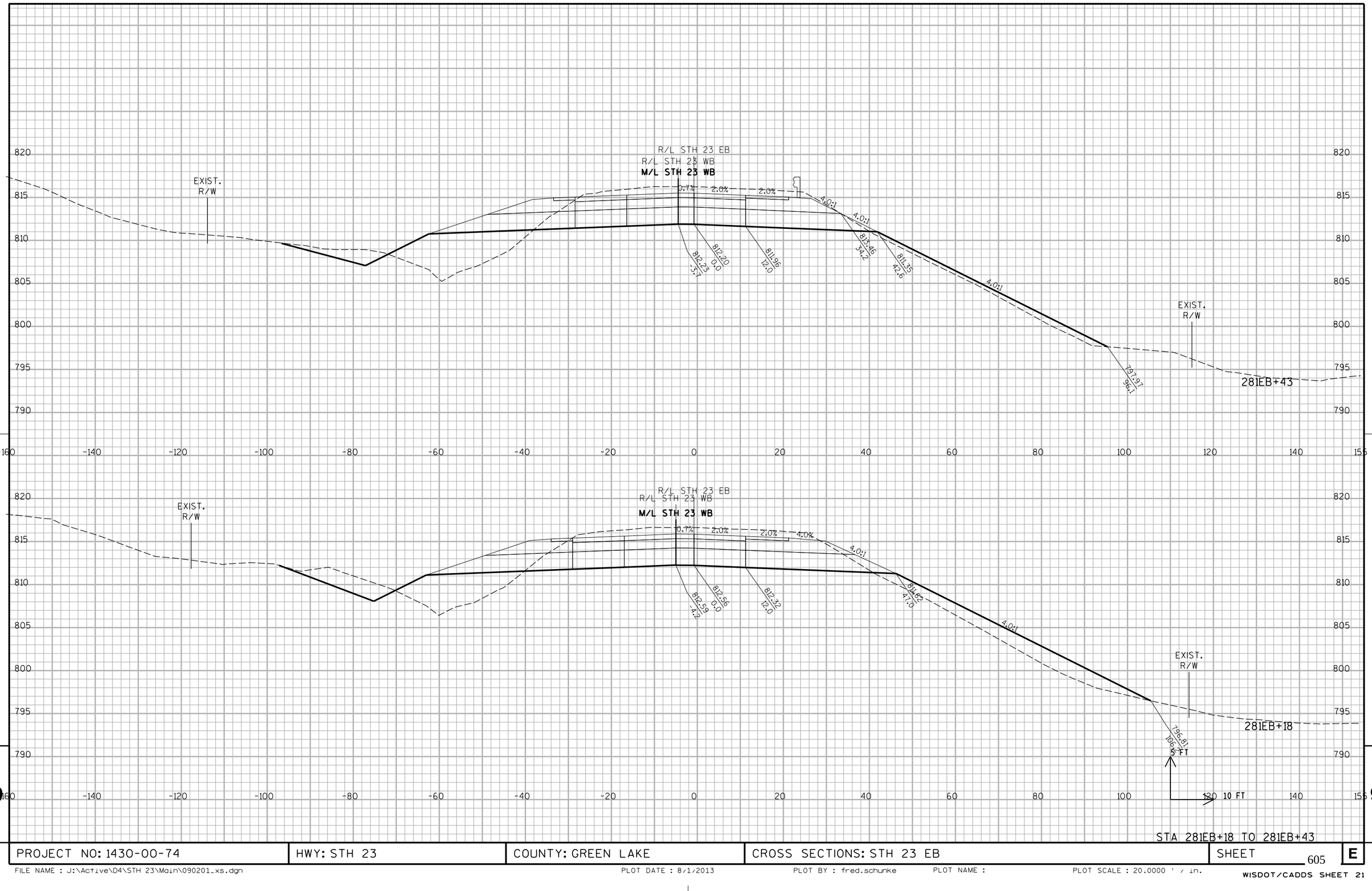
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 603	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 604	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

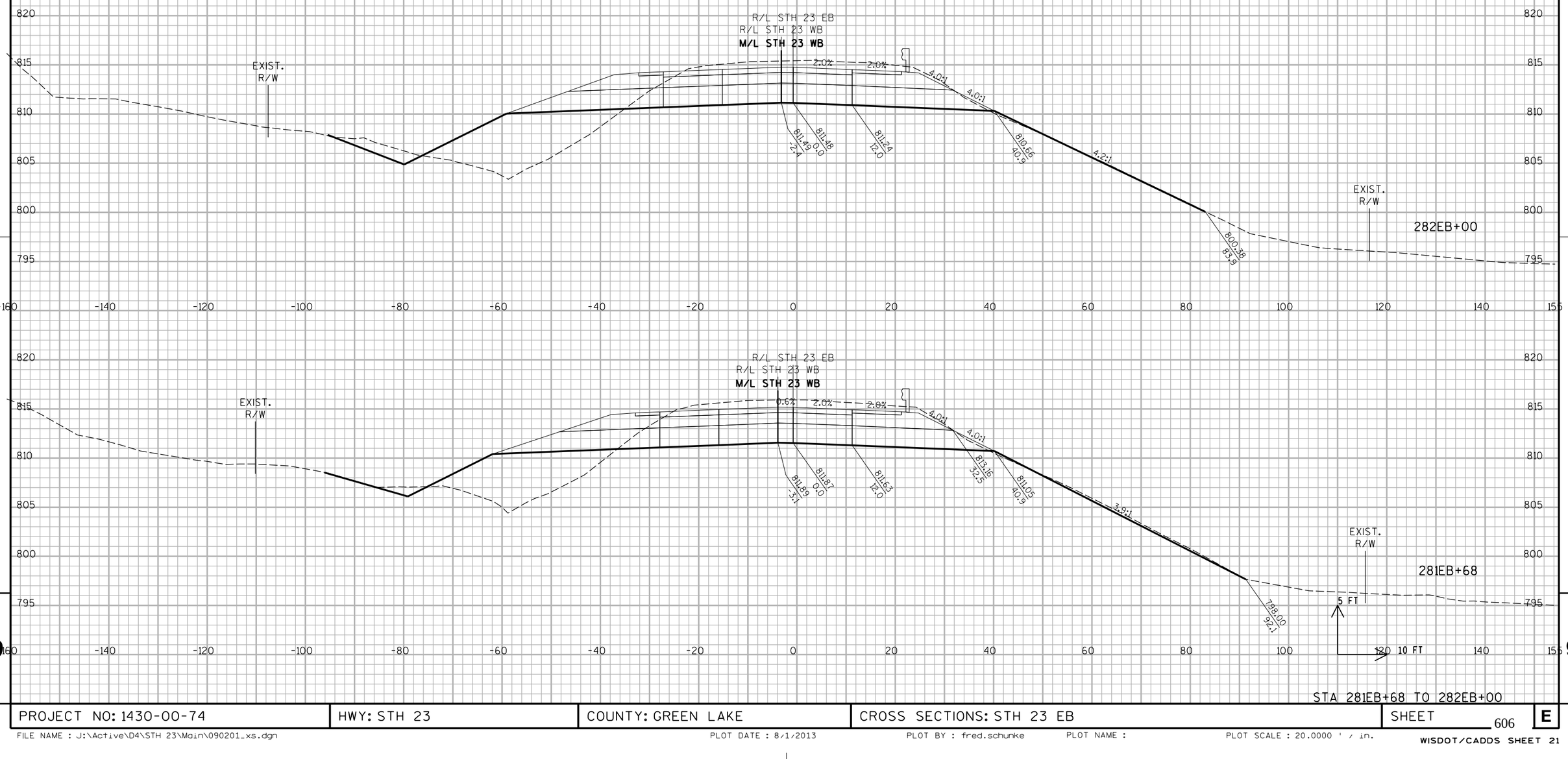
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 605	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

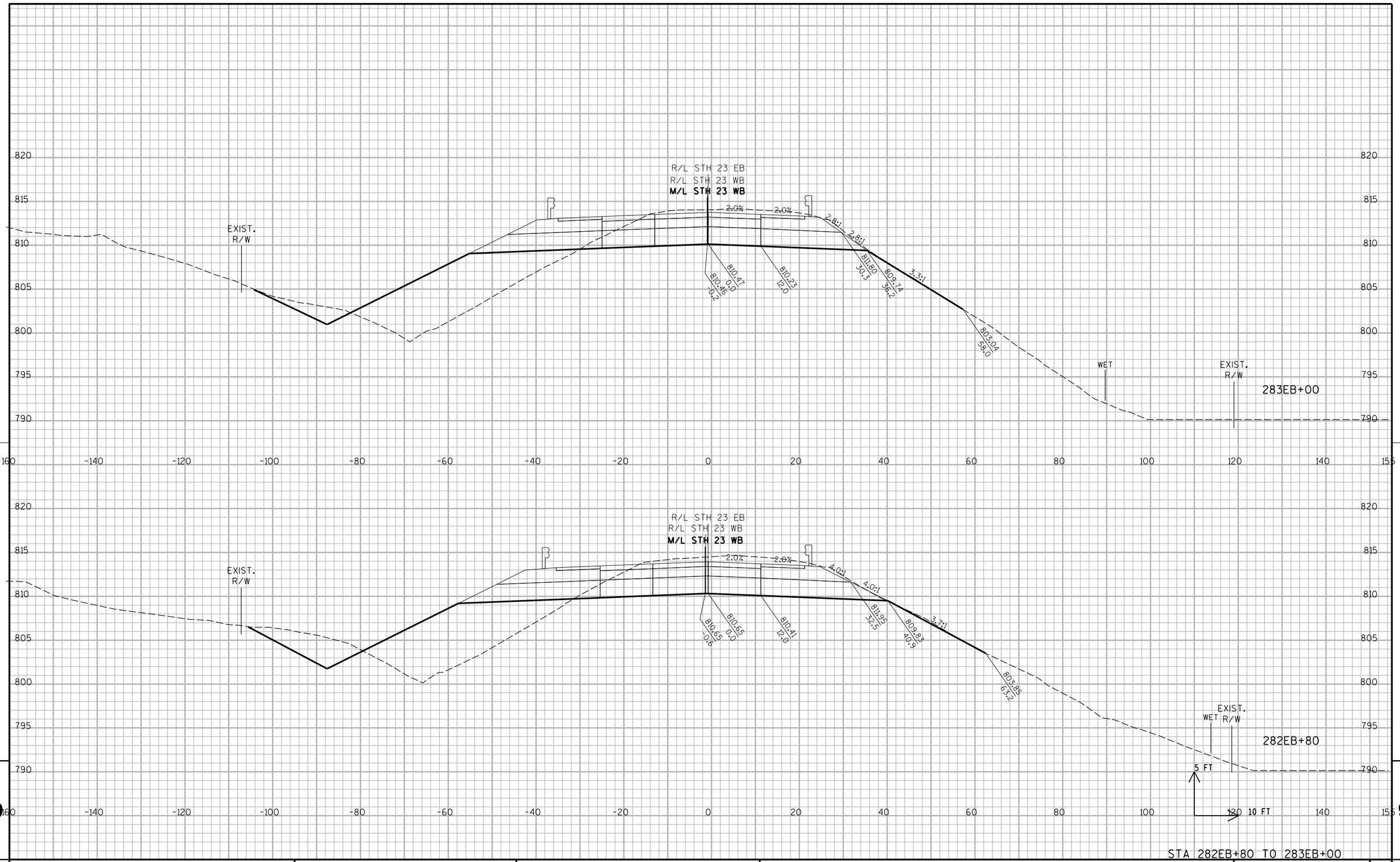


STA 281EB+68 TO 282EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 606	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



9

9

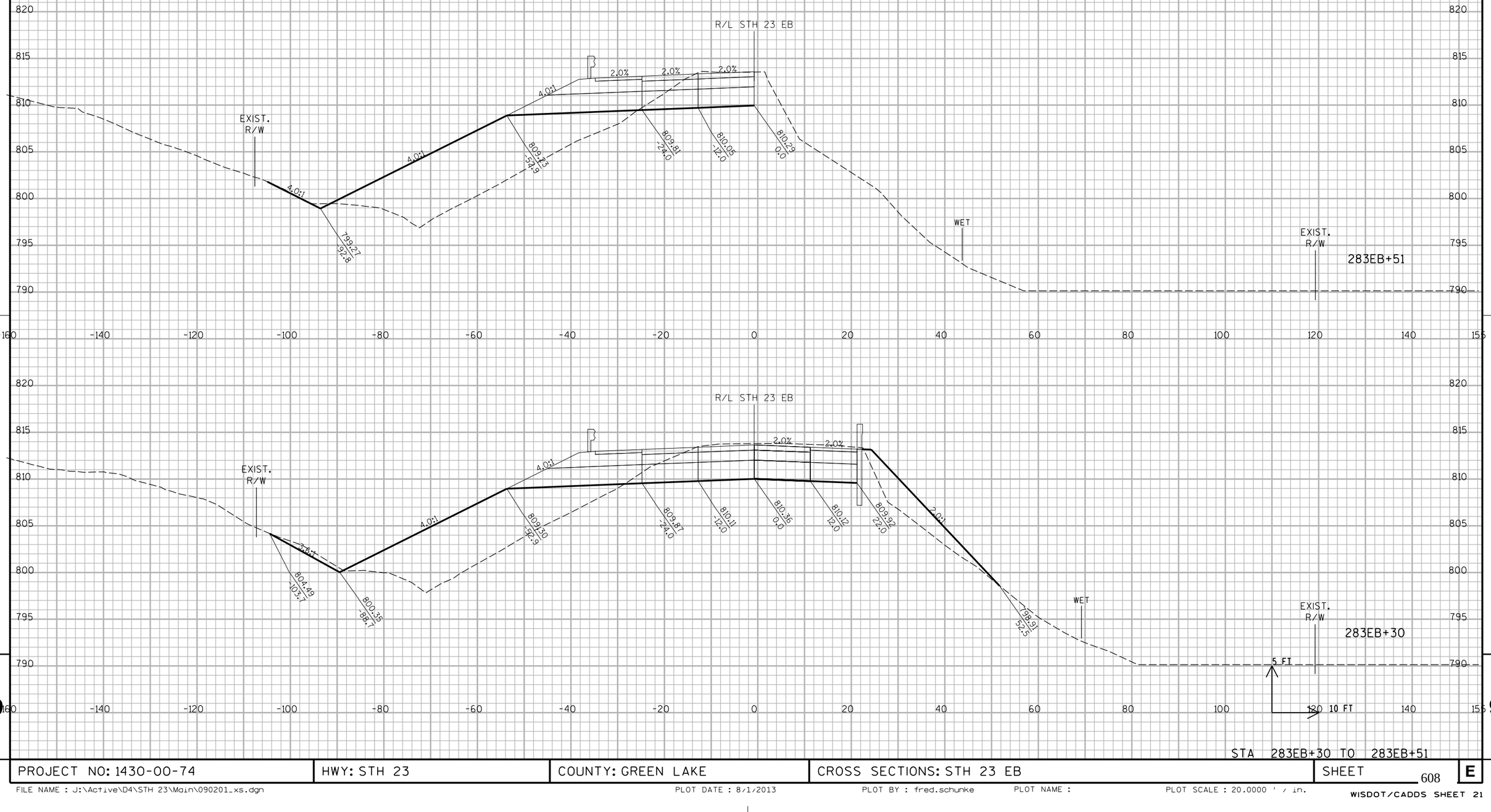
STA 282EB+80 TO 283EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 607	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

FROM STA 283EB+29 - 286EB+86
SEE STRUCTURE B-24-09
PROJECT 1430-00-76

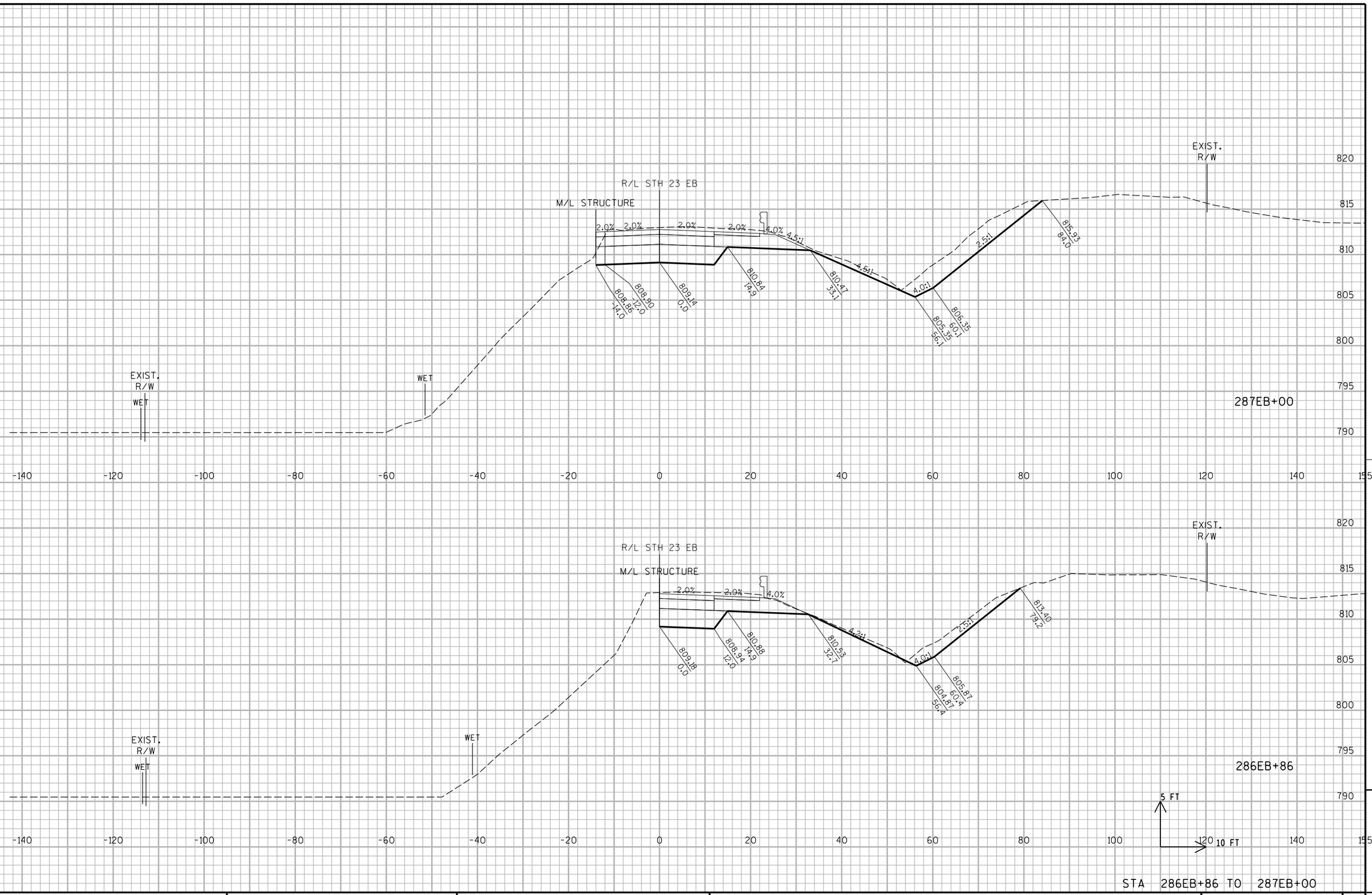


STA 283EB+30 TO 283EB+51

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 608	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

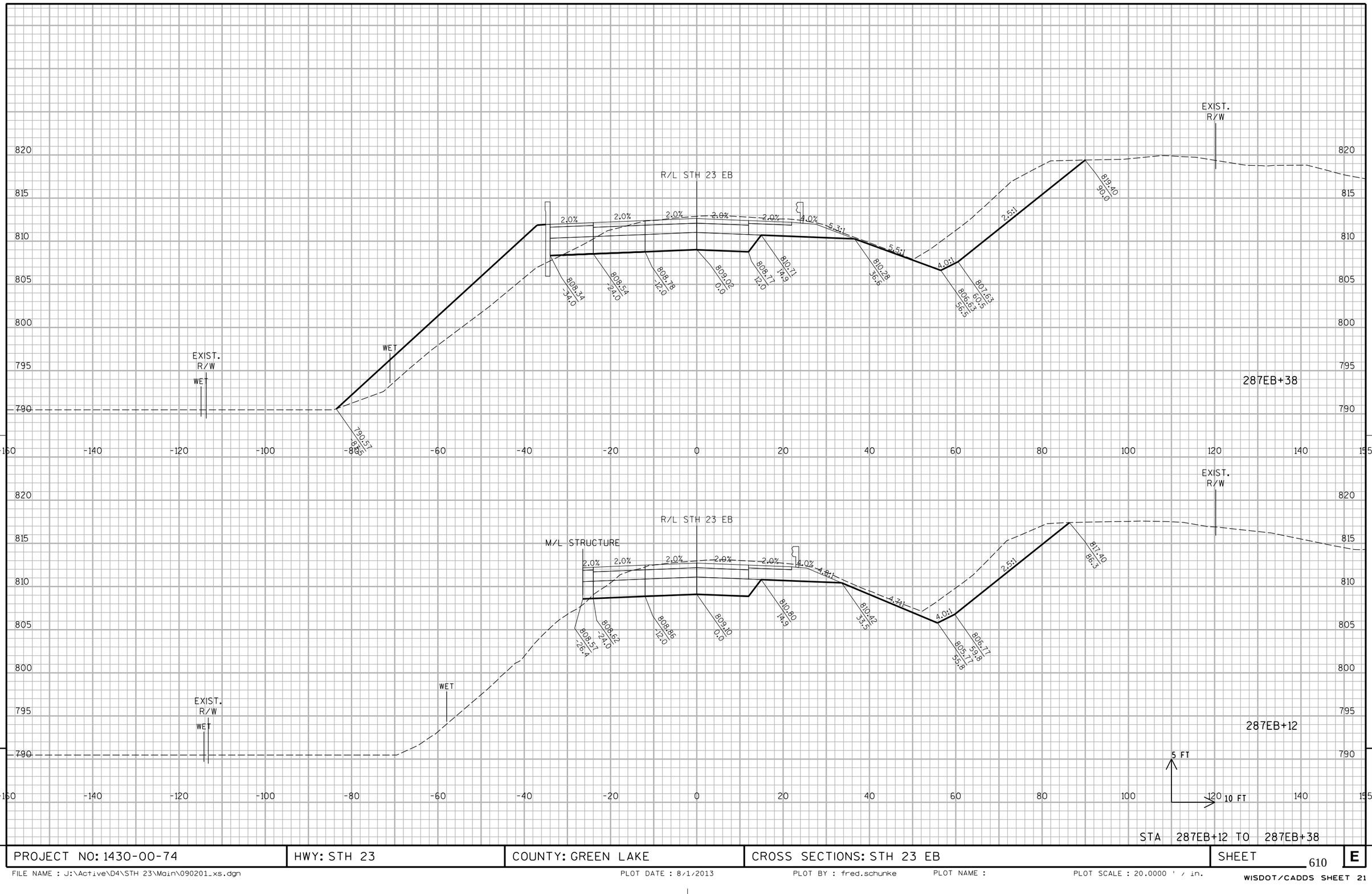
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 609	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

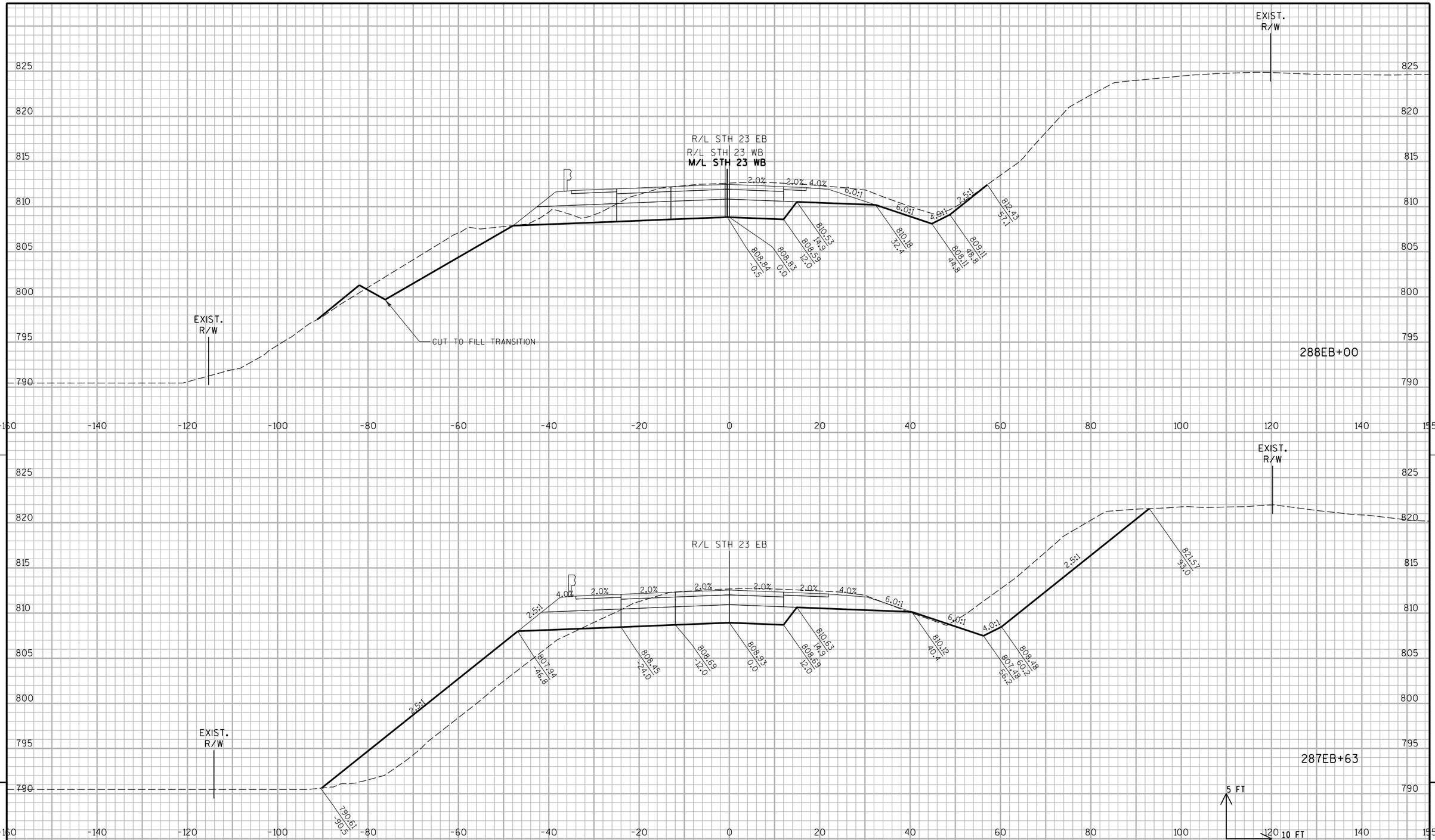
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 610	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

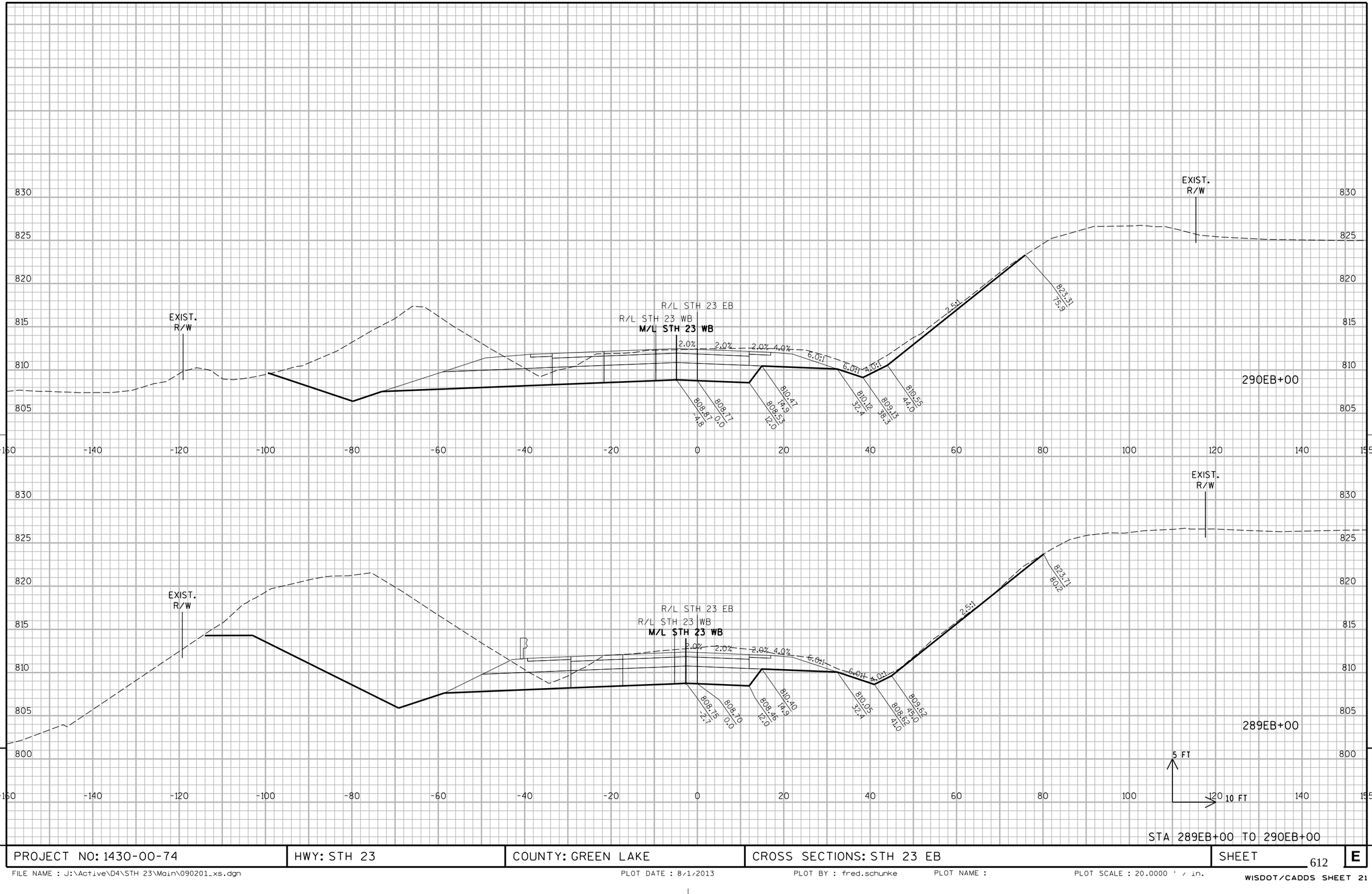
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 611	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

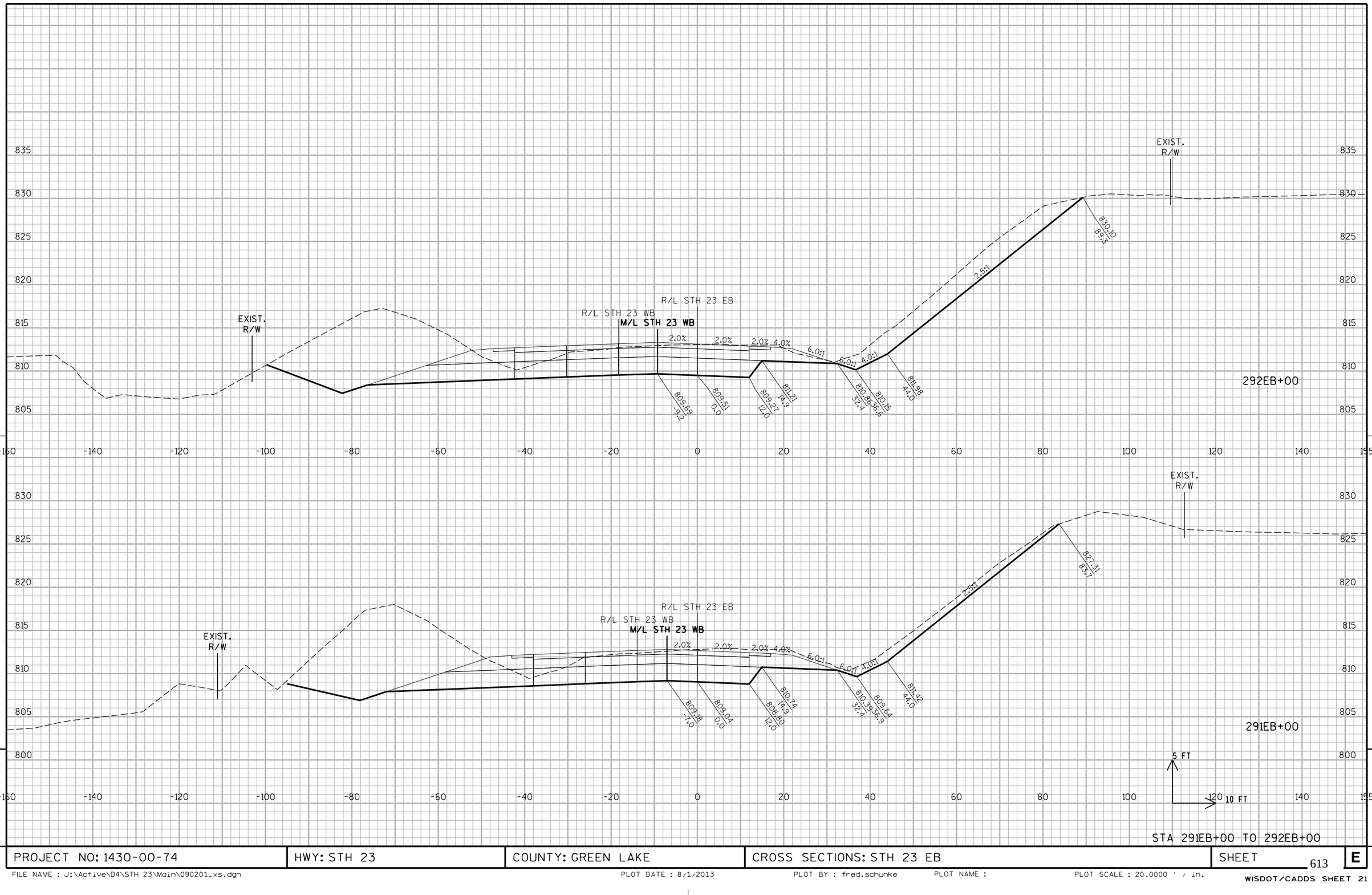
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 612	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

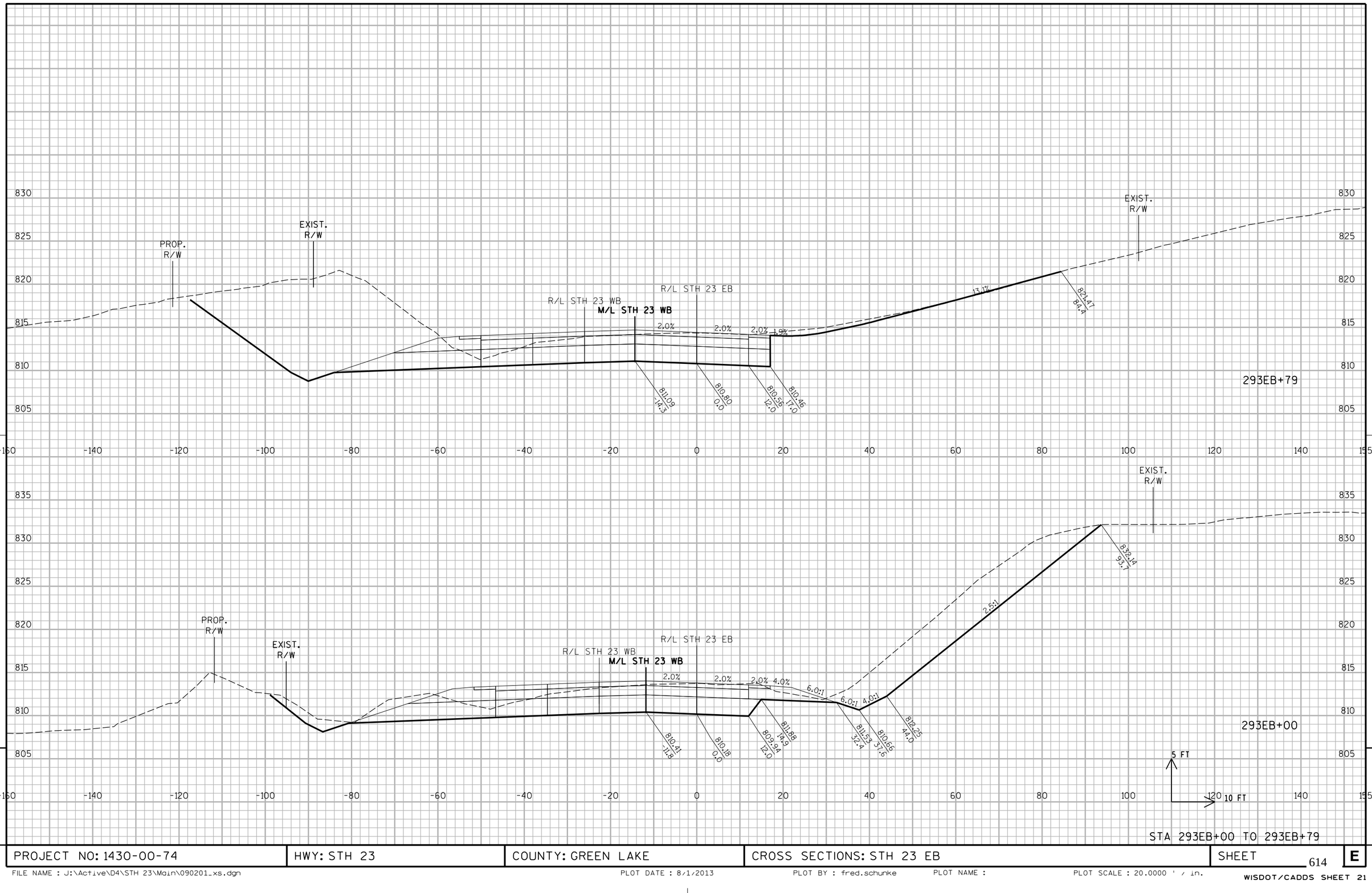


STA 291EB+00 TO 292EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 613	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

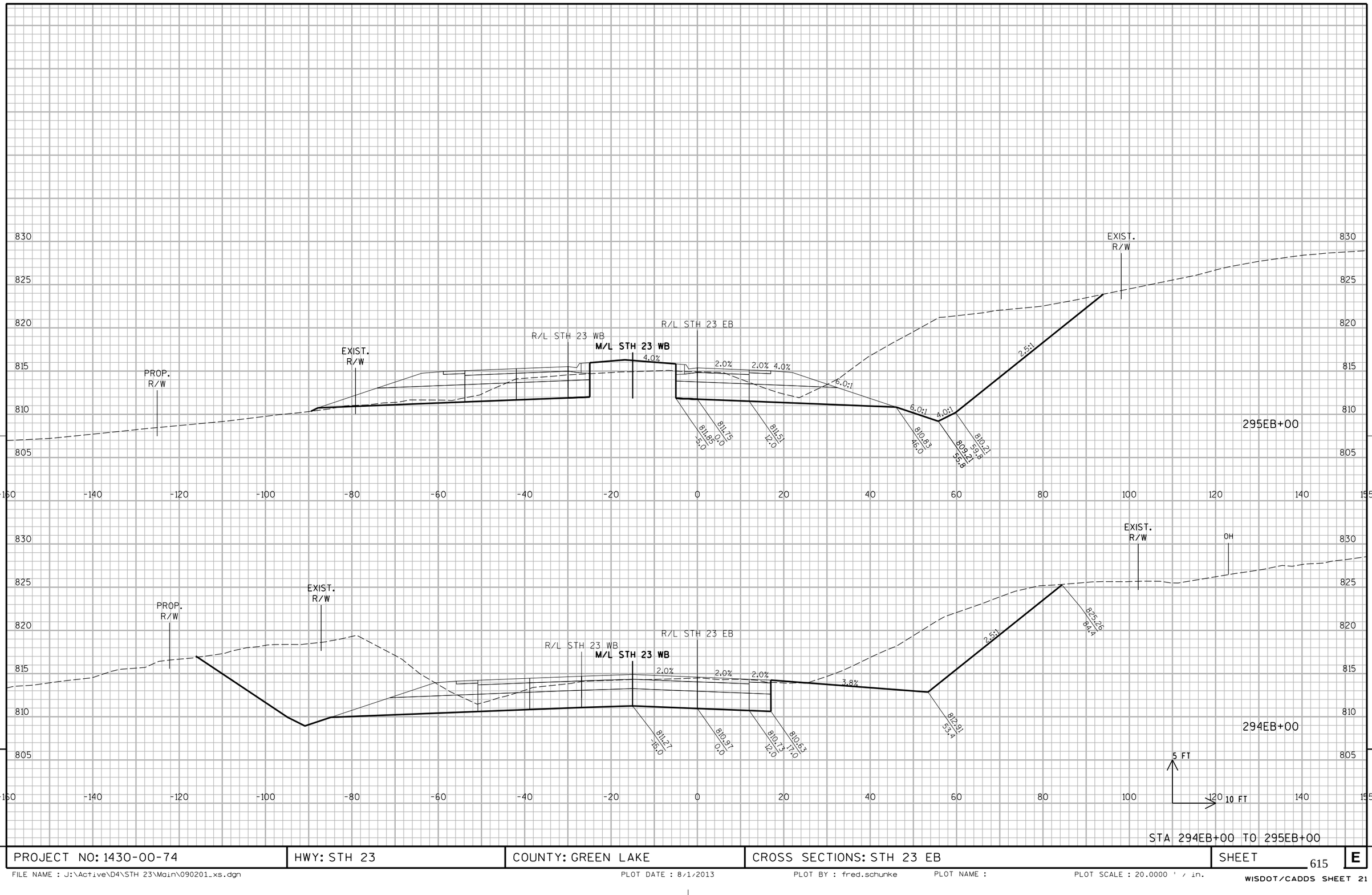
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 614	E

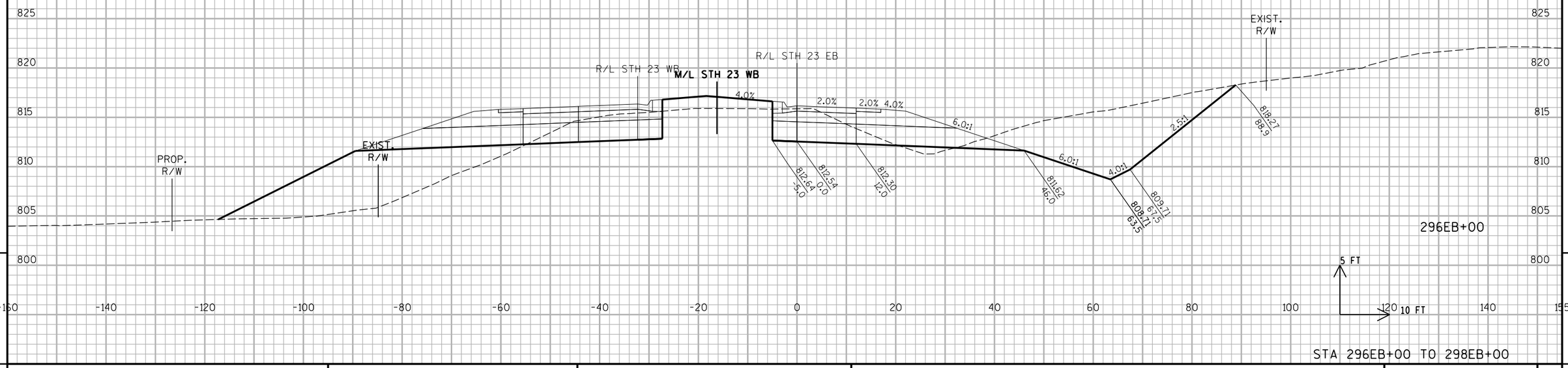
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 294EB+00 TO 295EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 615	E

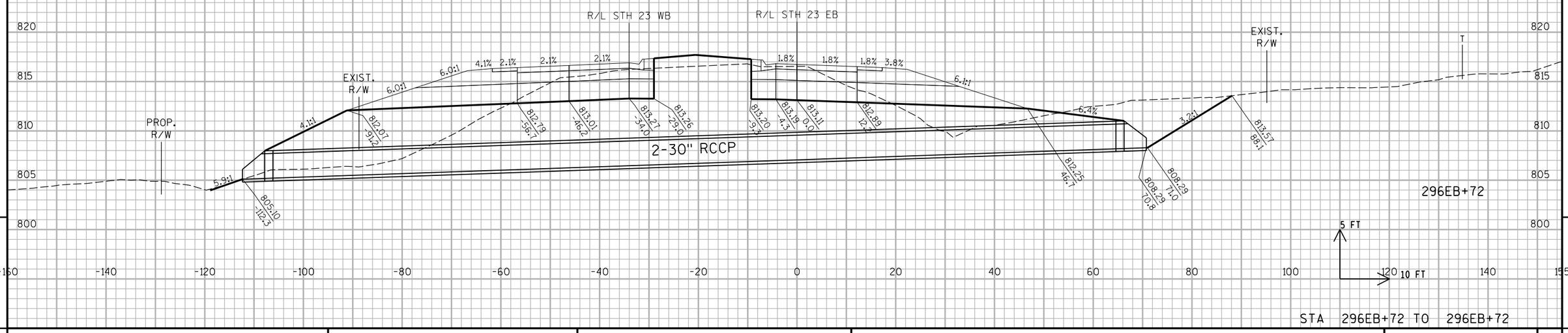


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 616	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 09°51'13" RHF
FOR INFORMATION PURPOSES ONLY



STA 296EB+72 TO 296EB+72

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 617	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 297EB+00 TO 299EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 618	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

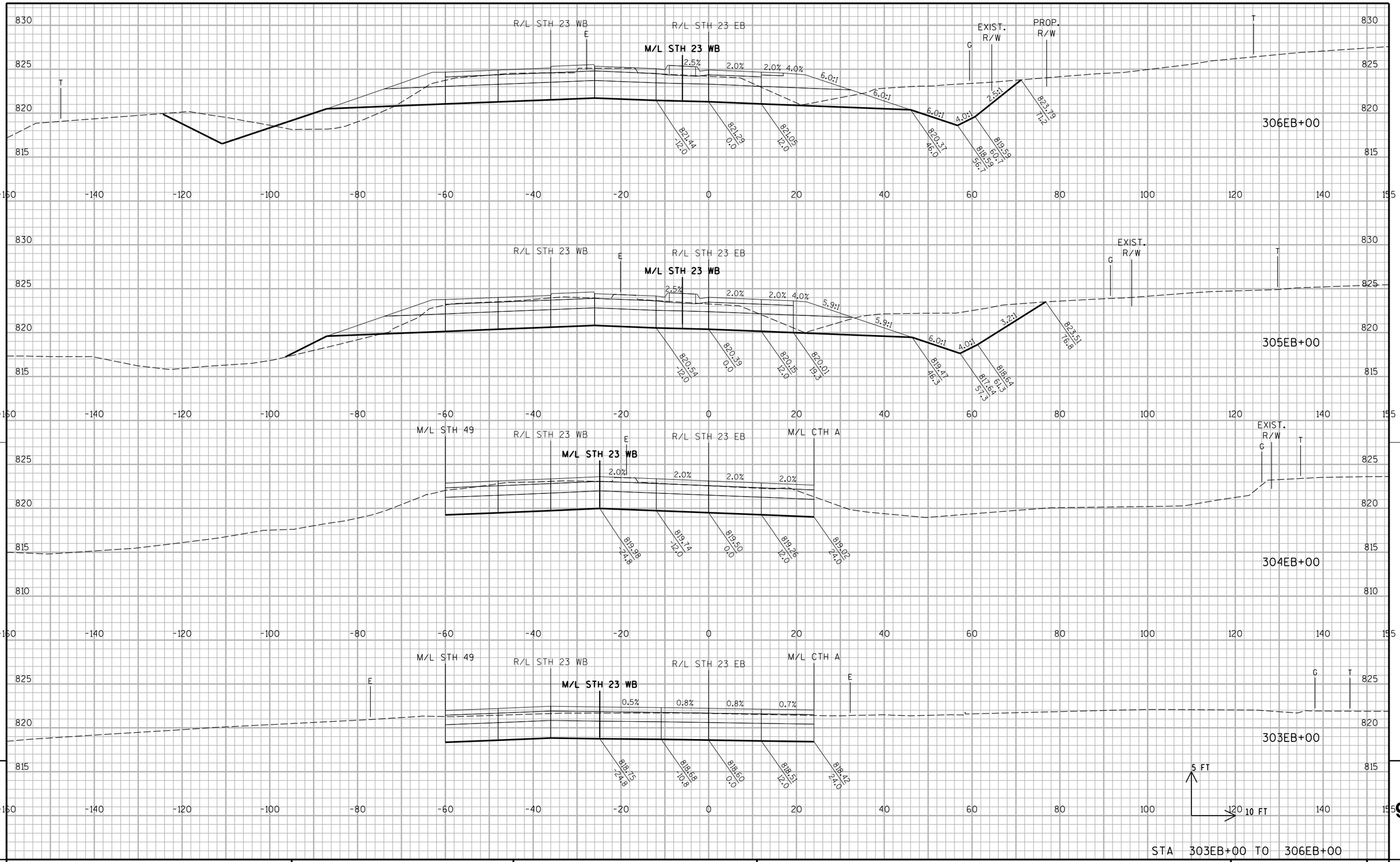
WISDOT/CADDS SHEET 21

STA 300EB+00 TO 302EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 619	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 303EB+00 TO 306EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 620	E

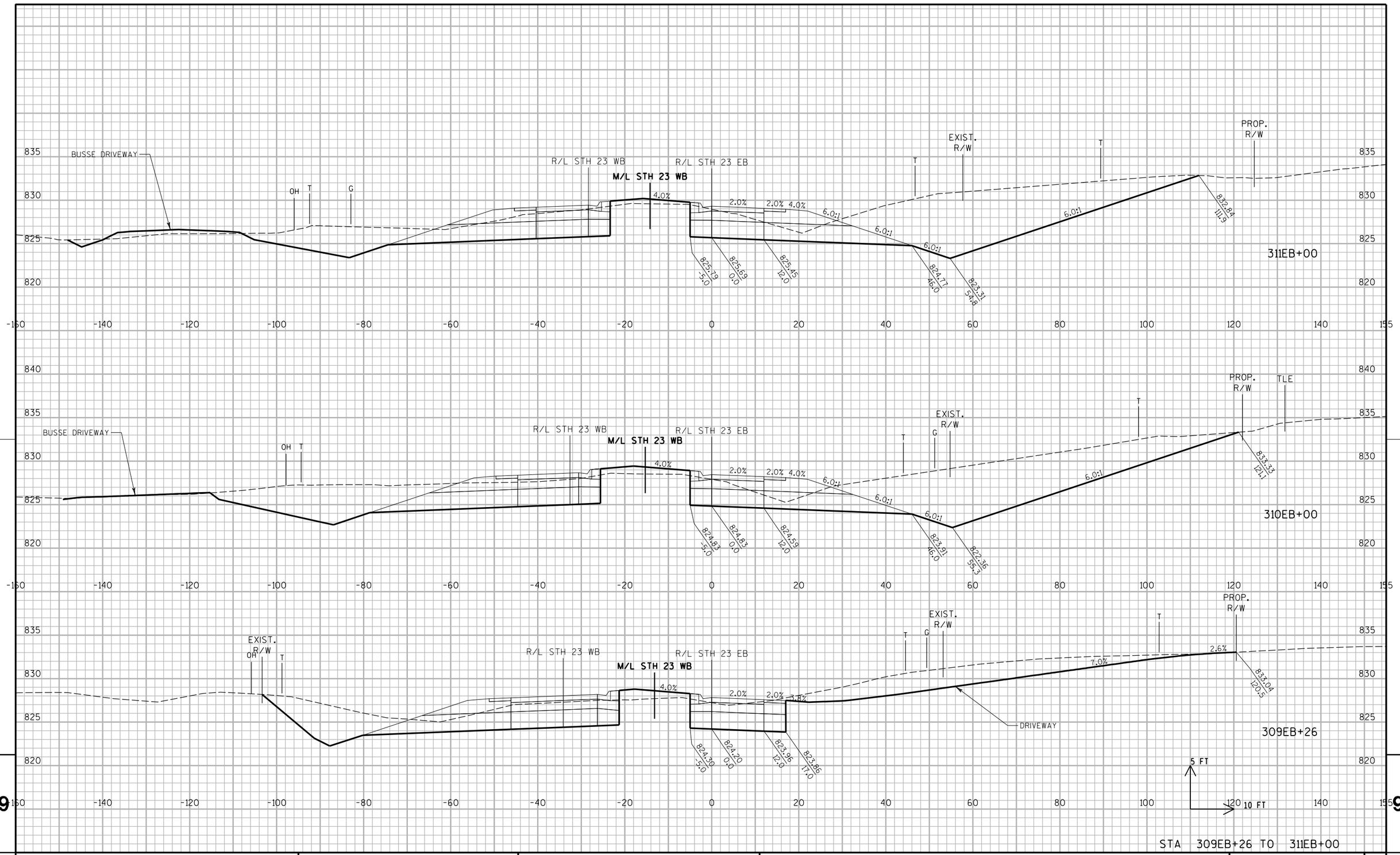
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 621	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

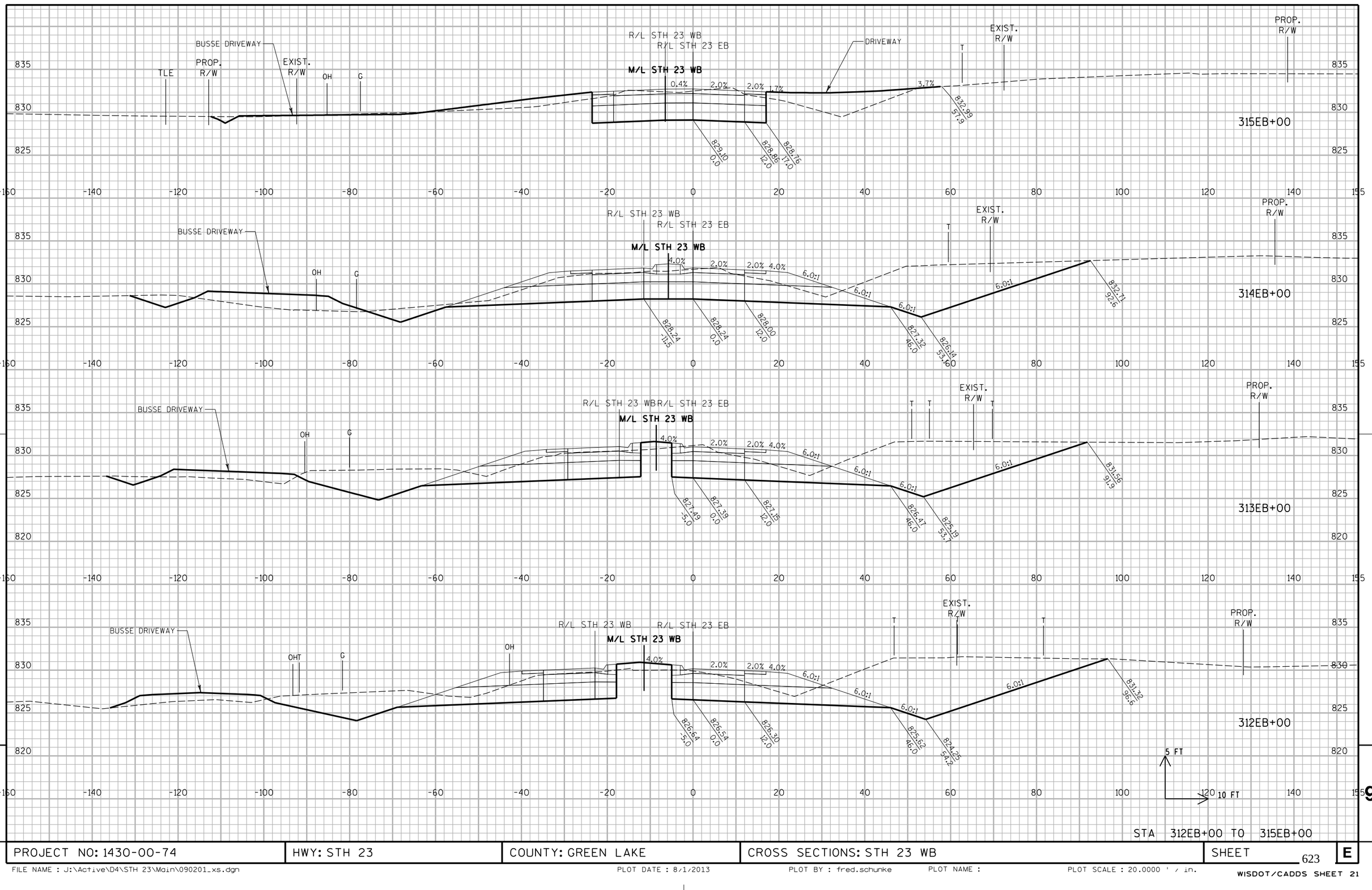


STA 309EB+26 TO 311EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 622	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

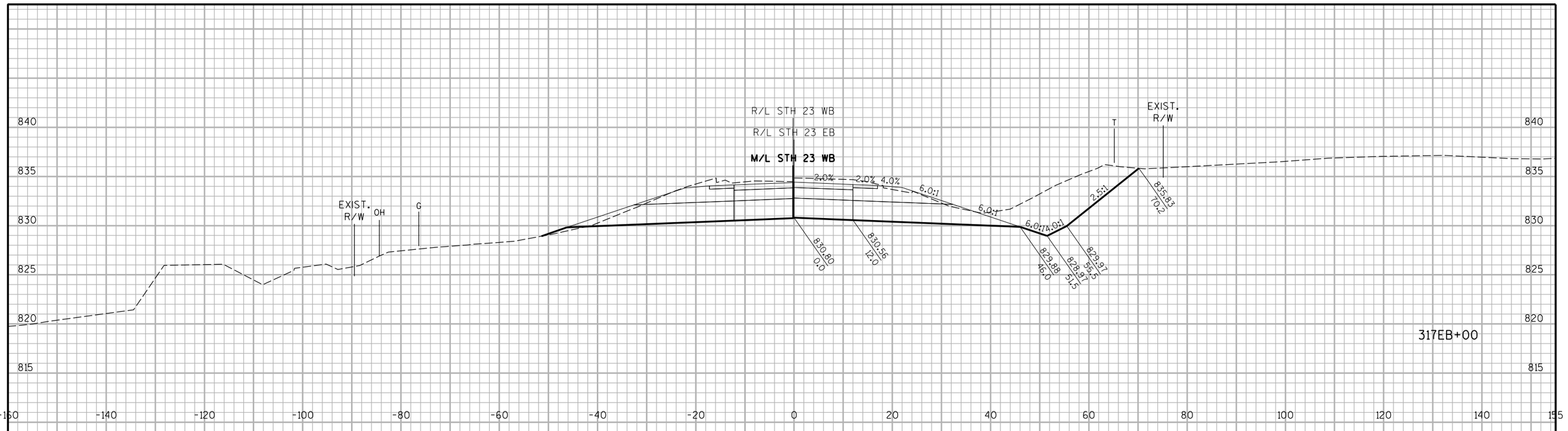


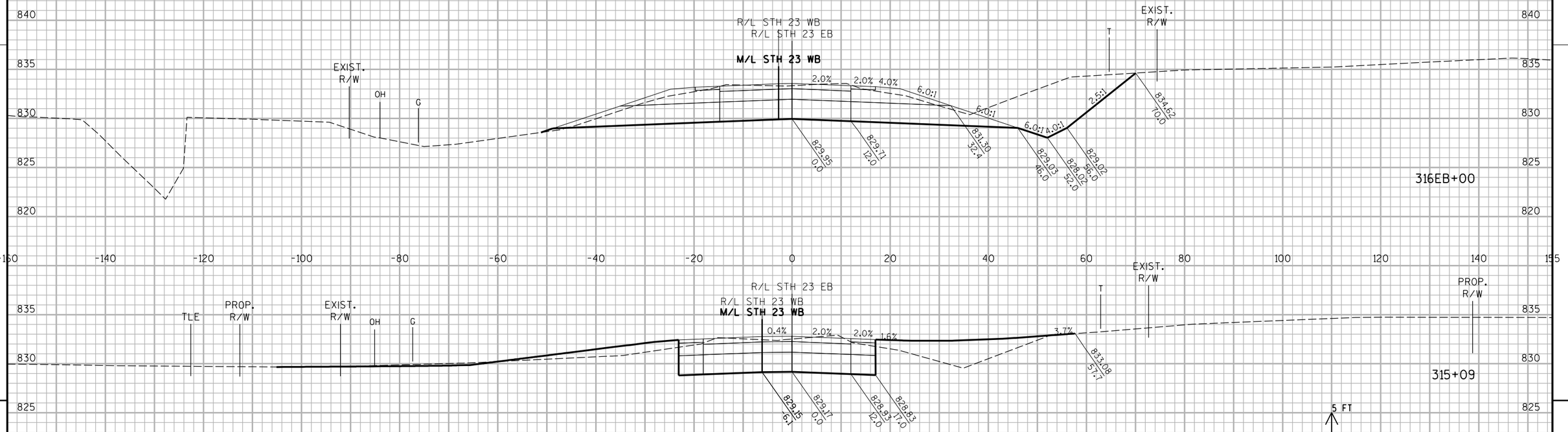
STA 312EB+00 TO 315EB+00

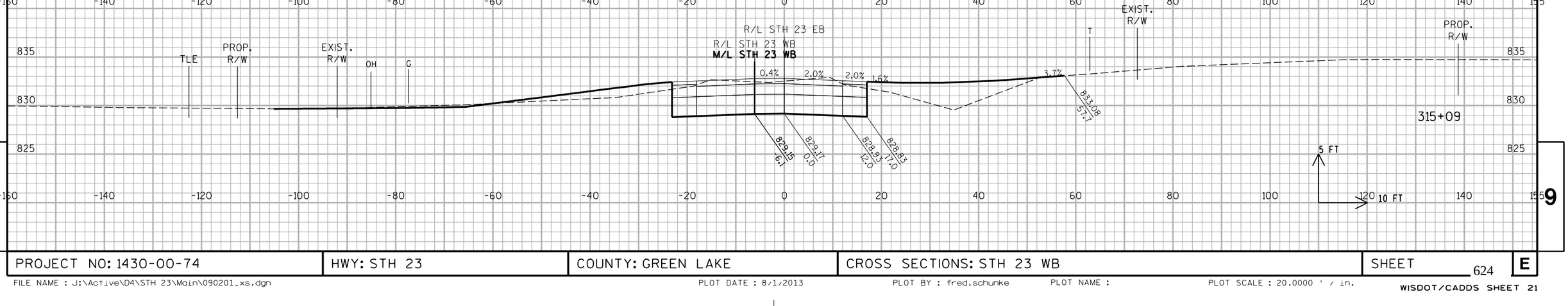
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 623	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21







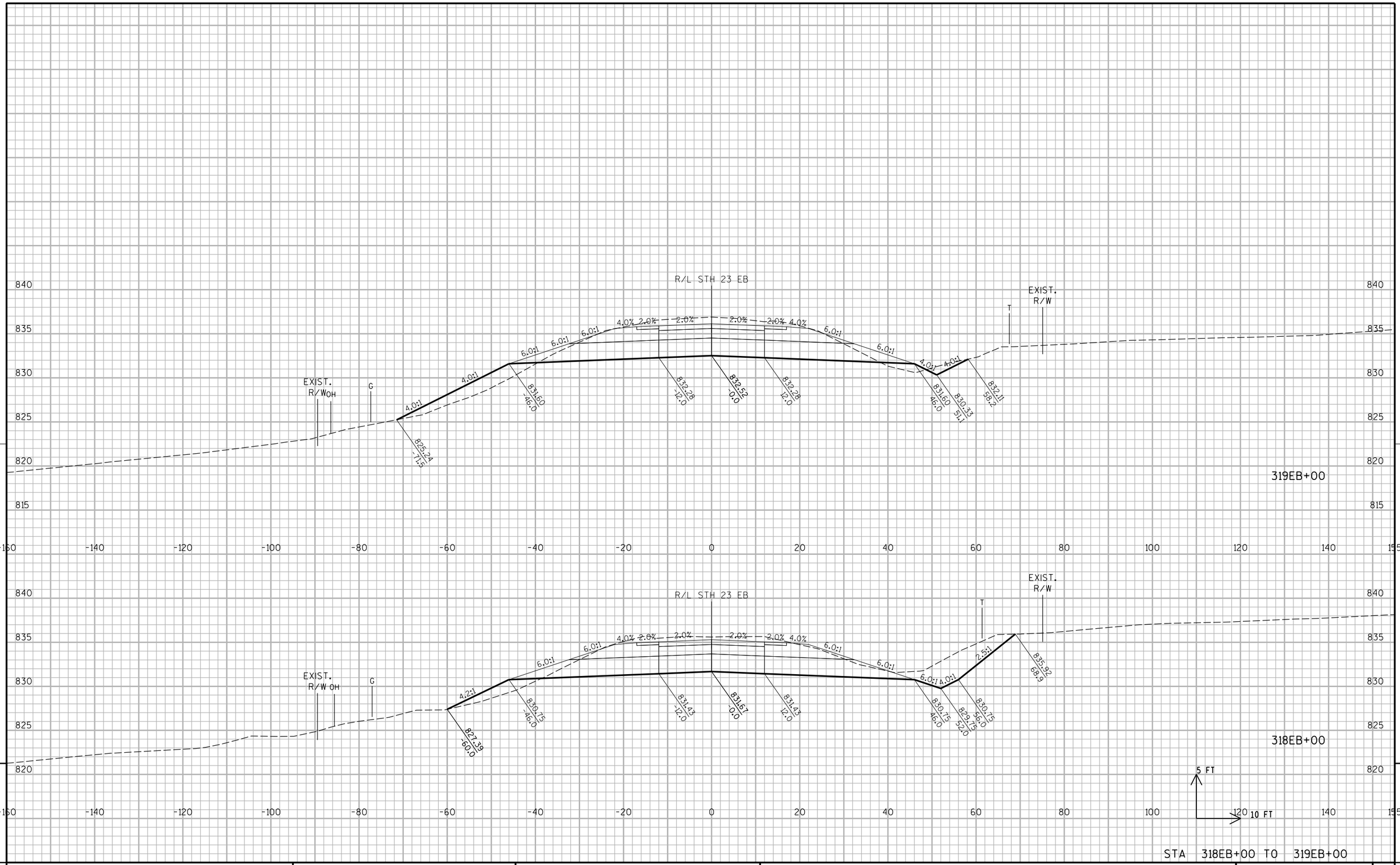
9

9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 624	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

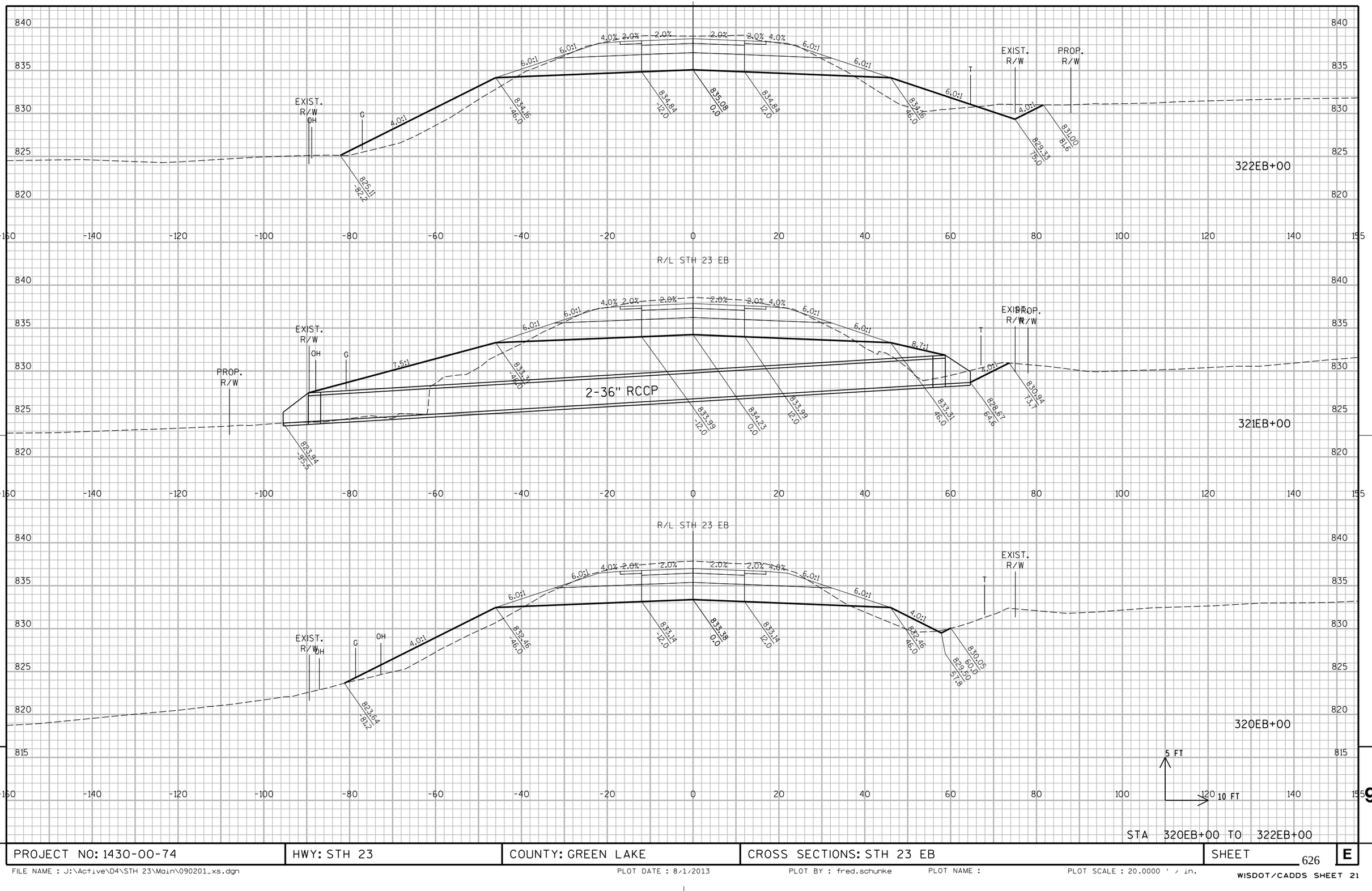


STA 318EB+00 TO 319EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 625	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

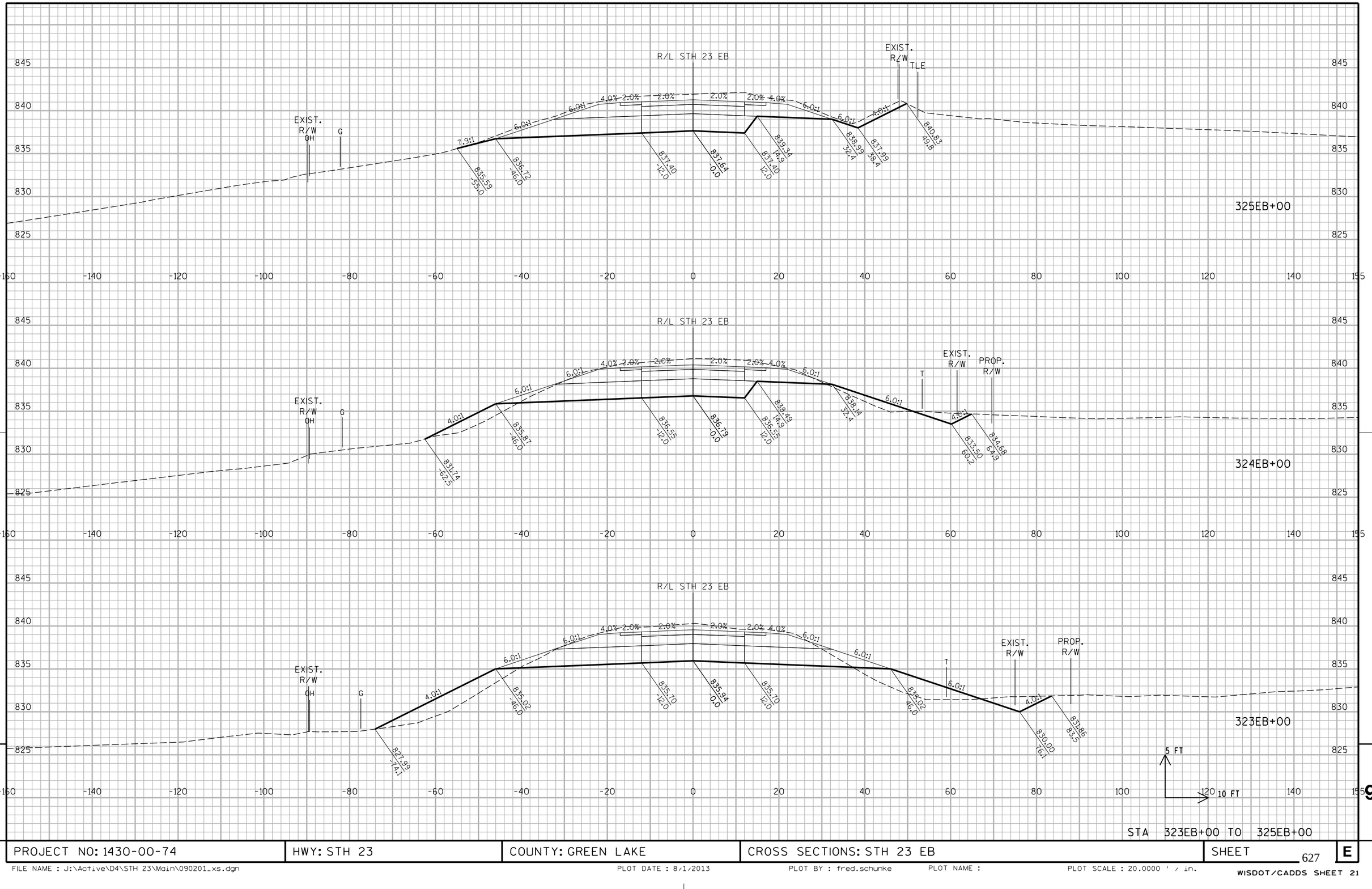
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 626	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

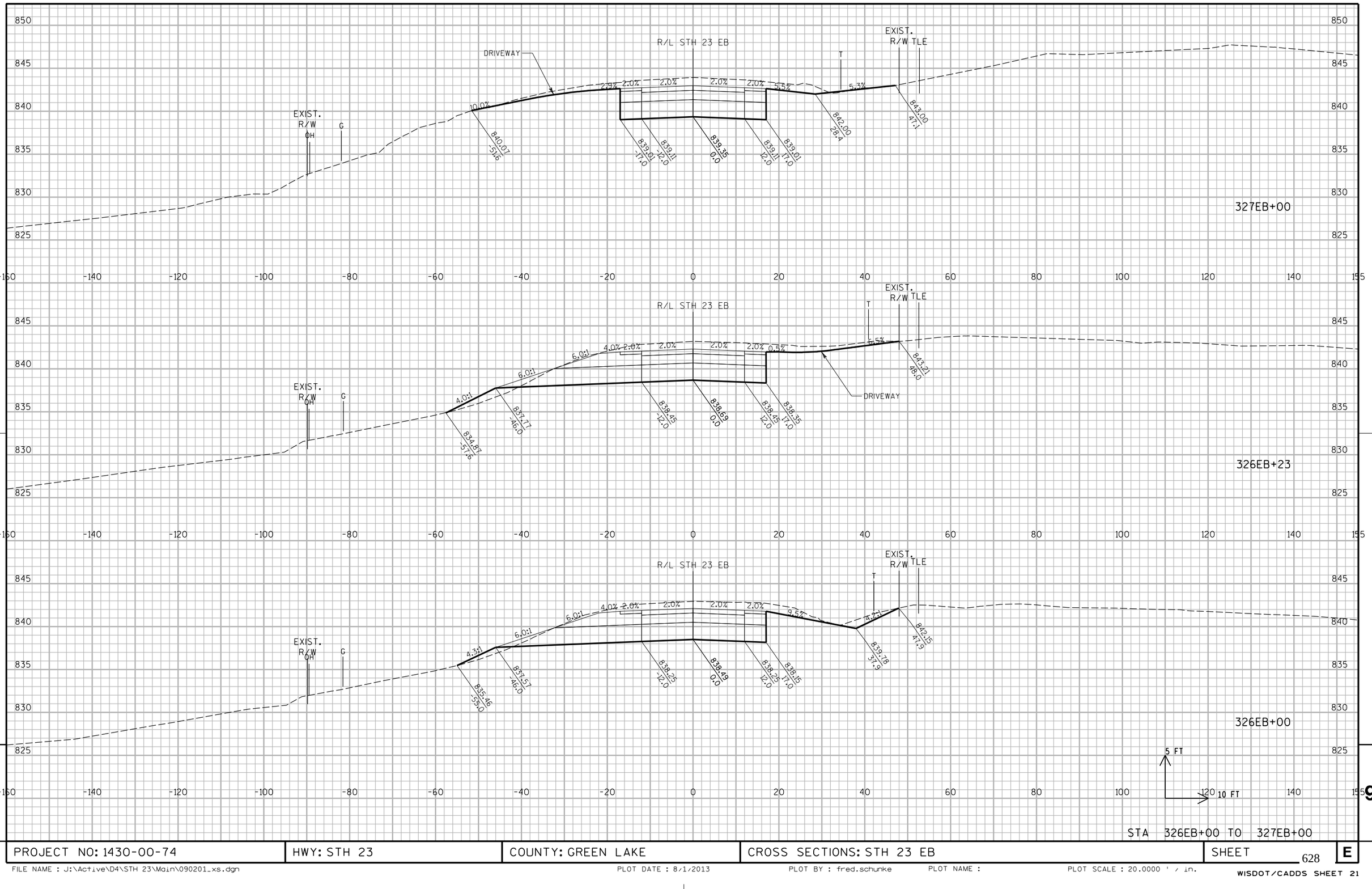


STA 323EB+00 TO 325EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 627	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

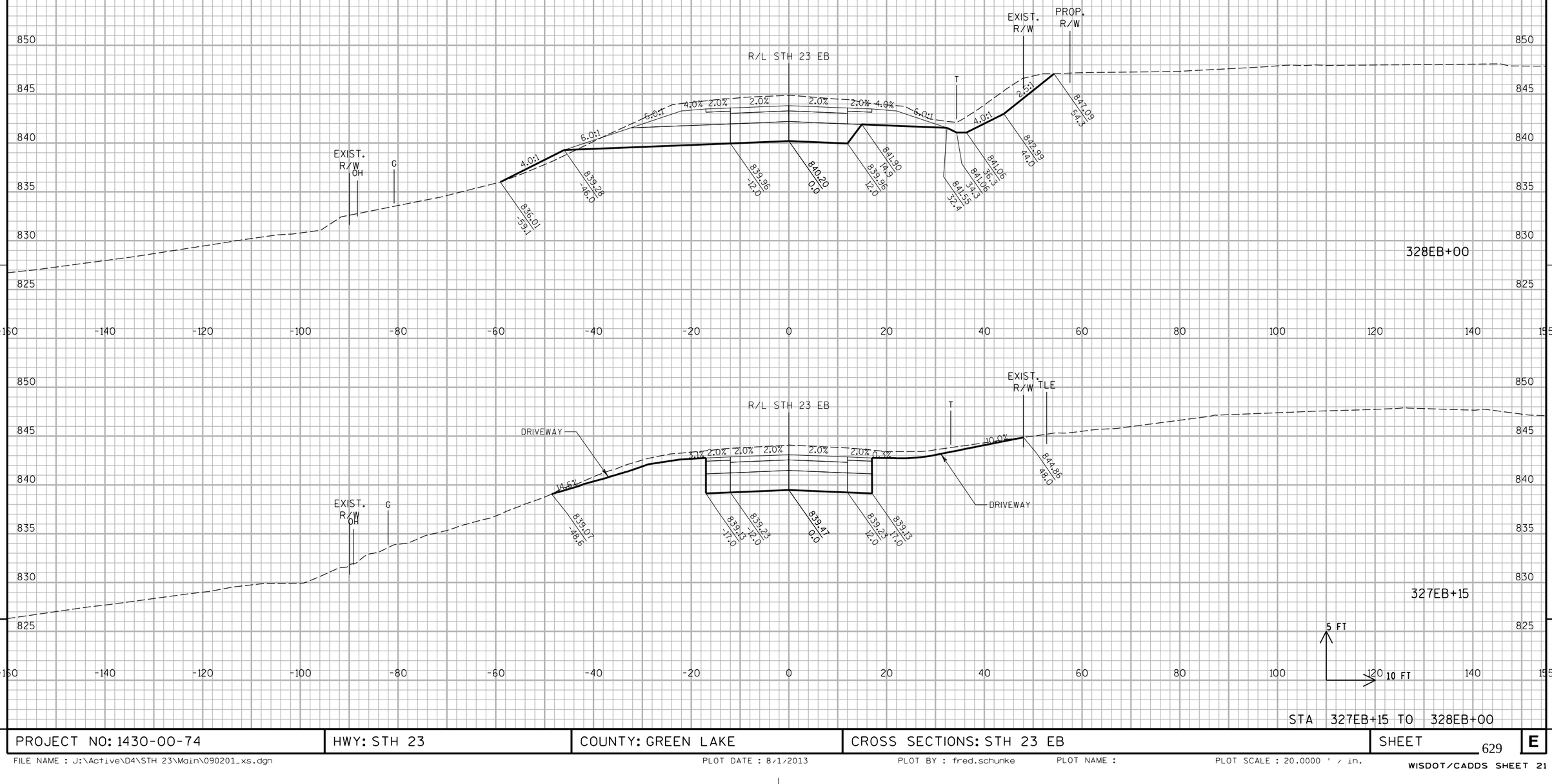


STA 326EB+00 TO 327EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 628	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



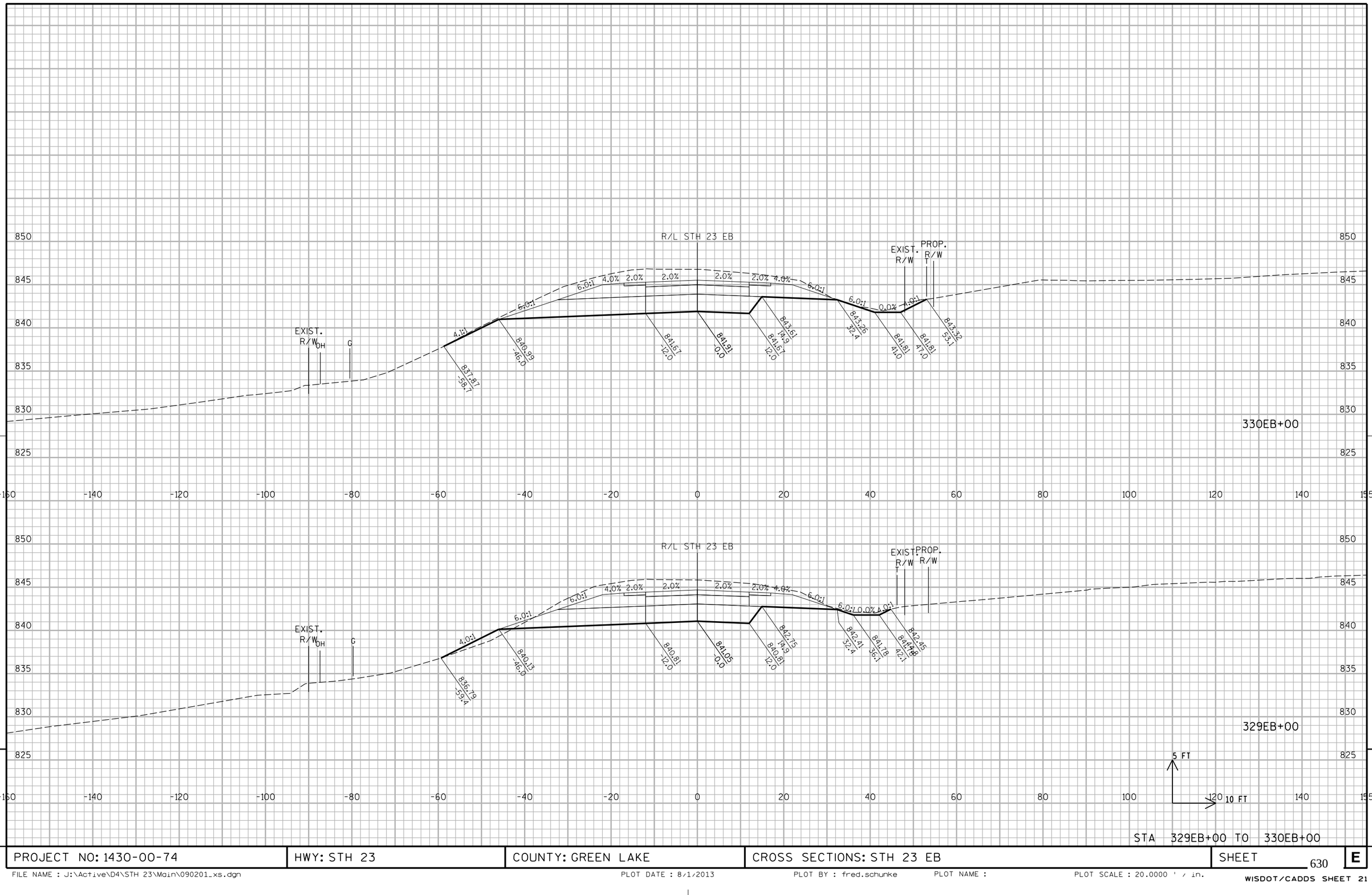
9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 629	E

STA 327EB+15 TO 328EB+00

9

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.
WISDOT/CADDS SHEET 21



9

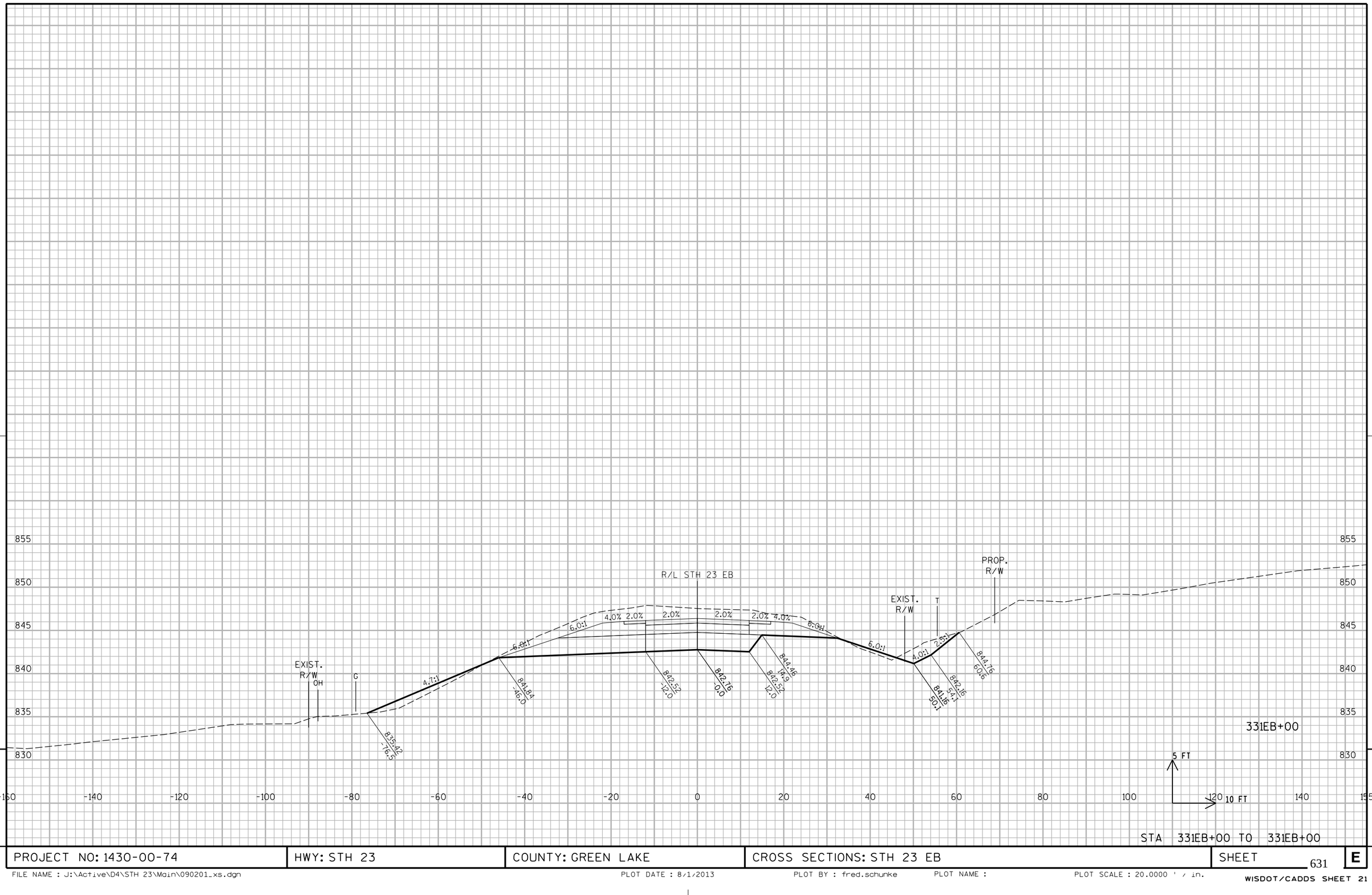
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 630	E

STA 329EB+00 TO 330EB+00

9

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



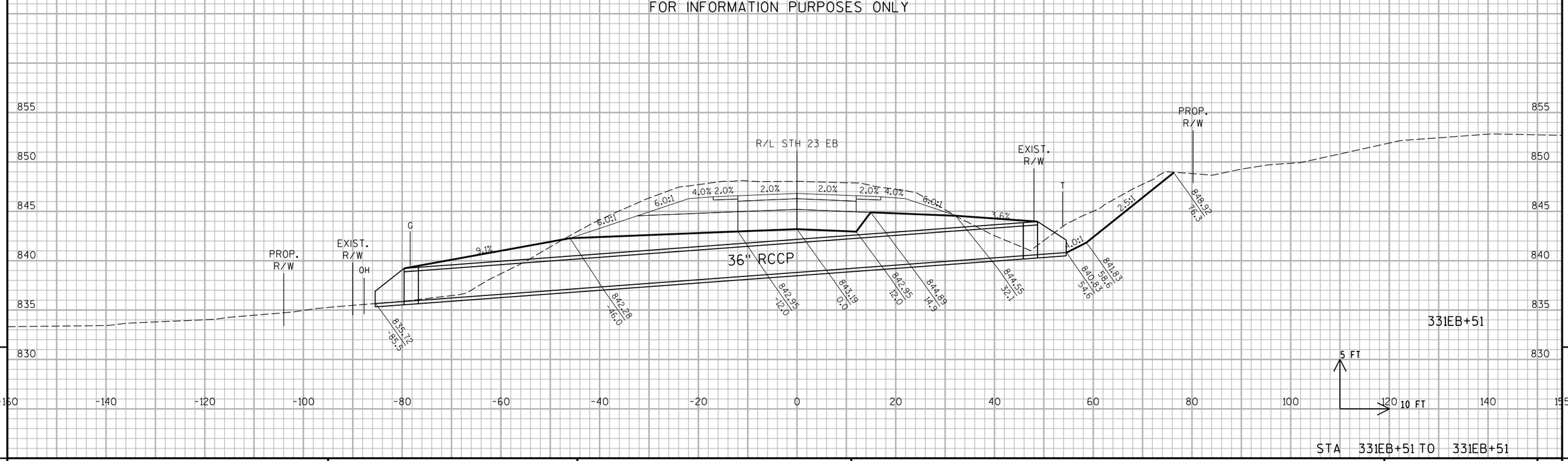
STA 331EB+00 TO 331EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 631	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

