LAX

PROJECT ID: 1430-01-73

COUNTY: ADAMS & JUNEAU

NOVEMBER 2017

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 = 498

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

POINT BLUFF BRIDGE

WISCONSIN RIVER BRI B-29-141,-148

STH 82

JUNEAU & ADAMS COUNTIES

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1430-01-73	WISC 2017537	1

STATE PROJECT NUMBER
1430-01-73



N

DESIGN DESIGNATION

A.A.D.T.	(2017)	= 4,900
A.A.D.T.	(2037)	= 6,100
D.H.V.	(2037)	= 690 VPH
D.D.		= 60/40
T. (% ADT)		= 21.2%
DESIGN SPEED		= 60 MPH
ESALS		= 2,900,000

CONVENTIONAL SYMBOLS

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

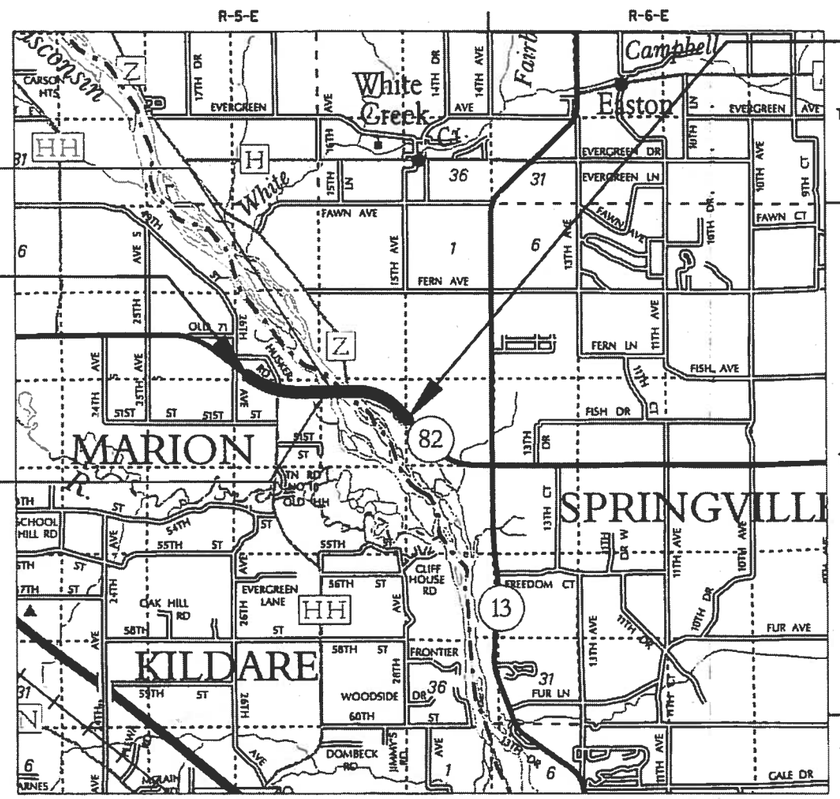
PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

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

STRUCTURE B-29-141

BEGIN PROJECT 1430-01-73
STA. 480+00
Y = 154368.73
X = 510761.89

STRUCTURE B-29-148



LAYOUT
SCALE 0 1.0 MI

TOTAL NET LENGTH OF CENTERLINE = 2.083 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), JUNEAU COUNTY, NAD 83 (91). ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAV 88 (2007).

ORIGINAL PLANS PREPARED BY
AECOM

WISCONSIN
SEAN M. HADFIELD
E - 34941
MADISON, WI
PROFESSIONAL ENGINEER

04/27/17 /
(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AECOM
Designer	AECOM
Project Manager	CRAIG FISHER
Regional Examiner	
Regional Supervisor	OSCAR L. WINGER

APPROVED FOR THE DEPARTMENT
DATE 04-27-2017 Oscar L. Winger
(Signature)

E

2

GENERAL NOTES

EXISTING CULVERT PIPE WITHIN THE CONSTRUCTION LIMITS THAT ARE TO BE REMOVED SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD. ALL CULVERT PIPE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER. DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

EXCAVATION BELOW SUBGRADE (EBS), FOR REMOVAL OF UNSUITABLE MATERIAL, IS MEASURED AND PAID FOR AS EXCAVATION COMMON. EXACT LOCATIONS FOR REMOVING UNSUITABLE MATERIAL WILL BE DETERMINED BY THE ENGINEER.

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

SALVAGED TOPSOIL, SEEDING, MULCHING AND FERTILIZER HAVE BEEN COMPUTED BY A DIRECT MEASUREMENT ON THE CROSS SECTIONS PLUS FIVE(5) FEET BEYOND THE TOE OF SLOPE.

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CROSS DRAIN PIPE ELEVATIONS, LENGTHS AND LOCATIONS AS SHOWN ON THE PLANS, SHALL BE ADJUSTED TO FIT THE EXISTING FIELD CONDITIONS, AS DIRECTED BY THE ENGINEER.

THE EXACT LOCATION OF DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

RADII, ELEVATIONS, AND DIMENSIONS ARE GIVEN AT THE PAVEMENT EDGES, UNLESS OTHERWISE NOTED IN THE PLANS.

THE CONTRACTOR SHALL NOT OPERATE BEYOND THE SLOPE INTERCEPTS AS SHOWN IN THE PLANS WHEN ADJACENT TO WETLANDS OR ENVIRONMENTALLY SENSITIVE AREAS.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.

THE HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON A UNIT WEIGHT OF 112 LBS/SY/IN OF DEPTH.

FOR STH 82 AND CTH HH, 6-INCH HMA PAVEMENT SHALL BE CONSTRUCTED IN THREE (3) LAYERS. EACH LAYER SHALL BE 2-INCHES. USE 4 MT 58-28 S FOR EACH LAYER.

FOR CTH Z, 4-INCH HMA PAVEMENT SHALL BE CONSTRUCTED IN TWO (2) LAYERS. THE BOTTOM LAYER SHALL BE 2-INCHES AND THE TOP LAYER SHALL BE 2-INCHES. USE 4 MT 58-28 S FOR EACH LAYER.

FOR ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-INCH HMA PAVEMENT SHALL BE CONSTRUCTED IN ONE (1) LAYER. FURNISH MATERIALS IN ACCORDANCE WITH STANDARD SPEC 465.2.

WHEN PORTIONS OF EXISTING ASPHALT, INCLUDING ROADWAYS AND DRIVEWAYS, ARE REMOVED TO ACCOMMODATE THE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT THROUGH THE ASPHALT PAVEMENT SUCH THAT REMOVAL OF THE PAVEMENT WILL BE ACCOMPLISHED WITHOUT DAMAGE TO THE REMAINING PORTIONS.

ABBREVIATIONS

A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC
ASPH.	ASPHALTIC
B.A.D.	BASE AGGREGATE DENSE
BM	BENCH MARK
℄ OR CL	CENTERLINE
CE	COMMERCIAL ENTRANCE
CONC.	CONCRETE
C.P.C.M.	CULVERT PIPE CORRUGATED METAL
C.P.C.S.	CULVERT PIPE CORRUGATED STEEL
C.T.H.	COUNTY TRUNK HIGHWAY
C.A.B.C	CRUSHED AGGREGATE BASE COURSE
C.P.	CULVERT PIPE
C.P.R.C.	CULVERT PIPE REINFORCED CONCRETE
C.P.R.C.H.E.	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.D.	DIRECTIONAL DISTRIBUTION
E	EAST
X	EAST GRID COORDINATE
ELEC.	ELECTRIC (AL)
EL. OR ELEV.	ELEVATION
E.S.A.L.S	EQUIVALENT SINGLE AXLE LOADS
EXC.	EXCAVATION
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
F.E.	FIELD ENTRANCE
F.L. OR F/L	FLOW LINE
FT.	FOOT
CWT.	HUNDREDWEIGHT
INL.	INLET
INV.	INVERT
I.P.	IRON PIPE OF PIN
LT.	LEFT
L.H.F.	LEFT-HAND FORWARD
L	LENGTH OF CURVE
L.S.	LUMP SUM
MH.	MANHOLE
M.L. OR M/L	MATCH LINE
MATL.	MATERIAL
N.C.	NORMAL CROWN
N	NORTH
Y	NORTH GRID COORDINATE
NB	NORTH BOUND
OBLIT	OBLITERATE
P.A.S.P	PIPE ARCH STRUCTURAL PLATE
PAVT.	PAVEMENT
P.L.E.	PERMANENT LIMITED EASEMENT

ABBREVIATIONS CONT.

PT.	POINT
P.C.C.	POINT OF COMPOUND CURVE
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.C.C.	PORTLAND CEMENT CONCRETE
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
P.L.	PROPERTY LINE
R	RADIUS
RR.	RAILROAD
R.L., R/L, OR ℞	REFERENCE LINE
REBAR.	REINFORCEMENT BAR
REINF	REINFORCING OR REINFORCEMENT
REQD.	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT-OF-WAY
RD.	ROAD
RRSP	RAILROAD SPIKE
SALV.	SALVAGED
SHLDR.	SHOULDER
S	SOUTH
SB	SOUTHBOUND
SPECS.	SPECIFICATIONS
S.F. OR SQ. FT.	SQUARE FOOT
S.Y. OR SQ. YD.	SQUARE YARD
STD.	STANDARD
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAYS
STA.	STATION
S.S.	STORM SEWER
S.S.P.R.C.	STORM SEWER PIPE REINFORCED CONCRETE
SE.	SUPERELEVATION
T	TANGENT
TEL.	TELEPHONE
TEMP.	TEMPORARY
T.L.E.	TEMPORARY LIMITED EASEMENT
T.P.M.	TEMPORARY PAVEMENT MARKING
T.P.M.R.T.	TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE
T	TRUCKS (PERCENT OF)
TYP.	TYPICAL
UG.	UNDERGROUND
U.S.H.	UNITED STATES HIGHWAY
V.C.	VERTICAL CURVE
WB	WESTBOUND

DETAIL SHEET INDEX

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
SUPERELEVATION DATA
PLAN DETAILS
EROSION CONTROL
PERMANENT SIGNING
ADVANCED WARNING SIGNING
LIGHTING PLANS
PAVEMENT MARKING
TRAFFIC CONTROL
DETOUR ROUTE
ALIGNMENT DIAGRAM

2

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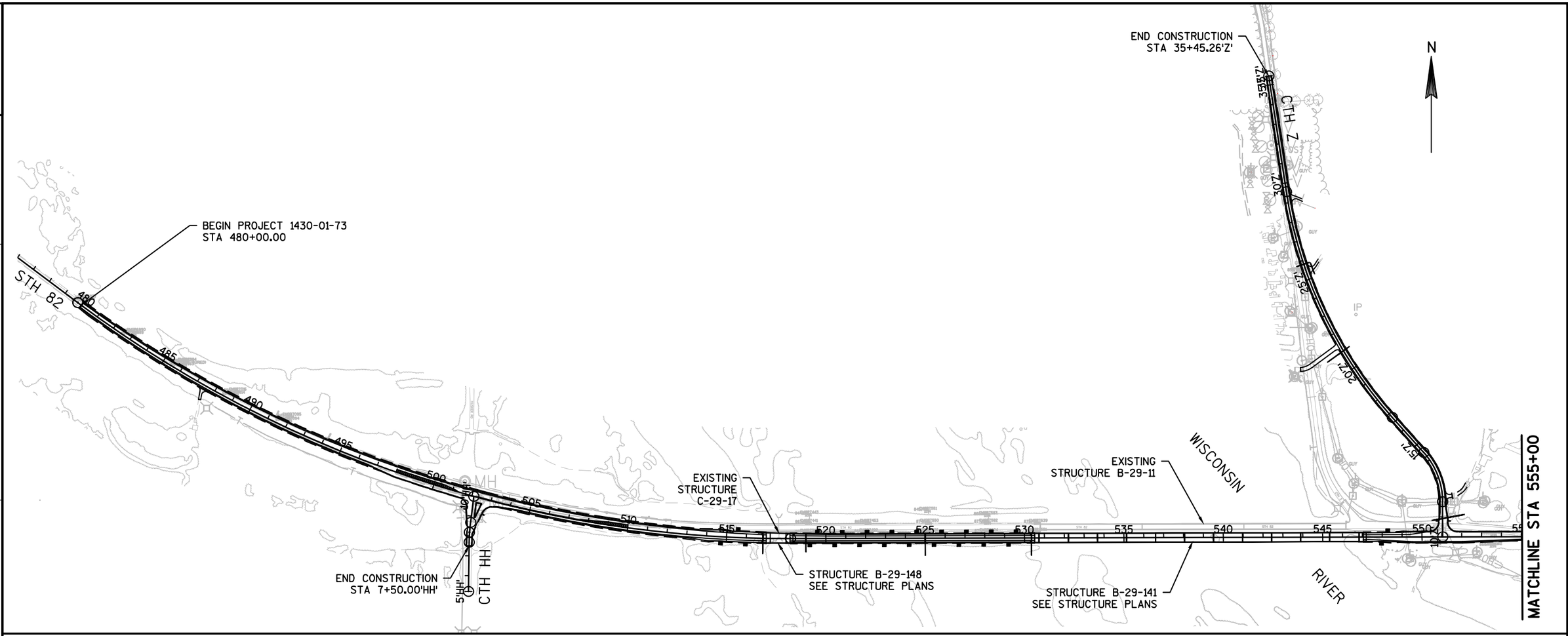
WDOT

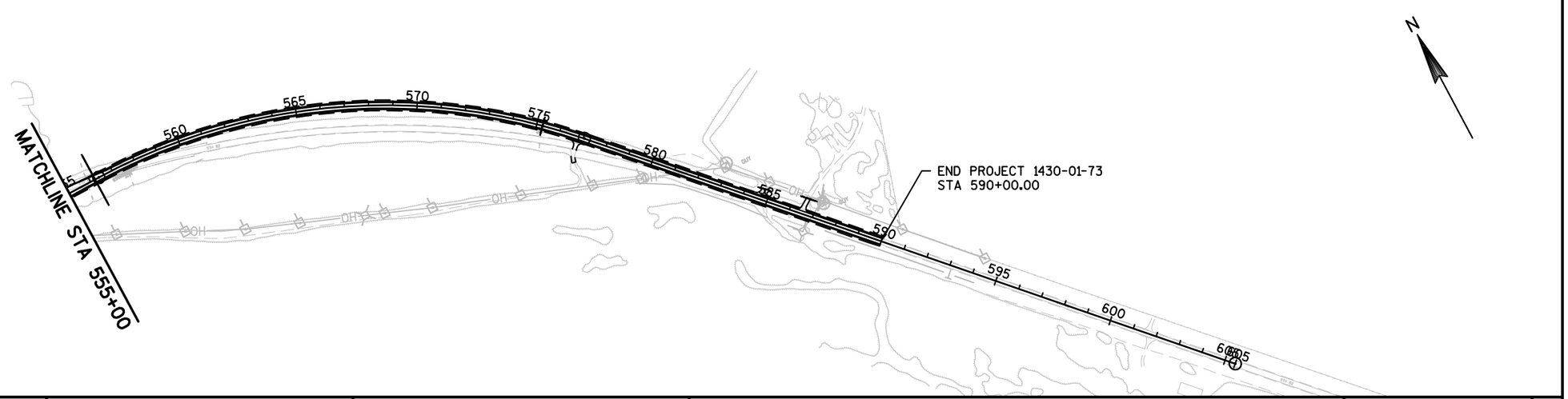
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(608) 785-9946
craig.fisher@dot.wi.gov

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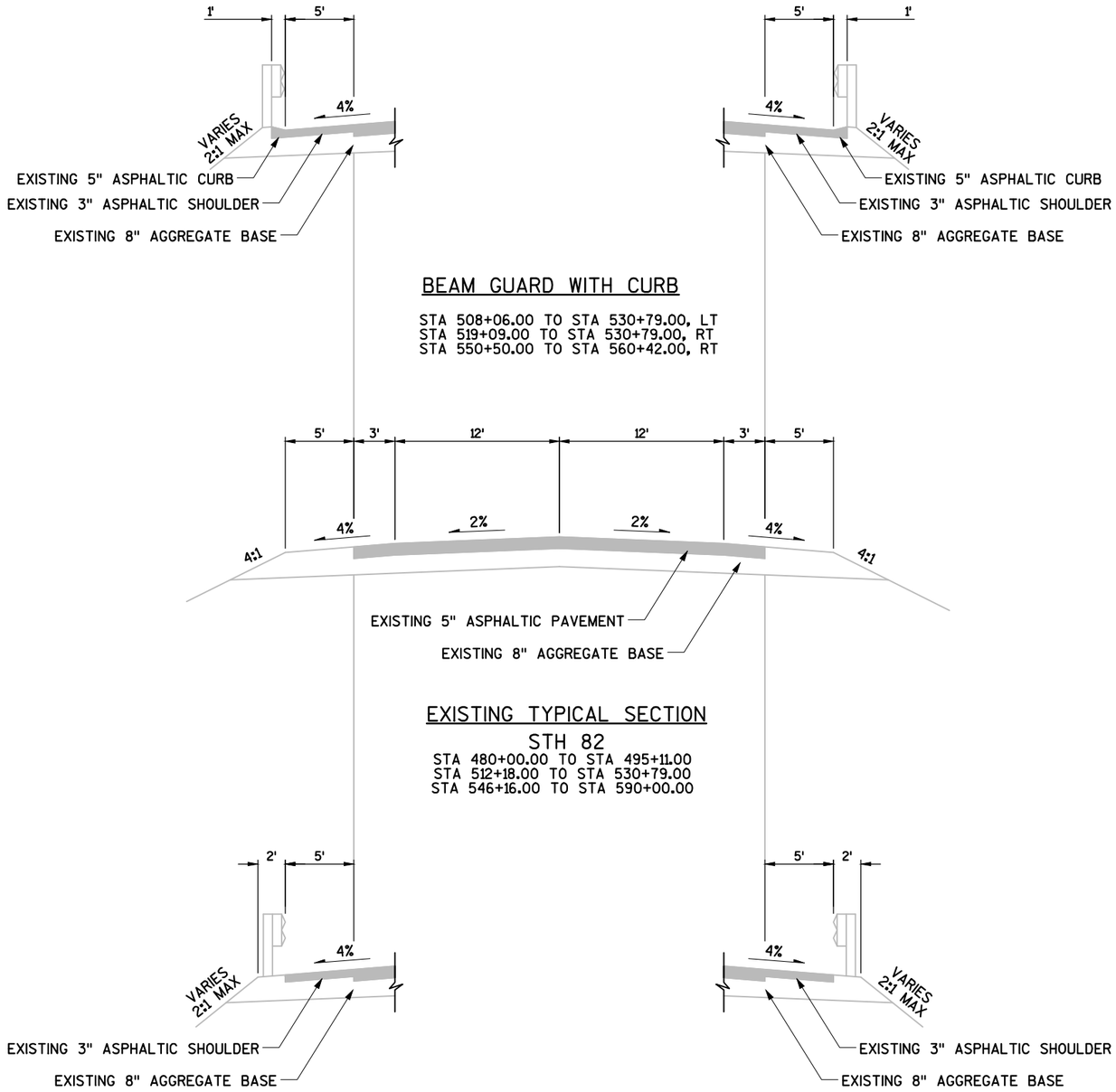
DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com





PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\020201_PO.DWG PLOT DATE : 4/27/2017 3:49 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42



BEAM GUARD WITH CURB

STA 508+06.00 TO STA 530+79.00, LT
STA 519+09.00 TO STA 530+79.00, RT
STA 550+50.00 TO STA 560+42.00, RT

EXISTING TYPICAL SECTION

STH 82

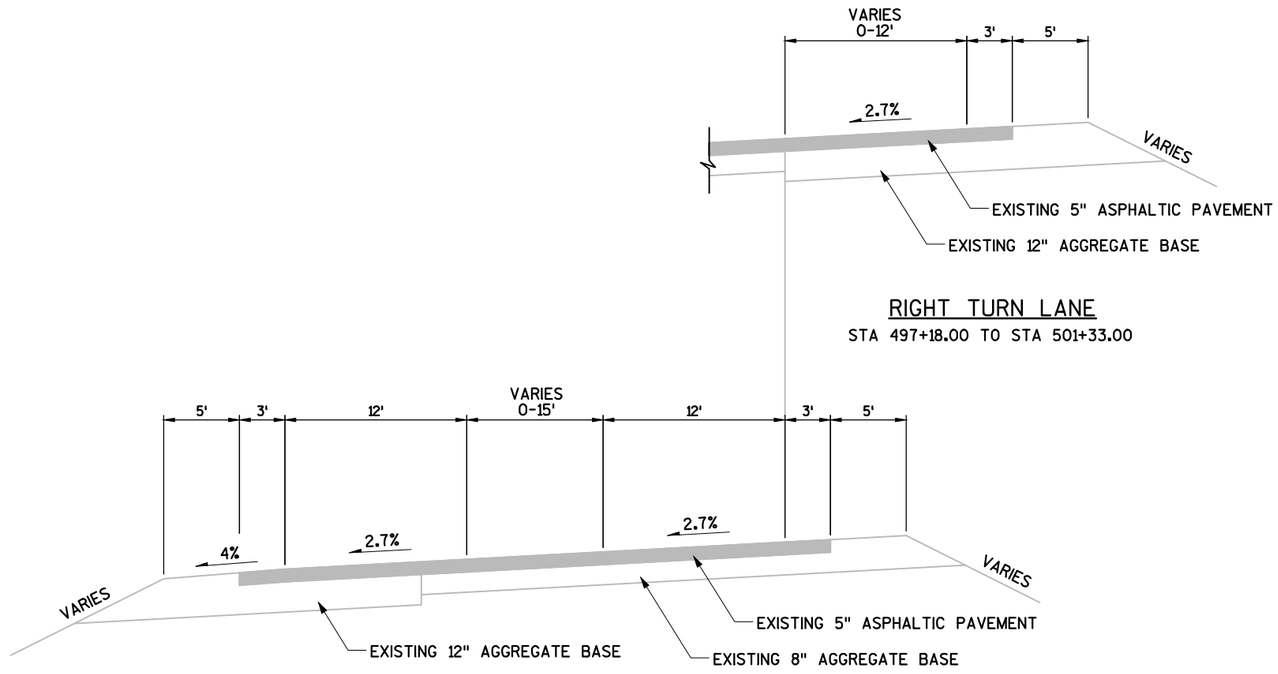
STA 480+00.00 TO STA 495+11.00
STA 512+18.00 TO STA 530+79.00
STA 546+16.00 TO STA 590+00.00

BEAM GUARD WITHOUT CURB

STA 552+24.00 TO STA 561+11.00, LT
STA 508+51.00 TO STA 519+09.00, RT
STA 546+59.00 TO STA 548+19.00, RT

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TYPICAL SECTIONS	SHEET 4	E

2



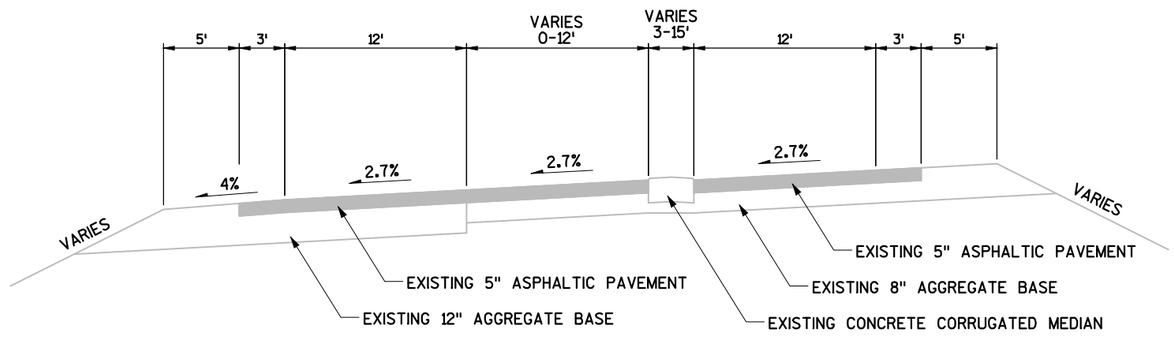
RIGHT TURN LANE

STA 497+18.00 TO STA 501+33.00

EXISTING TYPICAL SECTION

STH 82

STA 495+11.00 TO STA 501+93.00



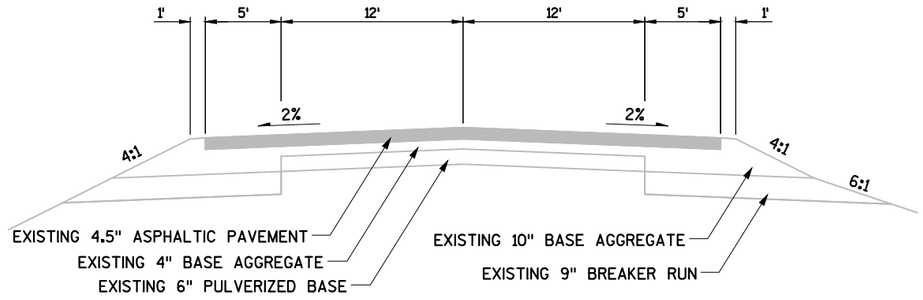
EXISTING TYPICAL SECTION

STH 82

STA 501+93.00 TO STA 512+18.00

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TYPICAL SECTIONS	SHEET 5	E

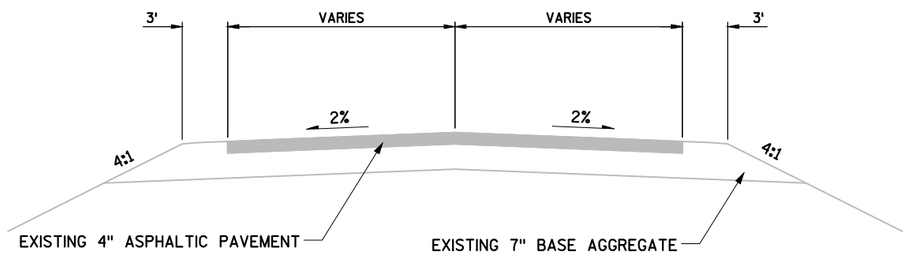
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EXISTING TYPICAL SECTION

CTH Z

STA 10+00.00'Z' TO STA 35+45.26'Z'



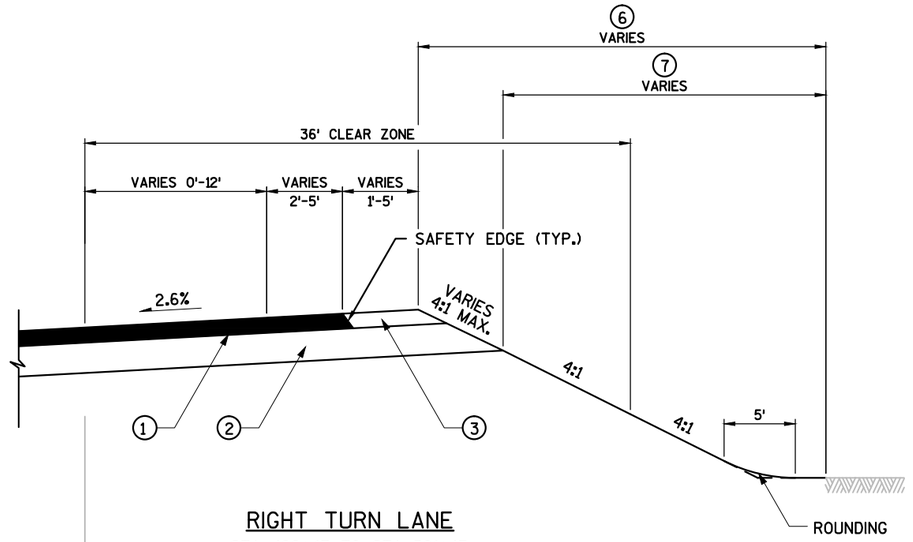
EXISTING TYPICAL SECTION

CTH HH

STA 7+50.00'HH' TO STA 10+00.00'HH'

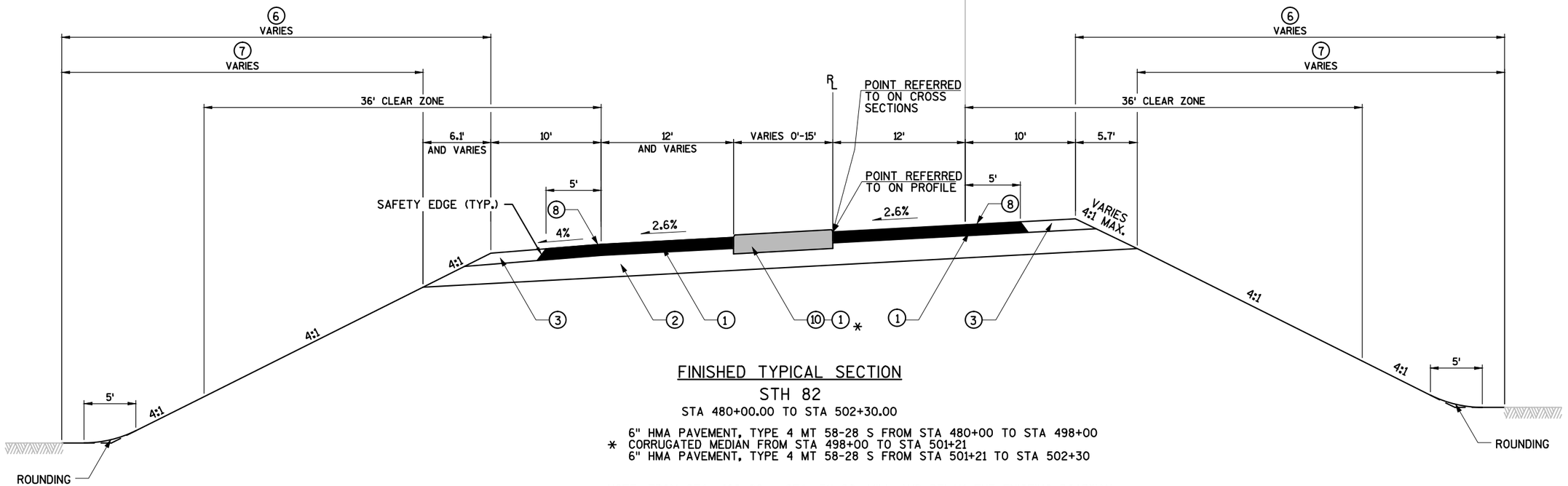
LEGEND

(1)	6" HMA PAVEMENT, TYPE 4 MT 58-28 S
(2)	12" BASE AGGREGATE DENSE 1 1/4-INCH
(3)	BASE AGGREGATE DENSE 3/4-INCH
(4)	CONCRETE CURB & GUTTER
(5)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
(6)	SEED AND FERTILIZER
(7)	TOPSOIL AND MULCH
(8)	ASPHALTIC SHOULDER RUMBLE STRIPS
(9)	ASPHALTIC CENTER LINE RUMBLE STRIPS
(10)	CONCRETE CORRUGATED MEDIAN



RIGHT TURN LANE

STA 496+47 TO STA 501+47



FINISHED TYPICAL SECTION

STH 82

STA 480+00.00 TO STA 502+30.00

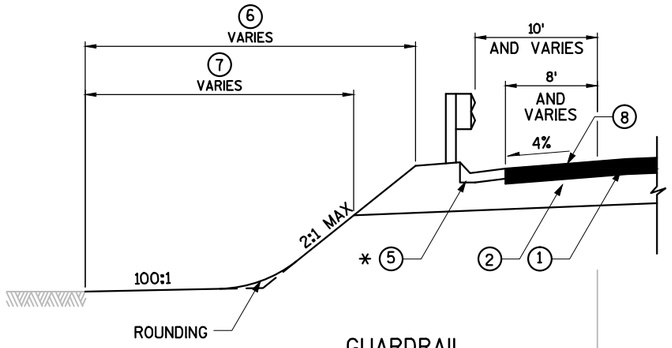
* 6" HMA PAVEMENT, TYPE 4 MT 58-28 S FROM STA 480+00 TO STA 498+00
CORRUGATED MEDIAN FROM STA 498+00 TO STA 501+21
6" HMA PAVEMENT, TYPE 4 MT 58-28 S FROM STA 501+21 TO STA 502+30

NOTE: FROM STA. 486+00 - STA. 511+00, MILL AND RELAY THE EXISTING ROADWAY THAT CONFLICTS WITH THE LIMITS OF THE PROPOSED ROADWAY PAVEMENT STRUCTURE. MILL OFF THE EXISTING FULL DEPTH 5" OF HMA AND RELAY 4" ON TOP OF THE 8" OF EXISTING BASE AGGREGATE DENSE FOR A TOTAL OF 12" BASE AGGREGATE DENSE. MATERIAL GENERATED FROM EXTRA 1" OF MATERIAL SHALL BE USED AS BASE AGGREGATE DENSE. PAVE 6" OF HMA PAVEMENT, TYPE 4 MT 58-28 S.

2

LEGEND

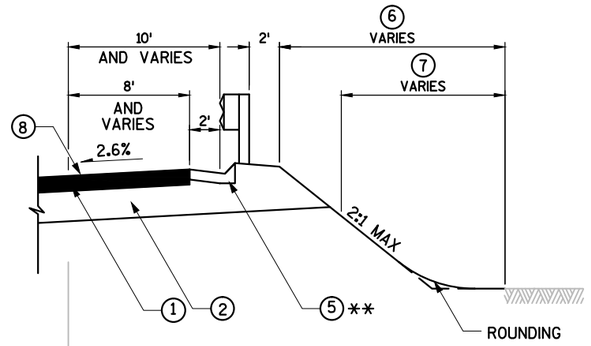
1	6" HMA PAVEMENT, TYPE 4 MT 58-28 S
2	12" BASE AGGREGATE DENSE 1 1/4-INCH
3	BASE AGGREGATE DENSE 3/4-INCH
4	CONCRETE CURB & GUTTER
5	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
6	SEED AND FERTILIZER
7	TOPSOIL AND MULCH
8	ASPHALTIC SHOULDER RUMBLE STRIPS
9	ASPHALTIC CENTER LINE RUMBLE STRIPS
10	CONCRETE CORRUGATED MEDIAN



GUARDRAIL

STA 514+71.00 TO STA 515+00.00 LT

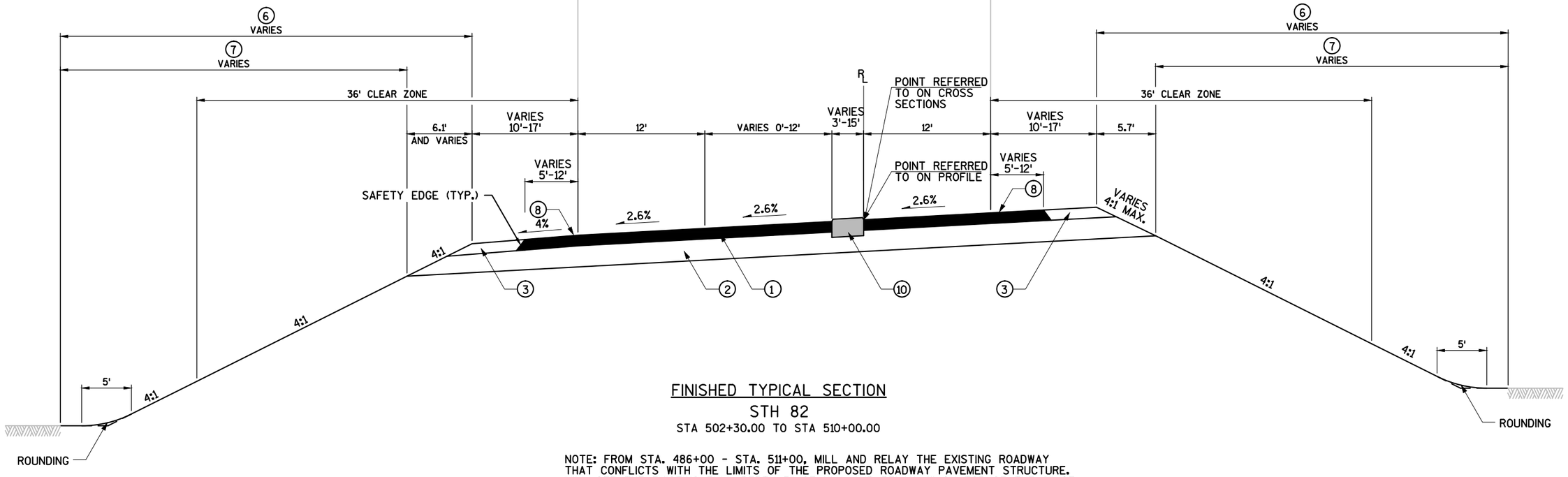
* STA 516+59.74 - STA 515+00.00



GUARDRAIL

STA 514+12.00 TO STA 515+00.00 RT

** STA 516+60.62 - STA 515+00.00



FINISHED TYPICAL SECTION

STH 82

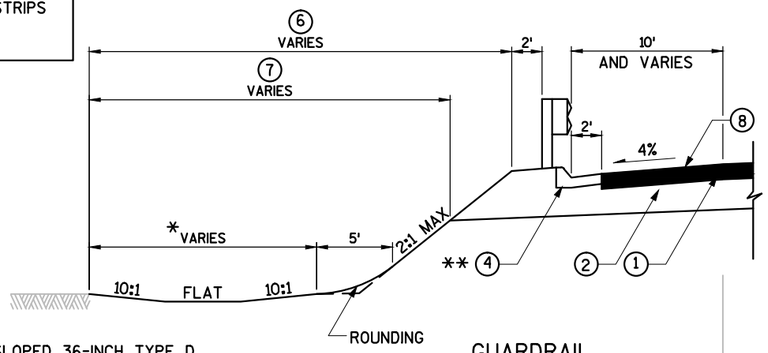
STA 502+30.00 TO STA 510+00.00

NOTE: FROM STA. 486+00 - STA. 511+00, MILL AND RELAY THE EXISTING ROADWAY THAT CONFLICTS WITH THE LIMITS OF THE PROPOSED ROADWAY PAVEMENT STRUCTURE. MILL OFF THE EXISTING FULL DEPTH 5" OF HMA AND RELAY 4" ON TOP OF THE 8" OF EXISTING BASE AGGREGATE DENSE FOR A TOTAL OF 12" BASE AGGREGATE DENSE. MATERIAL GENERATED FROM EXTRA 1" OF MATERIAL SHALL BE USED AS BASE AGGREGATE DENSE. PAVE 6" OF HMA PAVEMENT, TYPE 4 MT 58-28 S.

2

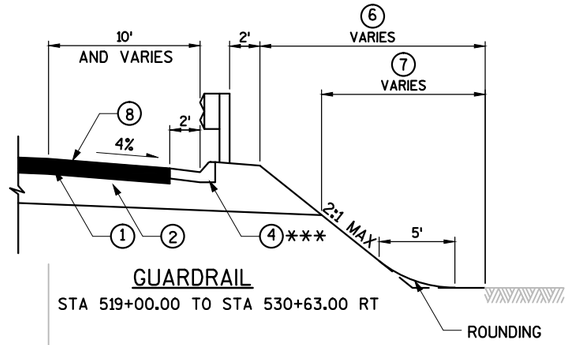
LEGEND

(1)	6" HMA PAVEMENT, TYPE 4 MT 58-28 S
(2)	12" BASE AGGREGATE DENSE 1 1/4-INCH
(3)	BASE AGGREGATE DENSE 3/4-INCH
(4)	CONCRETE CURB & GUTTER
(5)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
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(8)	ASPHALTIC SHOULDER RUMBLE STRIPS
(9)	ASPHALTIC CENTER LINE RUMBLE STRIPS
(10)	CONCRETE CORRUGATED MEDIAN

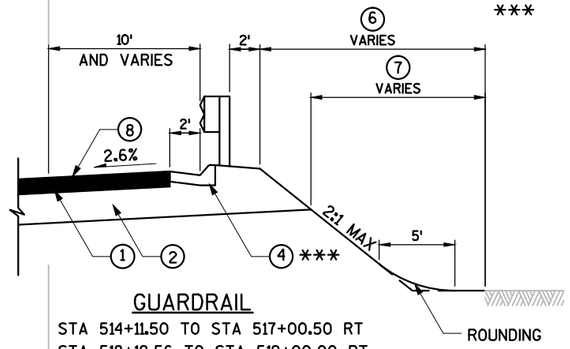


** CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
STA 518+69.98 - STA 529+90.19 LT
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
STA 515+00.00 - STA 516+78.00 LT
STA 516+78.00 - STA 516+99.94 LT (PAID WITH CONCRETE SURFACE DRAIN)
STA 518+19.97 - STA 518+69.98 LT
STA 529+90.19 - STA 530+18.60 LT
STA 530+18.60 - STA 530+40.00 LT (PAID WITH CONCRETE SURFACE DRAIN)

GUARDRAIL
STA 514+58.80 TO STA 516+99.94 LT
STA 518+20.00 TO STA 530+40.00 LT

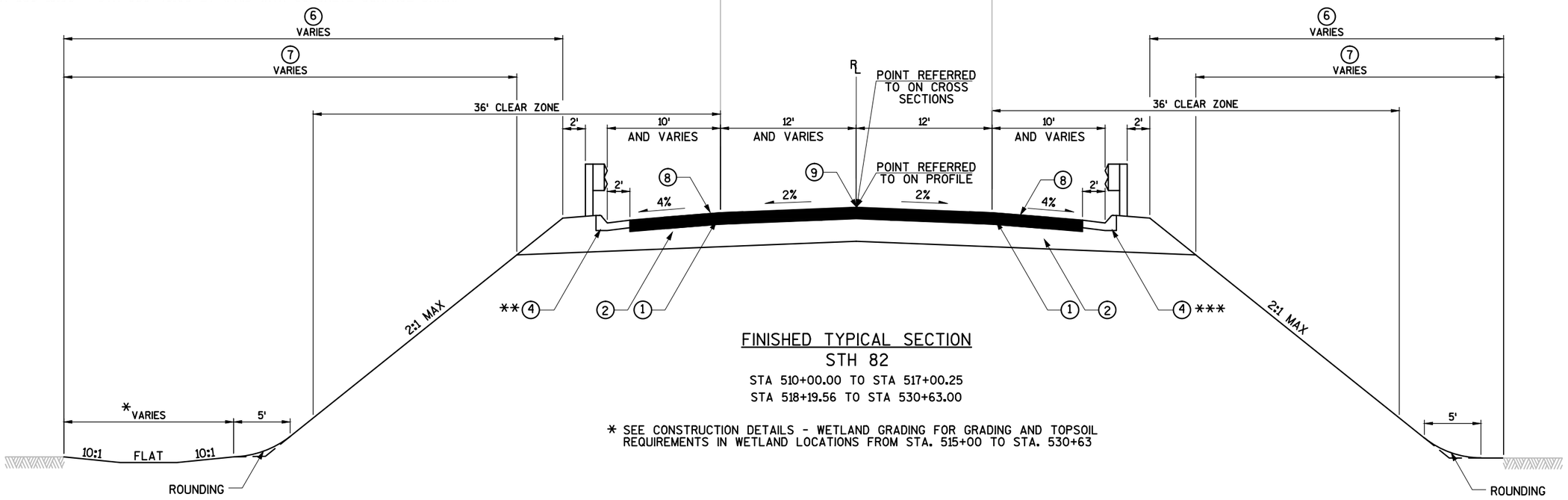


GUARDRAIL
STA 519+00.00 TO STA 530+63.00 RT



GUARDRAIL
STA 514+11.50 TO STA 517+00.50 RT
STA 518+19.56 TO STA 519+00.00 RT

*** CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
STA 518+69.57 - STA 530+13.23 RT
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
STA 515+00.00 - STA 516+79.00 RT
STA 516+79.00 - STA 517+00.50 RT
(PAID WITH CONCRETE SURFACE DRAIN)
STA 518+19.56 - STA 518+69.57 RT
STA 530+13.23 - STA 530+41.70 RT
STA 530+41.70 - STA 530+63.00 RT
(PAID WITH CONCRETE SURFACE DRAIN)



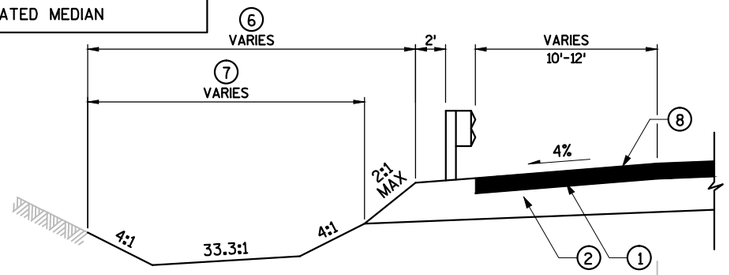
FINISHED TYPICAL SECTION
STH 82
STA 510+00.00 TO STA 517+00.25
STA 518+19.56 TO STA 530+63.00

* SEE CONSTRUCTION DETAILS - WETLAND GRADING FOR GRADING AND TOPSOIL REQUIREMENTS IN WETLAND LOCATIONS FROM STA. 515+00 TO STA. 530+63

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TYPICAL SECTIONS	SHEET 9	E

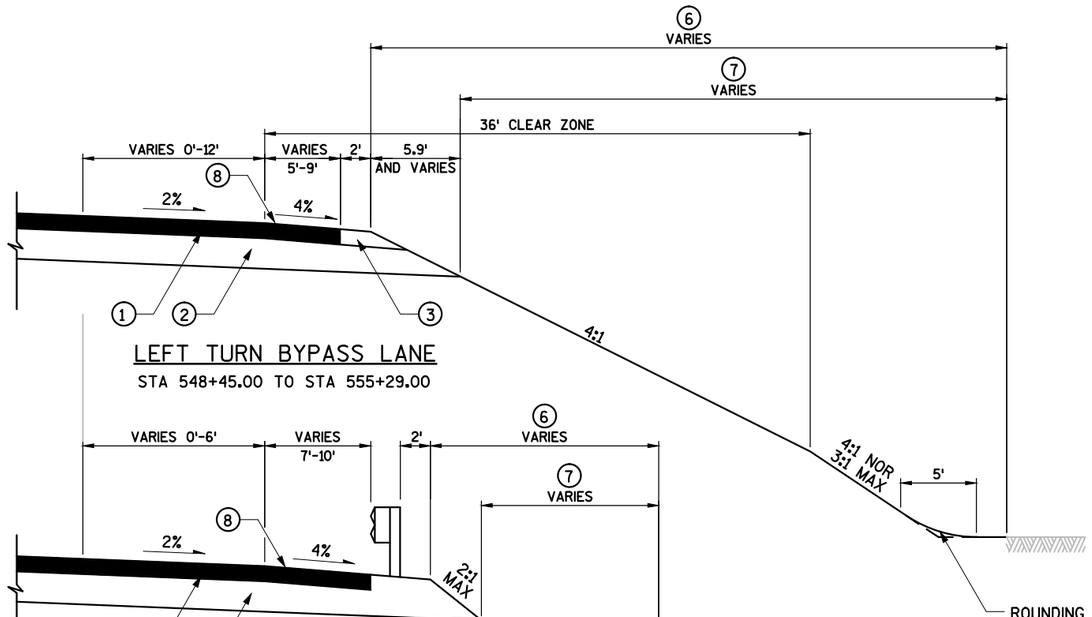
LEGEND

(1)	6" HMA PAVEMENT, TYPE 4 MT 58-28 S
(2)	12" BASE AGGREGATE DENSE 1 1/4-INCH
(3)	BASE AGGREGATE DENSE 3/4-INCH
(4)	CONCRETE CURB & GUTTER
(5)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
(6)	SEED AND FERTILIZER
(7)	TOPSOIL AND MULCH
(8)	ASPHALTIC SHOULDER RUMBLE STRIPS
(9)	ASPHALTIC CENTER LINE RUMBLE STRIPS
(10)	CONCRETE CORRUGATED MEDIAN



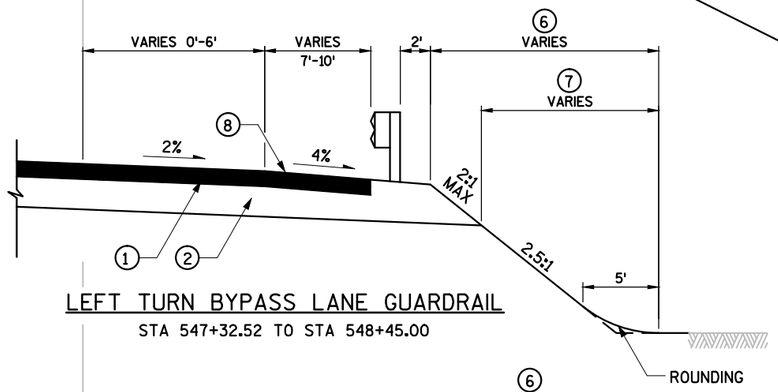
GUARDRAIL

STA 546+89.48 TO STA 548+89.00



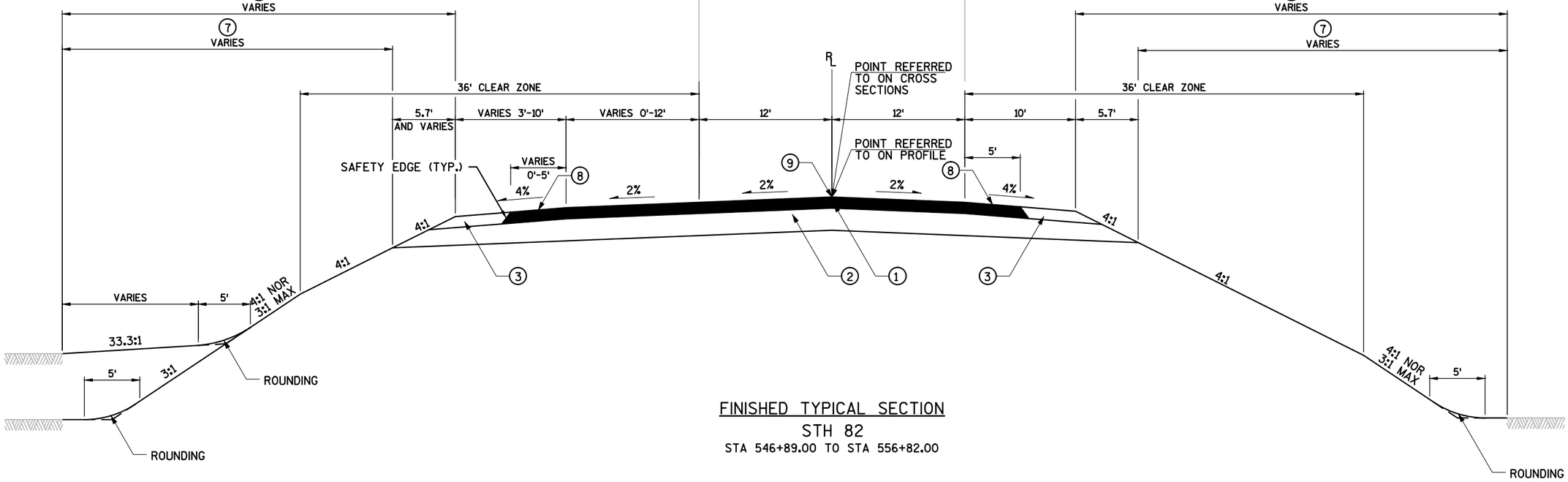
LEFT TURN BYPASS LANE

STA 548+45.00 TO STA 555+29.00



LEFT TURN BYPASS LANE GUARDRAIL

STA 547+32.52 TO STA 548+45.00



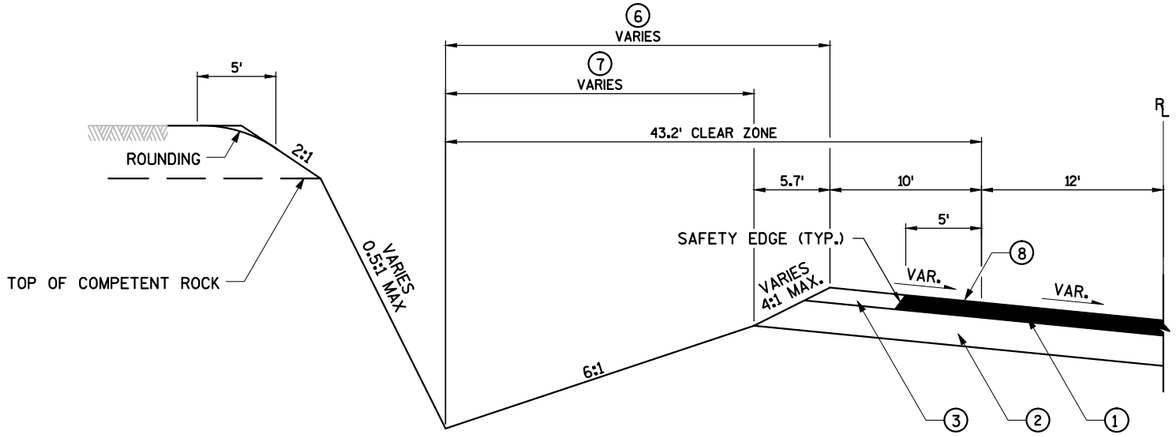
FINISHED TYPICAL SECTION

STH 82

STA 546+89.00 TO STA 556+82.00

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TYPICAL SECTIONS	SHEET 10	E

2



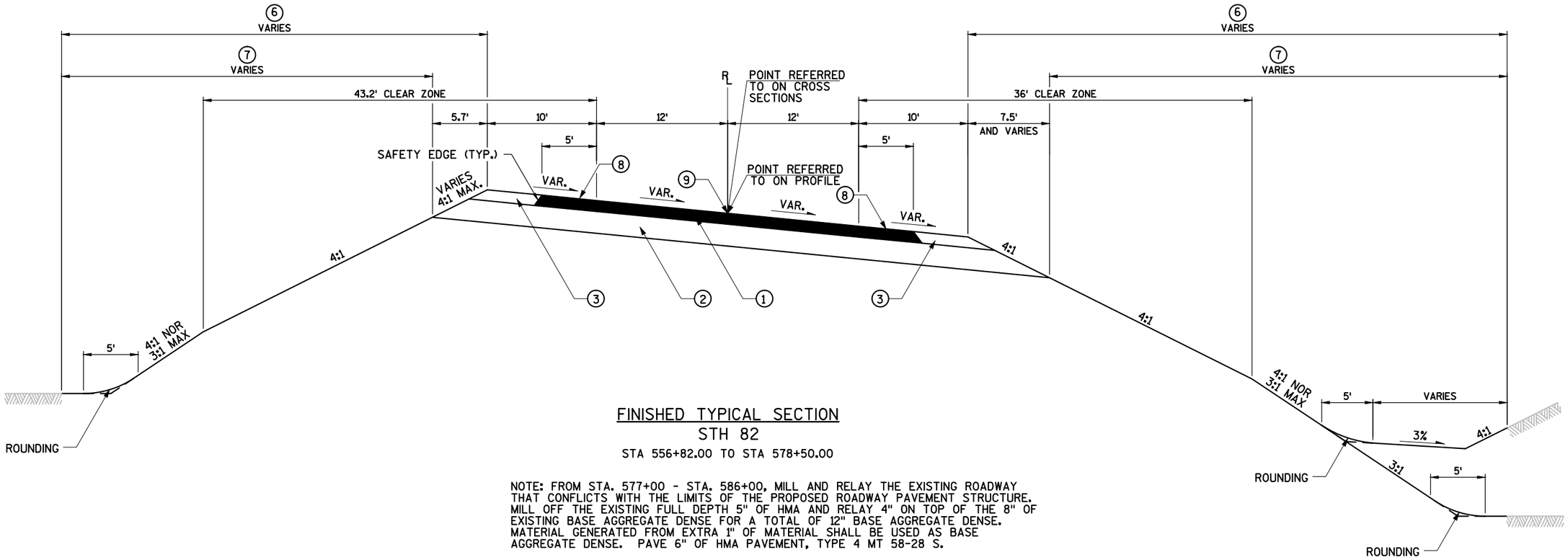
FINISHED TYPICAL SECTION

STH 82 ROCK CUT

STA 565+00.00 TO STA 573+00.00 LT
STA 576+61.00 TO STA 578+46.00 LT

LEGEND

1	6" HMA PAVEMENT, TYPE 4 MT 58-28 S
2	12" BASE AGGREGATE DENSE 1 1/4-INCH
3	BASE AGGREGATE DENSE 3/4-INCH
4	CONCRETE CURB & GUTTER
5	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
6	SEED AND FERTILIZER
7	TOPSOIL AND MULCH
8	ASPHALTIC SHOULDER RUMBLE STRIPS
9	ASPHALTIC CENTER LINE RUMBLE STRIPS
10	CONCRETE CORRUGATED MEDIAN



FINISHED TYPICAL SECTION

STH 82

STA 556+82.00 TO STA 578+50.00

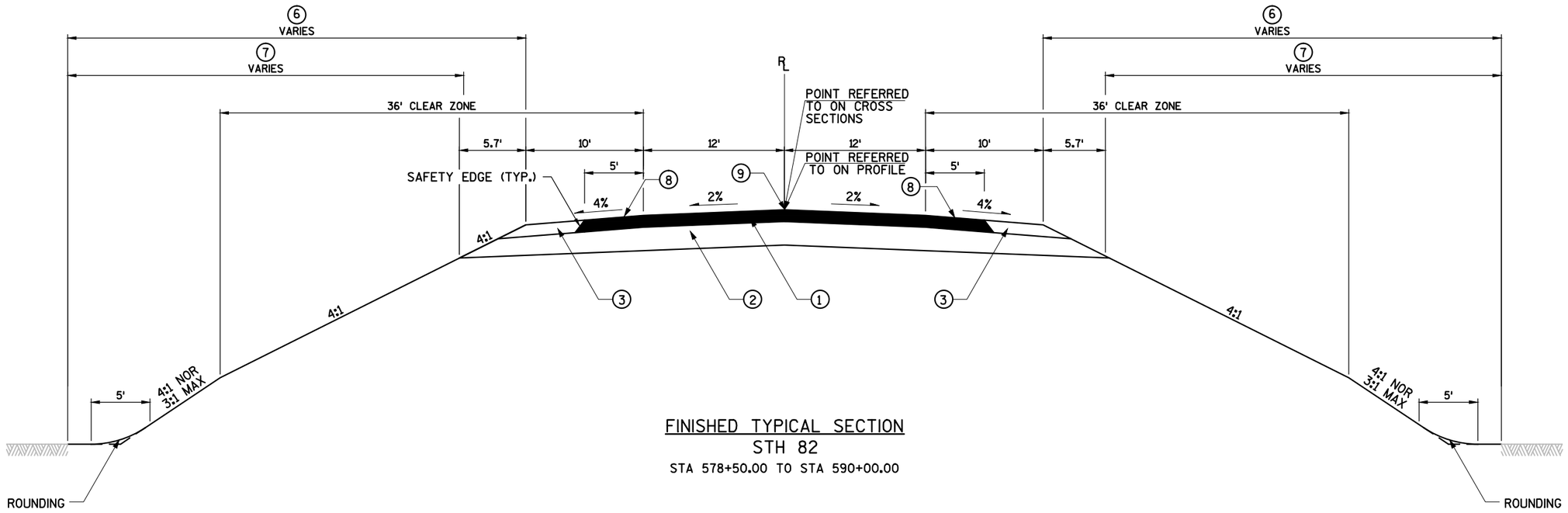
NOTE: FROM STA. 577+00 - STA. 586+00, MILL AND RELAY THE EXISTING ROADWAY THAT CONFLICTS WITH THE LIMITS OF THE PROPOSED ROADWAY PAVEMENT STRUCTURE. MILL OFF THE EXISTING FULL DEPTH 5" OF HMA AND RELAY 4" ON TOP OF THE 8" OF EXISTING BASE AGGREGATE DENSE FOR A TOTAL OF 12" BASE AGGREGATE DENSE. MATERIAL GENERATED FROM EXTRA 1" OF MATERIAL SHALL BE USED AS BASE AGGREGATE DENSE. PAVE 6" OF HMA PAVEMENT, TYPE 4 MT 58-28 S.

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TYPICAL SECTIONS	SHEET 11 E

2

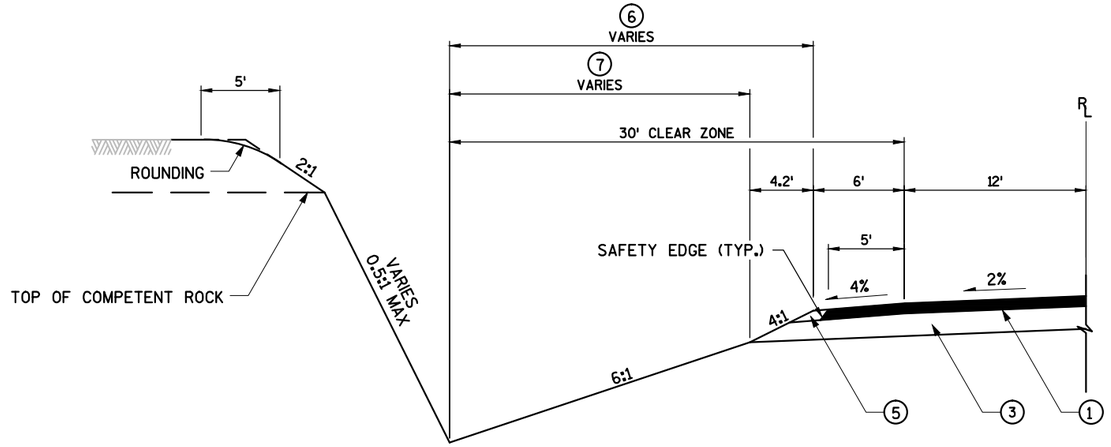
LEGEND

(1)	6" HMA PAVEMENT, TYPE 4 MT 58-28 S
(2)	12" BASE AGGREGATE DENSE 1 1/4-INCH
(3)	BASE AGGREGATE DENSE 3/4-INCH
(4)	CONCRETE CURB & GUTTER
(5)	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
(6)	SEED AND FERTILIZER
(7)	TOPSOIL AND MULCH
(8)	ASPHALTIC SHOULDER RUMBLE STRIPS
(9)	ASPHALTIC CENTER LINE RUMBLE STRIPS
(10)	CONCRETE CORRUGATED MEDIAN



FINISHED TYPICAL SECTION
STH 82
STA 578+50.00 TO STA 590+00.00

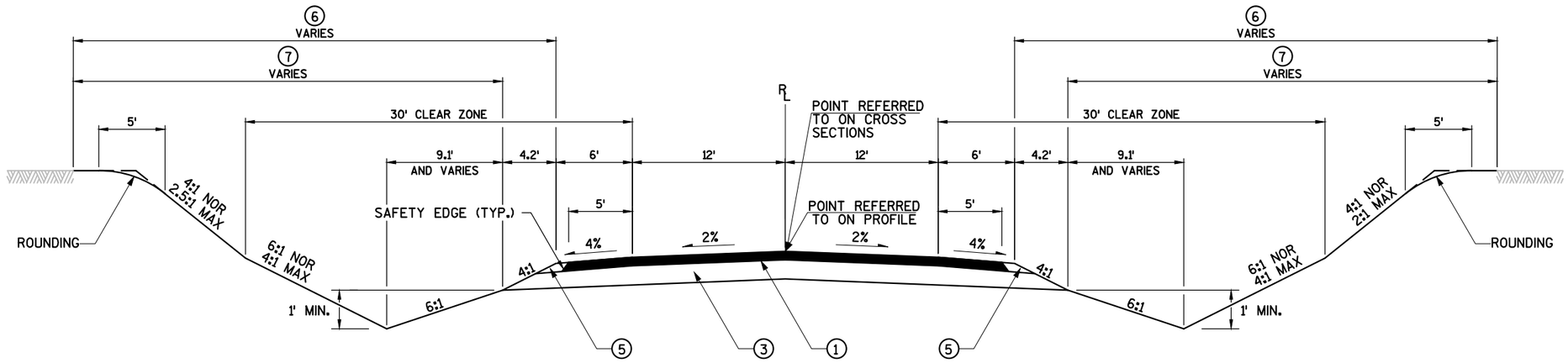
NOTE: FROM STA. 577+00 - STA. 586+00, MILL AND RELAY THE EXISTING ROADWAY THAT CONFLICTS WITH THE LIMITS OF THE PROPOSED ROADWAY PAVEMENT STRUCTURE. MILL OFF THE EXISTING FULL DEPTH 5" OF HMA AND RELAY 4" ON TOP OF THE 8" OF EXISTING BASE AGGREGATE DENSE FOR A TOTAL OF 12" BASE AGGREGATE DENSE. MATERIAL GENERATED FROM EXTRA 1" OF MATERIAL SHALL BE USED AS BASE AGGREGATE DENSE. PAVE 6" OF HMA PAVEMENT, TYPE 4 MT 58-28 S.



FINISHED TYPICAL SECTION

CTH Z ROCK CUT

STA 11+76.00 TO STA 13+00.00 LT
STA 13+00.00 TO STA 20+00.00 LT/RT
STA 20+00.00 TO STA 23+50.00 RT



LEGEND

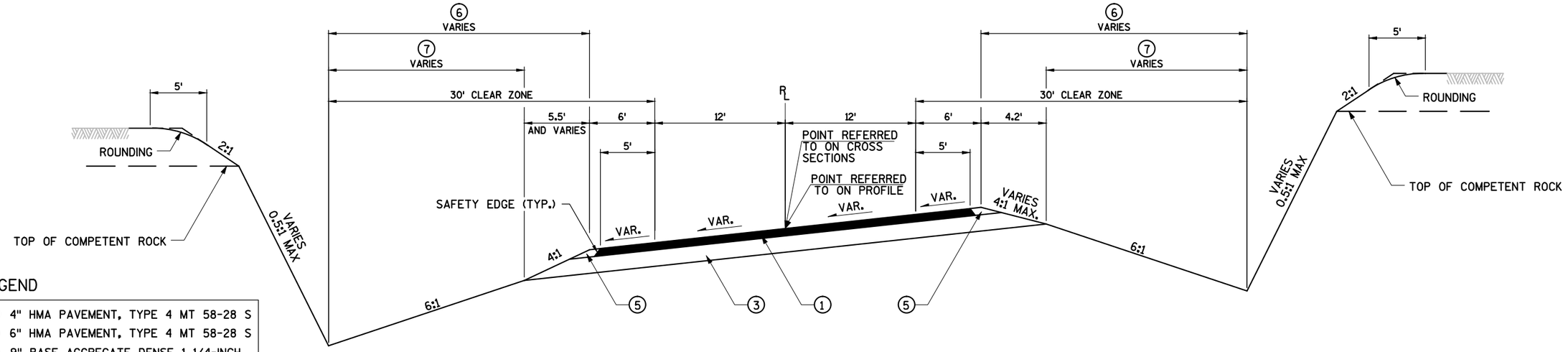
1	4" HMA PAVEMENT, TYPE 4 MT 58-28 S
2	6" HMA PAVEMENT, TYPE 4 MT 58-28 S
3	9" BASE AGGREGATE DENSE 1 1/4-INCH
4	12" BASE AGGREGATE DENSE 1 1/4-INCH
5	BASE AGGREGATE DENSE 3/4-INCH
6	SEED AND FERTILIZER
7	TOPSOIL AND MULCH

FINISHED TYPICAL SECTION

CTH Z

STA 10+74.00'Z' TO STA 35+45.26'Z'

PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TYPICAL SECTIONS	SHEET 13	E



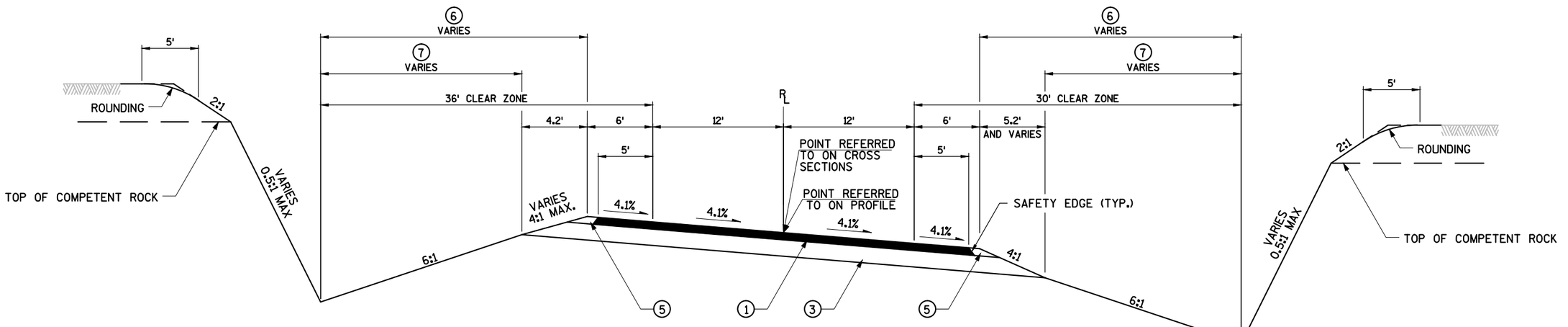
FINISHED TYPICAL SECTION

CTH Z

STA 12+09.00'Z' TO STA 15+50.00'Z'

LEGEND

1	4" HMA PAVEMENT, TYPE 4 MT 58-28 S
2	6" HMA PAVEMENT, TYPE 4 MT 58-28 S
3	9" BASE AGGREGATE DENSE 1 1/4-INCH
4	12" BASE AGGREGATE DENSE 1 1/4-INCH
5	BASE AGGREGATE DENSE 3/4-INCH
6	SEED AND FERTILIZER
7	TOPSOIL AND MULCH



FINISHED TYPICAL SECTION

CTH Z

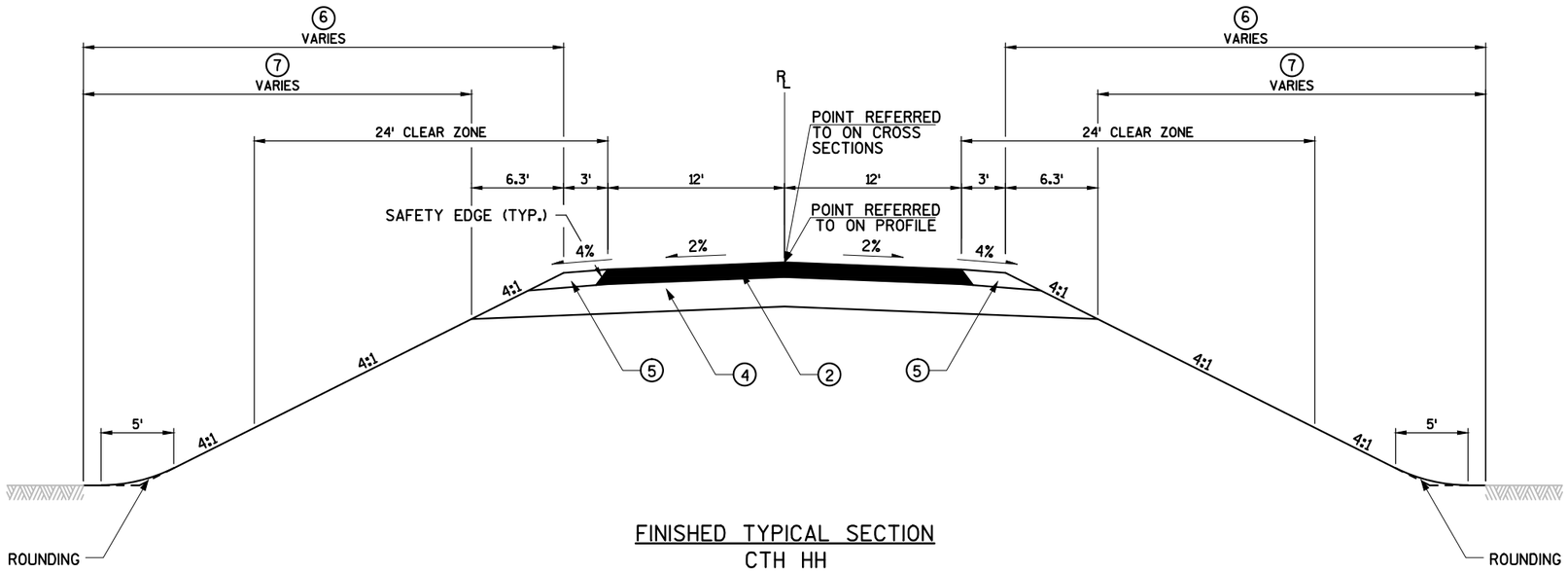
STA 17+17.00'Z' TO STA 29+24.00'Z'

PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TYPICAL SECTIONS	SHEET 14	E

2

LEGEND

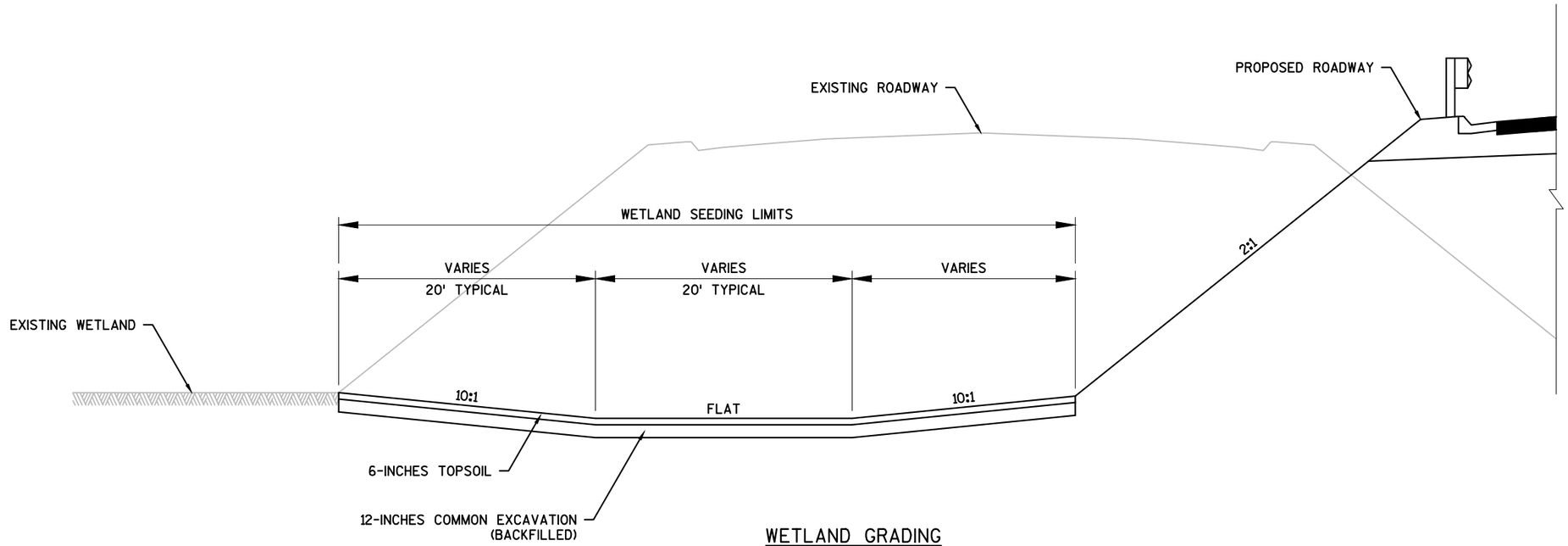
(1)	4" HMA PAVEMENT, TYPE 4 MT 58-28 S
(2)	6" HMA PAVEMENT, TYPE 4 MT 58-28 S
(3)	9" BASE AGGREGATE DENSE 1 1/4-INCH
(4)	12" BASE AGGREGATE DENSE 1 1/4-INCH
(5)	BASE AGGREGATE DENSE 3/4-INCH
(6)	SEED AND FERTILIZER
(7)	TOPSOIL AND MULCH



FINISHED TYPICAL SECTION
CTH HH
STA 7+50.00'HH' TO STA 9+16.00'HH'

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TYPICAL SECTIONS	SHEET 15 E

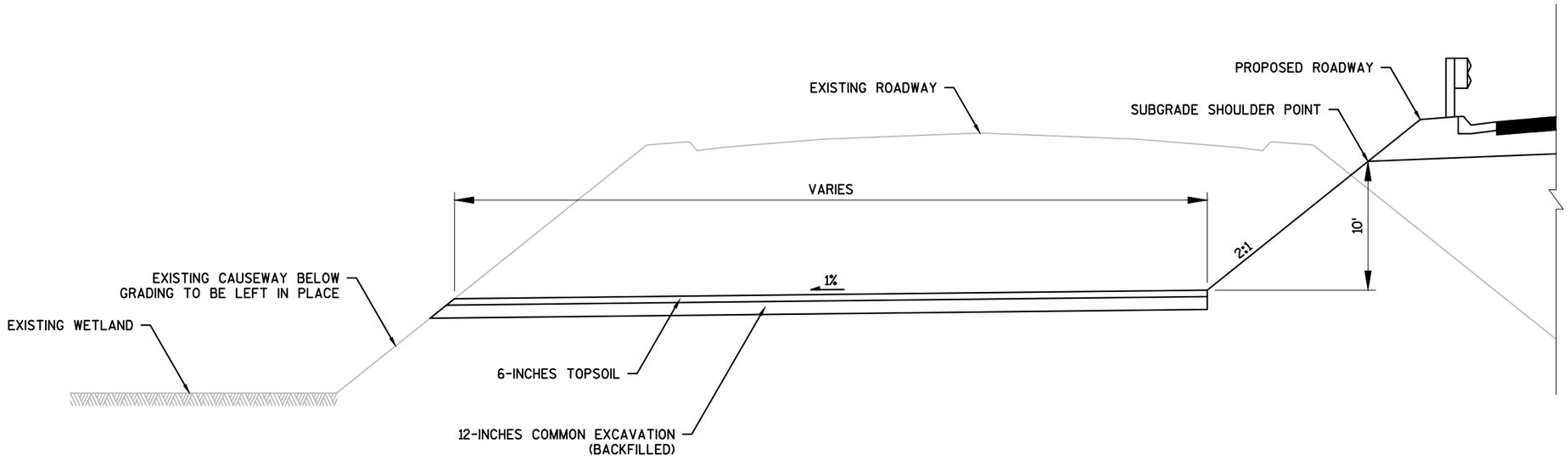
2



WETLAND GRADING
STH 82
STA 515+00 TO STA 528+50

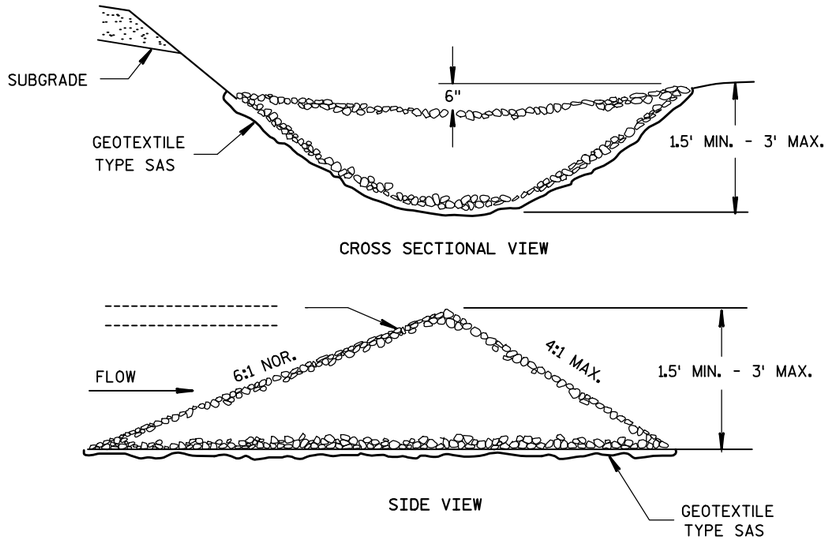
PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CONSTRUCTION DETAILS	SHEET 16	E

2

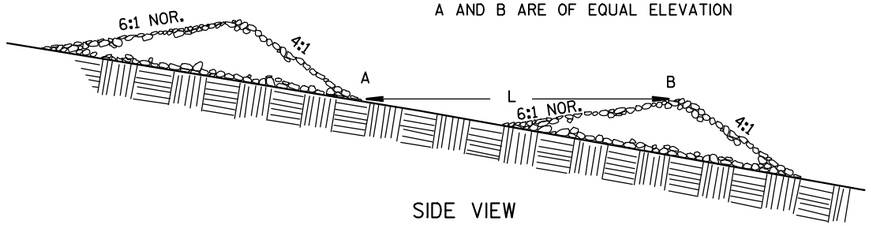


CAUSEWAY SHELF GRADING
STH 82
STA 528+50 TO STA 530+65

PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CONSTRUCTION DETAILS	SHEET 17	E



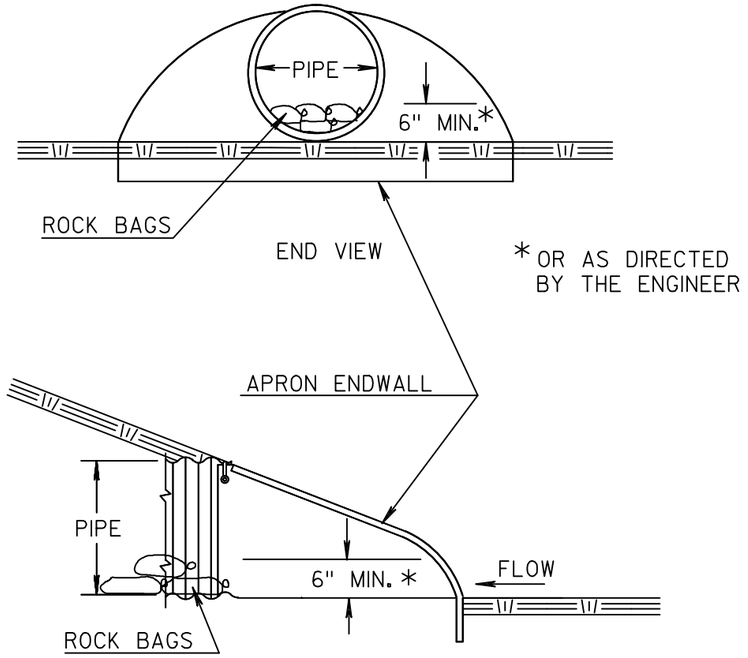
L = THE DISTANCE SUCH THAT POINTS
A AND B ARE OF EQUAL ELEVATION



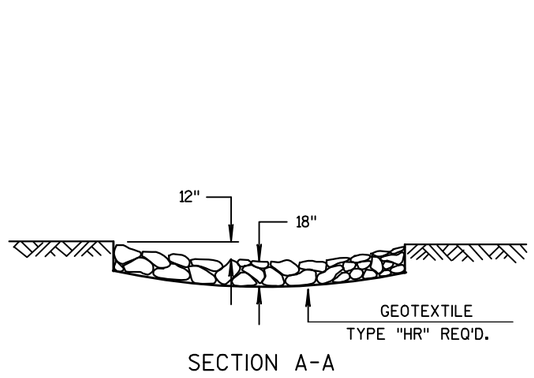
SIDE VIEW

PERMANENT STONE DITCH CHECK

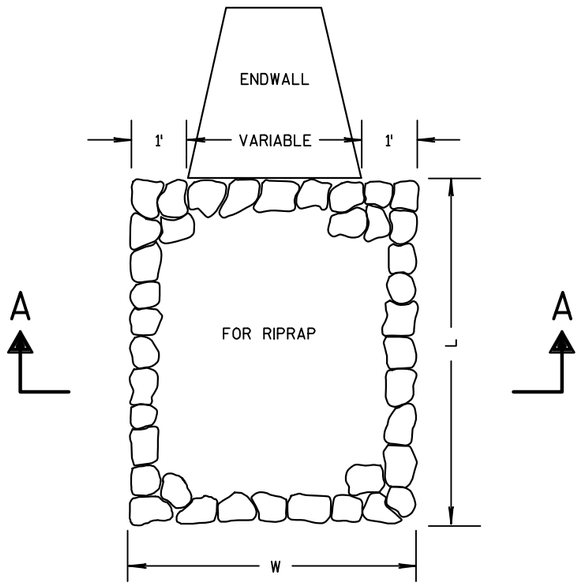
ESTIMATED BAG SIZE = 18" X 12" X 6"	
PIPE SIZE	ESTIMATED NO. OF BAGS
18"	2
24"	3
30"	5
48"	10
54"	10
60"	13
72"	16



CULVERT PIPE CHECK



SECTION A-A



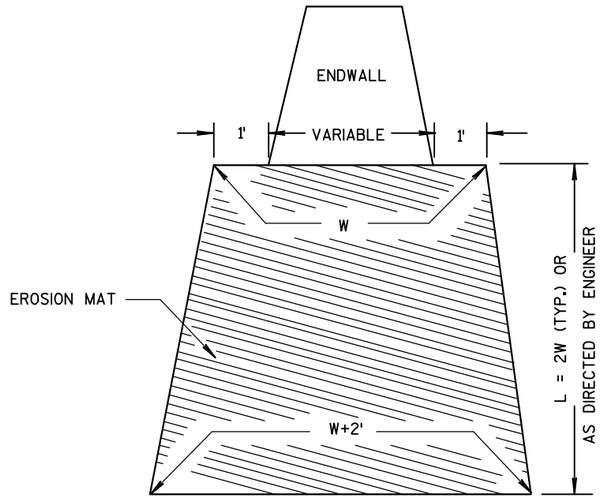
RIPRAP TREATMENT AT CROSS CULVERT AND STORM SEWER OUTLETS

SEE EROSION CONTROL PLANS FOR LOCATIONS AND "L" AND "W" DIMENSIONS

RUNOFF COEFFICIENT TABLE

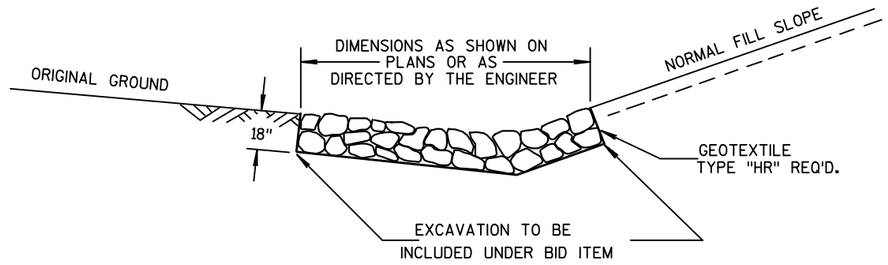
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .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 = 80 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 48 ACRES



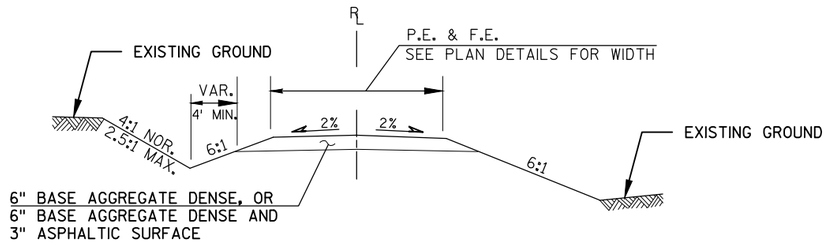
EROSION MAT TREATMENT AT CULVERTS

SEE EROSION CONTROL PLANS FOR LOCATIONS

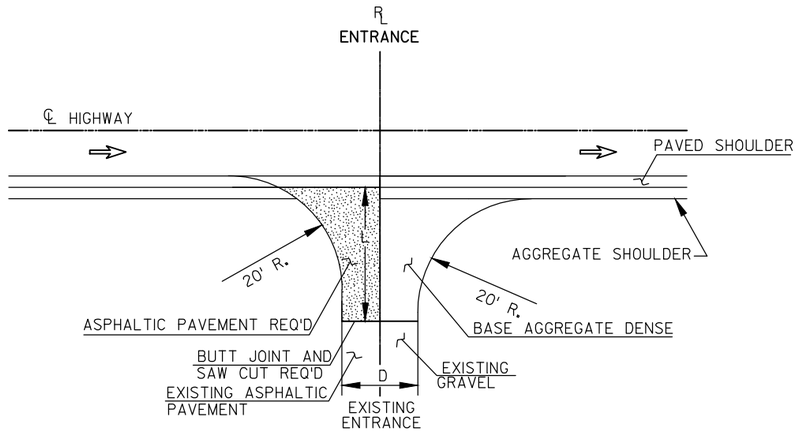


DETAIL FOR MEDIUM RANDOM RIPRAP IN DITCHES

STA. 20+00'Z' - STA. 21+00'Z' LT
STA. 23+50'Z' - STA. 25+20'Z' RT



TYPICAL CROSS SECTION

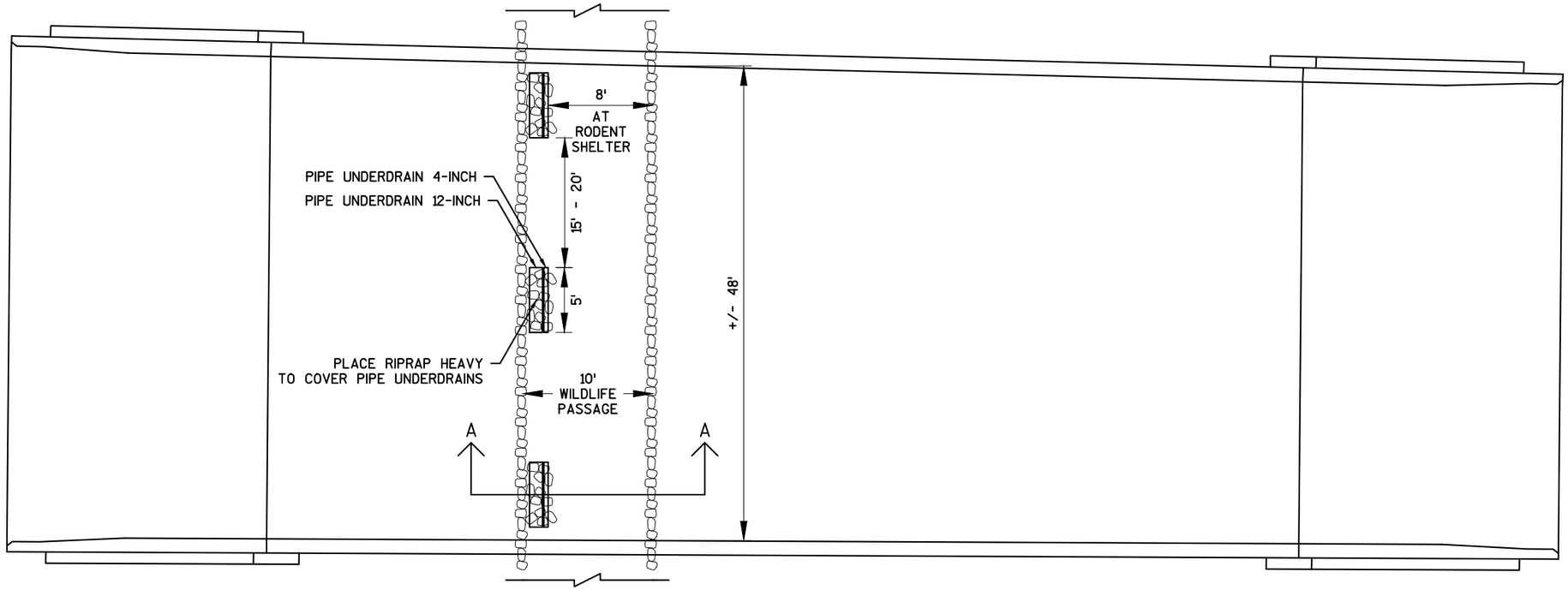


L=SEE CROSS SECTIONS

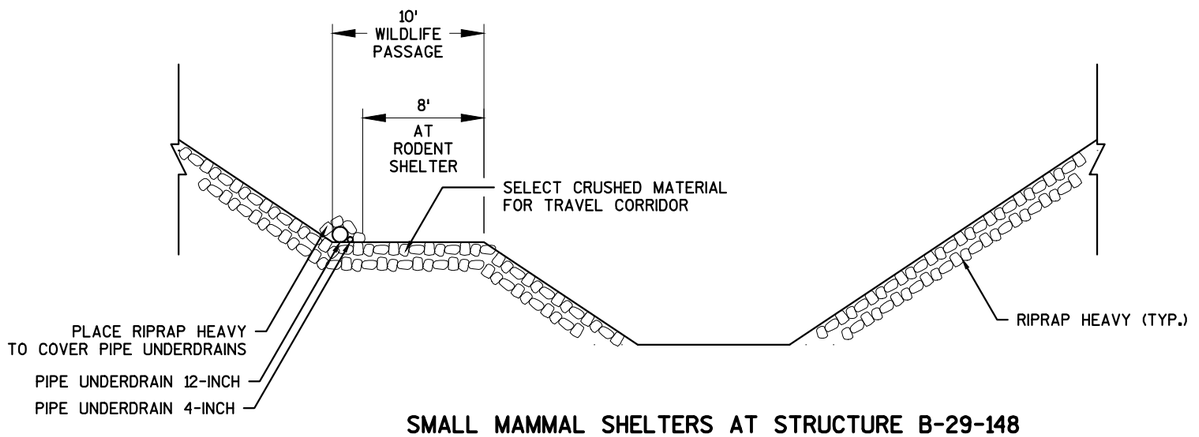
D=DRIVEWAY WIDTH (SEE PLAN DETAILS)

PLAN VIEW

RURAL DRIVEWAY INTERSECTION DETAIL
(P.E. & F.E.)
(FOR NEW CONSTRUCTION)
SEE PLAN & PROFILE SHEETS FOR DRIVEWAY ALIGNMENT AND PROFILE INFORMATION

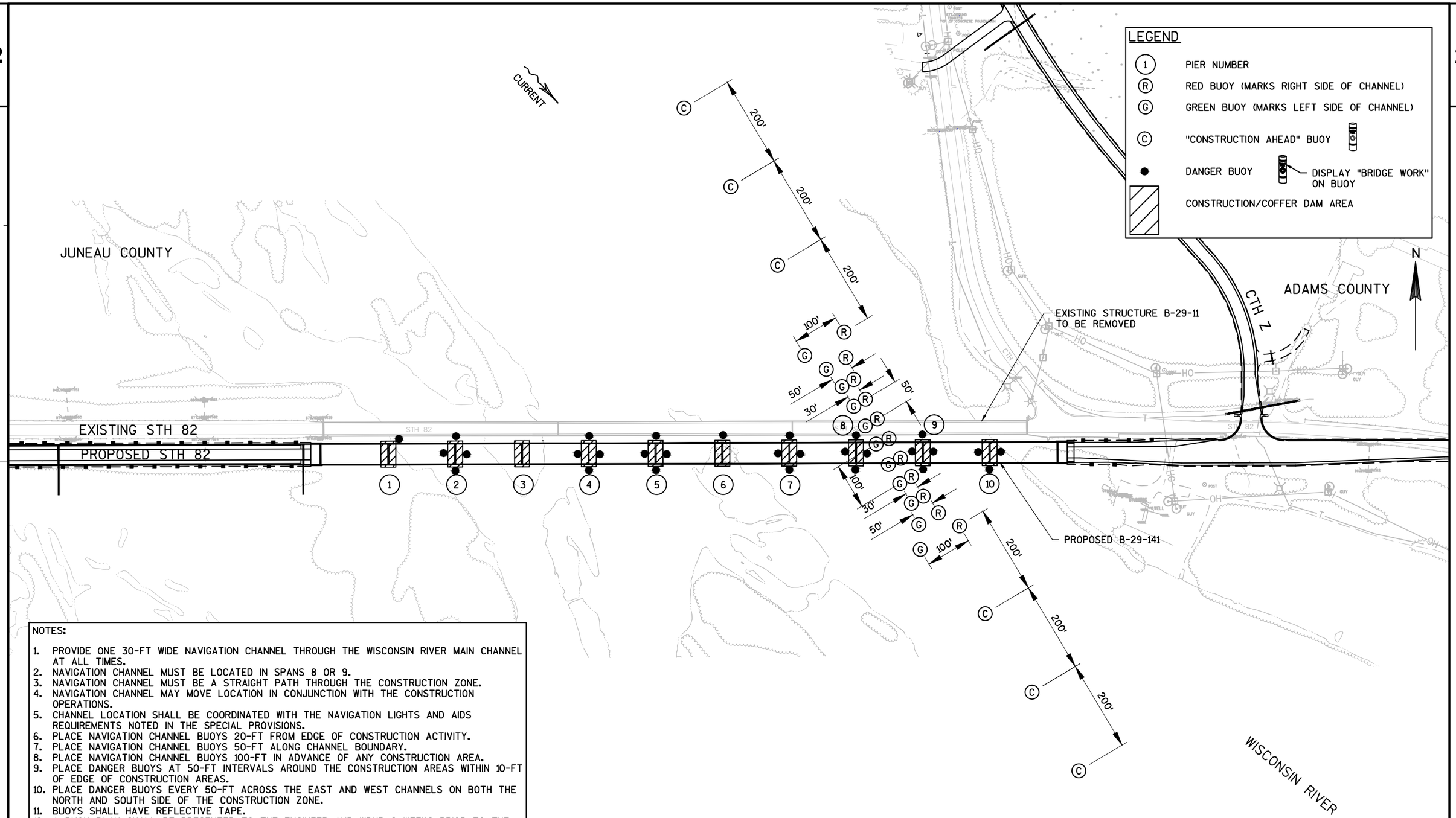


SMALL MAMMAL SHELTERS AT STRUCTURE B-29-148
PLAN
(NOT TO SCALE)



SMALL MAMMAL SHELTERS AT STRUCTURE B-29-148
SECTION A-A
(NOT TO SCALE)

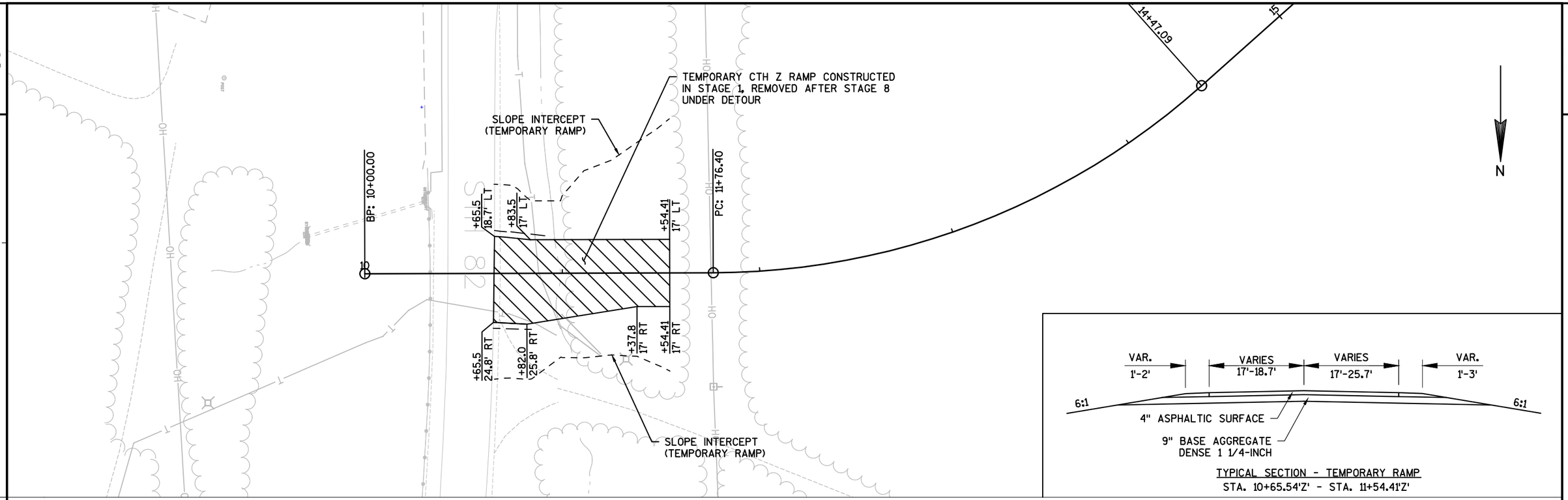
2



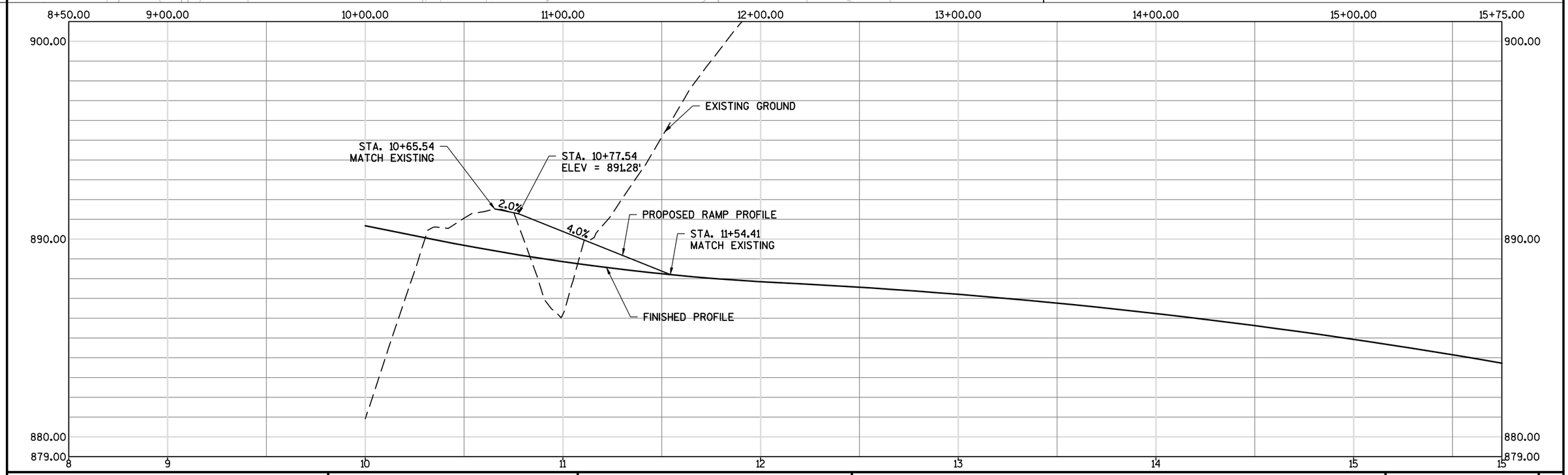
NOTES:

1. PROVIDE ONE 30-FT WIDE NAVIGATION CHANNEL THROUGH THE WISCONSIN RIVER MAIN CHANNEL AT ALL TIMES.
2. NAVIGATION CHANNEL MUST BE LOCATED IN SPANS 8 OR 9.
3. NAVIGATION CHANNEL MUST BE A STRAIGHT PATH THROUGH THE CONSTRUCTION ZONE.
4. NAVIGATION CHANNEL MAY MOVE LOCATION IN CONJUNCTION WITH THE CONSTRUCTION OPERATIONS.
5. CHANNEL LOCATION SHALL BE COORDINATED WITH THE NAVIGATION LIGHTS AND AIDS REQUIREMENTS NOTED IN THE SPECIAL PROVISIONS.
6. PLACE NAVIGATION CHANNEL BUOYS 20-FT FROM EDGE OF CONSTRUCTION ACTIVITY.
7. PLACE NAVIGATION CHANNEL BUOYS 50-FT ALONG CHANNEL BOUNDARY.
8. PLACE NAVIGATION CHANNEL BUOYS 100-FT IN ADVANCE OF ANY CONSTRUCTION AREA.
9. PLACE DANGER BUOYS AT 50-FT INTERVALS AROUND THE CONSTRUCTION AREAS WITHIN 10-FT OF EDGE OF CONSTRUCTION AREAS.
10. PLACE DANGER BUOYS EVERY 50-FT ACROSS THE EAST AND WEST CHANNELS ON BOTH THE NORTH AND SOUTH SIDE OF THE CONSTRUCTION ZONE.
11. BUOYS SHALL HAVE REFLECTIVE TAPE.
12. A BUOY PLAN SHALL BE PRESENTED TO THE ENGINEER AND WDNR 2 WEEKS PRIOR TO THE START OF CONSTRUCTION FOR REVIEW.
13. PLACEMENT AND MAINTENANCE OF BUOYS IS INCLUDED IN STRUCTURE BID ITEMS FOR BRIDGE B-29-141.
14. PLACE BUOYS AT THE CORNERS OF ANY CAUSEWAYS (NOT SHOWN ON THIS PLAN).

BOATING NAVIGATION DETAIL

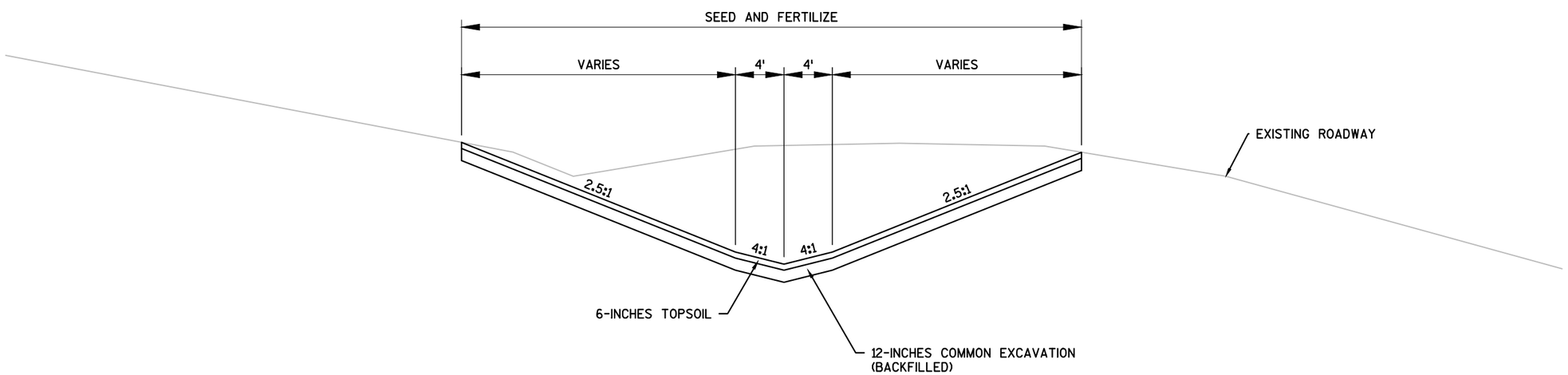


TYPICAL SECTION - TEMPORARY RAMP
STA. 10+65.54'Z' - STA. 11+54.41'Z'



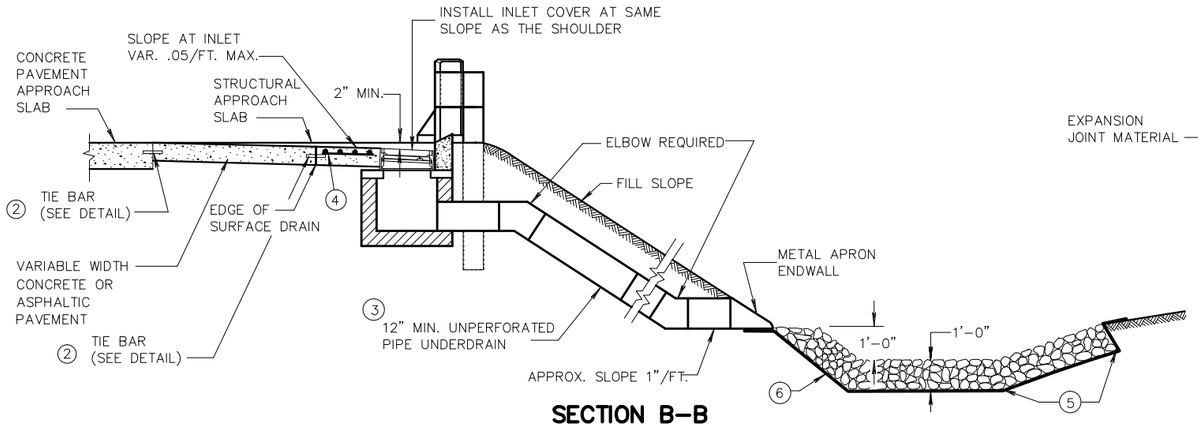
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CONSTRUCTION DETAIL - CTH Z TEMPORARY PROFILE	SHEET 23	E

2

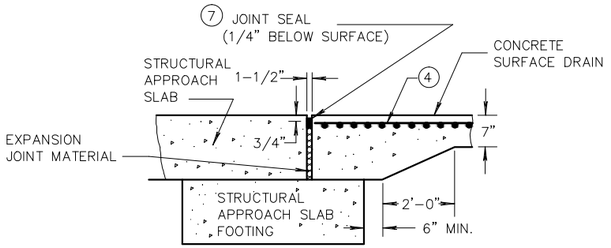


DITCH A

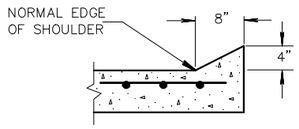
STA 00+00'A' TO STA 1+75'A'



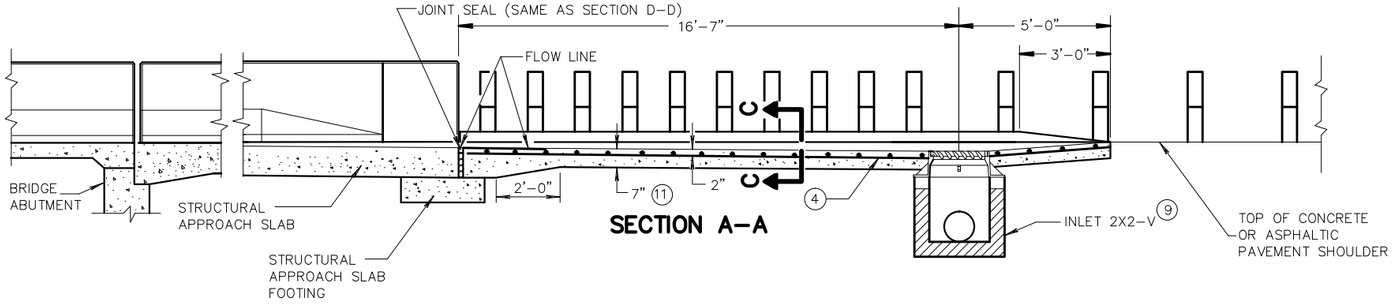
SECTION B–B



SECTION D–D



SECTION C–C



SECTION A–A

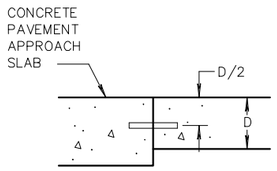
GENERAL NOTES

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.

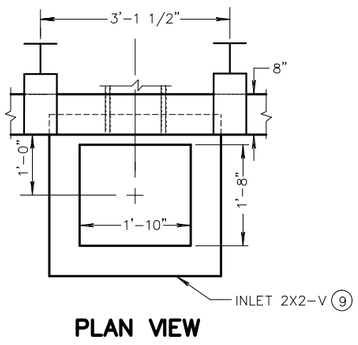
ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

1. NO. 4 X 2'–0" TIE BARS SPACED AT 3'–0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.
2. STANDARD LONGITUDINAL JOINT WITH TIE BARS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE. SEE SDD 'CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES'.
3. THE PIPE UNDERDRAIN MAY BE ANY OF THE 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 TYPE 'HR'
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 IS 3'–1 1/2".
9. SEE SDD 'INLET AND MANHOLE COVERS' AND 'INLETS 2X2–FT, 2X2.5–FT, 2X3–FT, & 2.5X3–FT' FOR DETAILS.
10. SEE SDD 'MGS THRIE BEAM TRANSITION' FOR MGS POST SPACING DETAILS.

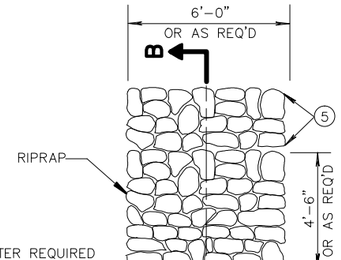
CONCRETE SURFACE DRAIN DETAIL WITH STRUCTURAL APPROACH

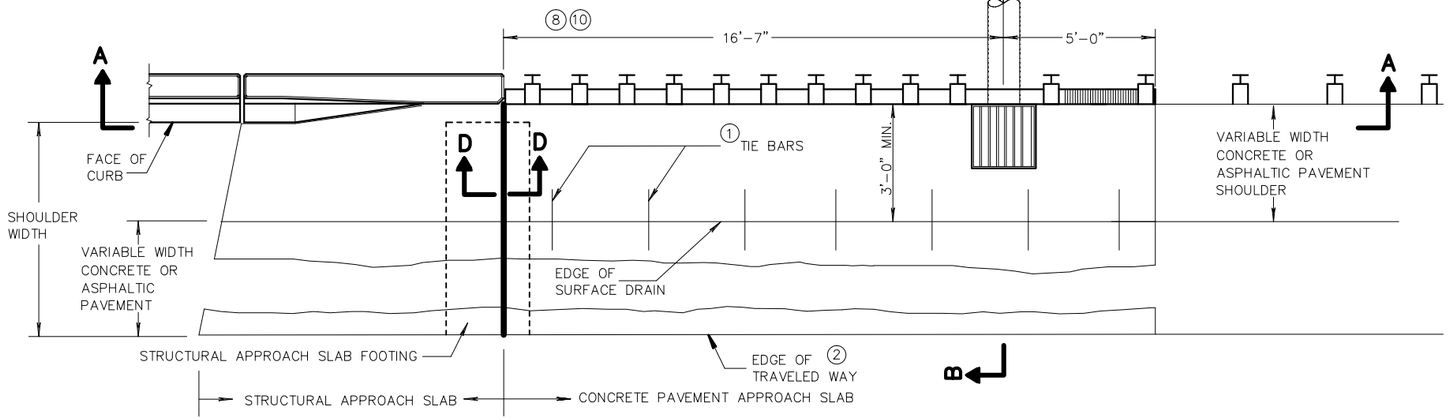


TIE BAR DETAIL



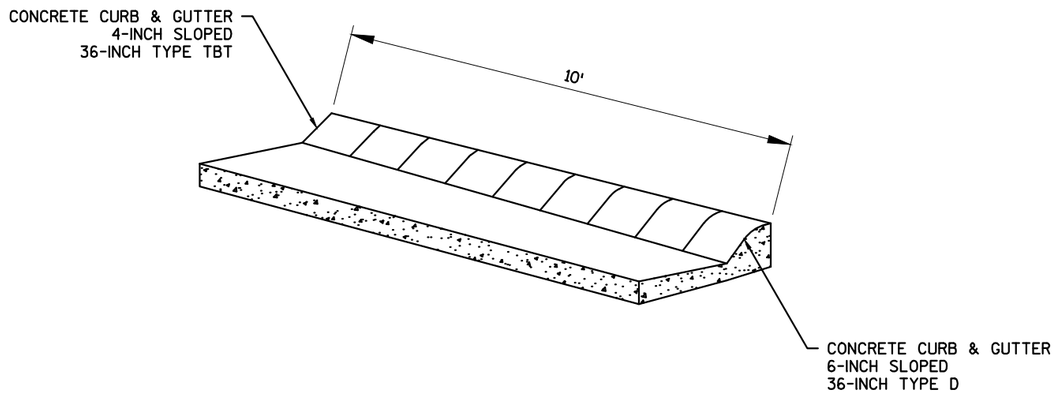
PLAN VIEW





PLAN VIEW

2



CONCRETE CURB & GUTTER TRANSITION

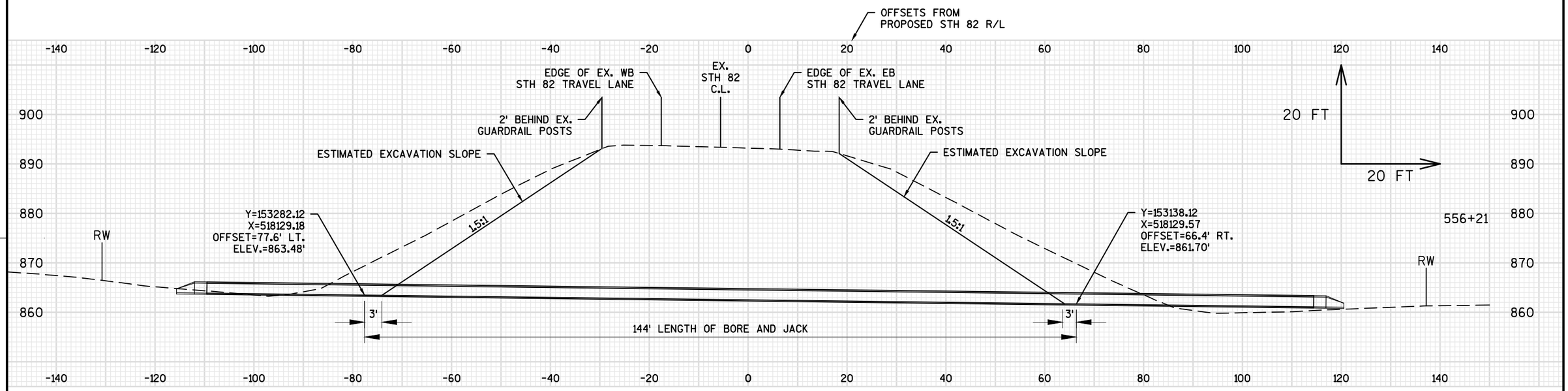
NOT TO SCALE

STA. 518+61.9 - STA. 518+71.8 LT
STA. 518+61.5 - STA. 518+71.5 RT
STA. 529+94.6 - STA. 530+04.6 LT
STA. 529+94.6 - STA. 530+04.6 RT

NOTE: CURB TRANSITION PAID FOR AS
CONCRETE CURB & GUTTER
4-INCH SLOPED
36-INCH TYPE TBT

TYPE TBTT TRANSITION SIMILAR

2

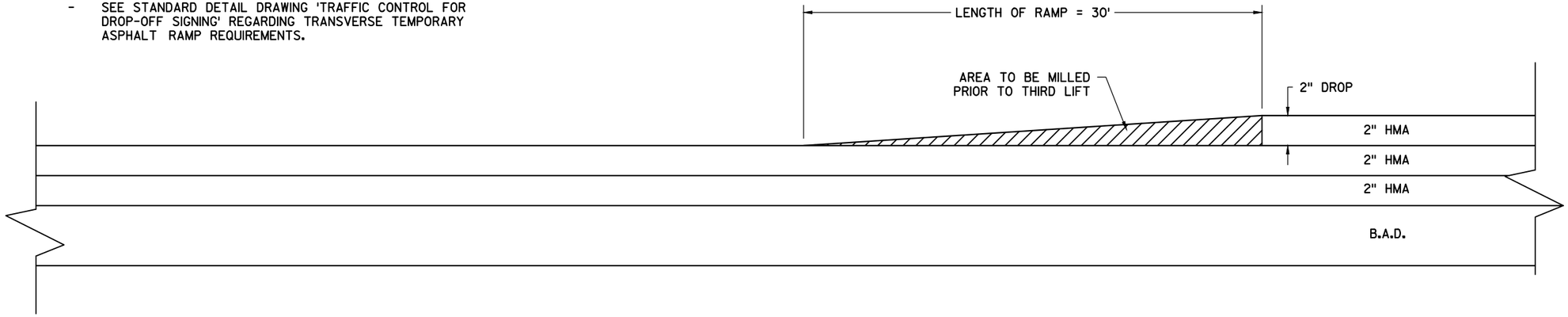


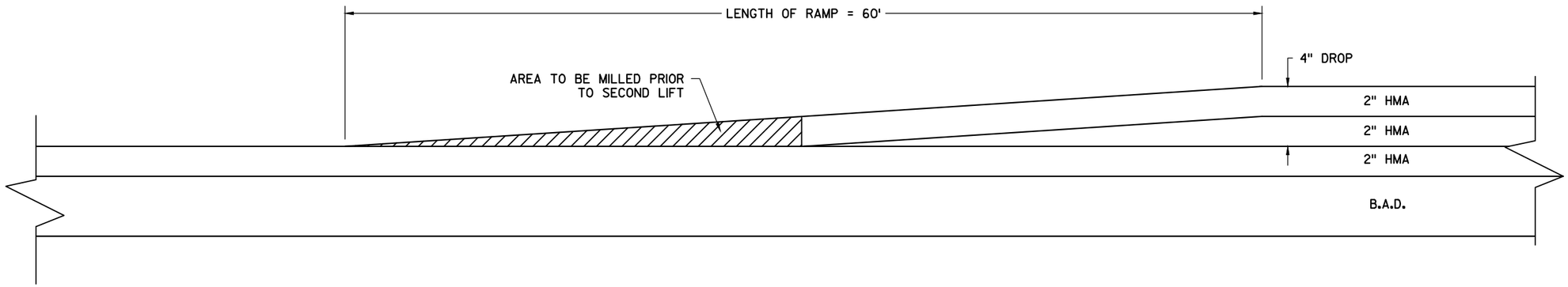
BORE AND JACK LIMITS

PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CONSTRUCTION DETAILS	SHEET 27	E

NOTES:

- A LONGITUDINAL TEMPORARY ASPHALT RAMP IS REQUIRED AT THE END OF EACH WORKING DAY PRIOR TO OPENING TO TWO LANES OF TRAFFIC FOR THE NIGHT.
- TEMPORARY PAVEMENT MARKINGS ARE REQUIRED AT THE END OF EACH WORKING DAY PRIOR TO OPENING TO TWO LANES OF TRAFFIC FOR THE NIGHT.
- SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL FOR DROP-OFF SIGNING' REGARDING TRANSVERSE TEMPORARY ASPHALT RAMP REQUIREMENTS.





PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CONSTRUCTION DETAILS-LONGITUDINAL TEMPORARY ASPHALT RAMP	SHEET 28	E

2

547+84.56, 69.43' RT

547+98.69, 77.46' RT

548+11.84, 91.18' RT

548+78.04, 111.46' RT

SHED TO BE REMOVED

R/W

TLE

GARAGE TO BE REMOVED

HOUSE TO REMAIN

REMOVING BUILDINGS DETAIL

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CONSTRUCTION DETAILS	SHEET 29	E

CURVE S.E. DATA
P.I. STA. 499+69.69

478+79.66	-2.00%	END NORMAL CROWN
479+32.73	0.00%	LEVEL CROWN
479+85.81	2.00%	REVERSE CROWN
480+01.73	2.60%	BEGIN FULL SUPER
517+98.72	2.60%	END FULL SUPER
518+14.64	2.00%	REVERSE CROWN
518+67.72	0.00%	LEVEL CROWN
519+20.79	-2.00%	END NORMAL CROWN

CURVE S.E. DATA
P.I. STA. 13+18.01'Z'

10+74.77'Z'	-2.00%	END NORMAL CROWN
11+11.06'Z'	0.00%	LEVEL CROWN
11+47.36'Z'	2.00%	REVERSE CROWN
12+09.06'Z'	5.40%	BEGIN FULL SUPER
14+14.42'Z'	5.40%	END FULL SUPER
14+76.13'Z'	2.00%	REVERSE CROWN
15+12.42'Z'	0.00%	LEVEL CROWN
15+48.72'Z'	-2.00%	END NORMAL CROWN

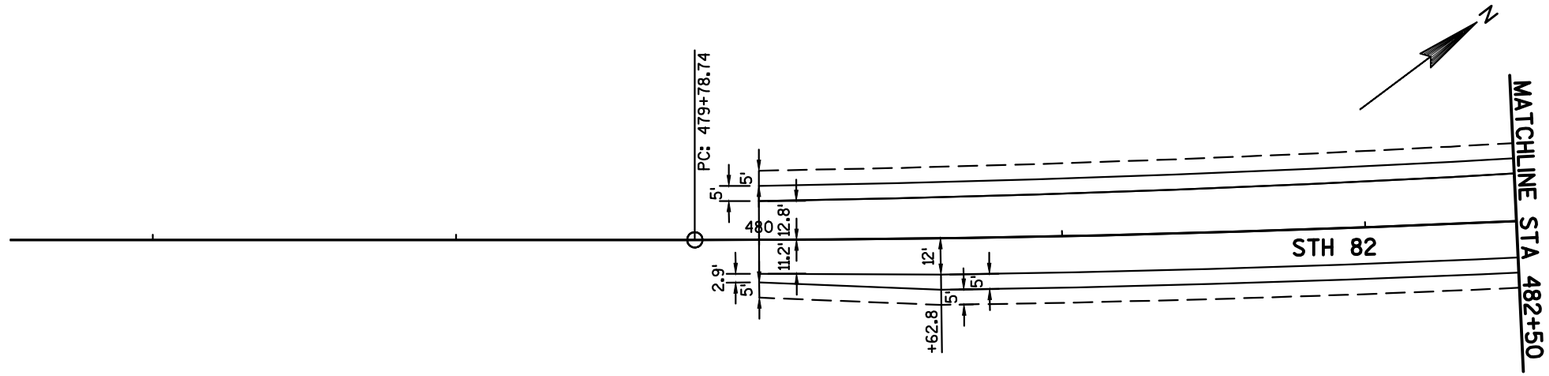
CURVE S.E. DATA
P.I. STA. 567+34.72

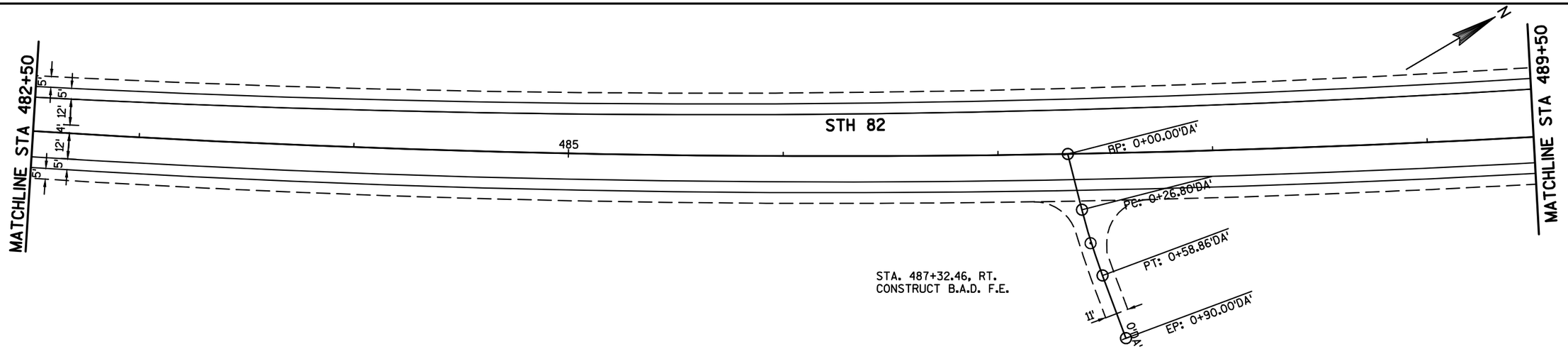
554+97.24	-2.00%	END NORMAL CROWN
555+50.70	0.00%	LEVEL CROWN
556+04.17	2.00%	REVERSE CROWN
556+81.70	4.90%	BEGIN FULL SUPER
576+61.35	4.90%	END FULL SUPER
577+38.88	2.00%	REVERSE CROWN
577+92.35	0.00%	LEVEL CROWN
578+45.82	-2.00%	END NORMAL CROWN

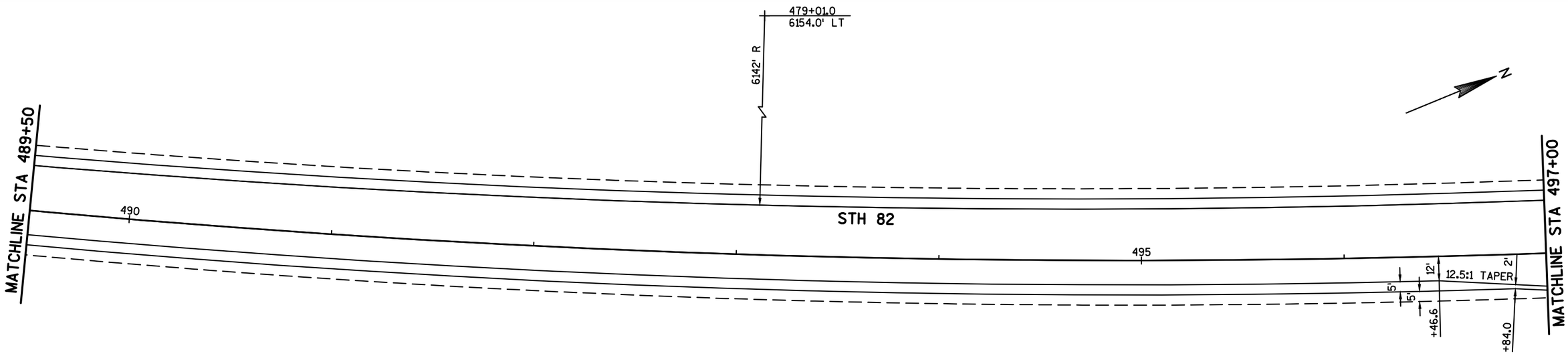
CURVE S.E. DATA
P.I. STA. 23+38.78'Z'

15+71.19'Z'	-2.00%	END NORMAL CROWN
16+19.00'Z'	0.00%	LEVEL CROWN
16+66.80'Z'	2.00%	REVERSE CROWN
17+17.00'Z'	4.10%	BEGIN FULL SUPER
29+23.88'Z'	4.10%	END FULL SUPER
29+74.07'Z'	2.00%	REVERSE CROWN BEGIN
33+52.19'Z'	2.00%	REVERSE CROWN END
34+00.00'Z'	0.00%	LEVEL CROWN
34+47.80'Z'	-2.00%	END NORMAL CROWN

2







PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN DETAILS	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\021201_PD.DWG PLOT DATE : 4/27/2017 2:33 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:50_XREF
WISDOT/CADDS SHEET 42

2

N

NOTE:
ALL ELEVATIONS ARE GIVEN TO THE FLANGE OF THE CURB & GUTTER UNLESS OTHERWISE NOTED.

TYPE A2 INTERSECTION (MODIFIED)

MATCHLINE STA 497+00

STH 82

CONCRETE CORRUGATED MEDIAN

1' 12.5:1 TAPER 24' 14' 12' +00.0 +34.0 +96.6 5' 5' 500 +33.2 15' 12' 2' 1'

PT 860.57

STA 501+42.0
40.0' LT

MID RAD. 860.66

501+19.21
2.00' LT
PC 860.87

STA 501+77.6
40.8' LT

STA 502+10.00 =
STA 10+00.00'HH'

479+78.7
5960.0' LT

5933' R

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

+30.0

STA 503+07.9
27.2' RT
861.73

1'-6" OR 2'-6" RADIUS AS REQUIRED

3/4" EXPANSION JOINT MATERIAL

C

C

C

CONCRETE CURB & GUTTER SLOPED 30-INCH TYPE J

NOTE:
ISLAND CORNER WILL BE PAID AS CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J

22" 2'-0" 2"

PLAN VIEW

PAVEMENT

22" 2'-0" 2"

CONCRETE SIDEWALK 5-INCH

6"

BASE AGGREGATE DENSE 1¼-INCH

SECTION C - C

ISLAND CORNER DETAIL
(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

STA 502+30.8, 28.4' RT
(CENTER OF 2.5' RADIUS)

MID RAD. 861.25

PT 861.26

PC 861.19

PC 861.35

MID RAD. 861.37

STA 502+55.2, 27.0' RT
(CENTER OF 2.5' RADIUS)

SEE ISLAND CORNER DETAIL (TYP.)