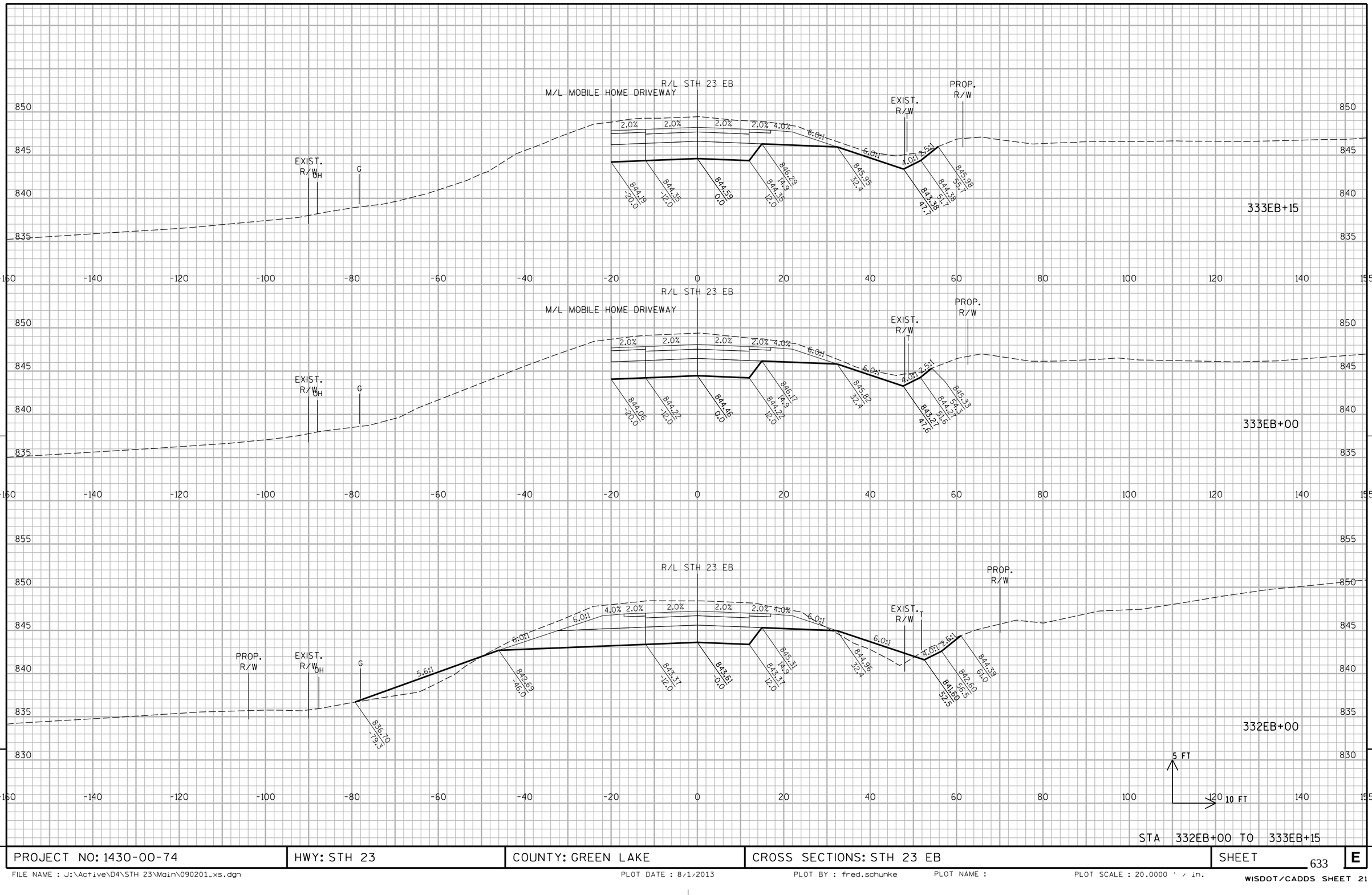
WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 09°51'13" RHF
FOR INFORMATION PURPOSES ONLY



STA 331EB+51 TO 331EB+51

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 632	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 633	E

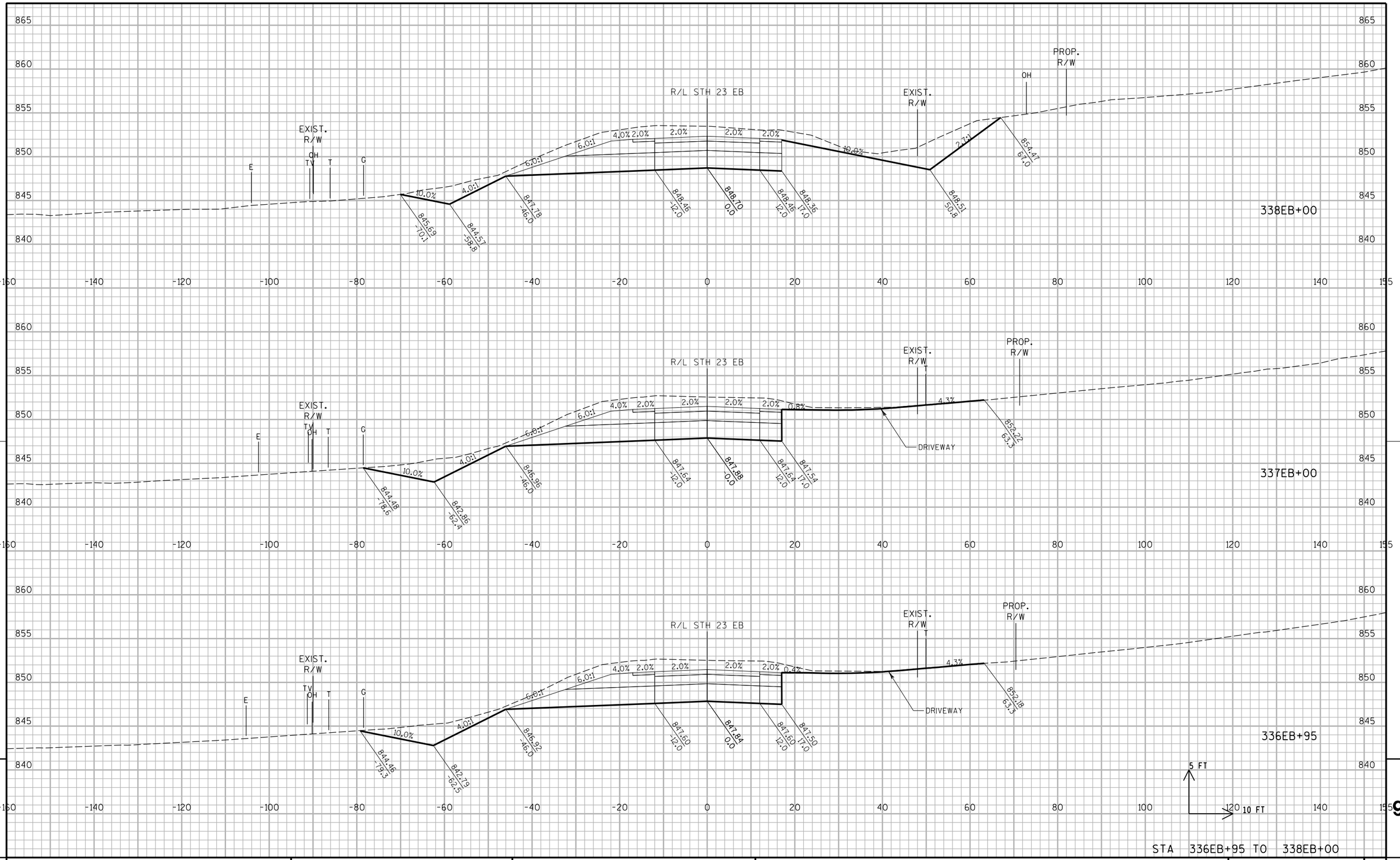
STA 332EB+00 TO 333EB+15

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 634 E

STA 334EB+00 TO 336EB+00

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



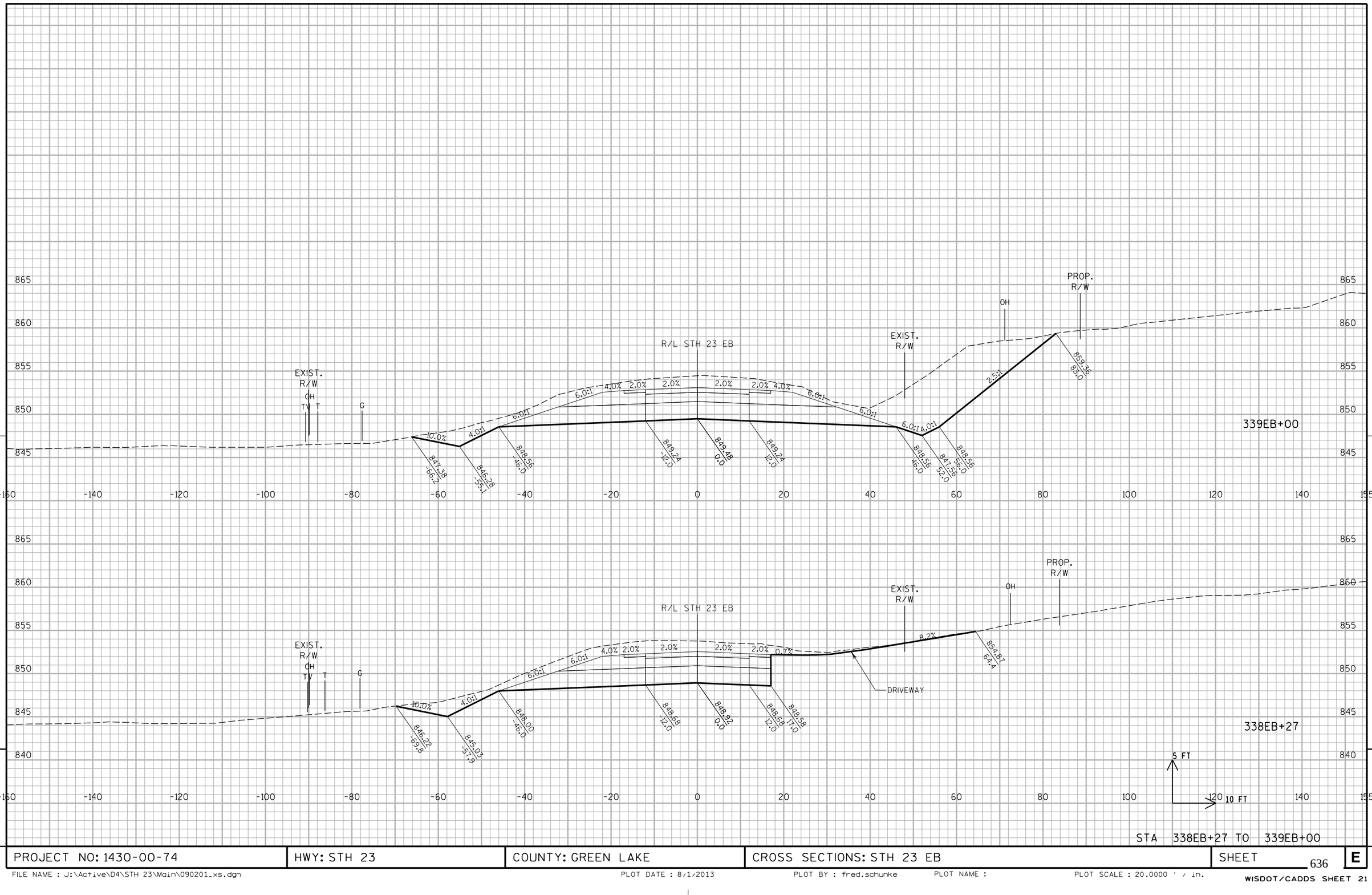
STA 336EB+95 TO 338EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 635	E

9 9

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

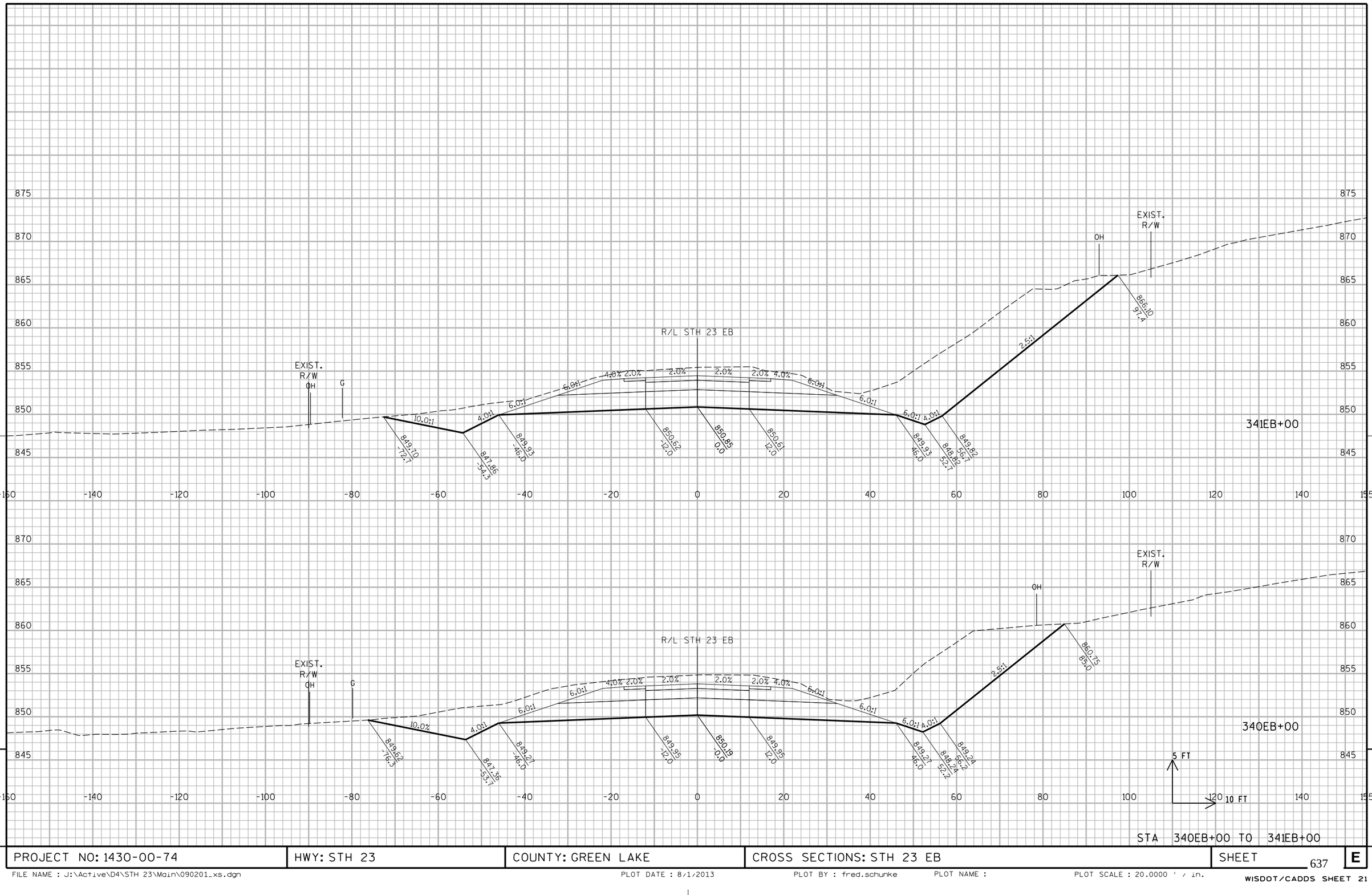
WISDOT/CADDS SHEET 21



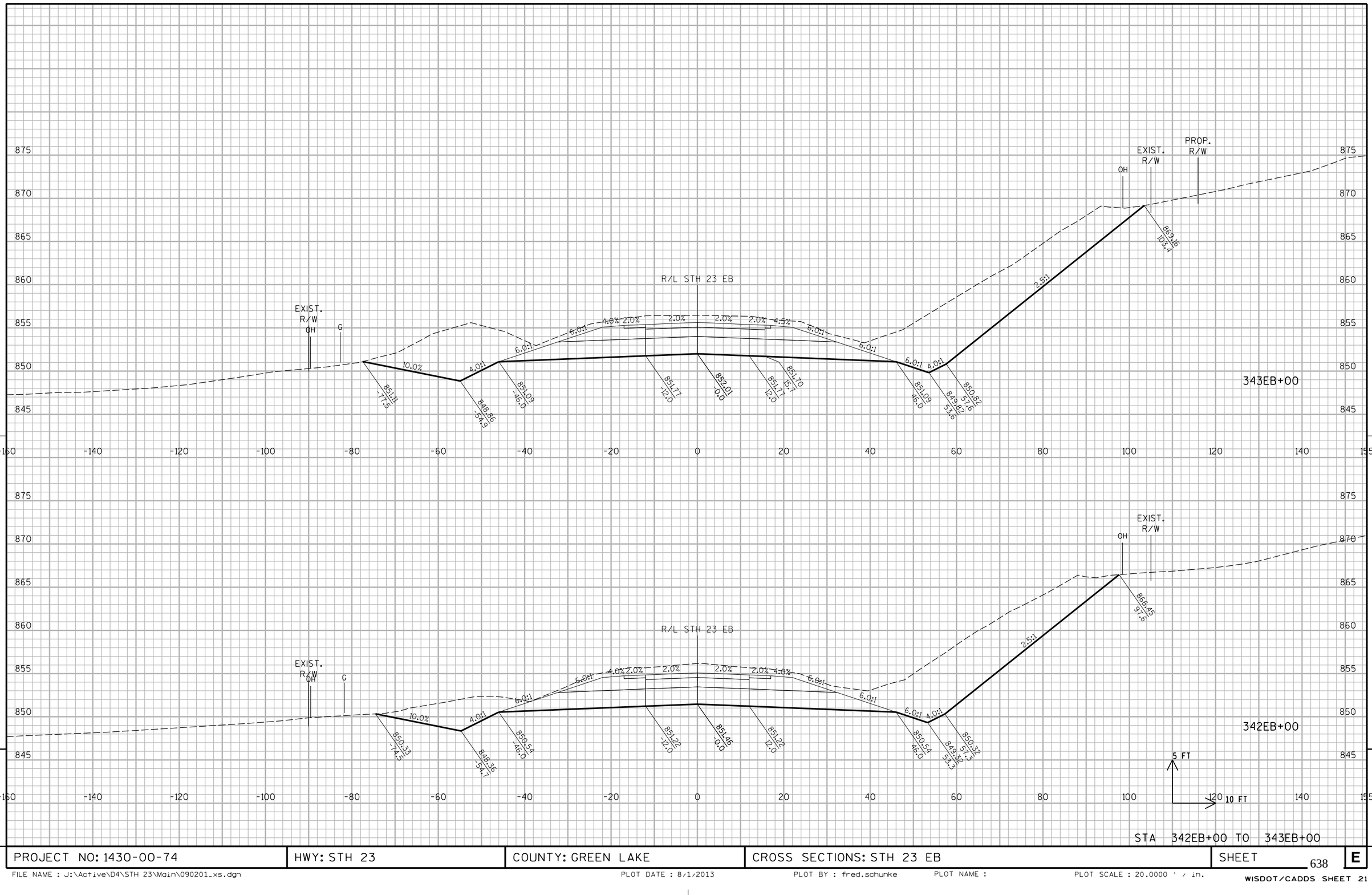
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 636	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



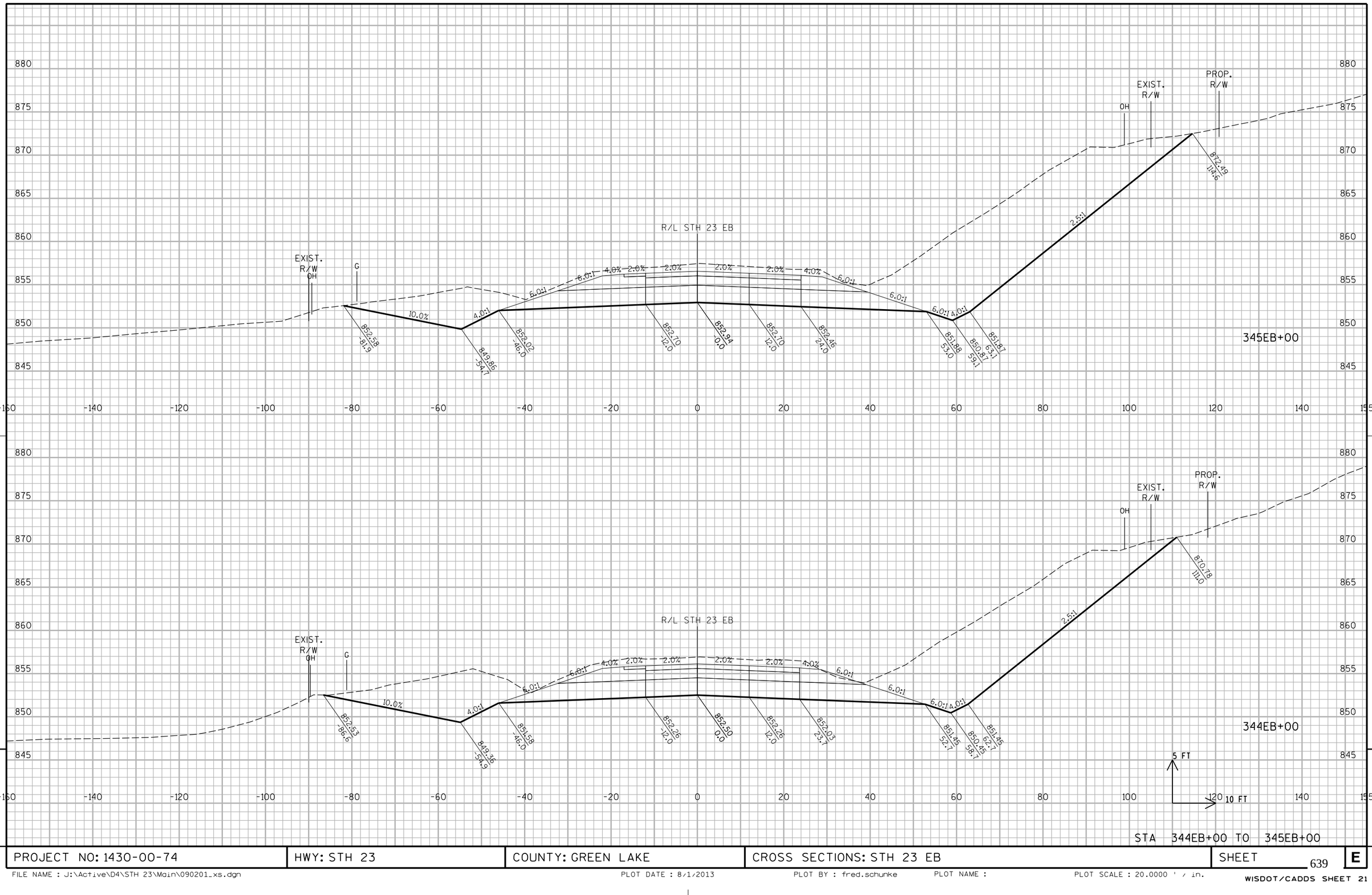
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 637	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 638	E

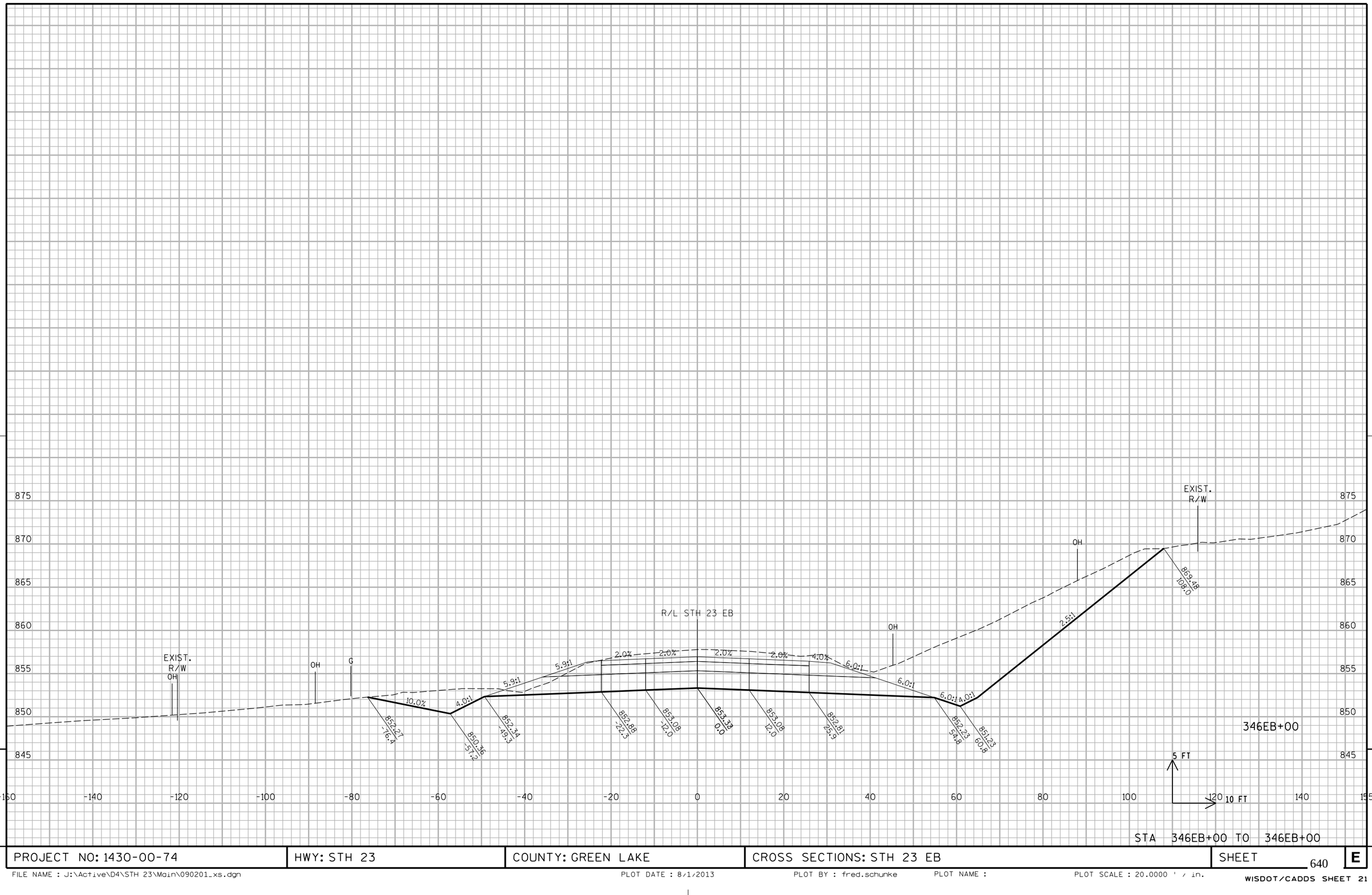
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 639	E

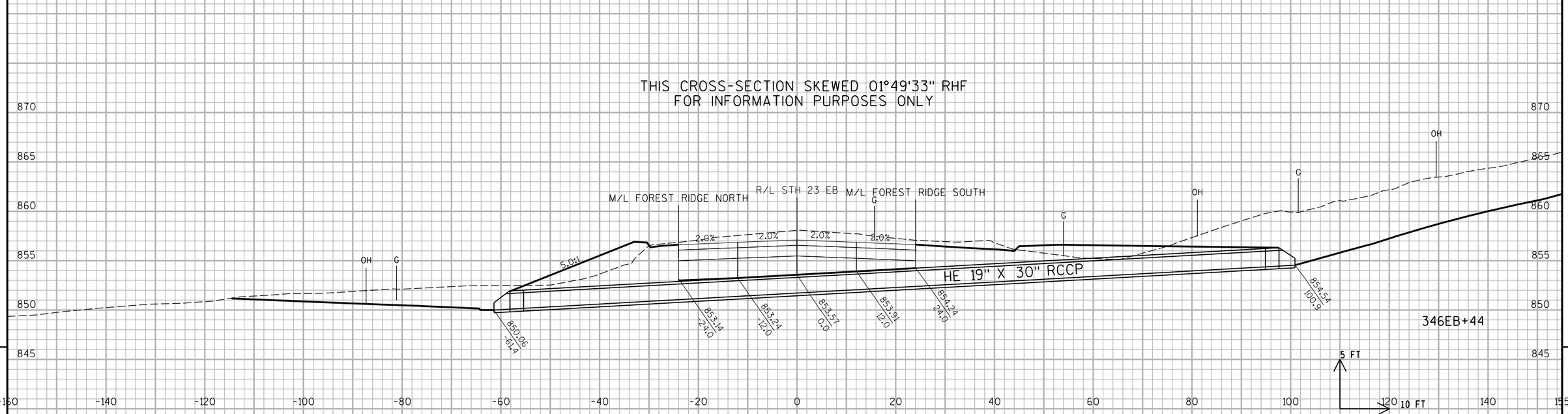
STA 344EB+00 TO 345EB+00



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 640	E

STA 346EB+00 TO 346EB+00

THIS CROSS-SECTION SKEWED 01°49'33" RHF
FOR INFORMATION PURPOSES ONLY

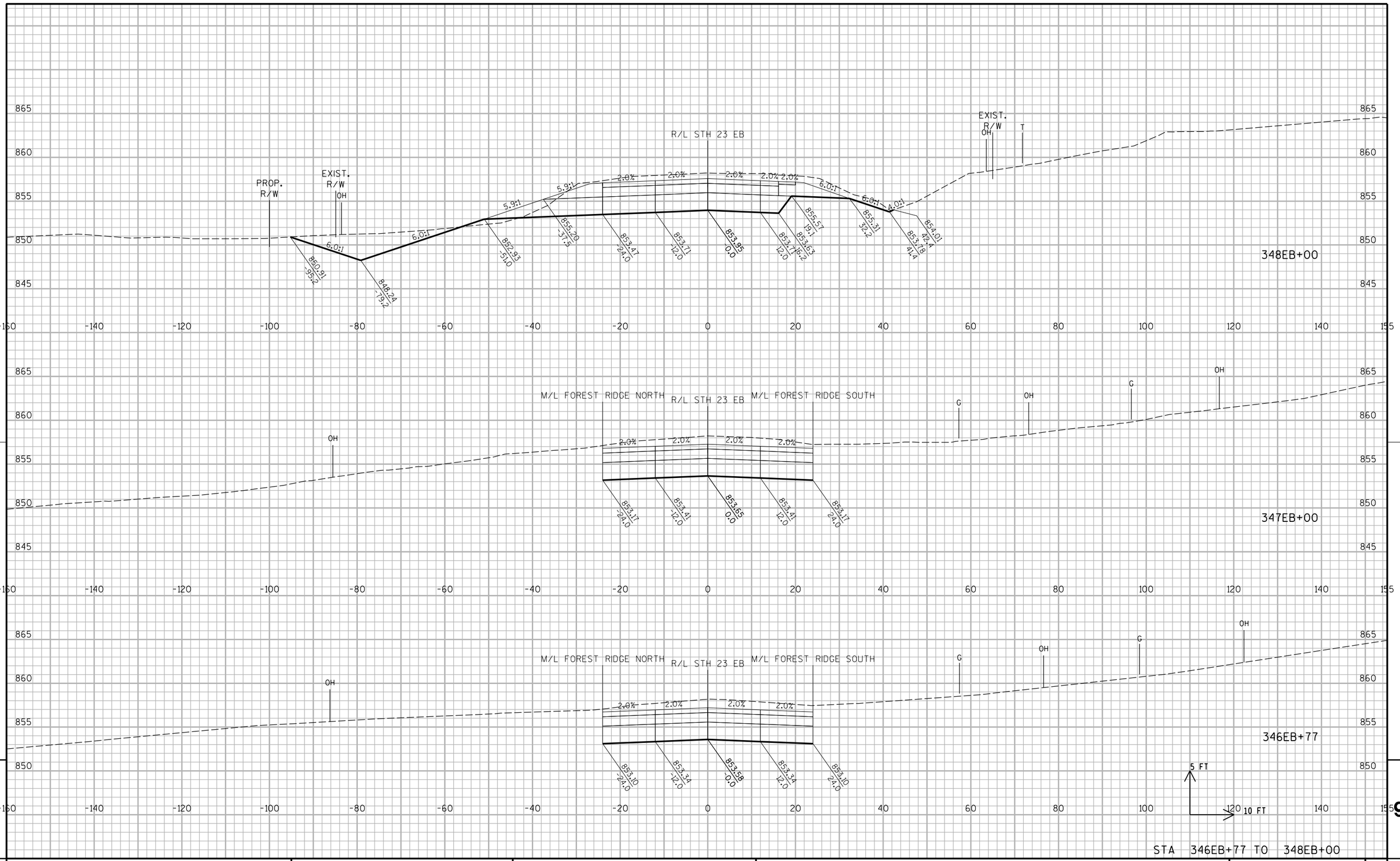


STA 346EB+44 TO 346EB+44

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 641	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

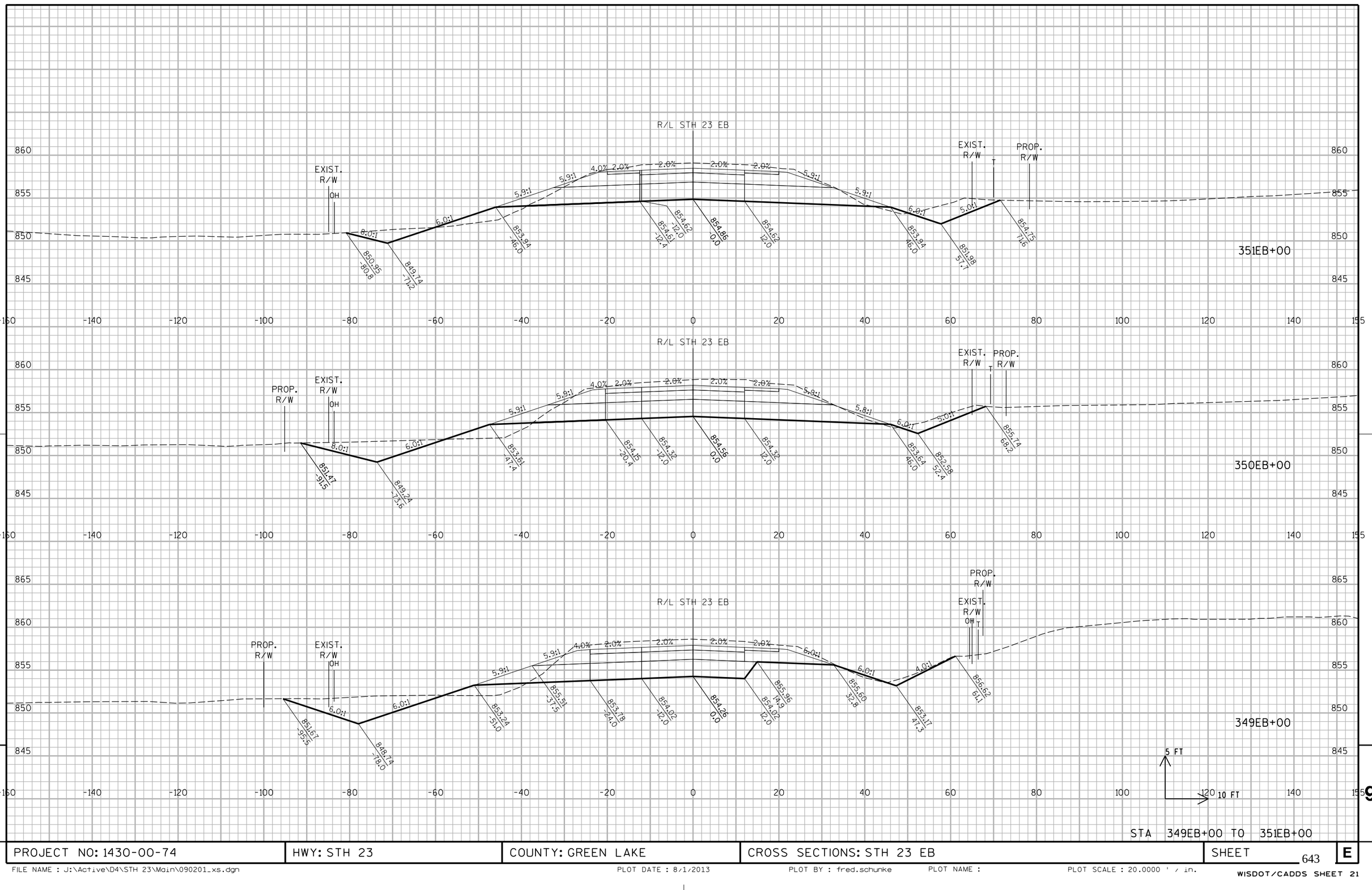


STA 346EB+77 TO 348EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 642	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

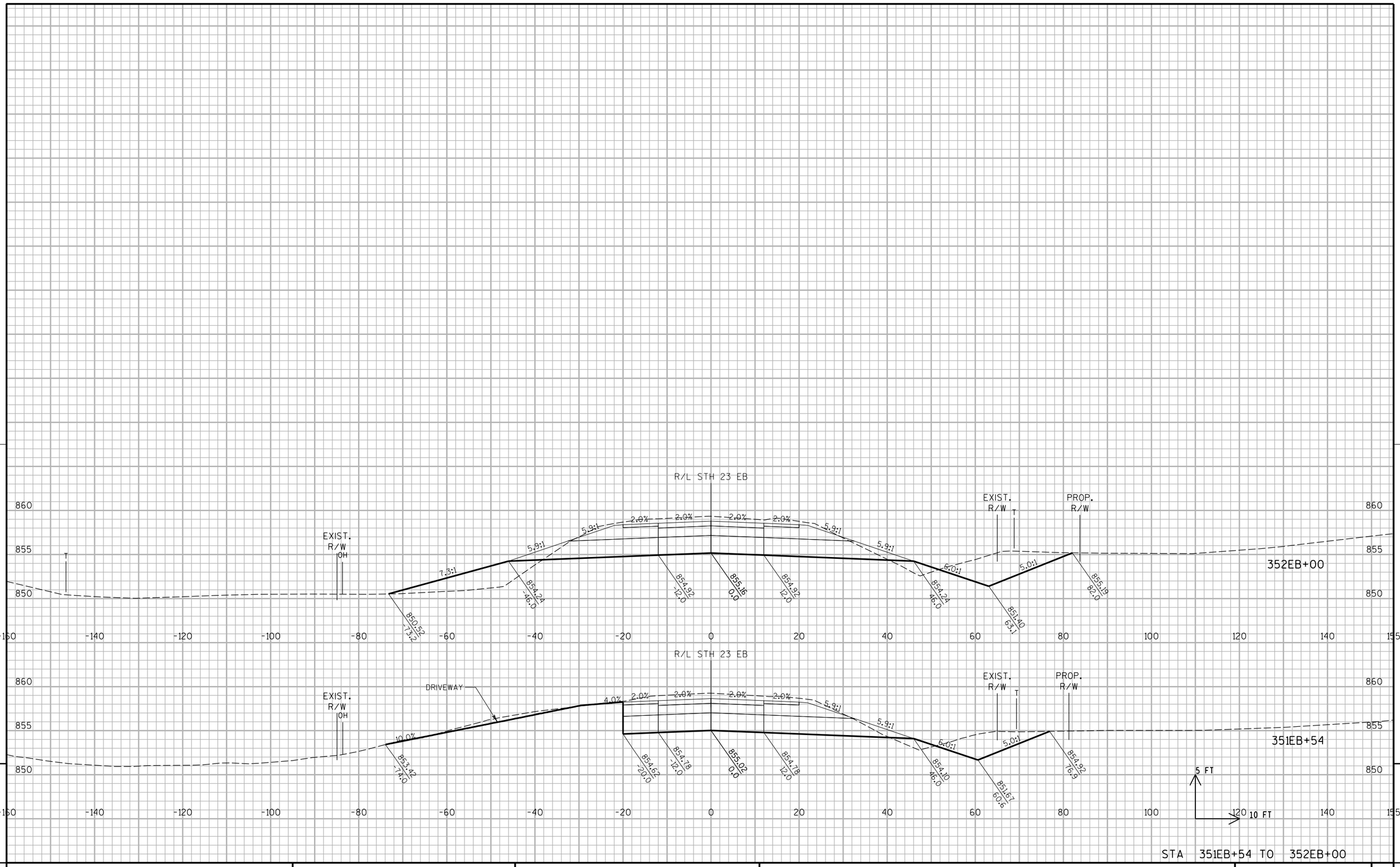


STA 349EB+00 TO 351EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 643	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



9

9

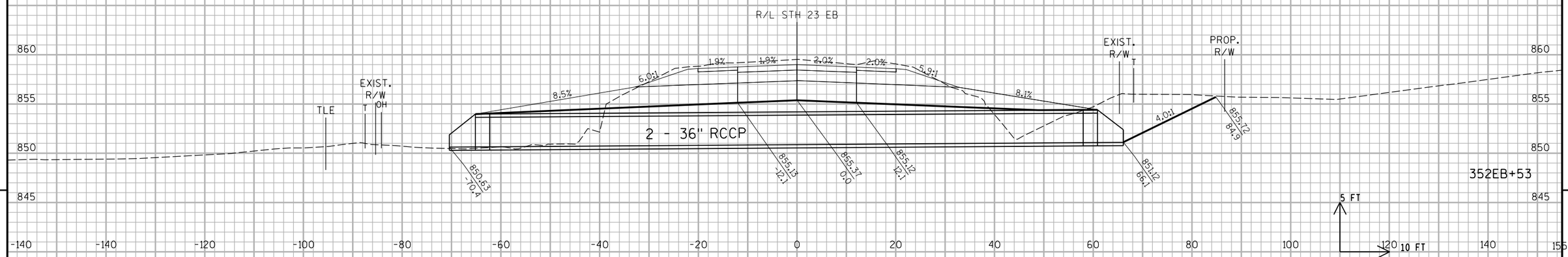
STA 351EB+54 TO 352EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 644	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 05°42'28" LHF
FOR INFORMATION PURPOSES ONLY

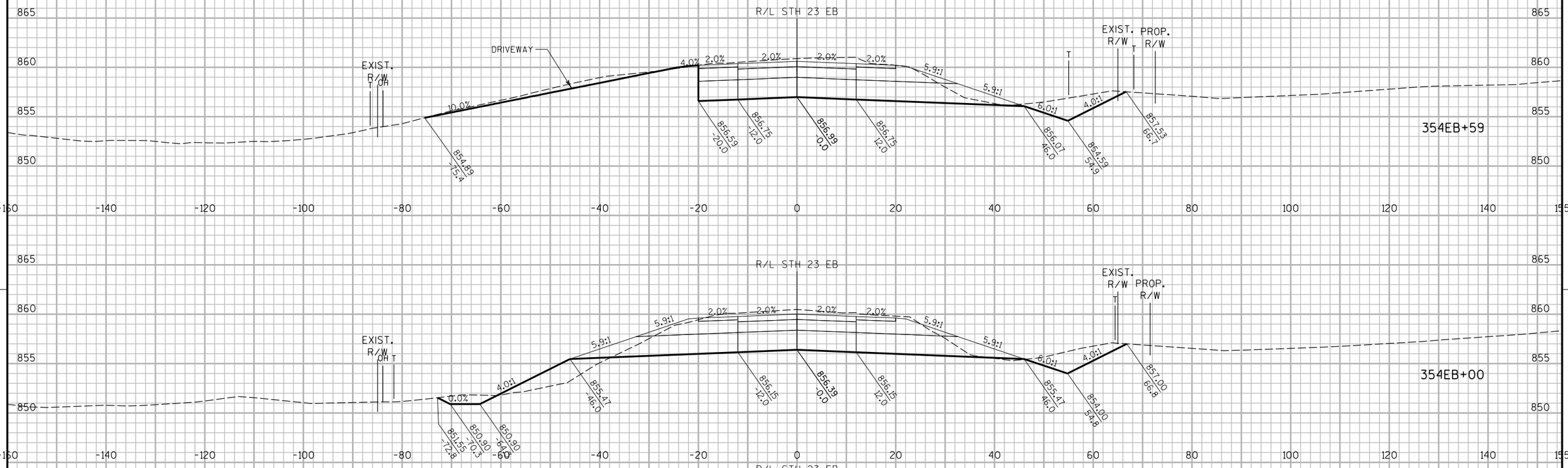


STA 352EB+53 TO 352EB+53

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 645	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 353EB+00 TO 354EB+59

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 646	E

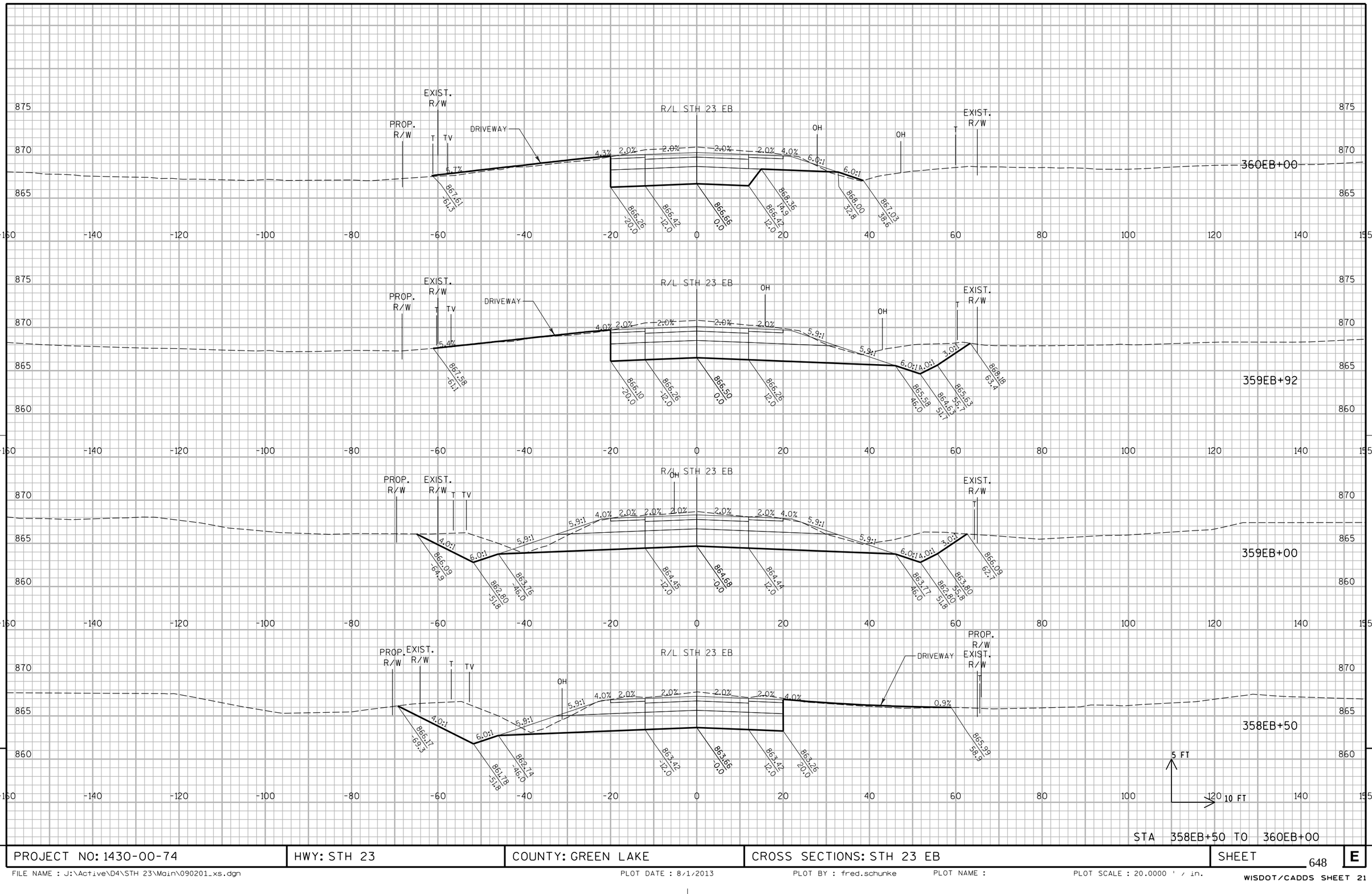
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 647	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

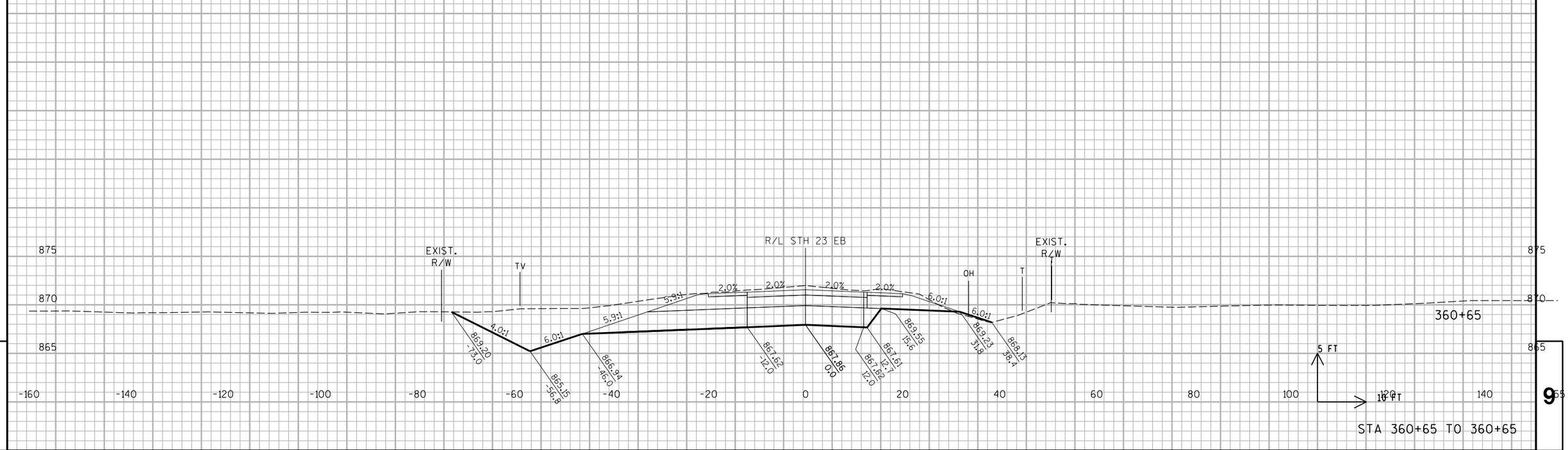
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 648	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

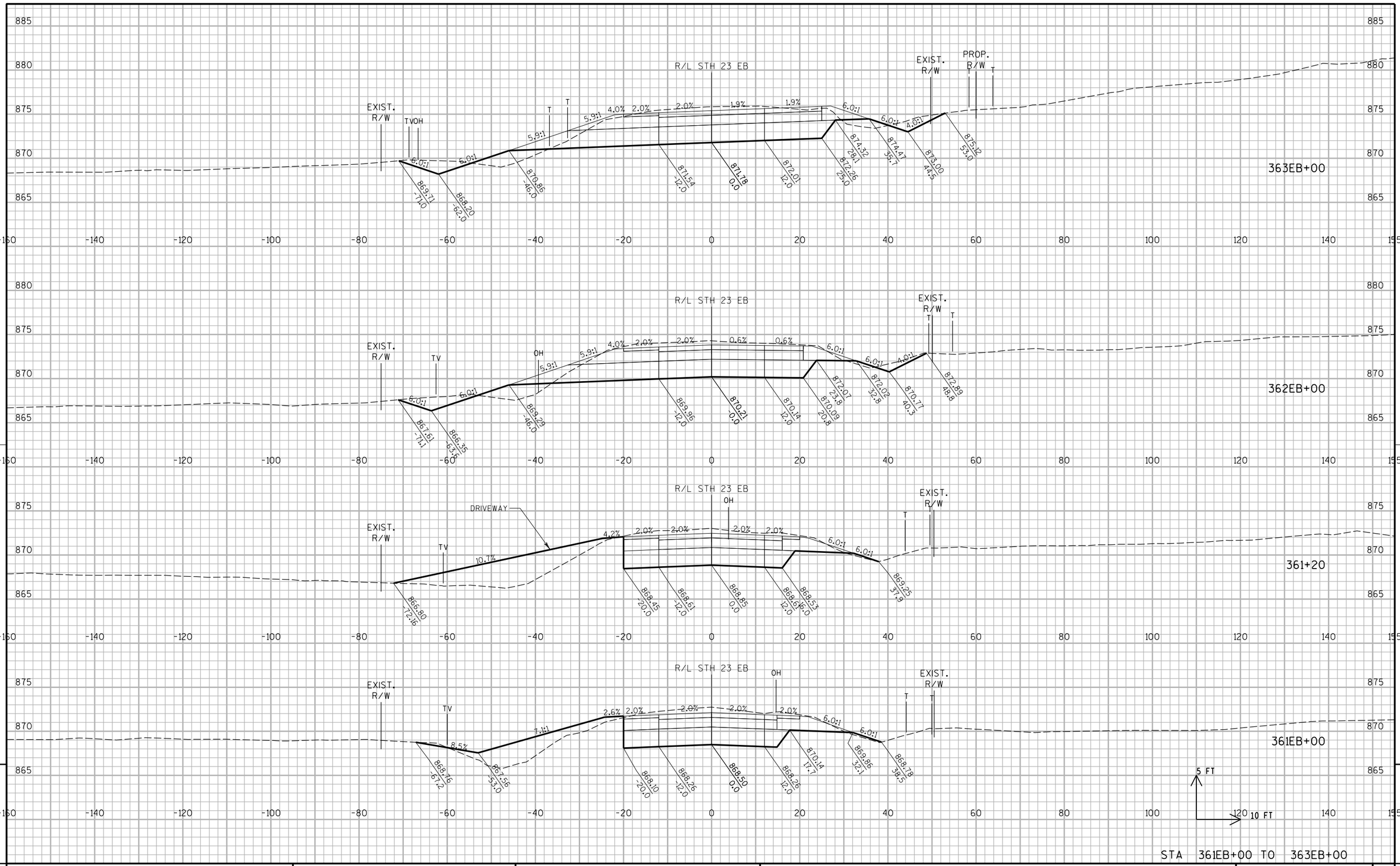


STA 360+65 TO 360+65

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 649	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

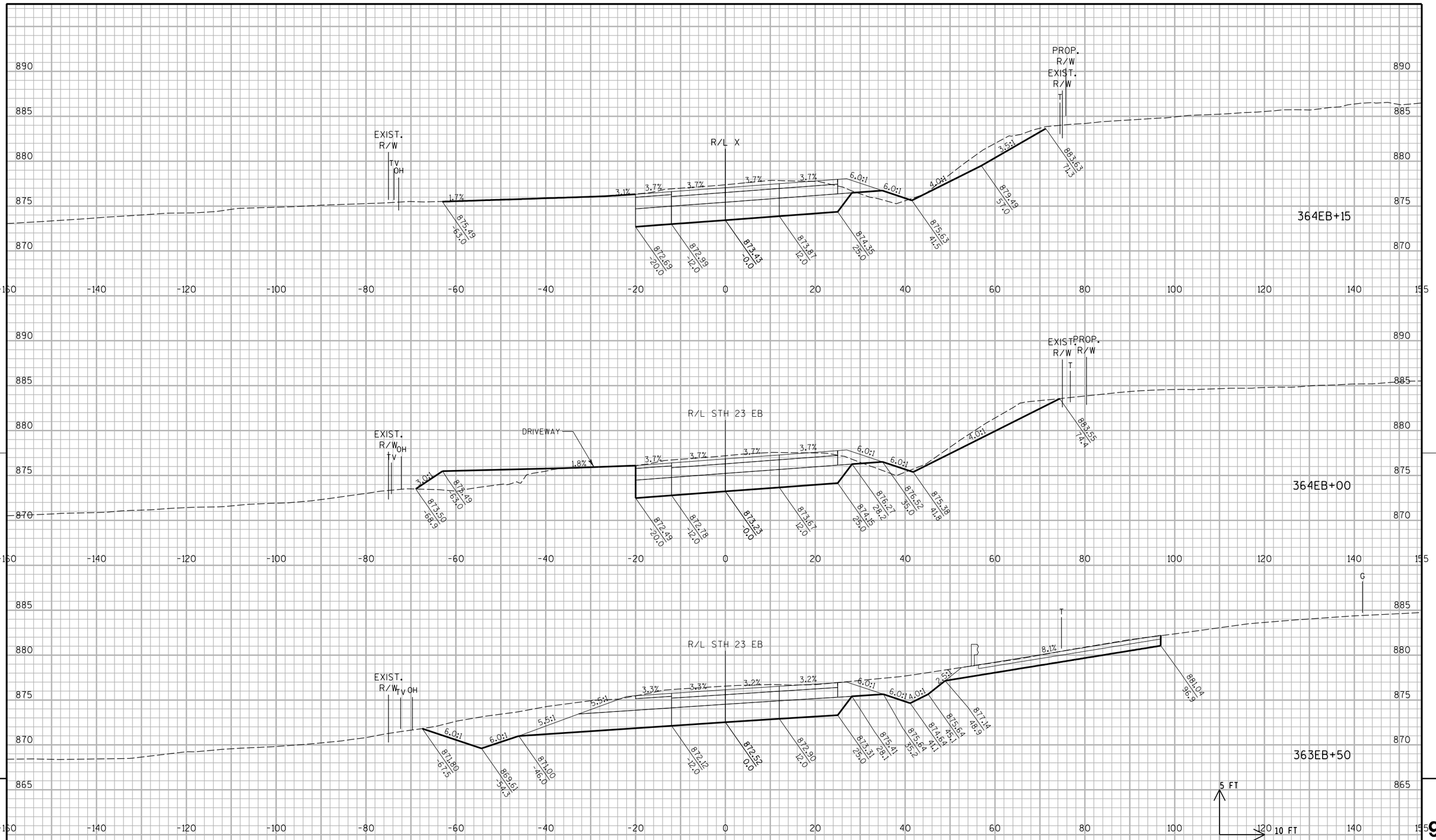


STA 361EB+00 TO 363EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 650	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

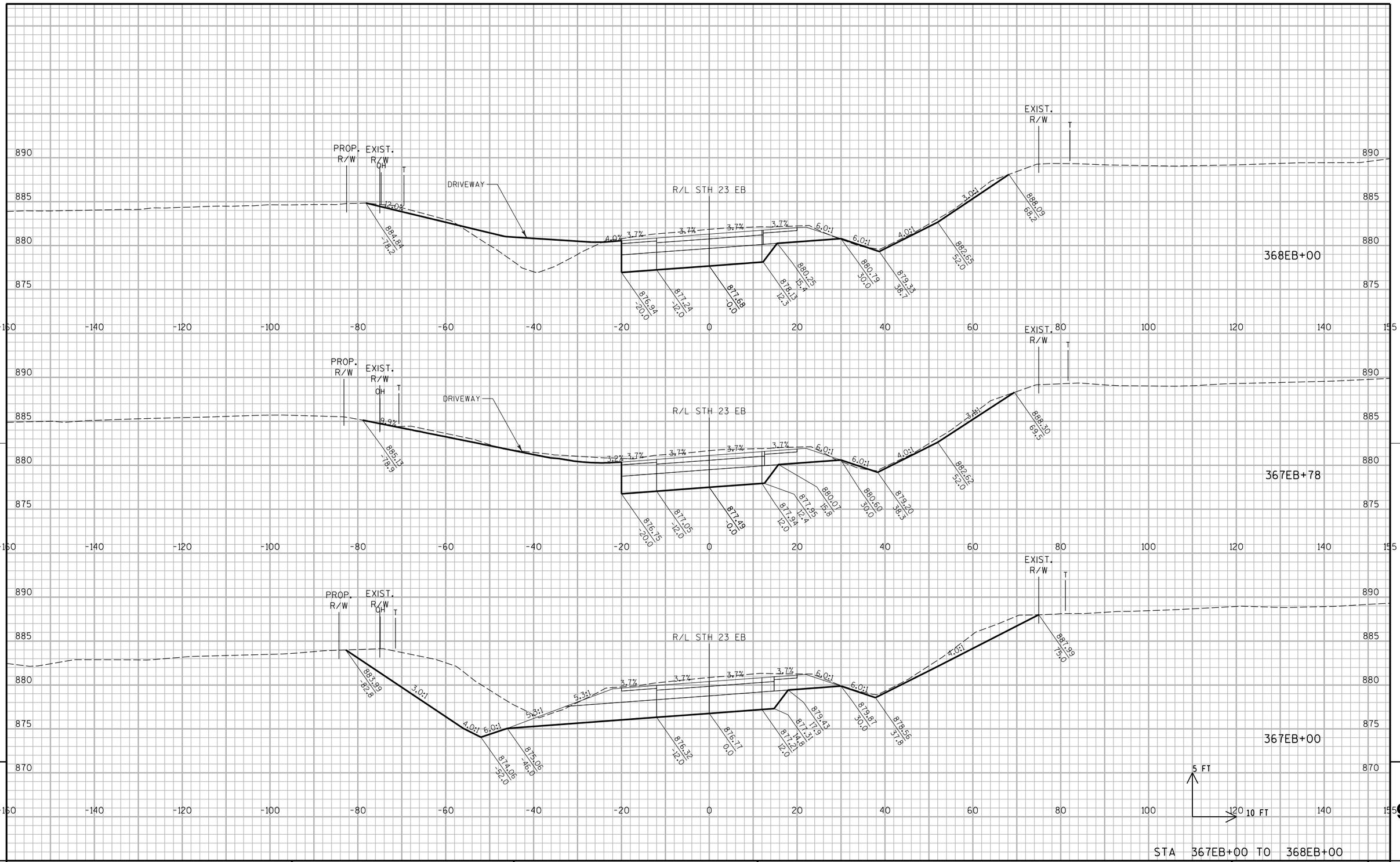


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 651	E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 652	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

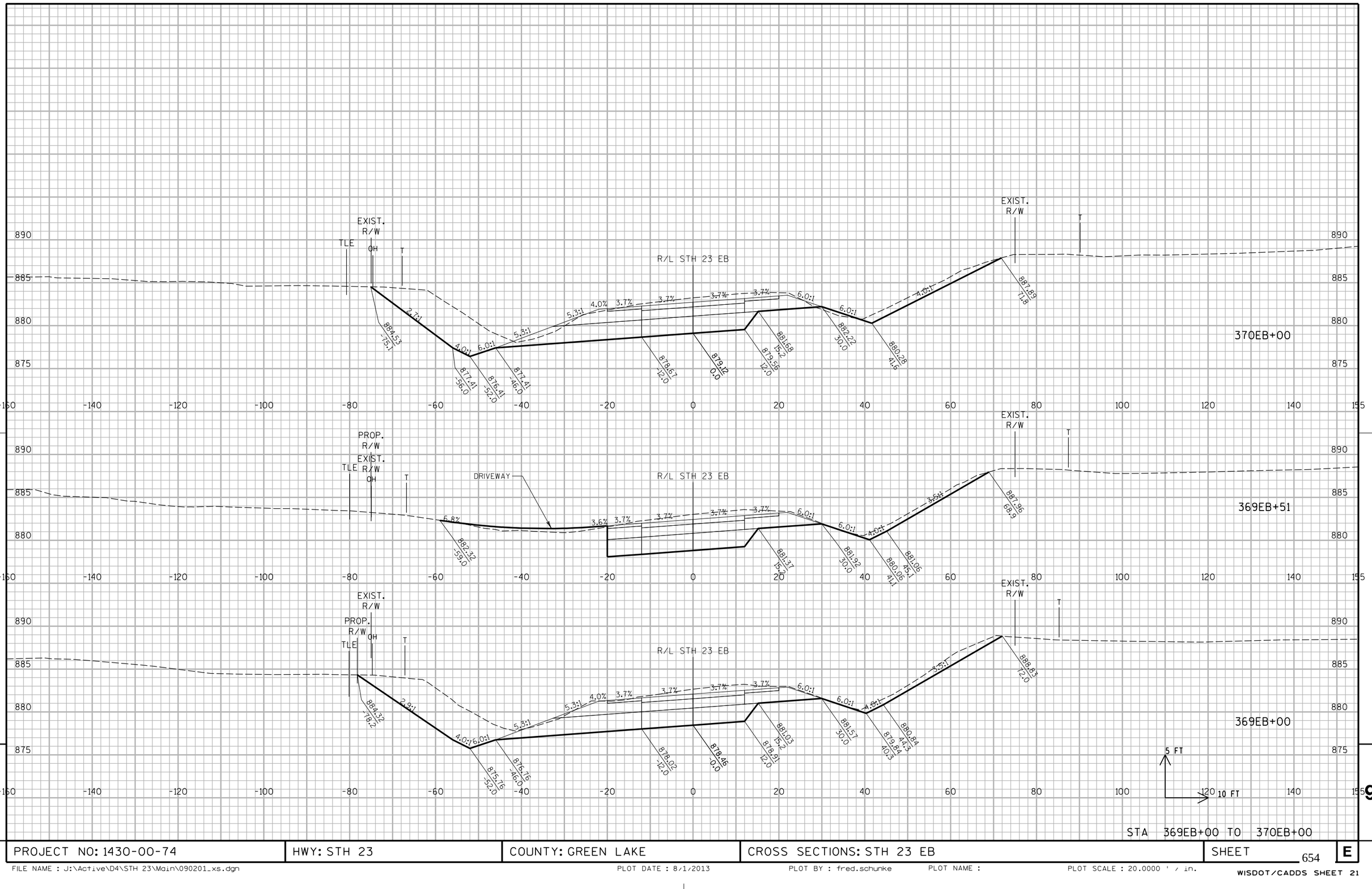
WISDOT/CADDS SHEET 21



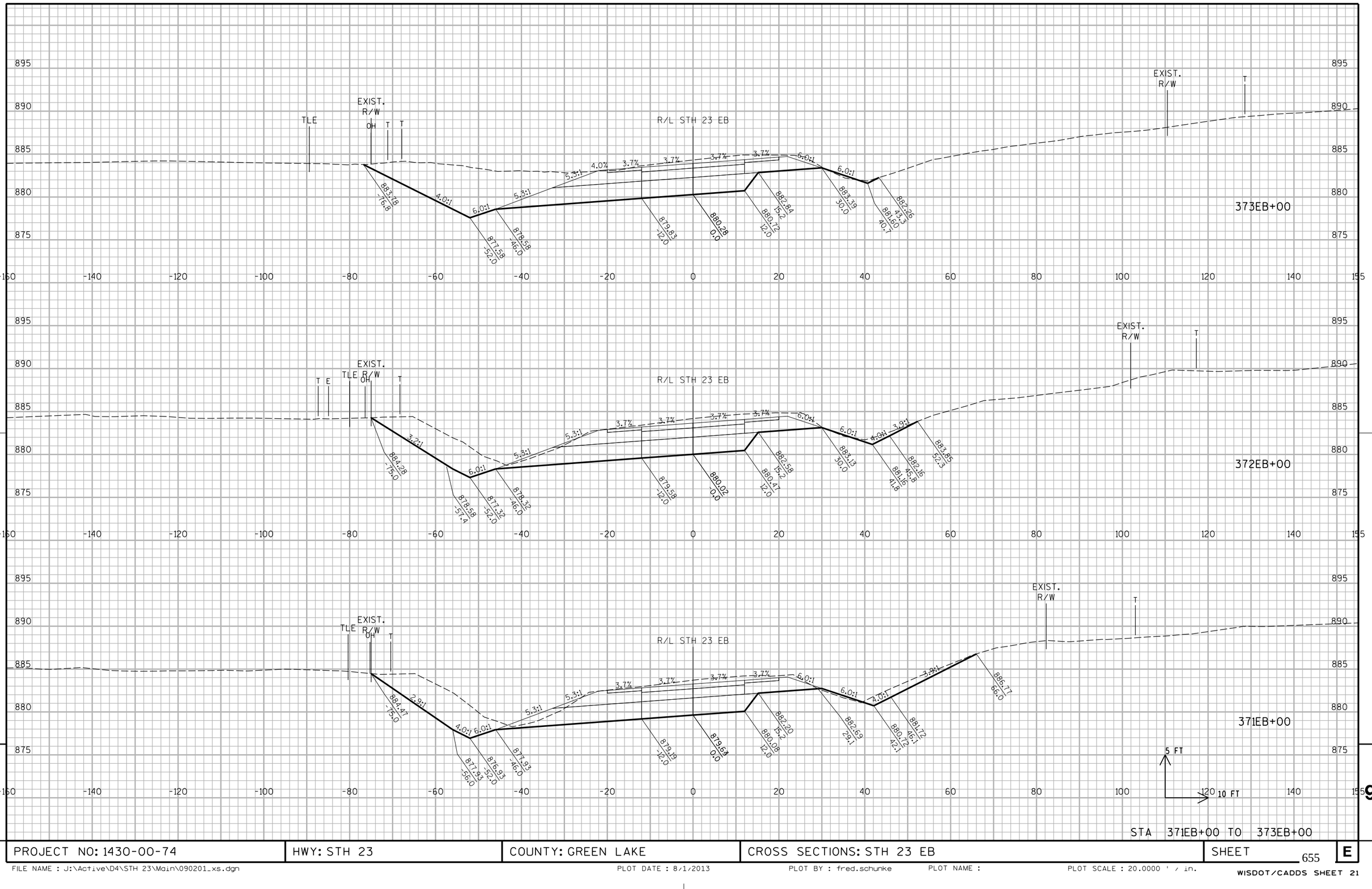
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 653	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 654	E

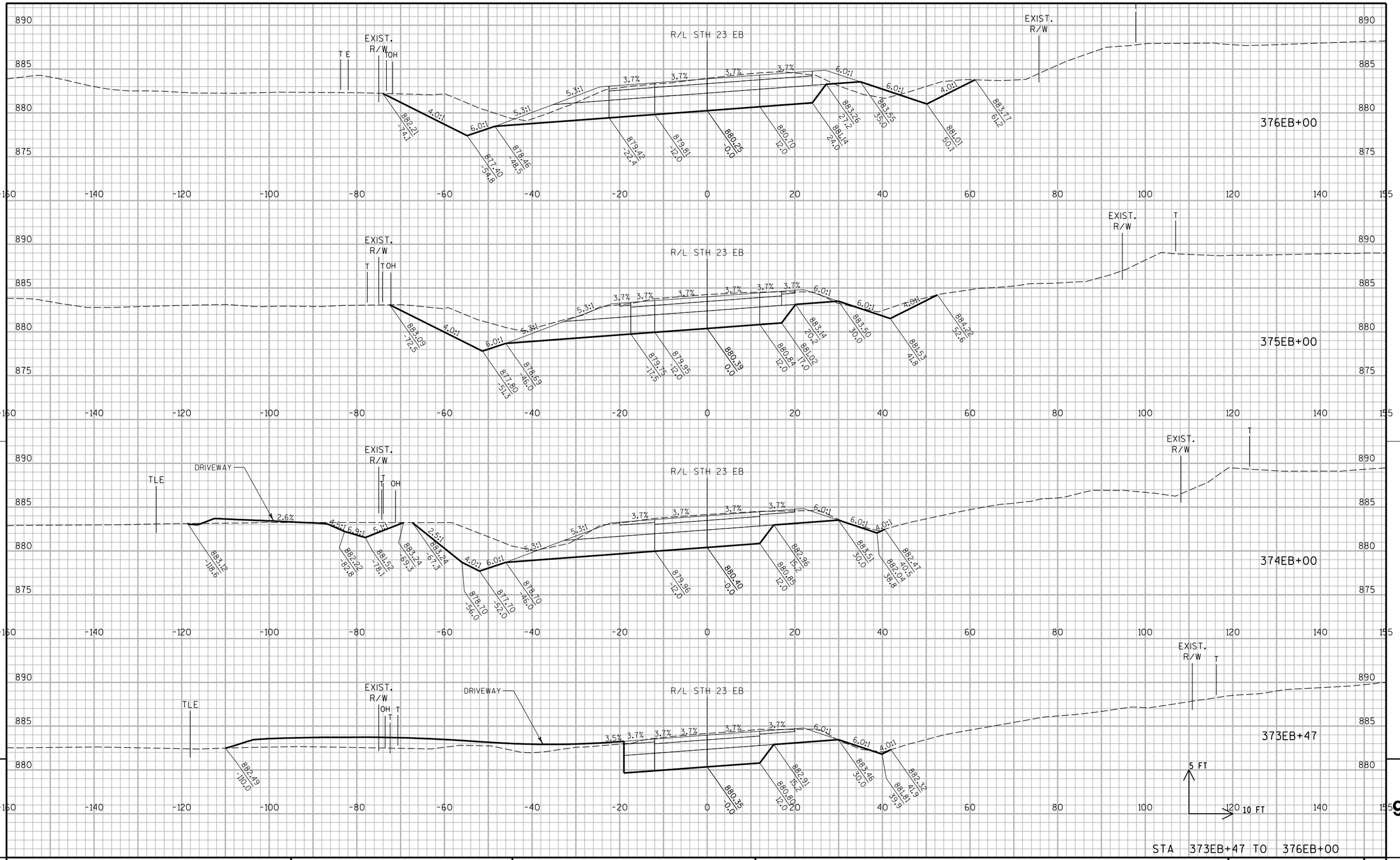


STA 371EB+00 TO 373EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 655	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

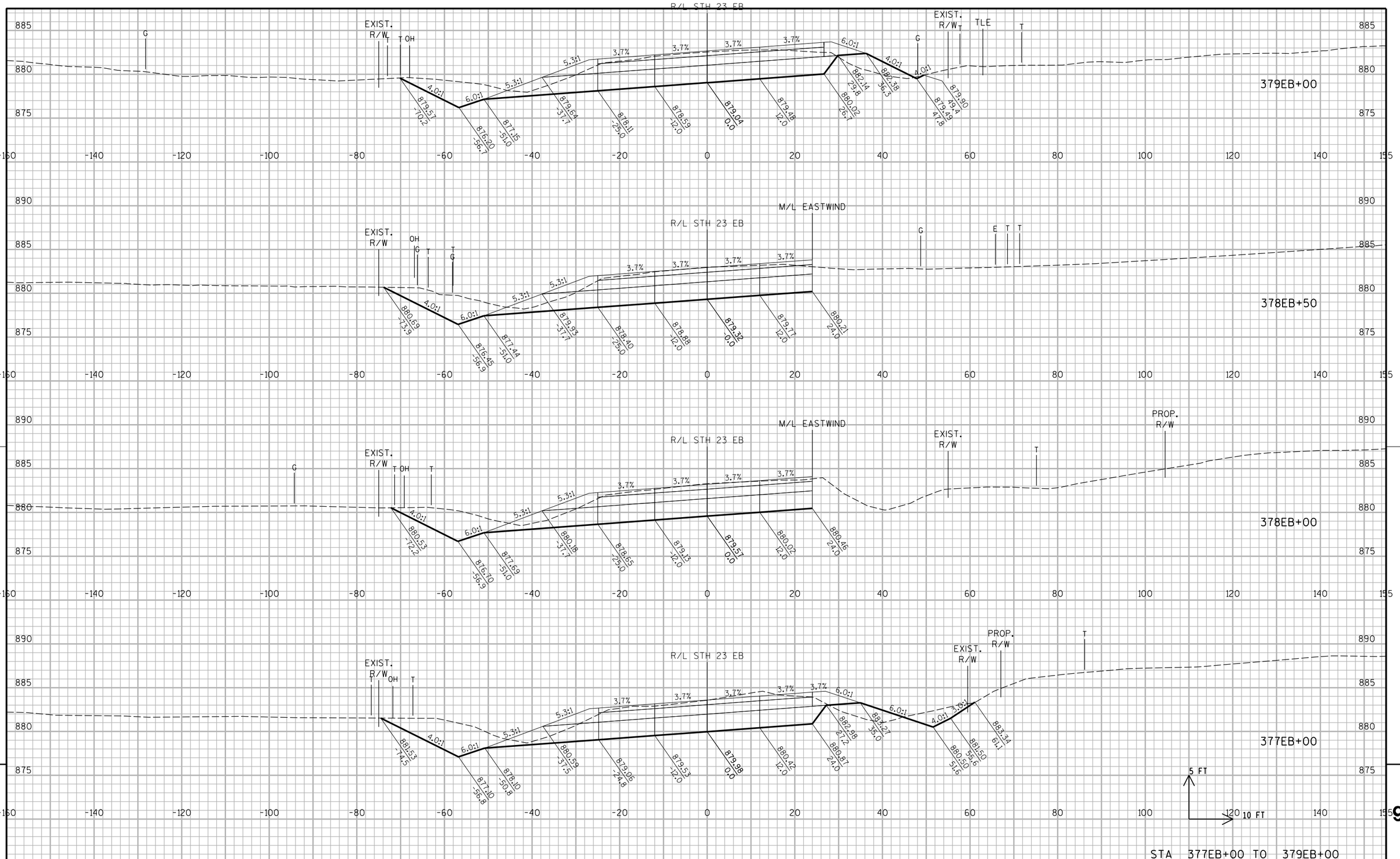
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 656	E

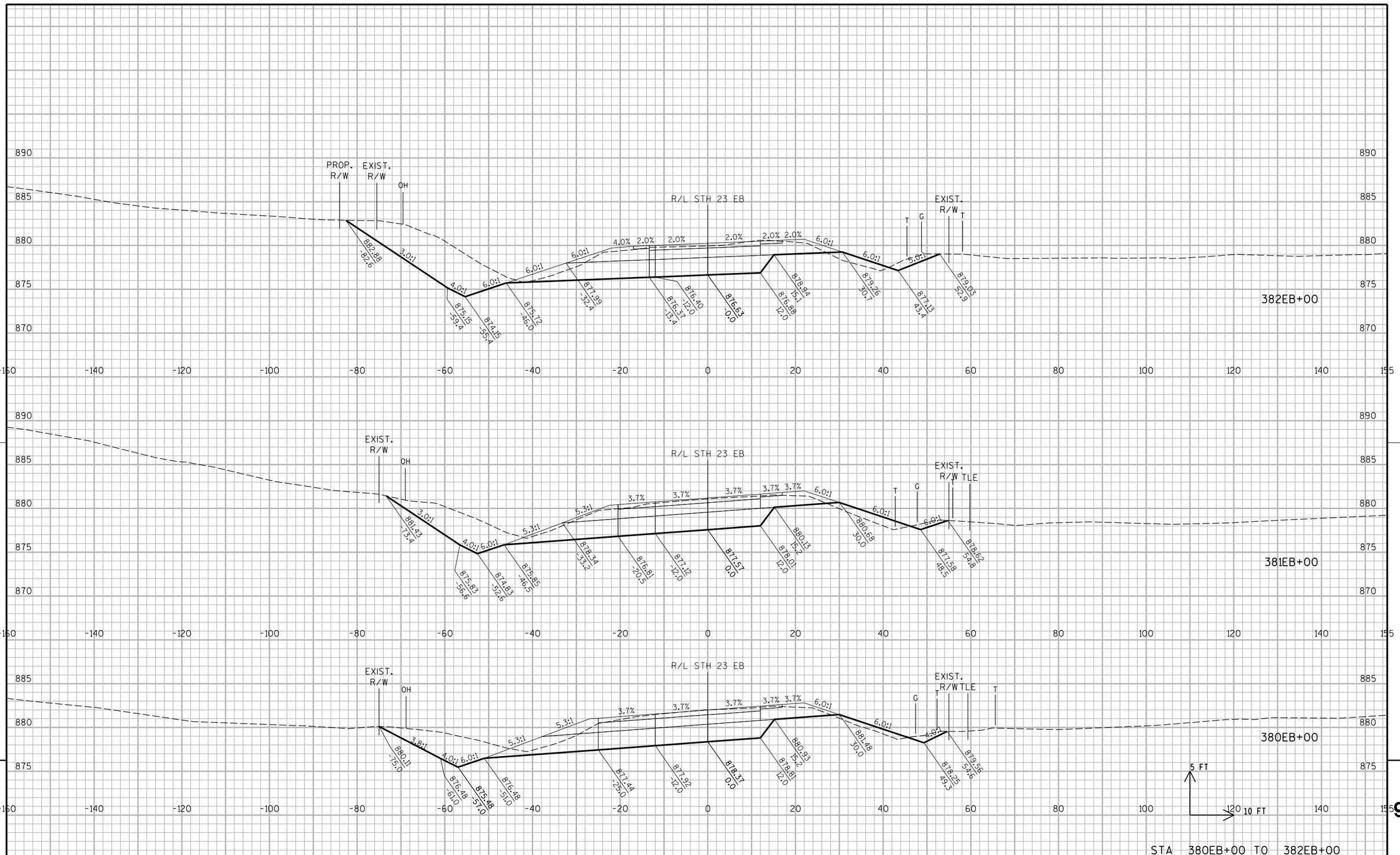
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 377EB+00 TO 379EB+00

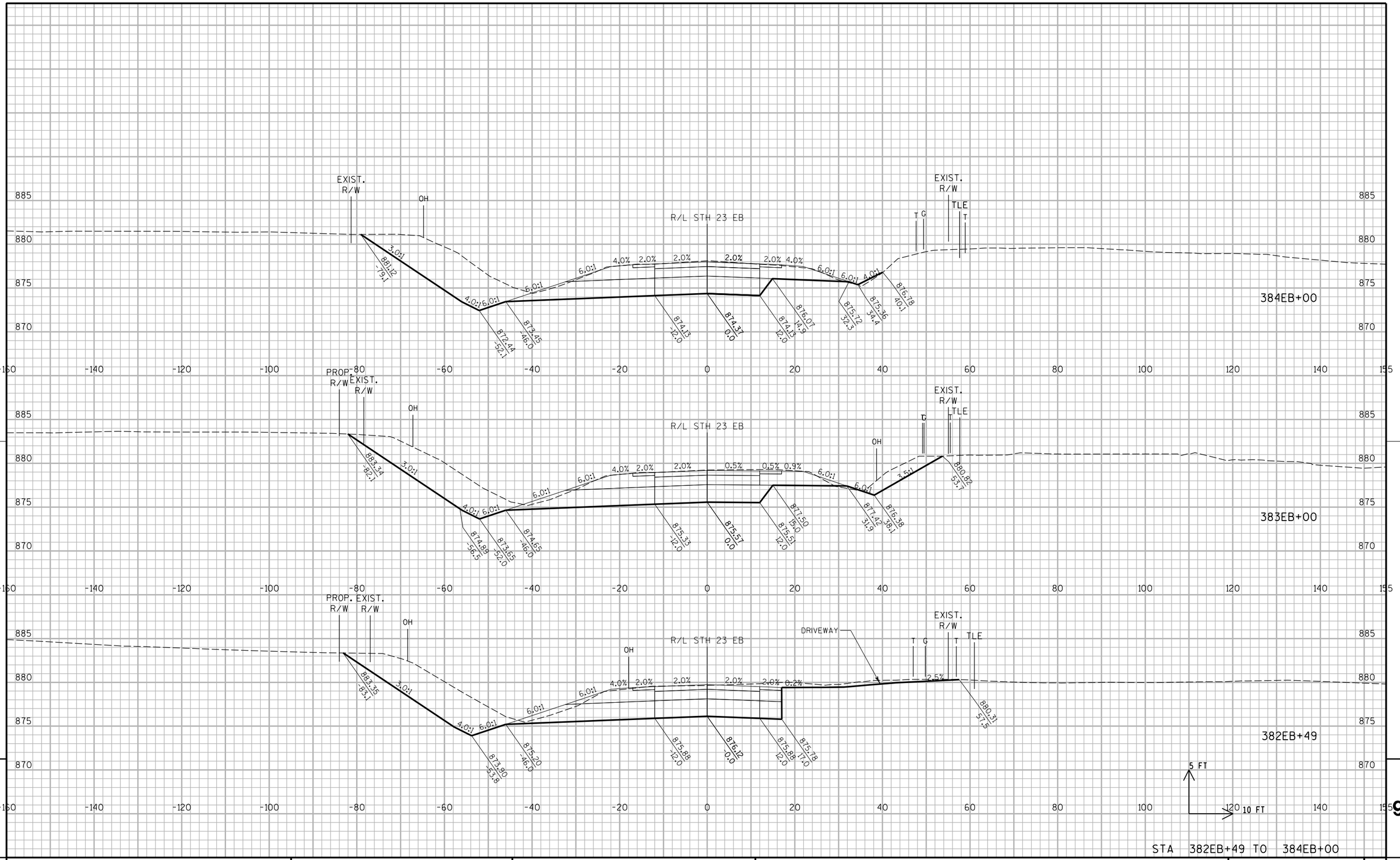
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 657	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 658	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

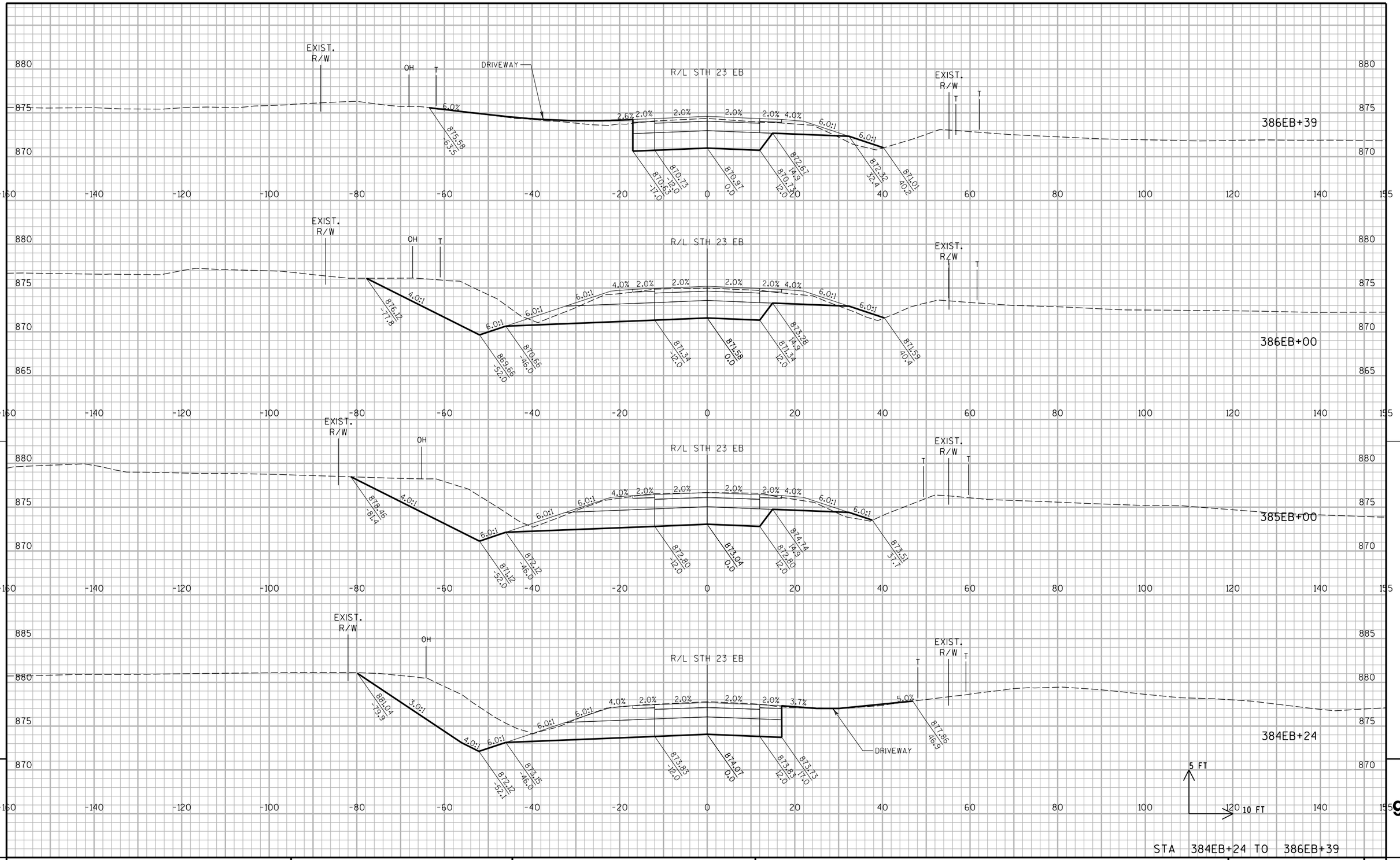


STA 382EB+49 TO 384EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 659	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

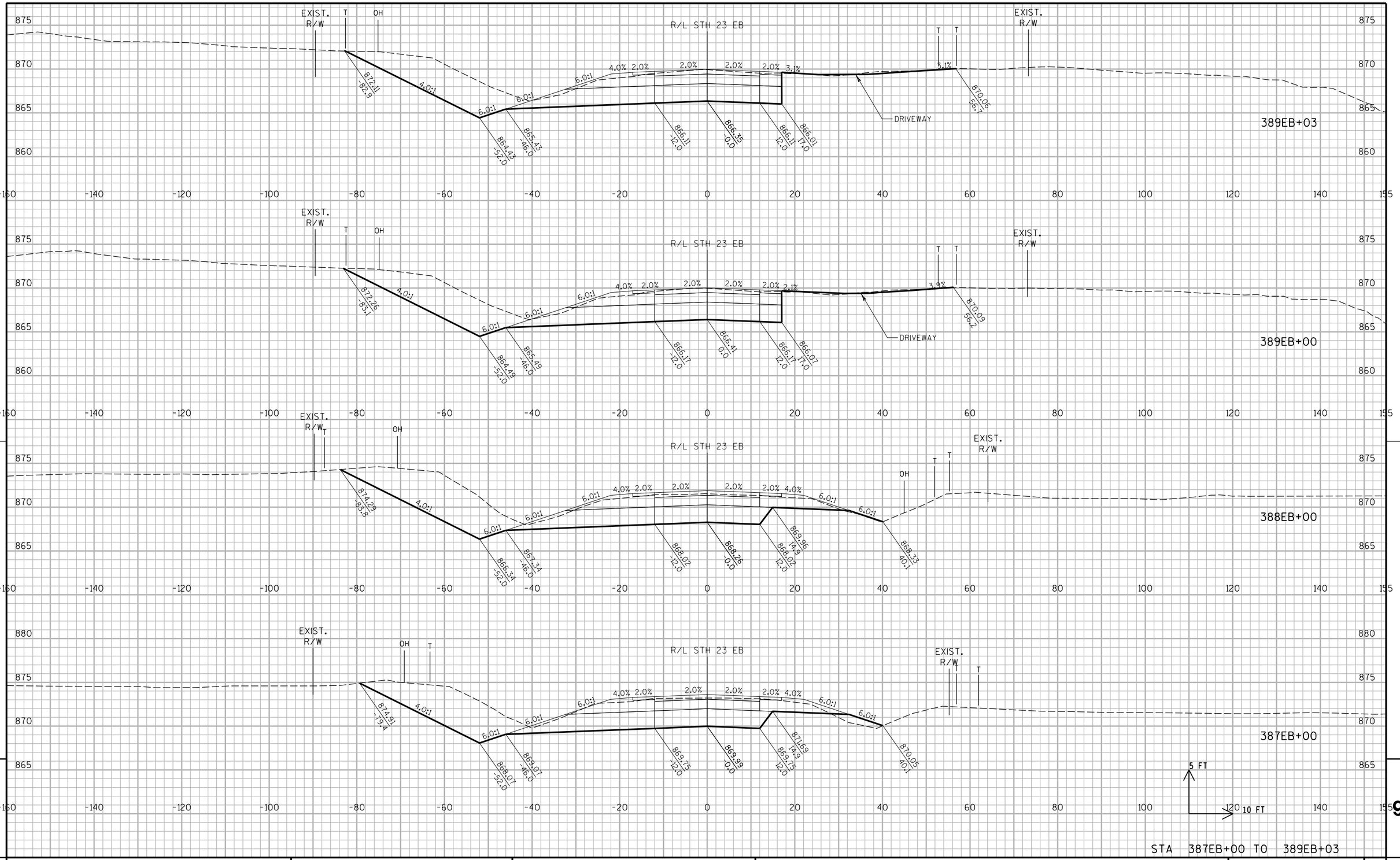
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 660	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

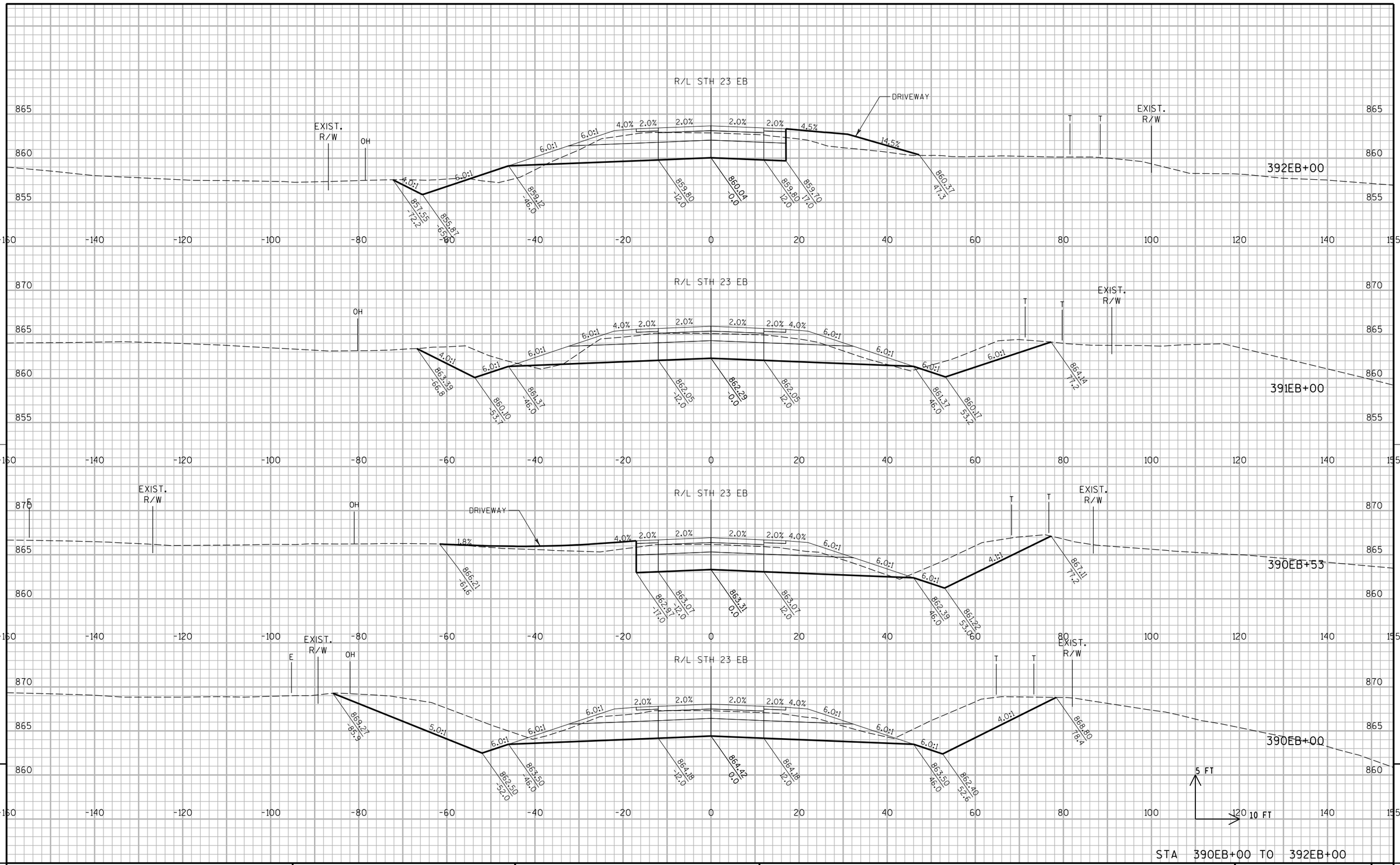


STA 387EB+00 TO 389EB+03

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 661	E

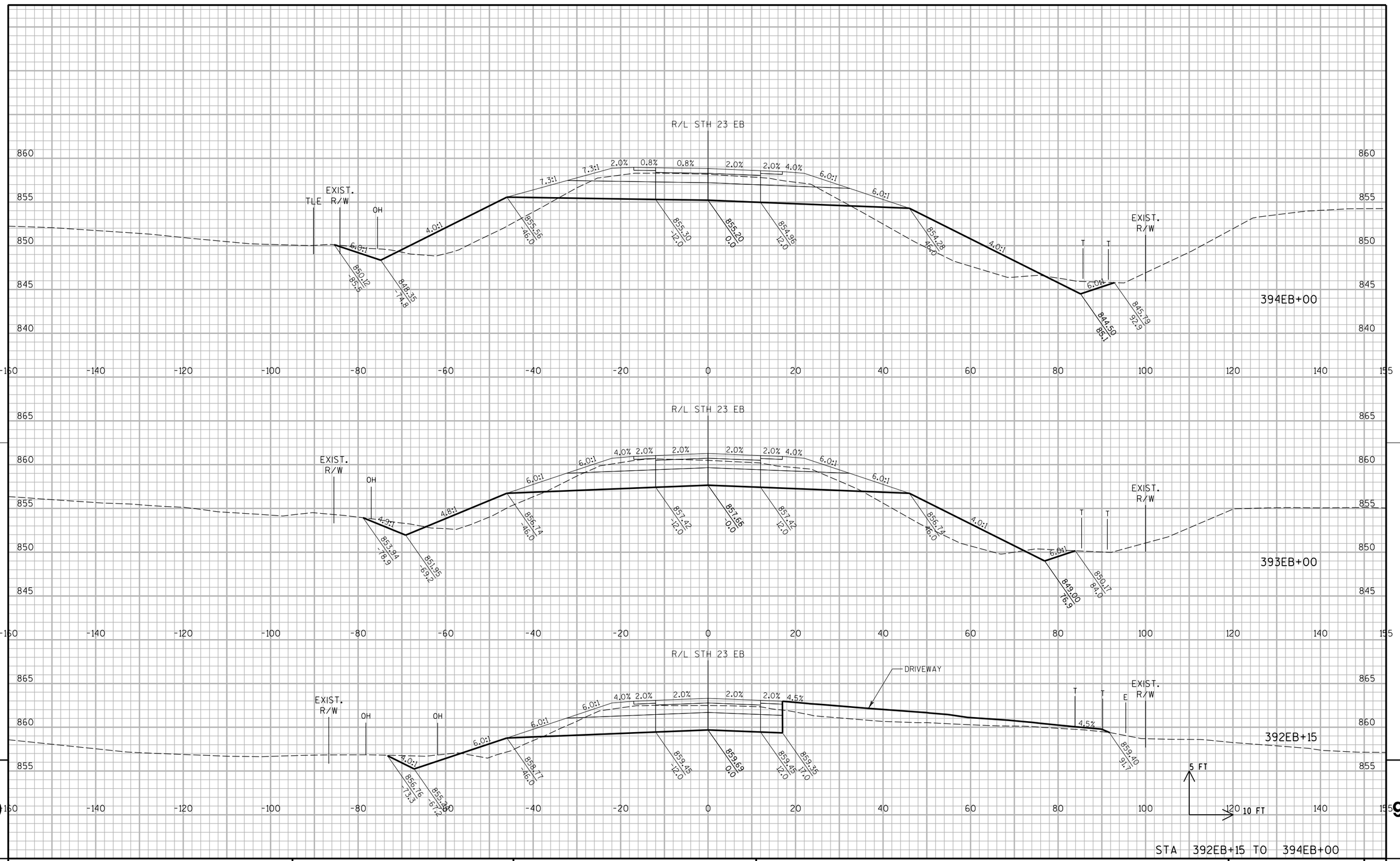
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 390EB+00 TO 392EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 662	E

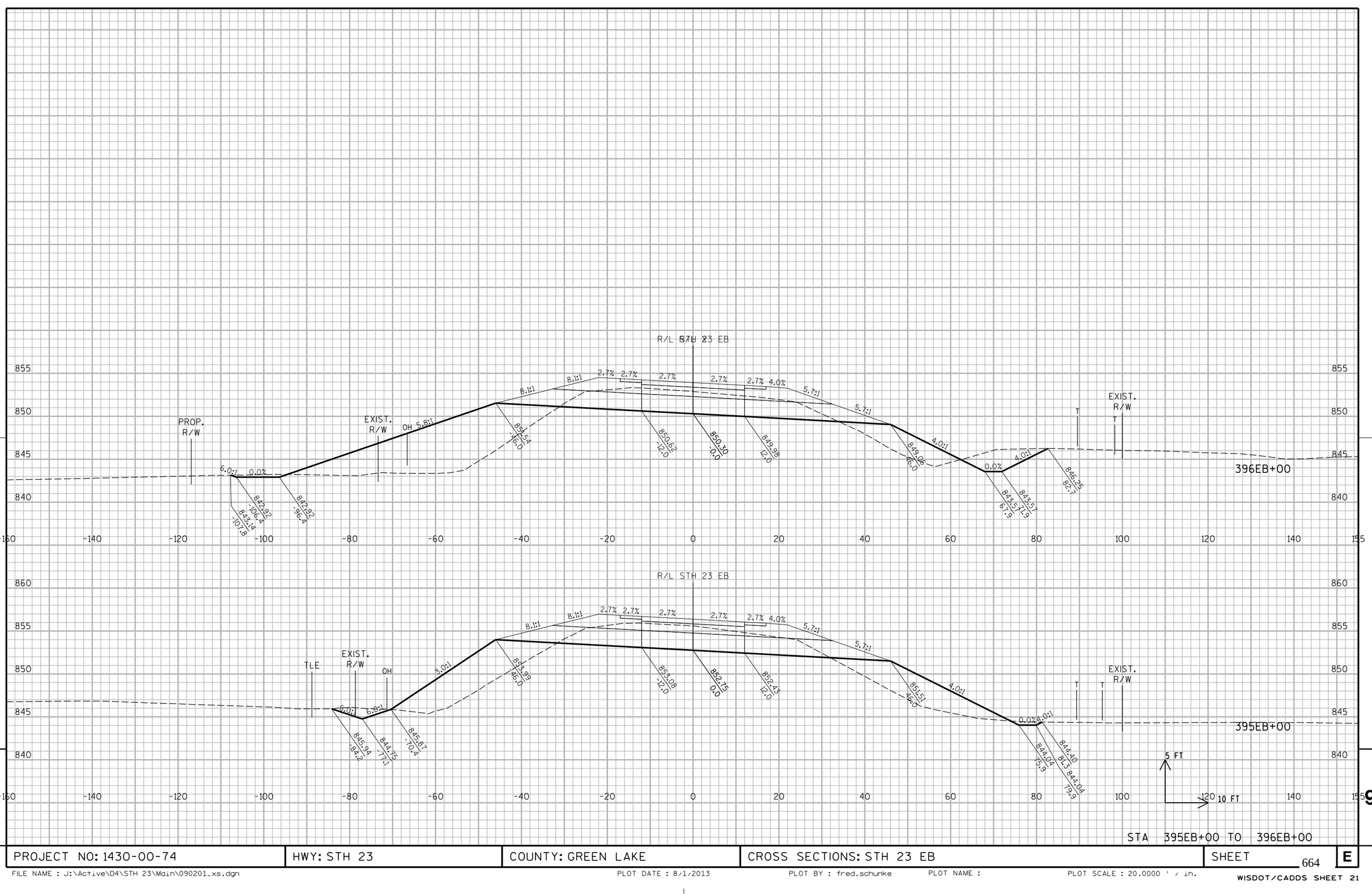


STA 392EB+15 TO 394EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 663	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



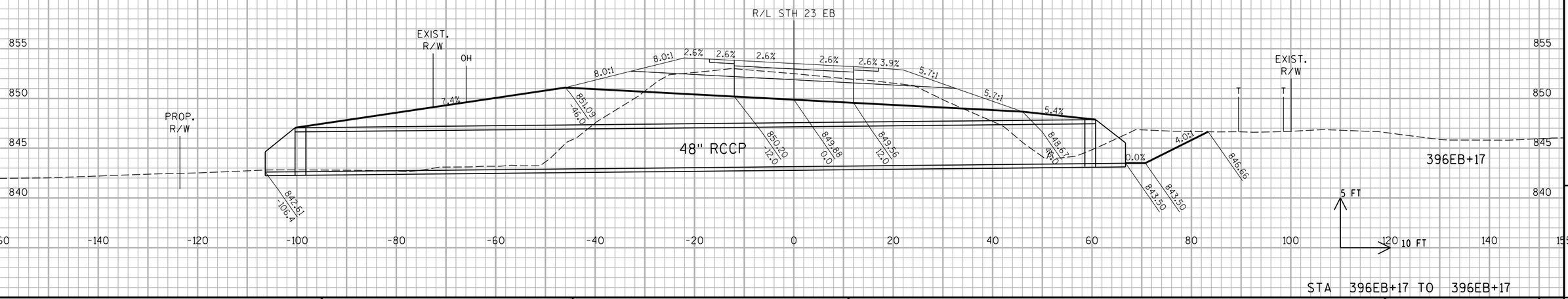
STA 395EB+00 TO 396EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 664	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 01°26'46" LHF
FOR INFORMATION PURPOSES ONLY



STA 396EB+17 TO 396EB+17

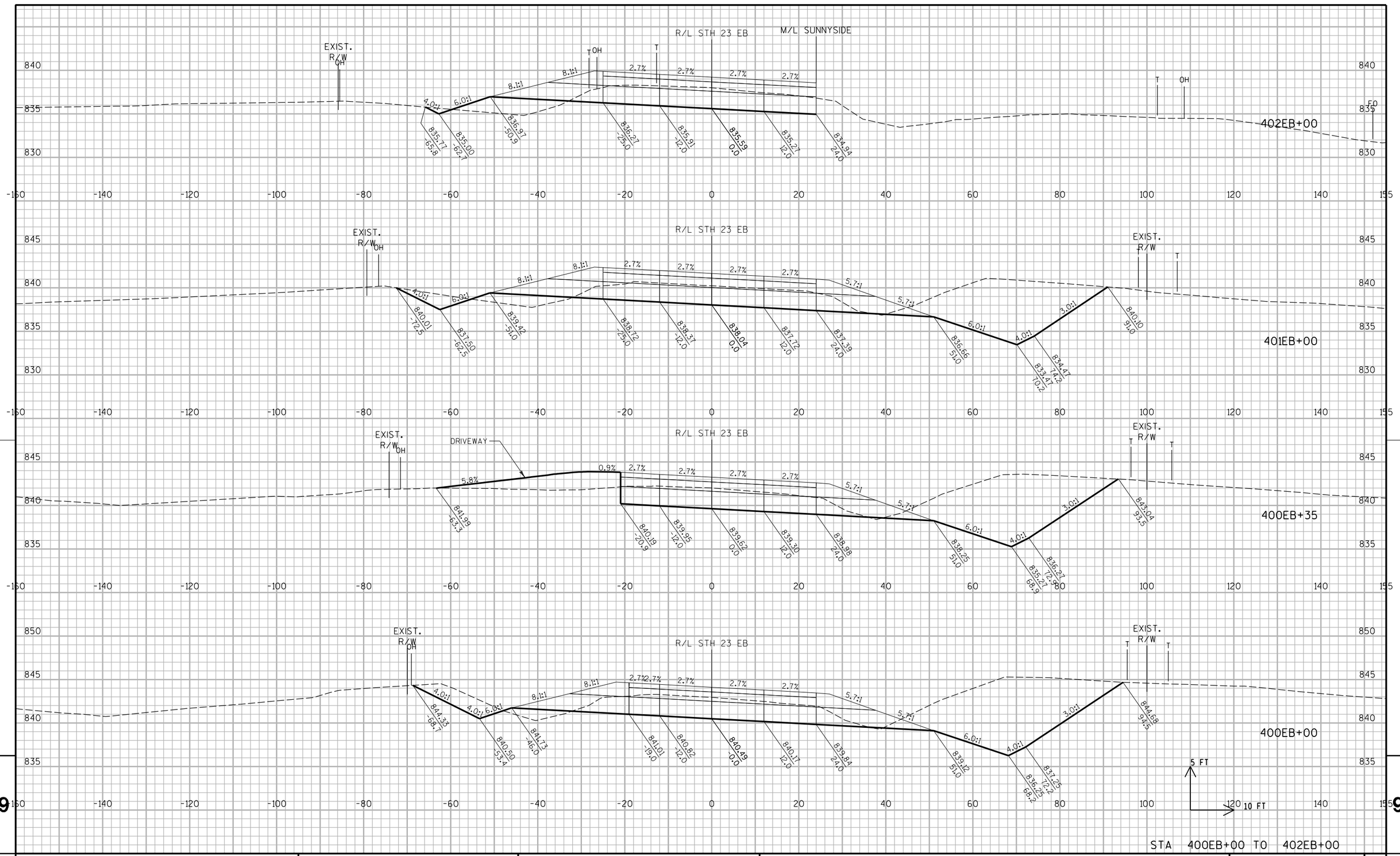
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 665	E

STA 397EB+00 TO 399EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 666	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 400EB+00 TO 402EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 667	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 668	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 405EB+00 TO 407EB+00

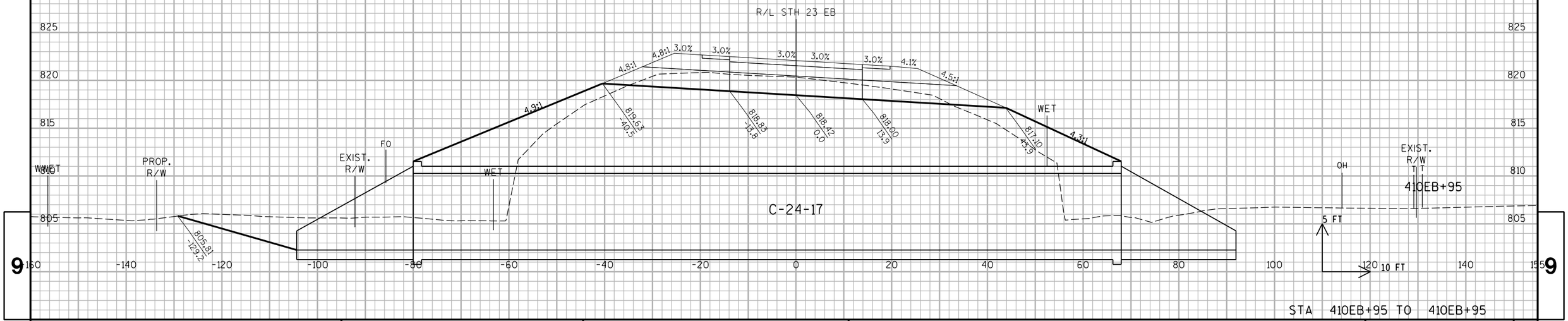
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 669	E

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 670	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 30°00'00" RHF
FOR INFORMATION PURPOSES ONLY

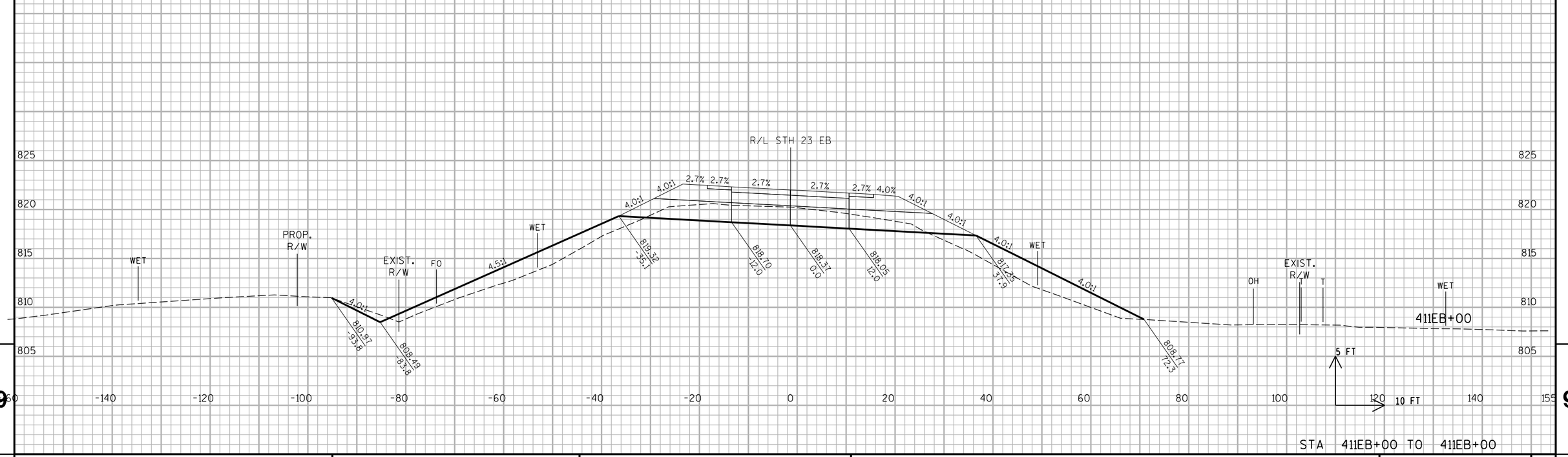


STA 410EB+95 TO 410EB+95

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 671	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

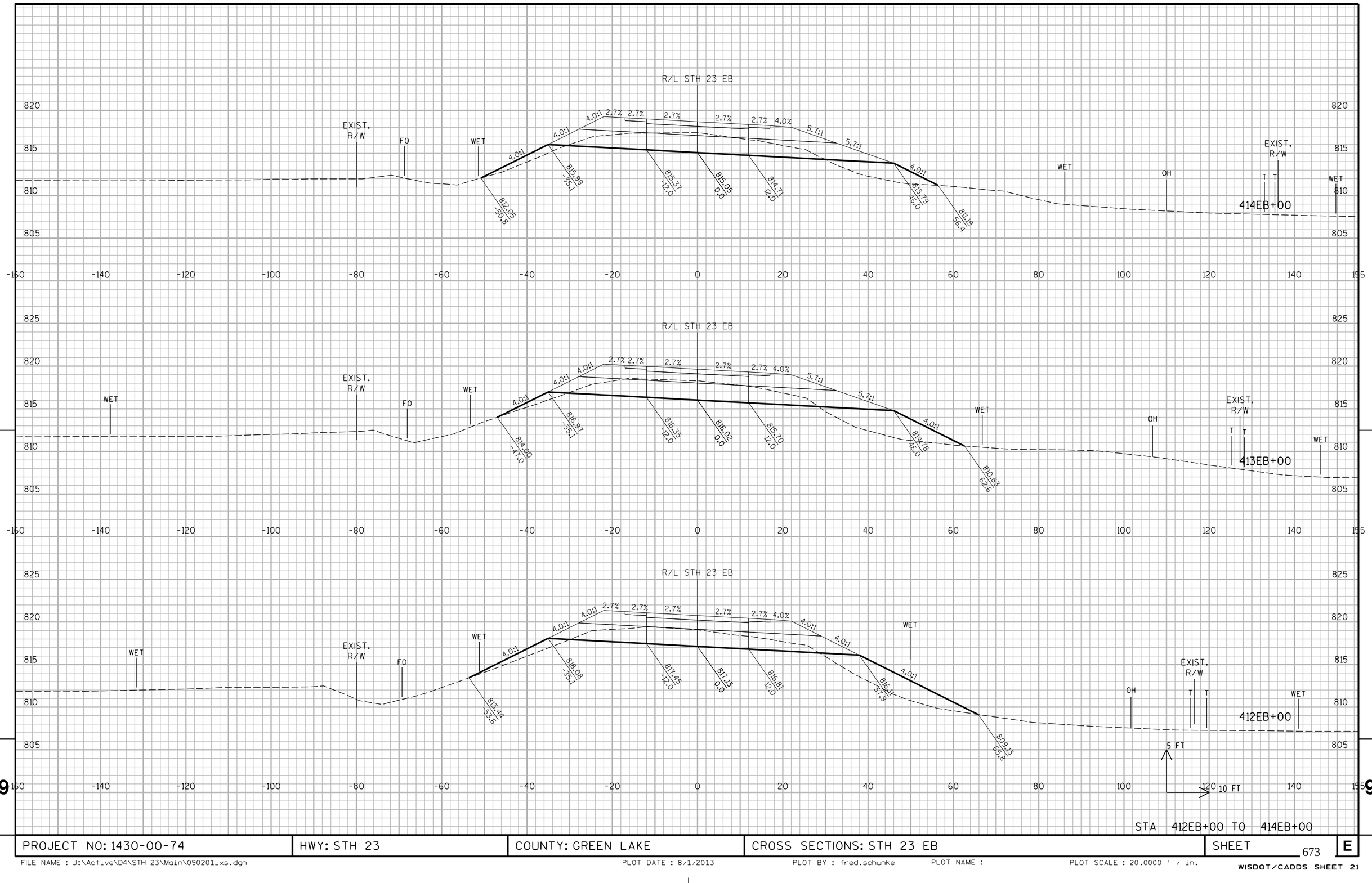


STA 411EB+00 TO 411EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 672	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 412EB+00 TO 414EB+00

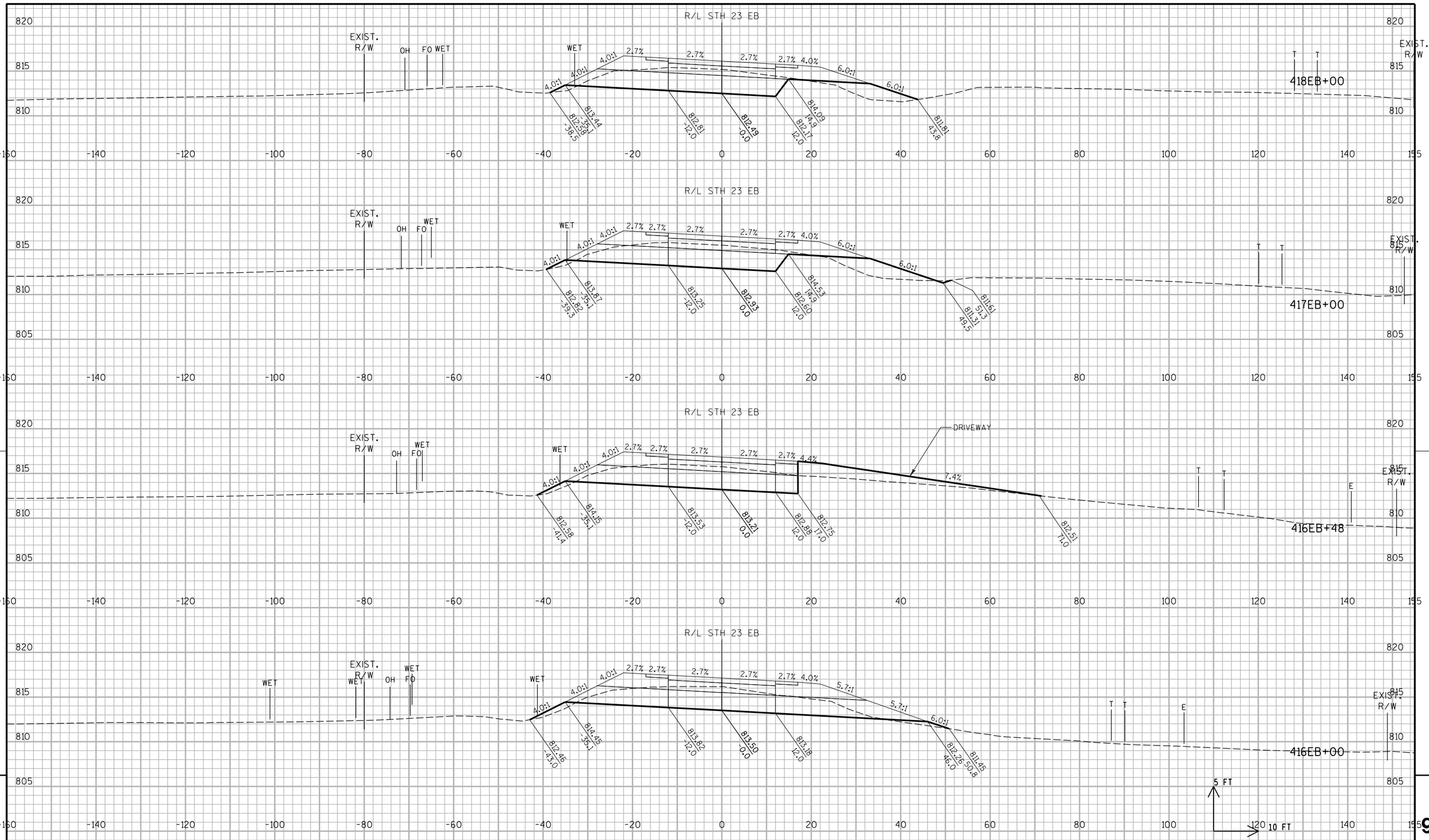
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 673	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 414EB+22 TO 415EB+58

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 674	E

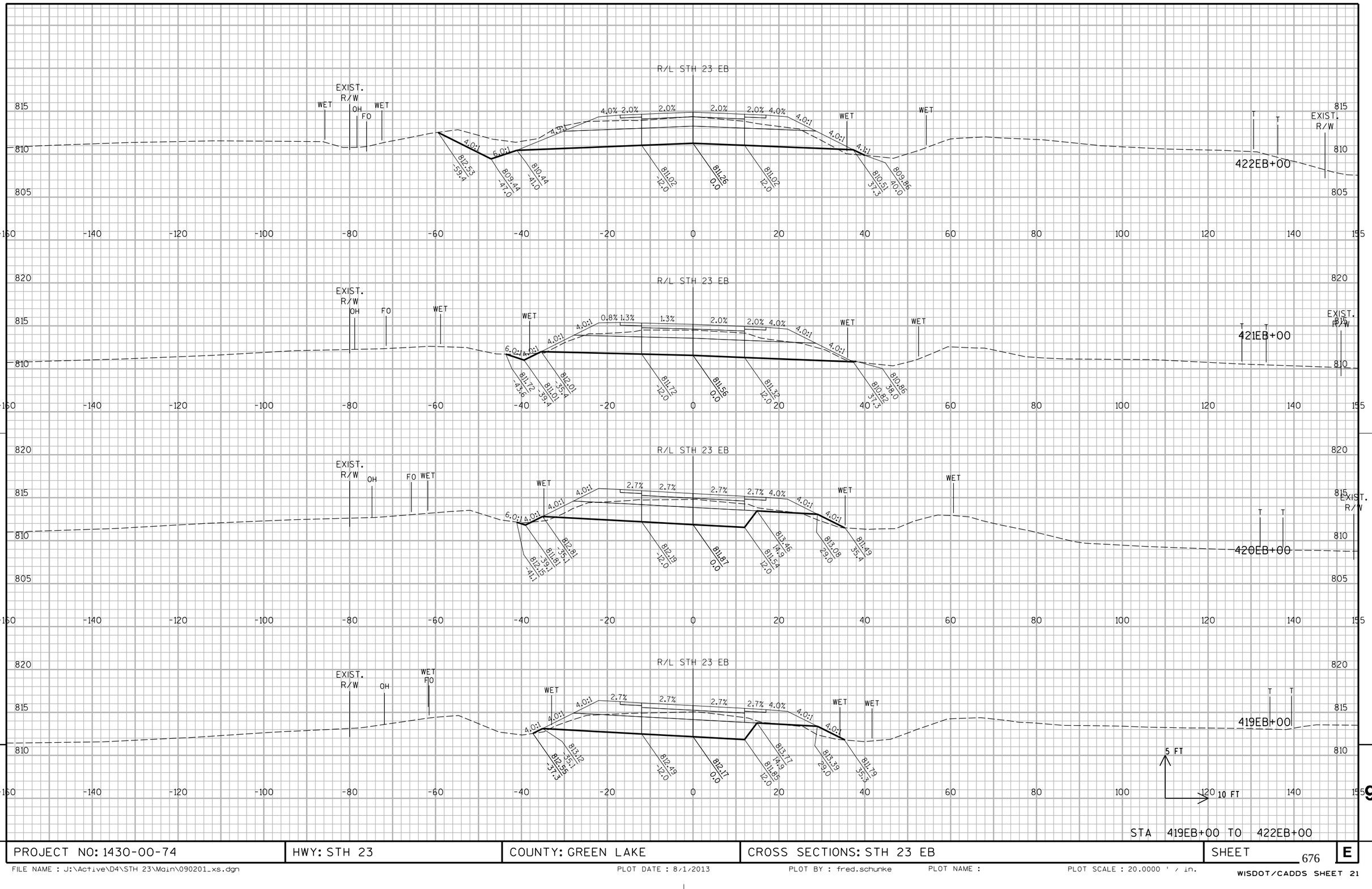


STA 416EB+00 TO 418EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 675	E

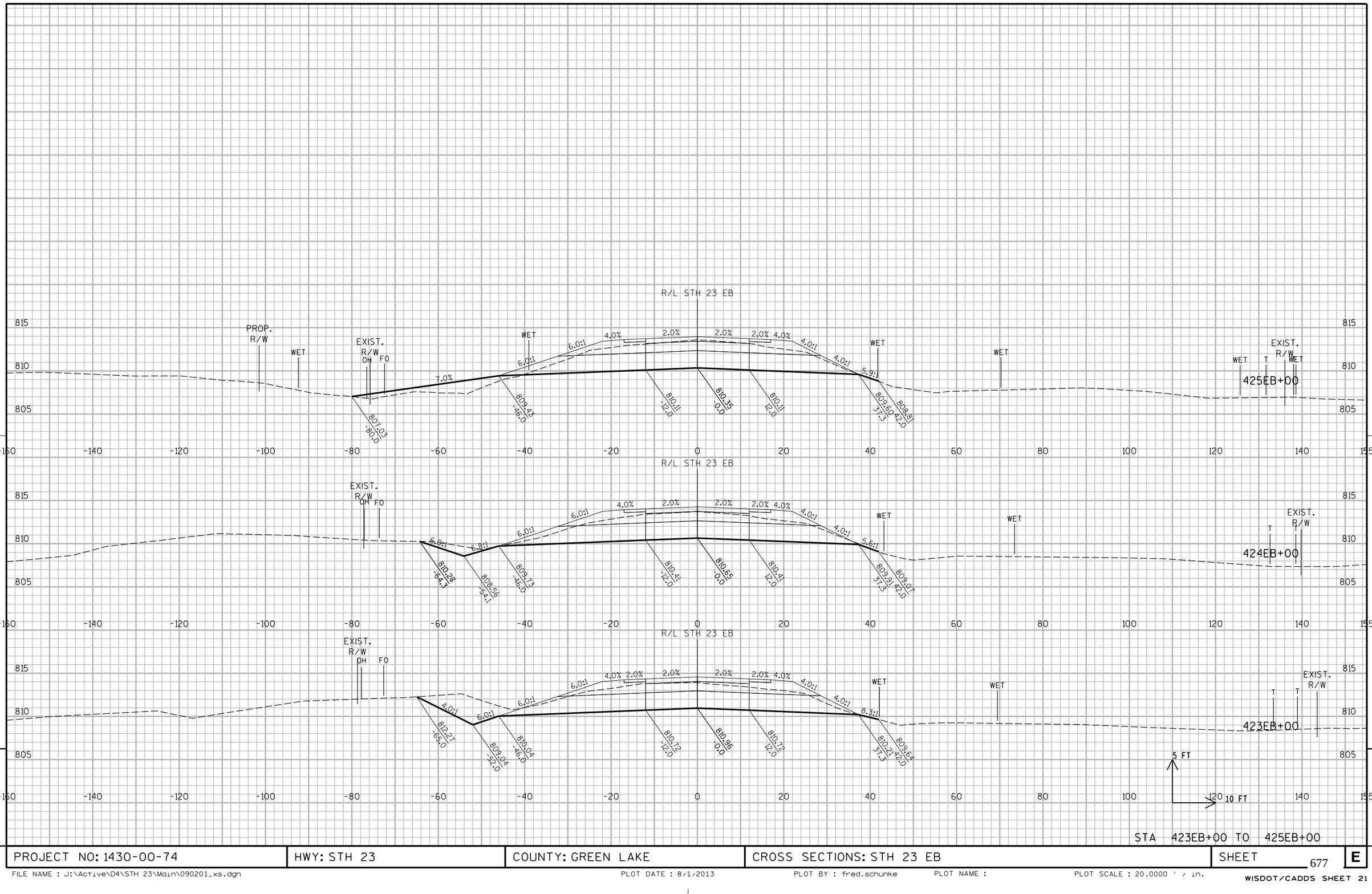
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 419EB+00 TO 422EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 676	E



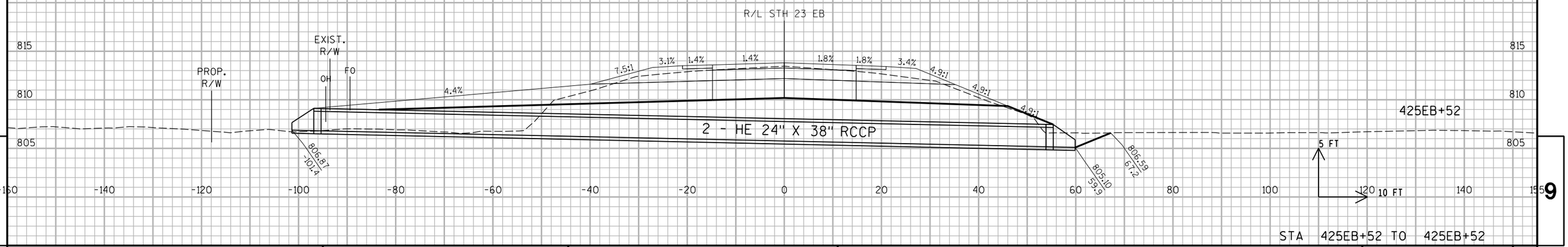
STA 423EB+00 TO 425EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 677	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 35°48'16" RHF
FOR INFORMATION PURPOSES ONLY

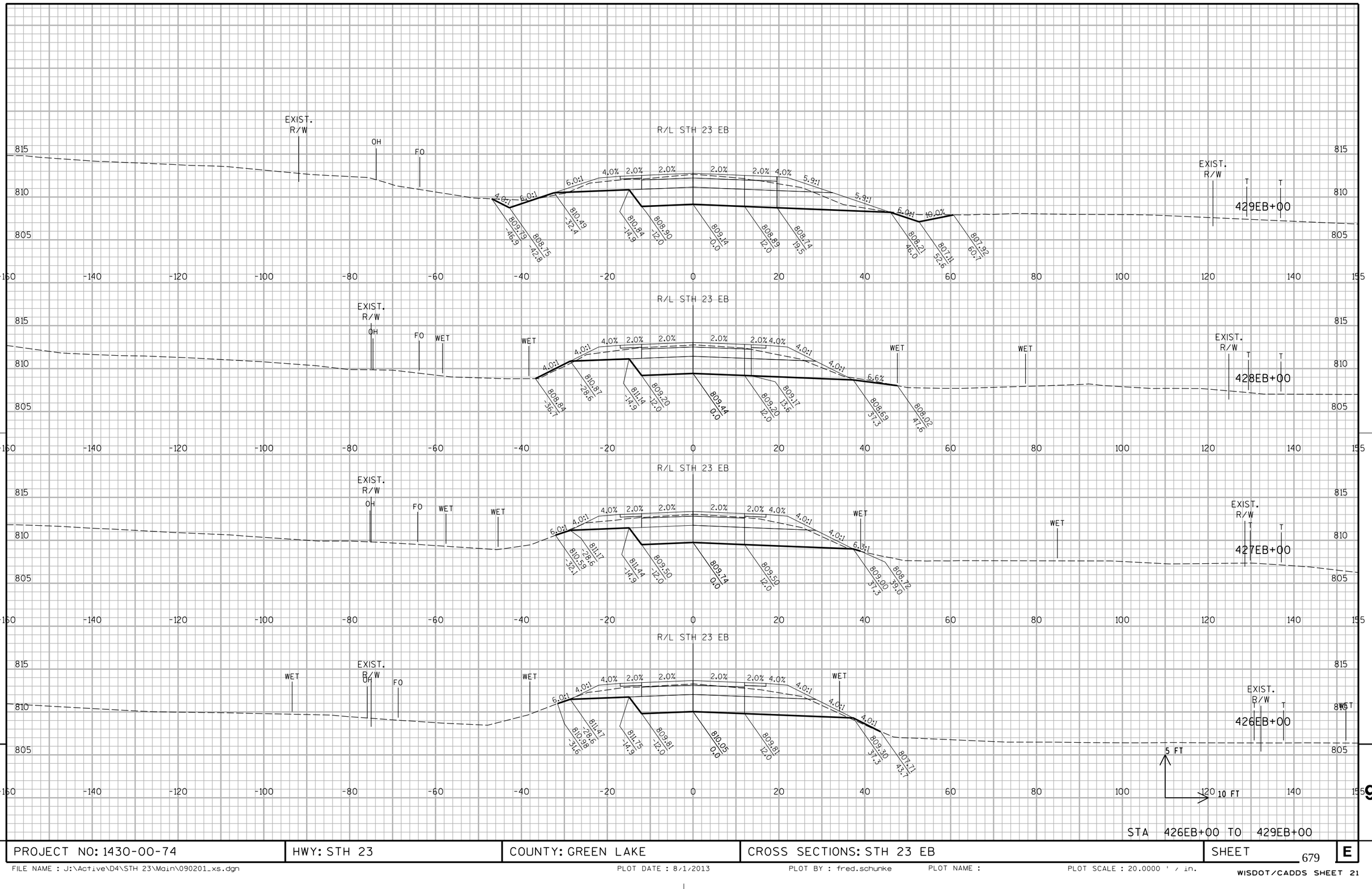


STA 425EB+52 TO 425EB+52

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 678	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 426EB+00 TO 429EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 679	E

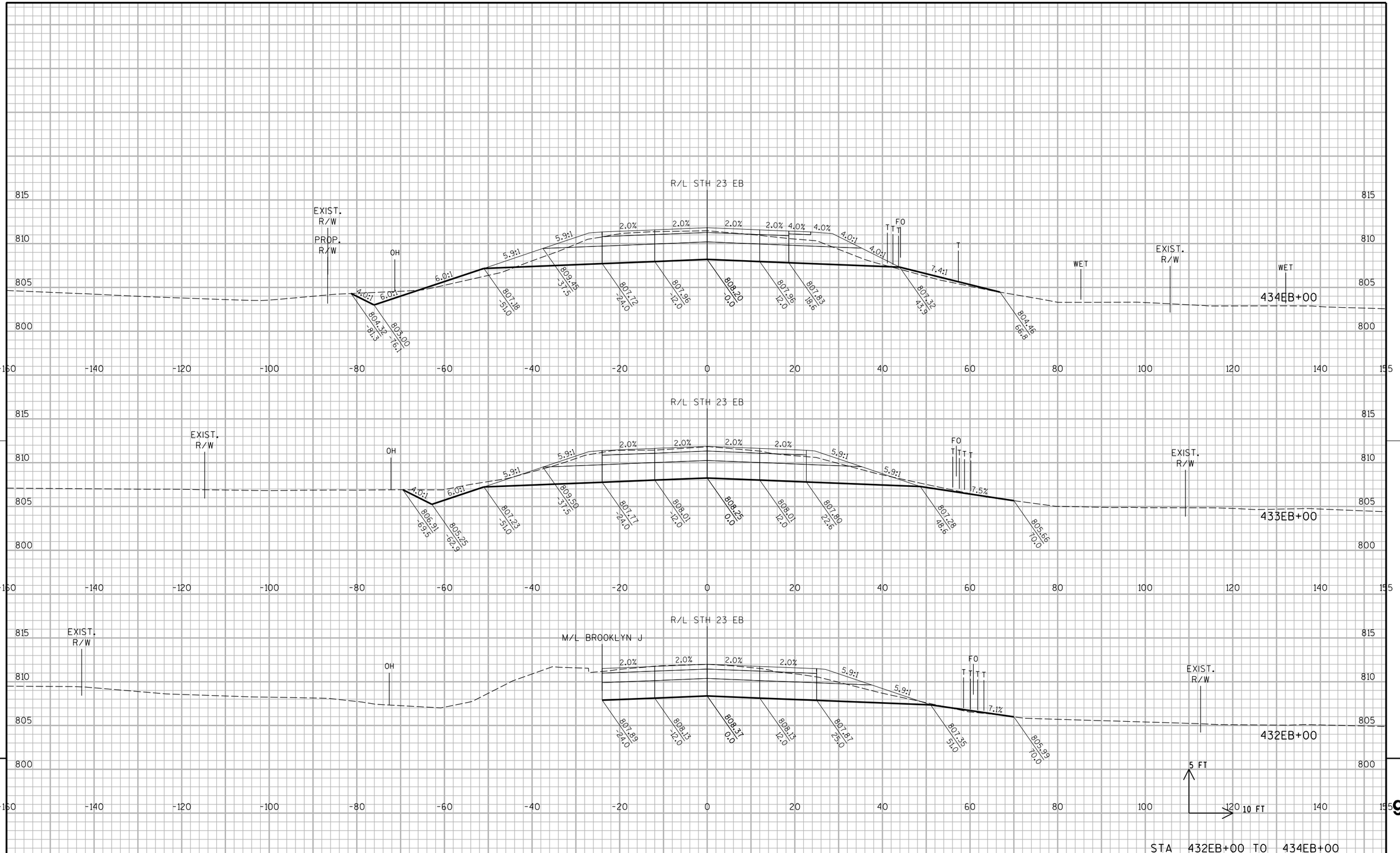
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 680	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



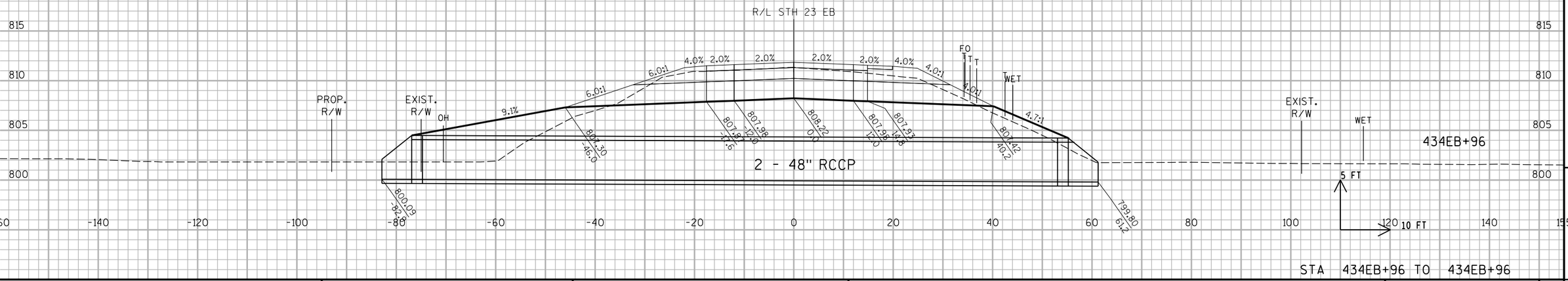
STA 432EB+00 TO 434EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 681	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 01°18'01" LHF
FOR INFORMATION PURPOSES ONLY

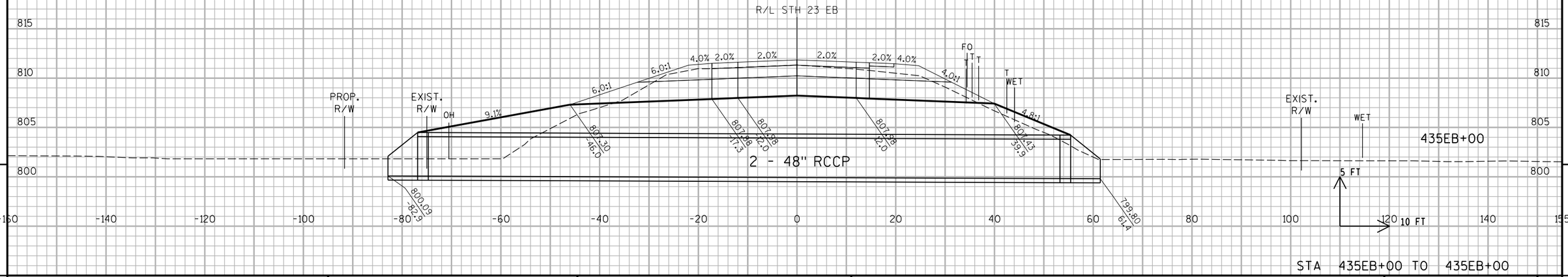


STA 434EB+96 TO 434EB+96

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 682	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 435EB+00 TO 435EB+00

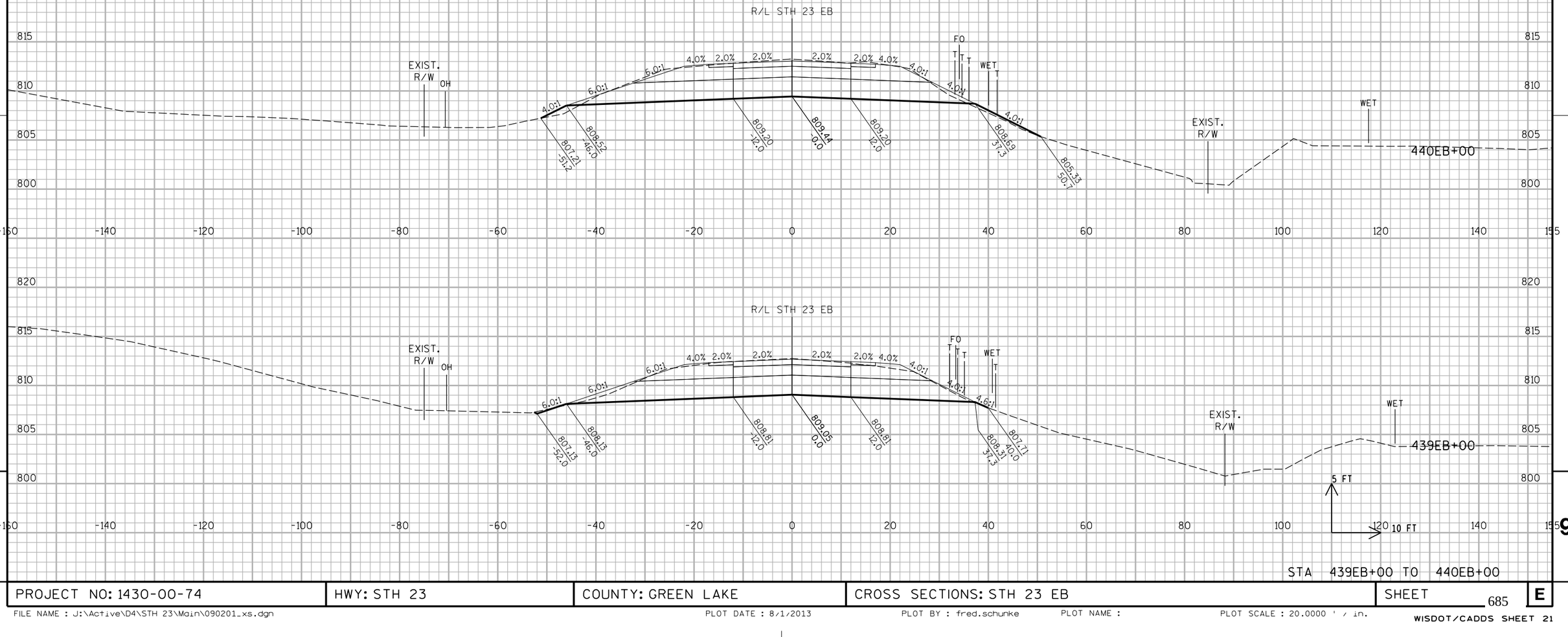
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 683	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 436EB+00 TO 438EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 684	E



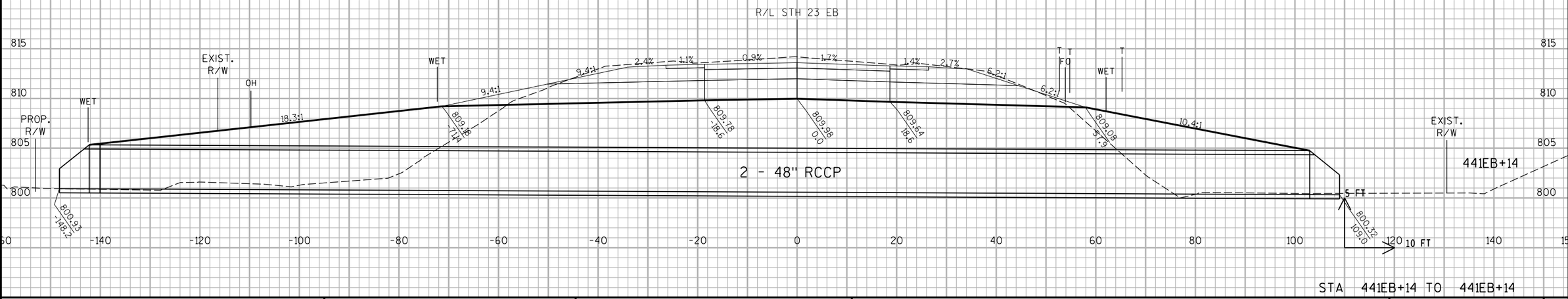
STA 439EB+00 TO 440EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 685	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

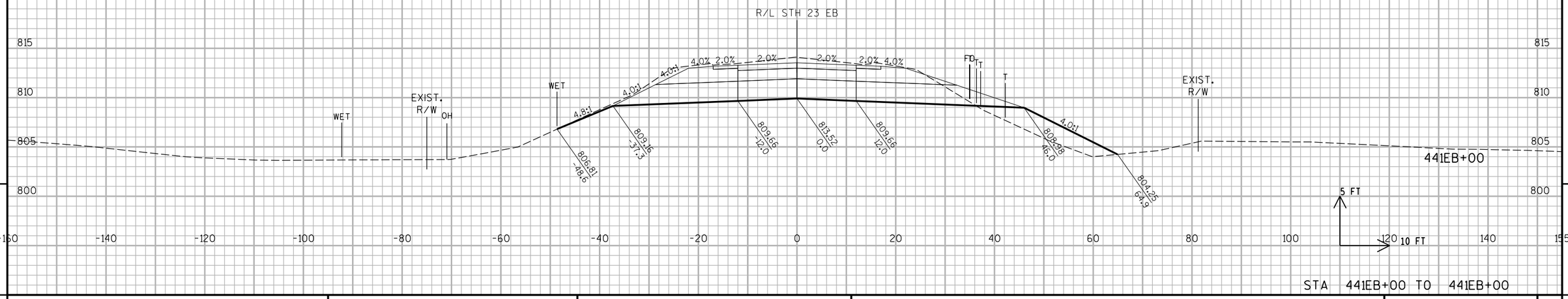
WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 49°53'09" LHF
FOR INFORMATION PURPOSES ONLY



STA 441EB+14 TO 441EB+14

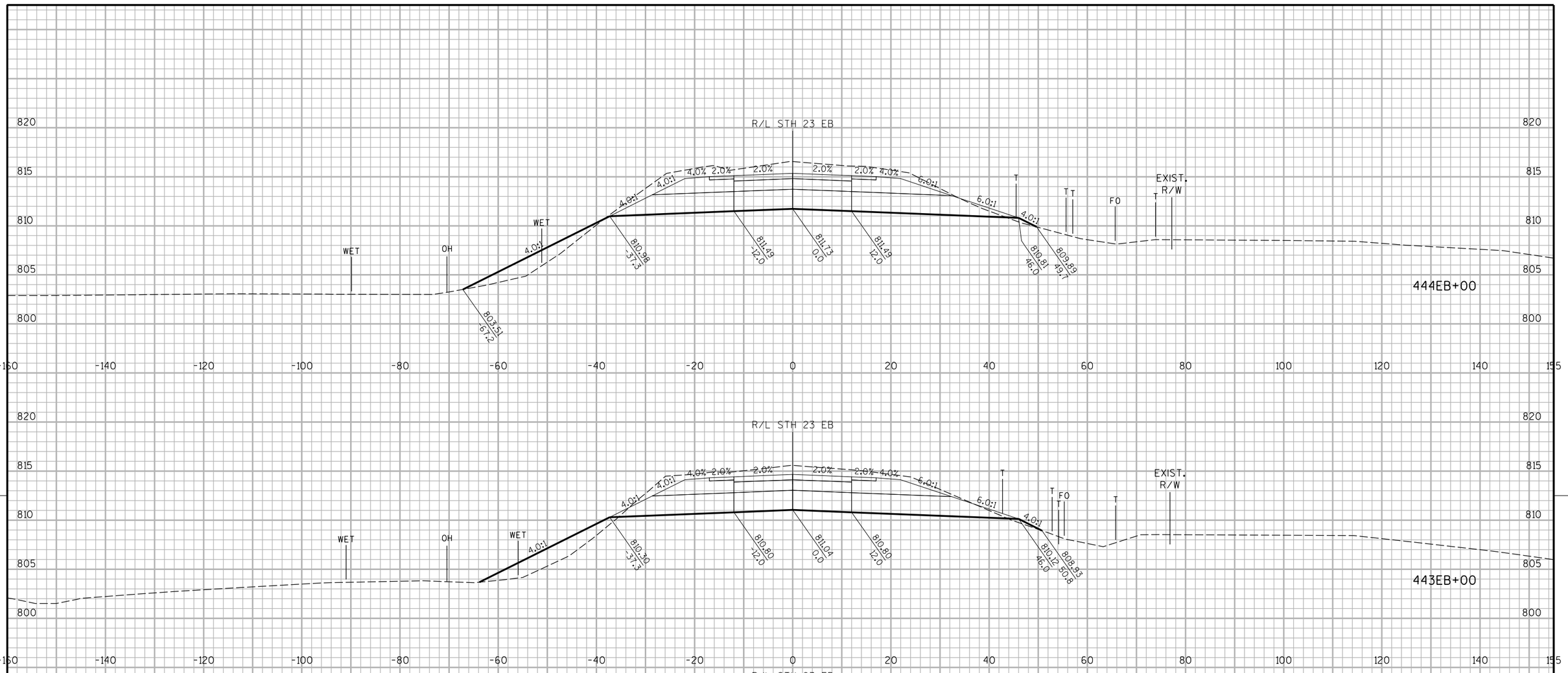
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 686	E

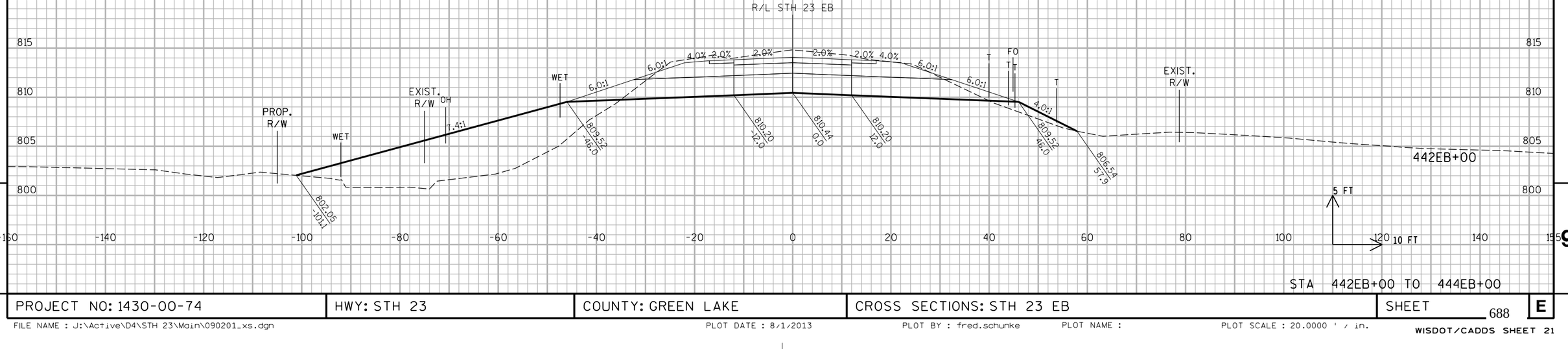


9 9

STA 441EB+00 TO 441EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 687	E





9

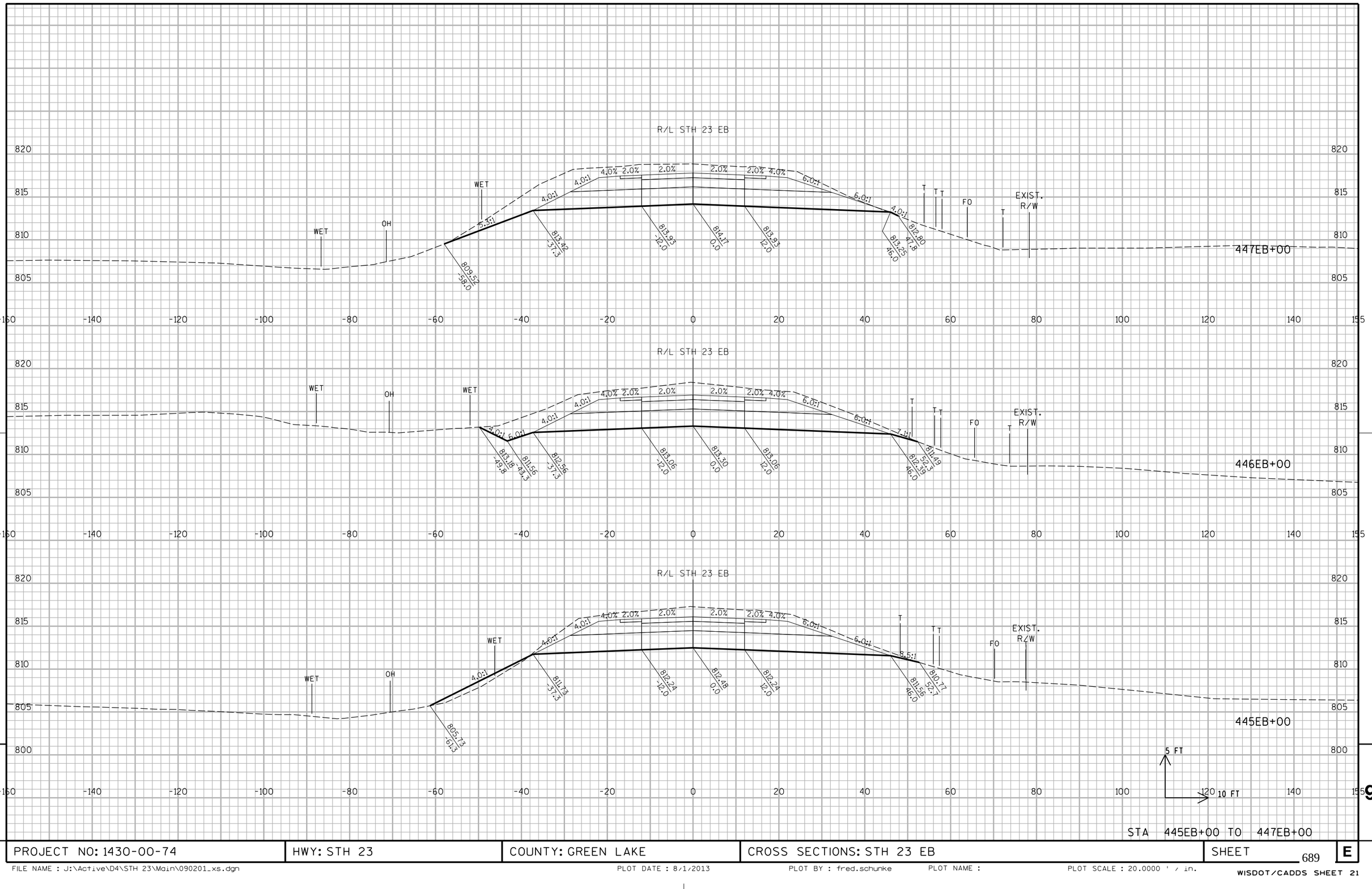
9

STA 442EB+00 TO 444EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 688	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

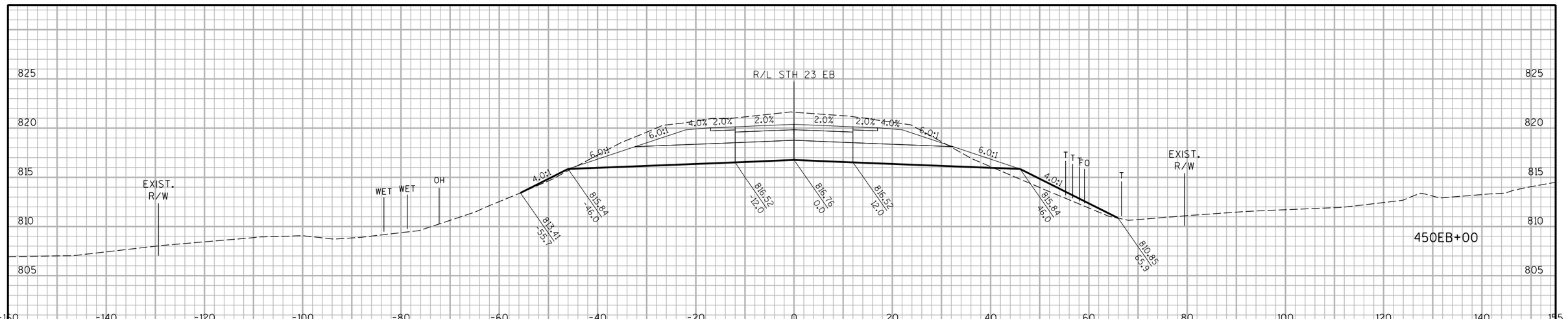


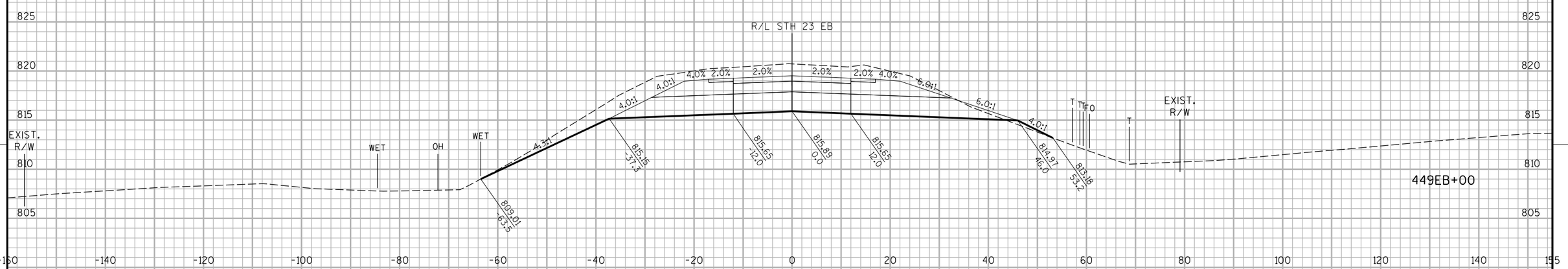
STA 445EB+00 TO 447EB+00

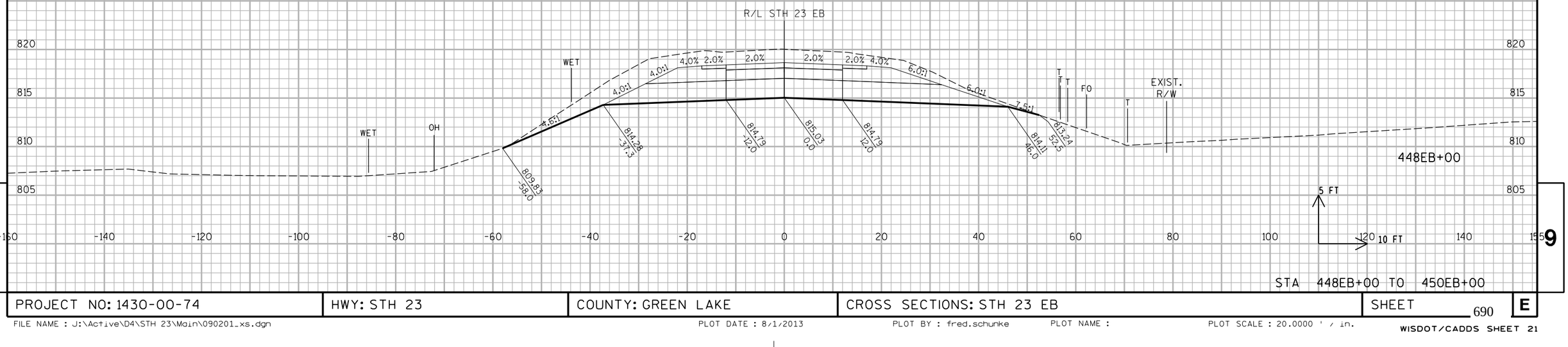
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 689	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21





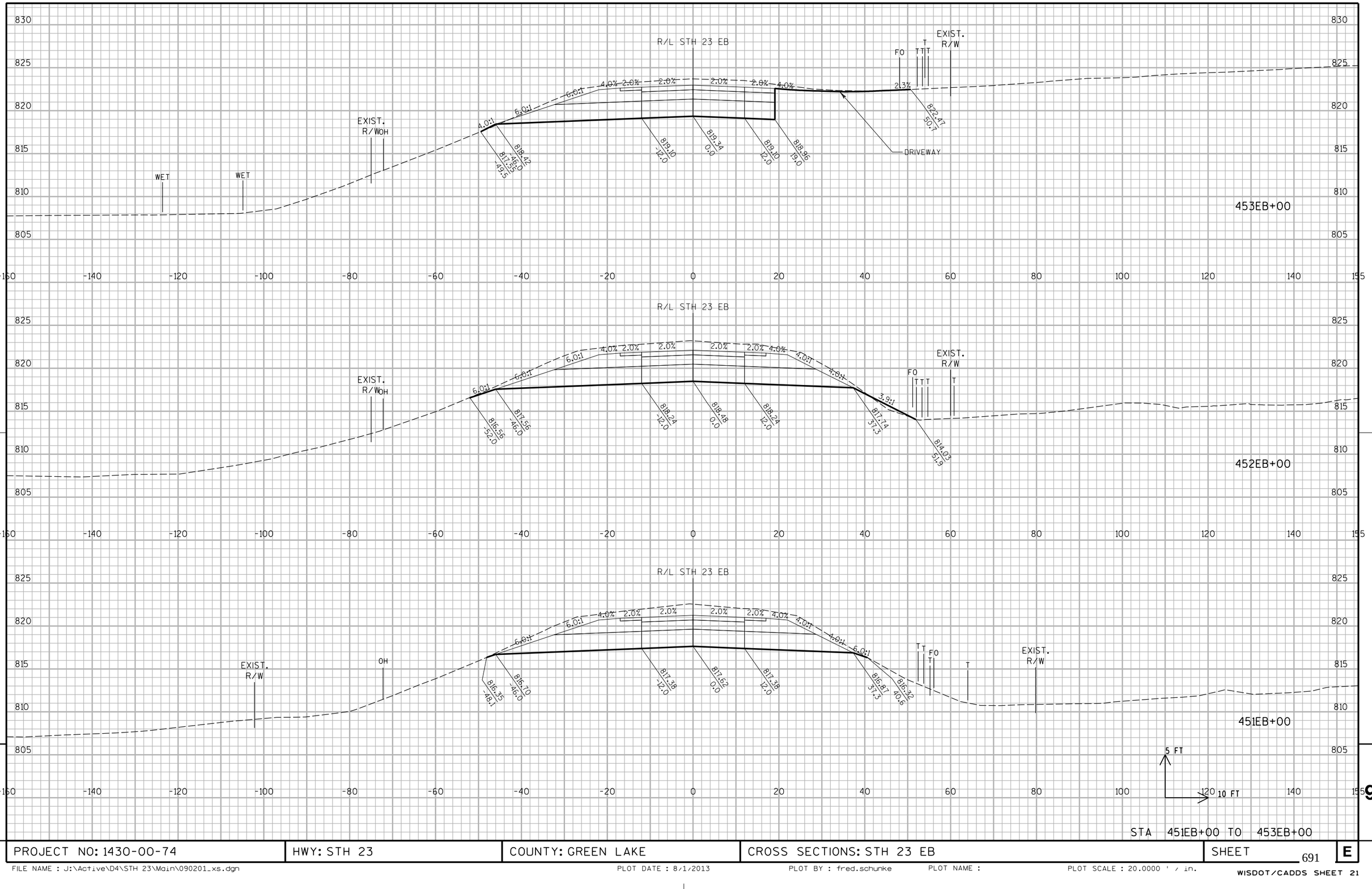


STA 448EB+00 TO 450EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 690	E

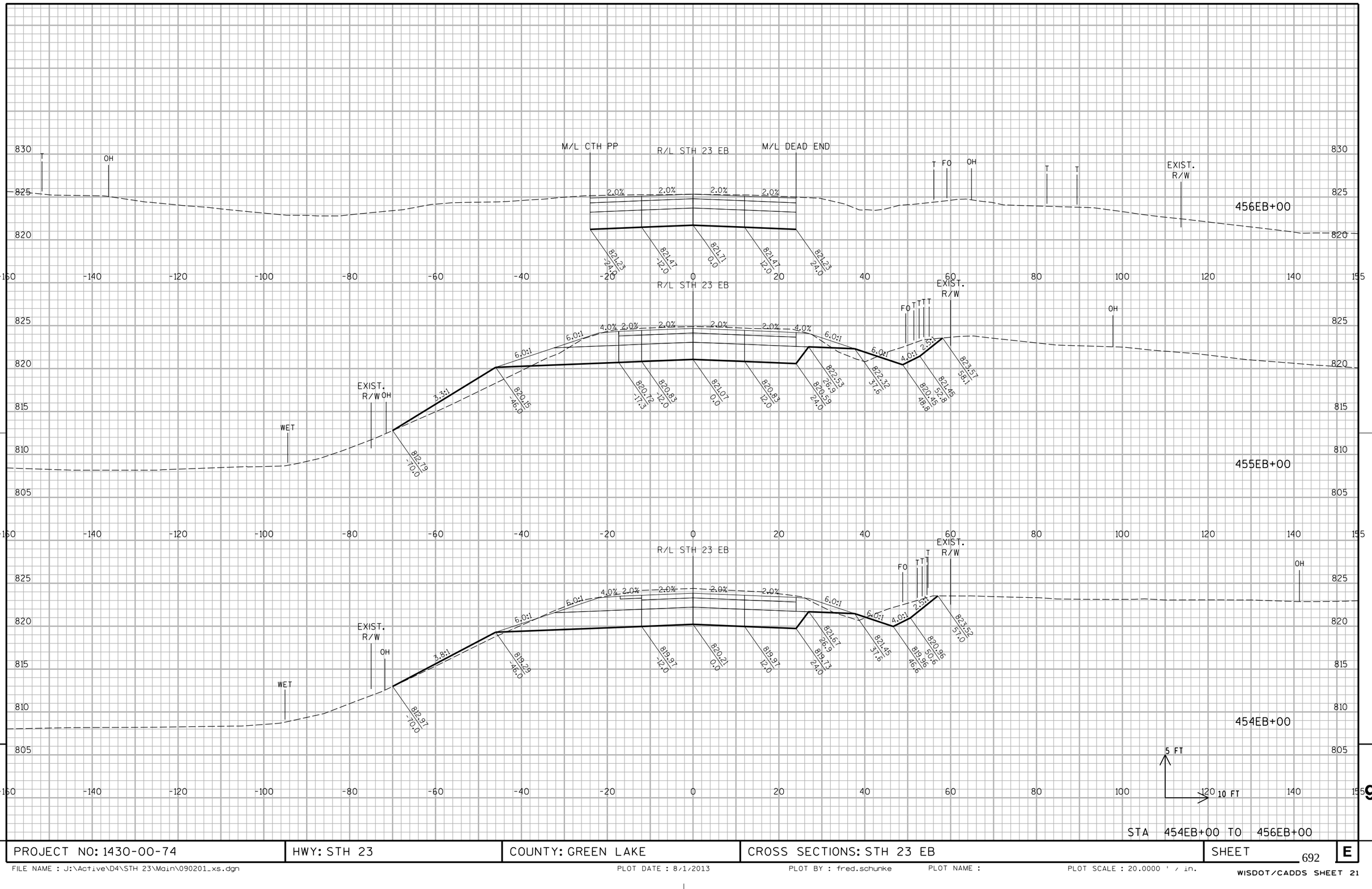
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 691	E

STA 451EB+00 TO 453EB+00

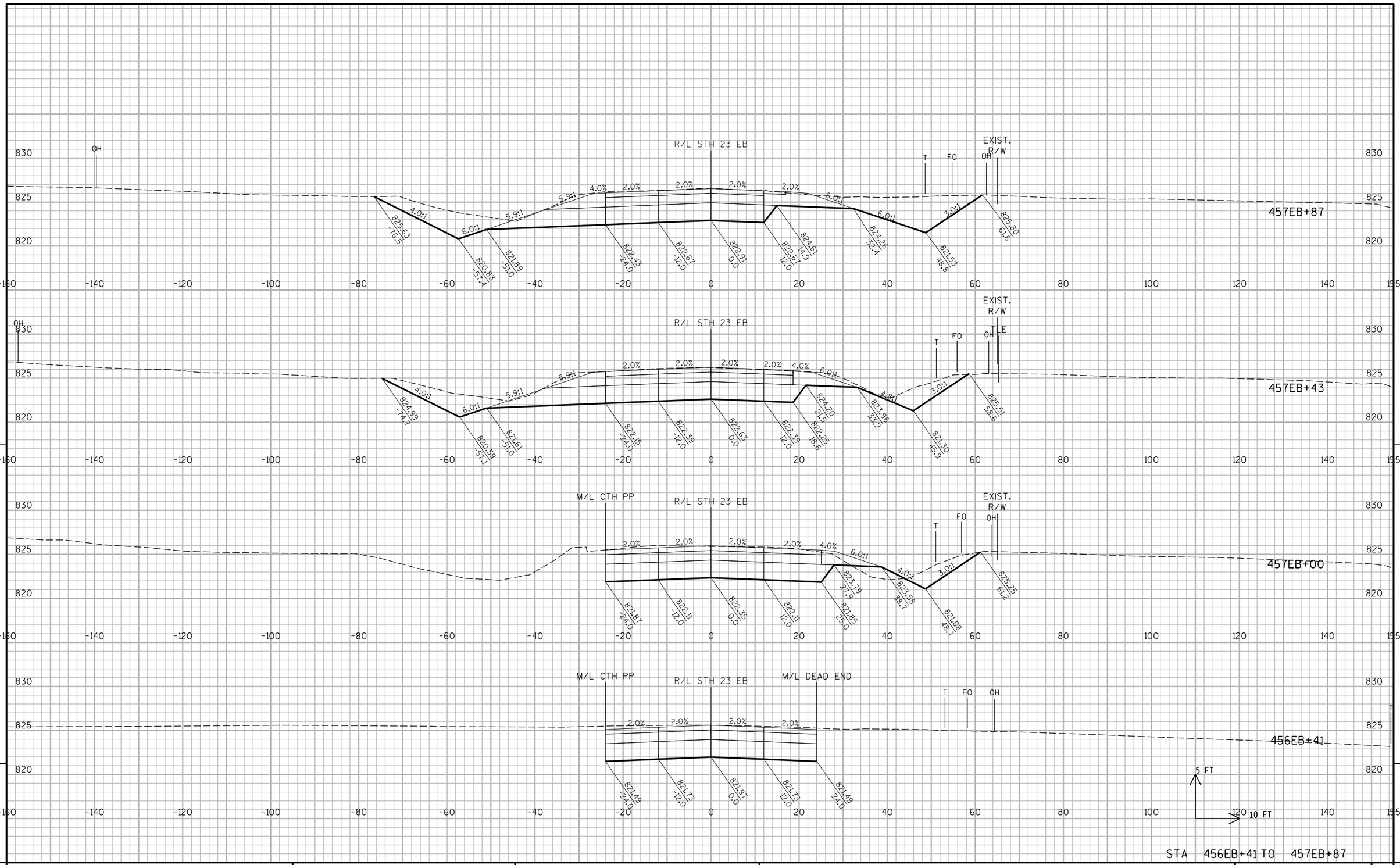


STA 454EB+00 TO 456EB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 692	E

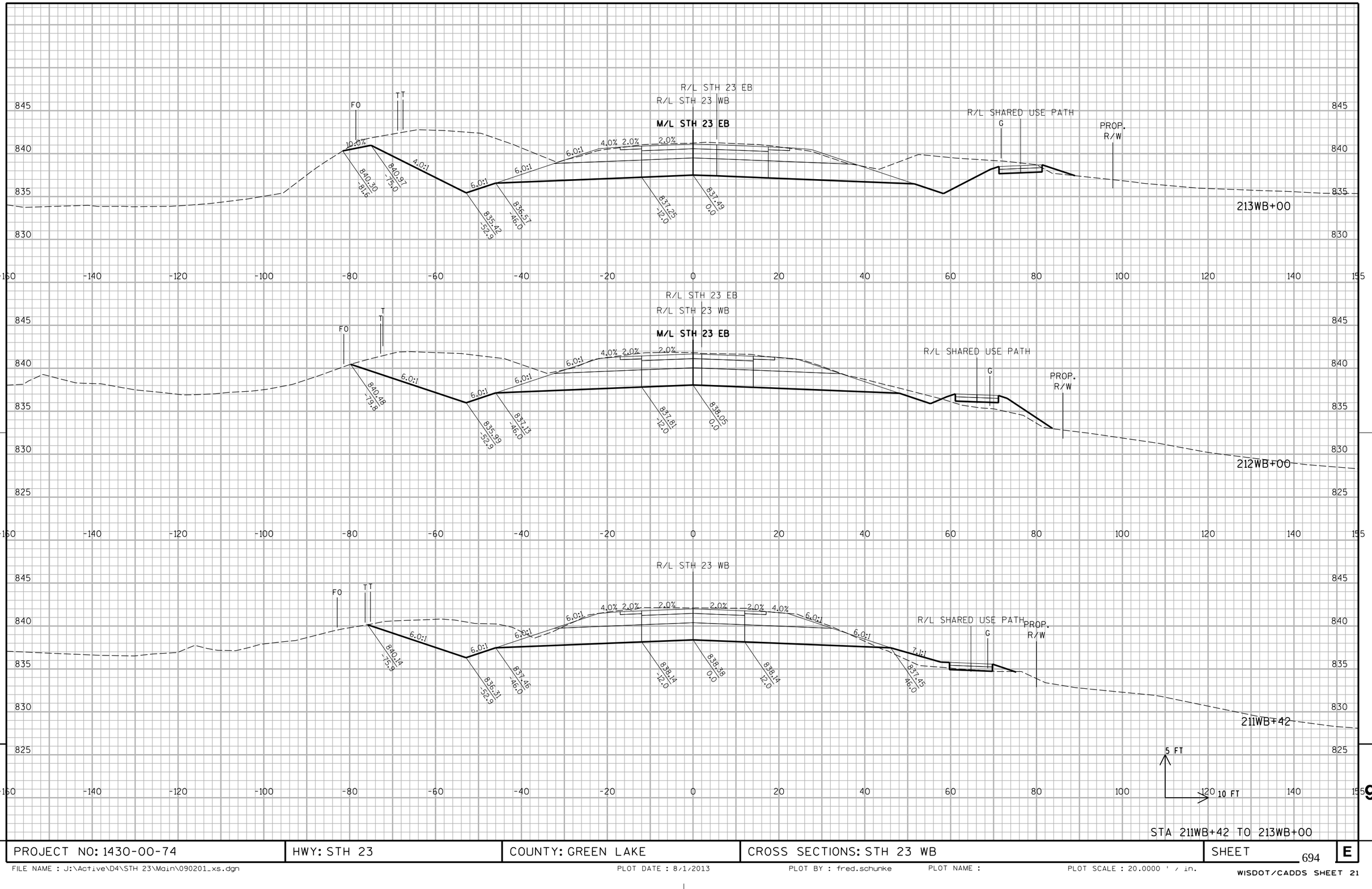
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

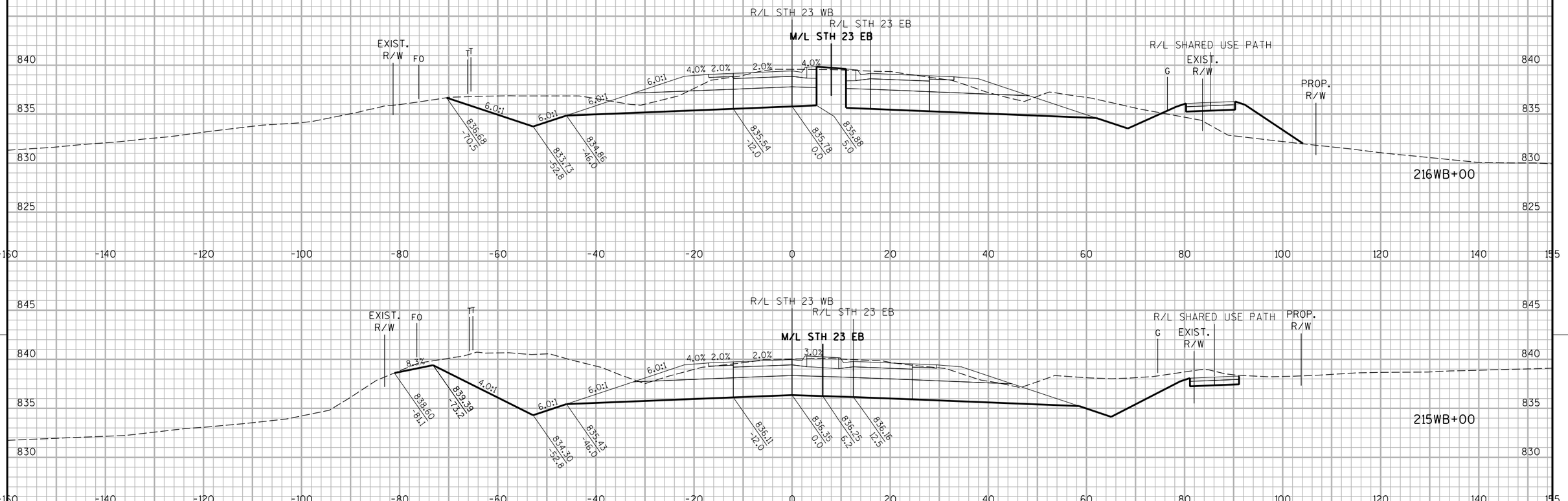


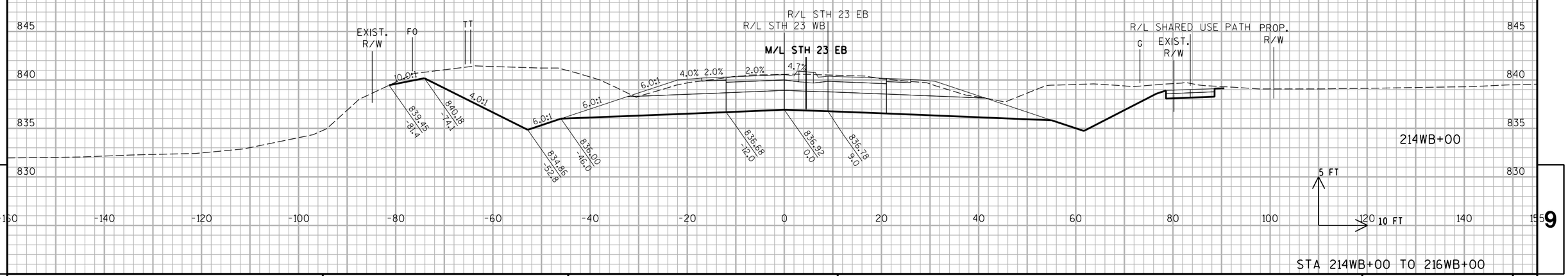
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 EB	SHEET 693	E