PT 861.24

REVERSE SLOPE CURB & GUTTER

CONCRETE SIDEWALK 5-INCH

CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J

PT 858.31

STA 8+95.2'HH', 17.1' RT
(CENTER OF 1.5' RADIUS)

MID RAD. 858.12

PC 858.19

ISLAND DETAIL

10' TYPICAL

24'

81°51'0"'

EP: 10+00.00'HH'

MID RAD. 860.98

PT 860.92

STA 9+47.5'HH'
25.6' RT

26'

24'

MID RAD. 861.10

STA 9+40'HH'
75.0' RT

3'

17'

MATCHLINE STA 504+00

465' R

STA 501+43.6, 74.0' RT
STA 9+36.7, 77.0' LT

+43.6
861.60

50' R

500+22.5
450' RT

STA 9+57.0'HH'
39.1' LT

+36.4
859.74

27'

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

STA 9+44'HH'
76.2' RT

245' R

+76.2

5'

SEE ISLAND DETAIL

14'

20'

STA. 9+33'HH', 27' LT
ASPHALTIC FLUME REQ'D

PT: 8+67.81'HH'

STA 9+00'HH'
65.0' RT

STA 503+23.7, 79.9' RT
STA 8+05.7, 102.8' RT

STA 9+23.0'HH'
50.6' RT
859.39

STA. 9+19'HH', 49' RT
ASPHALTIC FLUME REQ'D

+36.2

12'

3'

12'

+11.0

3'

8'HH'

CTH HH

PC: 7+67.52'HH'

STA 503+76.2
262' RT

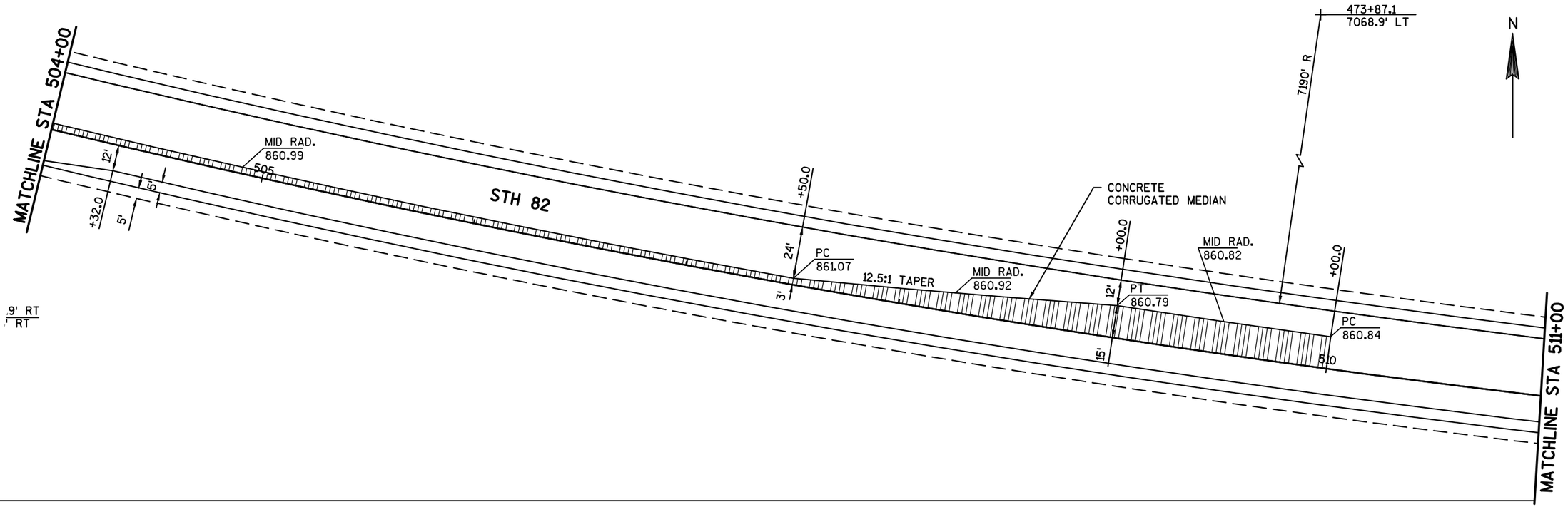
+50.0

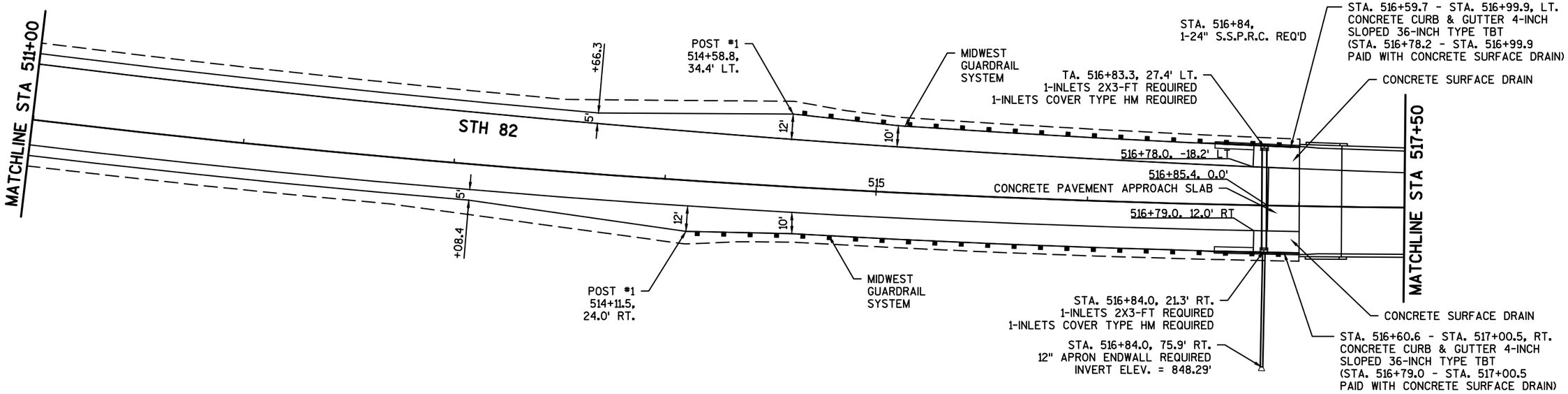
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN DETAILS	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\021201_PD.DWG PLOT DATE : 4/27/2017 2:33 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:50_XREF

WISDOT/CADDS SHEET 42

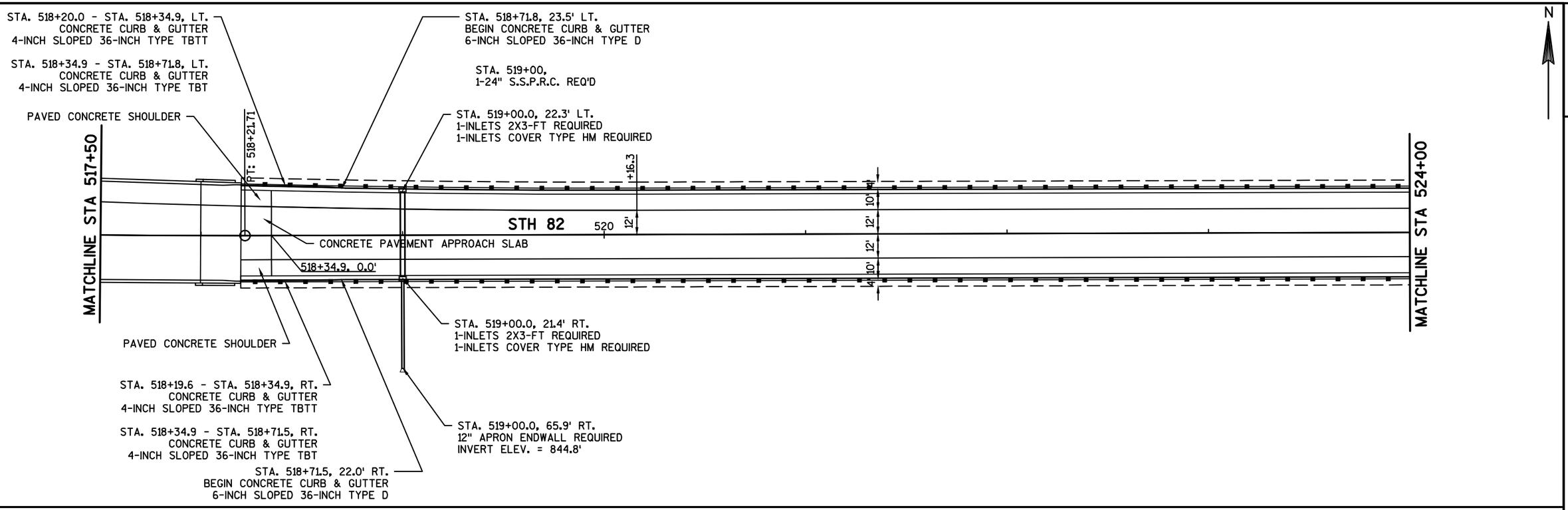
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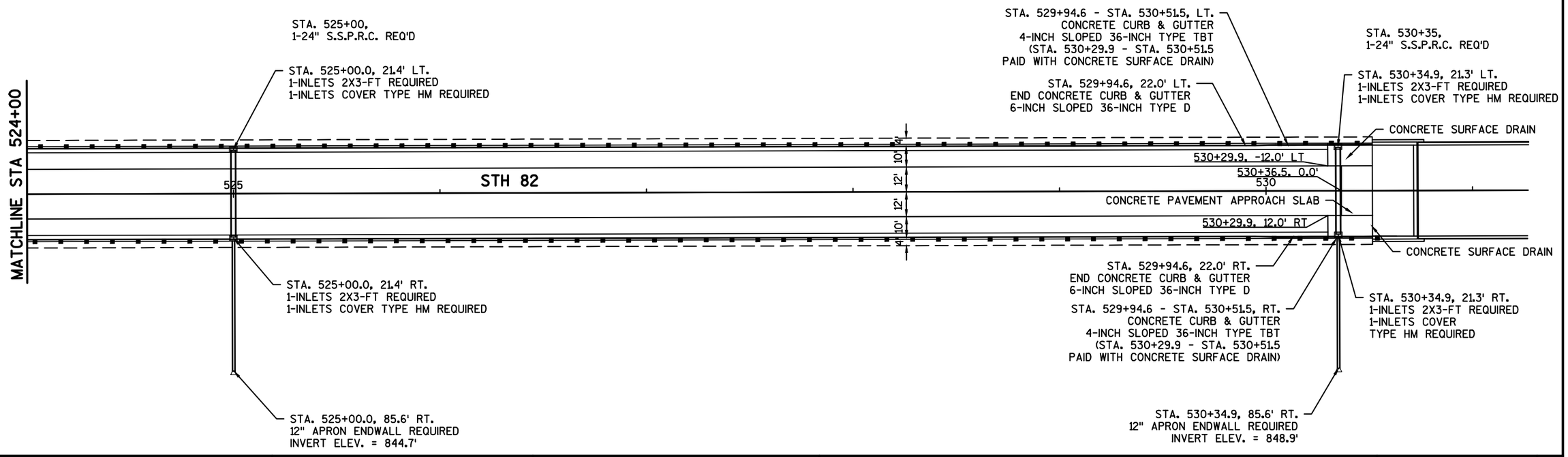




PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN DETAILS	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\021201_PD.DWG PLOT DATE : 4/28/2017 9:12 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:50_XREF
WISDOT/CADDS SHEET 42



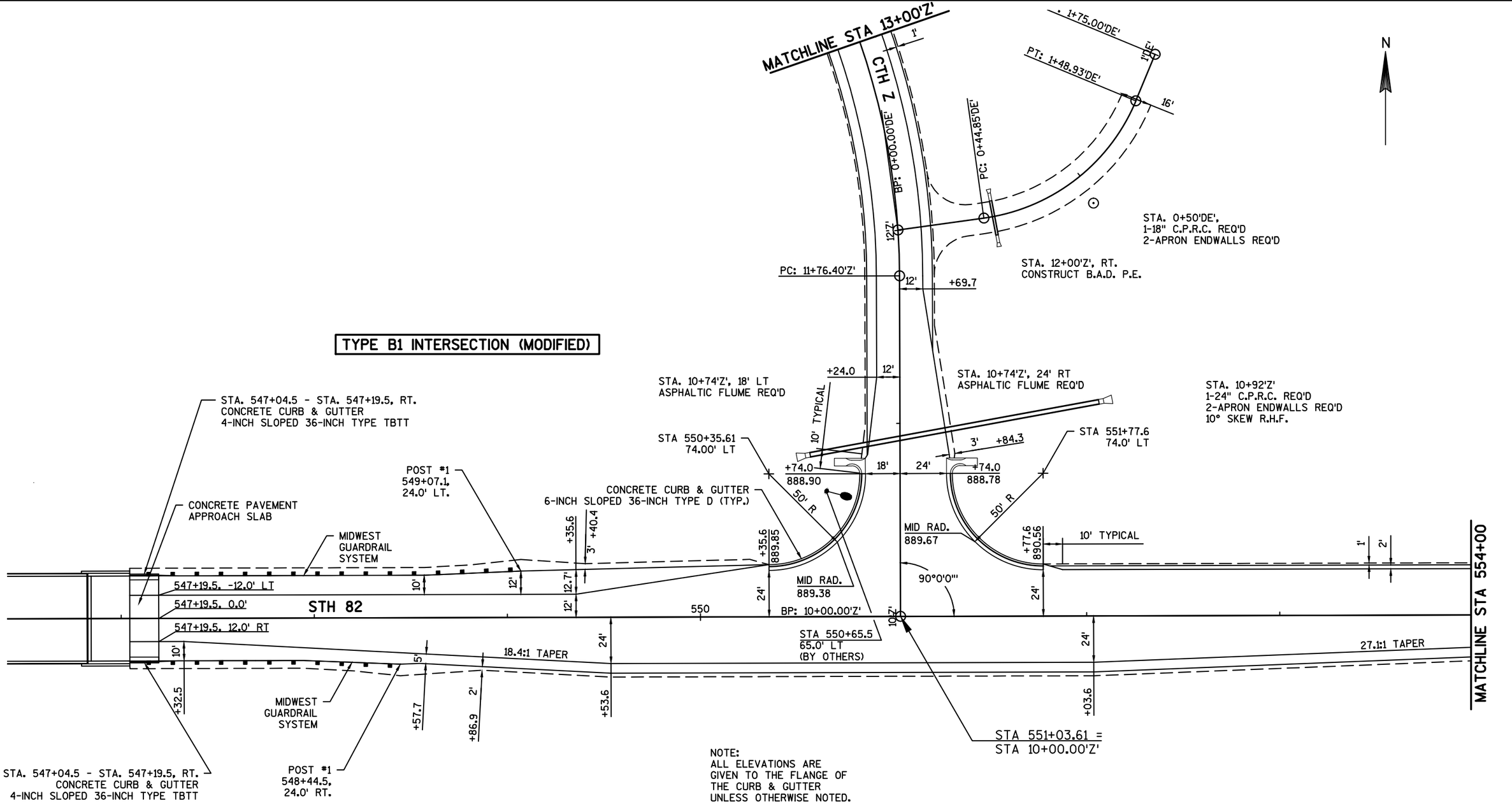


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN DETAILS	SHEET E

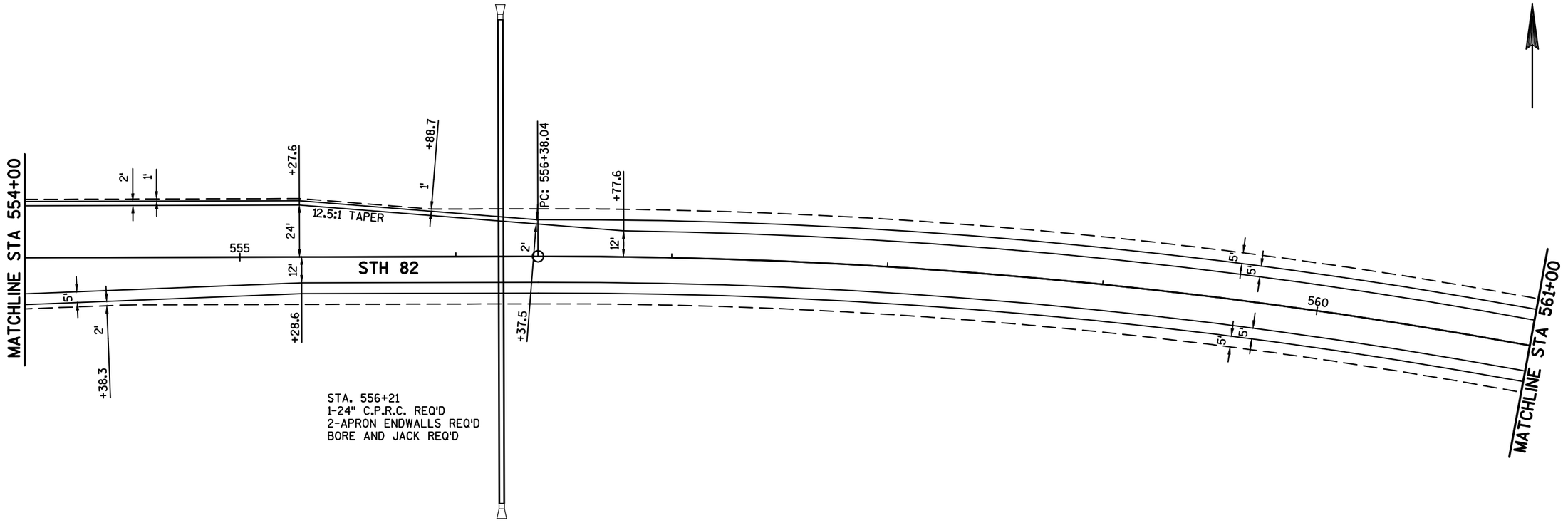
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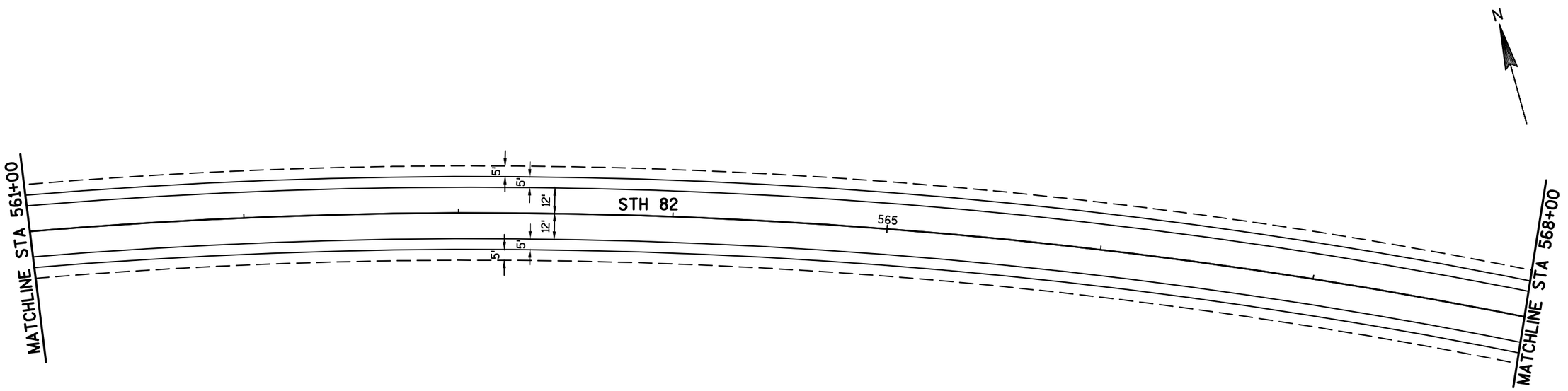
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TYPE B1 INTERSECTION (MODIFIED)

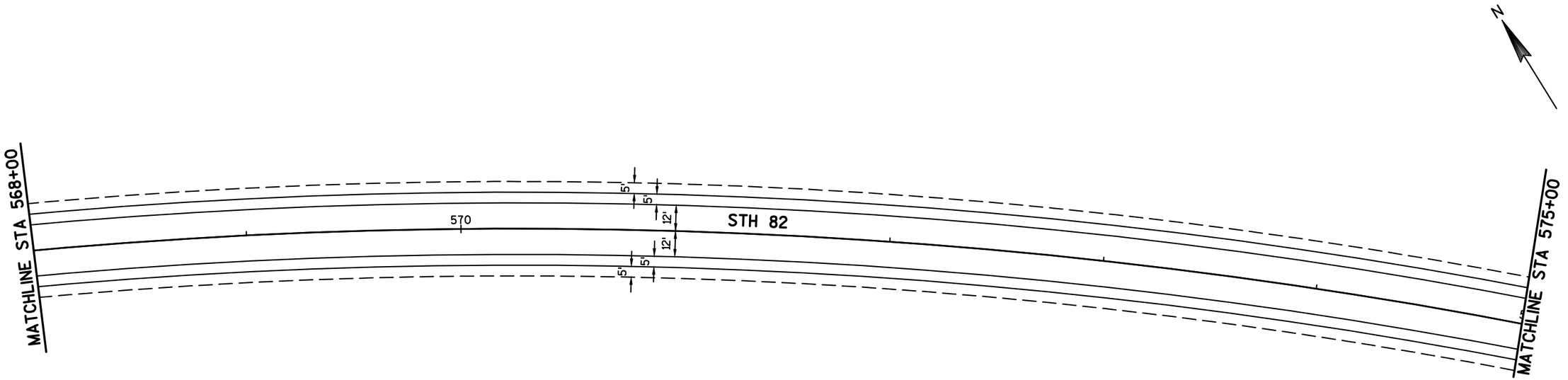


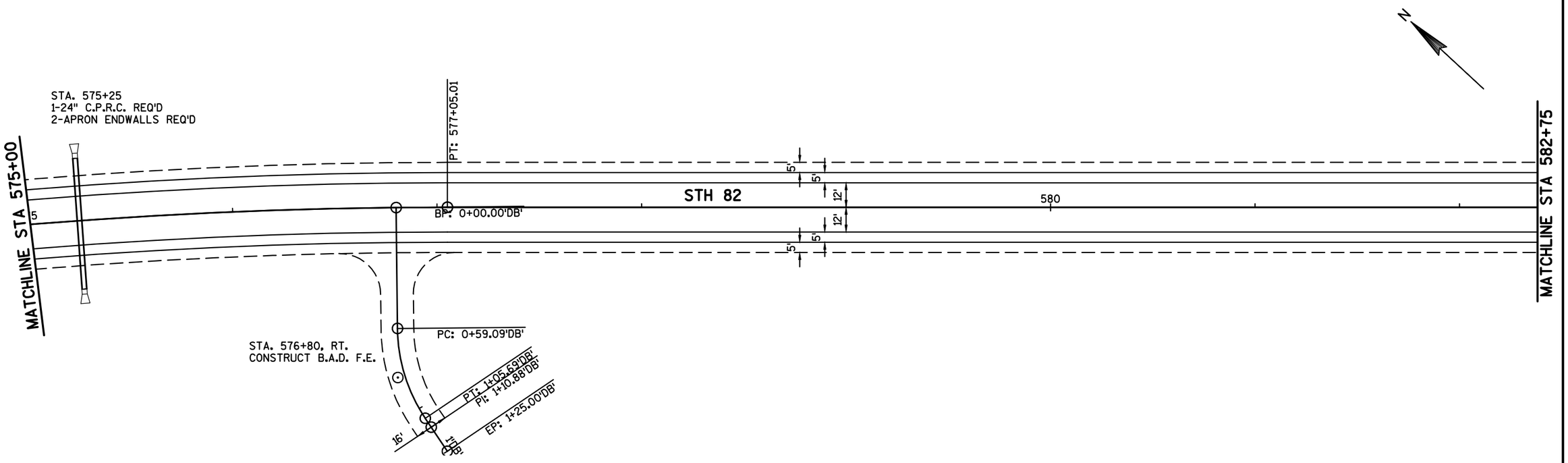
NOTE:
ALL ELEVATIONS ARE GIVEN TO THE FLANGE OF THE CURB & GUTTER UNLESS OTHERWISE NOTED.


MATCHLINE STA 554+00
2'
1'
+27.6
+88.7
1'
PC: 556+38.04
+77.6
12.5:1 TAPER
24'
555
2'
12'
STH 82
5'
2'
+38.3
+28.6
+37.5
560
5'
5'
5'
5'
MATCHLINE STA 561+00
STA. 556+21
1-24" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D
BORE AND JACK REQ'D
N


MATCHLINE STA 561+00
5'
5'
12'
STH 82
565
12'
5'
5'
MATCHLINE STA 568+00
N

2

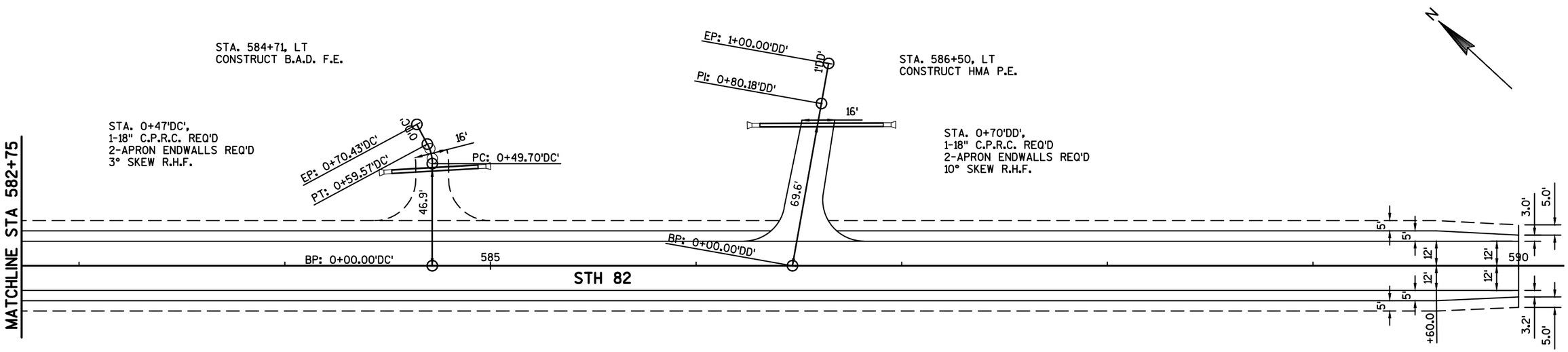




PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN DETAILS	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\021201_PD.DWG PLOT DATE : 4/27/2017 2:33 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : *********

2



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN DETAILS	SHEET 38	E

2

2

MATCHLINE STA 13+00'Z'

PT: 14+47.09'Z'

PC: 16+84.33'Z'

MATCHLINE STA 20+00'Z'

CTH Z

14'Z'

16'Z'

18'Z'

1'

5'

12'

12'

5'

1'

STA. 21+37'Z', LT.
CONSTRUCT HMA P.E.

20'

2'DF'

PC: 1+82.03'DF'

STA. 21+00'Z', 31' LT
1-INLETS MEDIAN 1 GRATE REQ'D
1-TYPE MS COVER REQ'D

1-18" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D
10° SKEW R.H.F.

MATCHLINE STA 20+00'Z'

BP: 0+00.00'DF'

22'Z'

24'Z'

CTH Z

STA. 25+34.2'Z', RT
CONSTRUCT B.A.D. P.E.

STA. 25+81'Z'
1-24" C.P.R.C. REQ'D - SKEWED
2-APRON ENDWALLS REQ'D

BP: 0+00.00'DG'

PC: 0+00.00'DG'

PT: 0+54.62'DG'

STA. 0+37'DG",
CONSTRUCT B.A.D. P.E.
1-18" C.P.R.C. REQ'D - SKEWED
2-APRON ENDWALLS REQ'D
26° SKEW L.H.F.

11'

PT: 0+97.41'DG'

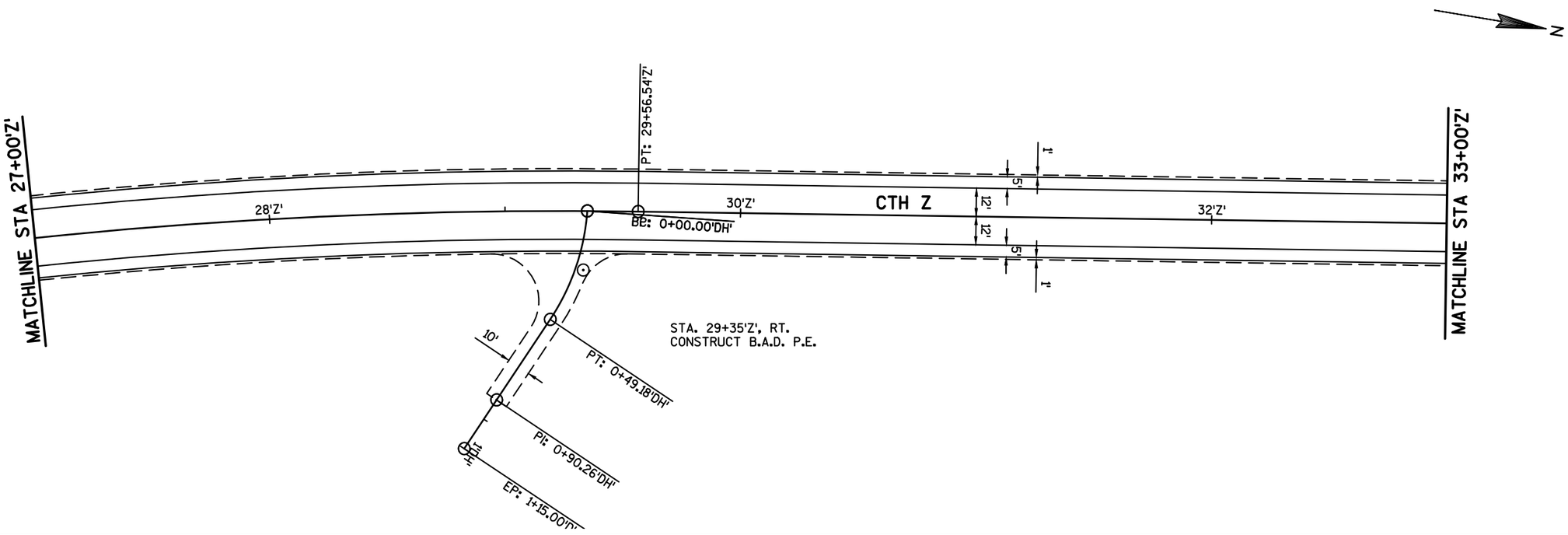
1+25.00'DG'

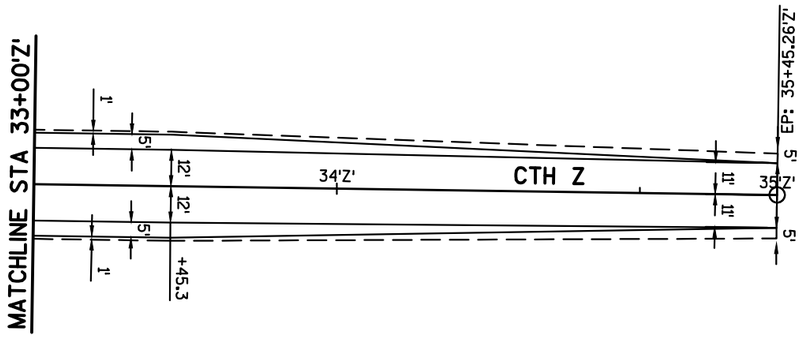
26'Z'

MATCHLINE STA 27+00'Z'

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN DETAILS	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\021201_PD.DWG PLOT DATE : 5/1/2017 12:38 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42







PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN DETAILS	SHEET 40	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\021201_PD.DWG PLOT DATE : 4/27/2017 2:33 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

STA. 482+75, LT - STA. 508+00, LT
EROSION MAT, SALVAGED TOPSOIL AND
TEMPORARY SEED REQUIRED
FROM THE TEMPORARY WIDENING
SHOULDER POINT TO THE SLOPE
INTERCEPT

SLOPE INTERCEPT (TYP.)

STH 82

480 481 482 483 484 485 486 487 488 489 490 491 492 493

MATCHLINE STA 495+00

MATCHLINE STA 495+00

SLOPE EMAT
CLASS I TYPE A

SLOPE INTERCEPT (TYP.)

STA. 482+75, LT - STA. 508+00, LT
EROSION MAT, SALVAGED TOPSOIL, AND
TEMPORARY SEED REQUIRED
FROM THE TEMPORARY WIDENING
SHOULDER POINT TO THE SLOPE
INTERCEPT

SLOPE EMAT
CLASS I TYPE A

495 496 497 498 499 500 501 502 503 504 505 506 STH 82 507

STH 82

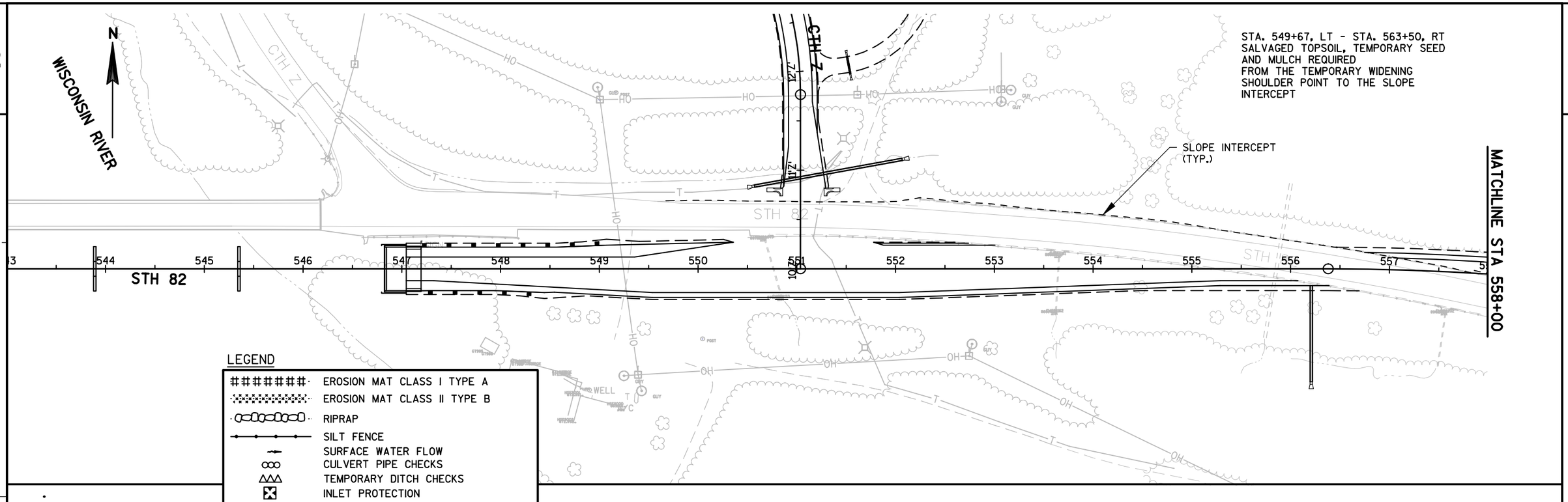
CTH HH

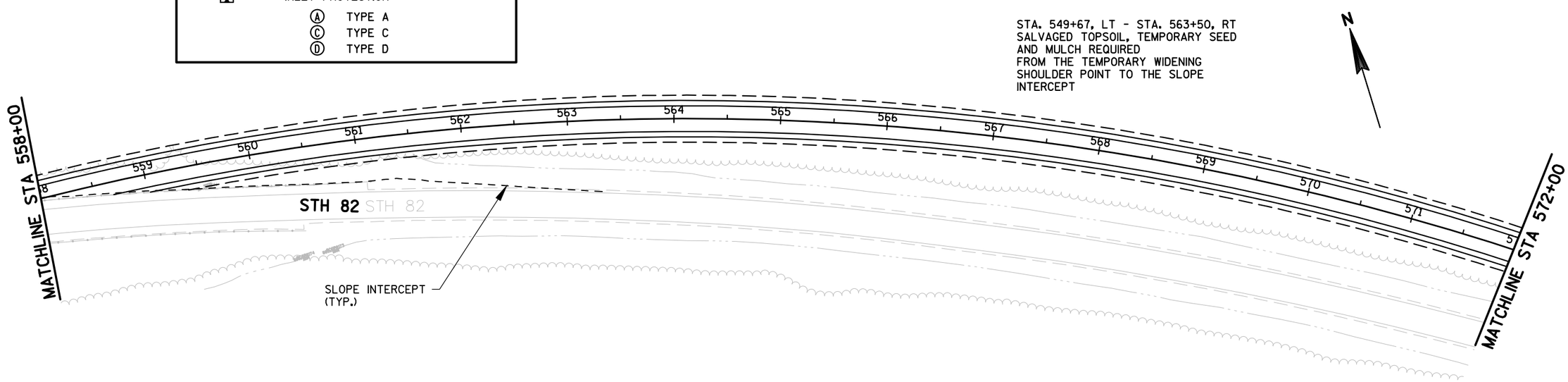
LEGEND

- EROSION MAT CLASS I TYPE A
- EROSION MAT CLASS II TYPE B
- RIPRAP
- SILT FENCE
- SURFACE WATER FLOW
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS
- INLET PROTECTION
  - (A) TYPE A
  - (C) TYPE C
  - (D) TYPE D

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EROSION CONTROL - TEMPORARY WIDENING	SHEET 41	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\022001_EC.DWG PLOT DATE : 8/22/2017 12:32 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:100_XREF





PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EROSION CONTROL - TEMPORARY WIDENING	SHEET 42	E

STA. 573+38, RT - STA. 594+40, LT
SALVAGED TOPSOIL, TEMPORARY SEED
AND MULCH REQUIRED
FROM THE TEMPORARY WIDENING
SHOULDER POINT TO THE SLOPE
INTERCEPT

MATCHLINE STA 567+00

SLOPE INTERCEPT (TYP.)

STH 82

MATCHLINE STA 586+00

LEGEND

#######	EROSION MAT CLASS I TYPE A
	EROSION MAT CLASS II TYPE B
	RIPRAP
	SILT FENCE
	SURFACE WATER FLOW
	CULVERT PIPE CHECKS
	TEMPORARY DITCH CHECKS
	INLET PROTECTION
Ⓐ	TYPE A
Ⓒ	TYPE C
Ⓓ	TYPE D

STA. 573+38, RT - STA. 594+40, LT
SALVAGED TOPSOIL, TEMPORARY SEED
AND MULCH REQUIRED
FROM THE TEMPORARY WIDENING
SHOULDER POINT TO THE SLOPE
INTERCEPT

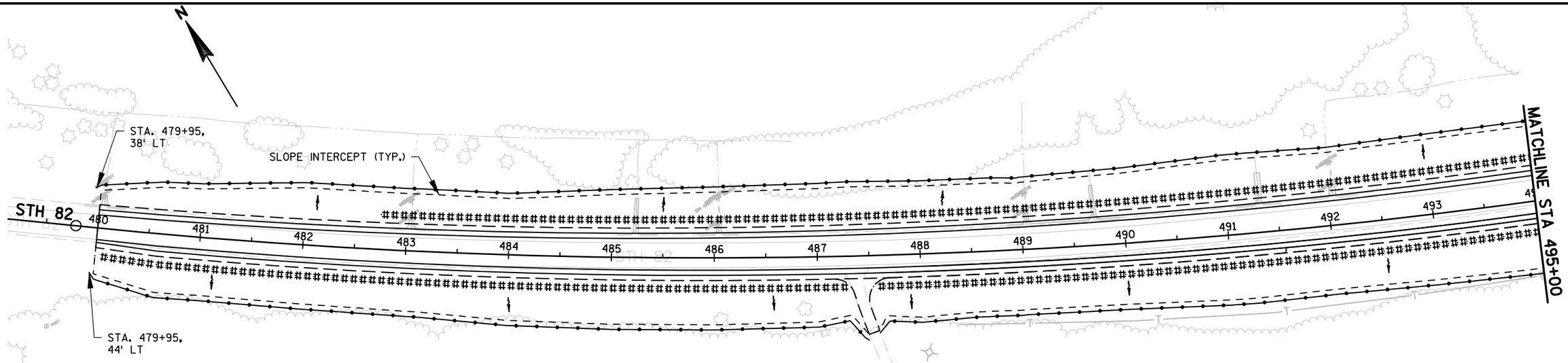
MATCHLINE STA 586+00

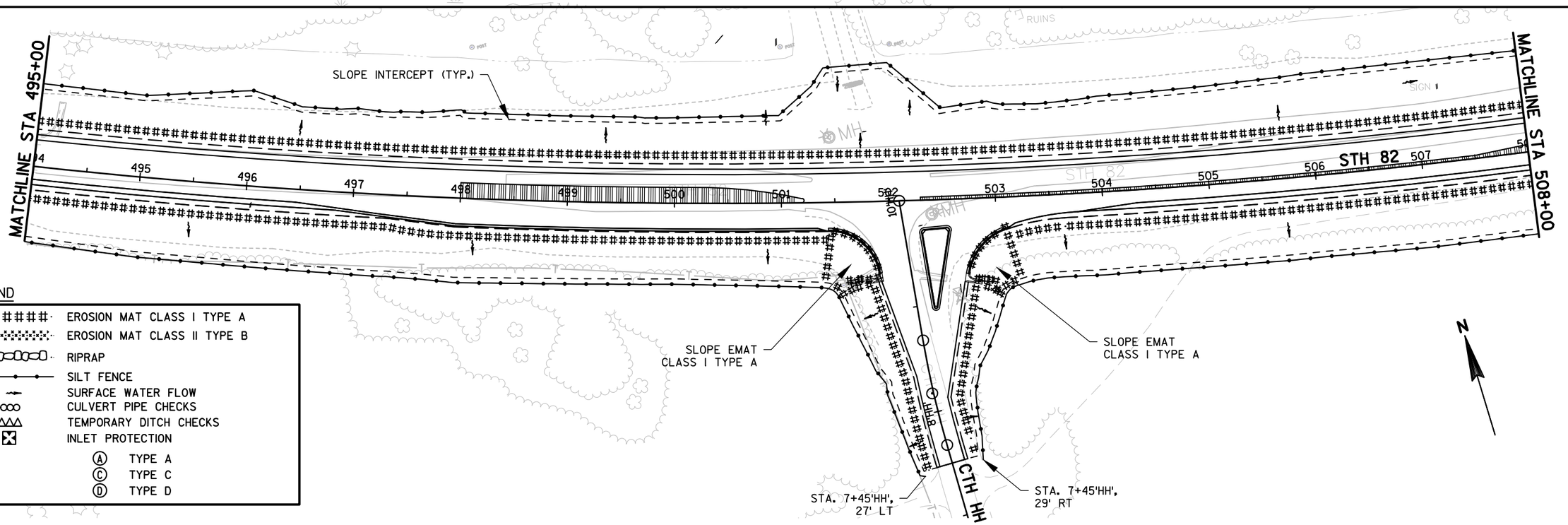
SLOPE INTERCEPT (TYP.)

STH 82

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EROSION CONTROL - TEMPORARY WIDENING	SHEET 43	E

2





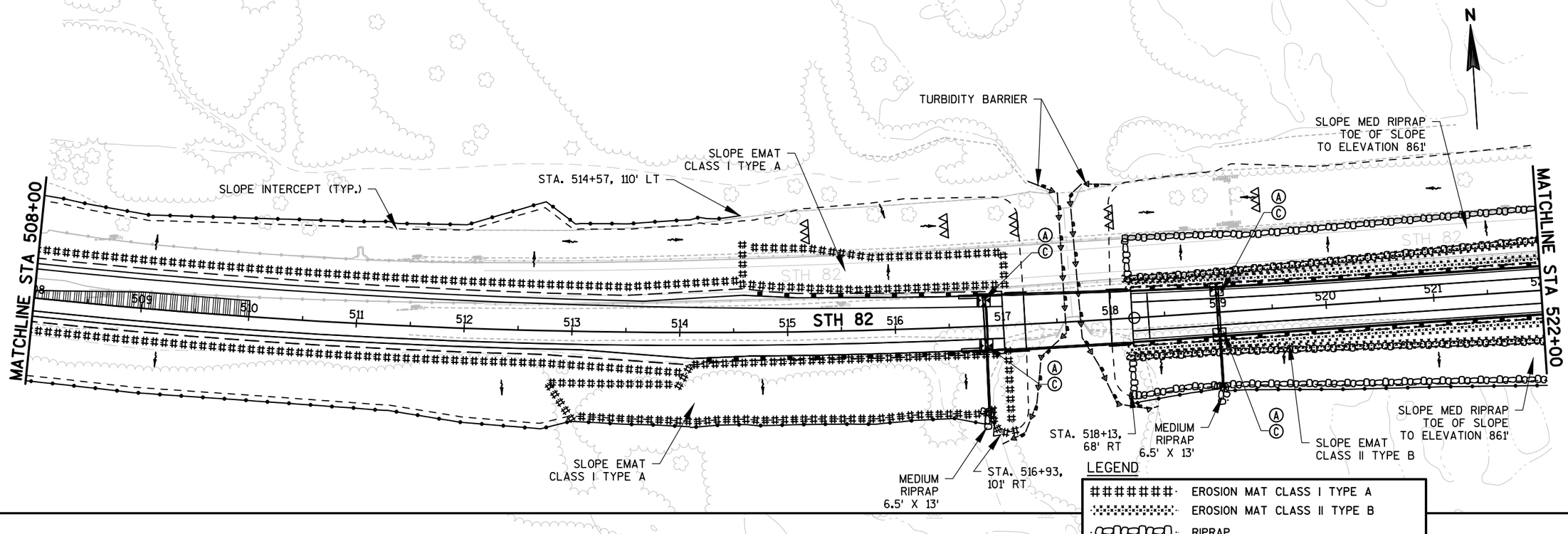
LEGEND

- EROSION MAT CLASS I TYPE A
- EROSION MAT CLASS II TYPE B
- RIPRAP
- SILT FENCE
- SURFACE WATER FLOW
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS
- INLET PROTECTION
  - (A) TYPE A
  - (C) TYPE C
  - (D) TYPE D

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EROSION CONTROL	SHEET 44	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\022001_EC.DWG PLOT DATE : 8/22/2017 12:32 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:100_XREF

2



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EROSION CONTROL	SHEET 45	E

2

N

WISCONSIN RIVER

LEGEND

- EROSION MAT CLASS I TYPE A
- EROSION MAT CLASS II TYPE B
- RIPRAP
- SILT FENCE
- SURFACE WATER FLOW
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS
- INLET PROTECTION
  - (A) TYPE A
  - (C) TYPE C
  - (D) TYPE D

MATCHLINE STA 537+00

STH 82

537 538 539 540 541 542 543 544 545 546 547 548 549 550 551

CTH Z

STA. 546+15, 70' LT

STA. 546+10, 35' LT

STA. 546+00, 21' RT

SLOPE INTERCEPT (TYP.)

SLOPE EMAT CLASS I TYPE A

MATCHLINE STA 552+00

TURBIDITY BARRIER

SLOPE EMAT CLASS II TYPE B

STA. 547+00, 112' RT

SLOPE EMAT CLASS I TYPE A

MATCHLINE STA 552+00

STH 82

552 553 554 555 556 557 558 559 560 561 562 563 564 565 566

STA. 559+00, 121' LT

SLOPE EMAT CLASS I TYPE A

STA. 562+00, 63' LT

SLOPE EMAT CLASS II TYPE B

MEDIUM RIP RAP 6.5'X15'

SLOPE EMAT CLASS I TYPE A

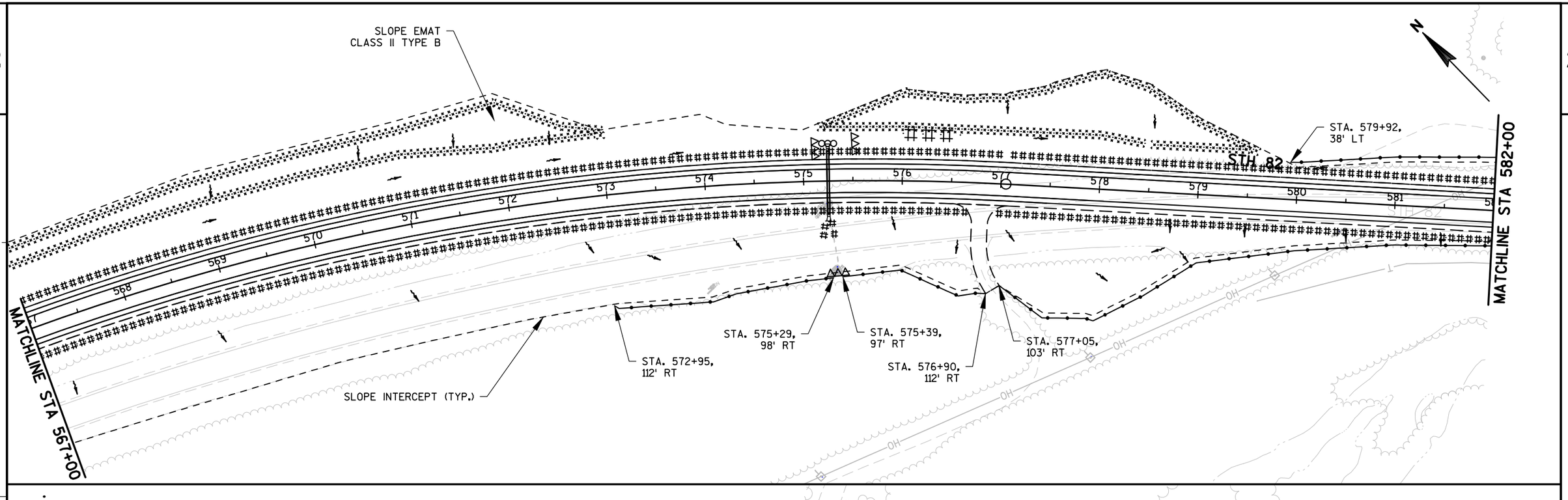
STA. 561+00, 99' RT

SLOPE INTERCEPT (TYP.)

MATCHLINE STA 567+00

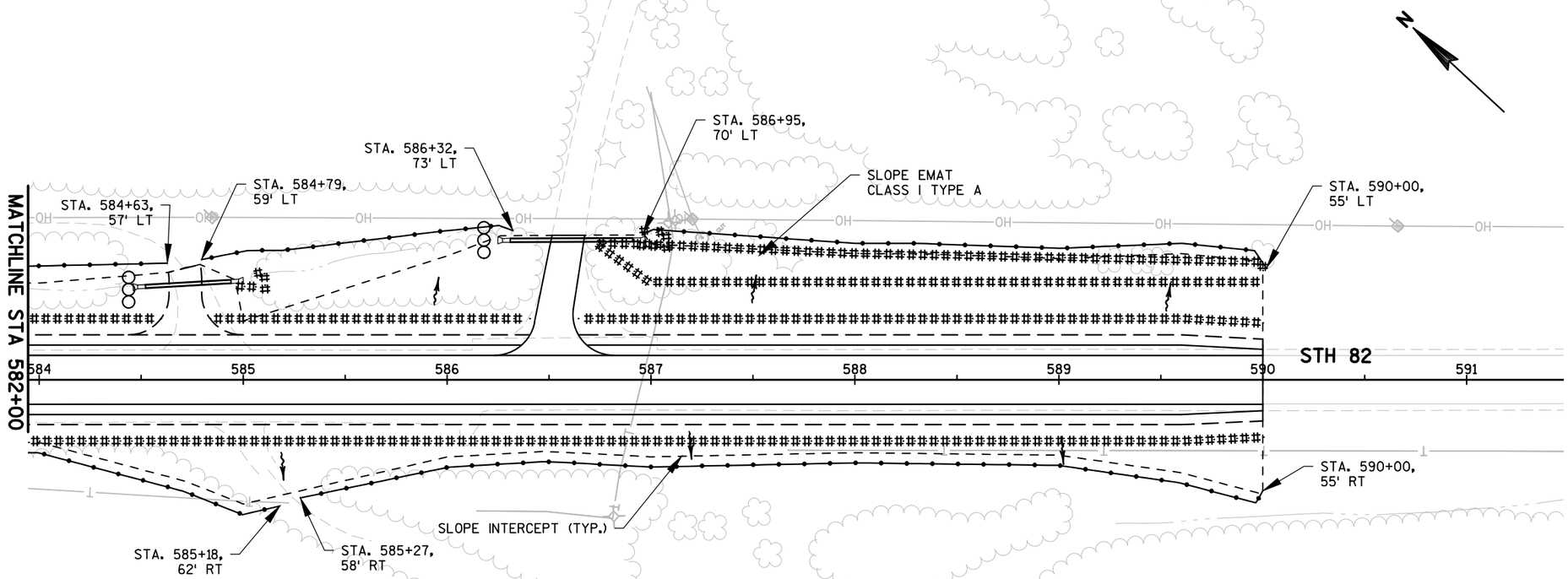
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EROSION CONTROL	SHEET 46	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\022001_EC.DWG PLOT DATE : 8/22/2017 12:32 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT



LEGEND

- EROSION MAT CLASS I TYPE A
- EROSION MAT CLASS II TYPE B
- RIPRAP
- SILT FENCE
- SURFACE WATER FLOW
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS
- INLET PROTECTION
  - (A) TYPE A
  - (C) TYPE C
  - (D) TYPE D



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EROSION CONTROL	SHEET 47	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\022001_EC.DWG PLOT DATE : 8/22/2017 12:32 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EROSION MAT CLASS I TYPE A
- EROSION MAT CLASS II TYPE B
- RIPRAP
- SILT FENCE
- SURFACE WATER FLOW
- CULVERT PIPE CHECKS
- TEMPORARY DITCH CHECKS
- INLET PROTECTION
  - (A) TYPE A
  - (C) TYPE C
  - (D) TYPE D

STH 82

CTH Z

MATCHLINE STA 23+00'Z'

STA. 18+05'Z', 390' LT

SLOPE EMAT CLASS II TYPE B

SLOPE EMAT CLASS I TYPE A

SLOPE INTERCEPT (TYP.)

MEDIUM RIPRAP 8'X100'

STA. 11+75'Z', 75' RT

STA. 11+10'Z', 247' RT

STA. 24+25'Z', 90' LT

STA. 25+70'Z', 68' LT

STA. 25+80'Z', 68' LT

MEDIUM RIP RAP 6.5'X10'

STA. 27+00'Z', 40' LT

MEDIUM RIP RAP 7'X10'

MEDIUM RIPRAP 8'X170'

STA. 31+30'Z', 30' LT

STA. 31+40'Z', 33' RT

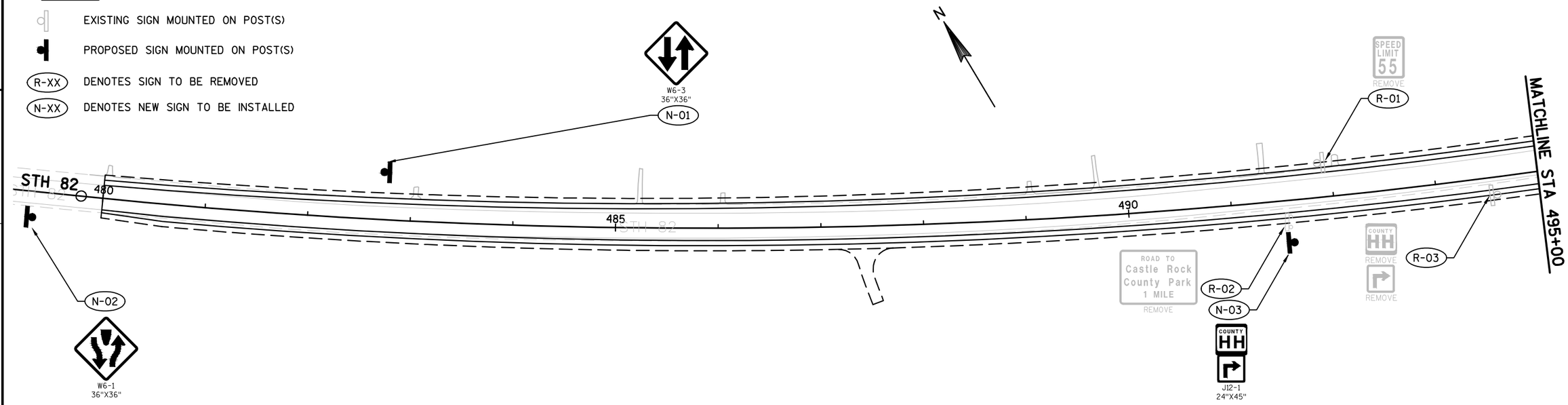
STA. 35+45'Z', 21' LT

STA. 35+45'Z', 23' RT

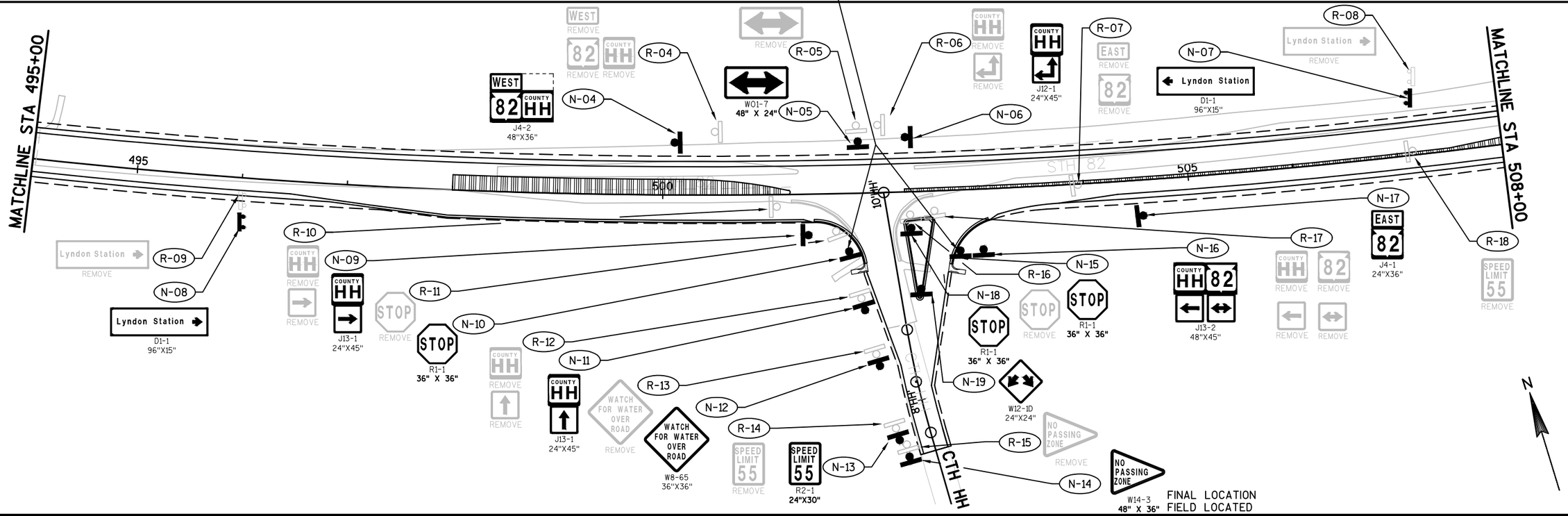
PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EROSION CONTROL	SHEET 48	E

LEGEND

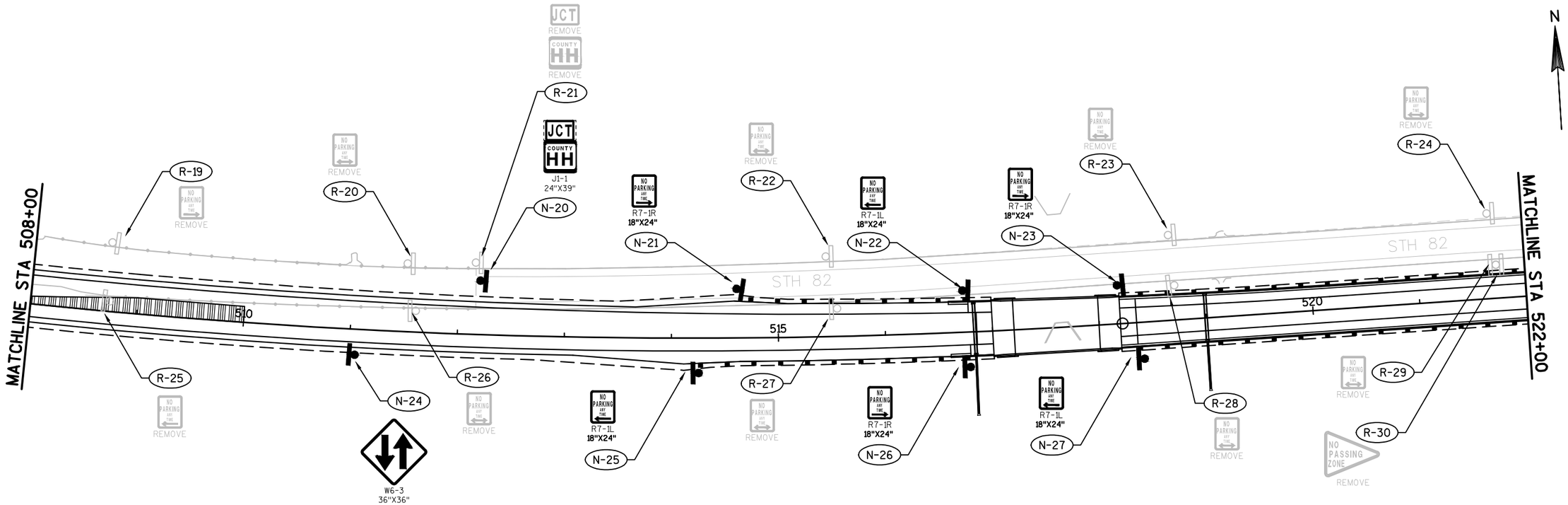
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- (R-XX) DENOTES SIGN TO BE REMOVED
- (N-XX) DENOTES NEW SIGN TO BE INSTALLED

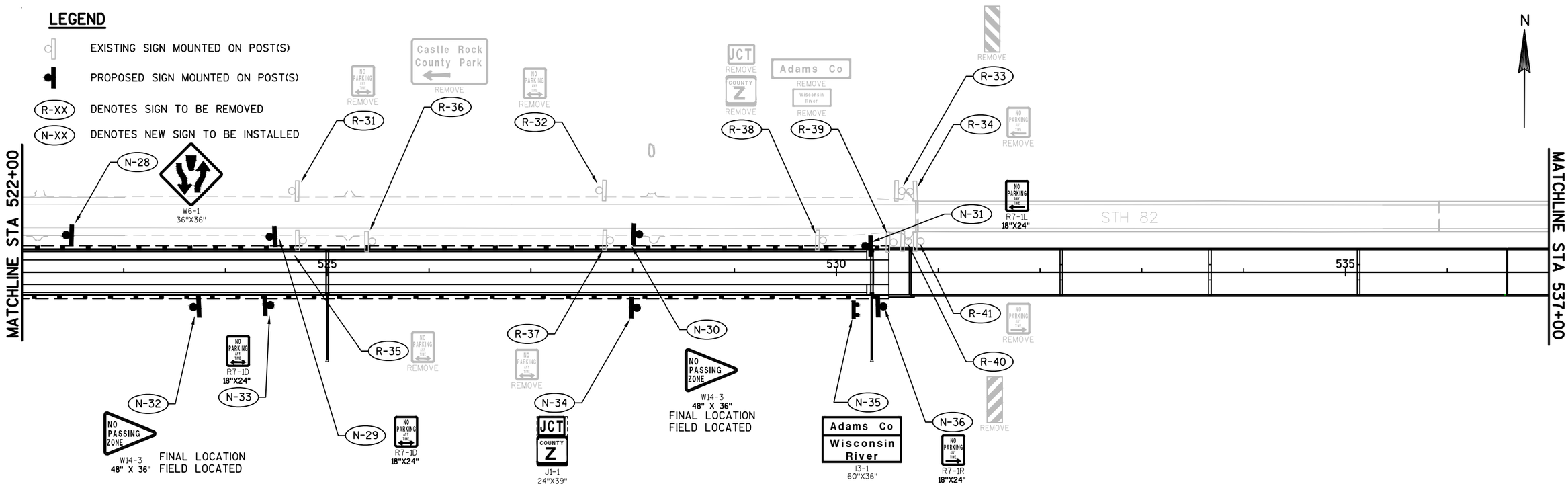


BLINKER STOP SIGNS TO BE REMOVED BY OTHERS. COORDINATE WITH JUNEAU COUNTY HIGHWAY DEPARTMENT

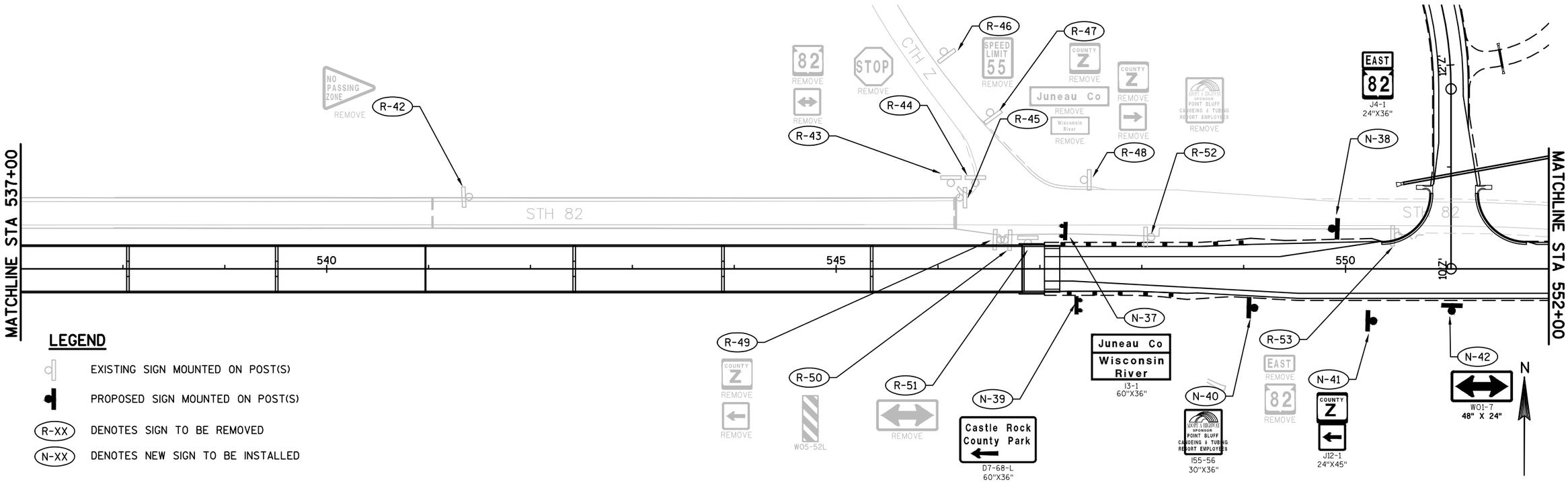


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PERMANENT SIGNING	SHEET	E





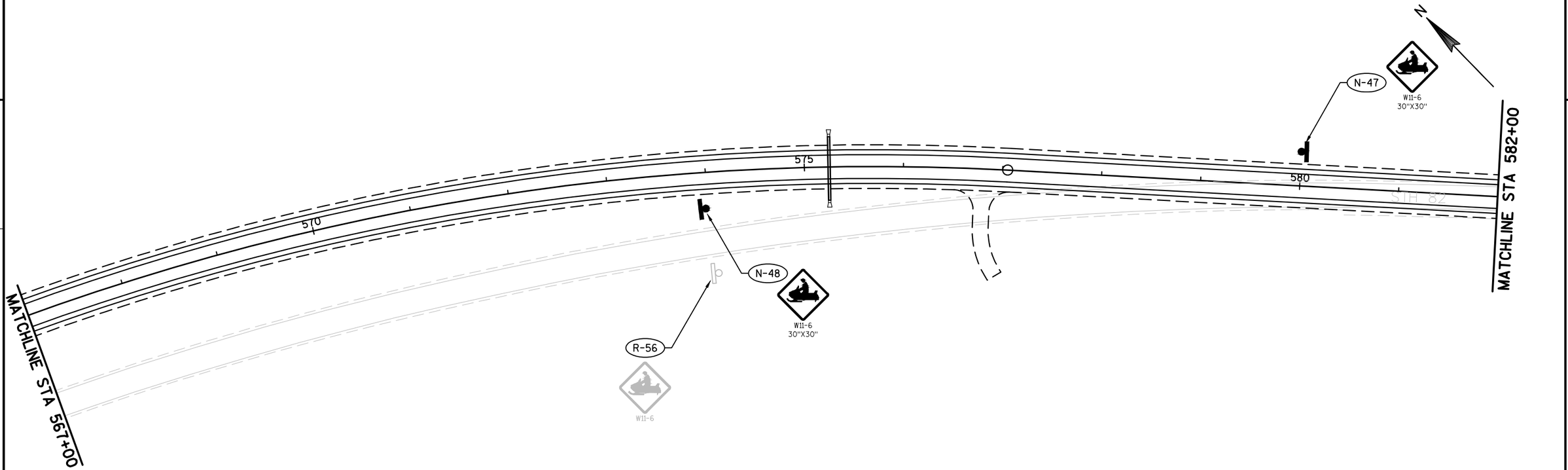
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PERMANENT SIGNING	SHEET 50	E



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- (R-XX) DENOTES SIGN TO BE REMOVED
- (N-XX) DENOTES NEW SIGN TO BE INSTALLED

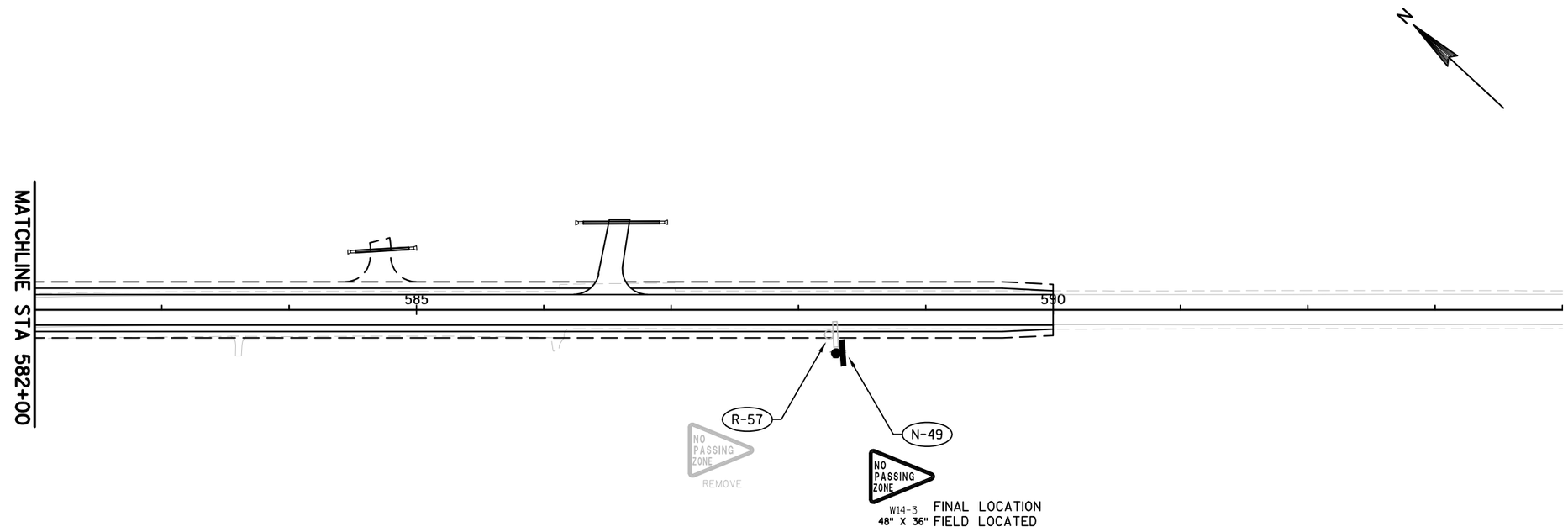
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PERMANENT SIGNING	SHEET 51 E



2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- (R-XX) DENOTES SIGN TO BE REMOVED
- (N-XX) DENOTES NEW SIGN TO BE INSTALLED



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PERMANENT SIGNING	SHEET 52	E

2

N

R-58

W1-6

STOP
REMOVE
R-59

R-60
REMOVE

82
J12-1
24"X45"
N-50

N-51

STOP
R1-1
30" X 30"

W20-1
N-52

JCT
82
J1-1
24"X39"
N-53

N-54

STOP
R1-1
30" X 30"

12'Z'
14'Z'
16'Z'
18'Z'
20'Z'
22'Z'

N-55

COUNTY
Z
M1-5A
24"X24"

W21-2-R
N-56

MATCHLINE STA 23+00'Z'

NO PASSING ZONE
REMOVE
R-61

JCT
REMOVE
82
REMOVE
R-62

W21-2L
N-57

REMOVE
R-64

24'Z'
26'Z'
28'Z'
30'Z'
32'Z'
34'Z'
36'Z'

R-63

NO PASSING ZONE
REMOVE

N-58

W21-2L

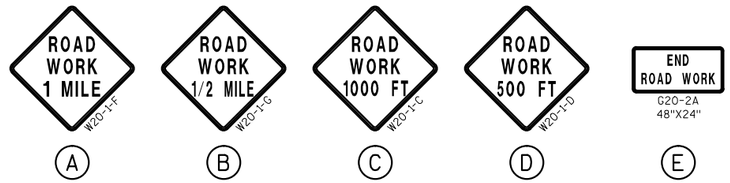
MATCHLINE STA 23+00'Z'

N

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- (R-XX) DENOTES SIGN TO BE REMOVED
- (N-XX) DENOTES NEW SIGN TO BE INSTALLED

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PERMANENT SIGNING	SHEET 53	E



LEGEND

PORTABLE CHANGEABLE MESSAGE BOARD

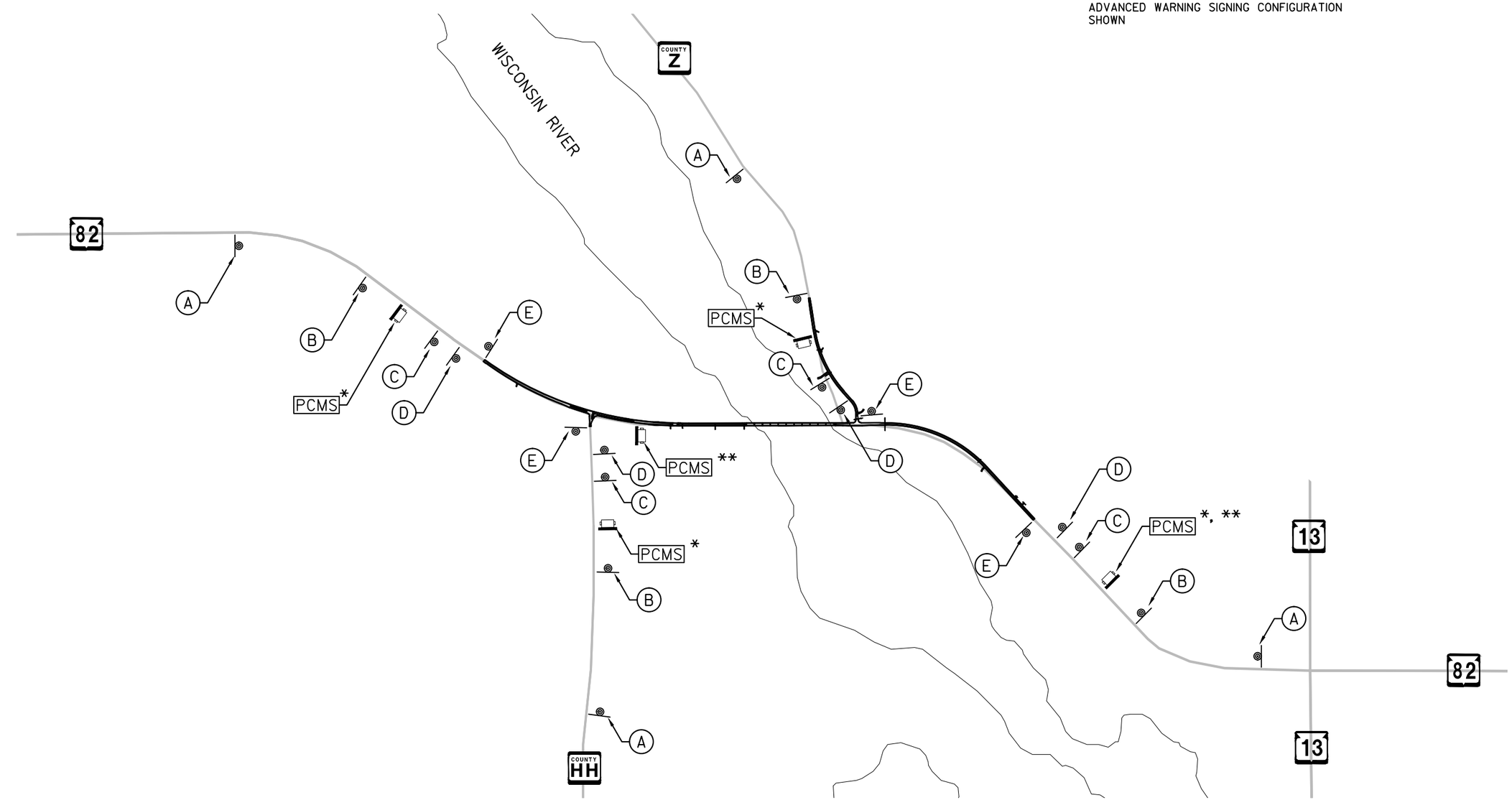
SIGN ON PERMANENT SUPPORT

* USE FOR 7-10 DAYS PRIOR TO TRAFFIC SHIFT

** USE WHEN ROCK BLASTING OR BRIDGE OPERATIONS ARE OCCURRING

NOTE: CTH Z CONSTRUCTED PRIOR TO ADVANCED WARNING SIGNING CONFIGURATION SHOWN

N



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	ADVANCED WARNING SIGNING	SHEET 54	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\023301_AW.DWG PLOT DATE : 8/22/2017 12:49 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:2000 FT

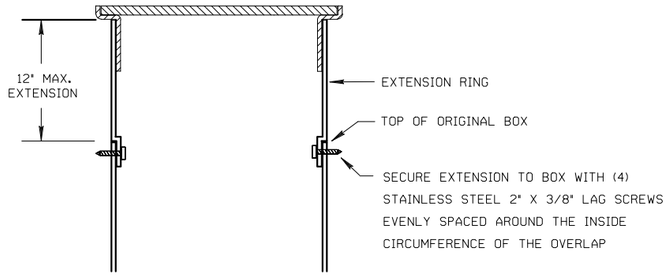
WISDOT/CADDS SHEET 42

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER•• (INSIDE)	A	24	24
BOX DIAMETER•• (OUTSIDE)	B	25	25
BOX LENGTH	C	36	42
COVER	D	25 1/2	25 1/2
FRAME	E	27	27
FRAME	F	25 3/4	25 3/4
FRAME	G	22 1/2	22 1/2
WEIGHT IN POUNDS •			
COVER		50	50

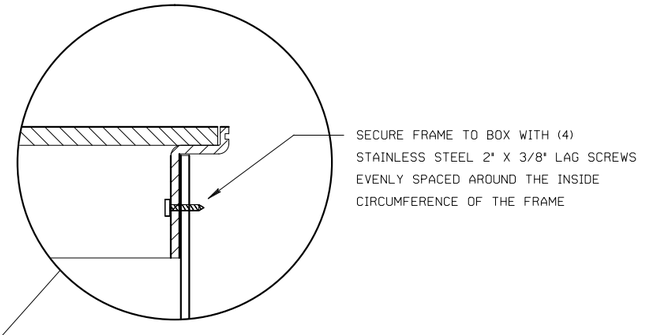
• THE ACTUAL WEIGHT OF THE COVER MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

•• DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

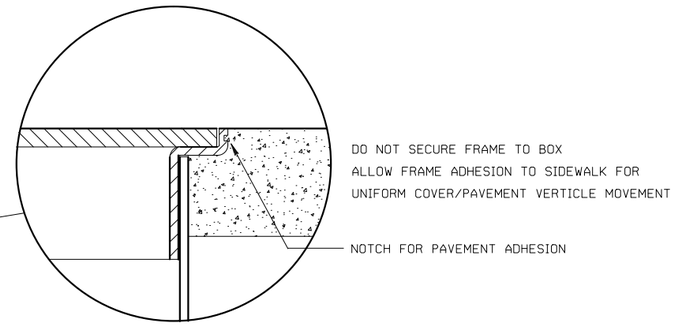


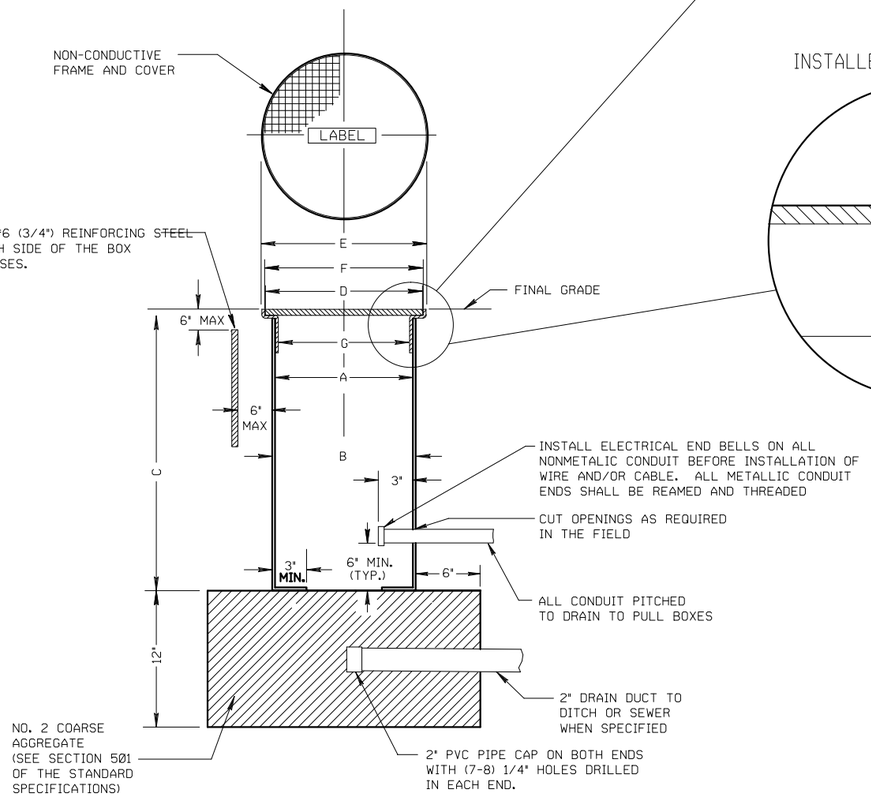
BOX EXTENSION

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK





NON-CONDUCTIVE PULL BOX

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

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 ¼".

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

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

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

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

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL OR LIGHTING SYSTEMS. "WISDOT COMMUNICATIONS" FOR COMMUNICATIONS SYSTEMS.

LEGEND

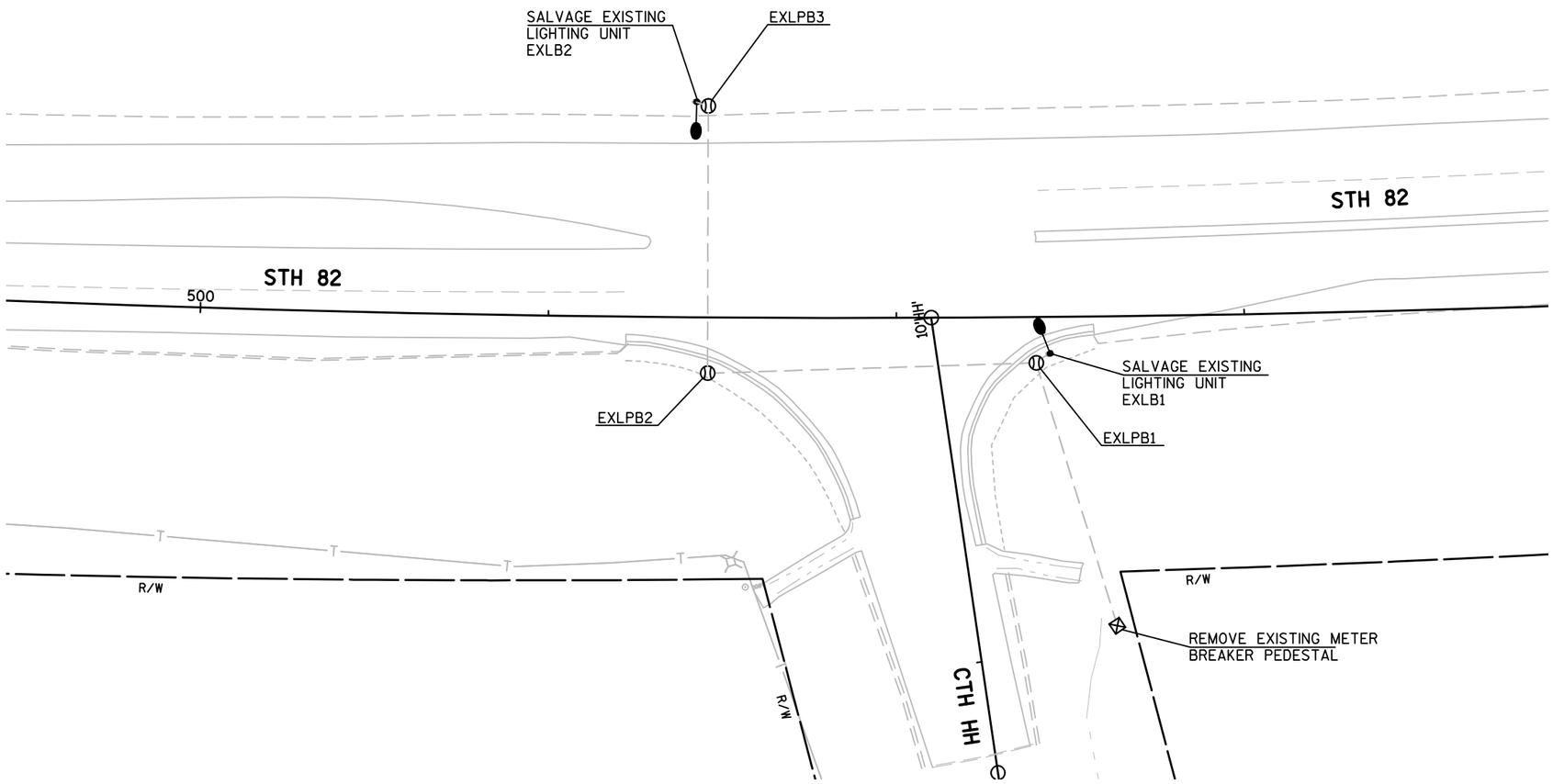
- ⊠ ELECTRICAL SERVICE METER BREAKER PEDESTAL
- NONMETALLIC CONDUIT 2-INCH UNLESS OTHERWISE NOTED
- WISDOT STANDARD ASSEMBLY LED
- PULL BOX

NOTES:

1. GRAYSHADE REPRESENTS EXISTING
2. BOLD REPRESENTS ITEMS TO BE REMOVED

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.
2. SALVAGE EXISTING LIGHT POLE UNITS. SALVAGE TRANSFORMER BASES, LIGHT POLES, AND LUMINAIRE ARMS. DISPOSE OF ALL WIRE IN LIGHT POLES AND CONDUIT. ABANDON CONDUIT IN PLACE.
3. REMOVE LUMINAIRES AT EXLB1 AND EXLB2.



HIGHWAY LIGHTING
STH 82 & CTH HH
JUNEAU COUNTY

DATE: APRIL 2017 PAGE 1 OF 1

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	LIGHTING REMOVAL PLAN	SHEET	E

FILE NAME : \\USMSN1FS001\PROD\DATA\PROJECTS\60317290\900-WORKINGDOCS-CAD\023401_LR.DWG PLOT DATE : 4/19/2017 4:13 PM PLOT BY : TKACHUK, TYLER PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

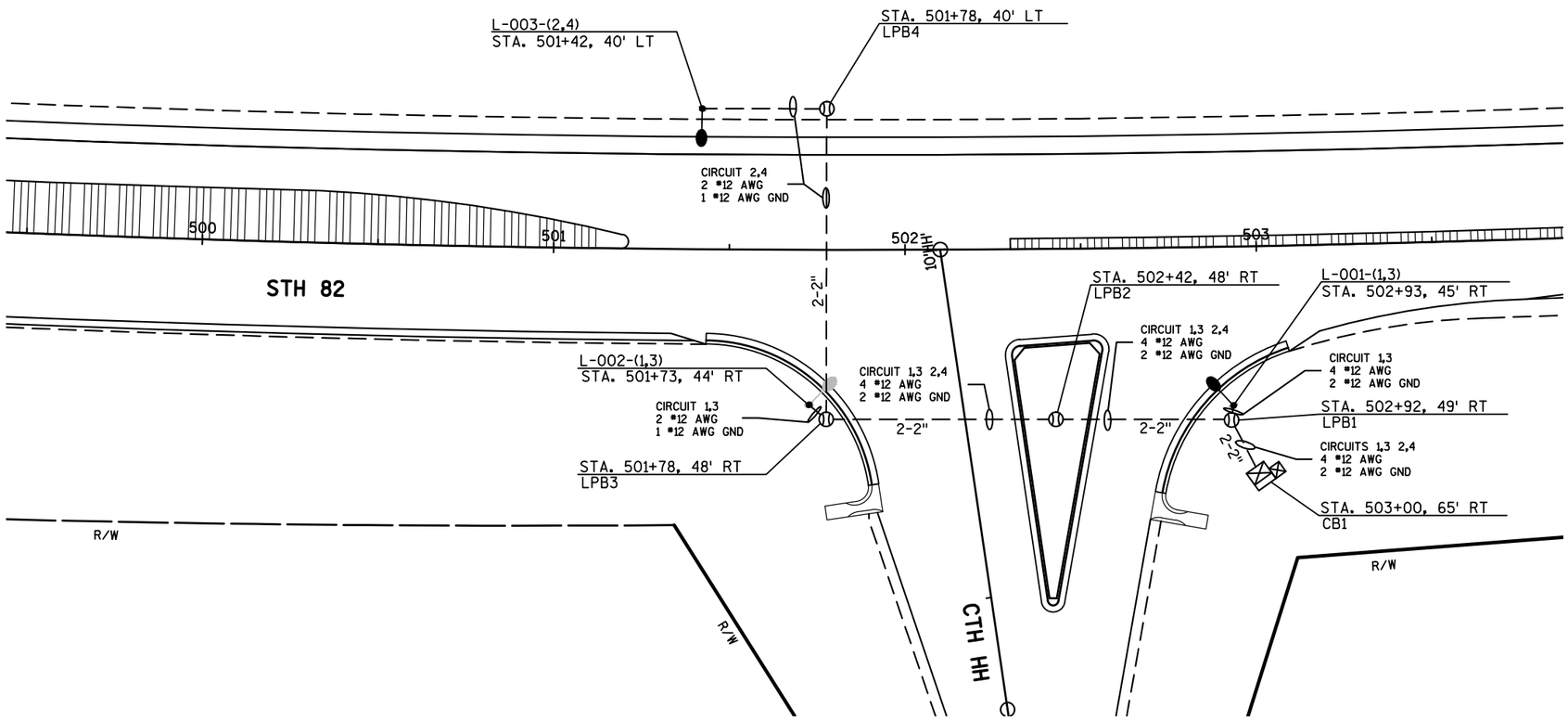
LEGEND

- CONTROL CABINET
- ELECTRICAL SERVICE METER BREAKER PEDESTAL
- NONMETALLIC CONDUIT 2-INCH UNLESS OTHERWISE NOTED
- WISDOT STANDARD ASSEMBLY LED
- PULL BOX, 24" X 42"

L-001-(1,3) — POLE NUMBER, LIGHTING CIRCUITS
STA. 703+33', 33' RT — LOCATION (TO CENTER OF POLE)

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.
2. INSTALL TYPE 5 CONCRETE BASE AND SALVAGED LIGHT POLE UNITS AT L-001 AND L-003.
3. INSTALL TYPE 5 CONCRETE BASE AT L-002.
4. LIGHT POLE, LUMINARIE ARM, AND LUMINAIRE AT L-002 TO BE INSTALLED BY WISDOT. COORDINATE LIGHT POLE INSTALLATION WITH WISDOT AT LEAST 10 DAYS PRIOR TO REQUIRED INSTALLATION. CONTACT WISDOT SW REGION ELECTRICIAN, (608) 785-9080, TO MAKE ARRANGEMENTS. CONTRACTOR TO MAKE ALL ELECTRICAL CONNECTIONS IN LIGHT POLE BASE L-002.
5. INSTALL CB1 AND L-001 AND HAVE OPERATIONAL WITHIN 10 DAYS OF REMOVING POWER TO EXISTING LIGHTING SYSTEM.



1,3 = 2-12AWG 1-12AWG GND
LIGHTING-240V
2,4= 2-12AWG 1-12AWG GND
LIGHTING-240V

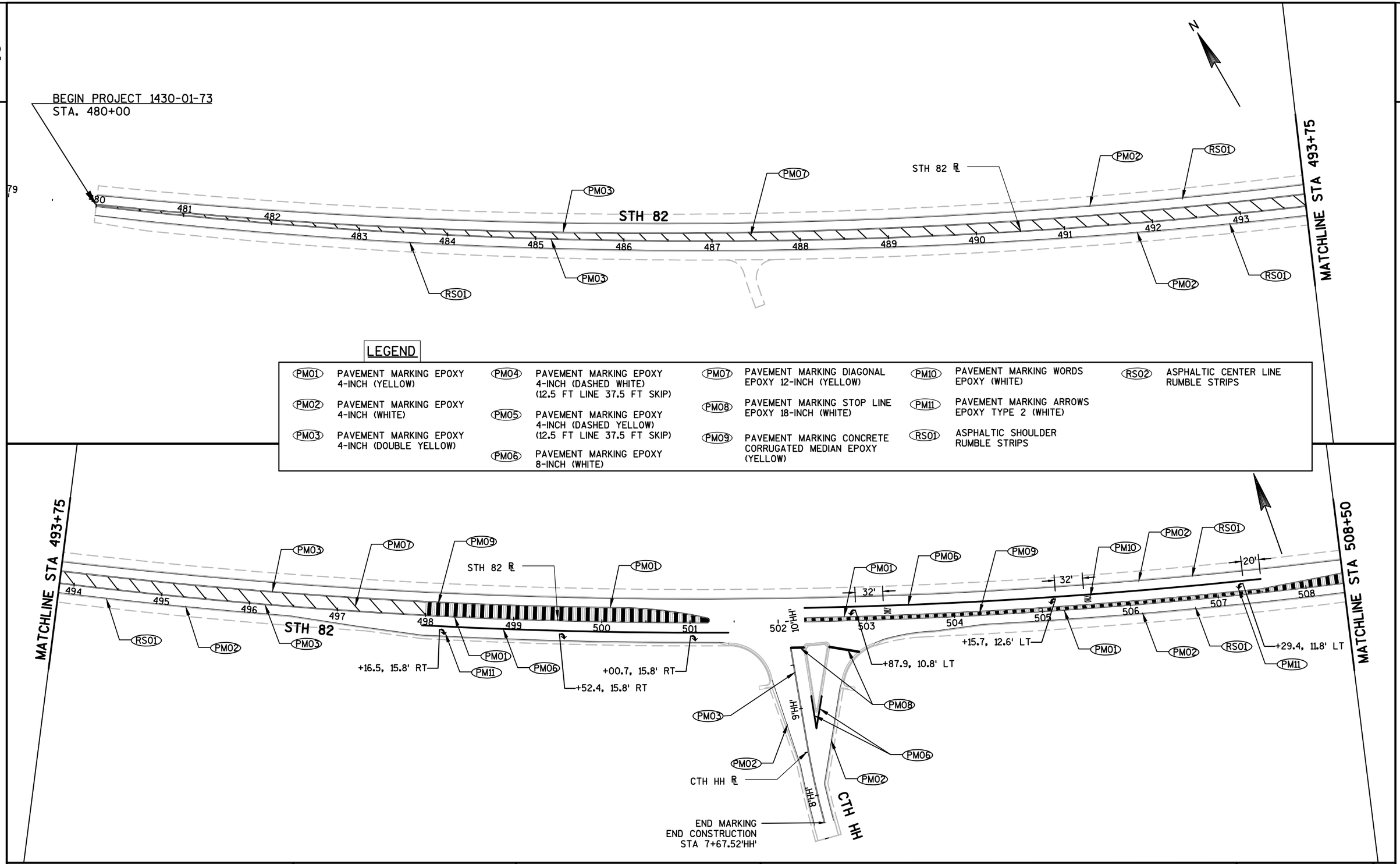
HIGHWAY LIGHTING
STH 82 & CTH HH
JUNEAU COUNTY

DATE: APRIL 2017 PAGE 1 OF 1

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	LIGHTING PLAN	SHEET 57 E

FILE NAME : \\USMSN1FS001\PROD\DATA\PROJECTS\60317290\900-WORKINGDOCS-CAD\023601_LP.DWG PLOT DATE : 4/19/2017 4:13 PM PLOT BY : TKACHUK, TYLER PLOT NAME : PLOT SCALE : 1:40_XREF

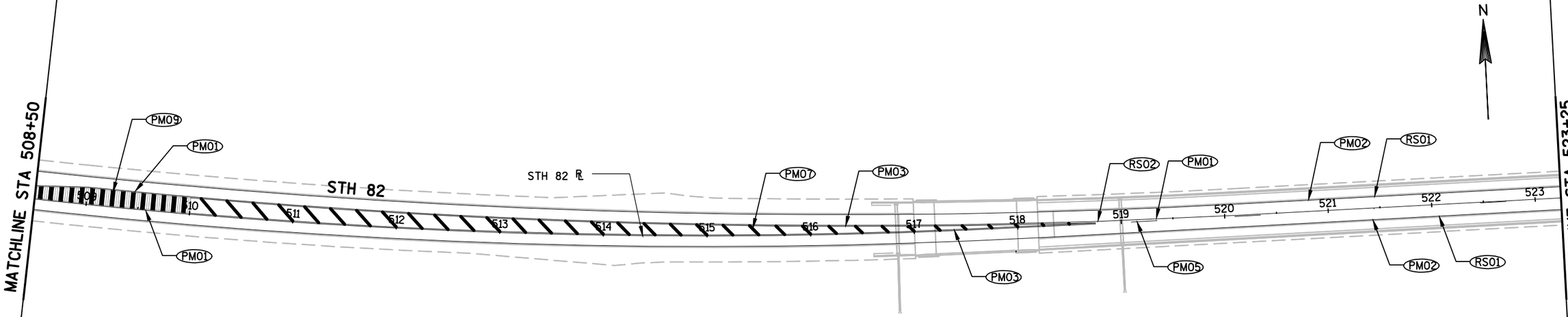
WISDOT/CADDS SHEET 42



LEGEND

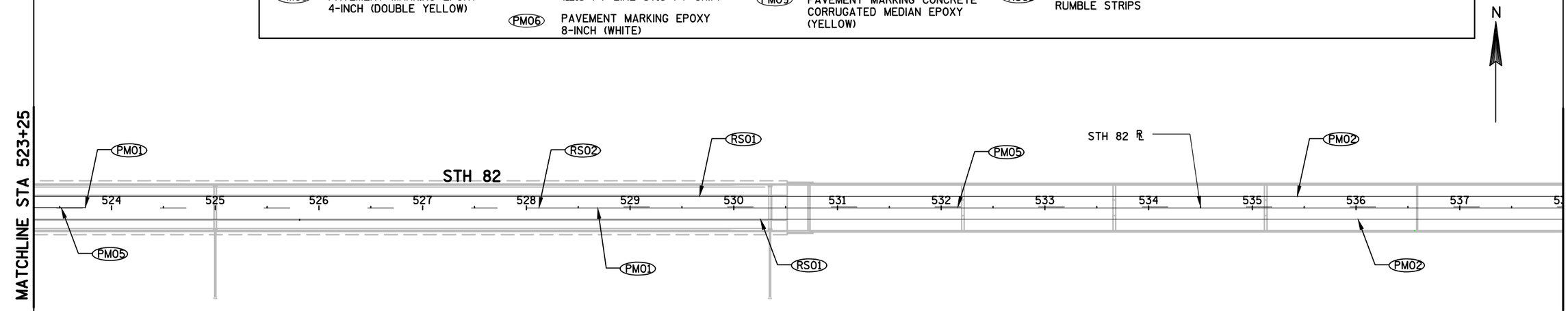
PM01	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)	PM04	PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)	PM07	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	PM10	PAVEMENT MARKING WORDS EPOXY (WHITE)
PM02	PAVEMENT MARKING EPOXY 4-INCH (WHITE)	PM05	PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	PM08	PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)	PM11	PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
PM03	PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)	PM06	PAVEMENT MARKING EPOXY 8-INCH (WHITE)	PM09	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)	RS01	ASPHALTIC SHOULDER RUMBLE STRIPS
						RS02	ASPHALTIC CENTER LINE RUMBLE STRIPS

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PAVEMENT MARKINGS	SHEET 58	E

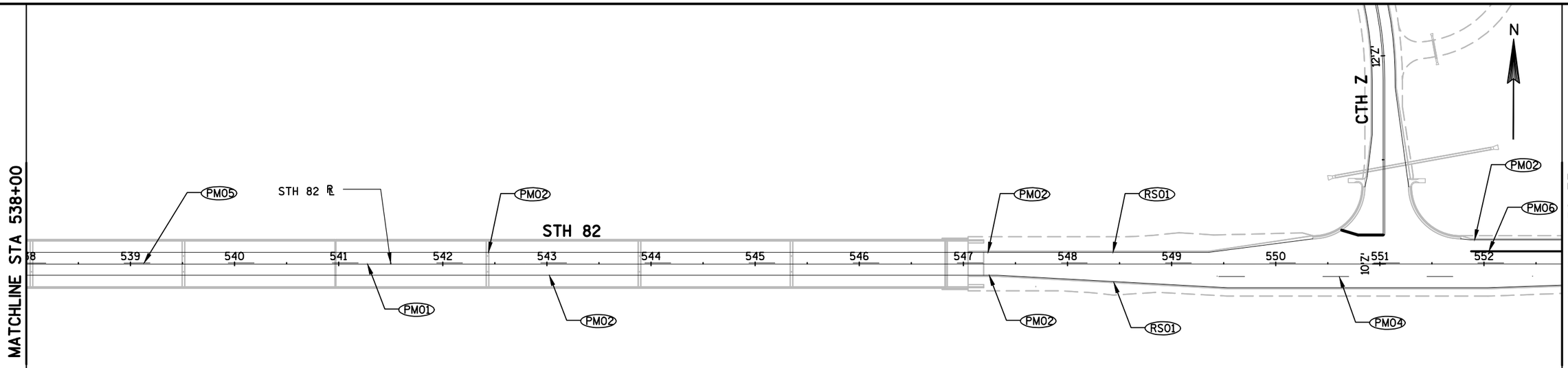


LEGEND

PM01	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)	PM04	PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)	PM07	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	PM10	PAVEMENT MARKING WORDS EPOXY (WHITE)
PM02	PAVEMENT MARKING EPOXY 4-INCH (WHITE)	PM05	PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	PM08	PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)	PM11	PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
PM03	PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)	PM06	PAVEMENT MARKING EPOXY 8-INCH (WHITE)	PM09	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)	RS01	ASPHALTIC SHOULDER RUMBLE STRIPS
						RS02	ASPHALTIC CENTER LINE RUMBLE STRIPS

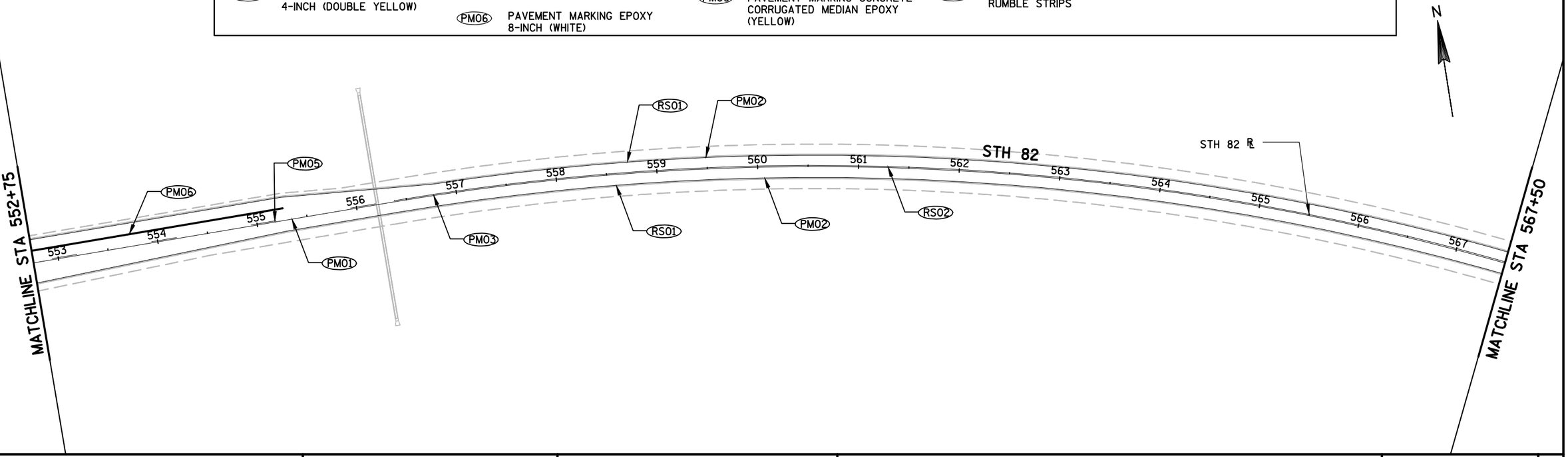


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PAVEMENT MARKINGS	SHEET 59	E

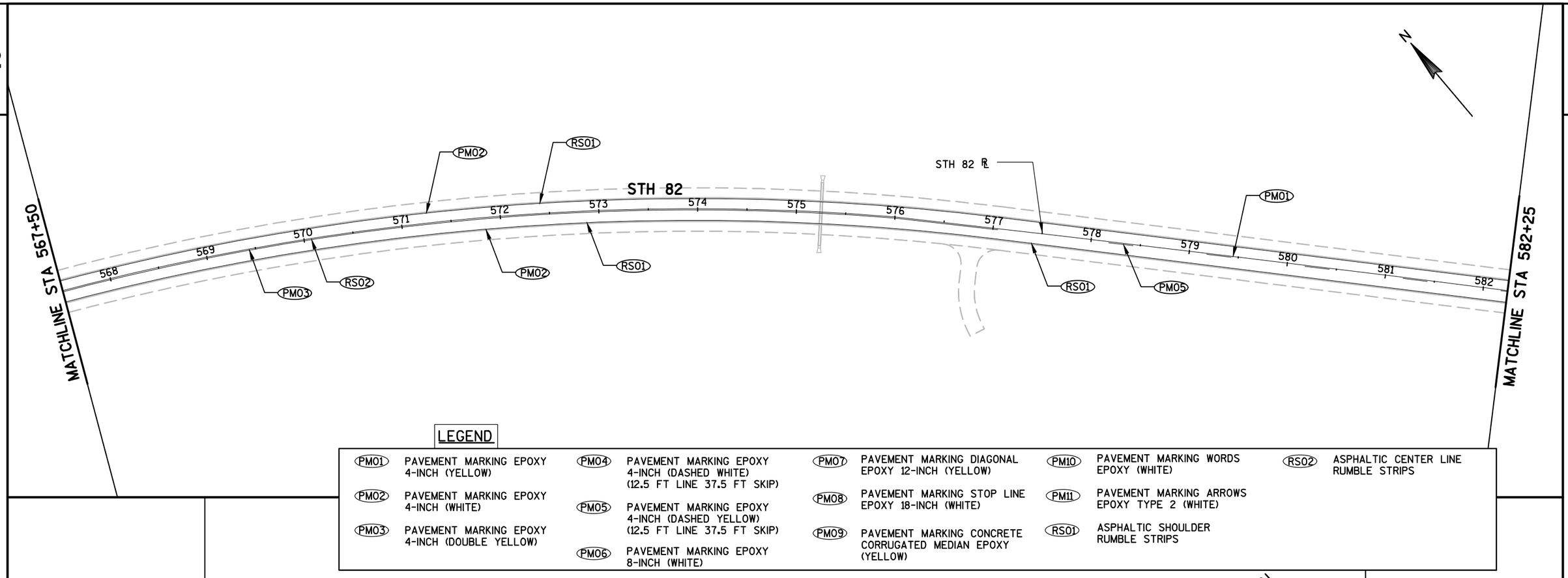


LEGEND

PM01	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)	PM04	PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)	PM07	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	PM10	PAVEMENT MARKING WORDS EPOXY (WHITE)
PM02	PAVEMENT MARKING EPOXY 4-INCH (WHITE)	PM05	PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)	PM08	PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)	PM11	PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
PM03	PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)	PM06	PAVEMENT MARKING EPOXY 8-INCH (WHITE)	PM09	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)	RS01	ASPHALTIC SHOULDER RUMBLE STRIPS
						RS02	ASPHALTIC CENTER LINE RUMBLE STRIPS

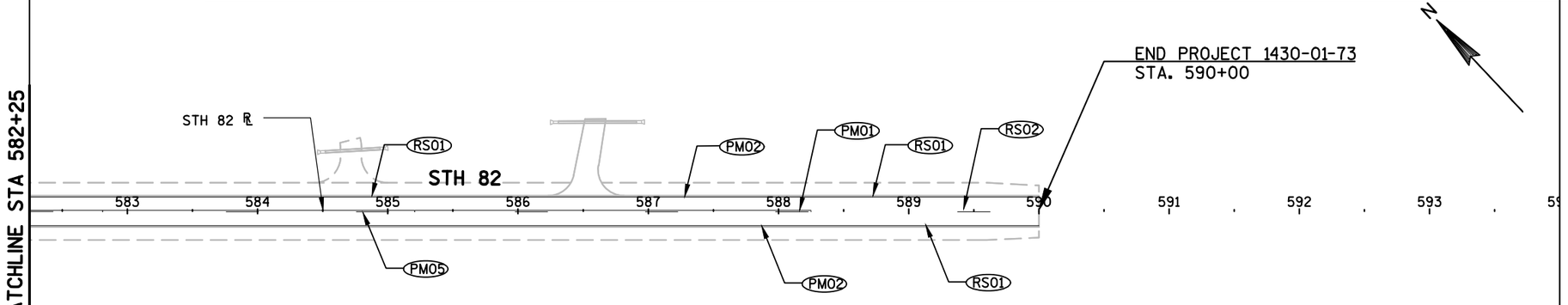


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PAVEMENT MARKINGS	SHEET 60 E



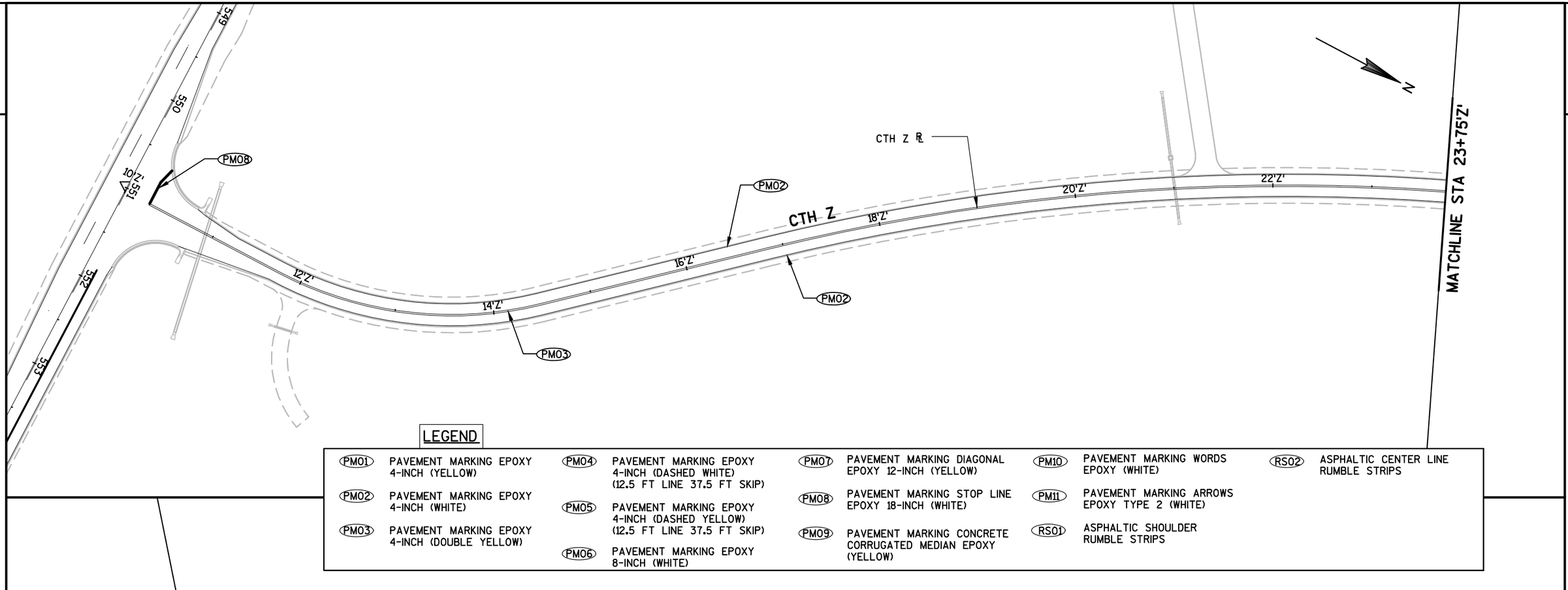
LEGEND

- PM01 PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- PM02 PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- PM03 PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)
- PM04 PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- PM05 PAVEMENT MARKING EPOXY 4-INCH (DASHED YELLOW) (12.5 FT LINE 37.5 FT SKIP)
- PM06 PAVEMENT MARKING EPOXY 8-INCH (WHITE)
- PM07 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- PM08 PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
- PM09 PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY (YELLOW)
- PM10 PAVEMENT MARKING WORDS EPOXY (WHITE)
- PM11 PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
- RS01 ASPHALTIC SHOULDER RUMBLE STRIPS
- RS02 ASPHALTIC CENTER LINE RUMBLE STRIPS



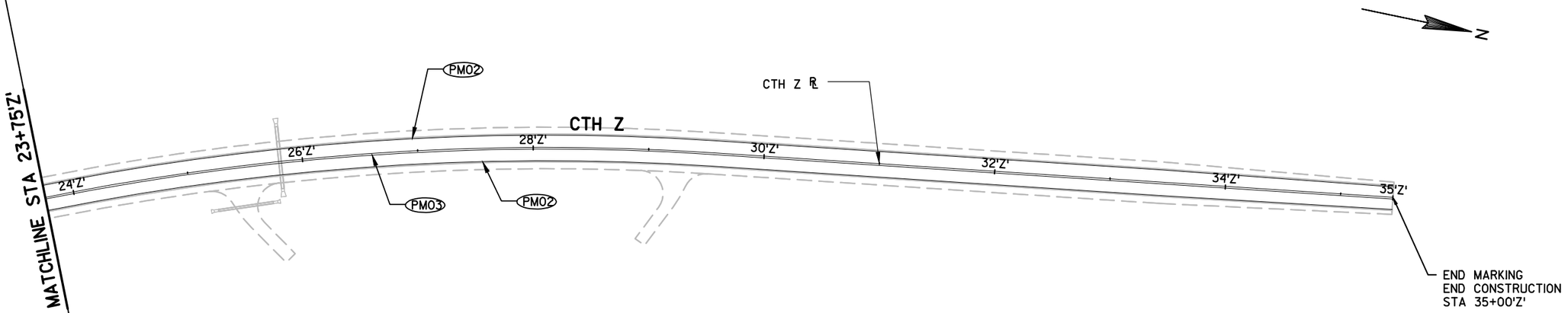
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PAVEMENT MARKINGS	SHEET 61	E

2



LEGEND

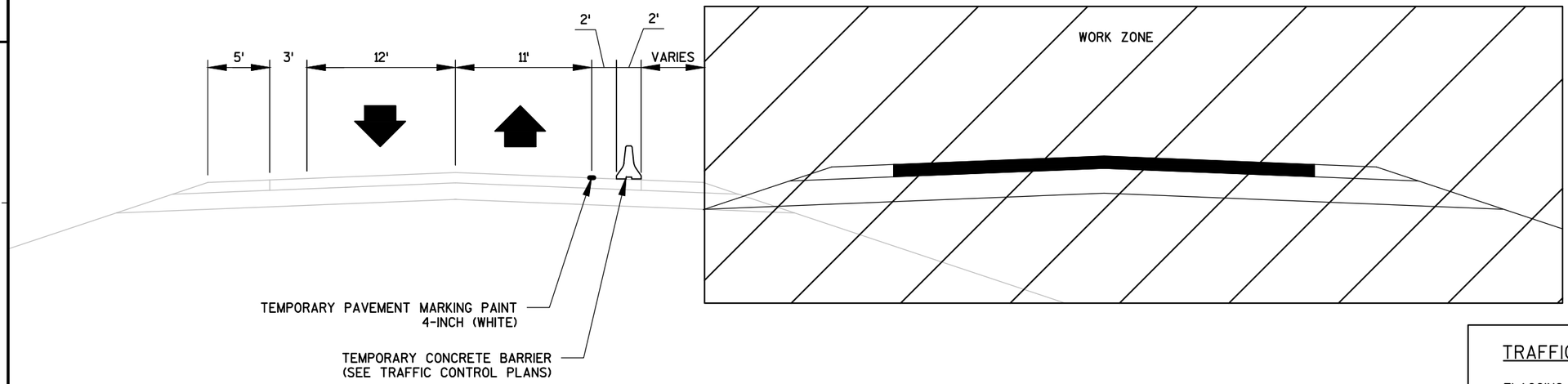
PM01	PAVEMENT MARKING EPOXY 4-INCH (YELLOW)	PM04	PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)	PM07	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	PM10	PAVEMENT MARKING WORDS EPOXY (WHITE)
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						RS02	ASPHALTIC CENTER LINE RUMBLE STRIPS



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PAVEMENT MARKINGS	SHEET 62 E

TRAFFIC CONTROL STAGE 1

TRAFFIC: CTH Z CLOSED AND DETOURED.
CONSTRUCTION: 1) CTH Z ROADWAY ON NEW ALIGNMENT
2) DEMOLITION OF EXISTING CTH Z ROADWAY
3) PAVEMENT MARKING



STH 82 TRAFFIC CONTROL STAGING TYPICAL SECTION
TRAFFIC CONTROL STAGE 2

TRAFFIC: TRAFFIC ON EXISTING LANES, SIGN FOR LANE WIDTH.
CONSTRUCTION: EMBANKMENTS AND PROPOSED ROADWAY.
TEMPORARY PAVEMENT MARKING.

STA. 487+66 - STA. 501+46
STA. 502+15 - STA. 531+38
STA. 546+00 - STA. 557+00

TRAFFIC CONTROL GENERAL NOTES:

FLAGGING ONLY DURING DAYTIME HOURS. ONE 11' MINIMUM LANE IN EACH DIRECTION MUST BE OPEN EACH NIGHT.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE TO BE USED ON ALL NEW SURFACES DURING INTERMEDIATE STAGES.

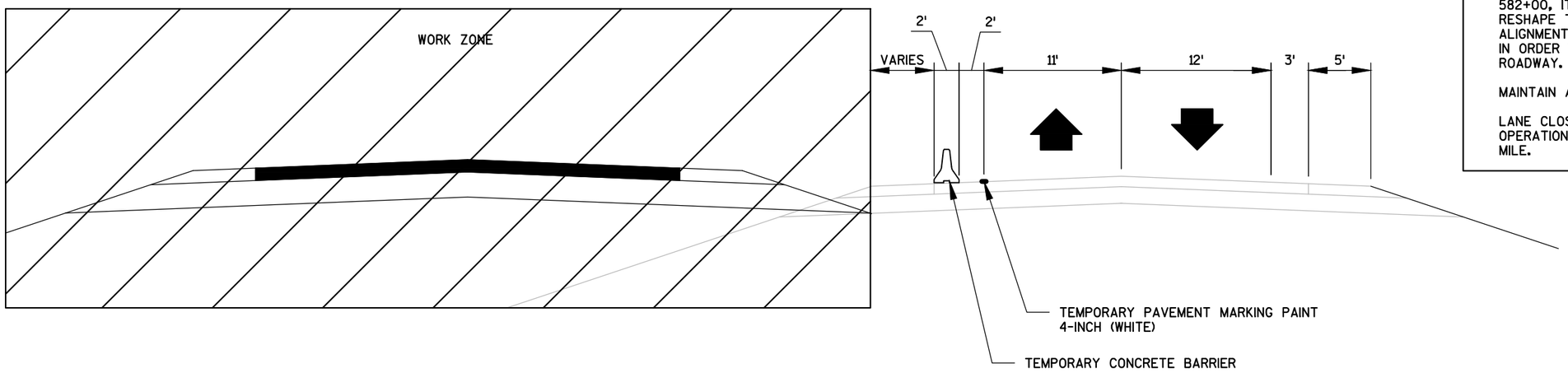
ASPHALT PAVING VARIABLE DEPTH WILL BE NECESSARY TO OPEN LANES TO TRAFFIC AT CONSTRUCTION JOINTS WHERE SURFACE ELEVATIONS DO NOT MATCH.

TEMPORARY PAVEMENT MARKING SHALL BE PLACED FOR EACH LANE PRIOR TO OPENING TO TRAFFIC EACH NIGHT.

STAGES 6 & 7 - STA. 554+50 TO 559+00 & STA. 577+00 - 582+00, IT MAY BE NECESSARY TO MILL THE SURFACE AND RESHAPE THE BASE, AFTER TRAFFIC IS FLOWING ON THE NEW ALIGNMENT AND BEFORE THE TOP LIFT OF ASPHALT PAVEMENT, IN ORDER TO CORRECTLY SET THE CROWN OF THE NEW ROADWAY.

MAINTAIN ACCESS TO HOMES AND BUSINESSES AT ALL TIMES.

LANE CLOSURES MAY NOT EXCEED ONE MILE. STAGGER OPERATIONS SO THAT LANE CLOSURES ARE LESS THAN ONE MILE.

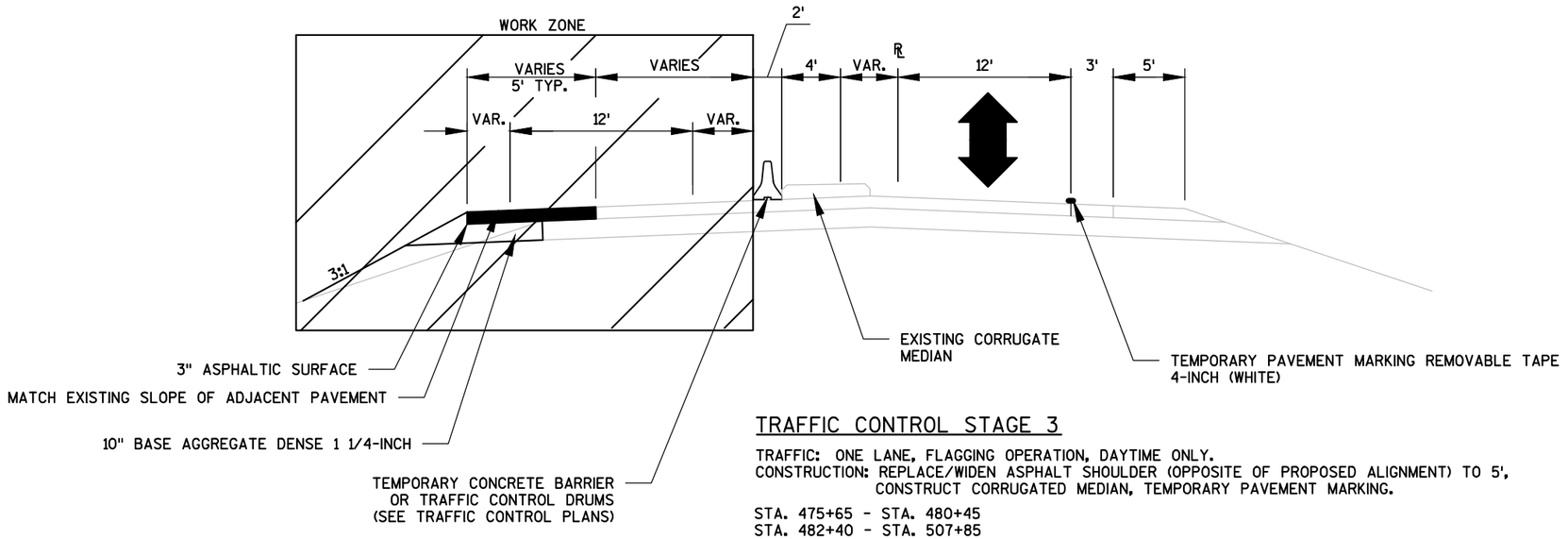


STH 82 TRAFFIC CONTROL STAGING TYPICAL SECTION
TRAFFIC CONTROL STAGE 2

TRAFFIC: TRAFFIC ON EXISTING LANES, SIGN FOR LANE WIDTH.
CONSTRUCTION: EMBANKMENTS AND PROPOSED ROADWAY.
TEMPORARY PAVEMENT MARKING.

STA. 556+25 - STA. 583+00

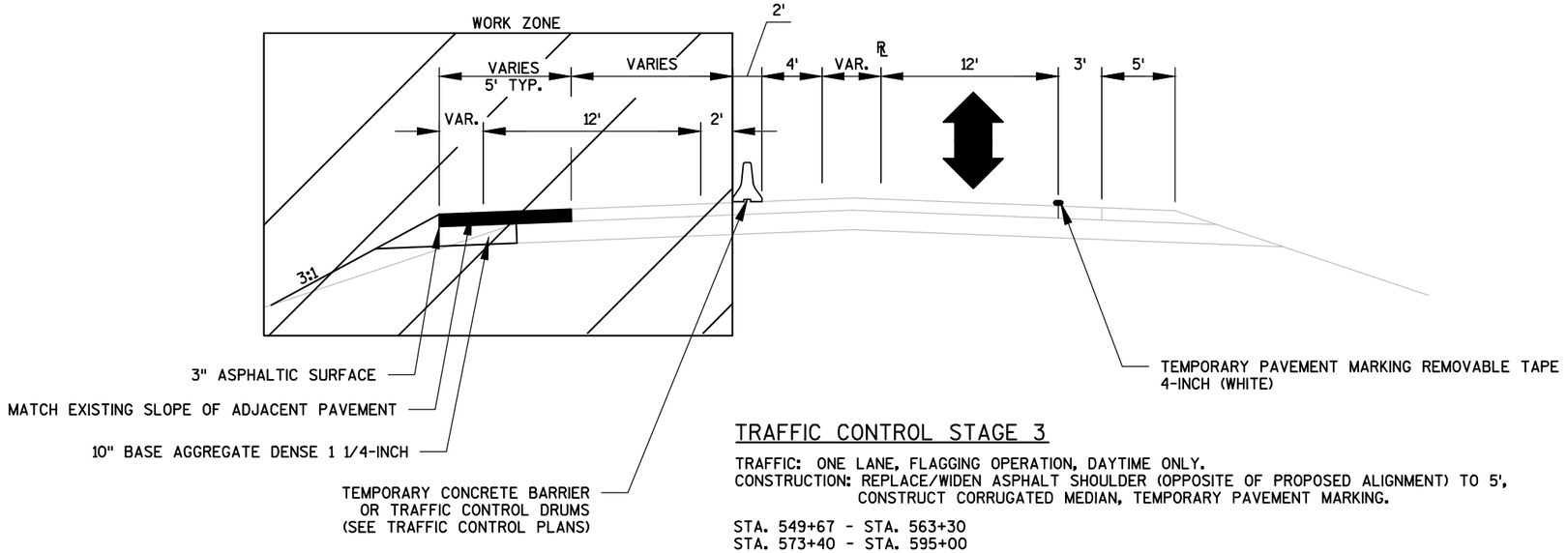
PROJECT NO: 1430-01-03	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL STAGING AND GENERAL NOTES	SHEET 63	E



TRAFFIC CONTROL STAGE 3

TRAFFIC: ONE LANE, FLAGGING OPERATION, DAYTIME ONLY.
CONSTRUCTION: REPLACE/WIDEN ASPHALT SHOULDER (OPPOSITE OF PROPOSED ALIGNMENT) TO 5', CONSTRUCT CORRUGATED MEDIAN, TEMPORARY PAVEMENT MARKING.

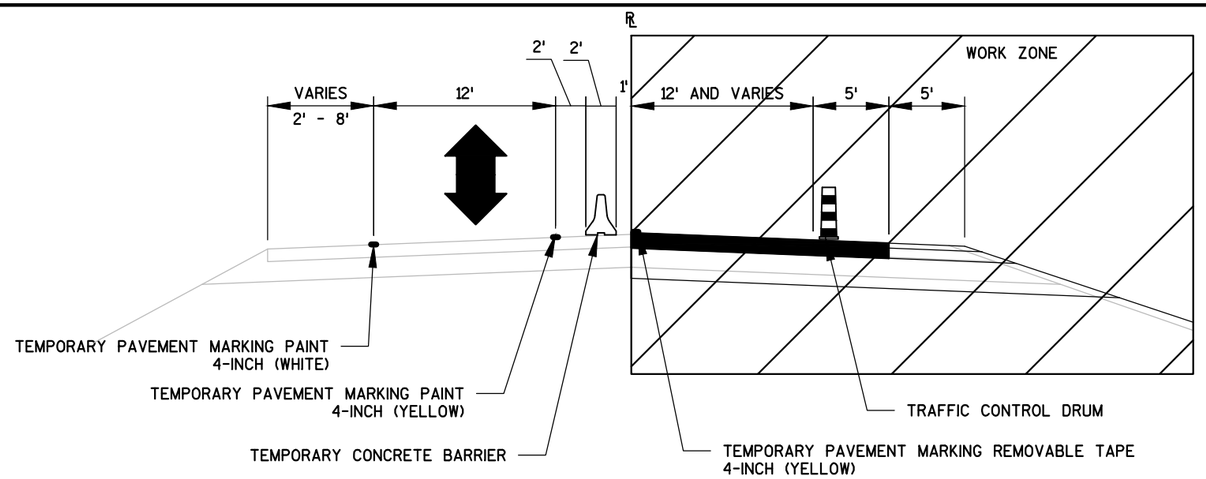
STA. 475+65 - STA. 480+45
STA. 482+40 - STA. 507+85
STA. 498+40 - STA. 505+10 REMOVE AND FILL EXISTING CORRUGATED MEDIAN
STA. 501+95 - STA. 508+00 REMOVE AND FILL EXISTING CORRUGATED MEDIAN



TRAFFIC CONTROL STAGE 3

TRAFFIC: ONE LANE, FLAGGING OPERATION, DAYTIME ONLY.
CONSTRUCTION: REPLACE/WIDEN ASPHALT SHOULDER (OPPOSITE OF PROPOSED ALIGNMENT) TO 5', CONSTRUCT CORRUGATED MEDIAN, TEMPORARY PAVEMENT MARKING.

STA. 549+67 - STA. 563+30
STA. 573+40 - STA. 595+00



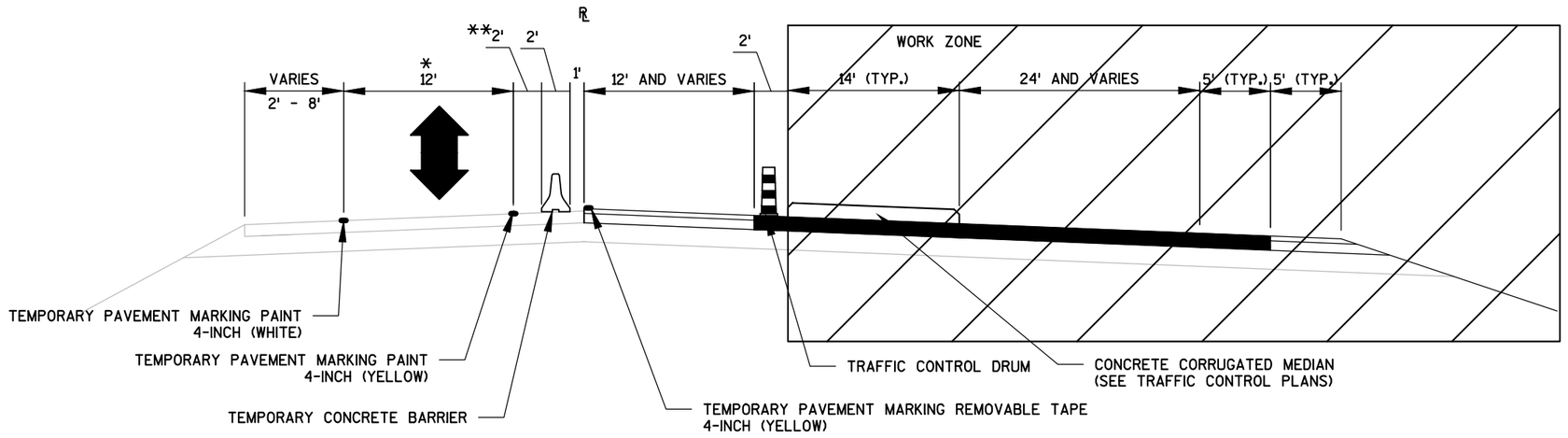
STH 82 TRAFFIC CONTROL STAGING: FULL DEPTH TYPICAL SECTION
CONSTRUCT EB
TRAFFIC CONTROL STAGE 4

TRAFFIC: ONE LANE, FLAGGING OPERATION, DAYTIME ONLY
CONSTRUCTION: 12" BASE AGGREGATE, AND FIRST 2" LIFT OF HMA.
TEMPORARY PAVEMENT MARKING.

STA. 480+00 - STA. 486+00
STA. 511+00 - STA. 515+00
STA. 554+00 - STA. 559+00
STA. 586+00 - STA. 590+00

* STA. 577+00 - STA. 590+00
11' LANE, SIGN FOR LANE WIDTH

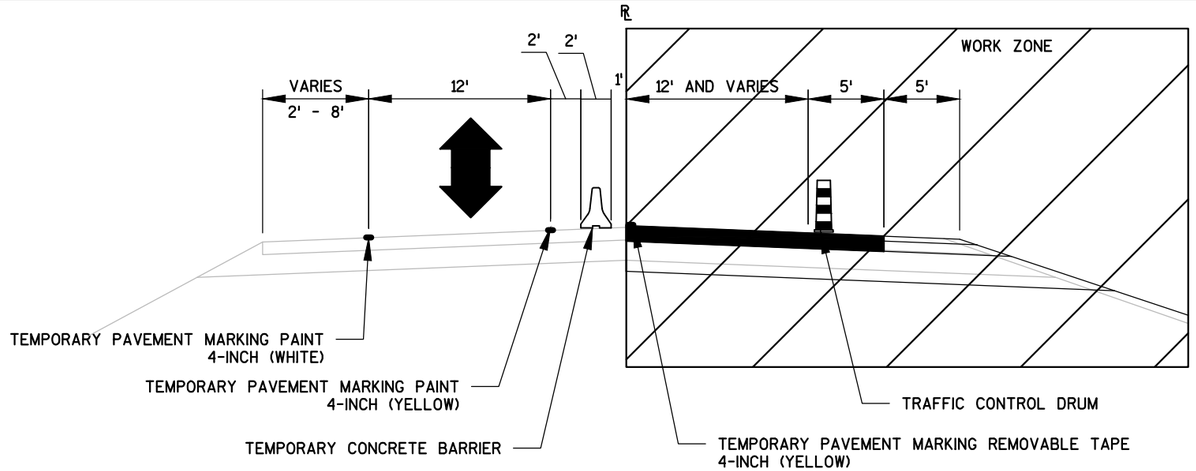
** STA. 577+00 - STA. 590+00
1' SHY DISTANCE



STH 82 TRAFFIC CONTROL STAGING: MILL & RELAY TYPICAL SECTION
CONSTRUCT EB
TRAFFIC CONTROL STAGE 4

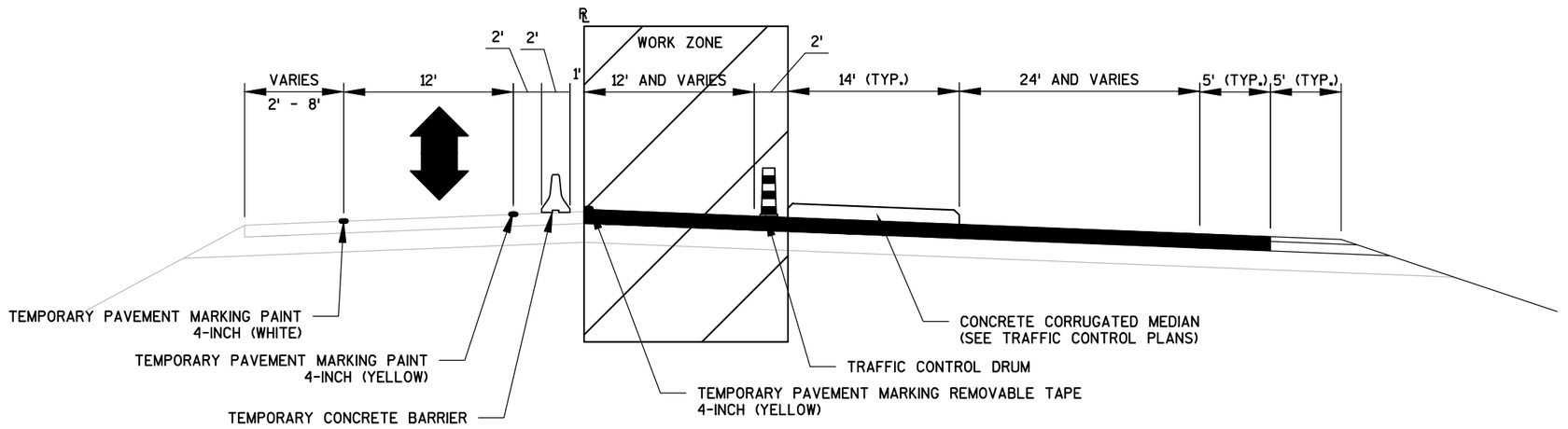
TRAFFIC: ONE LANE, FLAGGING OPERATION, DAYTIME ONLY
CONSTRUCTION: MILL EXISTING ASPHALT AND RELAY 4" AS BASE AGGREGATE,
PLACE FIRST 2" LIFT OF HMA.
CONSTRUCT CONCRETE CORRUGATED MEDIAN
TEMPORARY PAVEMENT MARKING.

STA. 486+00 - STA. 511+00
STA. 577+00 - STA. 586+00



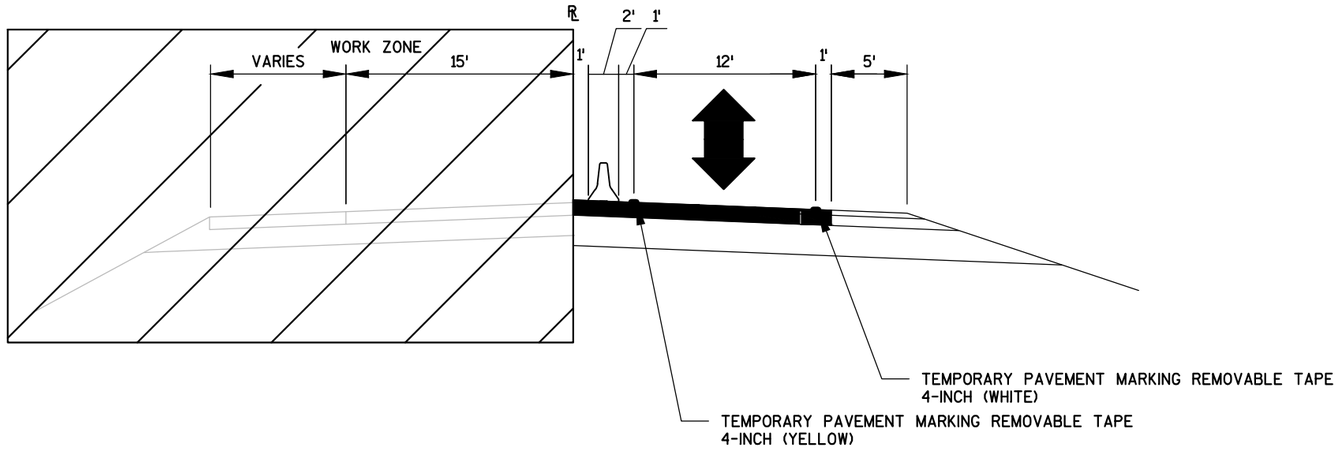
STH 82 TRAFFIC CONTROL STAGING: FULL DEPTH TYPICAL SECTION
CONSTRUCT EB
TRAFFIC CONTROL STAGE 5A

TRAFFIC: ONE LANE, FLAGGING OPERATION, DAYTIME ONLY
CONSTRUCTION: 12" BASE AGGREGATE, AND FIRST 2" LIFT OF HMA.
TEMPORARY PAVEMENT MARKING.
STA. 511+00 - STA. 515+00
STA. 554+50 - STA. 559+00
STA. 586+00 - STA. 590+00



STH 82 TRAFFIC CONTROL STAGING: MILL & RELAY TYPICAL SECTION
CONSTRUCT EB
TRAFFIC CONTROL STAGE 5A

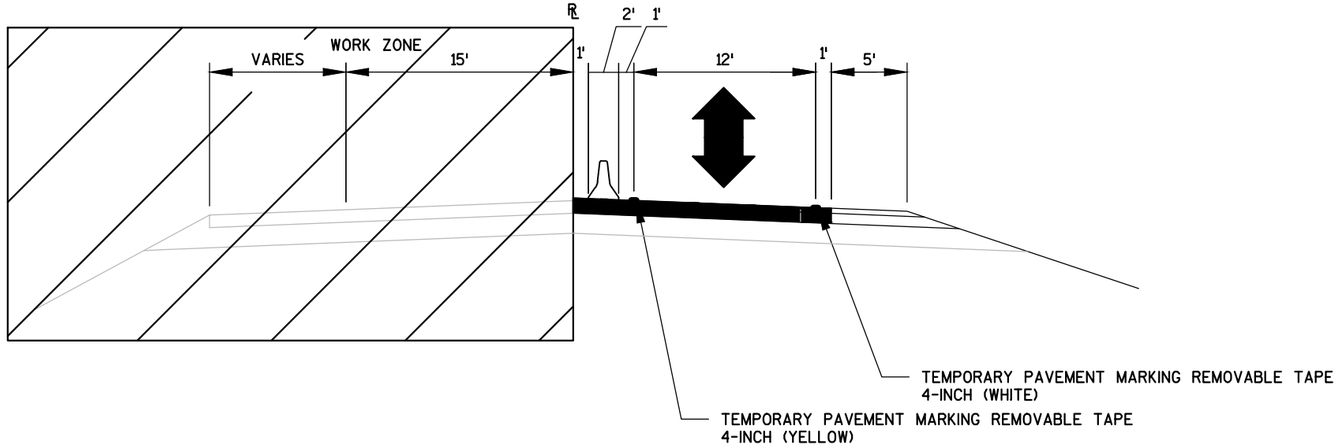
TRAFFIC: ONE LANE, FLAGGING OPERATION, DAYTIME ONLY
CONSTRUCTION: MILL EXISTING ASPHALT AND RELAY 4" AS BASE AGGREGATE,
PLACE FIRST 2" LIFT OF HMA.
TEMPORARY PAVEMENT MARKING.
STA. 496+60 - STA. 511+00



STH 82 TRAFFIC CONTROL STAGING: FULL DEPTH TYPICAL SECTION
CONSTRUCT WB
TRAFFIC CONTROL STAGE 5B

TRAFFIC: ONE LANE, FLAGGING OPERATION, DAYTIME ONLY
CONSTRUCTION: 12" BASE AGGREGATE, AND FIRST 2" LIFT OF HMA.
TEMPORARY PAVEMENT MARKING.