STA 456EB+41 TO 457EB+87



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 694	E



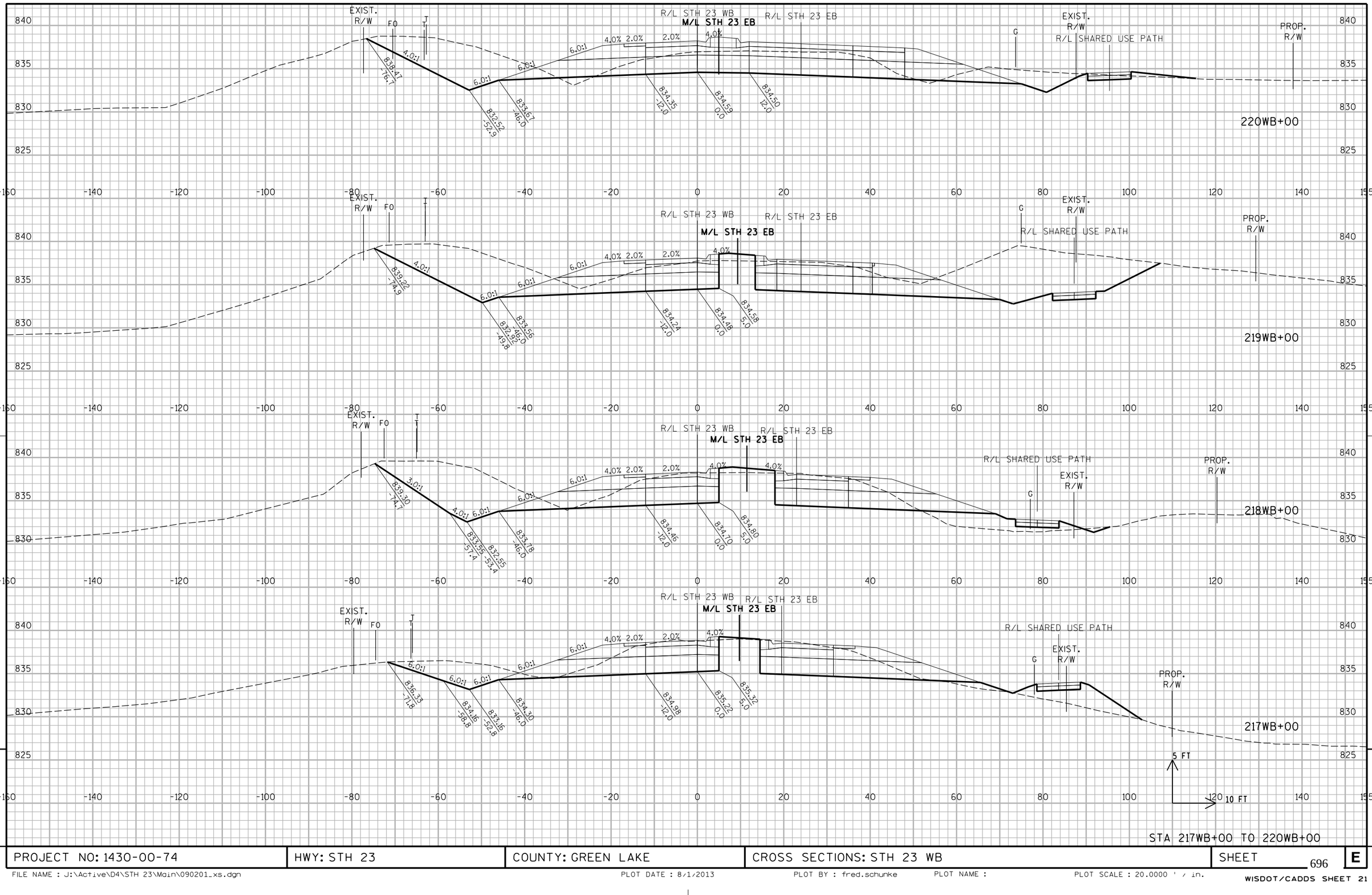


STA 214WB+00 TO 216WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 695	E

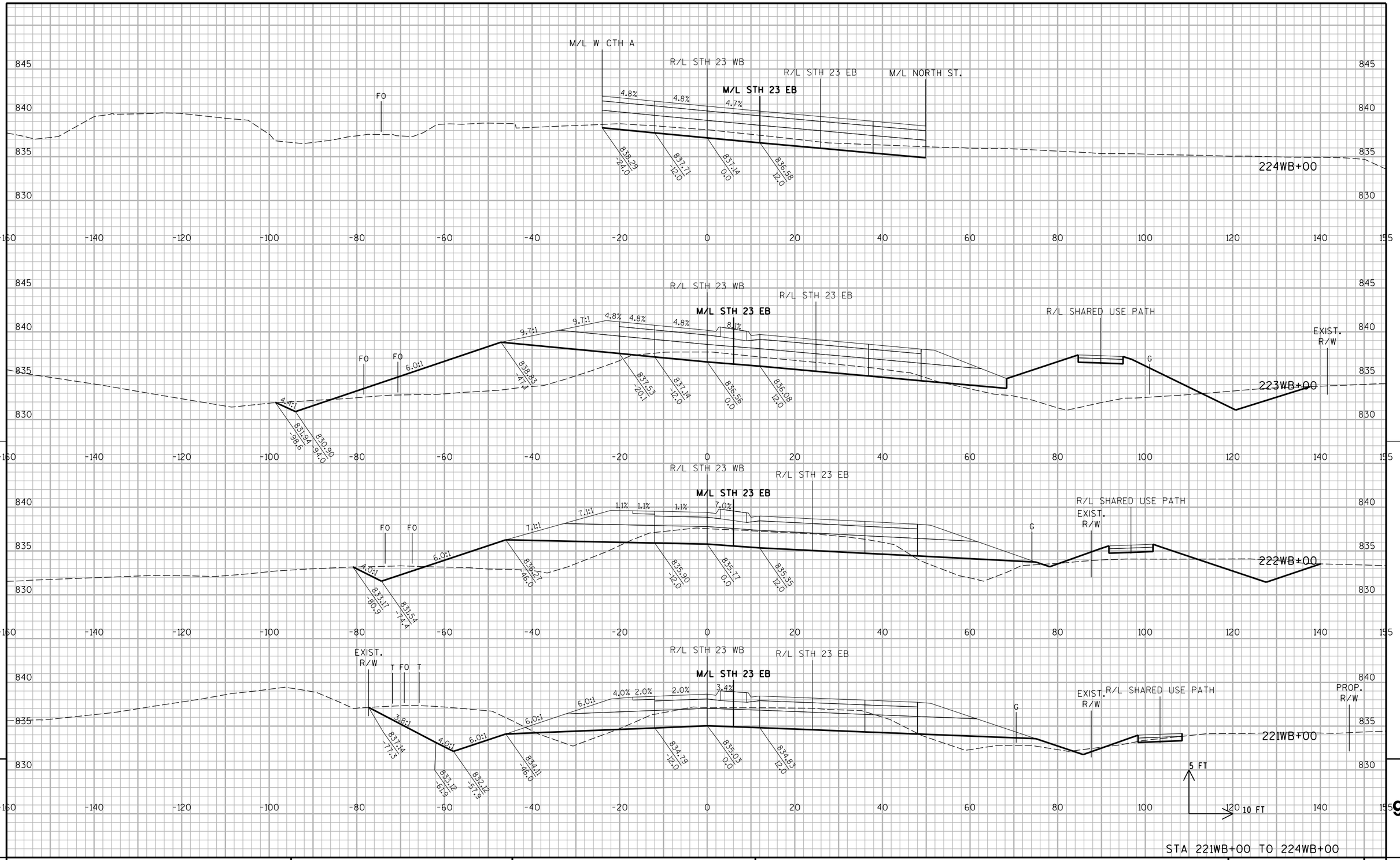
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 217WB+00 TO 220WB+00

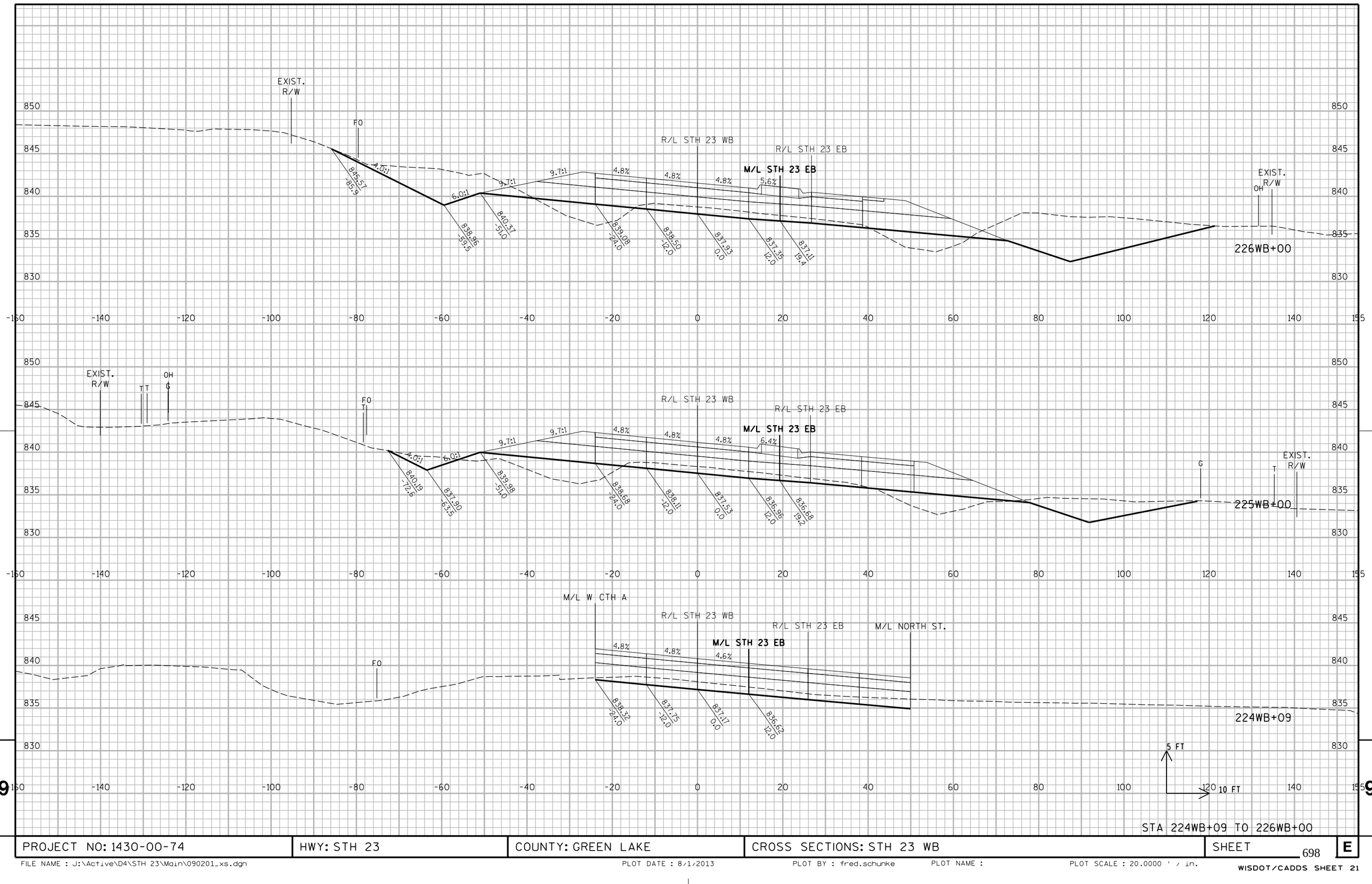
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 696	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 697	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

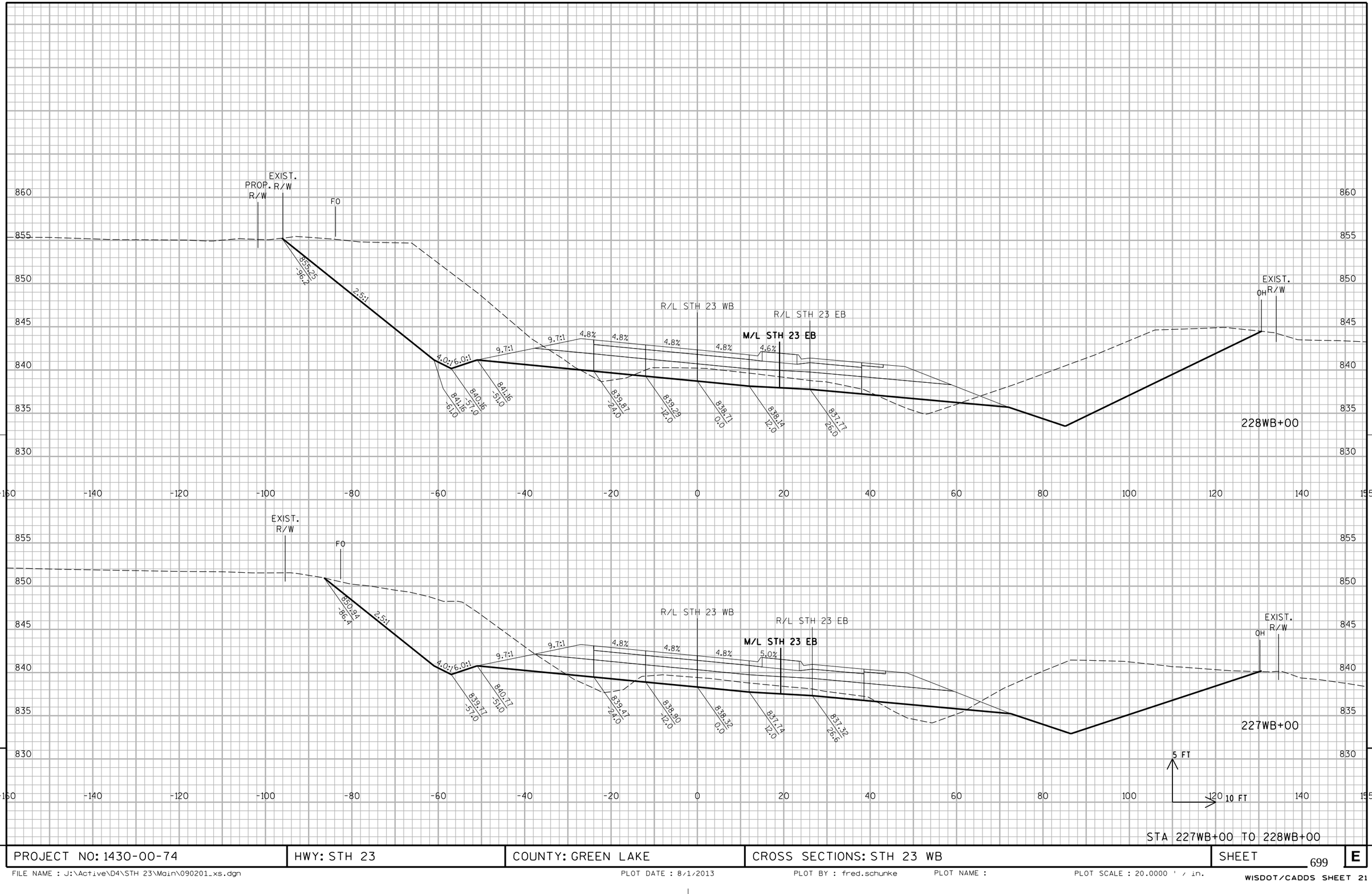


STA 224WB+09 TO 226WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 698	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

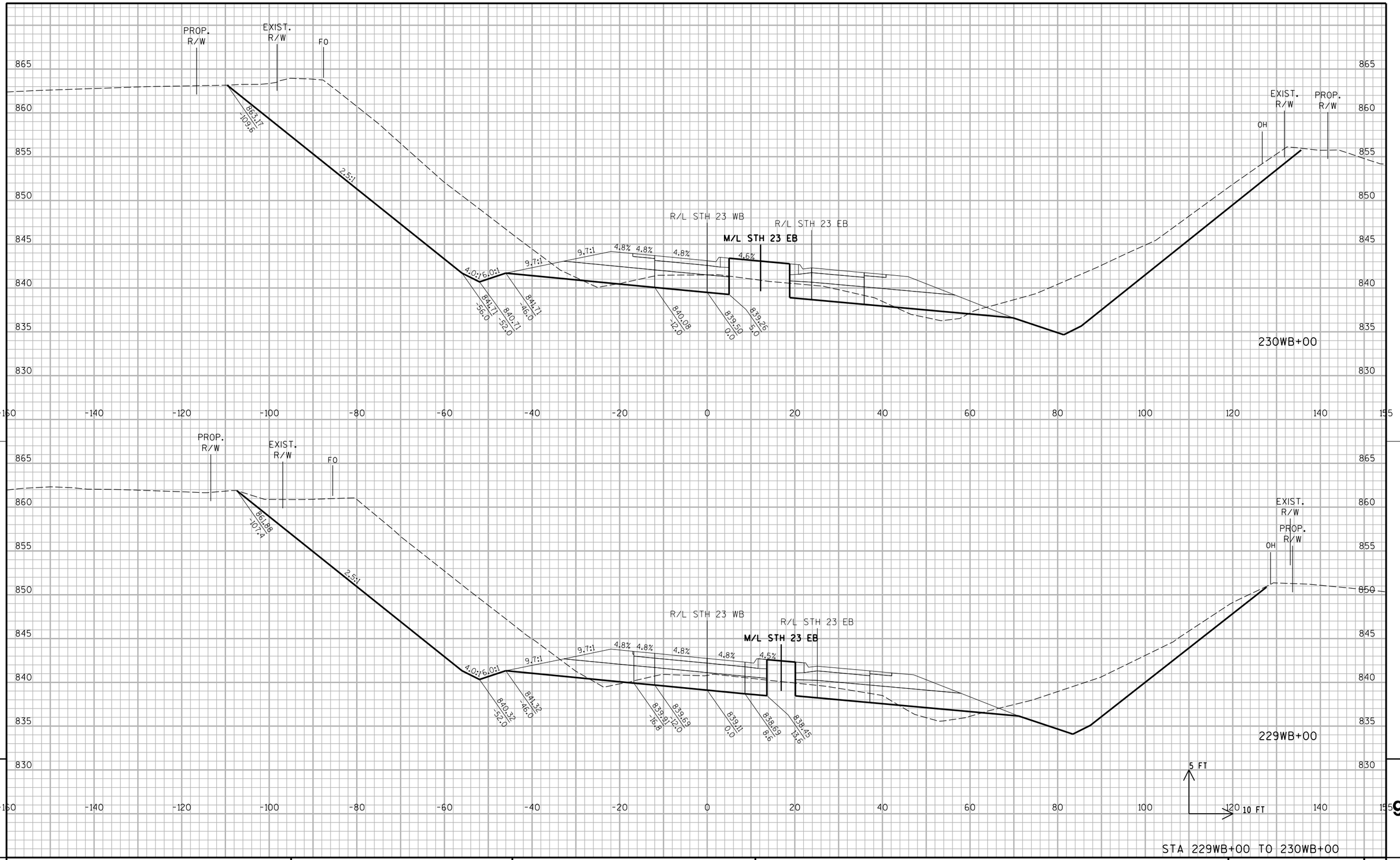
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 699	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

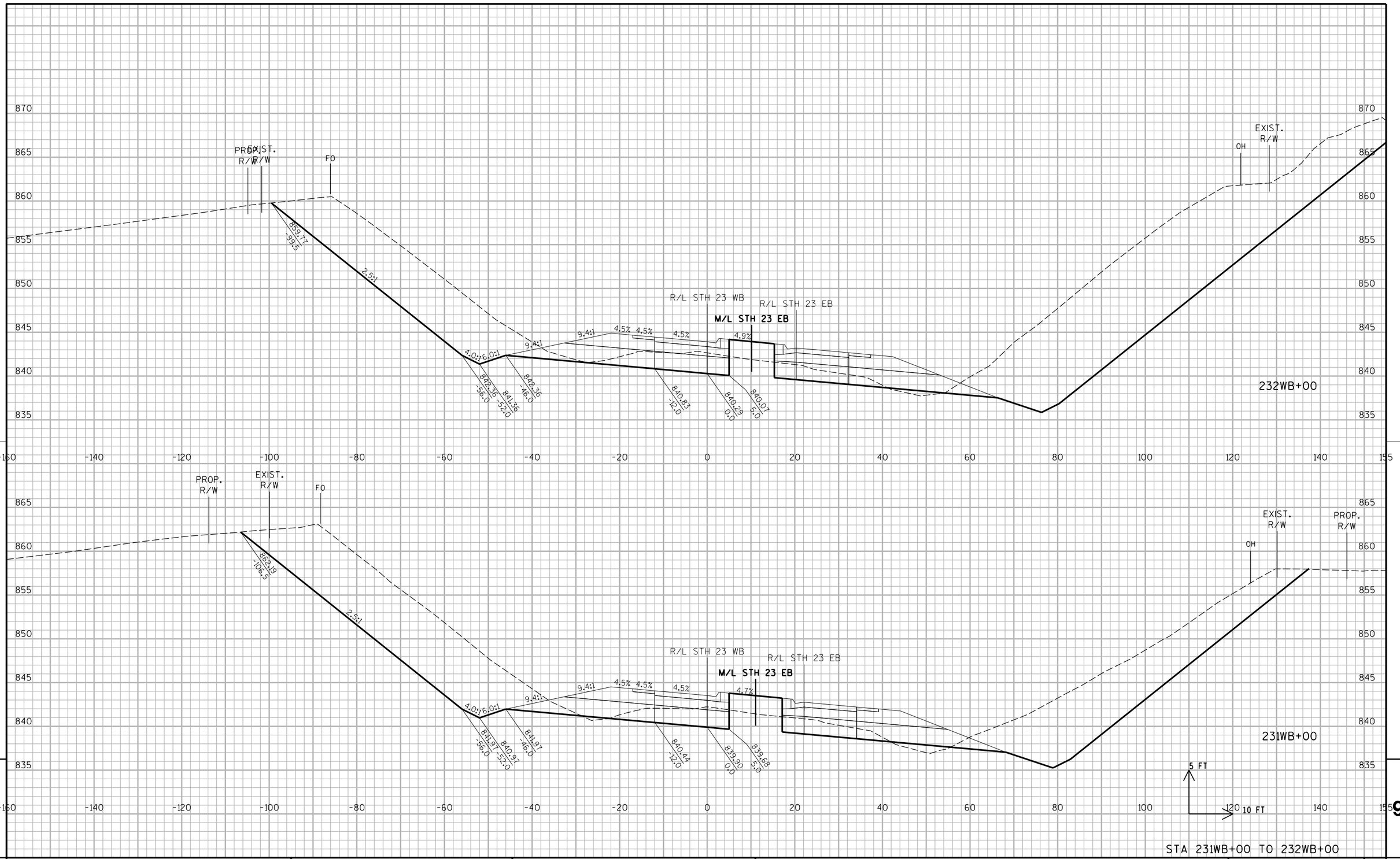


STA 229WB+00 TO 230WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 700	E

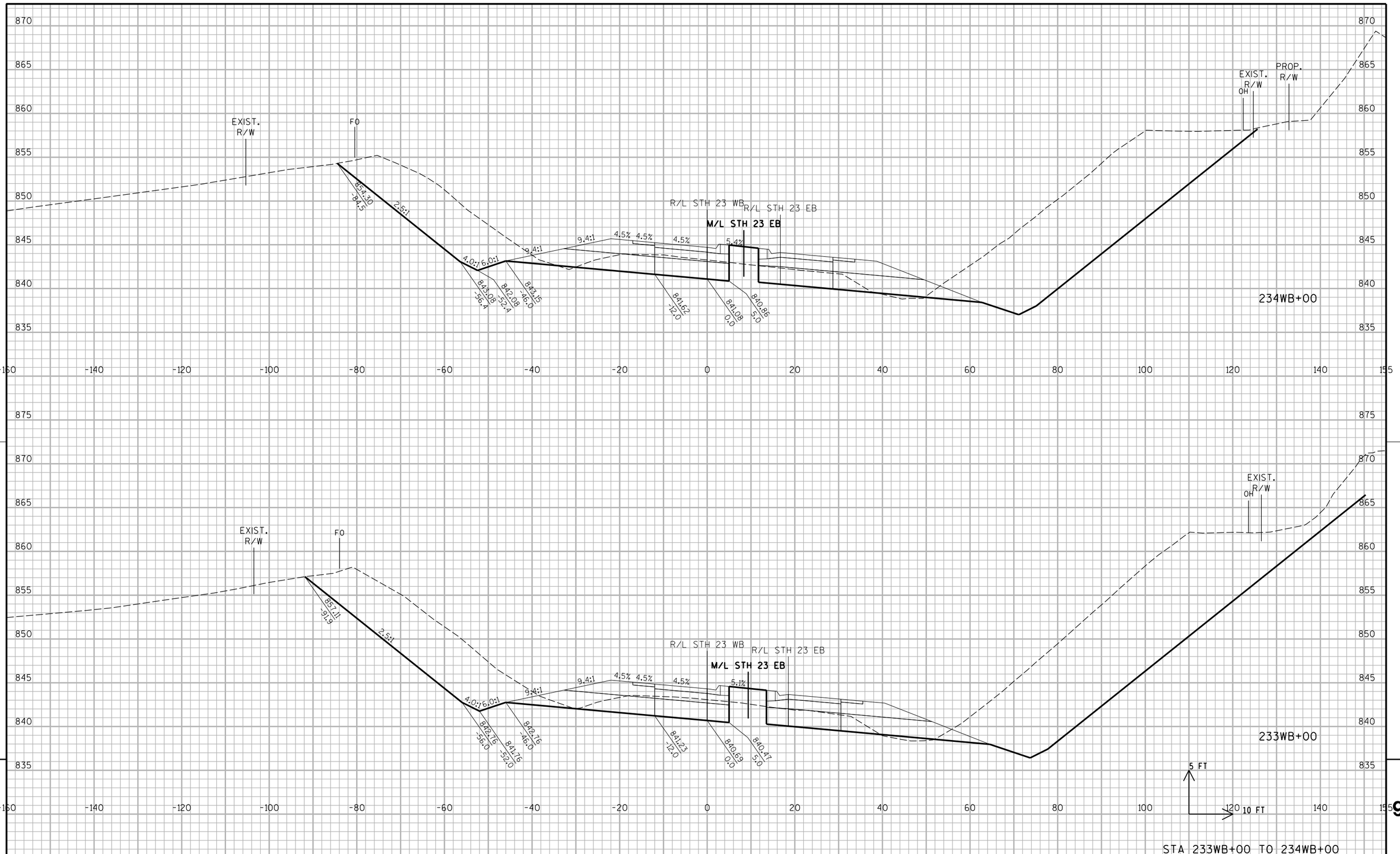
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 231WB+00 TO 232WB+00

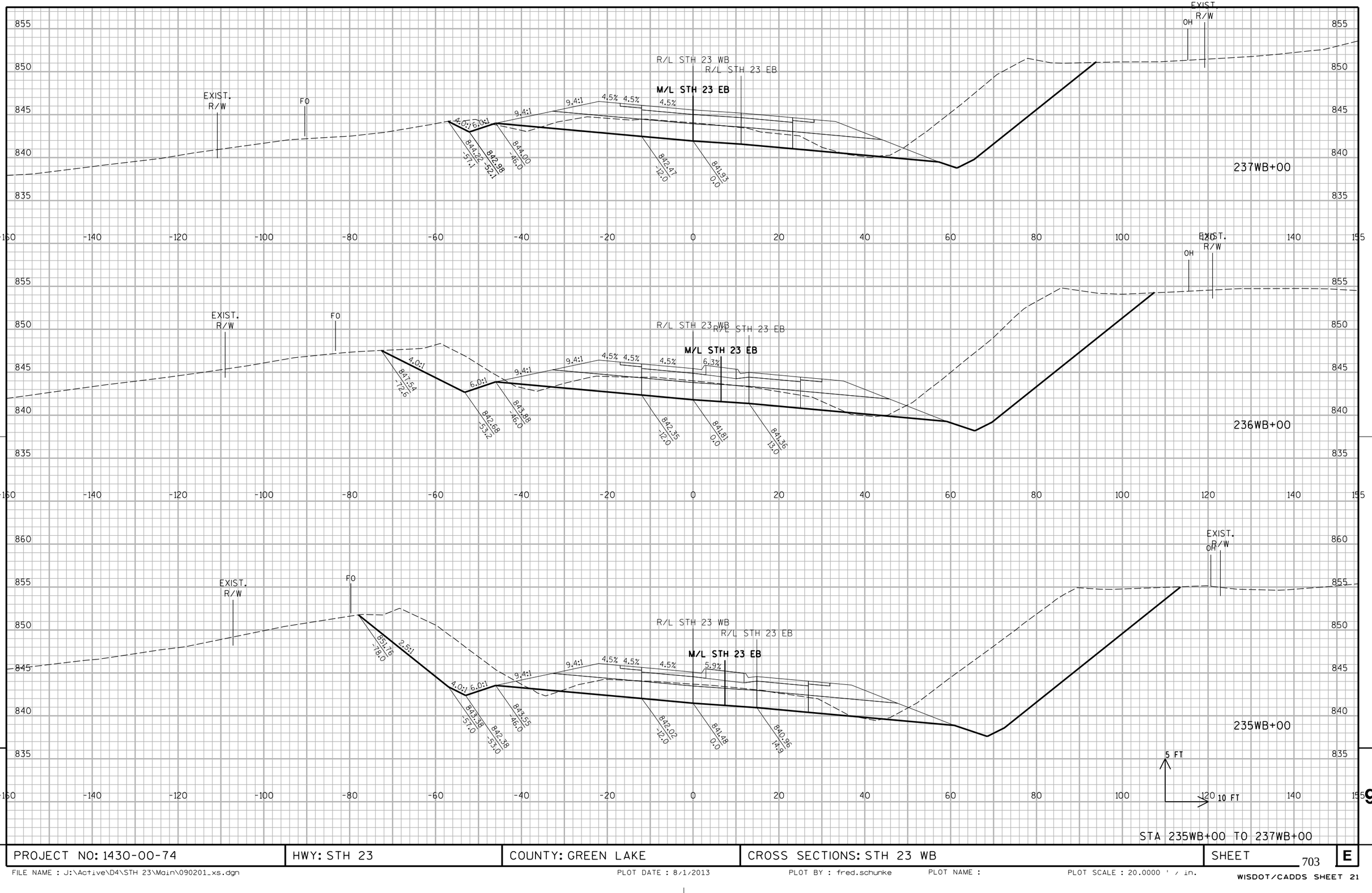
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 701	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 702	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

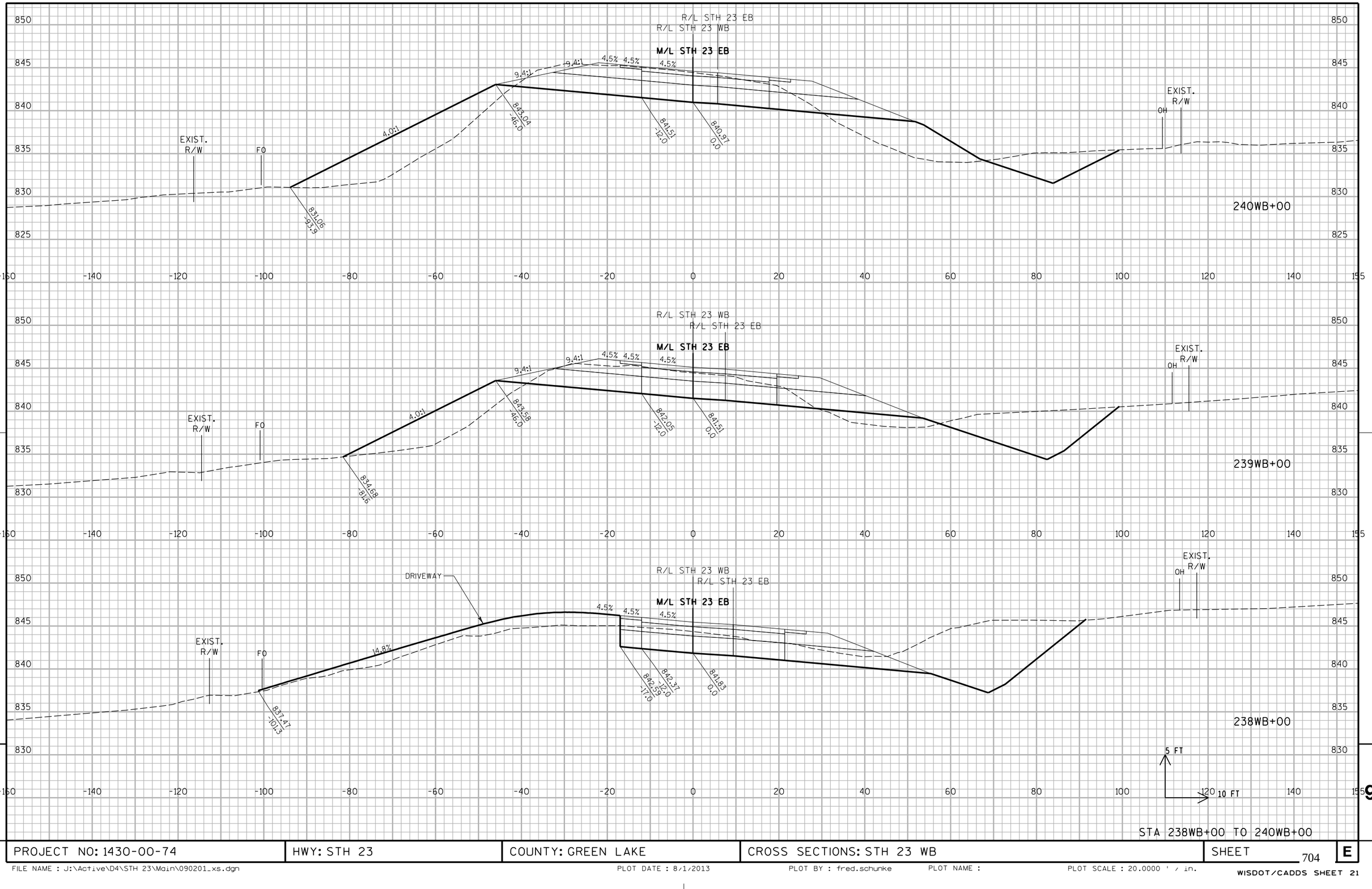
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 703	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

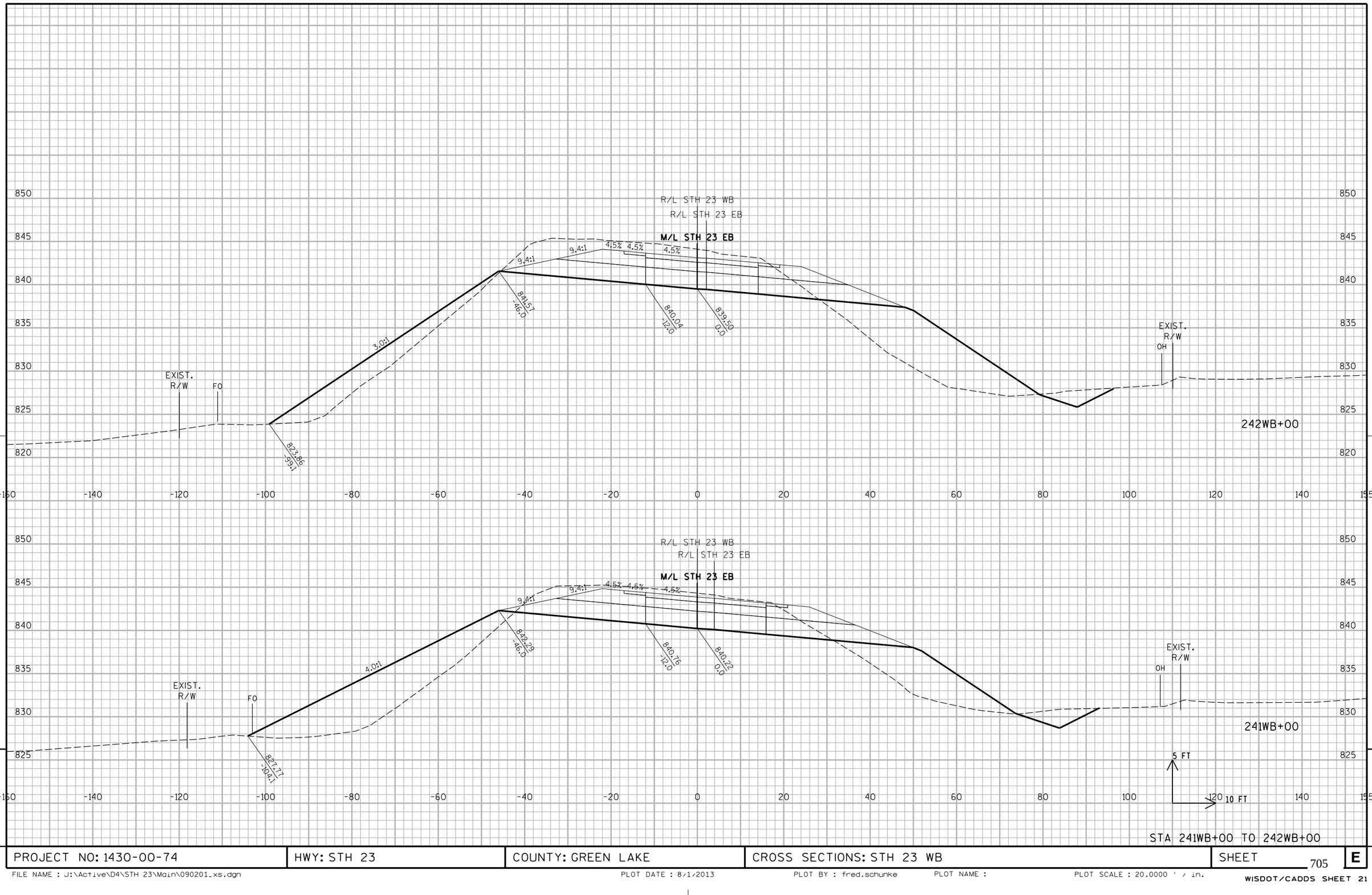


STA 238WB+00 TO 240WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 704	E

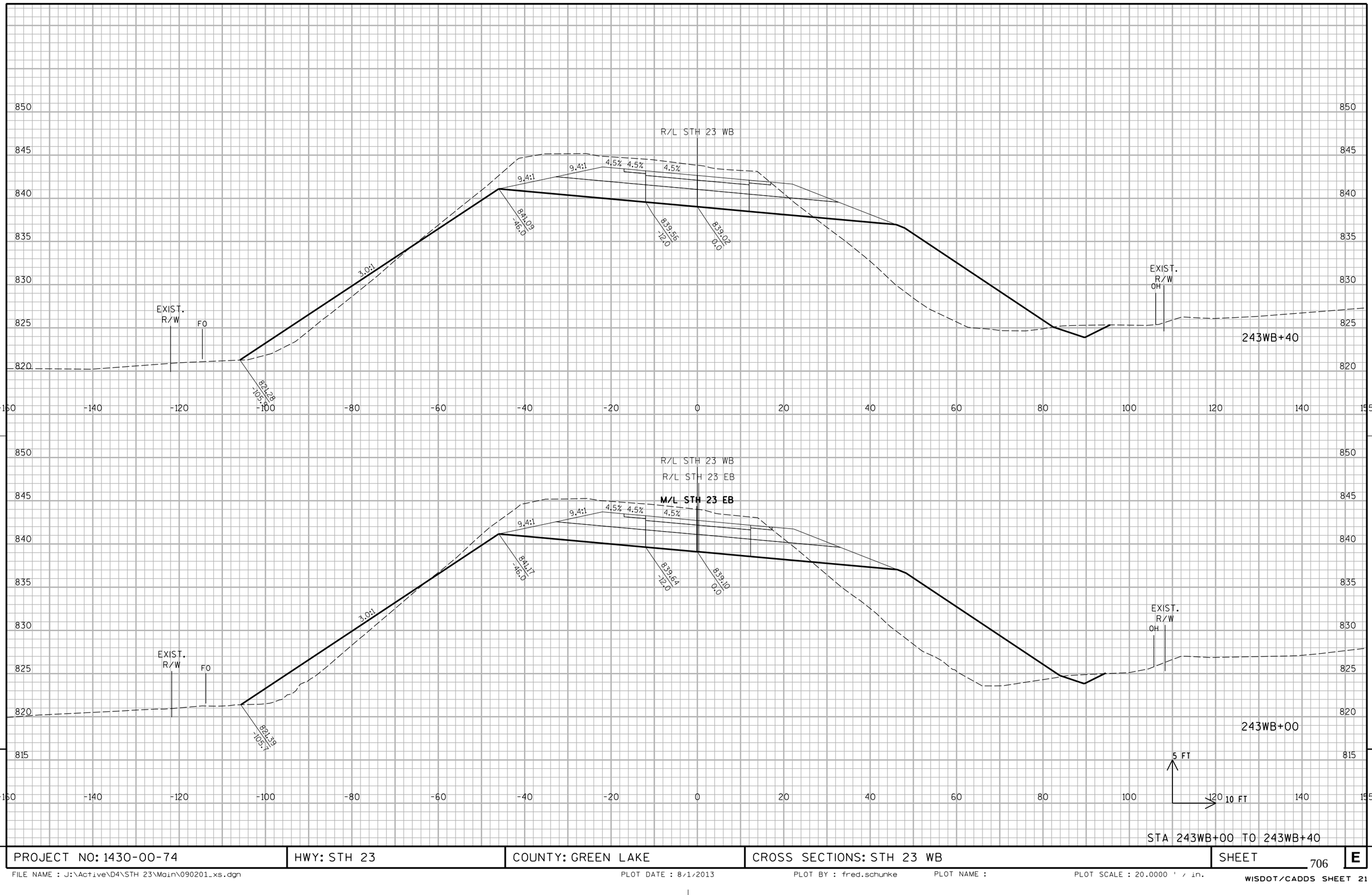
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



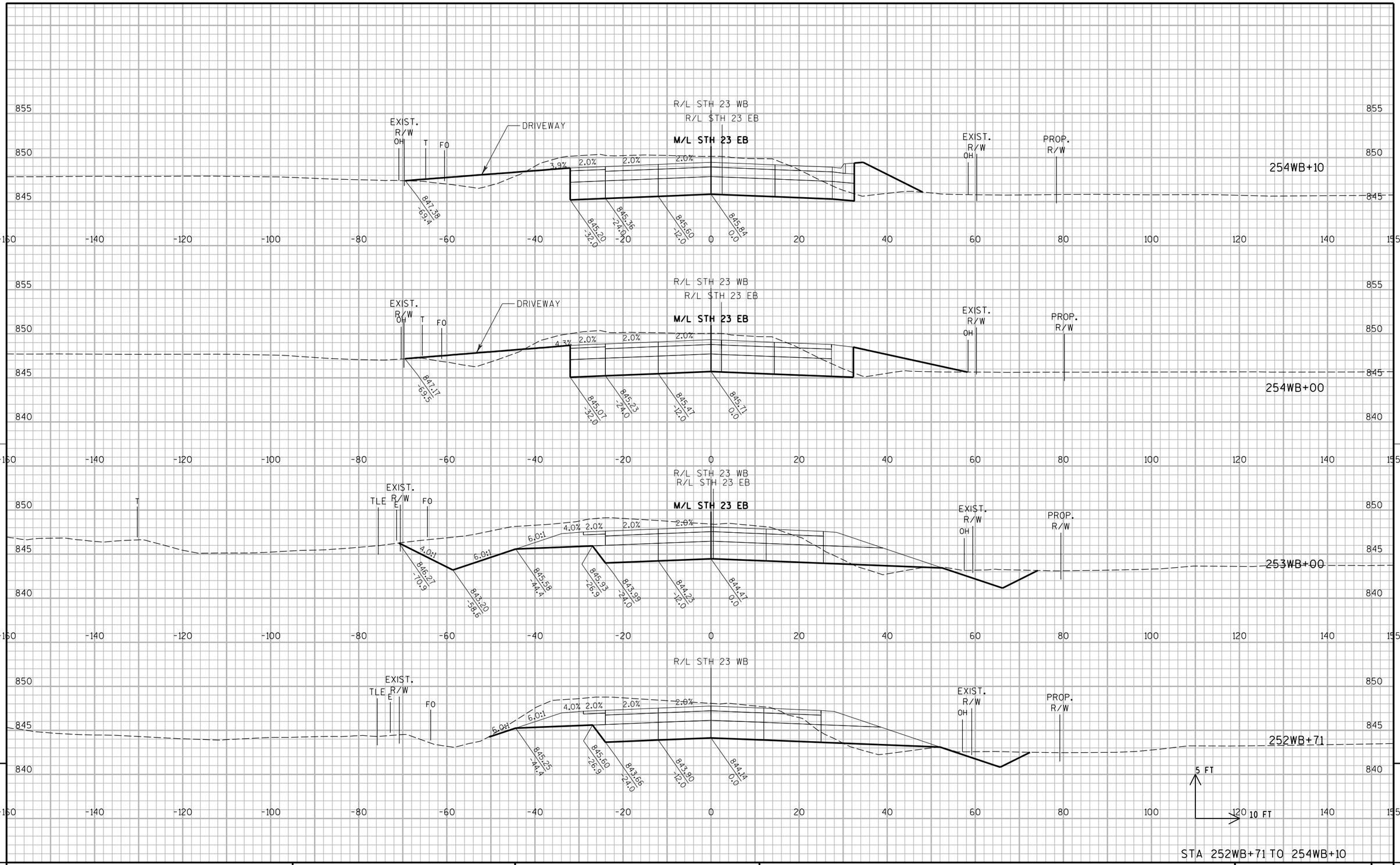
STA 241WB+00 TO 242WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 705	E



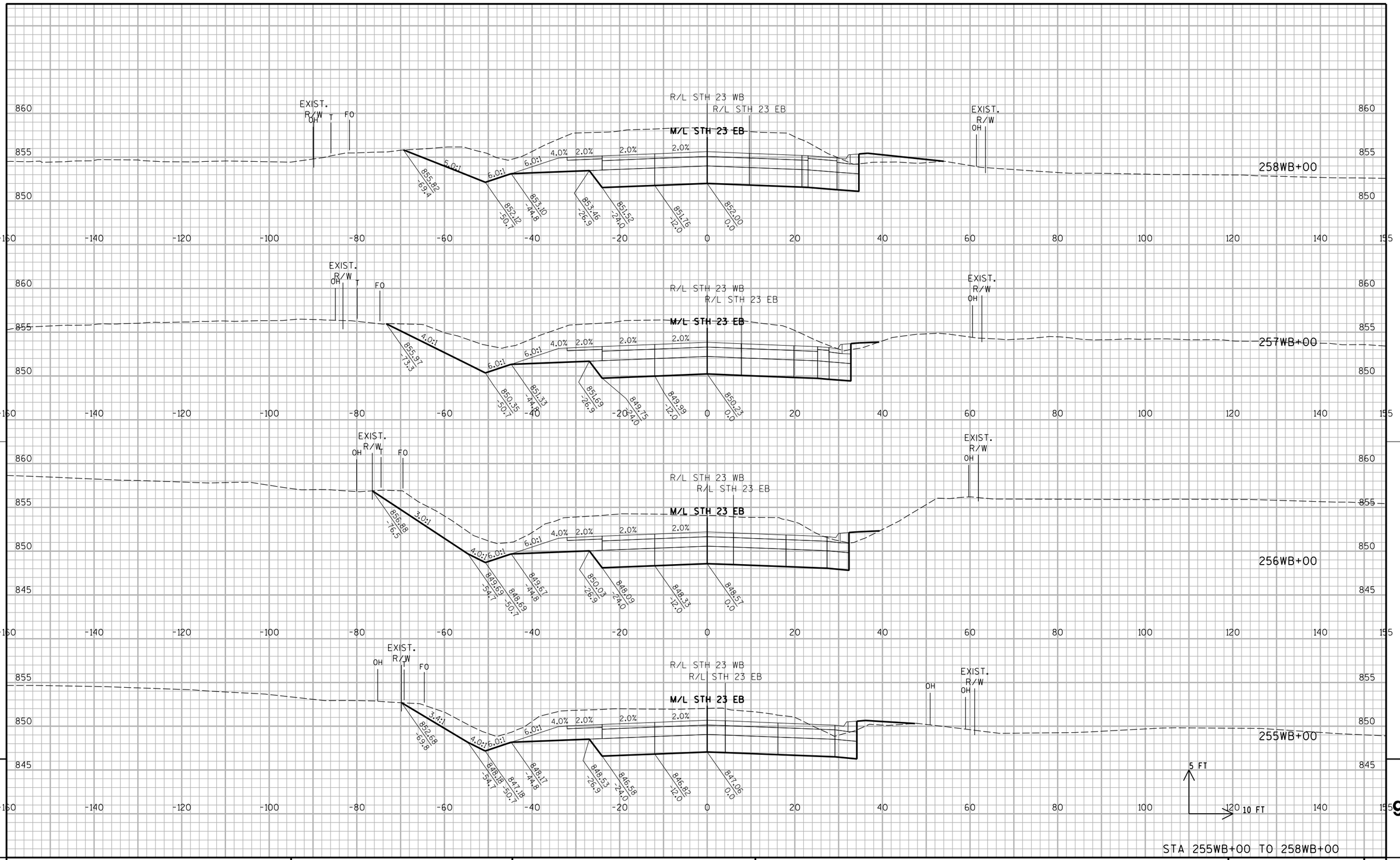
STA 243WB+00 TO 243WB+40

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 706	E



STA 252WB+71 TO 254WB+10

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 707	E



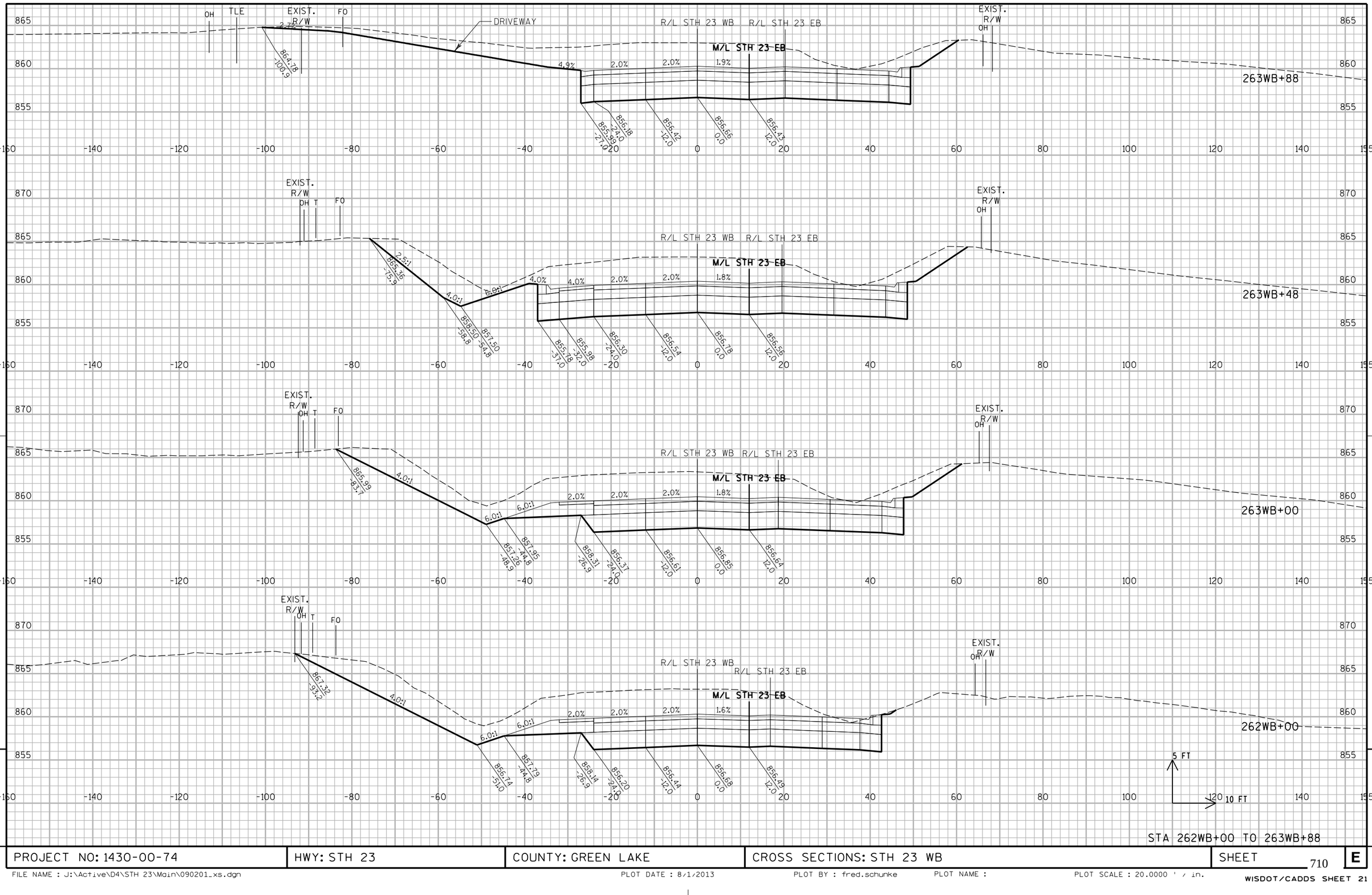
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 708	E

STA 259WB+00 TO 261WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 709	E

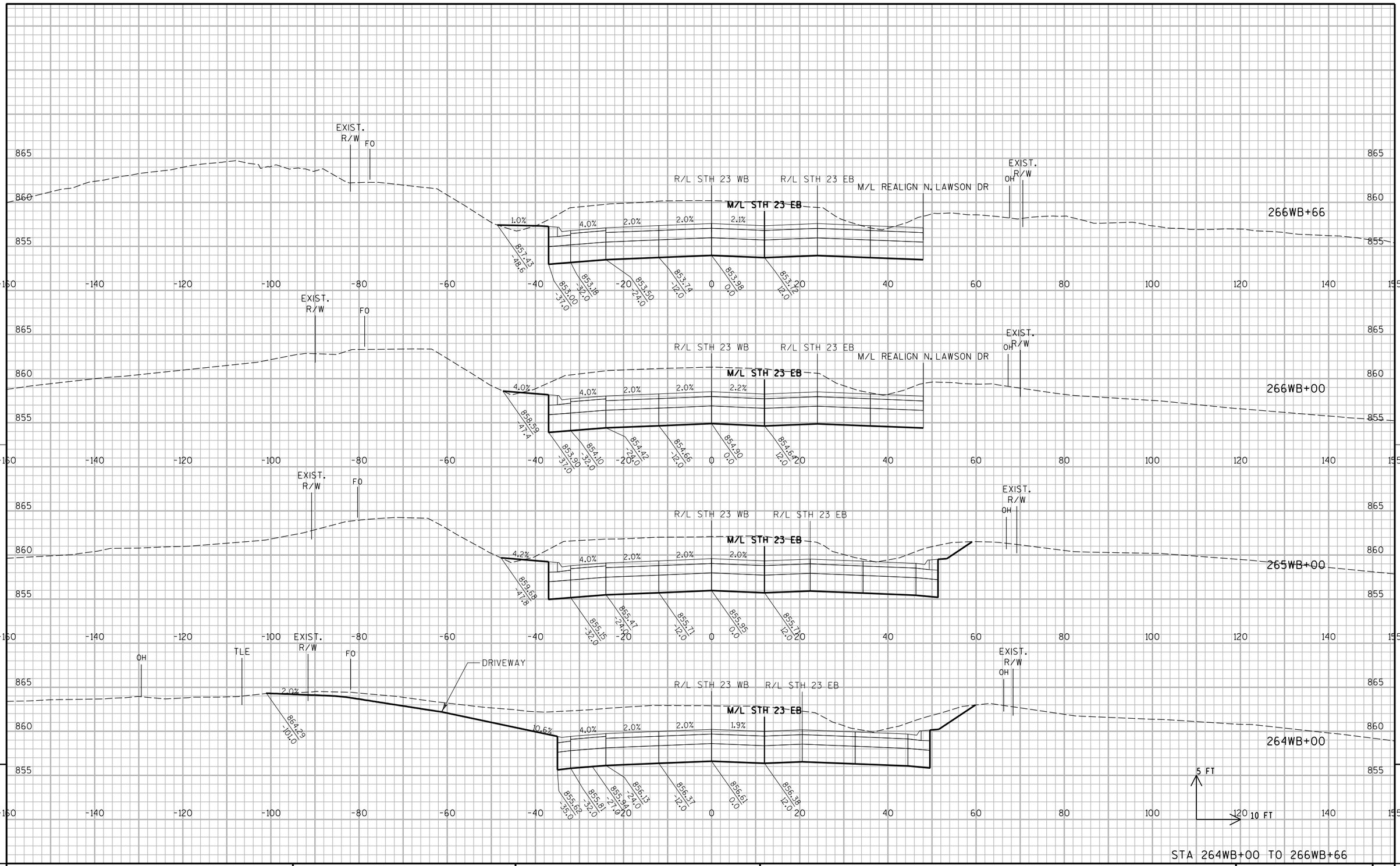
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 262WB+00 TO 263WB+88

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 710	E

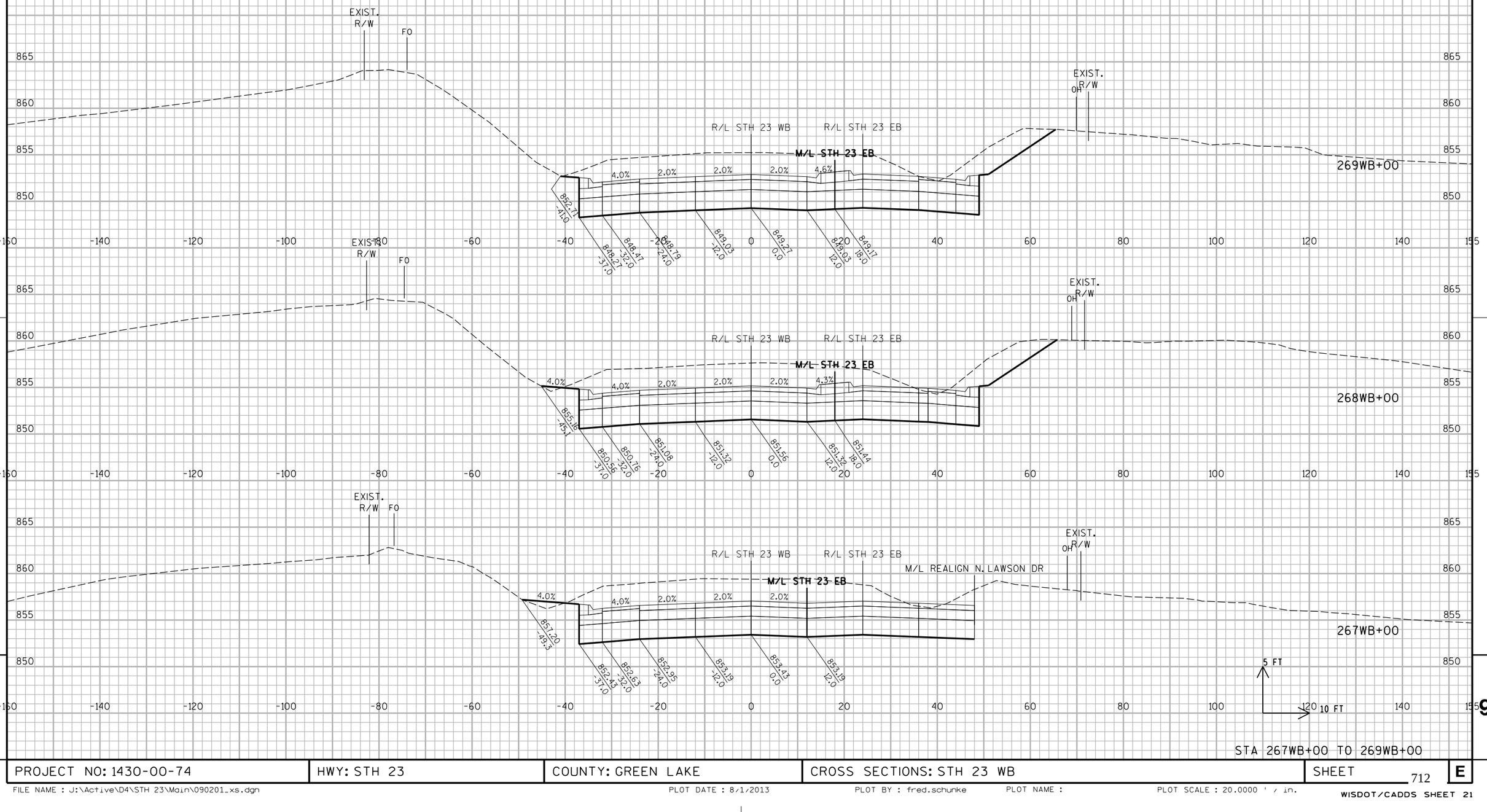


STA 264WB+00 TO 266WB+66

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 711	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 712	E

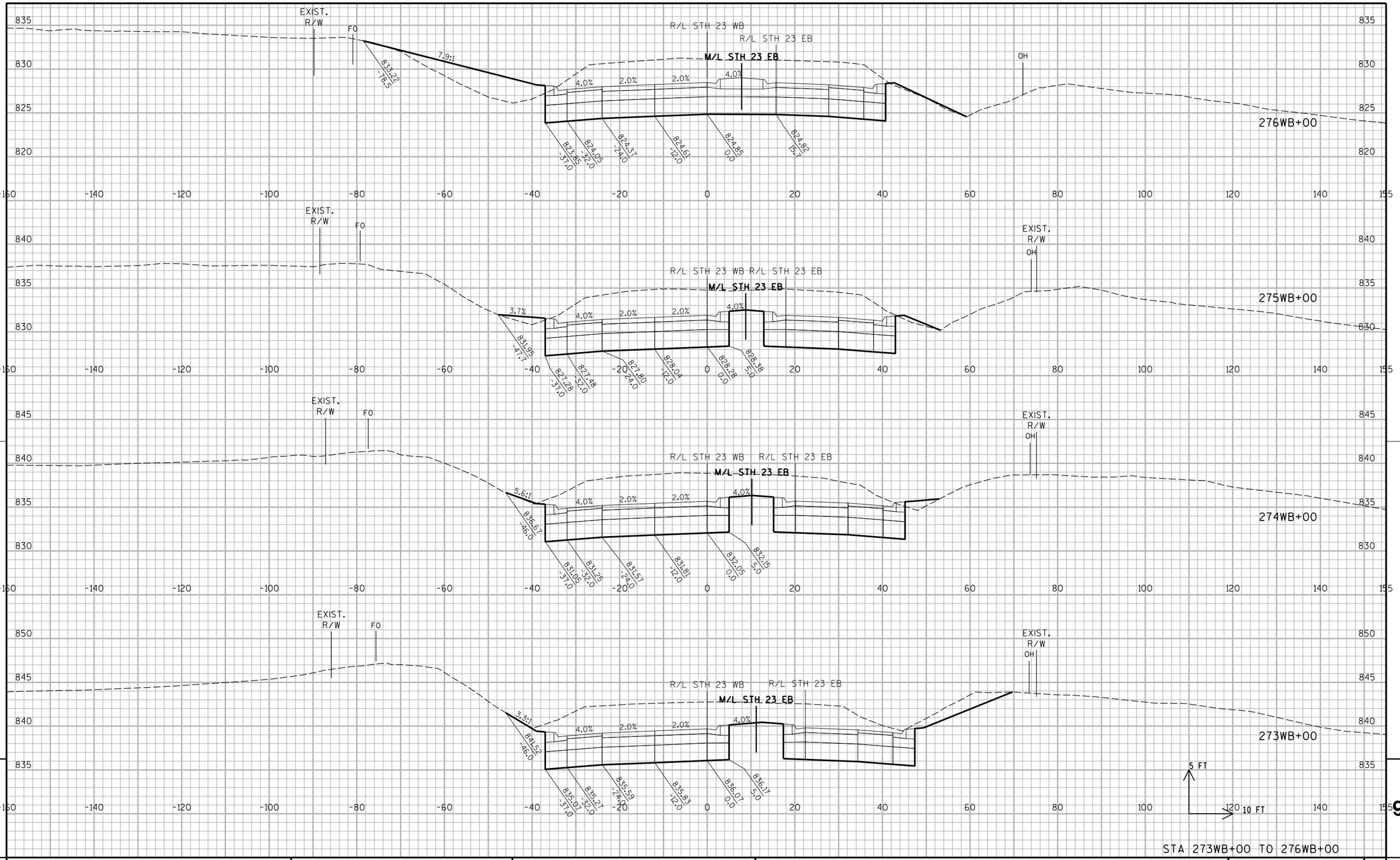
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 713	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

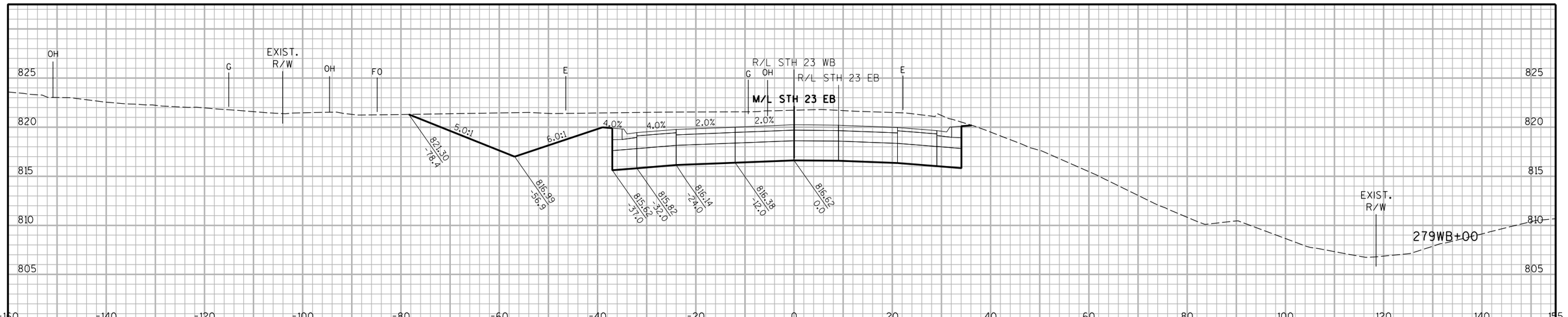
WISDOT/CADDS SHEET 21

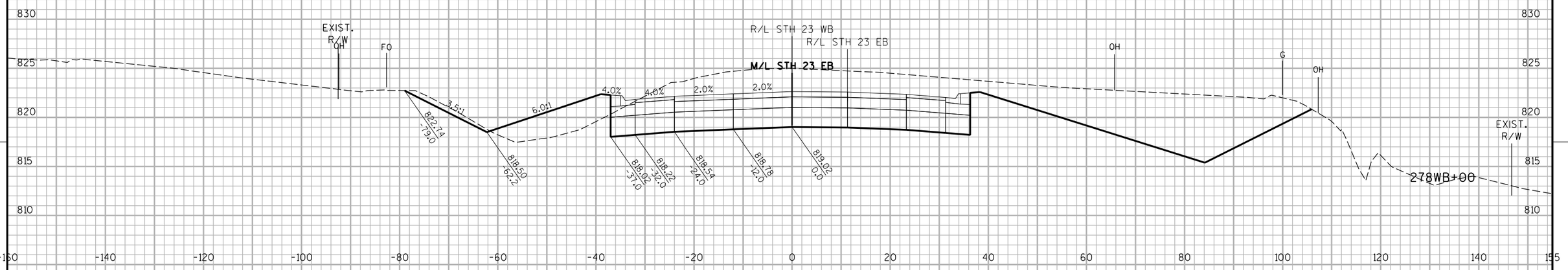


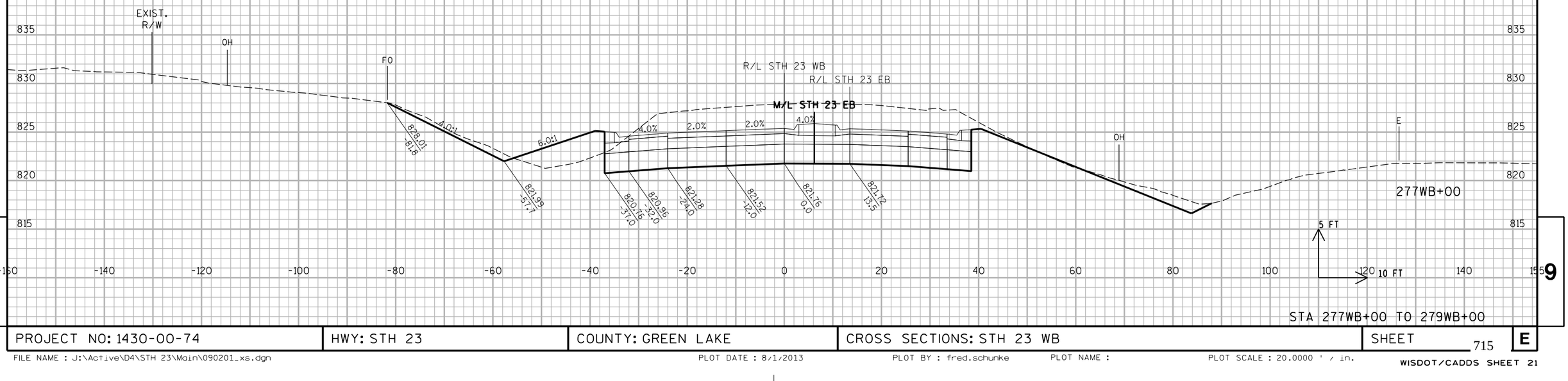
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 714	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



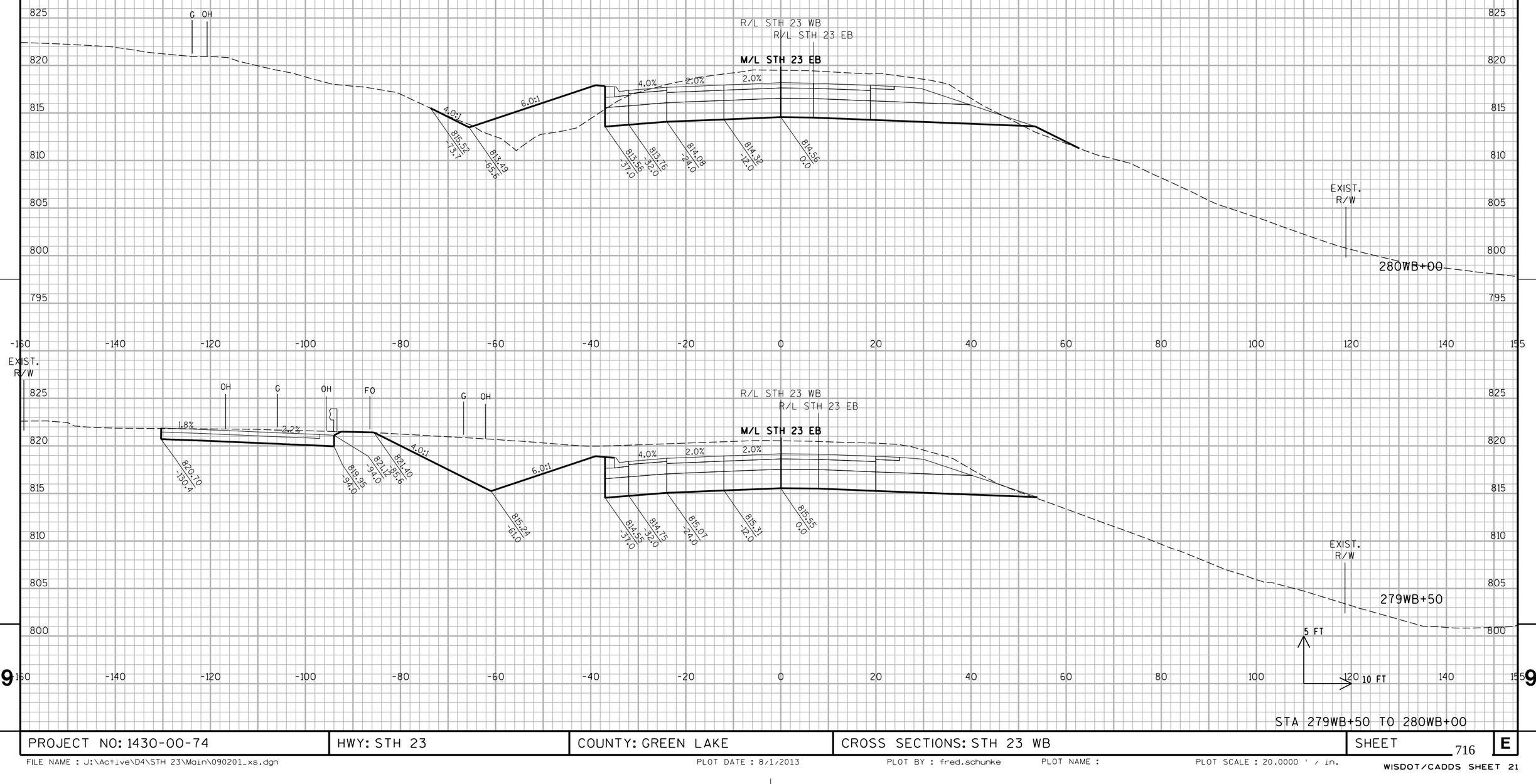




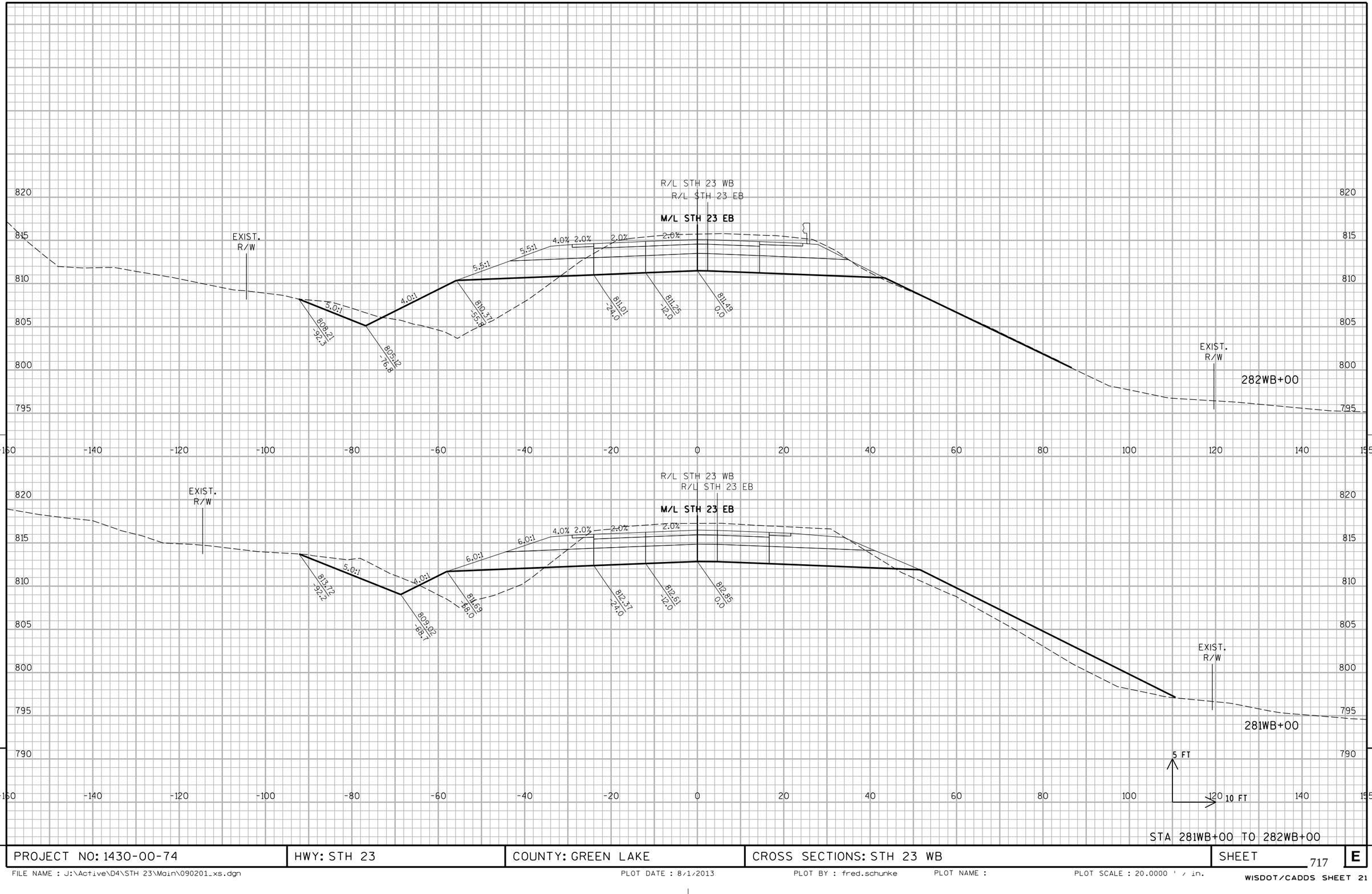
STA 277WB+00 TO 279WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 715	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.
WISDOT/CADDS SHEET 21



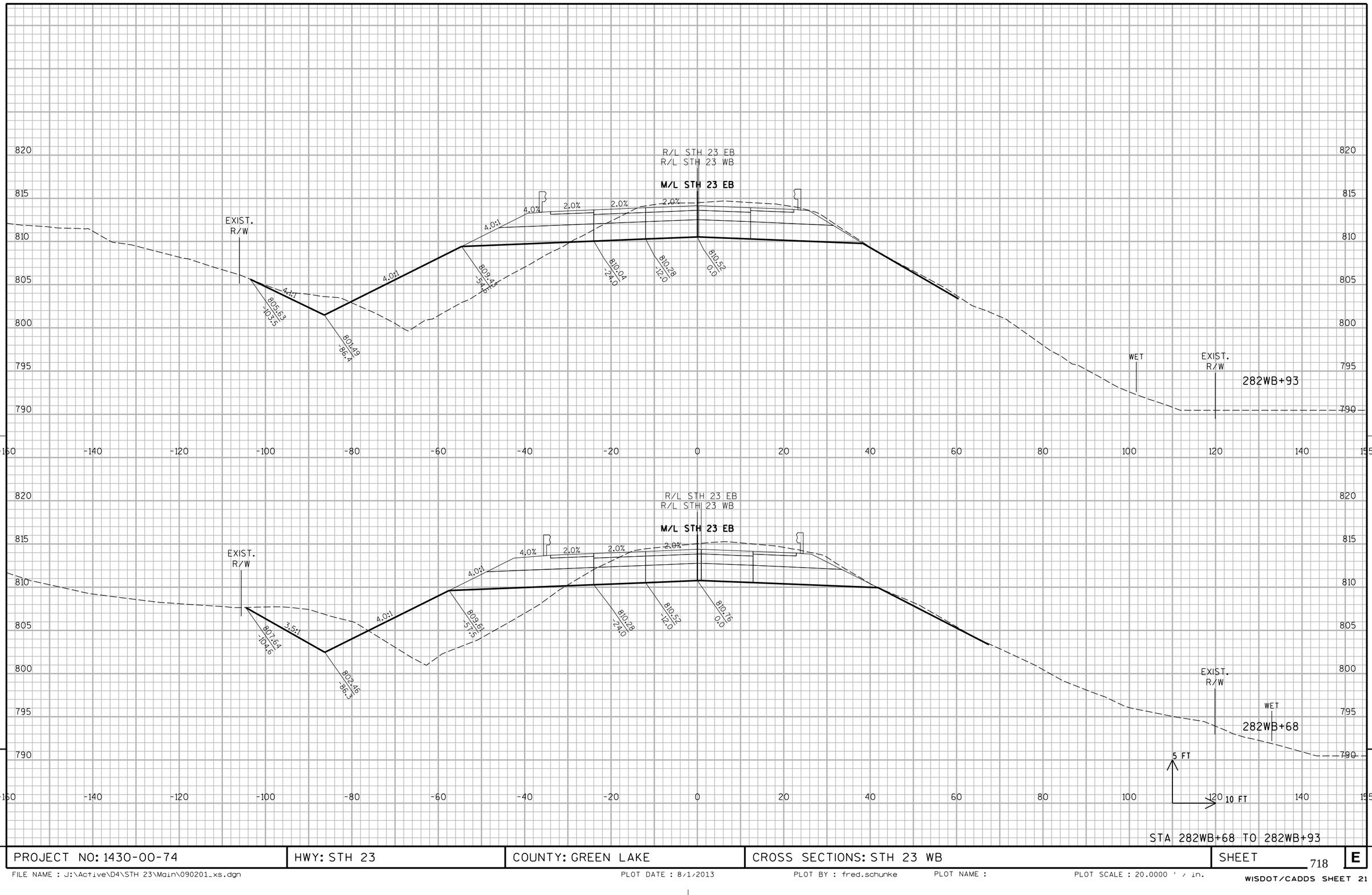
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 716	E



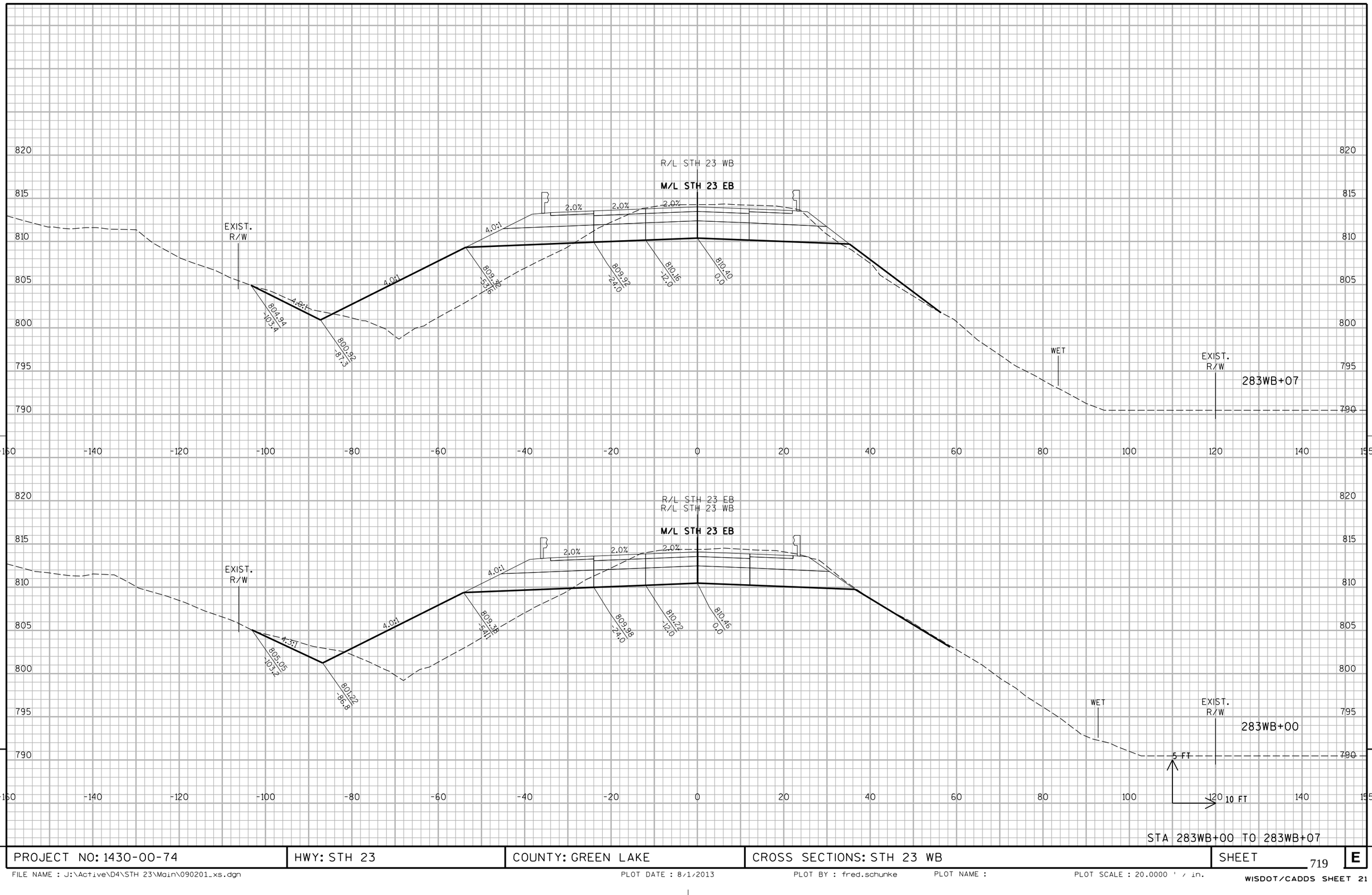
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 717	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 718	E



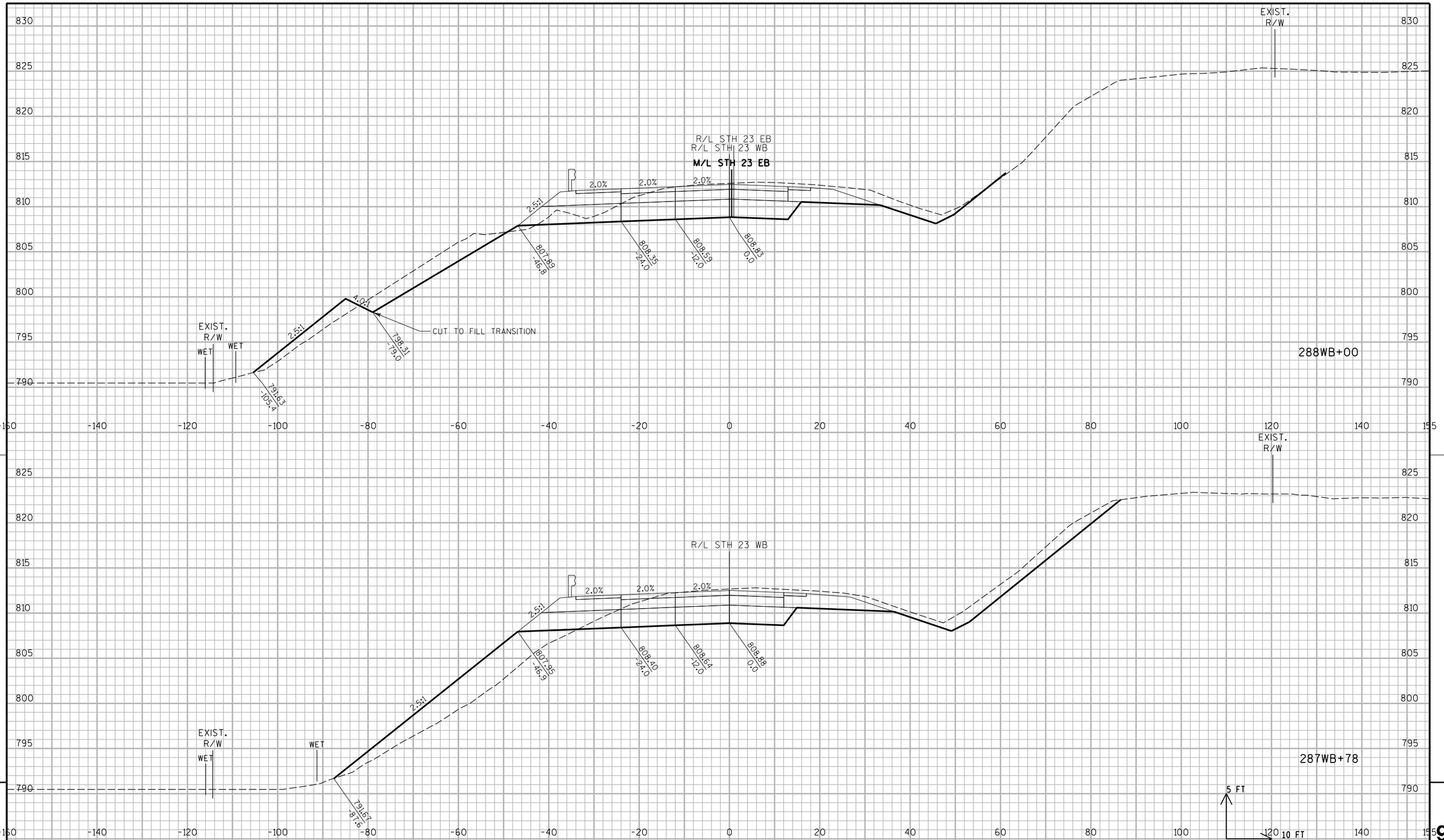
9 9

STA 283WB+00 TO 283WB+07

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 719	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

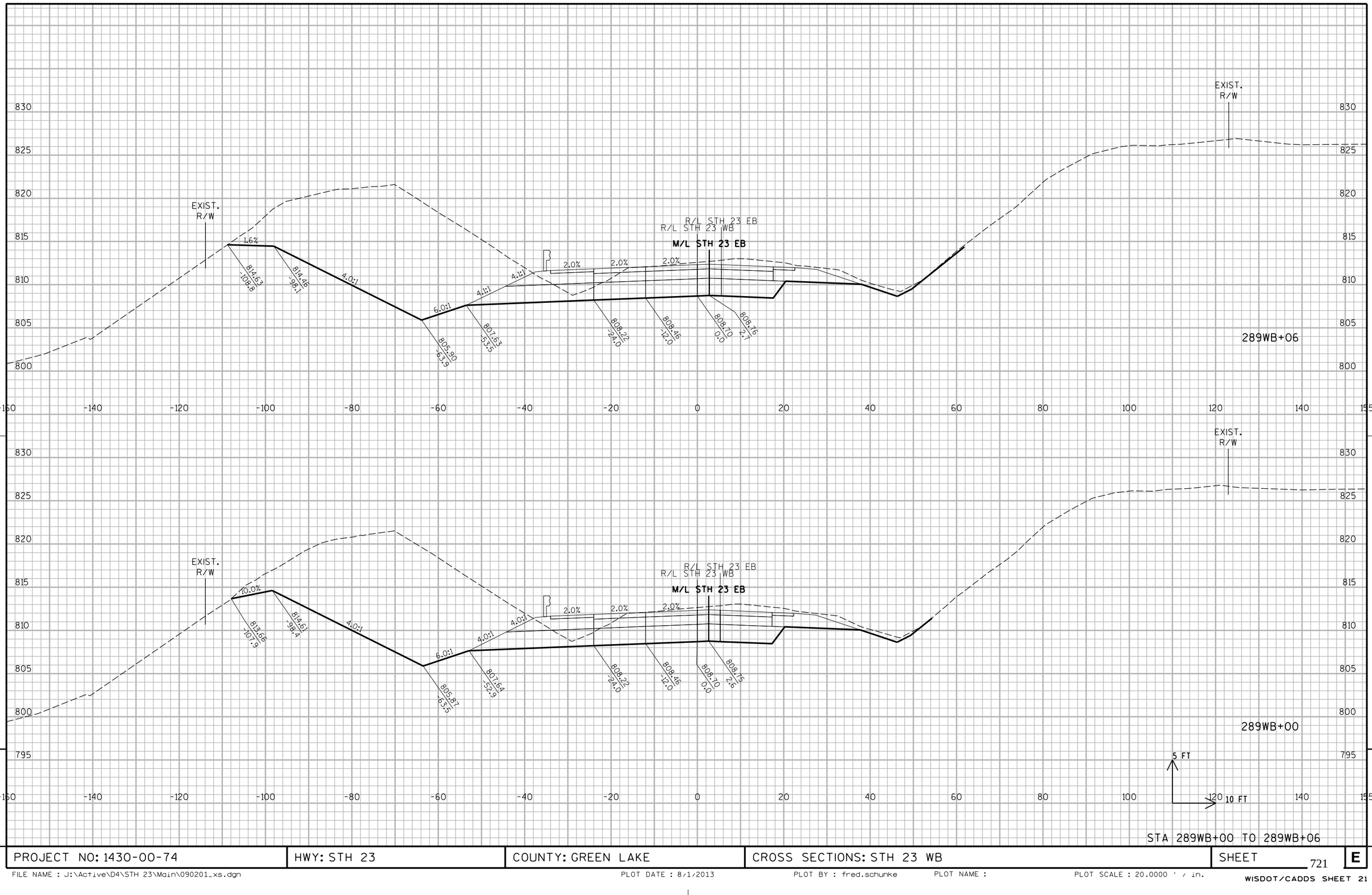


STA 287WB+78 TO 288WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 720	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

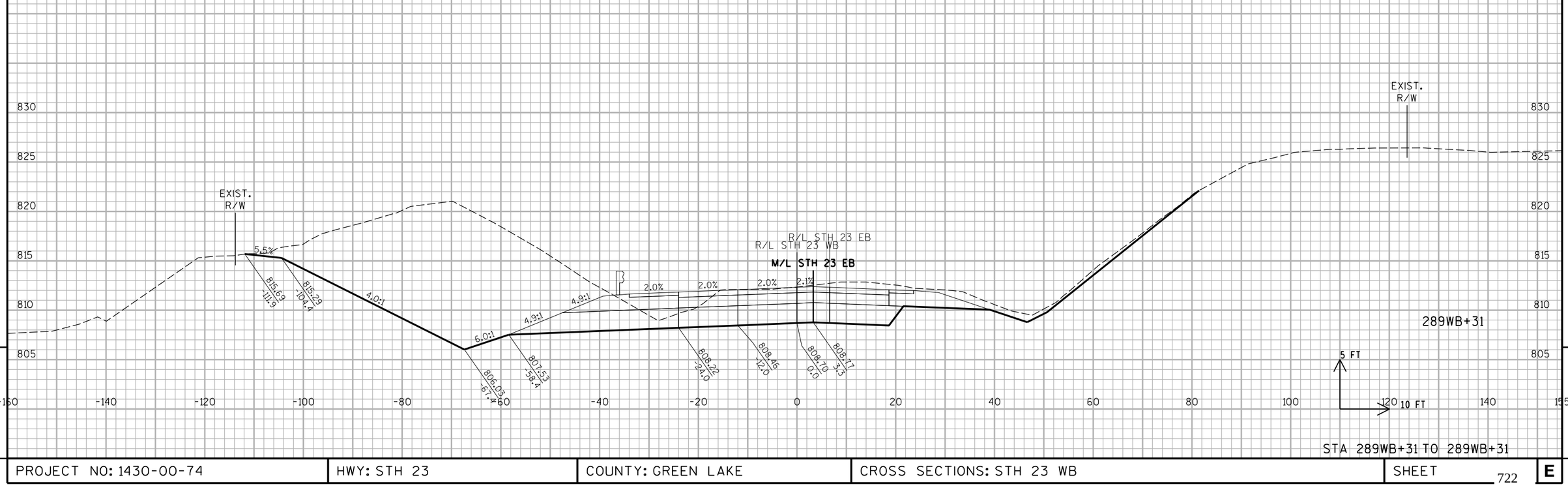


STA 289WB+00 TO 289WB+06

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 721	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

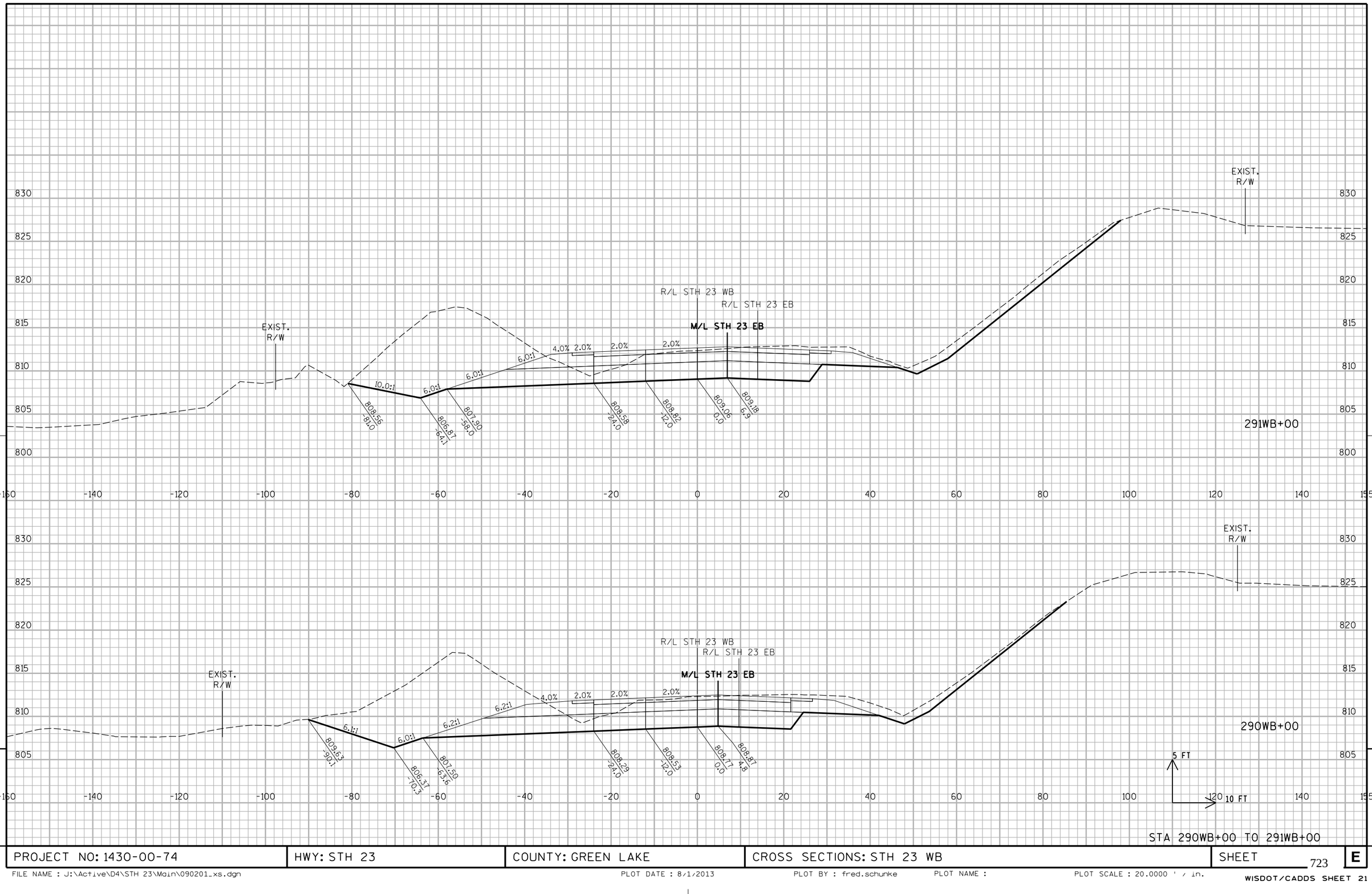


STA 289WB+31 TO 289WB+31

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 722	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

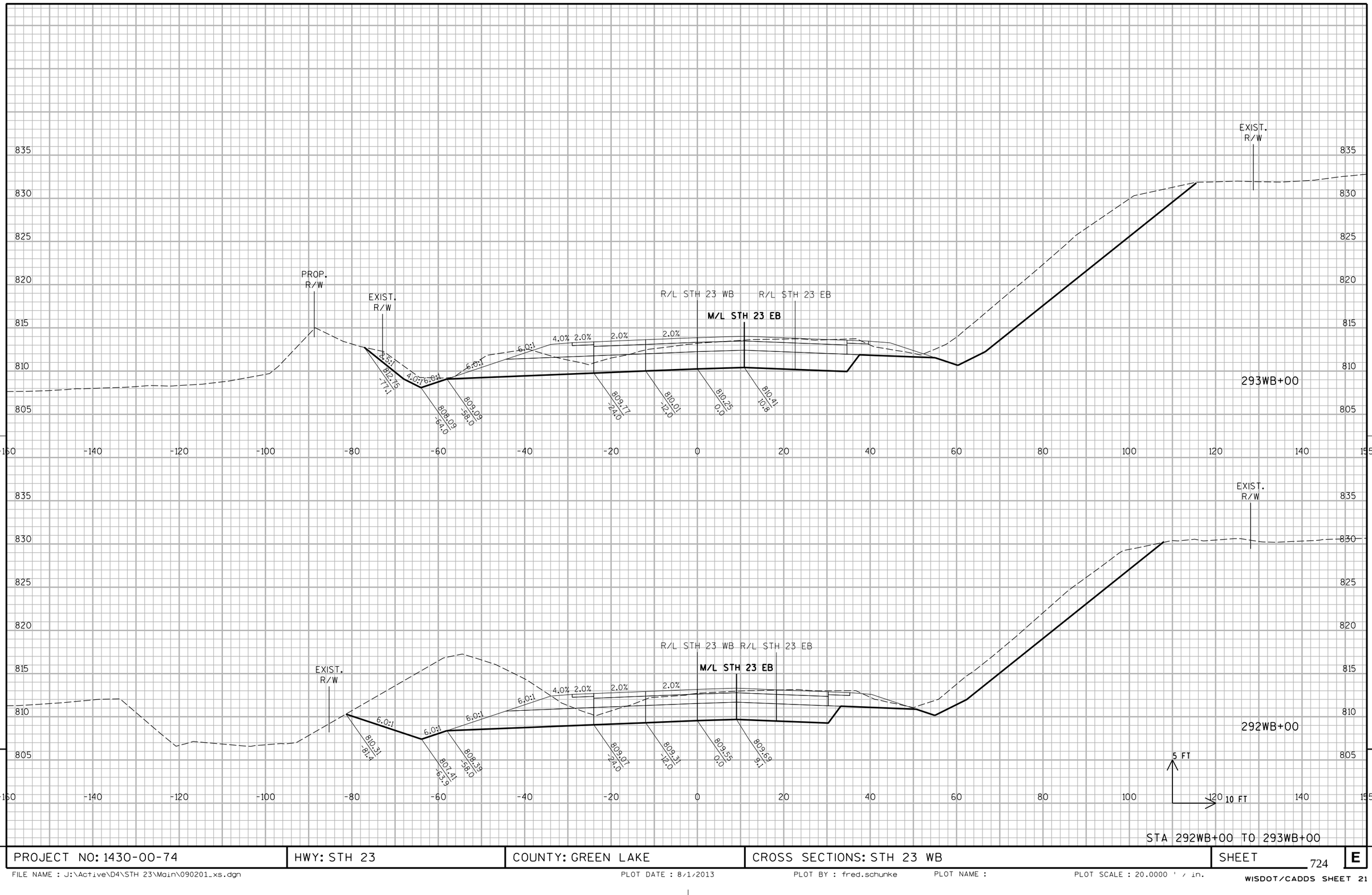


STA 290WB+00 TO 291WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 723	E

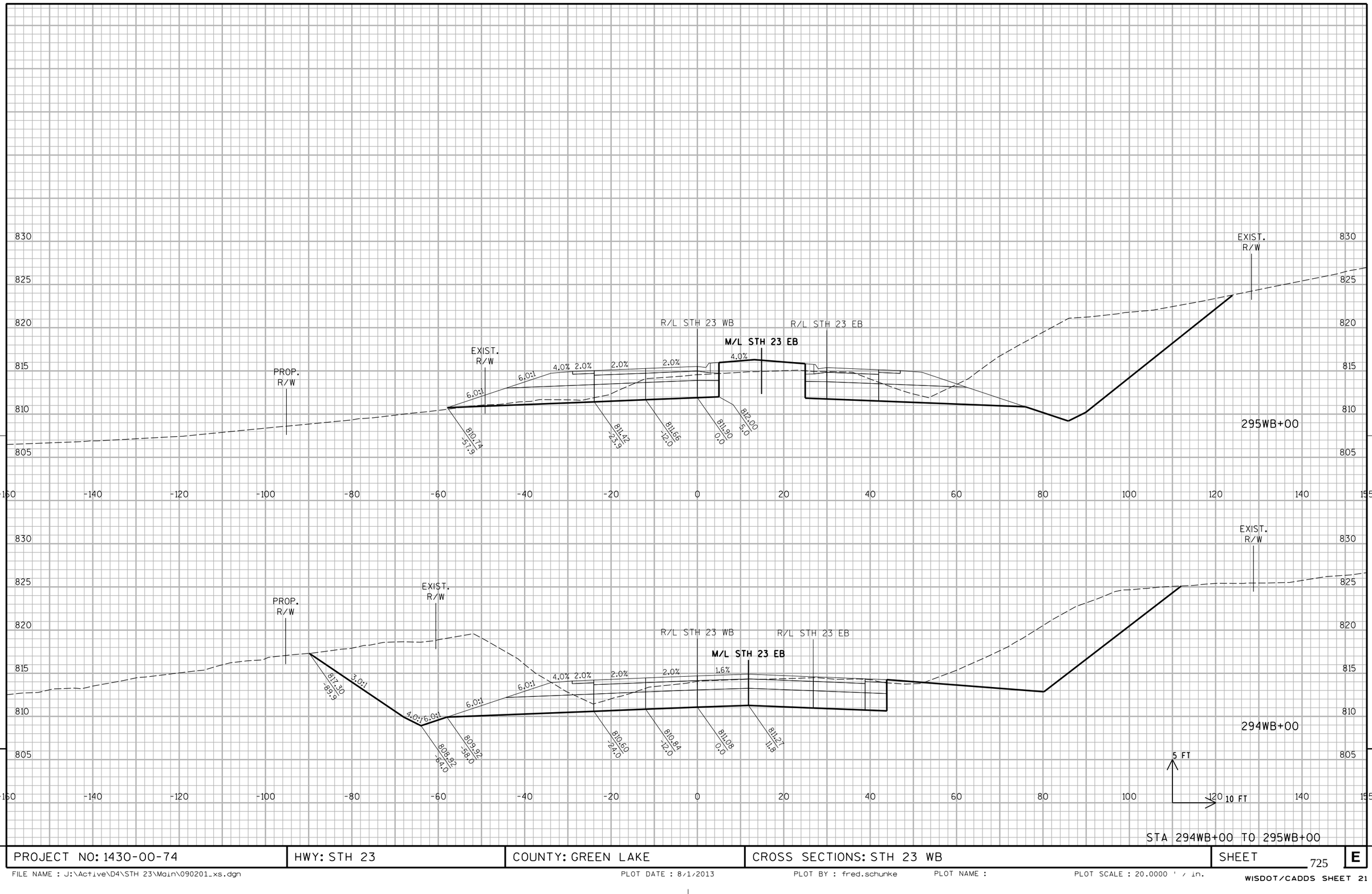
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 292WB+00 TO 293WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 724	E

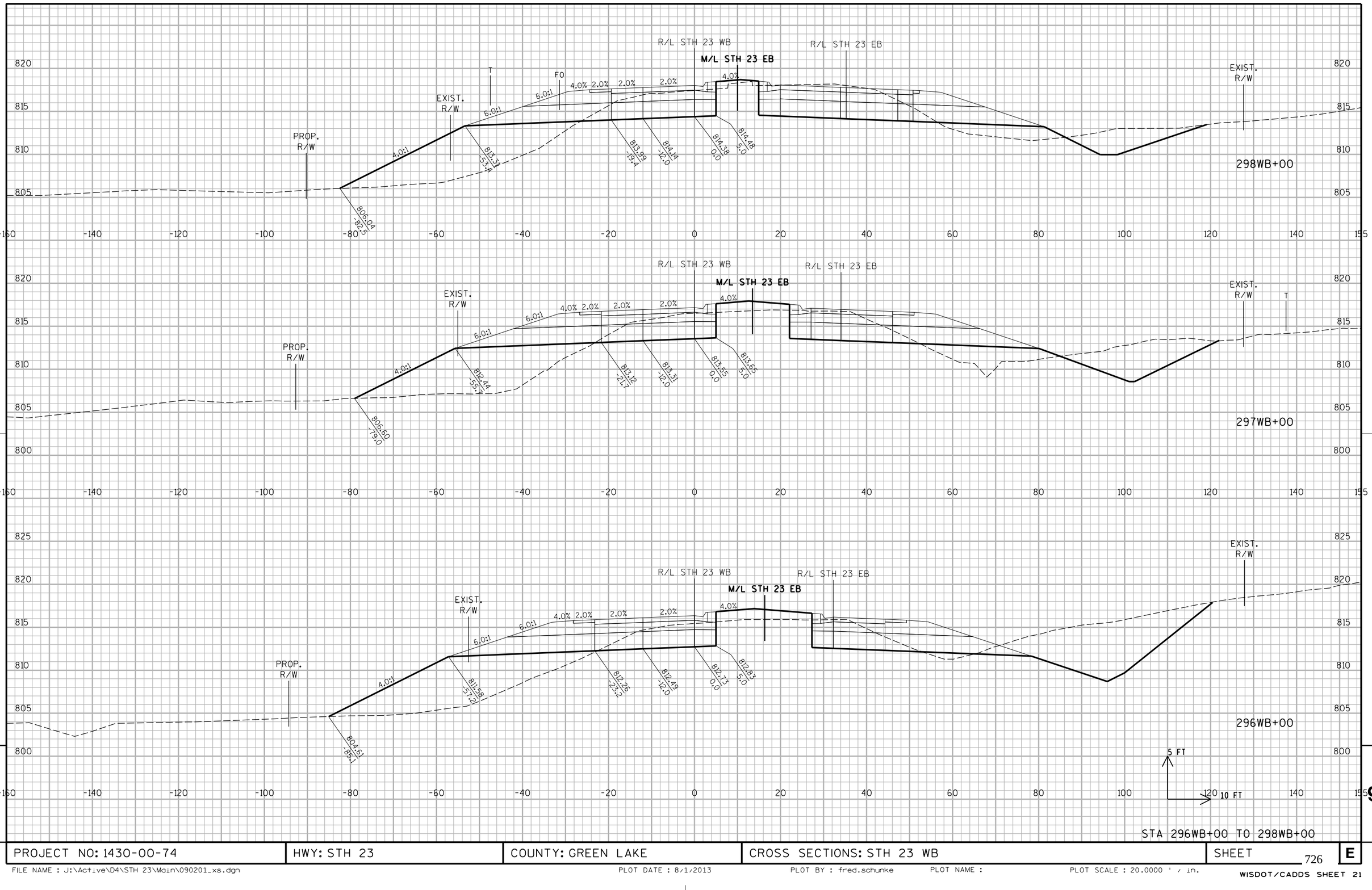


STA 294WB+00 TO 295WB+00

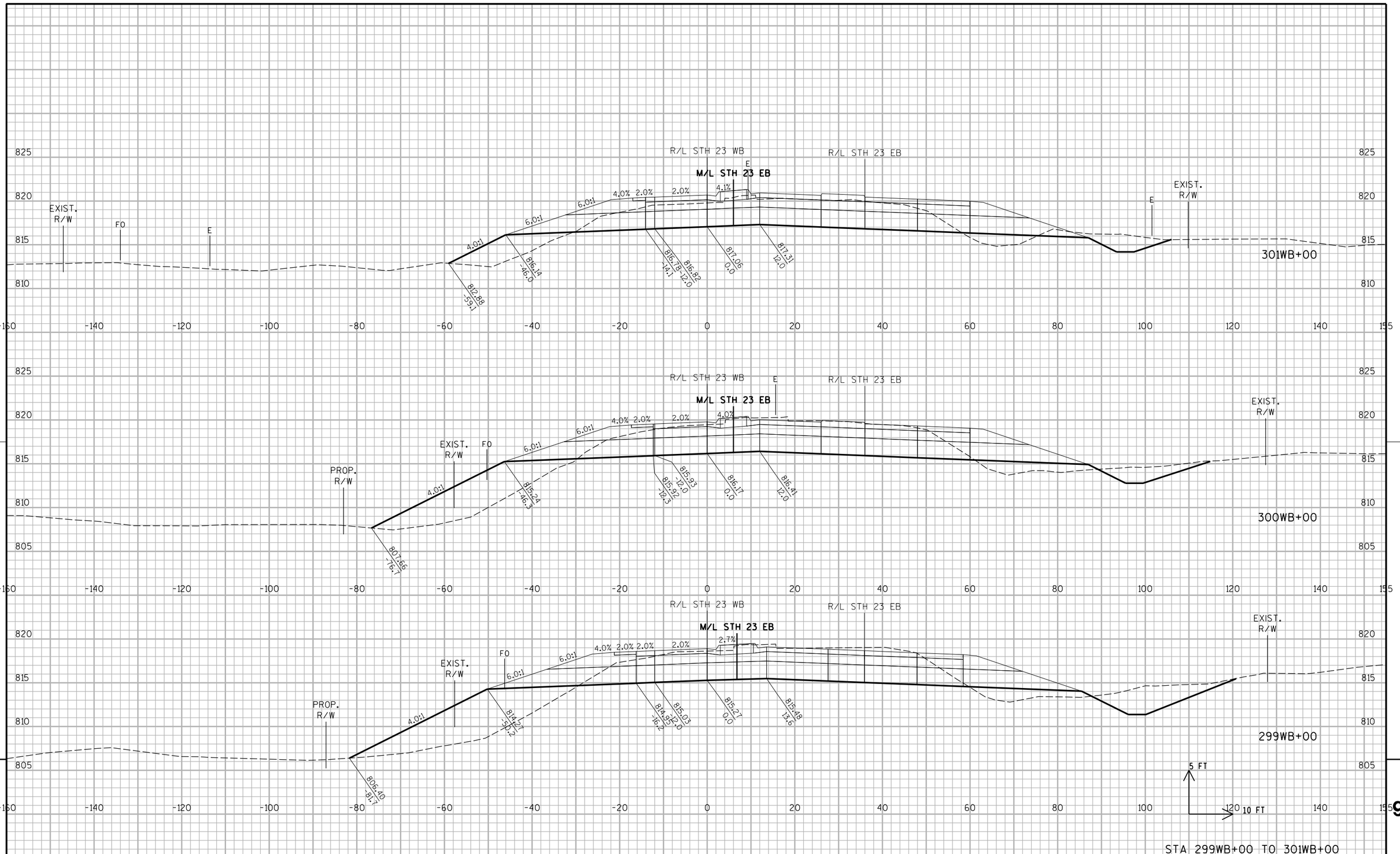
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 725	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

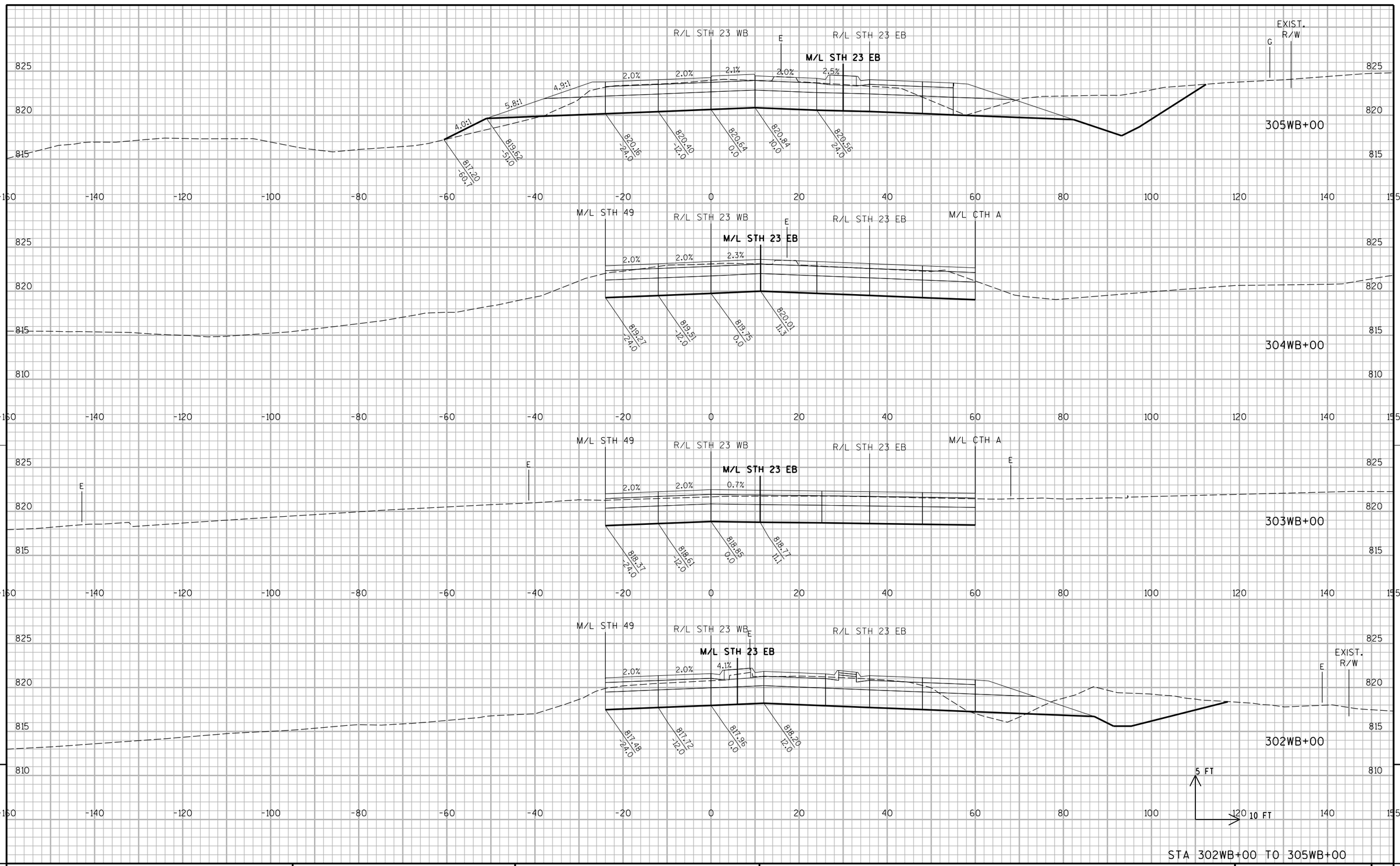


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 726	E



STA 299WB+00 TO 301WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 727	E



STA 302WB+00 TO 305WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 728	E

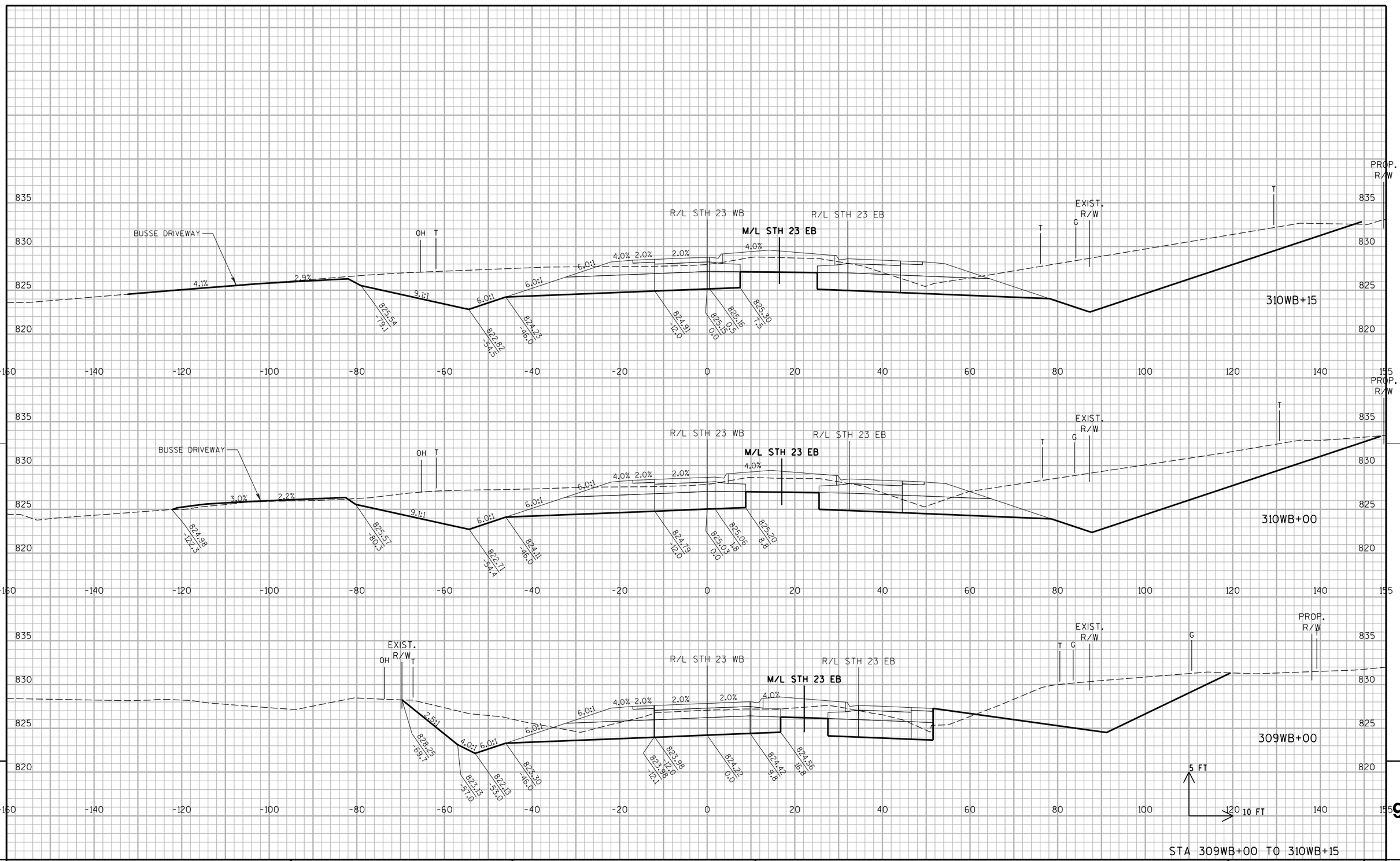
FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 729	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

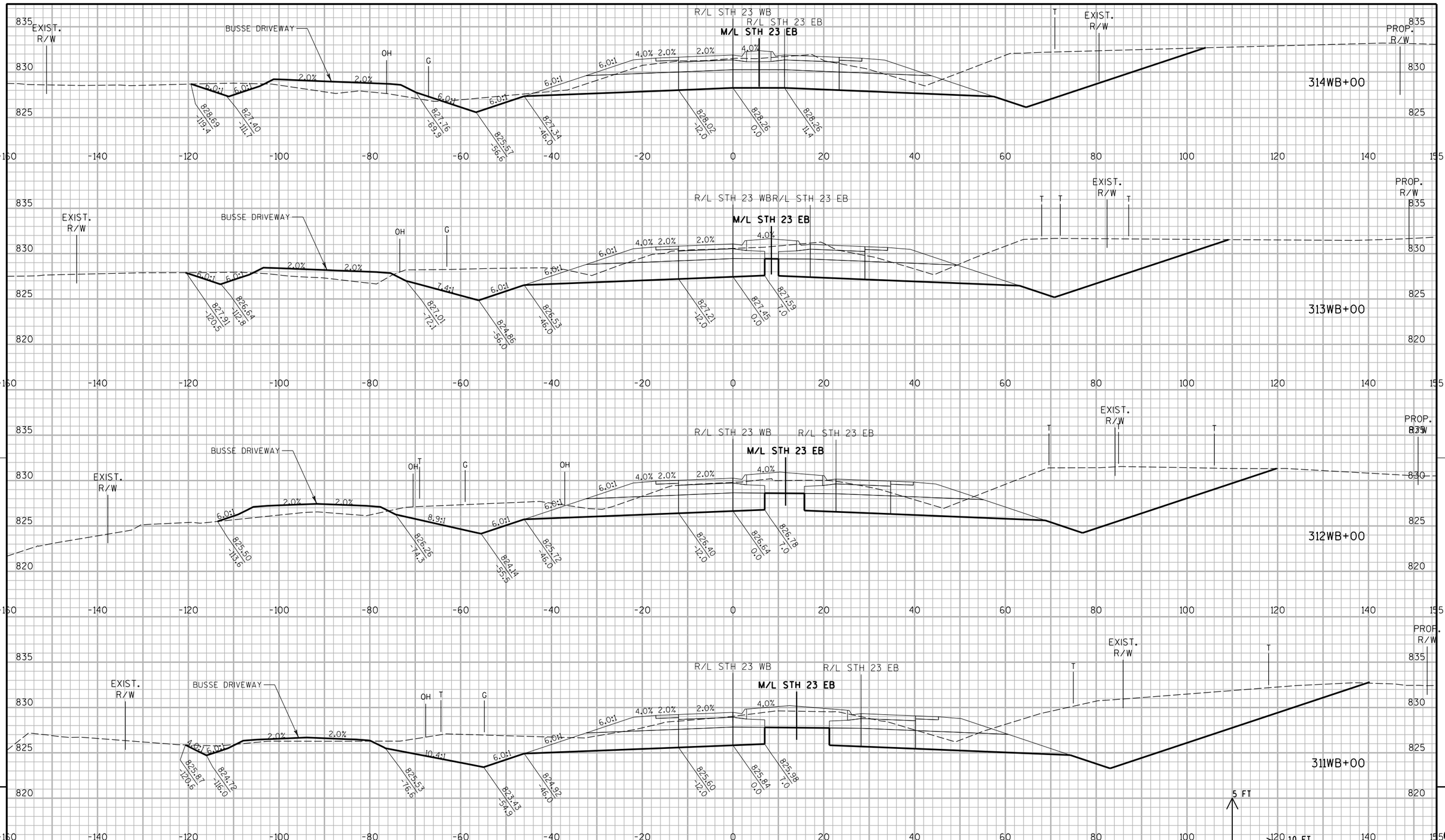


STA 309WB+00 TO 310WB+15

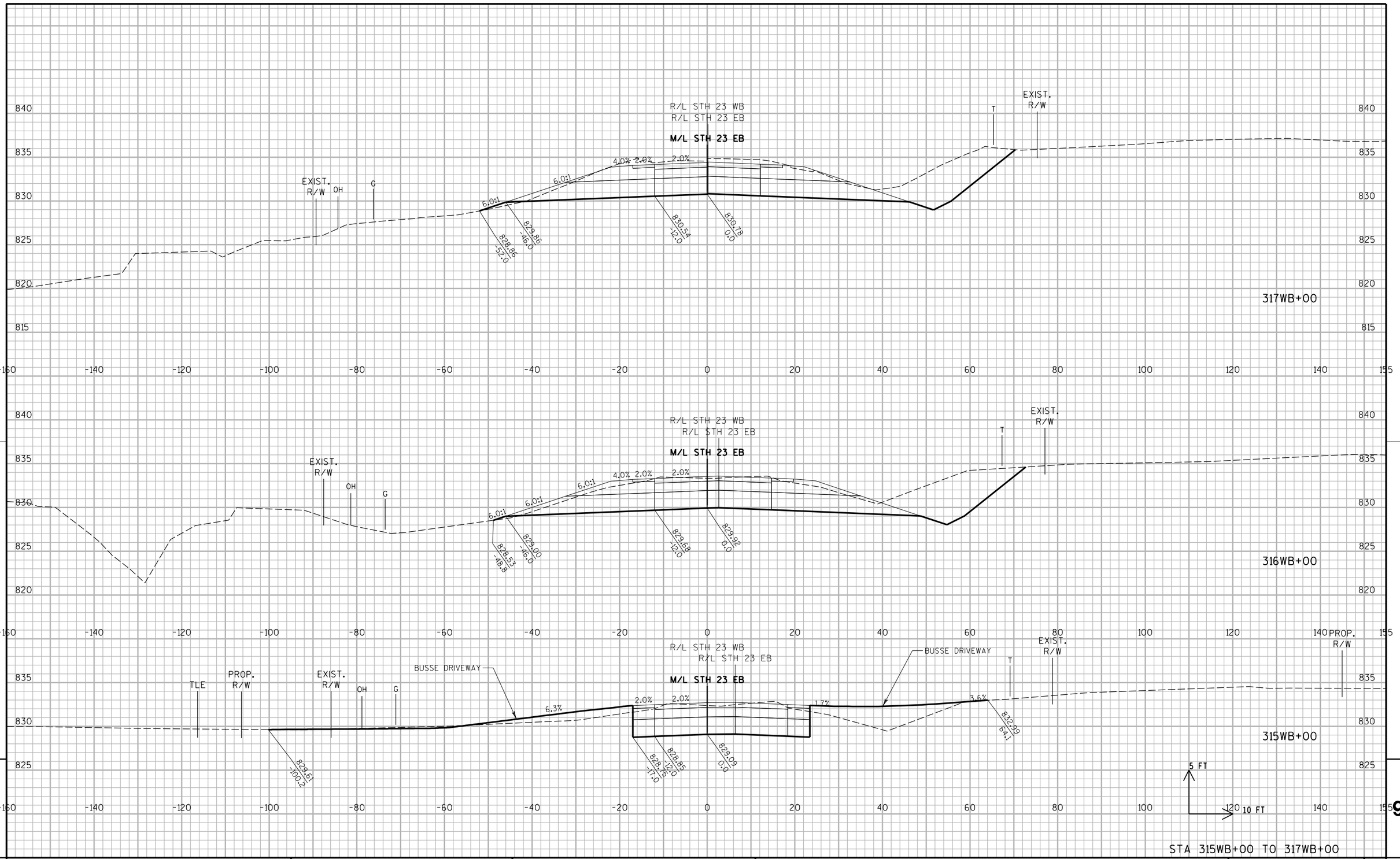
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 730	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 731	E

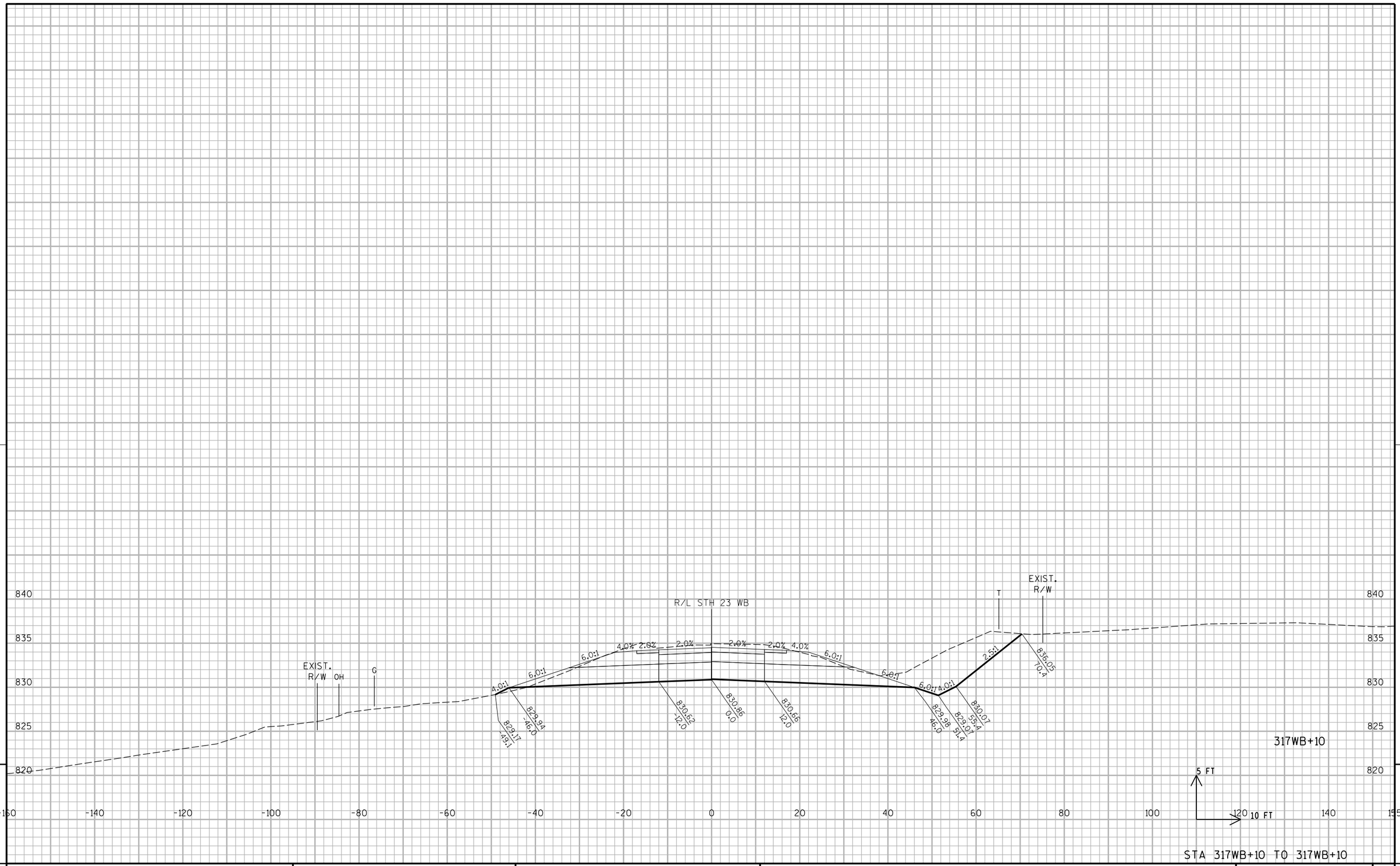


STA 315WB+00 TO 317WB+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 732	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

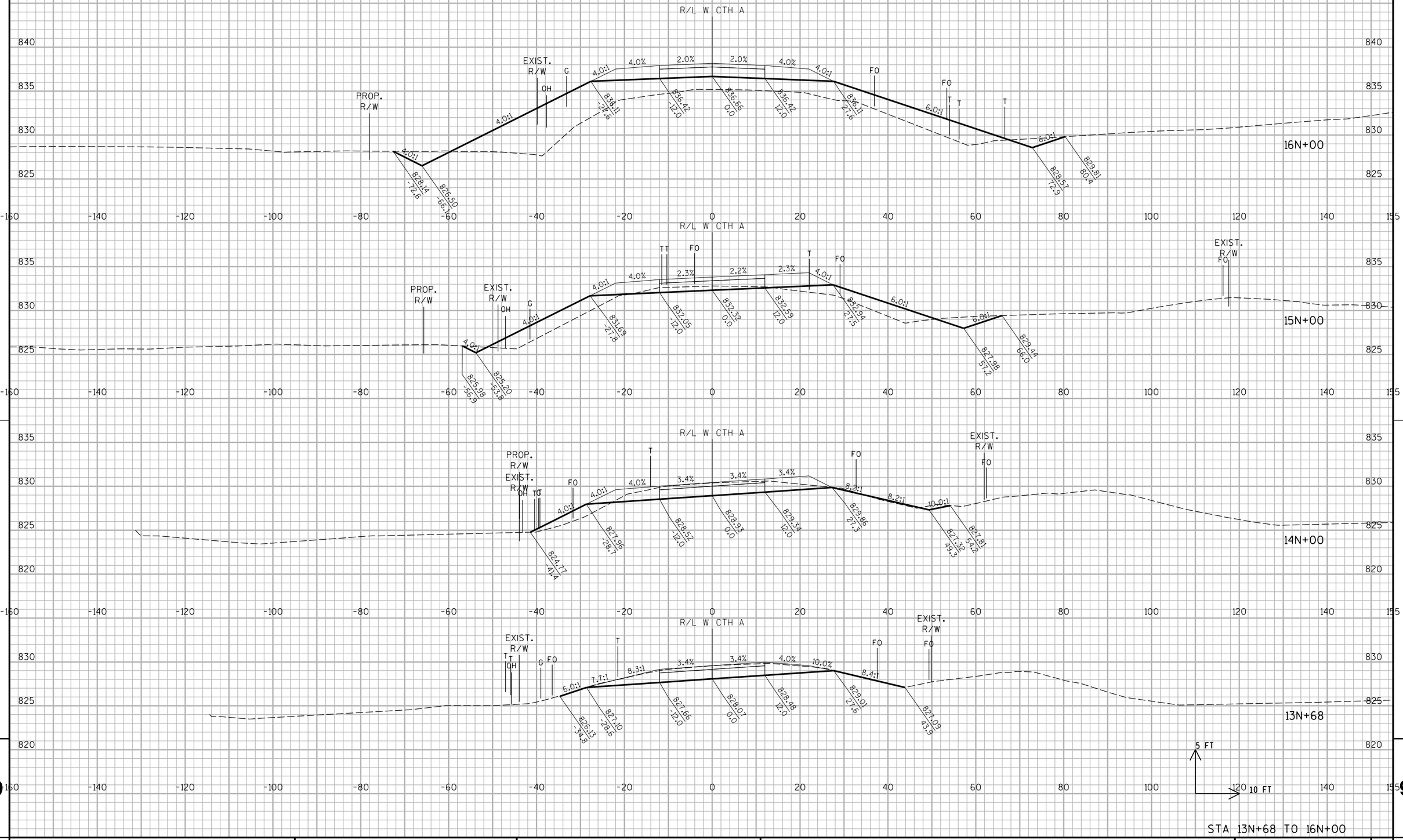


STA 317WB+10 TO 317WB+10

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 23 WB	SHEET 733	E

FILE NAME : J:\Active\D4\STH 23\Main\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

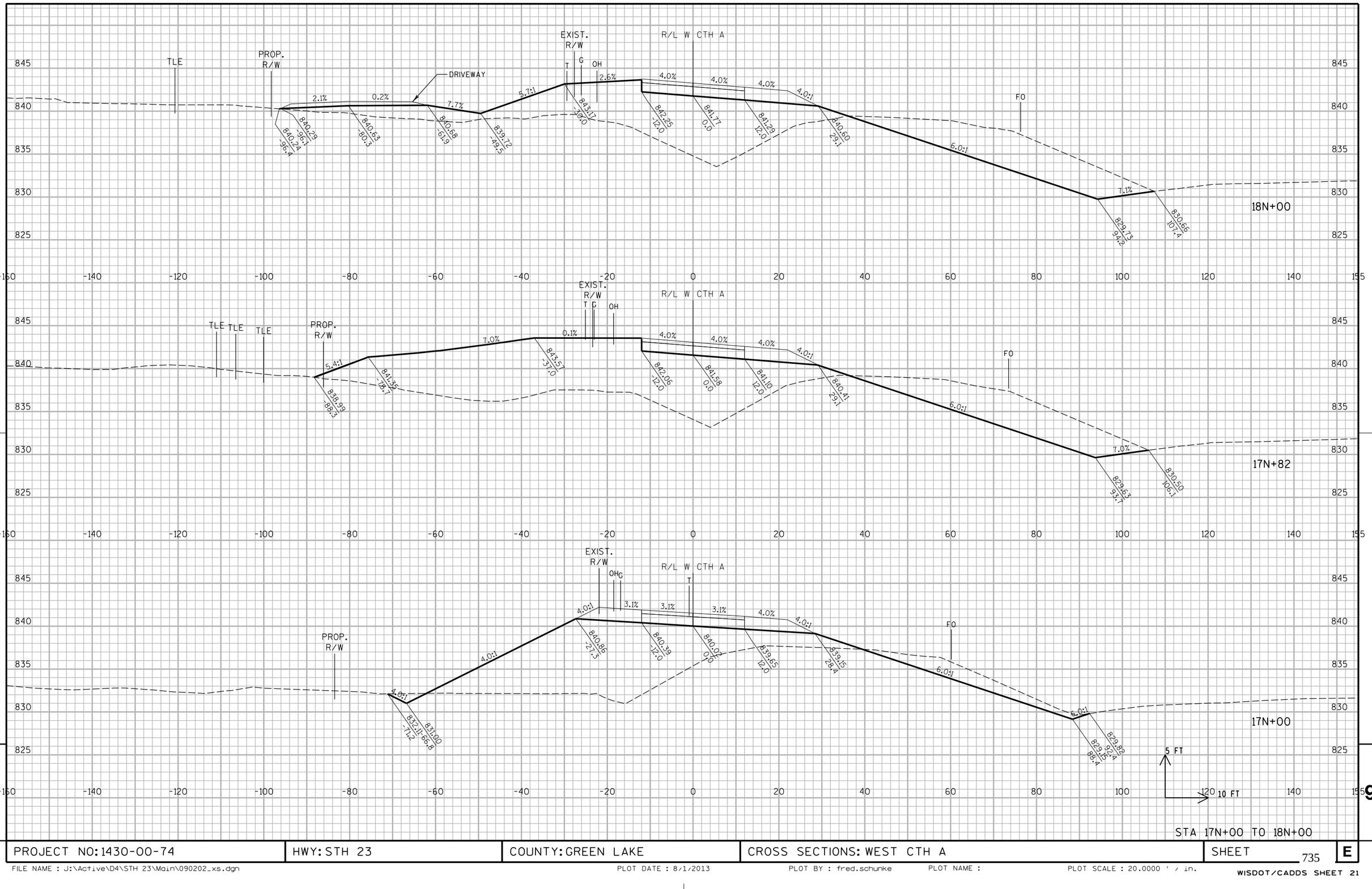
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: WEST CTH A	SHEET 734	E

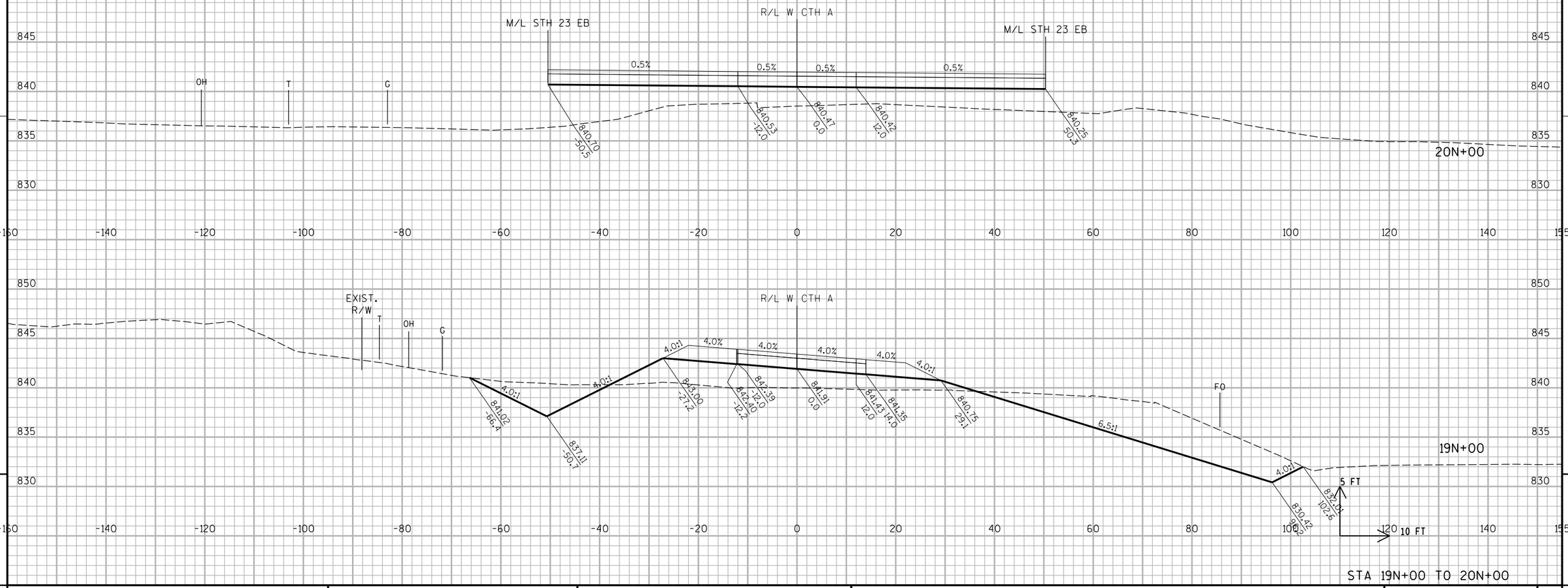
FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 17N+00 TO 18N+00

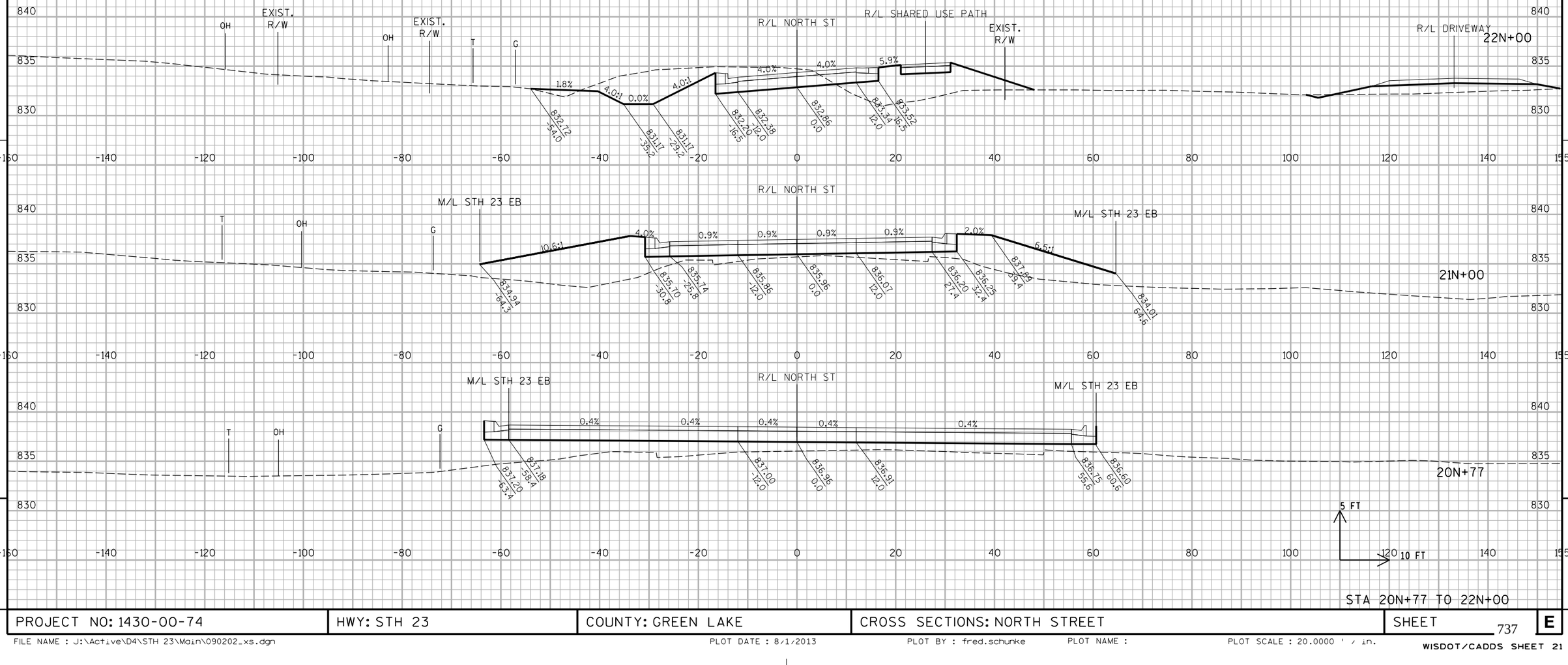
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: WEST CTH A	SHEET 735	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: WEST CTH A	SHEET 736	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

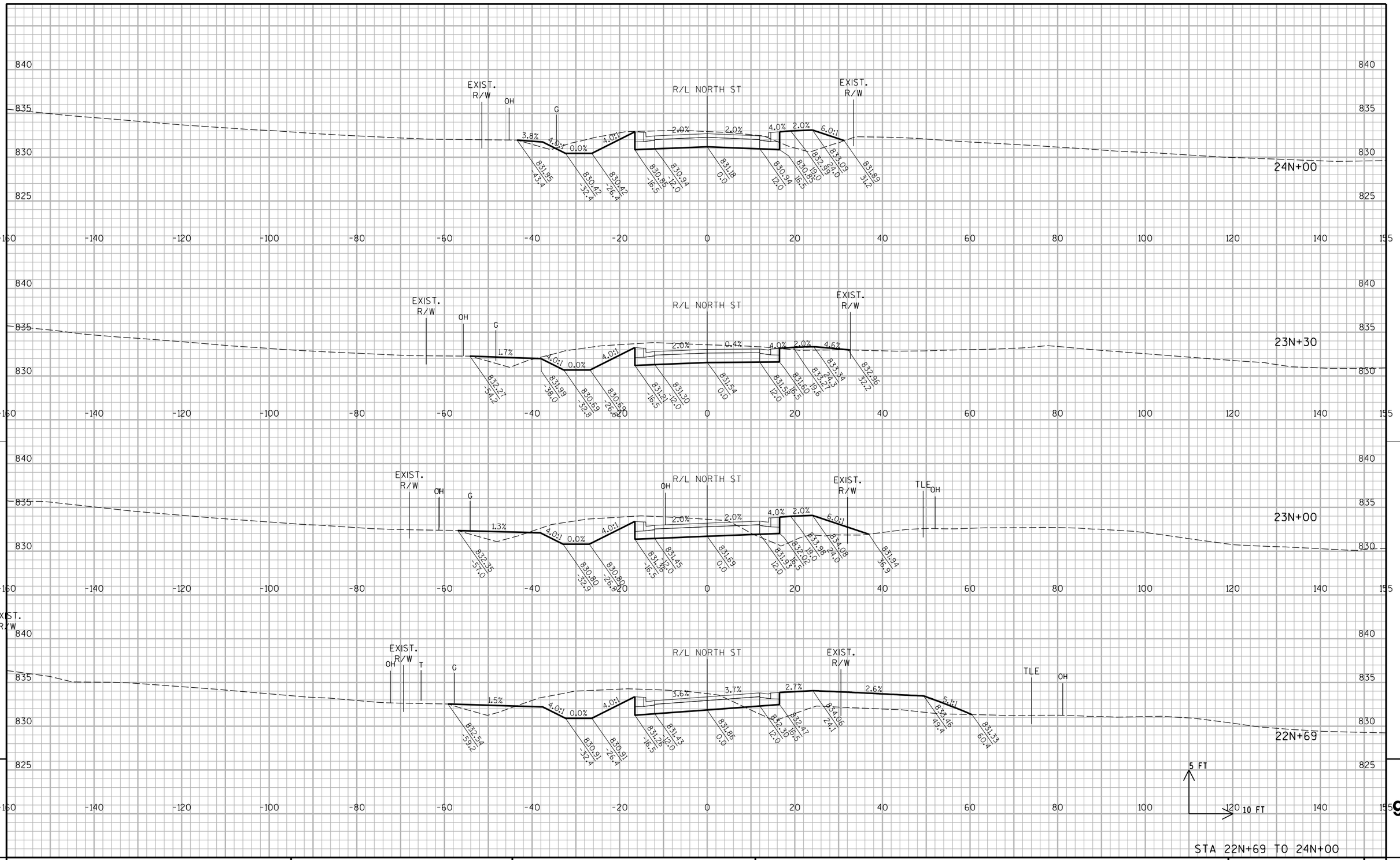
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: NORTH STREET	SHEET 737	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

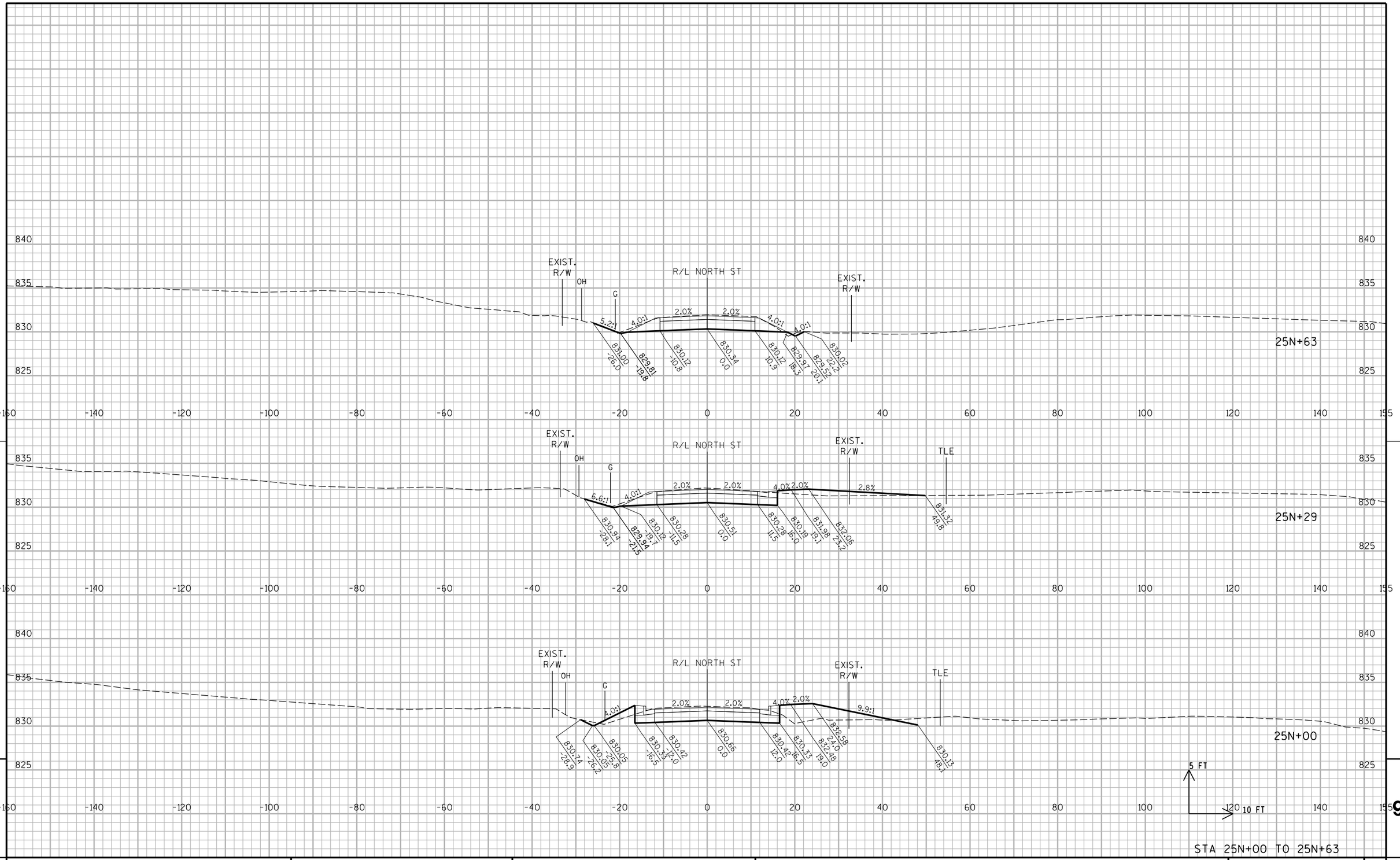
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: NORTH STREET	SHEET 738	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

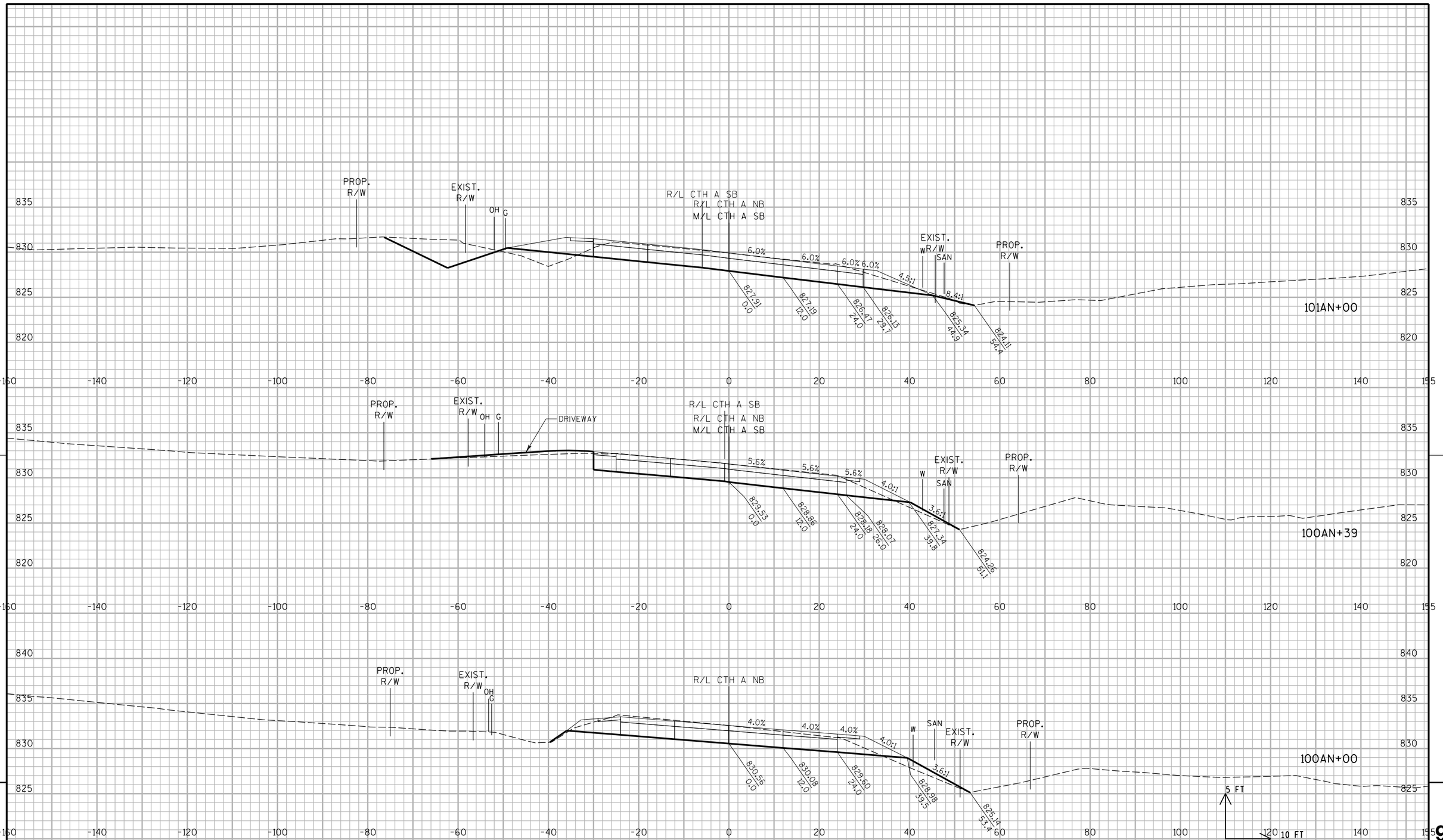
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: NORTH STREET	SHEET 739	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

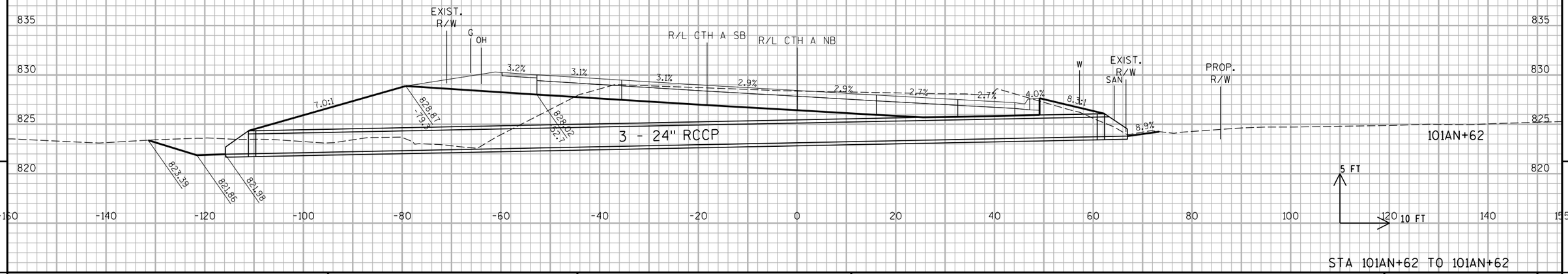
WISDOT/CADDS SHEET 21



STA 100AN+00 TO 101AN+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH A NB	SHEET 740	E

THIS CROSS-SECTION SKEWED 41°32'53" LHF
FOR INFORMATION PURPOSES ONLY

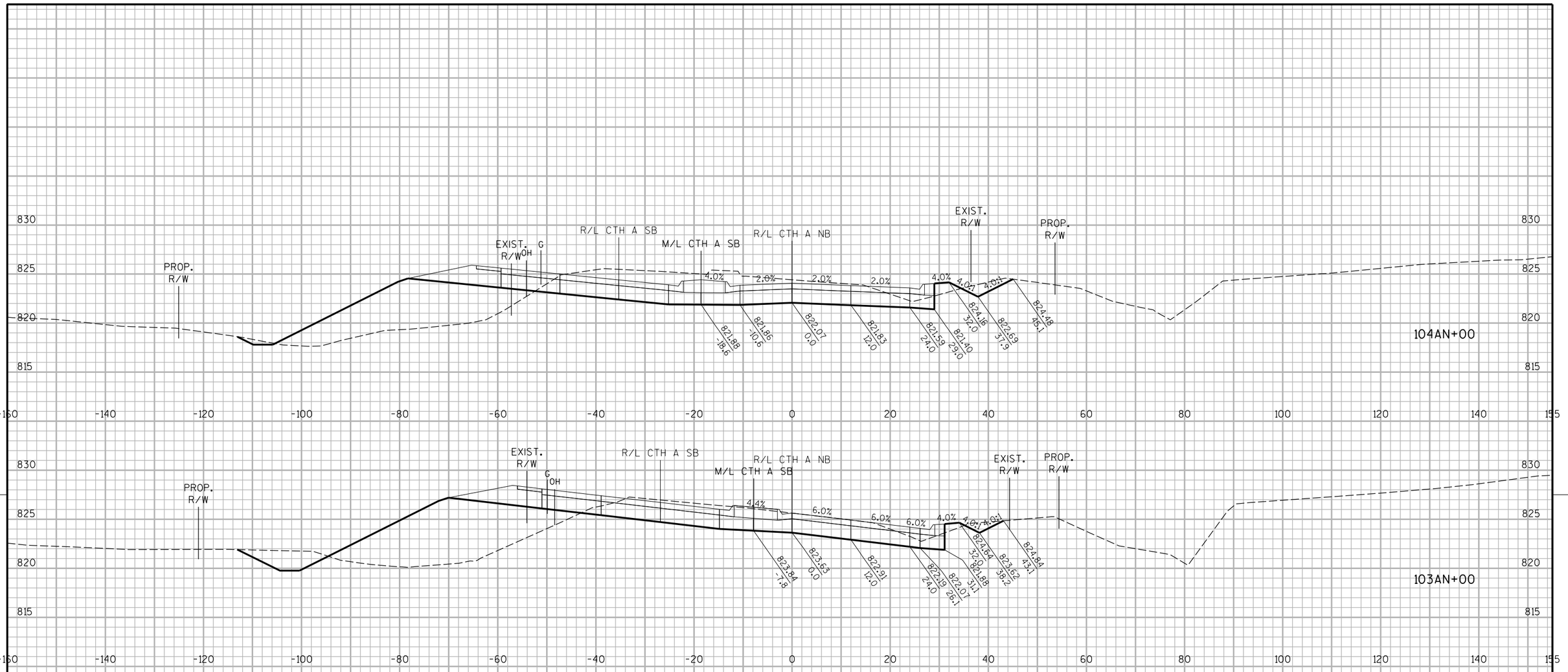


STA 101AN+62 TO 101AN+62

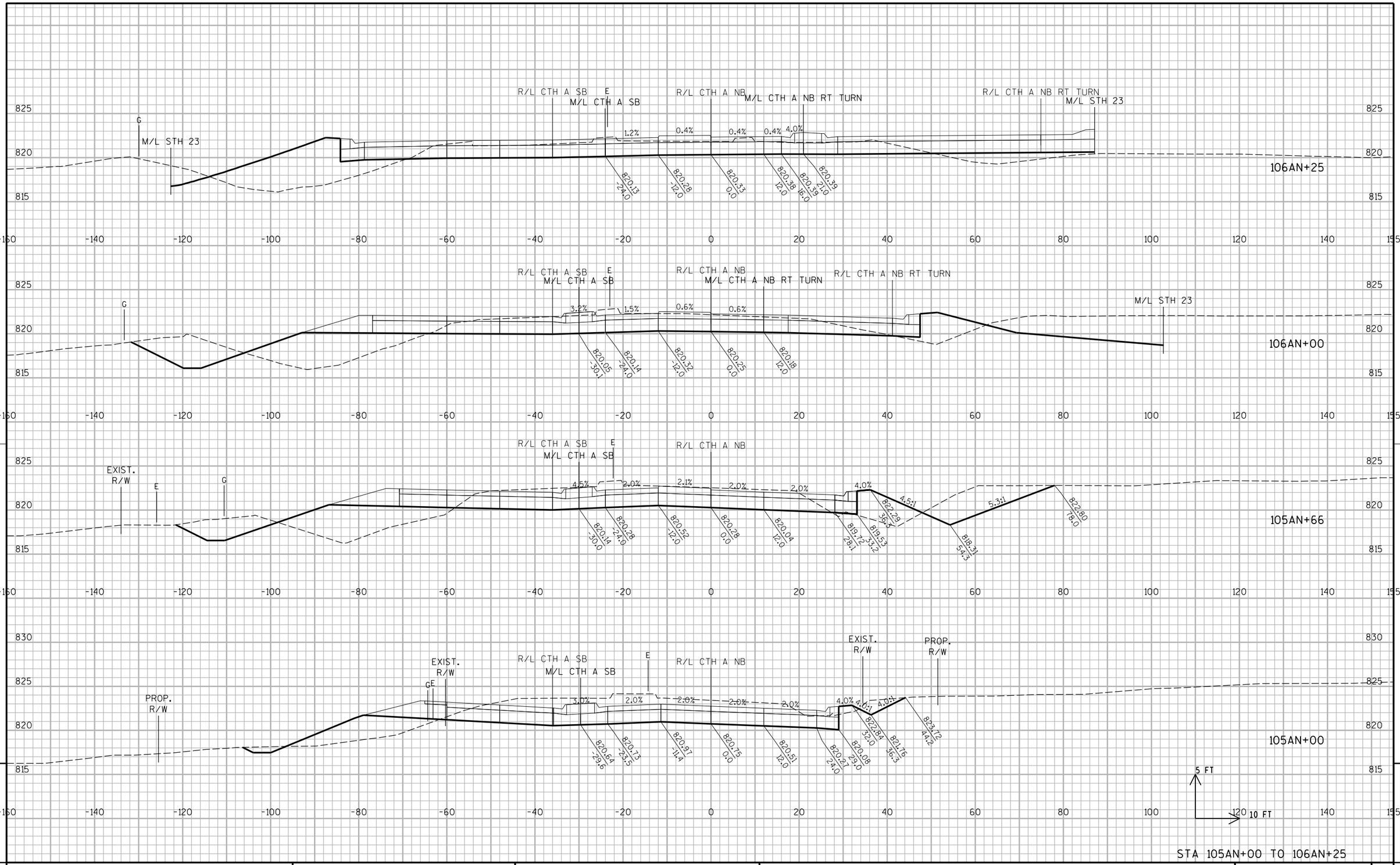
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH A NB	SHEET 741	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



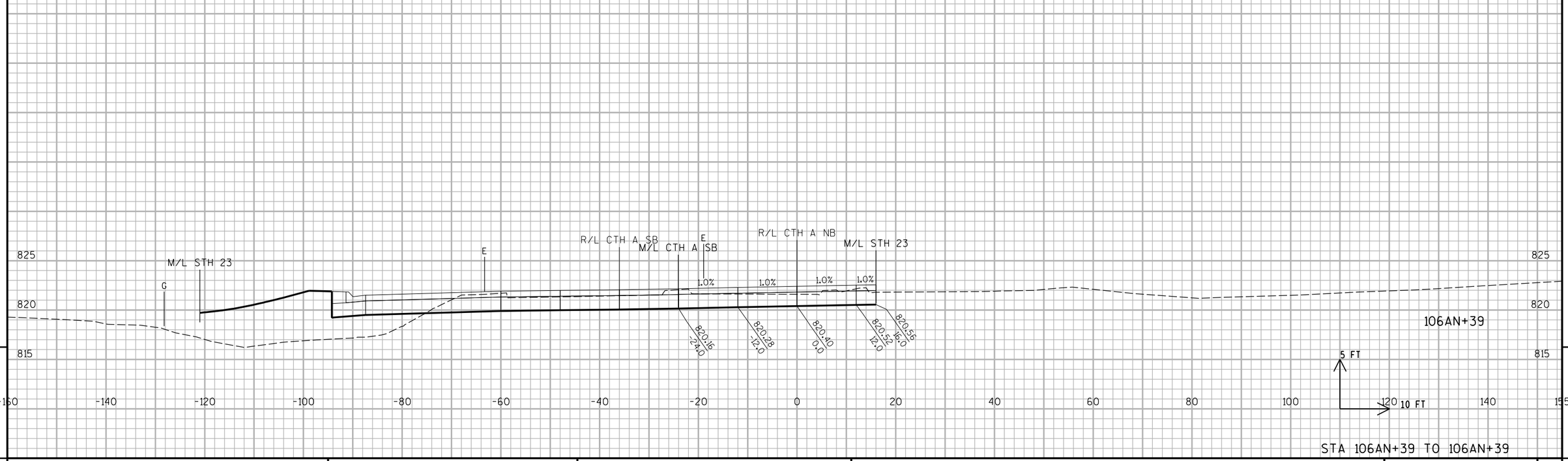
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH A NB	SHEET 742	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH A NB	SHEET 743	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

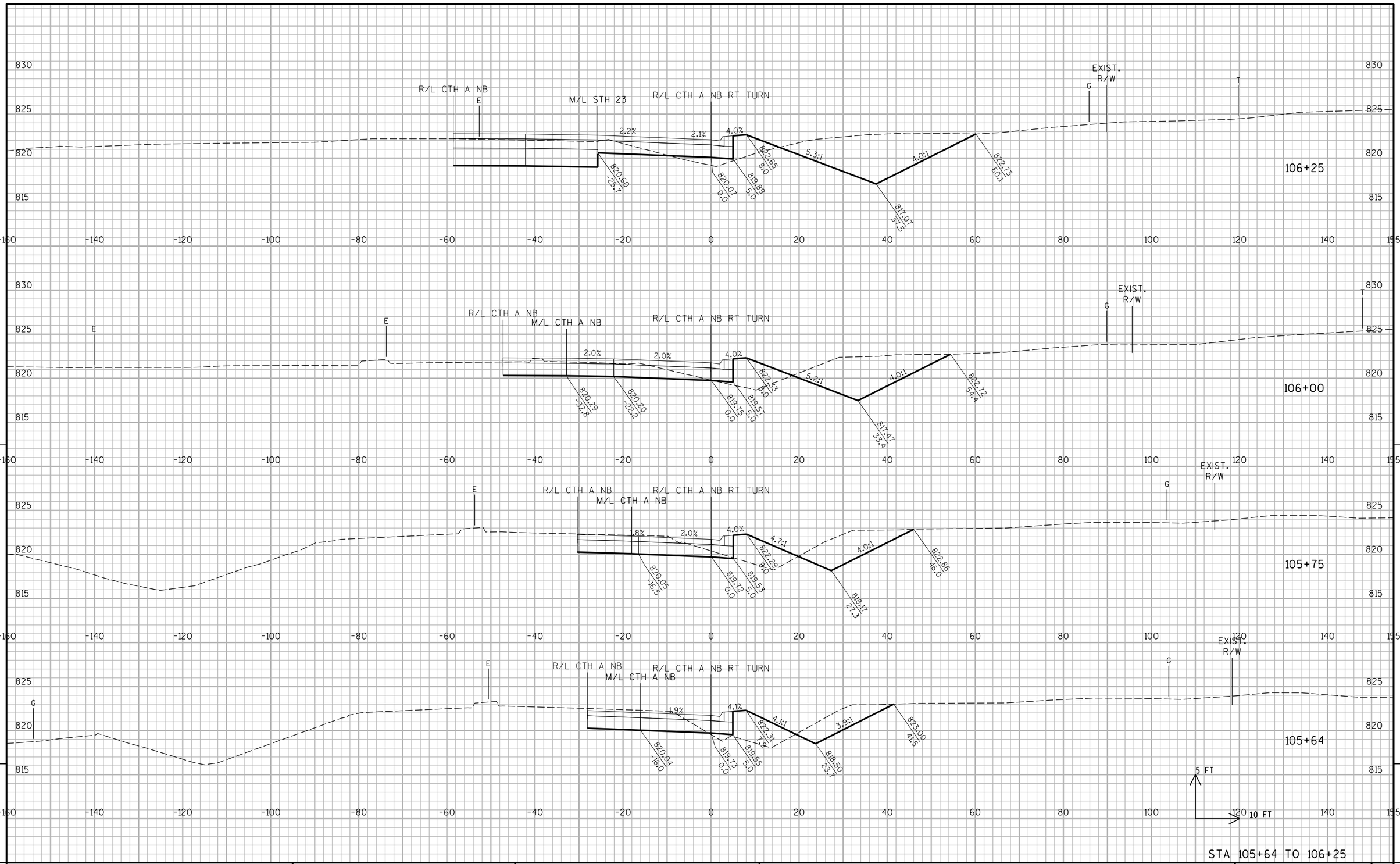
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH A NB	SHEET 744	E

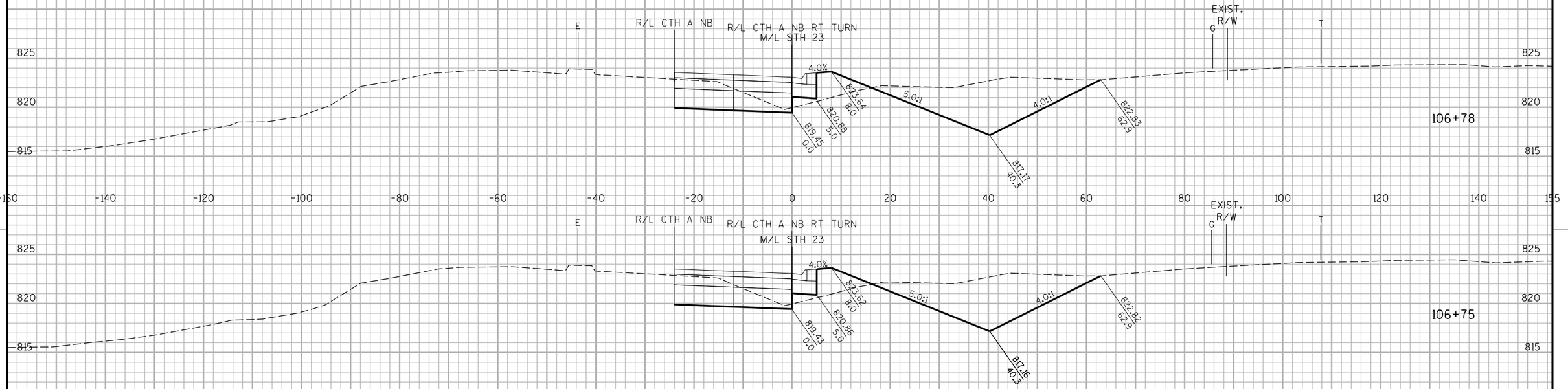
FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

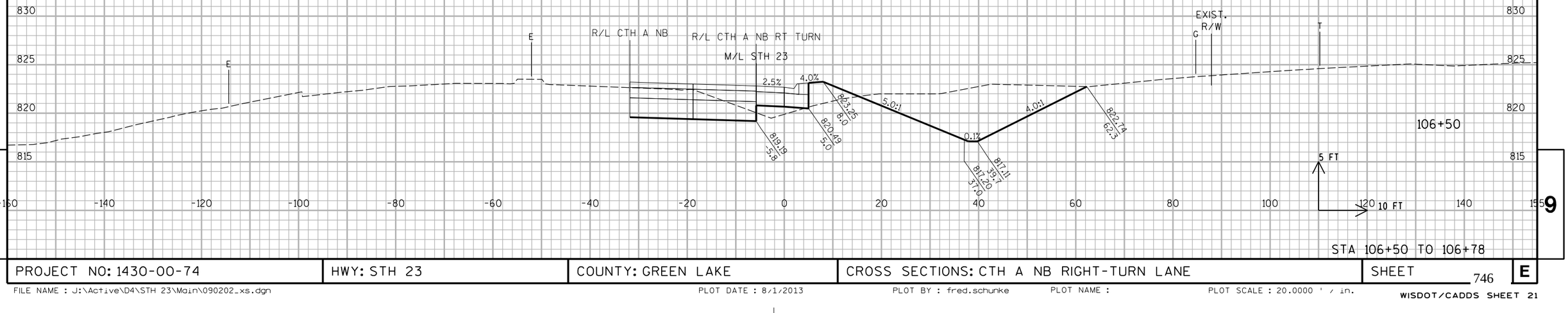
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH A NB RIGHT-TURN LANE	SHEET 745	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.
WISDOT/CADDS SHEET 21





STA 106+50 TO 106+78

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH A NB RIGHT-TURN LANE	SHEET 746	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 100AS+00 TO 101AS+00

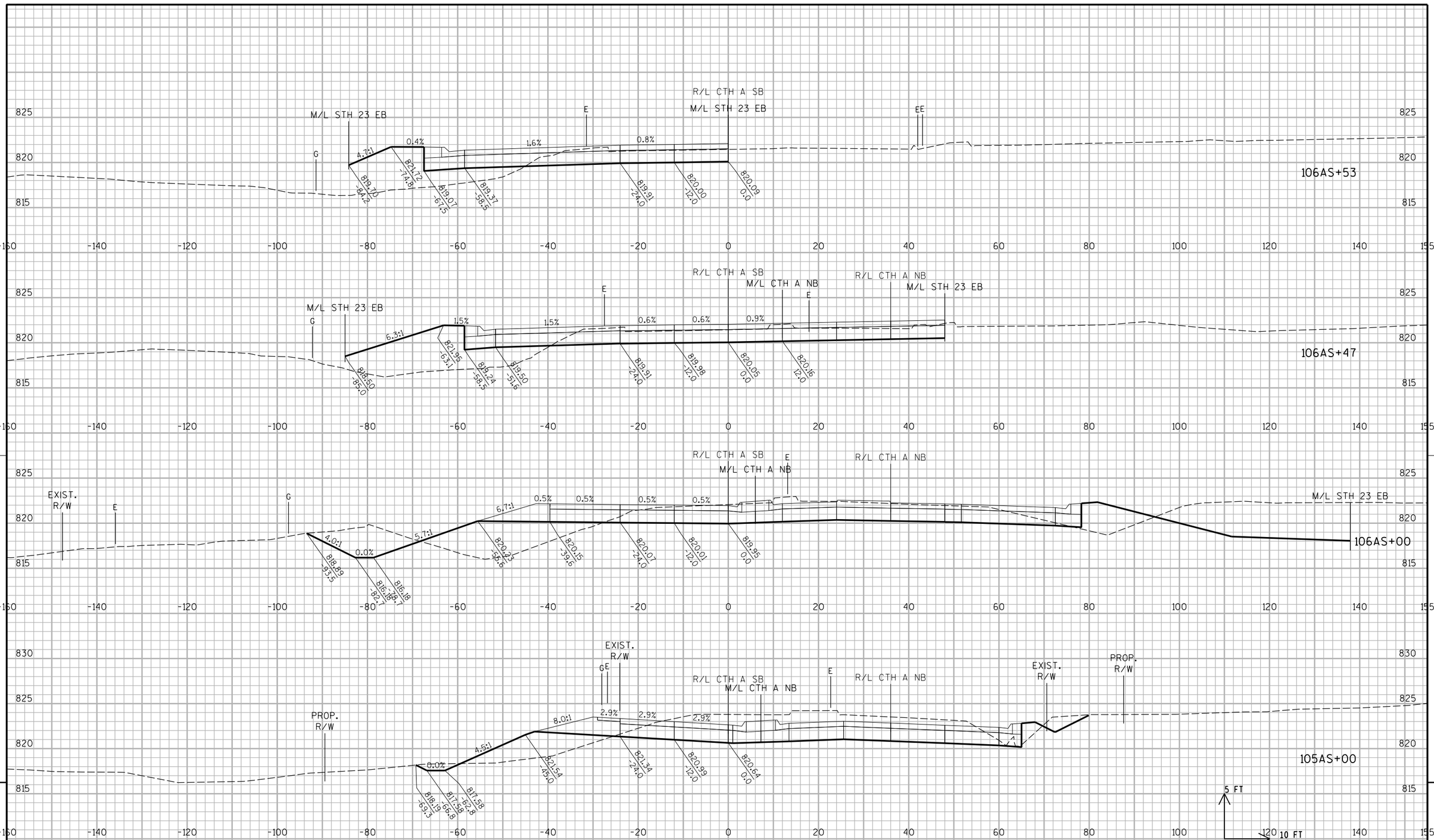
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH A SB	SHEET 747	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 102AS+00 TO 104AS+00

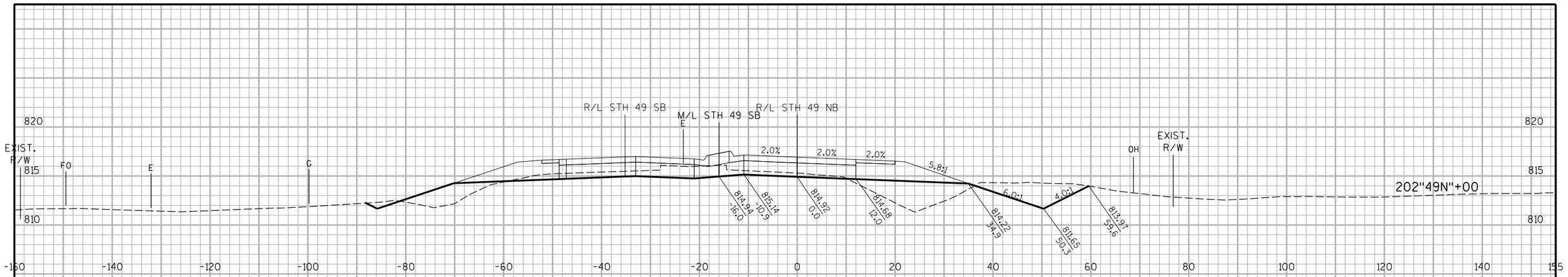
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH A SB	SHEET 748	E

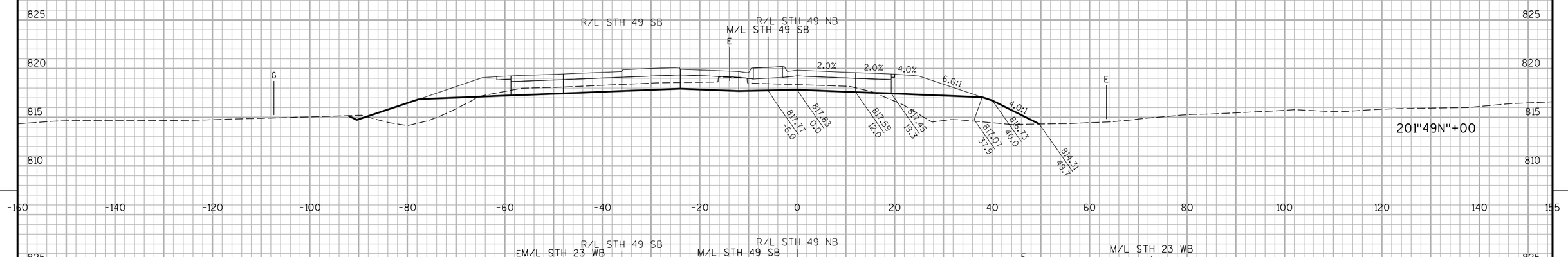


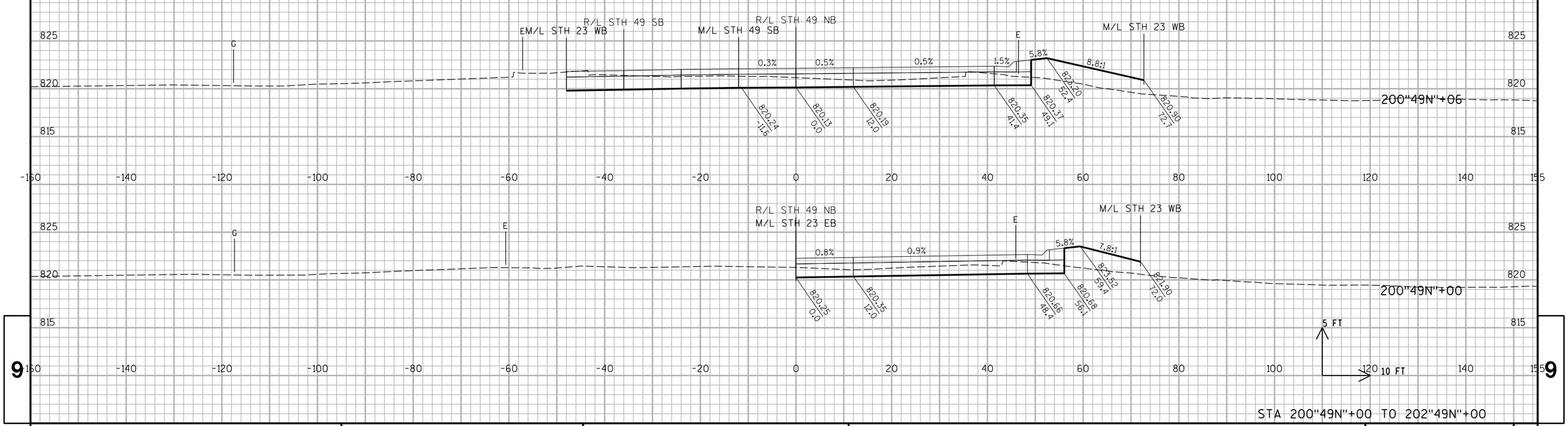
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH A SB	SHEET 749	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