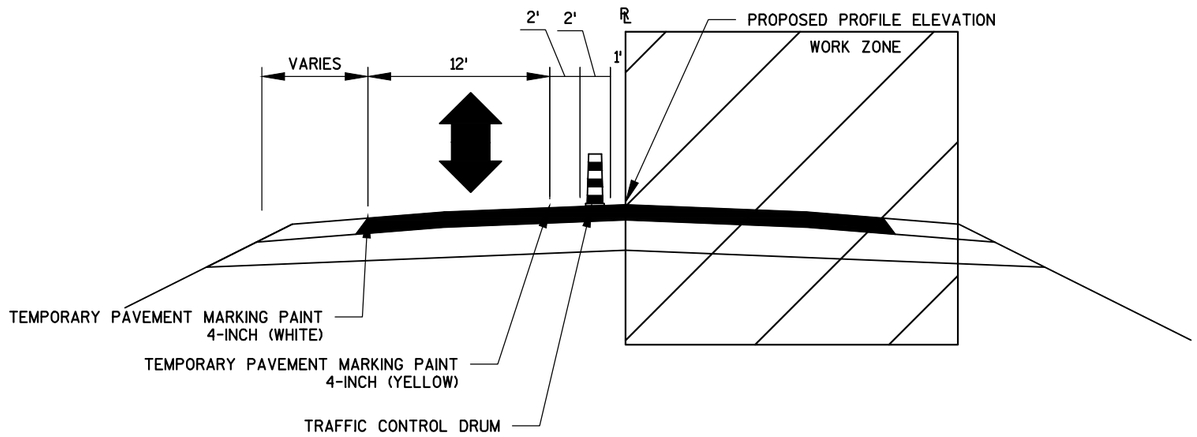
STA. 480+00 - STA. 486+00
STA. 554+50 - STA. 559+00
STA. 586+00 - STA. 590+00



STH 82 TRAFFIC CONTROL STAGING: MILL & RELAY TYPICAL SECTION
CONSTRUCT WB
TRAFFIC CONTROL STAGE 5B

TRAFFIC: ONE LANE, FLAGGING OPERATION, DAYTIME ONLY
CONSTRUCTION: MILL EXISTING ASPHALT AND RELAY 4" AS BASE AGGREGATE,
PLACE FIRST 2" LIFT OF HMA.
TEMPORARY PAVEMENT MARKING.

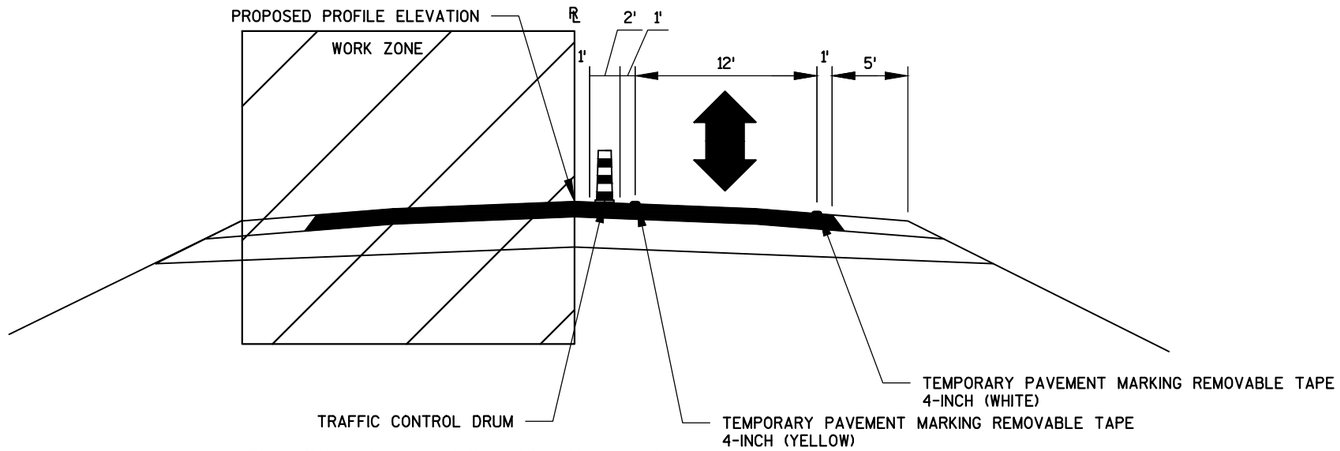
STA. 486+00 - STA. 496+50
STA. 577+00 - STA. 586+00



STH 82 TRAFFIC CONTROL STAGING
CONSTRUCT EB
TRAFFIC CONTROL STAGE 6

TRAFFIC: ONE LANE, FLAGGING OPERATION, DAYTIME ONLY.
CONSTRUCTION: PLACE MIDDLE AND TOP 2" LIFTS HMA.
PAVEMENT MARKING.

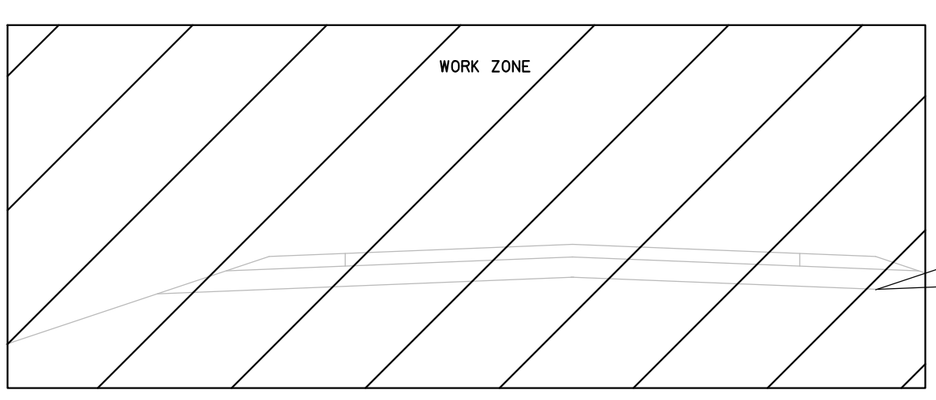
STA. 480+00 - STA. 515+00
STA. 554+50 - STA. 559+00
STA. 577+00 - STA. 590+00

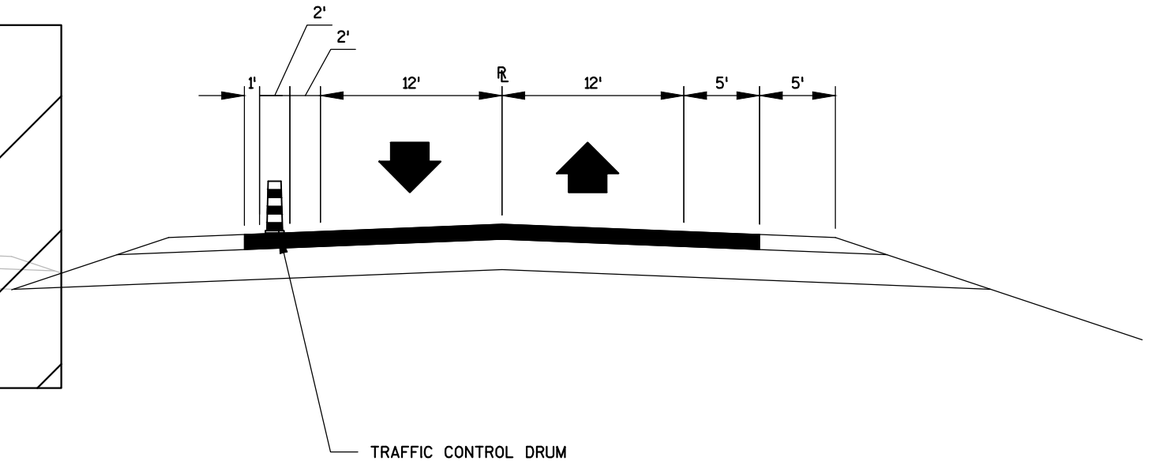


STH 82 TRAFFIC CONTROL STAGING
CONSTRUCT WB
TRAFFIC CONTROL STAGE 7

TRAFFIC: ONE LANE, FLAGGING OPERATION, DAYTIME ONLY.
CONSTRUCTION: PLACE MIDDLE AND TOP 2" LIFTS HMA SECTIONS.
PAVEMENT MARKING.

STA. 480+00 - STA. 500+00
STA. 554+50 - STA. 559+00
STA. 577+00 - STA. 590+00



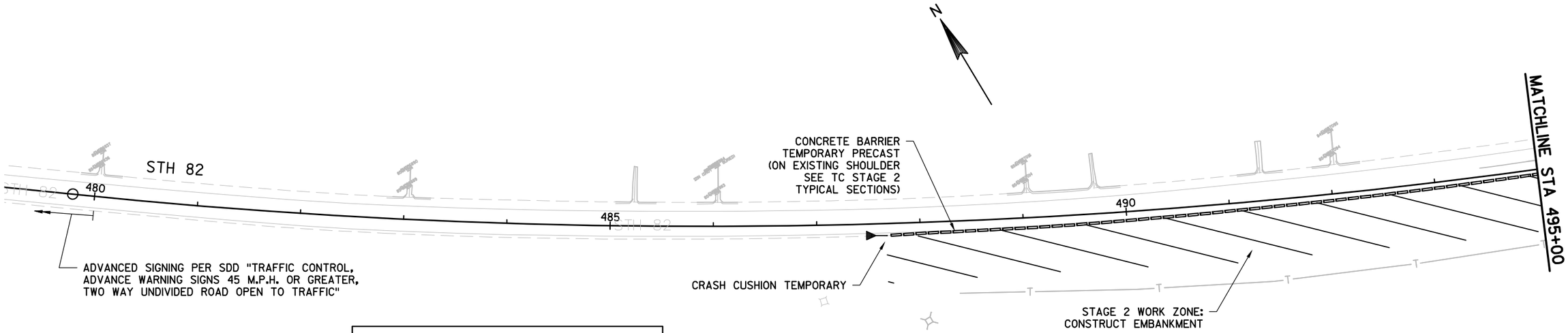


TRAFFIC CONTROL STAGE 8

TRAFFIC: ON FINAL ALIGNMENT.
CONSTRUCTION: REMOVE EXISTING BRIDGE AND ROADWAY.

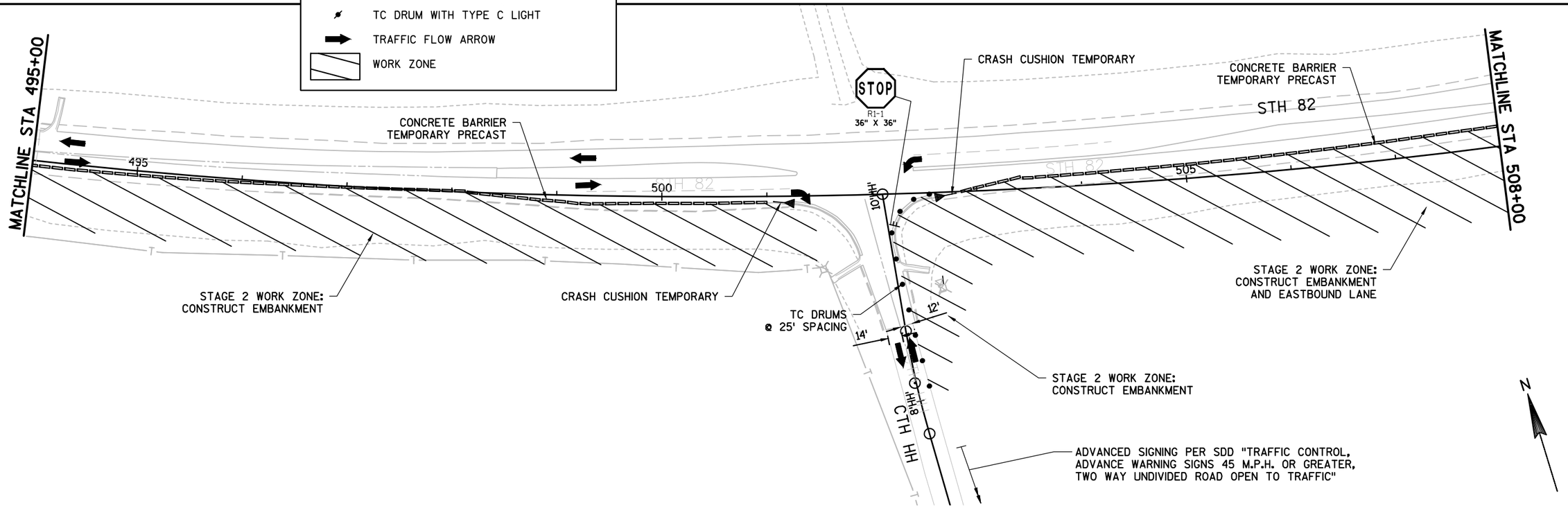
STA. 480+00 - STA. 590+00

2

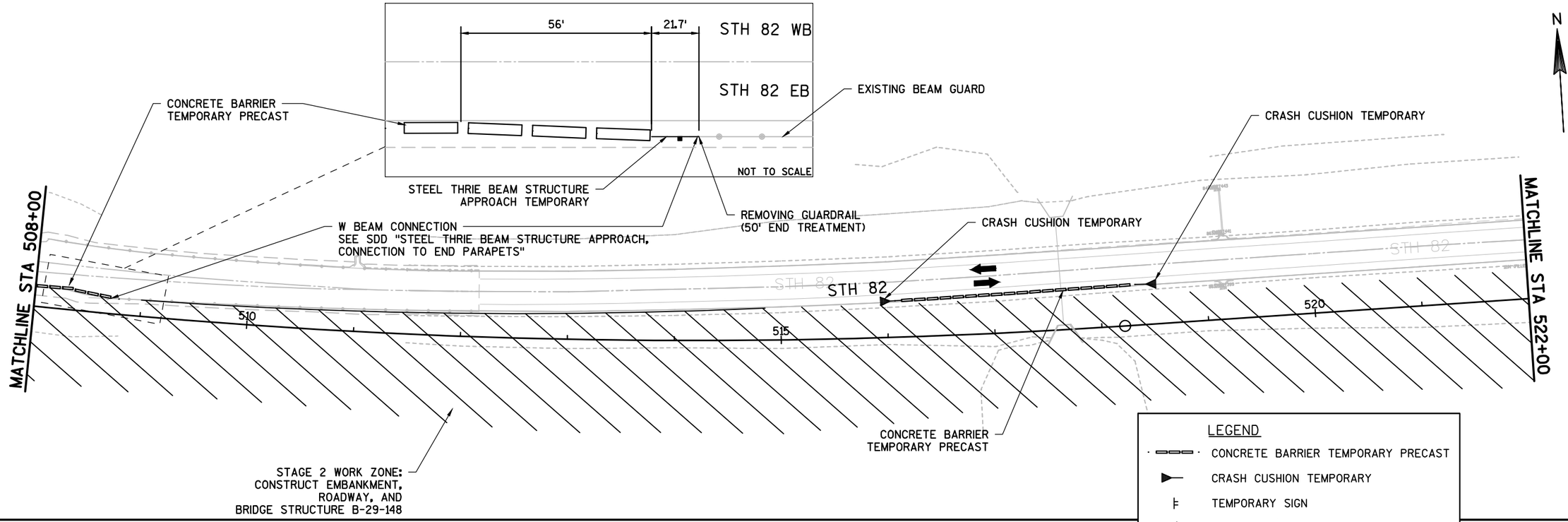


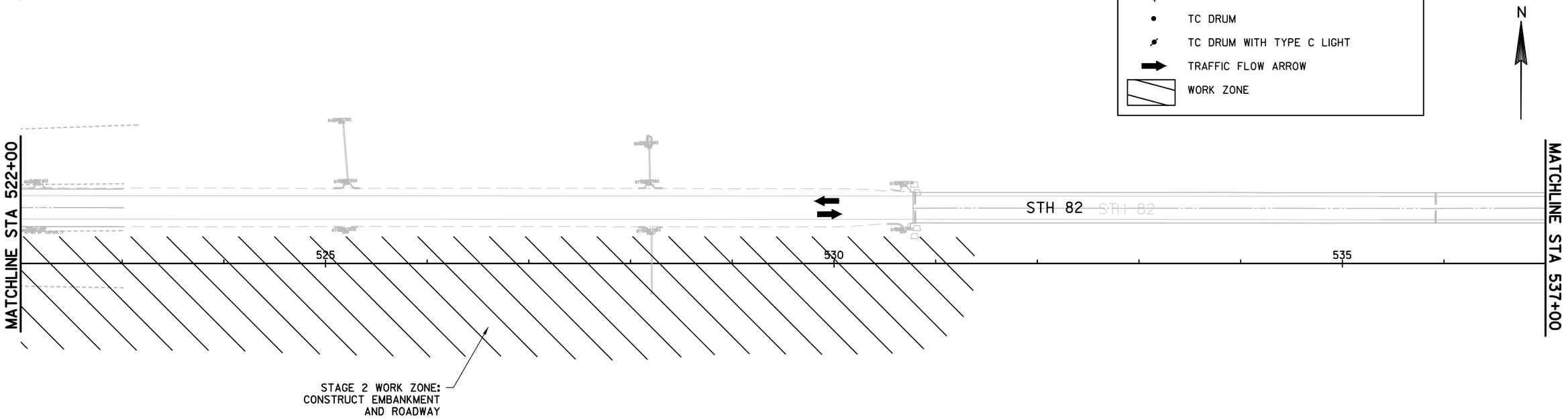
LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 2	SHEET 70	E





PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 2	SHEET 71	E

2

LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE

MATCHLINE STA 537+00

ROAD CLOSED
0.3 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"

ADVANCED SIGNING PER SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

STOP
R1-1
36" X 36"

EXISTING BEAM GUARD

STH 82

540

545

550

MATCHLINE STA 552+00

TRANSITION FROM NEW CTH Z UP TO EXISTING STH 82 WITH TEMPORARY HMA RAMP (SEE DETAIL)

STAGE 2 WORK ZONE: CONSTRUCT EMBANKMENT AND ROADWAY

EXISTING BEAM GUARD

N

MATCHLINE STA 552+00

555

560

565

STAGE 2 WORK ZONE: CONSTRUCT EMBANKMENT AND ROADWAY

EXISTING BEAM GUARD

STAGE 2 WORK ZONE: CONSTRUCT EMBANKMENT AND ROADWAY

MATCHLINE STA 567+00

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 2	SHEET 72	E

2

STAGE 2 WORK ZONE:
CONSTRUCT EMBANKMENT
AND ROADWAY

STH 82

570

575

580

MATCHLINE STA 567+00

MATCHLINE STA 582+00

CRASH CUSHION TEMPORARY

CONCRETE BARRIER
TEMPORARY PRECAST
(ON EXISTING SHOULDER
SEE TRAFFIC CONTROL
STAGE 2 TYPICAL SECTION)

OH

T

N

LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE

CONCRETE BARRIER
TEMPORARY PRECAST

CRASH CUSHION TEMPORARY

ADVANCED SIGNING PER SDD "TRAFFIC CONTROL,
ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER,
TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

MATCHLINE STA 582+00

585

590

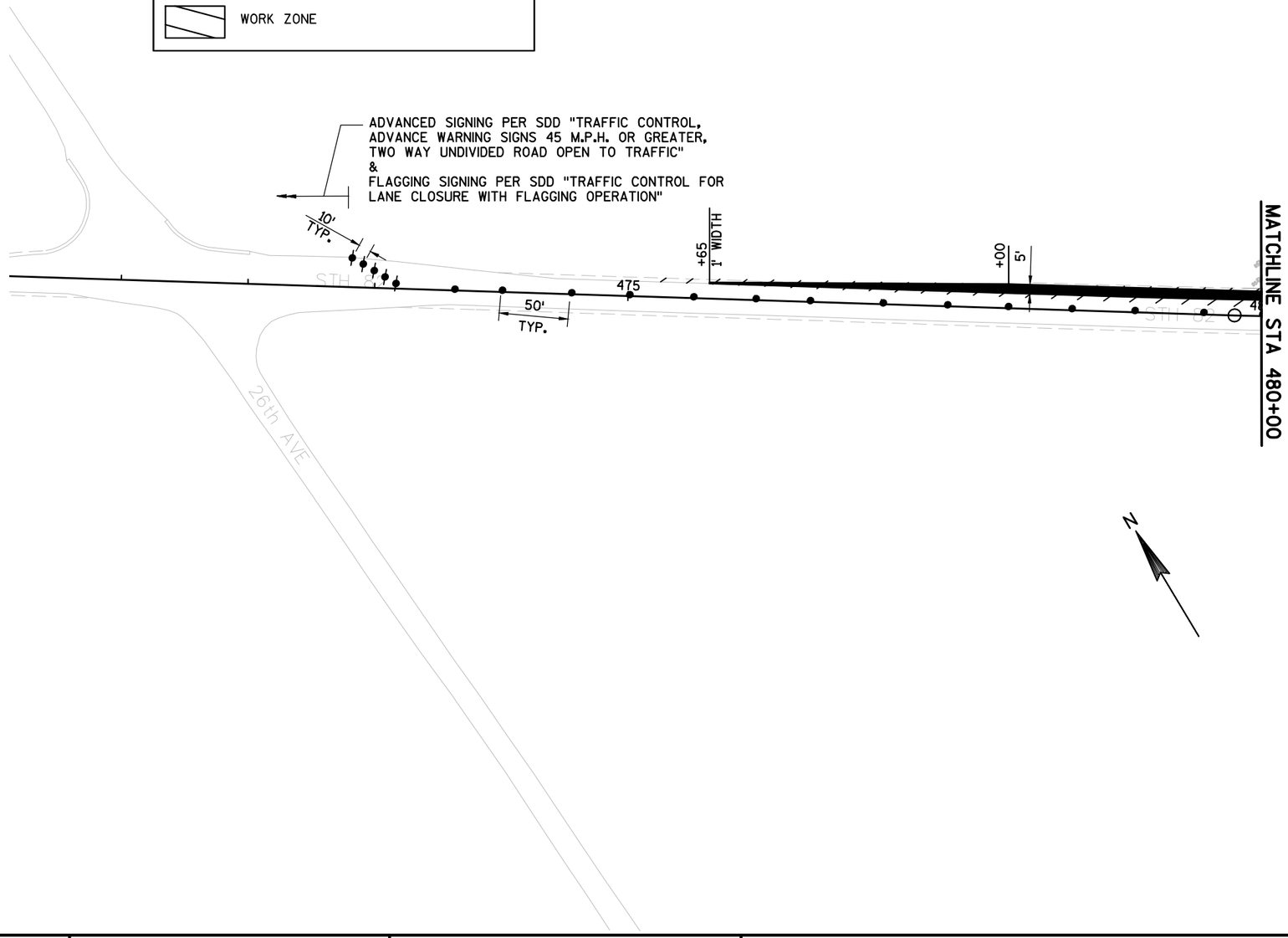
STH 82

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 2	SHEET 73	E

2

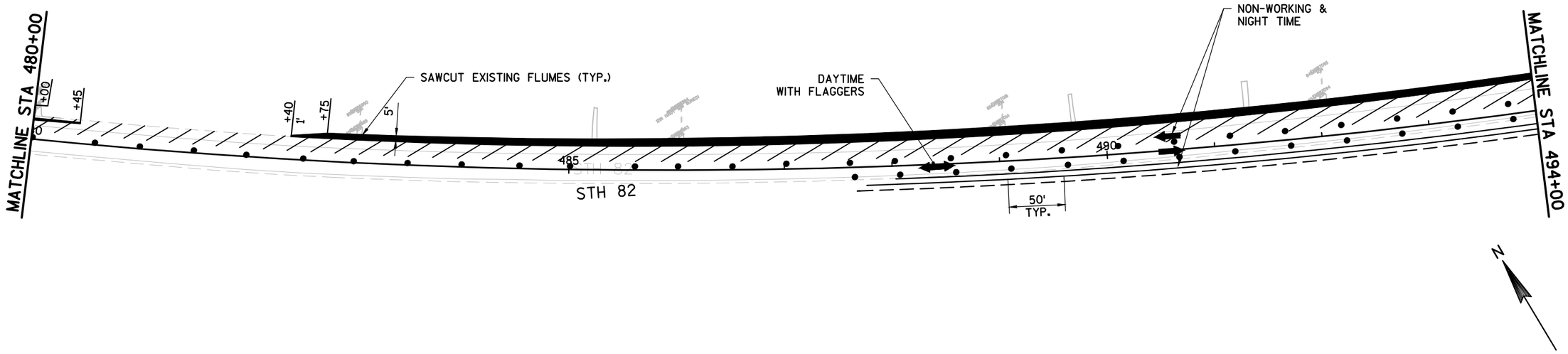
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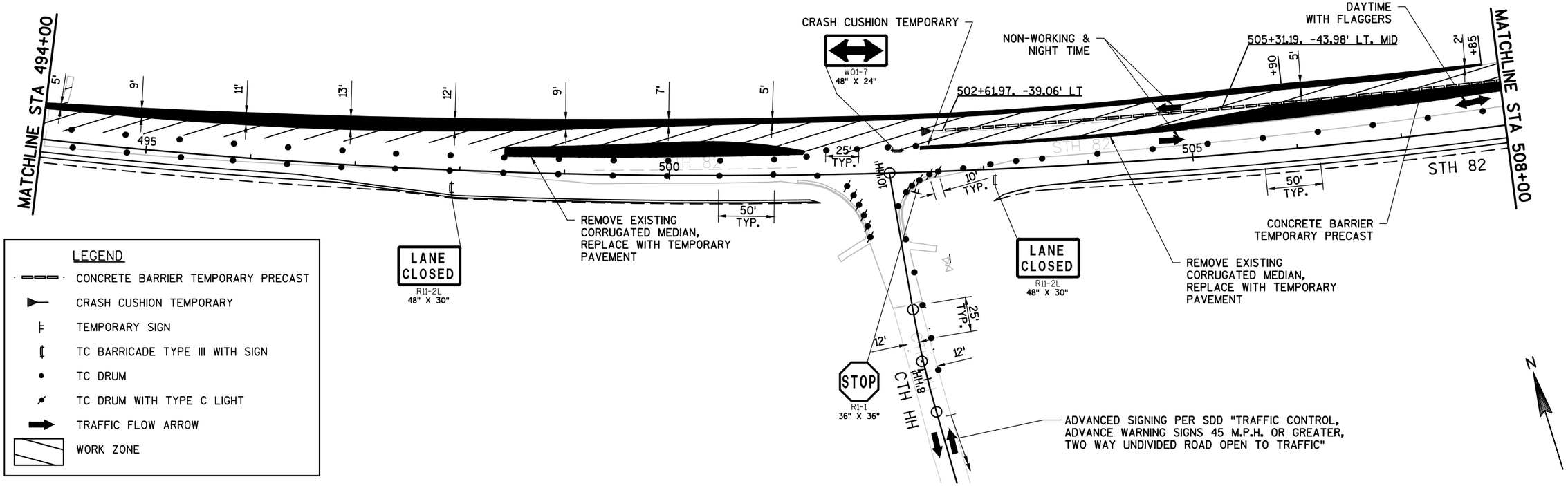
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE



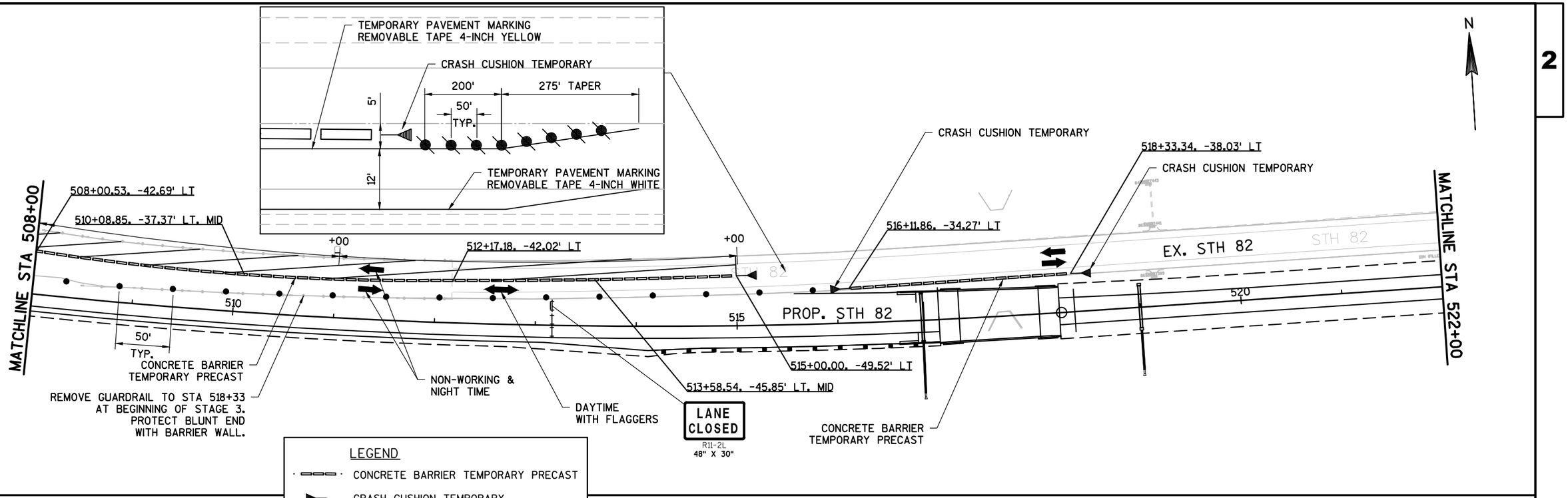
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 3	SHEET 74	E

2



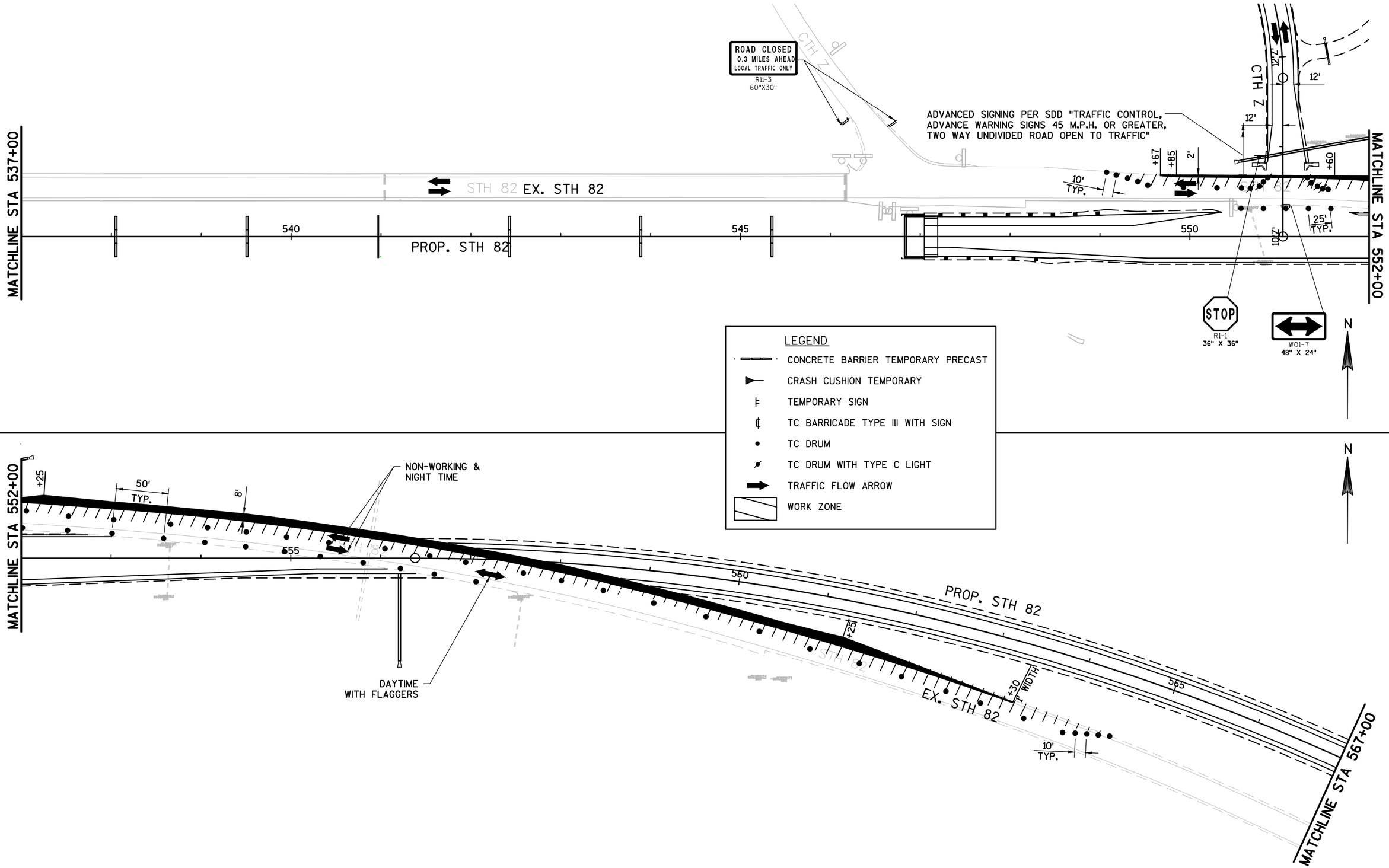


PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 3	SHEET 75	E



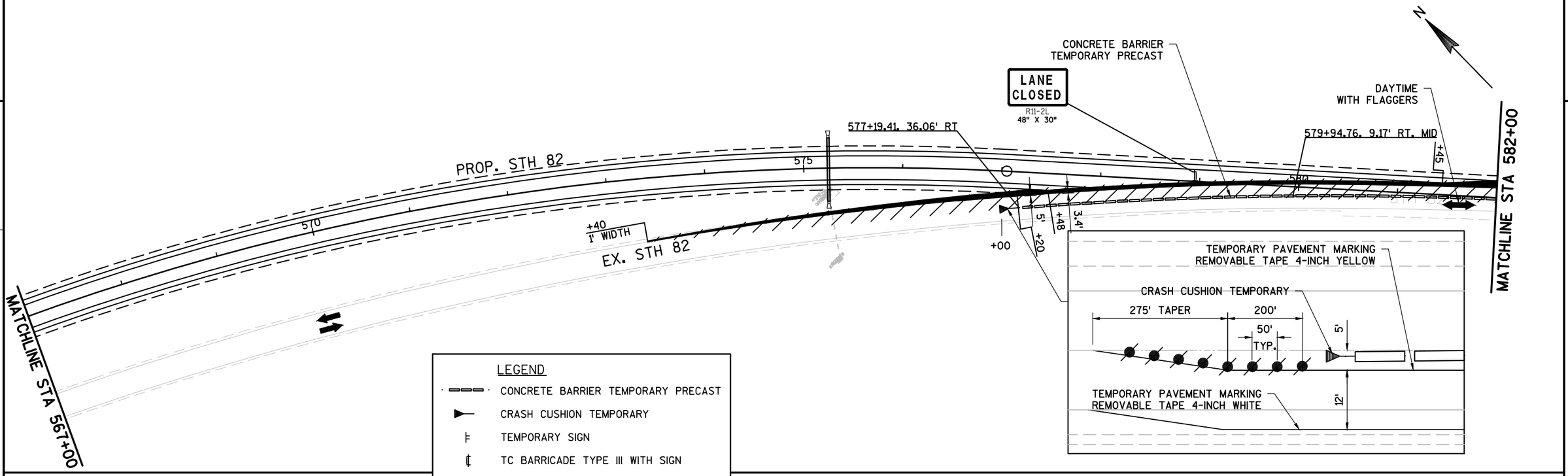
PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 3	SHEET 76	E

2

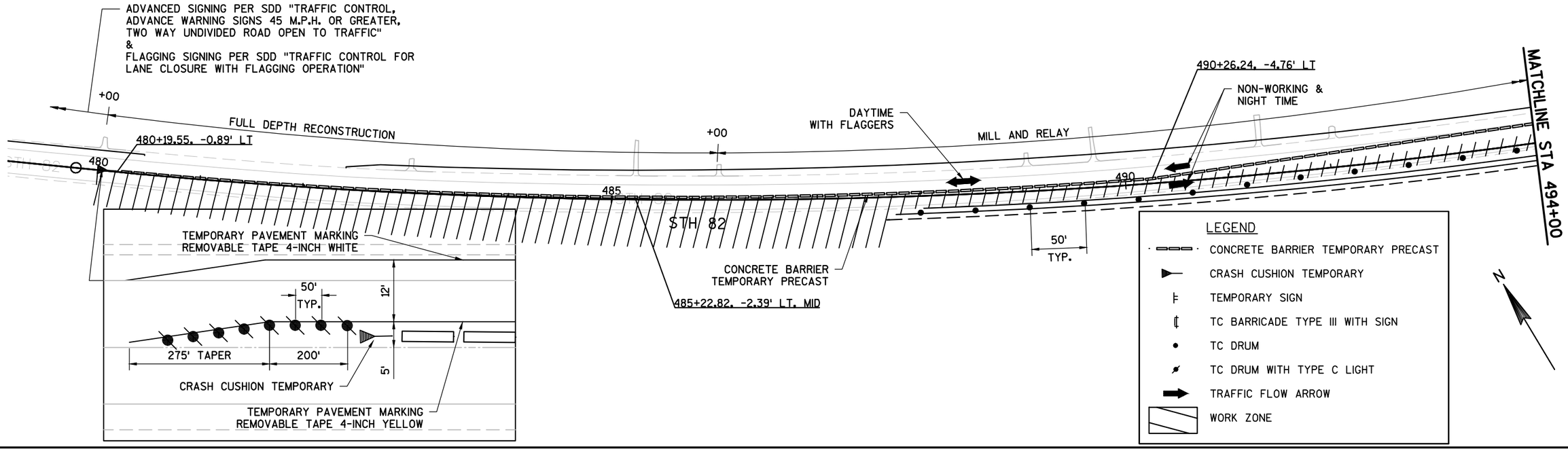


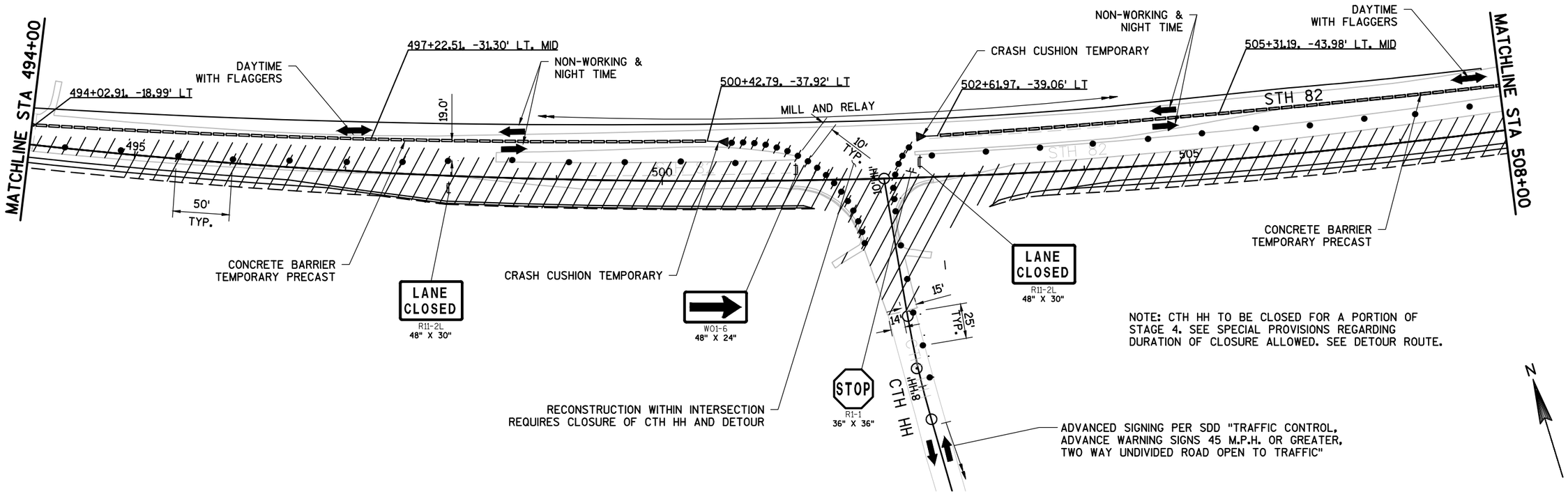
PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 3	SHEET 77	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\026001_S3.DWG PLOT DATE : 4/27/2017 2:04 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

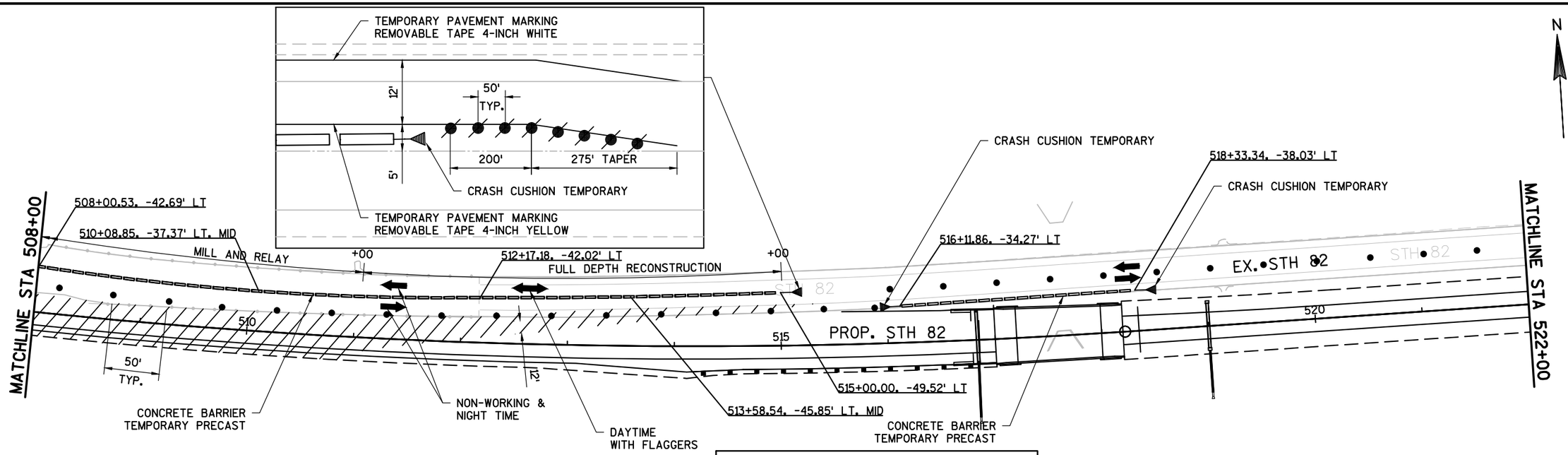


PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 3	SHEET 78	E



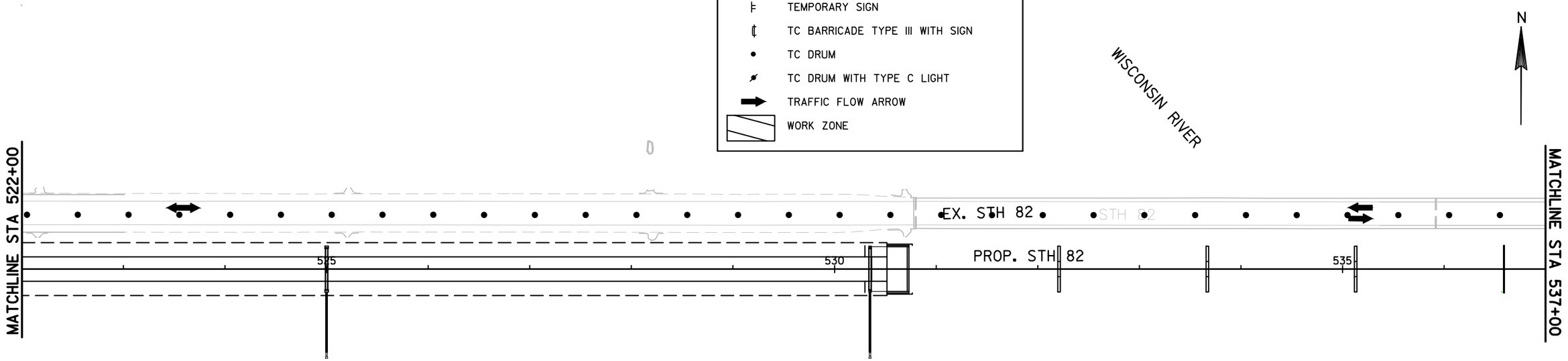


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 4	SHEET 79	E

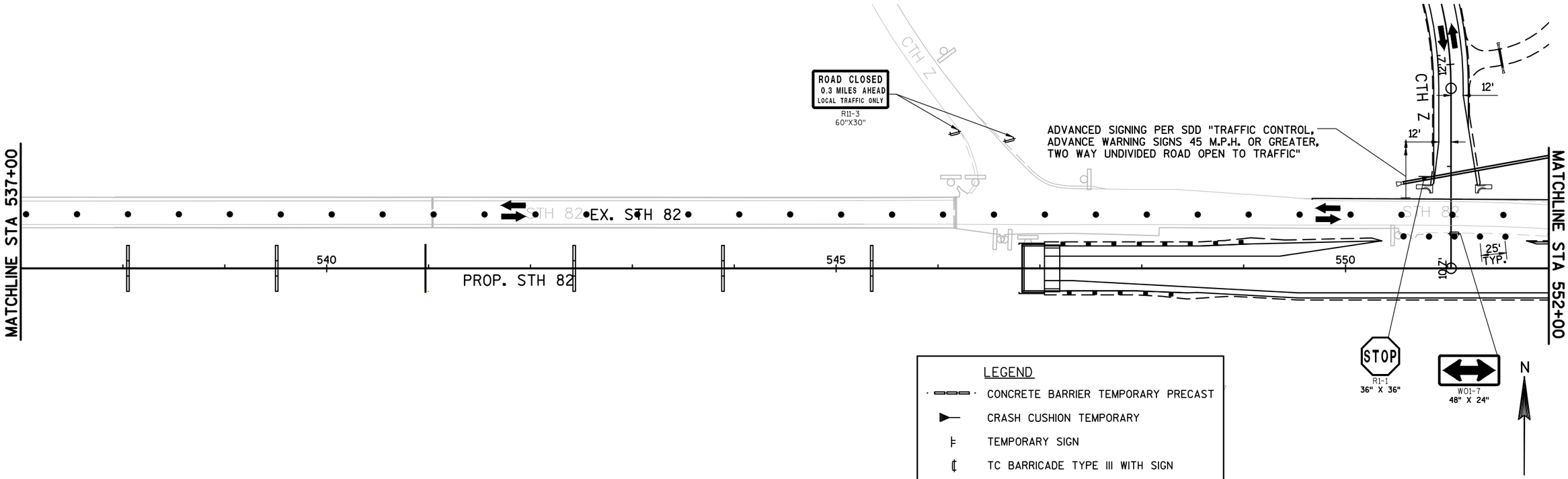


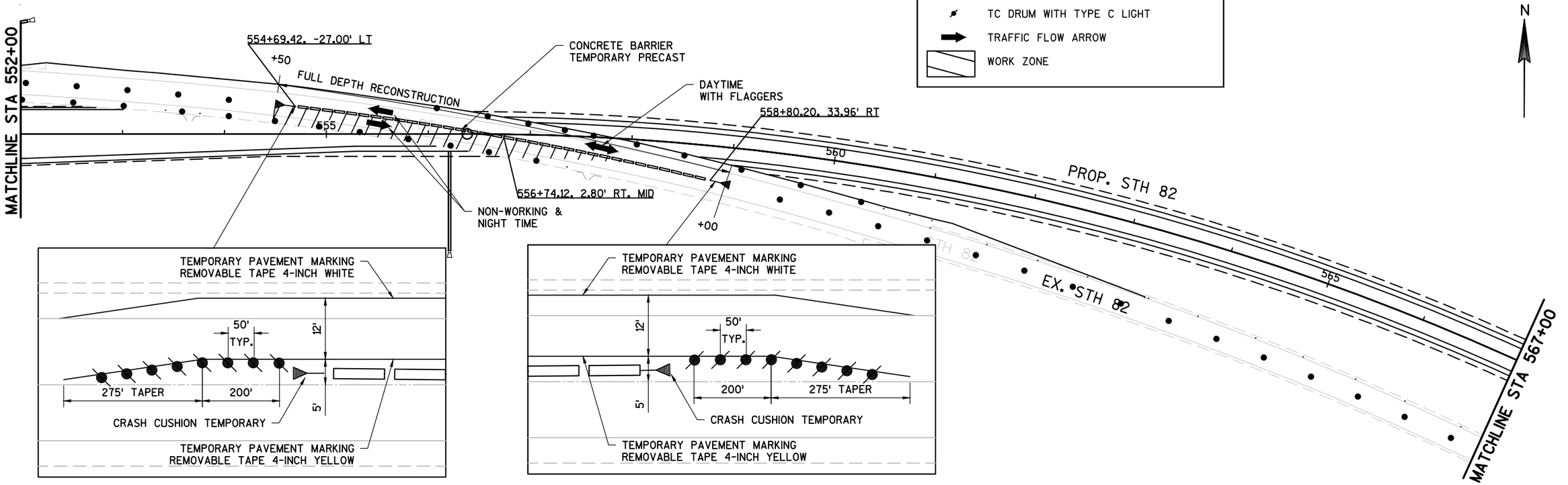
LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE

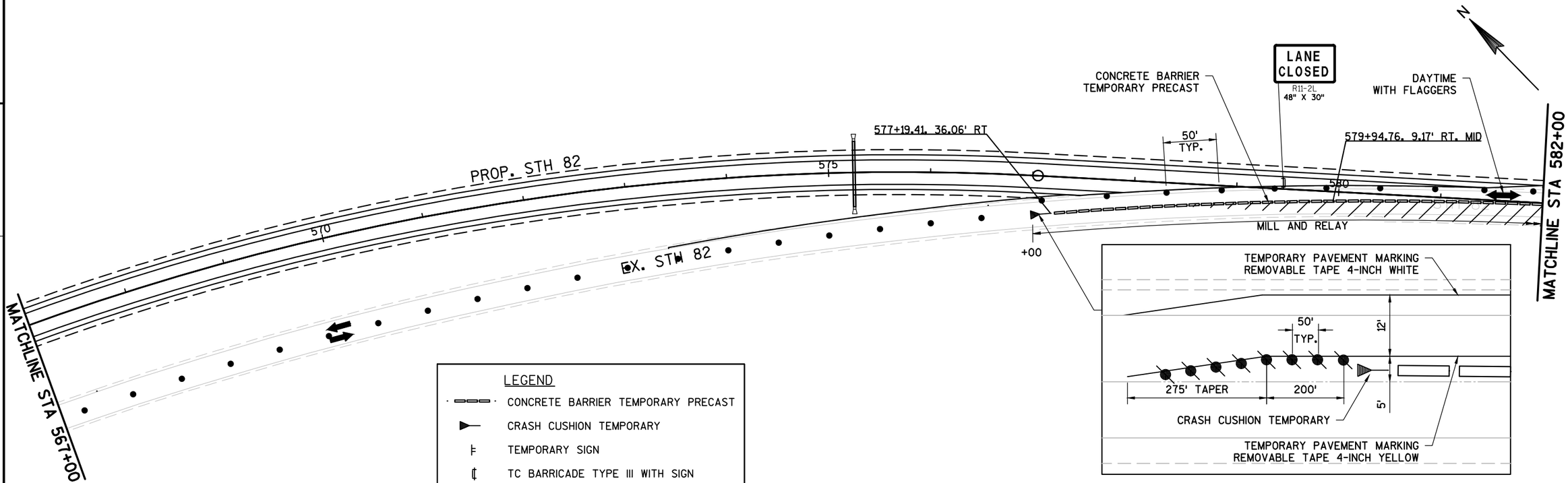


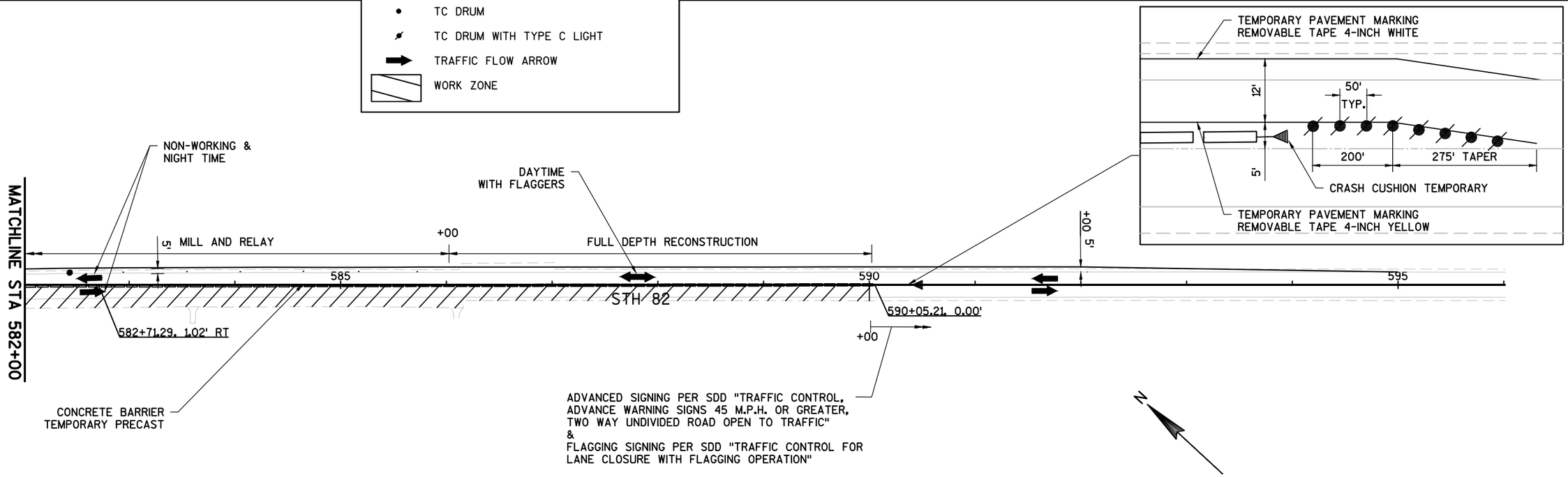
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 4	SHEET 81	E





PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 4	SHEET 82	E

2

ADVANCED SIGNING PER SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" & FLAGGING SIGNING PER SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"

+00

480+19.55, -0.89' LT

480

485

STH 82

485+22.82, -2.39' LT, MID

DAYTIME WITH FLAGGERS

490+26.24, -4.76' LT

NON-WORKING & NIGHT TIME

490

50' TYP.

MATCHLINE STA 495+00

CONCRETE BARRIER TEMPORARY PRECAST

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH WHITE

50' TYP.

12'

5'

275' TAPER

200'

CRASH CUSHION TEMPORARY

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH YELLOW

N

LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE

MATCHLINE STA 495+00

DAYTIME WITH FLAGGERS

494+02.91, -18.99' LT

+60

497+22.51, -31.30' LT.

NON-WORKING & NIGHT TIME

500+42.79, -37.92' LT

MILL AND RELAY

495

50' TYP.

CRASH CUSHION TEMPORARY

CONCRETE BARRIER TEMPORARY PRECAST

LANE CLOSED
R11-2L
48" X 30"

W01-6
48"X24"

STOP
R1-1
36" X 36"

10'

12'

12'

25' TYP.

CTH HH

W01-6
48"X24"

NON-WORKING & NIGHT TIME

CRASH CUSHION TEMPORARY

502+61.97, -39.06' LT

DAYTIME WITH FLAGGERS

505+31.19, -43.98' LT, MID

STH 82

505

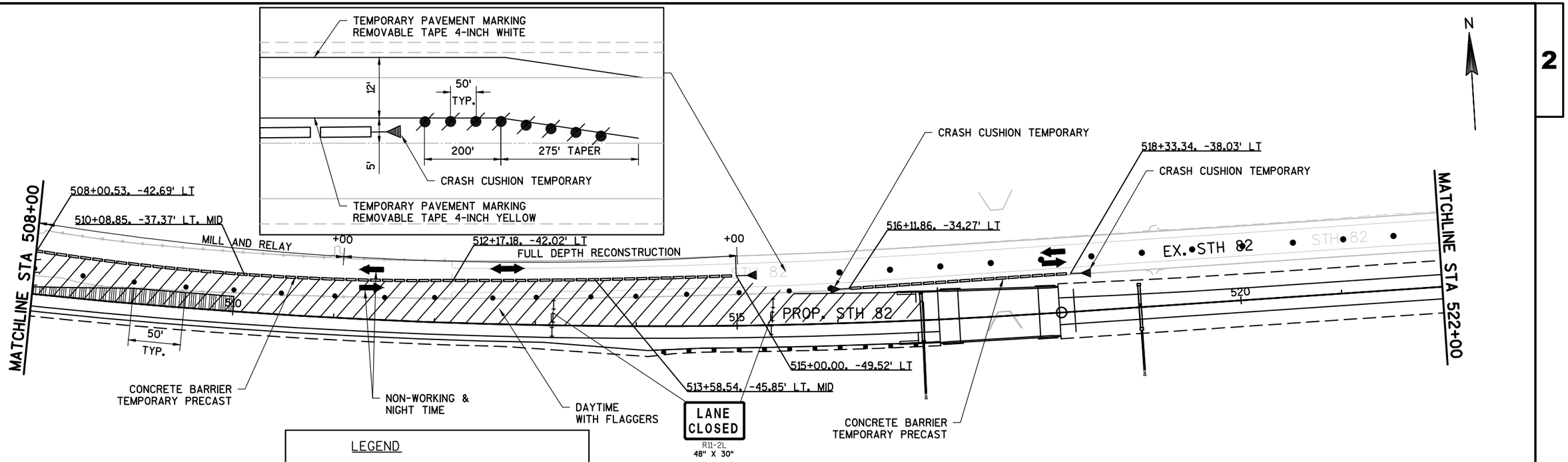
MATCHLINE STA 508+00

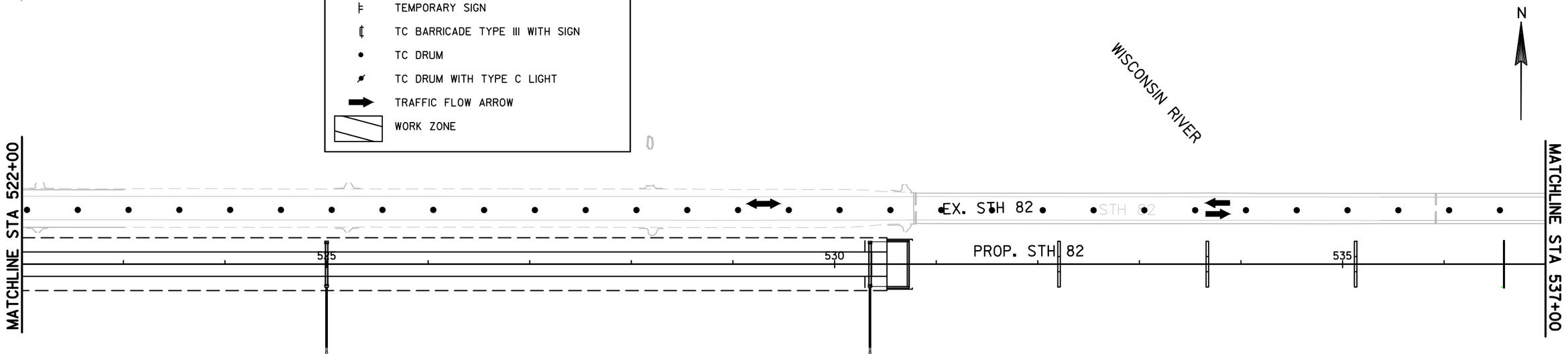
CONCRETE BARRIER TEMPORARY PRECAST

ADVANCED SIGNING PER SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

N

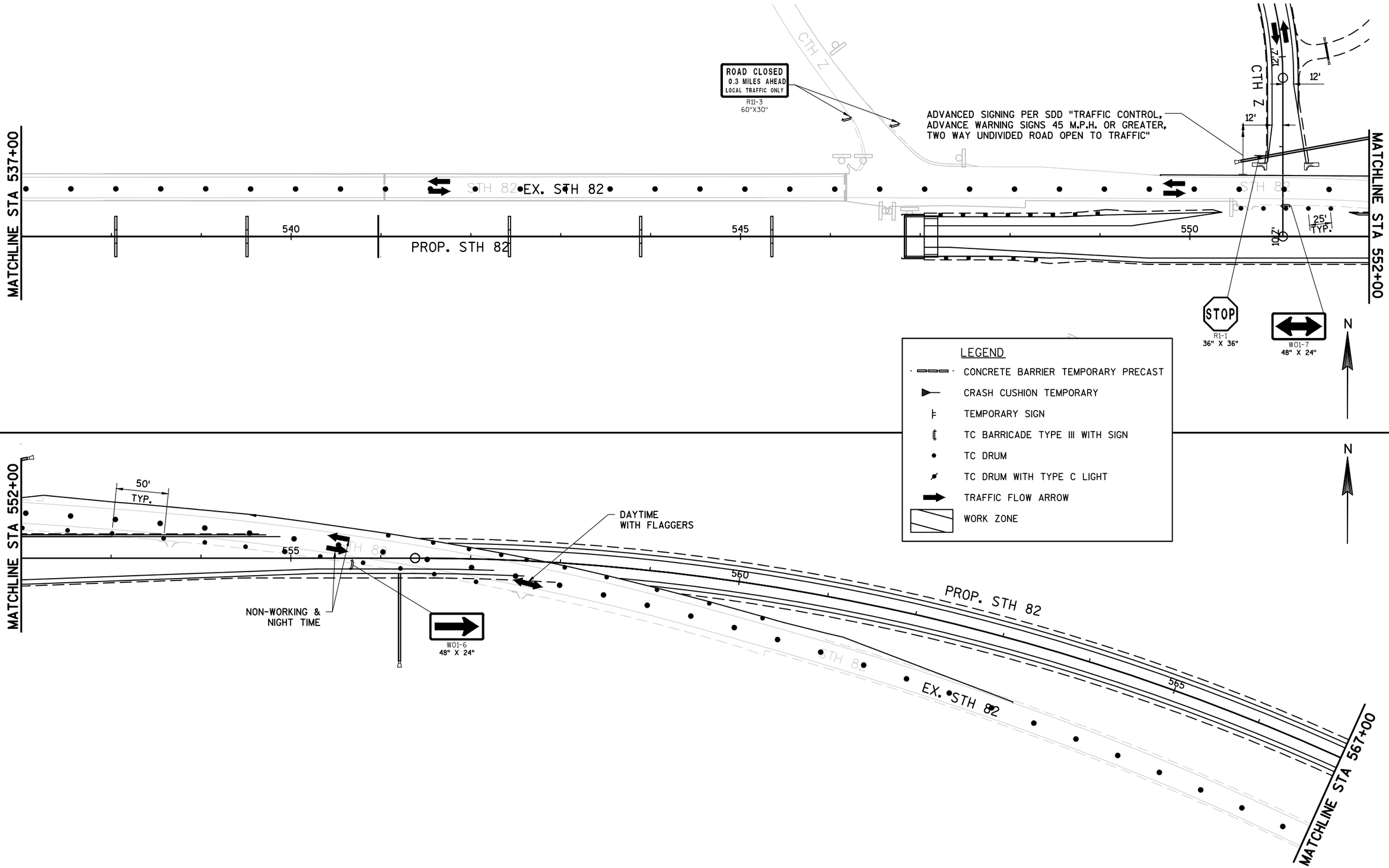
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 5A	SHEET 83	E



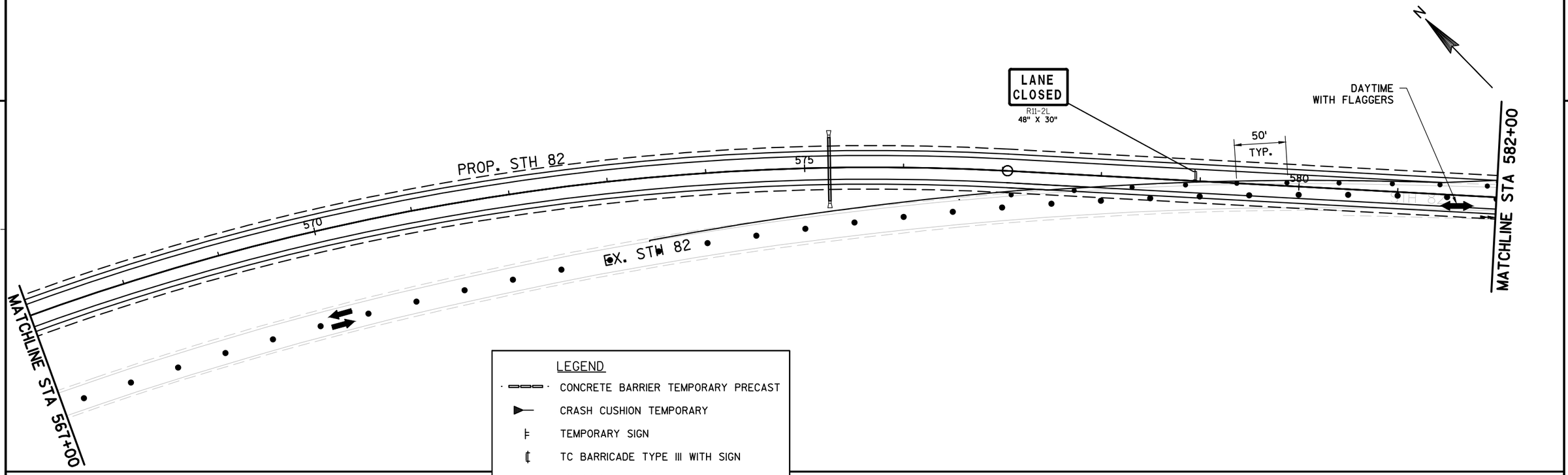


PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 5A	SHEET 84	E

2

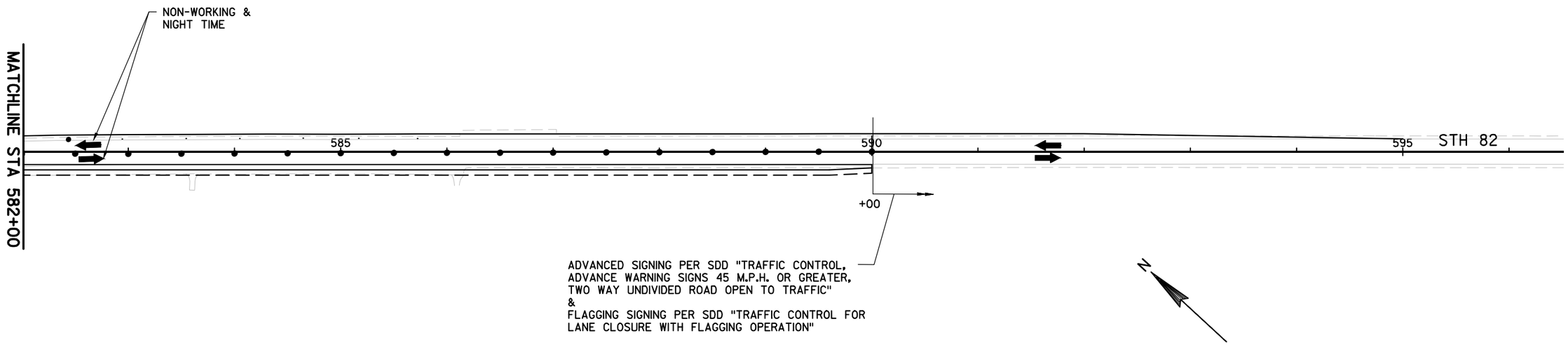


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 5A	SHEET 85	E



LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE

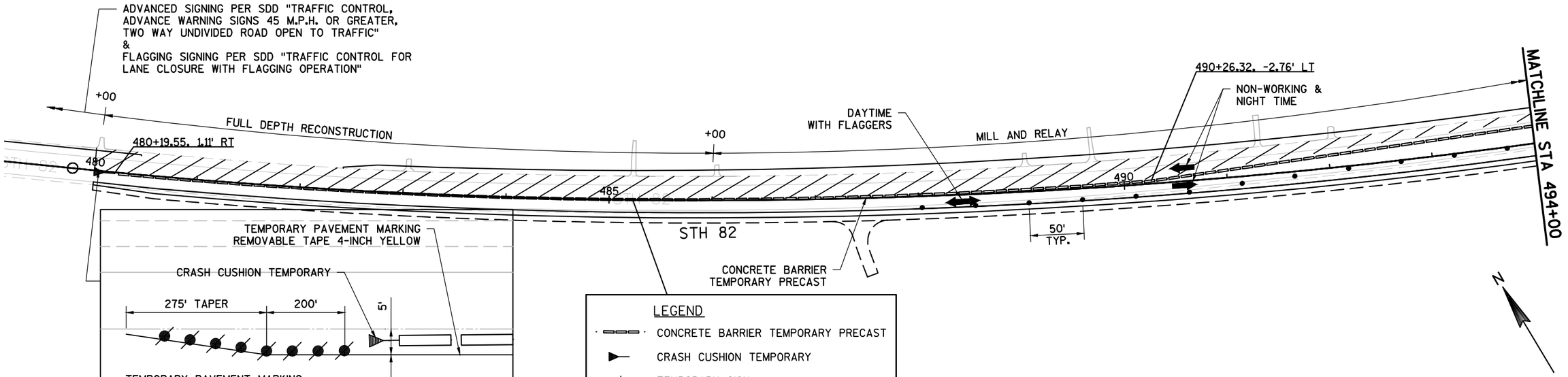


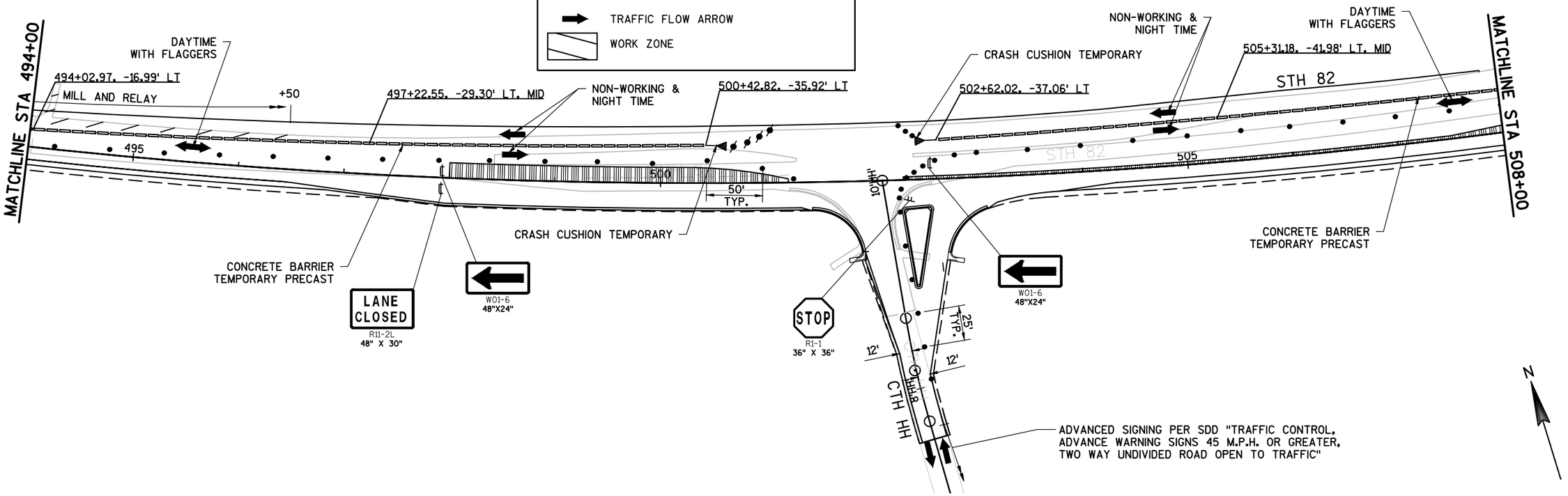
ADVANCED SIGNING PER SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
&
FLAGGING SIGNING PER SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"

PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 5A	SHEET 86	E

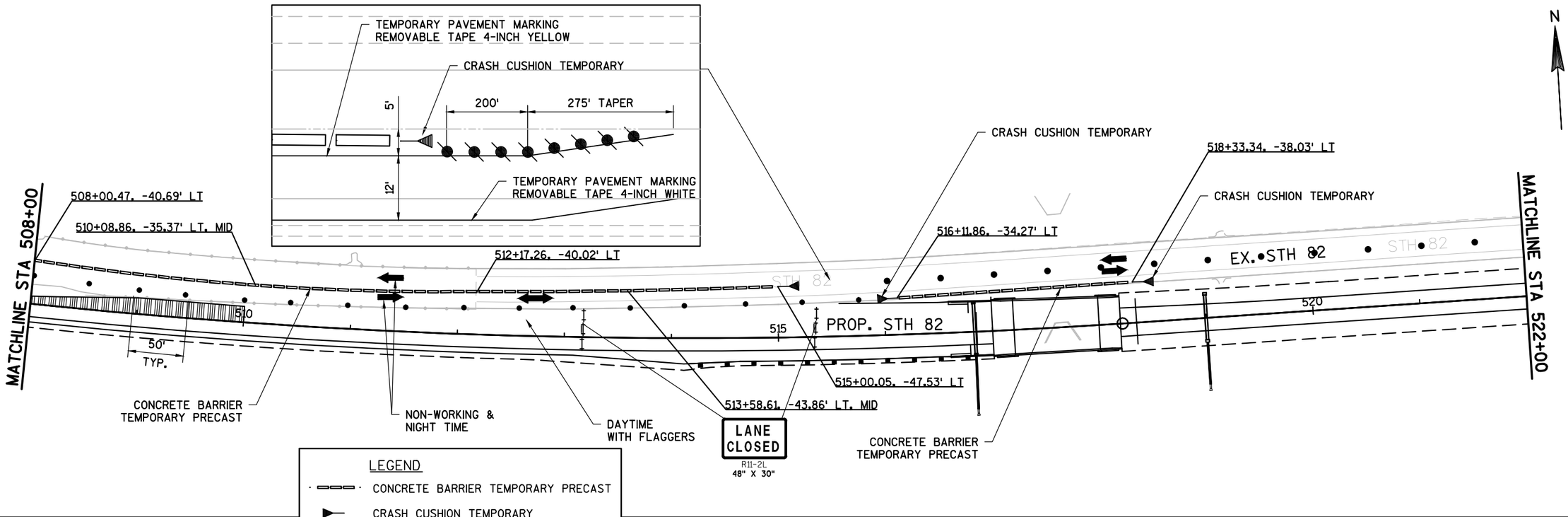
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WISDOT/CADDS SHEET 42

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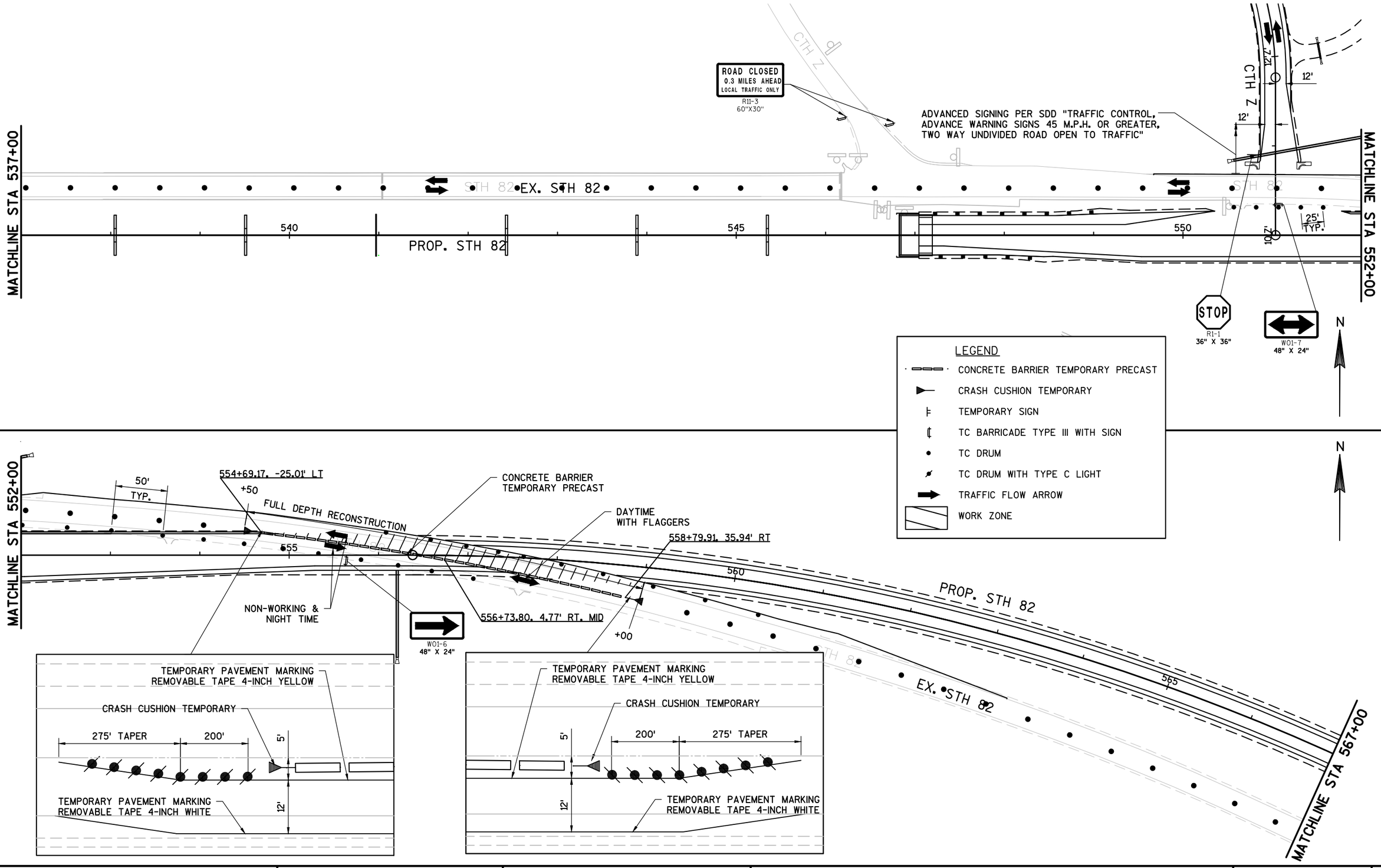


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 5B	SHEET 87	E

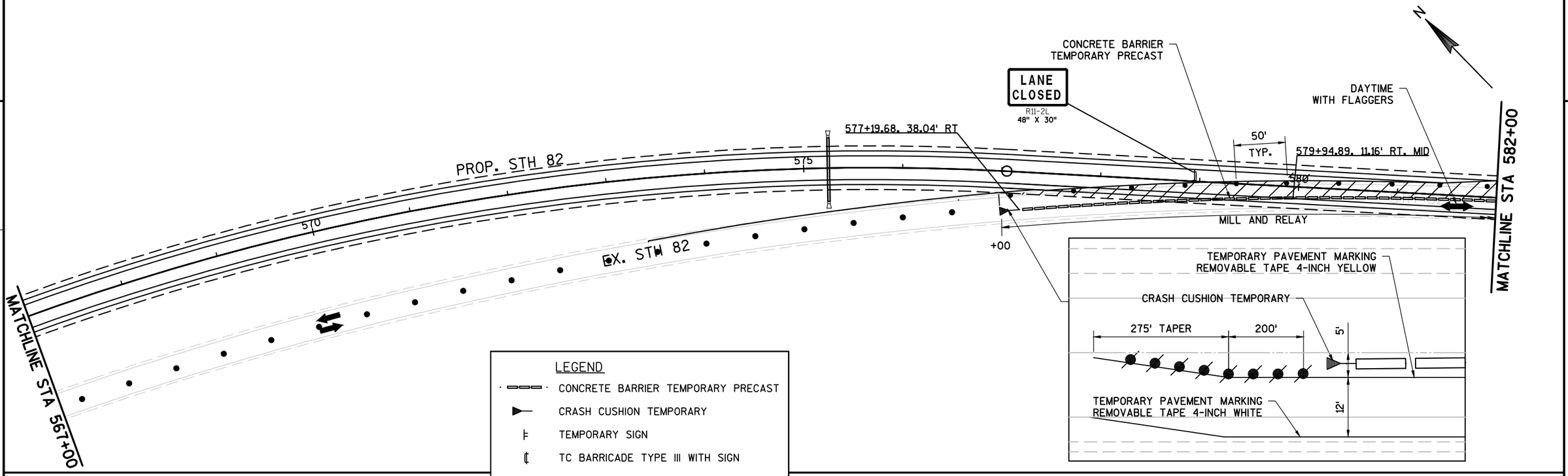


PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 5B	SHEET 88	E

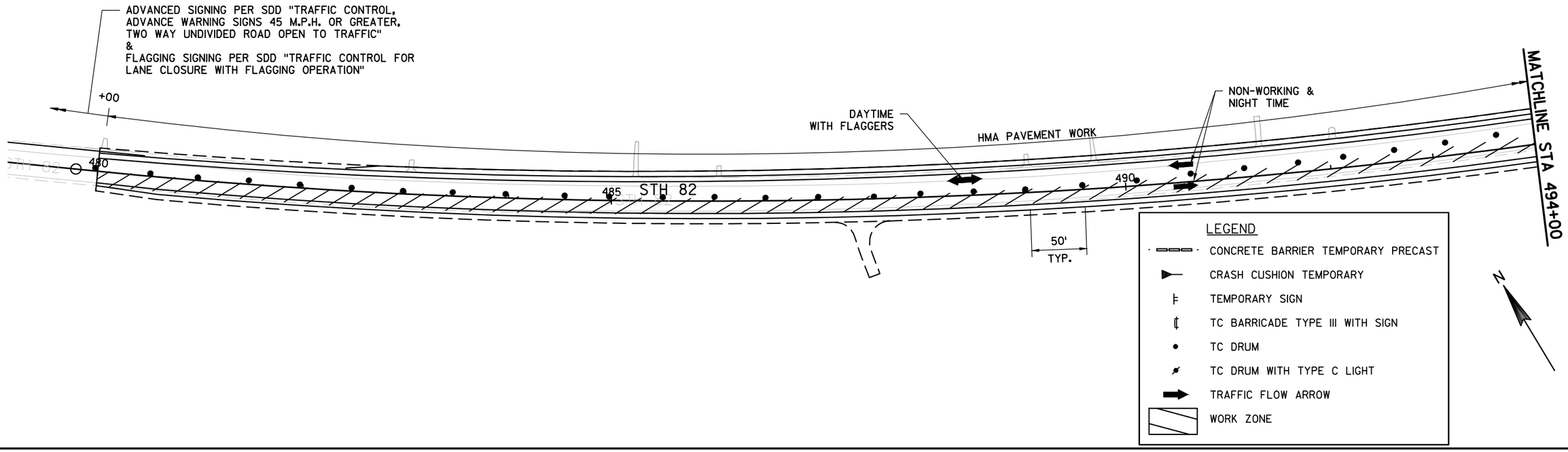
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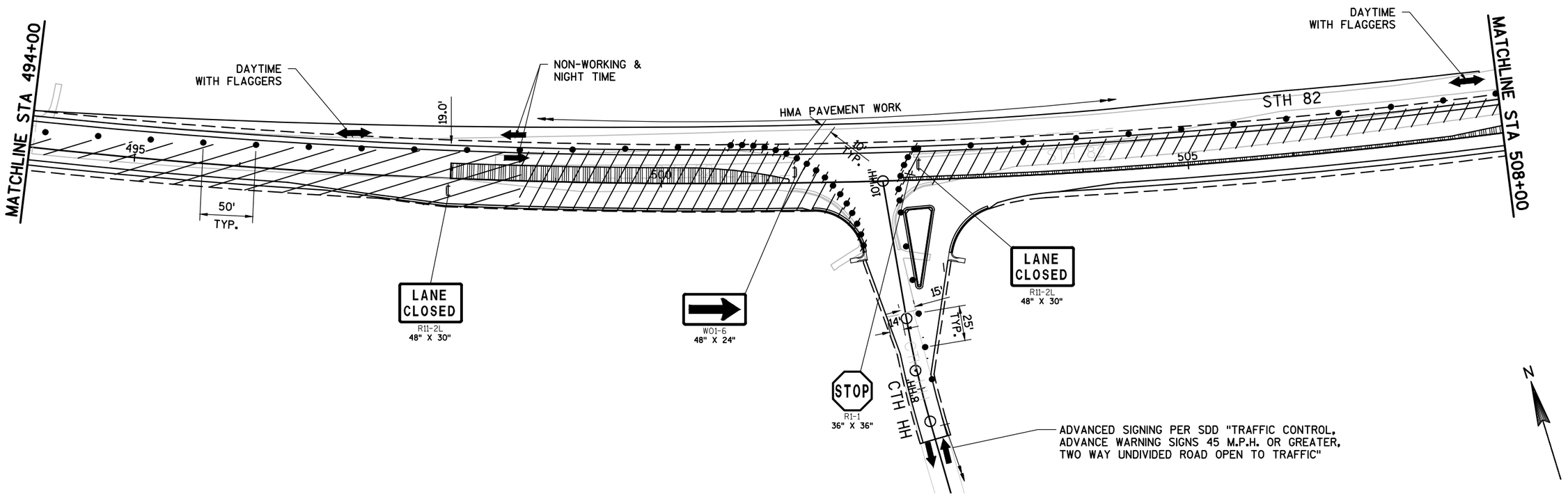


PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 5B	SHEET 89	E



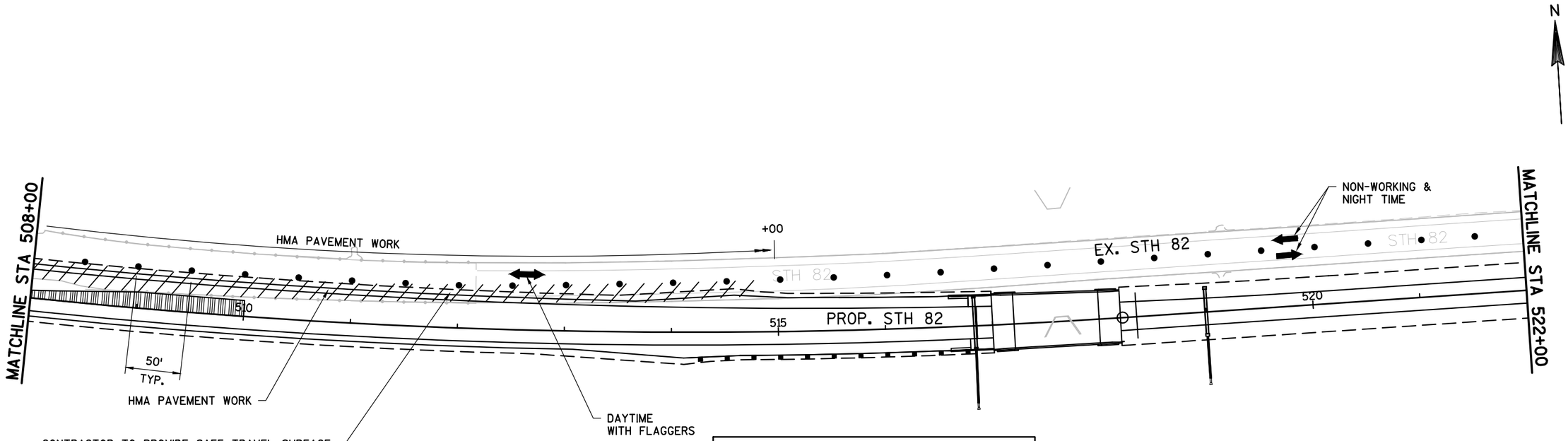
PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 5B	SHEET 90	E

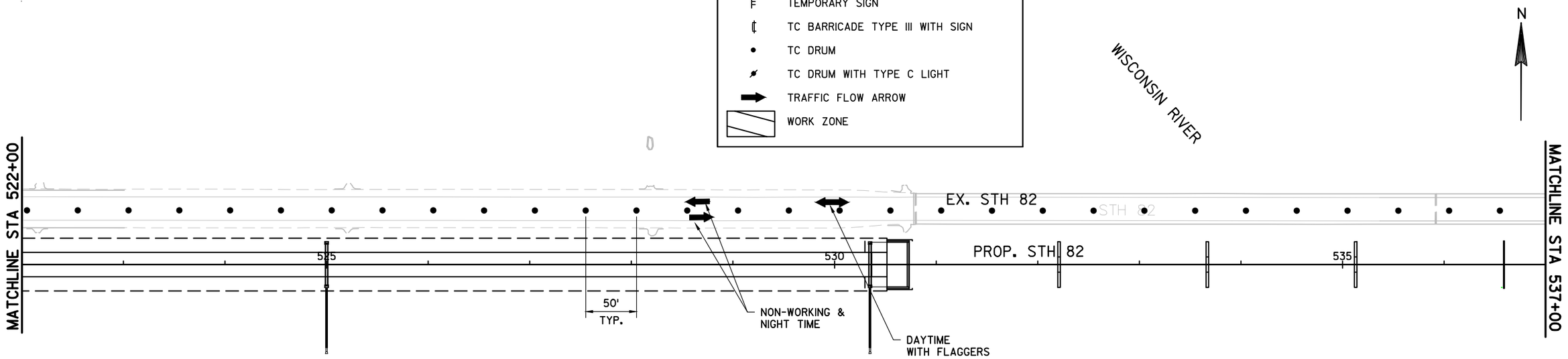




PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 6	SHEET 91	E

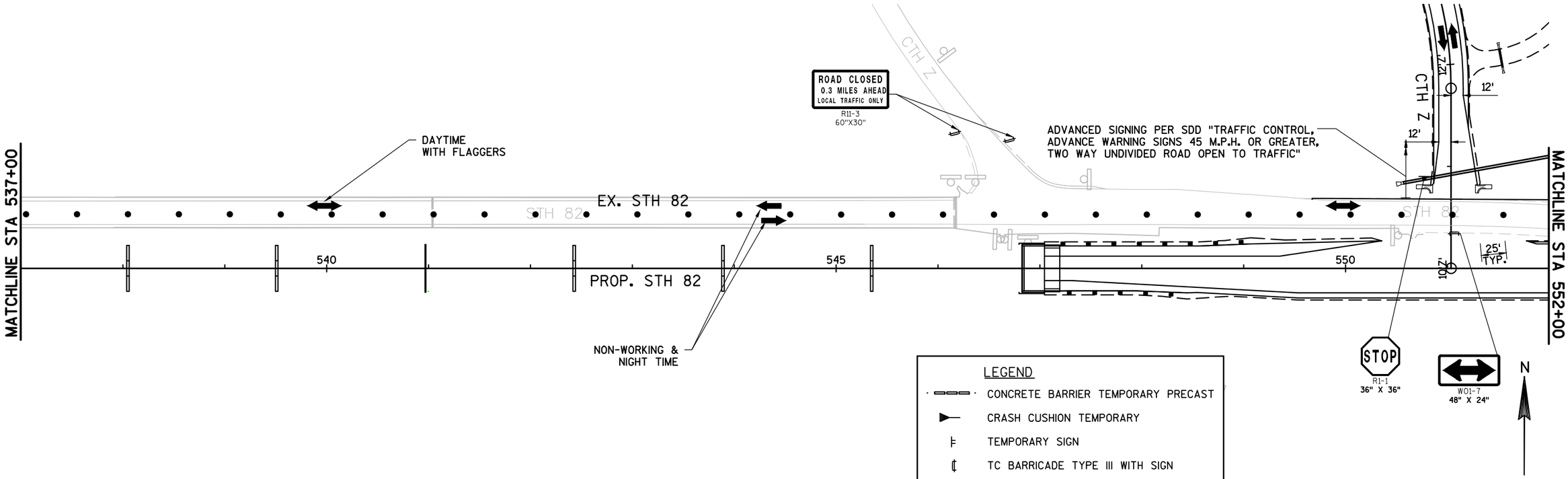
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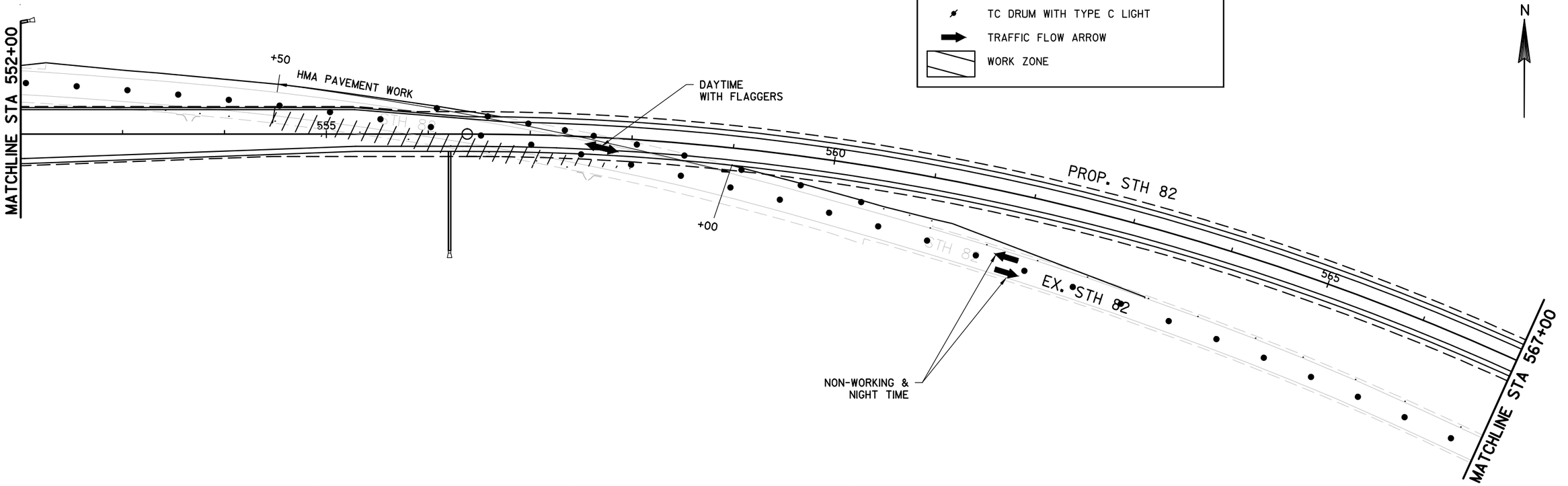




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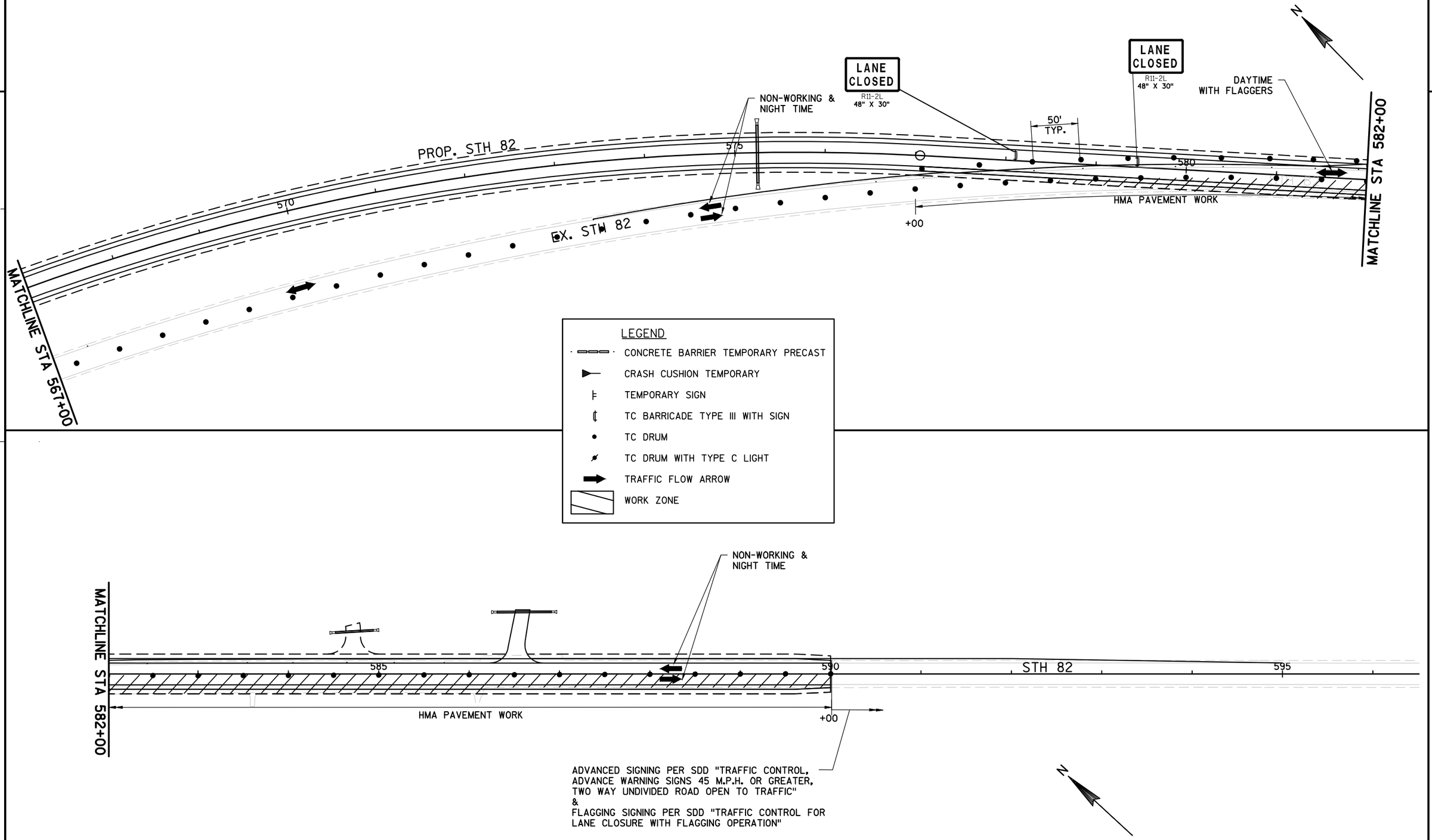
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 6	SHEET 93	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\026001_S6.DWG PLOT DATE : 4/27/2017 2:07 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 6	SHEET 94	E

2

ADVANCED SIGNING PER SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" & FLAGGING SIGNING PER SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"

+00

STH 82

480

485

490

HMA PAVEMENT WORK

DAYTIME WITH FLAGGERS

NON-WORKING & NIGHT TIME

50' TYP.

CONCRETE BARRIER TEMPORARY PRECAST

MATCHLINE STA 495+00

LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE

N

MATCHLINE STA 495+00

HMA PAVEMENT WORK

+00

495

50' TYP.

560

STH 82

505

MATCHLINE STA 508+00

DAYTIME WITH FLAGGERS

NON-WORKING & NIGHT TIME

DAYTIME WITH FLAGGERS

LANE CLOSED
R11-2L
48" X 30"

W01-6
48"X24"

STOP
R1-1
36" X 36"

10' TYP.

25' TYP.

12'

12'

CTH HH

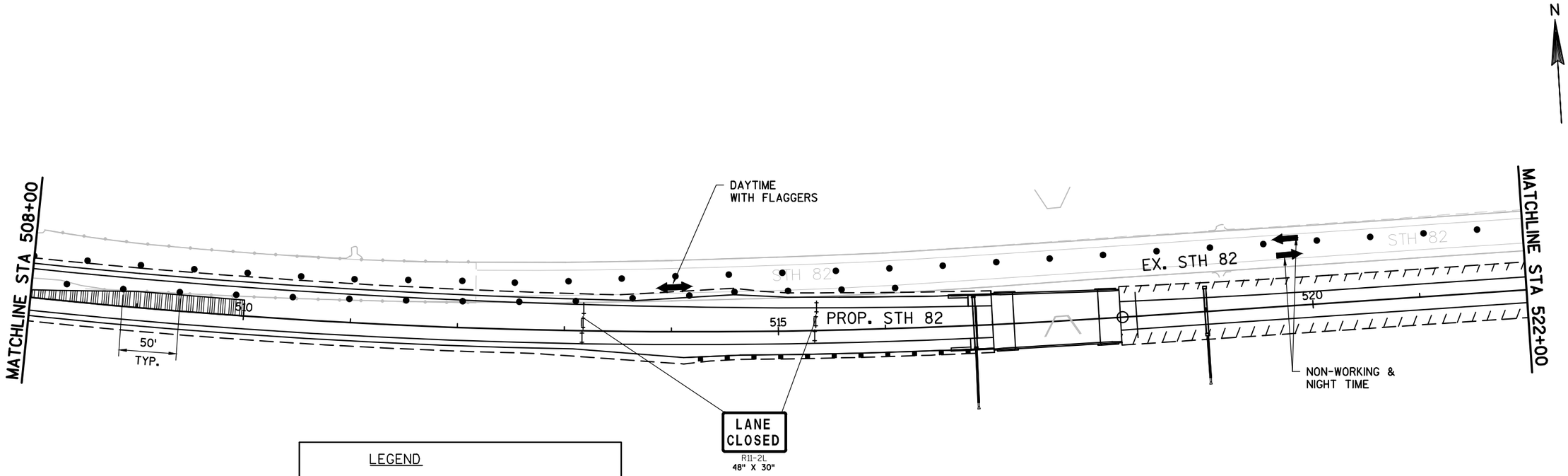
W01-6
48"X24"

ADVANCED SIGNING PER SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"

N

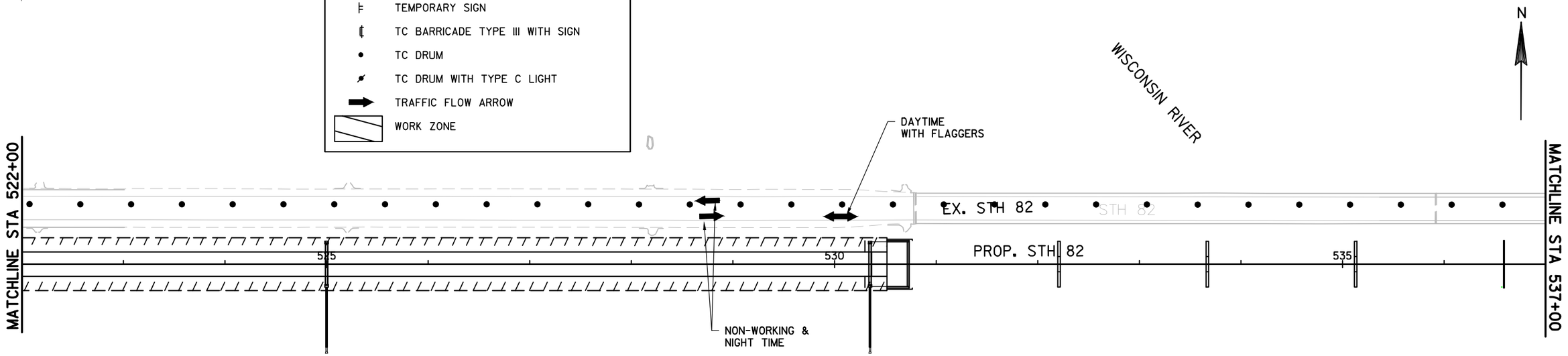
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 7	SHEET 95	E

2



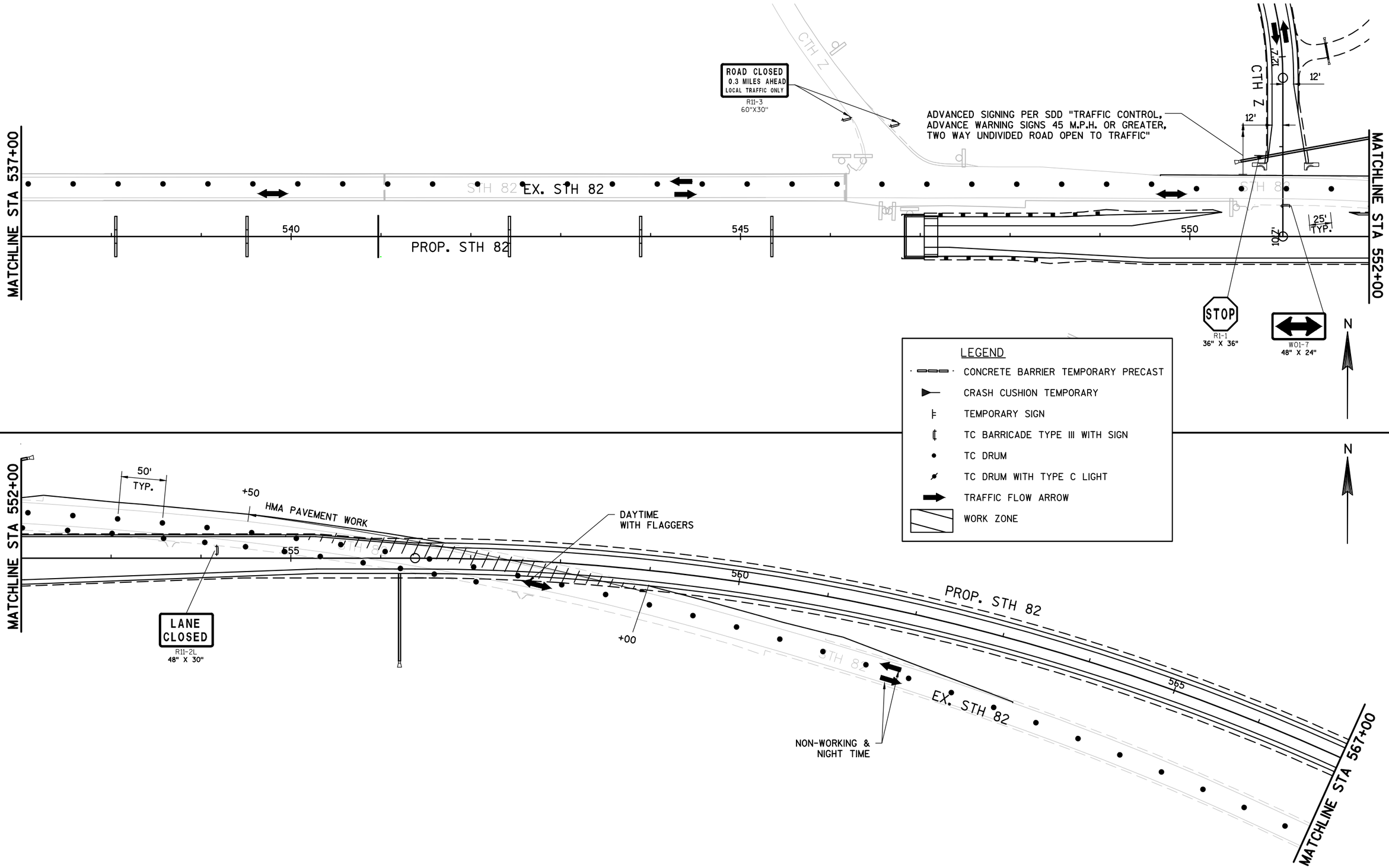
LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE



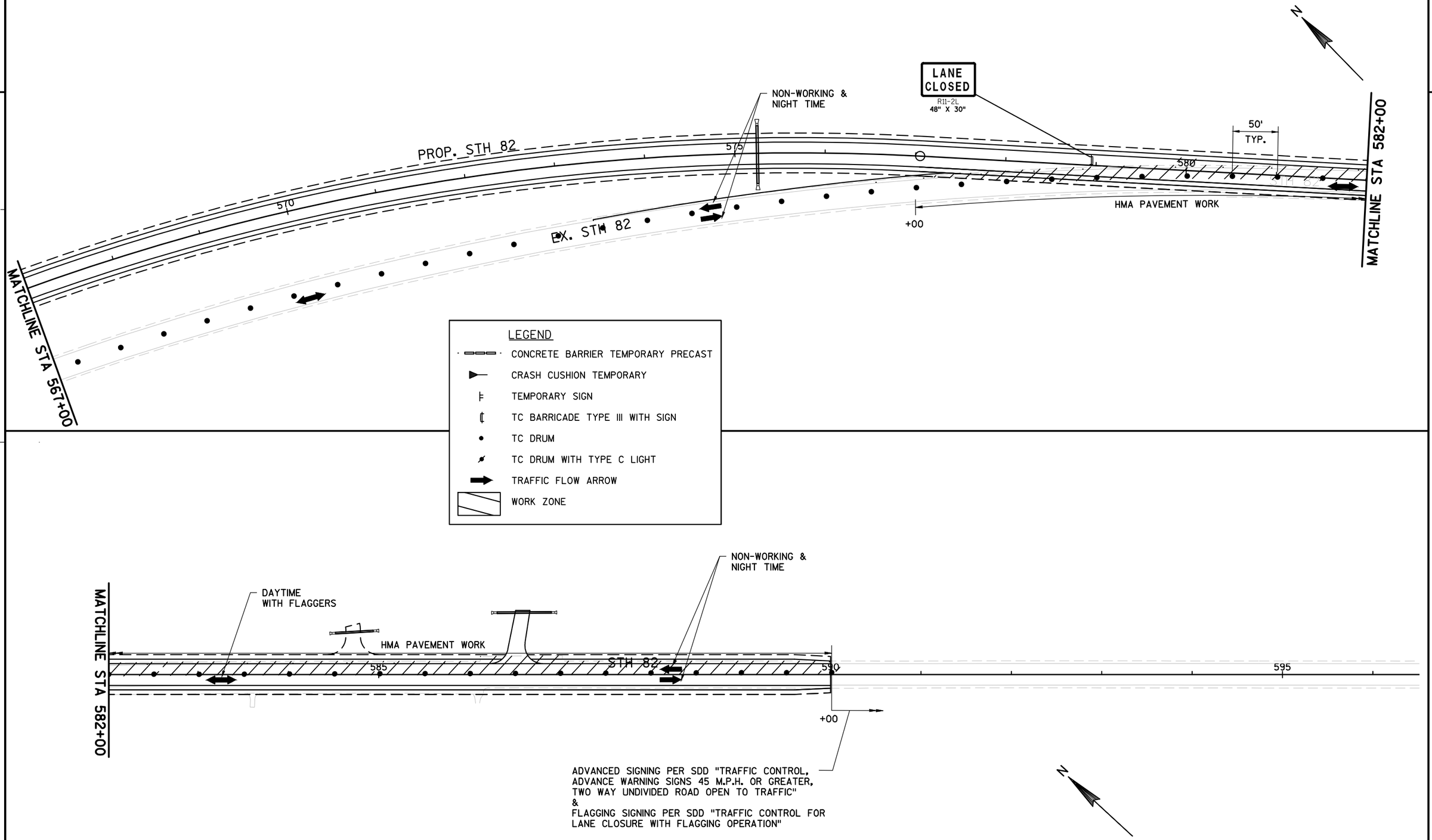
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2



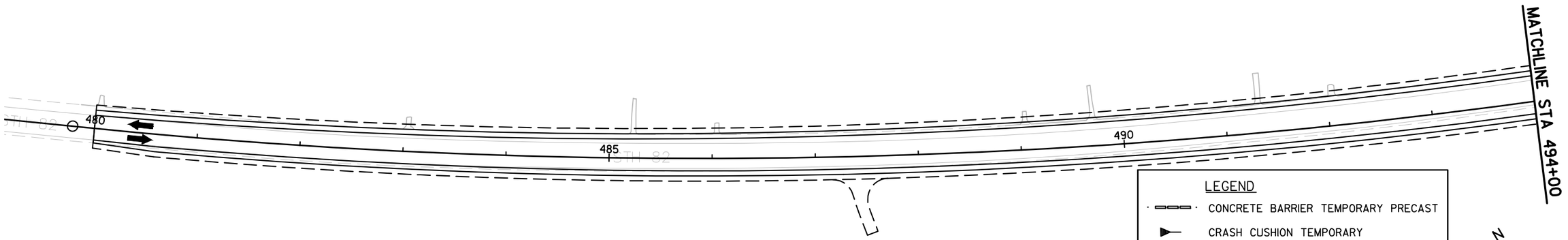
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 7	SHEET 97	E

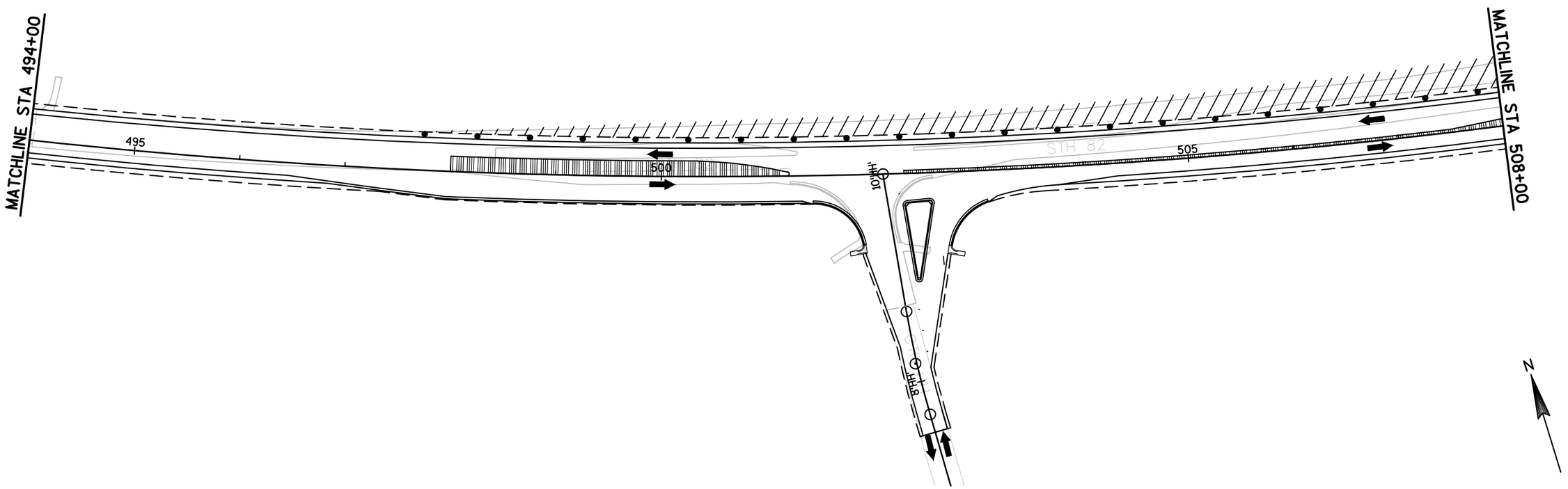
2



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 7	SHEET 98	E

2





PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 8	SHEET 99	E

2

N

MATCHLINE STA 508+00

GUARDRAIL TO BE INSTALLED UNDER LANE CLOSURE PRIOR TO FULLY OPENING STAGE 8 STH 82

510

515

520

MATCHLINE STA 522+00

LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE

N

WISCONSIN RIVER

MATCHLINE STA 522+00

525

530

EX. STH 82

PROP. STH 82

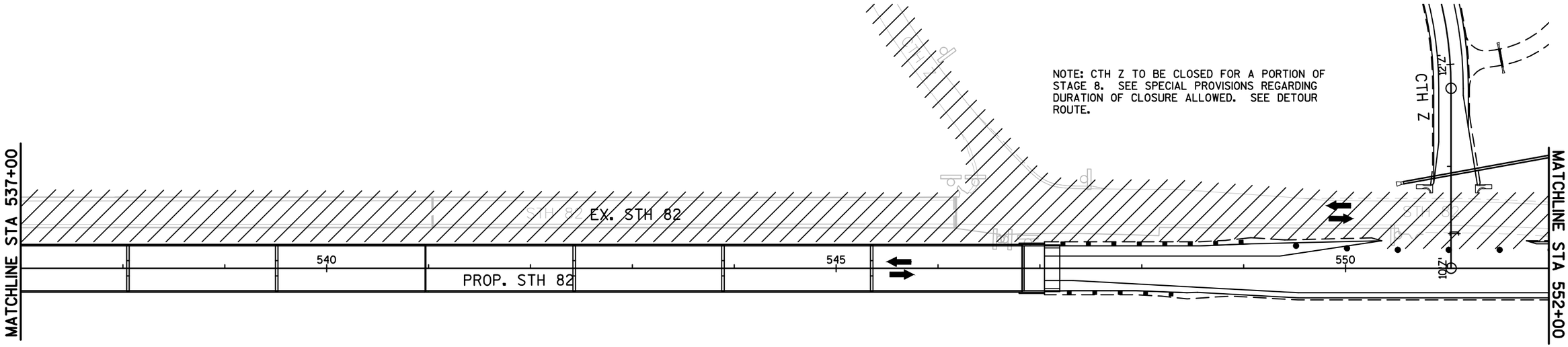
535

MATCHLINE STA 537+00

PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 8	SHEET 100	E

2

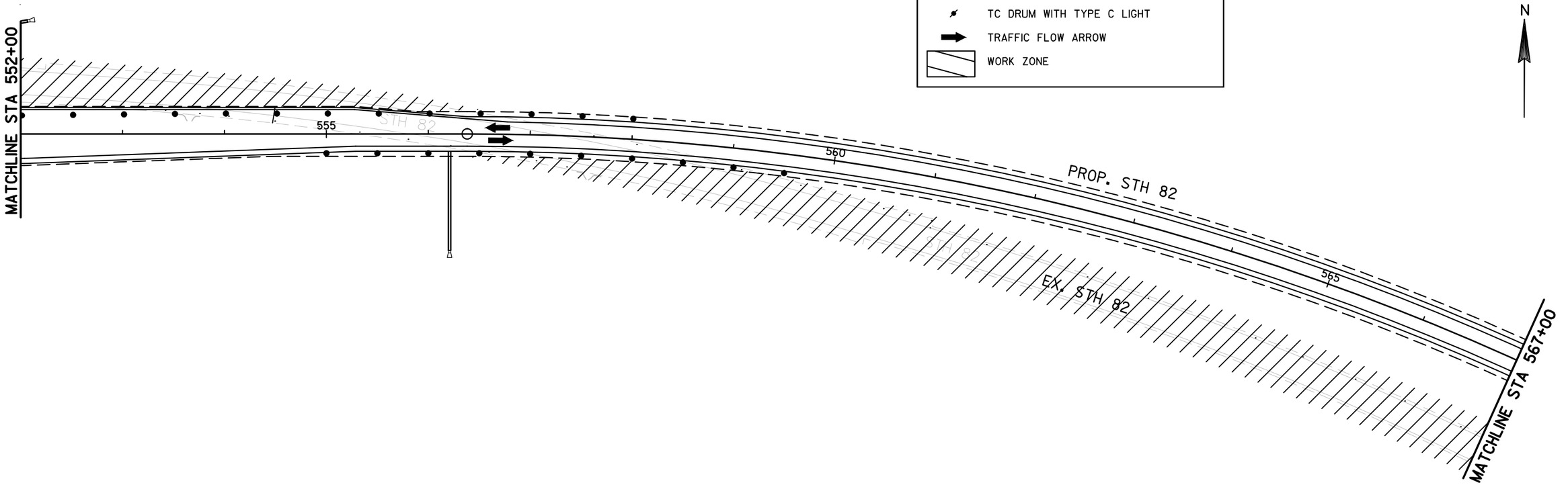
NOTE: CTH Z TO BE CLOSED FOR A PORTION OF STAGE 8. SEE SPECIAL PROVISIONS REGARDING DURATION OF CLOSURE ALLOWED. SEE DETOUR ROUTE.



LEGEND

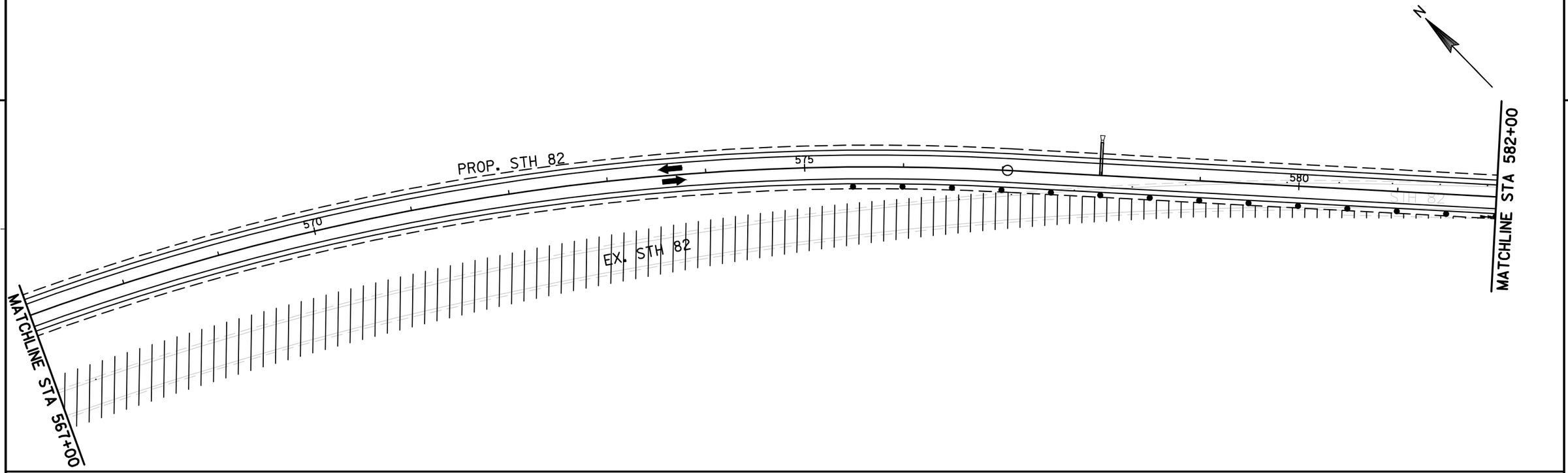
- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE

N



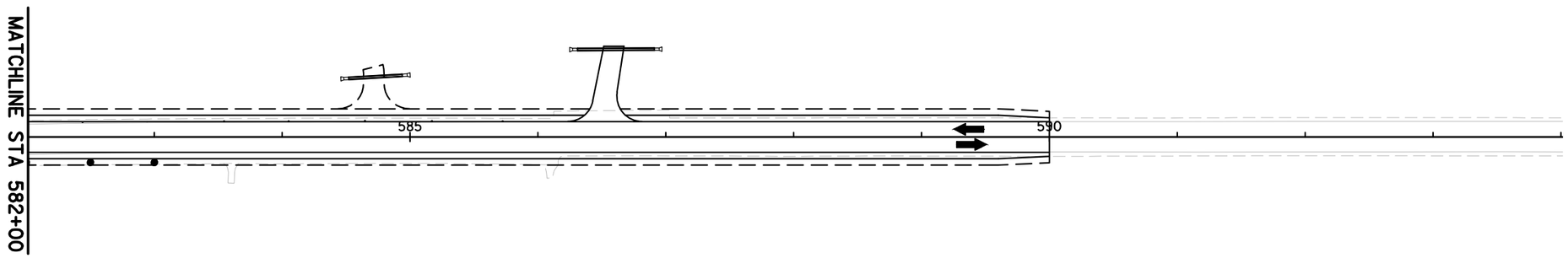
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 8	SHEET 101	E

2

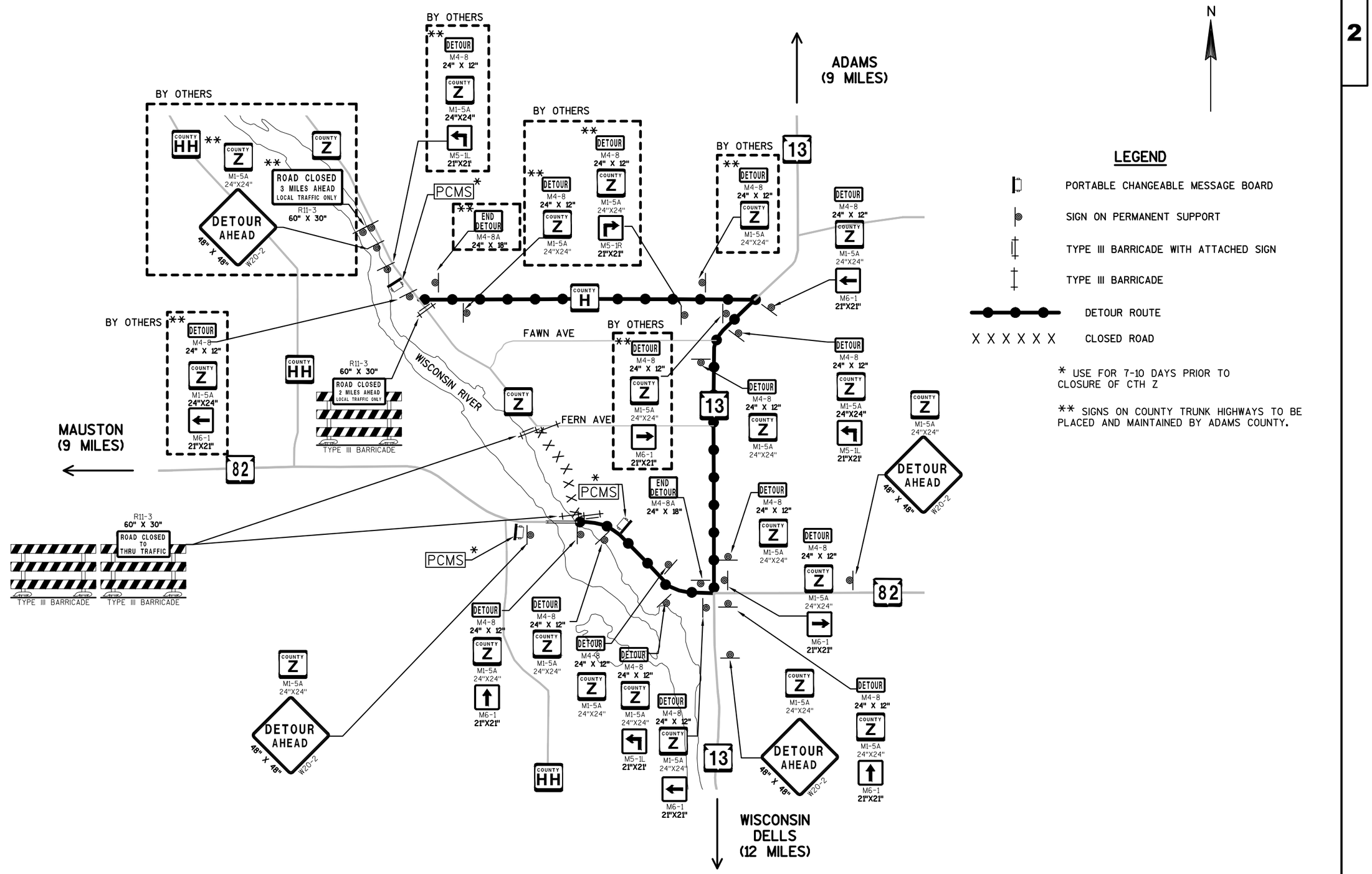


LEGEND

- CONCRETE BARRIER TEMPORARY PRECAST
- CRASH CUSHION TEMPORARY
- TEMPORARY SIGN
- TC BARRICADE TYPE III WITH SIGN
- TC DRUM
- TC DRUM WITH TYPE C LIGHT
- TRAFFIC FLOW ARROW
- WORK ZONE



PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	TRAFFIC CONTROL - STAGE 8	SHEET 102	E



LEGEND

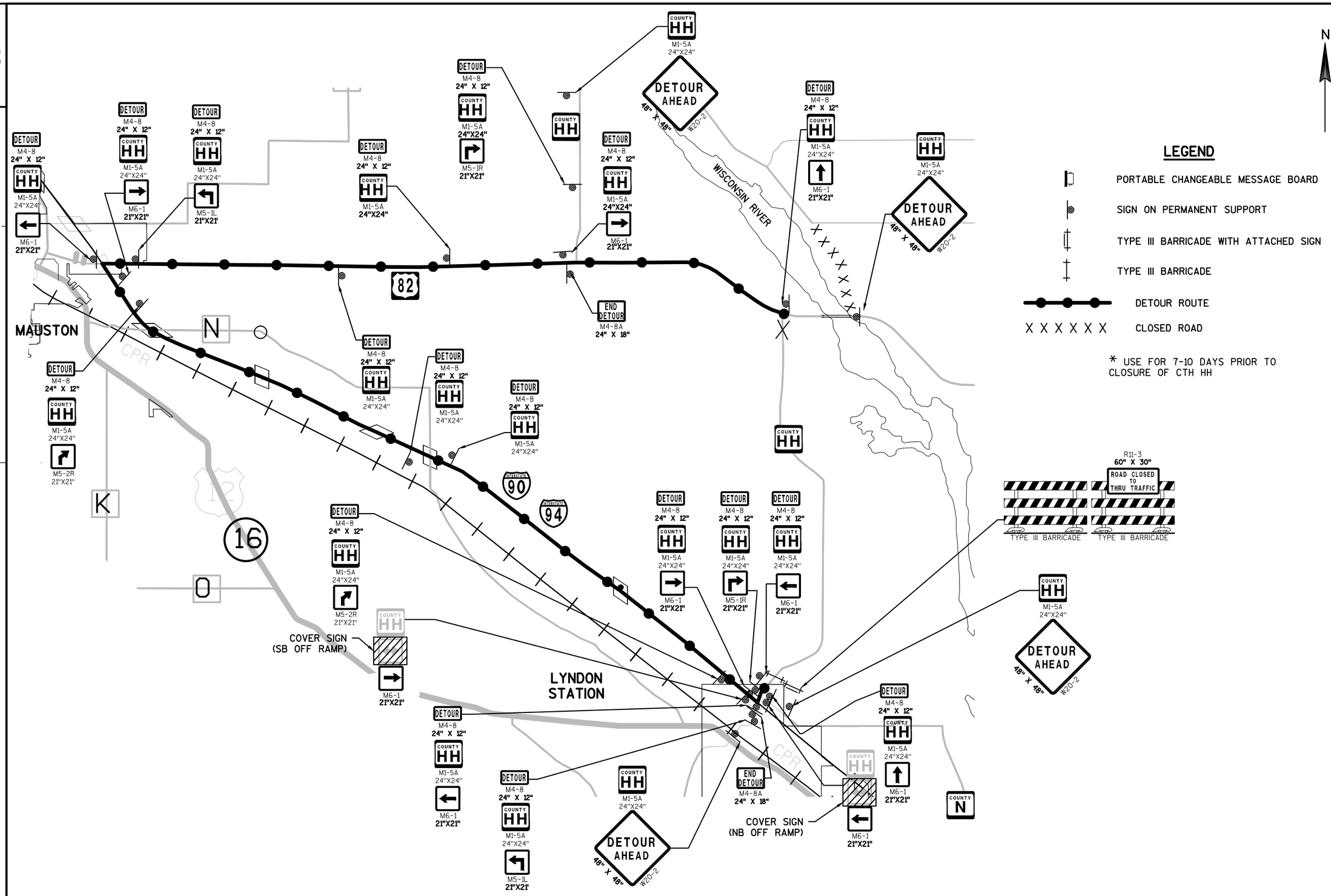
- PORTABLE CHANGEABLE MESSAGE BOARD
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- DETOUR ROUTE
- X X X X X X CLOSED ROAD

* USE FOR 7-10 DAYS PRIOR TO CLOSURE OF CTH Z

** SIGNS ON COUNTY TRUNK HIGHWAYS TO BE PLACED AND MAINTAINED BY ADAMS COUNTY.

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	DETOUR ROUTE - CTH Z	SHEET 103	E

2



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	DETOUR ROUTE - CTH HH	SHEET 104	E

2

CURVE 1
PI STA = 499+69.69
Y = 153189.061
X = 512339.242
DELTA = 36°56'39"
D = 0°57'41"
T = 1990.95'
L = 3842.98'
R = 5960.00'
PC STA = 479+78.74
Y = 154381.438
X = 510744.838
PT STA = 518+21.71
Y = 153194.377
X = 514330.187
SE = 2.6%

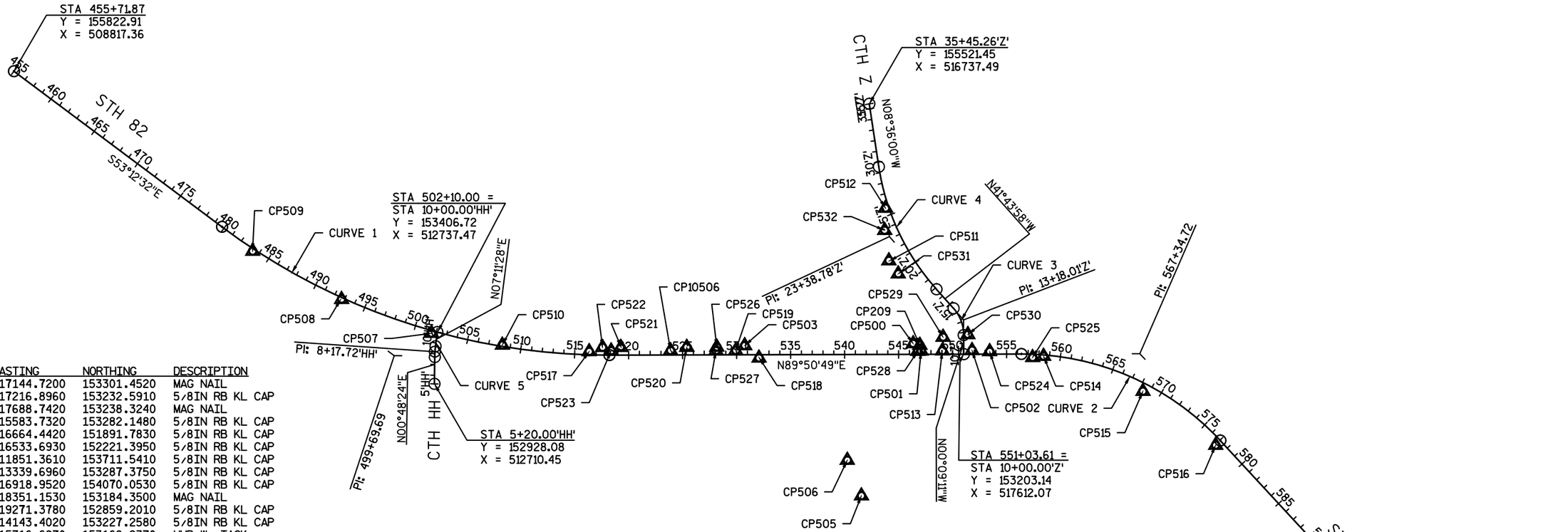
CURVE 2
PI STA = 567+34.72
Y = 153207.498
X = 519243.180
DELTA = 47°22'17"
D = 2°17'31"
T = 1096.68'
L = 2066.97'
R = 2500.00'
PC STA = 556+38.04
Y = 153204.569
X = 518146.502
PT STA = 577+05.01
Y = 152402.589
X = 519988.051
SE = 4.9%

CURVE 3
PI STA = 13+18.01'Z'
Y = 153521.153
X = 517611.217
DELTA = 41°34'48"
D = 15°21'39"
T = 141.61'
L = 270.69'
R = 373.00'
PC STA = 11+76.40'Z'
Y = 153379.539
X = 517611.595
PT STA = 14+47.09'Z'
Y = 153626.834
X = 517516.950
SE = 5.4%

CURVE 4
PI STA = 23+38.78'Z'
Y = 154292.263
X = 516923.389
DELTA = 33°07'58"
D = 2°36'16"
T = 654.44'
L = 1272.21'
R = 2200.00'
PC STA = 16+84.33'Z'
Y = 153803.881
X = 517359.025
PT STA = 29+56.54'Z'
Y = 154939.348
X = 516825.525
SE = 4.1%

CURVE 5
PI STA = 8+17.72'HH'
Y = 153225.771
X = 512714.641
DELTA = 6°23'03"
D = 6°21'58"
T = 50.19'
L = 100.28'
R = 900.00'
PC STA = 7+67.52'HH'
Y = 153175.582
X = 512713.934
PT STA = 8+67.81'HH'
Y = 153275.570
X = 512720.924
SE = NC

N



POINT #	EASTING	NORTHING	DESCRIPTION
CP500	517144.7200	153301.4520	MAG NAIL
CP501	517216.8960	153232.5910	5/8IN RB KL CAP
CP502	517688.7420	153238.3240	MAG NAIL
CP503	515583.7320	153282.1480	5/8IN RB KL CAP
CP505	516664.4420	151891.7830	5/8IN RB KL CAP
CP506	516533.6930	152221.3950	5/8IN RB KL CAP
CP508	511851.3610	153711.5410	5/8IN RB KL CAP
CP510	513339.6960	153287.3750	5/8IN RB KL CAP
CP511	516918.9520	154070.0530	5/8IN RB KL CAP
CP514	518351.1530	153184.3500	MAG NAIL
CP515	519271.3780	152859.2010	5/8IN RB KL CAP
CP517	514143.4020	153227.2580	5/8IN RB KL CAP
CP518	515716.6970	153168.2370	HUB W/ TACK
CP519	515500.2630	153236.7960	MAG NAIL
CP520	515047.5260	153267.6530	MAG NAIL
CP521	514436.9600	153266.1780	MAG NAIL
CP522	514267.6590	153265.8550	MAG NAIL
CP523	514346.9630	153233.9660	MAG NAIL
CP524	517852.3780	153227.8900	MAG NAIL
CP525	518249.4690	153172.5680	MAG NAIL
CP525	515325.0460	153268.5670	MAG NAIL
CP528	517186.4040	153230.5980	6IN NAIL
CP529	517420.7890	153361.0060	6IN NAIL
CP530	517650.1830	153385.1770	6IN NAIL
CP532	516879.5830	154351.2270	6IN NAIL
CP209	517205.9160	153285.8420	T209
CP5469	489616.7050	145864.7610	LEMONWEIR E GPS
CP5470	520025.7040	142188.0310	KIDARE E GPS
CP5486	532044.0200	159318.3440	SPRINGVILLE N GPS
CP5487	523203.4760	170693.5880	WHITE CREEK GPS
CP5692	510117.0520	157244.9570	PLAINVILLE GPS
CP10506	514897.4690	153236.0940	T105-06

POINT #	EASTING	NORTHING	DESCRIPTION	TIE
CP507	512683.5920	153397.1320	5/8IN RB KL CAP	13' NW OF SIGN, 54' NE OF RW POST
CP509	511028.0810	154157.0770	5/8IN RB KL CAP	55' S OF FLUME, 7' SW OF EDGE OF GRAVEL
CP512	516887.5310	154555.4950	5/8IN RB KL CAP	45' NW OF POST AT FIELD ENTRANCE, 95' SE OF GUY POLE ON W SIDE OF CTH Z
CP513	517414.9280	153233.7900	5/8IN RB KL CAP	11' NW OF SIGN BY DRIVEWAY, 113' E OF MAILBOX
CP516	519944.7680	152359.4320	5/8IN RB KL CAP	170' SE OF SOUTH END OF CULVERT, 8' SW OF EDGE OF GRAVEL
CP527	515318.2690	153235.9750	MAG NAIL	37' NE OF NO PARKING SIGN, 13' NW OF CULVERT
CP531	517005.5420	153947.3850	6IN NAIL	40' N OF POWER POLE, 65' SE OF SW EDGE OF BUILDING RUINS

PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	ALIGNMENT DIAGRAM	SHEET 105	E

1430-01-73

Line	Item	Item Description	Unit	Total	Qty
0002	108.4400	CPM Progress Schedule	EACH	1.000	1.000
0004	201.0105	Clearing	STA	99.000	99.000
0006	201.0205	Grubbing	STA	99.000	99.000
0008	203.0100	Removing Small Pipe Culverts	EACH	17.000	17.000
0010	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 539+11	LS	1.000	1.000
0012	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 02. 517+64.50	LS	1.000	1.000
0014	204.0100	Removing Pavement	SY	856.000	856.000
0016	204.0120	Removing Asphaltic Surface Milling	SY	5,956.000	5,956.000
0018	204.0150	Removing Curb & Gutter	LF	393.000	393.000
0020	204.0165	Removing Guardrail	LF	6,626.000	6,626.000
0022	204.0180	Removing Delineators and Markers	EACH	23.000	23.000
0024	204.0195	Removing Concrete Bases	EACH	2.000	2.000
0026	204.0235	Removing Buildings (parcel) 01. Parcel 3 Garage and Shed	LS	1.000	1.000
0028	205.0100	Excavation Common	CY	198,909.000	198,909.000
0030	205.0200	Excavation Rock	CY	223,601.000	223,601.000
0032	206.1000	Excavation for Structures Bridges (structure) 01. B-29-141	LS	1.000	1.000
0034	206.1000	Excavation for Structures Bridges (structure) 02. B-29-148	LS	1.000	1.000
0036	206.5000	Cofferdams (structure) 01. B-29-141	LS	1.000	1.000
0038	210.1500	Backfill Structure Type A	TON	1,470.000	1,470.000
0040	213.0100	Finishing Roadway (project) 01. 1430-01-73	EACH	1.000	1.000
0042	214.0100	Obliterating Old Road	STA	9.400	9.400
0044	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,400.000	1,400.000
0046	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	45,320.000	45,320.000
0048	330.0100	Mill and Relay	SY	10,500.000	10,500.000
0050	415.0070	Concrete Pavement 7-Inch	SY	53.500	53.500
0052	415.0410	Concrete Pavement Approach Slab	SY	173.500	173.500
0054	416.1010	Concrete Surface Drains	CY	20.600	20.600
0056	440.4410	Incentive IRI Ride	DOL	7,000.000	7,000.000
0058	450.4000	HMA Cold Weather Paving	TON	250.000	250.000
0060	455.0605	Tack Coat	GAL	5,695.000	5,695.000
0062	460.2000	Incentive Density HMA Pavement	DOL	11,770.000	11,770.000
0064	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	33,243.000	33,243.000
0066	460.6224	HMA Pavement 4 MT 58-28 S	TON	18,140.000	18,140.000
0068	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	105.000	105.000
0070	465.0125	Asphaltic Surface Temporary	TON	940.000	940.000
0072	465.0315	Asphaltic Flumes	SY	35.000	35.000

1430-01-73

Line	Item	Item Description	Unit	Total	Qty
0074	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	16,405.000	16,405.000
0076	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	4,968.000	4,968.000
0078	501.1000.S	Ice Hot Weather Concreting	LB	43,555.000	43,555.000
0080	502.0100	Concrete Masonry Bridges	CY	6,159.000	6,159.000
0082	502.1100	Concrete Masonry Seal	CY	1,740.000	1,740.000
0084	502.3110.S	Expansion Device Modular (structure) 01. B-29-141	LS	1.000	1.000
0086	502.3200	Protective Surface Treatment	SY	457.000	457.000
0088	502.3210	Pigmented Surface Sealer	SY	1,470.000	1,470.000
0090	502.4205	Adhesive Anchors No. 5 Bar	EACH	188.000	188.000
0092	503.0137	Prestressed Girder Type I 36W-Inch	LF	468.000	468.000
0094	503.0172	Prestressed Girder Type I 72W-Inch	LF	9,622.000	9,622.000
0096	505.0400	Bar Steel Reinforcement HS Structures	LB	309,815.000	309,815.000
0098	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	874,895.000	874,895.000
0100	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	3,335.000	3,335.000
0102	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	108.000	108.000
0104	506.2610	Bearing Pads Elastomeric Laminated	EACH	36.000	36.000
0106	506.4000	Steel Diaphragms (structure) 01. B-29-141	EACH	110.000	110.000
0108	506.4000	Steel Diaphragms (structure) 02. B-29-148	EACH	5.000	5.000
0110	509.5100.S	Polymer Overlay	SY	8,288.000	8,288.000
0112	514.0450	Floor Drains Type WF	EACH	10.000	10.000
0114	516.0500	Rubberized Membrane Waterproofing	SY	67.000	67.000
0116	522.0118	Culvert Pipe Reinforced Concrete Class III 18-Inch	LF	168.000	168.000
0118	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	270.000	270.000
0120	522.0524	Culvert Pipe Reinforced Concrete Class V 24-Inch	LF	80.000	80.000
0122	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	4.000	4.000
0124	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	10.000	10.000
0126	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	10.000	10.000
0128	550.0020	Pre-Boring Rock or Consolidated Materials	LF	1,590.000	1,590.000
0130	550.1120	Piling Steel HP 12-Inch X 53 Lb	LF	5,600.000	5,600.000
0132	550.2102	Piling CIP Concrete 10 3/4 X 0.219-Inch	LF	2,700.000	2,700.000
0134	550.2108	Piling CIP Concrete 10 3/4 X 0.50-Inch	LF	54,625.000	54,625.000
0136	601.0415	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	LF	176.000	176.000
0138	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	2,246.000	2,246.000
0140	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	286.000	286.000
0142	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	180.000	180.000
0144	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	60.000	60.000

1430-01-73

Line	Item	Item Description	Unit	Total	Qty
0146	602.0410	Concrete Sidewalk 5-Inch	SF	956.000	956.000
0148	603.8000	Concrete Barrier Temporary Precast Delivered	LF	7,322.000	7,322.000
0150	603.8125	Concrete Barrier Temporary Precast Installed	LF	12,831.000	12,831.000
0152	606.0200	Riprap Medium	CY	5,383.000	5,383.000
0154	606.0300	Riprap Heavy	CY	1,670.000	1,670.000
0156	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	120.000	120.000
0158	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	177.800	177.800
0160	611.0627	Inlet Covers Type HM	EACH	8.000	8.000
0162	611.0642	Inlet Covers Type MS	EACH	1.000	1.000
0164	611.3230	Inlets 2x3-FT	EACH	8.000	8.000
0166	611.3901	Inlets Median 1 Grate	EACH	1.000	1.000
0168	612.0204	Pipe Underdrain Unperforated 4-Inch	LF	15.000	15.000
0170	612.0212	Pipe Underdrain Unperforated 12-Inch	LF	264.000	264.000
0172	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	445.000	445.000
0174	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	8.000	8.000
0176	614.0250	Steel Thrie Beam Structure Approach Temporary	LF	22.000	22.000
0178	614.0905	Crash Cushions Temporary	EACH	23.000	23.000
0180	614.2300	MGS Guardrail 3	LF	2,828.500	2,828.500
0182	614.2500	MGS Thrie Beam Transition	LF	315.200	315.200
0184	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0186	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1430-01-73	EACH	1.000	1.000
0188	619.1000	Mobilization	EACH	1.000	1.000
0190	620.0100	Concrete Corrugated Median	SF	8,797.000	8,797.000
0192	624.0100	Water	MGAL	700.000	700.000
0194	625.0100	Topsoil	SY	174,043.000	174,043.000
0196	625.0500	Salvaged Topsoil	SY	4,750.000	4,750.000
0198	627.0200	Mulching	SY	86,908.000	86,908.000
0200	628.1504	Silt Fence	LF	18,344.000	18,344.000
0202	628.1520	Silt Fence Maintenance	LF	18,344.000	18,344.000
0204	628.1905	Mobilizations Erosion Control	EACH	30.000	30.000
0206	628.1910	Mobilizations Emergency Erosion Control	EACH	10.000	10.000
0208	628.2002	Erosion Mat Class I Type A	SY	78,101.000	78,101.000
0210	628.2023	Erosion Mat Class II Type B	SY	21,929.000	21,929.000
0212	628.6005	Turbidity Barriers	SY	1,143.000	1,143.000
0214	628.6510	Soil Stabilizer Type B	ACRE	36.000	36.000
0216	628.7005	Inlet Protection Type A	EACH	13.000	13.000
0218	628.7015	Inlet Protection Type C	EACH	12.000	12.000

1430-01-73

Line	Item	Item Description	Unit	Total	Qty
0220	628.7020	Inlet Protection Type D	EACH	4.000	4.000
0222	628.7504	Temporary Ditch Checks	LF	488.000	488.000
0224	628.7515.S	Stone or Rock Ditch Checks	CY	47.000	47.000
0226	628.7555	Culvert Pipe Checks	EACH	36.000	36.000
0228	628.7560	Tracking Pads	EACH	6.000	6.000
0230	629.0210	Fertilizer Type B	CWT	110.000	110.000
0232	630.0120	Seeding Mixture No. 20	LB	4,934.000	4,934.000
0234	630.0200	Seeding Temporary	LB	140.000	140.000
0236	633.5200	Markers Culvert End	EACH	24.000	24.000
0238	634.0410	Posts Wood 4x4-Inch X 10-FT	EACH	1.000	1.000
0240	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	1.000	1.000
0242	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	39.000	39.000
0244	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	20.000	20.000
0246	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	2.000	2.000
0248	637.2210	Signs Type II Reflective H	SF	282.740	282.740
0250	637.2230	Signs Type II Reflective F	SF	129.250	129.250
0252	638.2602	Removing Signs Type II	EACH	64.000	64.000
0254	638.3000	Removing Small Sign Supports	EACH	67.000	67.000
0256	642.5201	Field Office Type C	EACH	1.000	1.000
0258	643.0100	Traffic Control (project) 01. 1430-01-73	EACH	1.000	1.000
0260	643.0300	Traffic Control Drums	DAY	64,643.000	64,643.000
0262	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000
0264	643.0420	Traffic Control Barricades Type III	DAY	3,043.000	3,043.000
0266	643.0705	Traffic Control Warning Lights Type A	DAY	6,086.000	6,086.000
0268	643.0715	Traffic Control Warning Lights Type C	DAY	9,091.000	9,091.000
0270	643.0900	Traffic Control Signs	DAY	17,670.000	17,670.000
0272	643.0920	Traffic Control Covering Signs Type II	EACH	4.000	4.000
0274	643.1050	Traffic Control Signs PCMS	DAY	184.000	184.000
0276	643.3000	Traffic Control Detour Signs	DAY	1,449.000	1,449.000
0278	645.0111	Geotextile Type DF Schedule A	SY	220.000	220.000
0280	645.0120	Geotextile Type HR	SY	13,396.000	13,396.000
0282	645.0140	Geotextile Type SAS	SY	441.000	441.000
0284	646.0106	Pavement Marking Epoxy 4-Inch	LF	55,426.000	55,426.000
0286	646.0126	Pavement Marking Epoxy 8-Inch	LF	1,281.000	1,281.000
0288	646.0600	Removing Pavement Markings	LF	26,917.000	26,917.000
0290	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	6.000	6.000
0292	647.0356	Pavement Marking Words Epoxy	EACH	2.000	2.000
0294	647.0563	Pavement Marking Stop Line Paint 18-Inch	LF	90.000	90.000
0296	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	1,394.000	1,394.000
0298	647.0856	Pavement Marking Concrete Corrugated Median Epoxy	SF	3,486.000	3,486.000

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Line	Item	Item Description	Unit	Total	Qty
0300	647.0955	Removing Pavement Markings Arrows	EACH	2.000	2.000
0302	647.0965	Removing Pavement Markings Words	EACH	2.000	2.000
0304	648.0100	Locating No-Passing Zones	MI	5.530	5.530
0306	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	29,950.000	29,950.000
0308	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	71,063.000	71,063.000
0310	650.4000	Construction Staking Storm Sewer	EACH	12.000	12.000
0312	650.4500	Construction Staking Subgrade	LF	11,972.000	11,972.000
0314	650.5000	Construction Staking Base	LF	11,972.000	11,972.000
0316	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	2,948.000	2,948.000
0318	650.6000	Construction Staking Pipe Culverts	EACH	15.000	15.000
0320	650.7000	Construction Staking Concrete Pavement	LF	1,151.000	1,151.000
0322	650.9910	Construction Staking Supplemental Control (project) 01. 1430-01-73	LS	1.000	1.000
0324	650.9920	Construction Staking Slope Stakes	LF	12,562.000	12,562.000
0326	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	529.000	529.000
0328	653.0905	Removing Pull Boxes	EACH	3.000	3.000
0330	654.0105	Concrete Bases Type 5	EACH	3.000	3.000
0332	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0334	655.0610	Electrical Wire Lighting 12 AWG	LF	2,334.000	2,334.000
0336	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. CTH HH	LS	1.000	1.000
0338	659.1115	Luminaires Utility LED A	EACH	2.000	2.000
0340	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0342	690.0150	Sawing Asphalt	LF	13,859.000	13,859.000
0344	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0346	715.0502	Incentive Strength Concrete Structures	DOL	36,954.000	36,954.000
0348	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000	2,400.000
0350	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	3,200.000	3,200.000
0352	SPV.0005	Special 01. Wetland Seeding	ACRE	2.100	2.100
0354	SPV.0035	Special 01. Abandoning Culvert Pipe Special	CY	45.000	45.000
0356	SPV.0060	Special 01. Salvage and Reinstall Lighting Unit	EACH	2.000	2.000
0358	SPV.0060	Special 02. Remove Electrical Service Meter Breaker Pedestal	EACH	1.000	1.000
0360	SPV.0060	Special 03. Remove Luminaire	EACH	2.000	2.000
0362	SPV.0060	Special 04. Pull Box Non-Conductive 24x42-Inch	EACH	4.000	4.000
0364	SPV.0060	Special 05. Pile Dynamic Analyzer (PDA) Testing	EACH	16.000	16.000
0366	SPV.0060	Special 06. Pile Dynamic Analyzer (PDA) Restrikes	EACH	16.000	16.000
0368	SPV.0060	Special 07. Case Pile Wave Analysis Program (CAPWAP) Evaluation	EACH	8.000	8.000
0370	SPV.0090	Special 01. Removing HMA Pavement Notched Wedge Longitudinal Joint Milling	LF	33,243.000	33,243.000

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Line	Item	Item Description	Unit	Total	Qty
0372	SPV.0090	Special 02. Bore and Jack Culvert Pipe Reinforced Concrete Class V 24-Inch	LF	144.000	144.000
0374	SPV.0105	Special 01. Cofferdams B-29-141 Pier 10	LS	1.000	1.000
0376	SPV.0195	Special 01. Select Crushed Material for Travel Corridor	TON	123.000	123.000

CLEARING & GRUBBING

STATION	-	STATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
483+00	-	488+00	5	5
495+00	-	501+00	6	6
8+00'HH'	-	9+00'HH'	1	1
503+00	-	531+00	28	28
546+00	-	590+00	44	44
11+00'Z'	-	26+00'Z'	15	15
PROJECT TOTALS			99	99

REMOVING PAVEMENT

STATION	-	STATION	LOCATION	204.0100 REMOVING PAVEMENT SY	204.0150 REMOVING CURB & GUTTER LF
498+42	-	501+28	LT	360	---
501+23	-	501+89	RT	---	92
502+24	-	502+58	RT	---	85
502+40	-	508+01	LT	496	---
546+31	-	546+36	LT	---	61
546+39	-	547+65	LT	---	155
PROJECT TOTALS				856	393

REMOVING ASPHALTIC SURFACE MILLING

STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARK
480+00 - 480+60	RT	100	**STAGE 4 REMOVE TEMPORARY RAMP**
485+40 - 486+00	RT	100	**STAGE 4 REMOVE TEMPORARY RAMP**
512+00 - 515+20	LT	533	**STAGE 4 REMOVE TEMPORARY RAMP**
554+50 - 555+10	LT	100	**STAGE 4 REMOVE TEMPORARY RAMP**
558+40 - 559+00	RT	100	**STAGE 4 REMOVE TEMPORARY RAMP**
579+00 - 579+60	LT	100	**STAGE 4 REMOVE TEMPORARY RAMP**
586+00 - 586+00	RT	100	**STAGE 4 REMOVE TEMPORARY RAMP**
589+40 - 590+00	RT	100	**STAGE 4 REMOVE TEMPORARY RAMP**
480+00 - 480+60	RT	100	**STAGE 5B REMOVE TEMPORARY RAMP**
485+40 - 486+00	RT	100	**STAGE 5B REMOVE TEMPORARY RAMP**
512+00 - 515+20	LT	533	**STAGE 5B REMOVE TEMPORARY RAMP**
554+50 - 555+10	LT	100	**STAGE 5B REMOVE TEMPORARY RAMP**
558+40 - 559+00	RT	100	**STAGE 5B REMOVE TEMPORARY RAMP**
579+00 - 579+60	LT	100	**STAGE 5B REMOVE TEMPORARY RAMP**
586+00 - 586+00	RT	100	**STAGE 5B REMOVE TEMPORARY RAMP**
589+40 - 590+00	RT	100	**STAGE 5B REMOVE TEMPORARY RAMP**
480+00 - 480+60	RT	100	**STAGE 6 REMOVE TEMPORARY RAMP**
485+40 - 486+00	RT	100	**STAGE 6 REMOVE TEMPORARY RAMP**
512+00 - 515+20	LT	533	**STAGE 6 REMOVE TEMPORARY RAMP**
554+50 - 555+10	LT	100	**STAGE 6 REMOVE TEMPORARY RAMP**
558+40 - 559+00	RT	100	**STAGE 6 REMOVE TEMPORARY RAMP**
579+00 - 579+60	LT	100	**STAGE 6 REMOVE TEMPORARY RAMP**
586+00 - 586+00	RT	100	**STAGE 6 REMOVE TEMPORARY RAMP**
589+40 - 590+00	RT	100	**STAGE 6 REMOVE TEMPORARY RAMP**
480+00 - 480+60	RT	100	**STAGE 7 REMOVE TEMPORARY RAMP**
485+40 - 486+00	RT	100	**STAGE 7 REMOVE TEMPORARY RAMP**
512+00 - 515+20	LT	533	**STAGE 7 REMOVE TEMPORARY RAMP**
554+50 - 555+10	LT	100	**STAGE 7 REMOVE TEMPORARY RAMP**
558+40 - 559+00	RT	100	**STAGE 7 REMOVE TEMPORARY RAMP**
480+00 - 515+00	LT/RT	778	**STAGE 7 REMOVE TEMPORARY TRANSVERSE WEDGE FROM STAGE 6**
579+00 - 590+00	RT	244	**STAGE 7 REMOVE TEMPORARY TRANSVERSE WEDGE FROM STAGE 6**
579+00 - 579+60	LT	100	**STAGE 7 REMOVE TEMPORARY RAMP**
586+00 - 586+00	RT	100	**STAGE 7 REMOVE TEMPORARY RAMP**
589+40 - 590+00	RT	100	**STAGE 7 REMOVE TEMPORARY RAMP**
PROJECT TOTALS		5,956	

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

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REMOVING SMALL PIPE CULVERTS

STATION	-	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0180 REMOVING DELINEATORS AND MARKERS EACH	* ESTIMATED PIPE DIAMETER & MATERIAL	* ESTIMATED PIPE LENGTH	
480+05	-	-	32' LT	1	1	12" C.P.C.M.	13.5'	
483+04	-	-	33' LT	1	1	12" C.P.C.M.	17'	
486+04	-	-	34' LT	1	1	12" C.P.C.M.	26'	
489+04	-	-	37' LT	1	1	12" C.P.C.M.	18.5'	
492+04	-	-	39' LT	1	1	12" C.P.C.M.	23'	
519+18	-	-	80' LT	1	1	12" C.P.C.M.	42'	
525+22	-	-	80' LT	1	1	12" C.P.C.M.	60'	
528+19	-	-	79' LT	1	1	12" C.P.C.M.	38'	
528+21	-	-	LT/RT	1	2	12" C.P.C.M.	61.5'	
550+67	-	550+85	LT/RT	1	2	12" C.P.C.M.	62.5'	
553+65	-	-	LT/RT	1	2	12" C.P.C.M.	58'	
555+72	-	555+99	LT/RT	---	2	36" C.P.R.C.	160'	**
557+59	-	-	42' RT	1	1	12" C.P.C.M.	54.5'	
575+25	-	-	27' RT	1	1	36" C.P.R.C.	65.5'	
11+03'Z'	-	-	41' RT	1	1	18" C.P.R.C.	44'	
19+88'Z'	-	20+03'Z'	250' LT	1	2	24" C.P.R.C.	40'	
25+14'Z'	-	25+53'Z'	30' LT	1	1	15" C.P.C.M.	41'	
25+58'Z'	-	-	28' LT	1	1	18" C.P.R.C.	39'	
PROJECT TOTALS				17	23			

*FOR INFORMATION ONLY. PIPE SIZES & LENGTHS COULD DIFFER IN FIELD.
** PIPE TO BE ABANDONED USING ITEM ABANDONING CULVERT PIPE SPECIAL

REMOVING GUARDRAIL

STATION	LOCATION	-	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	COMMENTS
508+06.8	64' LT	-	530+74.9	71' LT	2,268	REMOVE IN TC STAGE 8
508+50.6	13' LT	-	509+00.6	38.5' LT	50	REMOVE IN TC STAGE 2 - REMOVE FIRST 50-FT. ATTACH REMAINING TO BARRIER WALL.
509+00.6	13' LT	-	518+33.3	38.5' LT	933	REMOVE IN TC STAGE 3 - PROTECT BLUNT END WITH BARRIER WALL
518+33.3	35' LT		530+76.0	38' LT	1,243	REMOVE IN TC STAGE 8
545+94.7	158' LT	-	546+15.6	71' LT	111	REMOVE IN TC STAGE 8
546+59.3	32' LT	-	548+19.0	31' LT	160	REMOVE IN TC STAGE 8
550+50.3	32' LT	-	560+42.2	78' RT	992	REMOVE IN TC STAGE 4
552+41.0	27' LT	-	561+11.0	22' RT	870	REMOVE IN TC STAGE 4
PROJECT TOTALS					6,626	

REMOVING BUILDINGS

DESCRIPTION	STATION	LOCATION	204.0235 REMOVING BUILDINGS LS
PARCEL 3 GARAGE AND SHED	548+11	RT	1
PROJECT TOTALS			1

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***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

EARTHWORK (PROJECT 1430-01-73)

Division	Stages	From/To Station	Location	Common Excavation (1) Cut (2)	Available Material (3)	Rock Excavation (4) (item #205.0200)	Expanded Rock (5) Factor 1.10	Unexpanded Fill	Expanded Fill (6) Factor 1.25	Mass Ordinate +/- (7)	Waste	Comment:
1	Stage 1	10+74'Z' to 35+45'Z'	CTH Z	47368	47368	131665	144831	3043	-177235	224602		
		0+40'DE' to 1+58'DE'	DRIVEWAY DE	490	490	0	0	9	11	479		
		00+35'DF' to 2+37'DF'	DRIVEWAY DF	4239	4239	0	0	0	0	4239		
		00+00'A' to 1+75'A'	DITCH A	868	868	0	0	0	0	868		
		10+66'Z' to 11+54'Z'	TEMP. RAMP	936	936	0	0	143	178	758		
	Stage 1 Subtotal			53901	53901	131665	144831	3195	-177045	230946	83889	
	Stage 2 - West	488+00 to 530+52	STH 82	819	819	0	0	115646	144557	-143738		
		8+50'HH' to 9+16'HH'	CTH HH	0	0	0	0	314	393	-393		
	Stage 2 - West Subtotal			819	819	0	0	115960	144950	-144131	0	See Note 8
	Stage 2 - East	547+20 to 581+00	STH 82	30628	30628	91936	101130	69613	-39397	70025		
	Stage 2 - East Subtotal			30628	30628	91936	101130	69613	-39397	284539	284539	
	Stage 3 - West	478+50 to 507+50	STH 82 SHLD. WIDENING	29	29	0	0	1116	1395	-1367		
	Stage 3 - West Subtotal			29	29	0	0	1116	1395	-1367	0	See Note 9
	Stage 3 - East	552+00 to 592+00	STH 82 SHLD. WIDENING	76	76	0	0	14	18	58		
	Stage 3 - East Subtotal			76	76	0	0	14	18	58	58	
	Stage 4 - West	480+00 to 503+00	STH 82	765	765	0	0	1186	1483	-718		
		7+50'HH' to 9+16'HH'	CTH HH	167	167	0	0	626	783	-615		
	Stage 4 - West Subtotal			932	932	0	0	1812	2266	-1333	0	See Note 10
	Stage 4 - East	554+47 to 590+00	STH 82	904	904	0	0	14	17	887		
	Stage 4 - East Subtotal			904	904	0	0	14	17	887	887	
	Stage 5A - West	491+00 to 516+00	STH 82	784	784	0	0	0	0	784		
	Stage 5A - West Subtotal			784	784	0	0	0	0	784	784	
	Stage 5B - West	480+00 to 485+00	STH 82	644	644	0	0	0	0	644		
	Stage 5B - West Subtotal			644	644	0	0	0	0	644	644	
	Stage 5B - East	554+97 to 590+00	STH 82	896	896	0	0	898	1122	-226		
	Stage 5B - East Subtotal			896	896	0	0	898	1122	-226	0	See Note 11
	Stage 8 - West	480+00 to 530+52	STH 82	85723	85723	0	0	1629	2037	83686		
	Stage 8 - West Subtotal			85723	85723	0	0	1629	2037	83686	83686	
	Stage 8 - East	547+05 to 582+00	STH 82	23573	23573	0	0	1810	2262	21311		
	Stage 8 - East Subtotal			23573	23573	0	0	1810	2262	21311	21311	
	Grand Total			198909	198909	223601	245961	196061	-62375	475798	475798	
			Total Common Exc		198909							

SEE FOLLOWING PAGE FOR EARTHWORK NOTES

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

EARTHWORK NOTES

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) Available Material = Cut - Salvaged/Unusuable Pavement Material
4) Rock Excavation item number 205.0200
5) Expanded Rock - Factor = 1.1.
6) Expanded Fill. Factor = 1.25

Depending on selections:

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

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

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

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor

7) 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.
8) Use 144131 CY of Material from Stage 1
9) Use 1367 CY of Material from Stage 1
10) Use 1333 CY of Material from Stage 1
11) Use 226 CY of Material from Stage 1

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

OBLITERATING OLD ROAD

ROAD	STA	-	STA	214.0100 OBLITERATING OLD ROAD STA
CTH Z	11+11'Z'	-	19+73'Z'	6.3
CTH Z	21+44'Z'	-	24+25'Z'	3.1
PROJECT TOTAL				9.4

MILL AND RELAY

STATION	LOCATION	330.0100 MILL AND RELAY SY
486+00 - 511+00	STH 82	8100
577+00 - 586+00	STH 82	2400
PROJECT TOTALS		10,500

CONCRETE PAVEMENT ITEMS

STATION	-	STATION	LOCATION	415.0070 CONCRETE PAVEMENT 7-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	416.1010 CONCRETE SURFACE DRAINS CY
516+78	-	517+00	LT	---	---	5.2
516+85	-	517+00	LT	---	29.1	---
516+85	-	517+00	RT	---	19.9	---
516+79	-	517+00	RT	---	---	5.1
518+20	-	518+35	LT	13.3	---	---
518+20	-	518+35	LT	---	24.2	---
518+20	-	518+35	RT	---	20.2	---
518+20	-	518+35	RT	13.3	---	---
530+30	-	530+52	LT	---	---	5.1
530+37	-	530+52	LT	---	20.0	---
530+37	-	530+52	RT	---	20.0	---
530+30	-	530+52	RT	---	---	5.1
547+05	-	547+20	LT	13.3	---	---
547+05	-	547+20	LT	---	20.0	---
547+05	-	547+20	RT	---	20.0	---
547+05	-	547+20	RT	13.6	---	---
PROJECT TOTALS				53.5	173.5	20.6

BASE AGGREGATE DENSE

STATION	-	STATION	OFFSET	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
480+00	-	517+00	LT/RT	STH 82	340	11960	185	
518+20	-	530+52	LT/RT	STH 82	---	5780	87	
547+05	-	590+00	LT/RT	STH 82	400	14730	227	
7+50'HH'	-	9+76'HH'	LT/RT	CTH HH	20	1070	16	
10+24'Z'	-	35+45'Z'	LT/RT	CTH Z	120	5780	89	
487+32			RT	STH 82	40	---	1	FIELD ENTRANCE
576+80			RT	STH 82	70	---	1	FIELD ENTRANCE
584+71			LT	STH 82	30	---	1	FIELD ENTRANCE
586+50			LT	STH 82	---	40	1	PRIVATE ENTRANCE, HMA
12+00'Z'			RT	CTH Z	90	---	1	PRIVATE ENTRANCE, B.A.D.
21+37'Z'			LT	CTH Z	0	180	3	PRIVATE ENTRANCE, HMA
25+34'Z'			RT	CTH Z	50	---	1	PRIVATE ENTRANCE, B.A.D.
29+35'Z'			RT	CTH Z	40	---	1	PRIVATE ENTRANCE, B.A.D.
10+65'Z'	-	11+54'Z'	RT/LT	CTHZ	---	230	3	STAGE 1 - TEMP. CONNECTION
475+65	-	507+85	LT	WB SHLDR	---	1670	25	STAGE 3 - TEMP. WIDENING
549+67	-	563+30	LT/RT	WB SHLDR	---	710	11	STAGE 3 - TEMP. WIDENING
573+40	-	595+50	LT/RT	WB SHLDR	---	1150	17	STAGE 3 - TEMP. WIDENING
SUBTOTALS					1,200	43,300	669	
UNDISTRIBUTED					200	1400	31	USED FOR MILL & RELAY AREAS
PROJECT TOTALS					1400	44700	700	

REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

STATION	-	STATION	LAYERS	460.4110.S REHEATING HMA PAVEMENT LONGITUDINAL LF
480+00	-	498+00	3	5,400
498+00	-	502+30	3	1,290
502+30	-	509+00	3	2,010
510+00	-	516+85	3	2,055
518+35	-	530+37	3	3,606
547+20	-	590+00	3	12,840
10+24'Z'	-	35+45'Z'	2	5,042
UNDISTRIBUTED (FOR STAGING)				1,000
PROJECT TOTALS				33,243

REMOVING HMA PAVEMENT NOTCHED WEDGE LONGITUDINAL JOINT MILLING

STATION	-	STATION	LAYERS	SPV.0090.01 REMOVING HMA MILLING PAVEMENT NOTCHED WEDGE LONGITUDINAL JOINT LF
480+00	-	498+00	3	5,400
498+00	-	502+30	3	1,290
502+30	-	509+00	3	2,010
510+00	-	516+85	3	2,055
518+35	-	530+37	3	3,606
547+20	-	590+00	3	12,840
10+24'Z'	-	35+45'Z'	2	5,042
UNDISTRIBUTED (FOR STAGING)				1,000
PROJECT TOTALS				33,243

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

ASPHALT ITEMS

STA - STA		PAVEMENT DEPTH INCHES	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0315 ASPHALTIC FLUMES SY	455.0605 TACK COAT GAL	REMARKS
PERMANENT ASPHALT:							
480+00 - 516+85		6	6630	---	---	2225	
518+35 - 530+37		6	1930	---	---	640	
547+20 - 590+00		6	6400	---	---	2,115	
586+41 - 586+64		3	---	20	---	---	DRIVEWAY
10+24'Z' - 35+45'Z'		4	2420	---	---	575	
10+78'Z'		-	---	---	8.8	---	LT
10+78'Z'		-	---	---	8.8	---	RT
21+16'Z' - 21+50'Z'		3	---	85	---	---	DRIVEWAY
7+50'HH' - 9+76'HH'		6	395	---	---	140	
9+36'HH'		-	---	---	8.8	---	LT
9+36'HH'		-	---	---	8.8	---	RT
PERMANENT TOTALS			17,775	105	35	5,695	
ASPHALT FOR TEMPORARY WEDGES AND TEMPORARY RAMPS:							
10+65.54'Z' - 11+54.41'Z'	LT/RT	4	85	---	---	---	STAGE 1 TEMPORARY CONNECTION TO STH 82
480+00 - 515+00	LT/RT	VARIES	4	---	---	---	STAGE 4 TRANSVERSE WEDGE
579+00 - 590+00	RT	VARIES	4	---	---	---	STAGE 4 TRANSVERSE WEDGE
480+00 - 480+60	RT	VARIES	8	---	---	---	STAGE 4 TEMPORARY RAMP
485+40 - 486+00	RT	VARIES	8	---	---	---	STAGE 4 TEMPORARY RAMP
512+00 - 515+20	LT	VARIES	10	---	---	---	STAGE 4 TEMPORARY RAMP
554+50 - 555+10	LT	VARIES	8	---	---	---	STAGE 4 TEMPORARY RAMP
558+40 - 559+00	RT	VARIES	8	---	---	---	STAGE 4 TEMPORARY RAMP
579+00 - 579+60	LT	VARIES	8	---	---	---	STAGE 4 TEMPORARY RAMP
586+00 - 586+00	RT	VARIES	8	---	---	---	STAGE 4 TEMPORARY RAMP
589+40 - 590+00	RT	VARIES	8	---	---	---	STAGE 4 TEMPORARY RAMP
480+00 - 480+60	RT	VARIES	8	---	---	---	STAGE 5B REMOVE TEMPORARY RAMP
485+40 - 486+00	RT	VARIES	8	---	---	---	STAGE 5B REMOVE TEMPORARY RAMP
512+00 - 515+20	LT	VARIES	10	---	---	---	STAGE 5B REMOVE TEMPORARY RAMP
554+50 - 555+10	LT	VARIES	8	---	---	---	STAGE 5B REMOVE TEMPORARY RAMP
558+40 - 559+00	RT	VARIES	8	---	---	---	STAGE 5B REMOVE TEMPORARY RAMP
579+00 - 579+60	LT	VARIES	8	---	---	---	STAGE 5B REMOVE TEMPORARY RAMP
586+00 - 586+00	RT	VARIES	8	---	---	---	STAGE 5B REMOVE TEMPORARY RAMP
589+40 - 590+00	RT	VARIES	8	---	---	---	STAGE 5B REMOVE TEMPORARY RAMP
480+00 - 515+00	LT/RT	VARIES	4	---	---	---	STAGE 6 TRANSVERSE WEDGE
579+00 - 590+00	RT	VARIES	4	---	---	---	STAGE 6 TRANSVERSE WEDGE
480+00 - 480+60	RT	VARIES	8	---	---	---	STAGE 6 REMOVE TEMPORARY RAMP
485+40 - 486+00	RT	VARIES	8	---	---	---	STAGE 6 REMOVE TEMPORARY RAMP
512+00 - 515+20	LT	VARIES	10	---	---	---	STAGE 6 REMOVE TEMPORARY RAMP
554+50 - 555+10	LT	VARIES	8	---	---	---	STAGE 6 REMOVE TEMPORARY RAMP
558+40 - 559+00	RT	VARIES	8	---	---	---	STAGE 6 REMOVE TEMPORARY RAMP
579+00 - 579+60	LT	VARIES	8	---	---	---	STAGE 6 REMOVE TEMPORARY RAMP
586+00 - 586+00	RT	VARIES	8	---	---	---	STAGE 6 REMOVE TEMPORARY RAMP
589+40 - 590+00	RT	VARIES	8	---	---	---	STAGE 6 REMOVE TEMPORARY RAMP
480+00 - 480+60	RT	VARIES	8	---	---	---	STAGE 7 REMOVE TEMPORARY RAMP
485+40 - 486+00	RT	VARIES	8	---	---	---	STAGE 7 REMOVE TEMPORARY RAMP
512+00 - 515+20	LT	VARIES	10	---	---	---	STAGE 7 REMOVE TEMPORARY RAMP
554+50 - 555+10	LT	VARIES	8	---	---	---	STAGE 7 REMOVE TEMPORARY RAMP
558+40 - 559+00	RT	VARIES	8	---	---	---	STAGE 7 REMOVE TEMPORARY RAMP
579+00 - 579+60	LT	VARIES	8	---	---	---	STAGE 7 REMOVE TEMPORARY RAMP
586+00 - 586+00	RT	VARIES	8	---	---	---	STAGE 7 REMOVE TEMPORARY RAMP
589+40 - 590+00	RT	VARIES	8	---	---	---	STAGE 7 REMOVE TEMPORARY RAMP
WEDGES AND RAMPS TOTALS:			365	0	0	0	
PROJECT TOTALS:			18,140	105	35	5,695	

RUMBLE STRIPS

STATION		STATION	LOCATION	465.0425 ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL TYPE 1 LF	465.0475 ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF
480+00	-	516+60	LT	3660	---
480+00	-	496+46	RT	1646	---
504+82	-	516+60	RT	1178	---
518+60	-	530+12	LT	1152	---
518+60	-	530+12	RT	1152	---
519+00	-	530+12	CENTER	---	1112
547+44	-	549+04	CENTER	---	160
547+44	-	548+86	LT	142	---
547+44	-	576+65	RT	2921	---
553+04	-	590+00	CENTER	---	3696
556+76	-	586+15	LT	2939	---
576+95	-	590+00	RT	1305	---
586+90	-	590+00	LT	310	---
PROJECT TOTALS				16405	4968

ASPHALTIC SURFACE TEMPORARY

STA - STA	LOCATION	STAGE	PAVEMENT DEPTH INCHES	465.0125 ASPHALTIC SURFACE TEMPORARY TON	REMARKS
475+65 - 480+45	LT	3	3	50	WESTBOUND SHOULDER
482+40 - 507+85	LT	3	3	320	WESTBOUND SHOULDER
498+40 - 501+30	LT	3	3	70	EXISTING CORRUGATED MEDIAN
502+40 - 508+00	LT	3	3	90	EXISTING CORRUGATED MEDIAN
549+65 - 563+30	RT & LT	3	3	170	WESTBOUND SHOULDER
550+80 - 551+25	LT	1	3	70	CTH Z TIE-IN
573+35 - 595+00	RT & LT	3	3	170	WESTBOUND SHOULDER
PROJECT TOTALS				940	

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

CULVERT PIPES, STORM SEWER, AND INLETS

FROM	-	TO	* OFFSETS	522.0118 CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	522.0524 CULVERT PIPE REINFORCED CONCRETE CLASS V 24-INCH LF	SPV.0090.02 BORE AND JACK CULVERT PIPE REINFORCED CONCRETE CLASS V 24-INCH LF	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH 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	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	CROSS DRAINS ** 612.0204 PIPE UNDERDRAIN UNPERFORATED 4-INCH LF	** 612.0212 PIPE UNDERDRAIN UNPERFORATED 12-INCH LF	633.5200 MARKERS CULVERT END EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	611.0627 INLET COVERS TYPE HM EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	*** 611.0642 INLET COVER TYPE MS EACH	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE %	INLET RIM ELEVATION	TOP OF INLET STRUCTURE ELEVATION	INLET FLOWLINE ELEVATION
516+83	-	516+84	27.4 LT, 21.3 RT	---	---	---	---	---	---	---	---	48.7	---	---	---	1	---	---	---	---	---	857.91	857.44	0.97%	---	---	---
519+00	-		22.3 LT, 21.4 RT	---	---	---	---	---	---	---	---	43.7	---	---	---	1	---	---	---	---	---	861.42	861.00	0.96%	---	---	---
525+00	-		21.4 LT, 21.4 RT	---	---	---	---	---	---	---	---	42.8	---	---	---	1	---	---	---	---	---	871.55	871.14	0.96%	---	---	---
530+35	-		21.3 LT, 21.3 RT	---	---	---	---	---	---	---	---	42.6	---	---	---	1	---	---	---	---	---	875.12	874.71	0.96%	---	---	---
556+21	-	-	109.6 LT, 77.6 LT	---	---	32	---	---	---	2	---	---	---	---	2	---	1	---	---	---	---	863.88	863.48	1.25%	---	---	---
556+21	-	-	77.6 LT, 66.4 RT	---	---	---	144	---	---	---	---	---	---	---	---	---	---	---	---	---	---	863.48	861.70	1.24%	---	---	---
556+21	-	-	66.4 RT, 114.4 RT	---	---	48	---	---	---	2	---	---	---	---	2	---	1	---	---	---	---	861.70	861.11	1.23%	---	---	---
575+25	-	-	30.6 LT, 33.4 RT	---	64	---	---	---	---	2	---	---	---	---	2	---	1	---	---	---	---	881.10	877.97	4.89%	---	---	---
10+84'Z'	-	11+11'Z'	46.6 LT,103.0 RT	---	152	---	---	---	---	2	---	---	---	---	2	---	1	---	---	---	---	881.19	873.00	5.39%	---	---	---
20+98'Z'	-	21+03'Z'	30.6 RT, 29.2 LT	---	---	---	---	---	1	---	60	---	---	---	1	---	1	---	---	---	---	864.88	864.58	0.50%	---	---	---
20+94'Z'	-	20+98'Z'	32.7 LT, 92.5 LT	---	---	---	---	---	1	---	60	---	---	---	1	---	1	---	---	---	---	864.58	864.28	0.50%	---	---	---
21+00'Z'	-	-	31.0 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---	868.73	---	864.58
25+81	-		23.2 RT, 30.8 LT	---	54	---	---	---	---	2	---	---	---	---	2	---	1	---	---	---	---	854.75	854.67	0.16%	---	---	---
MINOR SIDE ROAD, PRIVATE ENTRANCE, AND SLOPE DRAINS																											
516+83	-	-	27.4 LT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1	---	---	---	---	---	862.55	861.55	857.91
516+84	-	-	21.3 RT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1	---	---	---	---	---	863.76	862.76	857.44
516+84	-	-	21.3 RT, 75.9 RT	---	---	---	---	1	---	---	---	---	---	55	1	---	1	---	---	---	---	857.44	848.29	N/A	---	---	---
519+00	-	-	22.3 LT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1	---	---	---	---	---	865.54	864.54	861.42
519+00	-	-	21.4 RT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1	---	---	---	---	---	865.78	864.78	861.00
519+00	-	-	21.4 RT, 65.9 RT	---	---	---	---	1	---	---	---	---	---	50	1	---	1	---	---	---	---	861.00	844.76	N/A	---	---	---
525+00	-	-	21.4 LT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1	---	---	---	---	---	875.67	874.67	871.55
525+00	-	-	21.4 RT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1	---	---	---	---	---	875.67	874.67	871.14
525+00	-	-	21.4 RT, 85.6 RT	---	---	---	---	1	---	---	---	---	---	72	1	---	1	---	---	---	---	871.14	844.74	N/A	---	---	---
530+35	-	-	21.3 LT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1	---	---	---	---	---	879.76	878.76	875.12
530+35	-	-	21.3 RT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1	---	---	---	---	---	879.76	878.76	874.71
530+35	-	-	21.3 RT, 85.6 RT	---	---	---	---	1	---	---	---	---	---	72	1	---	1	---	---	---	---	874.71	848.86	N/A	---	---	---
0+46'DC'	-	0+48'DC'	19.6 LT, 22.3 RT	42	---	---	---	---	2	---	---	---	---	---	2	---	1	---	---	---	---	861.00	860.50	1.19%	---	---	---
0+65'DD'	-	0+75'DD'	27.6 LT, 31.4 RT	60	---	---	---	---	2	---	---	---	---	---	2	---	1	---	---	---	---	853.22	852.00	2.03%	---	---	---
0+50'DE'	-	-	8.3 LT, 9.7 RT	18	---	---	---	---	2	---	---	---	---	---	2	---	1	---	---	---	---	886.87	886.63	1.33%	---	---	---
0+29'DG'	-	0+52'DG'	19.4 RT, 23.3 LT	48	---	---	---	---	2	---	---	---	---	---	2	---	1	---	---	---	---	855.58	854.92	1.37%	---	---	---
SMALL MAMMAL SHELTERS AT STRUCTURE B-29-148																											
517+45	-	-	29.0 LT, 24.0 RT	---	---	---	---	---	---	---	---	---	15	15	---	---	---	---	---	---	---						
PROJECT TOTALS				168	270	80	144	4	10	10	120	177.8	15	264	24	12	15	8	8	1	1						

* OFFSETS TO CENTER OF INLET STRUCTURE OR PIPE ENDPOINT
** METAL OR ALUMINUM PIPES ARE NOT TO BE USED FOR PIPE UNDERDRAINS
*** SLOPE OF INLET COVER TYPE MS TO BE NO SLOPE
THE DEPTH OF FRAME AND ADJUSTING RINGS
TYPE HM COVER = 1.00 FT

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

3

CONCRETE CURB & GUTTER

STATION	-	STATION	LOCATION	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0415 CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J LF	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT LF	601.0590 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT LF
9+36'HH'	-	9+86'HH'	LT	---	71	---	---	---
9+04'HH'	-	9+71'HH'	RT	---	---	176	---	---
9+23'HH	-	9+60'HH'	RT	---	57	---	---	---
516+60	-	516+78	LT	---	---	---	18	---
518+20	-	518+35	LT	---	---	---	---	15
518+35	-	518+72	LT	---	---	---	37	---
518+72	-	529+95	LT	1123	---	---	---	---
529+95	-	530+30	LT	---	---	---	35	---
547+05	-	547+20	LT	---	---	---	---	15
516+61	-	516+79	RT	---	---	---	18	---
518+20	-	518+35	RT	---	---	---	---	15
518+35	-	518+72	RT	---	---	---	37	---
518+72	-	529+95	RT	1123	---	---	---	---
529+95	-	530+30	RT	---	---	---	35	---
547+05	-	547+20	RT	---	---	---	---	15
10+24'Z'	-	10+74'Z'	LT	---	79	---	---	---
10+24'Z'	-	10+74'Z'	RT	---	79	---	---	---
PROJECT TOTALS				2246	286	176	180	60

MGS GUARDRAIL

STATION	-	STATION	LOCATION	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
514+11.5	-	514+64.5	RT	---	---	1
514+64.5	-	516+63.7	RT	200.0	---	---
516+63.7	-	517+03.1	RT	---	39.4	---
514+58.8	-	515+12.1	LT	---	---	1
515+12.1	-	516+62.9	LT	150.0	---	---
516+62.9	-	517+02.3	LT	---	39.4	---
518+17.1	-	518+56.5	RT	---	39.4	---
518+56.5	-	530+14.6	RT	1158.2	---	---
530+14.6	-	530+54.0	RT	---	39.4	---
518+17.5	-	518+56.9	LT	---	39.4	---
518+56.9	-	530+14.6	LT	1157.8	---	---
530+14.6	-	530+54.0	LT	---	39.4	---
547+02.0	-	547+41.4	RT	---	39.4	---
547+41.4	-	547+91.4	RT	50.0	---	---
547+91.4	-	548+44.5	RT	---	---	1
547+02.0	-	547+41.4	LT	---	39.4	---
547+41.4	-	548+53.9	LT	112.5	---	---
548+53.9	-	549+07.1	LT	---	---	1
PROJECT TOTALS				2828.5	315.2	4

CONCRETE SIDEWALK & CORRUGATED MEDIAN

STATION	-	STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	620.0100 CONCRETE CORRUGATED MEDIAN SF
498+00	-	501+21	STH 82	---	4,396
502+30	-	510+00	STH 82	---	4,401
8+97'HH'	-	9+69'HH'	CTH HH	956	---
PROJECT TOTALS				956	8,797

ABANDONING CULVERT PIPE SPECIAL

STATION	-	STATION	LOCATION	SPV.0035.01 ABANDON CULVERT PIPE SPECIAL CY	* ESTIMATED PIPE DIAMETER	* ESTIMATED PIPE LENGTH
555+72	-	555+99	LT/RT	45	36-INCH	160'
PROJECT TOTALS				45		

*FOR INFORMATION ONLY. PIPE LENGTHS COULD DIFFER IN FIELD.

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

FINISHING ITEMS

STATION	-	STATION	LOCATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.6510 SOIL STABILIZER TYPE B ACRE	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO.20 LB	630.0200 SEEDING TEMPORARY LB	SPV.0005.01 WETLAND SEEDING ACRE
480+00	-	487+48	RT	3108	---	1197	0.6	2.0	88	---	---
480+00	-	517+22	LT	17151	---	10105	3.5	10.8	486	---	---
487+59	-	501+93	RT	6213	---	4074	1.3	3.9	176	---	---
7+50'HH'	-	9+35'HH'	LT	509	---	180	0.1	0.3	14	---	---
7+50'HH'	-	9+35'HH'	RT	396	---	76	0.1	0.2	11	---	---
502+76	-	517+24	RT	8154	---	3706	1.7	5.1	231	---	---
518+01	-	531+40	LT	10698	---	7710	2.2	6.7	303	---	---
517+98	-	531+40	RT	8899	---	5509	1.8	5.6	252	---	---
546+15	-	550+84	LT	3291	---	2370	0.7	2.1	93	---	---
546+15	-	576+90	RT	30129	---	12385	6.2	19.0	854	---	---
551+30	-	584+64	LT	23831	---	6227	4.9	15.0	676	---	---
576+88	-	590+00	RT	3635	---	3635	0.8	2.3	103	---	---
584+80	-	590+00	LT	2206	---	2202	0.5	1.4	63	---	---
10+84'Z'	-	35+45'Z'	LT	10155	---	3359	2.1	6.4	288	---	---
10+90'Z'	-	11+97'Z'	RT	571	---	371	0.1	0.4	16	---	---
12+12'Z'	-	25+36'Z'	RT	9312	---	2226	1.9	5.9	264	---	---
25+60'Z'	-	29+12'Z'	RT	517	---	217	0.1	0.3	15	---	---
29+35'Z'	-	35+45'Z'	RT	459	---	159	0.1	0.3	13	---	---
515+00	-	528+50	LT, WETLAND	---	---	---	---	---	---	---	1.7
475+64	-	480+44	TEMP WIDENING	---	20	20	---	---	---	1	---
482+41	-	507+85	TEMP WIDENING	---	3538	3538	---	---	---	100	---
549+67	-	563+31	TEMP WIDENING	---	165	165	---	---	---	5	---
573+37	-	594+39	TEMP WIDENING	---	95	95	---	---	---	3	---
SUBTOTAL				139234	3818	69526	28.8	88	3947	108	1.7
UNDISTRIBUTED				34809	932	17382	7.2	22	987	32	0.4
PROJECT TOTALS				174043	4750	86908	36.0	110	4934	140	2.1

MOBILIZATIONS EROSION CONTROL

STAGE	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
1	3	1
2	3	1
3	3	1
4	3	1
5	3	1
6	3	1
7	3	1
8	3	1
SUBTOTALS	24	8
UNDISTRIBUTED	6	2
PROJECT TOTALS	30	10

TRAFFIC CONTROL (PROJECT)

PROJECT ID	643.0100 TRAFFIC CONTROL PROJECT EACH
1430-01-73	1.0
PROJECT TOTAL	1.0

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

EROSION CONTROL

STATION		STATION	LOCATION	*606.0200 RIPRAP MEDIUM CY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2002 EROSION MAT CLASS I TYPE A SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.6005 TURBITITY BARRIER SY	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH	*645.0120 GEOTEXTILE TYPE HR SY
480+00	-	501+50	RT	--	1,410	1,410	3,822	--	--	--	--	--	--	--	--	--
480+00	-	514+50	LT	--	3,470	3,470	6,133	--	--	--	--	--	--	--	--	--
501+50	-	501+95	RT	--	--	--	228	--	--	--	--	--	--	--	--	--
7+50'HH'	-	9+35'HH'	LT	--	200	200	329	--	--	--	--	--	--	--	--	--
7+50'HH'	-	9+30'HH'	RT	--	160	160	320	--	--	--	--	--	--	--	--	--
502+75	-	503+25	RT	--	--	--	188	--	--	--	--	--	--	--	--	--
503+00	-	514+50	RT	--	1,440	1,440	2,044	--	--	--	--	--	--	--	--	--
512+75	-	517+03	RT	--	--	--	2,216	--	--	--	--	--	--	--	--	--
514+55	-	517+03	LT	--	--	--	913	--	--	--	--	--	--	3	--	--
516+83			LT	--	--	--	--	--	--	1	1	--	--	--	--	--
516+84			RT	5	--	--	--	--	--	1	1	--	--	--	--	7
517+58			RT/LT	--	--	--	--	--	358	--	--	--	--	--	--	--
517+72			RT/LT	--	--	--	--	--	353	--	--	--	--	--	--	--
518+17	-	531+40		--	1,775	1,775	--	--	--	--	--	--	--	--	--	--
518+17	-	531+15	RT	2,317	--	--	--	--	--	--	--	--	--	--	--	4,664
518+17	-	528+60	LT	1,868	--	--	--	--	--	--	--	--	--	3	--	3,800
518+17	-	531+35	RT	--	--	--	--	3,378	--	--	--	--	--	--	--	--
518+17	-	531+35	LT	--	--	--	--	2,980	--	--	--	--	--	--	--	--
520+50			21' LT	--	--	--	--	--	--	1	1	--	--	--	--	--
520+50			21' RT	--	--	--	--	--	--	1	1	--	--	--	--	--
523+00			21' LT	--	--	--	--	--	--	1	1	--	--	--	--	--
523+00			21' RT	--	--	--	--	--	--	1	1	--	--	--	--	--
525+50			21' LT	--	--	--	--	--	--	1	1	--	--	--	--	--
525+50			21' RT	--	--	--	--	--	--	1	1	--	--	--	--	--
528+00			21' LT	--	--	--	--	--	--	1	1	--	--	--	--	--
528+00			21' RT	--	--	--	--	--	--	1	1	--	--	--	--	--
530+25			21' LT	--	--	--	--	--	--	1	1	--	--	--	--	--
530+45			21' RT	--	--	--	--	--	--	1	1	--	--	--	--	--
546+00			RT/LT	--	60	60	--	--	203	--	--	--	--	--	--	--
547+00	-	561+00		--	1,405	1,405	--	--	--	--	--	--	--	--	--	--
546+15	-	18+05'Z'		--	460	460	--	--	--	--	--	--	--	--	--	--
547+05	-	548+25	RT	--	--	--	--	811	--	--	--	--	--	--	--	--
546+90	-	550+35	LT	--	--	--	1,191	--	--	--	--	--	--	--	--	--
548+00	-	552+00	LT	--	--	--	26	--	--	--	--	--	20	3	--	--
548+25	-	590+00	RT	--	--	--	7,433	--	--	--	--	--	--	6	--	--
548+25	-	560+60	RT	5	--	--	8,483	--	--	--	--	--	--	--	--	11
550+35	-	550+80	LT	--	--	--	150	--	--	--	--	--	--	3	--	--
551+30	-	551+75	LT	--	--	--	151	--	--	--	--	--	--	--	--	--
551+75	-	590+00	LT	--	--	--	6,800	--	--	--	--	--	--	--	--	--
552+00	-	562+00	LT	--	--	--	6,051	--	--	--	--	--	--	--	--	--
559+00	-	562+00	LT	--	325	325	--	--	--	--	--	--	--	--	--	--
563+00	-	574+00	LT	--	--	--	--	2,379	--	--	--	--	40	--	--	--
573+00	-	576+90	RT	--	385	385	11	--	--	--	--	--	--	--	--	--
575+00	-	579+50	LT	--	--	--	99	1,672	--	--	--	--	100	--	--	--
577+05	-	585+15	RT	--	850	850	--	--	--	--	--	--	--	--	--	--
578+00			RT	--	--	--	100	--	--	--	--	--	--	3	--	--
580+00	-	584+50	LT	--	470	470	--	--	--	--	--	--	--	--	--	--
584+00	-	586+50	LT	--	--	--	7	--	--	--	--	--	--	4	--	--
585+30	-	590+00	RT	--	490	490	--	--	--	--	--	--	--	--	--	--
585+75	-	586+40	LT	--	155	155	--	--	--	--	--	--	--	--	--	--
586+50	-	590+00	LT	--	--	--	4,761	--	--	--	--	--	--	--	--	--
587+00	-	590+00	LT	--	320	320	--	--	--	--	--	--	--	--	--	--
10+80'Z'	-	35+00'Z'	RT	--	--	--	4,302	--	--	--	--	--	--	--	--	--
10+80'Z'	-	35+00'Z'	LT	--	--	--	4,302	--	--	--	--	--	--	--	--	--
11+10'Z'	-	11+75'Z'	RT	--	185	185	--	--	--	--	--	--	--	--	--	--
11+25'Z'	-	21+15'Z'	LT	30	--	--	4	2,529	--	1	--	--	60	--	--	89
11+85'Z'	-	26+60'Z'	RT	78	--	--	--	3,618	--	--	--	--	130	2	--	159
21+50'Z'	-	26+60'Z'	LT	4	--	--	--	176	--	--	--	--	40	--	--	4
24+25'Z'	-	27+00'Z'	LT	--	270	270	--	--	--	--	--	--	--	--	--	--
31+30'Z'	-	35+45'Z'	LT	--	430	430	--	--	--	--	--	--	--	--	--	--
31+40'Z'	-	35+45'Z'	RT	--	415	415	--	--	--	--	--	--	--	--	--	--
0+00'A'	-	1+75'A'	LT	--	--	--	289	--	--	--	--	--	--	2	--	--
0+25'A'	-	1+65'A'	RT	--	--	--	40	--	--	--	--	--	--	--	--	--
482+75	-	508+00	TEMP. WIDENING	--	--	--	2,085	--	--	--	--	--	--	--	--	--
SUBTOTAL				4,307	14,675	14,675	62,480	17,543	915	13	12	0	390	29	0	8,733
UNDISTRIBUTED				1,077	3,669	3,669	15,620	4,386	229	0	0	4	98	7	6	2,183
TOTAL				5,383	18,344	18,344	78,101	21,929	1,143	13	12	4	488	36	6	10,916

*NOTES
1. SEE CONSTRUCTION DETAILS "RIPRAP TREATMENT AT CROSS CULVERT AND STORM SEWER OUTLETS" FOR PROPER PLACEMENT OF RIPRAP AND GEOTEXTILE.

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

PERMANENT SIGNING

SIGN #	SIGN CODE	SIGN SIZE INCHES	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0410 POSTS WOOD 4X4-INCH 10-FT EACH	634.0612 POSTS WOOD 4X6-INCH 12-FT EACH	634.0614 POSTS WOOD 4X6-INCH 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH 18-FT EACH	SIGN DESCRIPTION
N-01	W6-3	36" X 36"	---	9.00	---	---	---	1	---	TWO-WAY TRAFFIC
N-02	W6-1	36" X 36"	---	9.00	---	---	---	1	---	DIVIDED HIGHWAY
N-03	J12-1	24" X 45"	7.50	---	---	---	---	1	---	COUNTY HH (W/ ARROW)
N-04	J4-2	48" X 36"	12.00	---	---	---	---	1	---	WEST STH 82/ COUNTY HH
N-05	W1-7	48" X 24"	---	8.00	---	---	1	---	---	TWO-DIRECTION
N-06	J12-1	24" X 45"	7.50	---	---	---	---	1	---	COUNTY HH (W/ ARROW)
N-07	D1-1	96" X 15"	10.00	---	---	---	2	---	---	LYNDON STATION (W/ ARROW)
N-08	D1-1	96" X 15"	10.00	---	---	---	2	---	---	LYNDON STATION (W/ ARROW)
N-09	J13-1	24" X 45"	7.50	---	---	---	---	1	---	COUNTY HH (W/ ARROW)
N-10	R1-1	36" X 36"	7.46	---	---	---	1	---	---	STOP SIGN
N-11	J13-1	24" X 45"	7.50	---	---	---	---	---	1	COUNTY HH (W/ ARROW)
N-12	W8-65	36" X 36"	---	9.00	---	---	---	---	1	WATCH FOR WATER
N-13	R2-1	24" X 30"	5.00	---	---	---	---	1	---	SPEED LIMIT 55
N-14	W14-3	48" X 36"	---	6.00	---	---	---	1	---	NO PASSING ZONE
N-15	R1-1	36" X 36"	7.46	---	---	---	1	---	---	STOP SIGN
N-16	J13-2	48" X 45"	15.00	---	---	---	1	---	---	STH 82/CTH HH (W/ ARROWS)
N-17	J4-1	24" X 36"	6.00	---	---	---	1	---	---	EAST STH 82
N-18	R1-1	36" X 36"	7.46	---	---	---	1	---	---	STOP SIGN
N-19	W12-1D	24" X 24"	---	4.00	1	---	---	---	---	DOUBLE DIAGONAL ARROW
N-20	J1-1	24" X 39"	6.50	---	---	---	---	1	---	JCT COUNTY HH
N-21	R7-1R	18" X 24"	3.00	---	---	---	1	---	---	NO PARKING ANY TIME RIGHT ARROW
N-22	R7-1L	18" X 24"	3.00	---	---	---	1	---	---	NO PARKING ANY TIME LEFT ARROW
N-23	R7-1R	18" X 24"	3.00	---	---	---	1	---	---	NO PARKING ANY TIME RIGHT ARROW
N-24	W6-3	36" X 36"	---	9.00	---	---	---	1	---	TWO-WAY TRAFFIC
N-25	R7-1L	18" X 24"	3.00	---	---	1	---	---	---	NO PARKING ANY TIME LEFT ARROW
N-26	R7-1R	18" X 24"	3.00	---	---	---	1	---	---	NO PARKING ANY TIME RIGHT ARROW
N-27	R7-1L	18" X 24"	3.00	---	---	---	1	---	---	NO PARKING ANY TIME LEFT ARROW
N-28	W6-1	36" X 36"	---	9.00	---	---	---	1	---	DIVIDED HIGHWAY
N-29	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	NO PARKING ANY TIME DOUBLE ARROW
N-30	W14-3	48" X 36"	---	6.00	---	---	1	---	---	NO PASSING ZONE
SUBTOTAL			137.88	69.00	1	1	17	11	2	

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

PERMANENT SIGNING (CONTINUED)

SIGN #	SIGN CODE	SIGN SIZE INCHES	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0410 POSTS WOOD 4X4-INCH 10-FT EACH	634.0612 POSTS WOOD 4X6-INCH 12-FT EACH	634.0614 POSTS WOOD 4X6-INCH 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH 18-FT EACH	SIGN DESCRIPTION
N-31	R7-1L	18" X 24"	3.00	---	---	---	1	---	---	NO PARKING ANY TIME LEFT ARROW
N-32	W14-3	48" X 36"	---	6.00	---	---	1	---	---	NO PASSING ZONE
N-33	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	NO PARKING ANY TIME DOUBLE ARROW
N-34	J1-1	24" X 39"	6.50	---	---	---	1	---	---	JCT COUNTY Z
N-35	I3-1	60" X 36"	15.00	---	---	---	1	1	---	ADAMS CO. WISCONSIN RIVER
N-36	R7-1R	18" X 24"	3.00	---	---	---	1	---	---	NO PARKING ANY TIME RIGHT ARROW
N-37	I3-1	60" X 36"	15.00	---	---	---	2	---	---	JUNEAU CO. WISCONSIN RIVER
N-38	J4-1	24" X 36"	6.00	---	---	---	1	---	---	EAST STH 82
N-39	D7-68L	60" X 36"	15.00	---	---	---	---	2	---	CASTLE ROCK (W/ ARROW)
N-40	I55-56	30" X 36"	7.50	---	---	---	1	---	---	ADOPT A HIGHWAY POINT BLUFF
N-41	J12-1	24" X 45"	7.50	---	---	---	---	1	---	COUNTY Z (W/ ARROW)
N-42	W1-7	48" X 24"	---	8.00	---	---	1	---	---	TWO-DIRECTION
N-43	J12-1	24" X 45"	7.50	---	---	---	---	1	---	COUNTY Z (W/ ARROW)
N-44	D7-68R	60" X 36"	15.00	---	---	---	1	---	---	CASTLE ROCK (W/ ARROW)
N-45	J1-1	24" X 39"	6.50	---	---	---	---	1	---	JCT COUNTY Z
N-46	J4-1	24" X 36"	6.00	---	---	---	1	---	---	EAST STH 82
N-47	W11-6	30" X 30"	---	6.25	---	---	1	---	---	SNOWMOBILE CROSSING
N-48	W11-6	30" X 30"	---	6.25	---	---	1	---	---	SNOWMOBILE CROSSING
N-49	W14-3	48" X 36"	---	6.00	---	---	1	---	---	NO PASSING ZONE
N-50	J12-1	24" X 45"	7.50	---	---	---	---	1	---	STH 82 (W/ ARROW)
N-51	R1-1	30" X 30"	5.18	---	---	---	---	1	---	STOP SIGN
N-52	W3-1	36" X 36"	---	9.00	---	---	1	---	---	STOP AHEAD
N-53	J1-1	24" X 39"	6.50	---	---	---	---	1	---	JCT STH 82
N-54	R1-1	30" X 30"	5.18	---	---	---	1	---	---	STOP SIGN
N-55	M1-5A	24" X 24"	4.00	---	---	---	1	---	---	COUNTY Z
N-56	W1-2R	30" X 30"	---	6.25	---	---	1	---	---	ROAD CURVES RIGHT
N-57	W1-2L	30" X 30"	---	6.25	---	---	1	---	---	ROAD CURVES LEFT
N-58	W1-2L	30" X 30"	---	6.25	---	---	1	---	---	ROAD CURVES LEFT
PROJECT TOTALS			282.74	129.25	1	1	39	20	2	

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

PERMANENT STONE DITCH CHECKS

STATION	LOCATION	628.7515.S STONE DITCH CHECKS CY	645.0140 GEOTEXTILE TYPE SAS SY
568+22	LT	1.9	17.6
569+86	LT	1.9	17.6
571+15	LT	1.9	17.6
572+26	LT	1.9	17.6
577+17	LT	1.9	17.6
577+82	LT	1.9	17.6
13+40'Z'	LT	1.9	17.6
14+38'Z'	RT	1.9	17.6
15+12'Z'	RT	1.9	17.6
15+28'Z'	LT	1.9	17.6
15+98'Z'	RT	1.9	17.6
16+65'Z'	LT	1.9	17.6
16+85'Z'	RT	1.9	17.6
17+36'Z'	LT	1.9	17.6
17+61'Z'	RT	1.9	17.6
18+04'Z'	LT	1.9	17.6
18+38'Z'	RT	1.9	17.6
18+72'Z'	LT	1.9	17.6
19+10'Z'	RT	1.9	17.6
19+36'Z'	LT	1.9	17.6
19+78'Z'	RT	1.9	17.6
19+97'Z'	LT	1.9	17.6
20+43'Z'	RT	1.9	17.6
22+11'Z'	RT	1.9	17.6
22+87'Z'	RT	1.9	17.6
PROJECT TOTAL		47	441

REMOVING SIGNS

SIGN #	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN DESCRIPTION
R-01	1	1	SPEED LIMIT 55
R-02	1	2	ROAD TO CASTLE ROCK
R-03	1	1	COUNTY HH (W/ ARROW)
R-04	1	1	WEST STH 82 COUNTY HH
R-05	1	1	DOUBLE ARROW
R-06	1	1	COUNTY HH (W/ ARROW)
R-07	1	1	EAST STH 82
R-08	1	2	LYNDON STATION (W/ ARROW)
R-09	1	2	LYNDON STATION (W/ ARROW)
R-10	1	1	COUNTY HH (W/ ARROW)
R-11	1	1	STOP SIGN
R-12	1	1	COUNTY HH (W/ ARROW)
R-13	1	1	WATCH FOR WATER
R-14	1	1	SPEED LIMIT 55
R-15	1	1	NO PASSING ZONE
R-16	1	1	STOP SIGN
R-17	1	1	COUNTY HH STH 82 (W/ ARROW)
R-18	1	1	SPEED LIMIT 55
R-19	1	1	NO PARKING ANYTIME
R-20	1	1	NO PARKING ANYTIME
R-21	1	1	JCT COUNTY HH, NO PARKING
R-22	1	1	NO PARKING ANYTIME
R-23	1	1	NO PARKING ANYTIME
R-24	1	1	NO PARKING ANYTIME
R-25	1	1	NO PARKING ANYTIME
R-26	1	1	NO PARKING ANYTIME
R-27	1	1	NO PARKING ANYTIME
R-28	1	1	NO PARKING ANYTIME
R-29	1	1	NO PARKING ANYTIME
R-30	1	1	NO PASSING ZONE
R-31	1	1	NO PARKING ANYTIME
R-32	1	1	NO PARKING ANYTIME
SUBTOTALS	32	35	

REMOVING SIGNS (CONTINUED)

SIGN #	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN DESCRIPTION
R-33	1	1	WARNING STRIPES
R-34	1	1	NO PARKING ANYTIME
R-35	1	1	NO PARKING ANYTIME
R-36	1	1	CASTLE ROCK (W/ ARROW)
R-37	1	1	NO PARKING ANYTIME
R-38	1	1	JCT COUNTY Z
R-39	1	1	ADAMS CO. WISCONSIN RIVER
R-40	1	1	WARNING STRIPES
R-41	1	1	NO PARKING ANYTIME
R-42	1	1	NO PASSING ZONE
R-43	1	1	STH 82 (W/ ARROW)
R-44	1	1	STOP SIGN
R-45	1	1	JUNEAU CO. WISCONSIN RIVER
R-46	1	1	SPEED LIMIT 55
R-47	1	1	COUNTY Z
R-48	1	1	COUNTY Z (W/ ARROW)
R-49	1	1	COUNTY Z (W/ ARROW)
R-50	1	1	WARNING STRIPES
R-51	1	1	DOUBLE ARROW
R-52	1	1	ADOPT A HIGHWAY POINT BLUFF
R-53	1	1	EAST STH 82
R-54	1	1	CASTLE ROCK (W/ ARROW)
R-55	1	1	JCT COUNTY Z
R-56	1	1	SNOWMOBILE WARNING
R-57	1	1	NO PASSING ZONE
R-58	1	1	ARROW
R-59	1	1	STOP SIGN
R-60	1	1	STOP SIGN WARNING
R-61	1	1	NO PASSING ZONE
R-62	1	1	JCT STH 82
R-63	1	1	NO PASSING ZONE
R-64	1	1	ROAD CURVES
PROJECT TOTALS	64	67	

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL ITEMS

STAGE	LOCATION	LAYOUT	DAYS IN SERVICE	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED (LF)	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED (LF)	614.0250 STEEL THRIE BEAM STRUCTURE APPROACH TEMPORARY (LF)	614.0905 CRASH CUSHION TEMPORARY (EACH)	643.0300 TRAFFIC CONTROL DRUMS NO.	643.0300 TRAFFIC CONTROL DRUMS (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO.	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO.	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAYS)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C NO.	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C (DAYS)	643.0900 TRAFFIC CONTROL SIGNS NO.	643.0900 TRAFFIC CONTROL SIGNS (DAYS)	** 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II (EACH)	643.1050 TRAFFIC CONTROL SIGNS PCMS NO.	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAYS)	643.3000 TRAFFIC CONTROL DETOUR SIGNS NO.	643.3000 TRAFFIC CONTROL DETOUR SIGNS (DAYS)	COMMENT
ADVANCED WARNING																							
	STH 82	EB	637	0	0	0	0	0	0	0	0	0	0	0	0	5	3,185	0	2	40	0	0	
	STH 82	WB	637	0	0	0	0	0	0	0	0	0	0	0	0	5	3,185	0	1	20	0	0	
	CTH Z	SB	637	0	0	0	0	0	0	0	0	0	0	0	0	5	3,185	0	1	20	0	0	
	CTH HH	NB	637	0	0	0	0	0	0	0	0	0	0	0	0	5	3,185	0	1	20	0	0	
				0	0	0	0		0		0		0		0		13,322	0		100		0	
STAGE 1/CTH Z DETOUR																							
	STH 82		21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	42	19	399	
	STH 13		21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	357	
	CTH H		21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	CTH Z		21	0	0	0	0	0	0	1	21	2	42	0	0	1	21	0	1	21	0	0	
	CTH Z	AT NEW CTH Z CONN.	21	0	0	0	0	0	0	2	42	4	84	0	0	1	21	0	0	0	0	0	
	CTH Z	AT NEW STH 82 CONN.	21	0	0	0	0	0	0	2	42	4	84	0	0	1	21	0	0	0	0	0	
				0	0	0	0		0		105		210		0		63	0		63		756	
STAGE 2																							
	STH 82	480+00 - 590+00	165	0	0	0	0	10	1,650	0	0	0	0	0	0		0	0	0	0	0	0	
	STH 82	487+66 - 501+06	165	1,340	1,340	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	STH 82	502+79 - 508+71	165	592	592	22	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	STH 82	516+13 - 518+27	165	214	214	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	STH 82	575+13 - 582+85	165	772	772	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	CTH HH	7+50 - 10+00'HH'	165	0	0	0	0	10	1,650	0	0	0	0	0	0	1	165	0	0	0	0	0	
	CTH Z	10+00 - 35+45'Z'	165	0	0	0	0	0	0	0	0	0	0	0	0	1	165	0	0	0	0	0	
	OLD CTH Z		165	0	0	0	0	0	0	2	330	4	660	0	0	2	330	0	0	0	0	0	
				2,918	2,918	22	7		3,300		330		660		0		660	0		0		0	
STAGE 3																							
	STH 82	480+00 - 590+00	15	0	0	0	0	224	3,360	8	120	16	240	53	795	6	90	0	0	0	0	0	
	STH 82	502+62 - 515+00	15	1,238	1,238	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BARRIER WALL TO BE INSTALLED AT THE END OF STAGE 3
	STH 82	577+00 - 590+05	15	716	1,277	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BARRIER WALL TO BE INSTALLED AT THE END OF STAGE 3
	CTH HH	7+50 - 10+00'HH'	15	0	0	0	0	17	255	0	0	0	0	11	165	1	15	0	0	0	0	0	
	CTH Z	10+00 - 35+45'Z'	15	0	0	0	0	0	0	0	0	0	0	0	0	1	15	0	0	0	0	0	
	OLD CTH Z		15	0	0	0	0	0	0	2	30	4	60	0	0	2	30	0	0	0	0	0	
				1,954	2,515	0	4		3,615		150		300		960		150	0		0		0	
WINTER SHUTDOWN																							
	STH 82	PROJECT LIMITS	150	0	0	0	0	47	7,050	0	0	0	0	0	0	10	1,500	2	0	0	0	0	DRUMS ALONG EXISTING STH 82 SHOULDER
	CTH HH	8+00'HH' - 10+00'HH'	150	0	0	0	0	8	1,200	0	0	0	0	0	0	1	150	0	0	0	0	0	
	OLD CTH Z	S OF LAST DW EXT SOUTH	150	0	0	0	0	0	0	5	750	10	1,500	0	0	1	150	0	0	0	0	0	
				0	0	0	0		8250		750		1500		0		1800	2		0		0	
STAGE 4																							
	STH 82	480+00 - 590+00	55	0	0	0	0	275	15,125	5	275	10	550	79	4,345	5	275	0	0	0	0	0	
	STH 82	480+00 - 500+46	55	2,046	2,046	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	STH 82	554+69 - 558+80	55	404	404	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	CTH HH	7+50 - 10+00'HH'	55	0	0	0	0	15	825	0	0	0	0	14	770	1	55	0	0	0	0	0	
	CTH Z	10+00 - 35+45'Z'	55	0	0	0	0	0	0	0	0	0	0	0	0	1	55	0	0	0	0	0	
	OLD CTH Z		55	0	0	0	0	0	0	2	110	4	220	0	0	2	110	0	0	0	0	0	
				2,450	2,450	0	4		15,950		385		770		5,115		495	0		0		0	
		PAGE TOTALS		7,322	7,883	22	15		31,115		1,720		3,440		6,075		16,490	2		163		756	

** NOTE: TRAFFIC CONTROL COVERING SIGNS TYPE II ARE COVERED/UNCOVERED ONLY ONCE PER APPLICABLE STAGE (1 CYCLE).

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

TRAFFIC CONTROL ITEMS (CONTINUED)

STAGE	LOCATION	LAYOUT	DAYS IN SERVICE	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED (LF)	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED (LF)	614.0250 STEEL THRIE BEAM STRUCTURE APPROACH TEMPORARY (LF)	614.0905 CRASH CUSHION TEMPORARY (EACH)	643.0300 DRUMS NO.	643.0300 DRUMS (DAYS)	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III (DAYS)	643.0705 WARNING LIGHTS TYPE A NO.	643.0705 WARNING LIGHTS TYPE A (DAYS)	643.0715 WARNING LIGHTS TYPE C NO.	643.0715 WARNING LIGHTS TYPE C (DAYS)	643.0900 TRAFFIC CONTROL SIGNS NO.	643.0900 TRAFFIC CONTROL SIGNS (DAYS)	643.0920 ** TRAFFIC CONTROL COVERING SIGNS TYPE II (EACH)	643.1050 TRAFFIC CONTROL SIGNS PCMS NO.	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAYS)	643.3000 TRAFFIC CONTROL DETOUR SIGNS NO.	643.3000 TRAFFIC CONTROL DETOUR SIGNS (DAYS)	COMMENT
STAGE 4/CTH HH DETOUR																						
	IH 90/94		7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	14	98	
	STH 82		7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	112	
	CTH HH	AT STH 82	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	56	
	CTH HH	AT IH 90/94	7	0	0	0	0	0	0	2	14	4	28	0	0	1	7	0	0	0	25	175	
				0	0	0	0		0		14		28		0		7	2		0		441	
STAGE 5A																							
	STH 82	480+00 - 590+00	18	0	0	0	0	270	4,860	12	216	24	432	28	504	8	144	0	0	0	0	0	
	CTH HH	7+50 - 10+00'HH'	18	0	0	0	0	9	162	0	0	0	0	0	0	1	18	0	0	0	0	0	
	CTH Z	10+00 - 35+45'Z'	18	0	0	0	0	0	0	0	0	0	0	0	0	1	18	0	0	0	0	0	
	OLD CTH Z		18	0	0	0	0	0	0	2	36	4	72	0	0	2	36	0	0	0	0	0	
				0	0	0	0		5,022		252		504		504		216	0		0		0	
STAGE 5B																							
	STH 82	480+00 - 590+00	18	0	0	0	0	274	4,932	12	216	24	432	64	1,152	8	144	0	0	0	0	0	
	STH 82	480+00 - 500+46	18	0	2,046	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MOVE BARRIER TO SOUTH SIDE OF STAGE 4/ 5A STAGING LINE
	STH 82	502+79 - 515+00	18	0	1,221	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MOVE BARRIER TO SOUTH SIDE OF STAGE 4/ 5A STAGING LINE
	STH 82	554+72 - 558+76	18	0	404	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MOVE BARRIER TO SOUTH SIDE OF STAGE 4/ 5A STAGING LINE
	STH 82	577+00 - 590+05	18	0	1,277	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MOVE BARRIER TO SOUTH SIDE OF STAGE 4/ 5A STAGING LINE
	CTH HH	7+50 - 10+00'HH'	18	0	0	0	0	8	144	0	0	0	0	0	0	1	18	0	0	0	0	0	
	CTH Z	10+00 - 35+45'Z'	18	0	0	0	0	0	0	0	0	0	0	0	0	1	18	0	0	0	0	0	
	OLD CTH Z		18	0	0	0	0	0	0	2	36	4	72	0	0	2	36	0	0	0	0	0	
				0	4,948	0	8		5,076		252		504		1,152		216	0		0		0	
STAGE 6																							
	STH 82	480+00 - 590+00	20	0	0	0	0	261	5,220	5	100	10	200	24	480	5	100	0	0	0	0	0	
	CTH HH	7+50 - 10+00'HH'	20	0	0	0	0	15	300	0	0	0	0	8	160	1	20	0	0	0	0	0	
	CTH Z	10+00 - 35+45'Z'	20	0	0	0	0	0	0	0	0	0	0	0	0	1	20	0	0	0	0	0	
	OLD CTH Z		20	0	0	0	0	0	0	2	40	4	80	0	0	2	40	0	0	0	0	0	
				0	0	0	0		5,520		140		280		640		180	0		0		0	
STAGE 7																							
	STH 82	480+00 - 590+00	45	0	0	0	0	276	12,420	12	540	24	1,080	4	180	8	360	0	0	0	0	0	
	CTH HH	7+50 - 10+00'HH'	45	0	0	0	0	18	810	0	0	0	0	12	540	1	45	0	0	0	0	0	
	CTH Z	10+00 - 35+45'Z'	45	0	0	0	0	0	0	0	0	0	0	0	0	1	45	0	0	0	0	0	
	OLD CTH Z		45	0	0	0	0	0	0	2	90	4	180	0	0	2	90	0	0	0	0	0	
				0	0	0	0		13,230		630		1,260		720		540	0		0		0	
STAGE 8																							
	STH 82	480+00 - 590+00	60	0	0	0	0	78	4,680	0	0	0	0	0	0	0	0	0	0	0	0	0	
	CTH HH	7+50 - 10+00'HH'	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	CTH Z	10+00 - 35+45'Z'	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	OLD CTH Z		60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
				0	0	0	0		4,680		0		0		0		0	0		0		0	
STAGE 8/CTH Z DETOUR																							
	STH 82		7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	14	19	133	
	STH 13		7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	119	
	CTH H		7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	CTH Z		7	0	0	0	0	0	0	1	7	2	14	0	0	1	7	0	1	7	0	0	
	CTH Z	AT NEW CTH Z CONN.	7	0	0	0	0	0	0	2	14	4	28	0	0	1	7	0	0	0	0	0	
	CTH Z	AT NEW STH 82 CONN.	7	0	0	0	0	0	0	2	14	4	28	0	0	1	7	0	0	0	0	0	
				0	0	0	0		0		35		70		0		21	0		21		252	
		PAGE TOTALS		0	4,948	0	8		33,528		1,323		2,646		3,016		1,180	2		21		693	
		PROJECT TOTALS		7,322	12,831	22	23		64,643		3,043		6,086		9,091		17,670	4		184		1,449	

** NOTE: TRAFFIC CONTROL COVERING SIGNS TYPE II ARE COVERED/UNCOVERED ONLY ONCE PER APPLICABLE STAGE (1 CYCLE).

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

CRASH CUSHION TEMPORARY

LOCATION	STAGE	** 614.0905 CRASH CUSHION TEMPORARY (EACH)	BACK WIDTH (FT)	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
487+66, R	2	1	4	OM-3R	TL-3	BIDIRECTIONAL	L	WORK ZONE, EXISTING SHOULDER
501+06, R	2	1	4	OM-3L	TL-3	BIDIRECTIONAL	R	WORK ZONE, EXISTING SHOULDER
502+79, R	2	1	4	OM-3R	TL-3	BIDIRECTIONAL	L	WORK ZONE, EXISTING SHOULDER
516+11, L	2	1	4	OM-3R	TL-3	BIDIRECTIONAL	L	WORK ZONE, EXISTING SHOULDER
518+33, L	2	1	4	OM-3L	TL-3	BIDIRECTIONAL	R	WORK ZONE, EXISTING SHOULDER
575+13, R	2	1	4	OM-3L	TL-3	BIDIRECTIONAL	R	WORK ZONE, EXISTING SHOULDER
582+85, L	2	1	4	OM-3R	TL-3	BIDIRECTIONAL	L	WORK ZONE, EXISTING SHOULDER
502+62, L	3	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING LANE EDGE
515+00, L	3	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
577+00, R	3	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
590+05, R	3	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
480+20, L	4	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
500+42, L	4	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING LANE EDGE
554+69, L	4	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
558+80, R	4	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
480+20, R	5B	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
500+43, L	5B	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING LANE EDGE
502+62, L	5B	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING LANE EDGE
515+00, L	5B	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
554+69, L	5B	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
558+74, R	5B	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
577+20, R	5B	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE
590+05, R	5B	1	4	OM-3L	TL-3	BIDIRECTIONAL	L & R	WORK ZONE, EXISTING CENTERLINE

** NOTE: THIS TABLE IS FOR INFORMATION PURPOSES ONLY. SEE TRAFFIC CONTROL ITEMS FOR CRASH CUSHION TEMPORARY QUANTITIES.

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***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

PERMANENT PAVEMENT MARKINGS

STATION	-	STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	WHITE LF	DOUBLE YELLOW LF	DASHED YELLOW LF	DASHED WHITE LF	646.0126 PAVEMENT MARKING EPOXY 8-INCH WHITE LF	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH YELLOW LF	647.0563 PAVEMENT MARKING STOP LINE EPOXY 18-INCH WHITE LF	647.0356 PAVEMENT MARKING WORDS EPOXY WHITE EACH	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 WHITE EACH	647.0856 PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY YELLOW SF
480+00	-	498+00	LT	1800	---	---	---	---	---	---	---	---	---	---
480+00	-	498+00	RT	1800	---	---	---	---	---	---	---	---	---	---
480+00	-	501+22	LT	2122	---	---	---	---	---	---	---	---	---	---
480+00	-	501+22	RT	2124	---	---	---	---	---	---	---	---	---	---
480+00	-	550+36	LT	---	7036	---	---	---	---	---	---	---	---	---
480+00	-	501+44	RT	---	2144	---	---	---	---	---	---	---	---	---
481+75	-	482+53	LT	---	---	---	---	---	---	926	---	---	---	---
498+00	-	501+22	LT	---	---	---	---	---	---	---	---	---	---	1766
502+30	-	510+00	LT	---	---	---	---	---	---	---	---	---	---	1720
497+97	-	501+44	RT	---	---	---	---	---	347	---	---	---	3	---
502+30	-	524+00	LT	2170	---	---	---	---	---	---	---	---	---	---
502+30	-	518+75	RT	1645	---	---	---	---	---	---	---	---	---	---
502+30	-	507+50	LT	---	---	---	---	---	520	---	---	2	3	---
503+08	-	590+00	RT	---	8692	---	---	---	---	---	---	---	---	---
510+00	-	518+75	LT	875	---	---	---	---	---	---	---	---	---	---
510+00	-	518+75	LT	875	---	---	---	---	---	---	---	---	---	---
510+00	-	518+75	LT	875	---	---	---	---	---	---	---	---	---	---
515+24	-	517+74	LT	---	---	---	---	---	---	469	---	---	---	---
518+75	-	528+00	RT	---	---	---	231	---	---	---	---	---	---	---
528+00	-	556+38	RT	2838	---	--	---	---	---	---	---	---	---	---
528+00	-	556+38	LT	---	---	---	710	---	---	---	---	---	---	---
549+44	-	552+47	RT	---	---	---	---	76	---	---	---	---	---	---
551+78	-	590+00	LT	---	3832	---	---	---	---	---	---	---	---	---
551+88		555+28	LT	---	---	---	---	---	340	---	---	---	---	---
556+38	-	577+05	LT/RT	---	---	4134	---	---	---	---	---	---	---	---
577+05	-	588+25	LT	1120	---	---	---	---	---	---	---	---	---	---
577+05	-	590+00	RT	---	---	---	324	---	---	---	---	---	---	---
10+30'Z'			LT	---	---	---	---	---	---	---	41	---	---	---
10+28'Z'	-	35+00'Z'	LT/RT	---	---	4944	---	---	---	---	---	---	---	---
10+74'Z'	-	35+00'Z'	LT	---	2429	---	---	---	---	---	---	---	---	---
10+74'Z'	-	35+00'Z'	RT	---	2426	---	---	---	---	---	---	---	---	---
7+68'HH'	-	9+70'HH'	LT/RT	---	---	756	---	---	---	---	---	---	---	---
7+68'HH'	-	9+37'HH'	LT	---	169	---	---	---	---	---	---	---	---	---
7+68'HH'	-	9+23'HH'	RT	---	155	---	---	---	---	---	---	---	---	---
8+75'HH'	-	9+12'HH'	RT	---	---	---	---	---	74	---	---	---	---	---
9+52'HH'	-	9+70'HH'	RT	---	---	---	---	---	---	---	49	---	---	---
SUBTOTALS				17369	26883	9834	1265	76	1281	1394	90	2	6	3486
PROJECT TOTALS				55426					1281	1394	90	2	6	3486

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

REMOVING PAVEMENT MARKINGS

STAGE	STATION	-	STATION	LOCATION	646.0600 REMOVING PAVEMENT MARKINGS (LF)	647.0955 REMOVING PAVEMENT MARKINGS ARROWS (EACH)	647.0965 REMOVING PAVEMENT MARKINGS WORDS (EACH)	REMARKS
2	482+91	-	501+25	RT	1,834	---	---	EASTBOUND - WHITE EDGE
	502+60	-	508+90	RT	630	---	---	EASTBOUND - WHITE EDGE
	574+30	-	583+75	LT/RT	945	---	---	WESTBOUND - WHITE EDGE
4	475+25	-	519+75	LT	4,450	---	---	WESTBOUND - WHITE EDGE
	475+25	-	501+30	CL	4,887	---	---	CENTERLINE, CENTERLINE SKIPS, DIAGONALS
	502+55	-	504+44	LT	189	2	2	LEFT TURN LANE
	508+00	-	519+75	CL	2,419	---	---	CENTERLINE, CENTERLINE SKIPS, DIAGONALS
	549+94	-	563+55	LT/RT	1,361	---	---	WESTBOUND - WHITE EDGE
	549+94	-	563+55	CL	2,722	---	---	CENTERLINE
	573+40	-	595+00	LT	2,160	---	---	WESTBOUND - WHITE EDGE
	573+40	-	595+00	CL	4,320	---	---	CENTERLINE
UNDISTRIBUTED					1,000	---	---	
PROJECT TOTALS					26,917	2	2	

CONSTRUCTION STAKING

STATION	-	STATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB & GUTTER LF	*650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL LS
48000	-	51700	3700	3700	36	1106	3700	1
51820	-	53051	1231	1231	2420	30	1231	---
54705	-	59000	4295	4295	30	15	4295	---
7+50'HH'	-	9+75'HH'	225	225	304	---	225	---
10+24'Z'	-	35+45'Z'	2521	2521	158	---	2521	---
0+00'A'	-	1+75'A'	---	---	---	---	175	---
0+12'DD'	-	0+71'DD'	---	---	---	---	59	---
0+18'DE'	-	1+49'DE'	---	---	---	---	131	---
0+12'DF'	-	2+37'DF'	---	---	---	---	225	---
PROJECT TOTALS			11972	11972	2948	1151	12562	1

*CONSTRUCTION STAKING CONCRETE PAVEMENT INCLUDES STAKING FOR CONCRETE CORRUGATED MEDIAN

LOCATING NO PASSING ZONES

ROADWAY	648.0100 LOCATING NO PASSING ZONES MI
STH 82	4.00
CTH HH	0.55
CTH Z	0.98
PROJECT TOTAL	5.53

SAWING ASPHALT

STATION			LOCATION	690.0150 SAWING ASPHALT LF	REMARK
35+45.26'Z'			LT/RT	21	**STAGE 1**
475+65	-	480+45	LT	480	**STAGE 3**
482+40	-	507+85	LT	2,545	**STAGE 3**
498+40	-	501+30	LT	580	**STAGE 3 - EXISTING MEDIAN**
502+41	-	508+00	LT	1,118	**STAGE 3 - EXISTING MEDIAN**
549+67	-	563+30	LT/RT	1,363	**STAGE 3**
573+40	-	595+00	LT	2,160	**STAGE 3**
480+00	-	486+00	CL	624	**STAGE 4**
496+00	-	511+00	LT	1,500	**STAGE 4**
511+00	-	515+00	LT	424	**STAGE 4**
554+50	-	559+00	LT/RT	474	**STAGE 4**
586+00	-	590+00	CL	424	**STAGE 4**
7+50'HH'			LT/RT	27	**STAGE 4**
480+00	-	486+00	CL	624	**STAGE 5B**
511+00	-	515+00	LT	424	**STAGE 5B**
554+50	-	559+00	LT/RT	474	**STAGE 5B**
586+00	-	590+00	CL	424	**STAGE 5B**
11+54'Z'			LT/RT	173	**STAGE 8**
PROJECT TOTALS				13,859	

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

TEMPORARY PAVEMENT MARKINGS

STAGE	STATION	-	STATION	OFFSET	649.0402 TEMPORARY PAVEMENT MARKING PAINT 4-INCH YELLOW (LF)	649.0402 TEMPORARY PAVEMENT MARKING PAINT 4-INCH WHITE (LF)	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH YELLOW (LF)	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH WHITE (LF)	REMARK
2	482+91	-	501+25	RT	---	1,834	---	---	EASTBOUND
	502+60	-	508+90	RT	---	630	---	---	EASTBOUND
	574+30	-	583+75	LT/RT	---	945	---	---	WESTBOUND
4	475+25	-	519+75	LT	3,975	3,975	475	475	WESTBOUND
	549+94	-	563+55	LT/RT	1,361	1,361	---	---	WESTBOUND
	573+40	-	595+00	LT	1,660	1,660	500	500	WESTBOUND
	475+25	-	519+75	RT	4,450	4,450	---	---	EASTBOUND - PLACE IN STAGE 5B CONFIGURATION
	549+94	-	563+55	LT/RT	1,361	1,361	---	---	EASTBOUND - PLACE IN STAGE 5B CONFIGURATION
	573+40	-	595+00	RT	1,660	1,660	500	500	EASTBOUND - PLACE IN STAGE 5B CONFIGURATION
5A	496+60	-	519+75	LT	2,315	2,315	---	---	EASTBOUND - PLACE IN STAGE 5B CONFIGURATION
5B	475+25	-	519+75	LT	3,975	3,975	475	475	WESTBOUND - PLACE IN STAGE 6 CONFIGURATION
	554+50	-	558+00	LT/RT	350	350	---	---	WESTBOUND - PLACE IN STAGE 6 CONFIGURATION
	578+30	-	590+00	RT	1,170	1,170	475	475	WESTBOUND - PLACE IN STAGE 6 CONFIGURATION
6	480+00	-	519+75	LT	3,975	3,975	---	---	EASTBOUND - SECOND LIFT
	554+00	-	560+00	LT/RT	600	600	---	---	EASTBOUND - SECOND LIFT
	578+00	-	590+00	RT	1,200	1,200	---	---	EASTBOUND - SECOND LIFT
	480+00	-	519+75	LT	---	---	3,975	3,975	EASTBOUND - FINAL SURFACE
	554+00	-	560+00	LT/RT	---	---	600	600	EASTBOUND - FINAL SURFACE
	578+00	-	590+00	RT	---	---	1,200	1,200	EASTBOUND - FINAL SURFACE
	** STAGE 6 UNDISTRIBUTED			LT/RT	---	---	500	500	
7	480+00	-	519+75	LT	3,975	3,975	---	---	WESTBOUND - SECOND LIFT
	554+00	-	560+00	LT/RT	600	600	---	---	WESTBOUND - SECOND LIFT
	578+00	-	590+00	LT	1,200	1,200	---	---	WESTBOUND - SECOND LIFT
	480+00	-	519+75	LT	---	---	3,975	3,975	WESTBOUND - FINAL SURFACE
	554+00	-	560+00	LT/RT	---	---	600	600	WESTBOUND - FINAL SURFACE
	578+00	-	590+00	LT	---	---	1,200	1,200	WESTBOUND - FINAL SURFACE
	** STAGE 7 UNDISTRIBUTED			LT/RT	---	---	500	500	
PROJECT TOTALS					33,827	37,236	14,975	14,975	
TOTAL					**71,063**		**29,950**		

* ALL AREAS SHALL HAVE PAVEMENT MARKINGS APPLIED THE SAME DAY PRIOR TO OPENING TO TRAFFIC
** QUANTITIES MAY VARY DEPENDING ON WHAT LIFT IS OPEN TO TRAFFIC

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

REMOVING PULL BOXES

PULL BOX NO.	LOCATION	653.0905 REMOVING PULL BOXES EACH
PB1	502+40, 13' RT	1
PB2	501+45, 16' RT	1
PB3	501+45, 61' LT	1
PROJECT TOTAL		3

REMOVING CONCRETE BASES

SIGNAL BASE NO.	LOCATION	204.0195 REMOVING CONCRETE BASES EACH
L-0001	502+44, 10' RT	1
L-0002	501+42, 62' LT	1
PROJECT TOTAL		2

ELECTRICAL SERVICE METER BREAKER PEDESTAL

CONTROL CABINET NO.	** LOCATION	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL L.S.	SPV.0060.02 REMOVE ELECTRIAL SERVICE METER BREAKER PEDESTAL EACH
CB1	STH 82 & CTH HH	1	1
PROJECT TOTAL		1	1

LIGHTING EQUIPMENT

BASE NO.	** LOCATION	654.0105 CONCRETE BASE TYPE 5 EACH	659.1115 LUMINAIRES UTILITY LED-A EACH
L-001	502+93, 45' RT	1	1
L-002	501+42, 40' LT	1	1
LB1	501+73, 44' RT	1	
PROJECT TOTAL		3	2

LIGHTING CONDUIT & ELECTRICAL WIRE

LOC.	TO	LOC.	LINEAR DISTANCE	NUMBER OF CONDUITS	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	IN CONDUIT RUN WIRE SLACK LF	IN CONDUIT RUN NUMBER OF WIRES (INCLUDING GROUND WIRE)	IN LIGHT POLE LENGTH OF WIRE IN POLE	IN LIGHT POLE NUMBER OF WIRES (INCLUDING GROUND WIRE)	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
CB1		LPB1	39	2	78	25	6			252
LPB1		L-001	4	1	4	17	6	45	3	261
LPB1		LPB2	50	2	100	34	6			504
LPB2		LPB3	65	2	130	34	6			594
LPB3		L-002	6	1	6	17	3			69
LPB3		LPB4	89	2	178	34	3			369
LPB4		L-003	33	1	33	17	3	45	3	285
PROJECT TOTAL					529					2334

PULL BOXES

PULL BOX NO.	** LOCATION	SPV.0060.04 PULL BOX NON-CONDUCTIVE 24X42-INCH EACH
LPB1	502+92, 49' RT	1
LPB2	502+42, 48' RT	1
LPB3	501+78, 48' RT	1
LPB4	501+78, 40' LT	1
PROJECT TOTAL		4

LIGHT POLES

LIGHT BASE NO.	LOCATION	SPV.0060.01 SALVAGE AND REINSTALL LIGHTING UNIT EACH	SPV.0060.03 REMOVE LUMINAIRE EACH
L-0001	502+44, 10' RT	1	1
L-0002	501+42, 62' LT	1	1
PROJECT TOTAL		2	2

LIGHTING CONTROL CABINET

CONTROL CABINET NO.	** LOCATION	654.0230 CONCRETE CONTROL CABINET BASE TYPE L30 EACH	659.2130 LIGHTING CONTROL CABINET 120/240 30-INCH EACH
CB1	503+00, 65' RT	1	1
PROJECT TOTAL		1	1

LEGEND

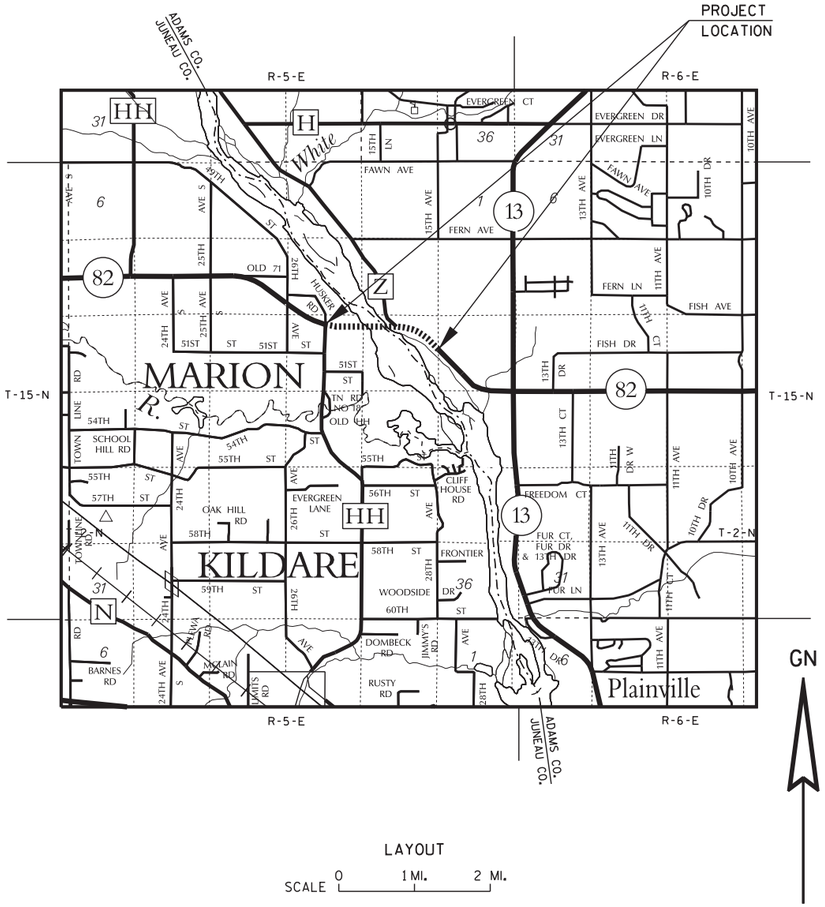
** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
PROJECT NO. 1430-01-21
STH 82 - POINT BLUFF BRIDGE
WISCONSIN RIVER BRIDGE AND APPROACHES



STH 82
JUNEAU COUNTY



THE NOTES, CONVENTIONAL SYMBOLS AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1430-01-21.

NOTES:

DISTANCES SHOWN FROM THE RIGHT OF WAY LINE TO BUILDINGS ARE APPROXIMATE ONLY.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JUNEAU COUNTY, NAD 83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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 R/W IS MEASURED ALONG AND PERPENDICULAR TO 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.

ALL RIGHT OF WAY LINES DEPICTED IN NON-AQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT OF WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS OR FROM CENTERLINE OF EXISTING PAVEMENT.

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.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING RIGHT OF WAY FOR STH 82 IS ESTABLISHED FROM PREVIOUS PROJECT S 0489(4.
EXISTING RIGHT OF WAY FOR HART ROAD IS ESTABLISHED FROM PREVIOUS PROJECT S 0489(4)
AND GOVERNMENT LAND LINES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE.

CONVENTIONAL SYMBOLS

- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- NEW REFERENCE LINE
- NEW R/W LINE
- EXISTING R/W OR HE LINE
- PROPERTY LINE
- LOT, TIE & OTHER MINOR LINES
- SLOPE INTERCEPT
- CORPORATE LIMITS
- UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
- NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
- TEMPORARY LIMITED EASEMENT AREA
- EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
- TRANSMISSION STRUCTURES
- BUILDING / TO BE REMOVED
- BRIDGE
- SECTION CORNER SYMBOL
- SECTION CORNER MONUMENT
- R/W MONUMENT (TO BE SET)
- NON-MONUMENTED R/W POINT
- FOUND IRON PIN (1-INCH UNLESS NOTED) IP
- GEODETIC SURVEY MONUMENT
- SIXTEENTH CORNER MONUMENT
- SIGN
- OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

- ACCESS RESTRICTED BY ACQUISITION
- NO ACCESS (BY STATUTORY AUTHORITY)
- ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
- NO ACCESS (NEW HIGHWAY)
- PARCEL NUMBER 25
- UTILITY NUMBER 40
- PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS POINT	AP	POINT OF REVERSE CURVATURE	PRC
ACCESS RIGHTS	AR	POINT ON TANGENT	POT
ACRES	AC	POINT OF TANGENCY	PT
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RIGHT	RT
CENTERLINE	C/L	RIGHT OF WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC
CONCRETE	CONC	SEPTIC VENT	SEPV
CORNER	COR	SQUARE FEET	SF
COUNTY	CO	STATE TRUNK HIGHWAY	STH
COUNTY TRUNK HIGHWAY	CTH	STATION	STA
DISTANCE	DIST	SUBDIVISION	SUBD
DOCUMENT NUMBER	DOC	TANGENT	TAN
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GOVERNMENT	GOV'T	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	VOL
HIGHWAY EASEMENT	HE		
INDENTIFICATION	ID		
IRON PIPE	IP		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NUMBER	NO		
OUTLOT	OL		
PAGE	PG		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF COMPOUND CURVE	PCC		
POINT OF CURVATURE	PC		
POINT OF INTERSECTION	PI		

CURVE DATA

LONG CHORD	LC		
LONG CHORD BEARING	LCB		
RADIUS	R		
DEGREE OF CURVE	D		
CENTRAL ANGLE	Δ	DELTA	
LENGTH OF CURVE	L		
TANGENT	T		
DIRECTION AHEAD	DA		
DIRECTION BACK	DB		

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—

PROJECT NUMBER 1430-01-21
SHEET 2 OF 2

FILE NAME : P:\60317290\900-WorkingDocs-CAD\Global CADD Standards\02-SHEETS\040100_J_rw.dgn PLOT DATE : 11/5/2015 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:100

APPRAISAL PLAT DATE :

TITLE

EASEMENT TABLE		
OWNER	RECORDING INFORMATION	PARCEL
SOUTHERN WISCONSIN POWER COMPANY (FLOWAGE EASEMENT)	VOL. 59 PG. 236	1
WISCONSIN POWER AND LIGHT COMPANY (EASEMENT ASSIGNMENT)	VOL. 130 PG. 58-73 DOC. 151902	1
STATE OF WISCONSIN (SCENIC EASEMENT)	NO RECORD OF EASEMENT FOUND SHOWN IN PROJECT T 1408(13)	1

TRANSPORTATION PROJECT PLAT NO: 1430-01-21 - 4.01 AMENDMENT NO. 1

REMOVES UTILITY NUMBER 52 FROM TRANSPORTATION PROJECT PLAT NO. 1430-01-21- 4.01 RECORDED AS VOL. 2, PAGES 8-9, DOCUMENT 712566, #50208.

PART OF THE NE 1/4 OF THE NW 1/4 AND THE NW 1/4 OF THE NE 1/4 OF SECTION 15, ALL IN T 15 N, R 5 E, TOWN OF MARION, JUNEAU COUNTY, WISCONSIN.

RELOCATION ORDER STH 82 POINT BLUFF BRIDGE, WISCONSIN RIVER BRIDGE.

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 SUBSECTIONS 84.02 (3), 84.09 AND 84.30, 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.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN JUNEAU COUNTY, WISCONSIN AT 10:30 A.M. ON OCT. 31, 2016 AS

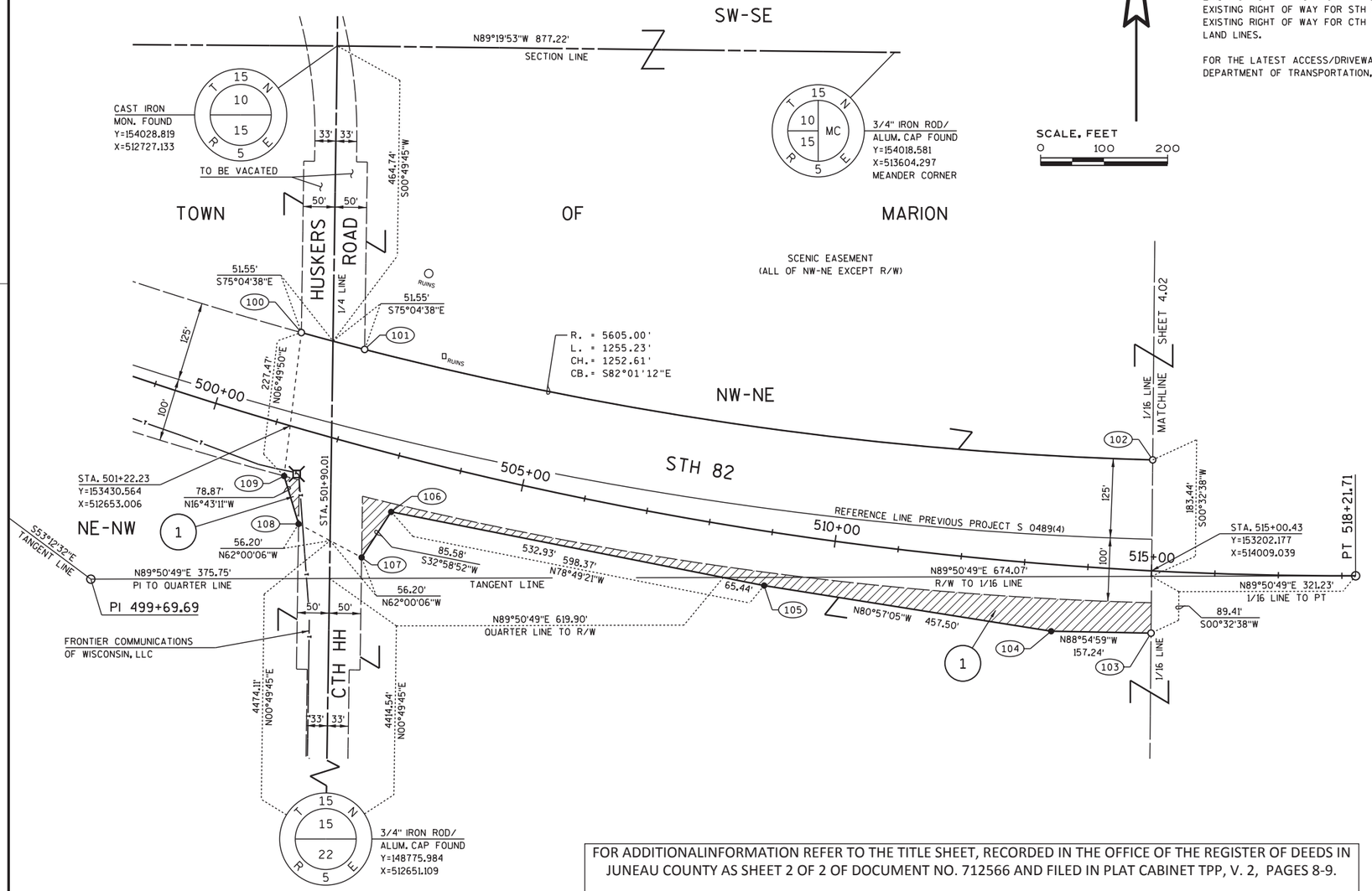
DOCUMENT # 717285

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-01-21-4.01
AMENDMENT NO. 1

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 WISCONSIN DEPARTMENT OF TRANSPORTATION.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED			TLE ACRES
			NEW	EXISTING	TOTAL	
1	PETER J. HOFFMAN	FEE	0.76	7.27	8.03	-----



GN

SCALE, FEET
0 100 200

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JUNEAU COUNTY, NAD 83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING RIGHT OF WAY FOR STH 82 ESTABLISHED FROM PREVIOUS PROJECT S 0489(4). EXISTING RIGHT OF WAY FOR CTH HH ESTABLISHED FROM PREVIOUS PROJECT S 0489(4) AND GOVERNMENT LAND LINES.

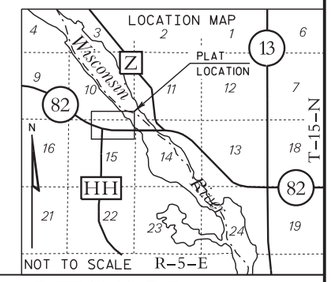
FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION OFFICE.

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
100	500+97.59	145.87'
101	502+03.28	147.65'
102	514+92.92	174.63'
103	515+04.46	97.99'
104	513+50.00	105.00'
105	509+00.00	85.00'
106	503+10.00	88.83'
107	502+83.46	170.00'
108	501+76.69	145.00'
109	501+35.00	78.54'

P.I. = 499+69.69
Y 153189.061
X 512339.242
Δ. = 36°56'39" LT.
D. = 00°57'41"
T. = 1990.95'
L. = 3842.98'
R. = 5960.00'

P.I. = 567+34.72
Y 153207.498
X 519243.180
Δ. = 47°22'17" RT.
D. = 02°17'31"
T. = 1096.68'
L. = 2066.97'
R. = 2500.00'



FOR ADDITIONALINFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN JUNEAU COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 712566 AND FILED IN PLAT CABINET TPP, V. 2, PAGES 8-9.

AECOM

I, LANCE J. HABECK, PROFESSIONAL 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 DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-01-21 - 4.01 AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN LANCE J. HABECK S-1444 PLOVER, WI LAND SURVEYOR

Lance J. Habeck 10/18/2016
LANCE J. HABECK DATE
REGISTRATION NUMBER: S-1444

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

Cory Schlagel 10/18/2016
CORY SCHLAGEL SIGNATURE DATE

FILE NAME : P:\60317290\900-WorkingDocs-CAD\Global CADD Standards\02-SHEETS\040101_rw_Amd_1.dgrPLOT DATE : 10/18/2016
APPRAISAL PLAT DATE : 10-18-16
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : 1:100

1430-01-21 -4.01 AMENDMENT NO. 1

TRANSPORTATION PROJECT PLAT NO: 1430-01-21 - 4.01

PART OF THE NE 1/4 OF THE NW 1/4 AND THE NW 1/4 OF THE NE 1/4 OF SECTION 15, ALL IN T 15 N, R 5 E, TOWN OF MARION, JUNEAU COUNTY, WISCONSIN.

RELOCATION ORDER STH 82 POINT BLUFF BRIDGE, WISCONSIN RIVER BRIDGE.

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 SUBSECTIONS 84.02 (3), 84.09 AND 84.30, 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.

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

10:15 A.M. ON JAN. 7, 2016
AS DOCUMENT # 712566 AND
FILED IN VOL. 2 OF TPP CABINET, PAGES 8-9.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-01-21-4.01
SHEET 1 OF 2

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 WISCONSIN DEPARTMENT OF TRANSPORTATION.

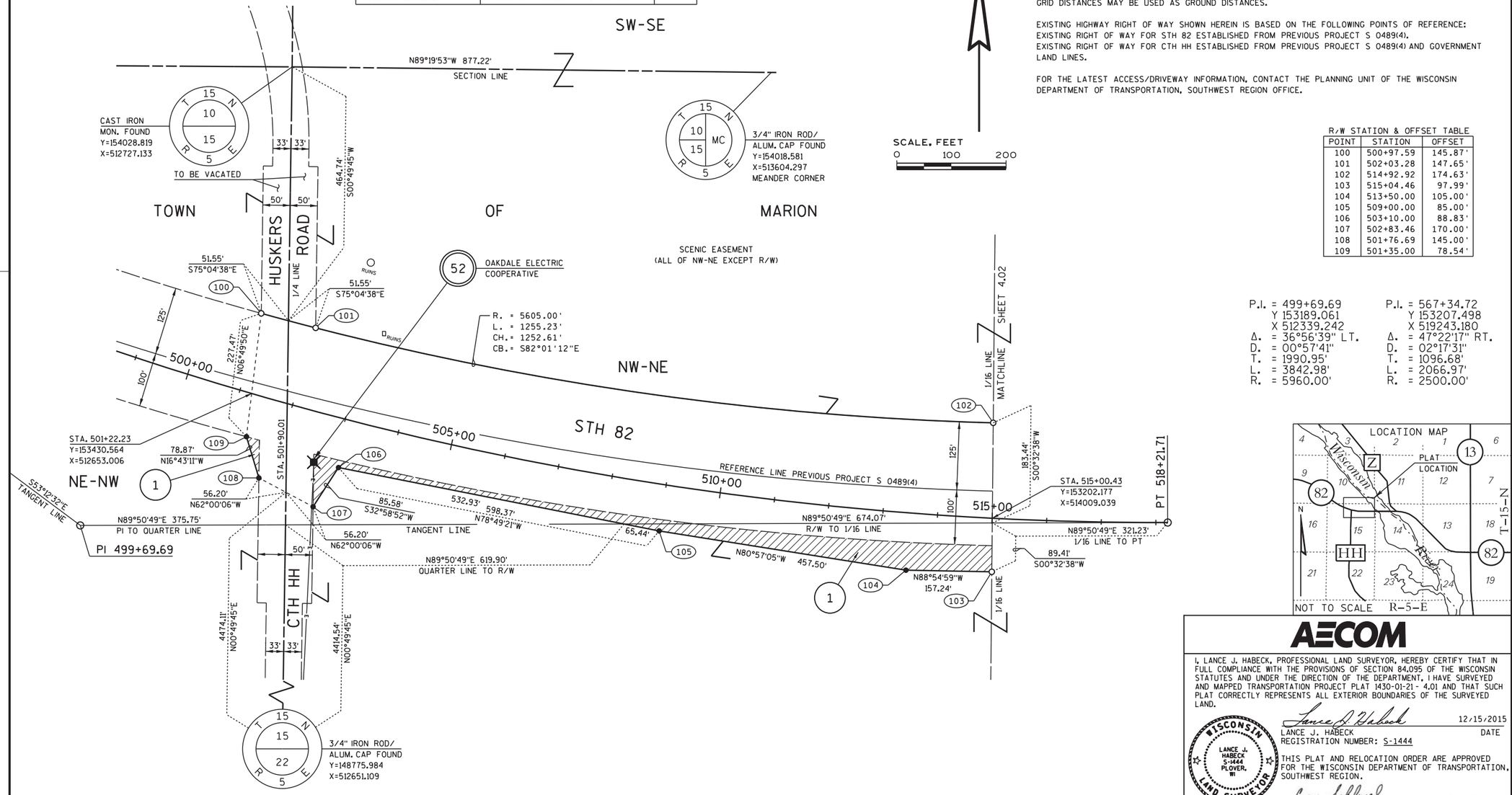
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
1	PETER J. HOFFMAN	FEE	0.76	7.27	8.03	-----

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
52	OAKDALE ELECTRIC COOPERATIVE	RELEASE OF RIGHTS

EASEMENT TABLE

OWNER	RECORDING INFORMATION	PARCEL
OAKDALE ELECTRIC COOPERATIVE	NO EASEMENT OF RECORD FOUND.	1
SOUTHERN WISCONSIN POWER COMPANY (FLOWAGE EASEMENT)	VOL. 59 PG. 236	1
WISCONSIN POWER AND LIGHT COMPANY (EASEMENT ASSIGNMENT)	VOL. 130 PG. 58-73 DOC. 151902	1
STATE OF WISCONSIN (SCENIC EASEMENT)	NO EASEMENT OF RECORD FOUND. SHOWN IN PROJECT T 1408 (13)	1



GN

SCALE, FEET
0 100 200

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JUNEAU COUNTY, NAD 83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING RIGHT OF WAY FOR STH 82 ESTABLISHED FROM PREVIOUS PROJECT S 0489(4). EXISTING RIGHT OF WAY FOR CTH HH ESTABLISHED FROM PREVIOUS PROJECT S 0489(4) AND GOVERNMENT LAND LINES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION OFFICE.

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
100	500+97.59	145.87'
101	502+03.28	147.65'
102	514+92.92	174.63'
103	515+04.46	97.99'
104	513+50.00	105.00'
105	509+00.00	85.00'
106	503+10.00	88.83'
107	502+83.46	170.00'
108	501+76.69	145.00'
109	501+35.00	78.54'

P.I. = 499+69.69
Y 153189.061
X 512339.242
Δ. = 36°56'39" LT.
D. = 00°57'41"
T. = 1990.95'
L. = 3842.98'
R. = 5960.00'

P.I. = 567+34.72
Y 153207.498
X 519243.180
Δ. = 47°22'17" RT.
D. = 02°17'31"
T. = 1096.68'
L. = 2066.97'
R. = 2500.00'

AECOM

I, LANCE J. HABECK, PROFESSIONAL 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 DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-01-21- 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN LANCE J. HABECK S-1444 PLOVER, WI LAND SURVEYOR

Lance J. Habeck 12/15/2015
LANCE J. HABECK DATE
REGISTRATION NUMBER: S-1444

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

Cory Schlagel 1/4/2016
CORY SCHLAGEL SIGNATURE DATE

FILE NAME : P:\60317290\900-WorkingDocs-CAD\Global CADD Standards\02-SHEETS\040101_rw.dgn PLOT DATE : 12/15/2015 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:100
APPRAISAL PLAT DATE : 12-15-15

1430-01-21 4.01

4

TRANSPORTATION PROJECT PLAT NO: 1430-01-21 - 4.02

PART OF GOVERNMENT LOT 1 OF SECTION 15 AND PART OF GOVERNMENT LOT 1 OF SECTION 14, ALL IN T 15 N, R 5 E, TOWN OF MARION, JUNEAU COUNTY, WISCONSIN.

RELOCATION ORDER STH 82 POINT BLUFF BRIDGE, WISCONSIN RIVER BRIDGE.

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 SUBSECTIONS 84.02 (3), 84.09 AND 84.30, 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.

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

10:45 A.M. ON JAN. 14, 2016
AS DOCUMENT # 712695 AND
FILED IN VOL. 2 OF TPP CABINET, PAGE 10.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-01-21-4.02

SCHEDULE OF LANDS & INTERESTS REQUIRED

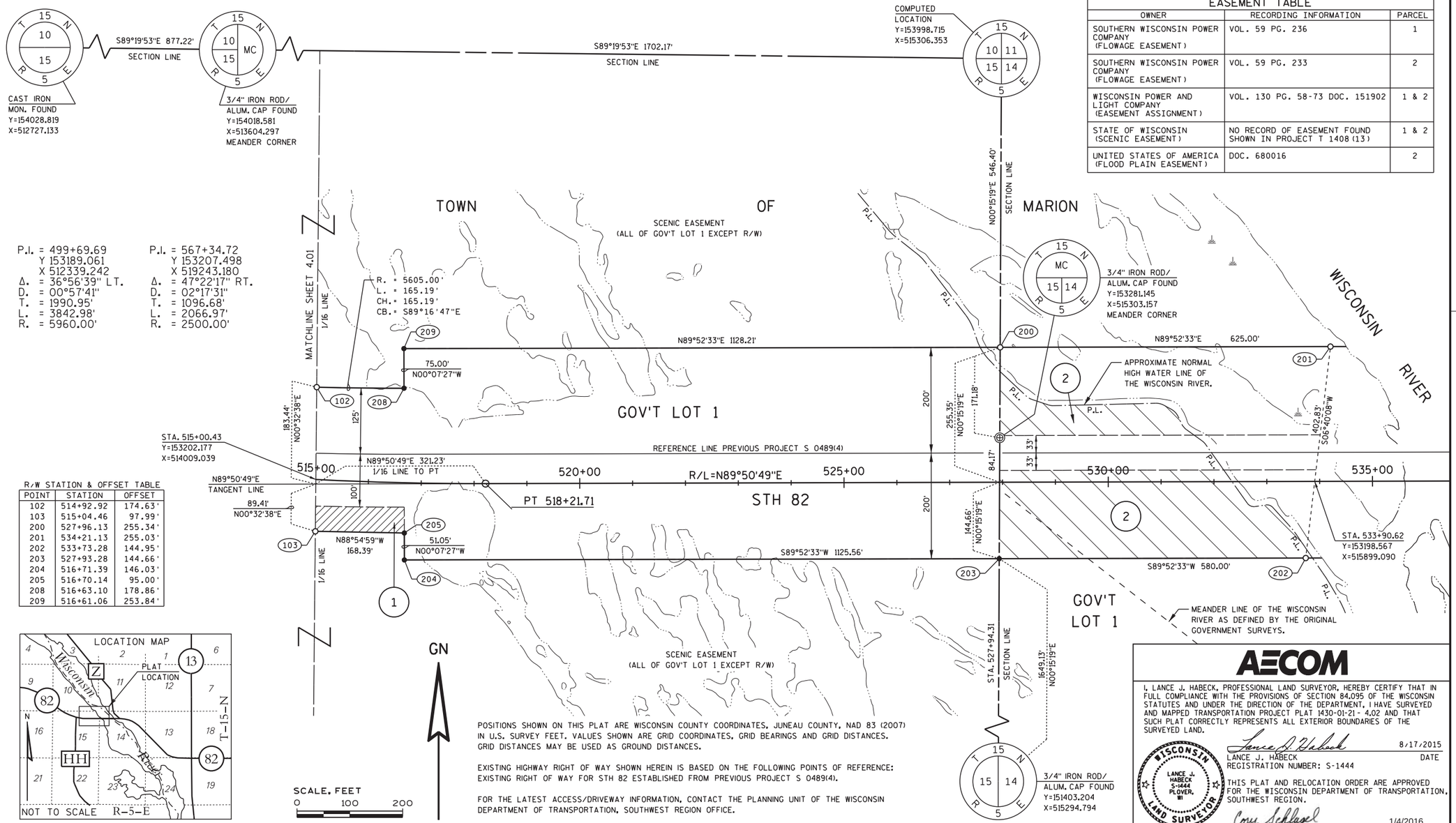
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED			TLE ACRES
			NEW	EXISTING	TOTAL	
1	PETER J. HOFFMAN	FEE	0.19	11.21	11.40	-----
2	JAMES L. WOLLMER & KATHLEEN A. WOLLMER	FEE	2.47	0.61	3.08	-----

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN JUNEAU COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 712566 AND FILED IN PLAT CABINET TPP, PAGE 8-9

EASEMENT TABLE

OWNER	RECORDING INFORMATION	PARCEL
SOUTHERN WISCONSIN POWER COMPANY (FLOWAGE EASEMENT)	VOL. 59 PG. 236	1
SOUTHERN WISCONSIN POWER COMPANY (FLOWAGE EASEMENT)	VOL. 59 PG. 233	2
WISCONSIN POWER AND LIGHT COMPANY (EASEMENT ASSIGNMENT)	VOL. 130 PG. 58-73 DOC. 151902	1 & 2
STATE OF WISCONSIN (SCENIC EASEMENT)	NO RECORD OF EASEMENT FOUND SHOWN IN PROJECT T 1408(13)	1 & 2
UNITED STATES OF AMERICA (FLOOD PLAIN EASEMENT)	DOC. 680016	2



R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
102	514+92.92	174.63'
103	515+04.46	97.99'
200	527+96.13	255.34'
201	534+21.13	255.03'
202	533+73.28	144.95'
203	527+93.28	144.66'
204	516+71.39	146.03'
205	516+70.14	95.00'
208	516+63.10	178.86'
209	516+61.06	253.84'

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, JUNEAU COUNTY, NAD 83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING RIGHT OF WAY FOR STH 82 ESTABLISHED FROM PREVIOUS PROJECT S 0489(4).

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION OFFICE.

AECOM

I, LANCE J. HABECK, PROFESSIONAL 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 DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-01-21 - 4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Lance J. Habeck 8/17/2015
LANCE J. HABECK DATE
REGISTRATION NUMBER: S-1444

WISCONSIN LANCE J. HABECK S-1444 PLOVER, WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

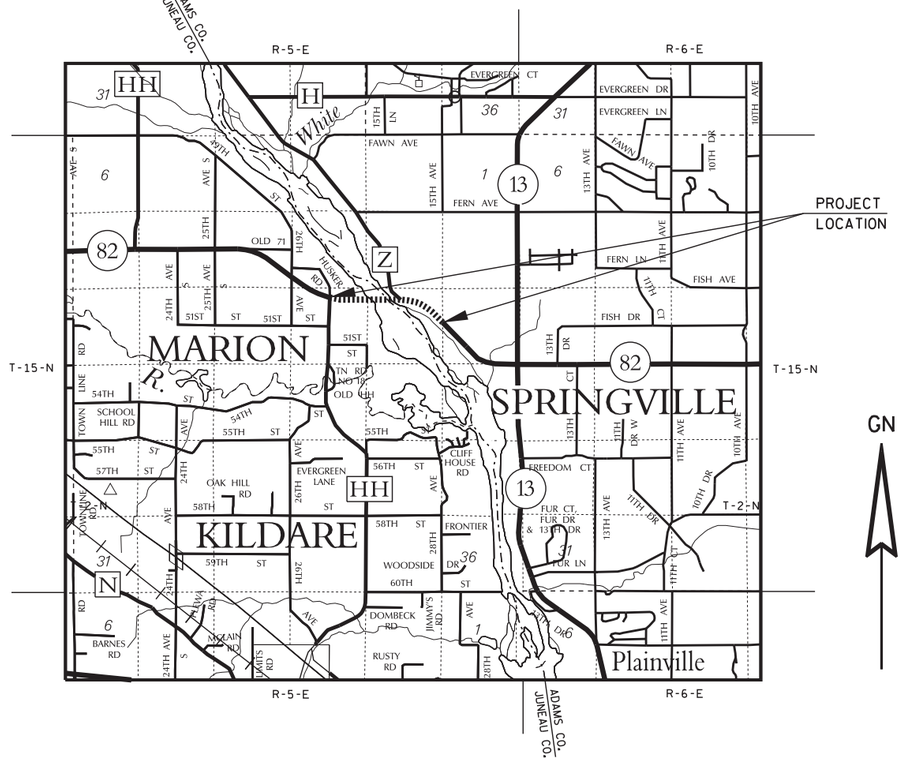
Cory Schlagel 1/4/2016
CORY SCHLAGEL SIGNATURE DATE

FILE NAME : P:\60317290\900-WorkingDocs-CAD\Global CADD Standards\02-SHEETS\040102_rw.dgn PLOT DATE : 8/18/2015 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:100
APPRAISAL PLAT DATE : 8-17-15

1430-01-21 4.02

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
PROJECT NO. 1430-01-21
STH 82 - POINT BLUFF BRIDGE
WISCONSIN RIVER BRIDGE AND APPROACHES
STH 82
ADAMS COUNTY





LAYOUT

SCALE 0 1 MI. 2 MI.

THE NOTES, CONVENTIONAL SYMBOLS AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1430-01-21.

NOTES:

DISTANCES SHOWN FROM THE RIGHT OF WAY LINE TO BUILDINGS ARE APPROXIMATE ONLY.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ADAMS COUNTY, NAD 83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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 R/W IS MEASURED ALONG AND PERPENDICULAR TO 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.

ALL RIGHT OF WAY LINES DEPICTED IN NON-AQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT OF WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS OR FROM CENTERLINE OF EXISTING PAVEMENT.

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.

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

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING RIGHT OF WAY FOR IH 39/90 IS ESTABLISHED FROM PREVIOUS PROJECT S 0489(4).
EXISTING RIGHT OF WAY FOR CTH Z ESTABLISHED FROM PREVIOUS PROJECT ADAMC0401.00.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION OFFICE.

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

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

PROJECT NUMBER 1430-01-21
SHEET 2 OF 2

FILE NAME : P:\60317290\900-WorkingDocs-CAD\Global CADD Standards\02-SHEETS\040100_A_rw.dgn PLOT DATE : 10/1/2015 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:100

TITLE

TRANSPORTATION PROJECT PLAT NO: 1430-01-21- 4.03 AMENDMENT NO. 1

AMENDS PARCELS 3 AND 4 OF TRANSPORTATION PROJECT PLAT NO. 1430-01-21- 4.03 RECORDED AS DOCUMENT 525235

PART OF LOT 1 OF CSM 2996, VOLUME 11, PAGE 298, DOC. 344242 AND PART OF LOT 1 OF CSM 424, VOLUME 2, PAGE 257, DOC. 248053, LOCATED IN GOVERNMENT LOT 2 OF SECTION 11, PART OF LOT 1 OF CSM 424, VOLUME 2, PAGE 257, DOC. 248053, PART OFLOT 1 OF CSM 4018, VOLUME 18, PAGE 239, DOC. 394205, LOCATED IN GOVERNMENTLOT 7 AND PART OF GOVERNMENT LOT 7, IN SECTION 14, ALL IN T 15 N, R 5 E, TOWN OF SPRINGVILLE, ADAMS COUNTY, WISCONSIN.

RELOCATION ORDER STH 82 POINT BLUFF BRIDGE, WISCONSIN RIVER BRIDGE.