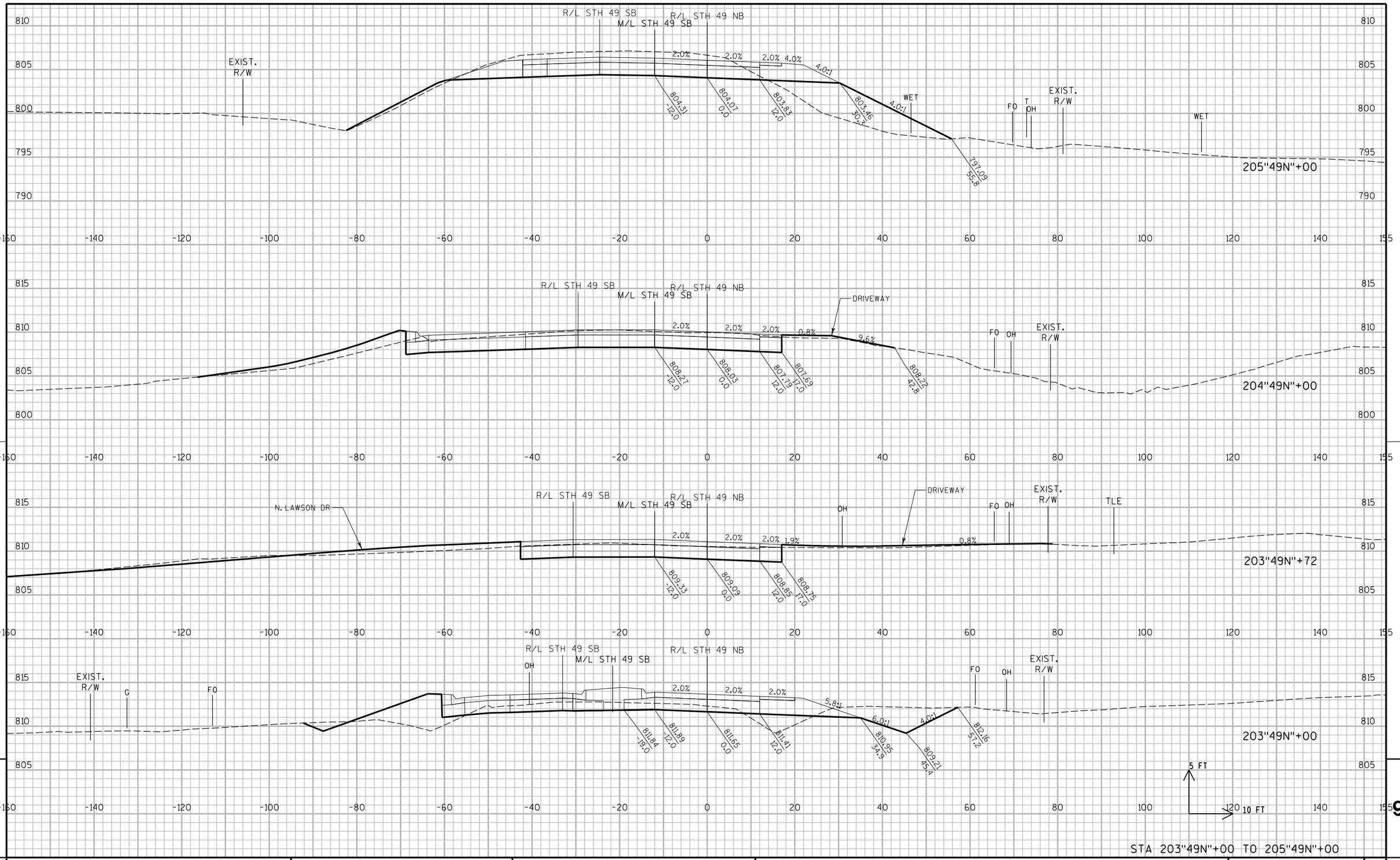






STA 200"49N"+00 TO 202"49N"+00

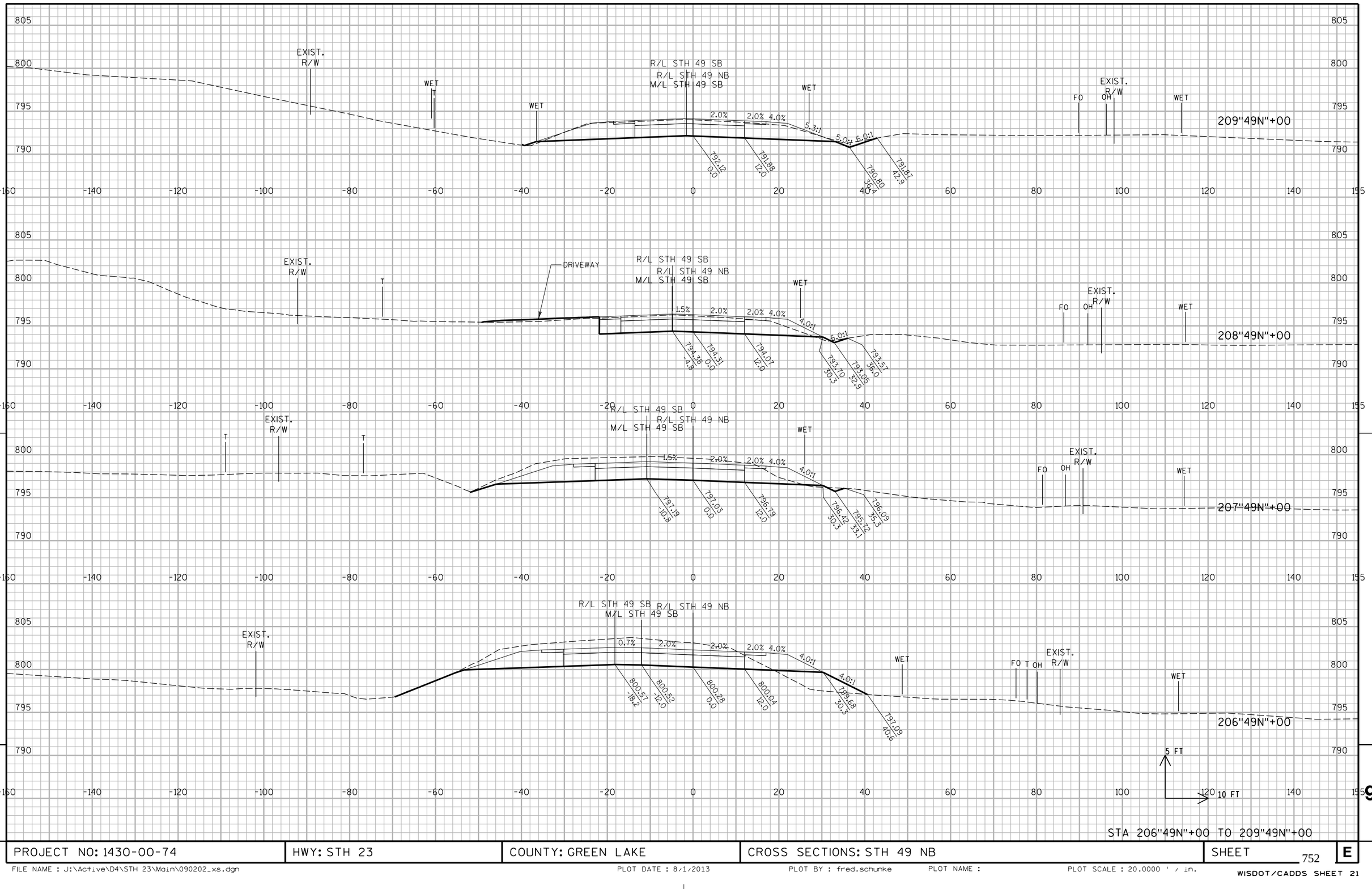
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 49 NB	SHEET 750	E



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 49 NB	SHEET 751	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

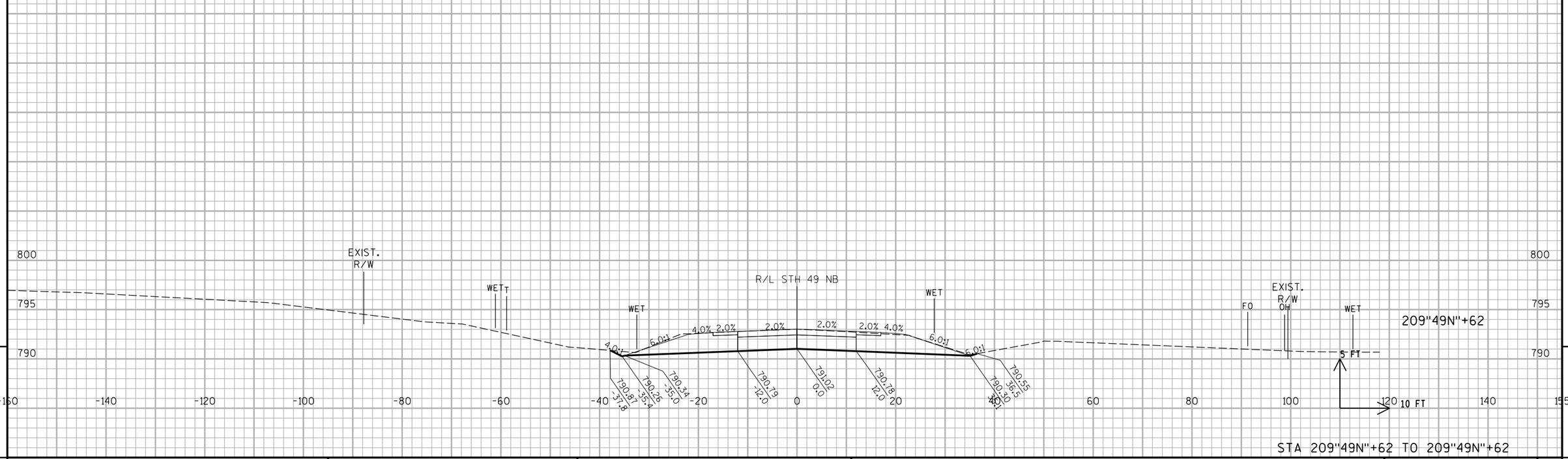


STA 206"49N"+00 TO 209"49N"+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 49 NB	SHEET 752	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

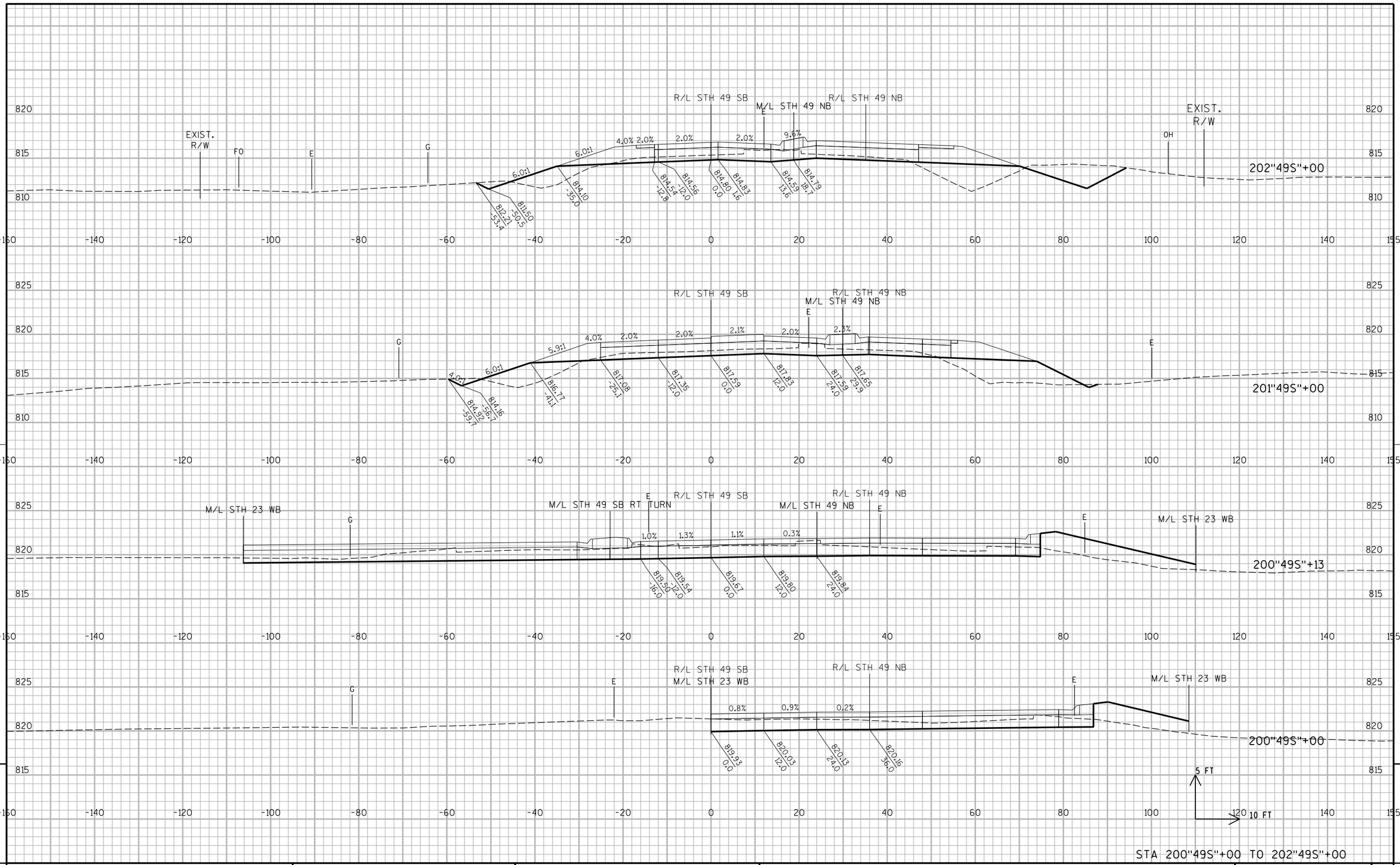


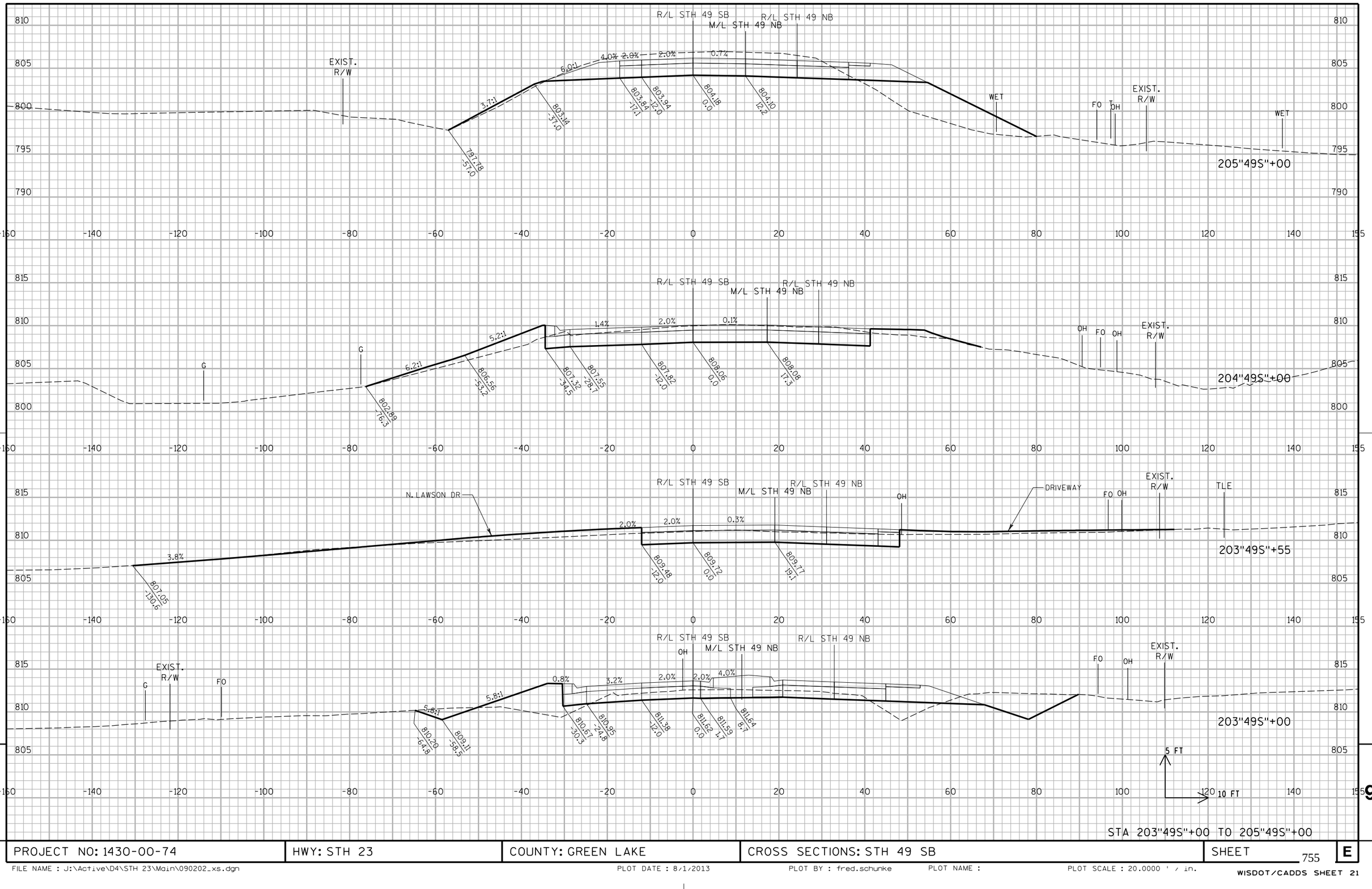
STA 209"49N"+62 TO 209"49N"+62

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 49 NB	SHEET 753	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

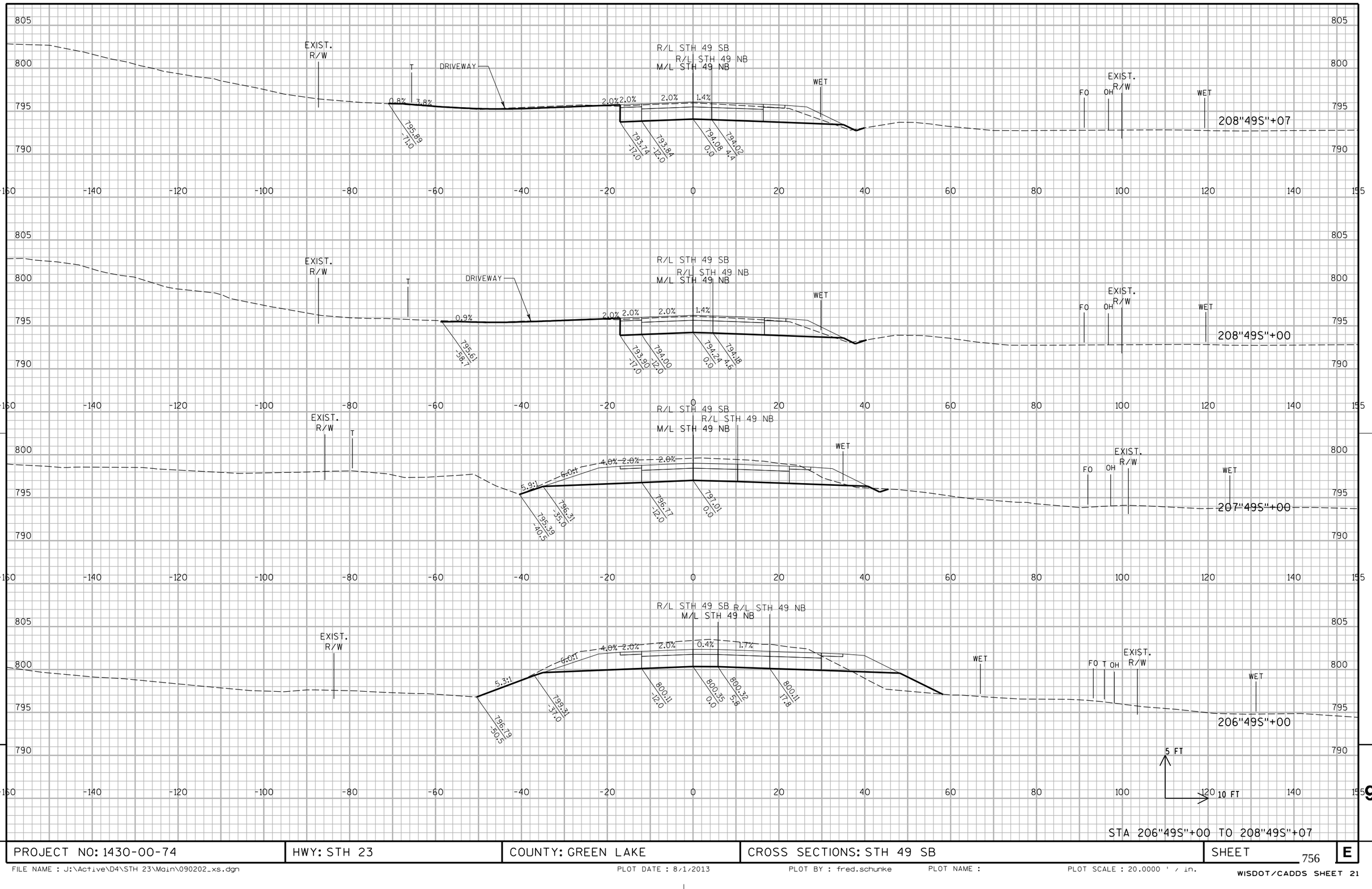

R/L STH 49 SB
M/L STH 49 NB
R/L STH 49 NB
E
EXIST. R/W
F O
E
G
OH
EXIST. R/W
4.0% 2.0%
2.0%
2.0%
9.6%
6.0:1
6.0:1
8.0:1
8.0:1
8



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 49 SB	SHEET 755	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

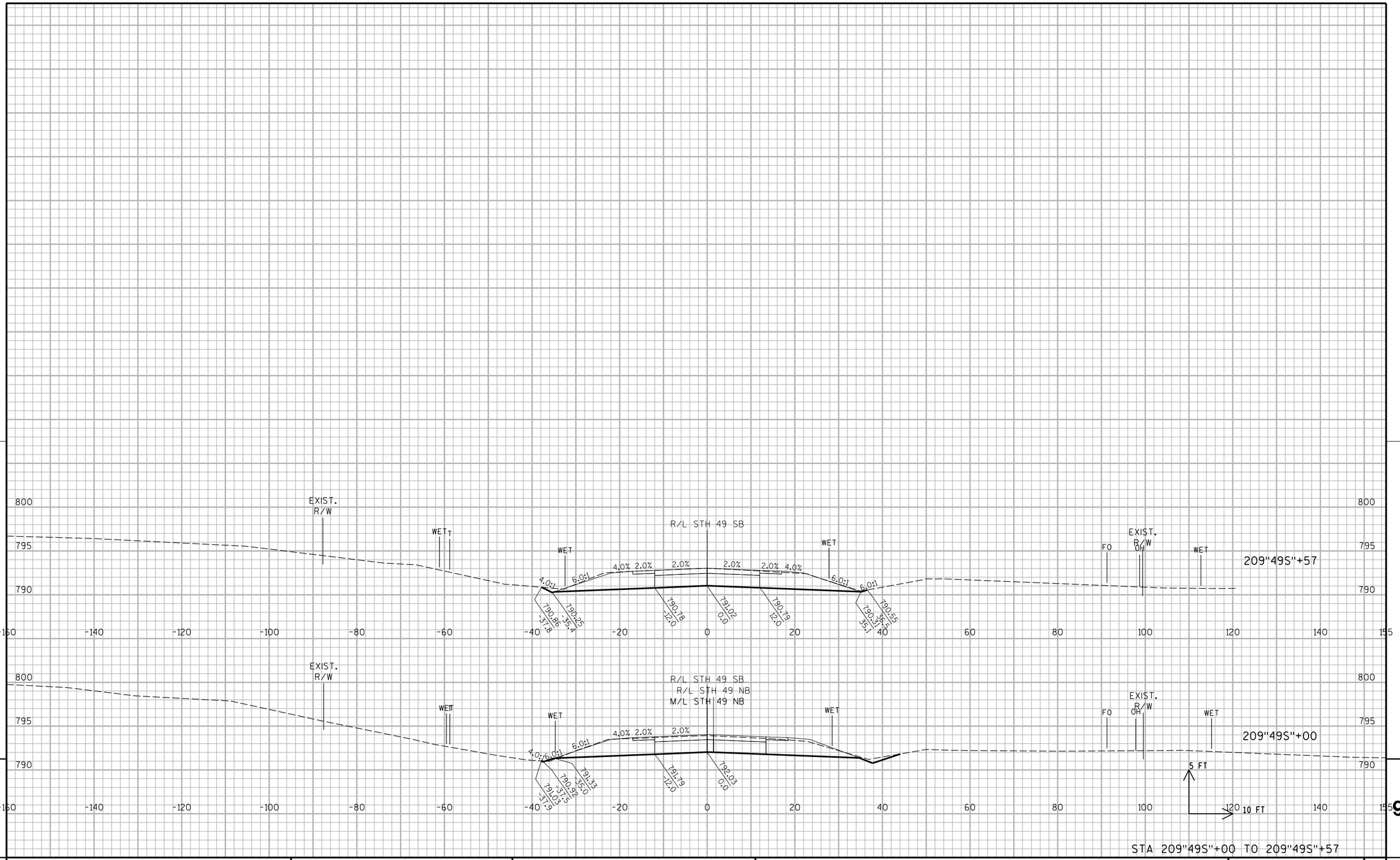


STA 206"49S"+00 TO 208"49S"+07

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 49 SB	SHEET 756	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

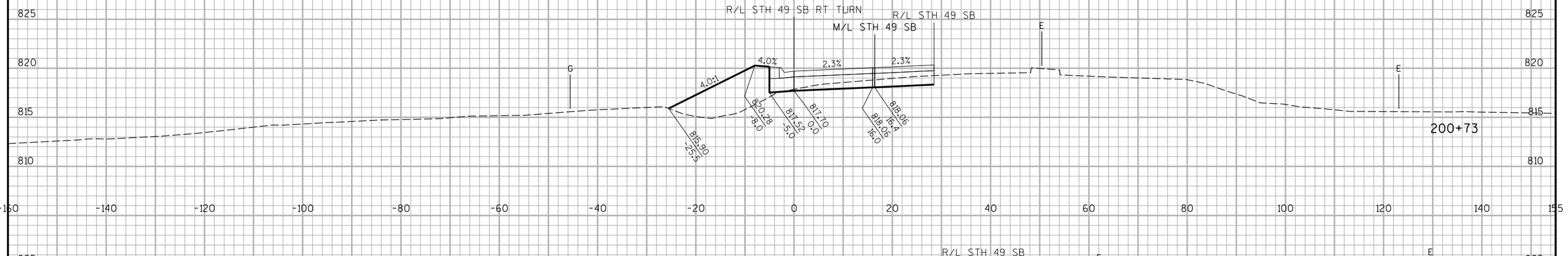


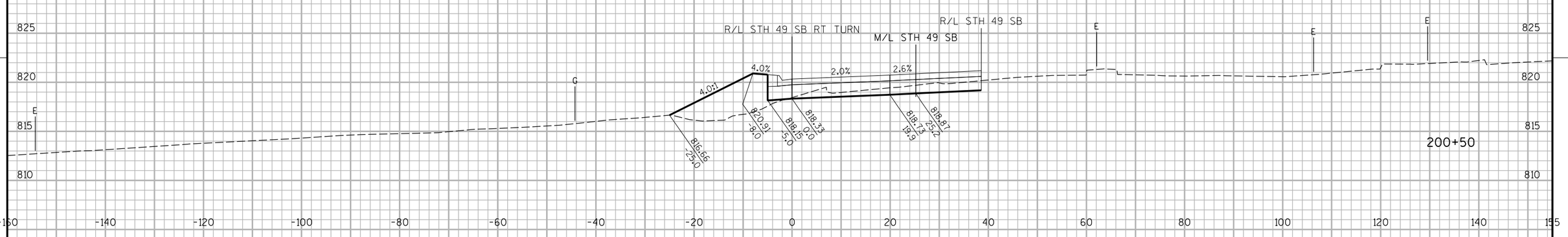
STA 209"49S"+00 TO 209"49S"+57

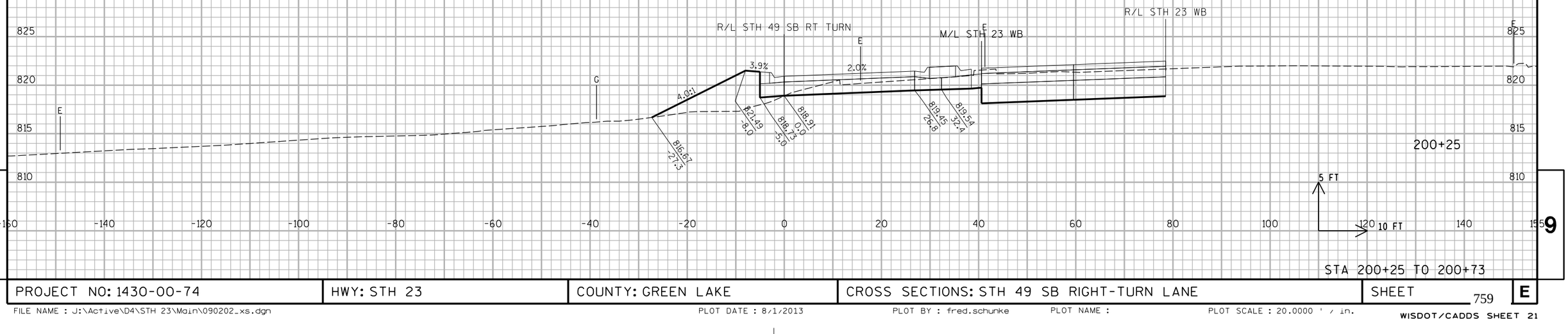
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 49 SB	SHEET 757	E

STA 199+63 TO 200+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 49 SB RIGHT-TURN LANE	SHEET 758	E





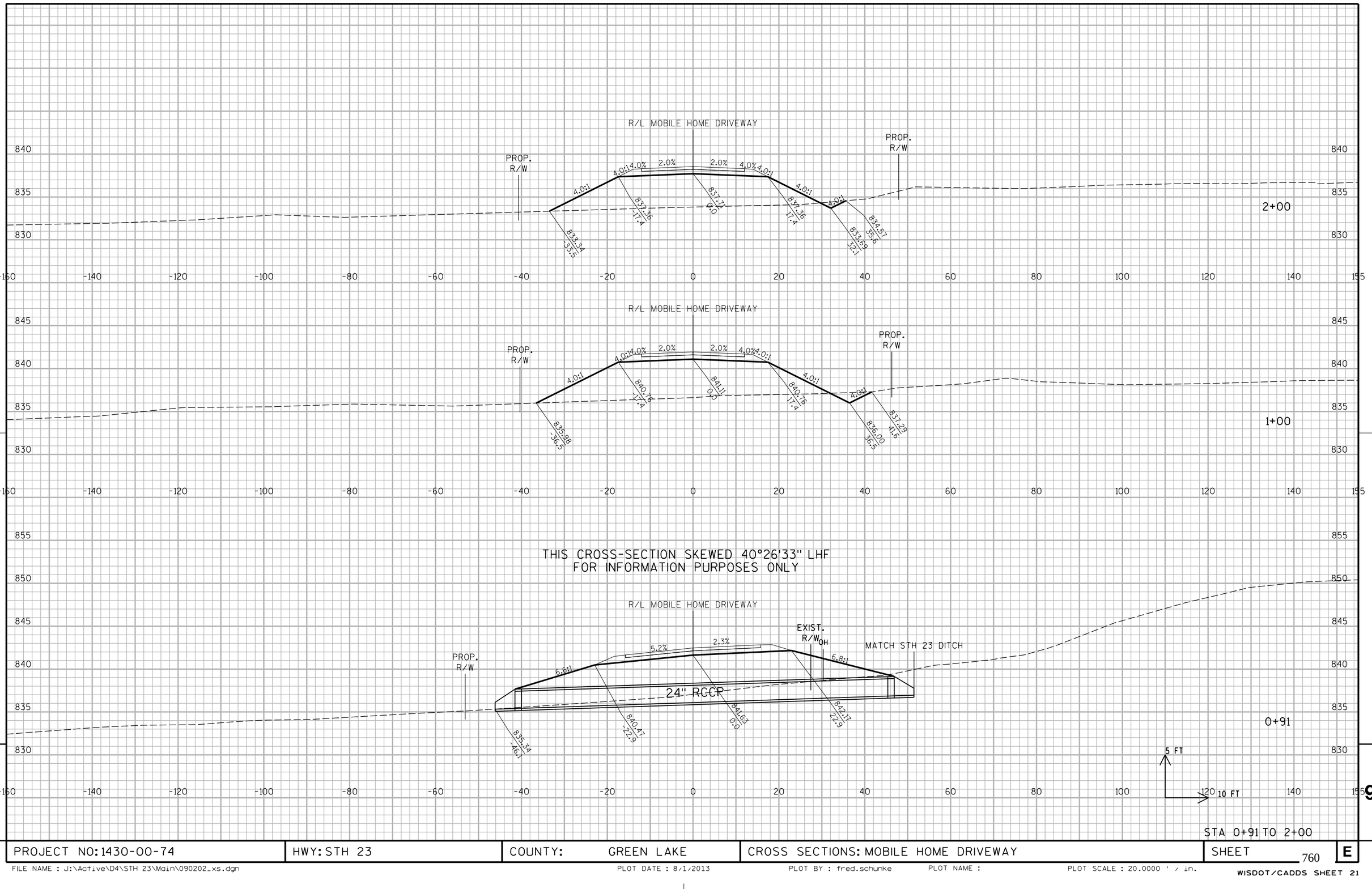


STA 200+25 TO 200+73

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STH 49 SB RIGHT-TURN LANE	SHEET 759	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

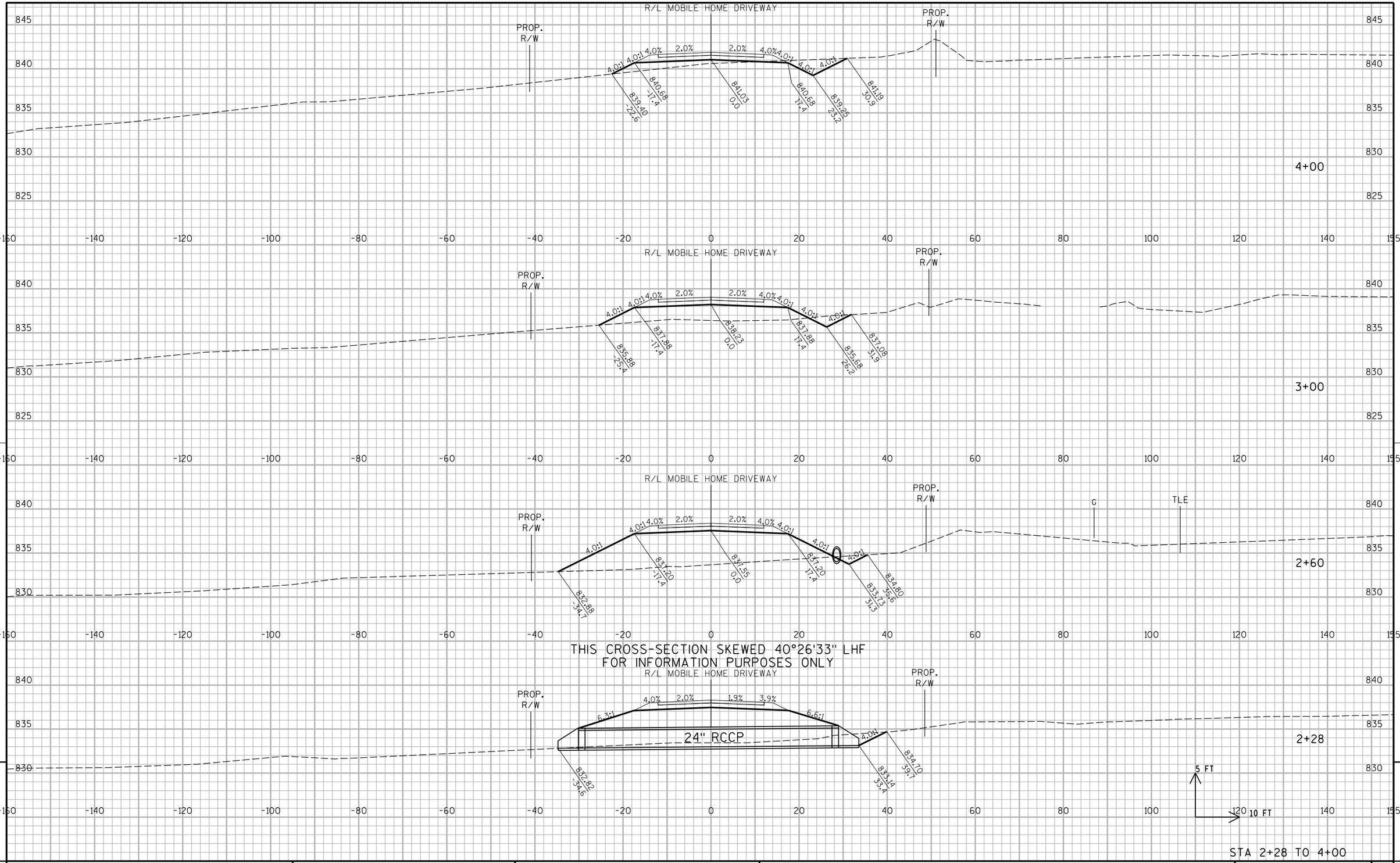
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: MOBILE HOME DRIVEWAY	SHEET 760 E

STA 0+91 TO 2+00

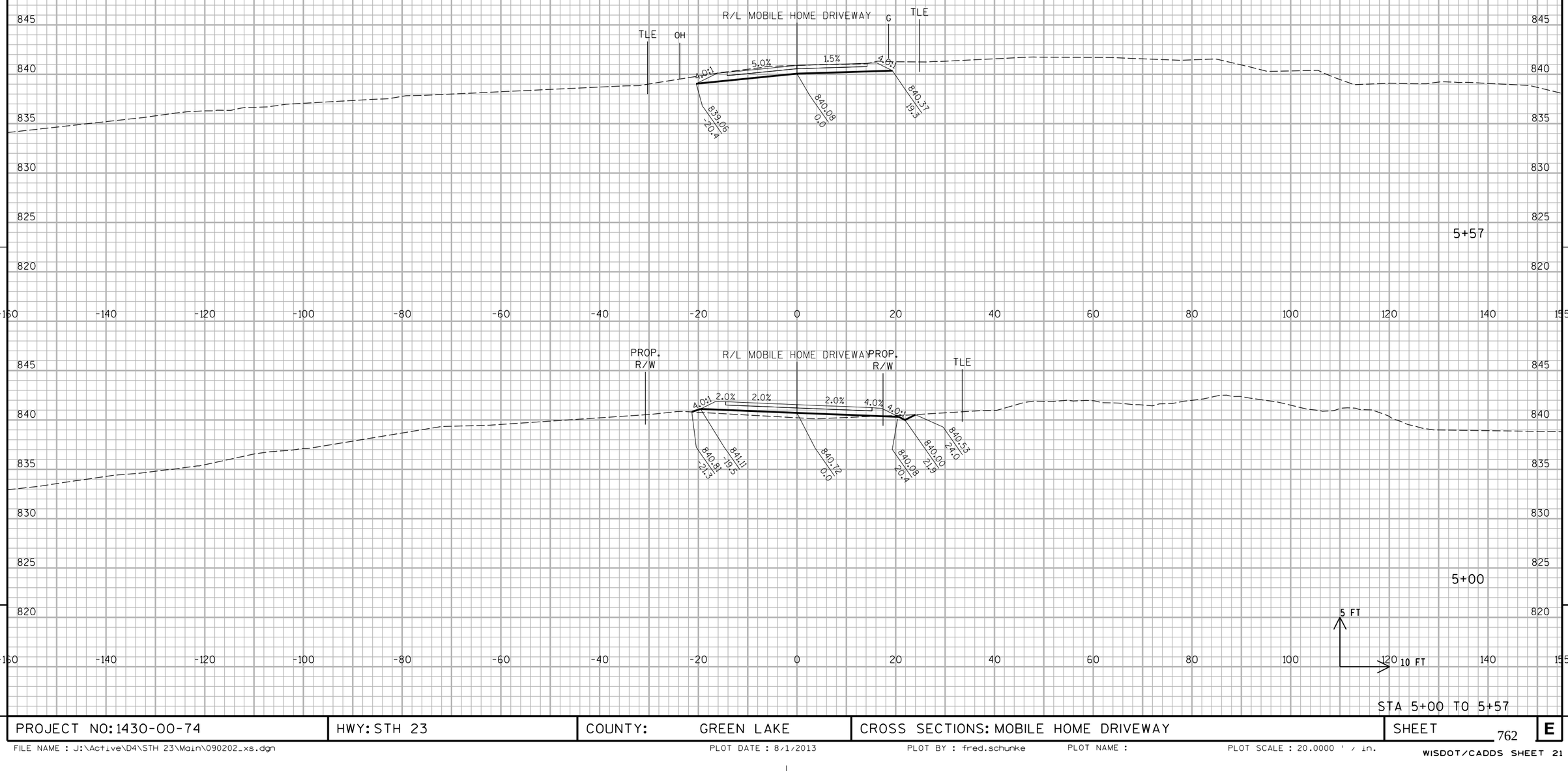
9 9



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: MOBILE HOME DRIVEWAY	SHEET 761	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

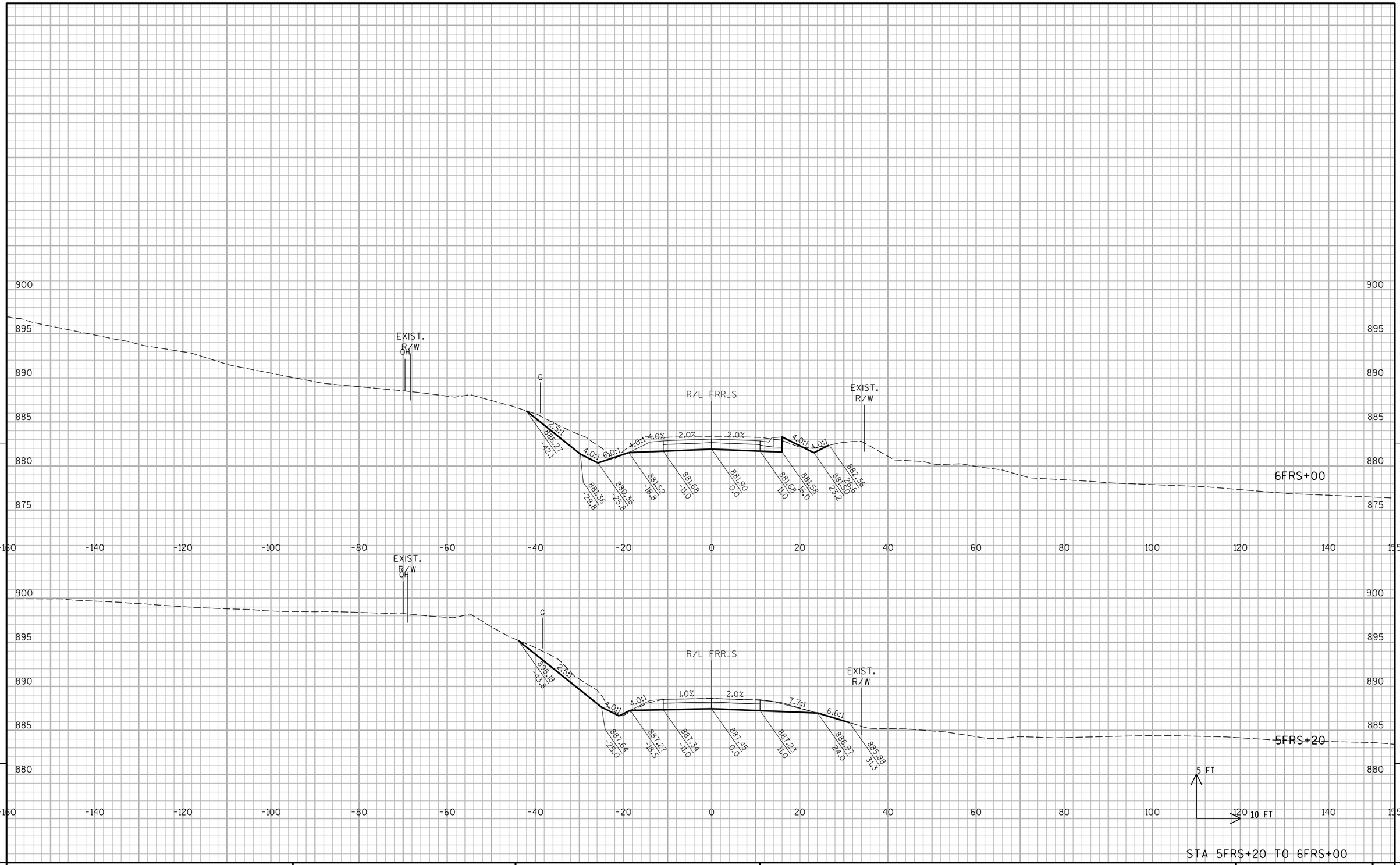
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: MOBILE HOME DRIVEWAY	SHEET 762	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

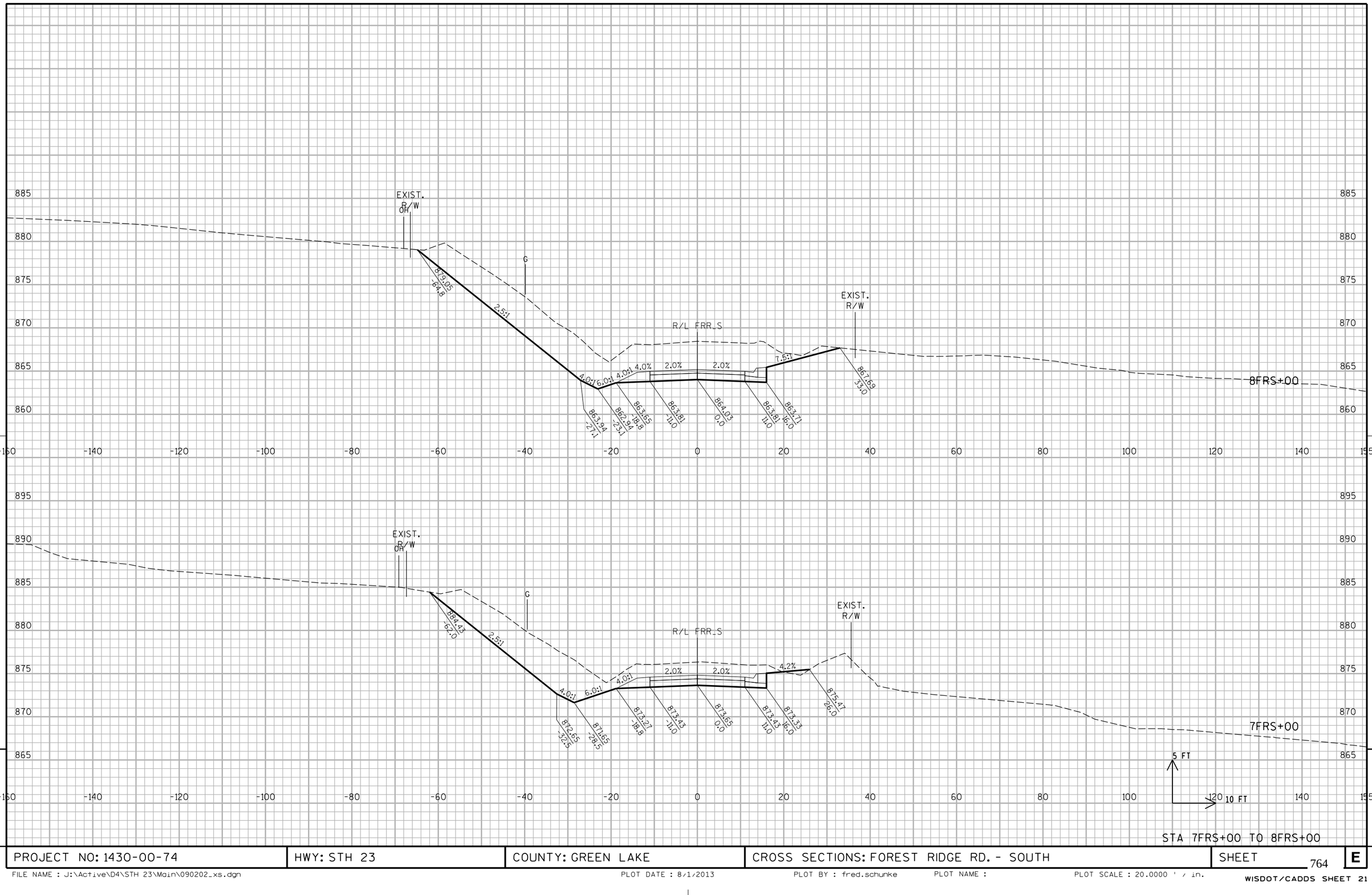


STA 5FRS+20 TO 6FRS+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: FOREST RIDGE RD. - SOUTH	SHEET 763	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

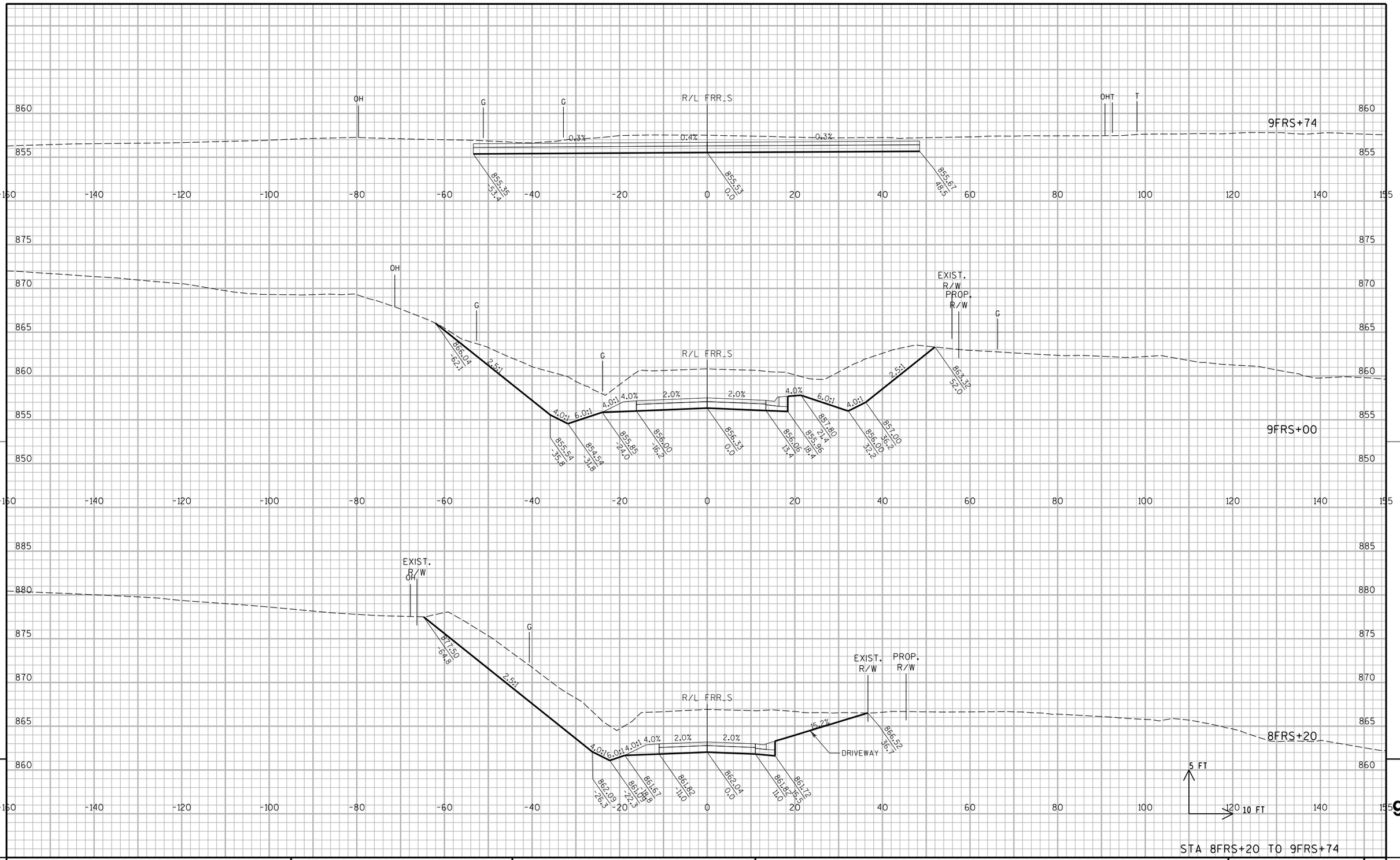
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: FOREST RIDGE RD. - SOUTH	SHEET 764	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

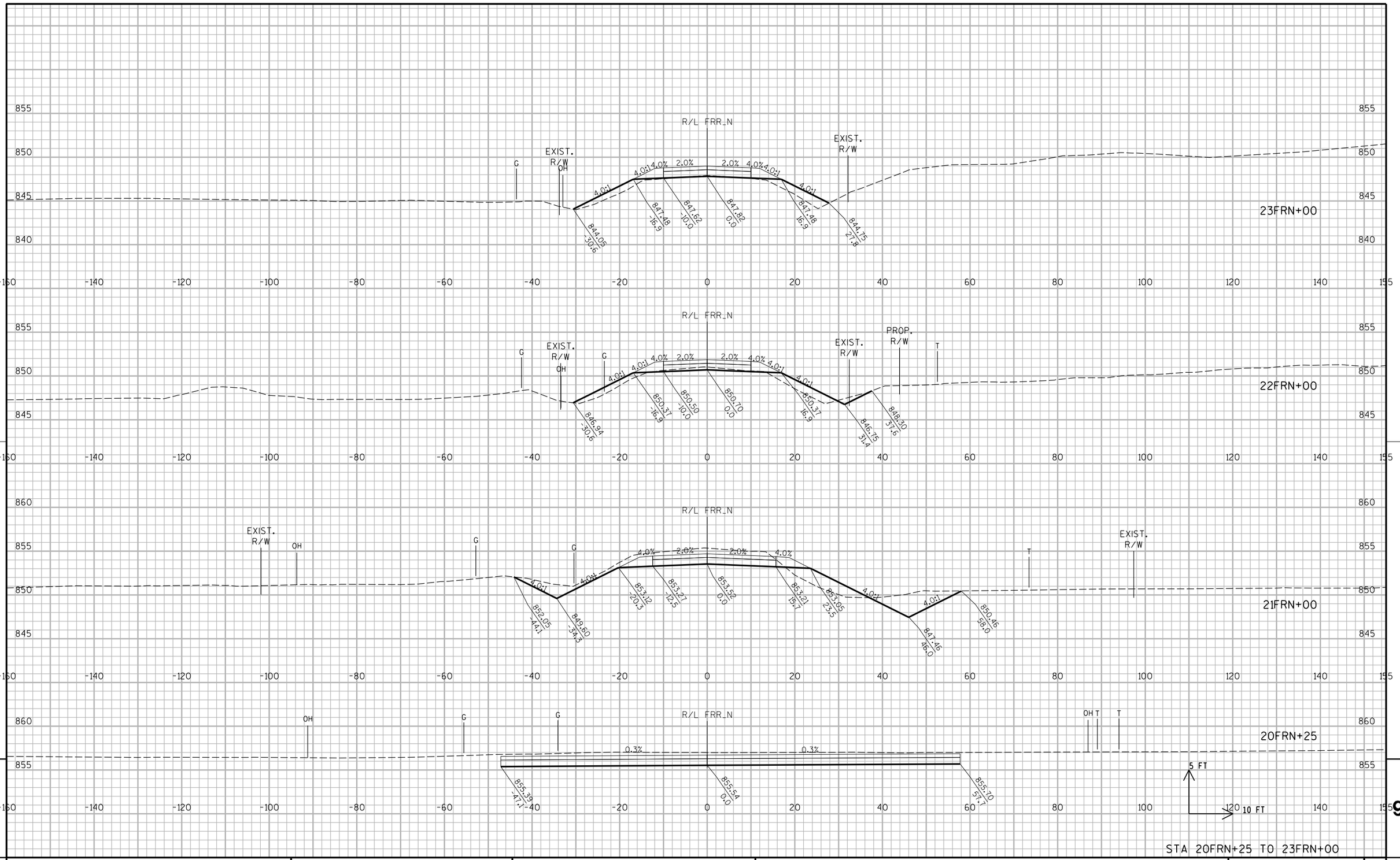
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: FOREST RIDGE RD. - SOUTH	SHEET 765	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: FOREST RIDGE RD. - NORTH	SHEET 766	E

STA 23FRN+44 TO 24FRN+13

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: FOREST RIDGE RD. - NORTH	SHEET 767	E

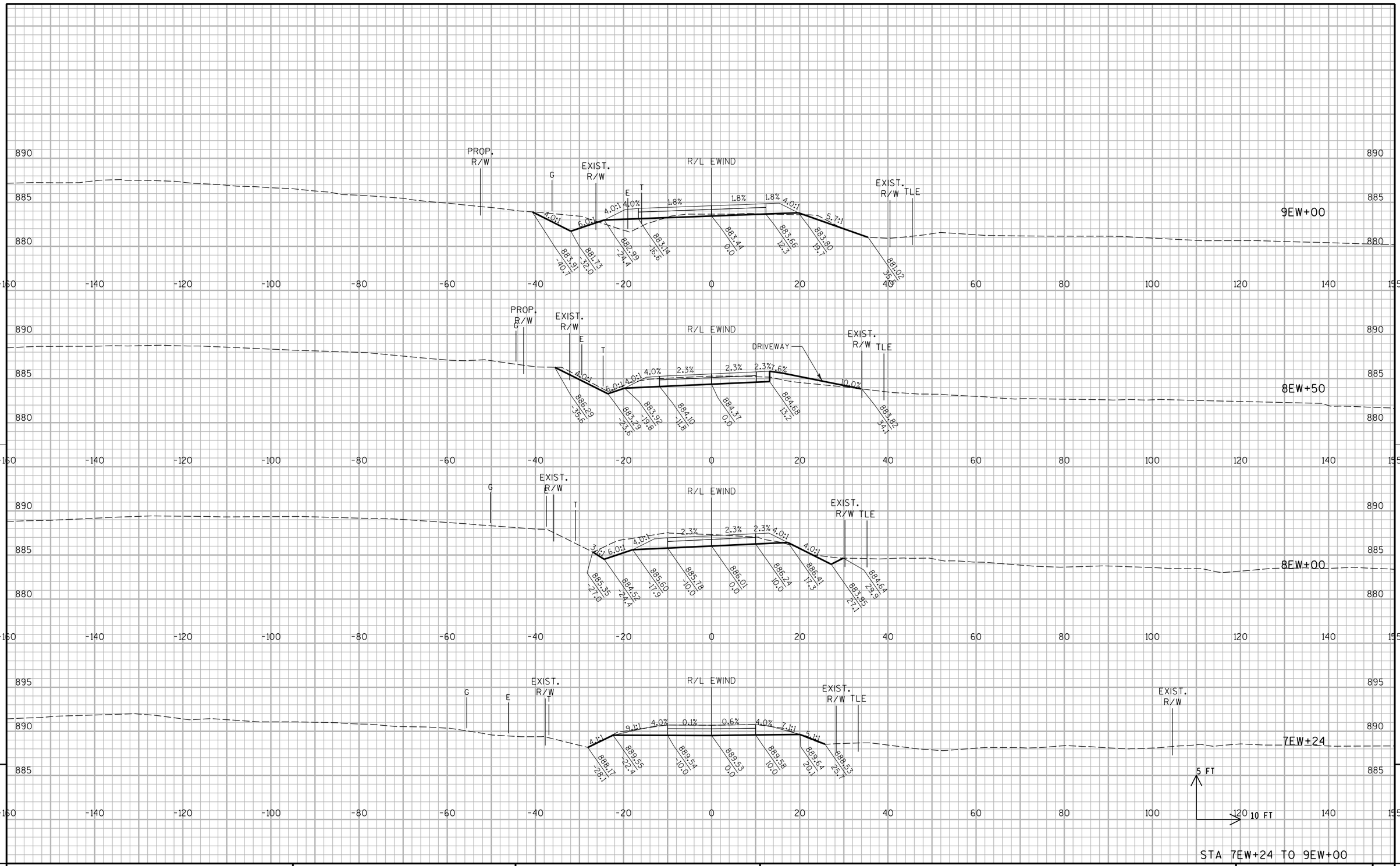
FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: FOREST RIDGE RD. - NORTH	SHEET 768	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

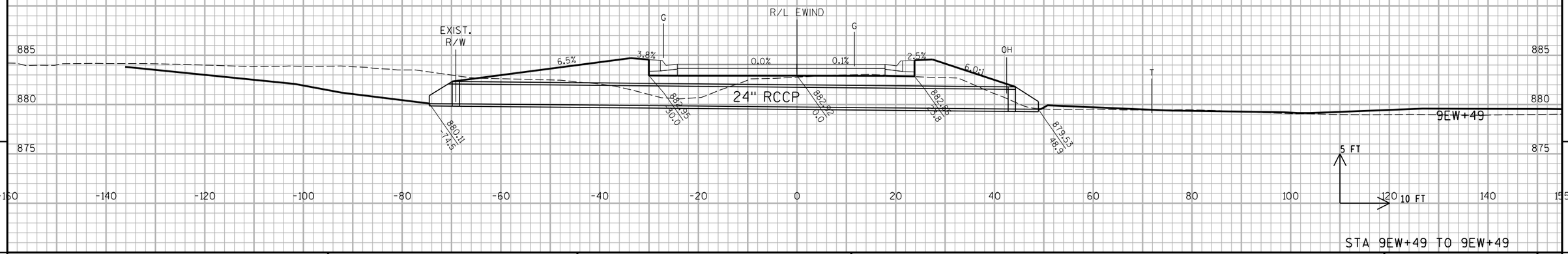


PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: EASTWIND RD.	SHEET 769	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 04°08'35" RHF
FOR INFORMATION PURPOSES ONLY

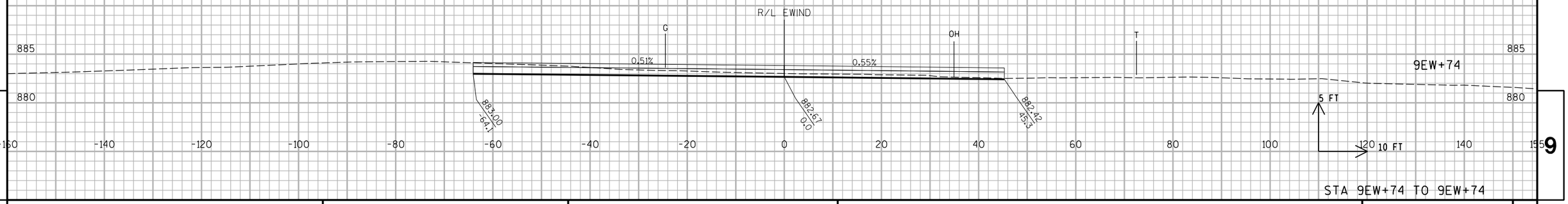


STA 9EW+49 TO 9EW+49

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: EASTWIND RD.	SHEET 770	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

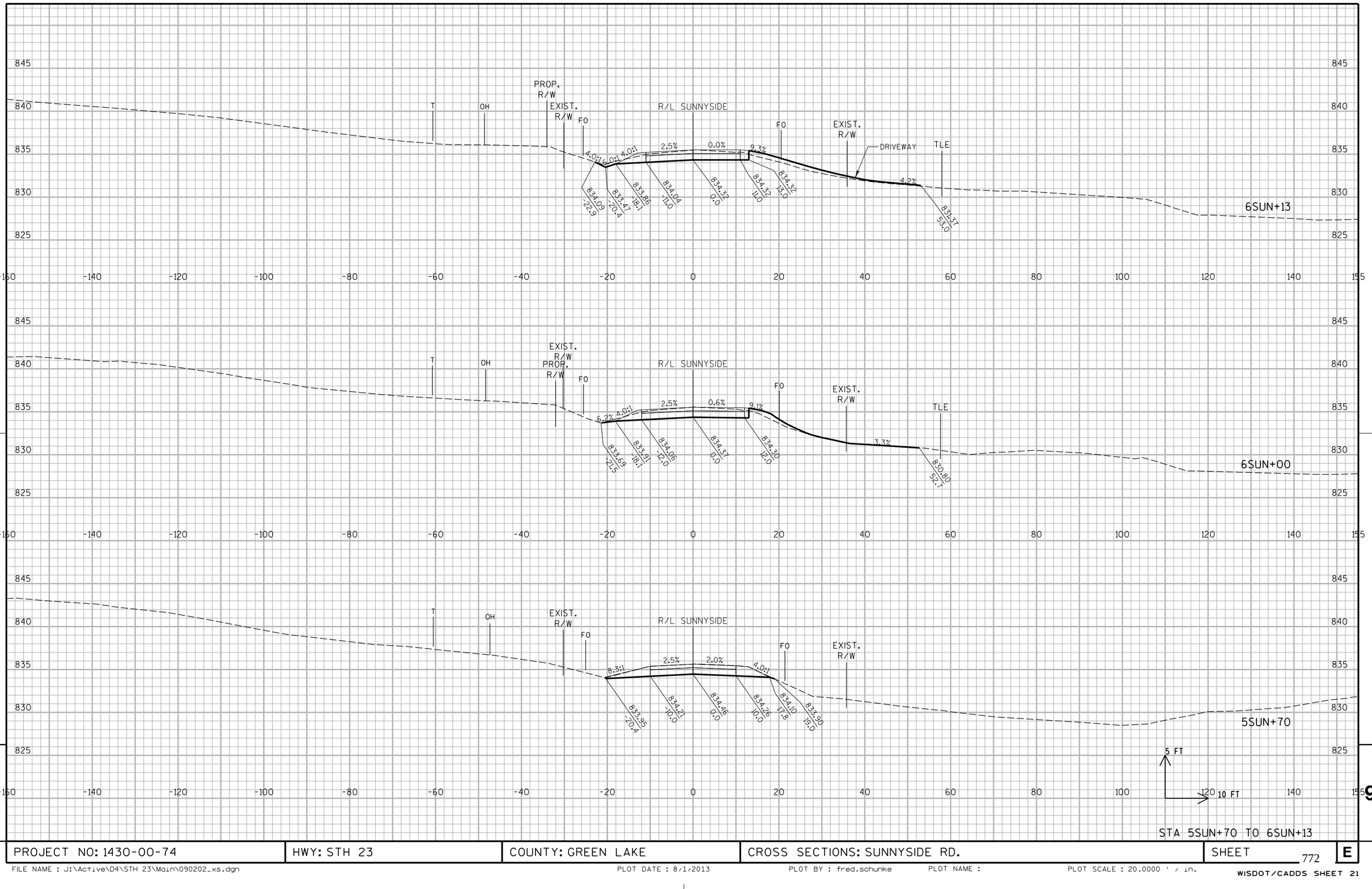


STA 9EW+74 TO 9EW+74

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: EASTWIND RD.	SHEET 771	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

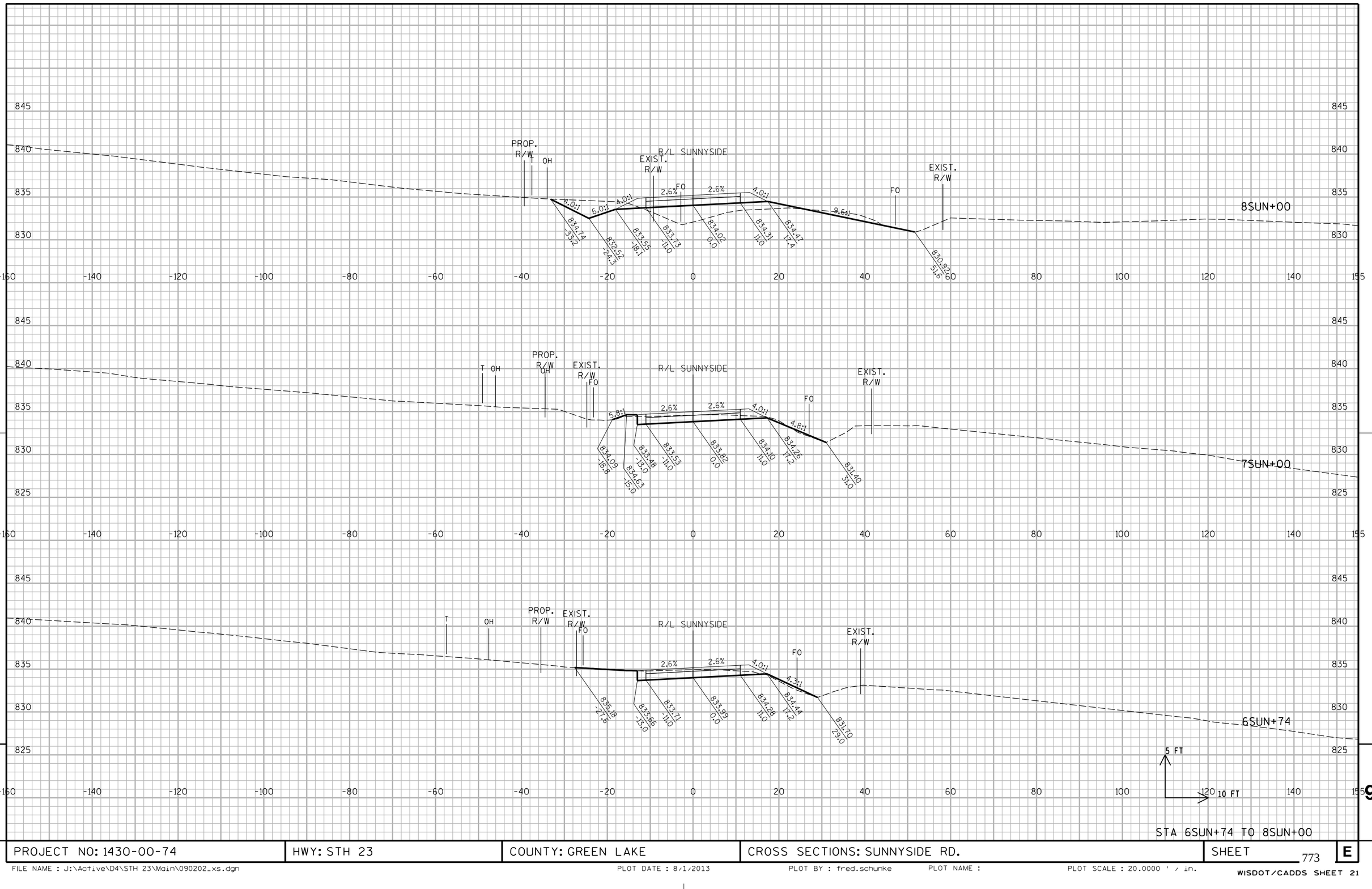
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SUNNYSIDE RD.	SHEET 772	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

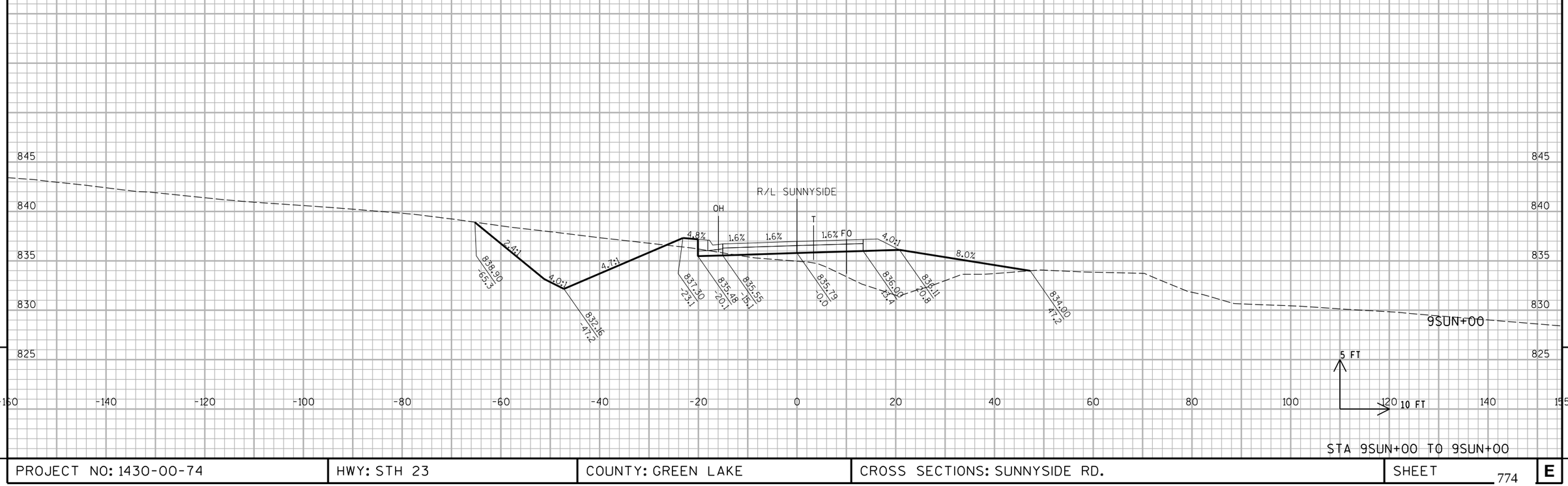
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SUNNYSIDE RD.	SHEET 773	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



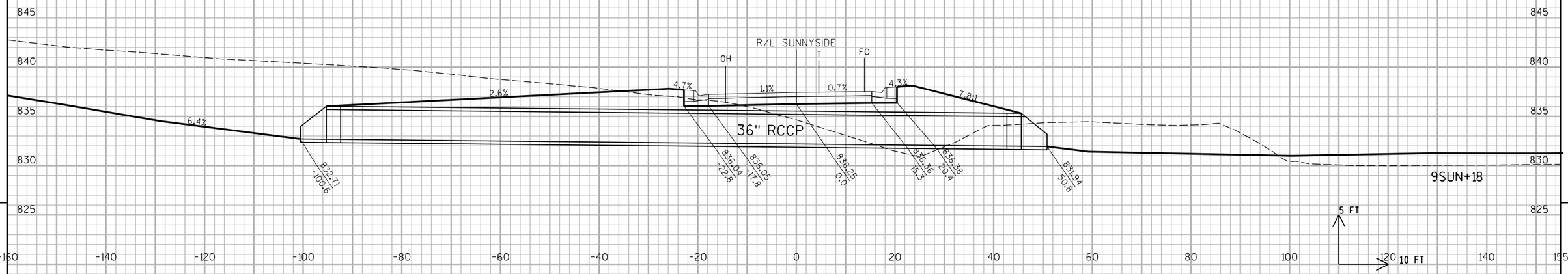
9 9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SUNNYSIDE RD.	SHEET 774	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 11°14'46" RHF
FOR INFORMATION PURPOSES ONLY

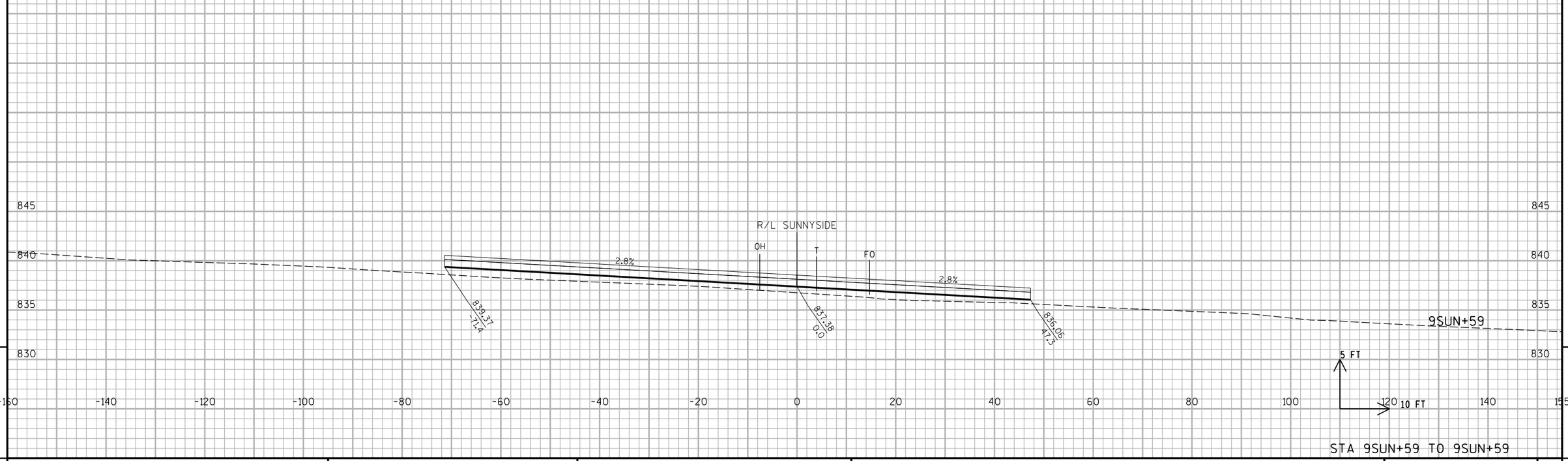


STA 9SUN+18 TO 9SUN+18

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SUNNYSIDE RD.	SHEET 775	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



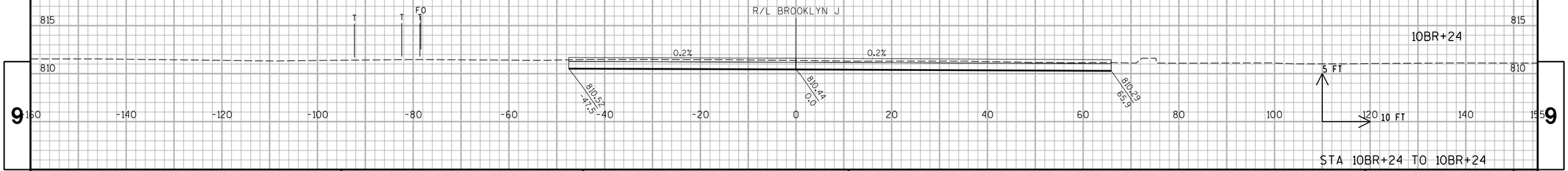
9 9

STA 9SUN+59 TO 9SUN+59

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SUNNYSIDE RD.	SHEET 776	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

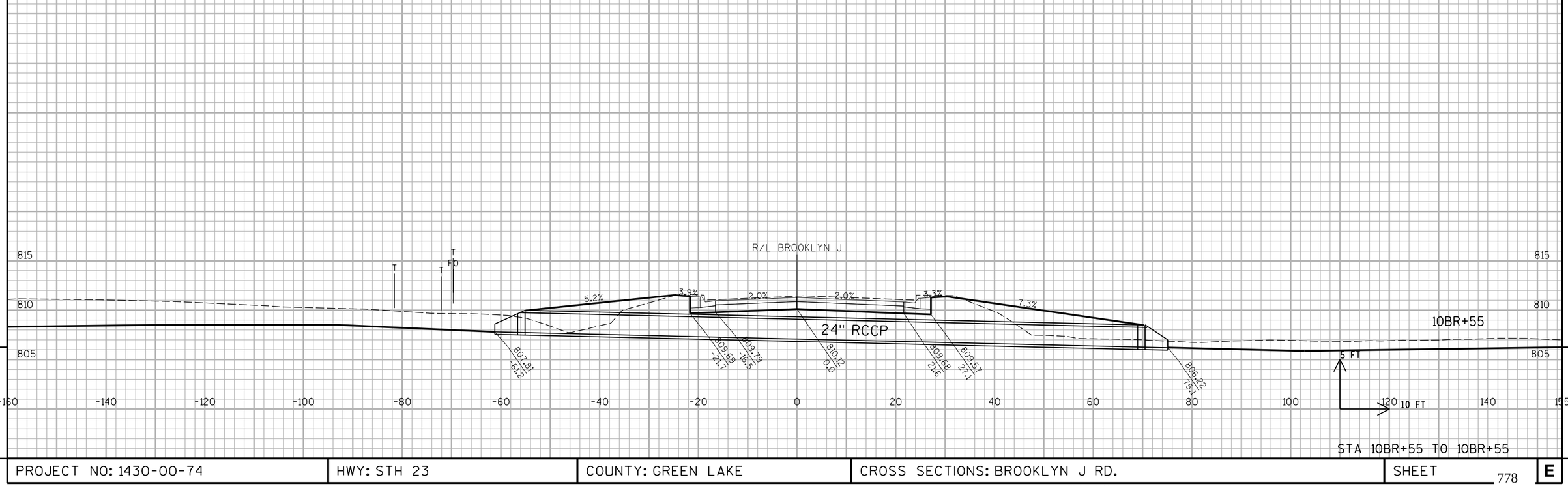


9 9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: BROOKLYN J RD.	SHEET 777	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

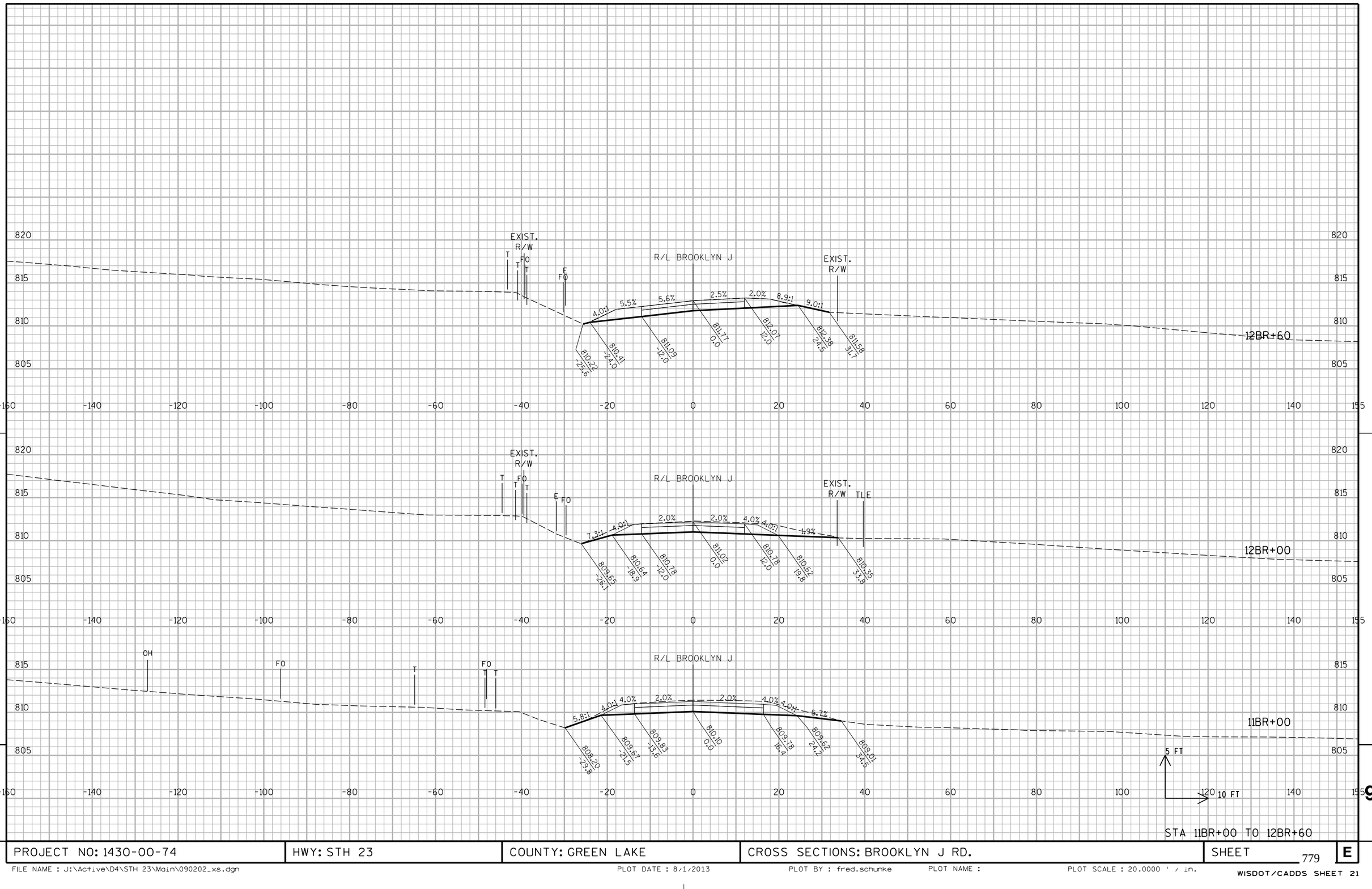


STA 10BR+55 TO 10BR+55

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: BROOKLYN J RD.	SHEET 778	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

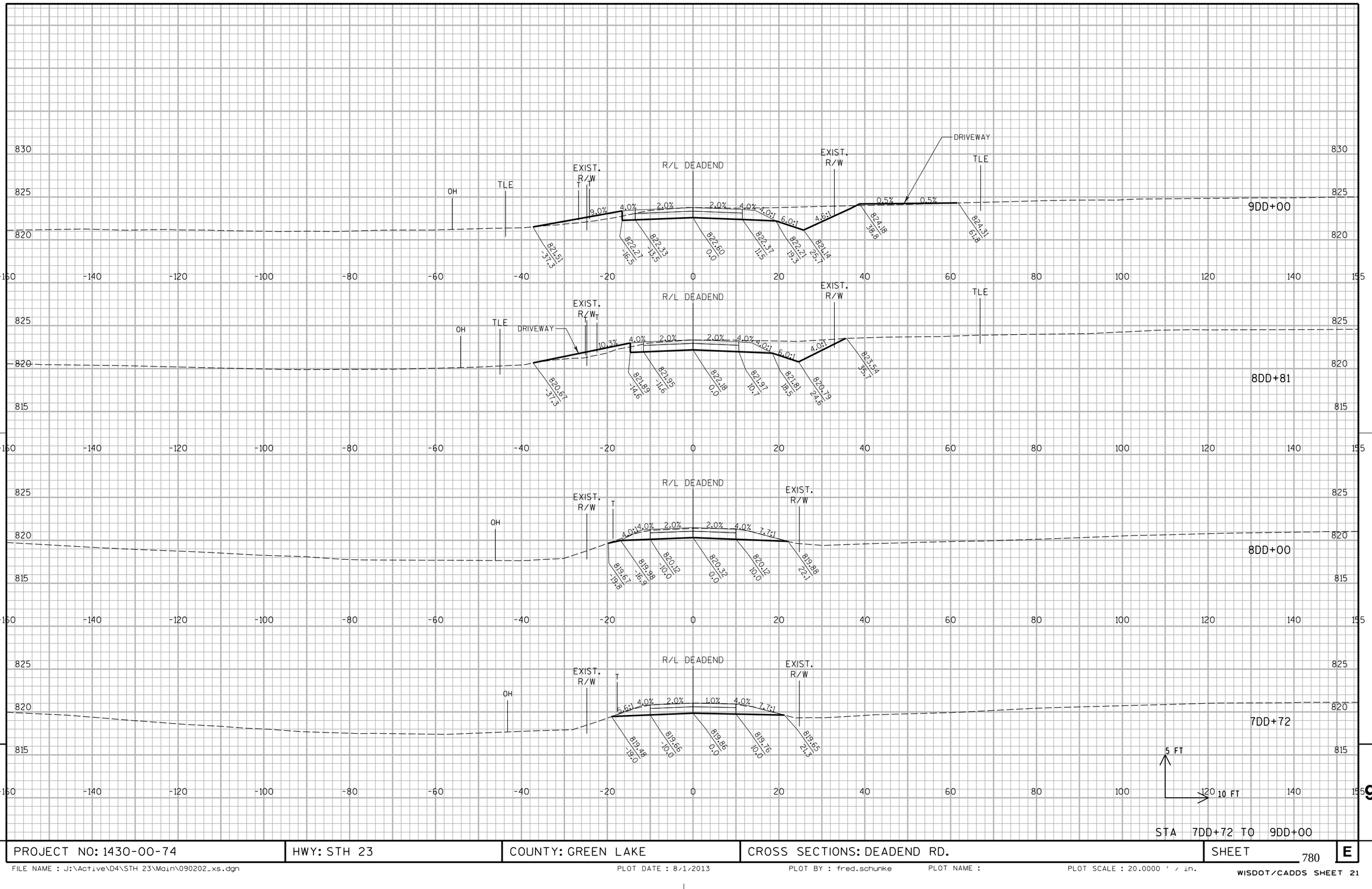
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: BROOKLYN J RD.	SHEET 779	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

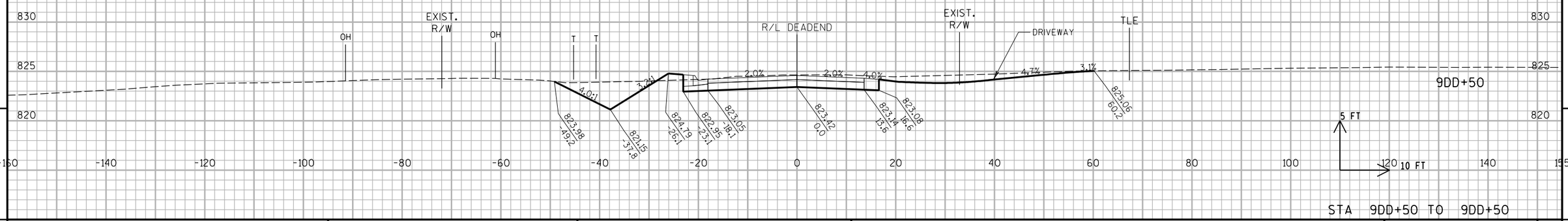
WISDOT/CADDS SHEET 21



9

9

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: DEADEND RD.	SHEET 780	E



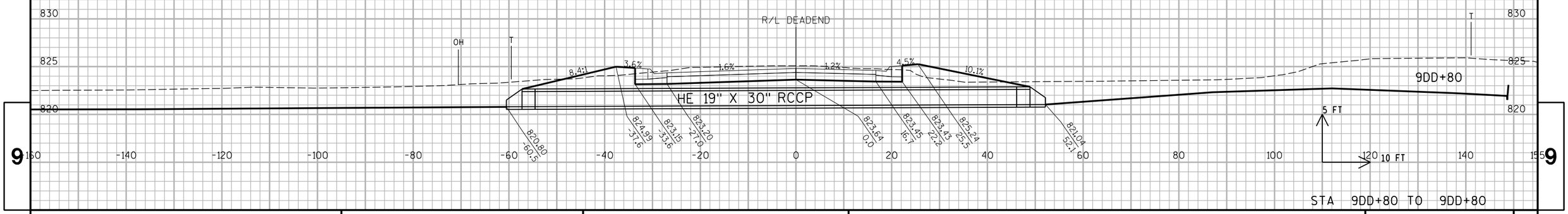
STA 9DD+50 TO 9DD+50

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: DEADEND RD.	SHEET 781	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

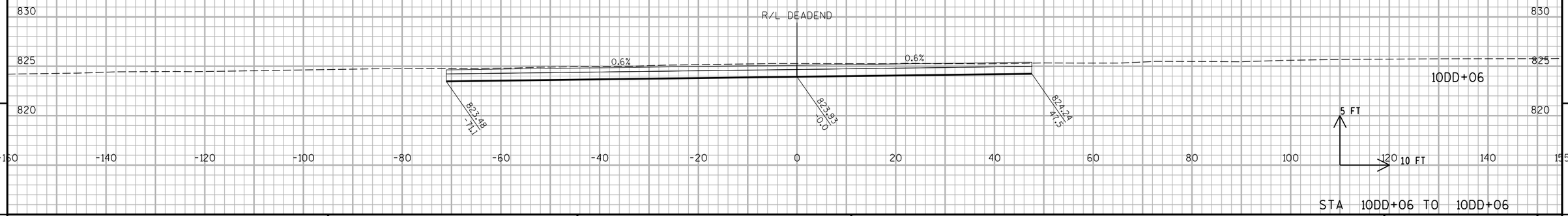
THIS CROSS-SECTION SKEWED 01°09'47" RHF
FOR INFORMATION PURPOSES ONLY



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: DEADEND RD.	SHEET 782	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