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 SUBSECTIONS 84.02 (3), 84.09 AND 84.30, 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
0 100 200

DOCUMENT 526375

WAS ACCEPTED IN THE OFFICE OF THE REGISTER OF DEEDS IN ADAMS COUNTY, WISCONSIN AT 12:44 P.M., ON JAN. 08, 2016 AND WAS

FILED IN FILE 3 OF PLATS IN ENVELOPE 6

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-01-21-4.03
AMENDMENT NO. 1

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ADAMS COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 525235 AND FILED IN FILE 3 OF PLATS, ENVELOPE 02

SCHEDULE OF LANDS & INTERESTS REQUIRED

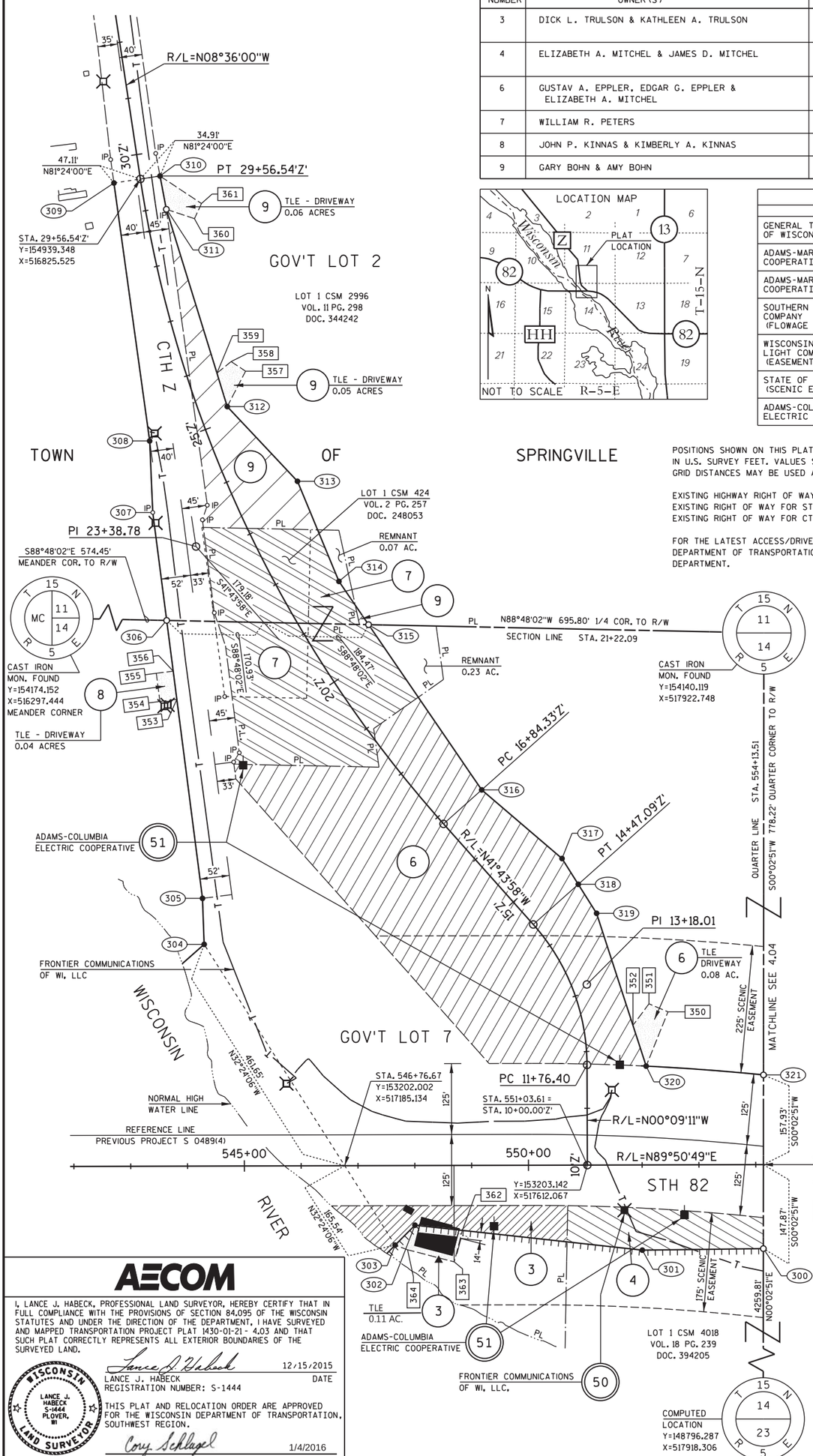
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
3	DICK L. TRULSON & KATHLEEN A. TRULSON	FEE, TLE & ACCESS RTS	0.47	-----	0.47	0.11
4	ELIZABETH A. MITCHEL & JAMES D. MITCHEL	FEE ACCESS RTS	0.53	-----	0.53	-----
6	GUSTAV A. EPPLER, EDGAR G. EPPLER & ELIZABETH A. MITCHEL	FEE & TLE	4.98	8.23	13.21	0.08
7	WILLIAM R. PETERS	FEE	2.47	-----	2.47	-----
8	JOHN P. KINNAS & KIMBERLY A. KINNAS	TLE	-----	-----	-----	0.04
9	GARY BOHN & AMY BOHN	FEE & TLE	0.93	-----	0.93	0.11

LOCATION MAP

EASEMENT TABLE

OWNER	RECORDING INFORMATION	PARCEL
GENERAL TELEPHONE COMPANY OF WISCONSIN	VOL. 171 PG. 340 DOC. 209898	4
ADAMS-MARQUETTE ELECTRIC COOPERATIVE	VOL. 255 PG. 406 DOC. 255768	3
ADAMS-MARQUETTE ELECTRIC COOPERATIVE	VOL. 226 PG. 137 DOC. 239310	3
SOUTHERN WISCONSIN POWER COMPANY (FLOWAGE EASEMENT)	VOL. 71 PG. 65 DOC. 78341	3,4,6, 7,8,9
WISCONSIN POWER AND LIGHT COMPANY (EASEMENT ASSIGNMENT)	VOL. 98 PG. 363-374 DOC. 109018	3,4,6, 7,8,9
STATE OF WISCONSIN (SCENIC EASEMENT)	VOL. 149 PG. 567 DOC. 199686 SHOWN IN PROJECT T 1408 (12)	3,4,6
ADAMS-COLUMBIA ELECTRIC COOPERATIVE	NO EASEMENT OF RECORD FOUND.	4 & 6



POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ADAMS COUNTY, NAD 83 (2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING RIGHT OF WAY FOR STH 82 ESTABLISHED FROM PREVIOUS PROJECT S 0489(4). EXISTING RIGHT OF WAY FOR CTH Z ESTABLISHED FROM PREVIOUS PROJECT ADAMC0401.00.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION OFFICE. AND THE ADAMS COUNTY HIGHWAY DEPARTMENT.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
50	FRONTIER COMMUNICATIONS OF WI. LLC	RELEASE OF RIGHTS
51	ADAMS-COLUMBIA ELECTRIC COOPERATIVE	RELEASE OF RIGHTS

P.I. = 499+69.69
Y 153189.061
X 512339.242
Δ. = 36°56'39" LT.
D. = 00°57'41"
T. = 1990.95'
L. = 3842.98'
R. = 5960.00'

P.I. = 567+34.72
Y 153207.498
X 519243.180
Δ. = 47°22'17" RT.
D. = 02°17'31"
T. = 1096.68'
L. = 2066.97'
R. = 2500.00'

P.I. = 13+18.01'Z'
Y 153521.153
X 517611.217
Δ. = 41°34'48" LT.
D. = 15°21'39"
T. = 141.61'
L. = 270.69'
R. = 373.00'

P.I. = 23+38.78'Z'
Y 154292.263
X 516923.389
Δ. = 33°07'58" RT.
D. = 02°36'16"
T. = 654.44'
L. = 1272.21'
R. = 2200.00'

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
300	554+12.99	147.87'
301	552+00.00	150.00'
302	548+00.00	105.00'
303	547+65.00	140.00'
304	17+85.45 'Z'	458.37'
305	18+39.98 'Z'	410.41'
306	22+32.54 'Z'	199.26'
307	24+01.86 'Z'	140.27'
308	25+14.90 'Z'	99.04'
309	29+56.54 'Z'	47.11'
310	29+56.54 'Z'	34.91'
311	28+95.96 'Z'	36.35'
312	25+25.00 'Z'	50.00'
313	23+50.00 'Z'	115.00'
314	21+50.00 'Z'	100.00'
315	20+53.31 'Z'	105.68'
316	16+84.33 'Z'	90.00'
317	15+00.00 'Z'	115.00'
318	14+47.09 'Z'	106.17'
319	14+00.00 'Z'	100.00'
320	552+07.61	174.01'
321	554+14.06	157.93'

TLE STATION & OFFSET TABLE

POINT	STATION	OFFSET
350	12+43.00 'Z'	151.00'
351	12+58.00 'Z'	121.00'
352	12+33.00 'Z'	86.22'
353	21+14.51 'Z'	250.92'
354	21+25.00 'Z'	278.53'
355	21+66.20 'Z'	259.49'
356	21+56.10 'Z'	231.67'
357	25+75.00 'Z'	101.00'
358	26+00.00 'Z'	82.00'
359	25+88.00 'Z'	52.00'
360	28+70.00 'Z'	82.00'
361	28+95.00 'Z'	99.00'
362	548+83.41	114.38'
363	548+68.92	169.73'
364	547+86.76	148.22'

R/W CURVE TABLE

FROM - TO	RADIUS	LENGTH	CHORD	CHORD BEARING
320 - 321	3945.00'	207.11'	207.08'	S85°42'02"E

R/W COURSE TABLE

FROM - TO	BEARING	DISTANCE
300 - 301	S89°16'27"W	213.00'
301 - 302	N83°44'03"W	402.52'
302 - 303	S44°50'49"W	49.50'
304 - 305	N02°05'54"W	81.01'
305 - 306	N07°20'18"W	493.43'
306 - 307	N07°20'18"W	191.63'
307 - 308	N02°29'43"W	126.10'
308 - 309	N07°52'49"W	458.47'
310 - 311	S10°46'06"E	59.61'
311 - 312	S17°09'10"E	363.51'
312 - 313	S43°12'33"E	180.48'
313 - 314	S22°29'43"E	190.75'
314 - 315	S34°23'17"E	92.34'
315 - 316	S34°23'17"E	352.50'
316 - 317	S49°27'23"E	186.02'
317 - 318	S32°15'39"E	53.65'
318 - 319	S32°15'39"E	60.37'
319 - 320	S17°57'28"E	282.81'
320 - 321	CURVE	

AECOM

I, LANCE J. HABECK, PROFESSIONAL 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 DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-01-21- 4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Lance J. Habeck 12/15/2015
LANCE J. HABECK DATE
REGISTRATION NUMBER: S-1444

WISCONSIN LANCE J. HABECK S-1444 PLOVER, WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

Cory Schlagel 1/4/2016
CORY SCHLAGEL SIGNATURE DATE

1430-01-21-4.03 AMENDMENT NO. 1
PLOT SCALE : 1:100
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT DATE : 12/15/2015
FILE NAME : P:\60317290\300-WorkingDocs-CAD\Global CADD Standards\02-SHEETS\040103_rw_Amd_1.dgn PLOT DATE :
APPRAISAL PLAT DATE : 12-15-15

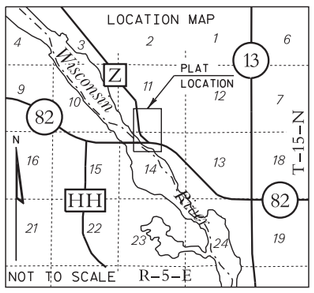
TRANSPORTATION PROJECT PLAT NO: 1430-01-21 - 4.03

PART OF LOT 1 OF CSM 2996, VOLUME 11, PAGE 298, DOC. 344242 AND PART OF LOT 1 OF CSM 424, VOLUME 2, PAGE 257, DOC. 248053, LOCATED IN GOVERNMENT LOT 2 OF SECTION 11, PART OF LOT 1 OF CSM 424, VOLUME 2, PAGE 257, DOC. 248053, PART OF LOT 1 OF CSM 4018, VOLUME 18, PAGE 239, DOC. 394205, LOCATED IN GOVERNMENT LOT 7 AND PART OF GOVERNMENT LOT 7, IN SECTION 14, ALL IN T 15 N, R 5 E, TOWN OF SPRINGVILLE, ADAMS COUNTY, WISCONSIN.

RELOCATION ORDER STH 82 POINT BLUFF BRIDGE, WISCONSIN RIVER BRIDGE.

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 SUBSECTIONS 84.02 (3), 84.09 AND 84.30, 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.



DOCUMENT 525235

WAS ACCEPTED IN THE OFFICE OF THE REGISTER OF DEEDS IN ADAMS COUNTY, WISCONSIN AT 12:20 P.M., ON NOV. 07, 2015 AND WAS

FILED IN FILE 3 OF PLATS IN ENVELOPE 2

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-01-21-4.03
SHEET 1 OF 2

1430-01-21 4.03

GN

SCALE, FEET
0 100 200

PLOT SCALE : 1:100

PLOT BY : $$...p\otuser...$$ PLOT NAME :

PLOT DATE : 10/1/2015 PLOT DATE :

FILE NAME : P:\60317290\300-WorkingDocs-CAD\Global CADD Standards\02-SHEETS\040103_rw.dgn

APPRAISAL PLAT DATE : 10-1-15

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 WISCONSIN DEPARTMENT OF TRANSPORTATION.

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	R/W ACRES REQUIRED EXISTING	R/W ACRES REQUIRED TOTAL	TLE ACRES
3	DICK L. TRULSON & KATHLEEN A. TRULSON	FEE	0.47	-----	0.47	-----
4	ELIZABETH A. MITCHEL & JAMES D. MITCHEL	FEE	0.53	-----	0.53	-----
6	GUSTAV A. EPPLER, EDGAR G. EPPLER & ELIZABETH A. MITCHEL	FEE & TLE	4.98	8.23	13.21	0.08
7	WILLIAM R. PETERS	FEE	2.47	-----	2.47	-----
~~8~~	~~JOHN P. KINNAS & KIMBERLY A. KINNAS~~	~~TLE~~	~~-----~~	~~-----~~	~~-----~~	~~0.04~~
9	GARY BOHN & AMY BOHN	FEE & TLE	0.93	-----	0.93	0.11

PARCEL 8 TO BE VACATED FROM PLAT

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
50	FRONTIER COMMUNICATIONS OF WI, LLC	RELEASE OF RIGHTS
51	ADAMS-COLUMBIA ELECTRIC COOPERATIVE	RELEASE OF RIGHTS

EASEMENT TABLE

OWNER	RECORDING INFORMATION	PARCEL
GENERAL TELEPHONE COMPANY OF WISCONSIN	VOL. 171 PG. 340 DOC. 209898	4
ADAMS-MARQUETTE ELECTRIC COOPERATIVE	VOL. 255 PG. 406 DOC. 255768	3
ADAMS-MARQUETTE ELECTRIC COOPERATIVE	VOL. 226 PG. 137 DOC. 239310	3
SOUTHERN WISCONSIN POWER COMPANY (FLOWAGE EASEMENT)	VOL. 71 PG. 65 DOC. 78341	3,4,6, 7,8,9
WISCONSIN POWER AND LIGHT COMPANY (EASEMENT ASSIGNMENT)	VOL. 98 PG. 363-374 DOC. 109018	3,4,6, 7,8,9
STATE OF WISCONSIN (SCENIC EASEMENT)	VOL. 149 PG. 567 DOC. 199686 SHOWN IN PROJECT T 1408 (12)	3,4,6
ADAMS-COLUMBIA ELECTRIC COOPERATIVE	NO EASEMENT OF RECORD FOUND.	4 & 6

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ADAMS COUNTY, NAD 83 (2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING RIGHT OF WAY FOR STH 82 ESTABLISHED FROM PREVIOUS PROJECT S 0489(4).
EXISTING RIGHT OF WAY FOR CTH Z ESTABLISHED FROM PREVIOUS PROJECT ADAMC0401.00.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION OFFICE, AND THE ADAMS COUNTY HIGHWAY DEPARTMENT.

R/L=N08°36'00"W
34.91'
N81°24'00"E
47.11'
N81°24'00"E
PT 29+56.54'Z'
STA. 29+56.54'Z'
Y=154939.348
X=516825.525
TLE - DRIVEWAY 0.06 ACRES
GOV'T LOT 2
LOT 1 CSM 2996 VOL. 11 PG. 298 DOC. 344242
CTH Z
TLE - DRIVEWAY 0.05 ACRES
TOWN OF SPRINGVILLE
LOT 1 CSM 424 VOL. 2 PG. 257 DOC. 248053
REMNANT 0.07 AC.
PI 23+38.78
S88°48'02"E 574.45'
MEANDER COR. TO R/W
CAST IRON MON. FOUND Y=154174.152 X=516297.444 MEANDER CORNER
~~TLE - DRIVEWAY 0.04 ACRES~~
N88°48'02"W 1395.80' 1/4 COR. TO R/W
SECTION LINE STA. 21+22.09
REMNANT 0.23 AC.
CAST IRON MON. FOUND Y=154140.119 X=517922.748
PC 16+84.33'Z'
R/L=N41°43'58"W
PT 14+47.09'Z'
PI 13+18.01
ADAMS-COLUMBIA ELECTRIC COOPERATIVE
FRONTIER COMMUNICATIONS OF WI, LLC
TLE DRIVEWAY 0.08 AC.
225' SCENIC EASEMENT
MATCHLINE SEE 4.04
QUARTER LINE STA. 554+13.51 S00°02'51"W 778.22' QUARTER CORNER TO R/W
WISCONSIN RIVER
GOV'T LOT 7
NORMAL HIGH WATER LINE
REFERENCE LINE PREVIOUS PROJECT S 0489(4)
545+00
550+00
STA. 546+76.67 Y=153202.002 X=517185.134
PC 11+76.40
STA. 551+03.61 = STA. 10+00.00'Z'
R/L=N00°09'11"W
R/L=N89°50'49"E
P.I.
STA. 554+13.51 Y=153203.970 X=517921.970
Y=153203.142 X=517612.067
STH 82
ADAMS-COLUMBIA ELECTRIC COOPERATIVE
FRONTIER COMMUNICATIONS OF WI, LLC.
LOT 1 CSM 4018 VOL. 18 PG. 239 DOC. 394205
COMPUTED LOCATION Y=148796.287 X=517918.306

P.I. = 499+69.69
Y 153189.061
X 512339.242
Δ. = 36°56'39" LT.
D. = 00°57'41"
T. = 1990.95'
L. = 3842.98'
R. = 5960.00'

P.I. = 567+34.72
Y 153207.498
X 519243.180
Δ. = 47°22'17" RT.
D. = 02°17'31"
T. = 1096.68'
L. = 2066.97'
R. = 2500.00'

P.I. = 13+18.01'Z'
Y 153521.153
X 517611.217
Δ. = 41°34'48" LT.
D. = 15°21'39"
T. = 141.61'
L. = 270.69'
R. = 373.00'

P.I. = 23+38.78'Z'
Y 154292.263
X 516923.389
Δ. = 33°07'58" RT.
D. = 02°36'16"
T. = 654.44'
L. = 1272.21'
R. = 2200.00'

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
300	554+12.99	147.87'
301	552+00.00	150.00'
302	548+00.00	105.00'
303	547+65.00	140.00'
304	17+85.45 'Z'	458.37'
305	18+39.98 'Z'	410.41'
306	22+32.54 'Z'	199.26'
307	24+01.86 'Z'	140.27'
308	25+14.90 'Z'	99.04'
309	29+56.54 'Z'	47.11'
310	29+56.54 'Z'	34.91'
311	28+95.96 'Z'	36.35'
312	25+25.00 'Z'	50.00'
313	23+50.00 'Z'	115.00'
314	21+50.00 'Z'	100.00'
315	20+53.31 'Z'	105.68'
316	16+84.33 'Z'	90.00'
317	15+00.00 'Z'	115.00'
318	14+47.09 'Z'	106.17'
319	14+00.00 'Z'	100.00'
320	552+07.61	174.01'
321	554+14.06	157.93'

TLE STATION & OFFSET TABLE

POINT	STATION	OFFSET
350	12+43.00 'Z'	151.00'
351	12+58.00 'Z'	121.00'
352	12+33.00 'Z'	86.22'
~~353~~	~~21+14.51 'Z'~~	~~250.32'~~
~~354~~	~~21+25.00 'Z'~~	~~278.53'~~
~~355~~	~~21+66.20 'Z'~~	~~259.49'~~
~~356~~	~~21+56.10 'Z'~~	~~231.67'~~
357	25+75.00 'Z'	101.00'
358	26+00.00 'Z'	82.00'
359	25+88.00 'Z'	52.00'
360	28+70.00 'Z'	82.00'
361	28+95.00 'Z'	99.00'

R/W CURVE TABLE

FROM - TO	RADIUS	LENGTH	CHORD	CHORD BEARING
320 - 321	3945.00'	207.11'	207.08'	S85°42'02"E

R/W COURSE TABLE

FROM - TO	BEARING	DISTANCE
300 - 301	S89°16'27"W	213.00'
301 - 302	N83°44'03"W	402.52'
302 - 303	S44°50'49"W	49.50'
304 - 305	N02°05'54"W	81.01'
305 - 306	N07°20'18"W	493.43'
306 - 307	N07°20'18"W	191.63'
307 - 308	N02°29'43"W	126.10'
308 - 309	N07°52'49"W	458.47'
310 - 311	S10°46'06"E	59.61'
311 - 312	S17°09'10"E	363.51'
312 - 313	S43°12'33"E	180.48'
313 - 314	S22°29'43"E	190.75'
314 - 315	S34°23'17"E	92.34'
315 - 316	S34°23'17"E	352.50'
316 - 317	S49°27'23"E	186.02'
317 - 318	S32°15'39"E	53.65'
318 - 319	S32°15'39"E	60.37'
319 - 320	S17°57'28"E	282.81'
320 - 321	CURVE	

AECOM

I, LANCE J. HABECK, PROFESSIONAL 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 DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-01-21 - 4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

LANCE J. HABECK 10/1/2015
LANCE J. HABECK DATE
REGISTRATION NUMBER: S-1444

WISCONSIN LANCE J. HABECK S-1444 PLOVER, WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

CORY SCHLAGEL 10/28/2015
CORY SCHLAGEL SIGNATURE DATE

TRANSPORTATION PROJECT PLAT NO: 1430-01-21 - 4.04

PART OF LOT 1 OF CSM 4411, VOLUME 21, PAGE 130, DOC. 416758 AND LOT 1 OF CSM 4018, VOLUME 18, PAGE 239, DOC. 394205, LOCATED IN GOVERNMENT LOT 6 AND THE NE 1/4 OF THE NE 1/4, ALSO PART OF GOVERNMENT LOT 6, ALL IN SECTION 14, T 15 N, R 5 E, TOWN OF SPRINGVILLE, ADAMS COUNTY, WISCONSIN.

RELOCATION ORDER STH 82 POINT BLUFF BRIDGE, WISCONSIN RIVER BRIDGE.

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 SUBSECTIONS 84.02 (3), 84.09 AND 84.30, 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.

DOCUMENT 525510

WAS ACCEPTED IN THE OFFICE OF THE REGISTER OF DEEDS IN ADAMS COUNTY, WISCONSIN AT 11:45 A.M., ON NOV. 16, 2015 AND WAS

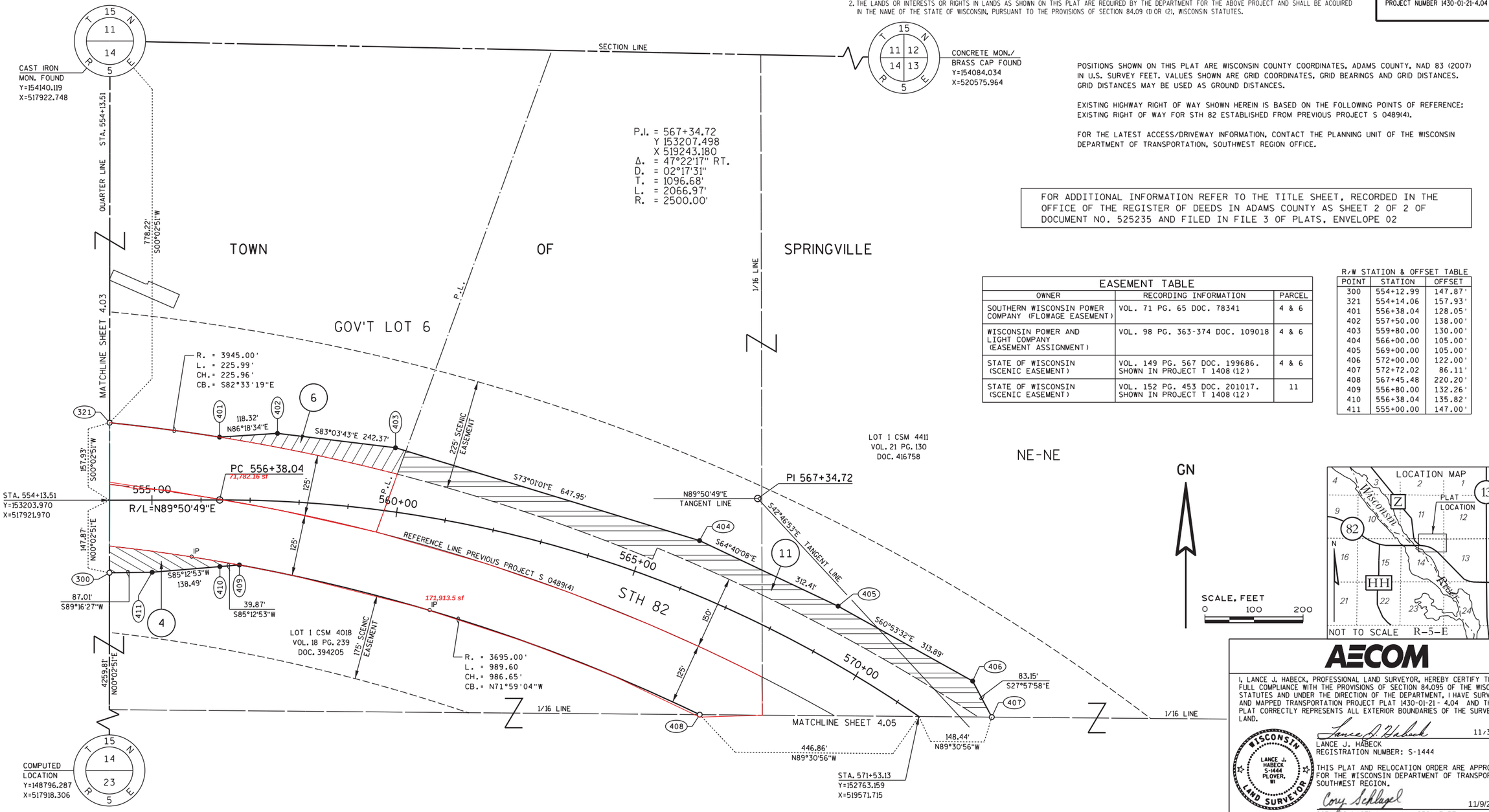
FILED IN FILE 3 OF PLATS IN ENVELOPE 3

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-01-21-4.04

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 WISCONSIN DEPARTMENT OF TRANSPORTATION.

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	R/W ACRES REQUIRED EXISTING	R/W ACRES REQUIRED TOTAL	TLE ACRES
4	ELIZABETH A. MITCHEL & JAMES D. MITCHEL	FEE	0.19	-----	0.19	-----
6	GUSTAV A. EPPLER, EDGAR G. EPPLER & ELIZABETH A. MITCHEL	FEE	0.27	5.70	5.97	-----
11	PAUL E. JOSEPH & DIANE JOSEPH	FEE	1.47	-----	1.47	-----



POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ADAMS COUNTY, NAD 83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING RIGHT OF WAY FOR STH 82 ESTABLISHED FROM PREVIOUS PROJECT S 0489(4).

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION OFFICE.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ADAMS COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 525235 AND FILED IN FILE 3 OF PLATS, ENVELOPE 02

EASEMENT TABLE

OWNER	RECORDING INFORMATION	PARCEL
SOUTHERN WISCONSIN POWER COMPANY (FLOWAGE EASEMENT)	VOL. 71 PG. 65 DOC. 78341	4 & 6
WISCONSIN POWER AND LIGHT COMPANY (EASEMENT ASSIGNMENT)	VOL. 98 PG. 363-374 DOC. 109018	4 & 6
STATE OF WISCONSIN (SCENIC EASEMENT)	VOL. 149 PG. 567 DOC. 199686. SHOWN IN PROJECT T 1408(12)	4 & 6
STATE OF WISCONSIN (SCENIC EASEMENT)	VOL. 152 PG. 453 DOC. 201017. SHOWN IN PROJECT T 1408(12)	11

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
300	554+12.99	147.87'
321	554+14.06	157.93'
401	556+38.04	128.05'
402	557+50.00	138.00'
403	559+80.00	130.00'
404	566+00.00	105.00'
405	569+00.00	105.00'
406	572+00.00	122.00'
407	572+72.02	86.11'
408	567+45.48	220.20'
409	556+80.00	132.26'
410	556+38.04	135.82'
411	555+00.00	147.00'

AECOM

I, LANCE J. HABECK, PROFESSIONAL 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 DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-01-21 - 4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

Lance J. Habeck 11/3/2015
LANCE J. HABECK DATE
REGISTRATION NUMBER: S-1444

WISCONSIN LANCE J. HABECK S-1444 PLOVER, WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

Cory Schlagel 11/9/2015
CORY SCHLAGEL SIGNATURE DATE

1430-01-21 4.04

FILE NAME : P:\60317290\900-WorkingDocs-CAD\Global CADD Standards\02-SHEETS\040104_rw.dgn
APPRAISAL PLAT DATE : 11-3-15
PLOT DATE : 11/4/2015 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:100

TRANSPORTATION PROJECT PLAT NO: 1430-01-21 - 4.05

PART OF LOT 1 OF CSM 4411, VOLUME 21, PAGE 130, DOC. 416758 LOCATED IN GOVERNMENT LOT 5 OF SECTION 14, T 15 N, R 5 E, TOWN OF SPRINGVILLE, ADAMS COUNTY, WISCONSIN.

RELOCATION ORDER STH 82 POINT BLUFF BRIDGE, WISCONSIN RIVER BRIDGE.

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 SUBSECTIONS 84.02 (3), 84.09 AND 84.30, 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 WISCONSIN DEPARTMENT OF TRANSPORTATION.

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
11	PAUL E. JOSEPH & DIANE JOSEPH	FEE	0.05	-----	0.05	-----

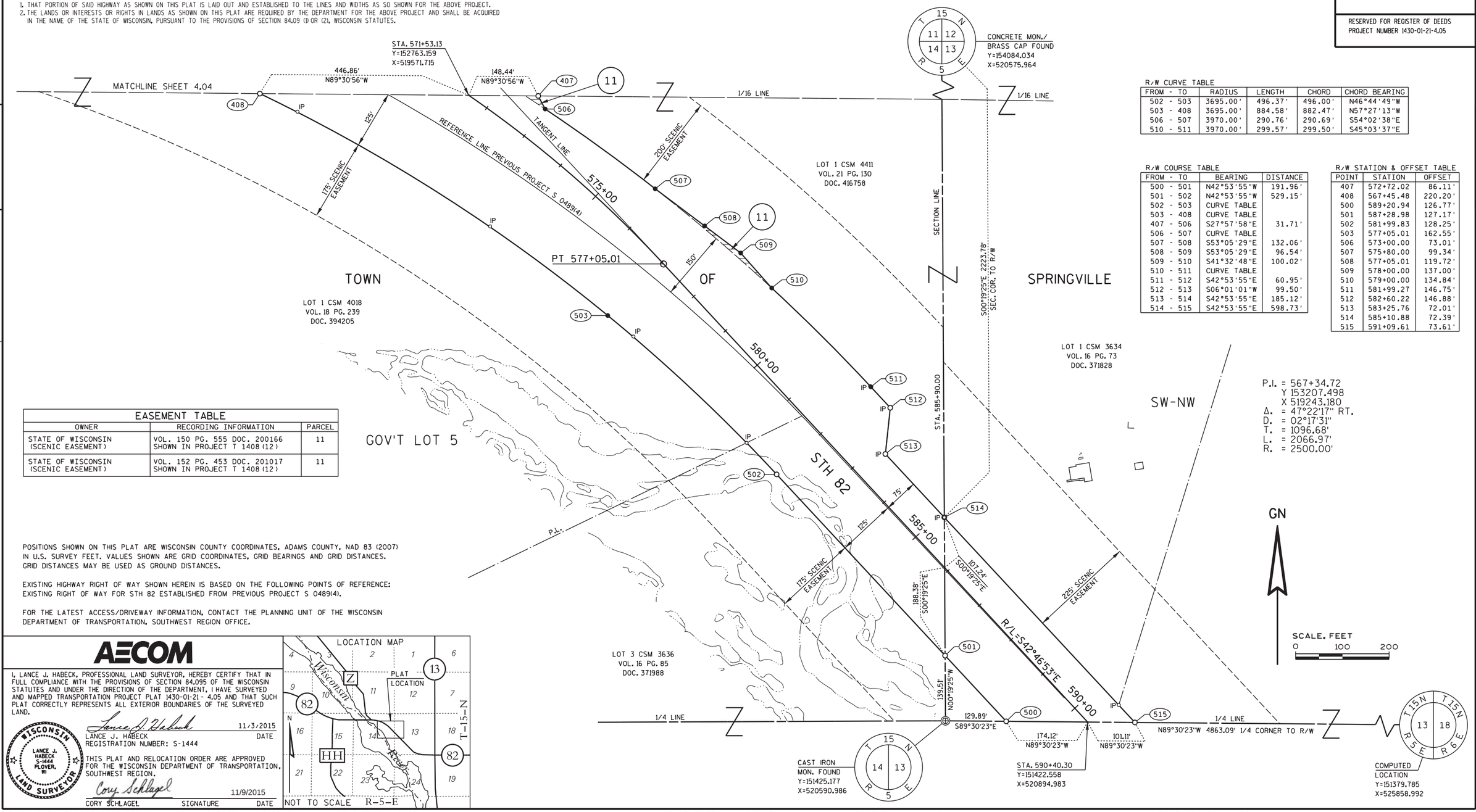
DOCUMENT 525537

WAS ACCEPTED IN THE OFFICE OF THE REGISTER OF DEEDS IN ADAMS COUNTY, WISCONSIN AT 3:23 P.M., ON NOV. 17, 2015 AND WAS

FILED IN FILE 3 OF PLATS IN ENVELOPE 5

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1430-01-21-4.05

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ADAMS COUNTY AS SHEET 2 OF 2 OF DOCUMENT NO. 525235 AND FILED IN FILE 3 OF PLATS, ENVELOPE 02



R/W CURVE TABLE

FROM - TO	RADIUS	LENGTH	CHORD	CHORD BEARING
502 - 503	3695.00'	496.37'	496.00'	N46°44'49"W
503 - 408	3695.00'	884.58'	882.47'	N57°27'13"W
506 - 507	3970.00'	290.76'	290.69'	S54°02'38"E
510 - 511	3970.00'	299.57'	299.50'	S45°03'37"E

R/W COURSE TABLE

FROM - TO	BEARING	DISTANCE
500 - 501	N42°53'55"W	191.96'
501 - 502	N42°53'55"W	529.15'
502 - 503	CURVE TABLE	
503 - 408	CURVE TABLE	
407 - 506	S27°57'58"E	31.71'
506 - 507	CURVE TABLE	
507 - 508	S53°05'29"E	132.06'
508 - 509	S53°05'29"E	96.54'
509 - 510	S41°32'48"E	100.02'
510 - 511	CURVE TABLE	
511 - 512	S42°53'55"E	60.95'
512 - 513	S06°01'01"W	99.50'
513 - 514	S42°53'55"E	185.12'
514 - 515	S42°53'55"E	598.73'

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
407	572+72.02	86.11'
408	567+45.48	220.20'
500	589+20.94	126.77'
501	587+28.98	127.17'
502	581+99.83	128.25'
503	577+05.01	162.55'
506	573+00.00	73.01'
507	575+80.00	99.34'
508	577+05.01	119.72'
509	578+00.00	137.00'
510	579+00.00	134.84'
511	581+99.27	146.75'
512	582+60.22	146.88'
513	583+25.76	72.01'
514	585+10.88	72.39'
515	591+09.61	73.61'

EASEMENT TABLE

OWNER	RECORDING INFORMATION	PARCEL
STATE OF WISCONSIN (SCENIC EASEMENT)	VOL. 150 PG. 555 DOC. 200166 SHOWN IN PROJECT T 1408(12)	11
STATE OF WISCONSIN (SCENIC EASEMENT)	VOL. 152 PG. 453 DOC. 201017 SHOWN IN PROJECT T 1408(12)	11

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ADAMS COUNTY, NAD 83 (2007) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING RIGHT OF WAY FOR STH 82 ESTABLISHED FROM PREVIOUS PROJECT S 0489(4).

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION OFFICE.

AECOM

I, LANCE J. HABECK, PROFESSIONAL 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 DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 1430-01-21 - 4.05 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN LANCE J. HABECK S-1444 PLOVER, WI LAND SURVEYOR

Lance J. Habeck 11/3/2015
LANCE J. HABECK DATE
REGISTRATION NUMBER: S-1444

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHWEST REGION.

Cory Schlagel 11/9/2015
CORY SCHLAGEL SIGNATURE DATE

FILE NAME : P:\60317290\900-WorkingDocs-CAD\Global CADD Standards\02-SHEETS\040105_rw.dgn PLOT DATE : 11/4/2015 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 1:100
APPRAISAL PLAT DATE : 11-3-15

1430-01-21 4.05

DATE:	REVISED:
10/1/2015	11/4/2015

TRANSPORTATION PROJECT PLAT NO: 1430-01-21 - 4.06

RELOCATION ORDER STH 82 POINT BLUFF BRIDGE (WISCONSIN RIVER BRIDGE).

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, ADAMS/JUNEAU COUNTY, NAD 83 (2011) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

4

4

JUNEAU COUNTY

TPP 1430-01-21 - 4.01

POINT	Y	X
100	153577.401	512670.594
101	153550.850	512770.221
102	153376.951	514010.698
103	153104.109	514008.108
104	153107.083	513850.895
105	153179.035	513399.087
106	153295.028	512812.065
107	153223.240	512765.479
108	153276.007	512666.232
109	153351.546	512643.541

TPP 1430-01-21 - 4.02

POINT	Y	X
102	153376.951	514010.698
103	153104.109	514008.108
200	153452.320	515303.919
201	153453.675	515928.918
202	153053.573	515882.137
203	153052.315	515302.138
204	153049.876	514176.576
205	153100.925	514176.466
208	153374.875	514175.872
209	153449.875	514175.710

ADAMS COUNTY

TPP 1430-01-21 - 4.03

POINT	Y	X
300	153056.099	517921.847
301	153053.400	517708.861
302	153097.332	517308.743
303	153062.238	517273.836
304	153591.780	516937.757
305	153672.740	516934.791
306	154162.126	516871.766
307	154352.187	516847.289
308	154478.166	516841.799
309	154932.303	516778.941
310	154944.569	516860.047
311	154886.009	516871.184
312	154538.669	516978.391
313	154407.121	517101.962
314	154230.884	517174.945
315	154154.686	517227.096
316	153863.790	517426.188
317	153742.872	517567.547
318	153697.508	517596.182
319	153646.454	517628.408
320	153377.426	517715.601
321	153361.901	517922.101

TPP 1430-01-21 - 4.04

POINT	Y	X
300	153056.099	517921.847
321	153361.901	517922.101
401	153332.623	518146.160
402	153340.239	518264.238
403	153310.962	518504.837
404	153121.703	519124.534
405	152988.037	519406.908
406	152835.344	519681.157
407	152761.904	519720.150
408	152766.936	519124.867
409	153072.080	518186.591
410	153068.754	518146.864
411	153057.201	518008.852

TPP 1430-01-21 - 4.05

POINT	Y	X
407	152761.904	519720.150
408	152766.936	519124.867
500	151424.058	520720.867
501	151564.682	520590.198
502	151952.316	520230.004
503	152292.186	519868.749
506	152733.895	519735.021
507	152563.212	519970.326
508	152483.905	520075.920
509	152425.926	520153.117
510	152351.067	520219.455
511	152139.509	520431.458
512	152094.858	520472.948
513	151995.903	520462.518
514	151860.293	520588.528
515	151421.686	520996.086

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM10	502+44	YELLOW KEEL NW BOLT LPM	862.36
BM11	501+42	YELLOW KEEL SE BOLT LPM	859.57
BM12	491+54	6IN NAIL N WOOD POST "ROAD TO CASTLE ROCK COUNTY PARK 1 MIL	859.71
BM13	487+06	BLACK SQ TOP NE COR ELEC PED	852.41
BM14	483+04	MAG NAIL TOP 12IN CMCP	855.76

STA. 483+00 - STA. 488+00
CLEAR AND GRUB

STA. 480+05, LT
REMOVE SMALL PIPE CULVERT

STA. 483+04, LT
REMOVE SMALL PIPE CULVERT

STA. 486+04, LT
REMOVE SMALL PIPE CULVERT

STA. 489+04, LT
REMOVE SMALL PIPE CULVERT

STA. 492+04, LT
REMOVE SMALL PIPE CULVERT

STA. 495+00 - STA. 501+00
CLEAR AND GRUB

STA. 503+00 - STA. 531+00
CLEAR AND GRUB

SEE LIGHTING PLAN
FOR STREET LIGHT
DETAILS AT CTH HH

STH 82
S53° 12' 32"E

R/L STH 82

R/W

P.L.

BM14

BM13

BM12

BM11

BM10

480

485

490

495

500

505

OAKDALE ELECTRIC
(ELECTRIC)

CONCRETE CORRUGATED MEDIAN

STA. 502+10.00 =
STA. 10+00.00'HH'

HUSKER RD

MATCHLINE STA. 507+00

STA. 487+32.46 =
STA. 00+00.00'DA'

R/L DRIVEWAY-DA

STA. 487+32, RT.
CONSTRUCT F.E.

SLOPE INTERCEPTS (TYP.)

FRONTIER COMMUNICATIONS (TELEPHONE)

BURIED ELECTRIC

OAKDALE ELECTRIC (ELECTRIC)

BEGIN PROJECT 1430-01-73
STA. 480+00
MATCH EXISTING - SAWCUT REQUIRED
Y = 154368.73
X = 510761.89

PETER HOFFMAN

PETER HOFFMAN

STA. 7+50.00'HH'
MATCH EXISTING - SAWCUT REQUIRED

STA. 8+00'HH' - STA. 9+00'HH'
CLEAR AND GRUB

N 0° 48' 24" E

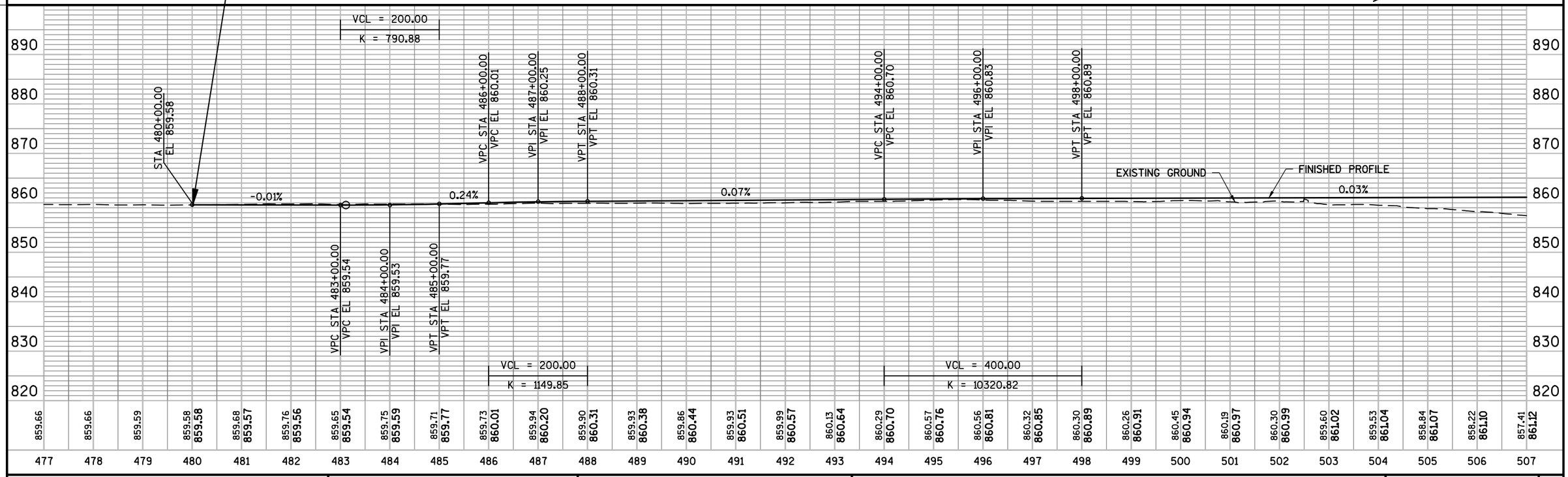
CTH HH

R/L CTH HH

HH

5

5



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN AND PROFILE: STH 82	SHEET 142	E

STA. 514+58.8 - STA. 517+02.3, LT
150 LF MGS GUARDRAIL 3 REQ'D
39.4 LF MGS THRIE BEAM TRANSITION REQ'D
1-MGS TERMINAL EAT REQ'D

PETER HOFFMAN

STA. 508+07 - STA. 530+75, LT
REMOVE GUARDRAIL

STA. 503+00 - STA. 531+00
CLEAR AND GRUB

STA. 519+18, LT
REMOVE SMALL PIPE CULVERT

STA. 518+17.5 - STA. 530+54.0, LT
1157.8 LF MGS GUARDRAIL 3 REQ'D
78.8 LF MGS THRIE BEAM TRANSITION REQ'D

STA. 525+22, LT
REMOVE SMALL PIPE CULVERT

P.I.

STA. 528+19, LT
REMOVE SMALL PIPE CULVERT

WISCONSIN RIVER

N

STA. 528+21, LT & RT
REMOVE SMALL PIPE CULVERT

STA. 530+75
REMOVE OLD STRUCTURE B-29-11

STA. 517+64
REMOVE OLD STRUCTURE C-29-17
10'X12' SINGLE CELL CONCRETE BOX CULVERT

MATCHLINE STA. 507+00

MATCHLINE STA. 537+00

R/W

BM9 — CONCRETE CORRUGATED MEDIAN

BM8

BM7

BM1

BM2

R/L STH 82

STH 82

510 515 520 525 530 535

N89° 50' 48"E

STRUCTURE B-29-141

B-29-148

SLOPE INTERCEPTS (TYP.)

JAMES WOLLMER

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM1	530+78	CHIS SQ NW ABUT WINGWALL STH 82 BRIDGE OVER WI RIVER	882.58
BM2	534+20	CHIS SQ N PARAPET ABOVE PIER #2 STH 82 BRIDGE OVER WI RIVER	886.68
BM7	522+18	CHIS SQ TOP CENTER CONC ENDWALL 12IN CMCP	870.83
BM8	519+19	RR SPIKE N SIDE WOOD GUARD RAIL POST	865.86
BM9	508+53	SPIKE S SIDE WOOD GUARD RAIL POST @ EAT	860.95

STA. 508+51 - STA. 530+76, LT
REMOVE GUARDRAIL

PETER HOFFMAN

STA. 514+11.5 - STA. 517+03.1 RT
200 LF MGS GUARDRAIL 3 REQ'D
39.4 LF MGS THRIE BEAM TRANSITION REQ'D
1-MGS TERMINAL EAT REQ'D

STA. 518+17.1 - STA. 530+54.0, RT
1158.2 LF MGS GUARDRAIL 3 REQ'D
78.8 LF MGS THRIE BEAM TRANSITION REQ'D

P.I.

5

5

VCL = 200.00
K = 2567.27

VCL = 390.00
K = 258.27

VPC STA 509+00.00
VPC EL 861.18

VPI STA 510+00.00
VPI EL 861.20

VPT STA 511+00.00
VPT EL 861.31

STA 512+00.00
EL 861.41

VPC STA 515+15.00
VPC EL 862.24

VPI STA 517+10.00
VPI EL 862.75

VPT STA 519+05.00
VPT EL 866.21

VPC STA 522+80.00
VPC EL 872.86

VPI STA 525+70.00
VPI EL 878.00

VPT STA 528+60.00
VPT EL 879.45

STA. 540+00
STRUCTURE B-29-141
11-SPAN 72W PRESTRESSED CONCRETE GIRDERS
44'-0" CLEAR WIDTH

FINISHED PROFILE

EXISTING GROUND

0.10%

0.26%

1.77%

STA. 517+67.50
CONSTRUCT SINGLE SPAN 36W"
PRESTRESSED GIRDER BRIDGE
B-29-148

VCL = 580.00
K = 455.75

900 890 880 870 860 850 840 830

507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537
857.41	856.03	855.14	853.98	852.75	851.64	851.19	849.87	850.41	850.21	848.15	847.99	849.71	851.98	854.18	856.44	857.93	859.82	861.76	862.77	863.49	864.27	864.90	865.13	863.43	847.94	841.87	841.86	843.33	841.83	841.83
861.12	861.15	861.18	861.22	861.31	861.41	861.67	861.94	862.20	862.60	863.39	864.56	866.12	867.89	869.67	871.44	873.21	874.83	876.23	877.41	878.37	879.11	879.65	880.15	880.65	881.15	881.65	882.15	882.65	883.15	883.65

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN AND PROFILE: STH 82	SHEET 143 E

STA. 547+02.0 - STA. 549+07.1, LT
112.5 LF MGS GUARDRAIL 3 REQ'D
39.4 LF MGS THRIE BEAM TRANSITION REQ'D
1-MGS TERMINAL EAT REQ'D

STA. 545+95 - STA. 546+16, LT
REMOVE GUARDRAIL

CTH Z
(OBLITERATE OLD ROAD)

STA. 538+28
REMOVE OLD STRUCTURE B-29-11
9-SPAN STEEL TRUSS

FRONTIER COMMUNICATIONS
(TELEPHONE)

ADAMS-COLUMBIA ELECTRIC COOP.
(ELECTRIC)

STREET LIGHT
(INSTALLED BY OTHERS)

R/L CTH Z

STA. 11+08'Z'
1-24" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

EDGAR EPPLER &
ELIZABETH MITCHEL

STA. 552+24 - STA. 561+11, LT & RT
REMOVE GUARDRAIL

STA. 555+72 - STA. 555+99, LT & RT
REMOVE SMALL PIPE CULVERT

STA. 553+65, LT & RT
REMOVE SMALL PIPE CULVERT

PAUL E. JOSEPH

SLOPE INTERCEPTS (TYP.)

R/L STH 82

STA. 551+03.61 =
STA. 10+00.00'Z'

BM3 BM4 BM5 BM6 BM17 BM18

STH 82

MATCHLINE STA. 537+00

MATCHLINE STA. 567+00

N89° 50' 49"E

STRUCTURE B-29-141

WISCONSIN RIVER

STA. 549+00 RT
REMOVING BUILDINGS

HOUSE TO REMAIN

DICK & KATHY
TRULSON

STA. 550+67 - STA. 550+85, LT & RT
REMOVE SMALL PIPE CULVERT

STA. 557+59, RT
REMOVE SMALL PIPE CULVERT

STA. 550+50 - STA. 560+42, LT & RT
REMOVE GUARDRAIL

STA. 546+59 - STA. 548+19, LT
REMOVE GUARDRAIL

STA. 547+02.0 - STA. 548+44.5, RT
50 LF MGS GUARDRAIL 3 REQ'D
39.4 LF MGS THRIE BEAM TRANSITION REQ'D
1-MGS TERMINAL EAT REQ'D

STA. 546+00 - STA. 590+00
CLEAR AND GRUB

JAMES & ELIZABETH
MITCHEL

ADAMS-COLUMBIA ELECTRIC COOP.
(ELECTRIC)

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM3	537+62	CHIS SQ N PARAPET ABOVE PIER *4 STH 82 BRIDGE OVER WI RIVER	888.01
BM4	541+03	CHIS SQ N PARAPET ABOVE PIER *6 STH 82 BRIDGE OVER WI RIVER	889.34
BM5	544+44	CHIS SQ N PARAPET ABOVE PIER *8 STH 82 BRIDGE OVER WI RIVER	890.74
BM6	546+16	CHIS SQ NE ABUT WINGWALL STH 82 BRIDGE OVER WI RIVER	888.77
BM17	551+30	RR SPIKE 14IN OAK TREE	888.91
BM18	561+02	RR SPIKE N SIDE WOOD GUARD RAIL POST @ EAT	896.25

STA. 540+00
STRUCTURE B-29-141
11-SPAN 72W PRESTRESSED CONCRETE GIRDERS
44'-0" CLEAR WIDTH

0.50%

FINISHED PROFILE

EXISTING GROUND

VPC STA 562+05.00
VPC EL 896.18

STA. 556+21
1-24" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

VCL = 1220.00
K = 463.83

537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567
841.83	841.83	841.83	841.83	841.83	841.83	841.83	841.83	841.82	846.30	877.74	881.26	884.26	884.12	881.06	879.77	882.33	886.94	891.84	892.97	893.89	893.91	888.39	884.89	884.82	893.39	903.81	911.90	921.68	927.38	928.93
883.65	884.15	884.65	885.15	885.65	886.15	886.65	887.15	887.65	888.15	888.65	889.15	889.65	890.16	890.66	891.16	891.66	892.16	892.66	893.16	893.66	894.16	894.66	895.16	895.66	896.16	896.56	896.75	896.72	896.48	896.02

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN AND PROFILE: STH 82	SHEET 144	E

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM19	575+35	CHIS SQ TOP S END 36IN RCCP	877.52

PERMANENT STONE DITCH CHECKS REQUIRED
STA. 568+22 LT
STA. 569+86 LT
STA. 571+15 LT
STA. 572+26 LT
STA. 572+90 LT
STA. 577+17 LT
STA. 577+82 LT

PAUL E. JOSEPH

STA. 575+25, RT
REMOVE SMALL PIPE CULVERT

SLOPE INTERCEPTS (TYP.)

STA. 578+00
1-24" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

STA. 584+71, LT
CONSTRUCT F.E.
1-18" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

MARQUETTE ADAMS
TELEPHONE COOP. INC.
(FIBER OPTIC)

FRONTIER
COMMUNICATIONS
(TELEPHONE)

KENDAL C. NICHOLS

STA. 586+50, LT.
CONSTRUCT P.E.
1-18" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

MATCHLINE STA. 567+00

R/W

P.L.

575

580

585

590

595

100.00'

100.00'DD'

1-18" C.P.R.C.
1-25'DB

R/L STH 82

STH 82

S42° 46' 53"E

STA. 576+80, RT.
CONSTRUCT F.E.

FRONTIER COMMUNICATIONS
(TELEPHONE)

ADAMS-COLUMBIA ELECTRIC COOP.
(ELECTRIC)

STA. 546+00 - STA. 590+00
CLEAR AND GRUB

FRONTIER COMMUNICATIONS
(TELEPHONE)

FRONTIER COMMUNICATIONS
(TELEPHONE)

JAMES & ELIZABETH
MITCHEL

PAUL & DIANE
JOSEPH

OH

END PROJECT 1430-01-73
STA. 590+00
MATCH EXISTING - SAWCUT REQUIRED
Y = 151452.14
X = 520867.61

5

5

VPI STA 568+15.00
VPI EL 899.23

VCL = 1000.00
K = 759.29

EXISTING GROUND

FINISHED PROFILE

-2.13%

-0.81%

VPT STA 574+25.00
VPT EL 886.24

VPC STA 577+50.00
VPC EL 879.32

STA. 578+00
1-24" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

VPI STA 582+50.00
VPI EL 868.67

VPT STA 587+50.00
VPT EL 864.60

STA. 590+00.00
EL 862.57

VCL = 1220.00
K = 463.83

910 900 890 880 870 860 850 840

928.93	927.64	926.88	925.79	920.15	909.22	893.45	883.56	882.64	881.25	877.74	877.06	875.71	873.90	872.18	870.75	869.14	867.67	866.61	865.60	864.73	863.92	863.36	862.57	861.95	861.28	860.78	860.48	860.34	860.23	860.10
896.02	895.34	894.45	893.35	892.03	890.49	888.74	886.77	884.64	882.51	880.38	878.27	876.27	874.41	872.67	871.07	869.60	868.26	867.05	865.97	865.03	864.20	863.38	862.57							

567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN AND PROFILE: STH 82	SHEET 145	E

WISCONSIN RIVER

STRUCTURE B-29-141

STH 82

CTH Z

R/L STH 82

R/L CTH Z

STA. 11+00'Z' - STA. 26+00'Z'
CLEAR AND GRUB

STA. 11+03'Z', RT
REMOVE SMALL PIPE CULVERT

STA. 10+92'Z'
1-24" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

N0° 09' 11"W

SLOPE INTERCEPTS (TYP.)

N41° 43' 58"W

N8° 36' 00"W

STA. 551+03.61 =
STA. 10+00.00'Z'
Y = 153203.14
X = 517612.07

STA. 12+00'Z', RT.
CONSTRUCT P.E.
1-18" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

STA. 19+88'Z' - STA. 20+03'Z', LT
REMOVE SMALL PIPE CULVERT

STA. 21+37'Z', LT.
CONSTRUCT P.E.

STA. 21+00'Z', 31' LT
1-INLETS MEDIAN 1 GRATE REQ'D
1-TYPE MS COVER REQ'D

STA. 21+00'Z'
1-18" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

STA. 25+14'Z' - STA. 25+53'Z', LT
REMOVE SMALL PIPE CULVERT

STA. 25+58'Z', LT
REMOVE SMALL PIPE CULVERT

STA. 25+34'Z', RT.
CONSTRUCT P.E.
1-18" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

STA. 25+81'Z'
1-24" C.P.R.C. REQ'D
2-APRON ENDWALLS REQ'D

STA. 29+35'Z', RT.
CONSTRUCT P.E.

PERMANENT STONE DITCH CHECKS REQUIRED
STA. 13+40'Z' LT
STA. 14+38'Z' RT
STA. 15+12'Z' RT
STA. 15+28'Z' LT
STA. 15+98'Z' RT
STA. 16+65'Z' LT
STA. 16+85'Z' RT
STA. 17+36'Z' LT
STA. 17+61'Z' RT
STA. 18+04'Z' LT
STA. 18+38'Z' RT
STA. 18+72'Z' LT
STA. 19+10'Z' RT
STA. 19+36'Z' LT
STA. 19+78'Z' RT
STA. 20+43'Z' RT
STA. 22+11'Z' RT
STA. 23+87'Z' RT

DICK & KATHY TRULSON

JAMES & ELIZABETH MITCHEL

EDGAR EPPLER & ELIZABETH MITCHEL

WILLIAM PETERS

JAMES & KIMBERLY KINNAS

GARY & AMY BOHN

FRONTIER COMMUNICATIONS (TELEPHONE)

ADAMS-COLUMBIA ELECTRIC COOP. (ELECTRIC)

ADAMS-COLUMBIA ELECTRIC COOP. (ELECTRIC)

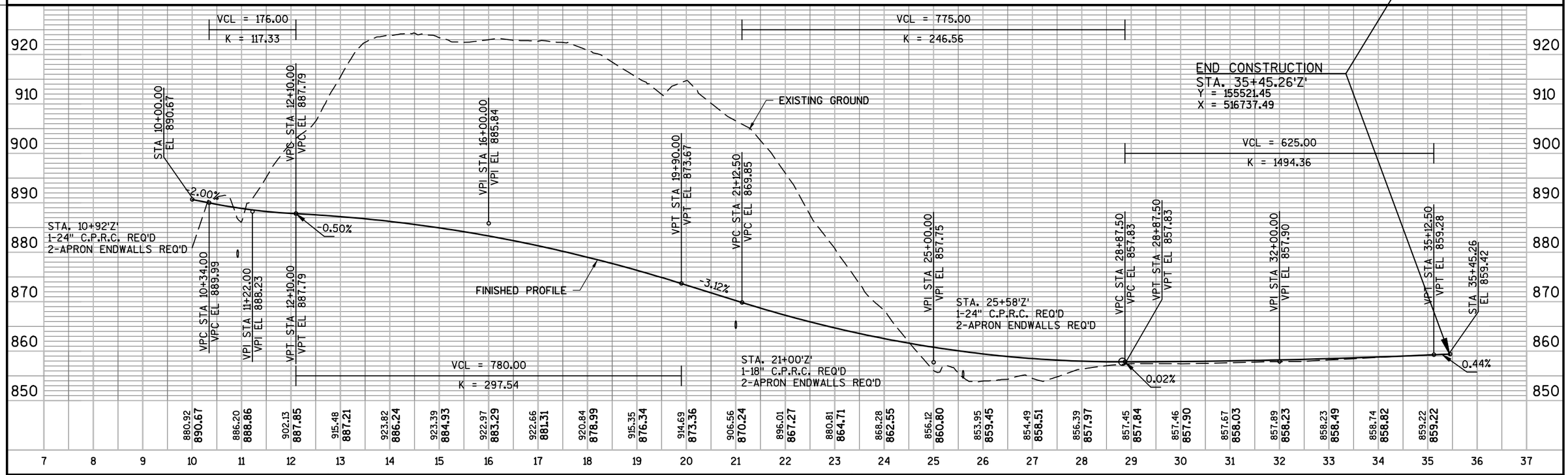
BM15

BM16

BM17

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM15	11+19	RR SPIKE PPOL *WA10 25 49-1	862.54
BM16	22+85	RR SPIKE 8IN DTRE	856.30
BM17	25+96	RR SPIKE 14IN OAK TREE	888.91



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN AND PROFILE: CTH Z	SHEET 146 E

PI STA = 0+42.85'DA'
Y = 153928.216
X = 511363.347
DELTA = 6°07'19"
D = 19°05'55"
T = 16.04'
L = 32.05'
R = 300.00'
PC STA = 0+26.80'DA'
Y = 153943.617
X = 511367.837
PT STA = 0+58.86'DA'
Y = 153912.424
X = 511360.524

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
BM10	502+44	YELLOW KEEL NW BOLT LPM	862.36
BM11	501+42	YELLOW KEEL SE BOLT LPM	859.57
BM12	491+54	6IN NAIL N WOOD POST "ROAD TO CASTLE ROCK COUNTY PARK 1 MIL	859.71
BM13	487+06	BLACK SQ TOP NE COR ELEC PED	852.41
BM14	483+04	MAG NAIL TOP 12IN CMCP	855.76
BM19	575+35	CHIS SQ TOP S END 36IN RCCP	877.52

PI STA = 0+83.07'DB'
Y = 152363.834
X = 519910.568
DELTA = 33°22'44"
D = 71°37'11"
T = 23.99'
L = 46.61'
R = 80.00'
PC STA = 0+59.09'DB'
Y = 152380.301
X = 519928.008
PT STA = 1+05.69'DB'
Y = 152340.489
X = 519905.064

PETER HOFFMAN
PAUL E. JOSEPH
PETER HOFFMAN
PETER HOFFMAN
PETER HOFFMAN
PETER HOFFMAN
JAMES & ELIZABETH MITCHEL
ADAMS-COLUMBIA ELECTRIC COOP. (ELECTRIC)
FRONTIER COMMUNICATIONS (TELEPHONE)
BURIED ELECTRIC
OAKDALE ELECTRIC (ELECTRIC)
CONCRETE CORRUGATED MEDIAN
SLOPE INTERCEPTS (TYP.)
R/L STH 82
R/L CTH HH
R/L DRIVEWAY-DA
R/L DRIVEWAY-DB
BM10
BM11
BM12
BM13
BM14
BM19
STH 82
CTH HH
HUSKER RD
P.L.
R/W
S16° 15' 20"W
S10° 08' 01"W
S13° 15' 58"W
S46° 38' 43"W
N0° 48' 24"E
0+90'DA'
STA. 487+32, RT. CONSTRUCT F.E.
STA. 487+32.46 = STA. 00+00.00'DA'
STA. 502+10.00 = STA. 10+00.00'HH'
STA. 7+50.00'HH'
MATCH EXISTING - SAWCUT REQUIRED
STA. 576+80, RT. CONSTRUCT F.E.
STA. 576+80.00 = STA. 00+00.00'DB'
1'DB'
17.25'DB'
5'HH'
10'HH'
490
485
505
586

STA 0+17.47 EL 860.69
VPT STA 0+38.25 VPT EL 859.84
STA 0+77.71 EL 856.09
2.52%
-1.00%
-9.51%
FINISHED PROFILE
EXISTING GROUND
STA 0+00.00 EL 860.25
VPC STA 0+23.25 VPC EL 860.63
VPI STA 0+30.75 VPI EL 860.56
VCL = 15.00
K = 1.76
859.84 860.25

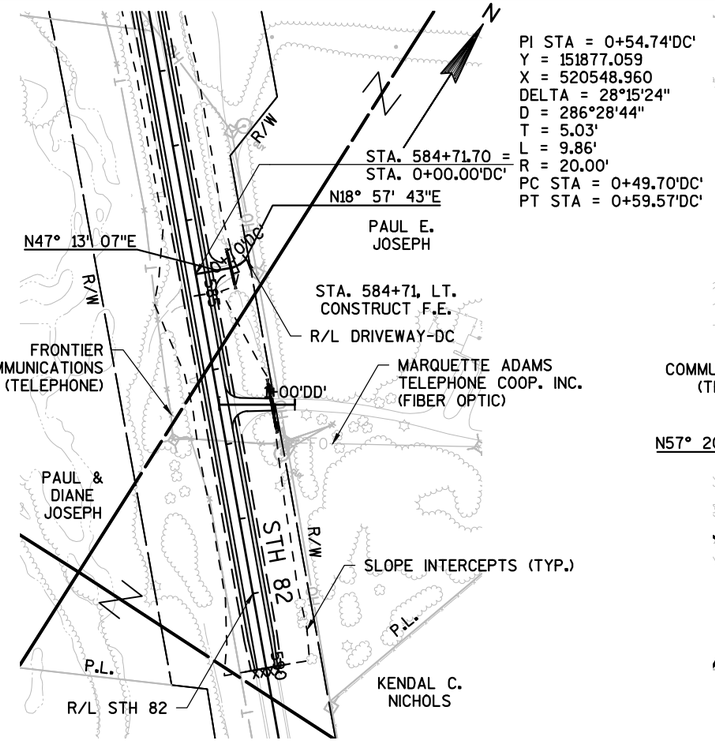
VPI STA 9+69.02 VPI EL 861.57
STA 9+75.76 EL 861.63
STA 10+00.00 EL 861.00
FINISHED PROFILE
0.88%
-2.60%
STA 7+50.00 EL 852.55
4.12%
EXISTING GROUND
VPC STA 9+64.02 VPC EL 861.36
VPT STA 9+74.02 VPT EL 861.61
VCL = 10.00
K = 3.09
850.02 851.00 854.43 854.61 857.30 858.72 860.17 861.00

STA 0+17.00 EL 880.09
VPI STA 0+62.02 VPI EL 877.80
-4.21%
-5.10%
-1.25%
EXISTING GROUND
FINISHED PROFILE
STA 0+00.00 EL 880.81
VPC STA 0+24.52 VPC EL 879.71
VPT STA 0+99.52 VPT EL 875.08
STA 1+10.88 EL 874.25
VCL = 75.00
K = 34.96
878.07 880.81 875.31 875.04

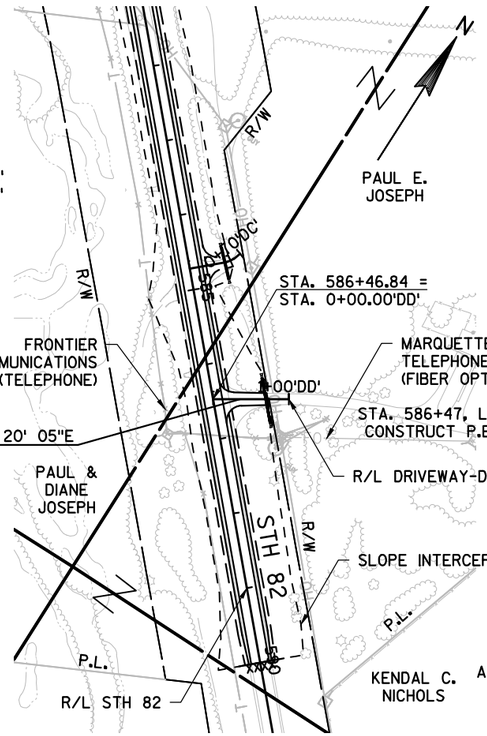
PROJECT NO: 1430-01-73 | HWY: STH 82 | COUNTY: ADAMS & JUNEAU | PLAN AND PROFILE: DRIVEWAY-DA, CTH HH, & DRIVEWAY-DB | SHEET 147 | E

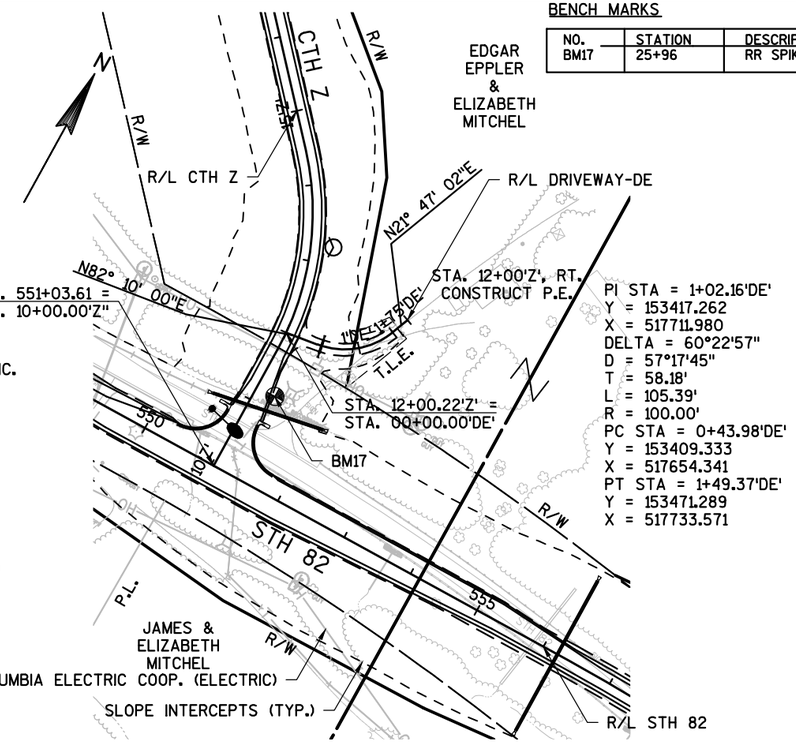
FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\050101_PP.DWG PLOT DATE : 4/27/2017 2:02 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

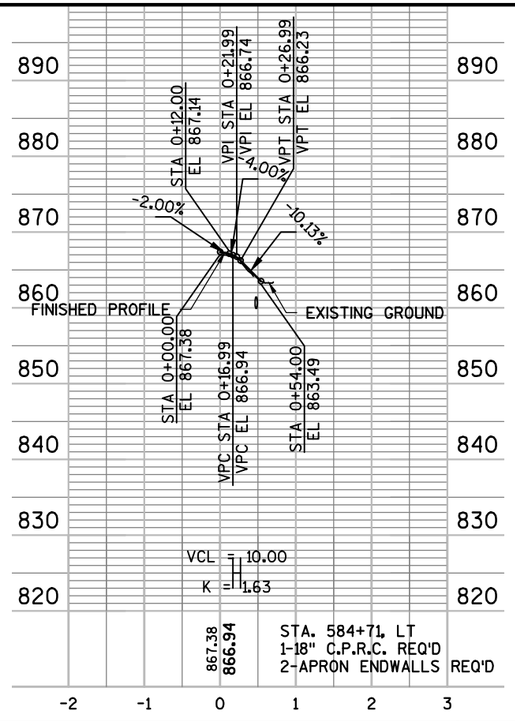


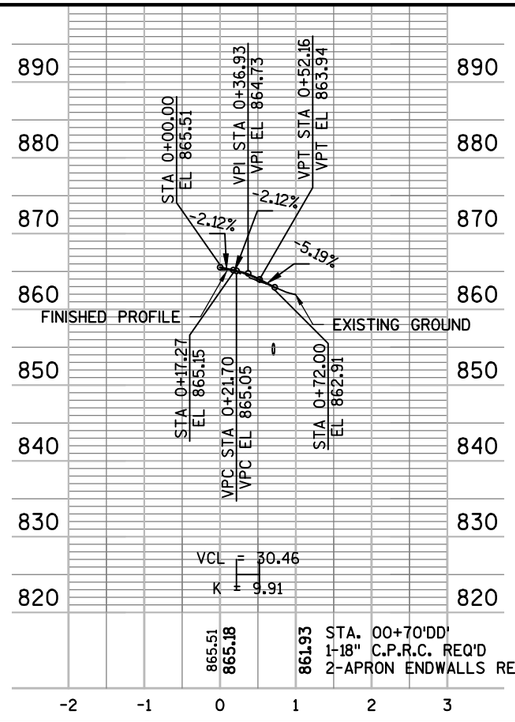
PI STA = 0+54.74'DC'
Y = 151877.059
X = 520548.960
DELTA = 28°15'24"
D = 286°28'44"
T = 5.03'
L = 9.86'
R = 20.00'
PC STA = 0+49.70'DC'
PT STA = 0+59.57'DC'

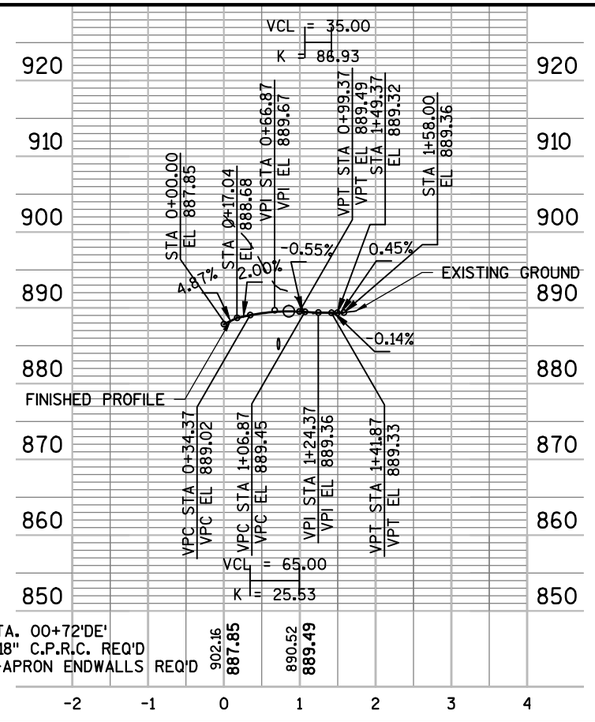




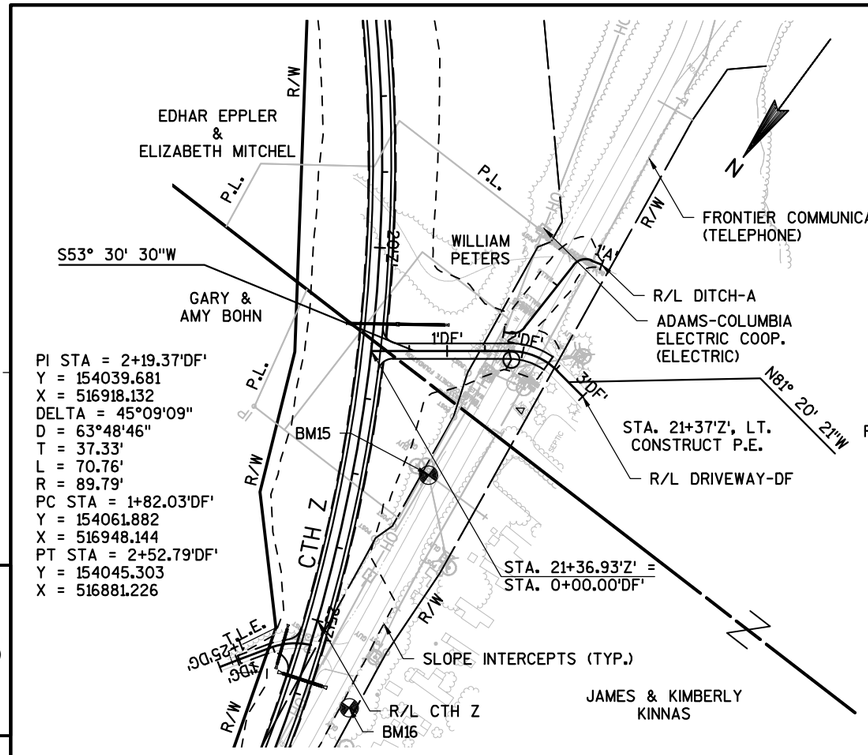
PI STA = 1+02.16'DE'
Y = 153417.262
X = 517711.980
DELTA = 60°22'57"
D = 57°17'45"
T = 58.18'
L = 105.39'
R = 100.00'
PC STA = 0+43.98'DE'
Y = 153409.333
X = 517654.341
PT STA = 1+49.37'DE'
Y = 153471.289
X = 517733.571

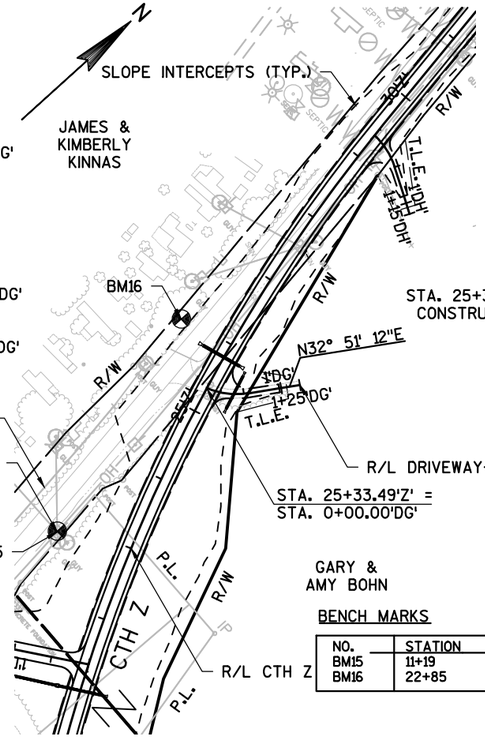


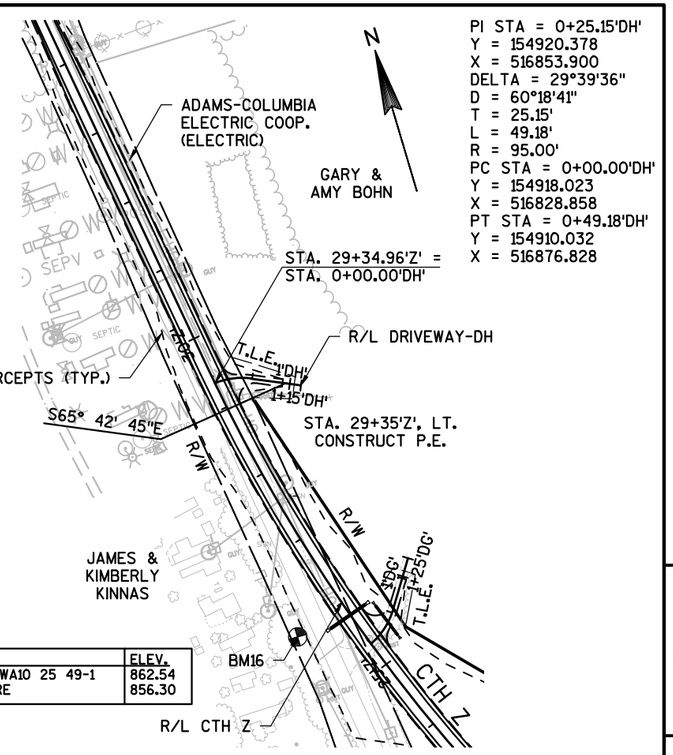


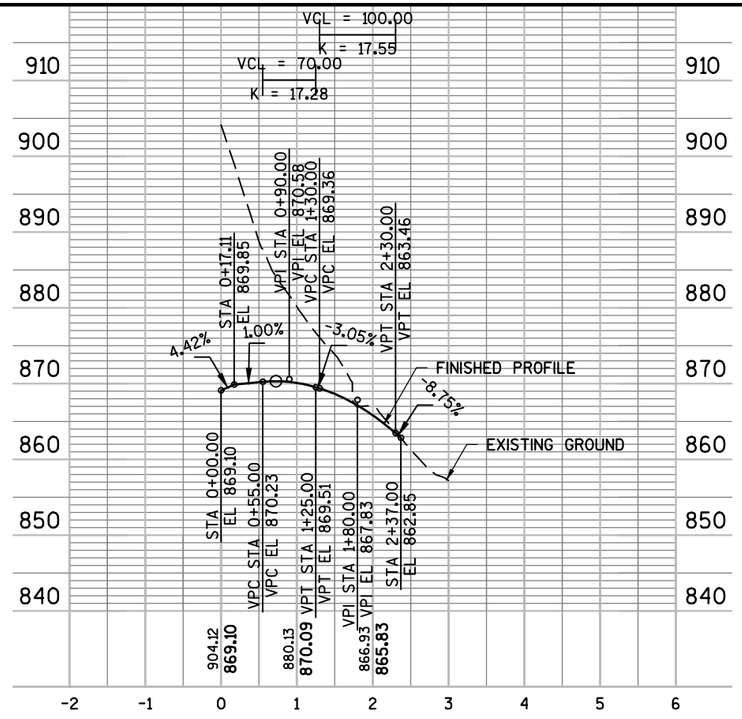


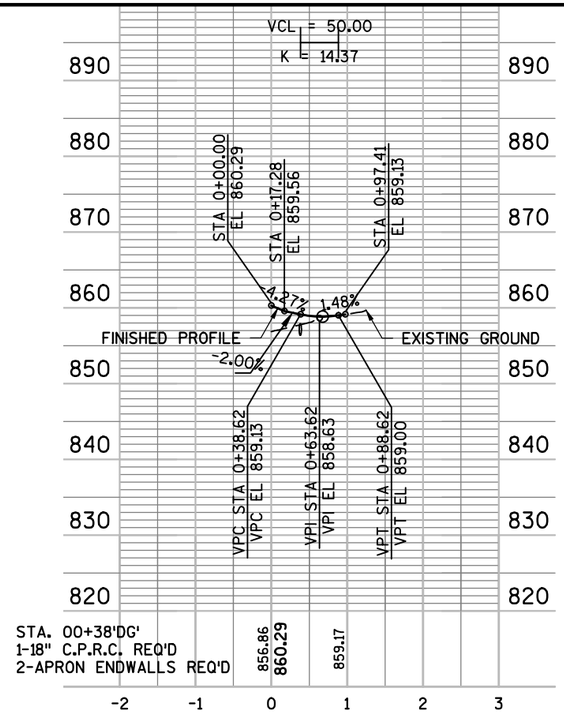
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN AND PROFILE: DRIVEWAY-DC, DRIVEWAY-DD, & DRIVEWAY-DE	SHEET 148	E

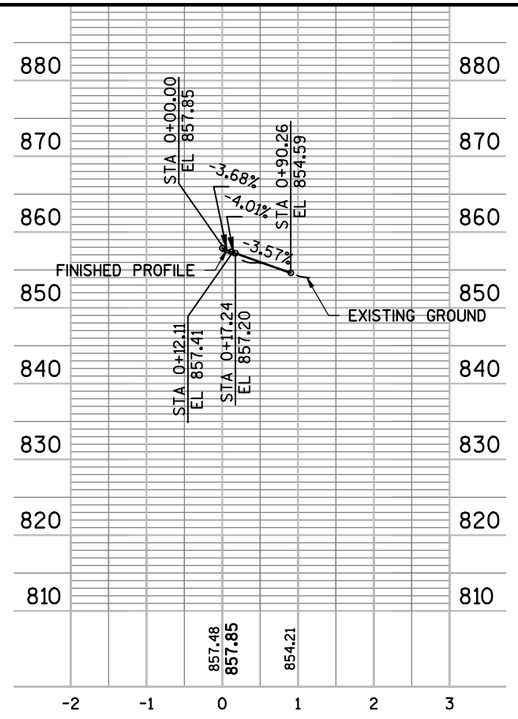








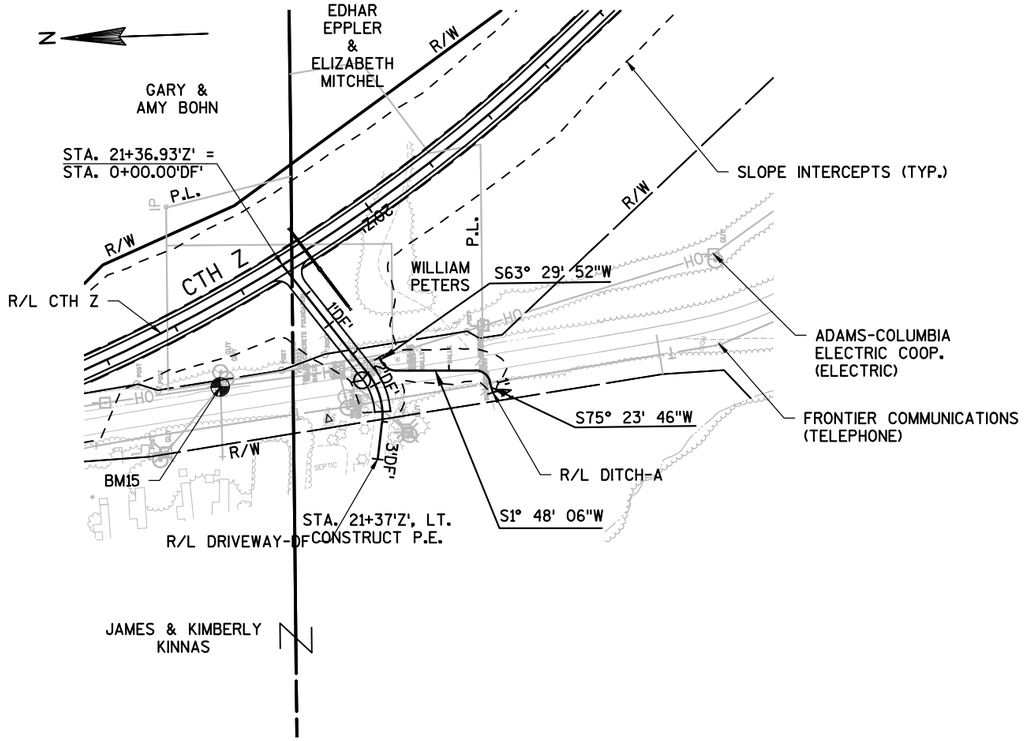


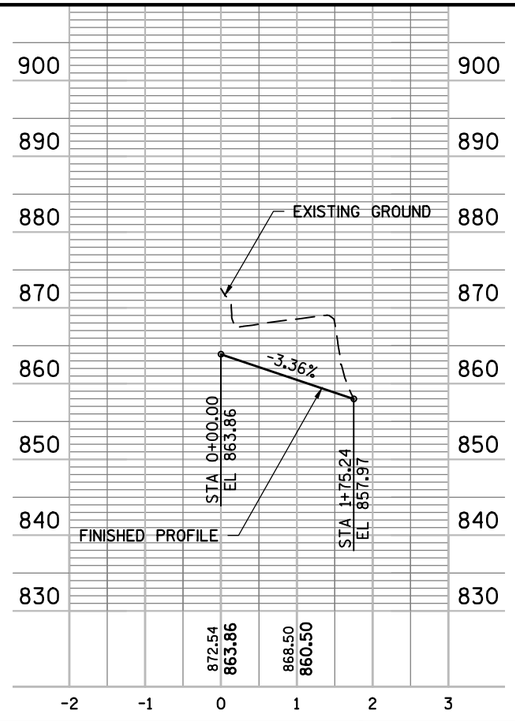


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN AND PROFILE: DRIVEWAY-DF, DRIVEWAY-DG, & DRIVEWAY-DH	SHEET 149	E

PI STA = 0+20.00'A'
Y = 154036.965
X = 516950.826
DELTA = 61°41'46"
D = 286°28'44"
T = 11.95'
L = 21.54'
R = 20.00'
PC STA = 0+08.05'A'
PT STA = 0+29.59'A'

PI STA = 1+49.47'A'
Y = 153905.201
X = 516946.681
DELTA = 73°35'39"
D = 286°28'44"
T = 14.96'
L = 25.69'
R = 20.00'
PC STA = 1+34.51'A'
PT STA = 1+60.20'A'





PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PLAN AND PROFILE: DITCH-A	SHEET 150	E

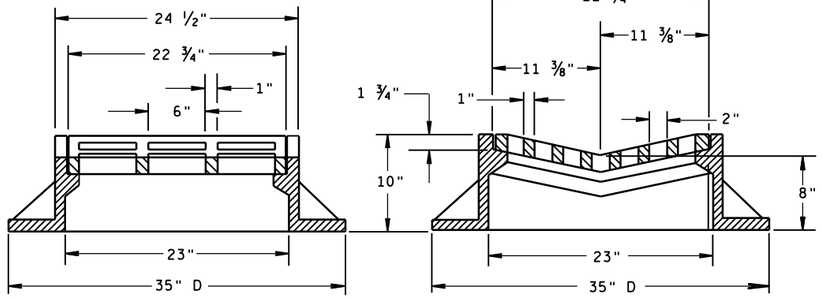
Standard Detail Drawing List

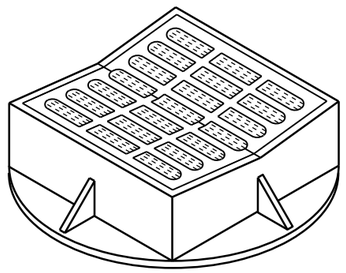
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
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
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D05-01	L30 LIGHTING CONTROL CABINET 240/480 VOLT
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
11B01-05	CONCRETE CORRUGATED MEDIAN
12A03-10	NAME PLATE (STRUCTURES)
13A10-01A	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
13B02-08A	CONCRETE PAVEMENT APPROACH SLAB
13B02-08B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B15-09A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-09C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B18-06A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B20-11A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-11B	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS
14B20-11C	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO VERTICAL FACED PARAPETS
14B20-11D	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS
14B20-11E	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"
14B20-11F	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPE "M"
14B20-11G	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL
14B20-11H	STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT
14B29-01	SAFETY EDGE
14B42-04A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

6

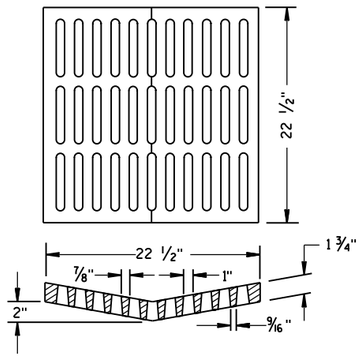
Standard Detail Drawing List

14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-13B	PAVEMENT MARKING WORDS
15C07-13C	PAVEMENT MARKING ARROWS
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C08-17B	PAVEMENT MARKING (TURN LANES)
15C08-17C	PAVEMENT MARKING (ISLANDS)
15C12-05	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-03	MEDIAN ISLAND MARKING
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-01A	PAVEMENT MARKING (INTERSECTIONS)
15D03-04	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS
15D38-01B	ATTACHMENT OF SIGNS TO POSTS
15D39-01	TRAFFIC CONTROL, DROP-OFF SIGNING



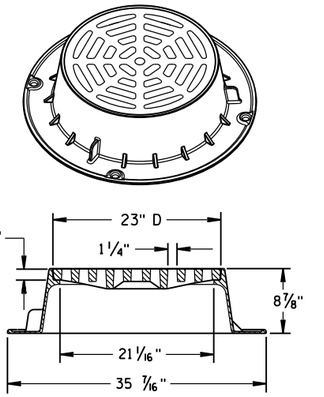


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

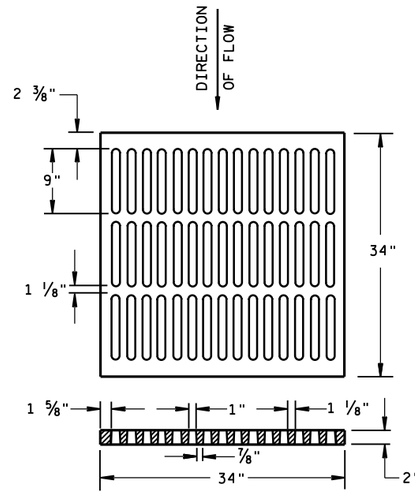
NOTE: EITHER CASTING IS ACCEPTABLE

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.

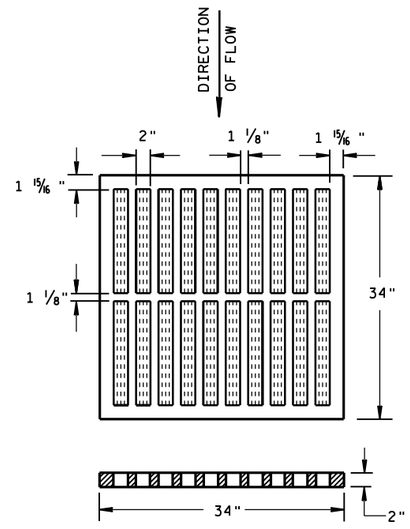
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



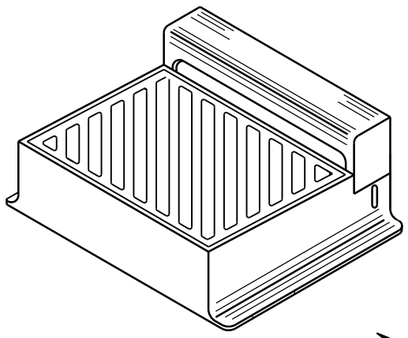
ALTERNATIVE TYPE "MS"

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

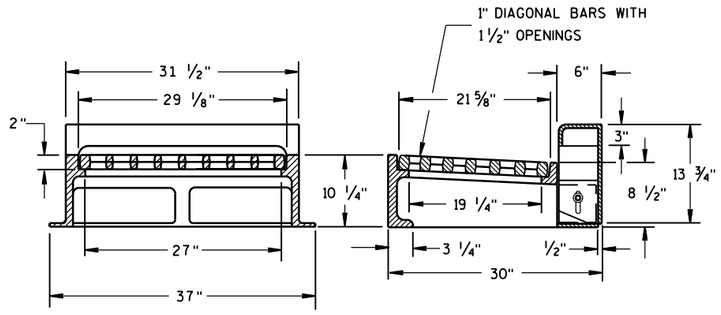


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

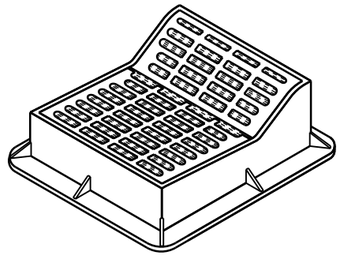
INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM

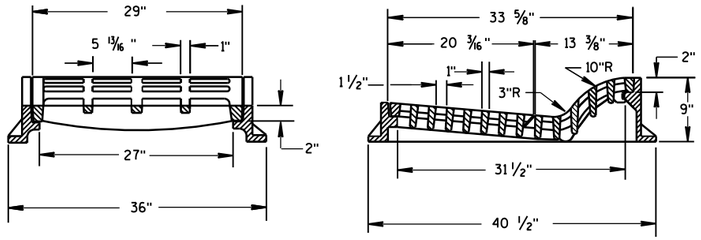
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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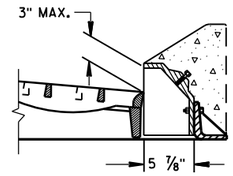
S.D.D. 8 A 5-19b





TYPE "F"

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



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

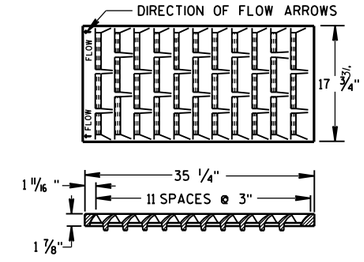
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

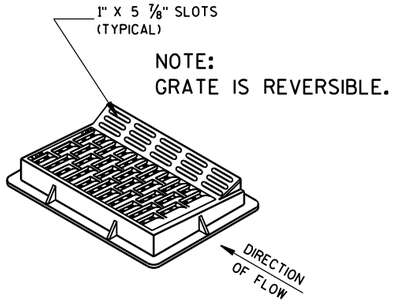
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

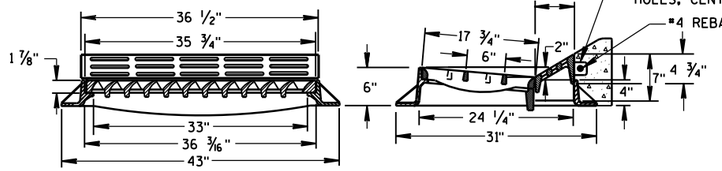
GENERAL NOTES

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.



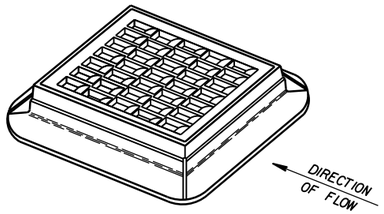


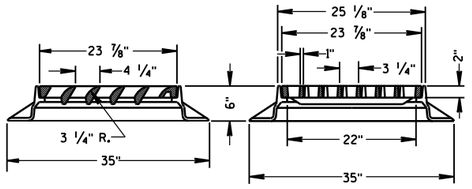


TYPE "HM"

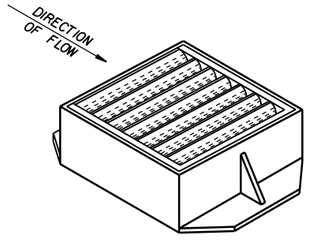
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

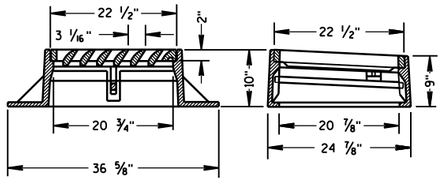
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



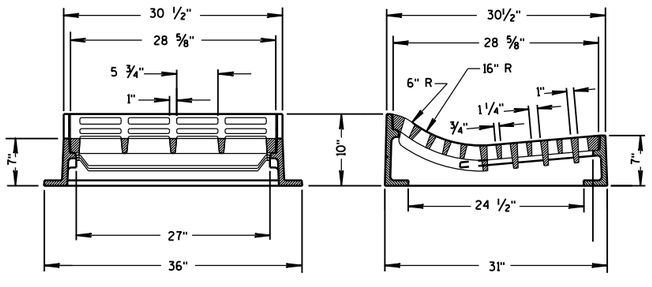


TYPE "S"



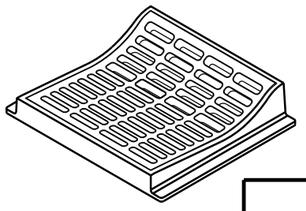


TYPE "V"



TYPE "T"

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
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

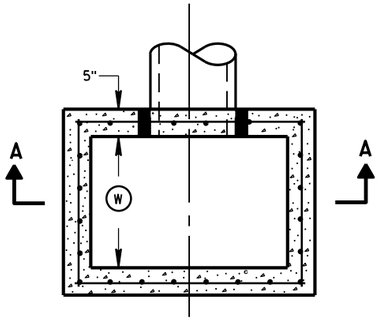
FHWA

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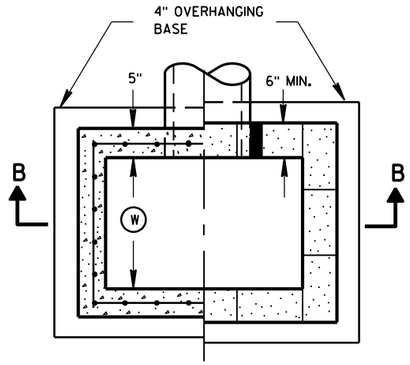
S.D.D. 8 A 5-19c

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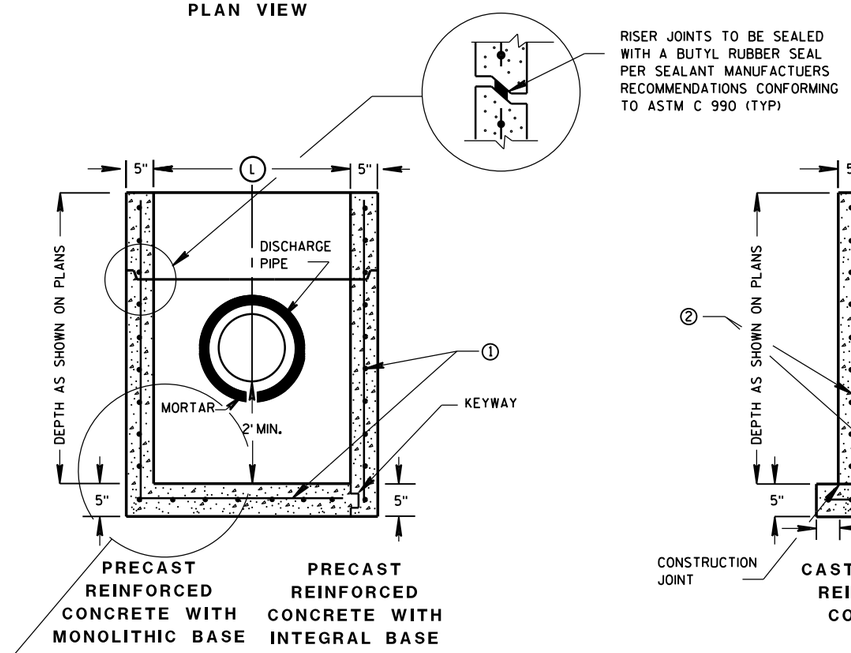
S.D.D. 8 A 5-19c



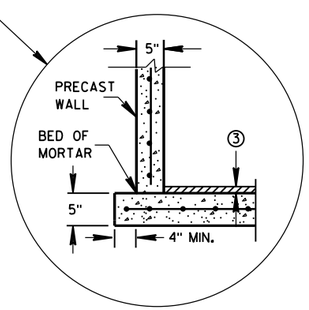
PLAN VIEW



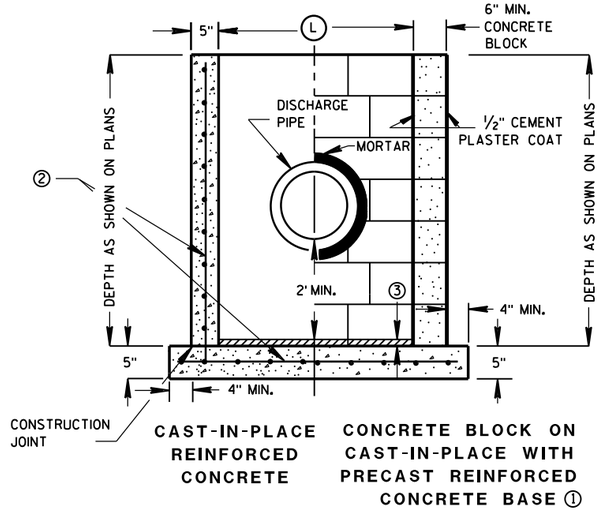
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



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 FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

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

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

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" 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.

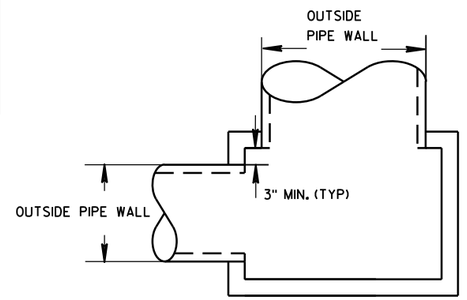
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

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

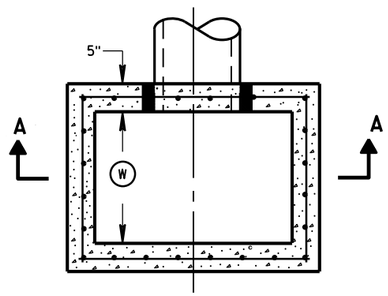
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
FHWA

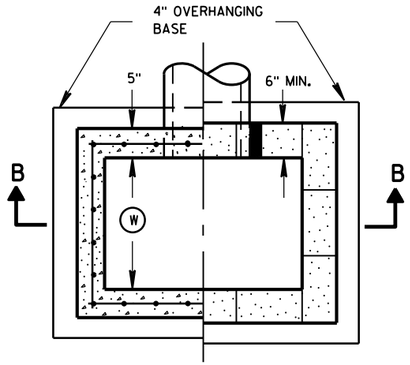
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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S.D.D. 8 A 9-2

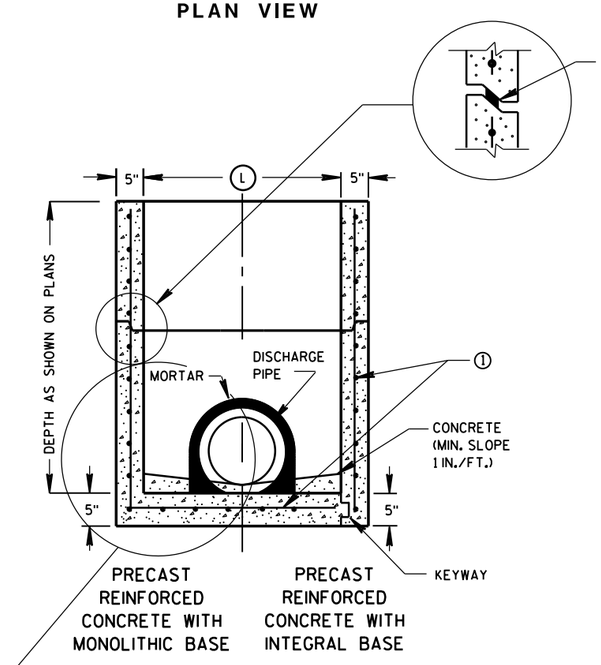
CATCH BASINS 2X3-FT AND 2.5X3-FT



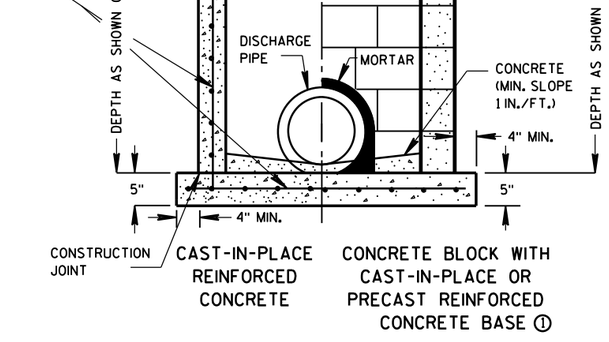
PLAN VIEW



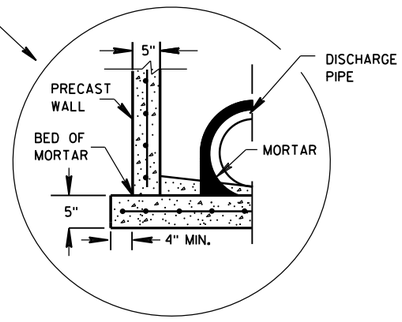
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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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 FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

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

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

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

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

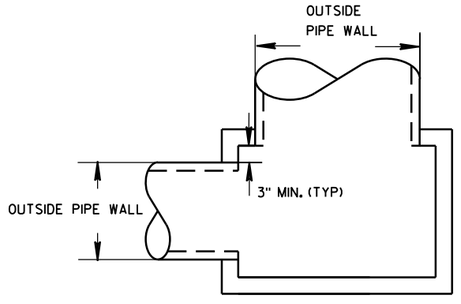
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



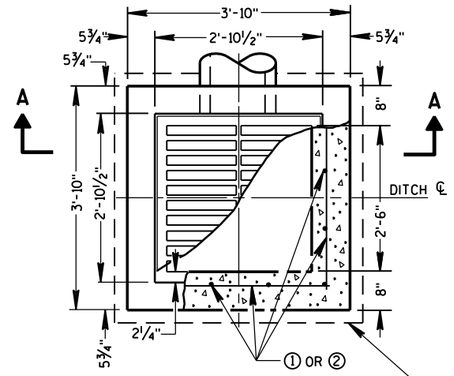
DETAIL "A"

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

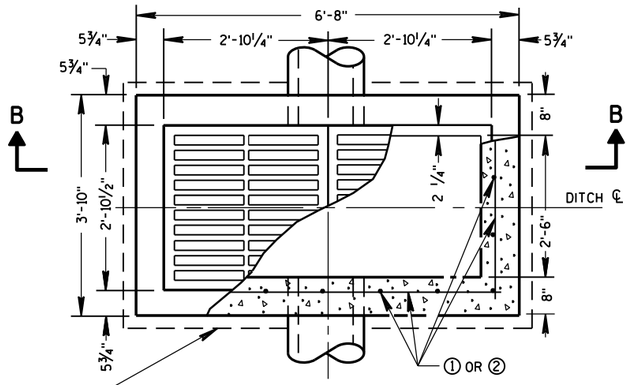
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

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

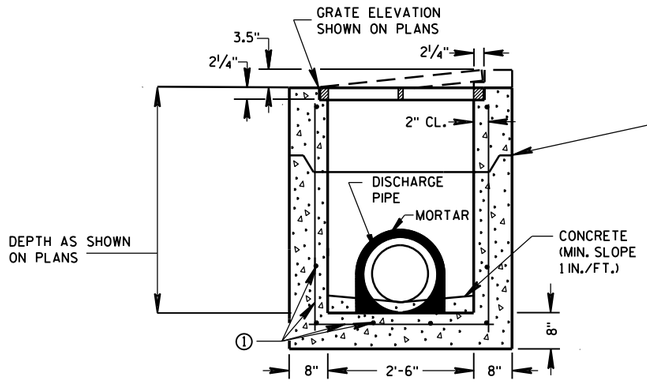


PLAN VIEW

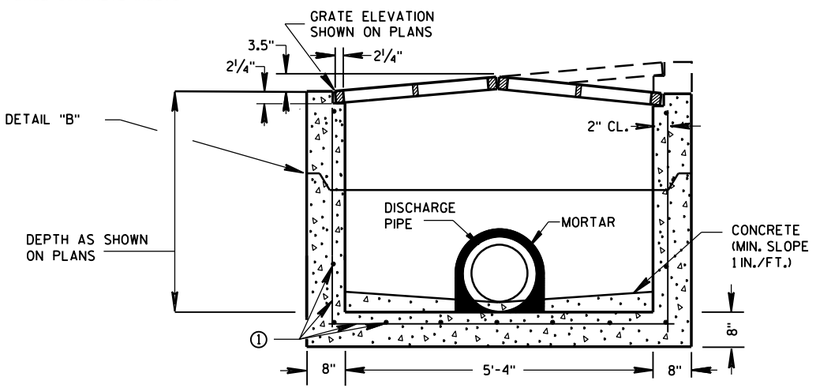


PLAN VIEW

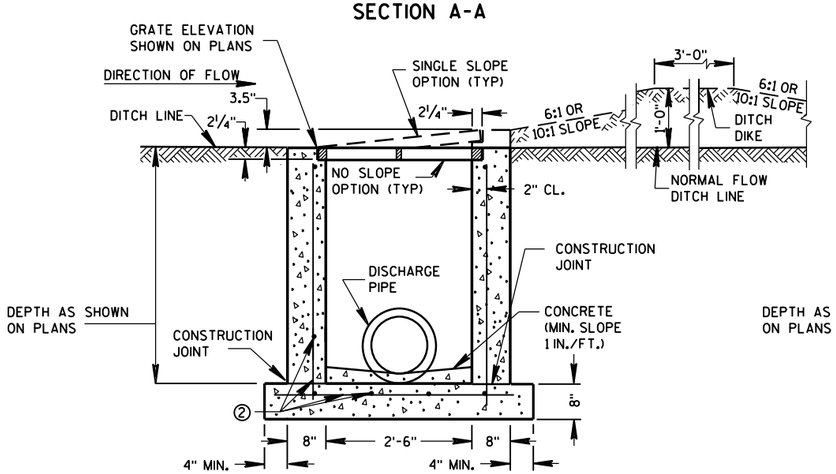
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



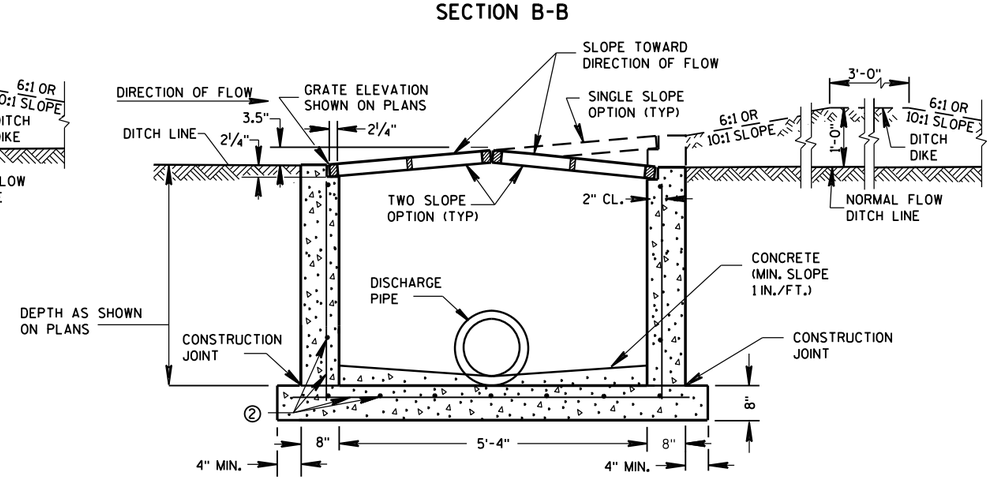
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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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.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION 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.

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

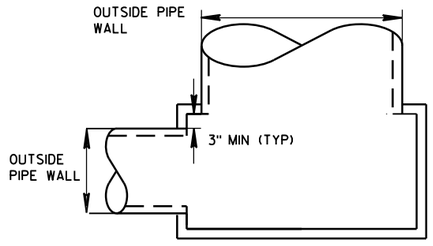
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

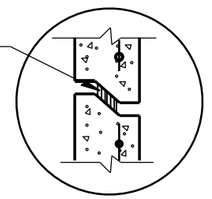
PIPE MATRIX

	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 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

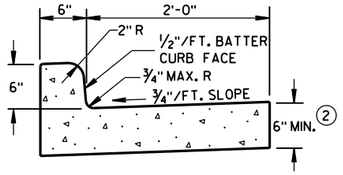
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI ENT
FHWA

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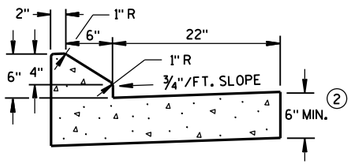
S.D.D. 8 C 8-2

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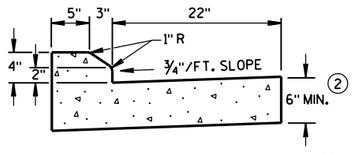
S.D.D. 8 C 8-2



TYPES A & D ①

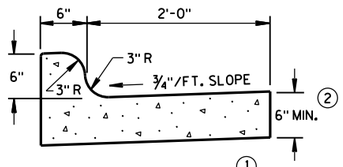


6" SLOPED CURB TYPES G & J ①

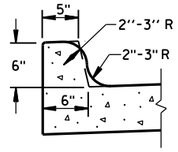


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

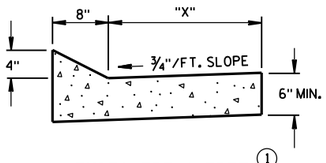


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

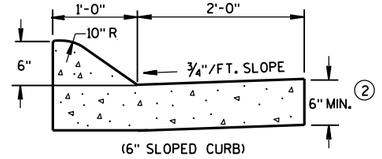
CONCRETE CURB & GUTTER 30"



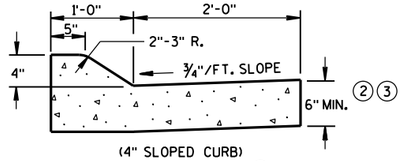
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

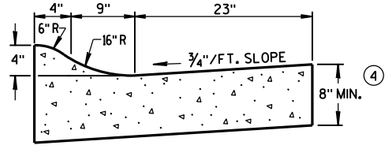


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ①⑤

CONCRETE CURB & GUTTER 36"

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, R AND TBTT.

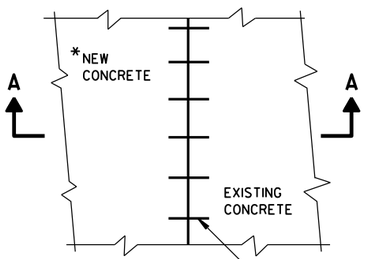
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

④ 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.

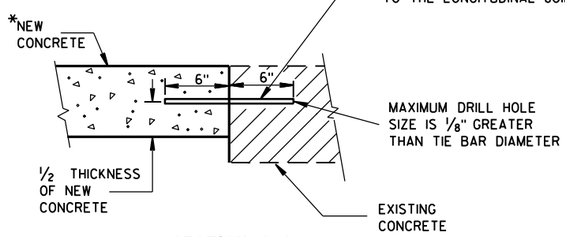
⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



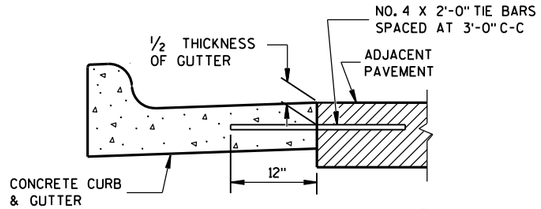
PLAN VIEW

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

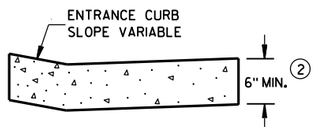


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT

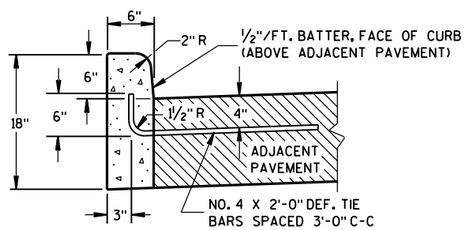


TYPICAL TIE BAR LOCATION ①

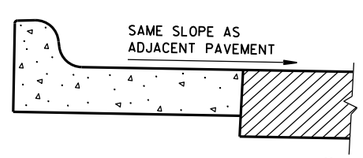


DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)

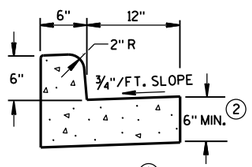


① TYPES A & D



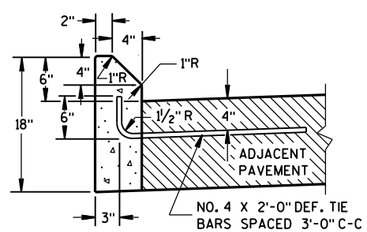
⑥ REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)



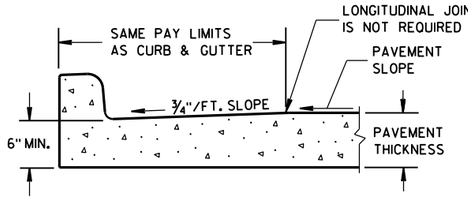
① TYPES A & D

CONCRETE CURB & GUTTER 18"

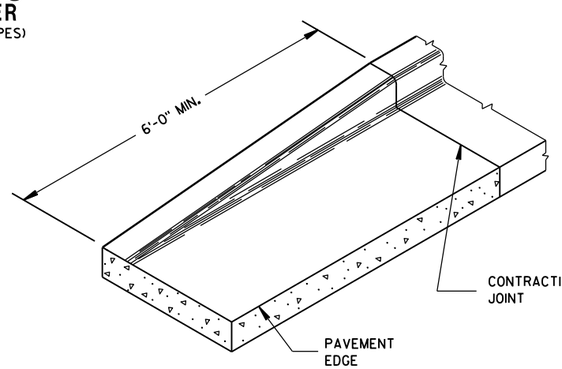


① TYPES G & J

CONCRETE CURB



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2016 — DATE

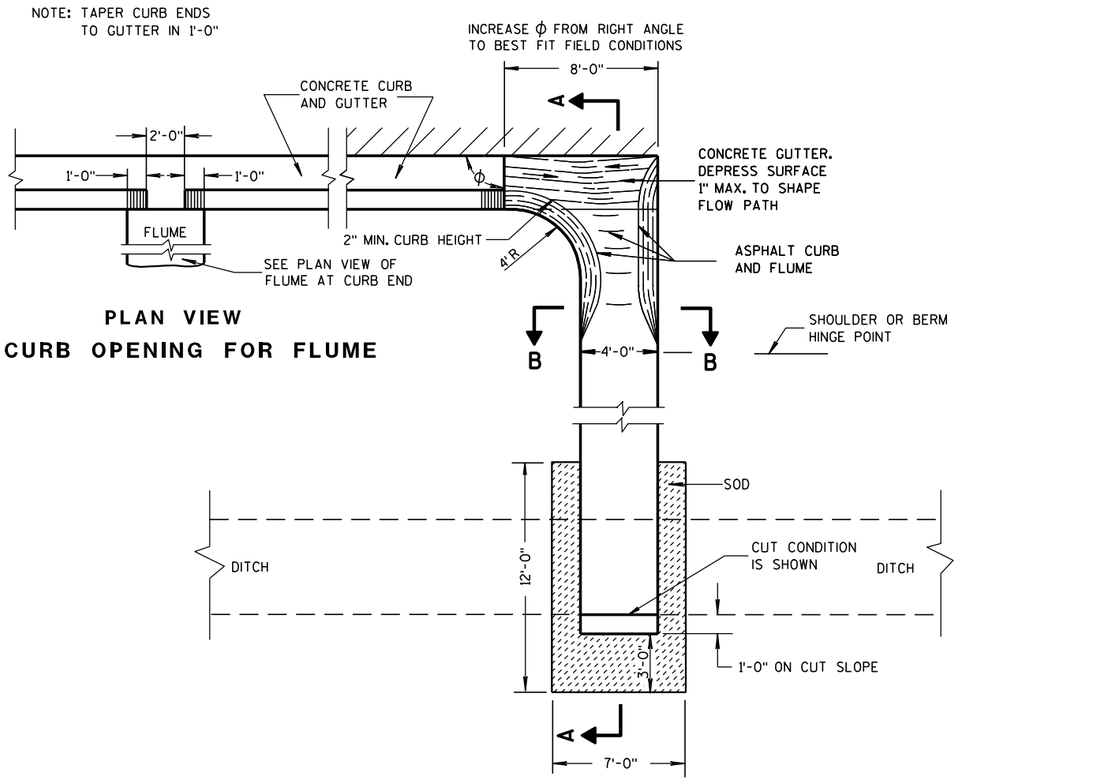
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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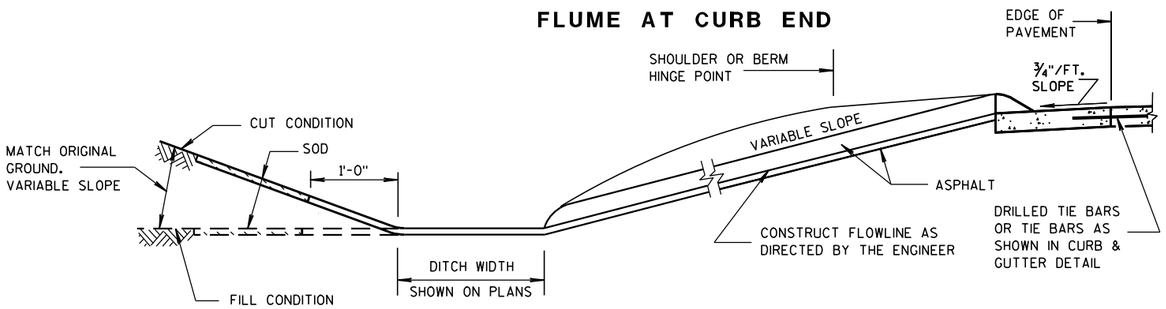
S.D.D. 8 D 1-19

ASPHALTIC FLUME

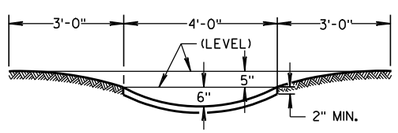


PLAN VIEW
CURB OPENING FOR FLUME

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.

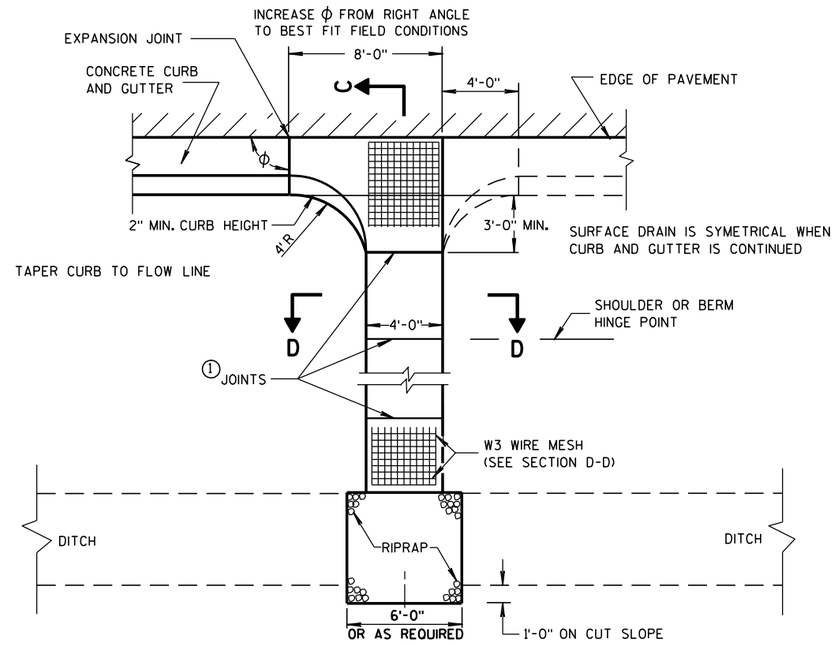
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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.

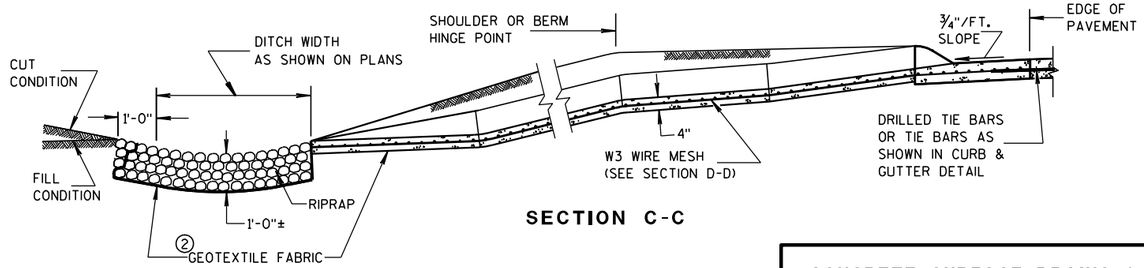
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

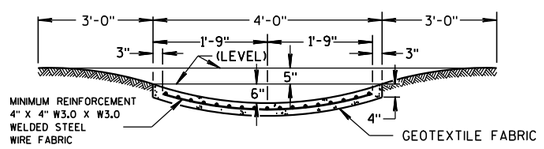
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

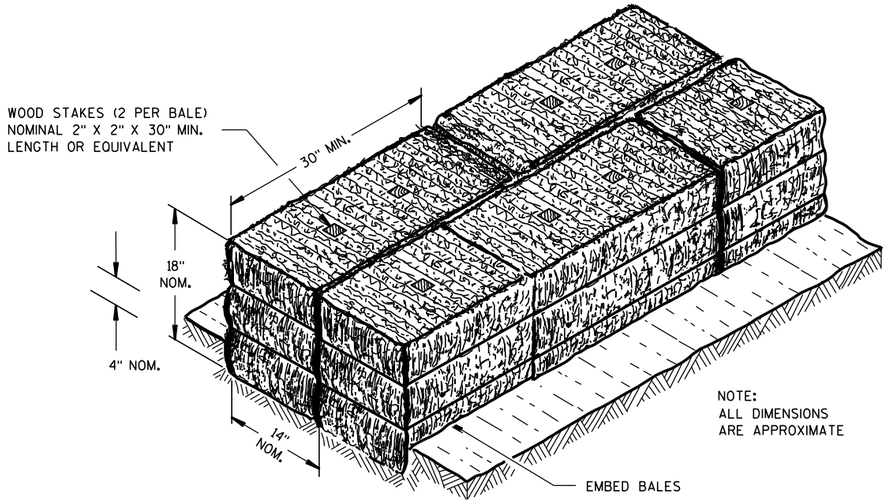
APPROVED
9-4-08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
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MENT
FHWA

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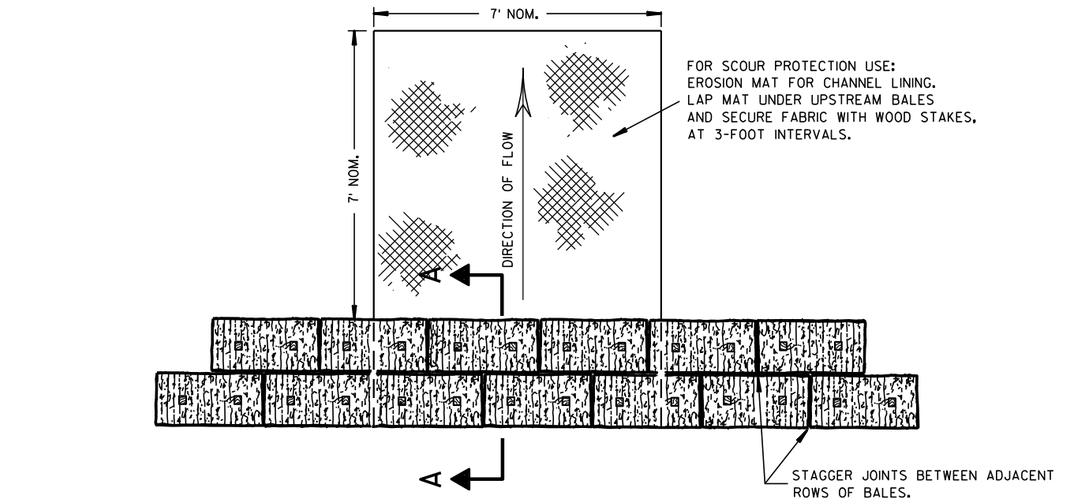
S.D.D. 8 D 4-5

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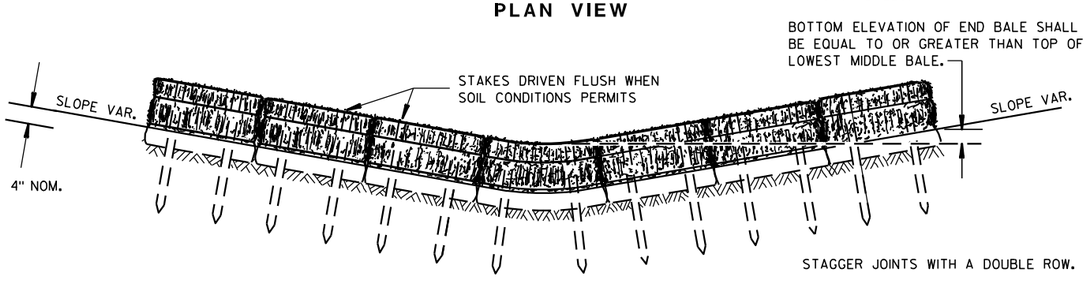
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



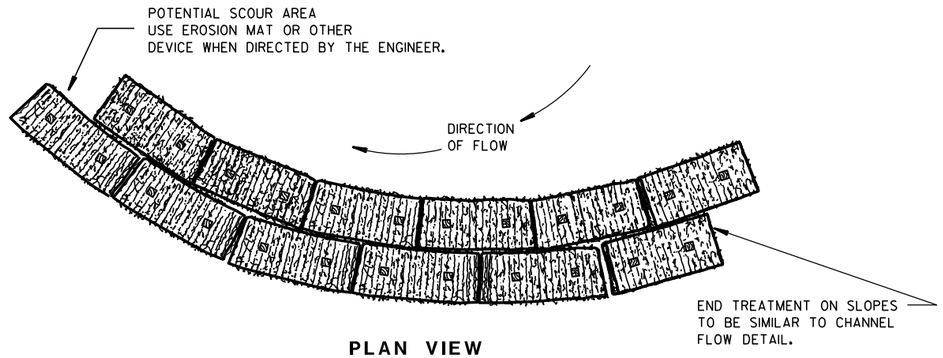
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

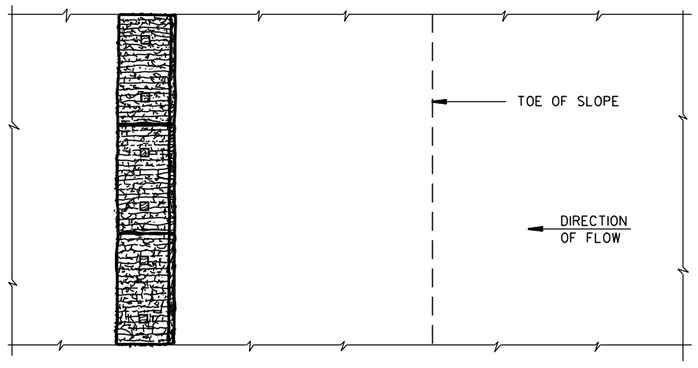
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

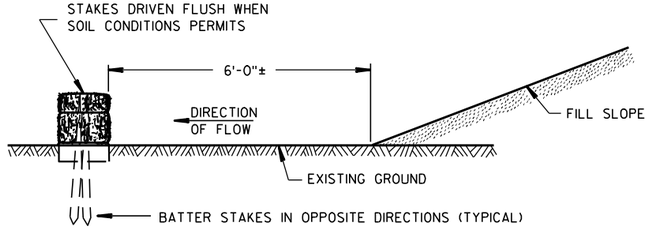


PLAN VIEW

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

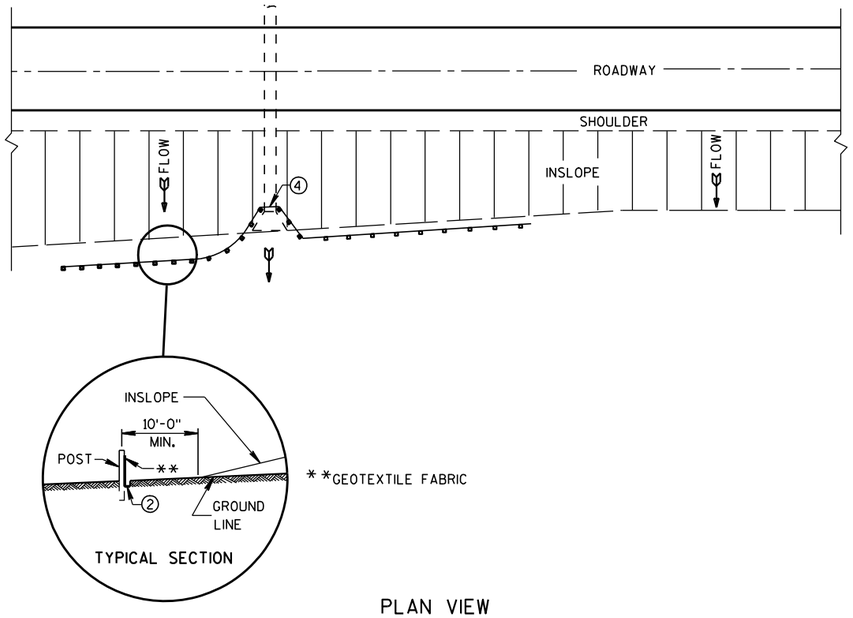
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 8-3

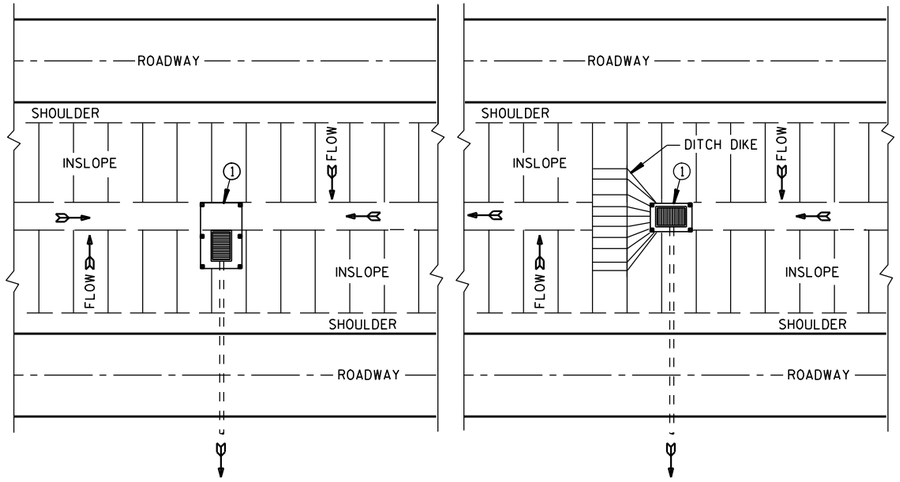
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



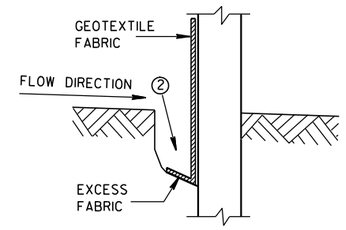
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

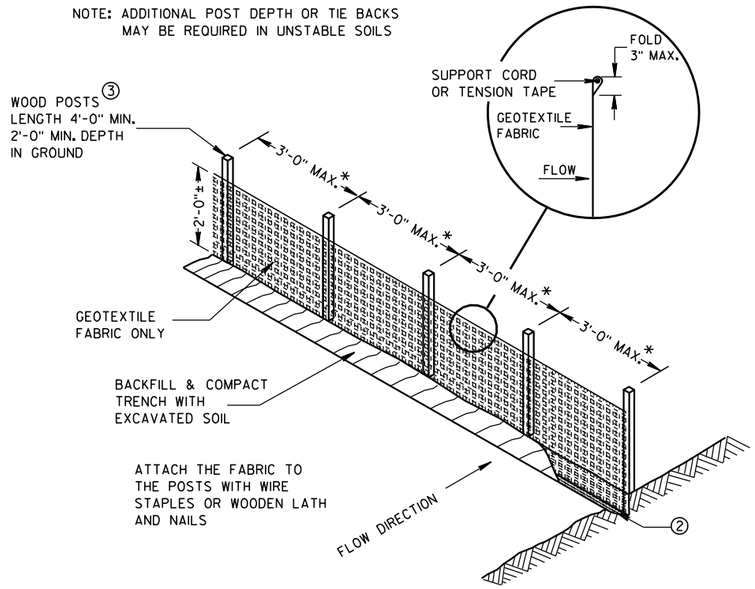
GENERAL NOTES

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.

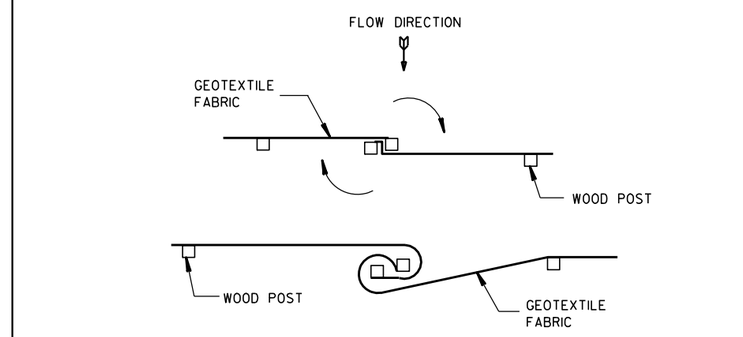


TRENCH DETAIL

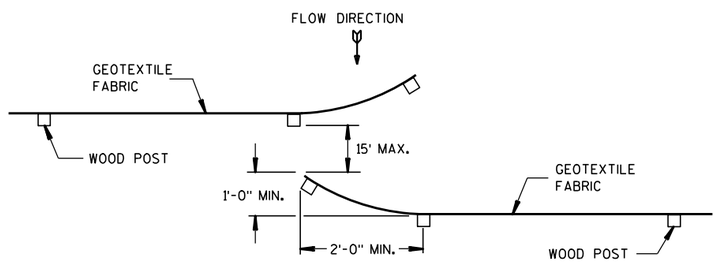


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

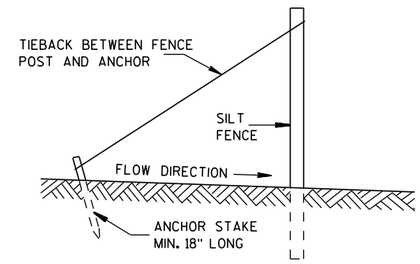


TWIST METHOD



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

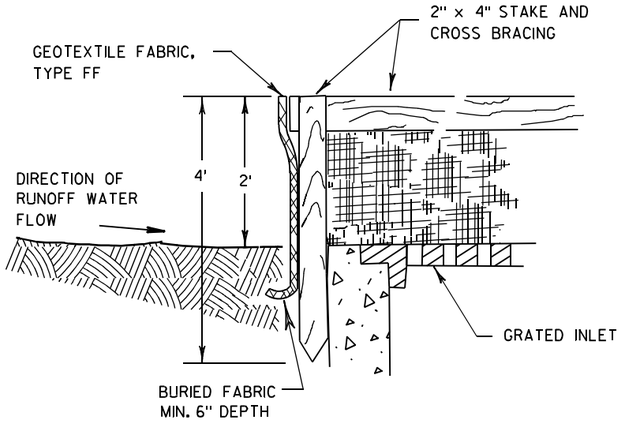
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

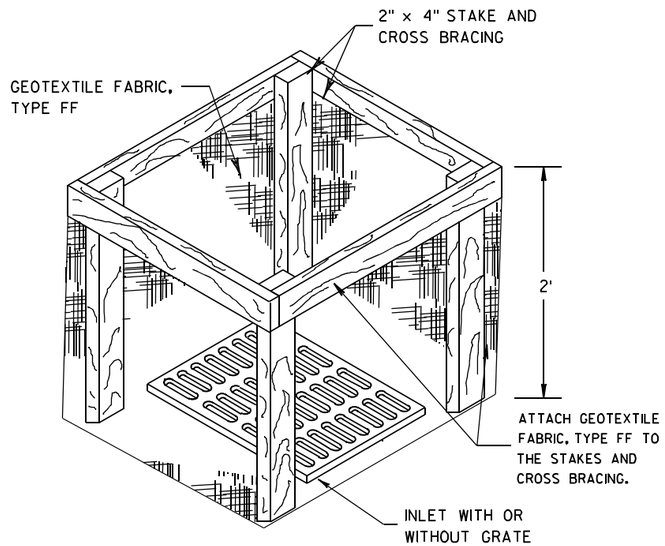
6

S.D.D. 8 E 9-6

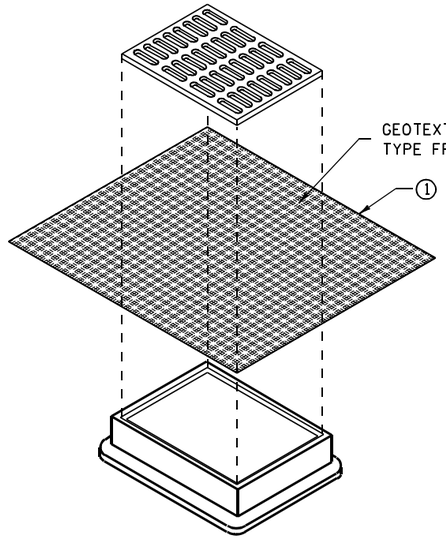
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S.D.D. 8 E 9-6



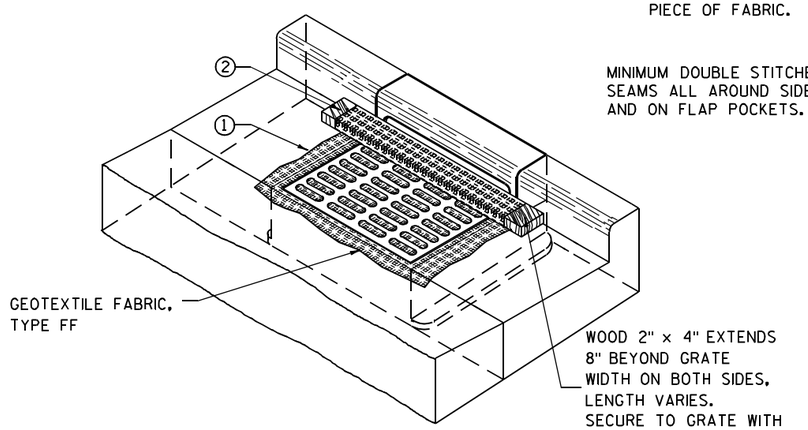


INLET PROTECTION, TYPE A

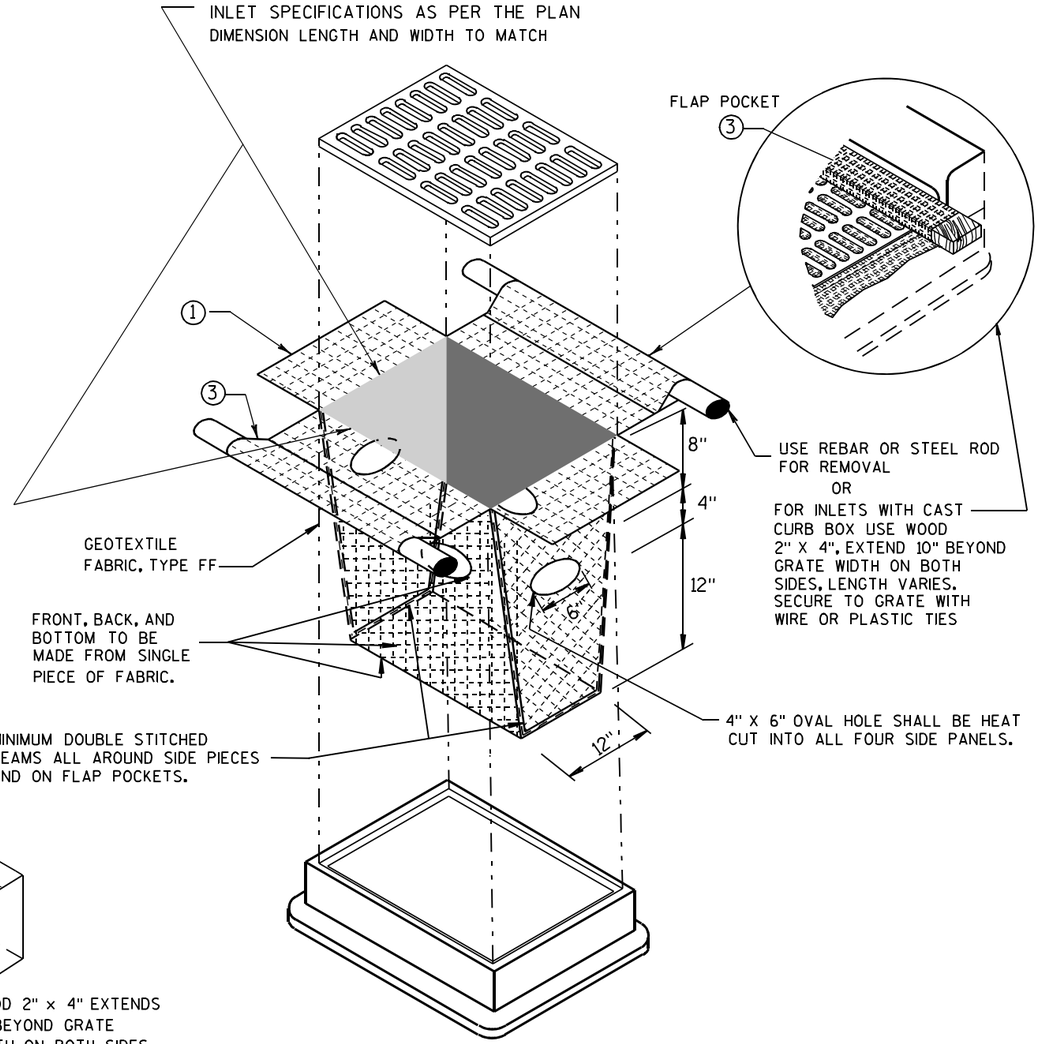


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

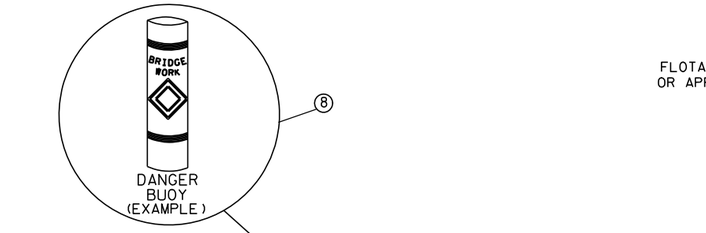
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

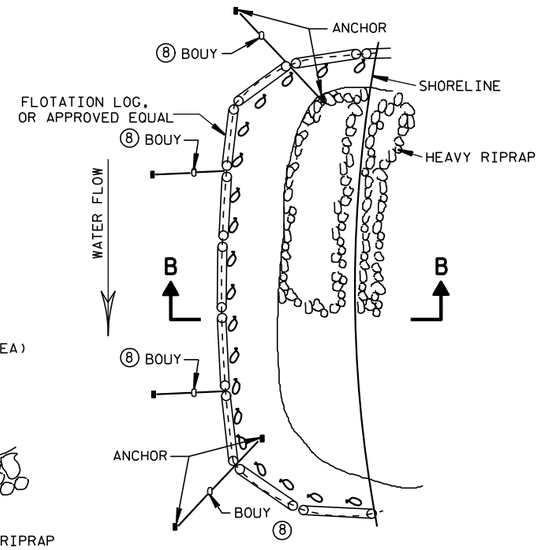
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

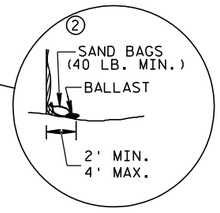
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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

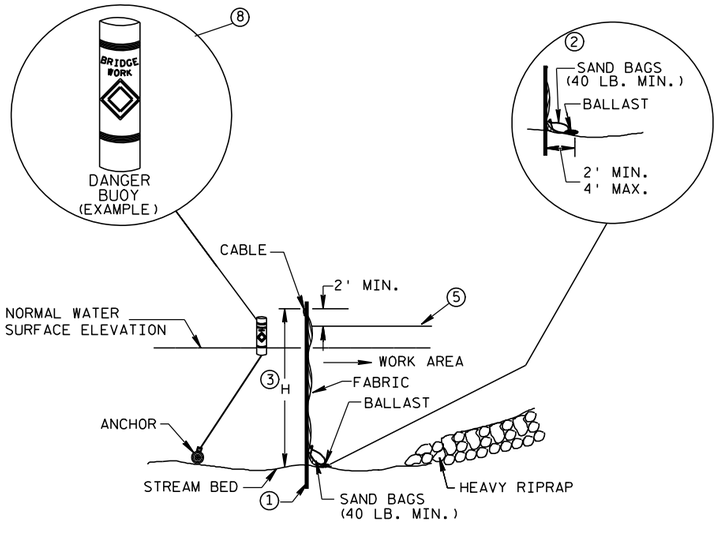


SECTION B-B

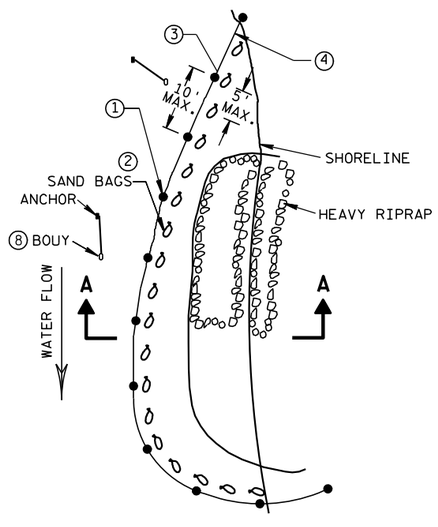




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



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.

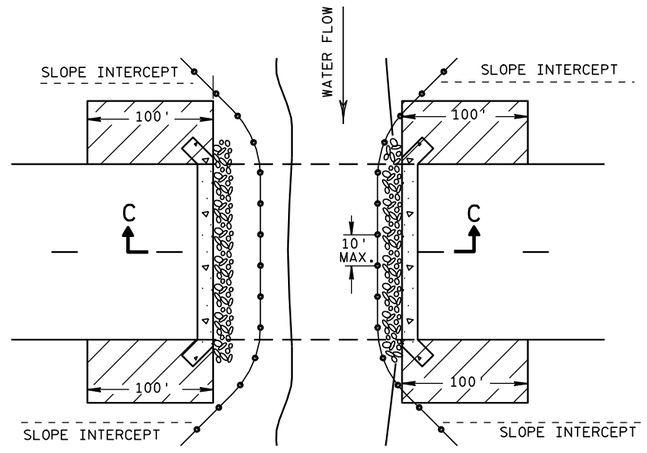
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

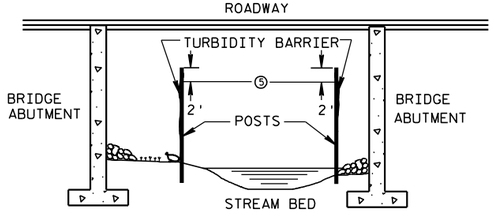
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

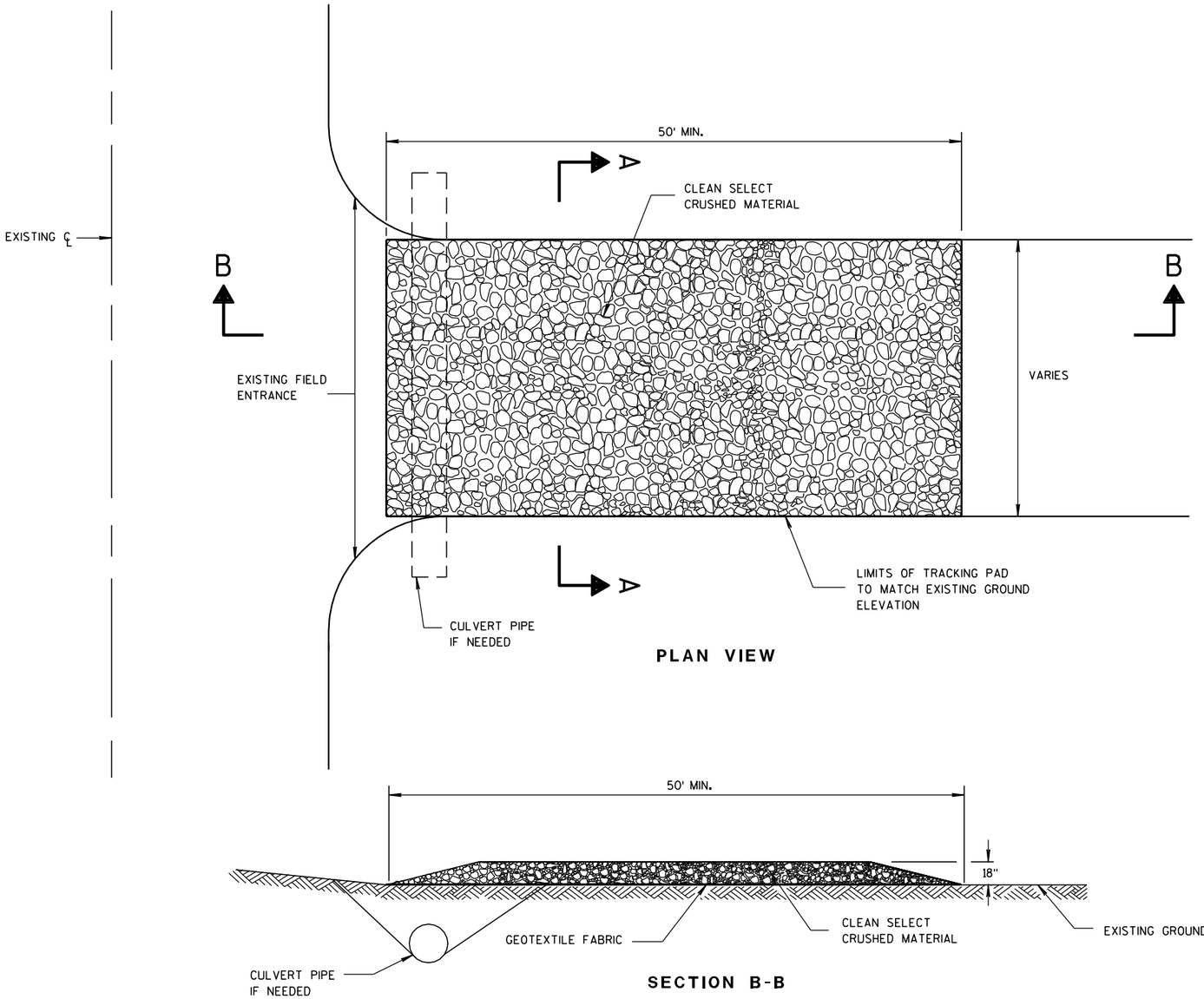
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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.

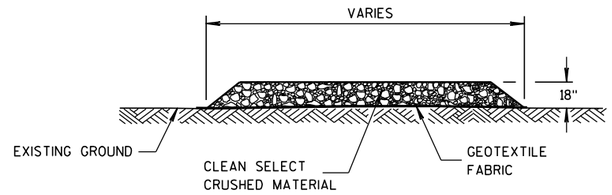
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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
/S/ Jerry H. Zoda — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 E 14-1

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

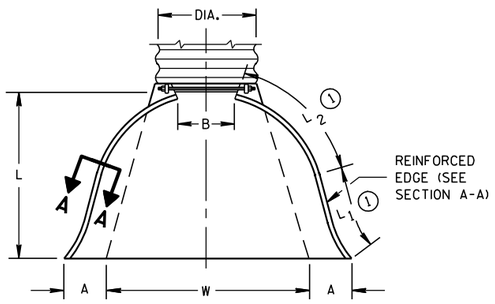
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

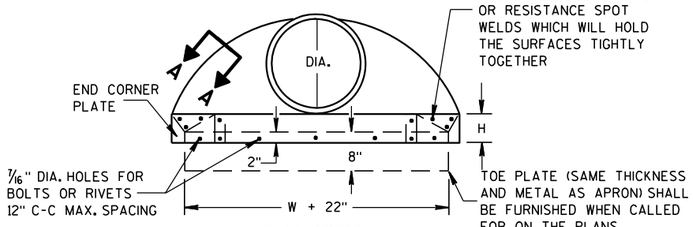
REINFORCED CONCRETE APRON ENDWALLS

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

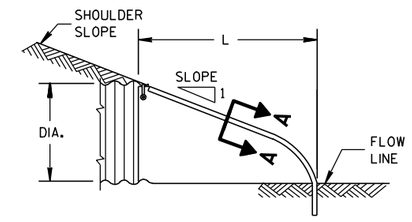
* MINIMUM
** MAXIMUM



PLAN VIEW

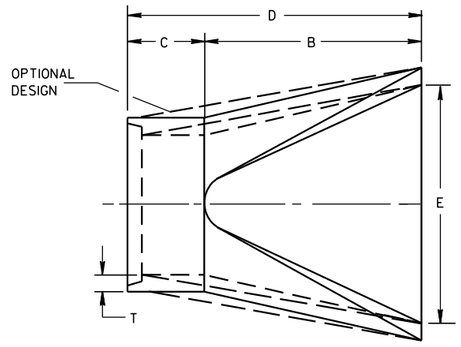


END VIEW

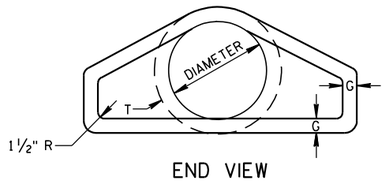


SIDE ELEVATION

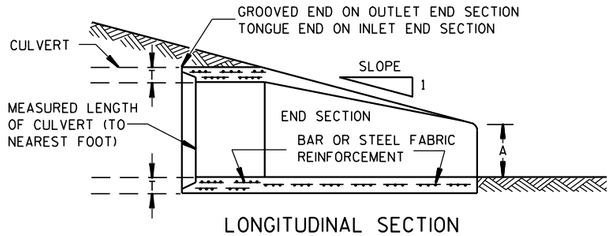
METAL ENDWALLS



PLAN

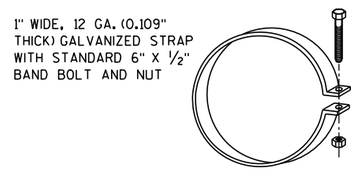


END VIEW



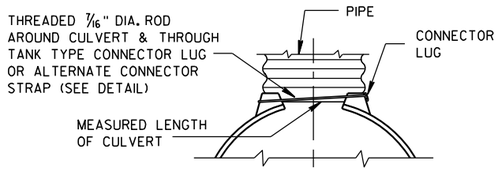
LONGITUDINAL SECTION

CONCRETE ENDWALLS

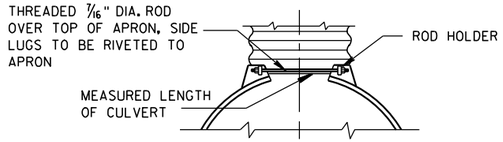


ALTERNATE FOR TYPE 1 CONNECTION

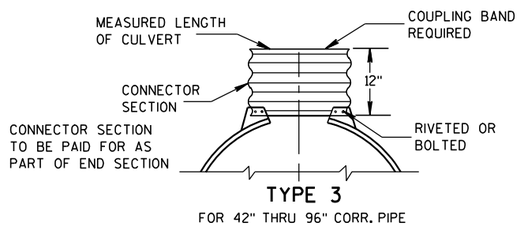
END SECTION CONNECTOR STRAP



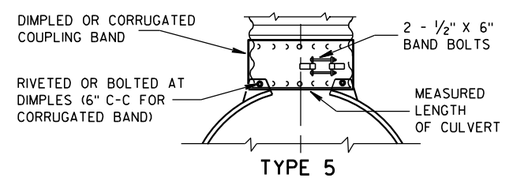
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

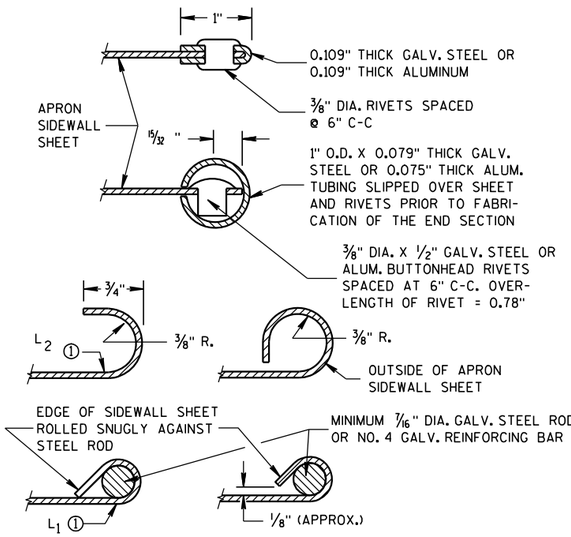
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

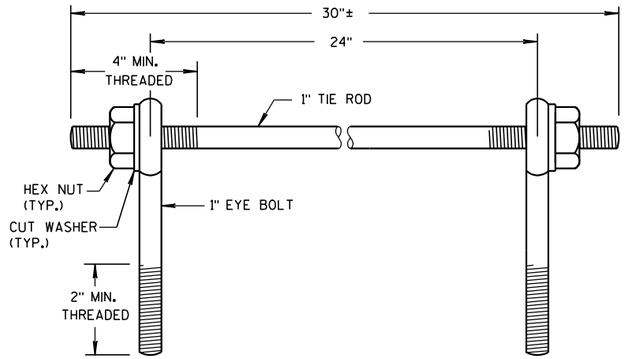
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

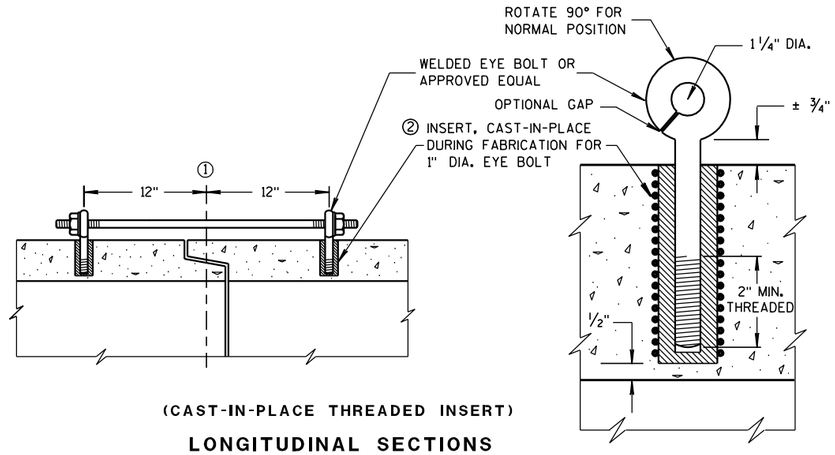
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

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

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

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

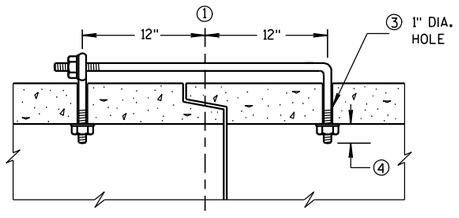
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

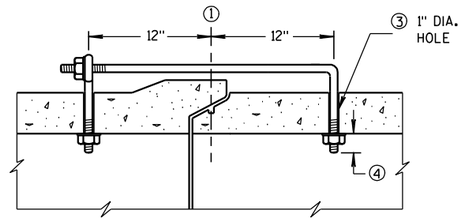
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

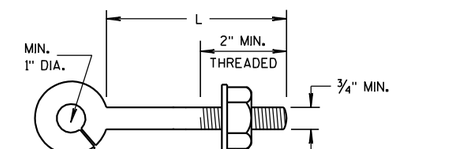


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

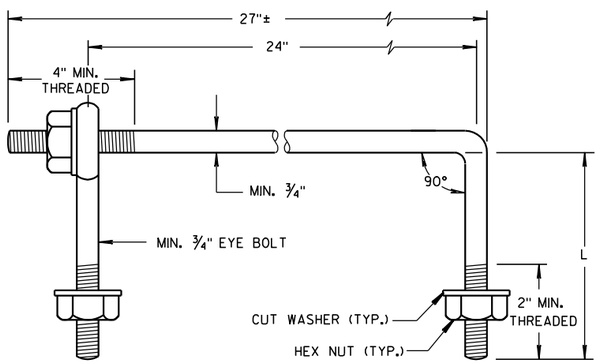
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

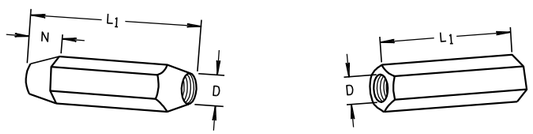
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

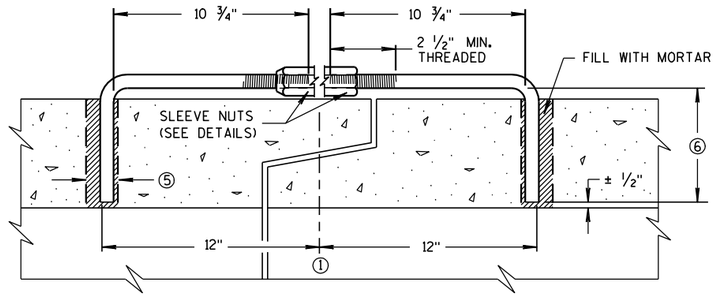
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

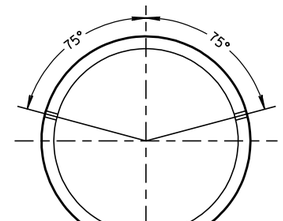
SLEEVE NUTS



LONGITUDINAL SECTION

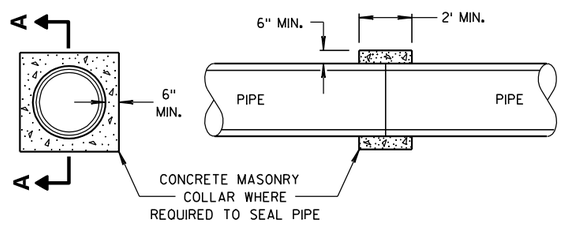
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

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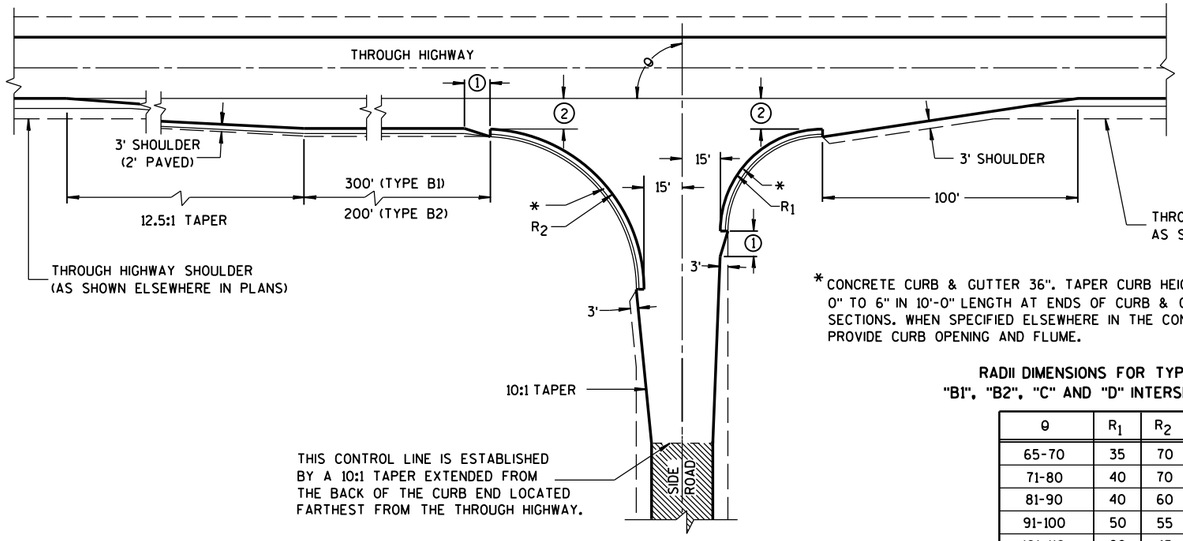
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 8 F 4-7

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S.D.D. 8 F 4-7

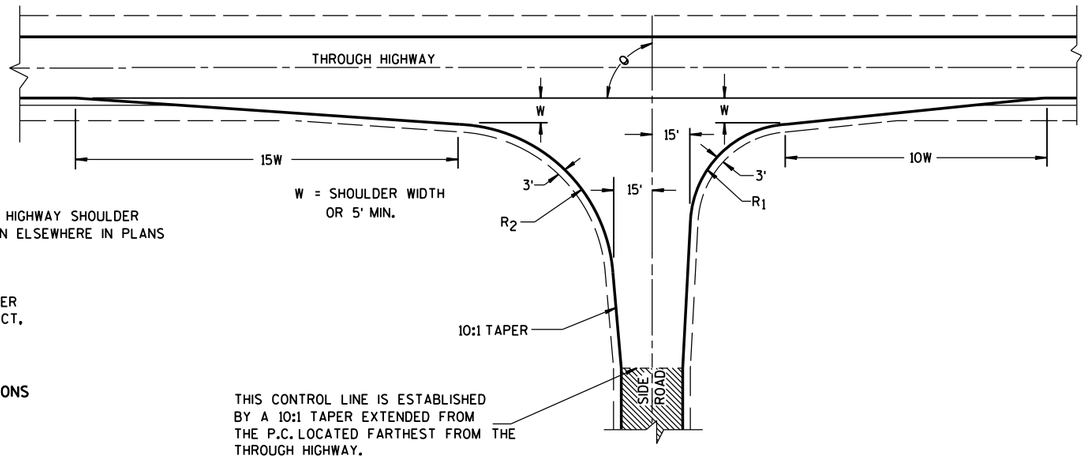


TYPE "B1" AND "B2"

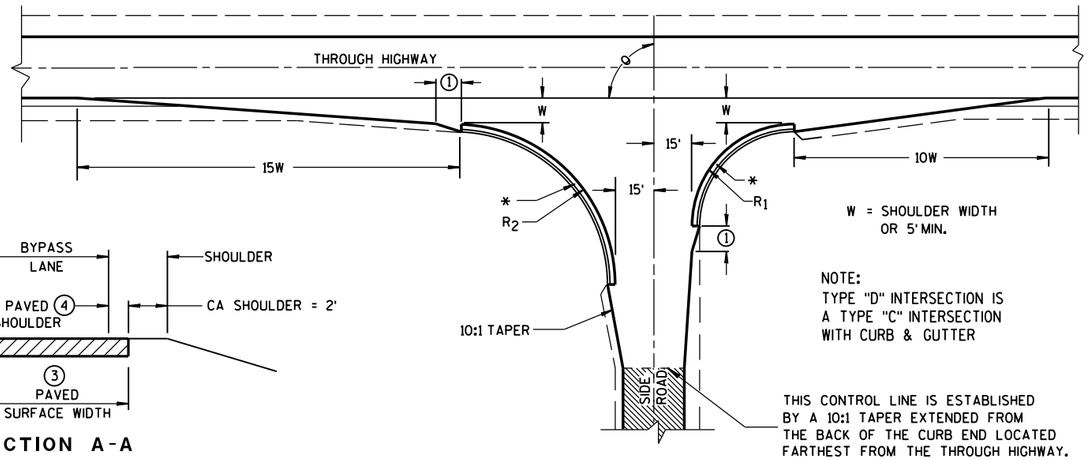
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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 PAVED SURFACE

BYPASS LANE

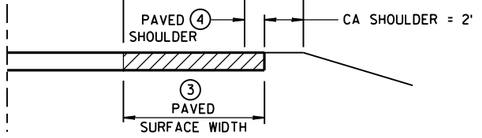
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

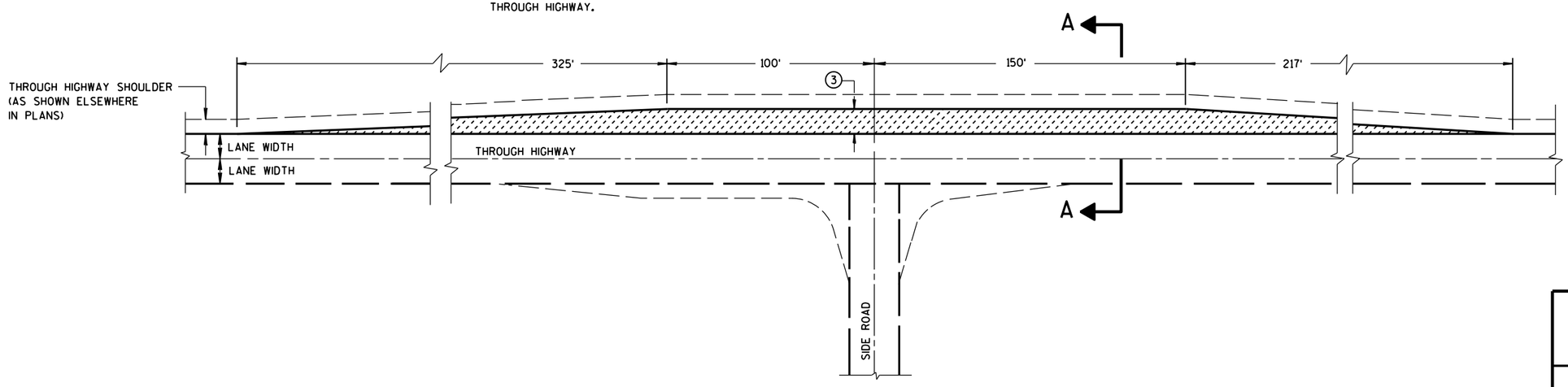
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



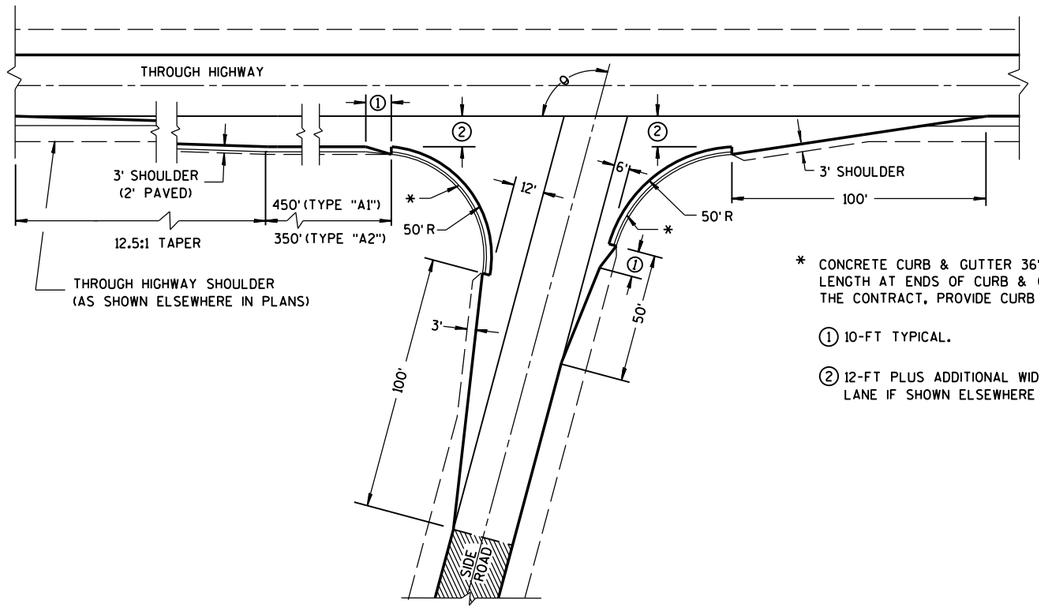
TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
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S.D.D. 9 A 1-13a



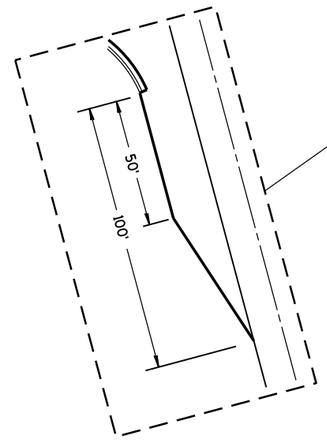
θ = MORE THAN 80°

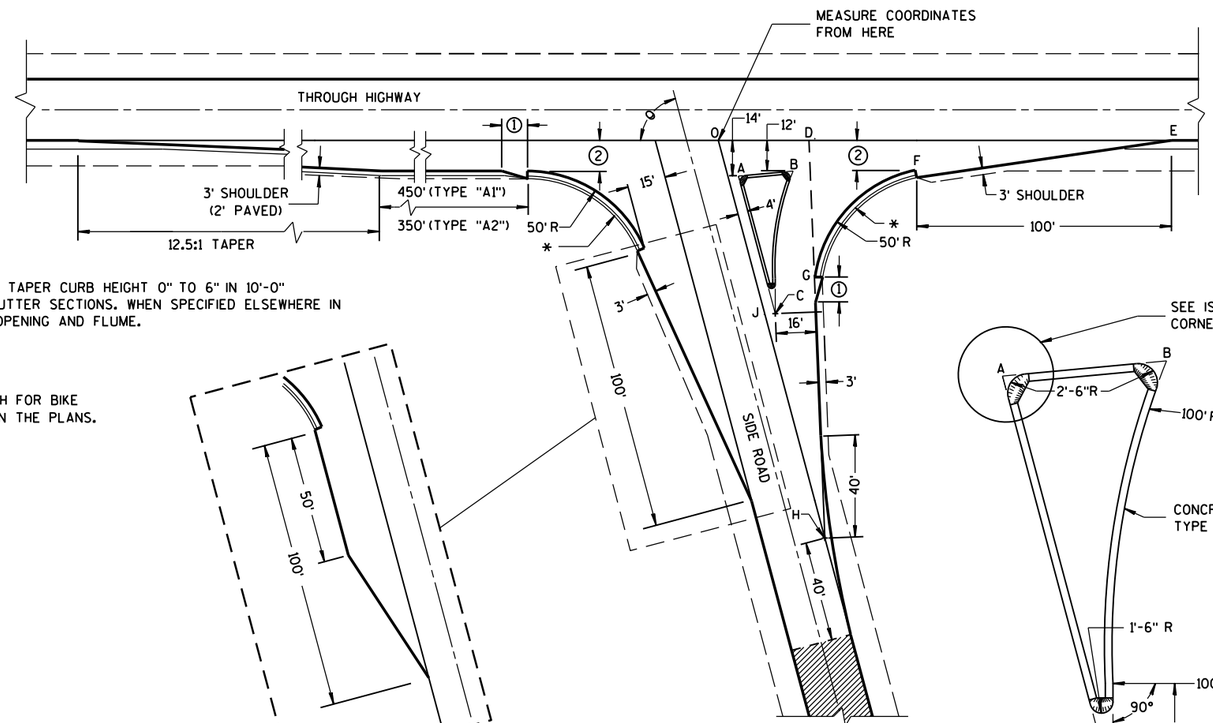
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

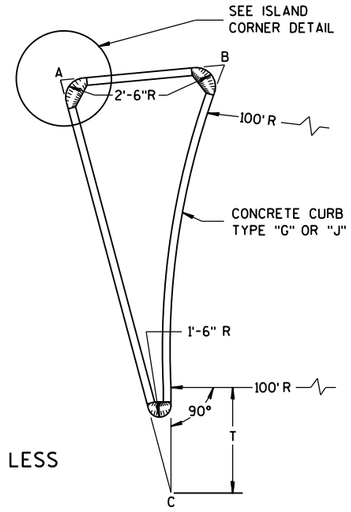
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

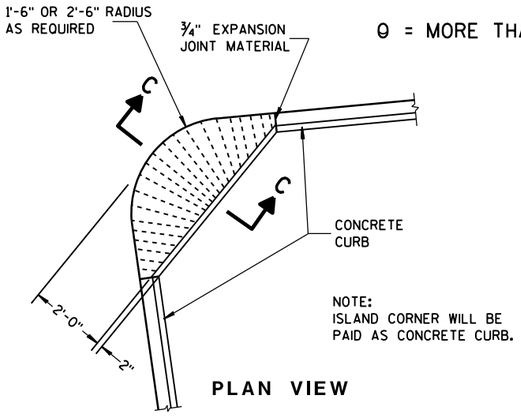




θ = ACUTE ANGLES 80° OR LESS

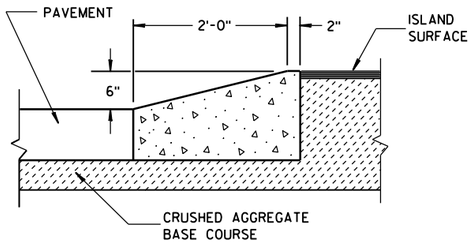


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



NOTE:
ISLAND CORNER WILL BE
PAID AS CONCRETE CURB.

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

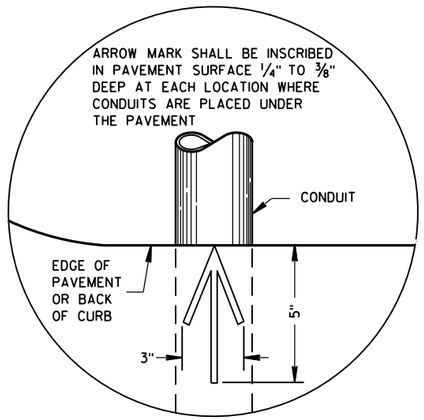
AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

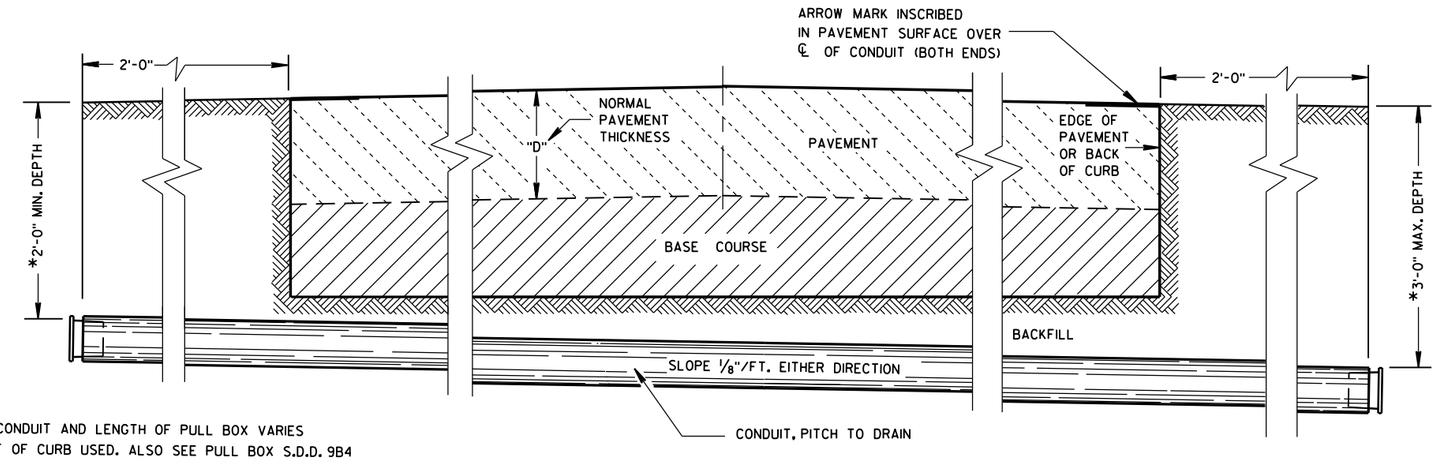
S.D.D. 9 A 1-13b

S.D.D. 9 A 1-13b



PLAN VIEW

ARROW MARK



*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

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.).

TRACER 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.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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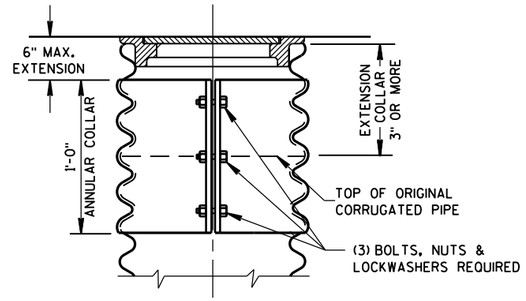
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

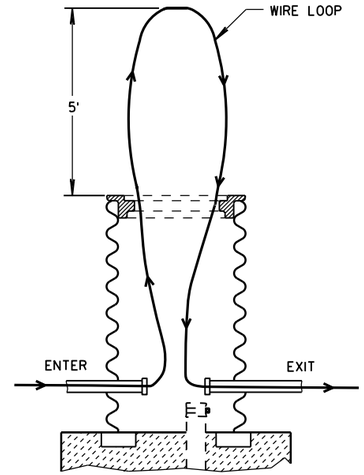
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2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

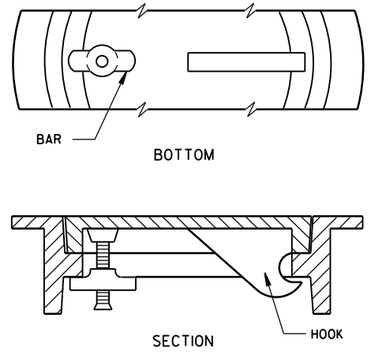
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

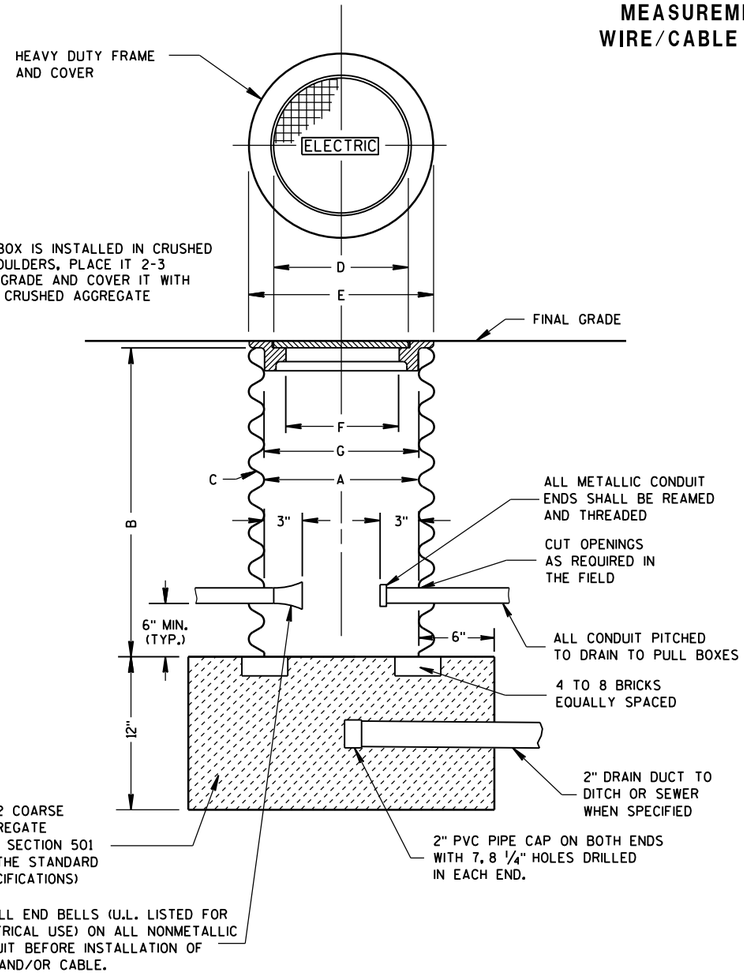


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



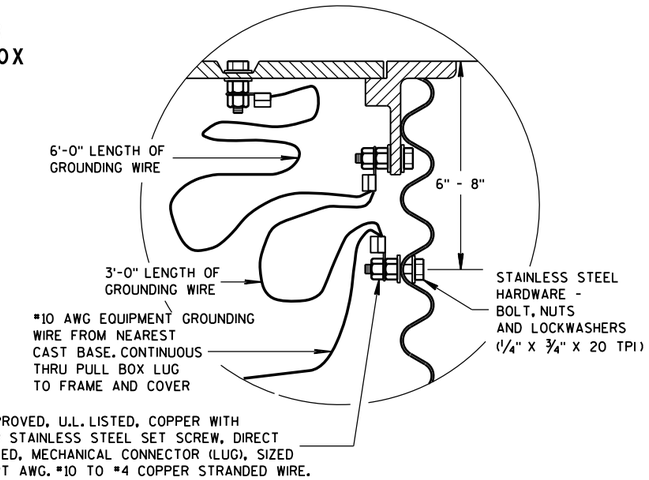
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

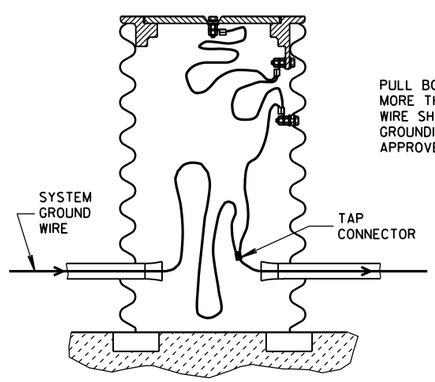


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

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.

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

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.

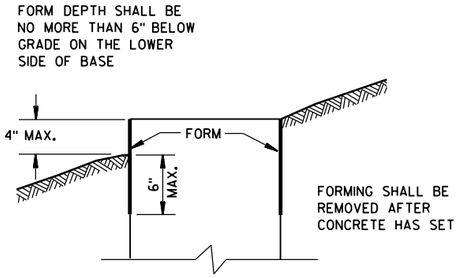
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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Sept. 2014 — DATE
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FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
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 1, TYPE 2, TYPE 5, AND TYPE 6 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 OF THE STANDARD SPECIFICATIONS.

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.

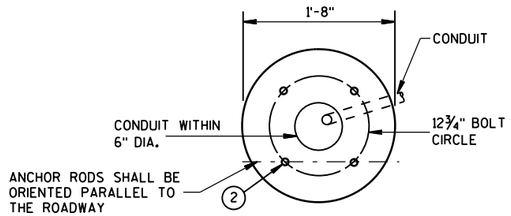
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

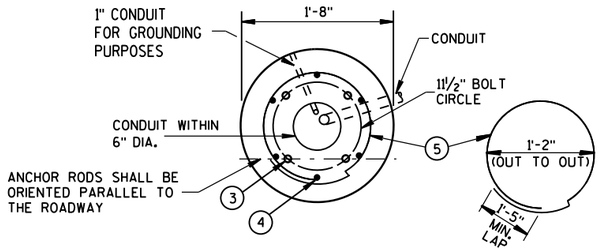
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

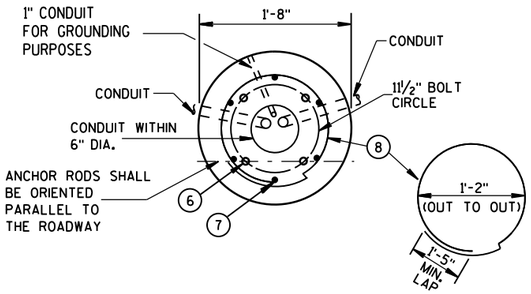
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

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

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

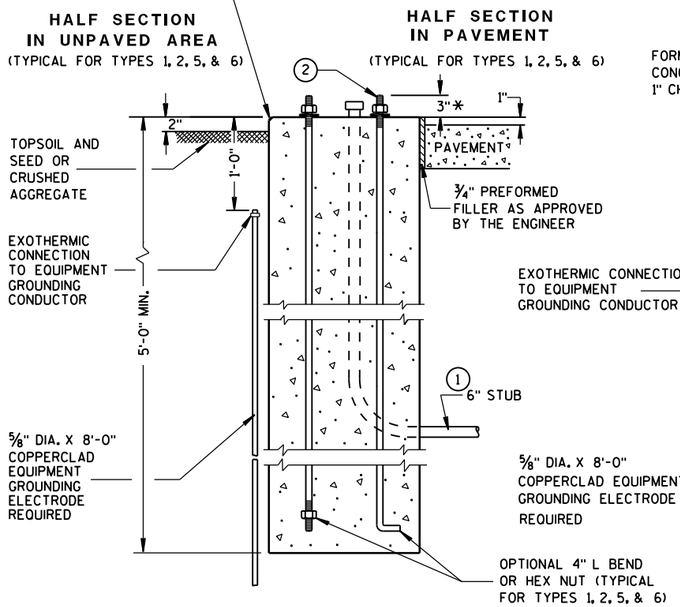






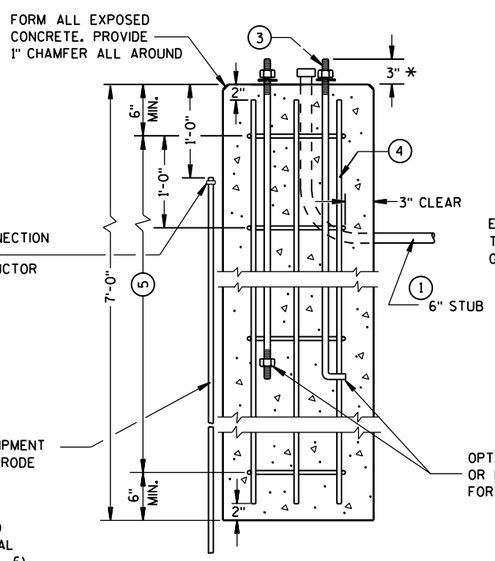
HALF SECTION IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

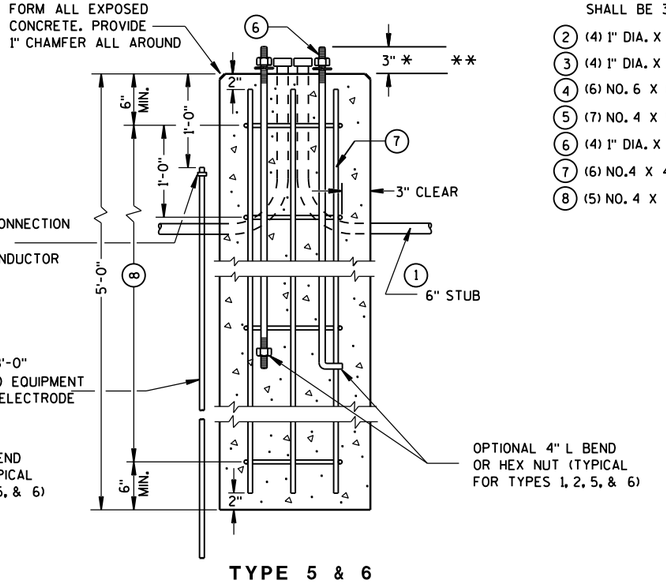


HALF SECTION IN PAVEMENT

(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 2



TYPE 5 & 6

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.

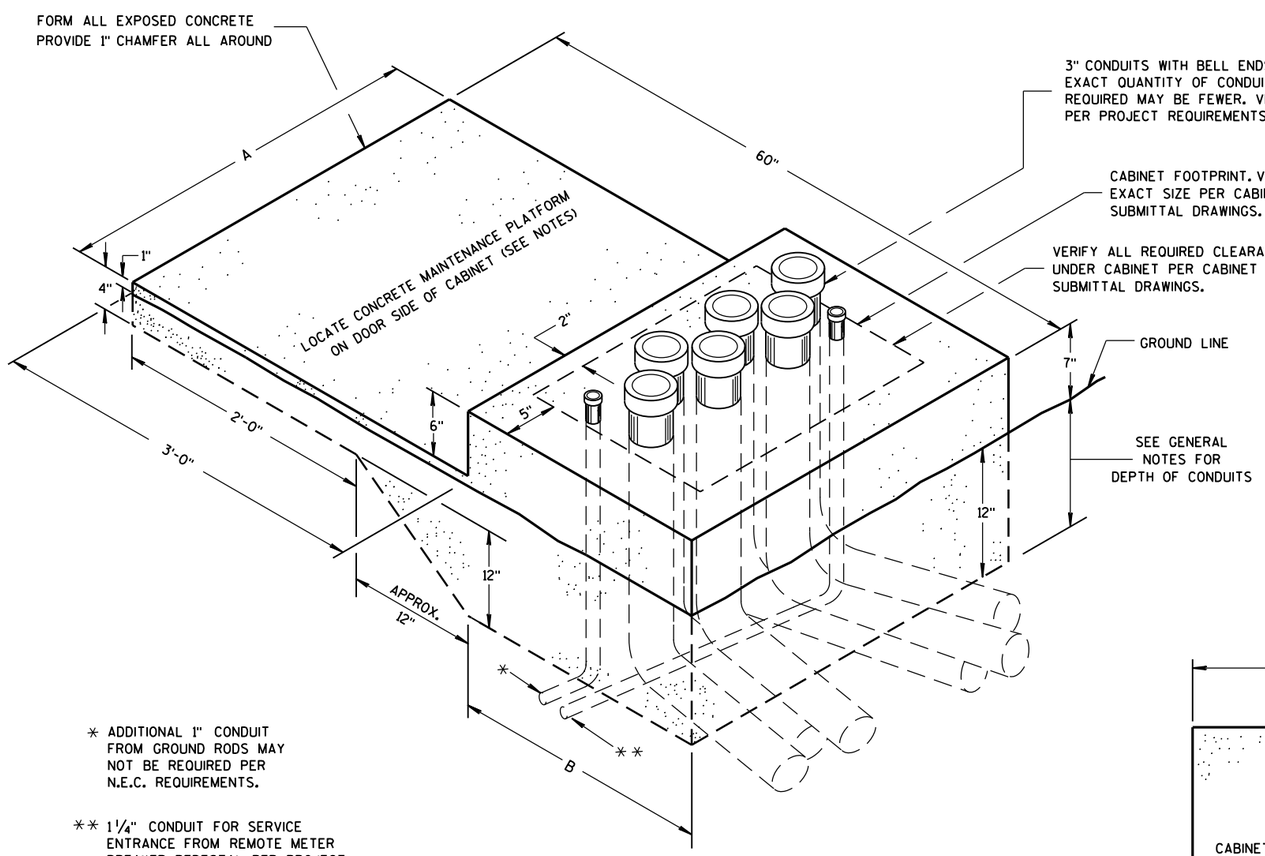
CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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Sept. 2014 — DATE
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* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

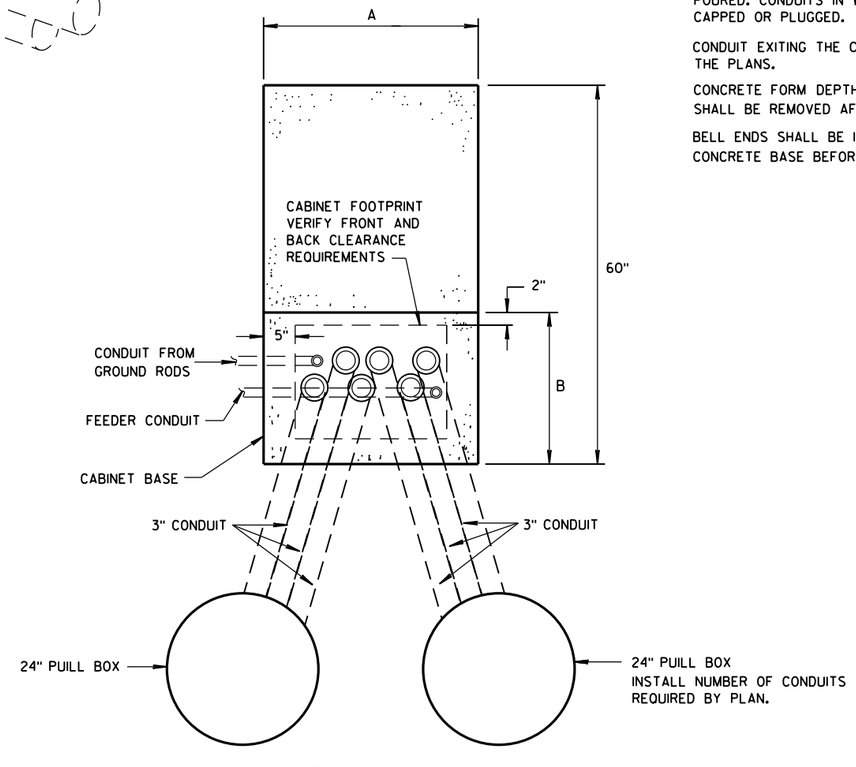
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS 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 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 L

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DEPARTMENT OF TRANSPORTATION

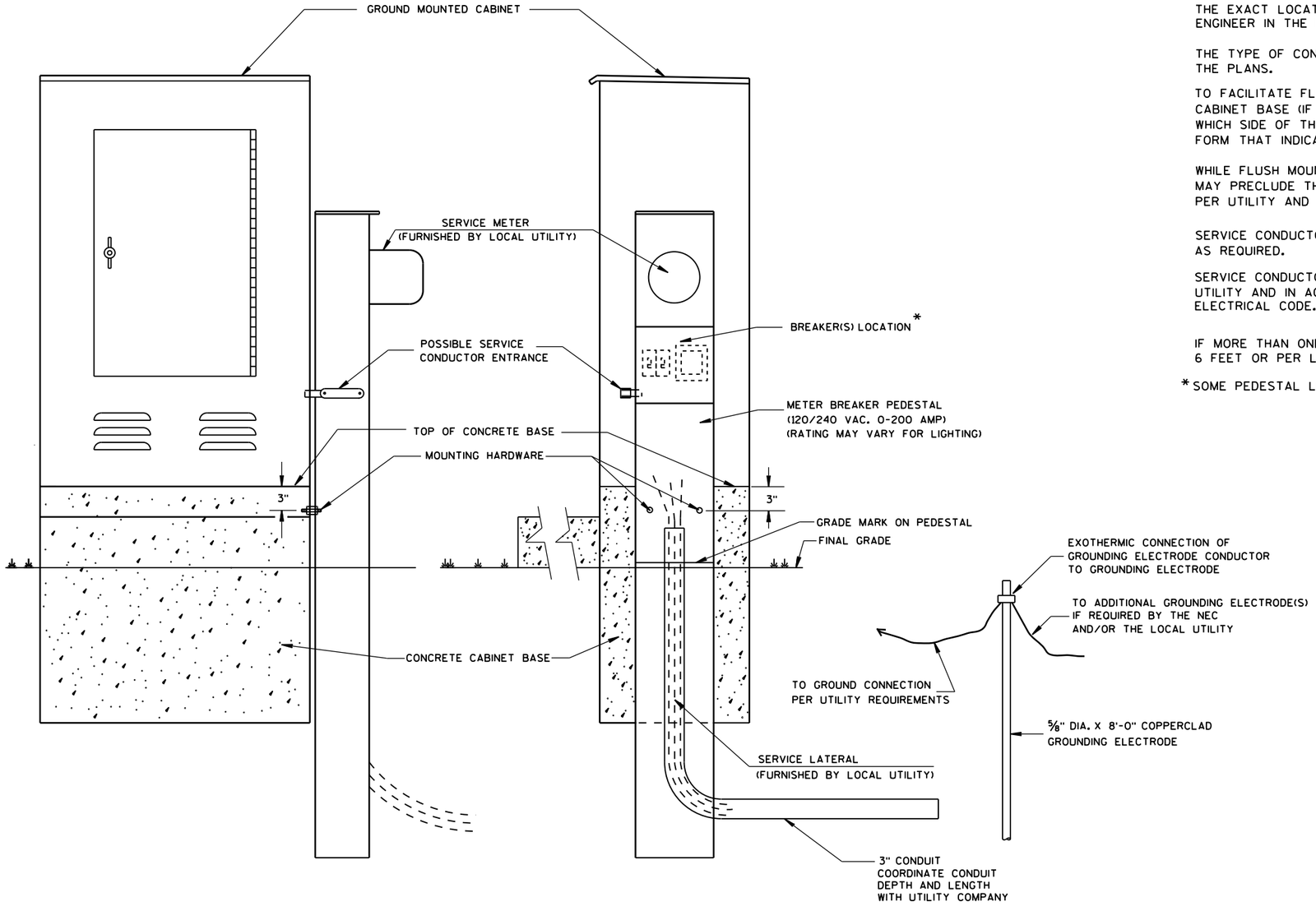
APPROVED
Nov. 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE — WYS
FHWA

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S.D.D. 9 C 14-2

6

S.D.D. 9 C 14-2



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.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 D 1-5

GENERAL NOTES

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

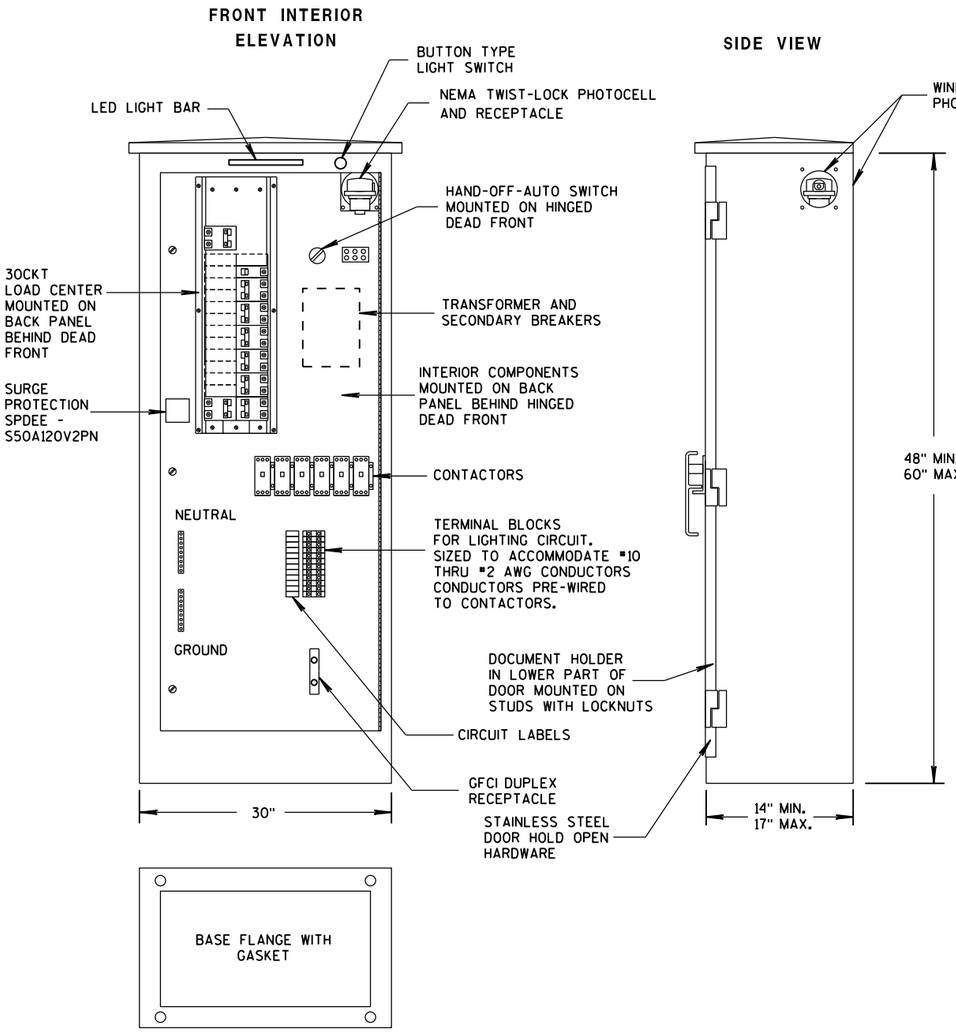
ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

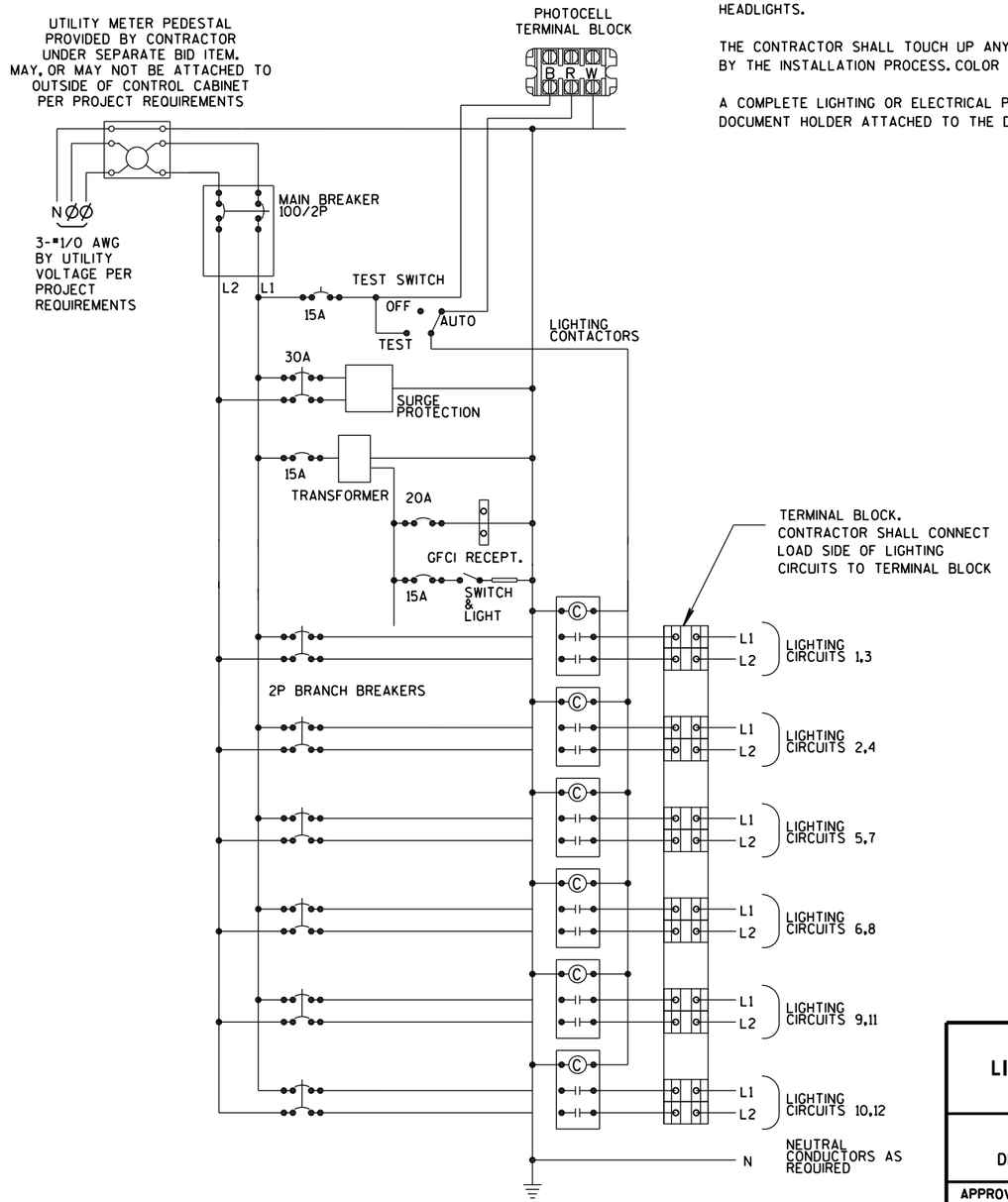
ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.



LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

L30
LIGHTING CONTROL CABINET
240/480 VOLT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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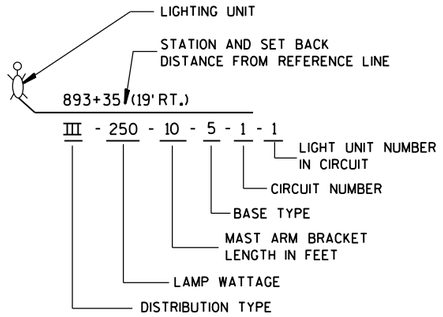
Sept. 2015 — DATE

/S/ Thomas Gonring — STATE LIGHTING ENGINEER

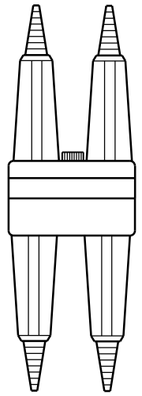
WYS.

FHWA

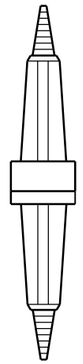
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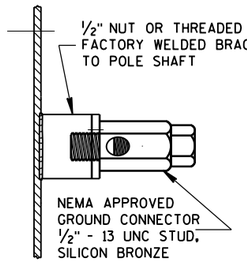
LIGHTING UNIT CODE
(TYPICAL)

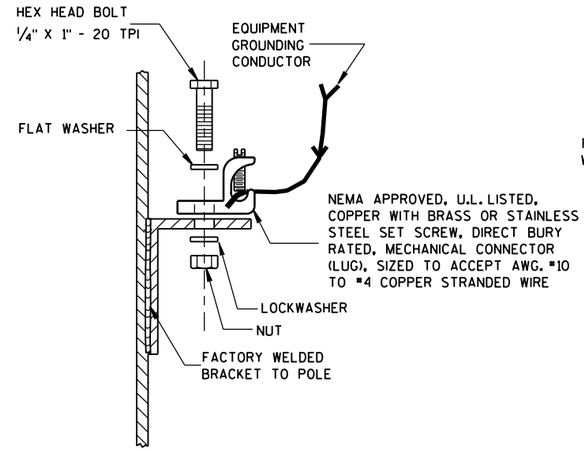


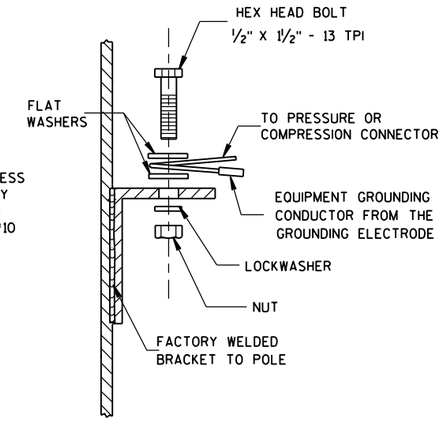
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



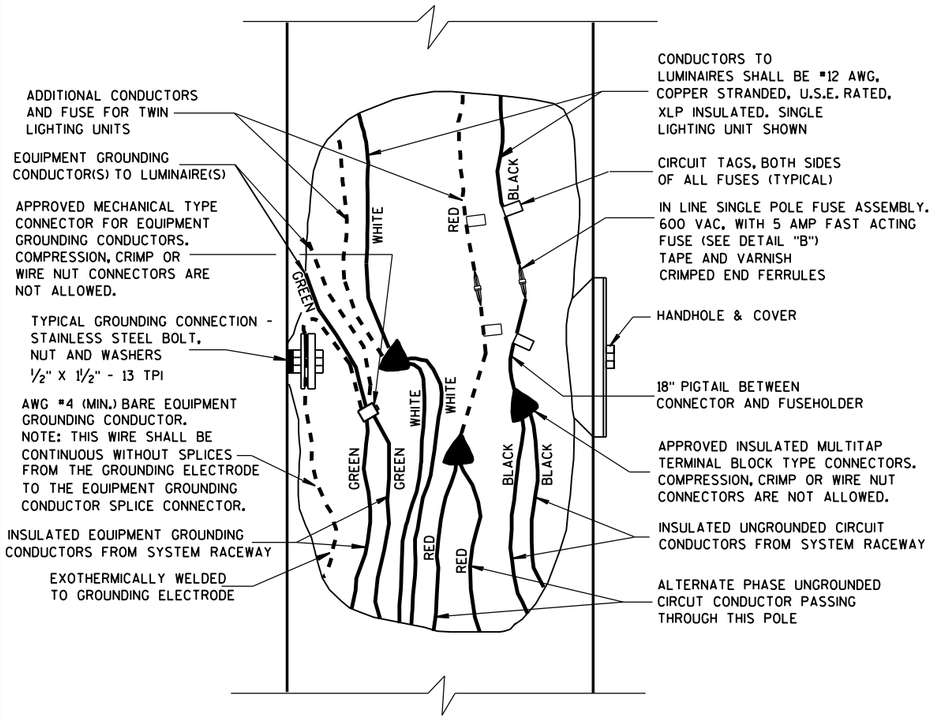
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



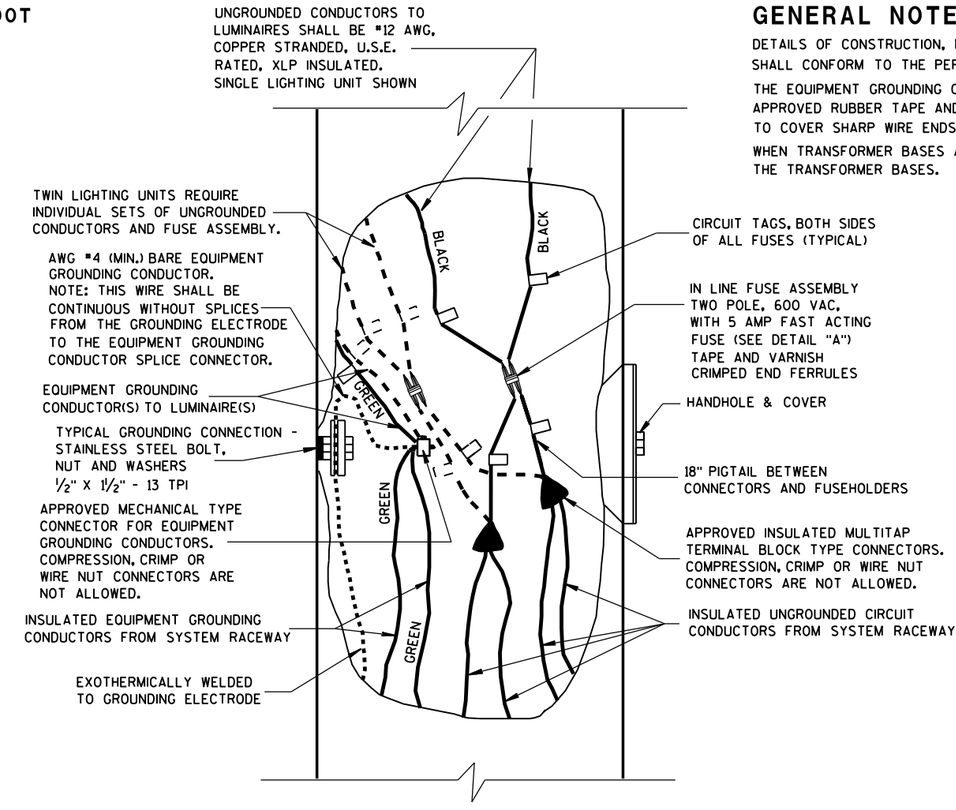




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



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



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

GENERAL NOTES

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

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

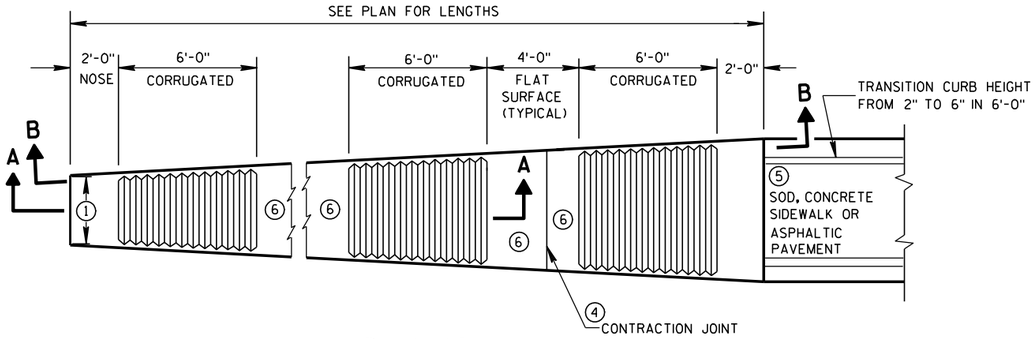
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

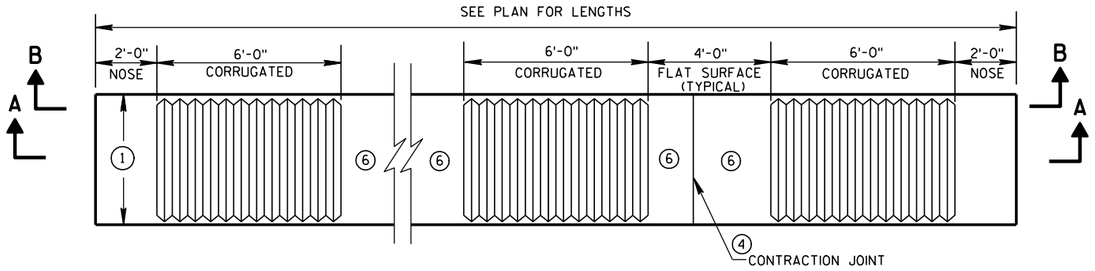
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 E 3-5



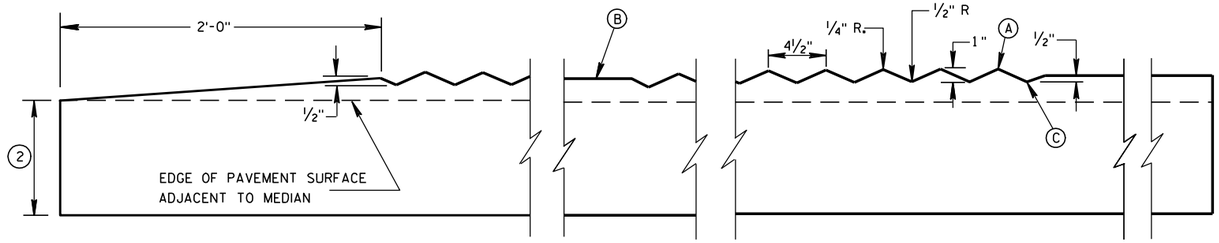
PLAN VIEW

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.

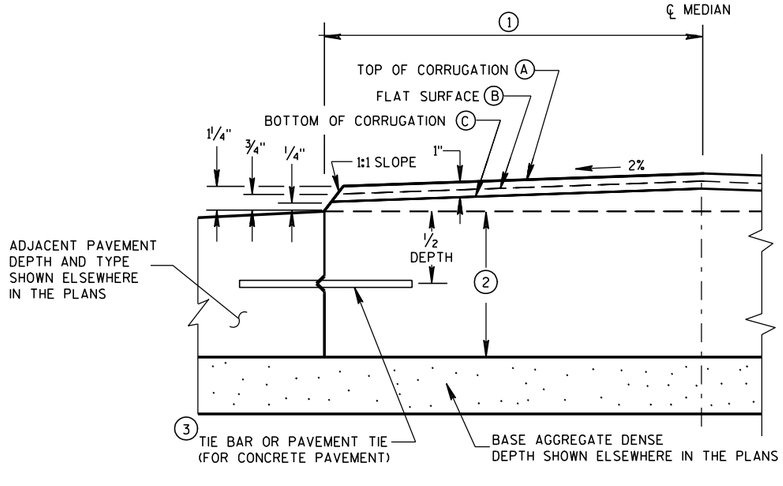
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

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.

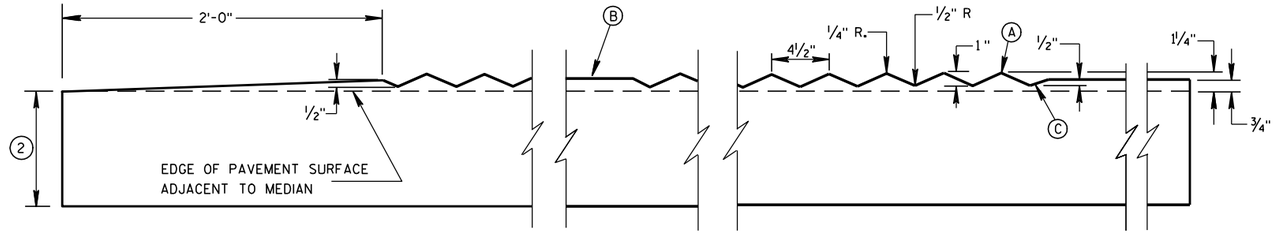
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(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

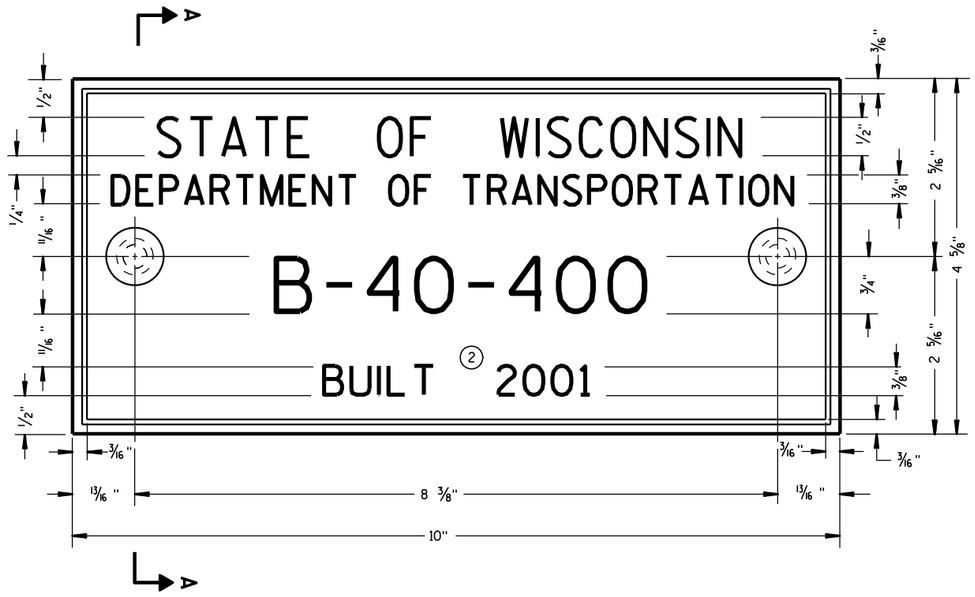
FHWA

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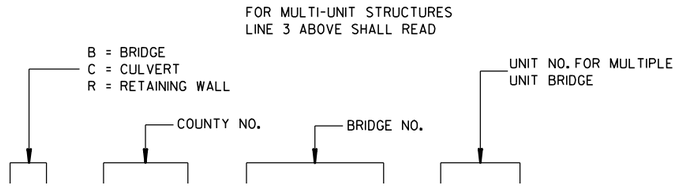
S.D.D. 11 B 1-5

6

S.D.D. 11 B 1-5



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

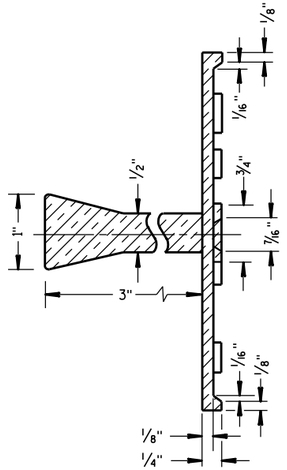
GENERAL NOTES

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

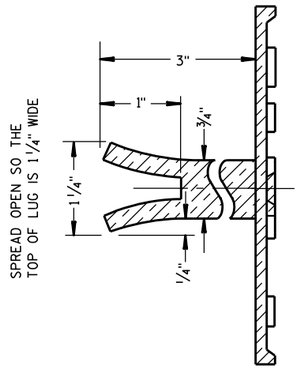
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

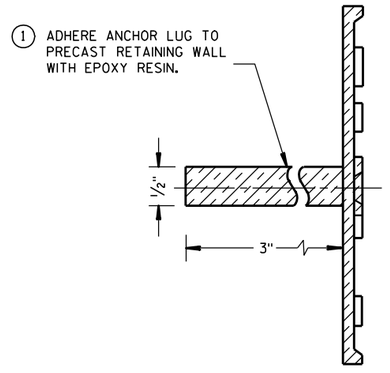
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



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

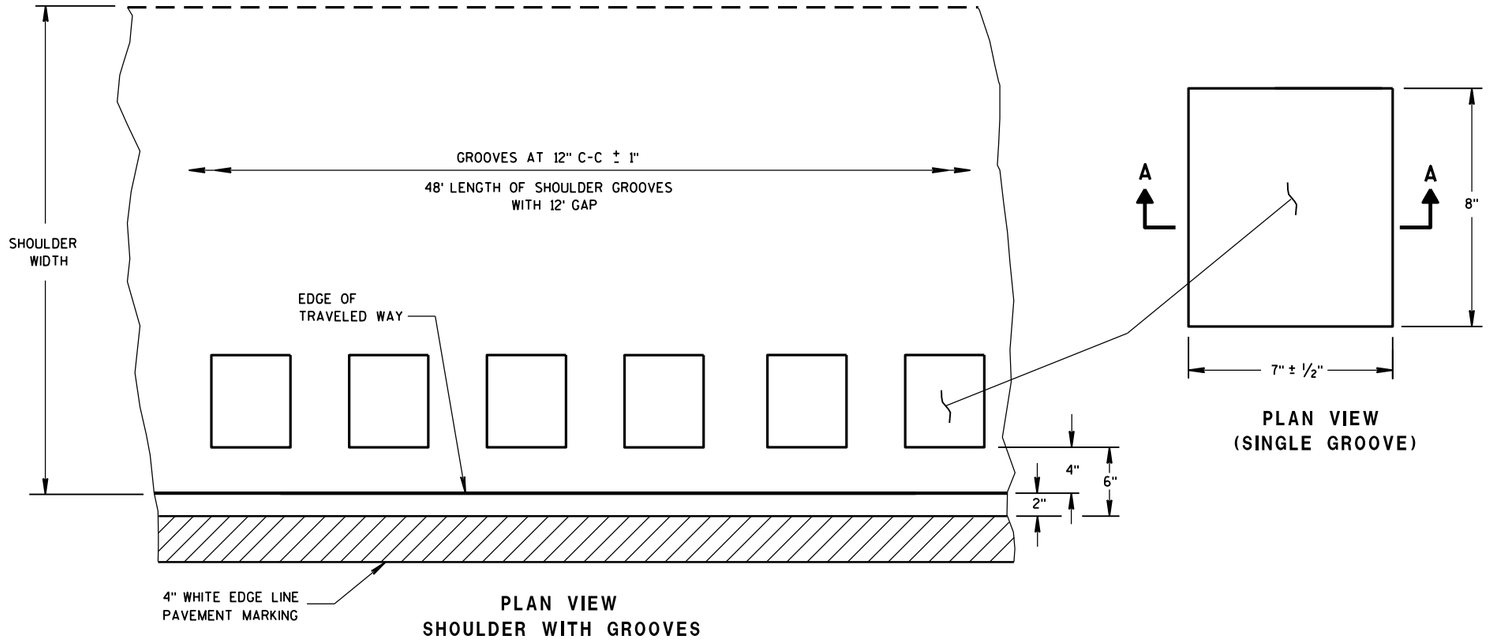
FHWA

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S.D.D. 12 A 3-10

6

S.D.D. 12 A 3-10



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

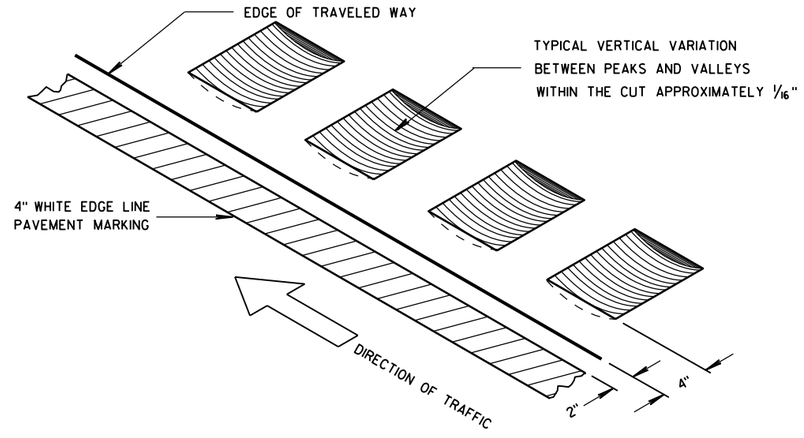
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

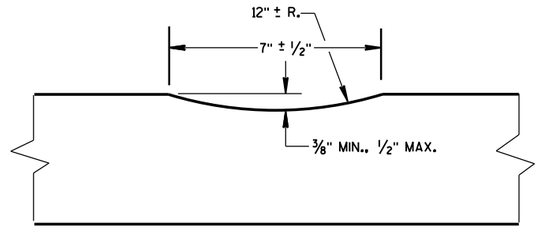
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

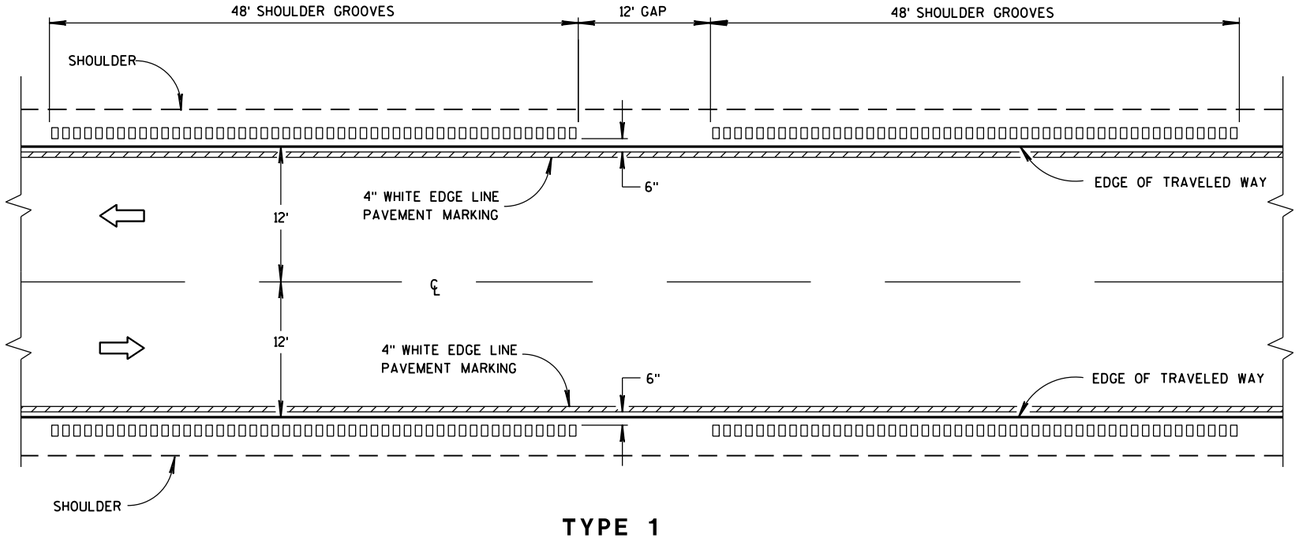
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



SECTION A-A



TYPE 1
2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

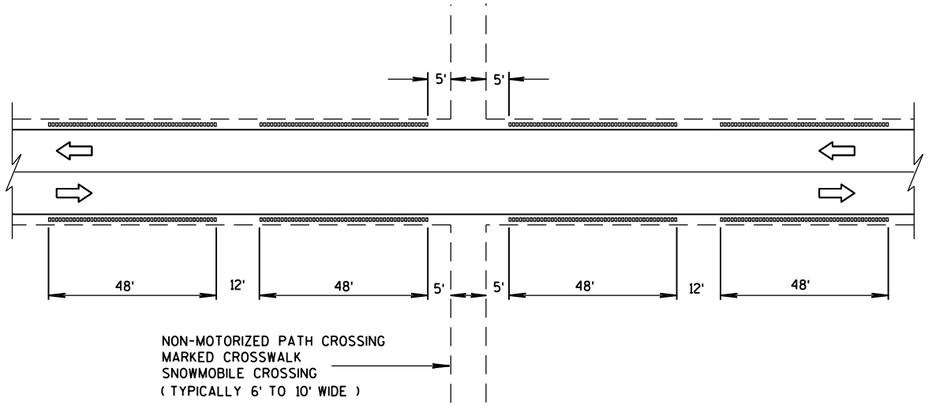
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

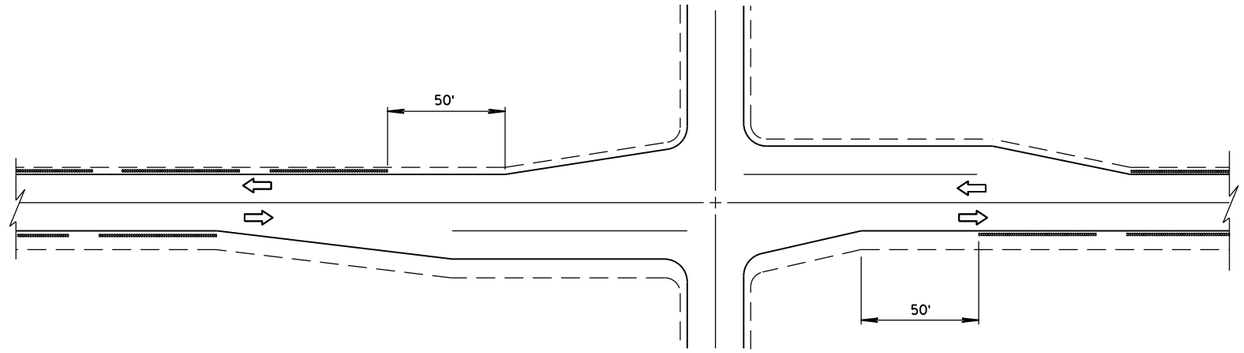
S.D.D. 13 A 10-1a

6

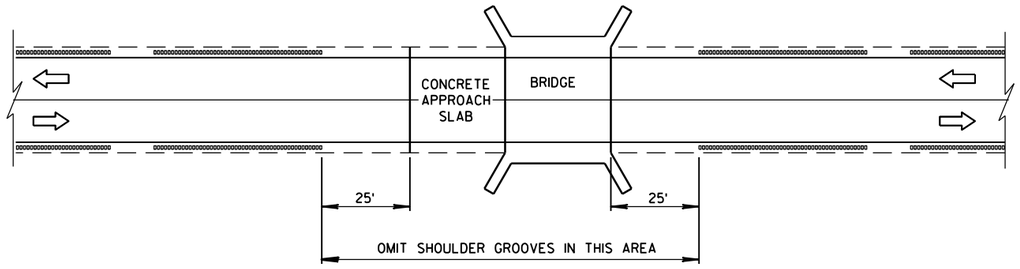
S.D.D. 13 A 10-1a



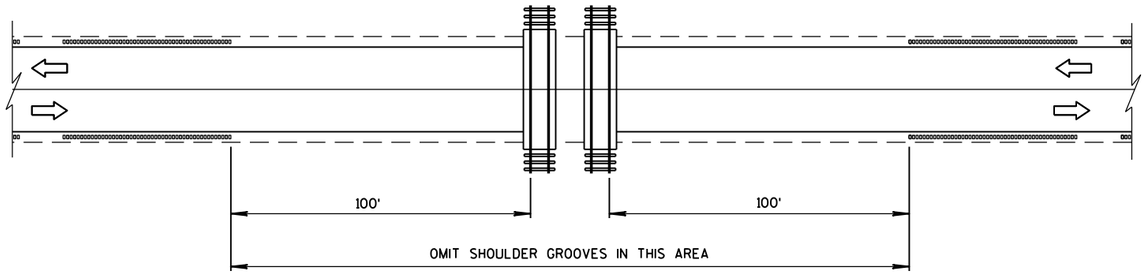
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



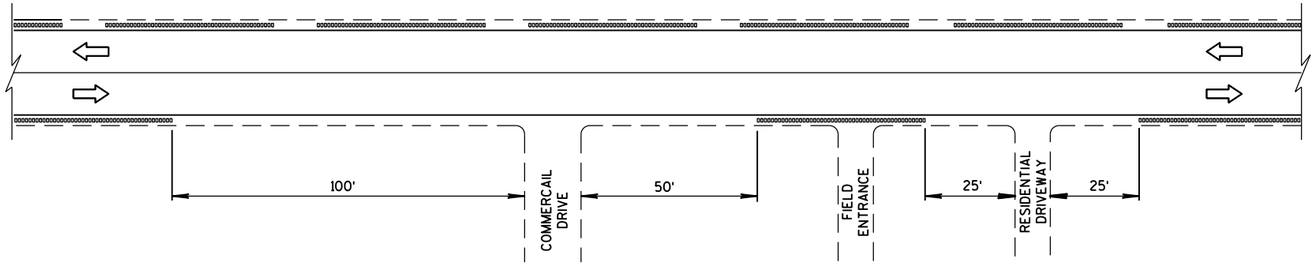
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT DRIVEWAYS (1)

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

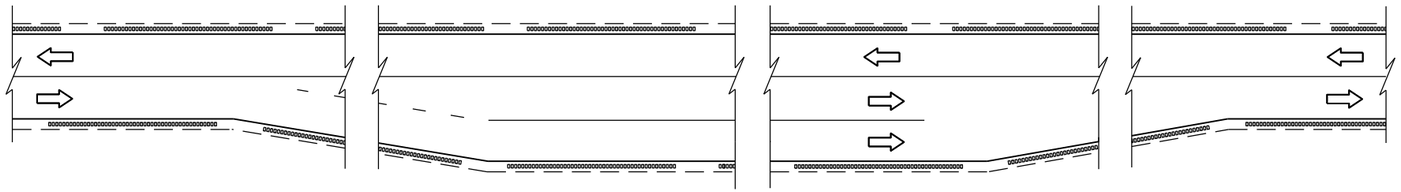
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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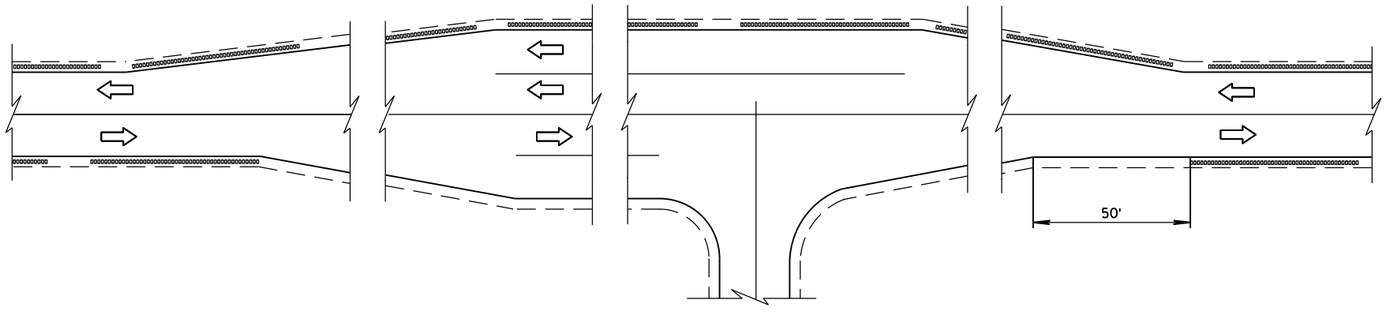
S.D.D. 13 A 10-1c

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

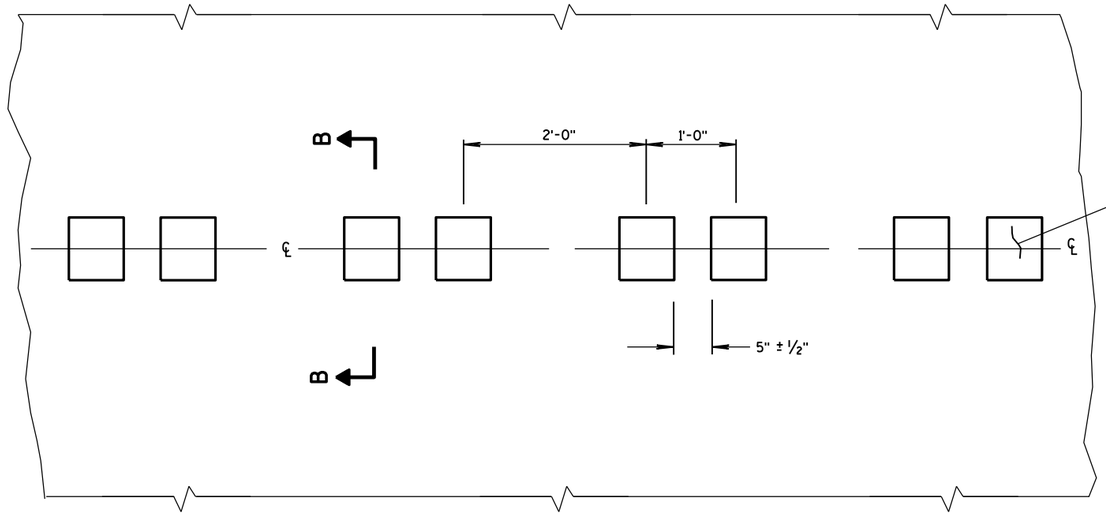
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

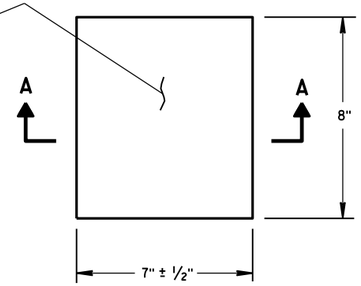
12/17/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA



PLAN VIEW
CENTER LINE WITH GROOVES



PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

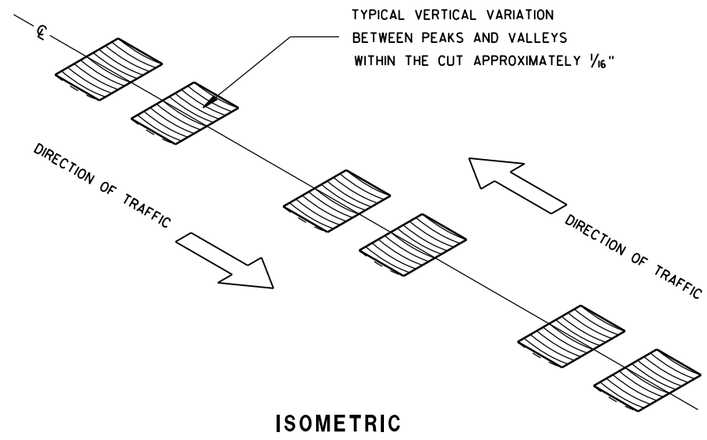
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

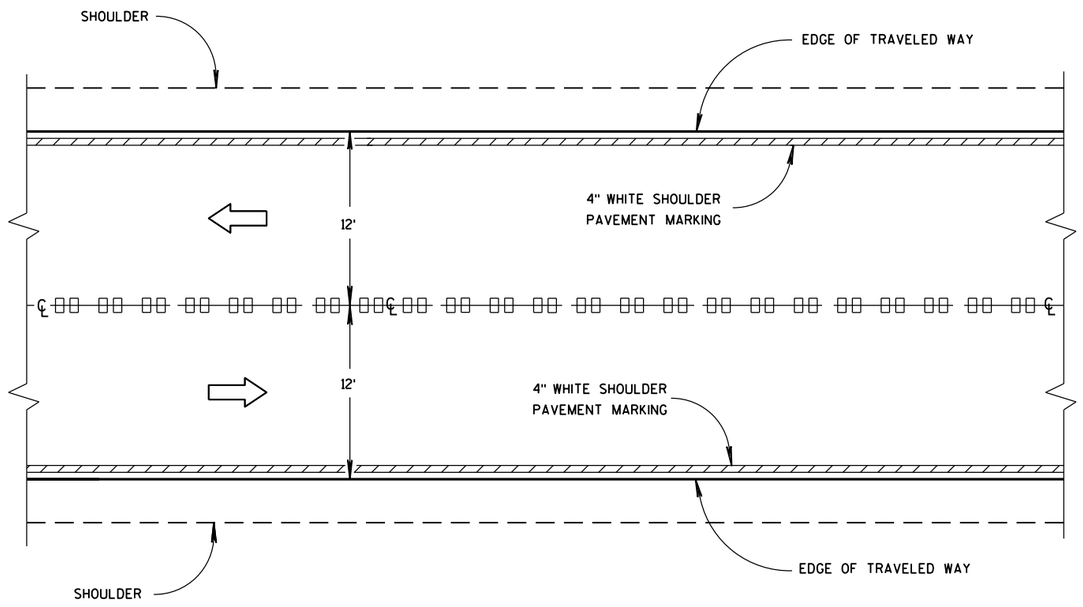
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

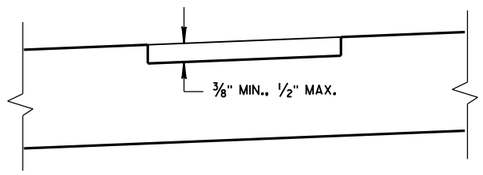
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



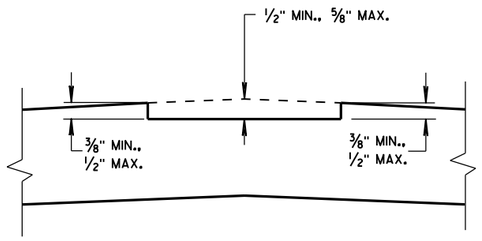
ISOMETRIC



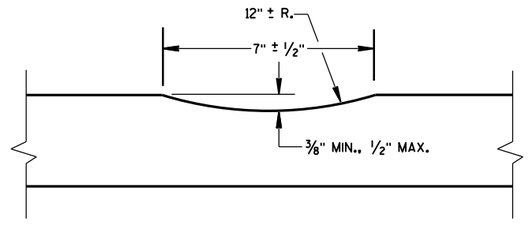
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

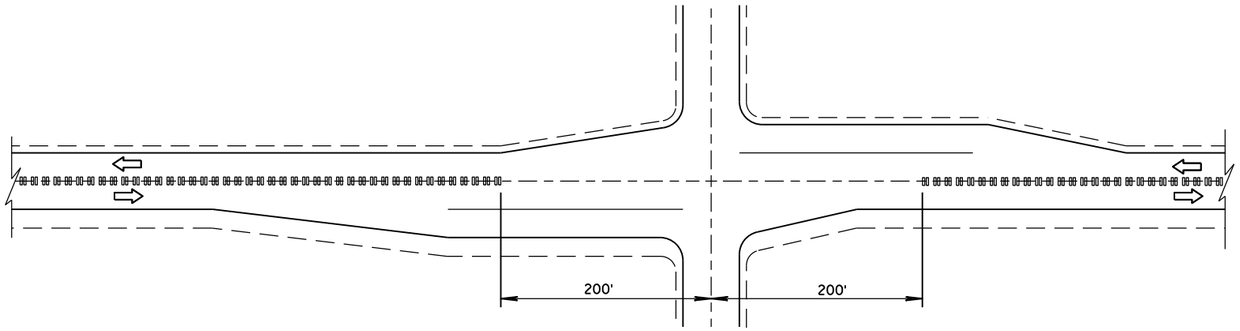
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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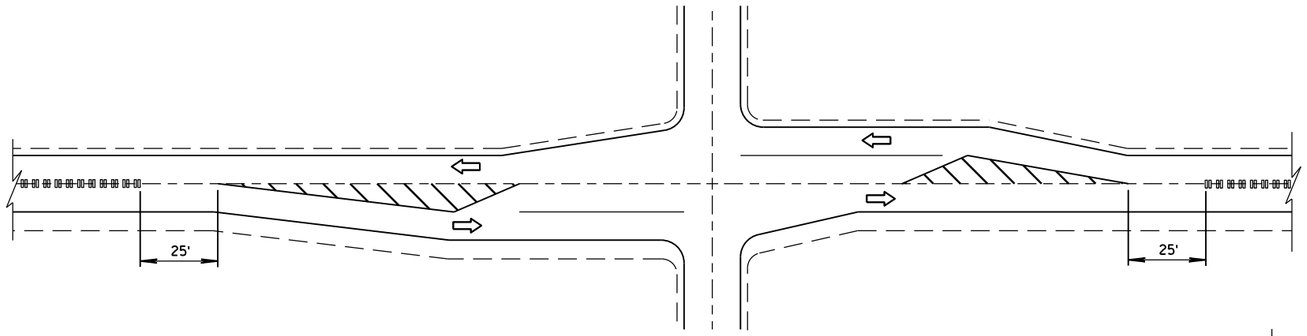
S.D.D. 13 A 11-2a

6

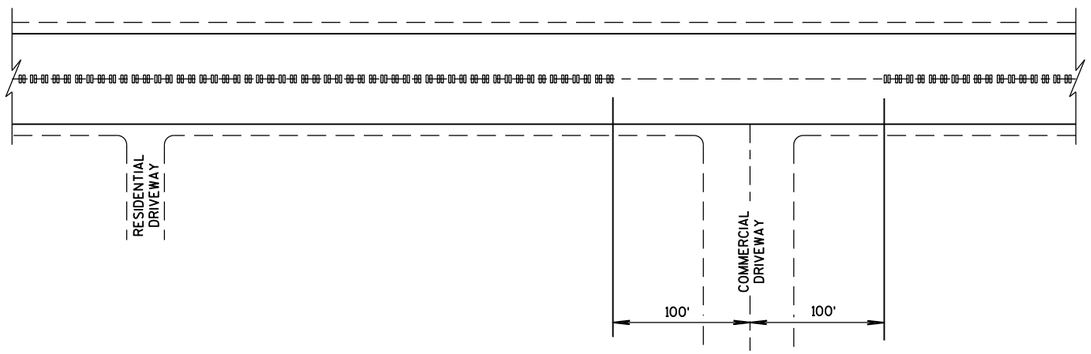
S.D.D. 13 A 11-2a



CENTER LINE GROOVES AT INTERSECTIONS

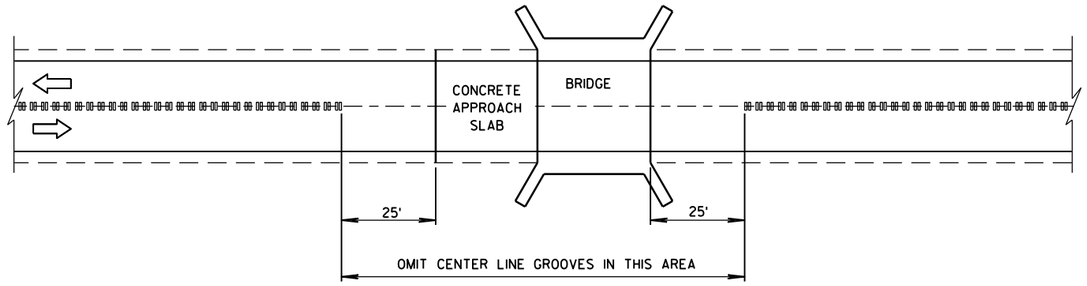


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

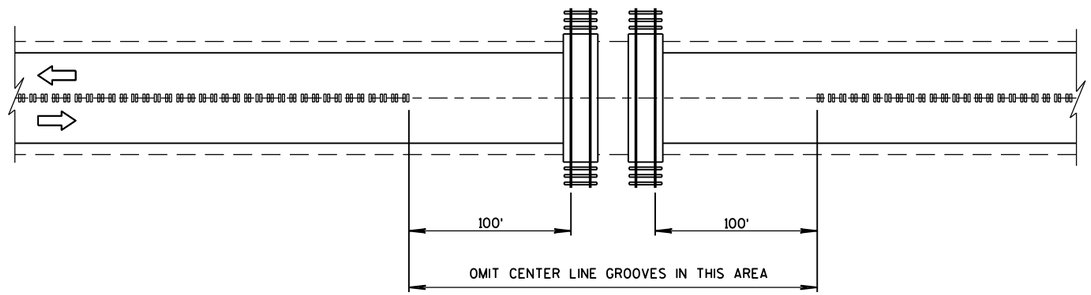


CENTER LINE GROOVES AT DRIVEWAYS (1)

(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

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/15/2013
DATE

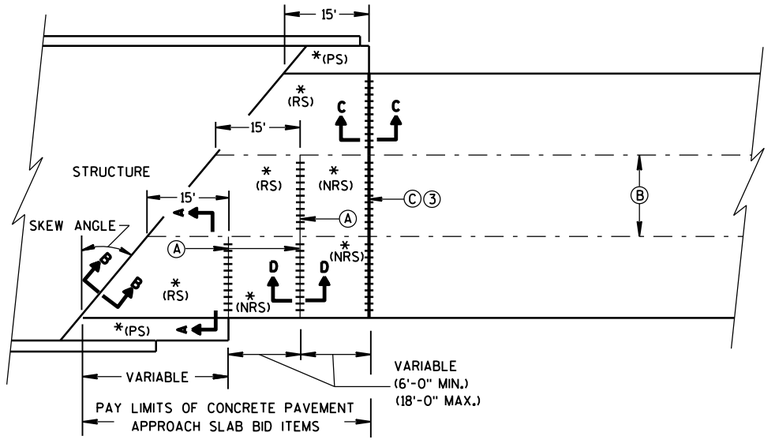
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

NT

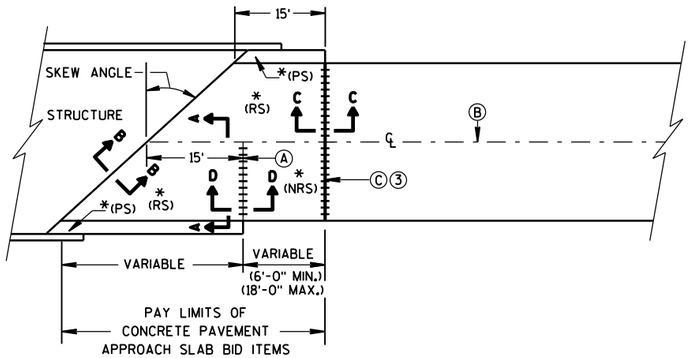
FHWA

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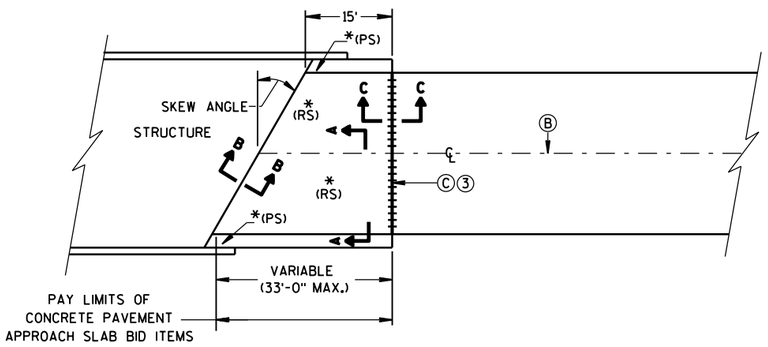
S.D.D. 13 A 11-2b



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >20°
(PAVEMENT WIDTH ≤30')



SKEWS ≤20°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

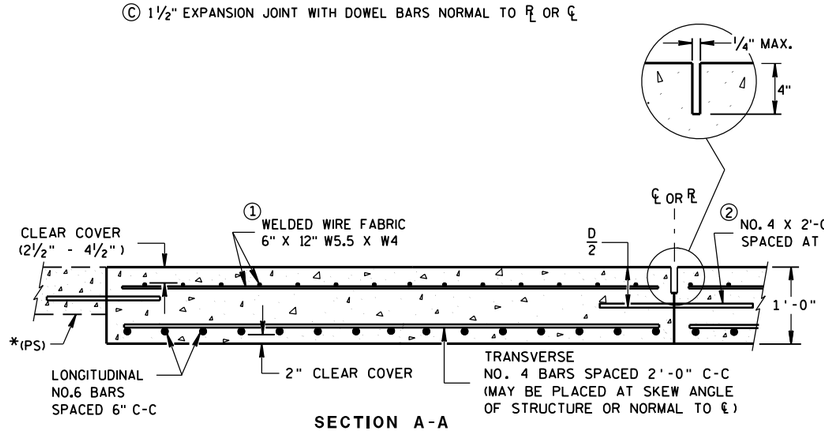
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

***STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

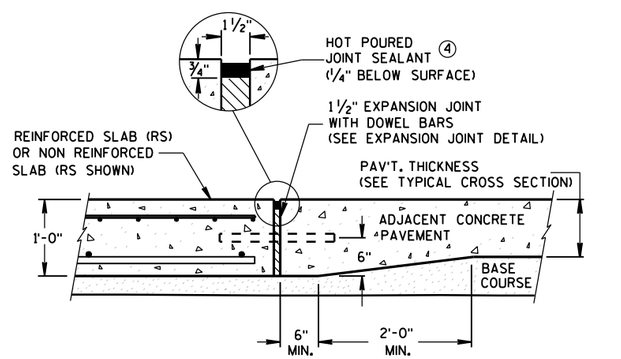
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.

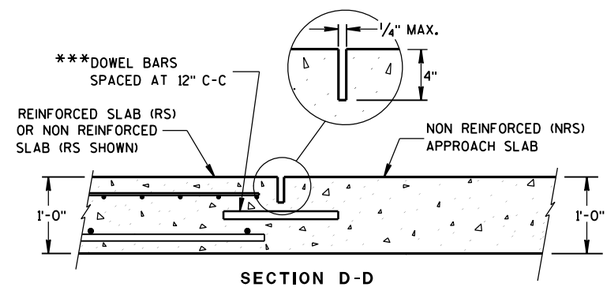
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

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.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

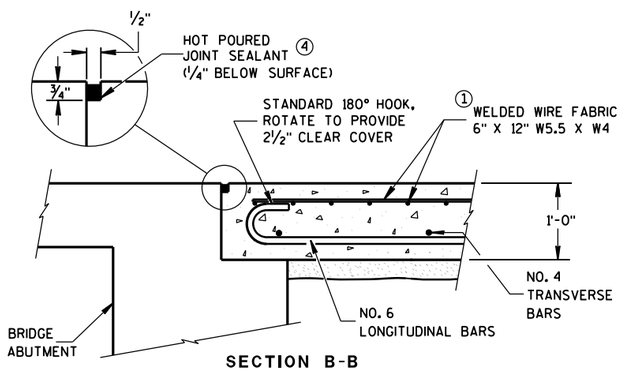
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

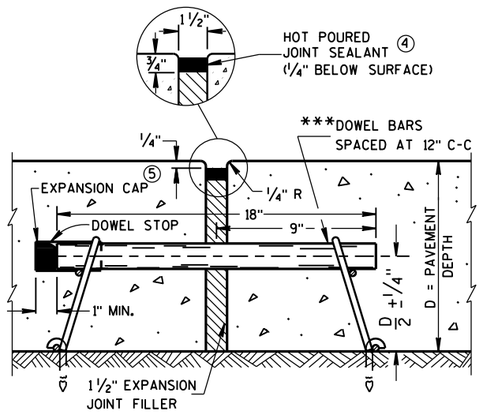
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

④ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.

⑤ PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

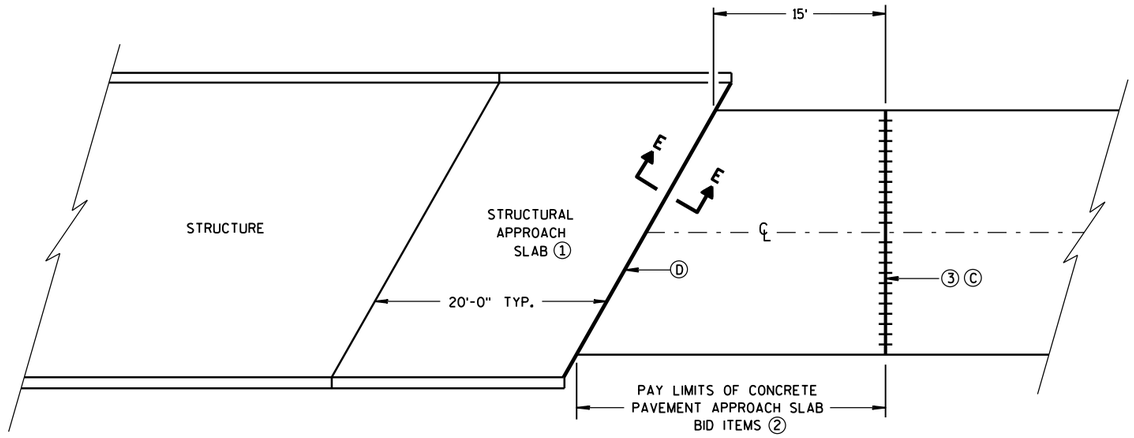
6

S.D.D. 13 B 2-8a

6

S.D.D. 13 B 2-8a

BRIDGE APPROACHES



GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

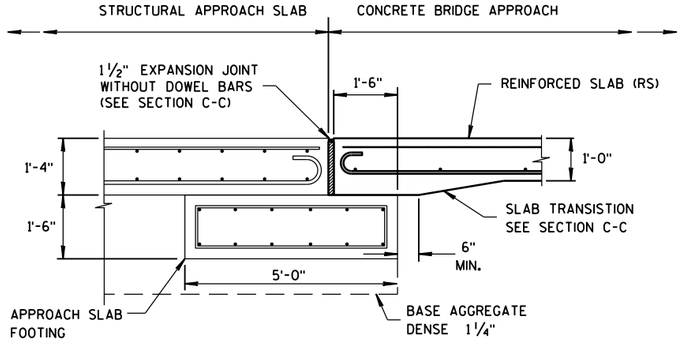
① SEE BRIDGE PLAN.

② CONFORM TO SHEET 13 B 2(A) FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS.

③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION E-E

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

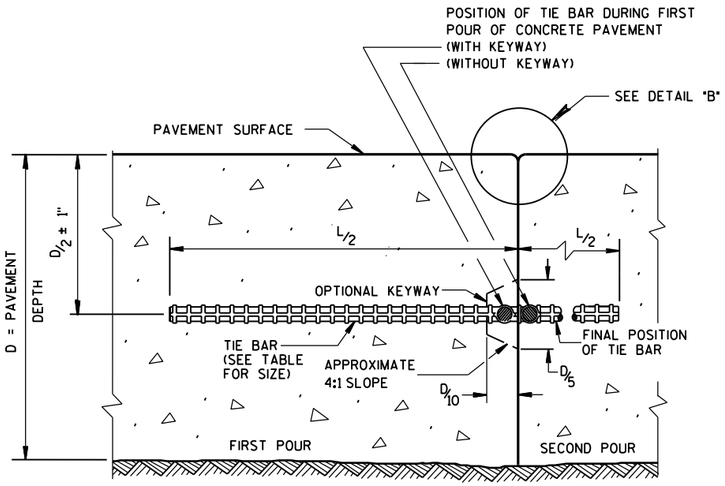
STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

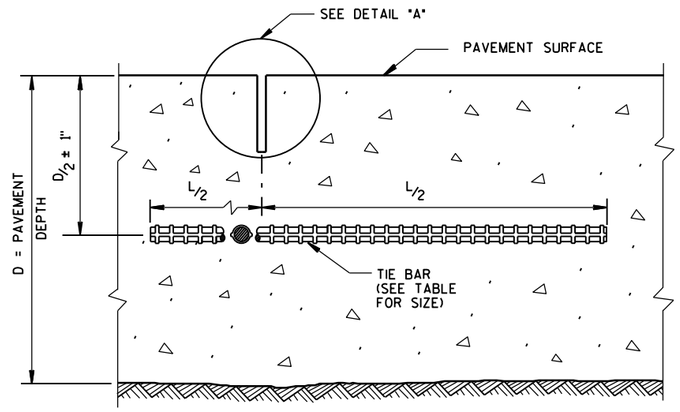
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEF
FHWA

6

S.D.D. 13 B 2-8b



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

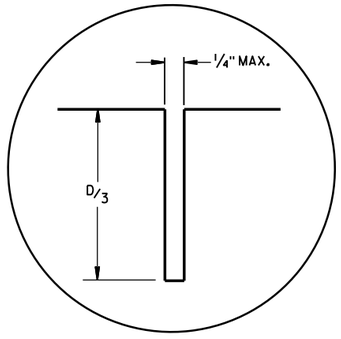
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

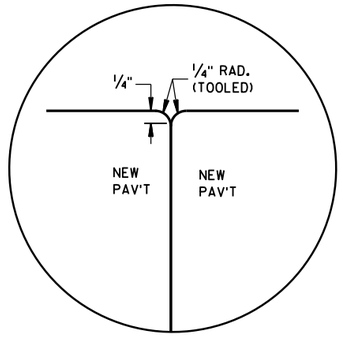
PLAN VIEW

SECTION A-A

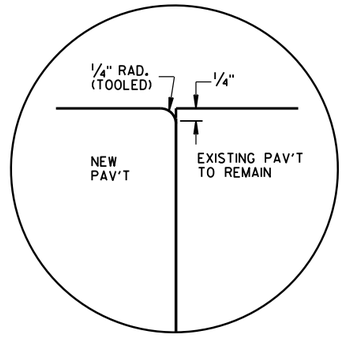
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



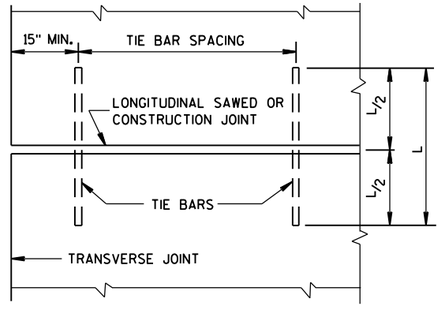
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

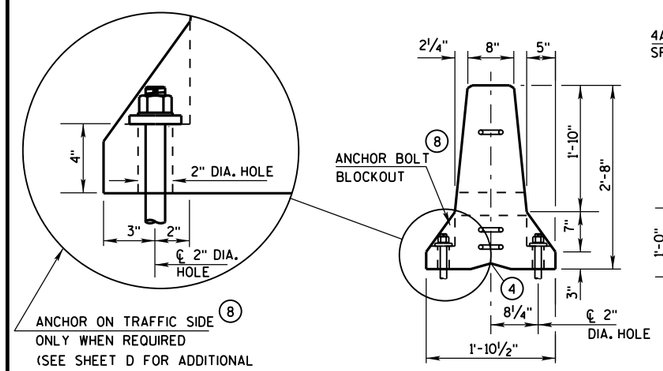
CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

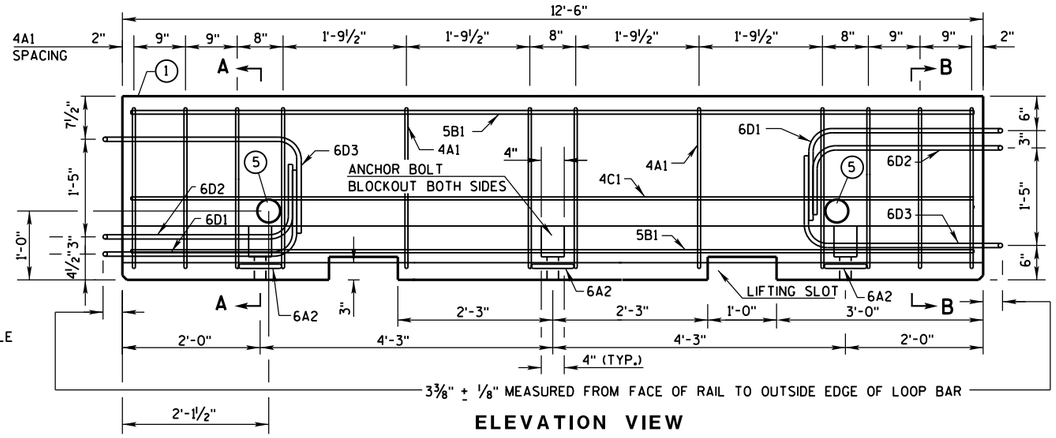
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

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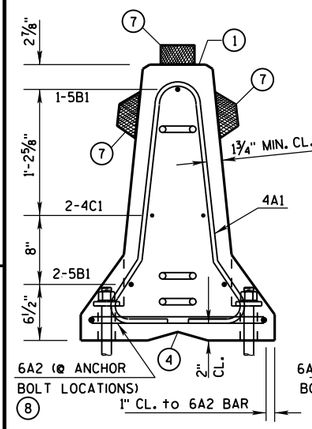
S.D.D. 13 C 1-18



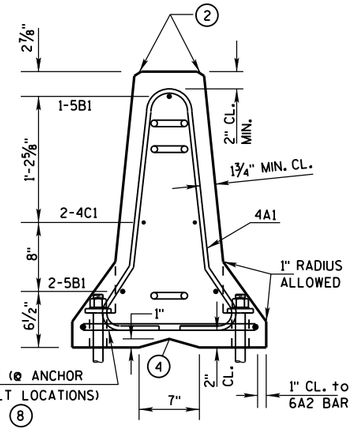
END VIEW



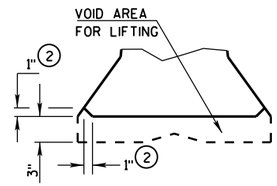
ELEVATION VIEW



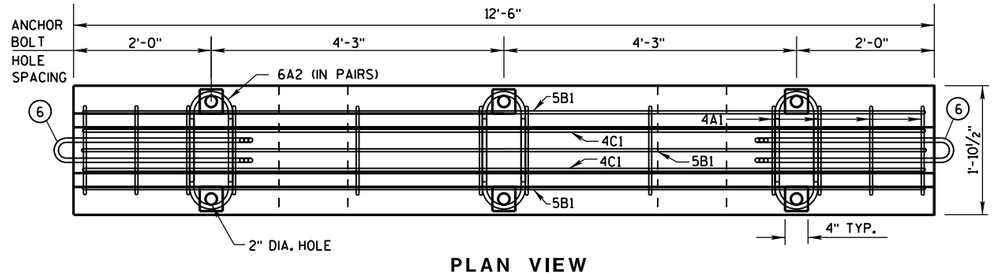
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

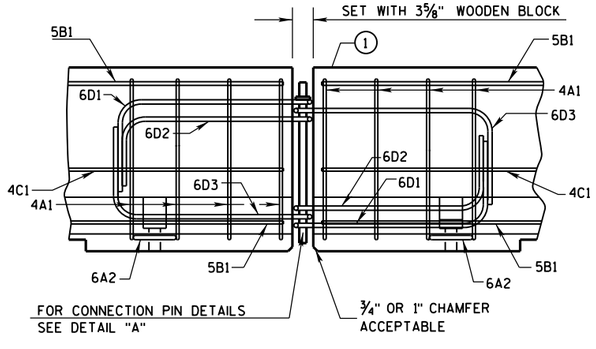


DETAIL "B"
LIFTING SLOT DETAIL

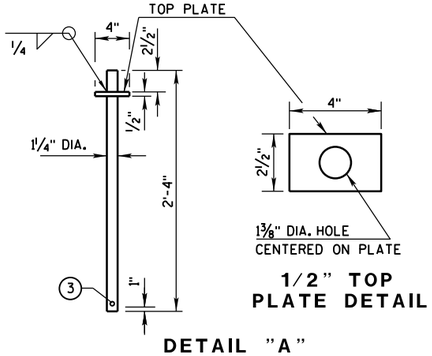


PLAN VIEW

DETAILS OF BARRIER SECTION

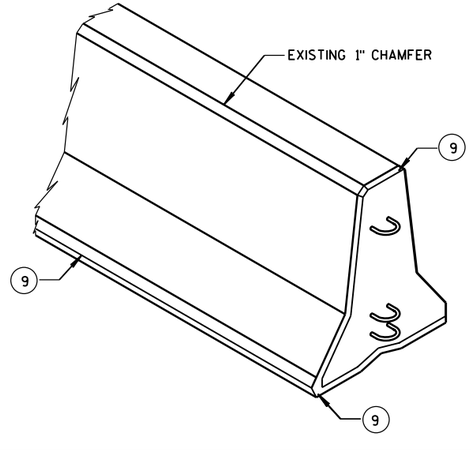


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(a) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR ANCHORING CRITERIA.