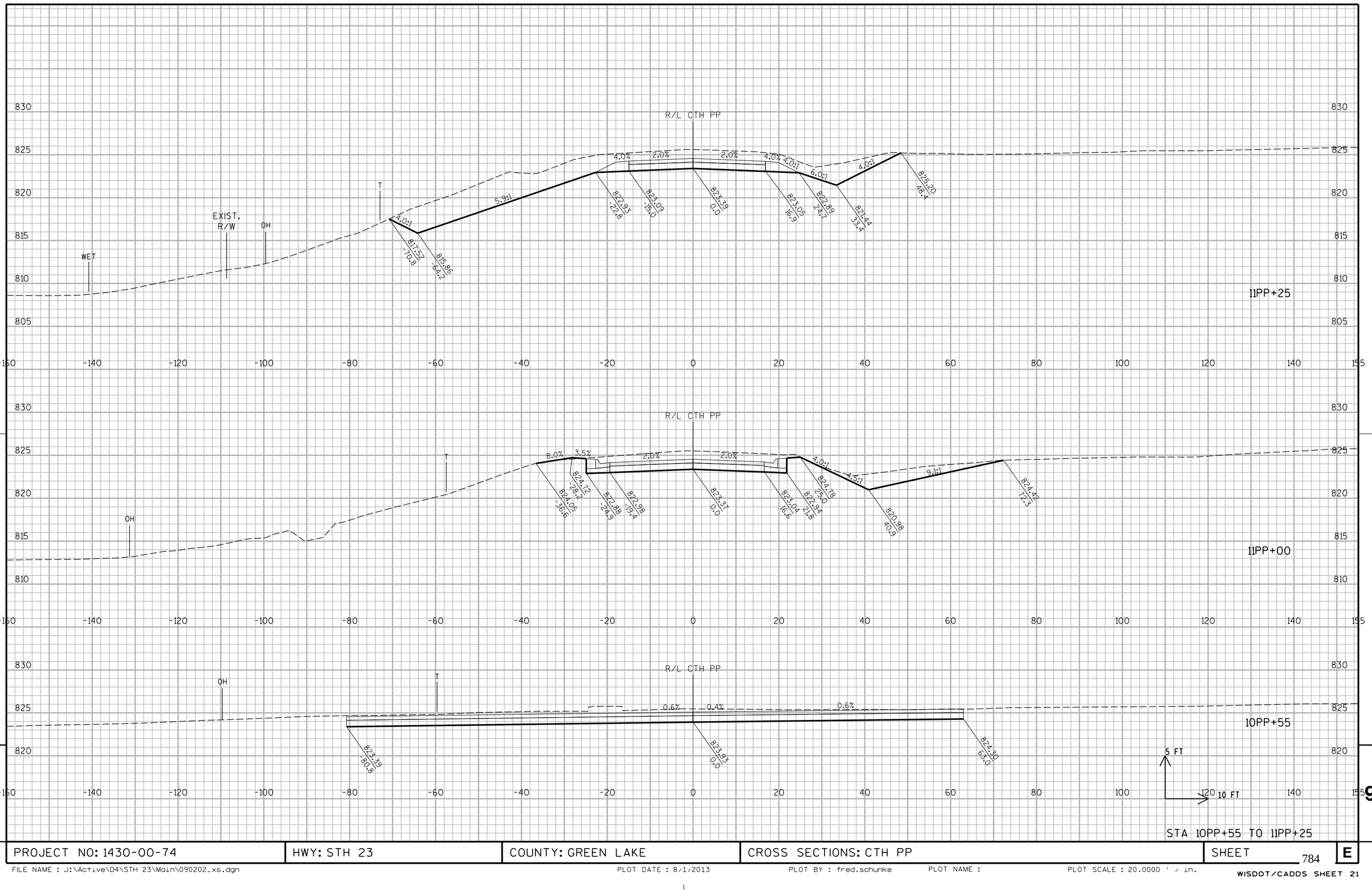
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: DEADEND RD.	SHEET 783	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

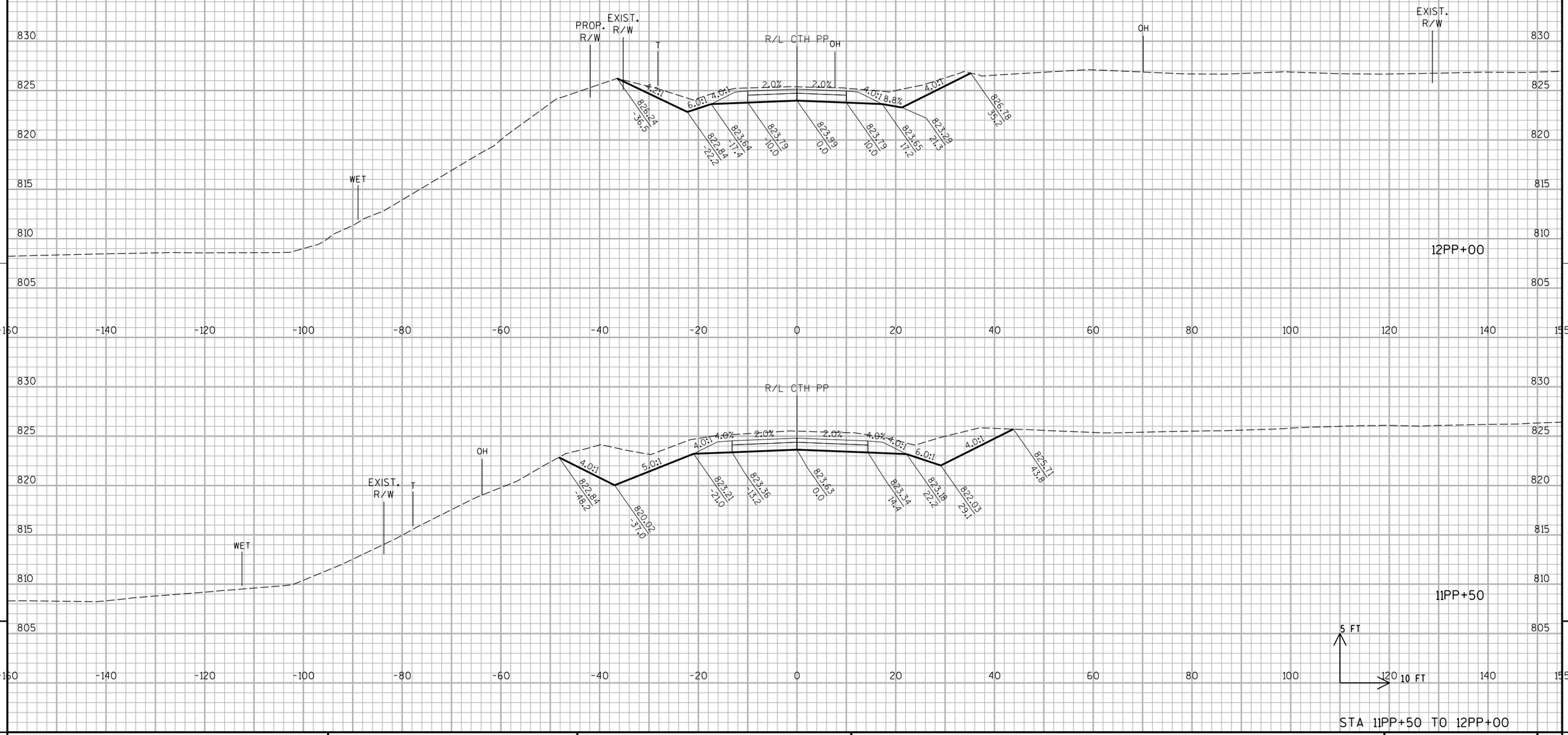
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH PP	SHEET 784	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

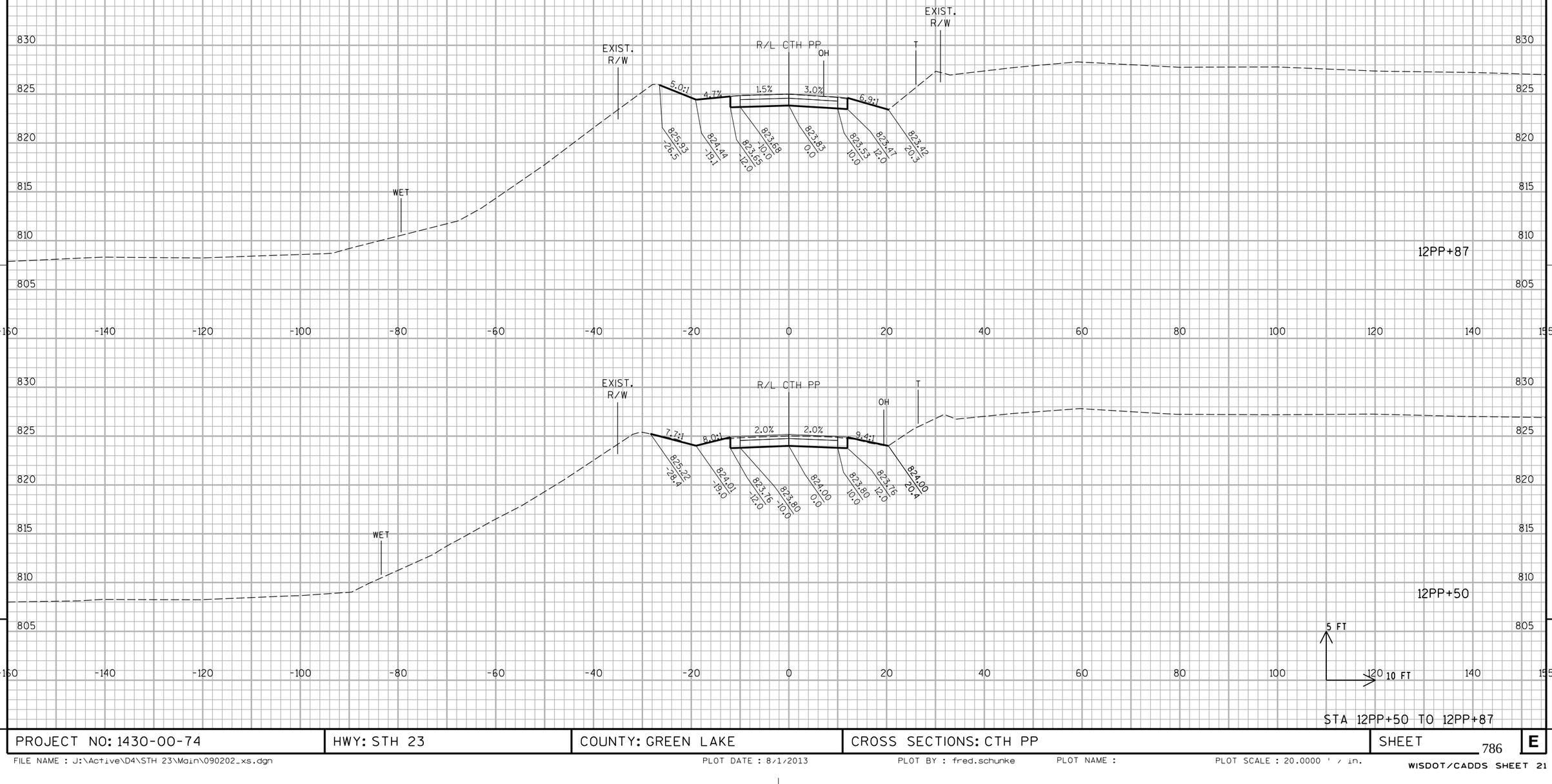
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH PP	SHEET 785	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

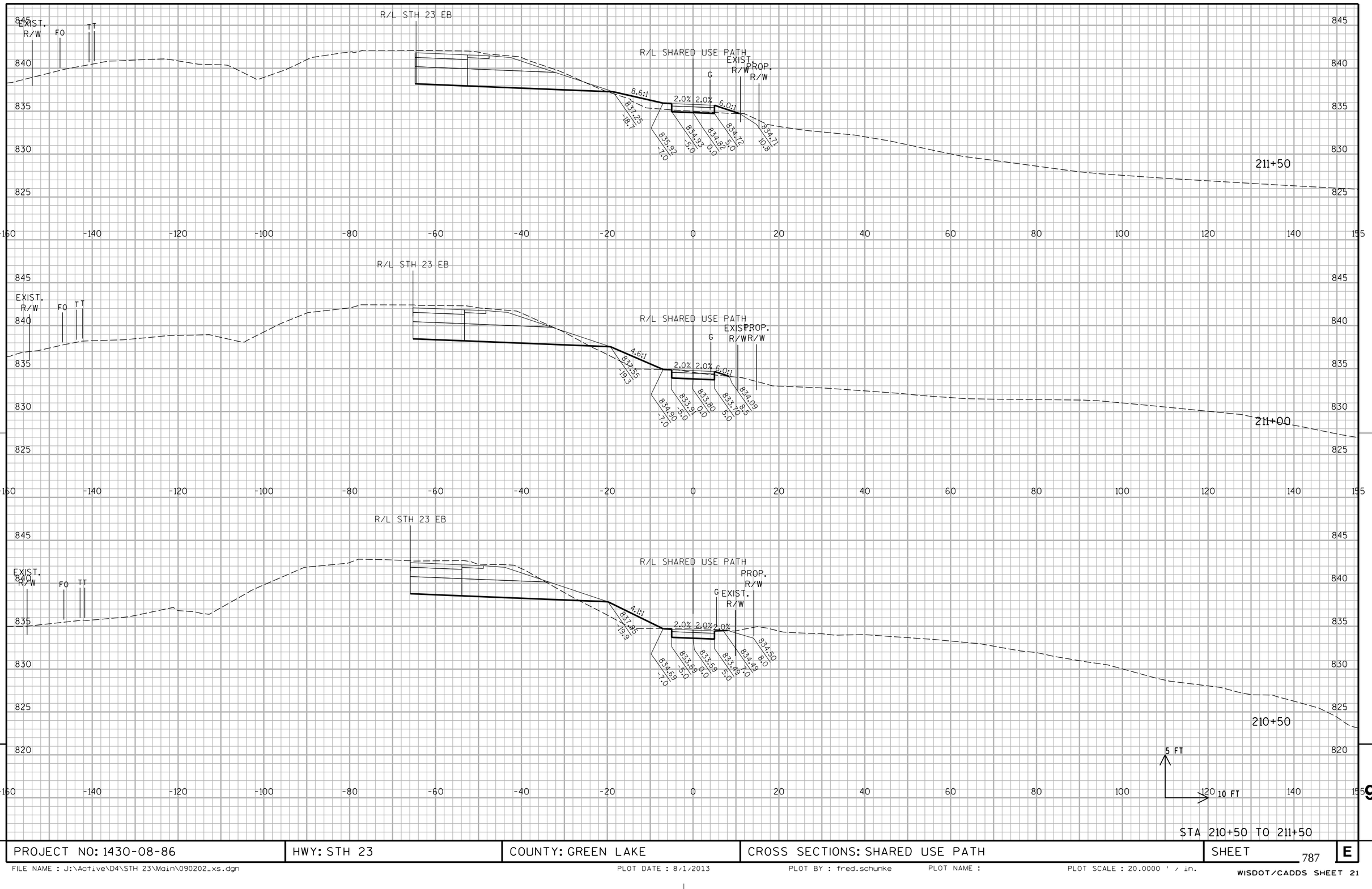
WISDOT/CADDS SHEET 21



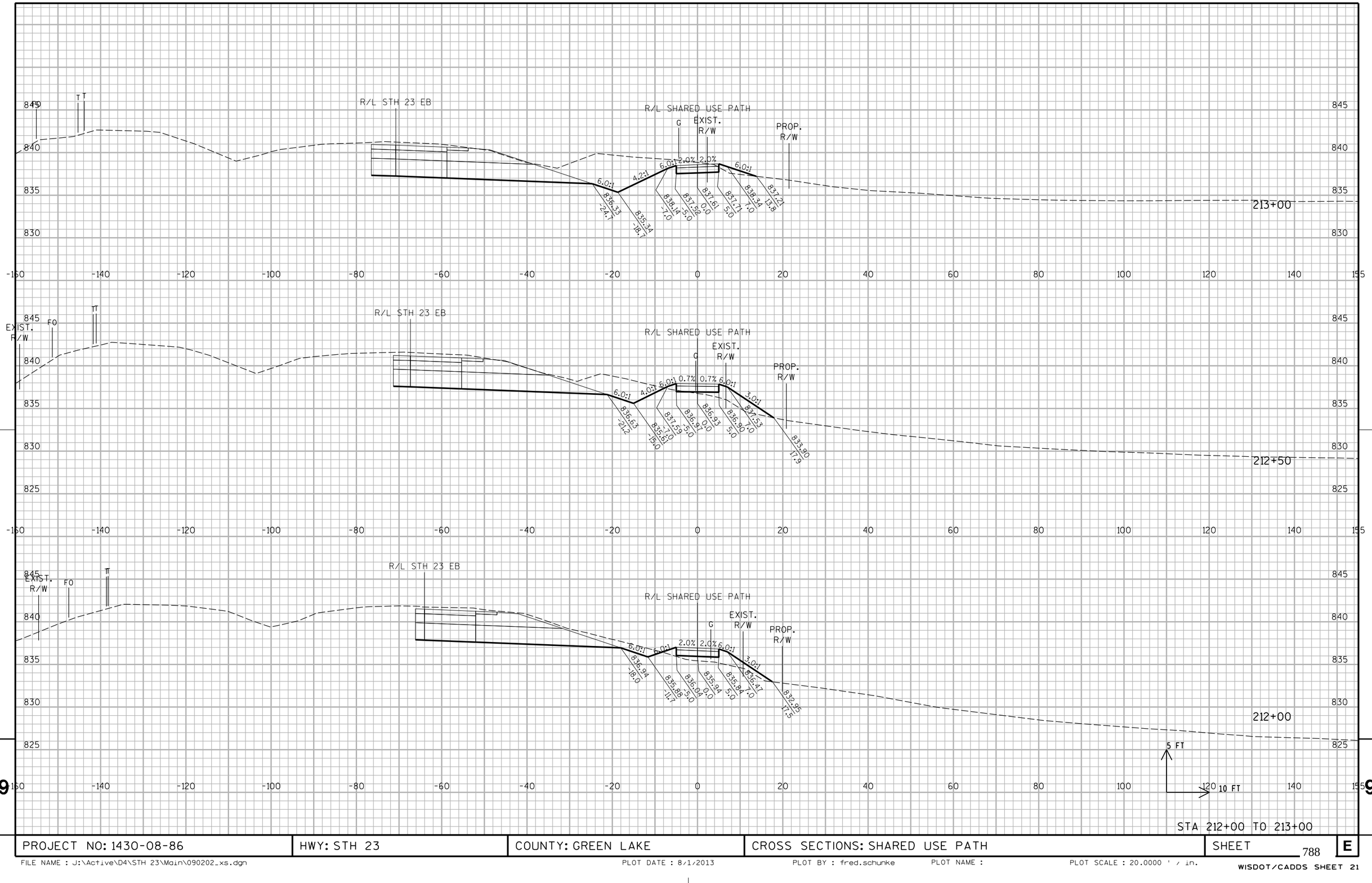
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: CTH PP	SHEET 786	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SHARED USE PATH	SHEET 787	E

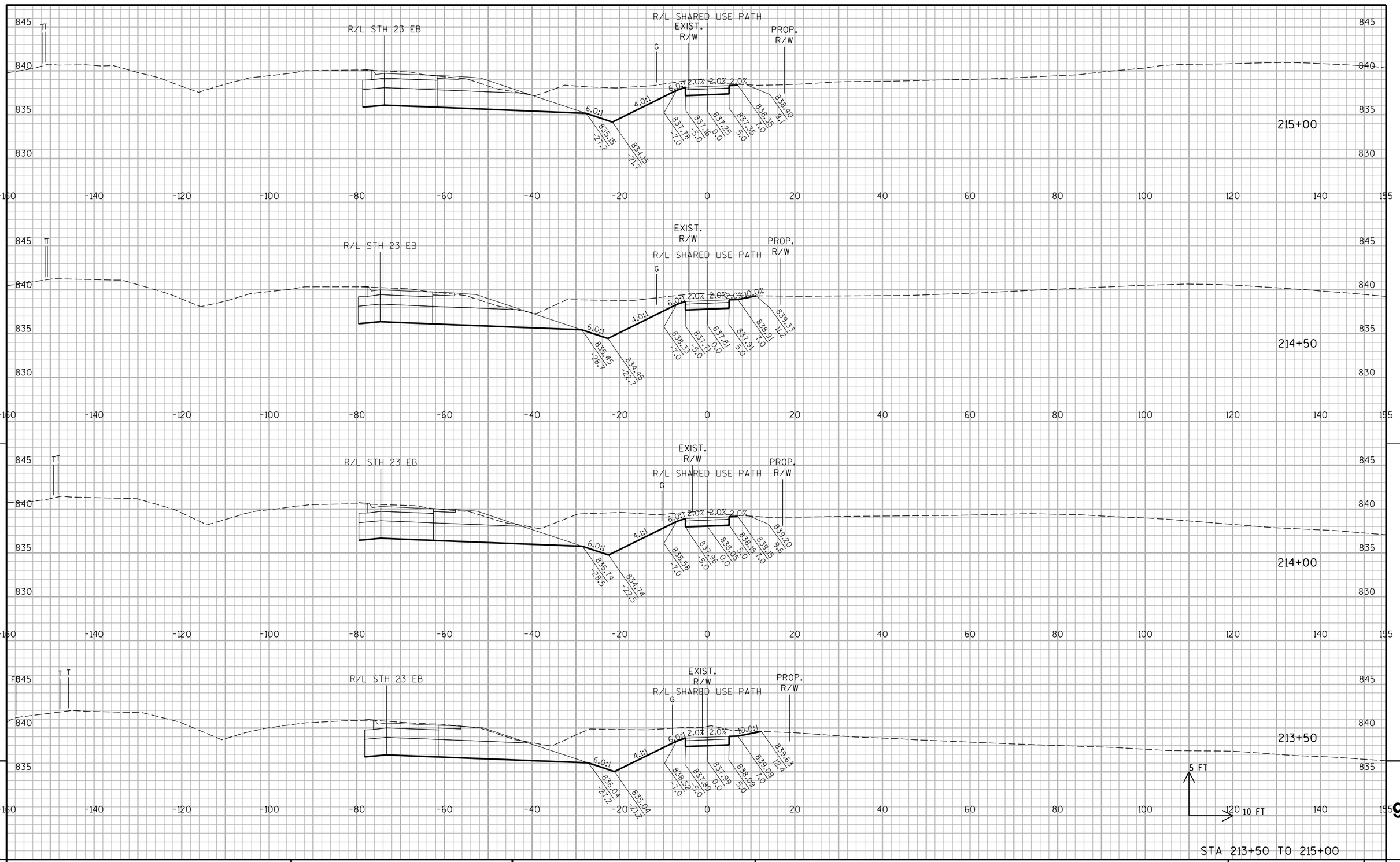


STA 212+00 TO 213+00

PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SHARED USE PATH	SHEET 788	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

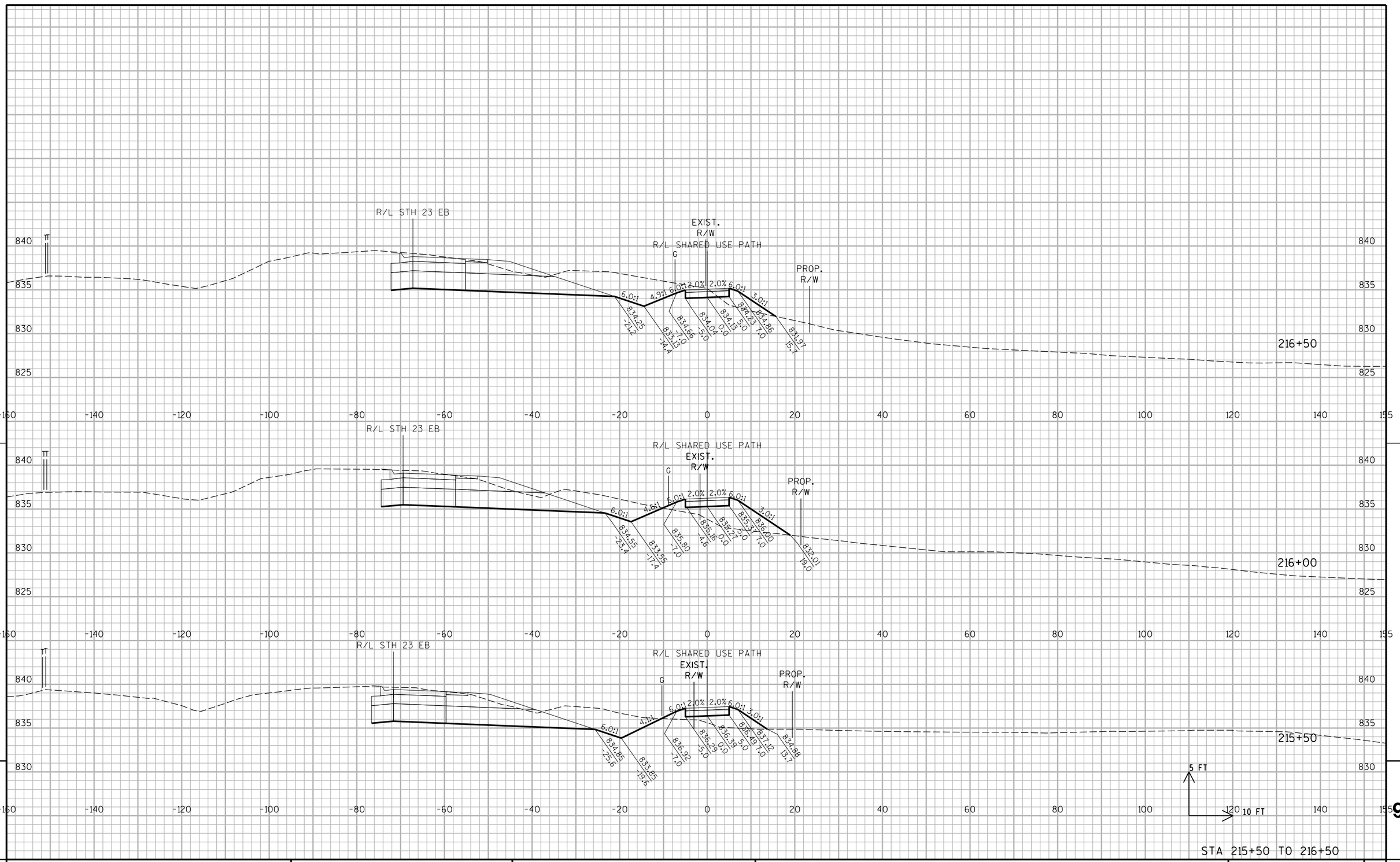
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SHARED USE PATH	SHEET 789	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



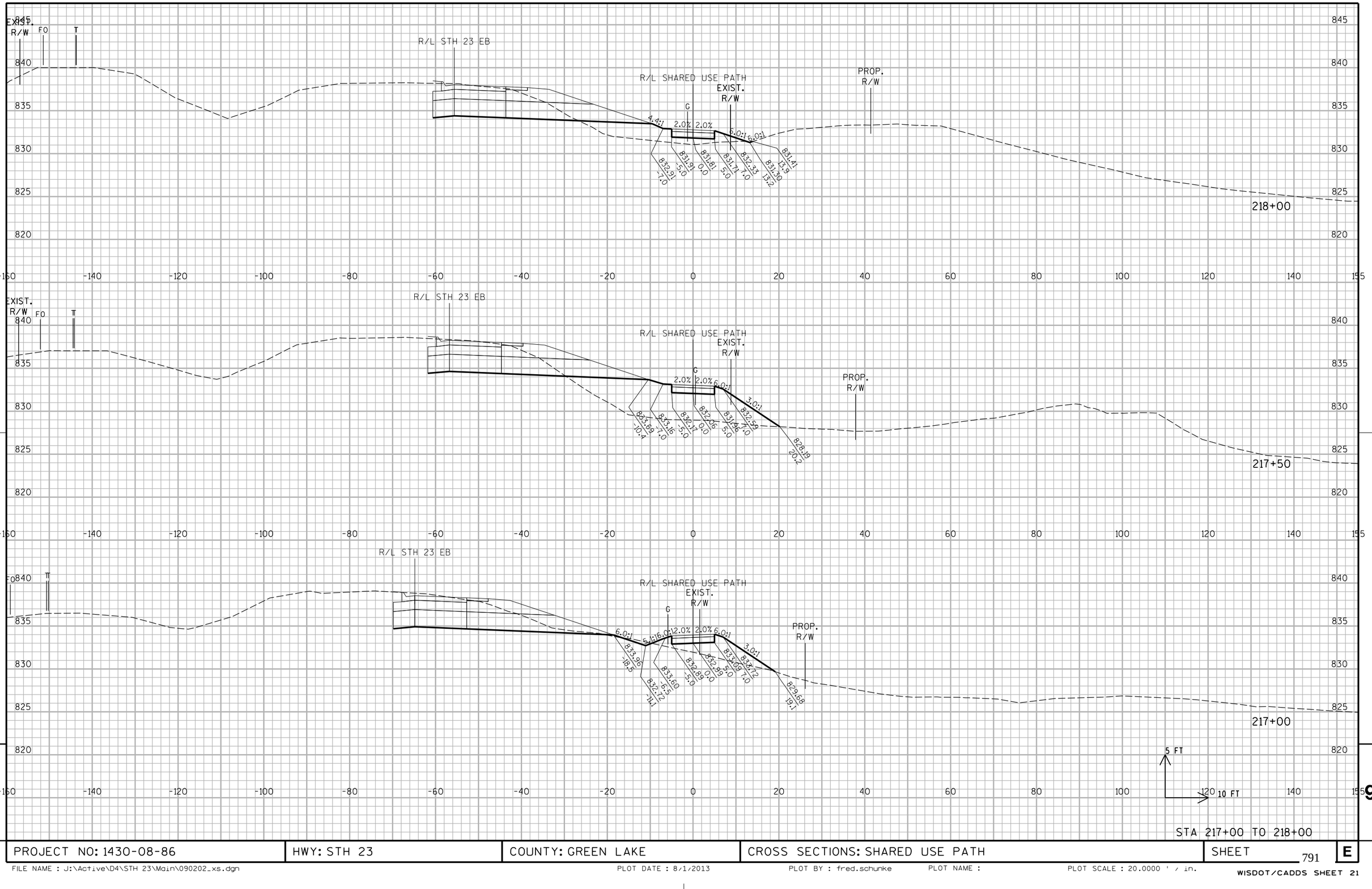
9

9

PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SHARED USE PATH	SHEET 790	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

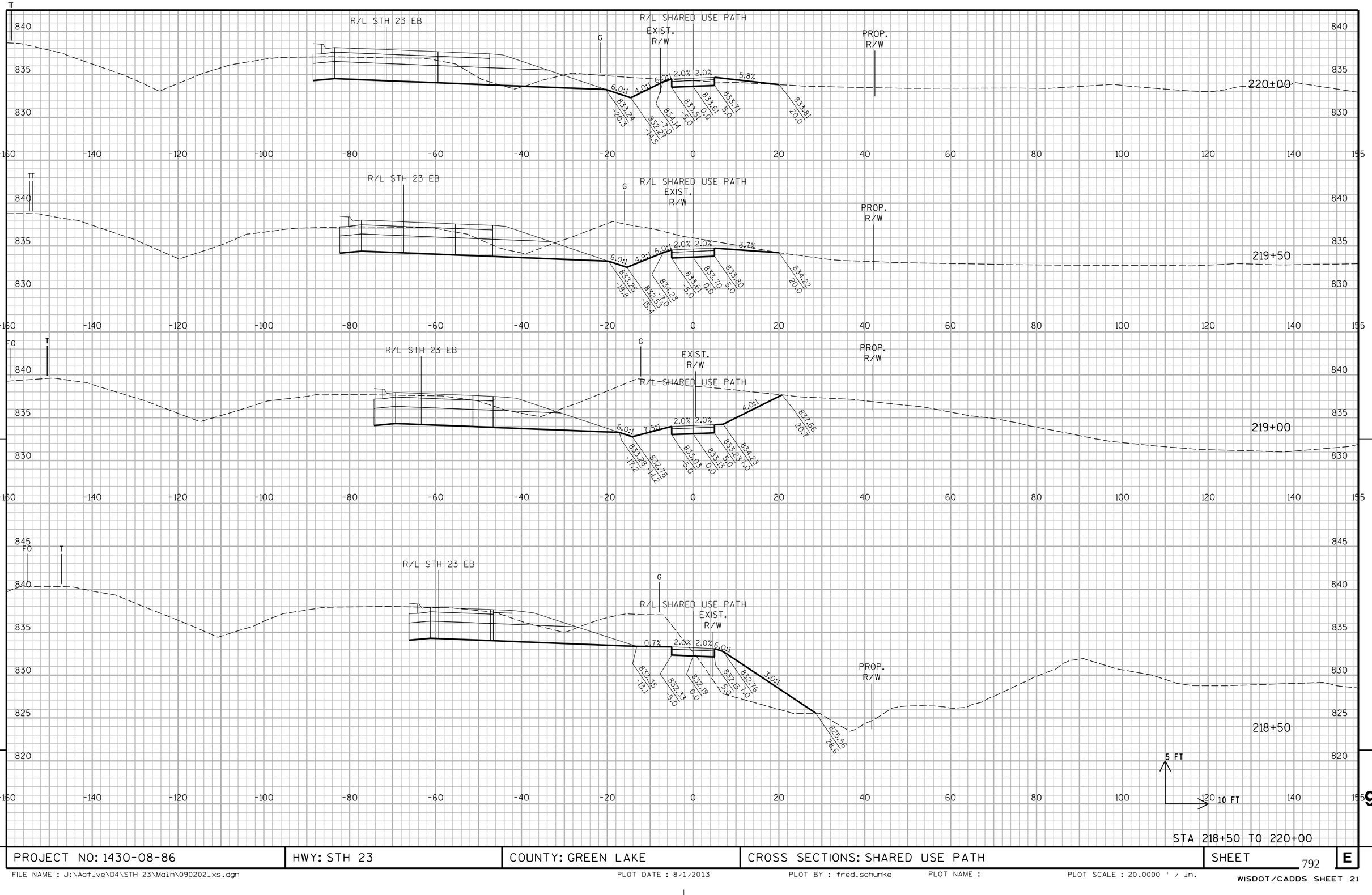
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SHARED USE PATH	SHEET 791	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

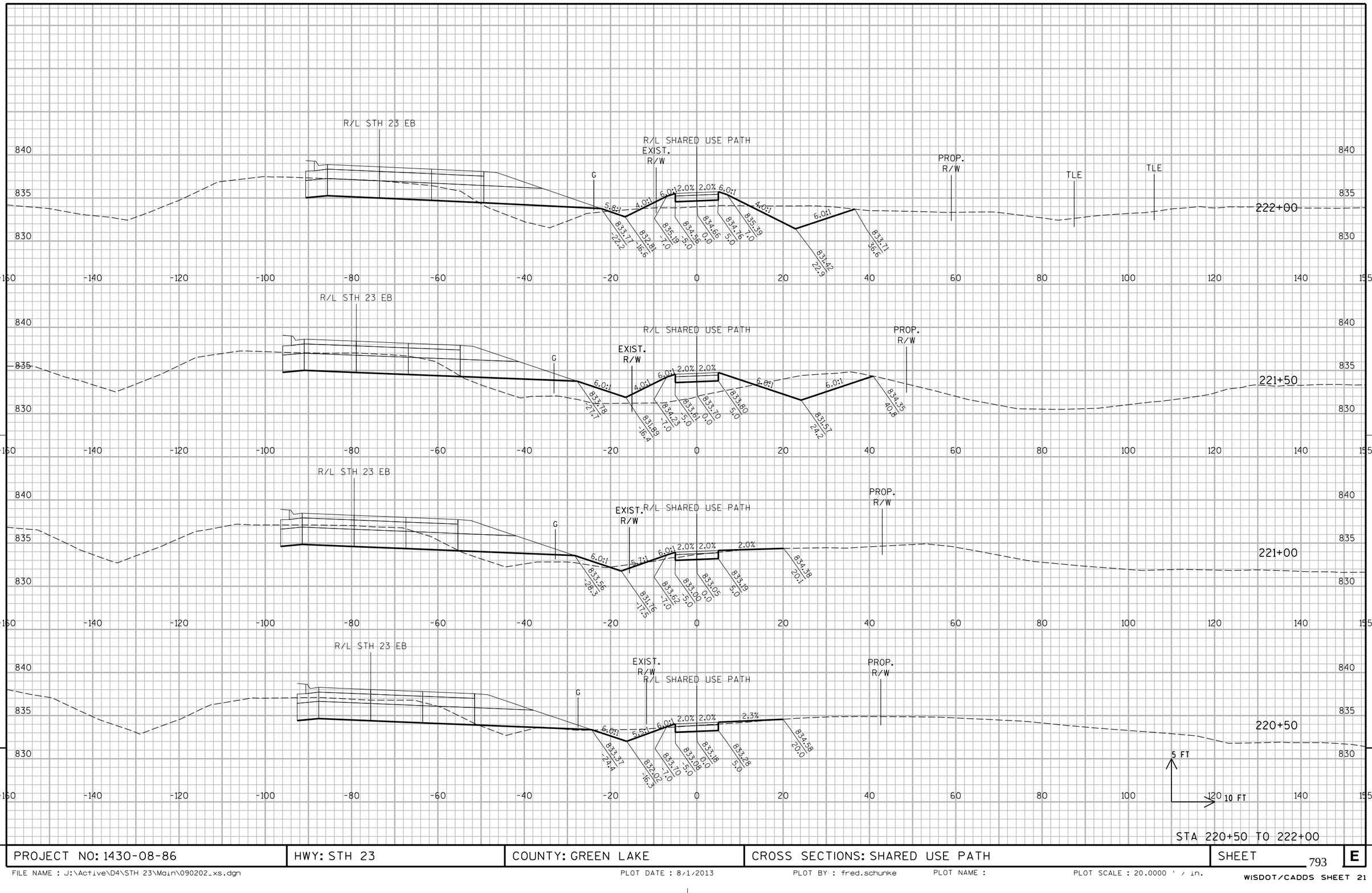
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SHARED USE PATH	SHEET 792 E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



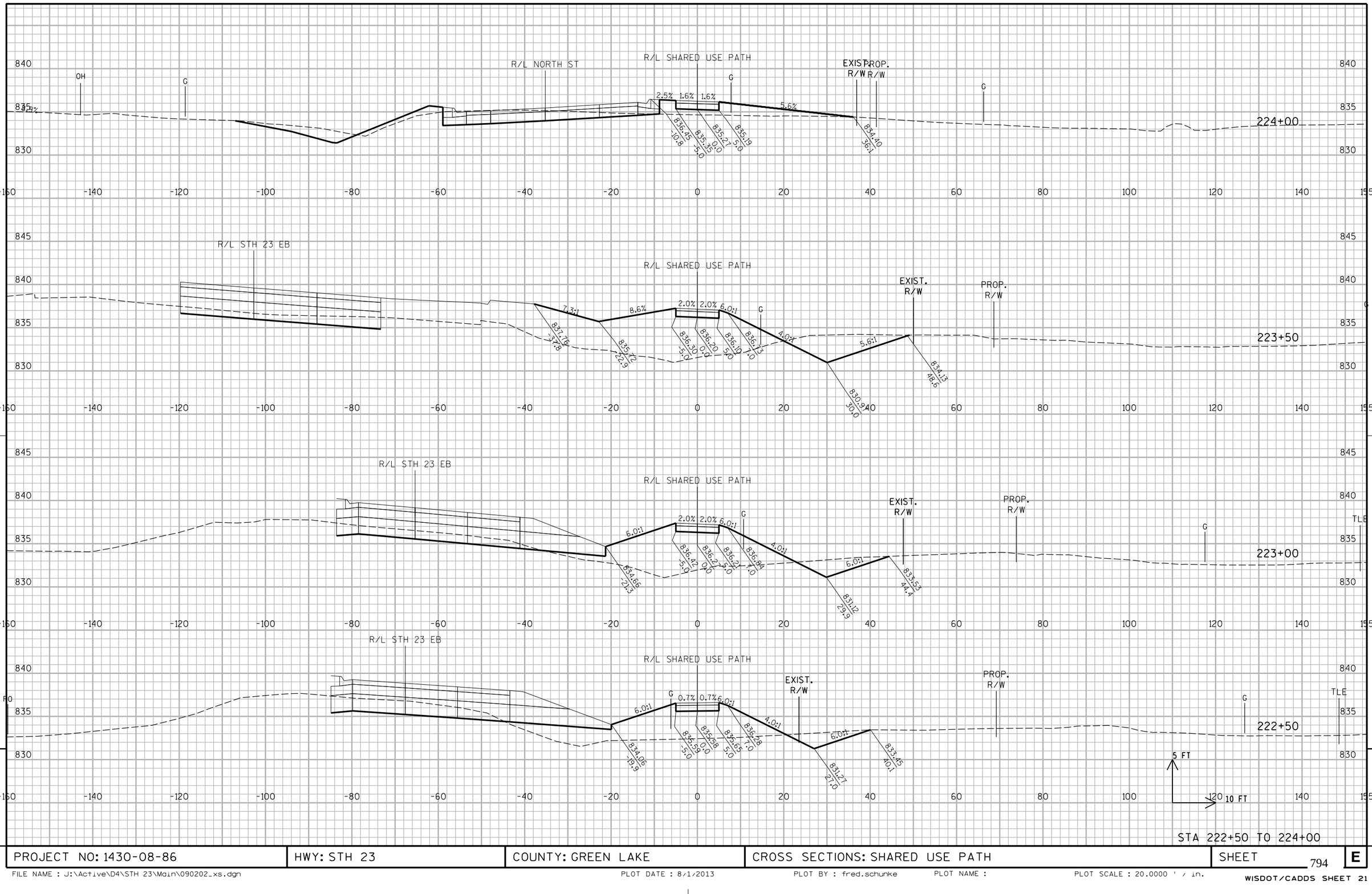
9

9

PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SHARED USE PATH	SHEET 793	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

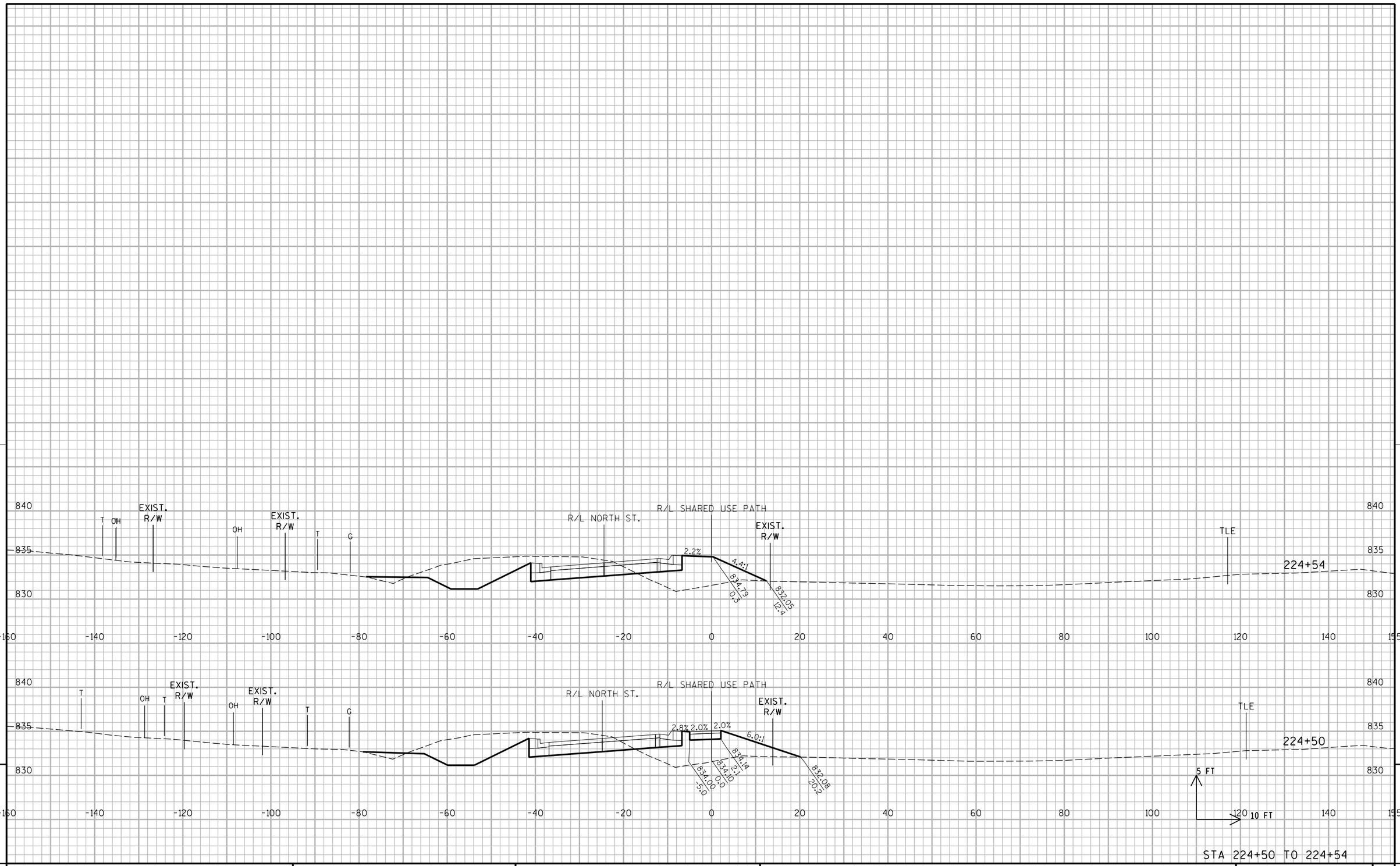
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SHARED USE PATH	SHEET 794	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

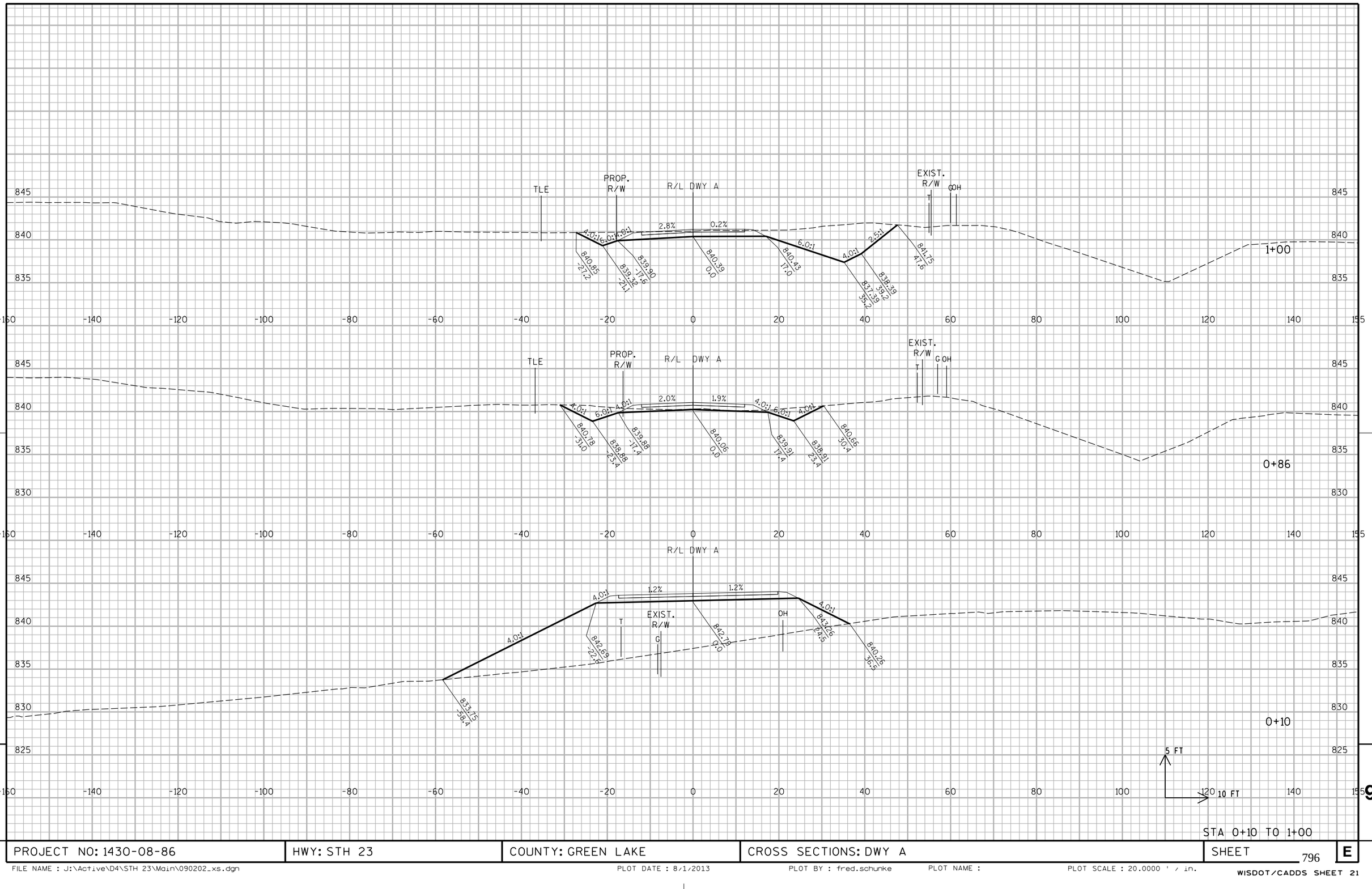


STA 224+50 TO 224+54

PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: SHARED USE PATH	SHEET 795	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

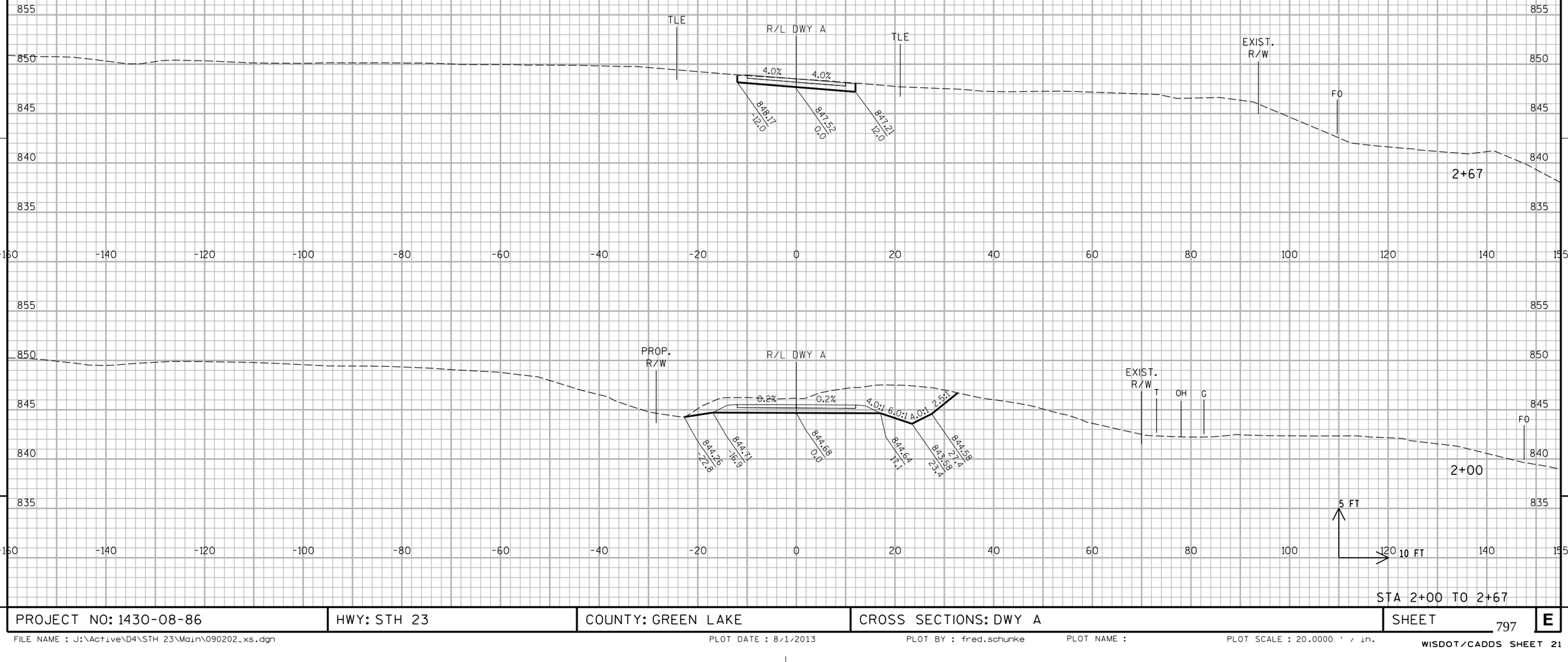
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: DWY A	SHEET 796	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

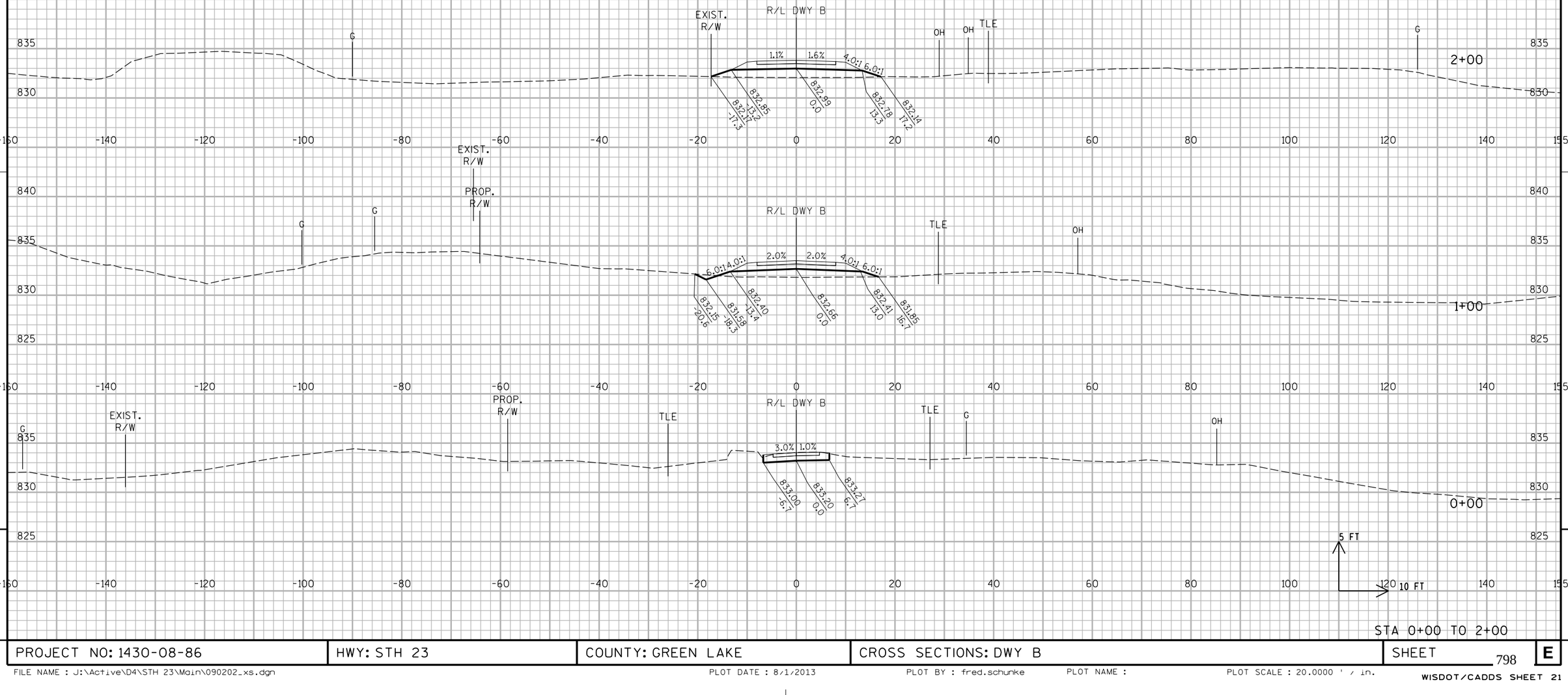


STA 2+00 TO 2+67

PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: DWY A	SHEET 797	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

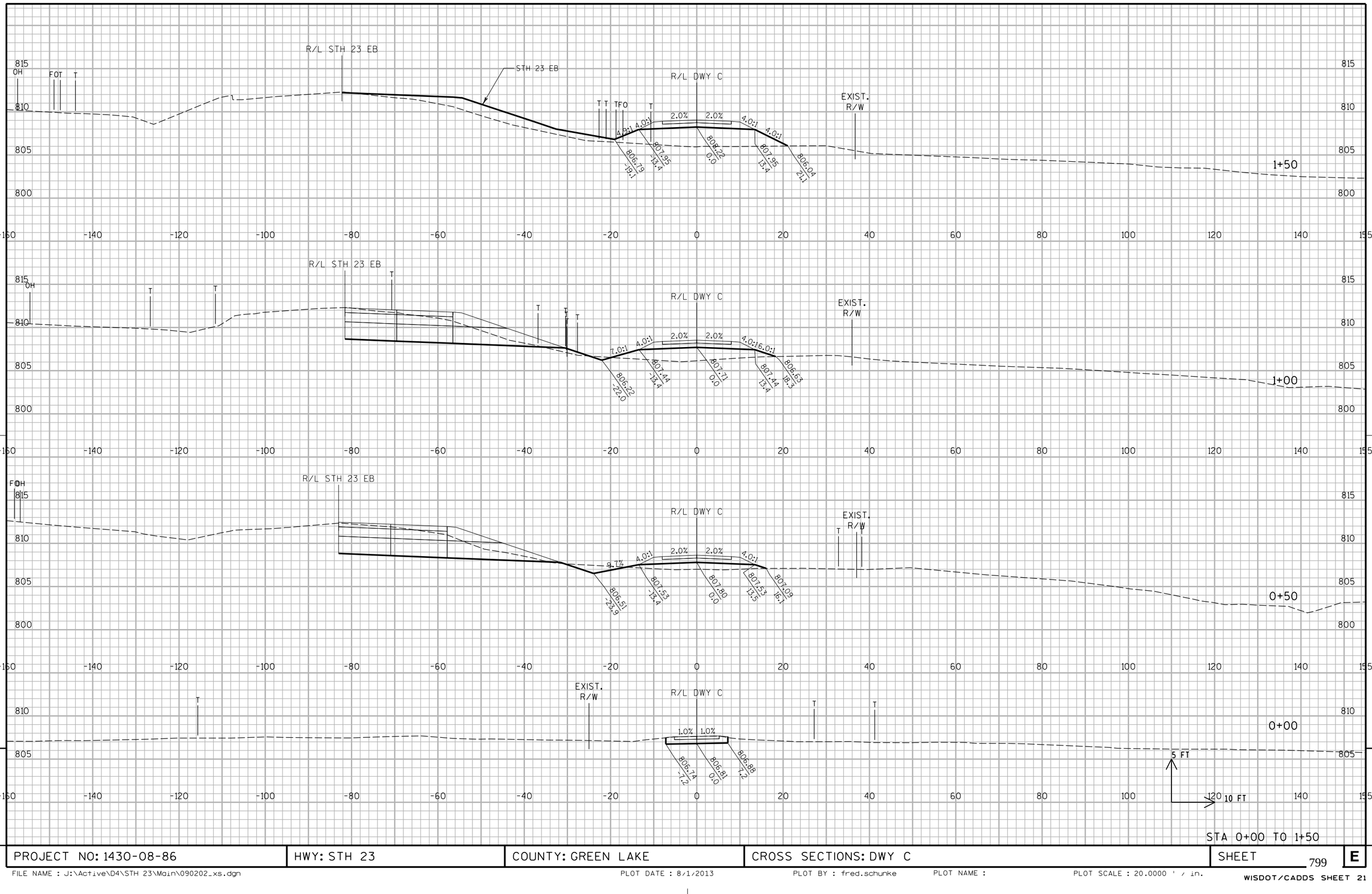


STA 0+00 TO 2+00

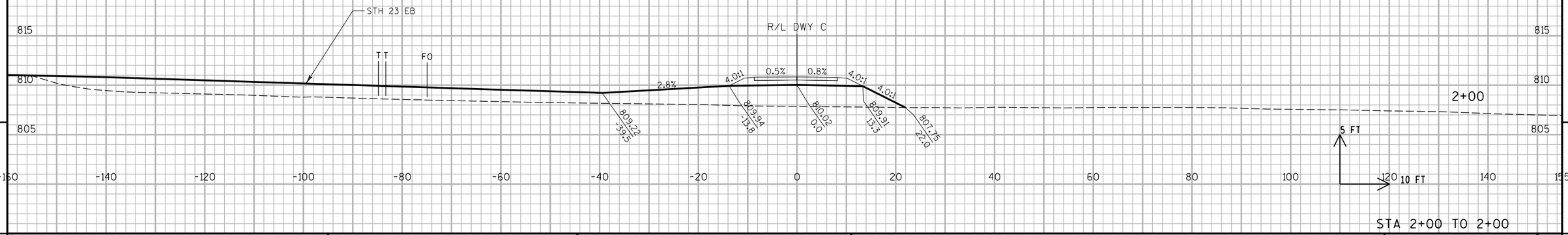
PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: DWY B	SHEET 798	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: DWY C	SHEET 799	E



9

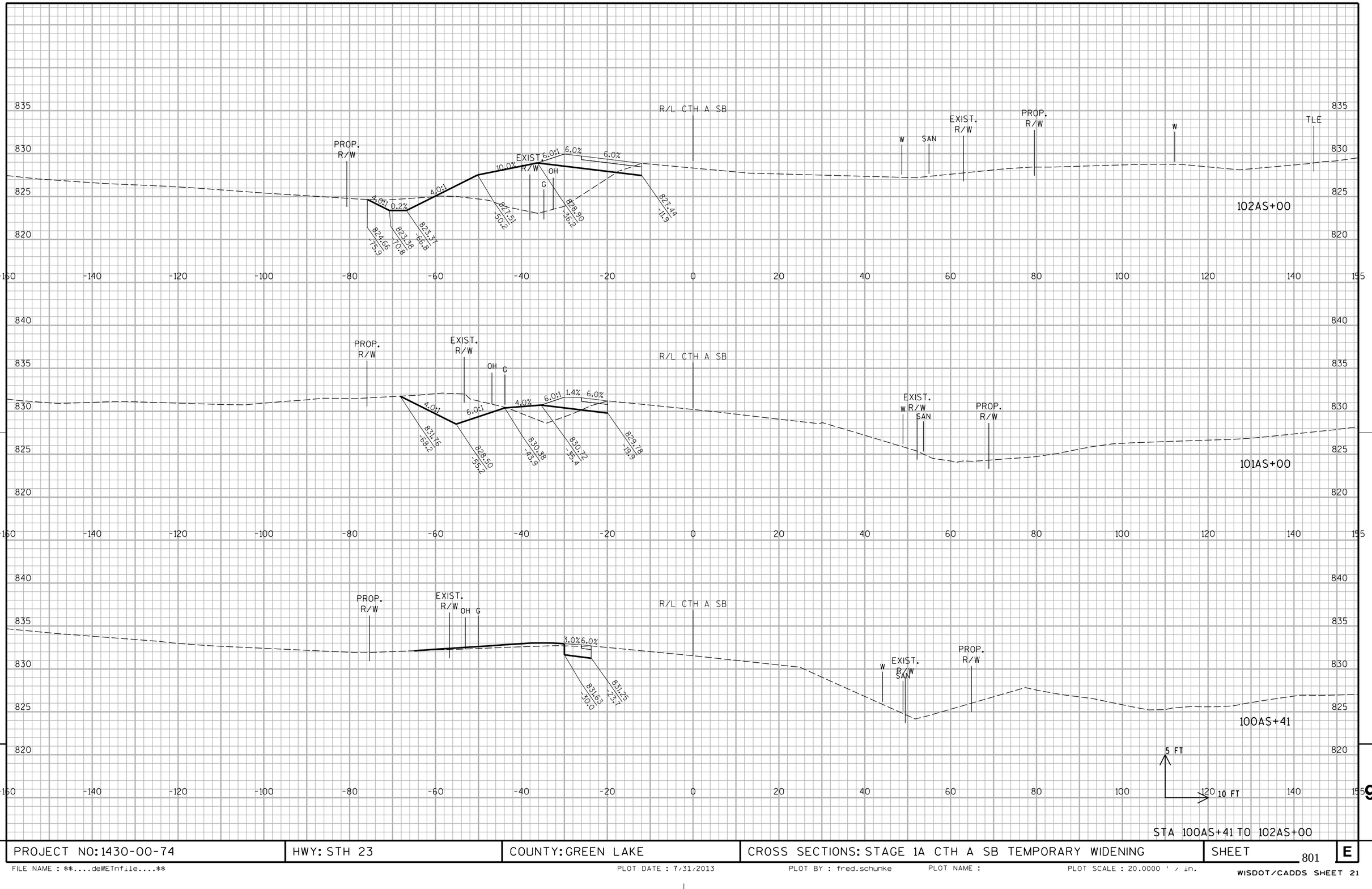
9

STA 2+00 TO 2+00

PROJECT NO: 1430-08-86	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: DWY C	SHEET 800	E

FILE NAME : J:\Active\D4\STH 23\Main\090202_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 100AS+41 TO 102AS+00

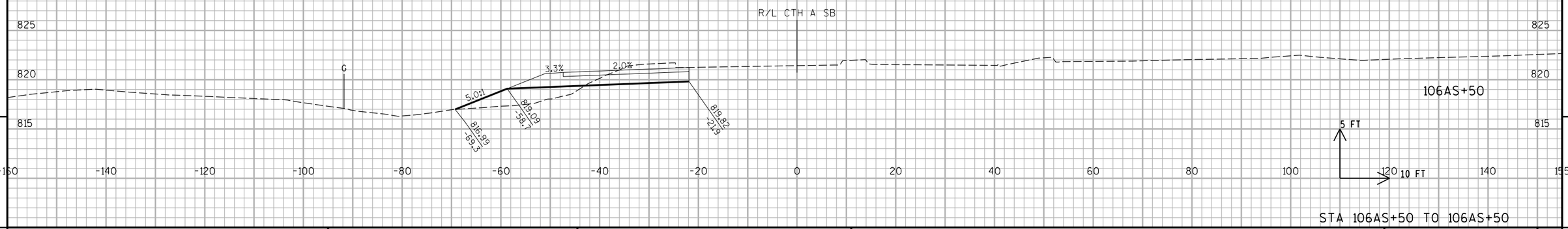
PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STAGE 1A CTH A SB TEMPORARY WIDENING	SHEET 801	E

FILE NAME : $$....deWETnfile....$$ PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 103AS+00 TO 106AS+00

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STAGE 1A CTH A SB TEMPORARY WIDENING	SHEET 802	E

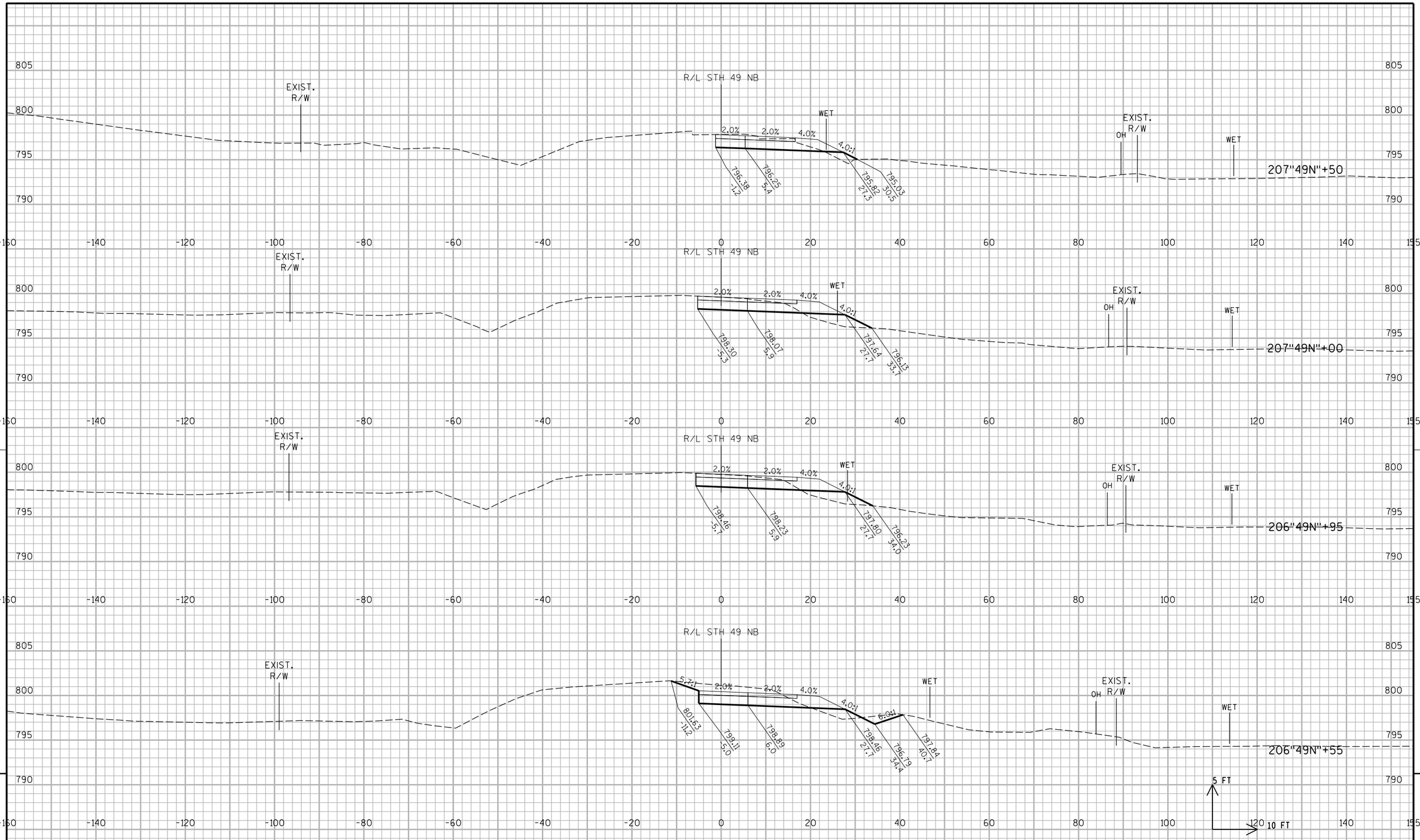


STA 106AS+50 TO 106AS+50

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STAGE 1A CTH A SB TEMPORARY WIDENING	SHEET 803	E

FILE NAME : $$....deWETnfile....$$ PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 206"49N"+55 TO 207"49N"+50

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STAGE 1B STH 49 NB TEMPORARY WIDENING	SHEET 804	E

FILE NAME : $$....deWETnfile....$$ PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

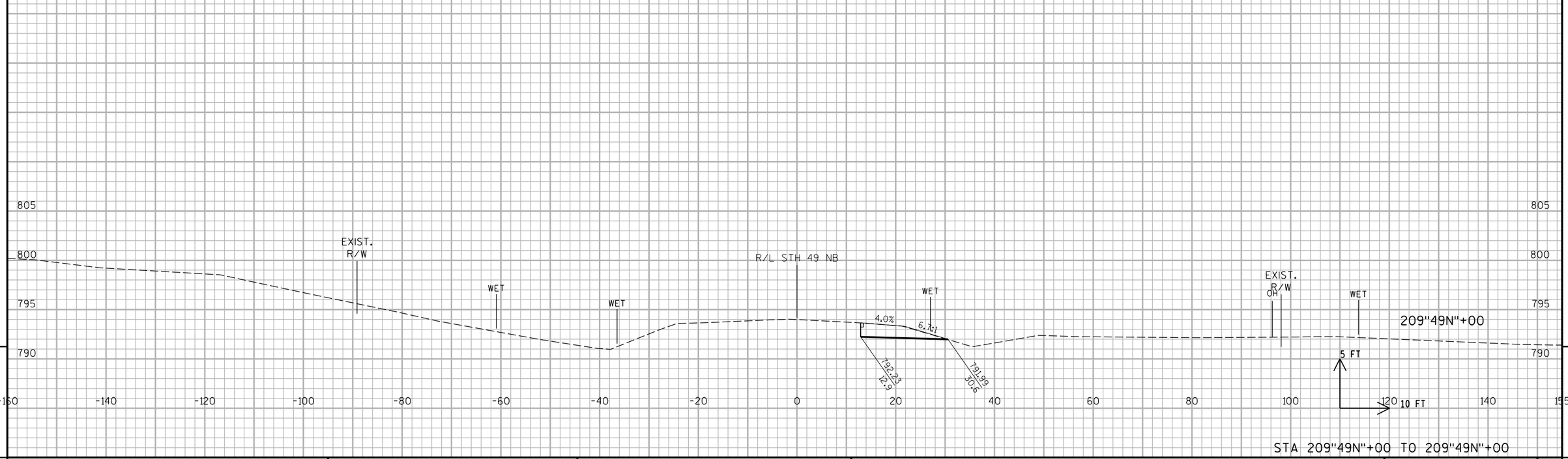
WISDOT/CADDS SHEET 21

STA 207"49N"+66 TO 208"49N"+50

PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STAGE 1B STH 49 NB TEMPORARY WIDENING	SHEET 805	E

FILE NAME : $$....deWETnfile....$$ PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

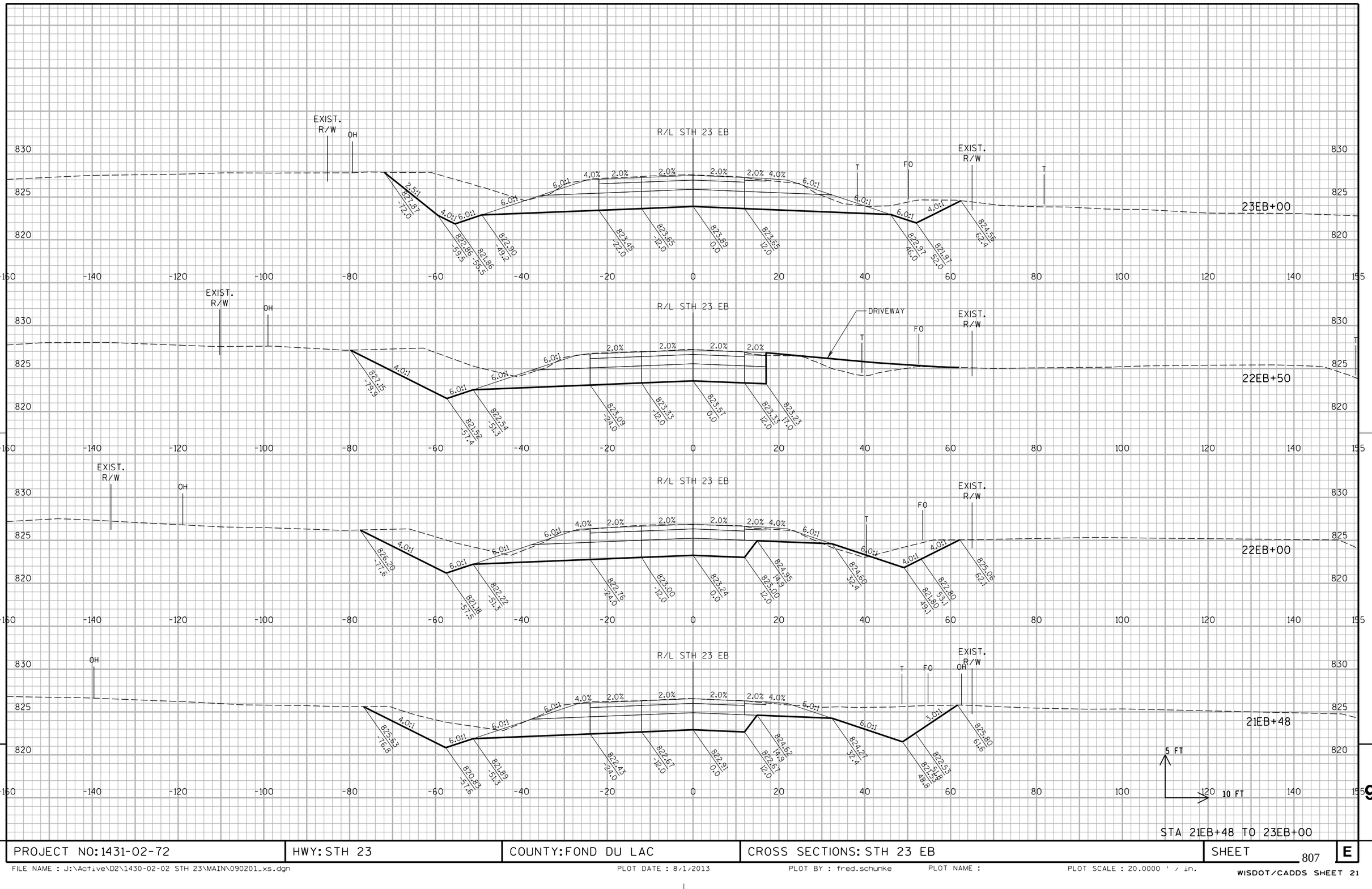
WISDOT/CADDS SHEET 21



PROJECT NO: 1430-00-74	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: STAGE 1B STH 49 NB TEMPORARY WIDENING	SHEET 806	E

FILE NAME : $$....deWETnfile....$$ PLOT DATE : 7/31/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

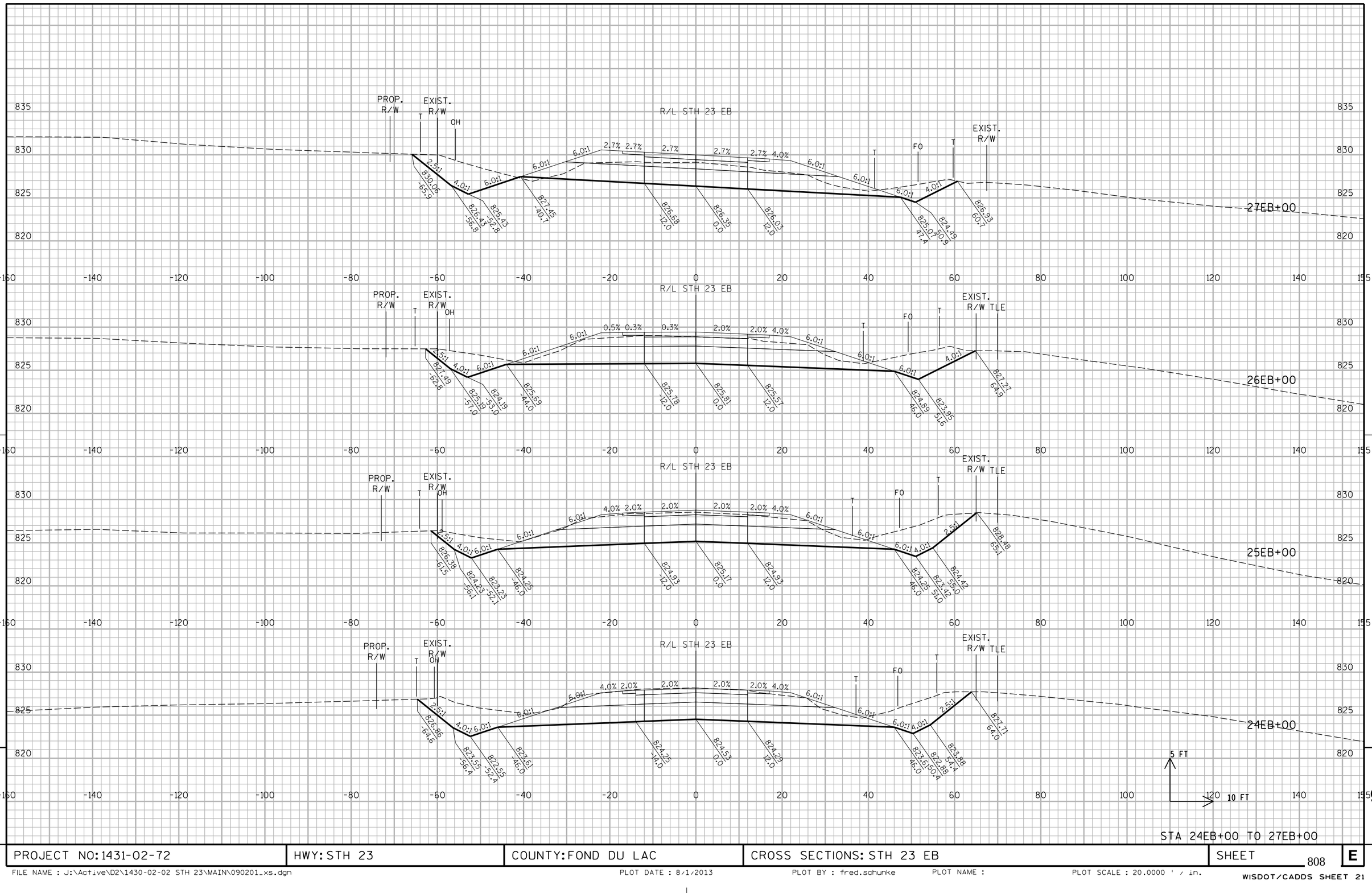
WISDOT/CADDS SHEET 21



PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 807	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



STA 24EB+00 TO 27EB+00

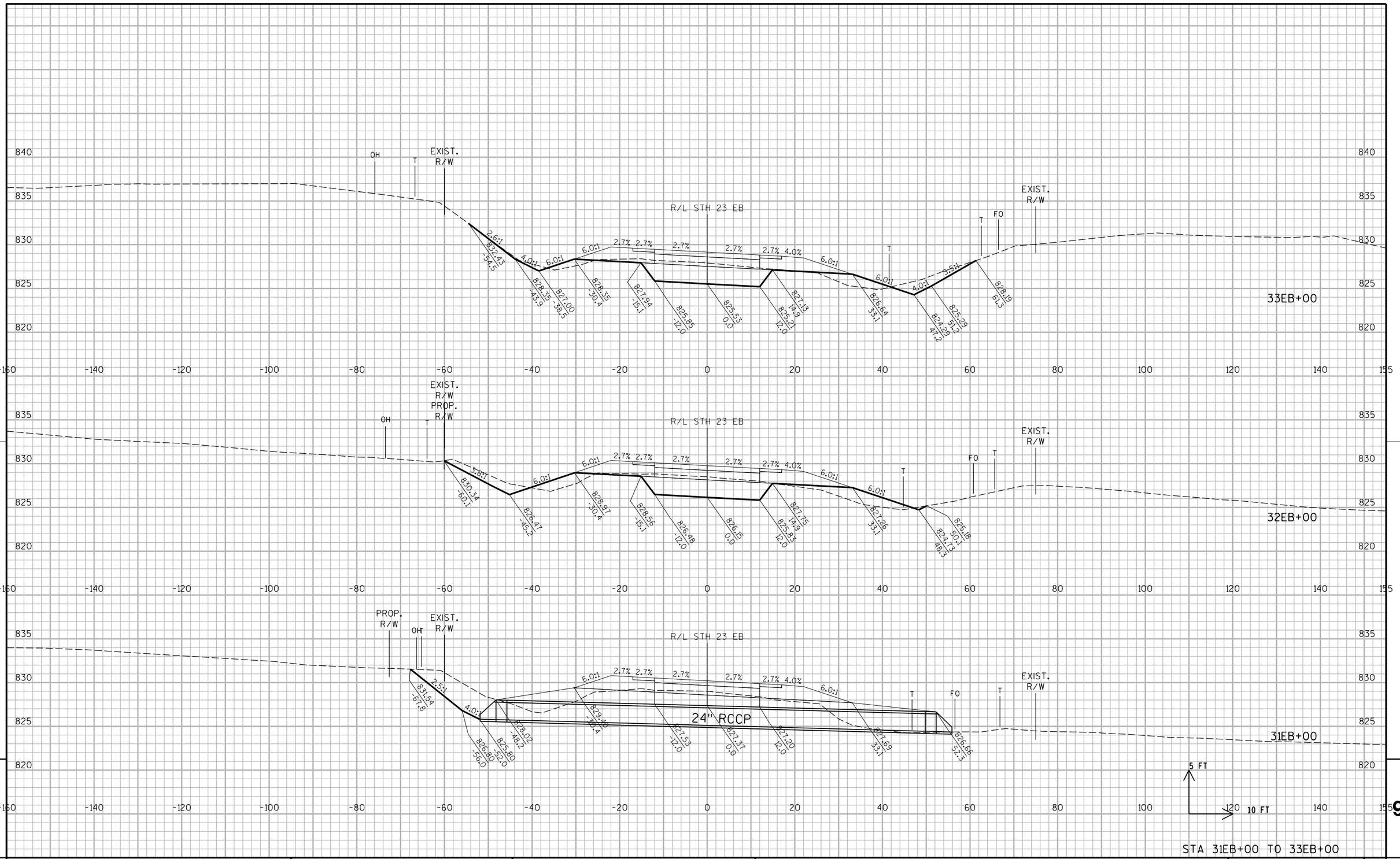
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 808	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 28EB+00 TO 30EB+00

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 809	E

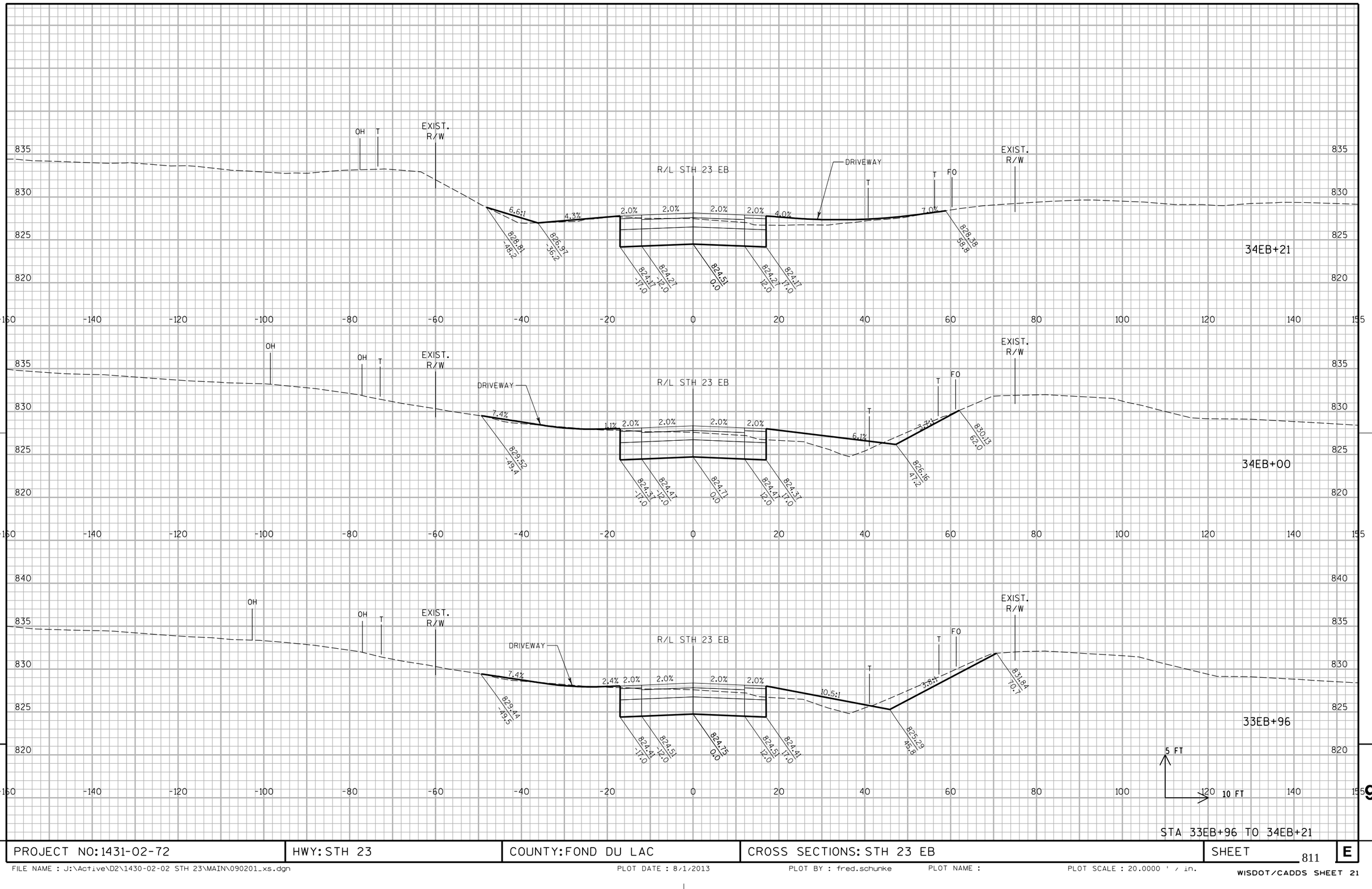


STA 31EB+00 TO 33EB+00

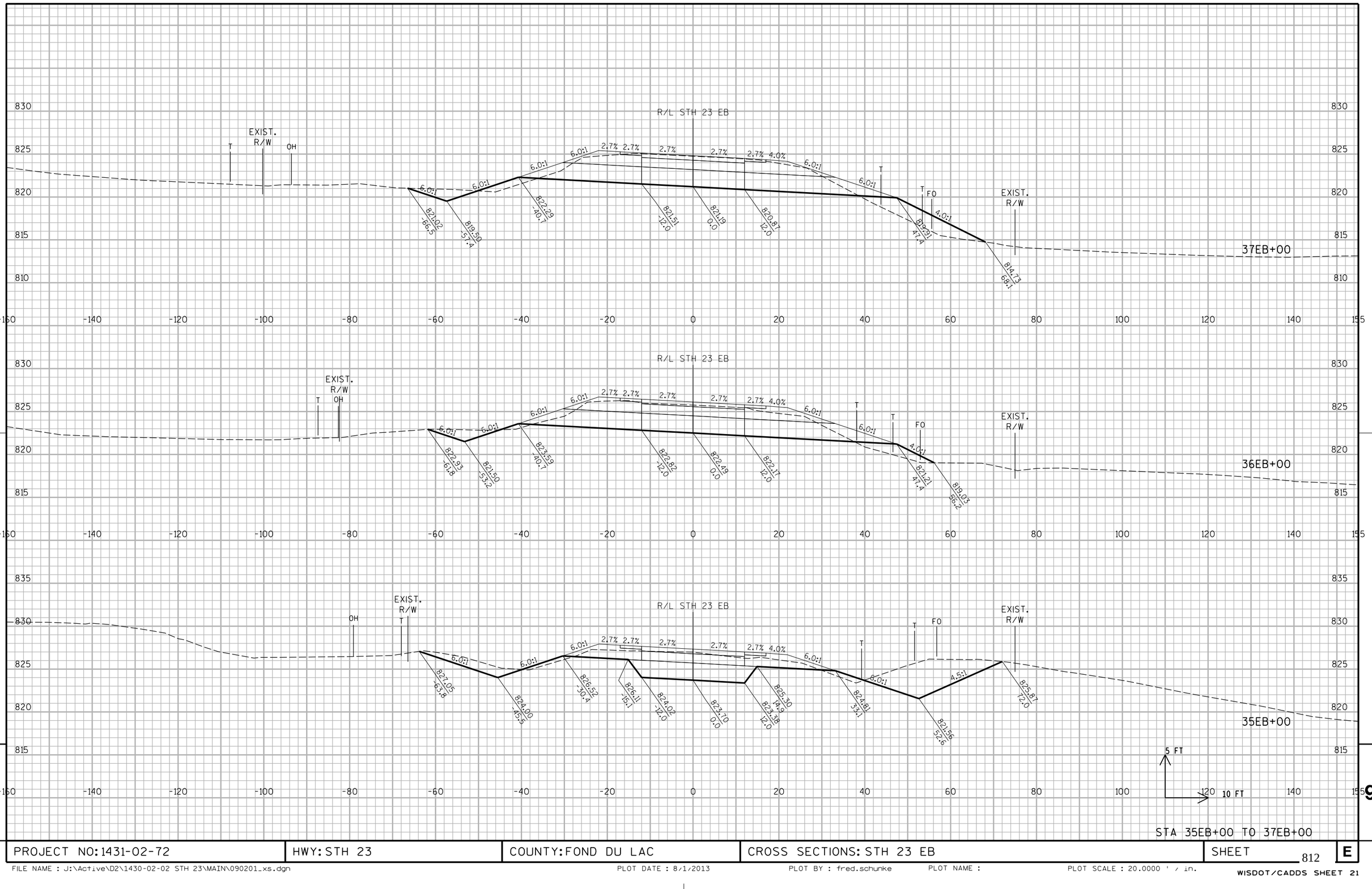
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 810	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