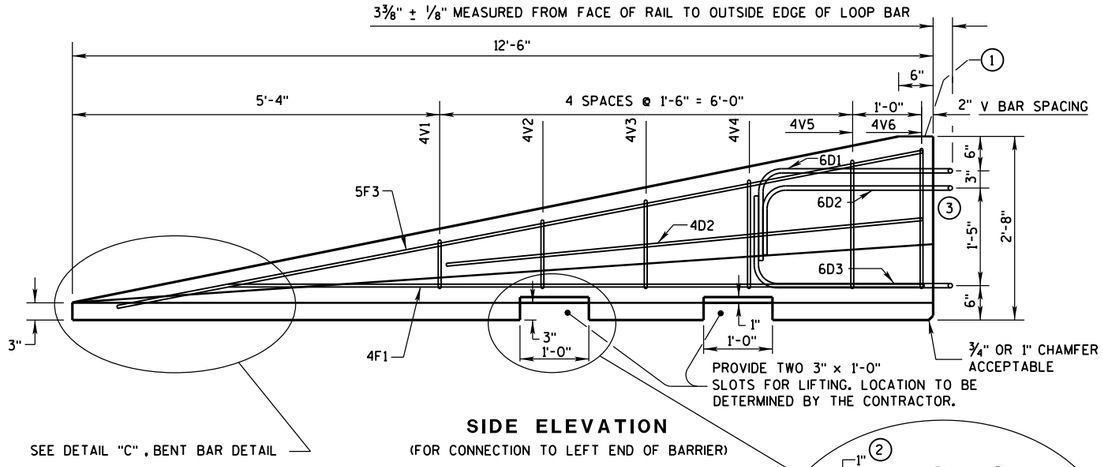
(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

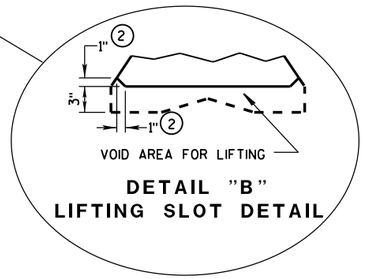
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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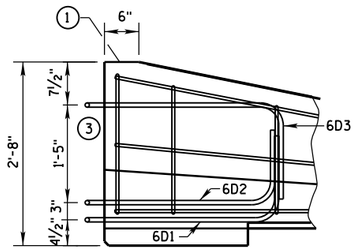
S.D.D. 14 B 7-14a



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



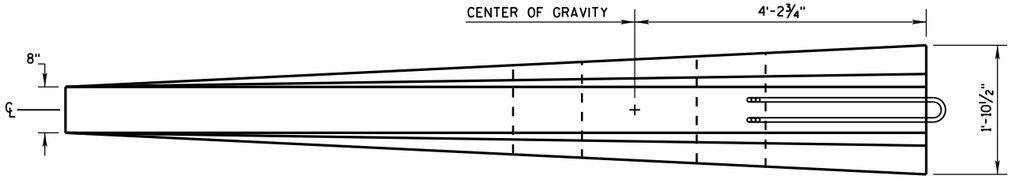
DETAIL "B"
LIFTING SLOT DETAIL



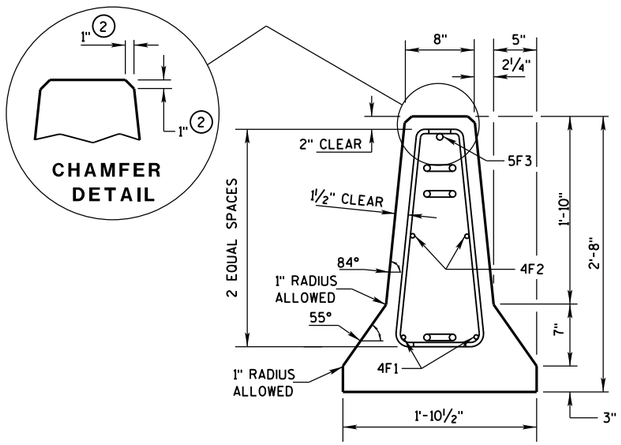
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

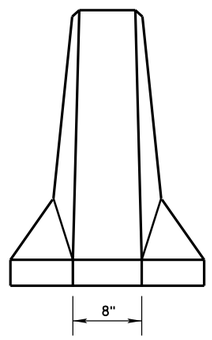
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



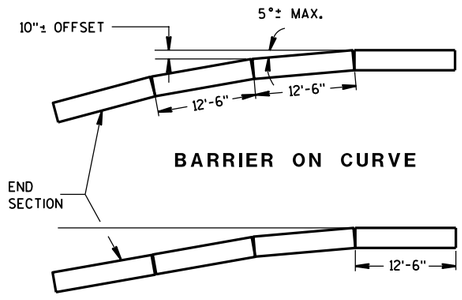
PLAN VIEW



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

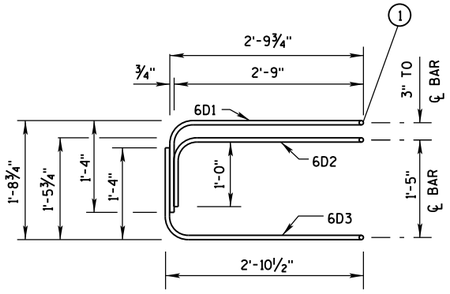
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 7-14b

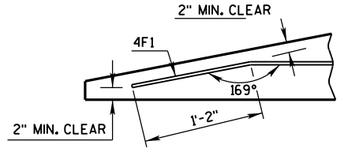
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

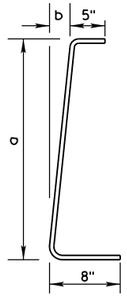
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

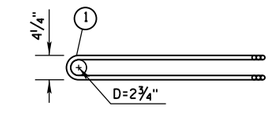
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

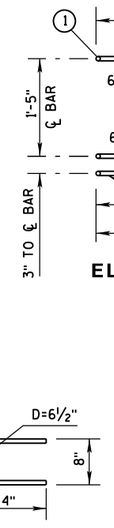
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

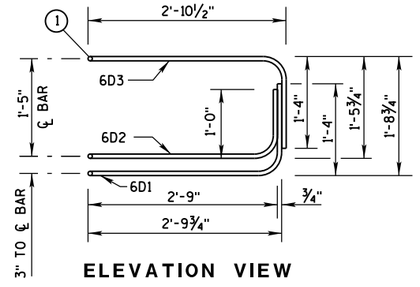
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



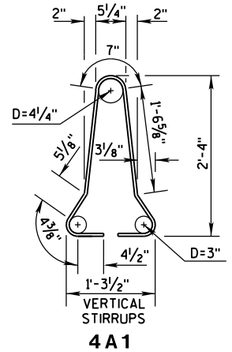
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



ELEVATION VIEW



4A1

BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

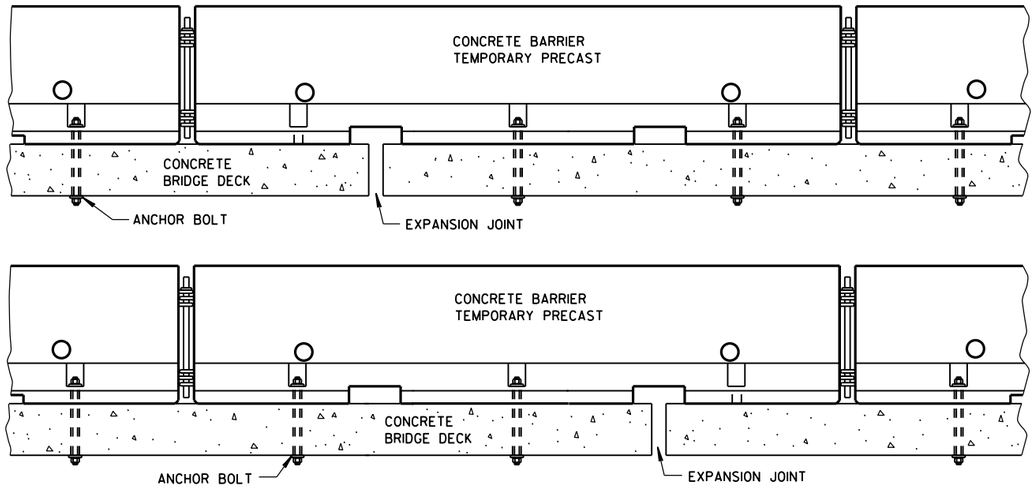
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 188

6

S.D.D. 14 B 7-14c

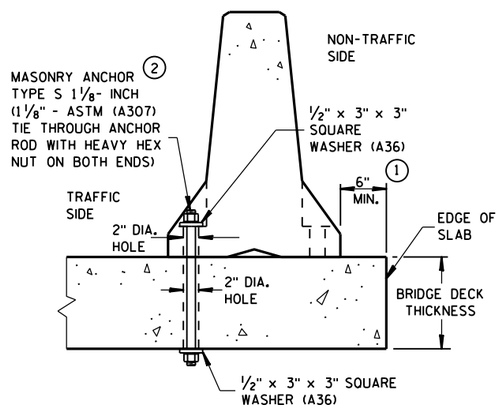
6

S.D.D. 14 B 7-14c



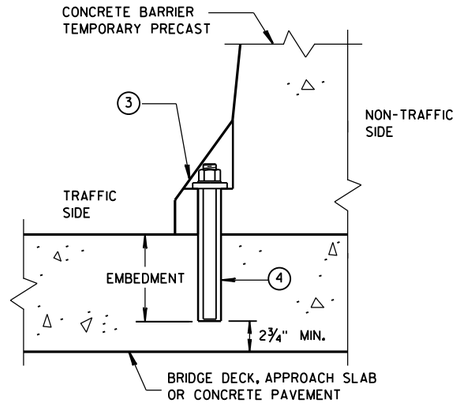
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT ②

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

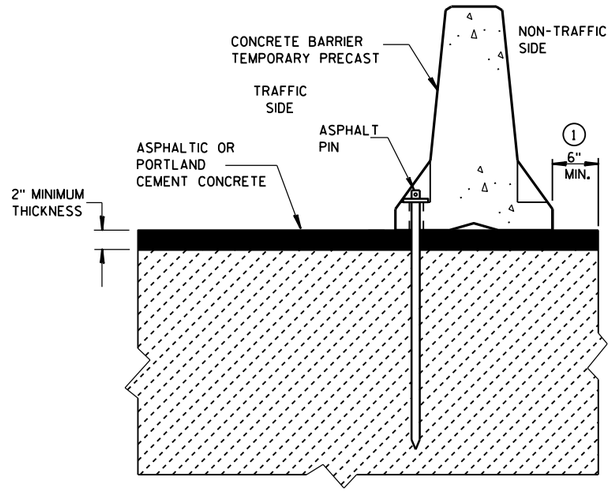
② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

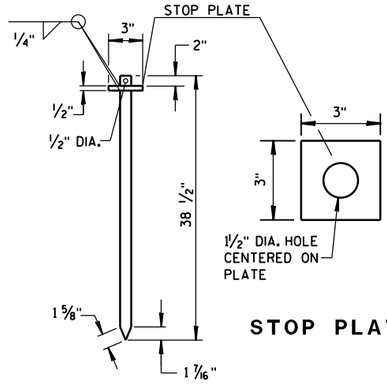
③ 1⅛" DIAMENTER A307 THREADED ROD, ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.

④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

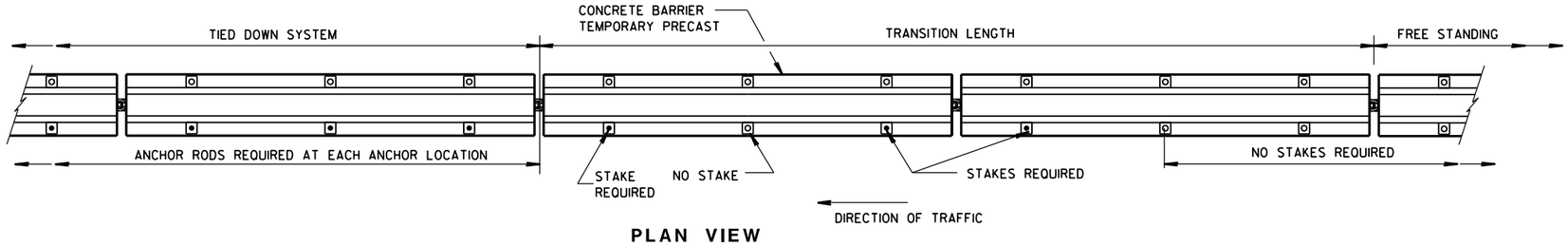
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



PLAN VIEW

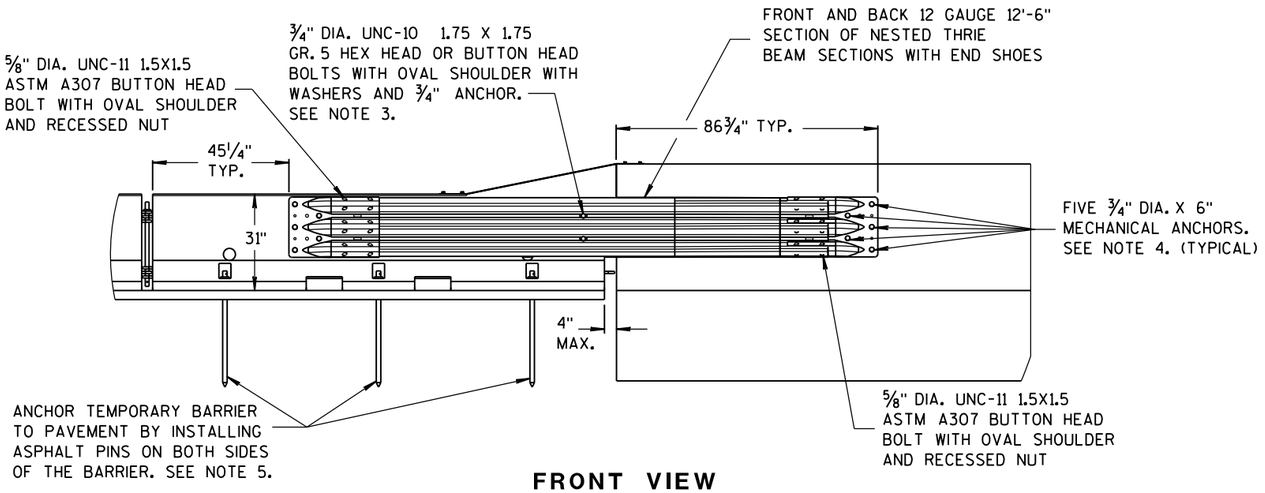
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

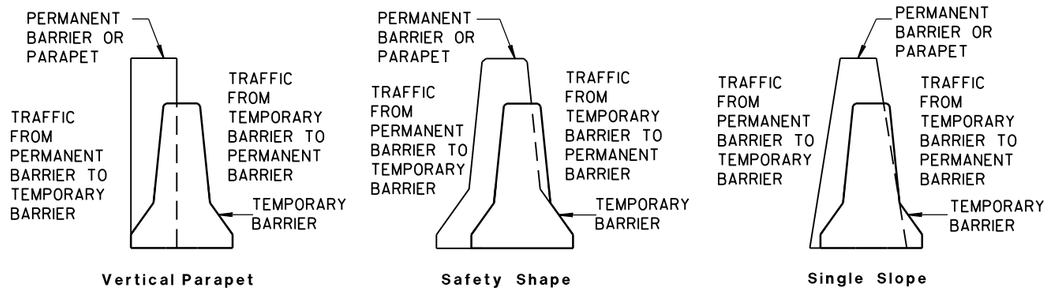
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-14d



FRONT VIEW



TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

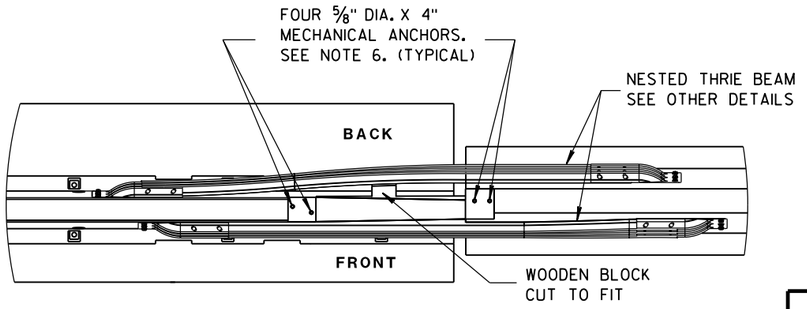
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

BACK VIEW

FRONT VIEW



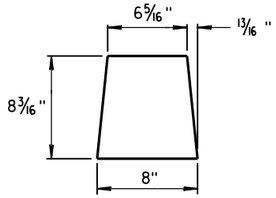
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

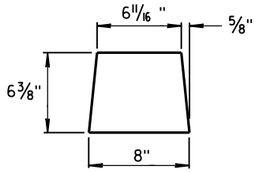
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

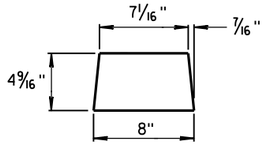
6
S.D.D. 14 B 7-14e



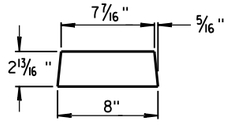
GUSSET 1



GUSSET 2

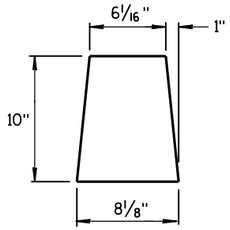


GUSSET 3

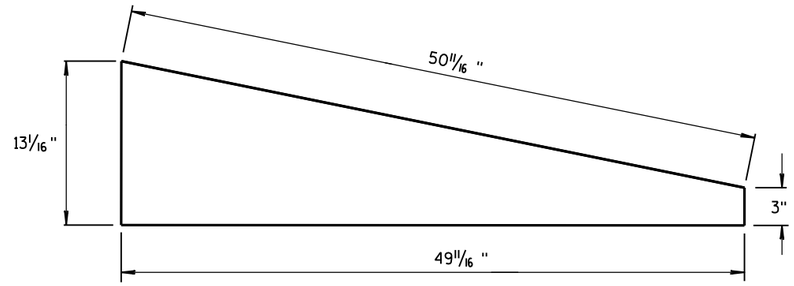


GUSSET 4

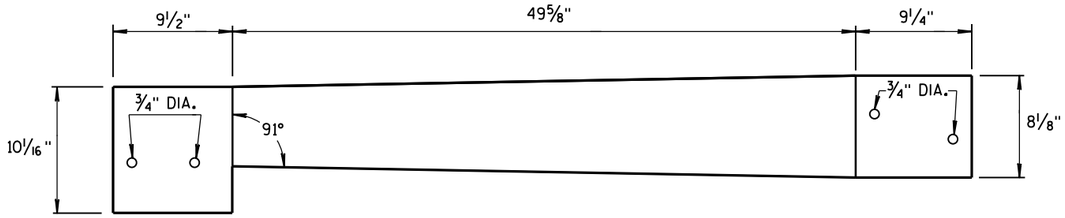
GUSSETS

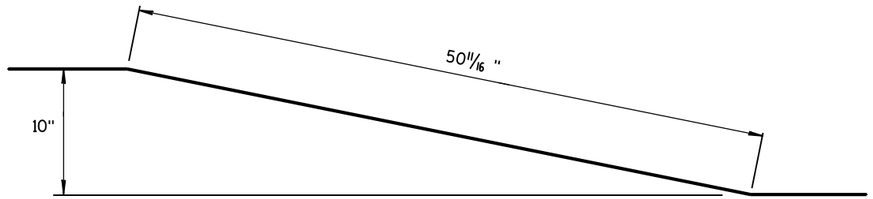


END PLATE



SIDE PLATE

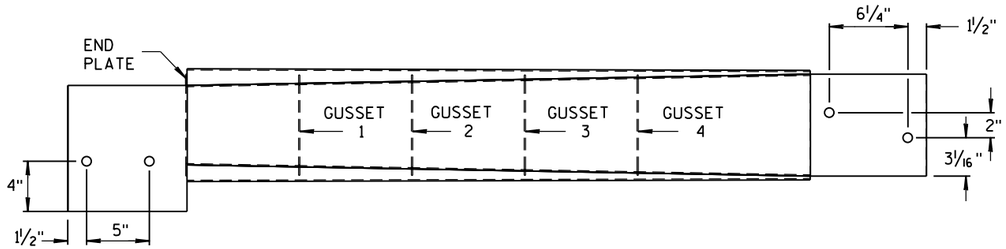


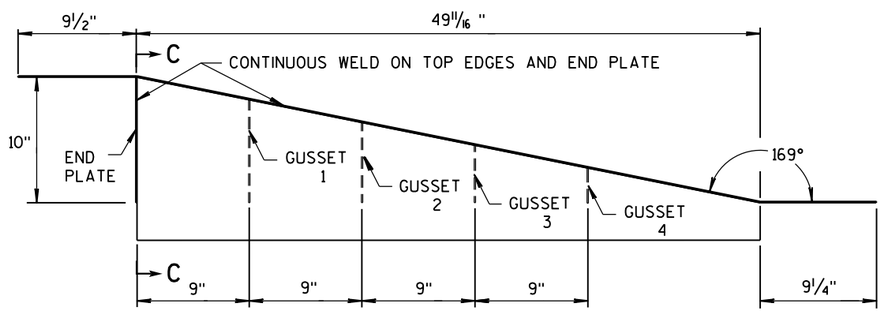


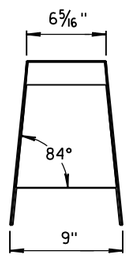
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

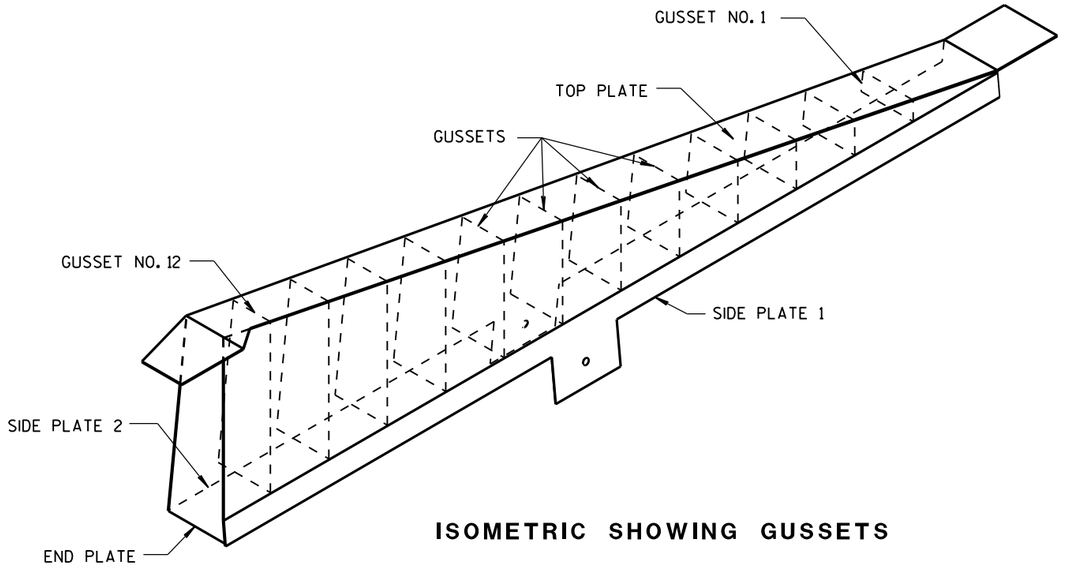
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

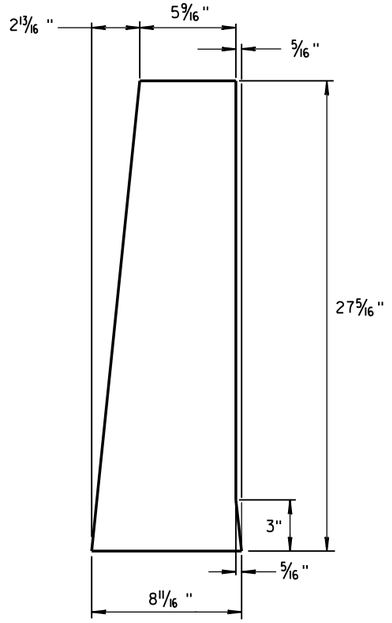
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-14f

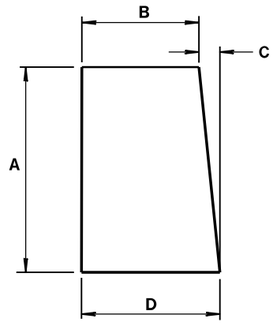


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



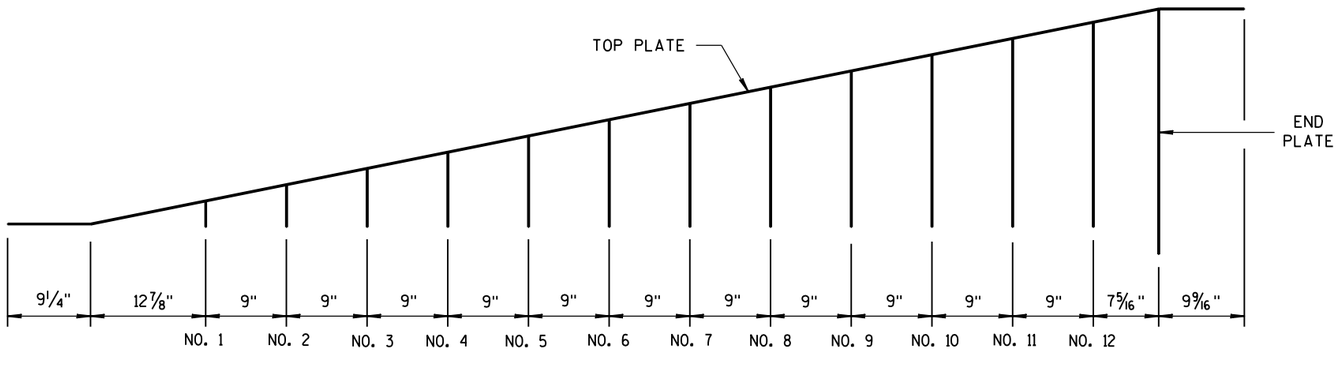
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

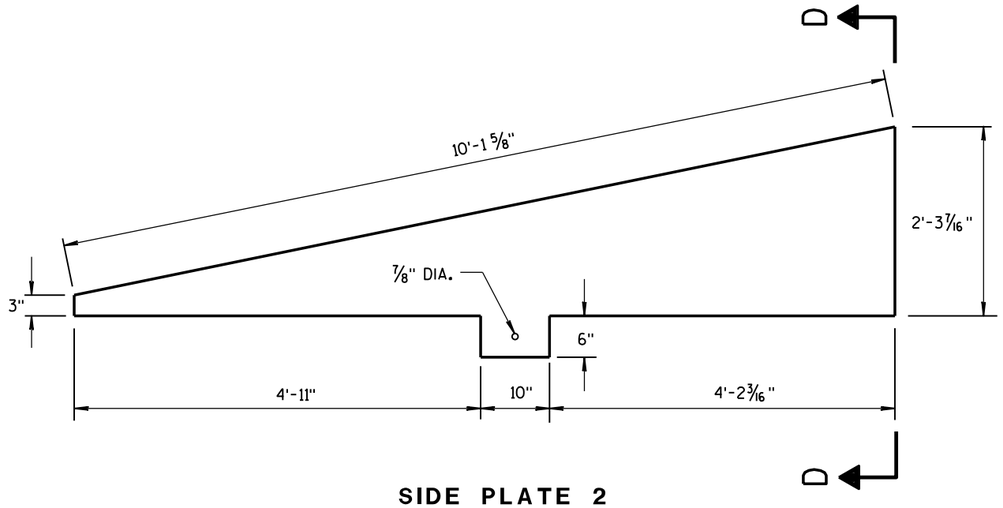
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

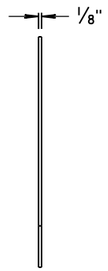
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

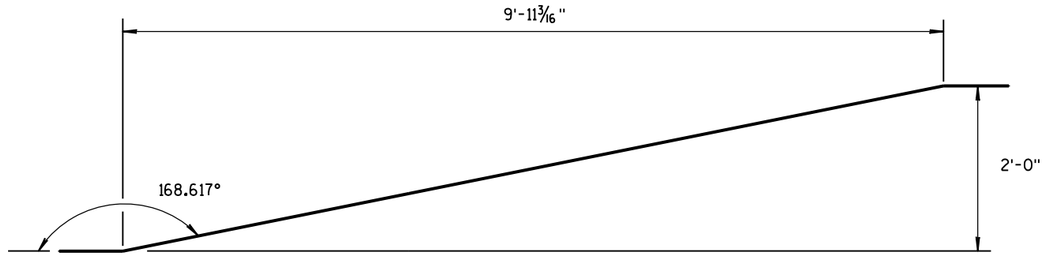
S.D.D. 14 B 7-14g



SIDE PLATE 2

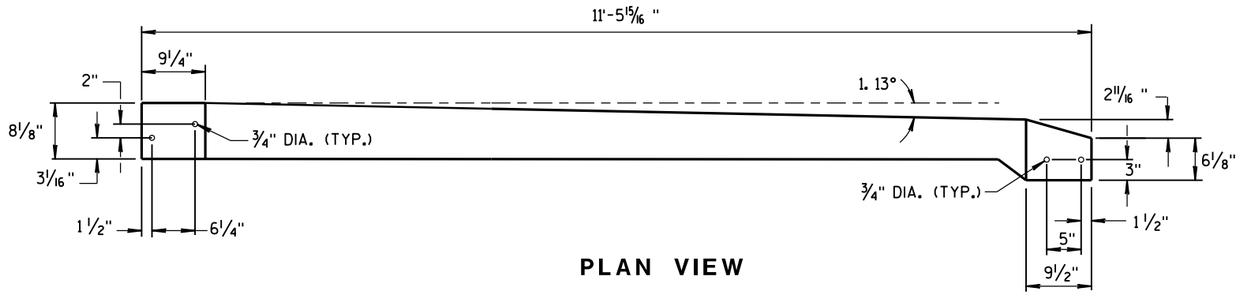


END VIEW



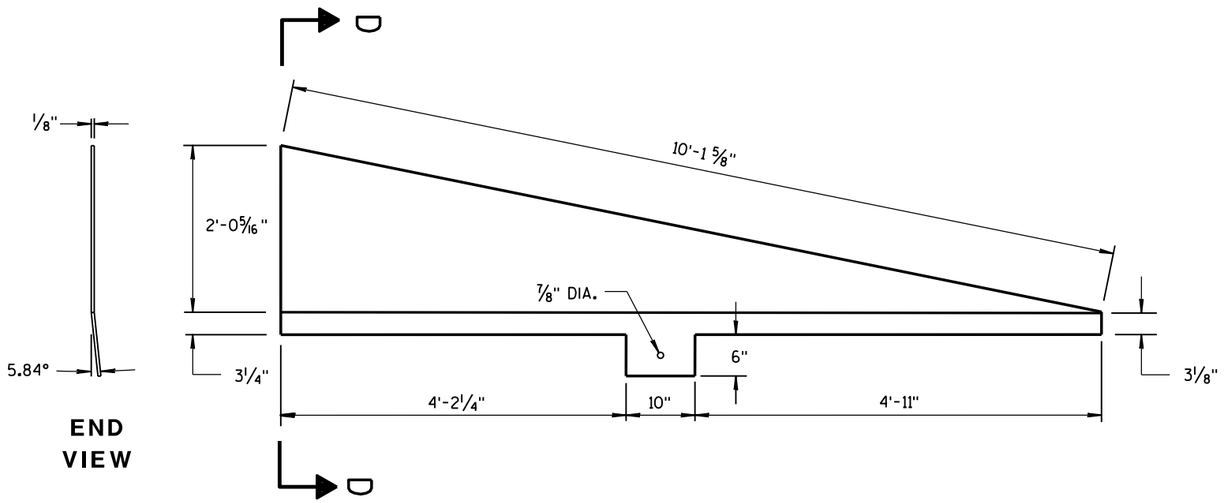
SIDE VIEW

TOP PLATE



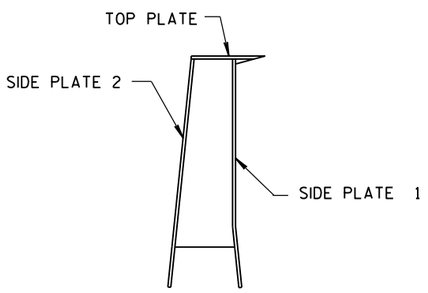
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

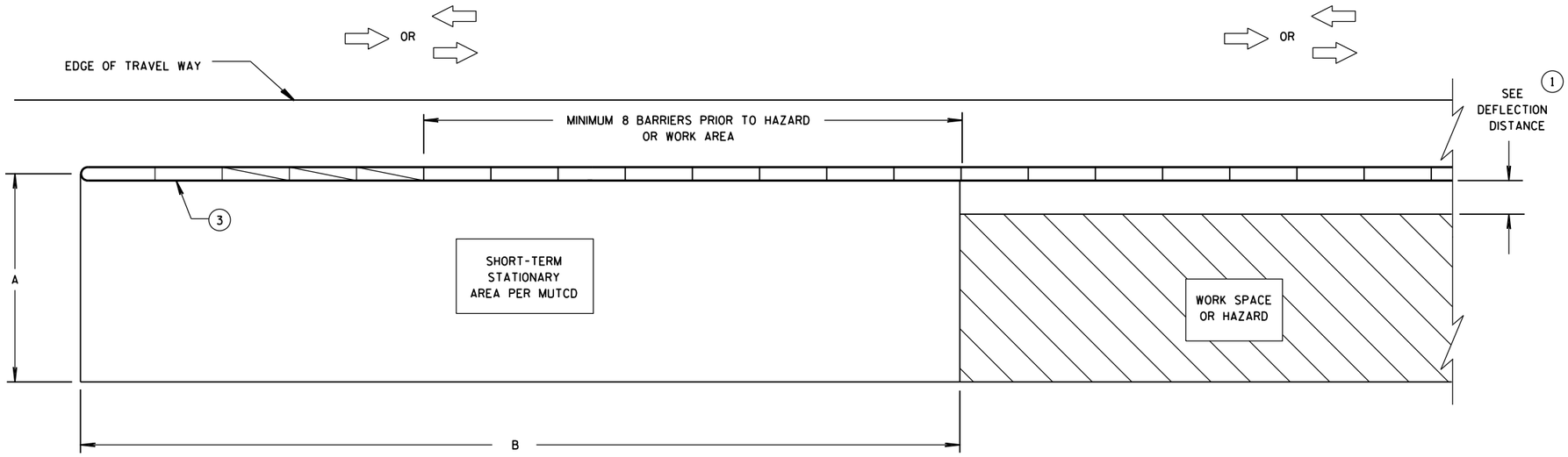
APPROVED
June 2014 — DATE
/S/ Jerry H. Zoaa — ROADWAY STANDARD D ENGINEER
FHWA

6

S.D.D. 14 B 7-14h

6

S.D.D. 14 B 7-14h



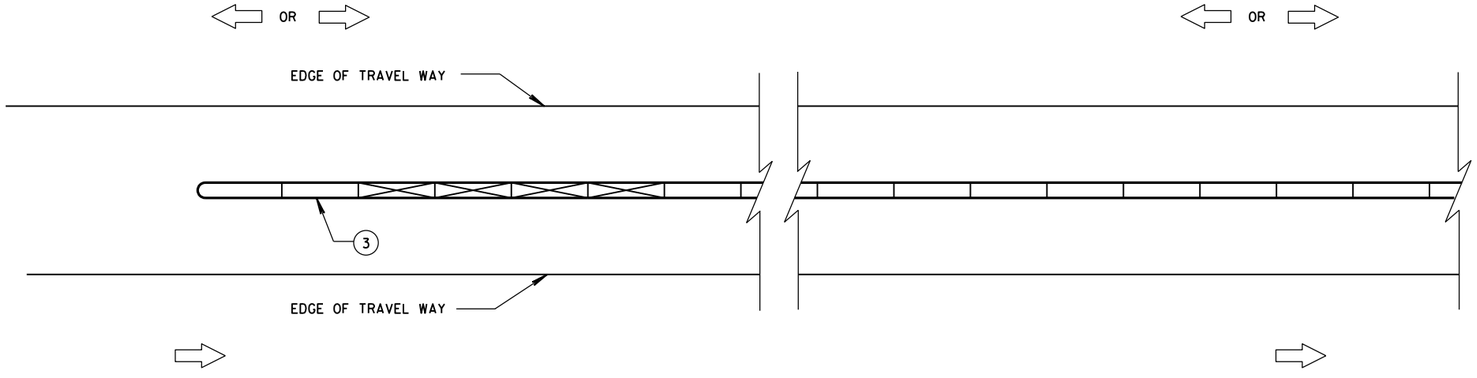
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

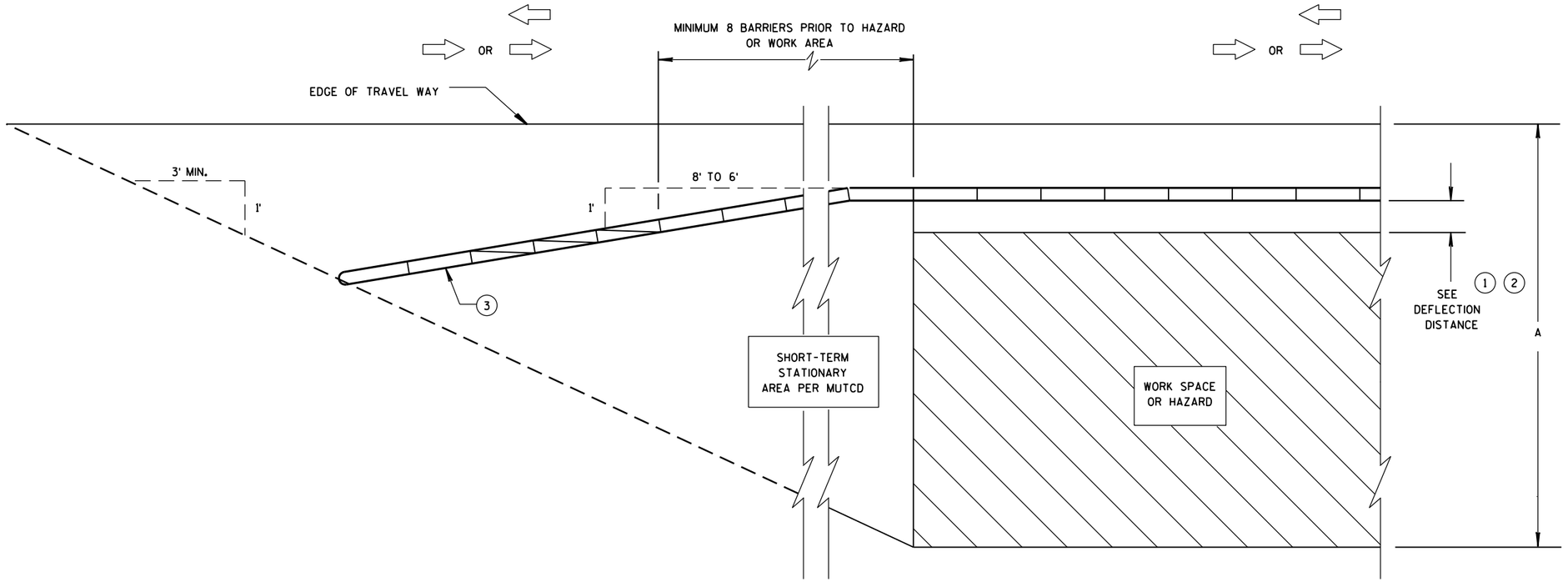
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

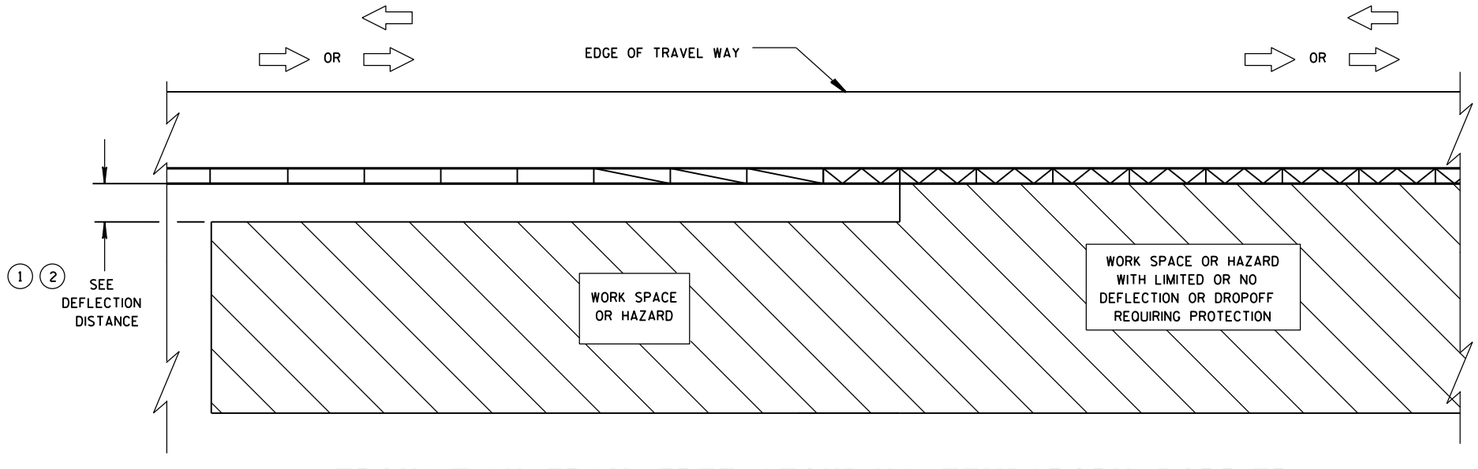
STATE OF WISCONSIN
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S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

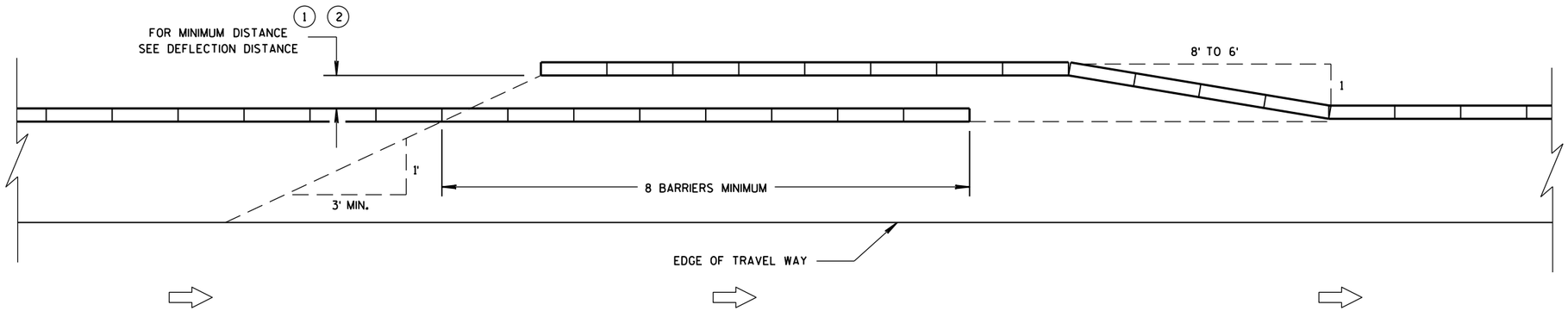
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

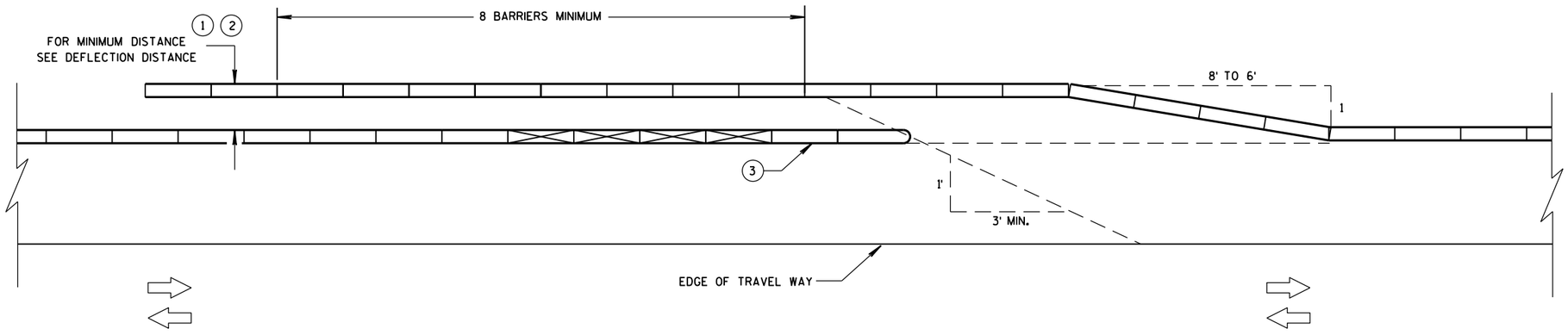
STATE OF WISCONSIN
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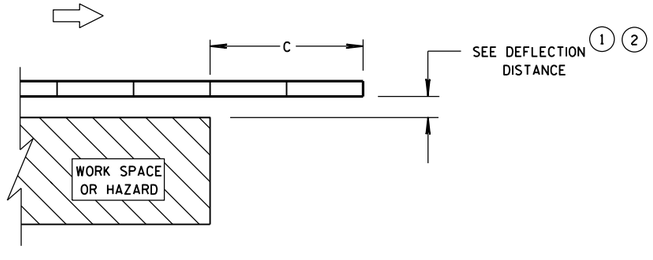
S.D.D. 14 B 8-2b



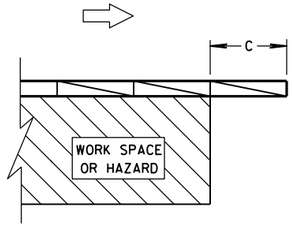
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

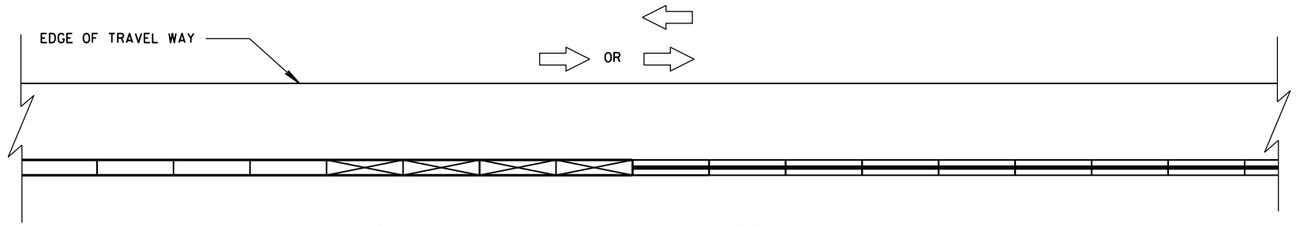
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

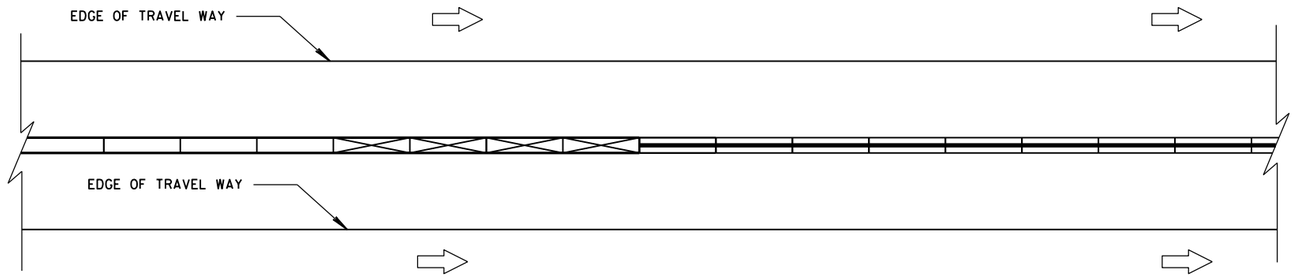
STATE OF WISCONSIN
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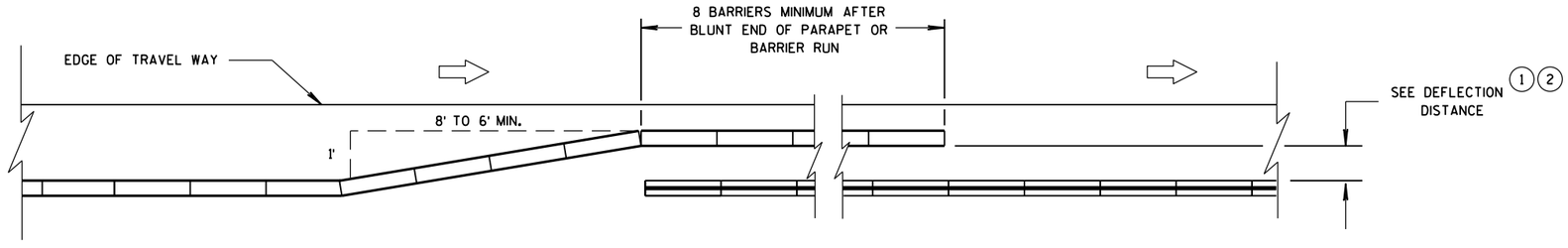
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



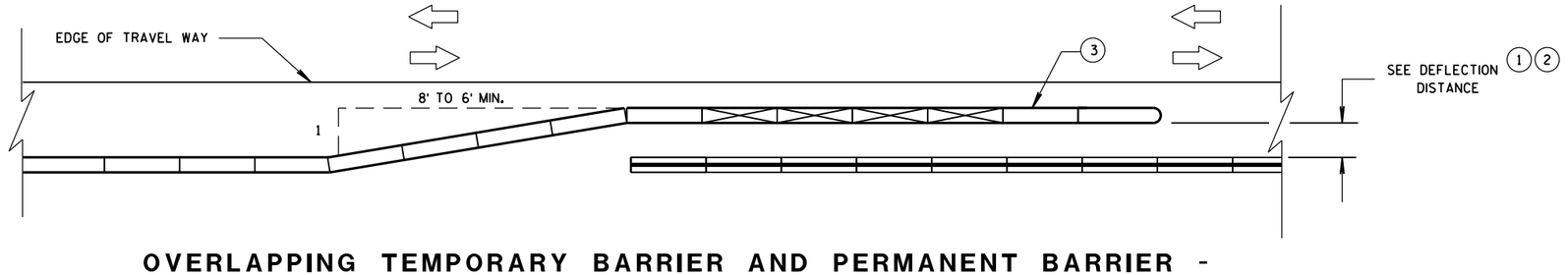
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
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LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

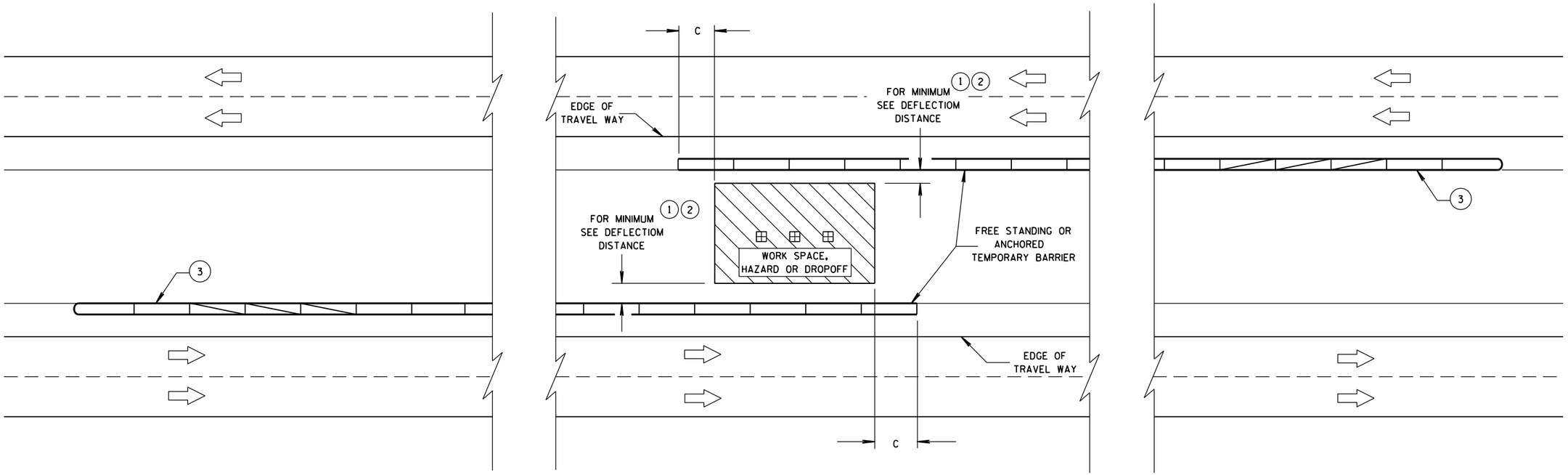
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER
FHWA

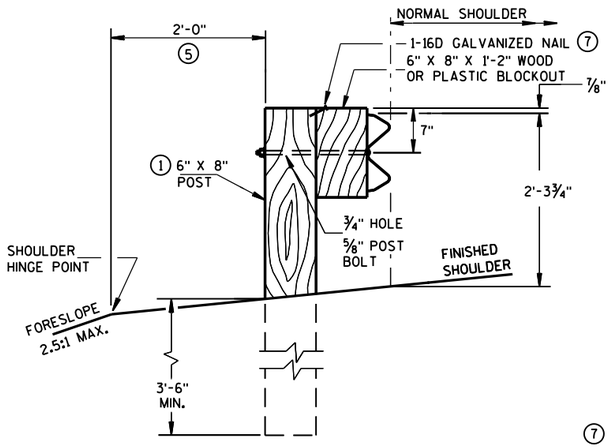
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S.D.D. 14 B 8-2e

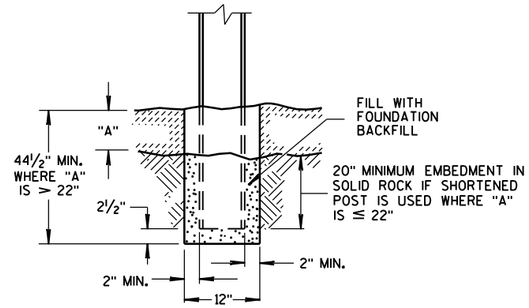
GENERAL NOTES

1. W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.
   DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
2. USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.
3. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
4. USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
5. IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).
6. IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.
7. WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

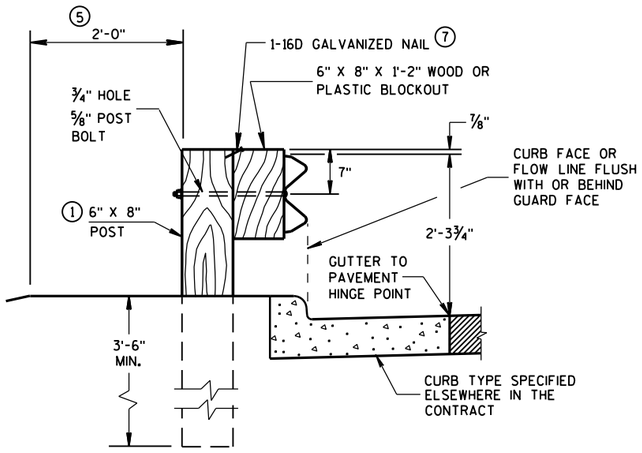
INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



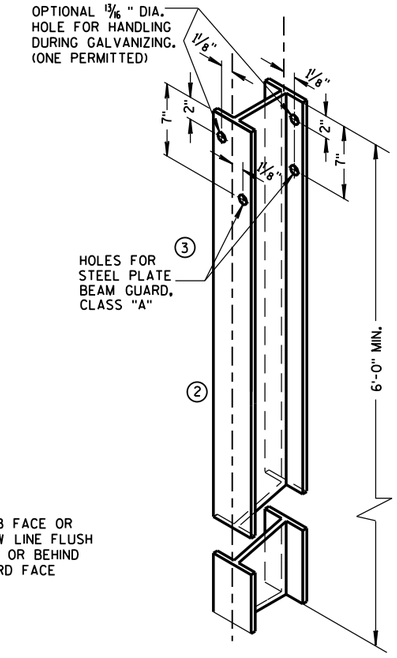
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



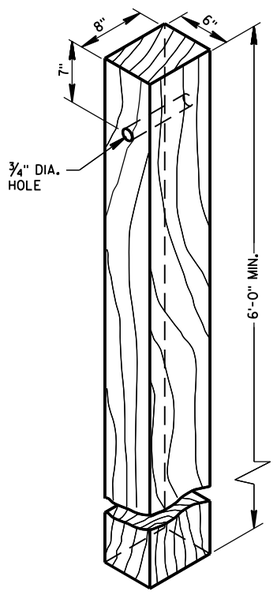
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥



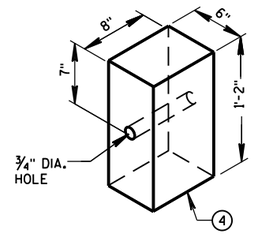
END VIEW
LOCATED ALONG A CURBED ROADWAY



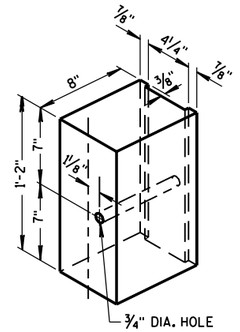
STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



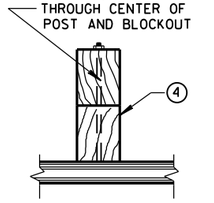
WOOD POST
(6"X8") NOMINAL



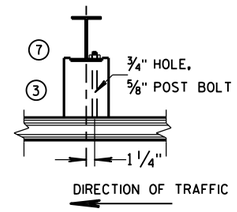
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



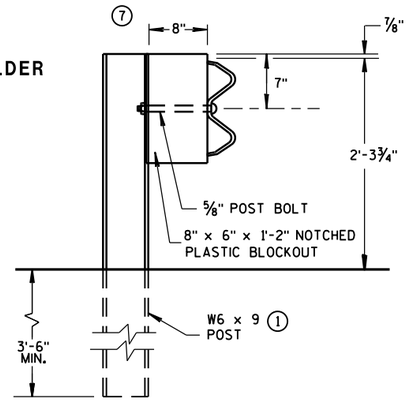
TYPICAL NOTCHED ①
PLASTIC BLOCKOUT
FOR STEEL POSTS



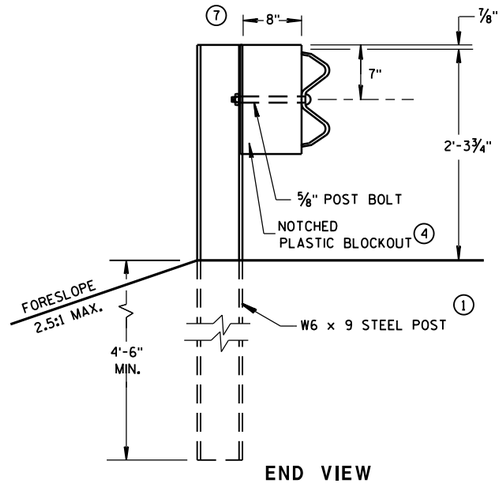
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



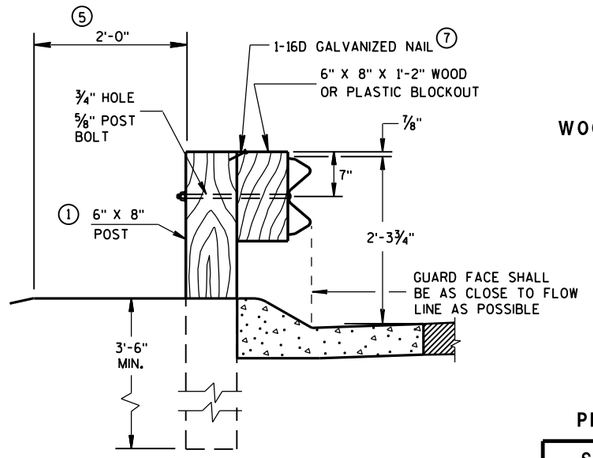
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



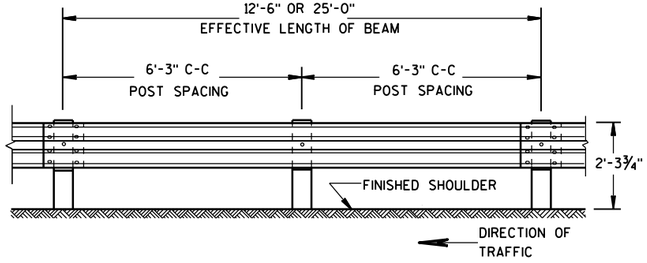
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

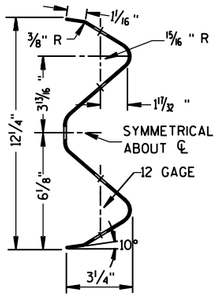
STATE OF WISCONSIN
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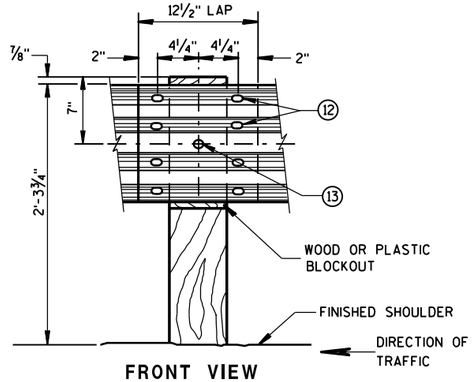


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

GENERAL NOTES

(8) PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

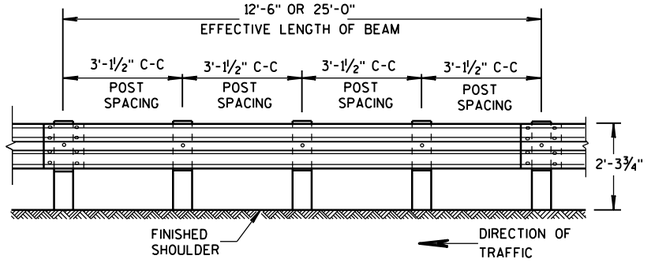
(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

(10) REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

(11) PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

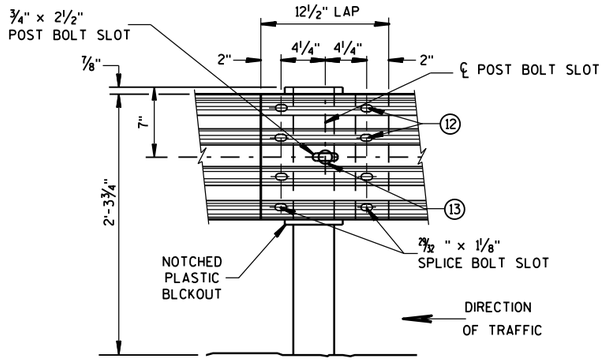
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) ⅝" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH ⅝" DIA. F844 FLAT WASHER UNDER NUT.



FRONT VIEW

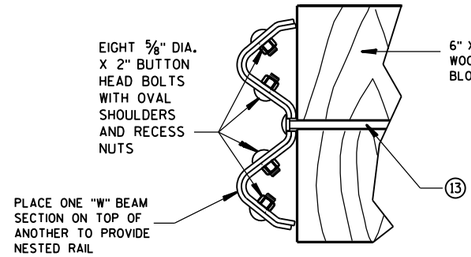
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

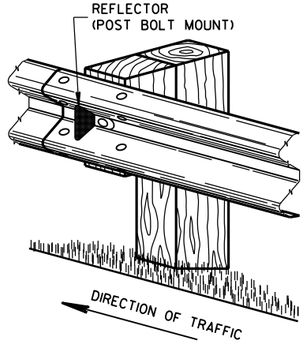


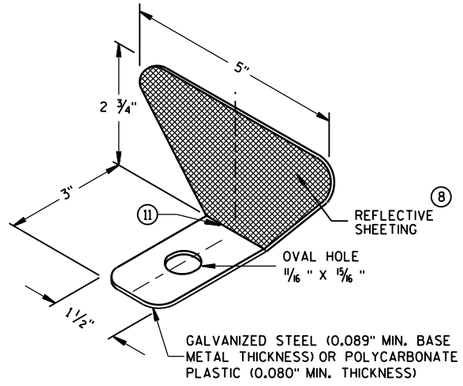
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING (9)

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (10)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 (11)	3
	> 200'	100' C-C	2	





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (8)

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

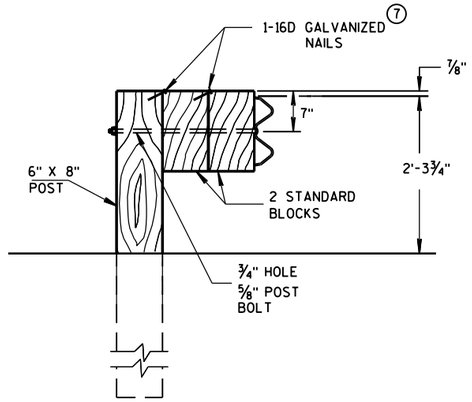
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 200

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S.D.D. 14 B 15-9b

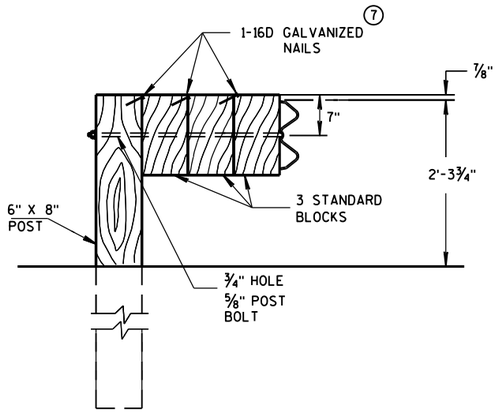
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S.D.D. 14 B 15-9b



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

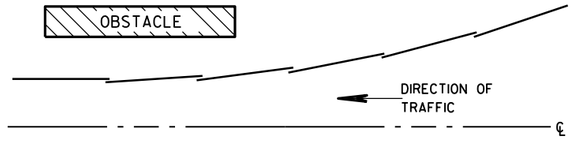


DETAIL FOR TRIPLE BLOCKS

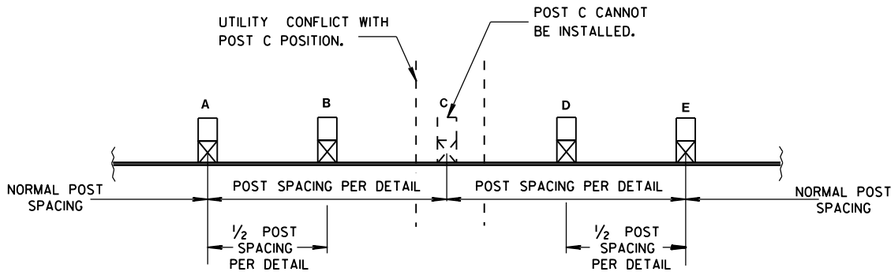
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

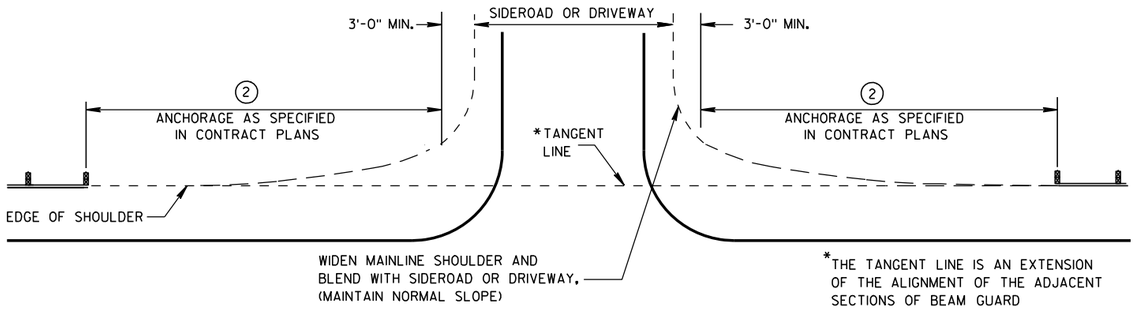
June 2016 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

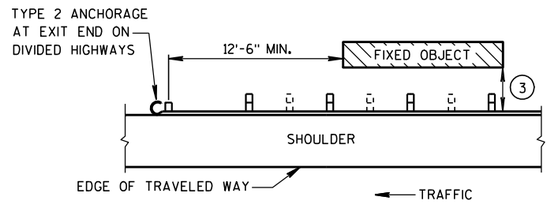
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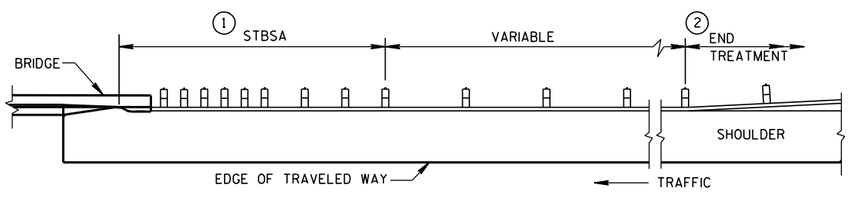
S.D.D. 14 B 15-9c



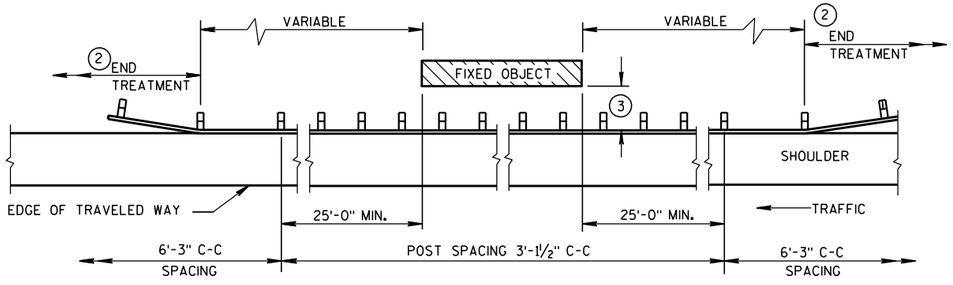
BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC

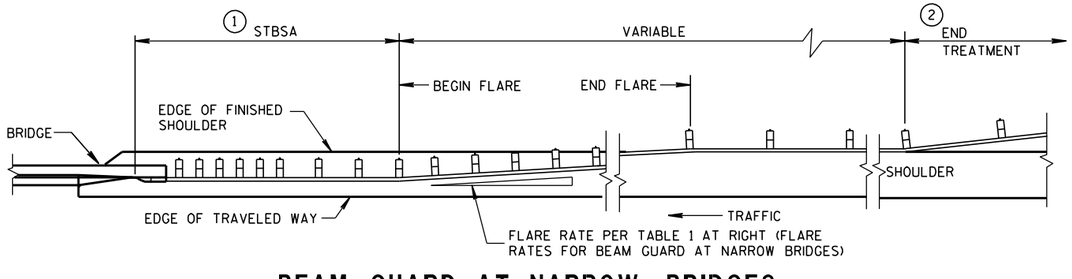


BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")



BEAM GUARD AT NARROW BRIDGES

(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

(1) STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.

(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(3)

MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT	POST SPACING
3'-6"	3' - 1½"
4'-6"	6' - 3"

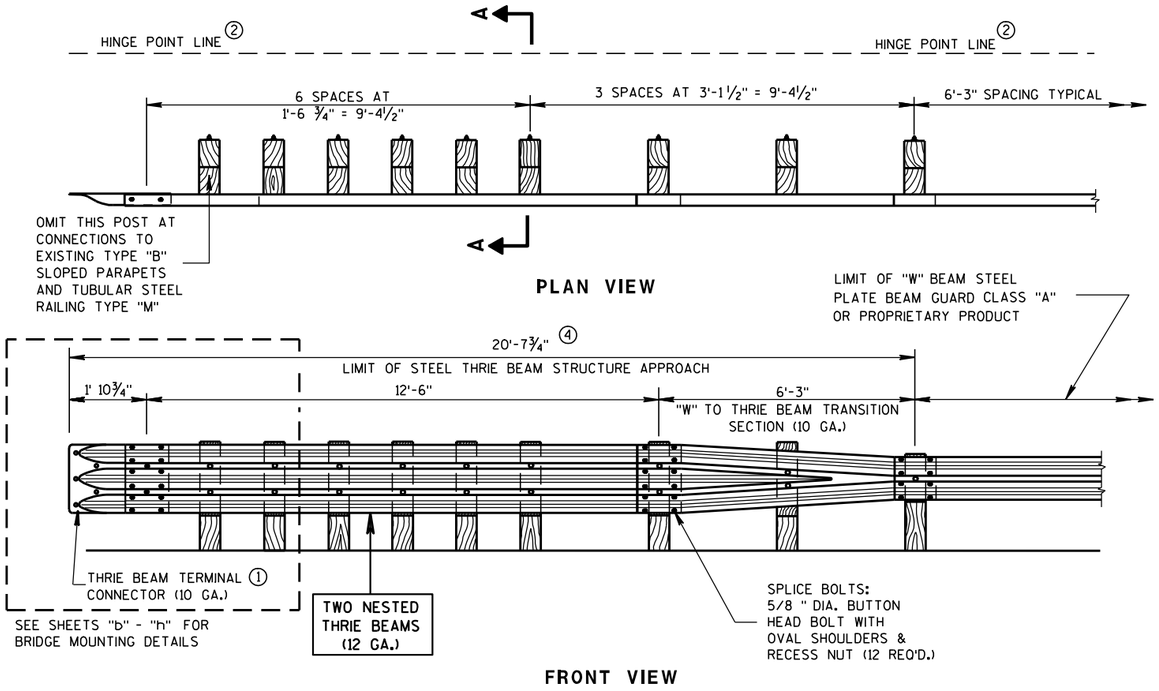
TABLE 1
FLARE RATES FOR BEAM GUARD AT NARROW BRIDGES

POSTED SPEED (MPH)	FLARE RATE
25	13:1
30	15:1
35	16:1
40	18:1
45	21:1
50	24:1
55	26:1
65	30:1

STEEL PLATE BEAM GUARD CLASS "A" AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-21-07 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



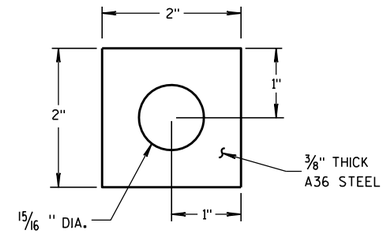


PLATE WASHER DETAIL

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".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

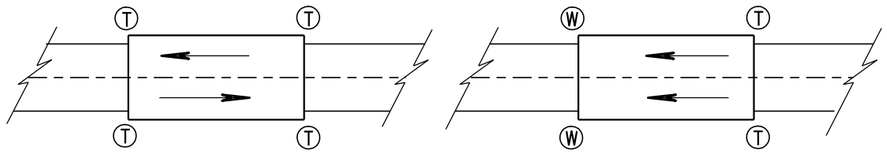
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.

③ POST BOLTS ARE 5/8" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A 5/8" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.

④ ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.



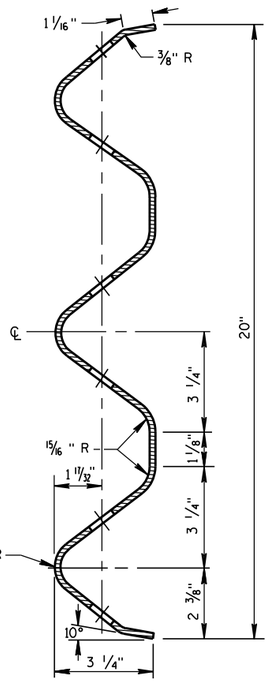
TWO WAY TRAFFIC

ONE WAY TRAFFIC

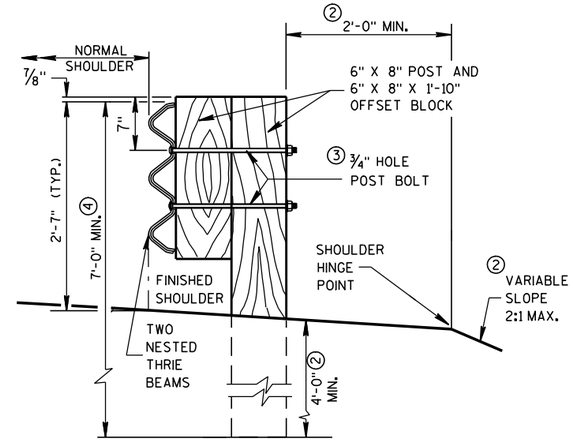
(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

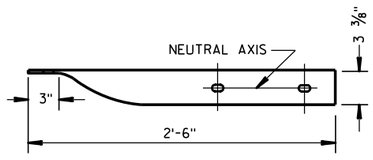
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

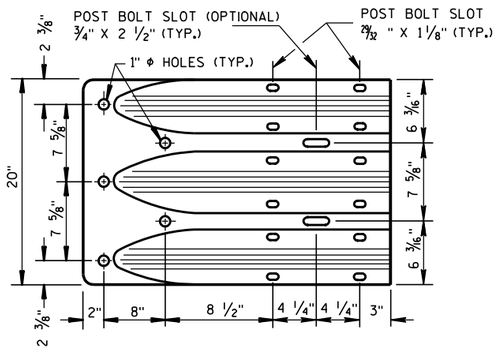


SECTION THRU THRIE BEAM RAIL ELEMENT

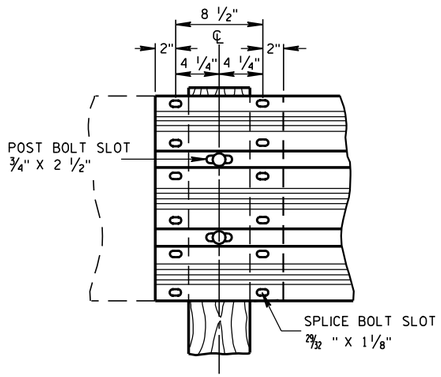


SECTION A-A





THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE

STEEL THRIE BEAM STRUCTURE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

203

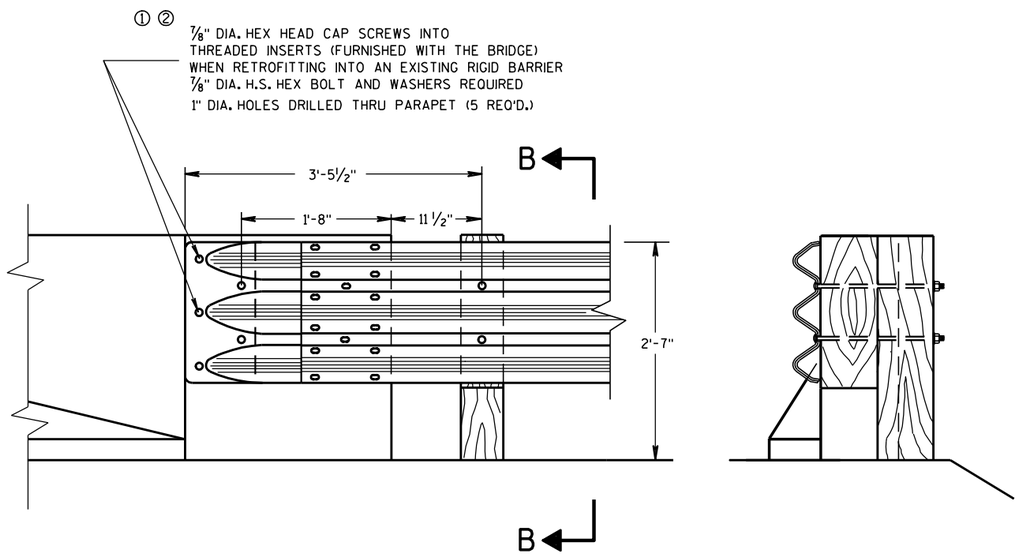
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S.D.D. 14 B 20-11a

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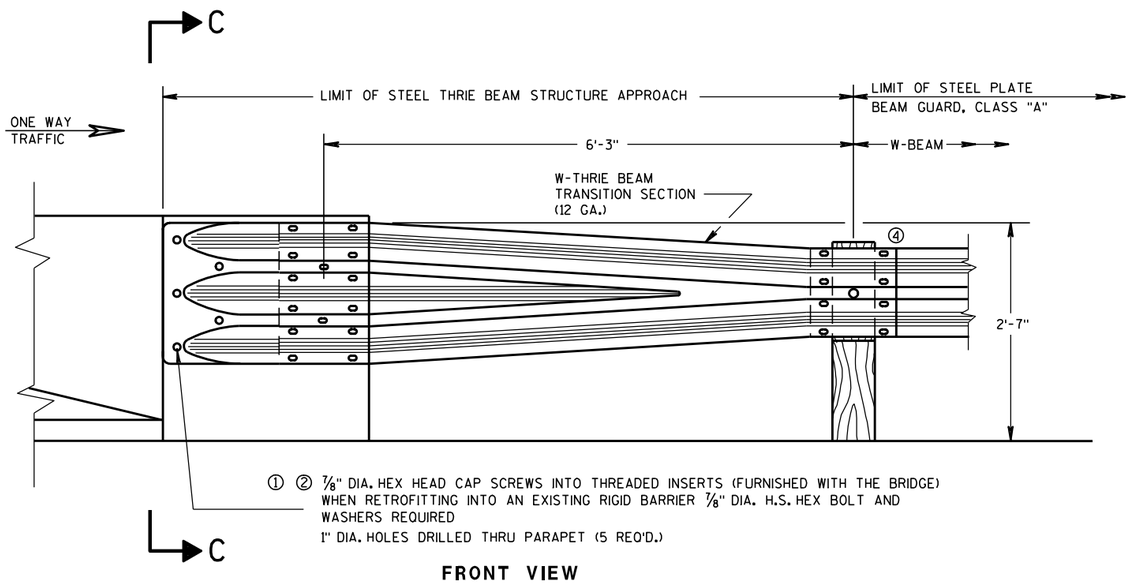
S.D.D. 14 B 20-11a



FRONT VIEW

SECTION B-B

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



① ② ⅞" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER ⅞" DIA. H.S. HEX BOLT AND WASHERS REQUIRED
1" DIA. HOLES DRILLED THRU PARAPET (5 REQ'D.)

FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

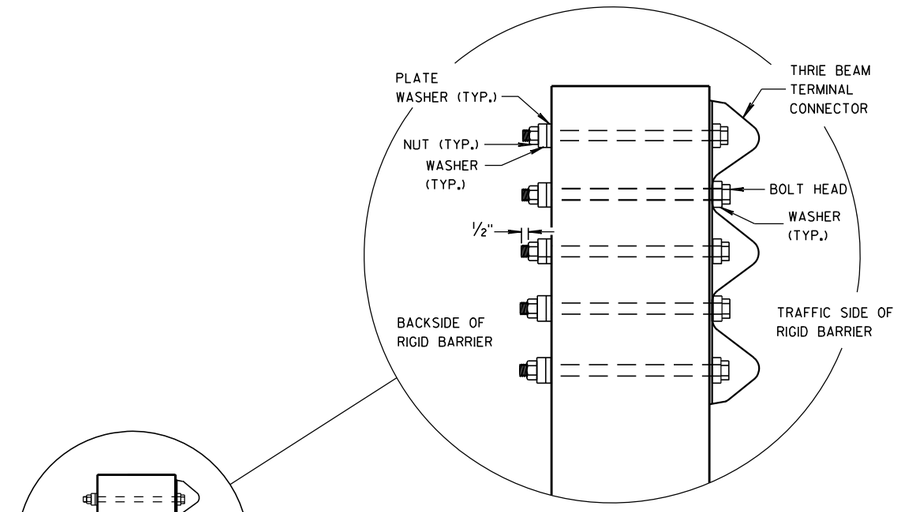
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

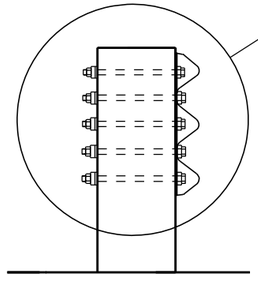
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" 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 ½".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.





SECTION C-C

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS [204 ENGINEER

FHWA

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S.D.D. 14 B 20-11b

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S.D.D. 14 B 20-11b

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

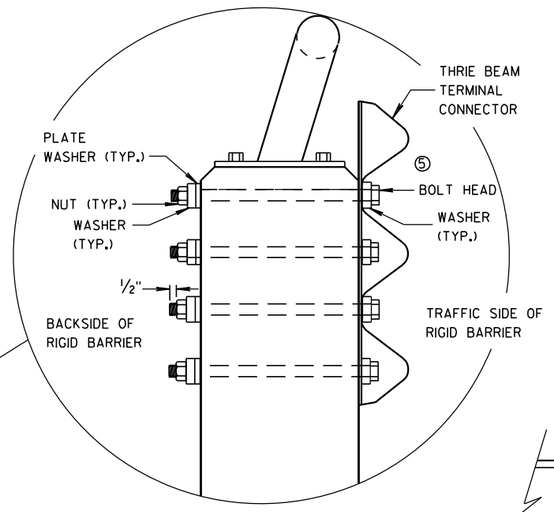
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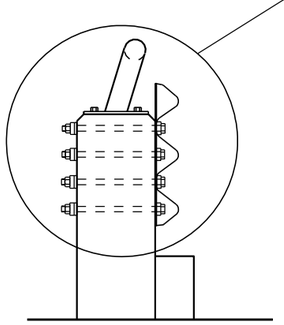
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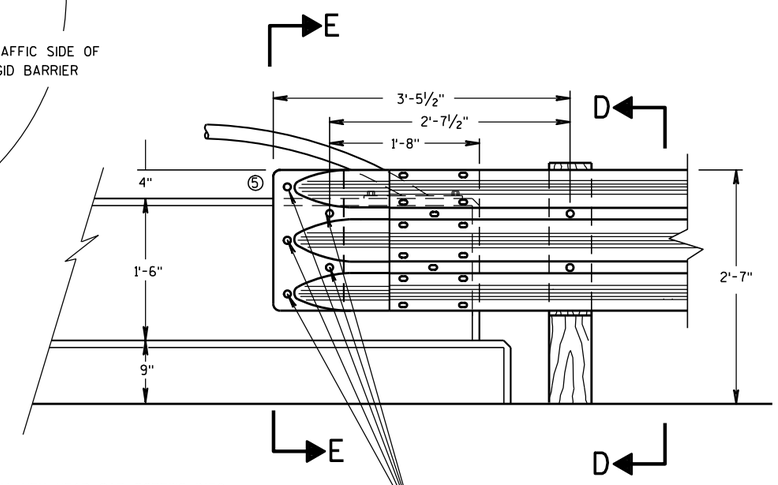
⑤ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.





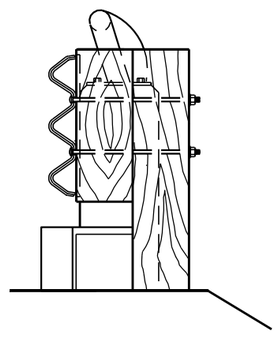
SECTION E-E



① ② ⅞" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER ⅞" DIA. H.S. HEX BOLT AND WASHERS REQUIRED

1" DIA. HOLES DRILLED THRU PARAPET (4 REQ'D.)

FRONT VIEW

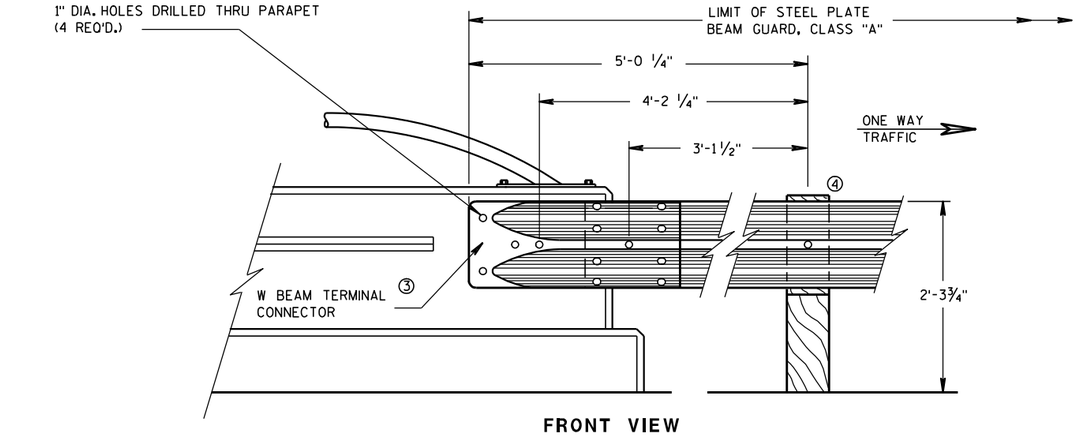


SECTION D-D

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

① ② ⅞" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER ⅞" DIA. H.S. HEX BOLT AND WASHERS REQUIRED

1" DIA. HOLES DRILLED THRU PARAPET (4 REQ'D.)



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO VERTICAL FACED PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

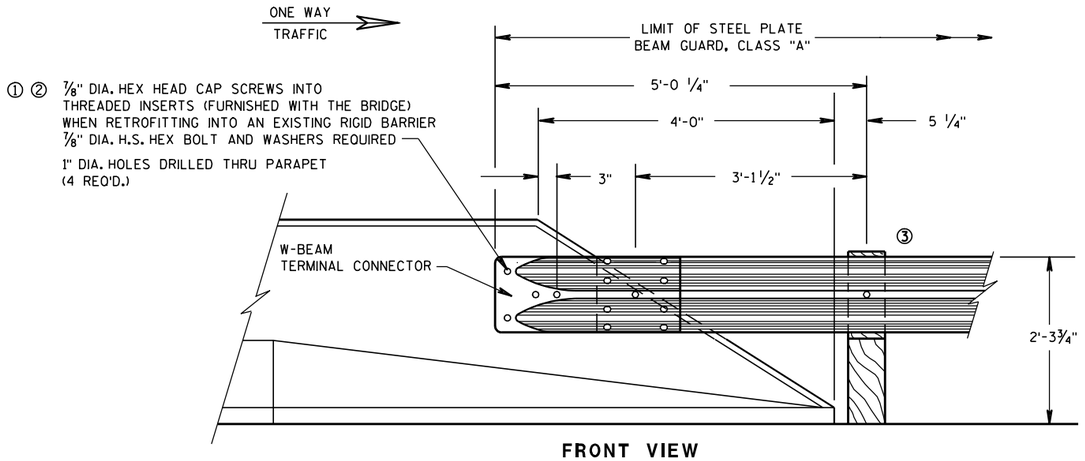
APPROVED
8/31/2012 — DATE
/S/ Jerry H. Zaa — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

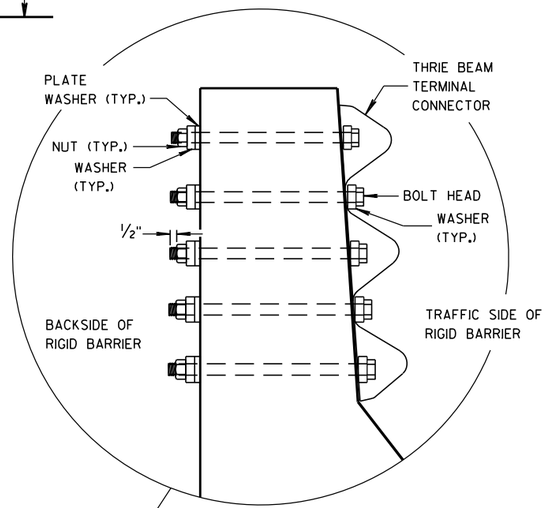
BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

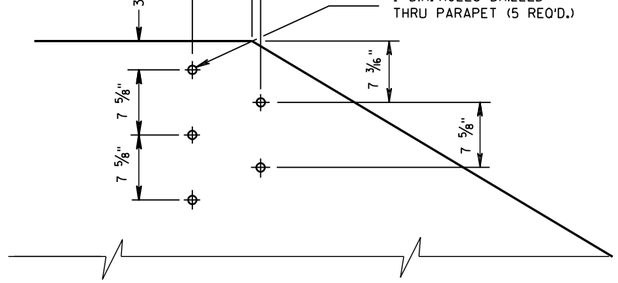
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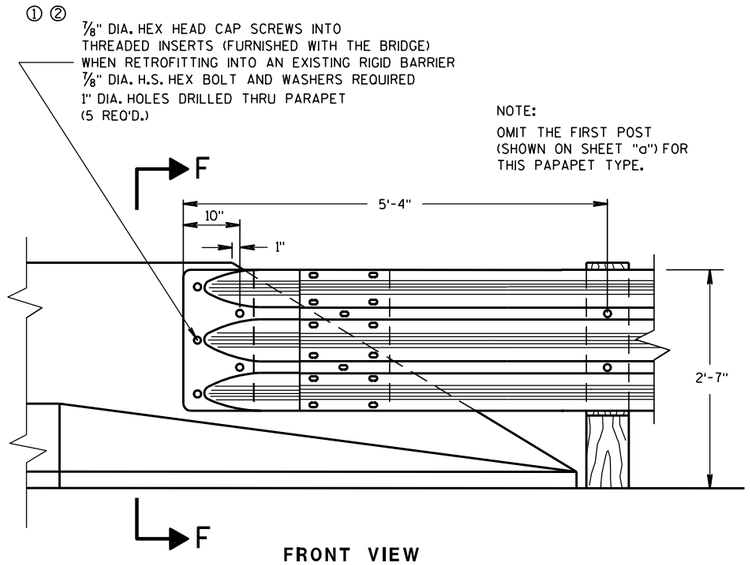
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DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

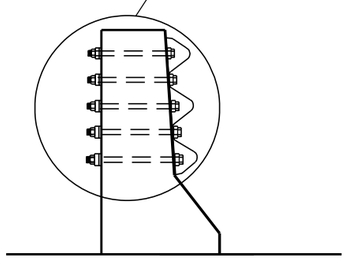




DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION F-F

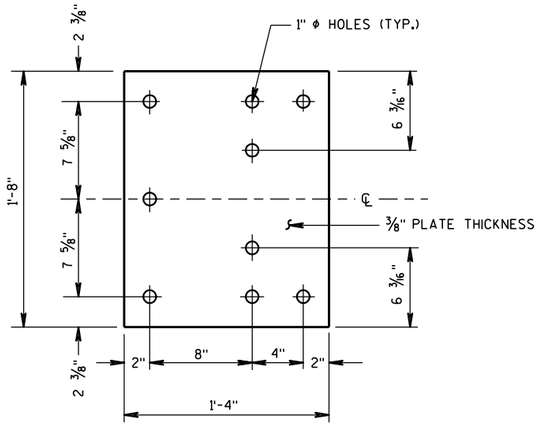
THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS

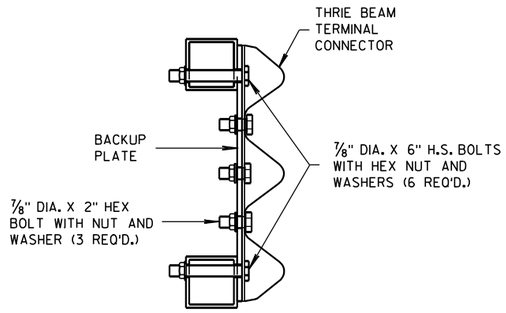
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 — DATE
/S/ Jerry H. [illegible] — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 20-11d



BACK-UP PLATE DETAIL



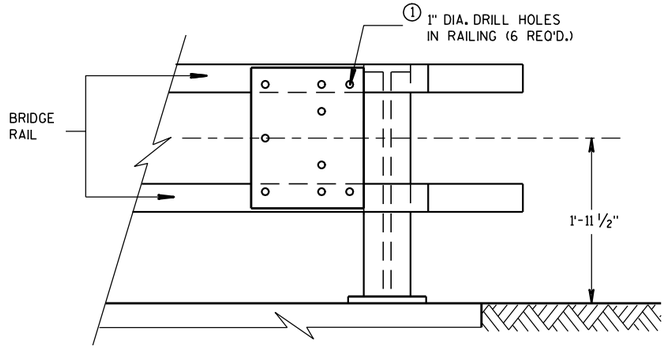
SECTION G-G

GENERAL NOTES

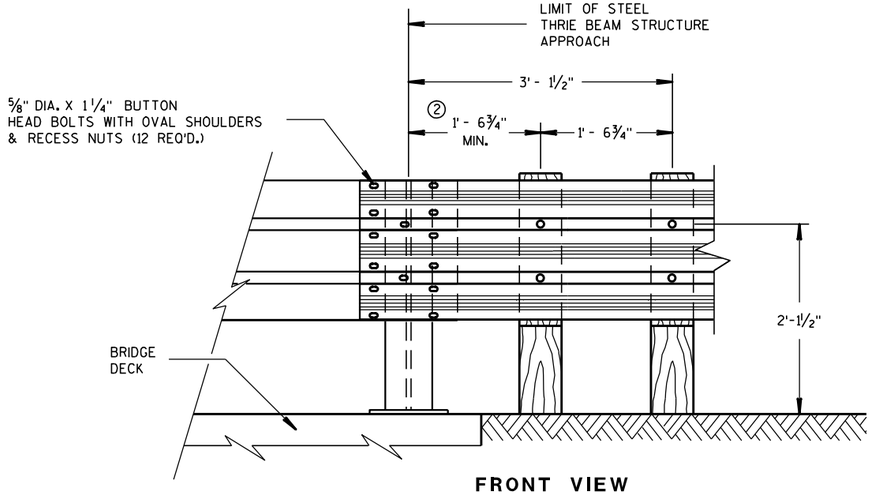
BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325 AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AND ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL AS CLOSE AS FEASIBLE TO THE STEEL END POST.

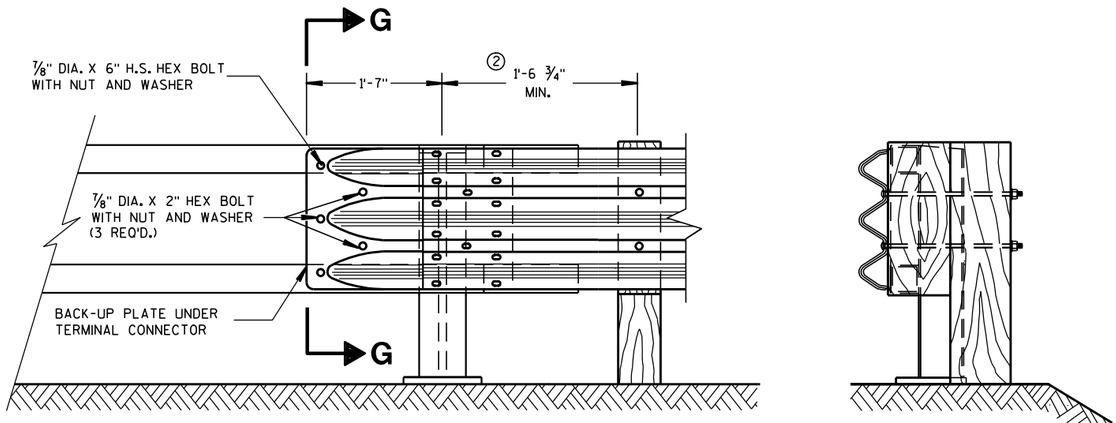


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING



FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW

END VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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8/31/2012 DATE
/S/ Jerry H ____ ROADWAY STANDARDS ENGINEER
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ENT
FHWA

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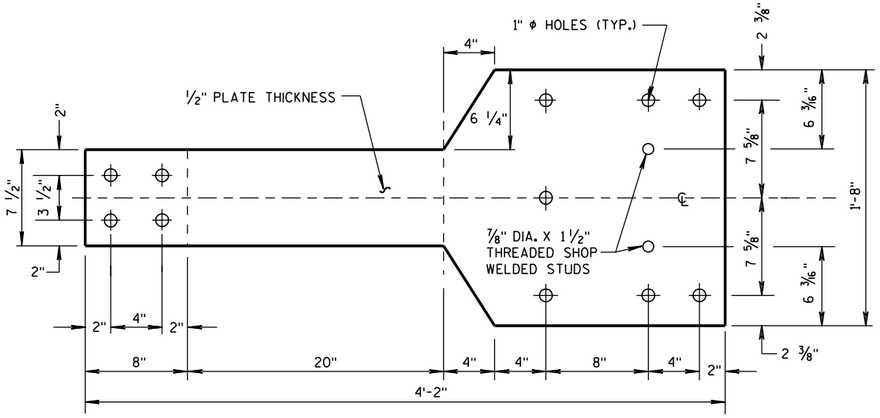
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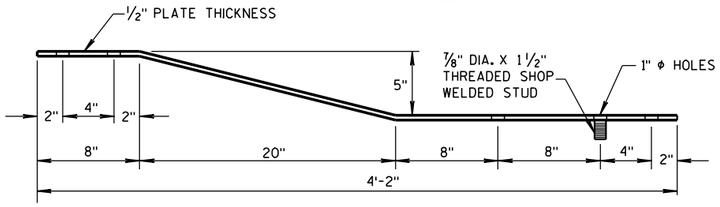
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GENERAL NOTES

① VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AND ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL BE AS CLOSE AS FEASIBLE TO THE STEEL END POST.

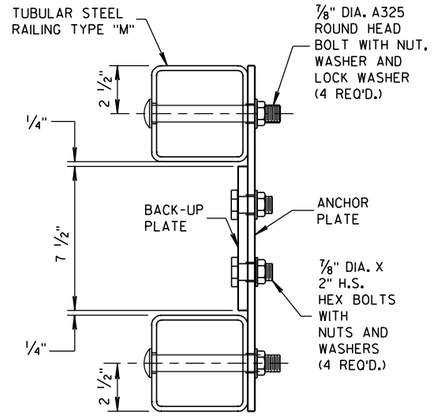


FRONT VIEW

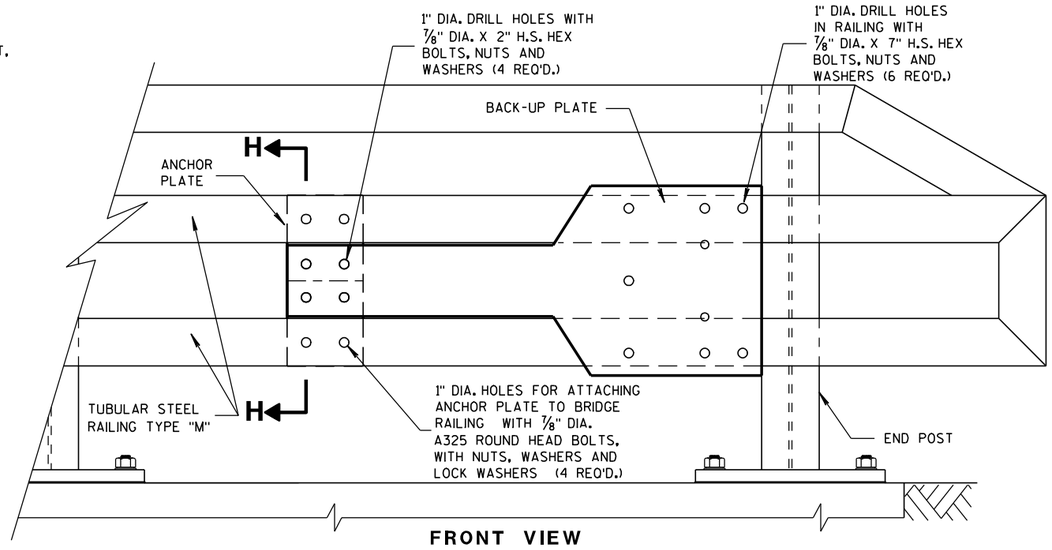


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

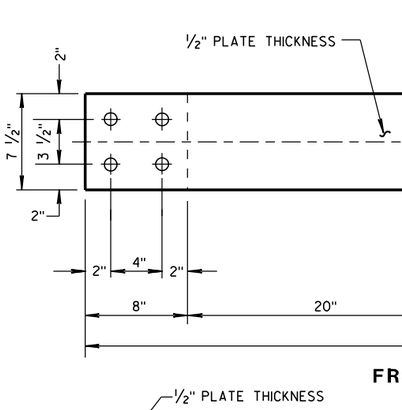


SECTION H-H



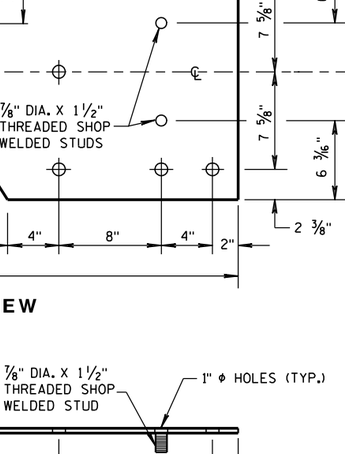
FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"

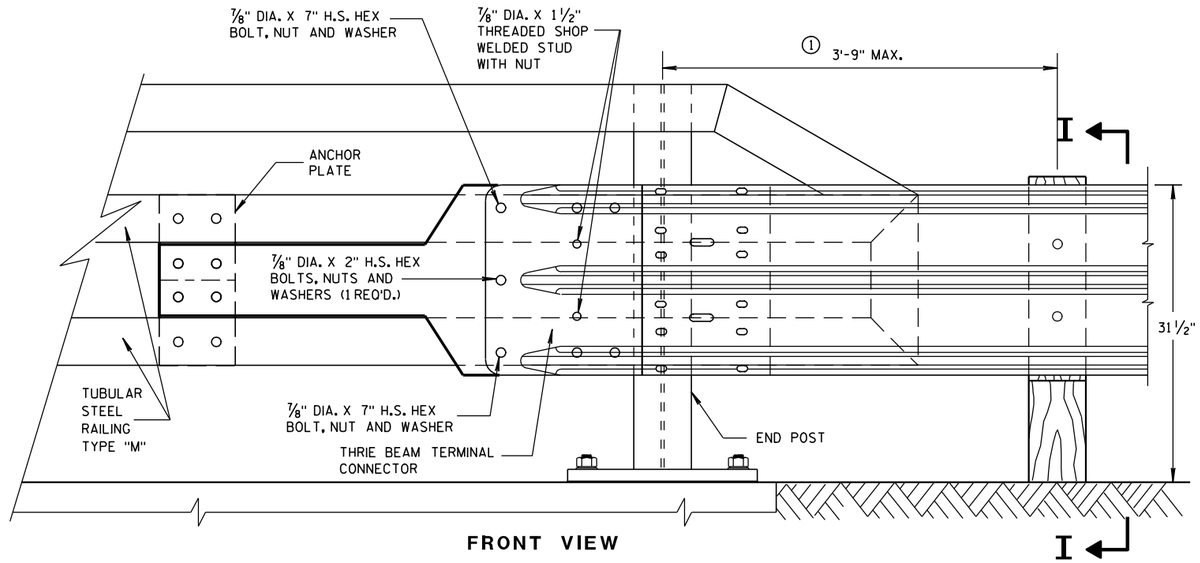


FRONT VIEW

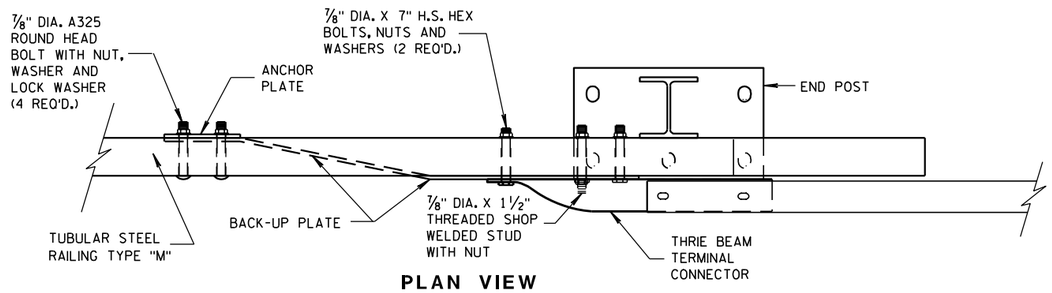
ANCHOR PLATE DETAIL, TYPE "M"



SECTION I-I



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPE "M"

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S.D.D. 14 B 20-11f

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

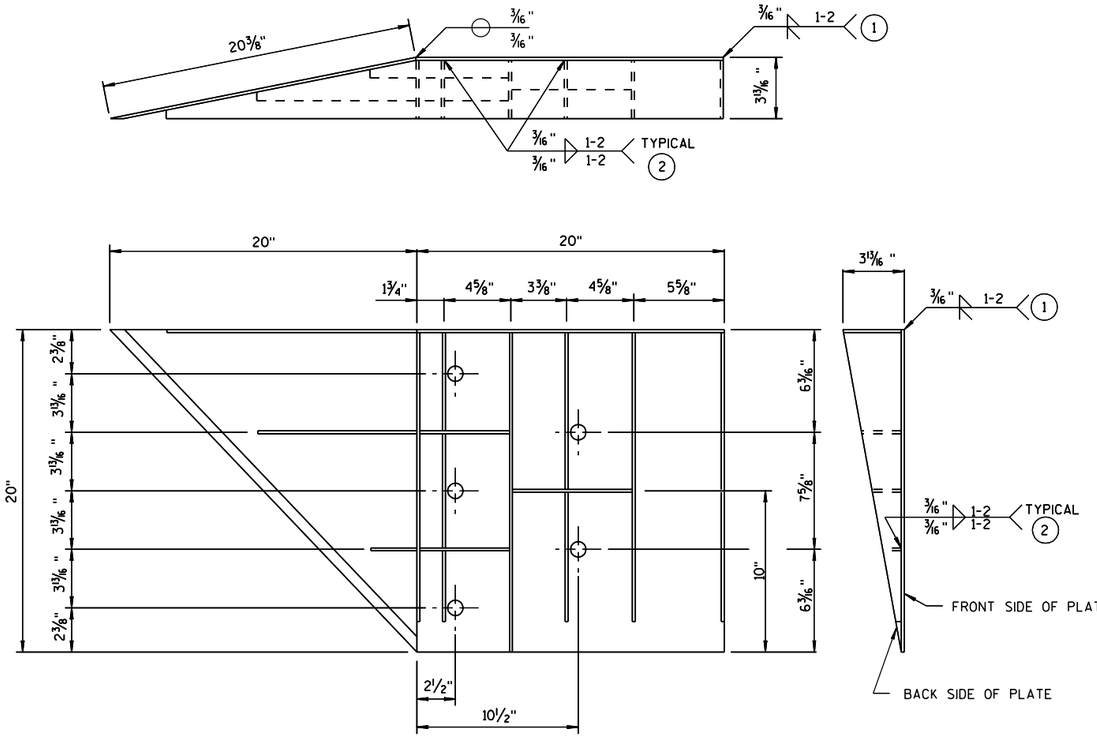
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(1) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(2) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

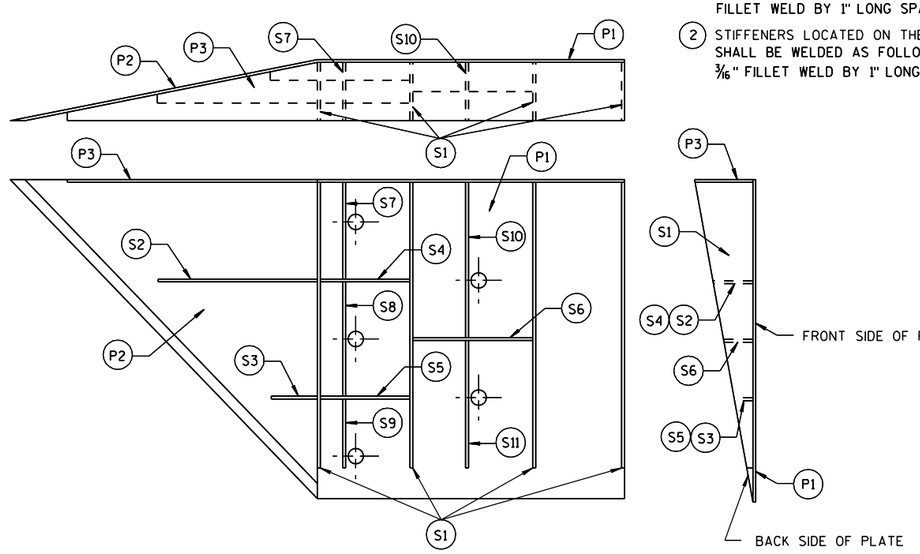


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

STEEL THRIE BEAM STRUCTURE APPROACH

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

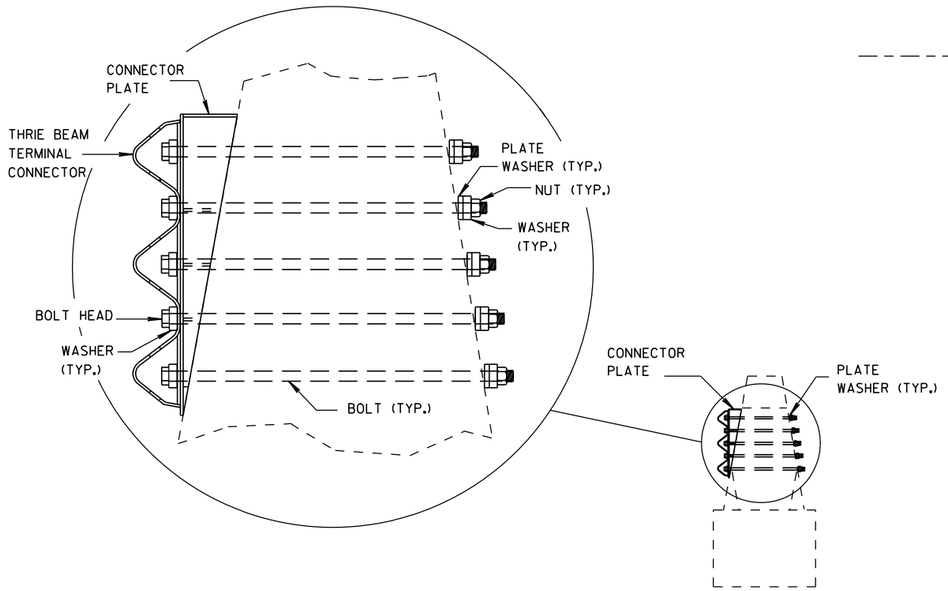
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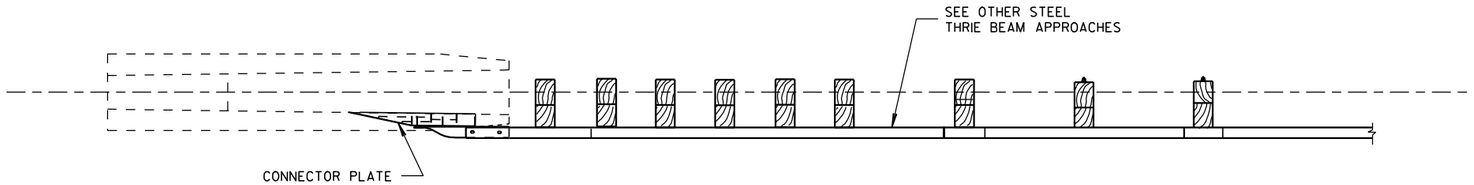
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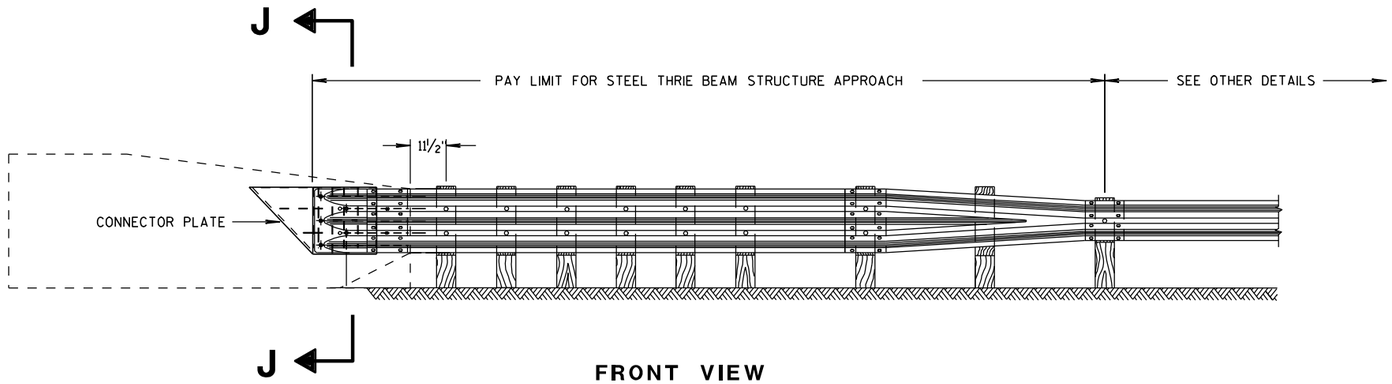
S.D.D. 14 B 20-11g



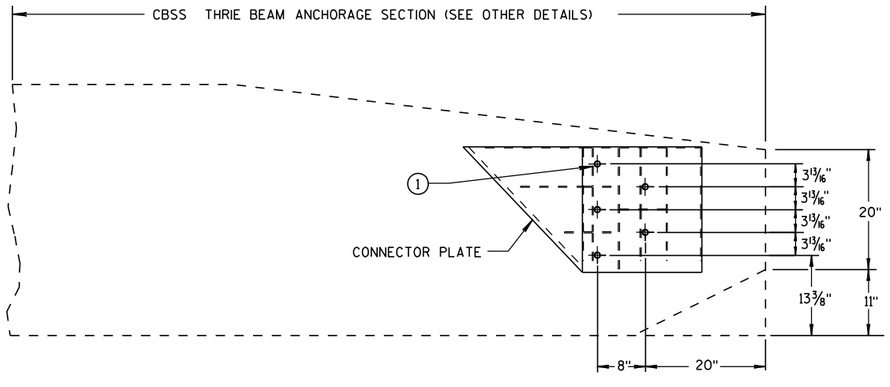
SECTION J-J



PLAN VIEW



FRONT VIEW



CONNECTOR PLATE LOCATION

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 614.

CONNECTOR PLATE, DRILLING HOLES THROUGH PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(1) 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 TERMINAL CONNECTOR. 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.

STEEL THRIE BEAM STRUCTURE APPROACH

STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT

STATE OF WISCONSIN
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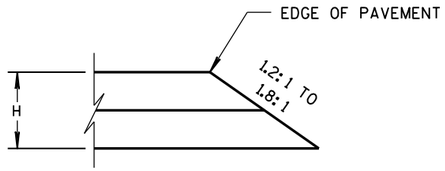
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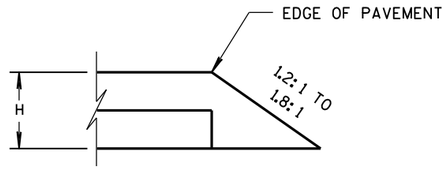
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S.D.D. 14 B 20-11h



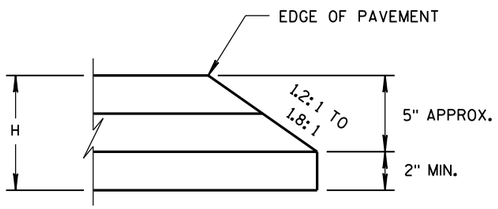
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



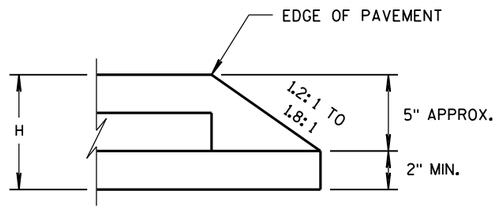
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

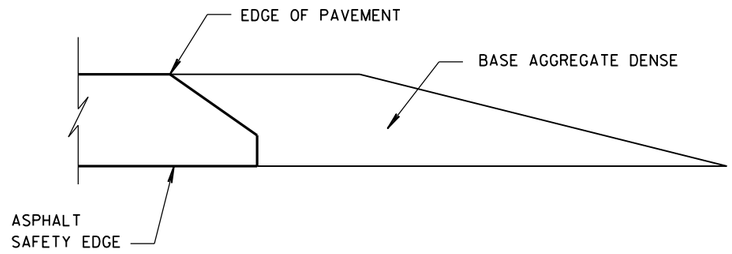
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

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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.

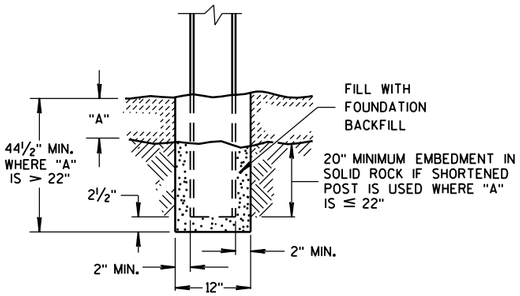
② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES 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.

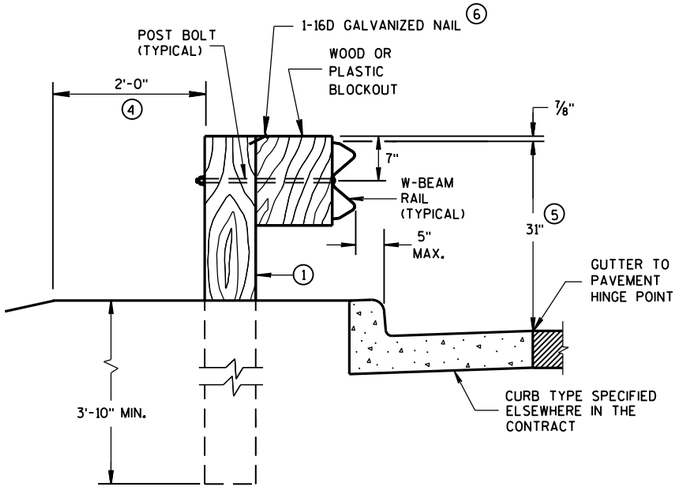
④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

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".

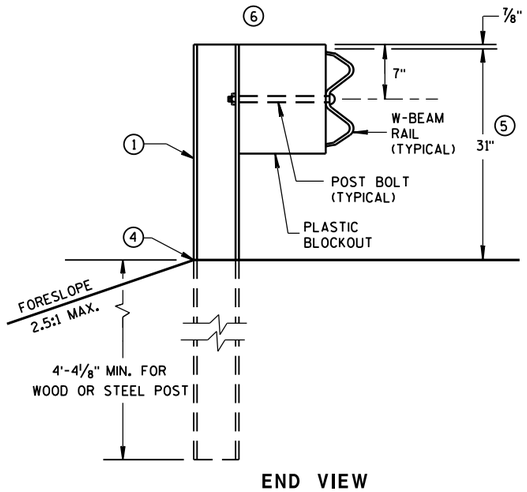
⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



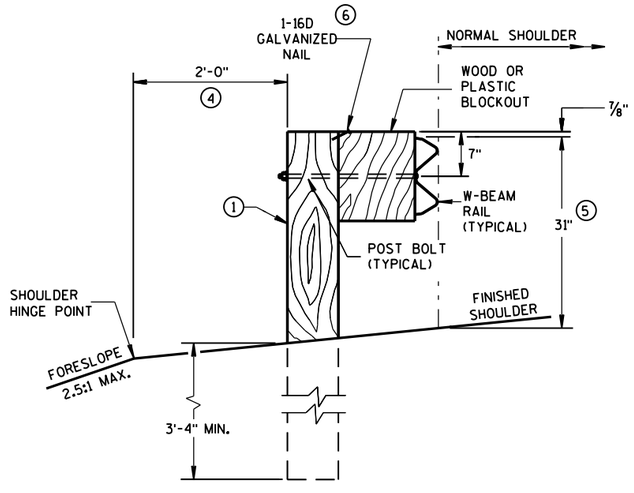
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ③



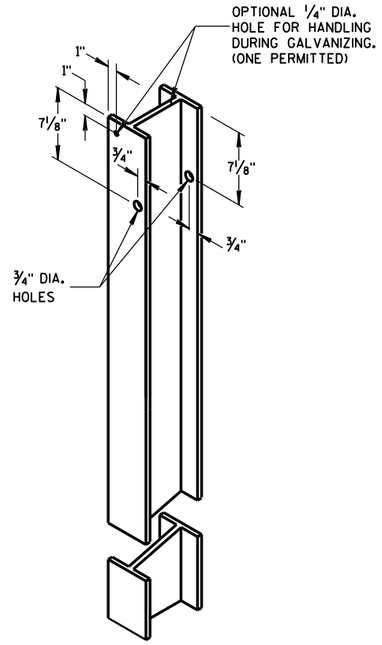
END VIEW
LOCATED ALONG A CURBED ROADWAY



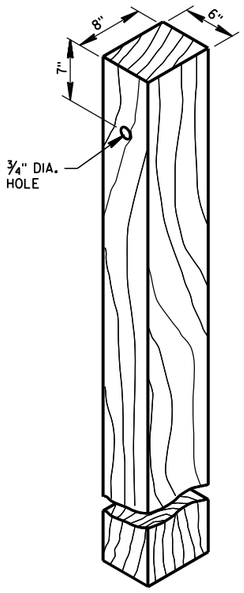
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



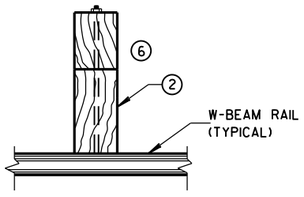
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



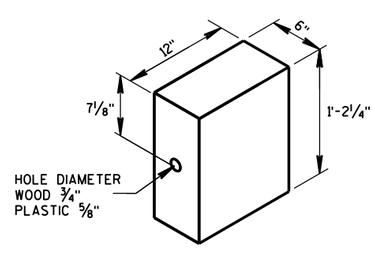
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



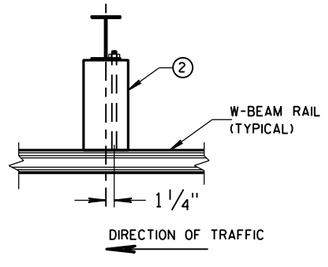
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

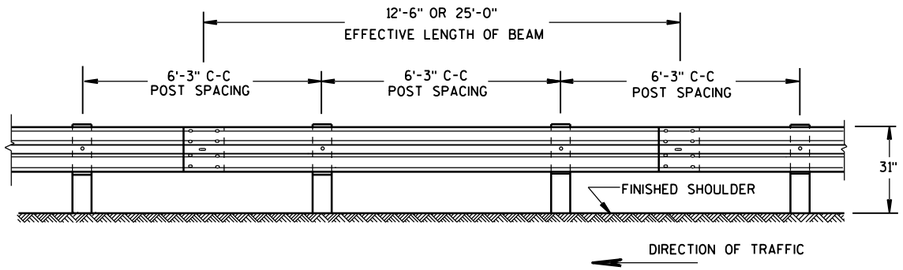


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

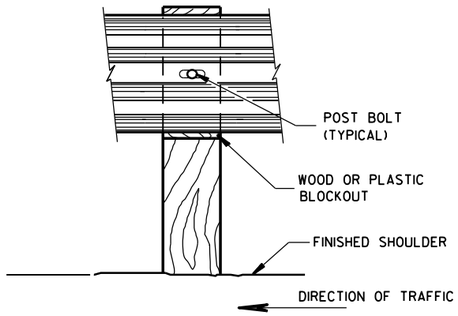
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FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

7. PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

8. 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.

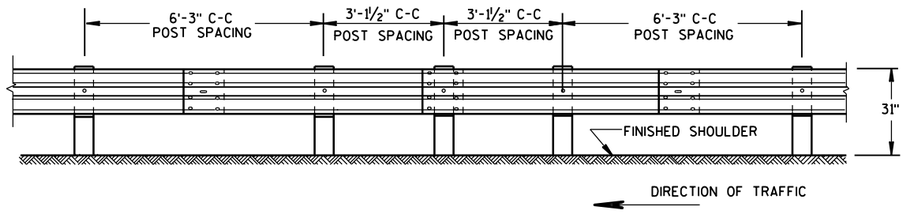
9. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

10. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

11. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

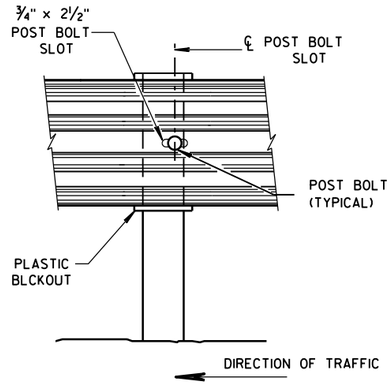
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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.

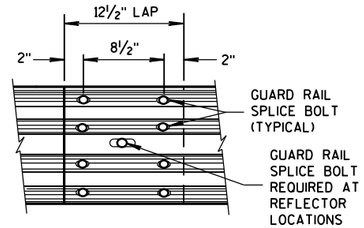


FRONT VIEW

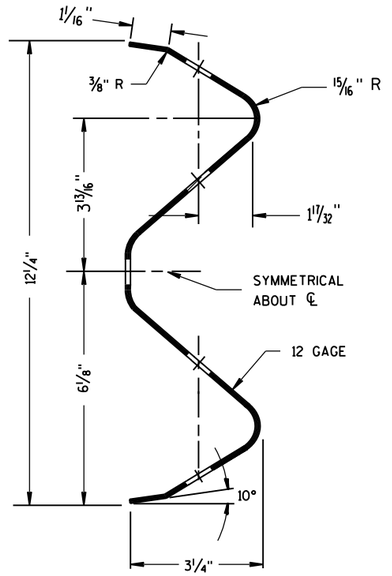
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



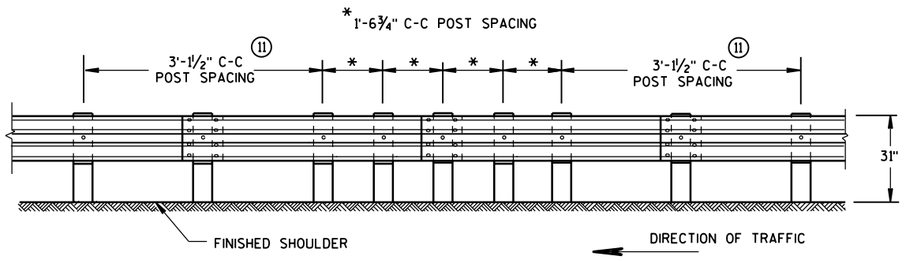
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

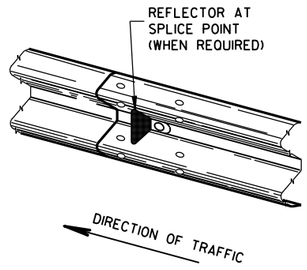


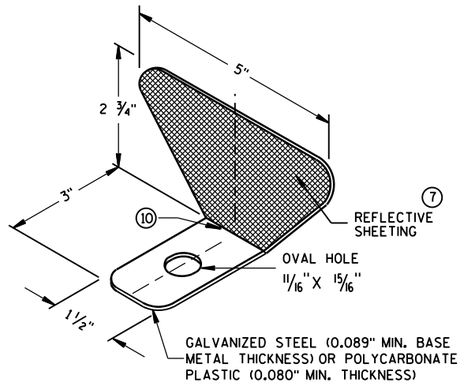
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (7)

REFLECTOR SPACING (8)

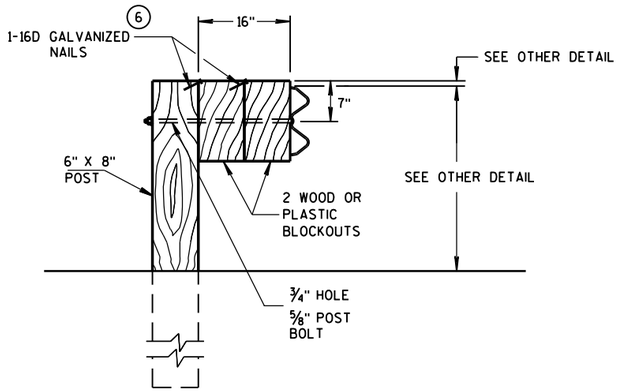
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (9)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 (10)	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

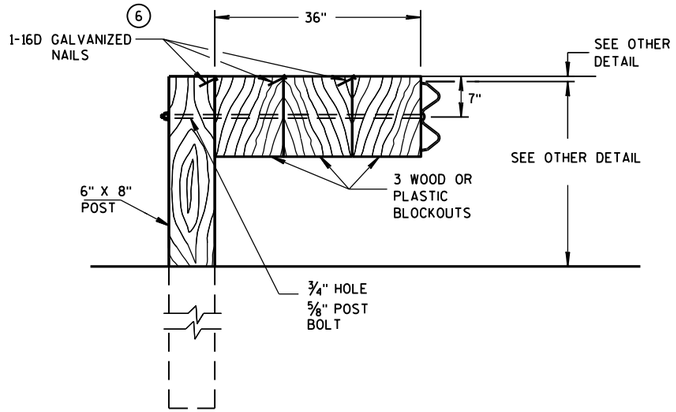
6

S.D.D. 14 B 42-4b



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.

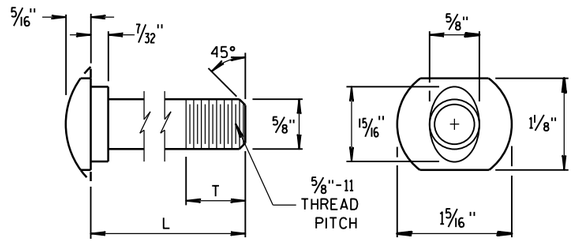


DETAIL FOR 36" BLOCKOUT DEPTH

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.

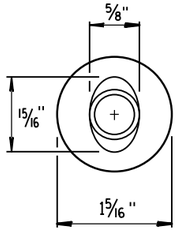
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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.

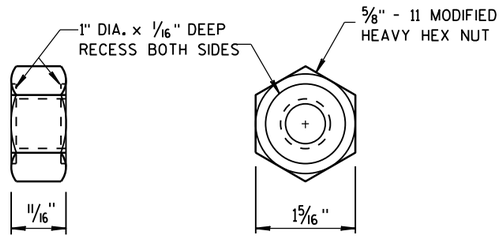


POST BOLT TABLE

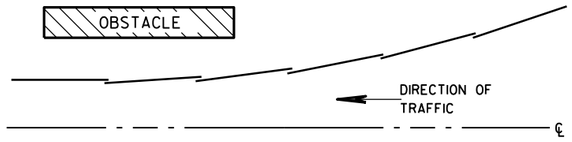
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

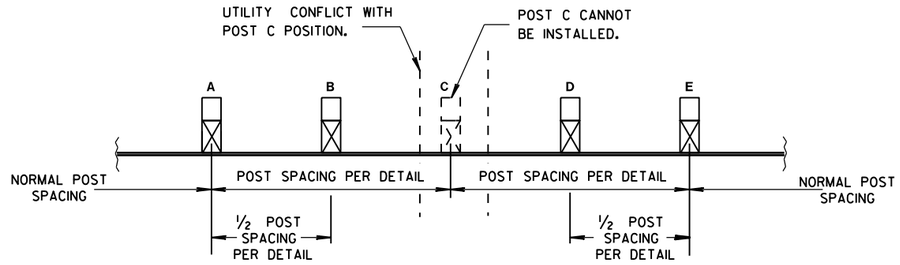


POST BOLT, SPLICE BOLT AND RECESS NUT

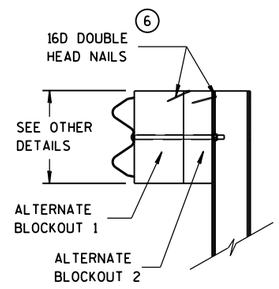


PLAN VIEW

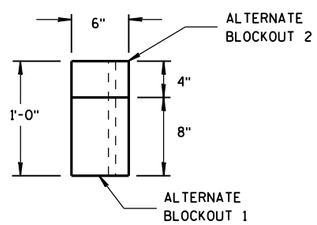
BEAM LAPPING DETAIL



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
June 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6
S.D.D. 14 B 42-4c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, 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) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(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.

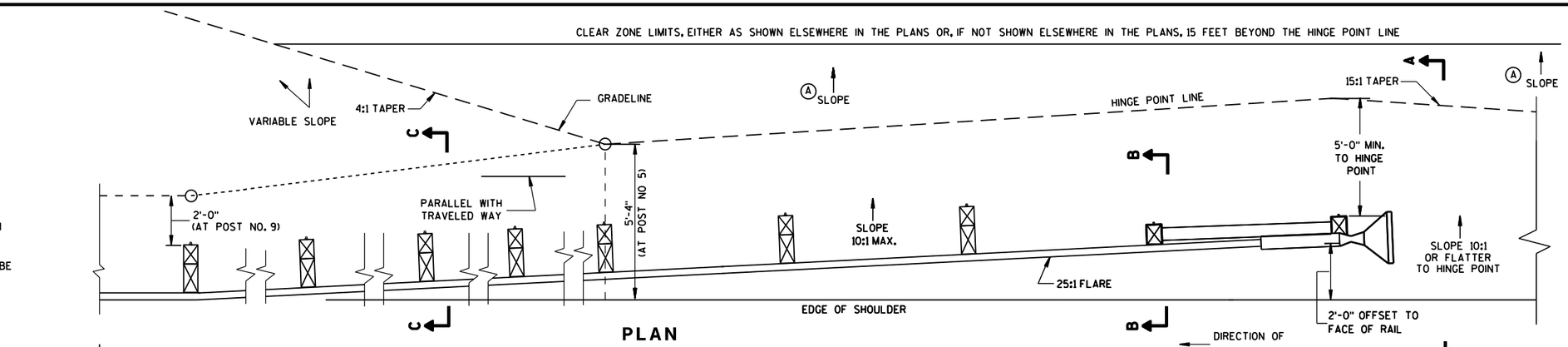
SEE SDD 14B42 FOR MORE INFORMATION.

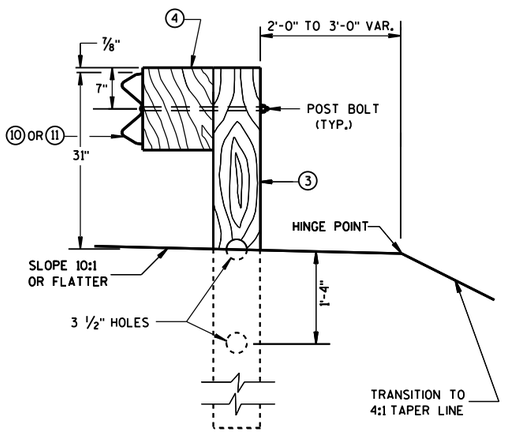
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

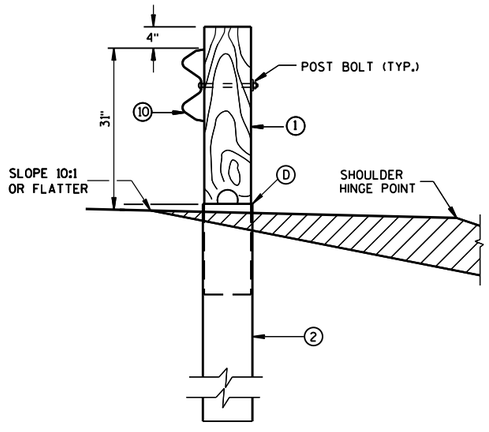
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

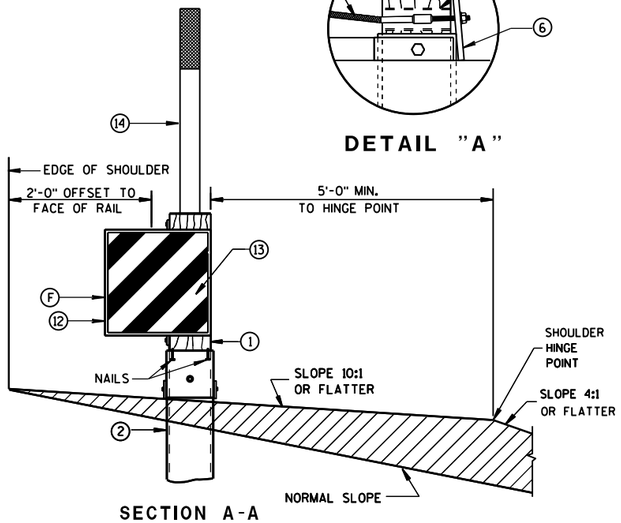




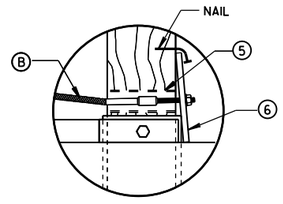
SECTION C-C
TYPICAL AT POST NOS. 3-9



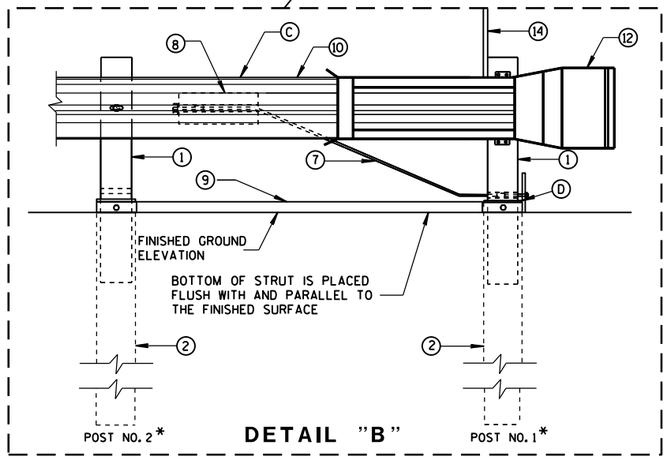
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



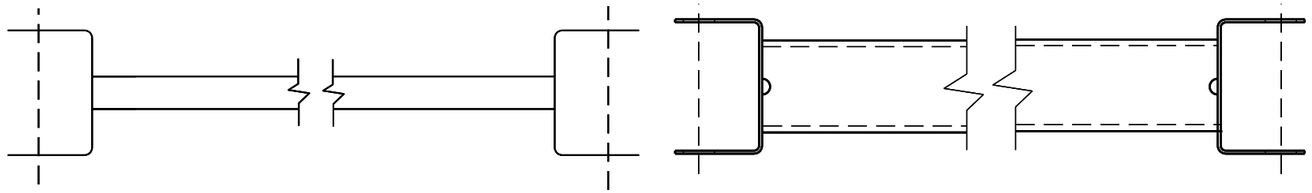
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

S.D.D. 14 B 44-2a

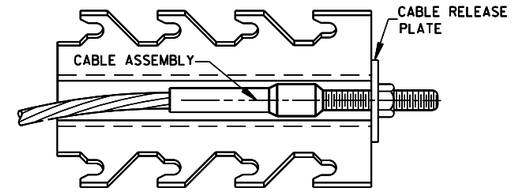
S.D.D. 14 B 44-2a



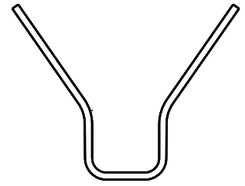
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

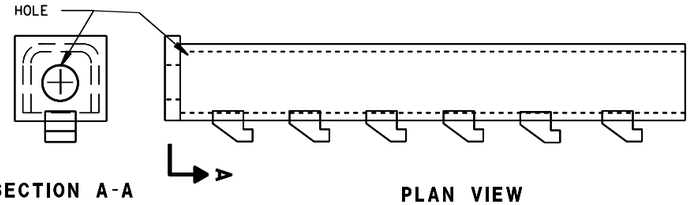
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR 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 F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



FRONT VIEW



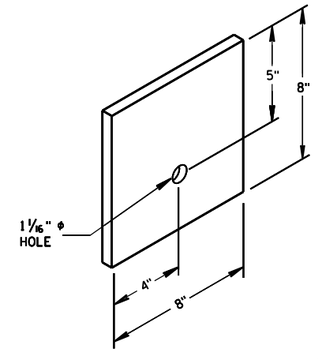
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



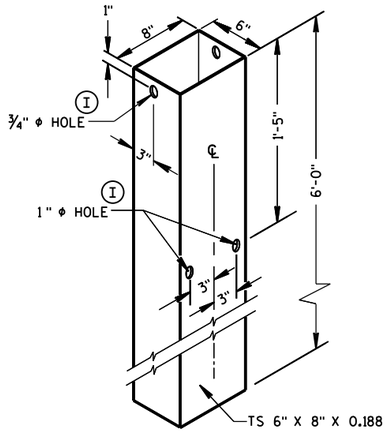
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

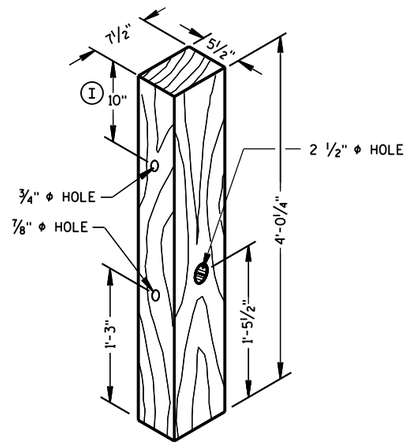
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 44-2b

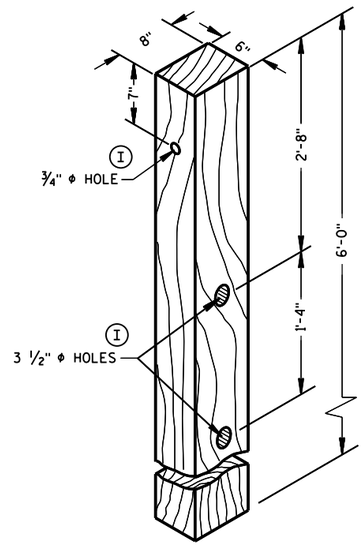


FOUNDATION TUBE (2)



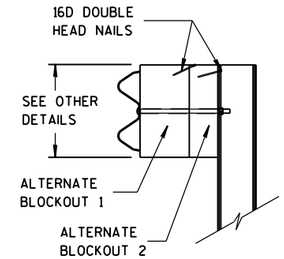
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

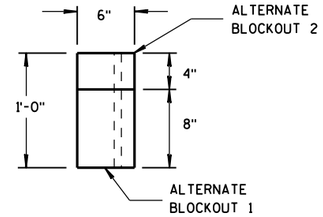


POSTS NUMBER 3-9

WOOD CRT POST (3)

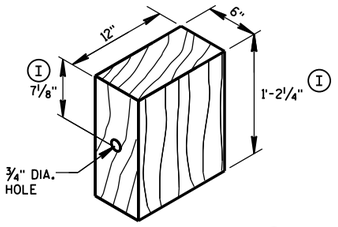


SIDE VIEW



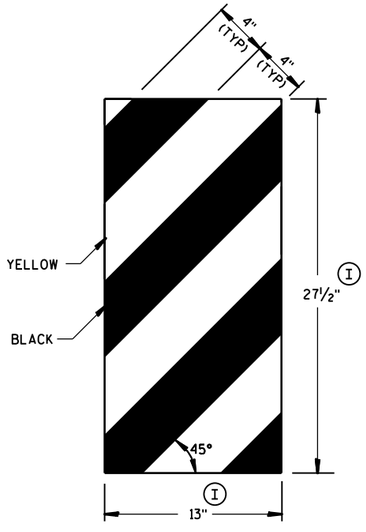
TOP VIEW

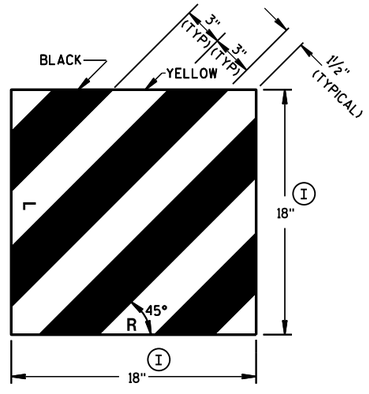
ALTERNATE WOOD BLOCKOUT DETAIL



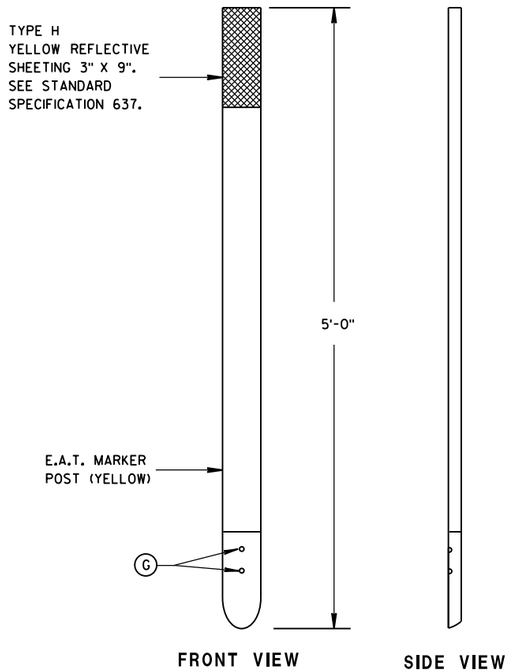
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





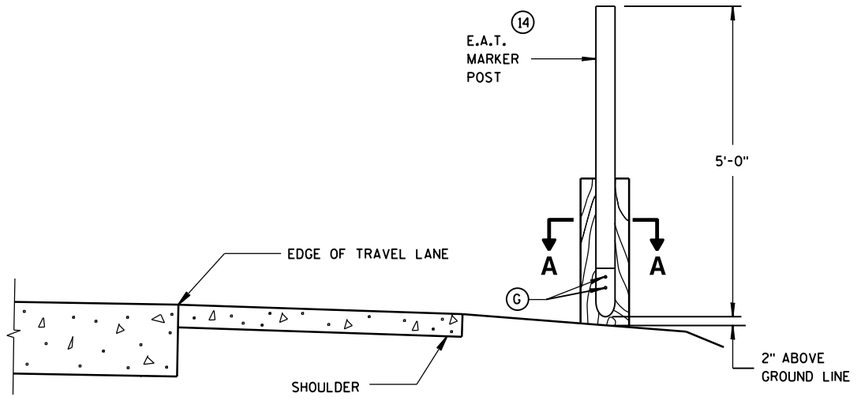
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

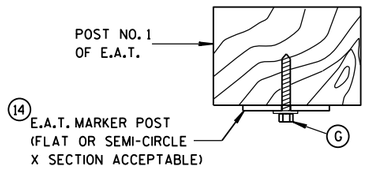
SIDE VIEW

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

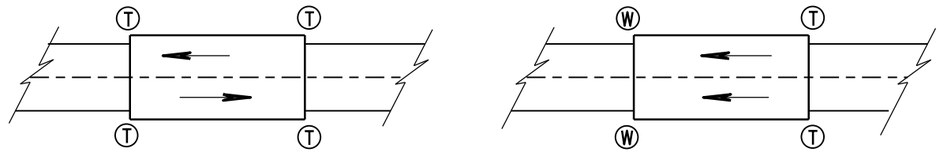
APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 14 B 44-2c

6

S.D.D. 14 B 44-2c



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

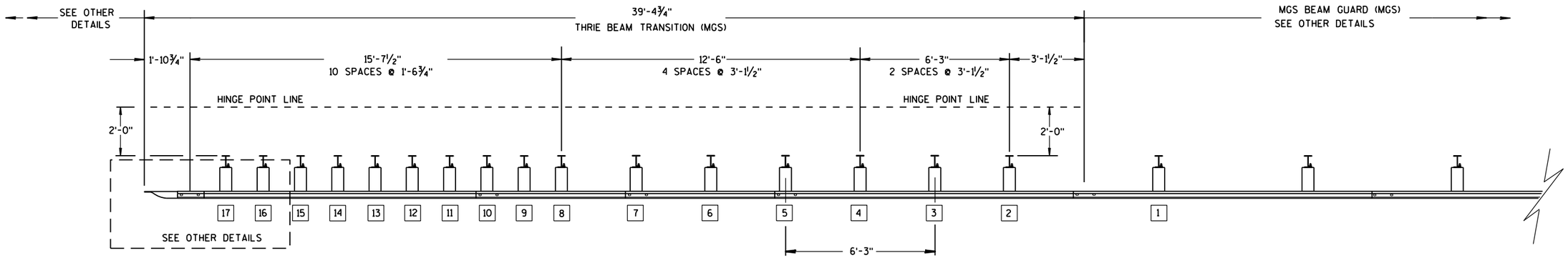
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

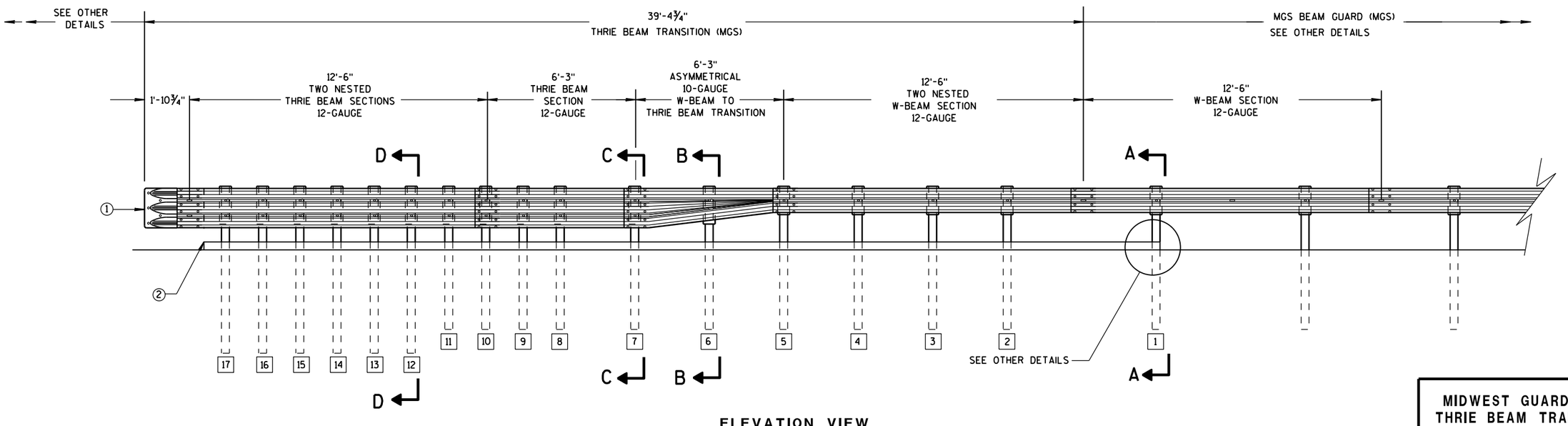
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

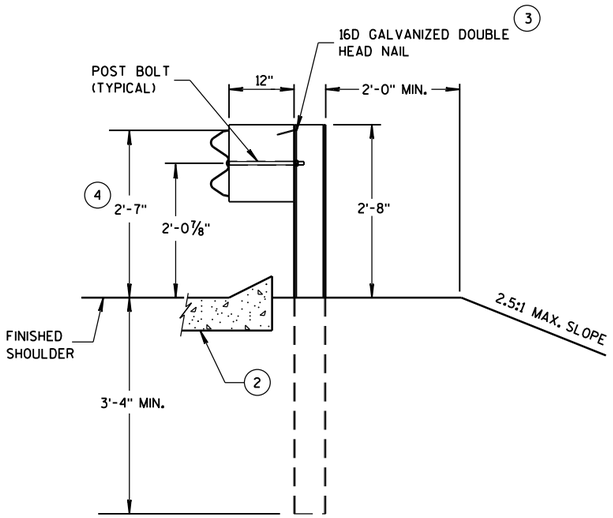
S.D.D. 14 B 45-4a

GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE_FEATURE SEE PLAN FOR INFORMATION.

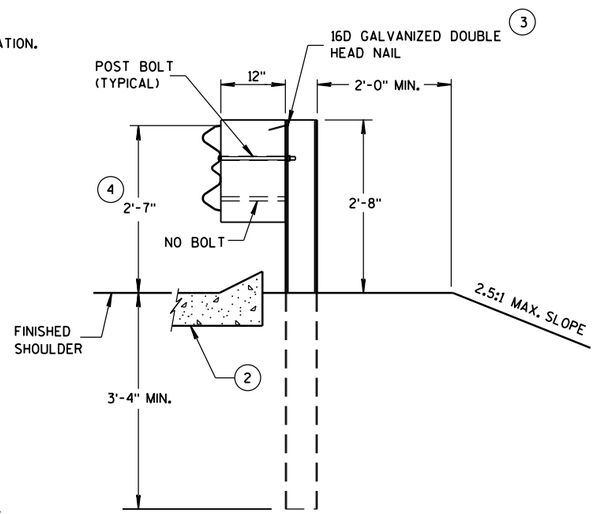
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



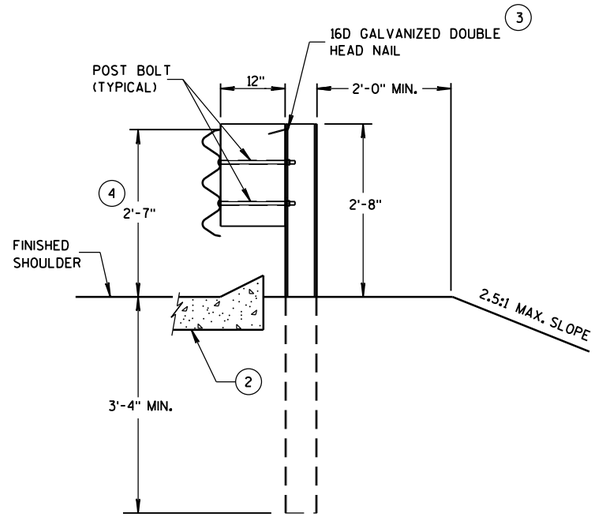
SECTION A-A

POSTS 1-5



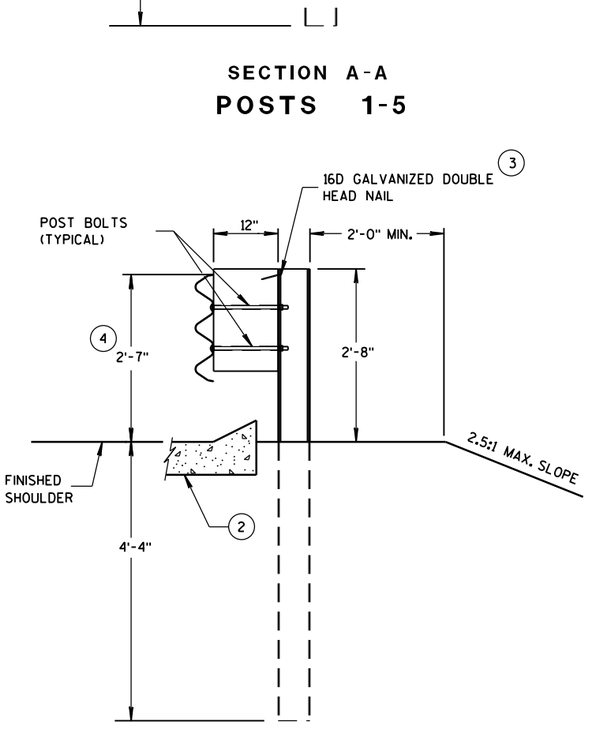
SECTION B-B

POST 6



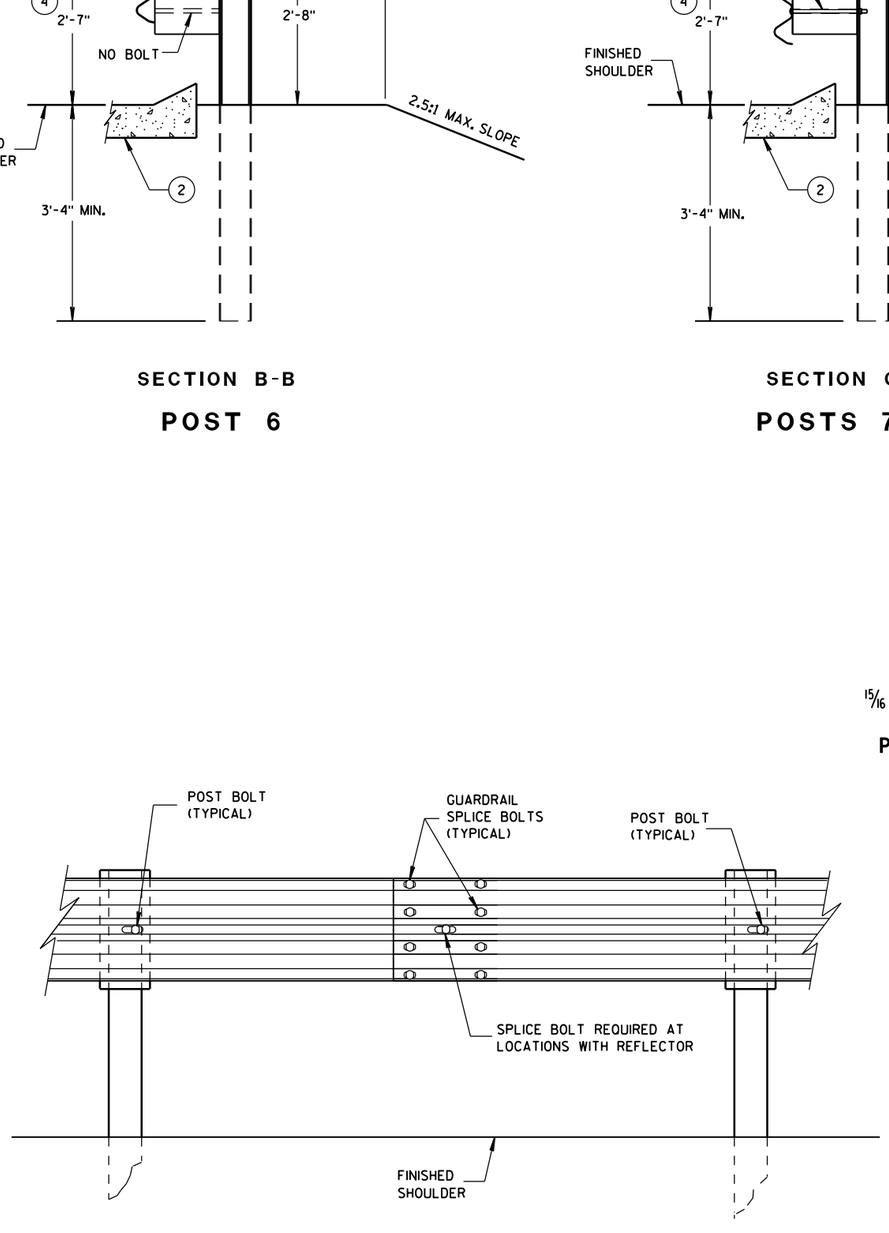
SECTION C-C

POSTS 7-11



SECTION D-D

POSTS 12-17



SPLICE DETAIL

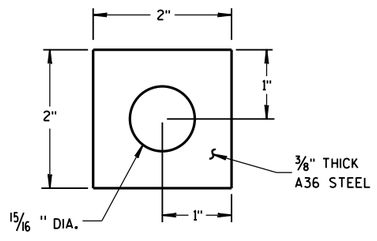
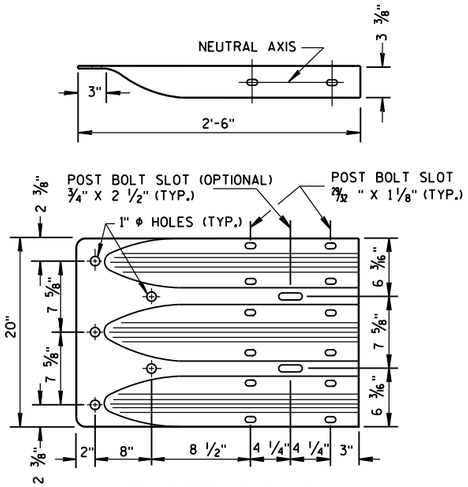
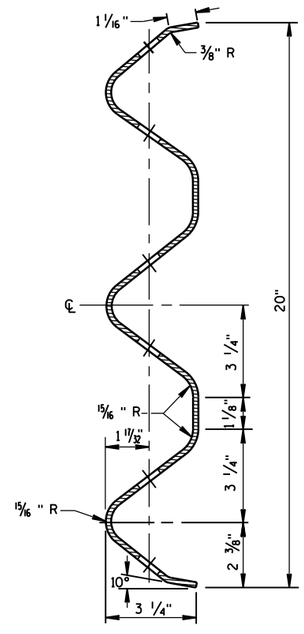


PLATE WASHER DETAIL



THRIE BEAM TERMINAL CONNECTOR



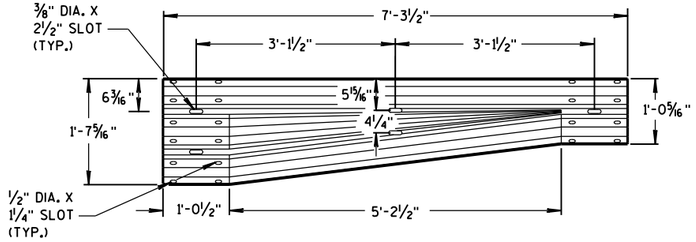
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

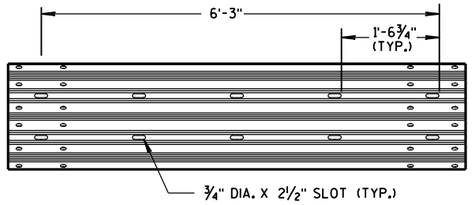
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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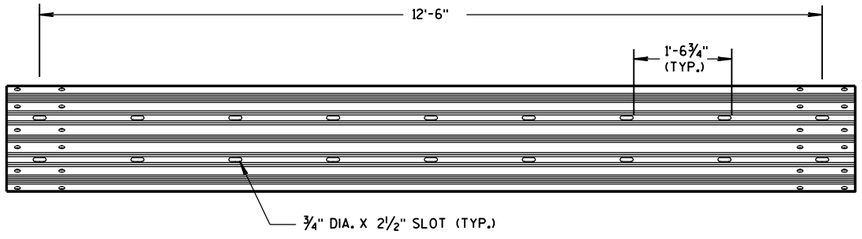
S.D.D. 14 B 45-4b



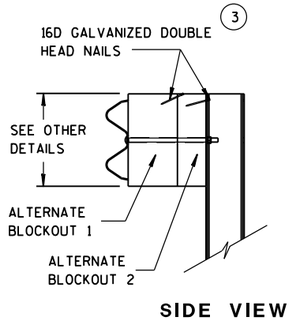
W-BEAM TO THRIE BEAM TRANSITION SECTION



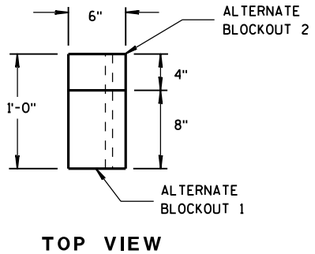
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

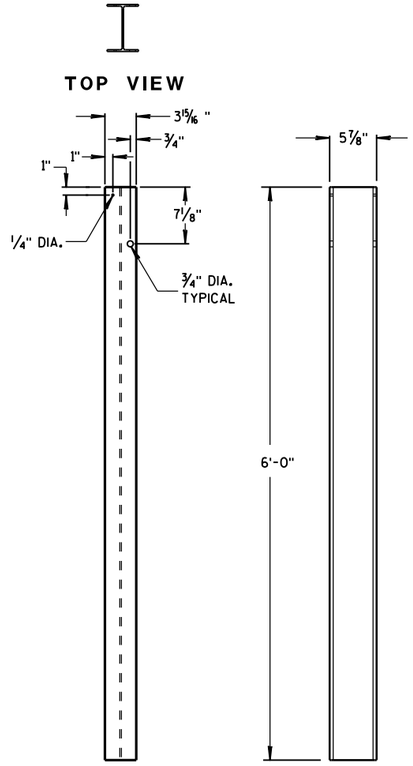


SIDE VIEW

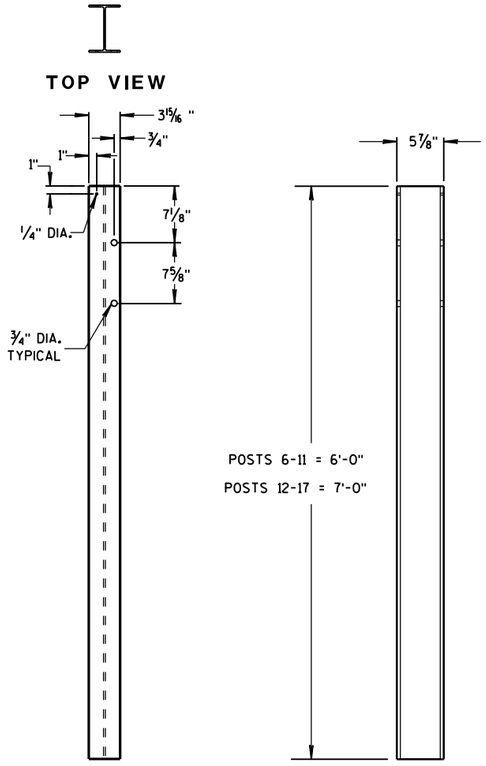


TOP VIEW

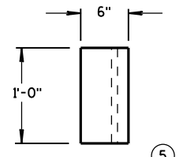
ALTERNATE WOOD BLOCKOUT DETAIL



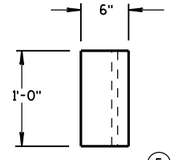
STEEL POSTS 1-5



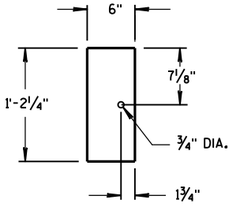
STEEL POSTS 6-17



TOP VIEW (5)

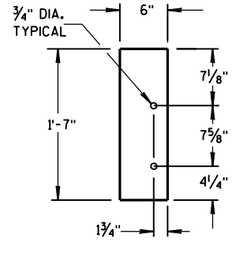


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

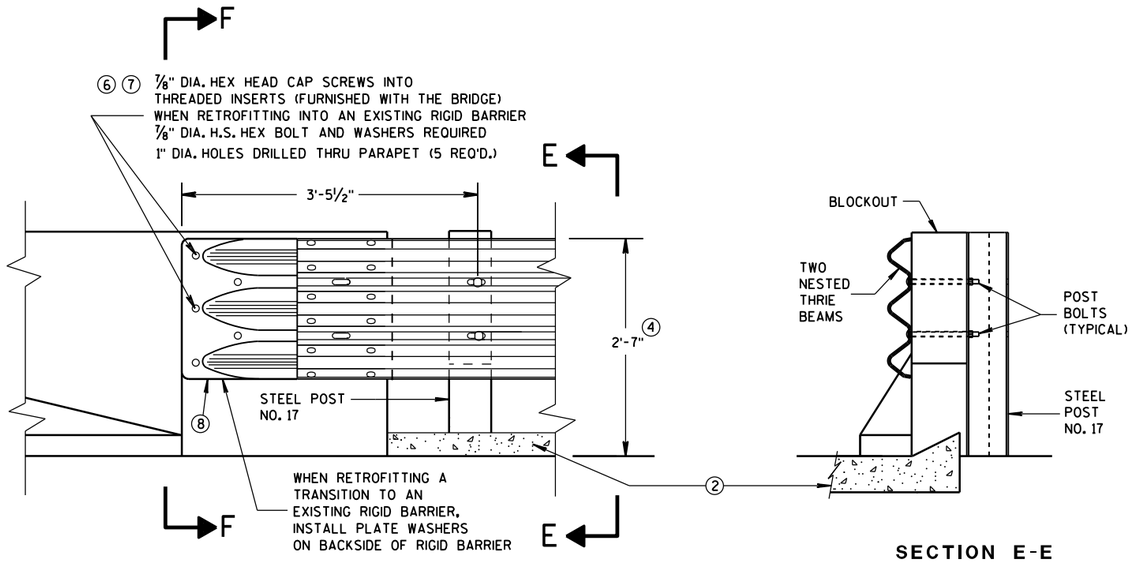
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 14 B 45-4c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

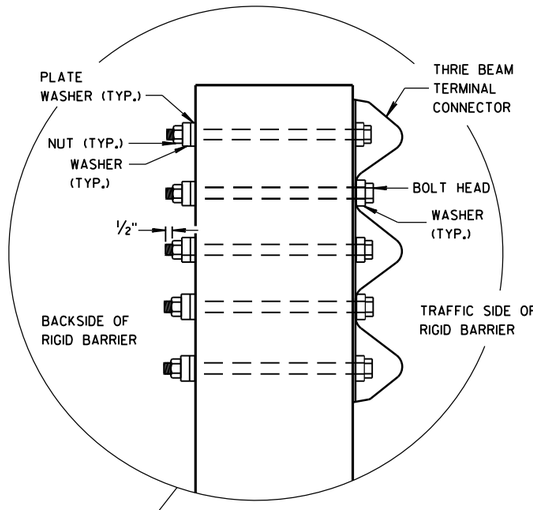
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

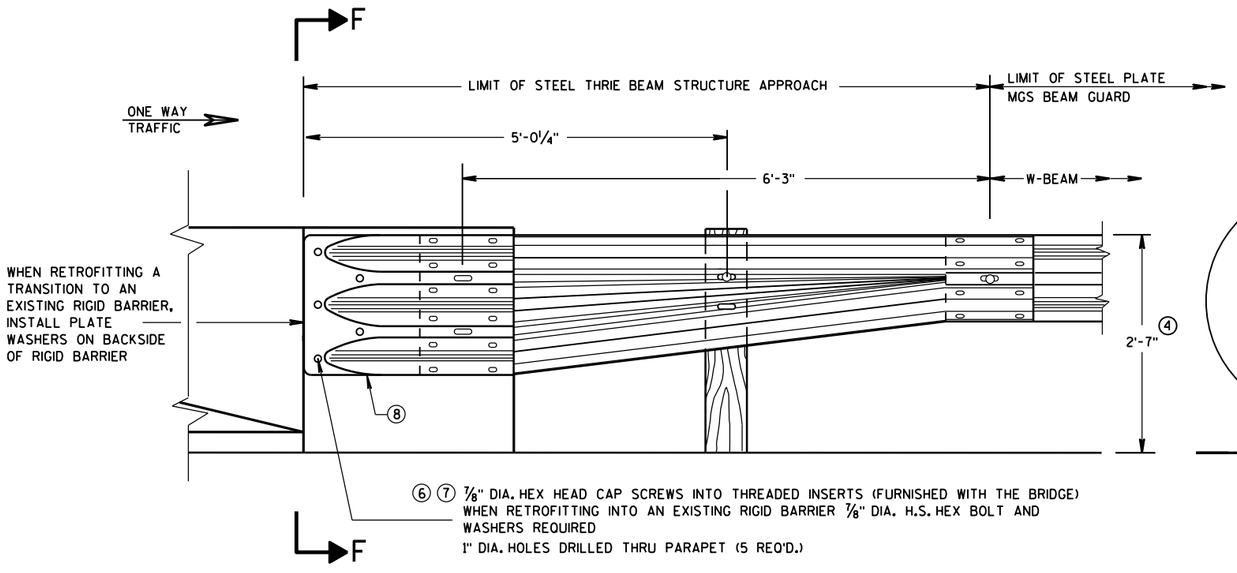
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

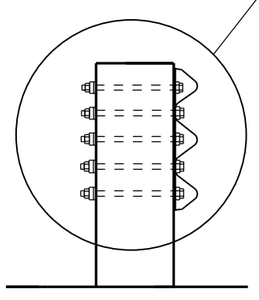
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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.

⑧ 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".

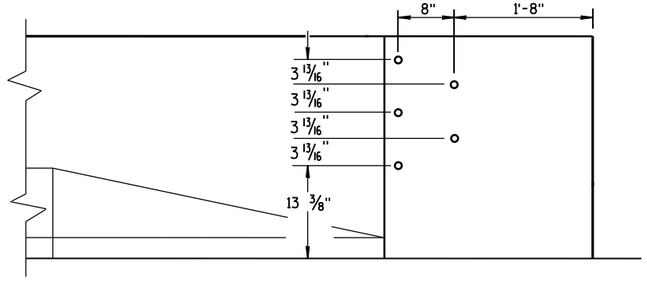




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

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
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 45-4d

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S.D.D. 14 B 45-4d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

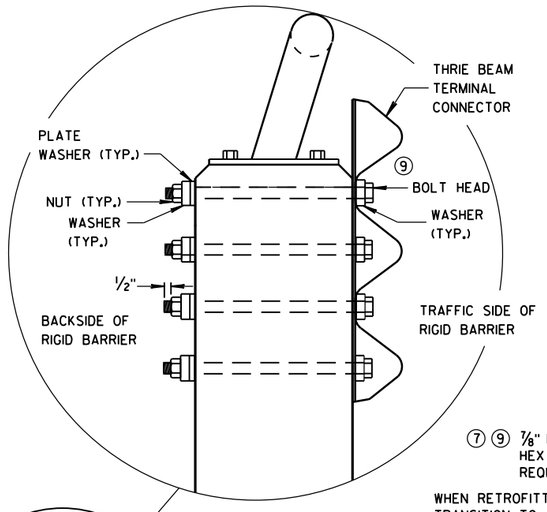
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

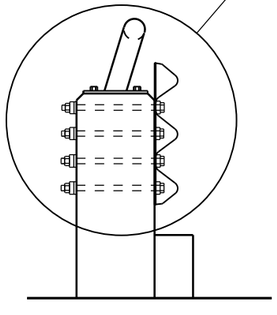
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) 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.

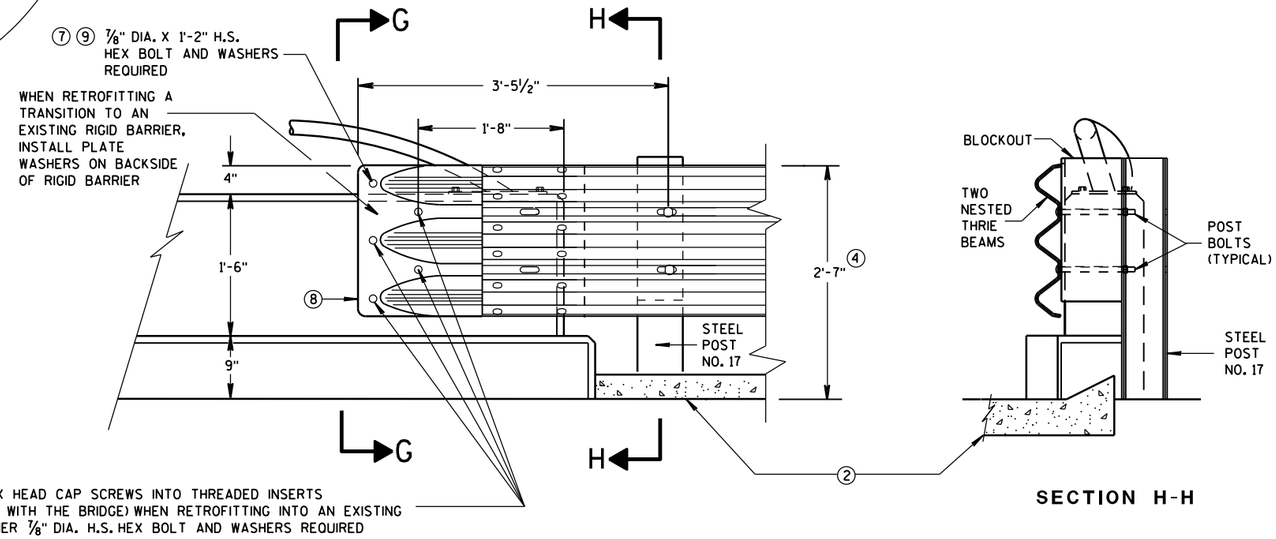
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

(9) 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.





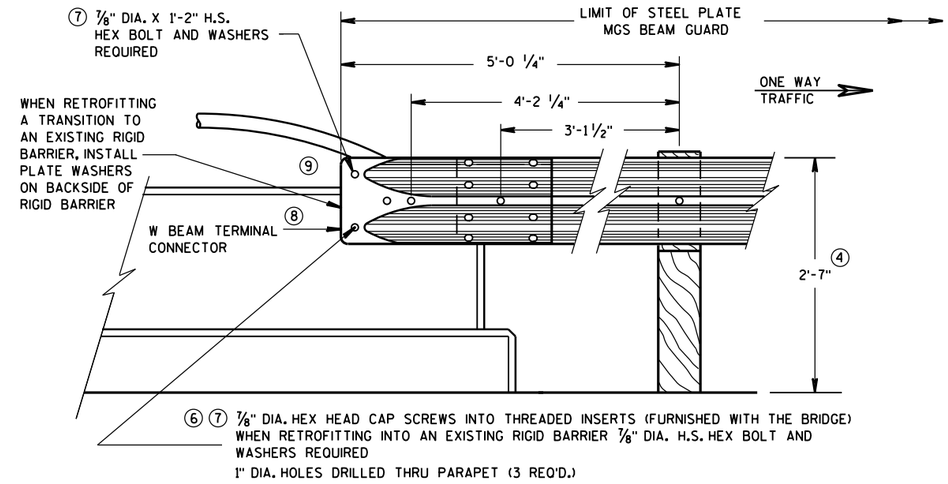
SECTION G-G



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

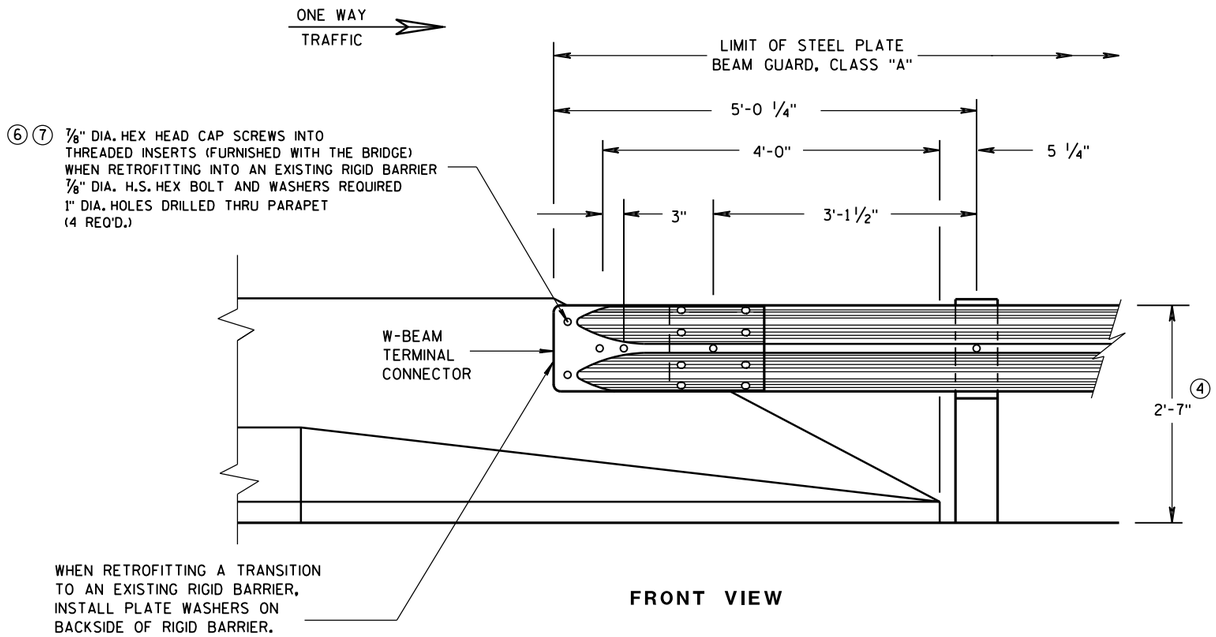
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June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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S.D.D. 14 B 45-4e

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S.D.D. 14 B 45-4e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

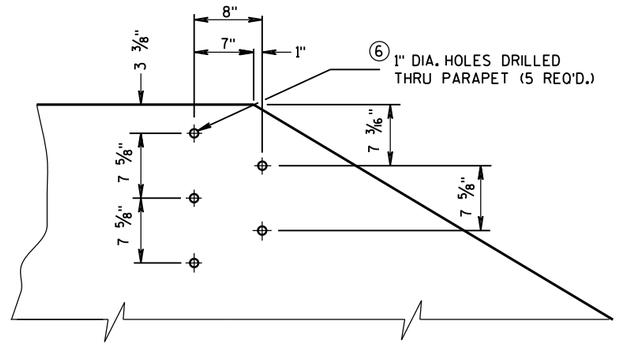
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

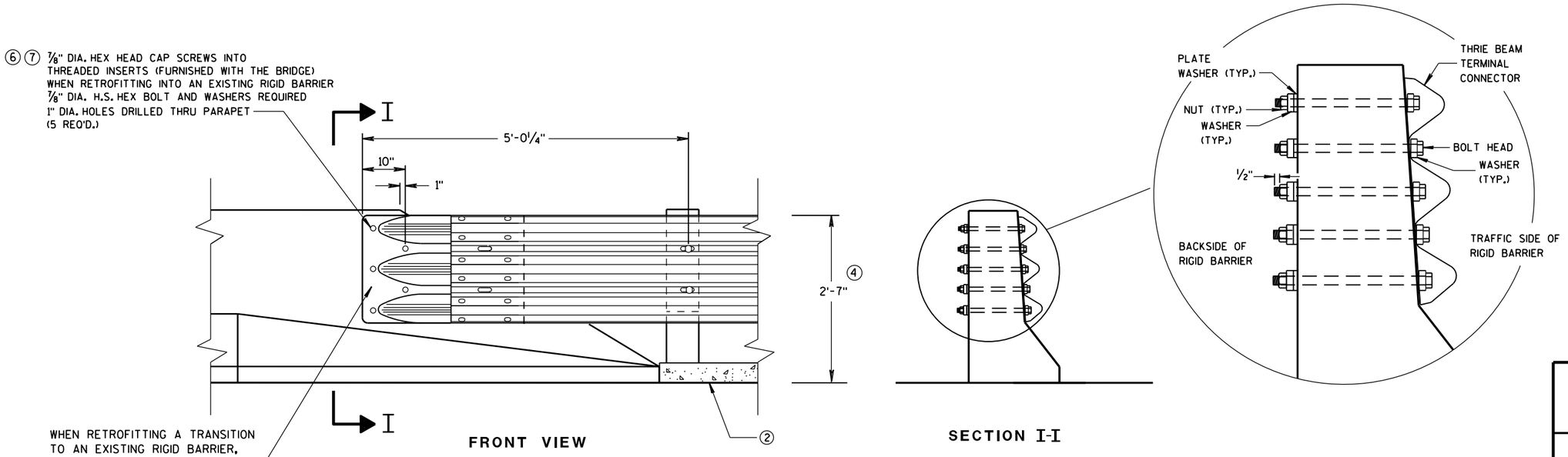
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

⑦ 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.



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

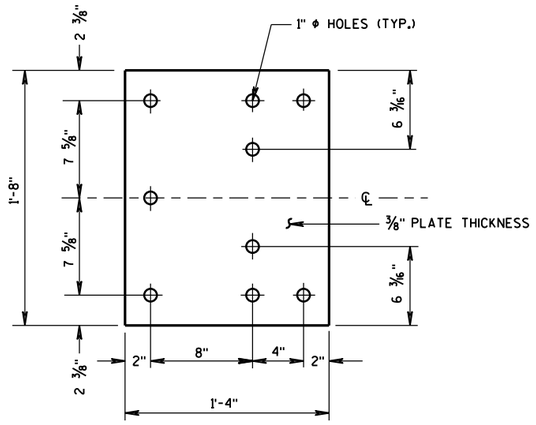
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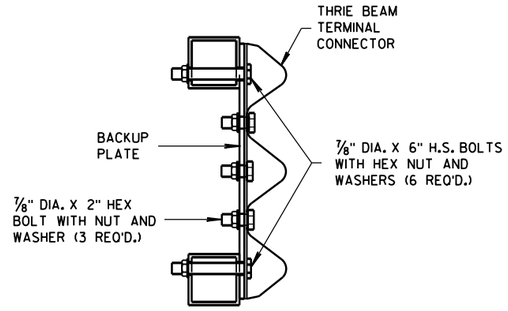
S.D.D. 14 B 45-4f

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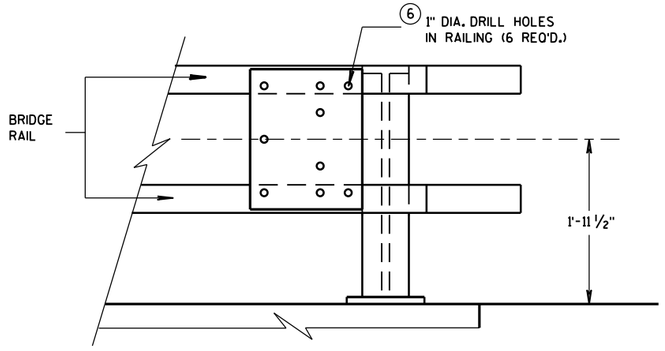
S.D.D. 14 B 45-4f



BACK-UP PLATE DETAIL



SECTION J-J

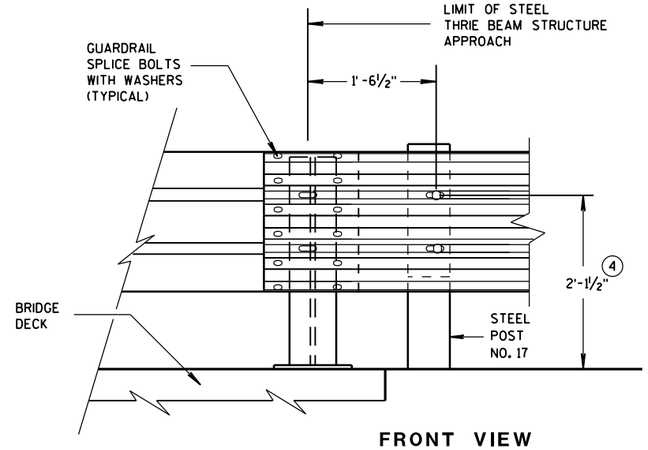


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

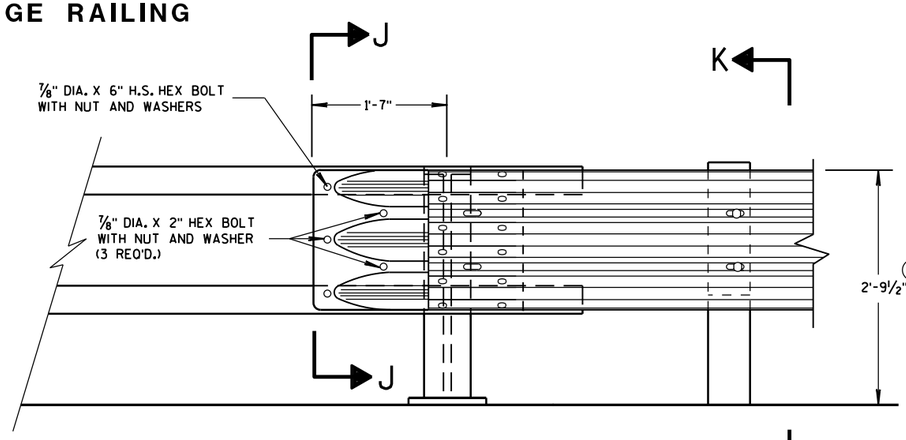
4 TOLERANCE FOR TOP OF BEAM IS ± 1".

6 DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

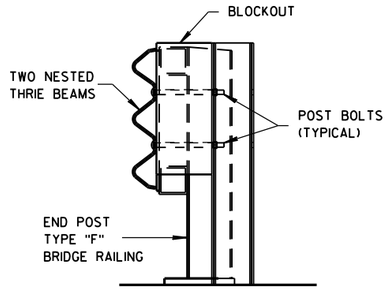


FRONT VIEW

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

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June, 2015 — DATE
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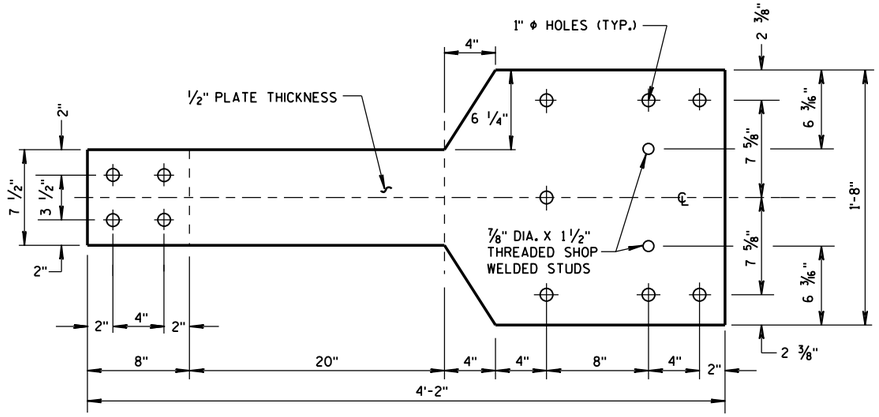
S.D.D. 14 B 45-4g

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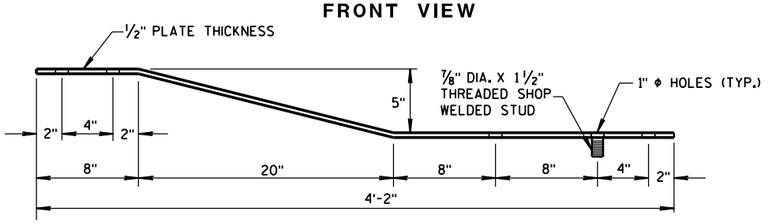
S.D.D. 14 B 45-4g

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

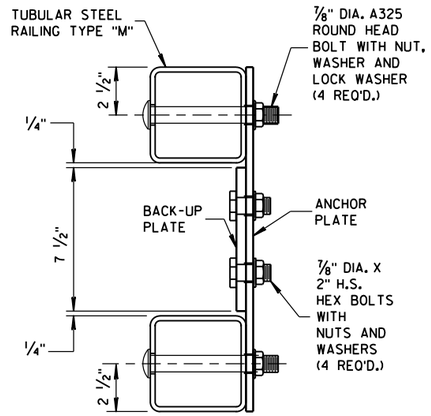


FRONT VIEW

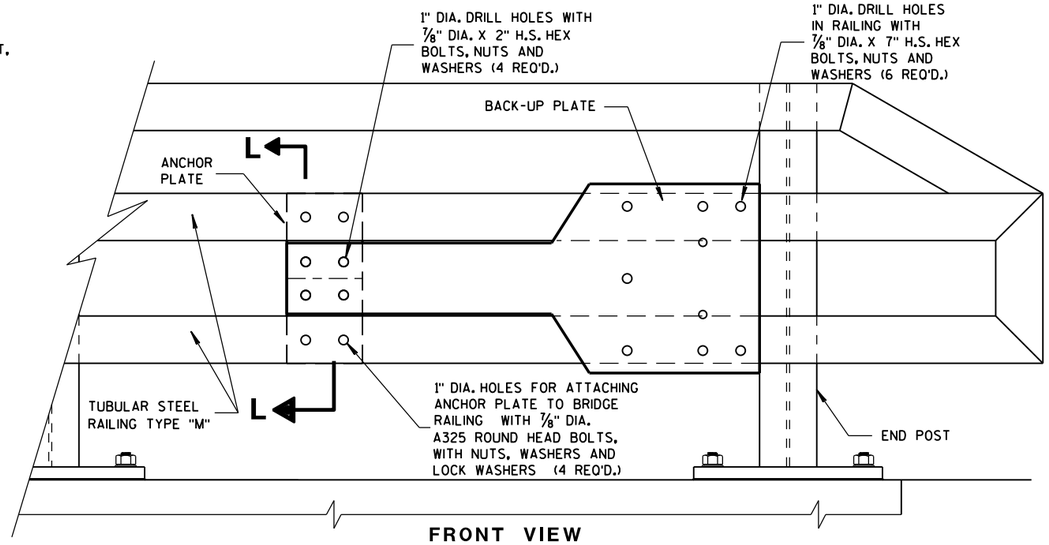


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

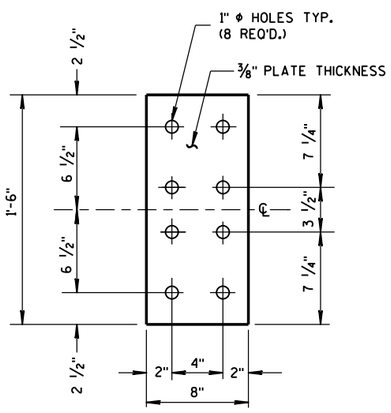


SECTION L-L



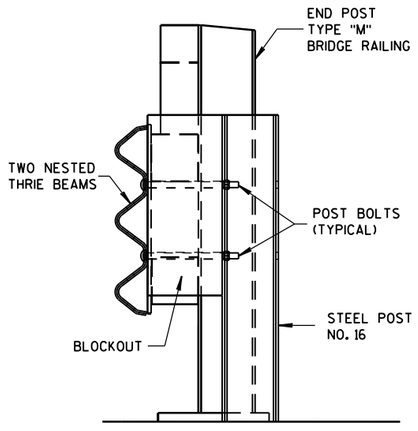
FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"

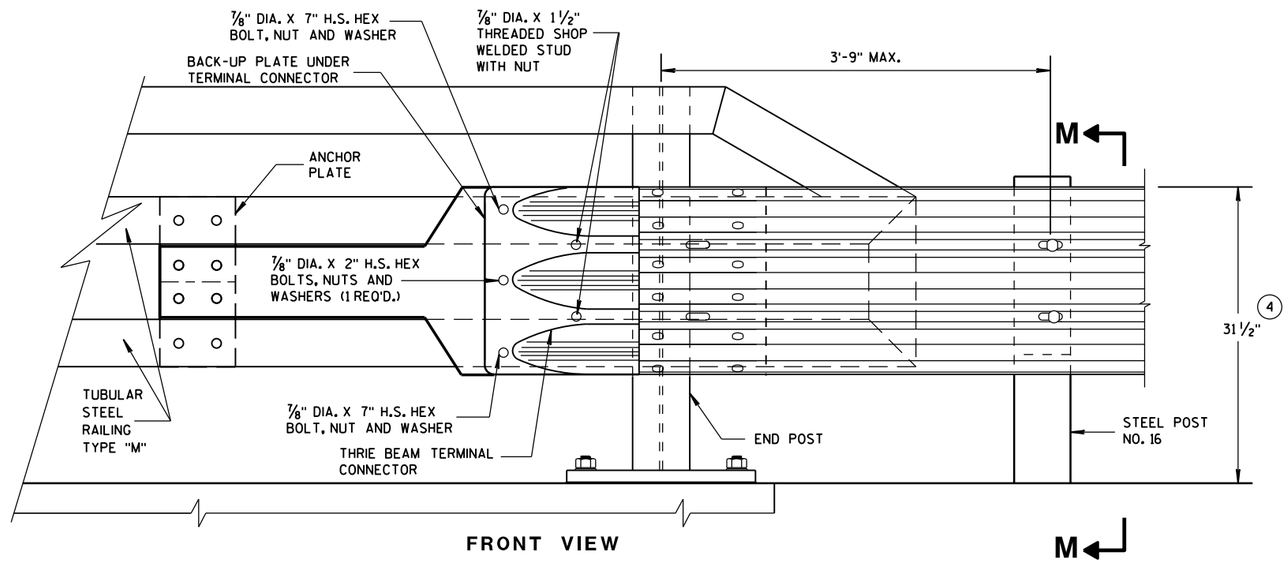


FRONT VIEW

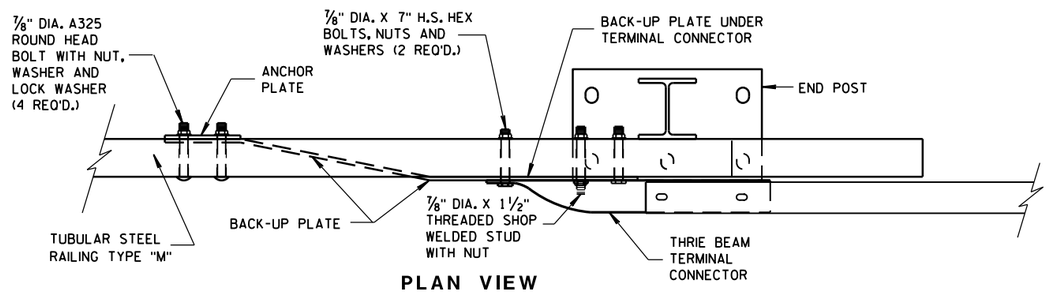
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

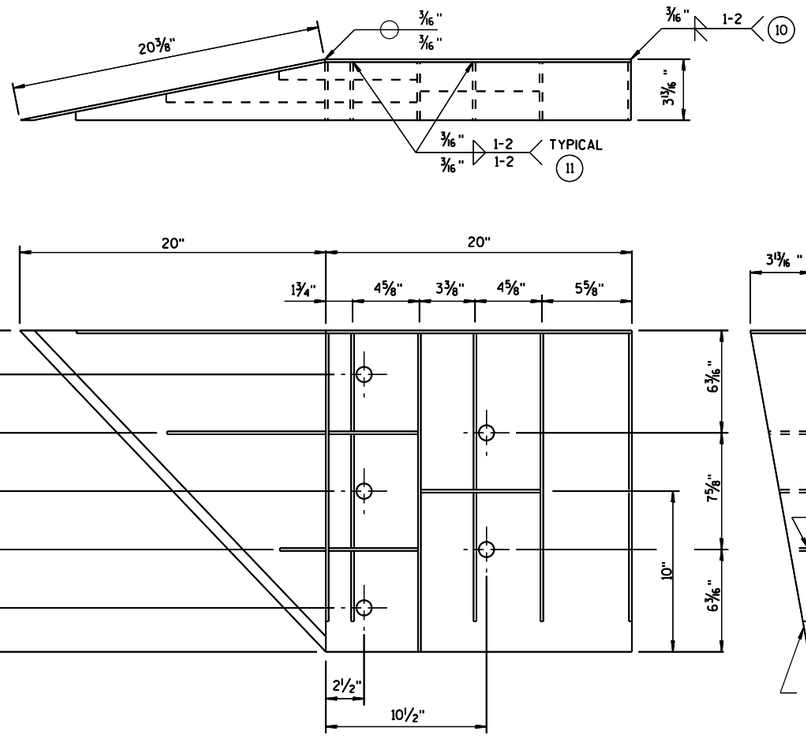
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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S.D.D. 14 B 45-4h

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WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

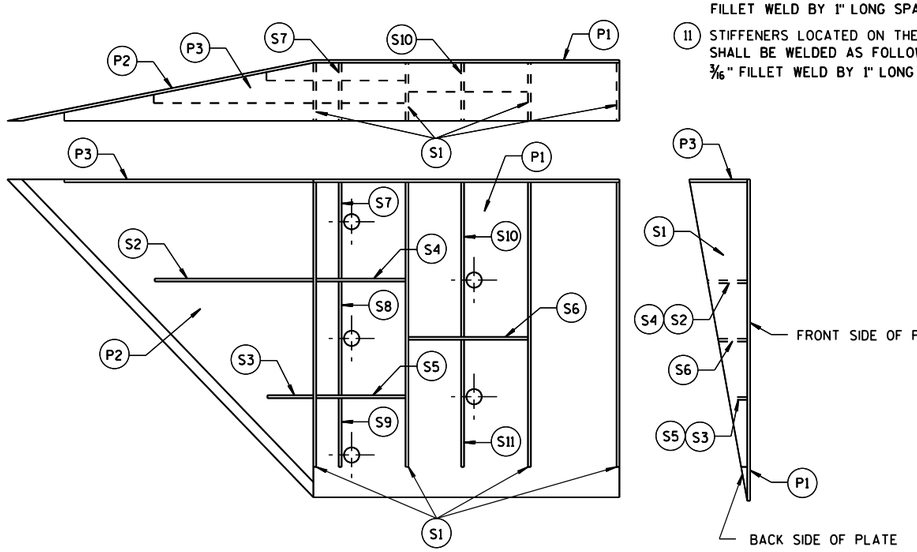


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 3/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 1/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

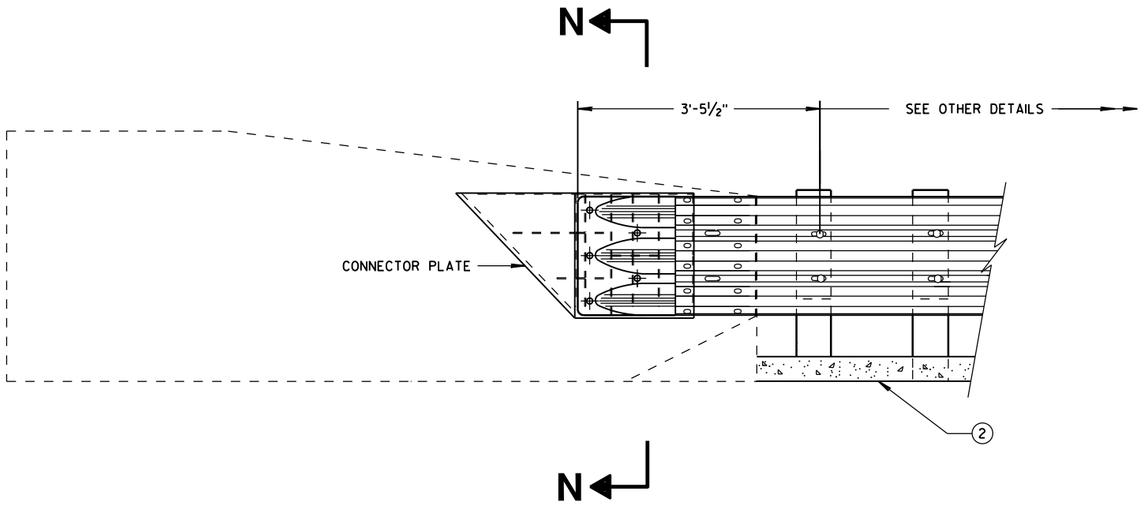
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
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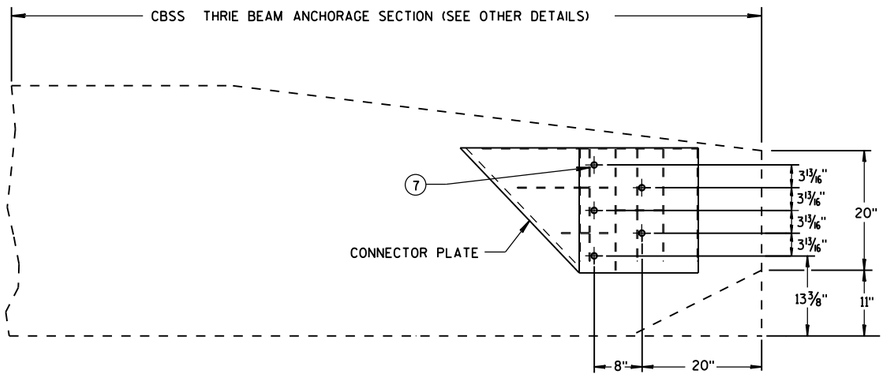
S.D.D. 14 B 45-4i

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S.D.D. 14 B 45-4i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



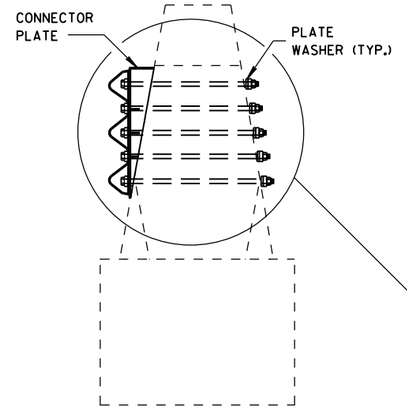
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

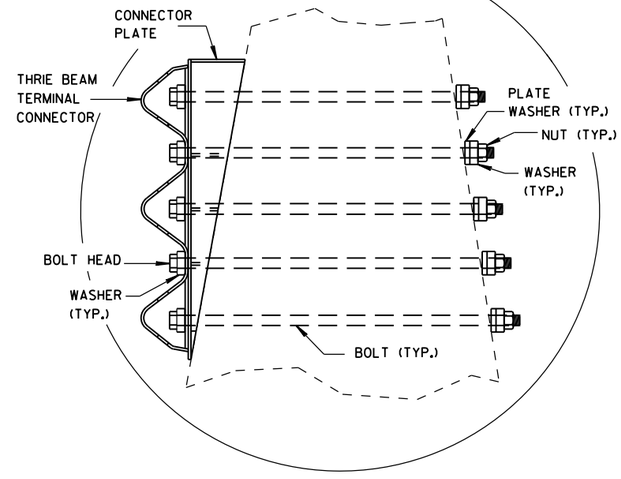
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) 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.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

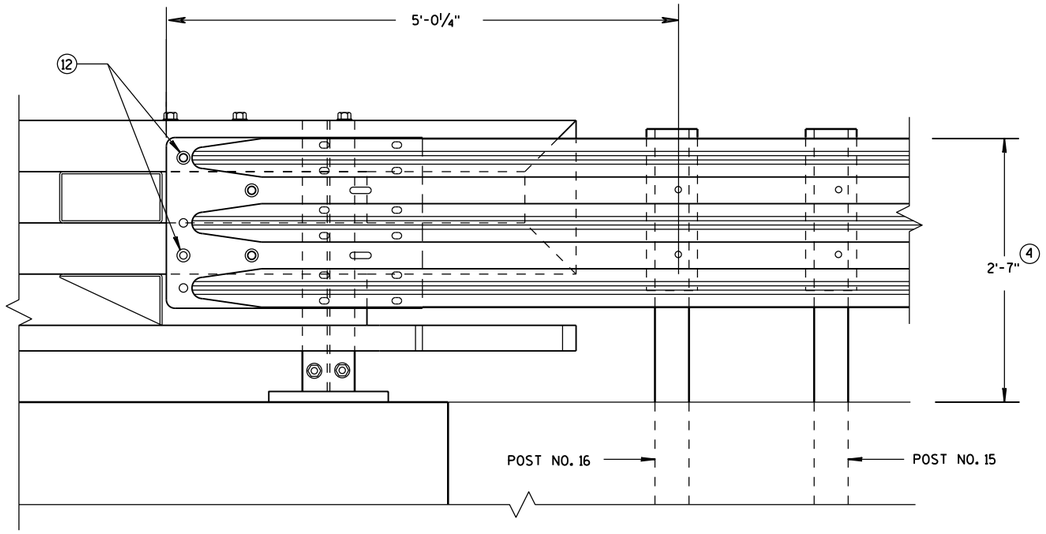
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS DEVELOPMENT ENGINEER
227
NT
FHWA

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S.D.D. 14 B 45-4j

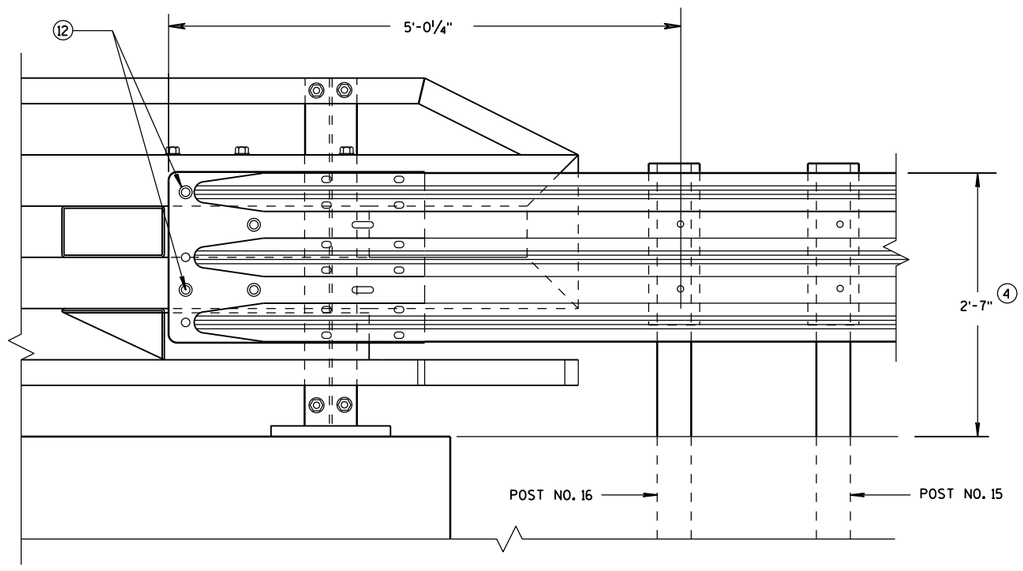
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S.D.D. 14 B 45-4j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
FHWA

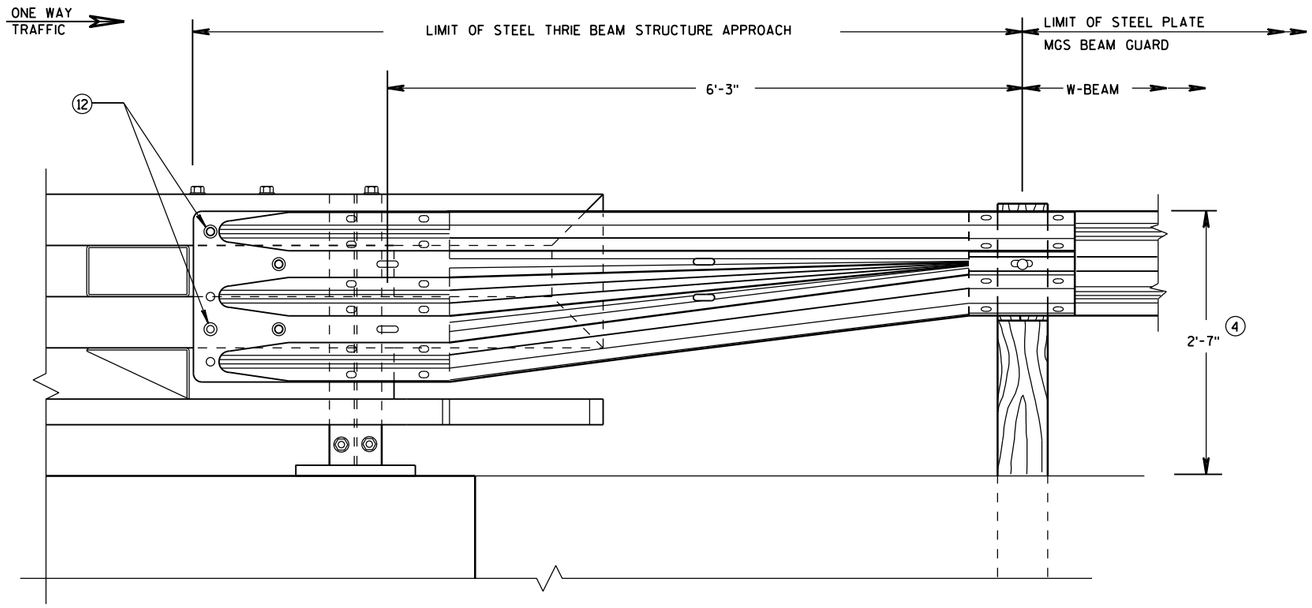
/S/ Jerry H. Zogg
ROADWAY STANDARDS D 228 NT
ENGINEER

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S.D.D. 14 B 45-4k

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S.D.D. 14 B 45-4k



FRONT VIEW

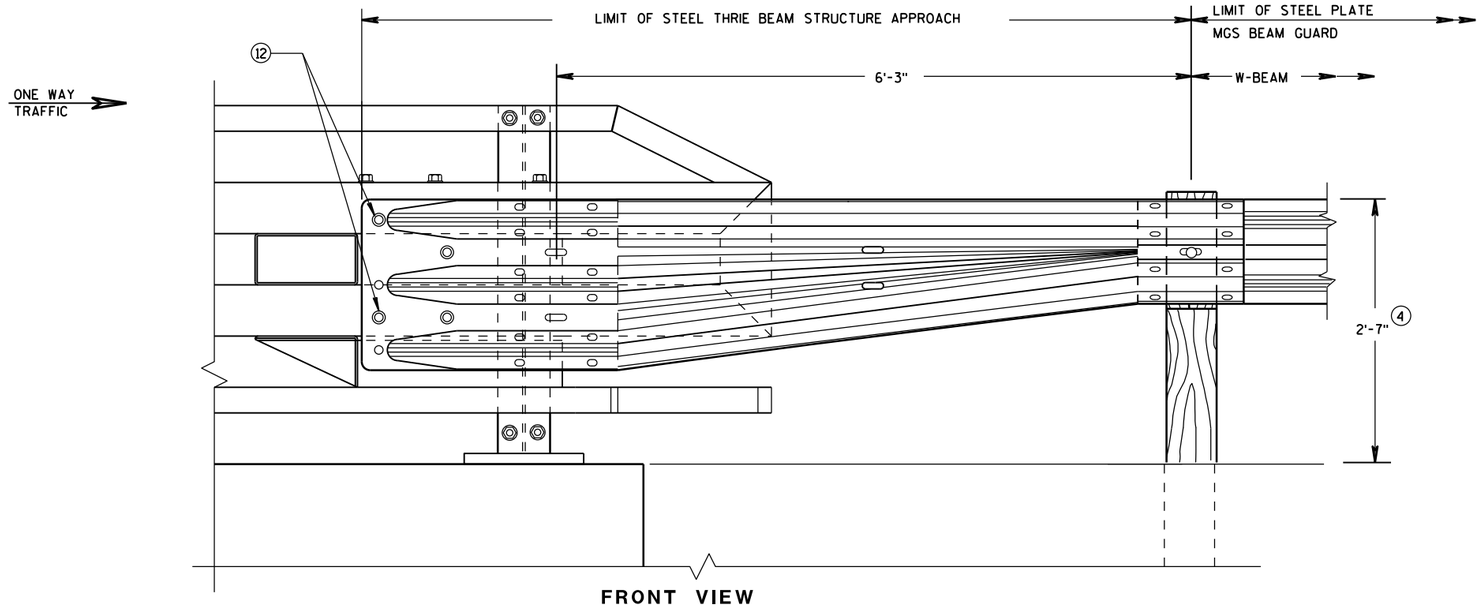
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

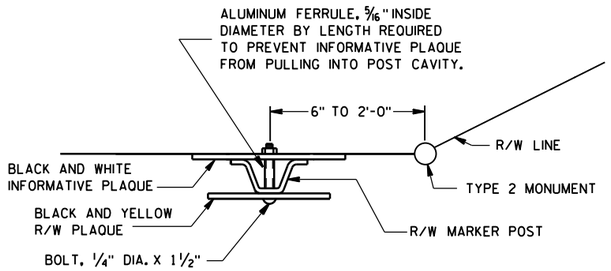
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
D 229 NT
FHWA

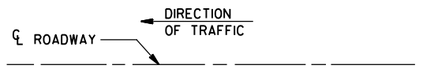
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S.D.D. 14 B 45-4L

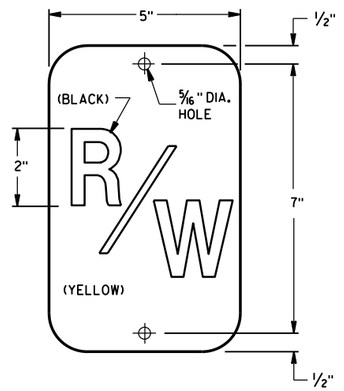
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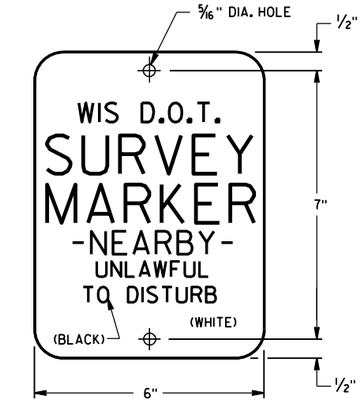


PLAN VIEW



R/W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

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

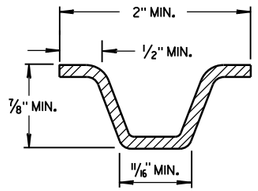
A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. R/W AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

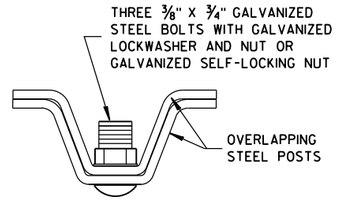
(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK TO A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3'10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR.

FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT. DEPENDING ON THE STABILITY OF THE ROCK.

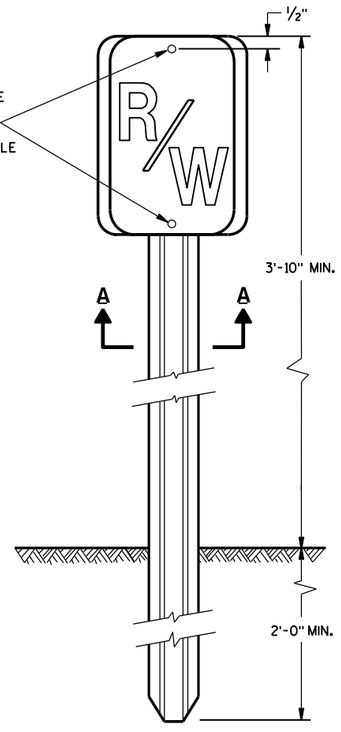


MIN. WEIGHT 1.12 LB./FT.

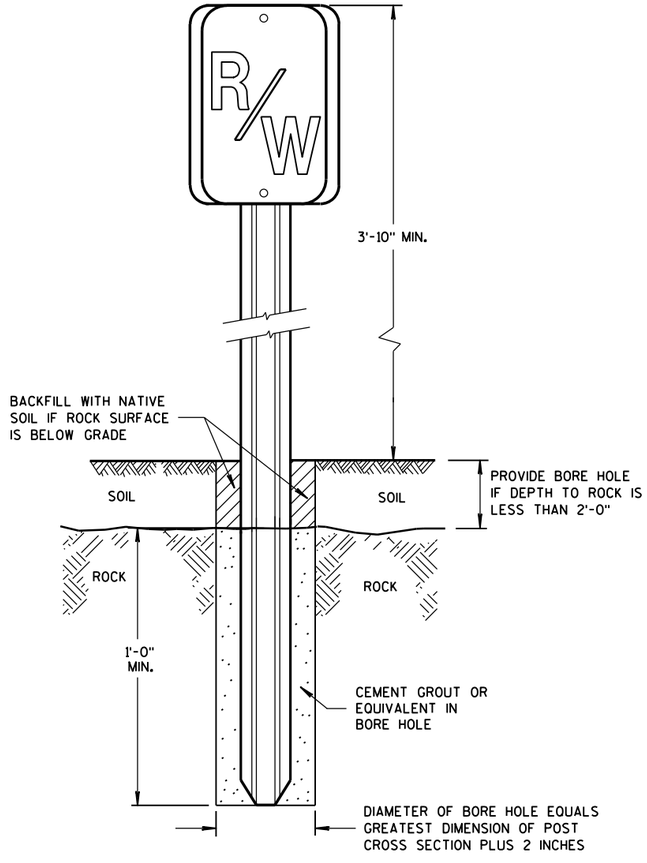
SECTION A-A



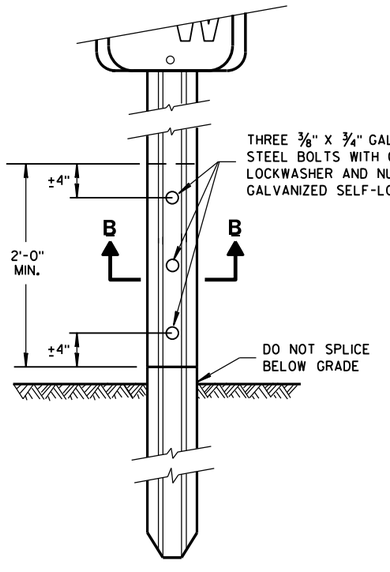
SECTION B-B



FRONT VIEW
STEEL MARKER POST



FRONT VIEW
ROCK INSTALLATION (1)



FRONT VIEW
SPLICE DETAIL

MARKER POST FOR RIGHT-OF-WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

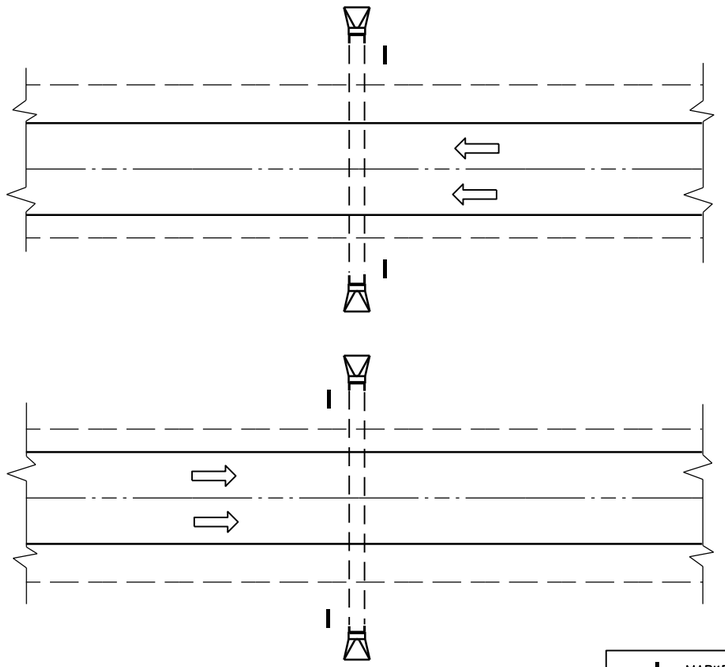
APPROVED
2/18/2016 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

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S.D.D. 15 A 1-13a

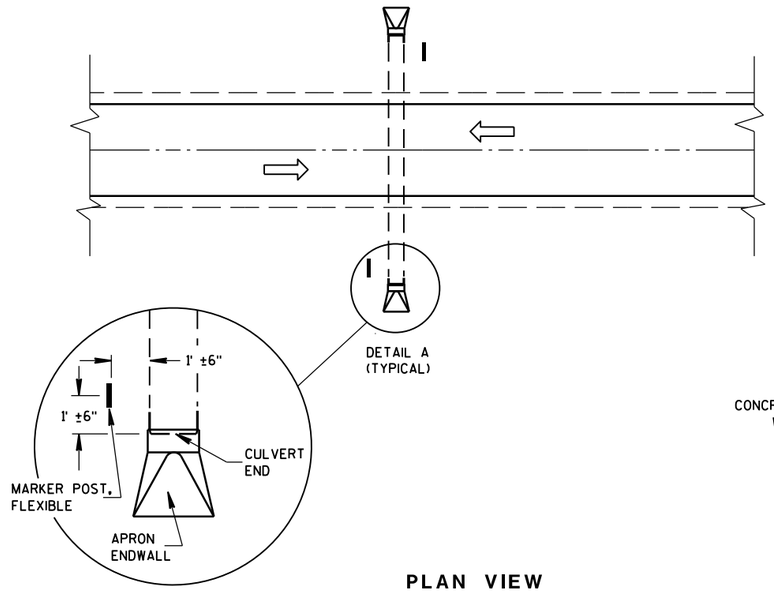
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S.D.D. 15 A 1-13a



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

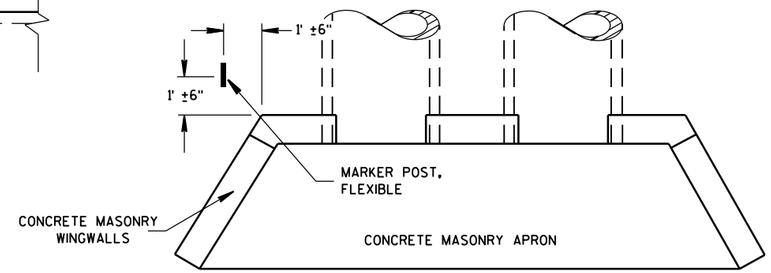
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

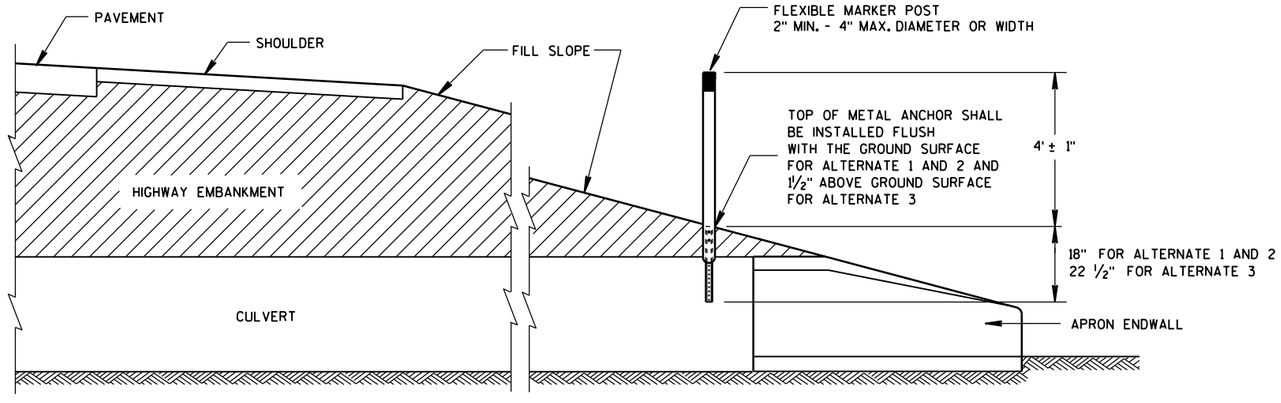
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

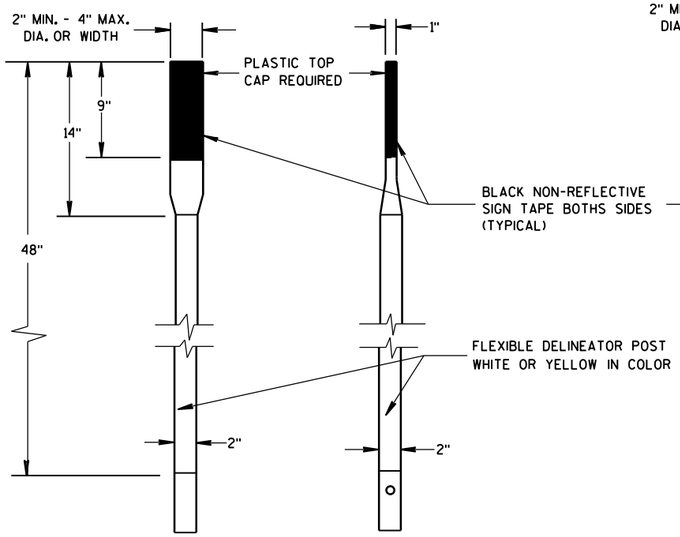
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

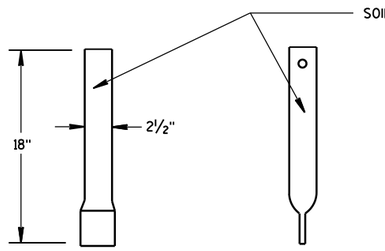
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S.D.D. 15 A 3-2a

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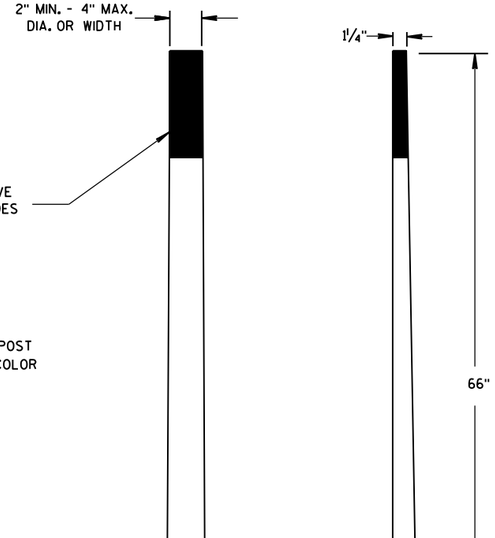
S.D.D. 15 A 3-2a





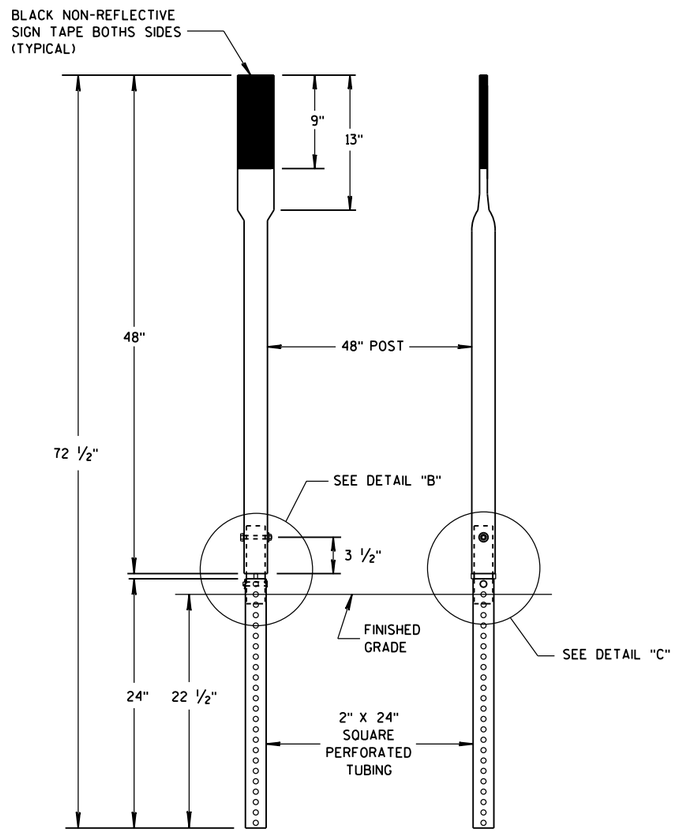
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

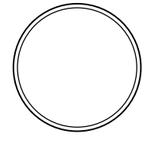
ALTERNATE 2



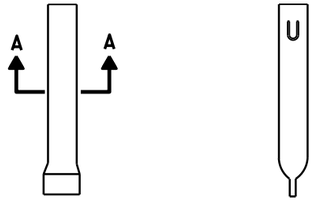
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

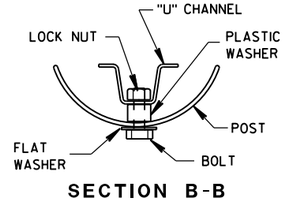


SECTION A-A

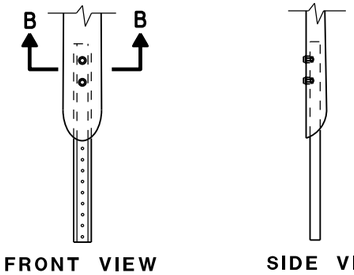


FRONT VIEW SIDE VIEW

ALTERNATE 1

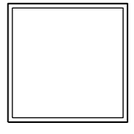


SECTION B-B

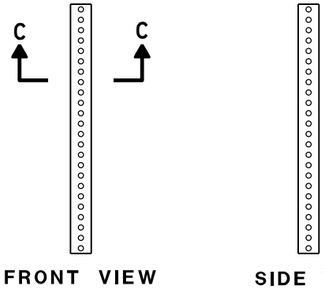


FRONT VIEW SIDE VIEW

ALTERNATE 2



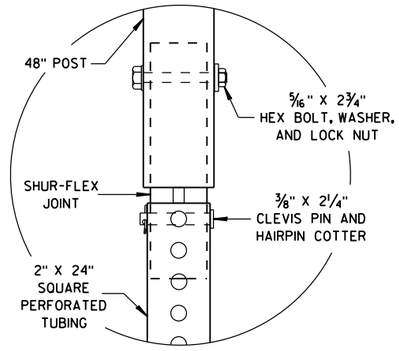
SECTION C-C



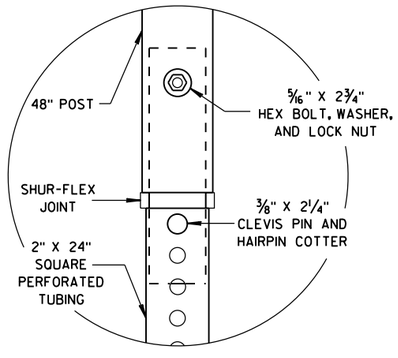
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

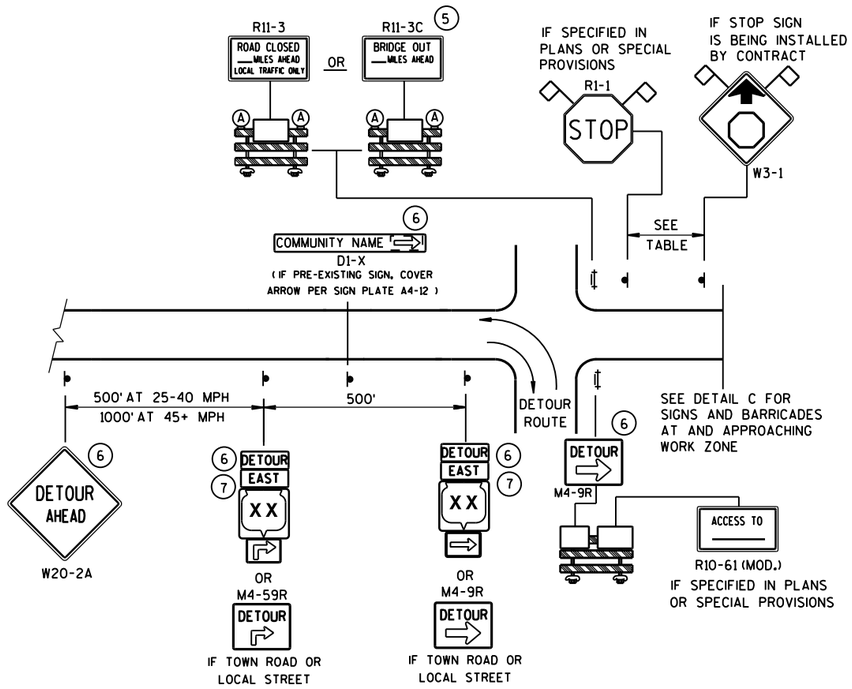
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

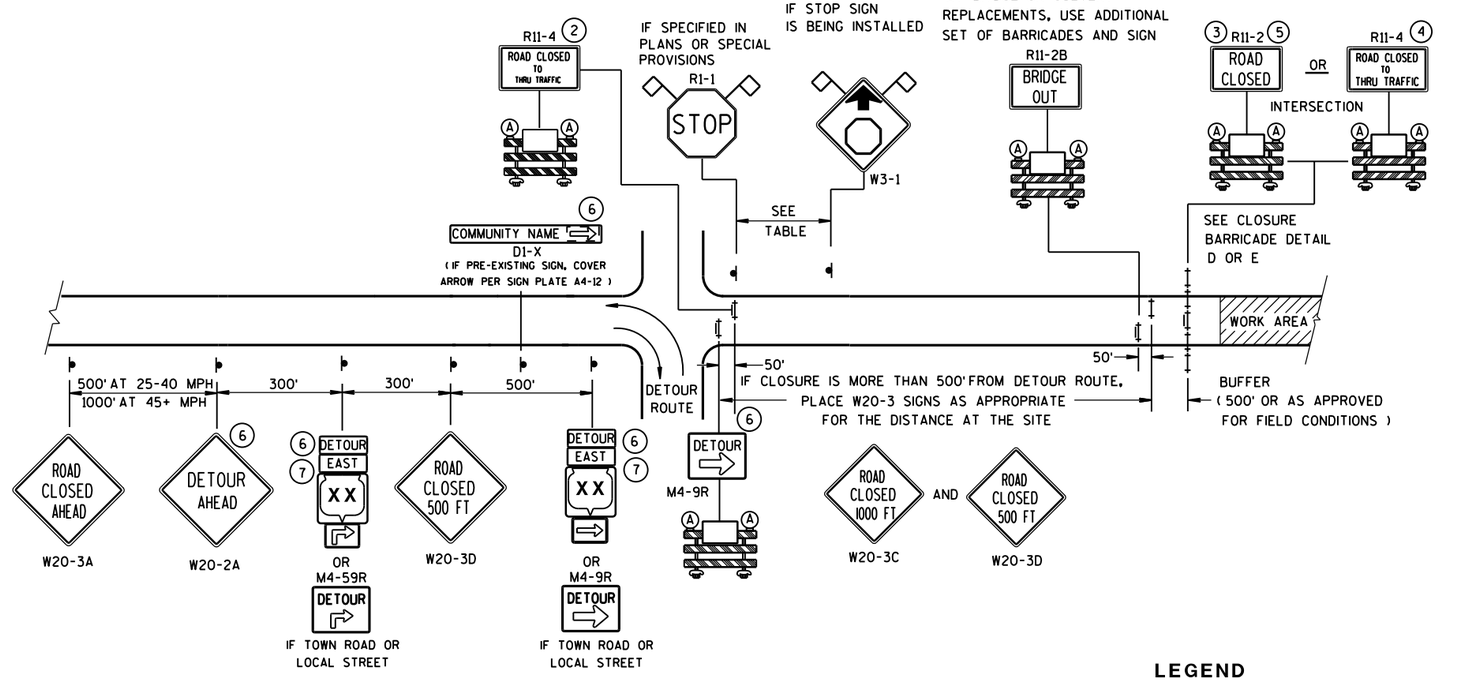
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S.D.D. 15 A 3-2b



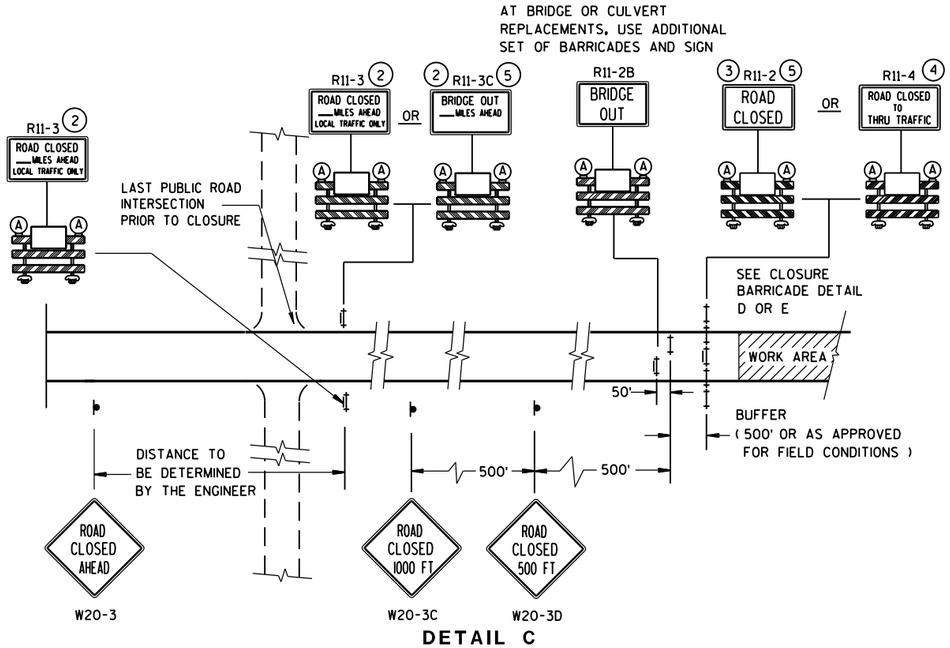
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

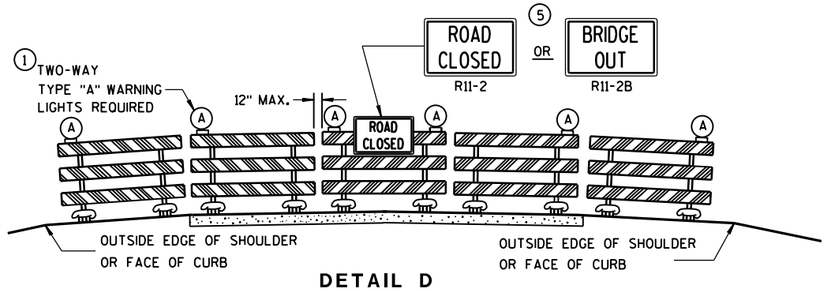
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

6

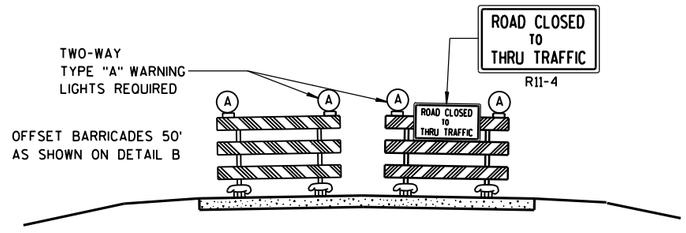
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO SAFETY ENGI
FHWA — FIC

6

S.D.D. 15 C 2-6b

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

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

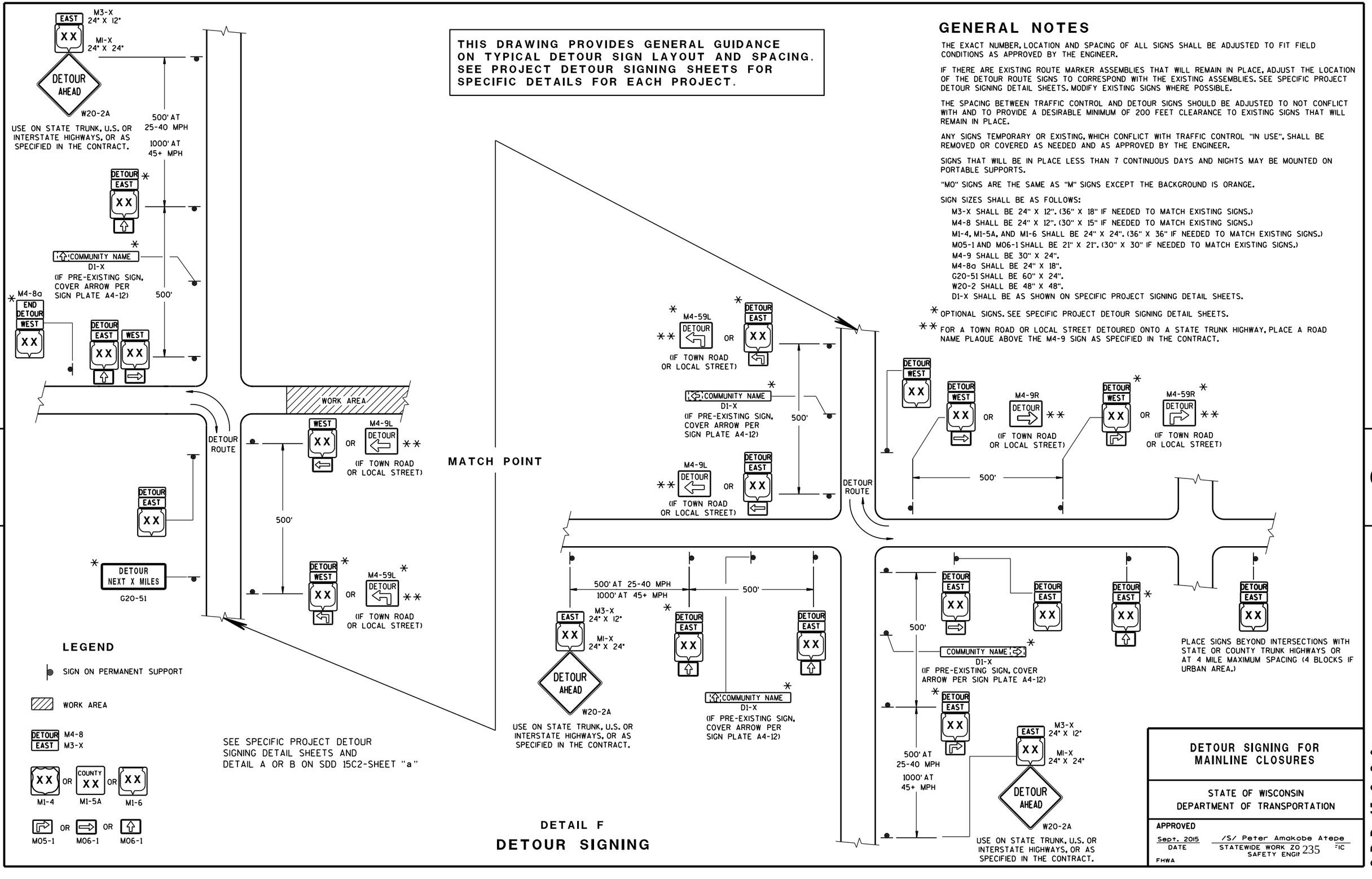
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 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

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- 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

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

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

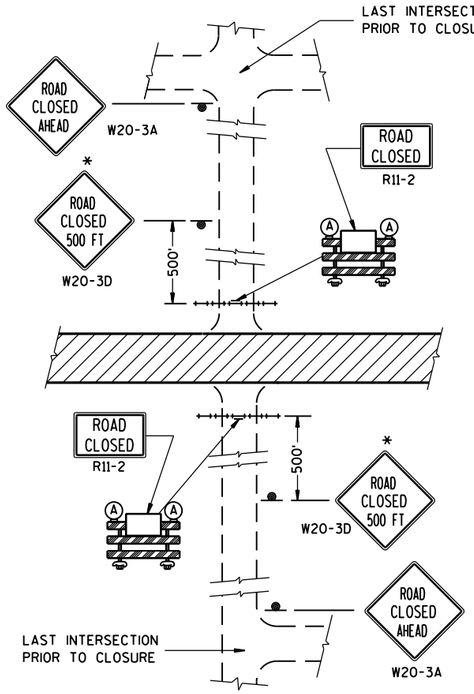
Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO SAFETY ENGI FIC

FHWA

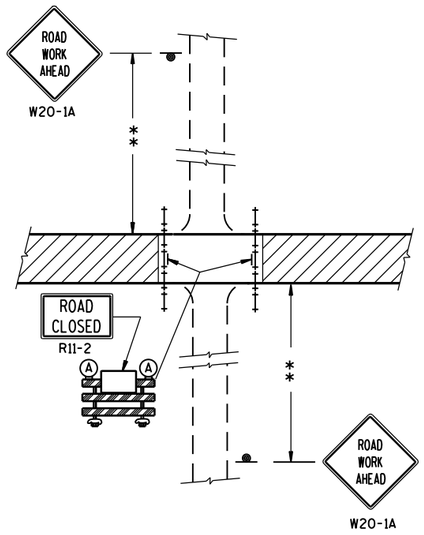
S.D.D. 15 C 2-6c

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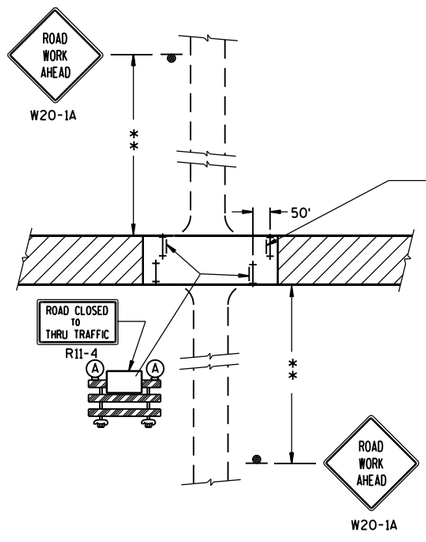
DETAIL 1

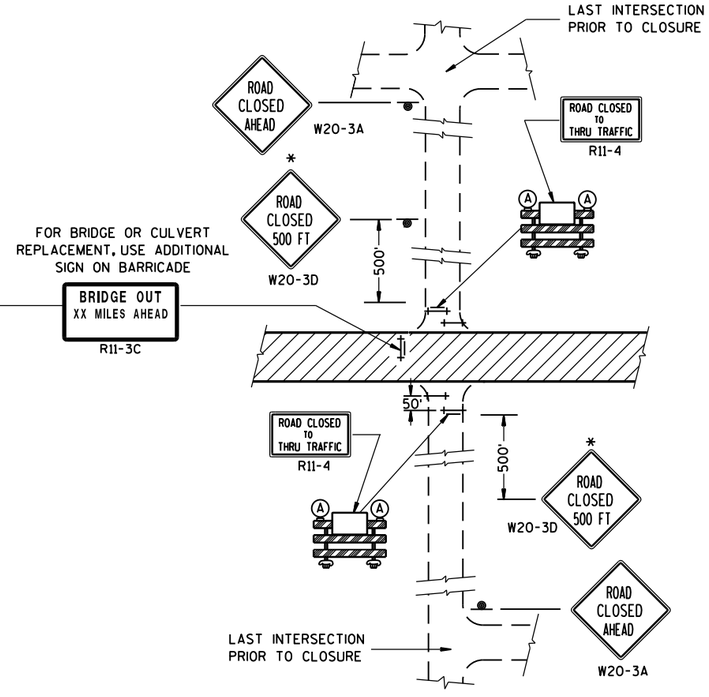
(NO ACCESS TO PROJECT)



DETAIL 2

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





DETAIL 3

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

DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI... FIC
FHWA

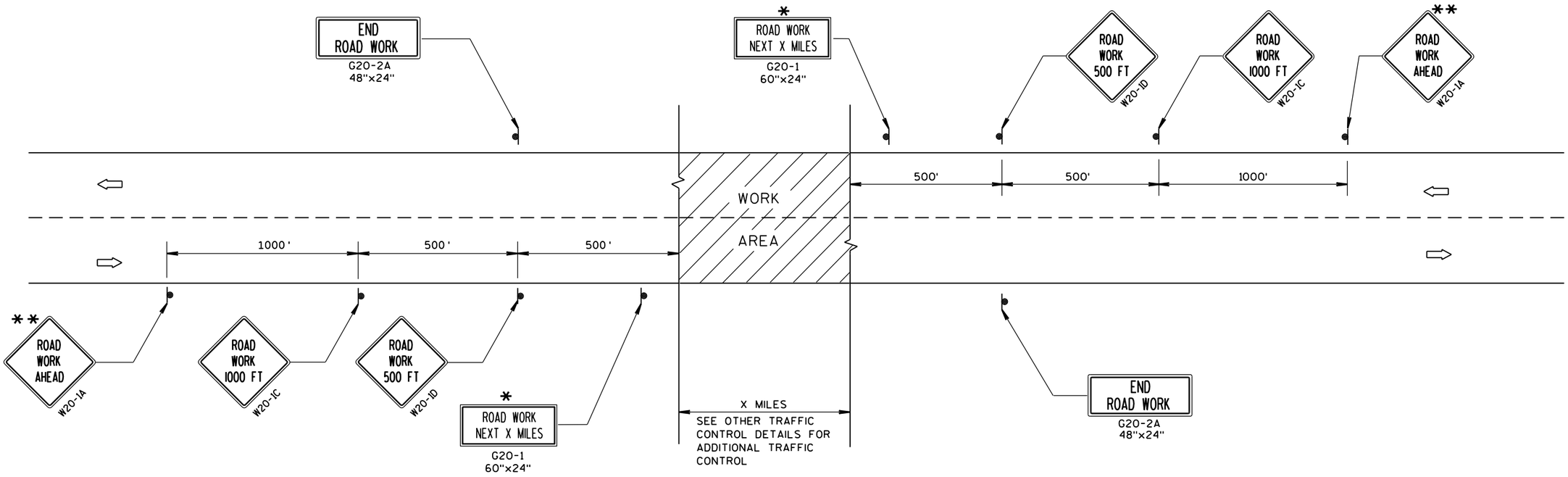
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S.D.D. 15 C 3-3

6

S.D.D. 15 C 3-3

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.

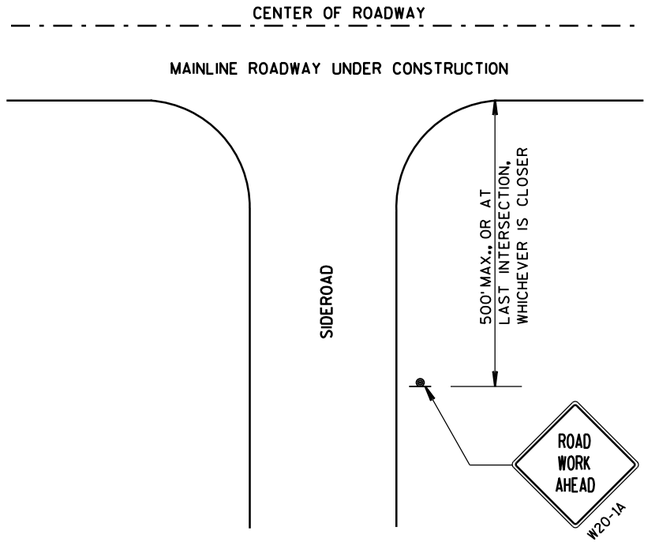
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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 W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

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

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
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

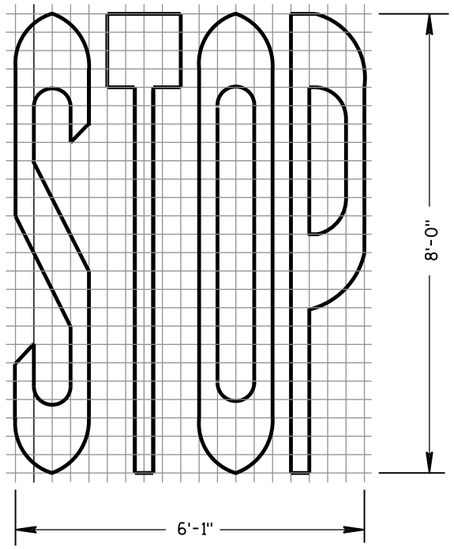
S.D.D. 15 C 4-3

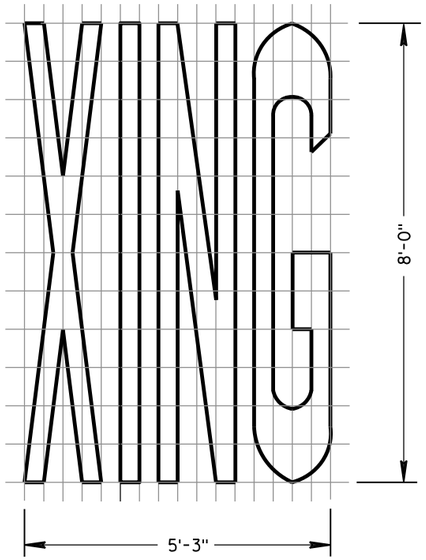
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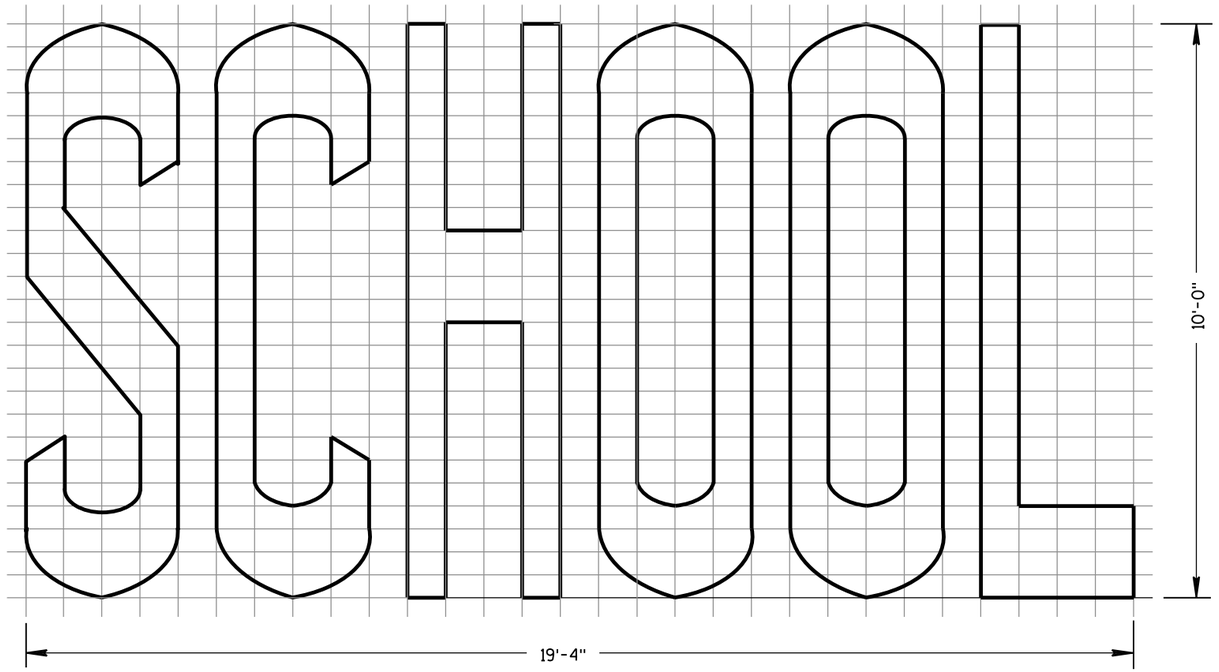
S.D.D. 15 C 4-3

GENERAL NOTES

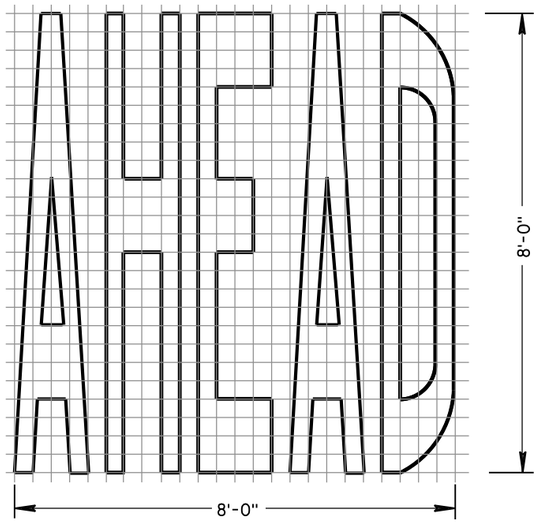
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

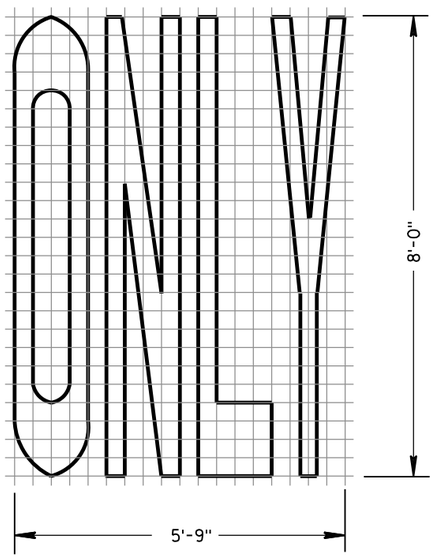


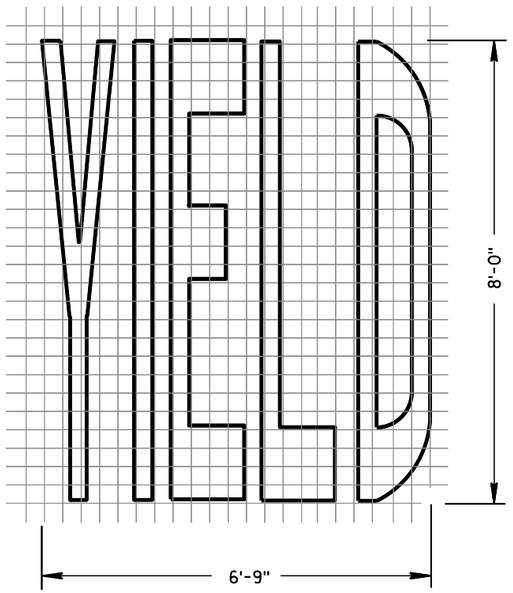


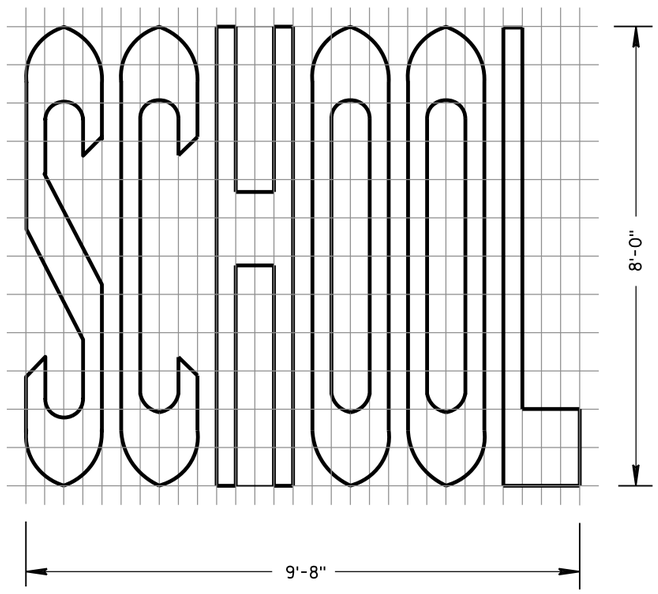


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-16	/S/ Matthew R. Rauch	
DATE	STATE SIGNING AND MARK	EER

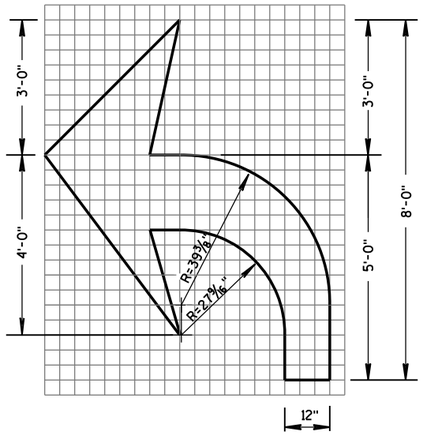
FHWA

6

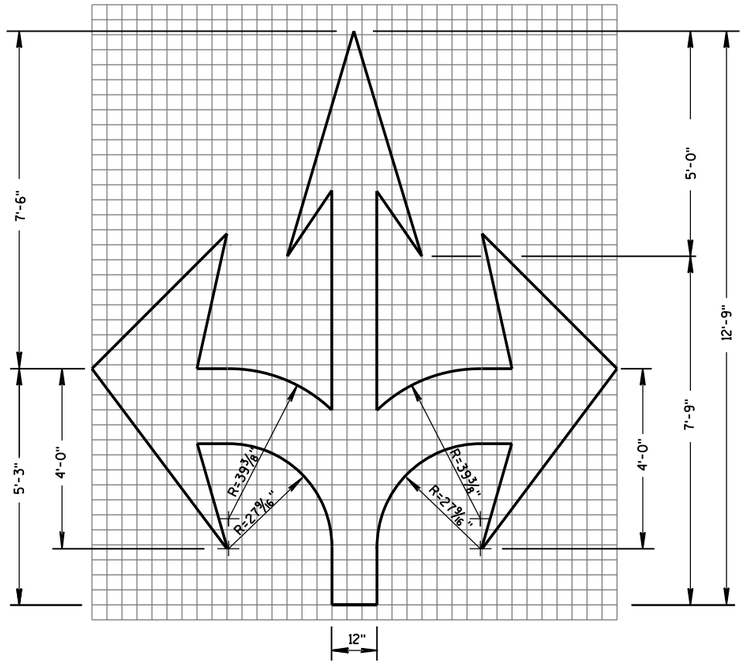
S.D.D. 15 C 7-13b

GENERAL NOTES

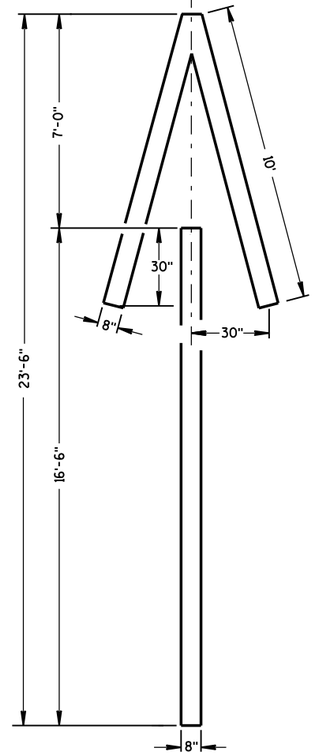
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



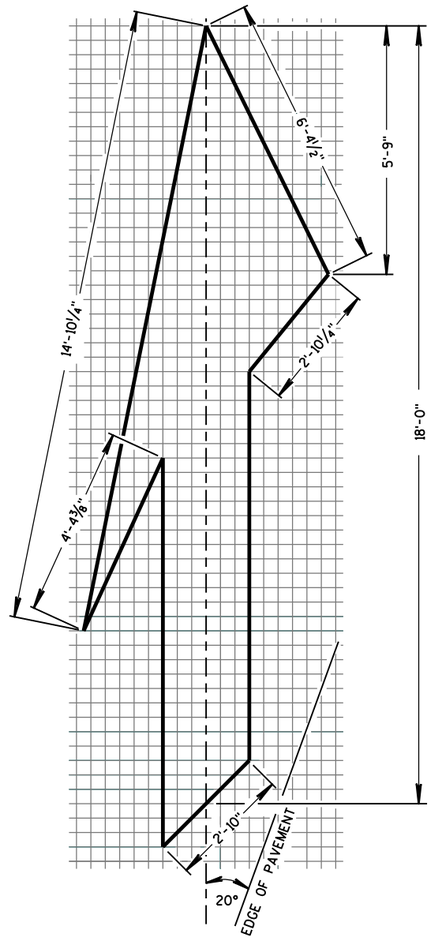
TYPE 2



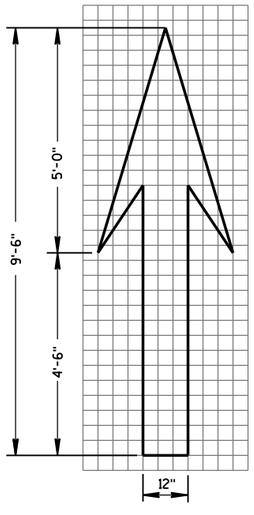
TYPE 6



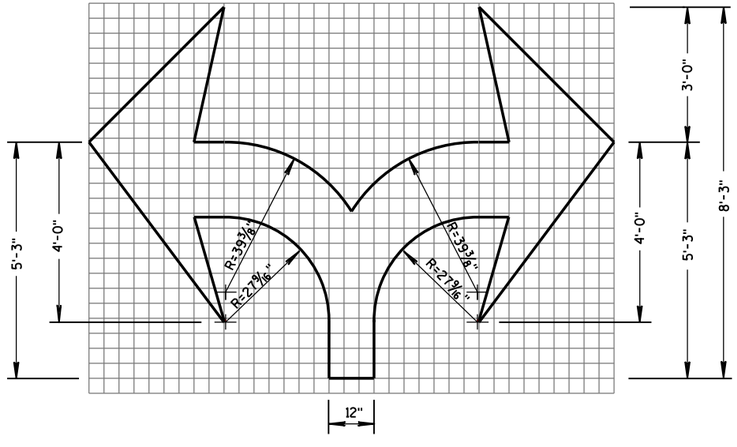
TYPE 4



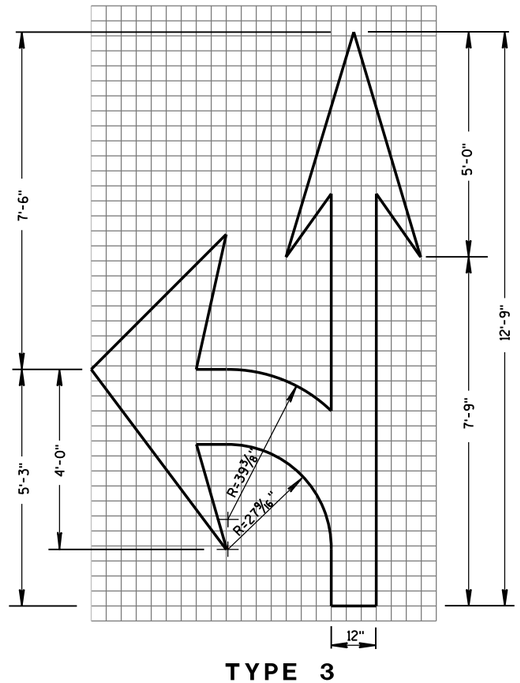
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

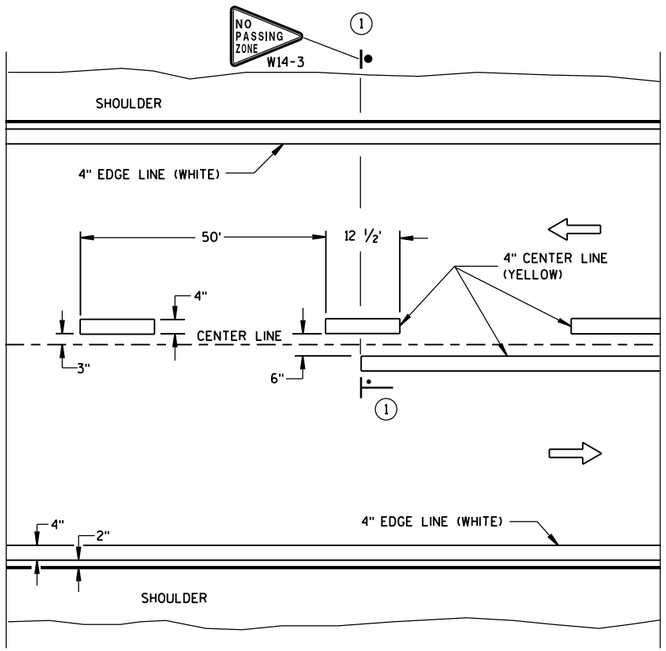
APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER
FHWA

6

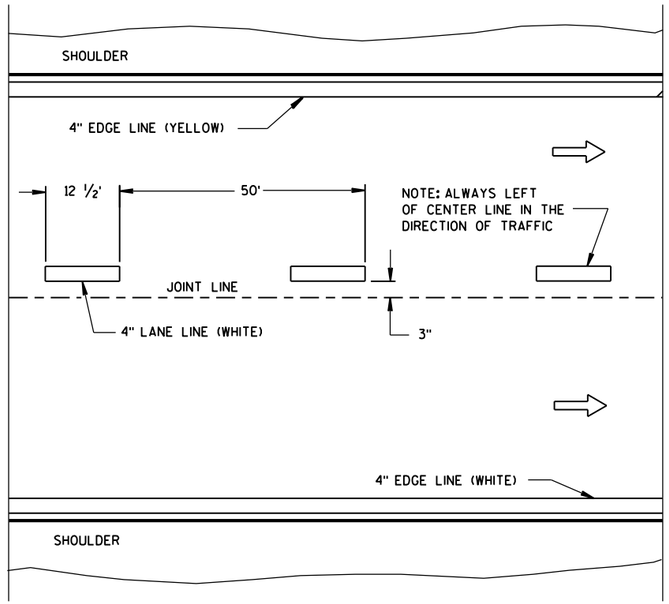
S.D.D. 15 C 7-13c

6

S.D.D. 15 C 7-13c



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

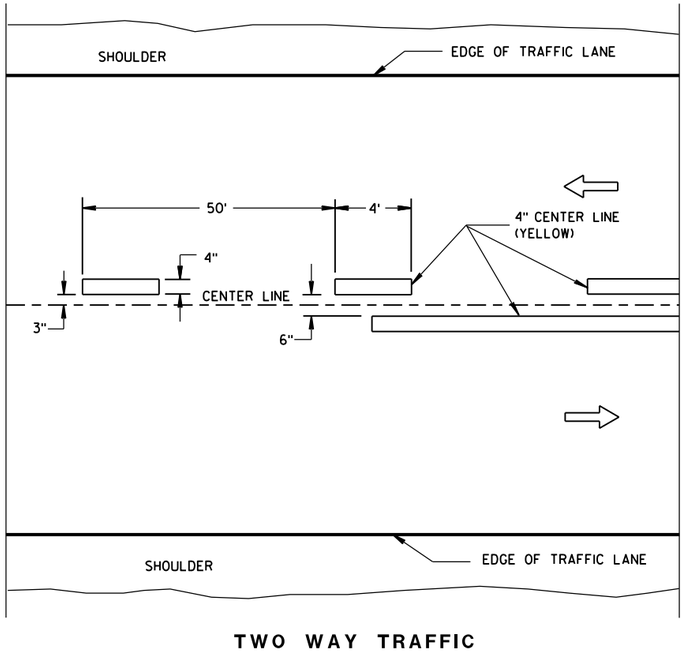
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