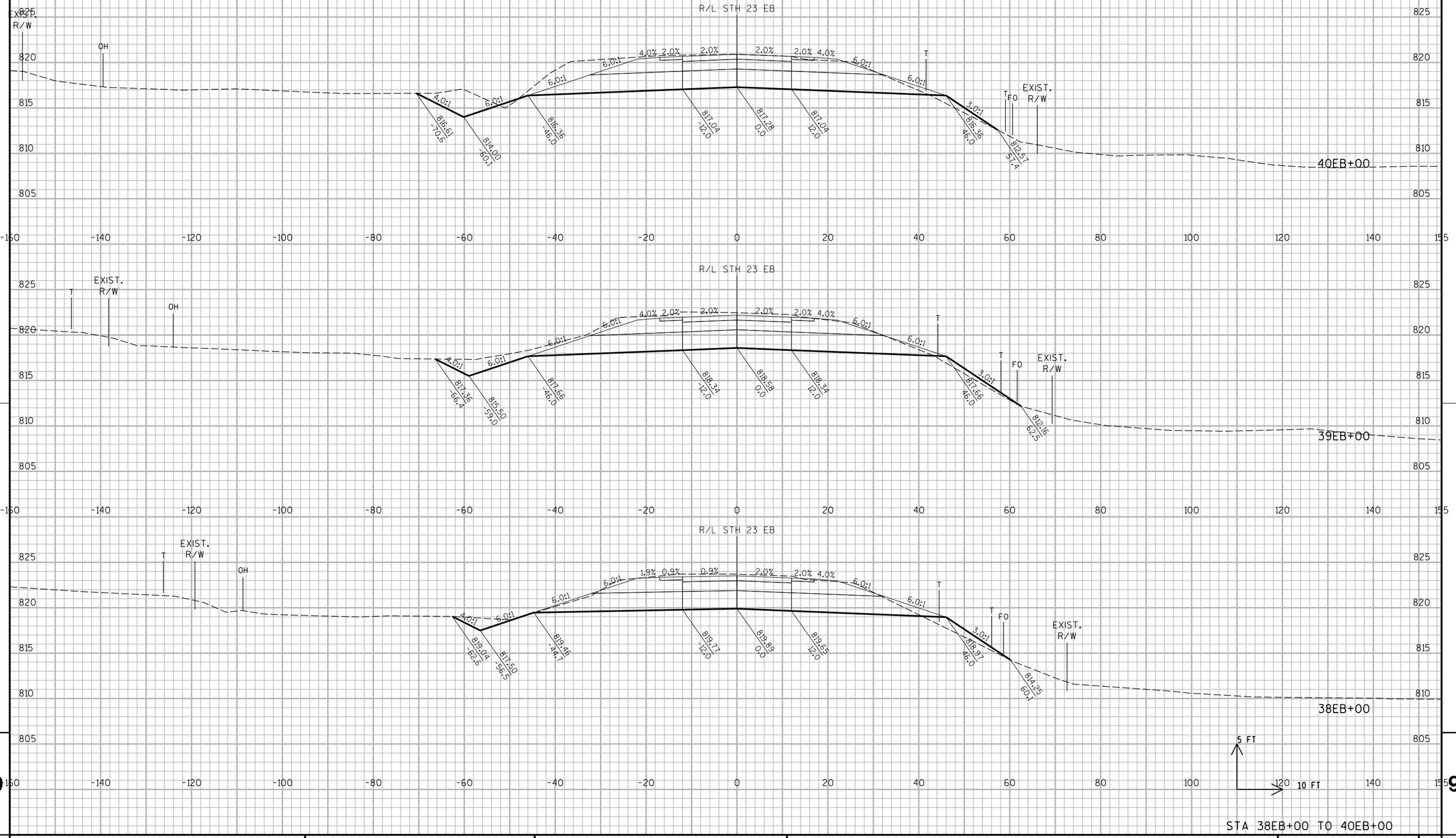
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 811	E



PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 812	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

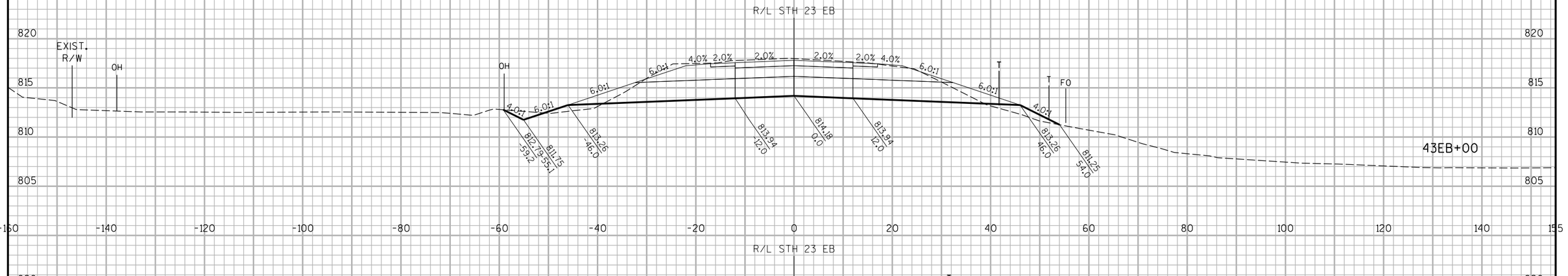


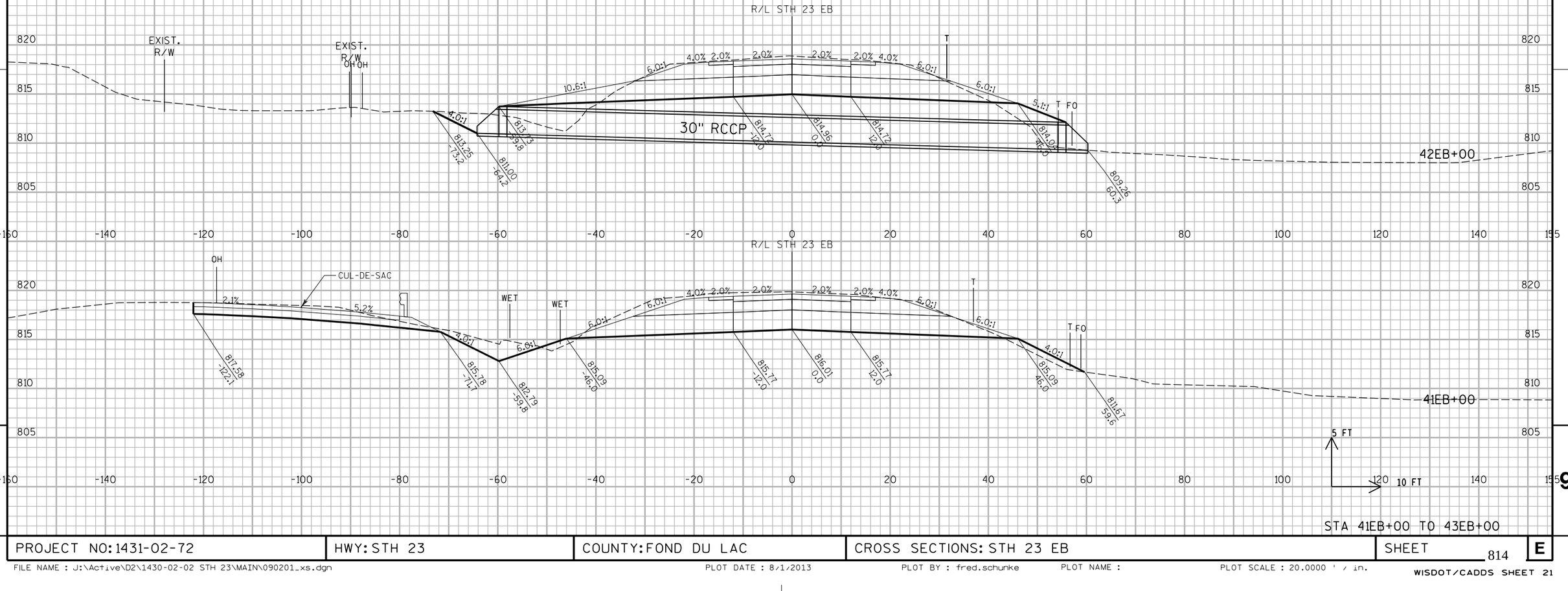
STA 38EB+00 TO 40EB+00

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 813	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



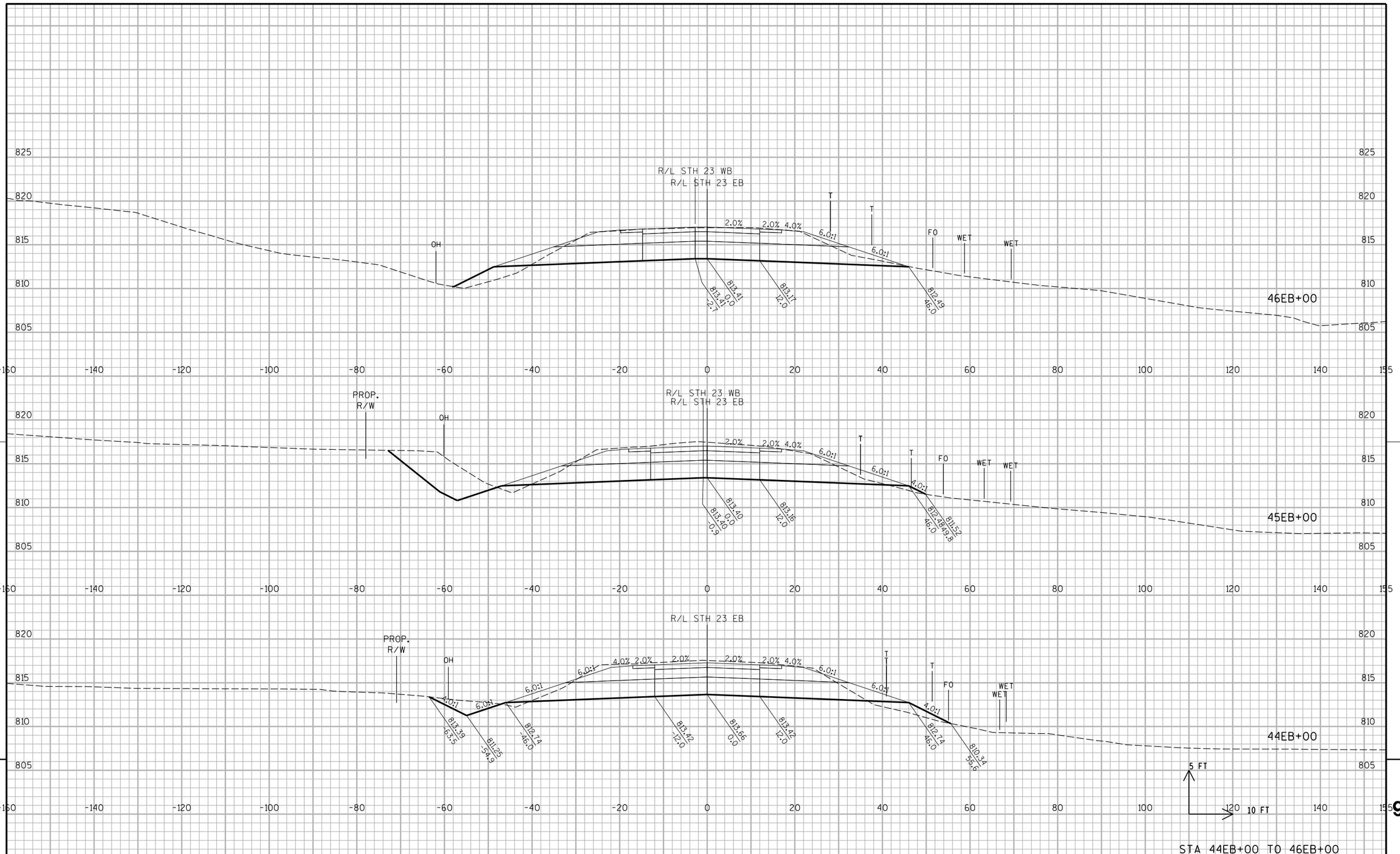


STA 41EB+00 TO 43EB+00

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 814	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

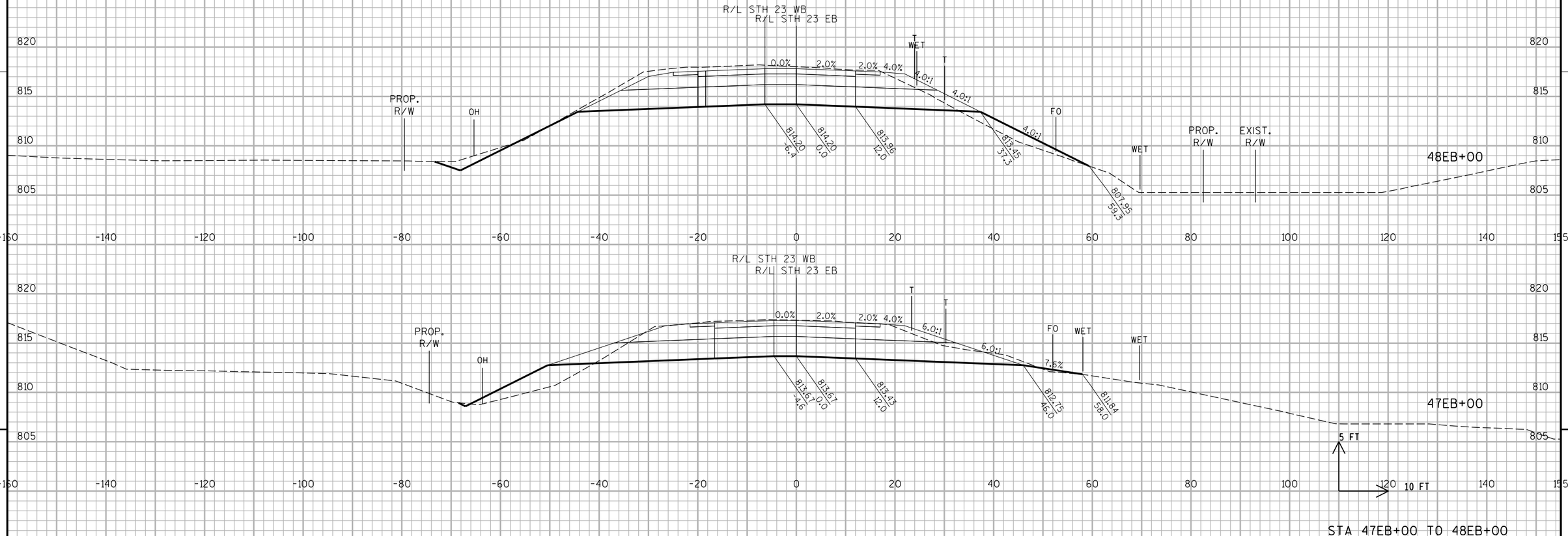
WISDOT/CADDS SHEET 21



PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 815	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



9

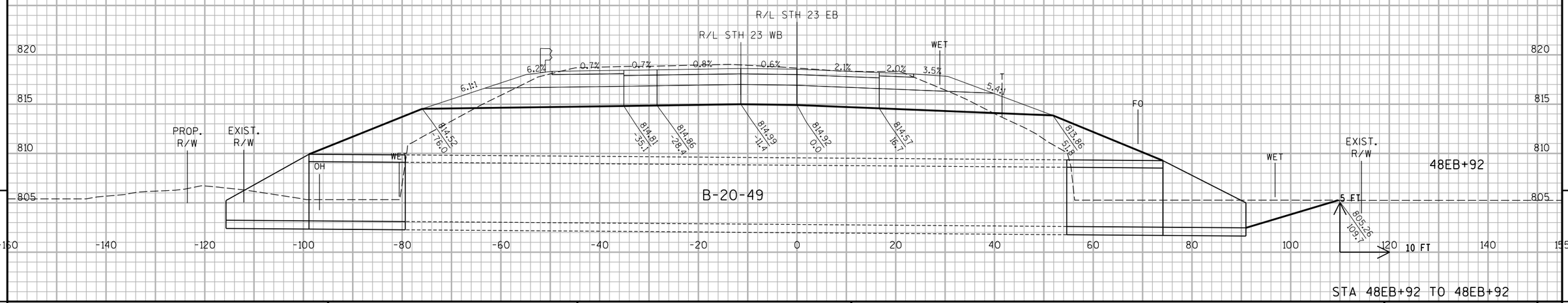
9

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 816	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

THIS CROSS-SECTION SKEWED 43°31'21" LHF
FOR INFORMATION PURPOSES ONLY

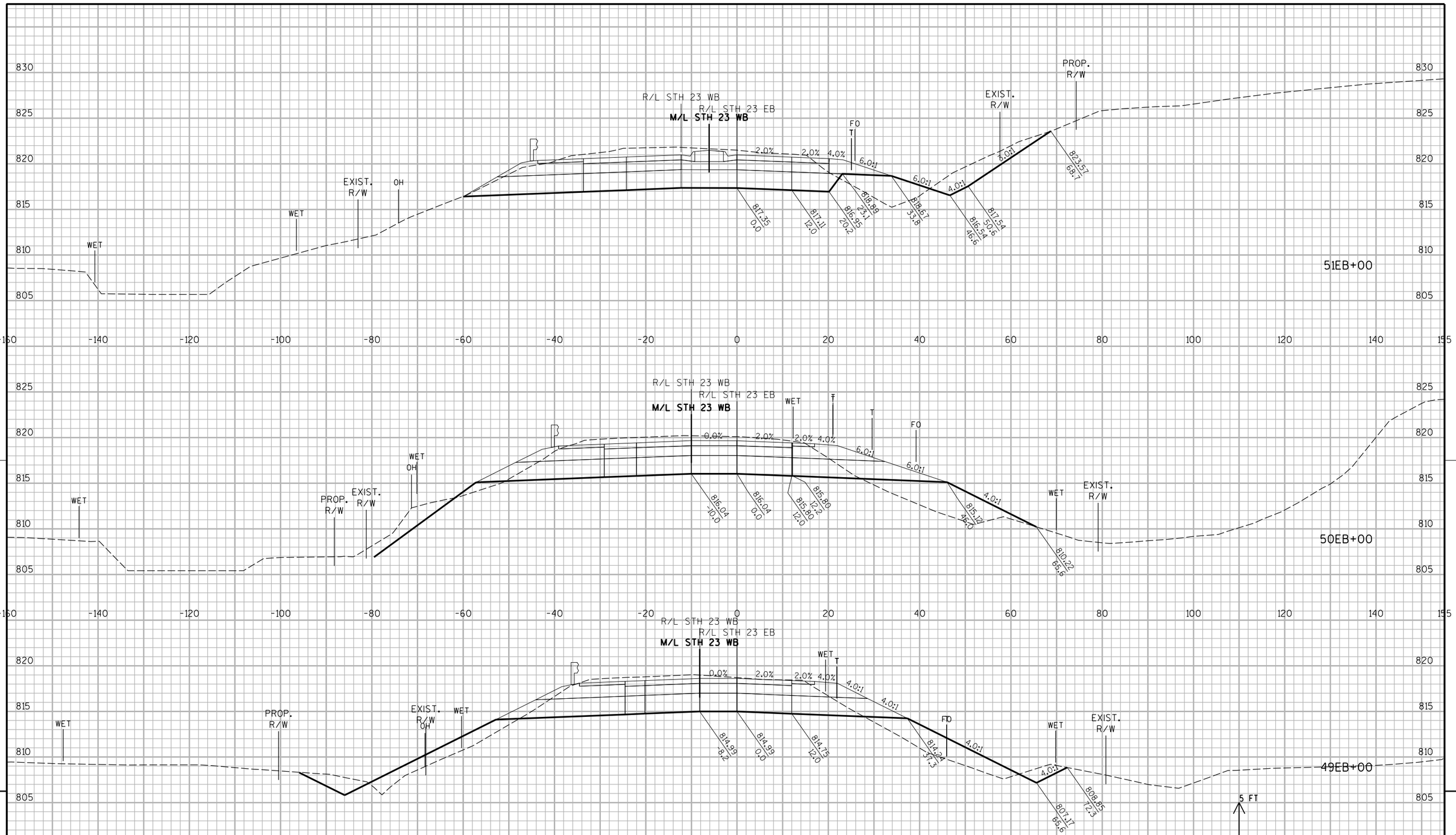


STA 48EB+92 TO 48EB+92

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 817	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

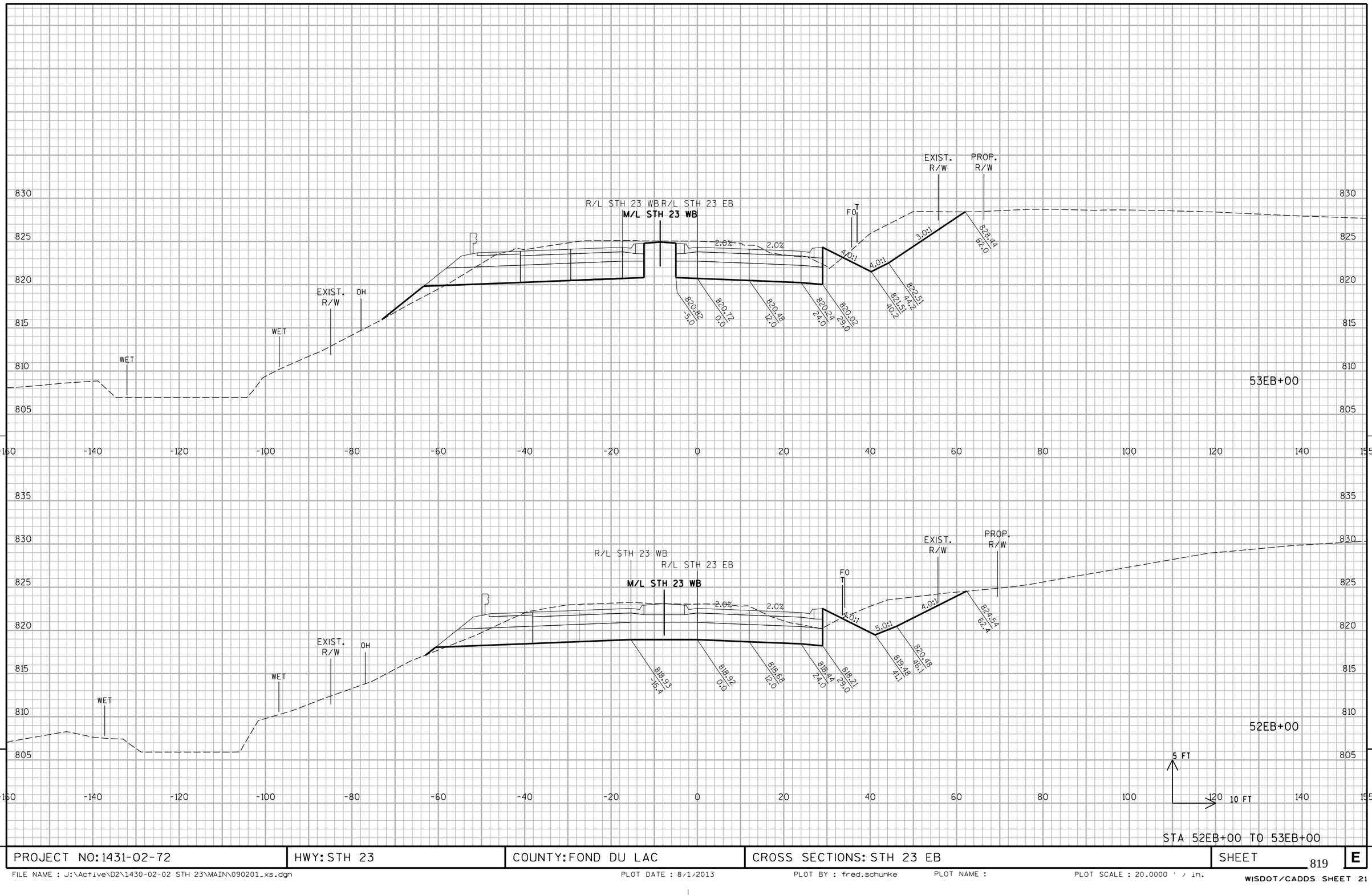
WISDOT/CADDS SHEET 21



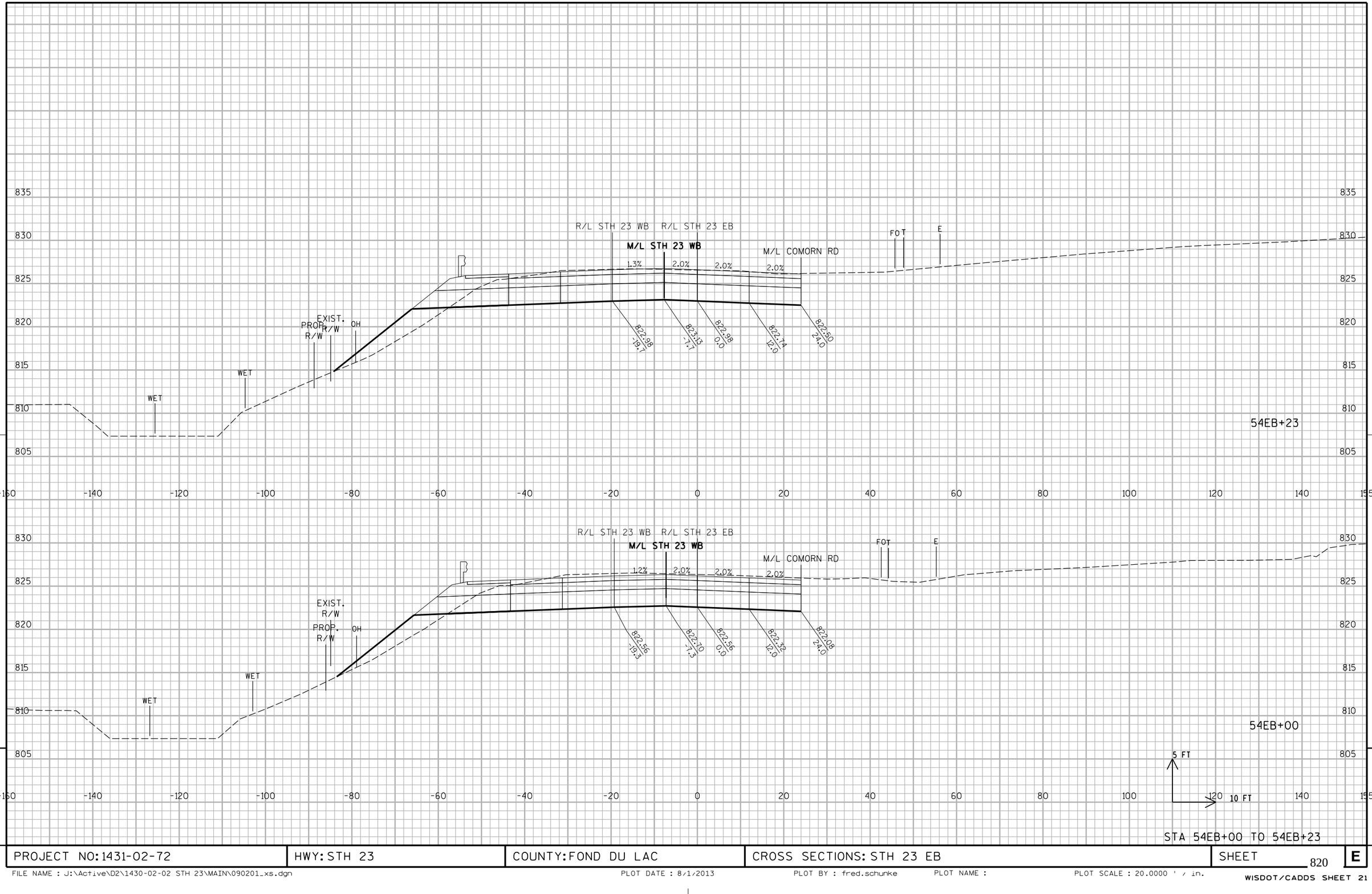
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 818	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 819	E

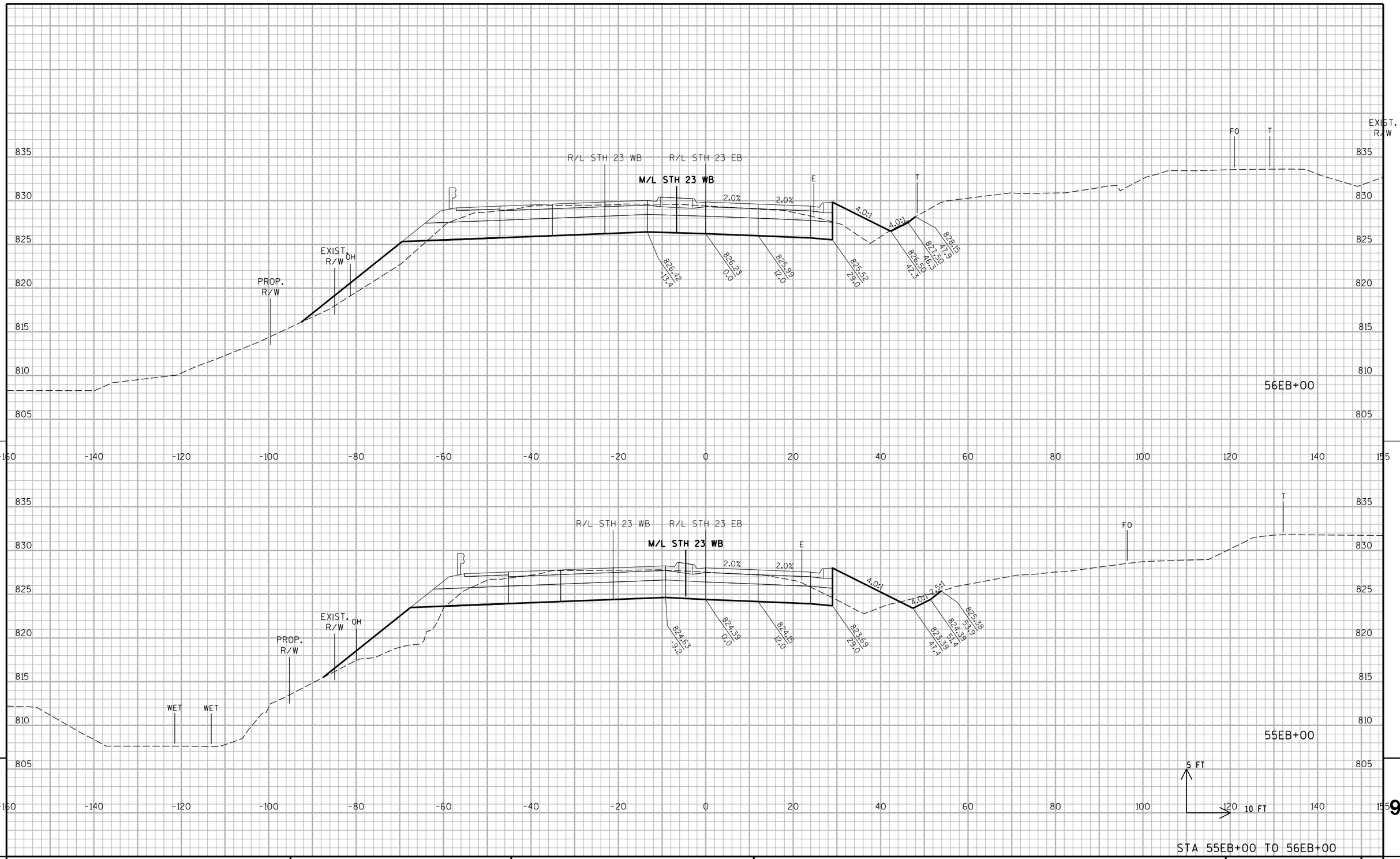


STA 54EB+00 TO 54EB+23

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 820	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



9

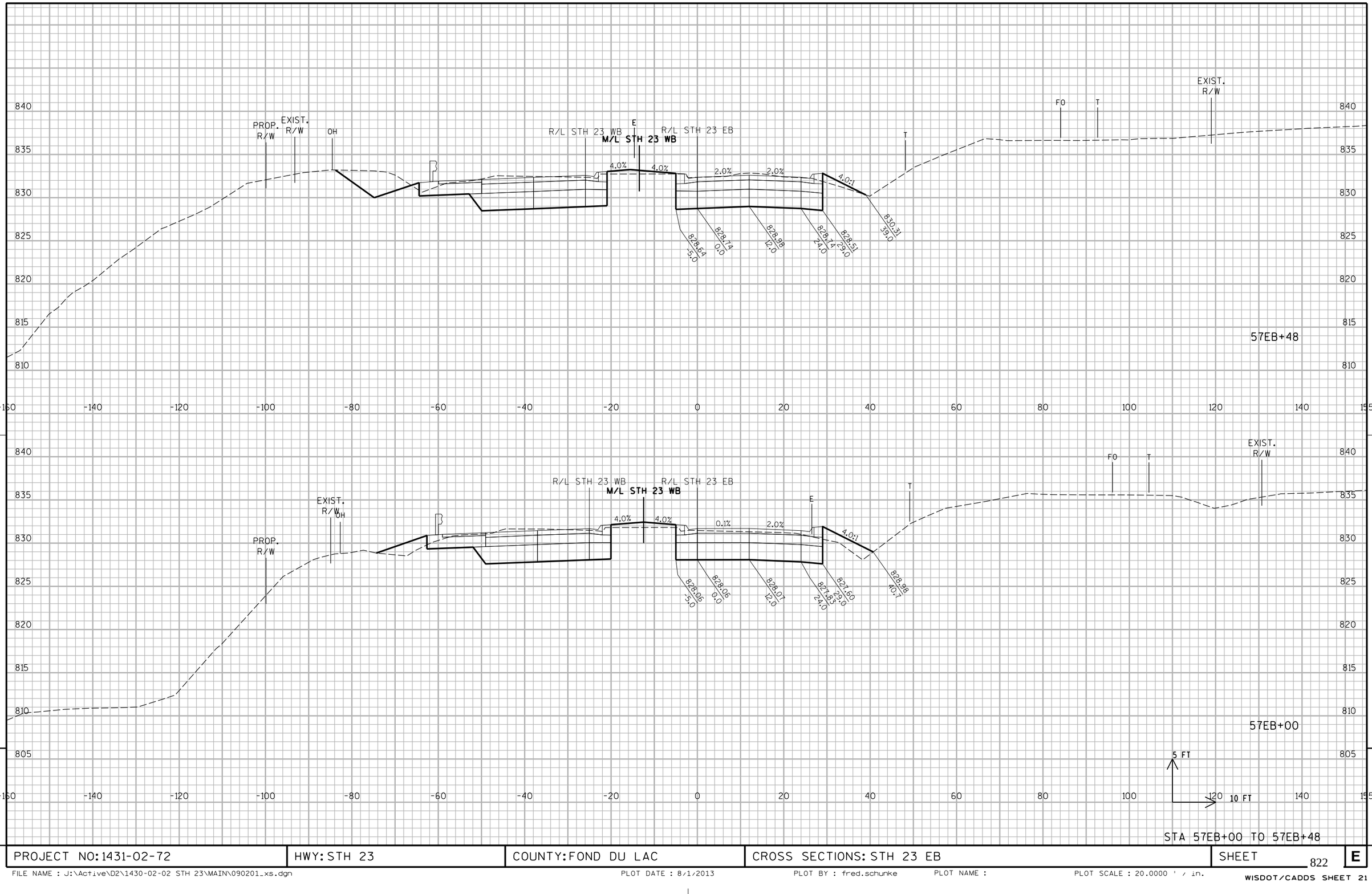
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 821	E

STA 55EB+00 TO 56EB+00

9

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn | PLOT DATE : 8/1/2013 | PLOT BY : fred.schunke | PLOT NAME : | PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



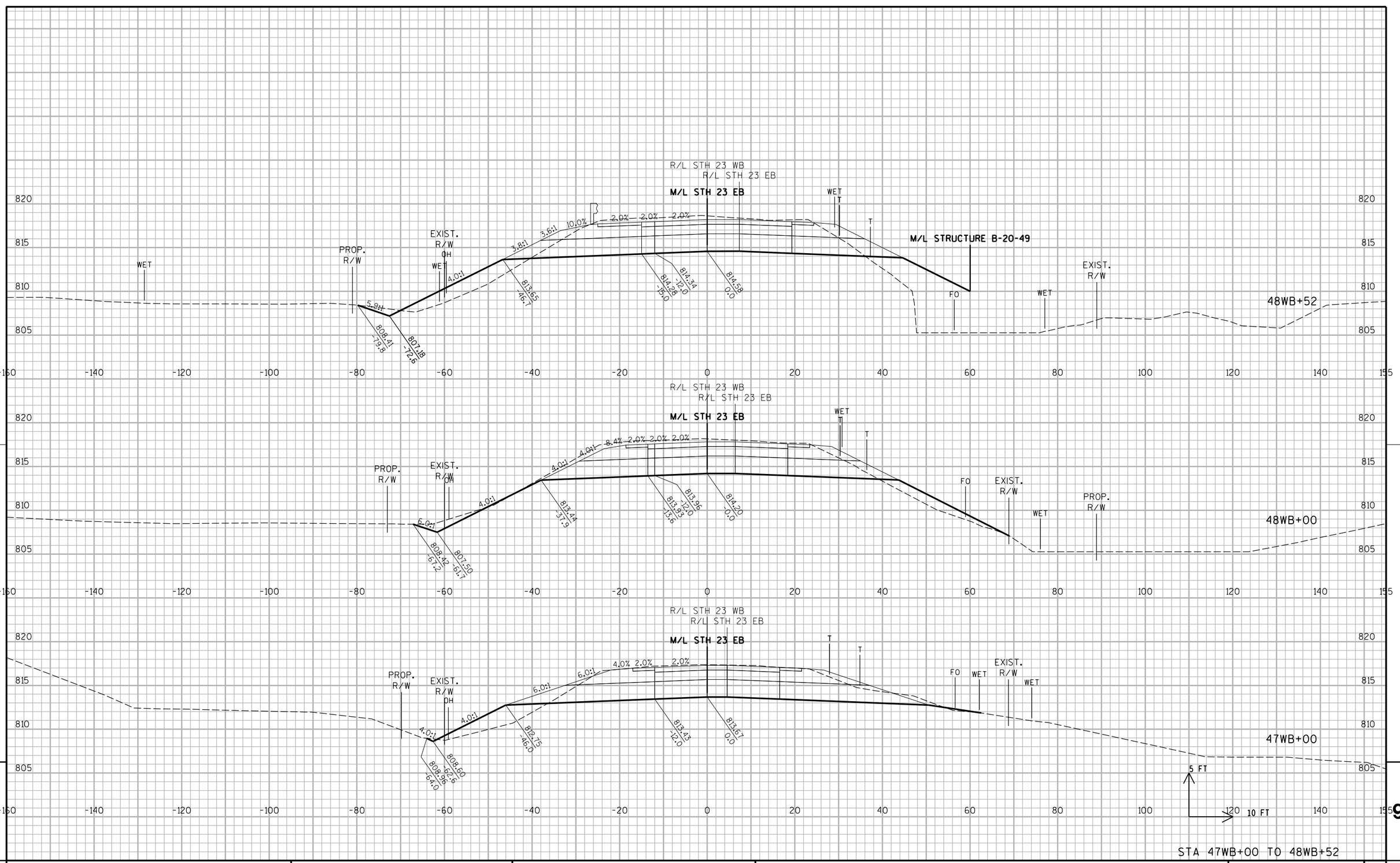
STA 57EB+00 TO 57EB+48

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 EB	SHEET 822	E

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 WB	SHEET 823	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

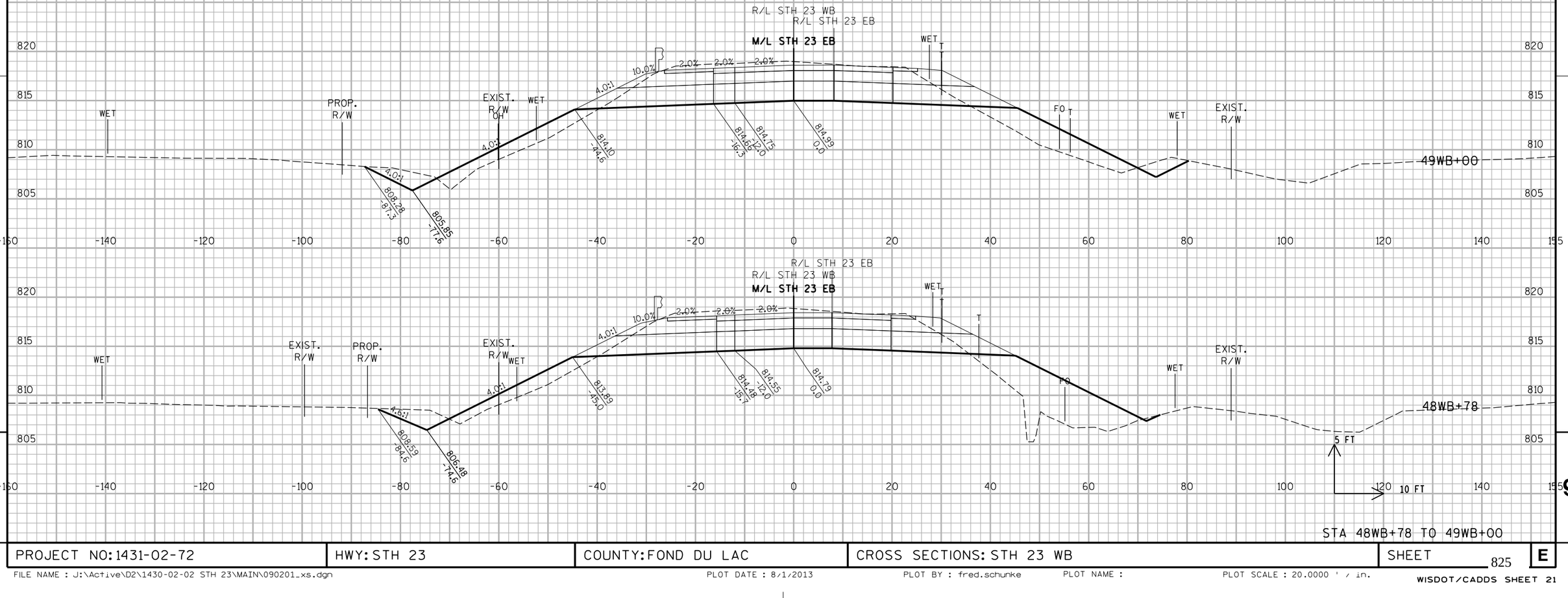


STA 47WB+00 TO 48WB+52

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 WB	SHEET 824	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

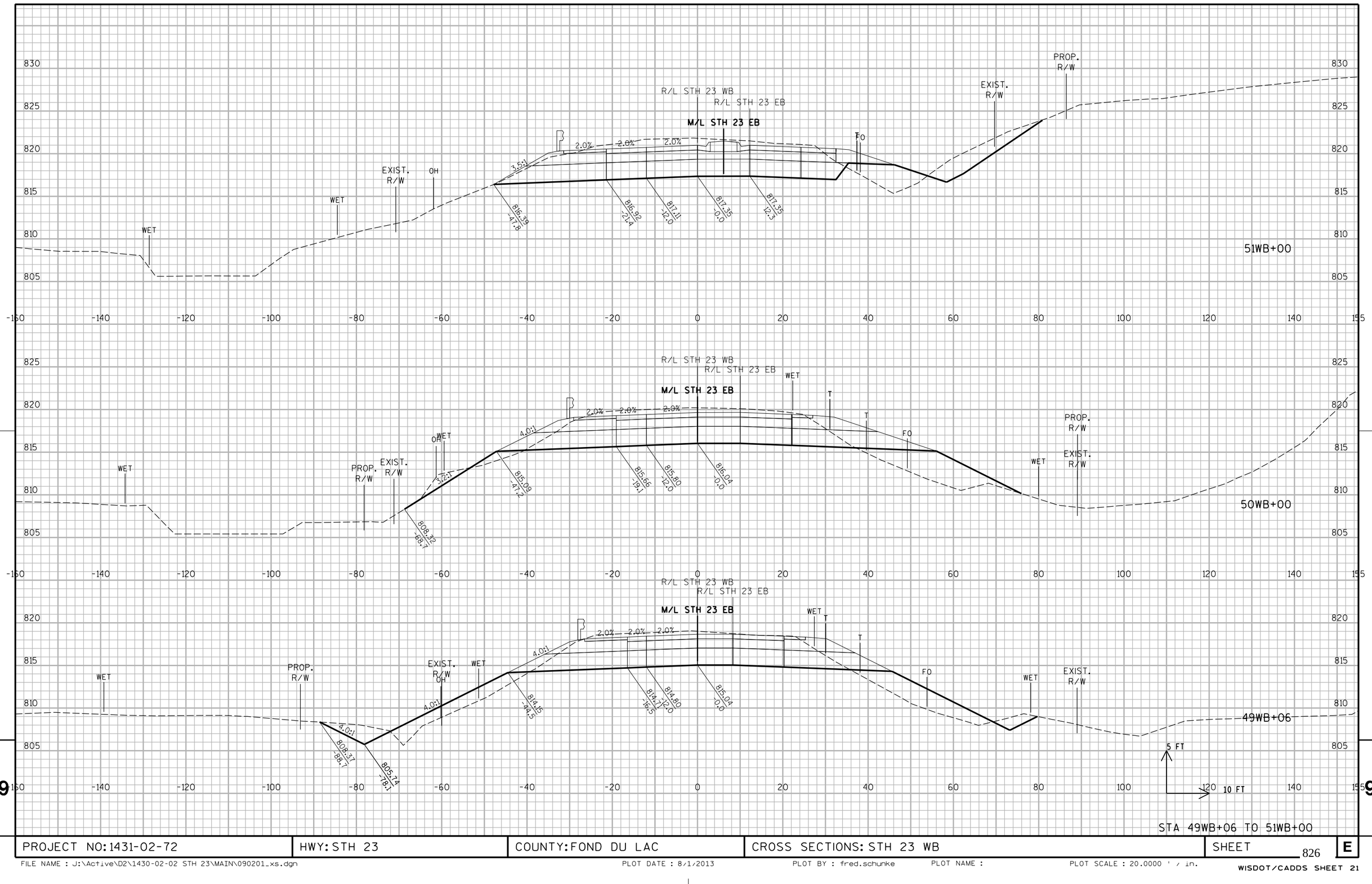


STA 48WB+78 TO 49WB+00

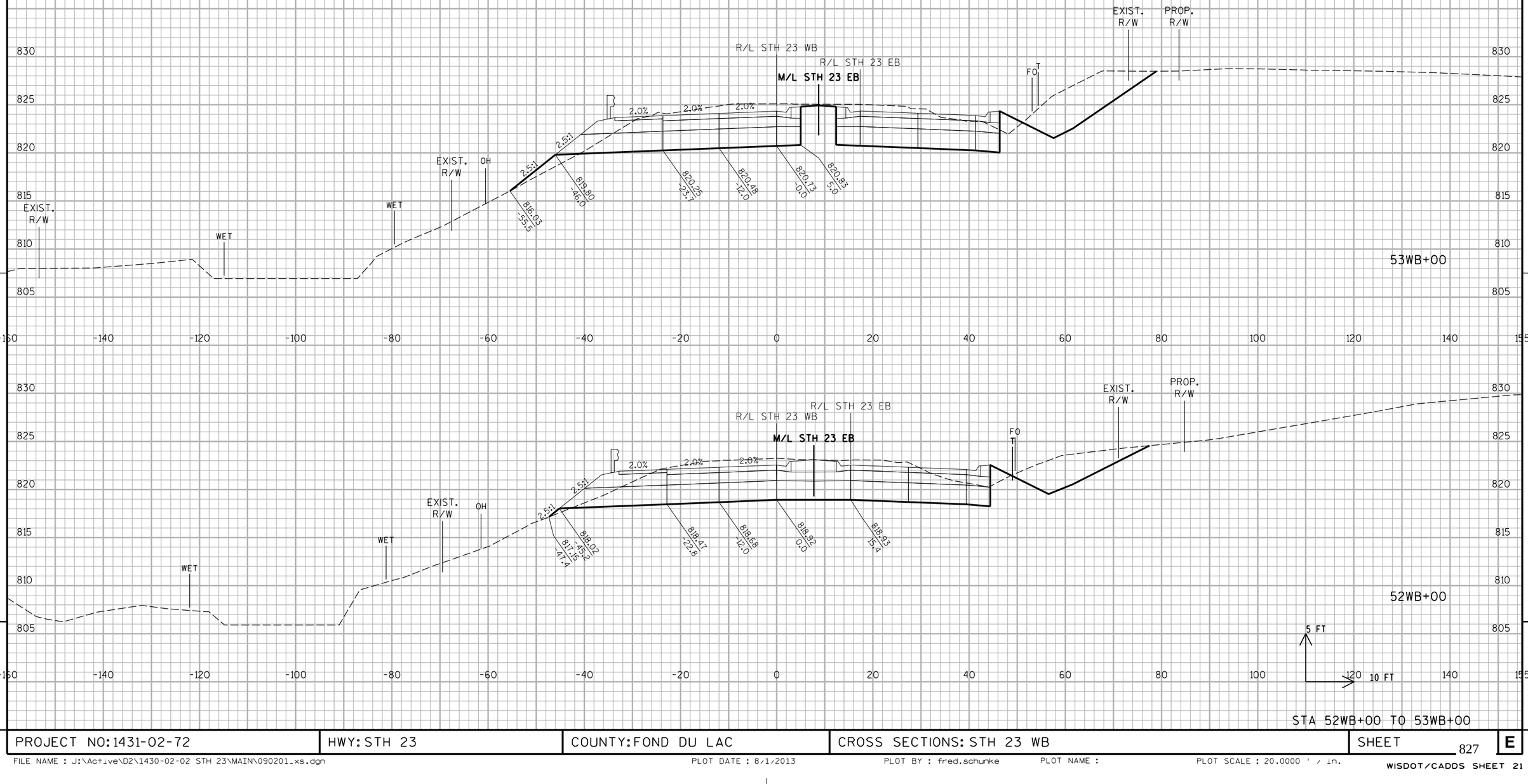
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 WB	SHEET 825	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



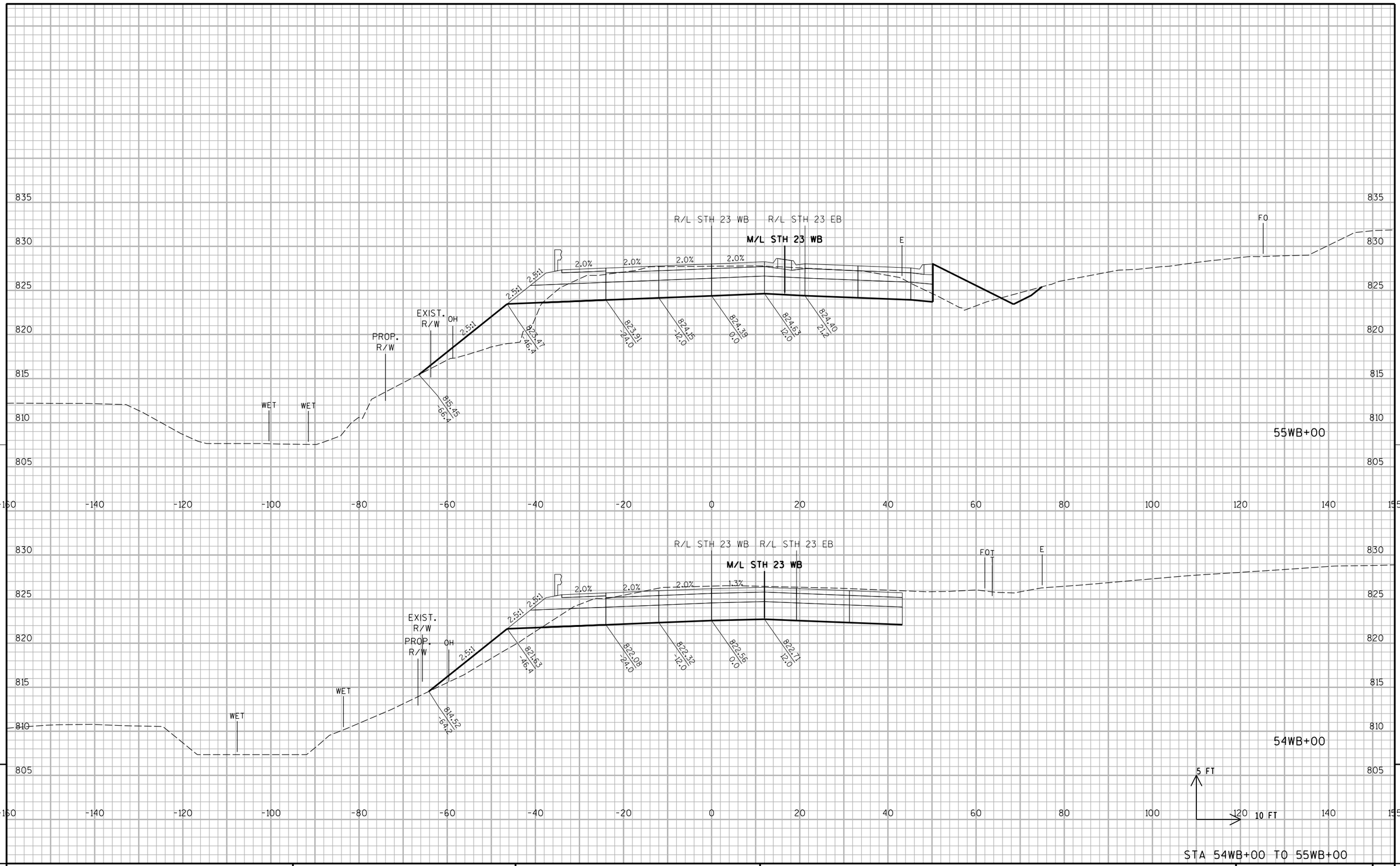
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 WB	SHEET 826	E



PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 WB	SHEET 827	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

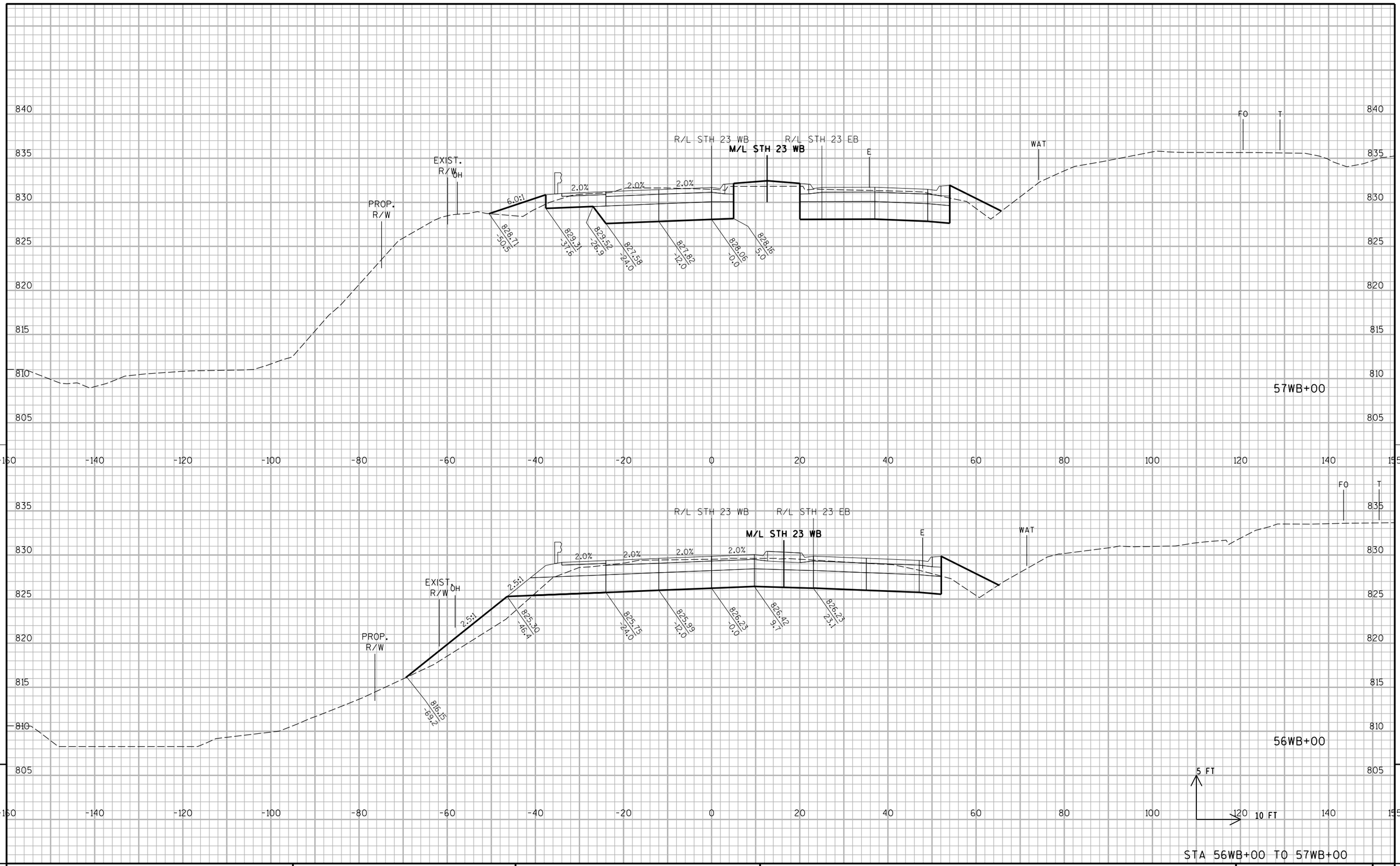


STA 54WB+00 TO 55WB+00

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 WB	SHEET 828	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



9

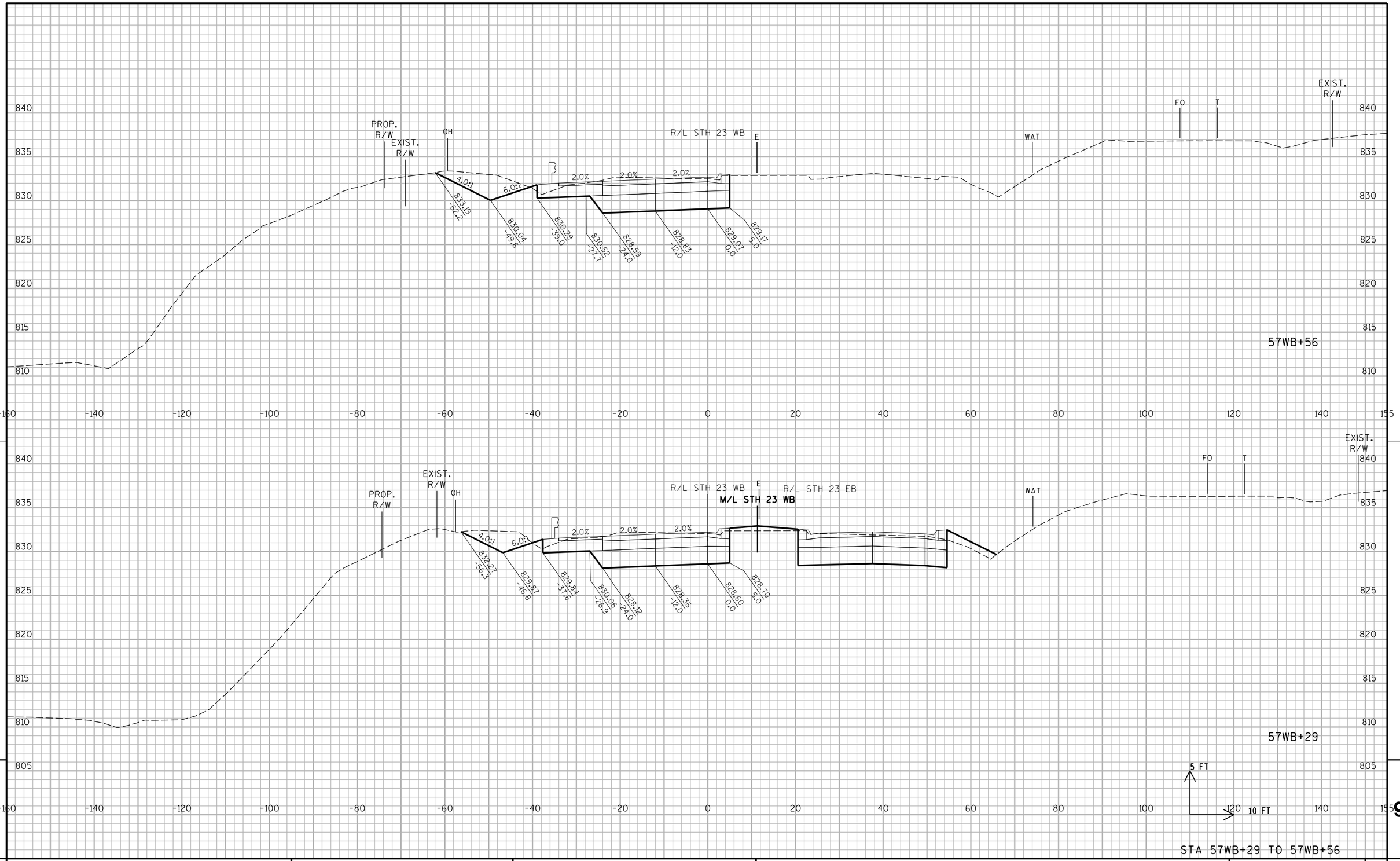
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 WB	SHEET 829	E

STA 56WB+00 TO 57WB+00

9

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



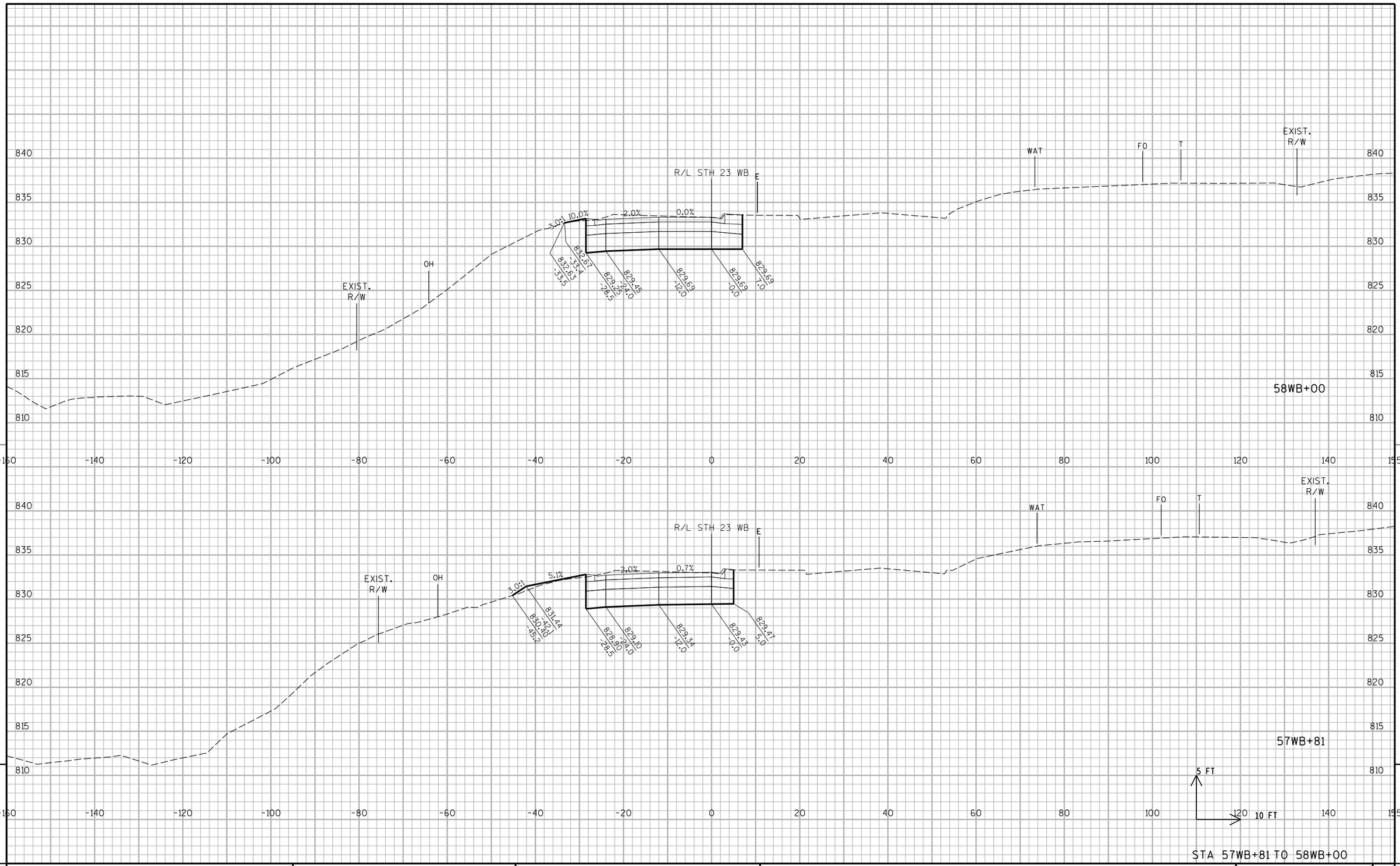
STA 57WB+29 TO 57WB+56

PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 WB	SHEET 830	E

9 9

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

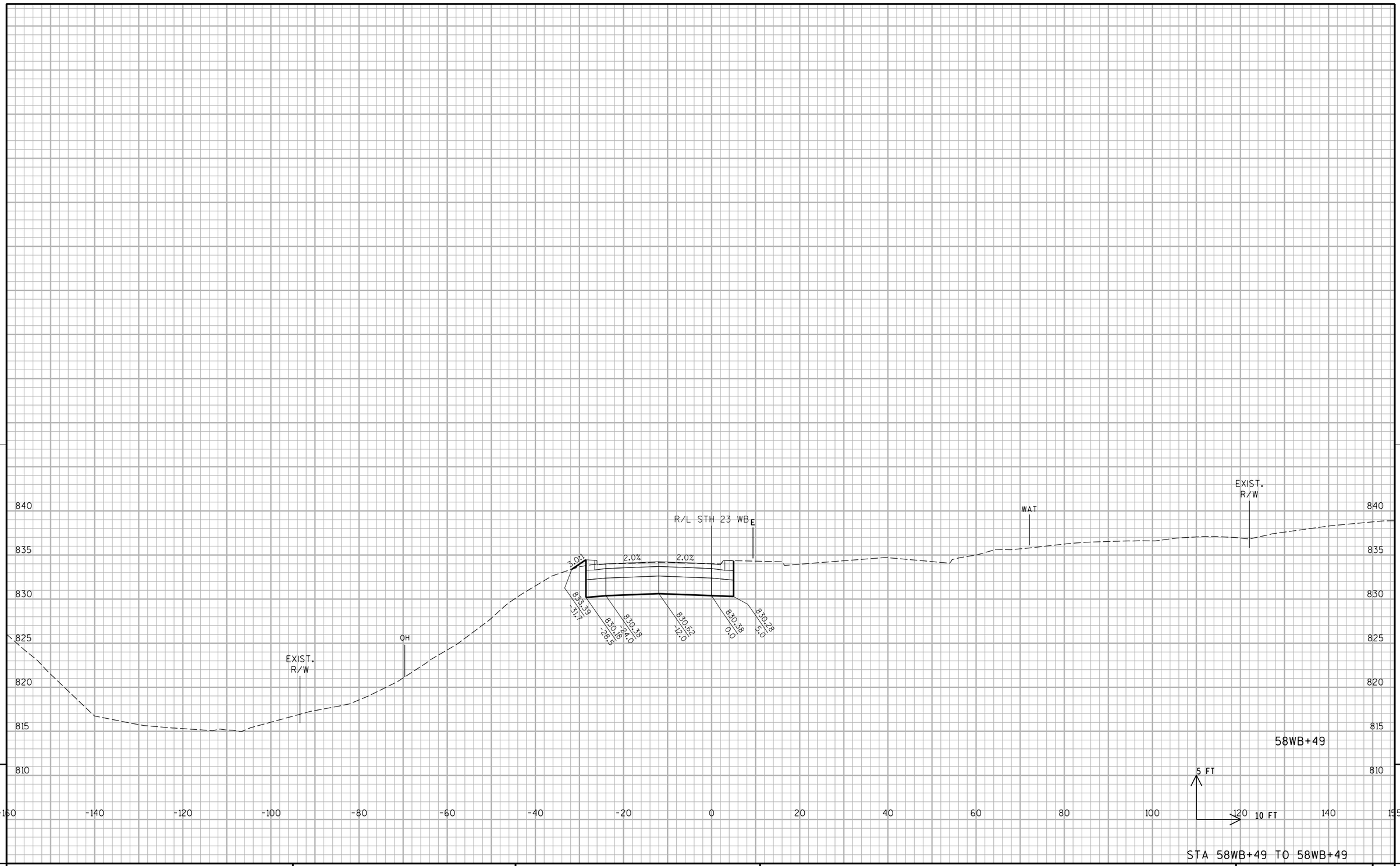
WISDOT/CADDS SHEET 21



PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 WB	SHEET 831	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

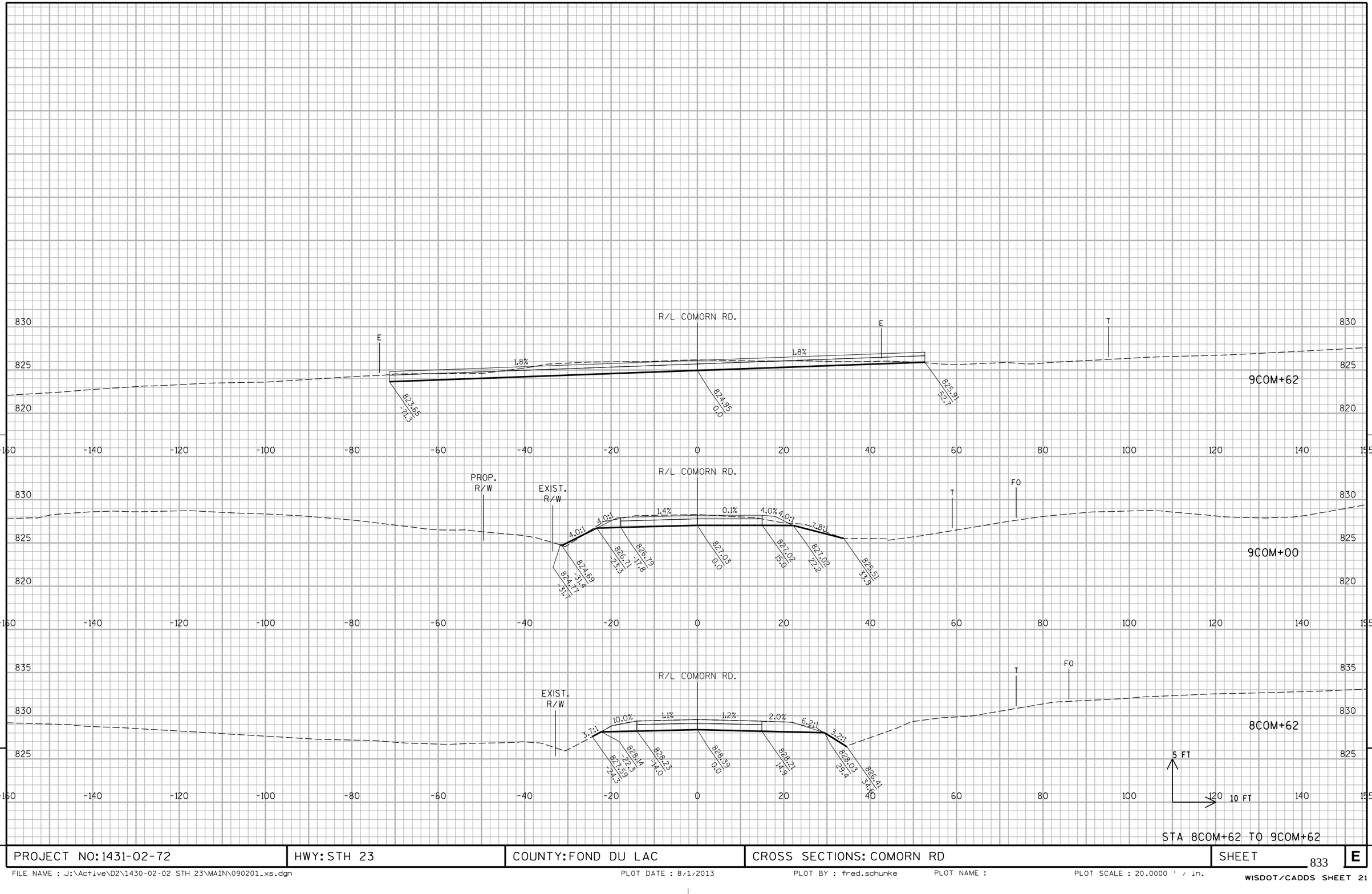
WISDOT/CADDS SHEET 21



9 9

STA 58WB+49 TO 58WB+49

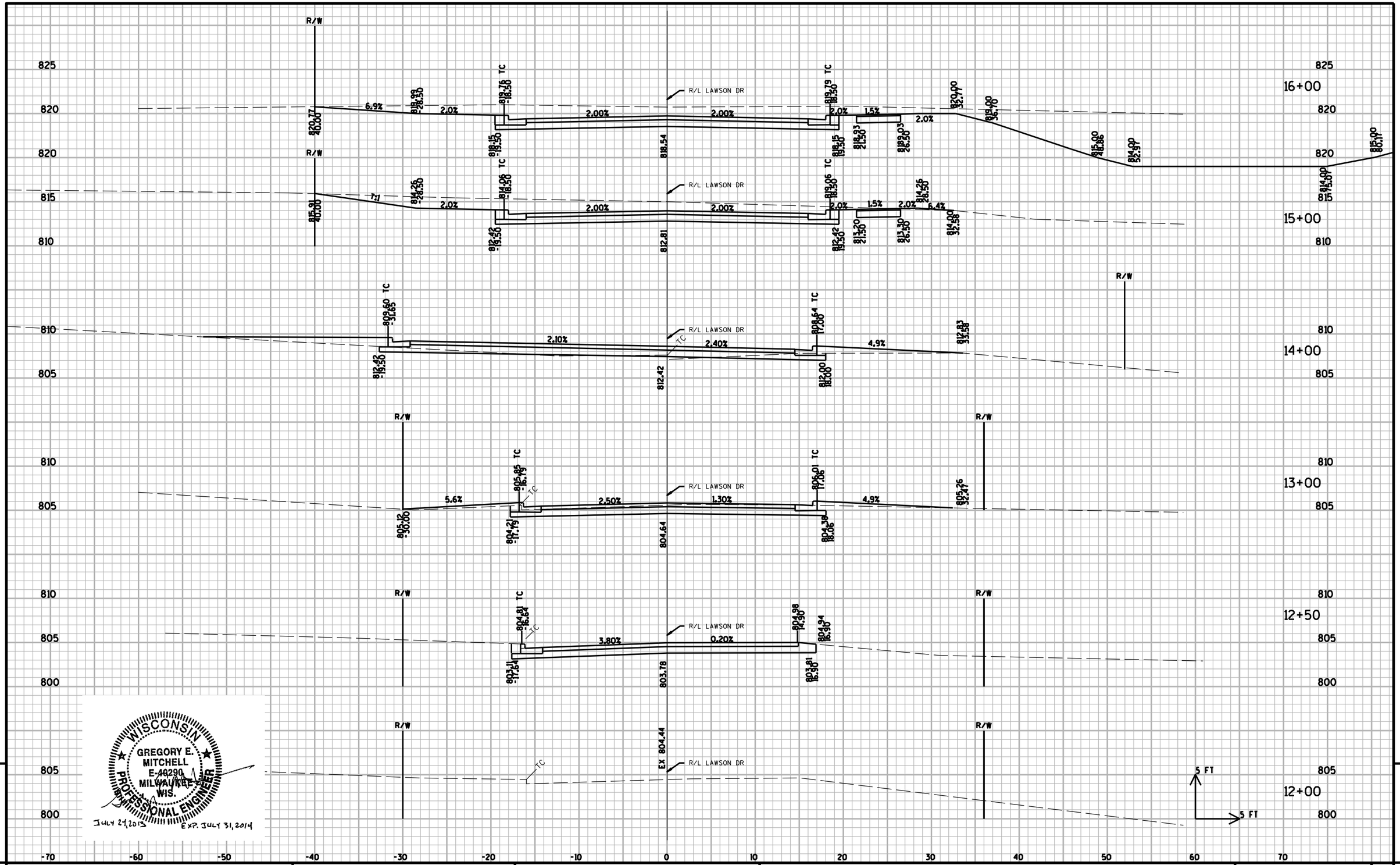
PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 WB	SHEET 832	E



PROJECT NO: 1431-02-72	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: COMORN RD	SHEET 833	E

FILE NAME : J:\Active\D2\1430-02-02 STH 23\MAIN\090201_xs.dgn PLOT DATE : 8/1/2013 PLOT BY : fred.schunke PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

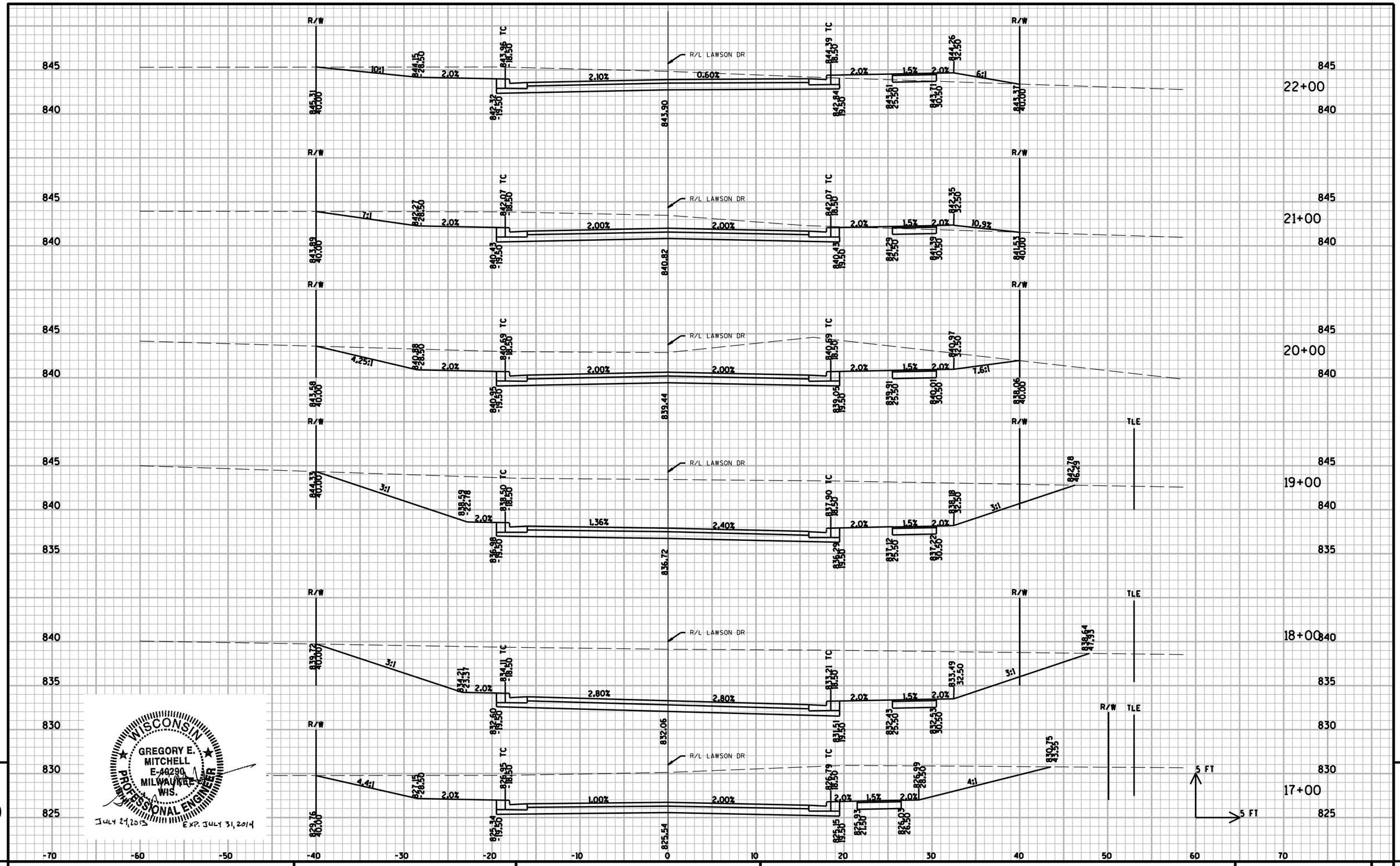


WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE
WIS.
PROFESSIONAL ENGINEER
JULY 24, 2013
EXP. JULY 31, 2014

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: NORTH LAWSON DRIVE	SHEET 834	E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN\N-LAWSON-XS01.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=10'

WISDOT/CADDS SHEET 21

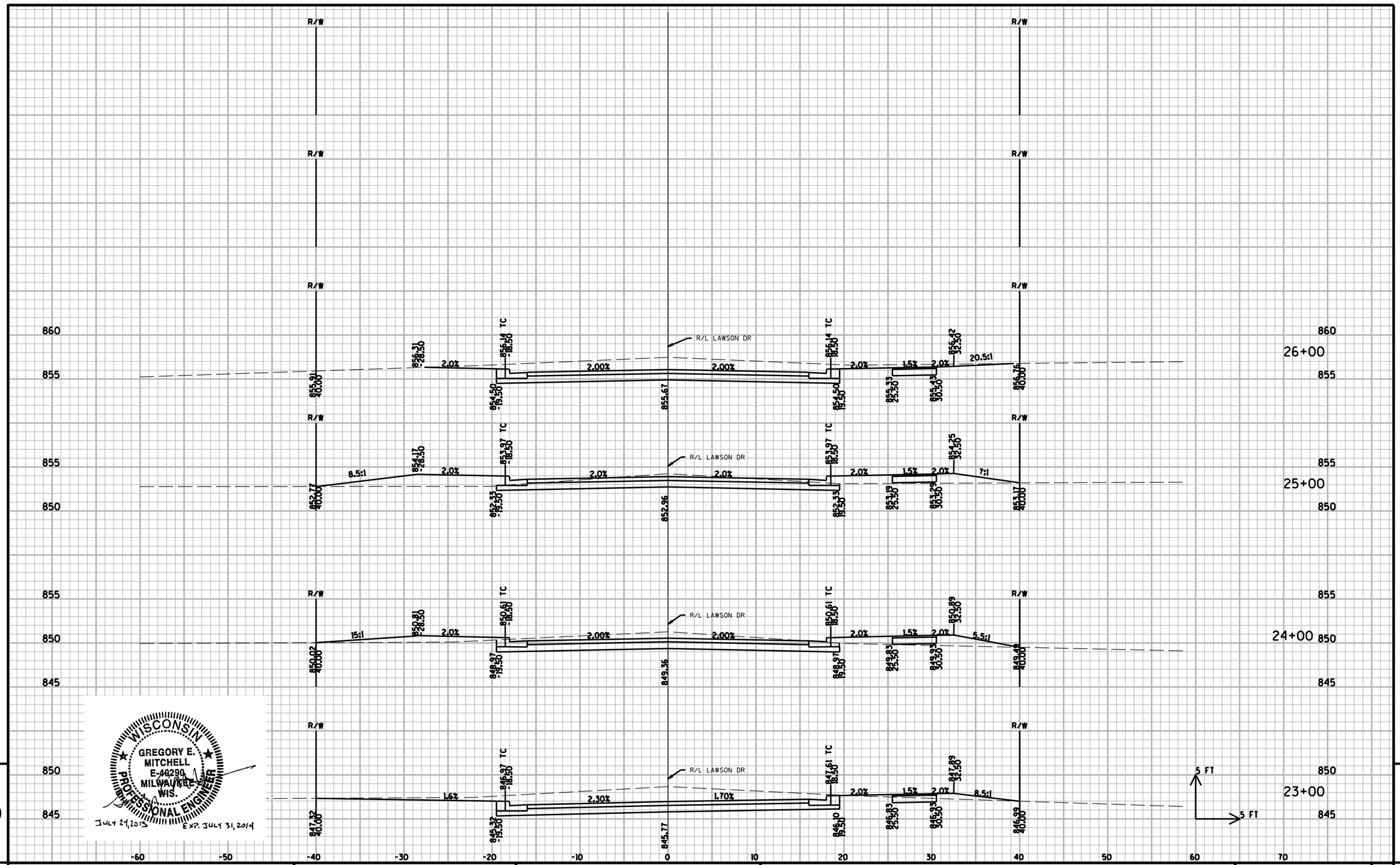


WISCONSIN
GREGORY E. MITCHELL
E-46290
MILWAUKEE, WIS.
PROFESSIONAL ENGINEER
JULY 21, 2013
EXP. JULY 31, 2014

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: NORTH LAWSON DRIVE	SHEET 835	E

FILE NAME : S:\TOWNS\GREENLAKE\NLAWSONDRIVE\DGN\N-LAWSON-XS02.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 21

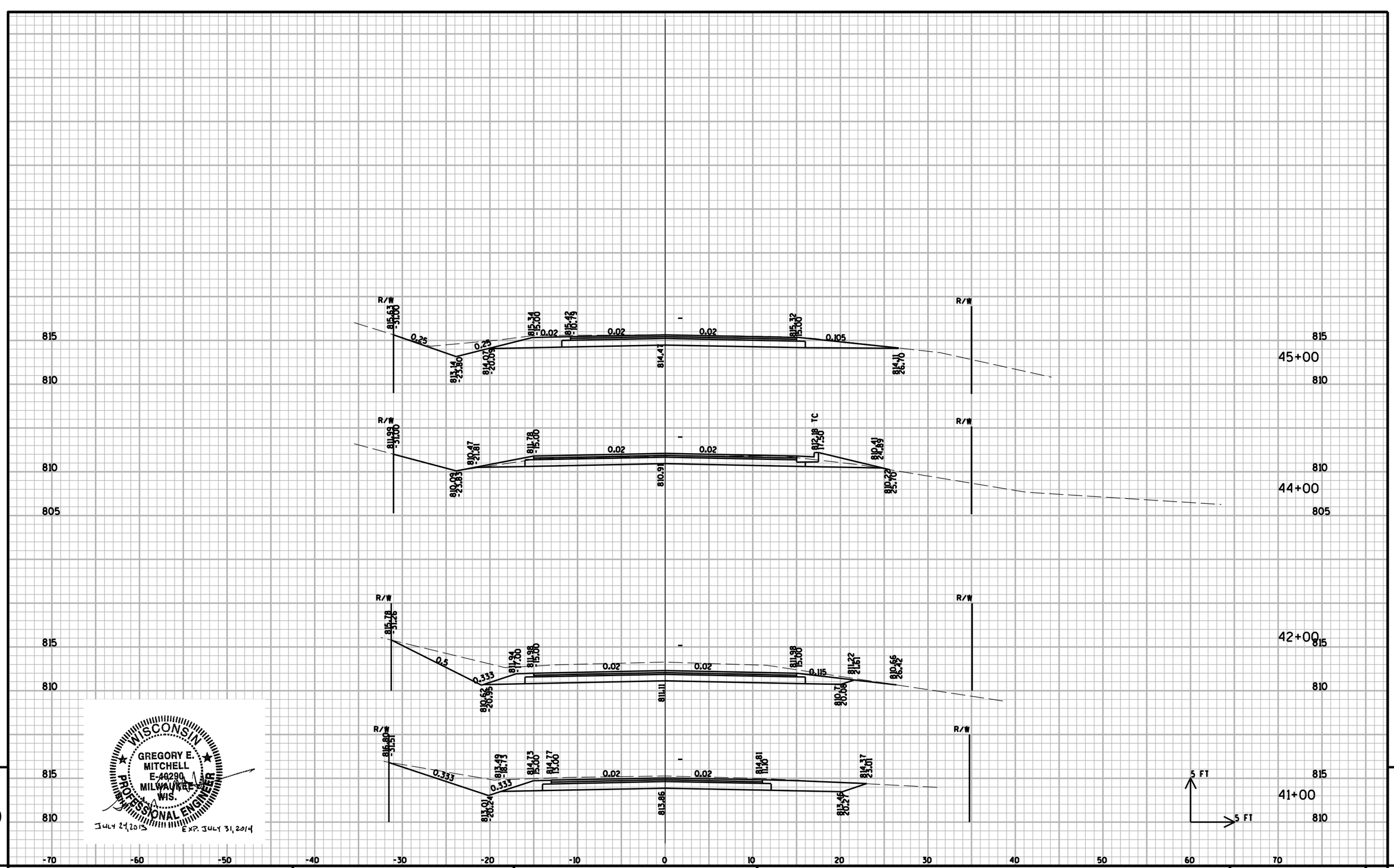


WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE
WIS.
PROFESSIONAL ENGINEER
JULY 24, 2013
EXP. JULY 31, 2014

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: NORTH LAWSON DRIVE	SHEET	E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN WORKING-CURRENT\N-LAWSON-XS03.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=10'

WISDOT/CADDS SHEET 21



WISCONSIN
GREGORY E. MITCHELL
E-40290
MILWAUKEE
WIS.
PROFESSIONAL ENGINEER
JULY 24, 2013
EXP. JULY 31, 2014

9

PROJECT NO: 1430-00-84	HWY: STH 23	COUNTY: GREEN LAKE	CROSS SECTIONS: NORTH STREET	SHEET 837	E

FILE NAME : S:\TOWNS\GREEN LAKE_CITY\N.LAWSON DRIVE\DGN CURRENT-WORKING\N-LAWSON-XS04.DGN PLOT DATE : 07-12-2013 PLOT BY : G. MITCHELL PLOT NAME : PLOT SCALE : 1"=10'

WISDOT/CADDS SHEET 21

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov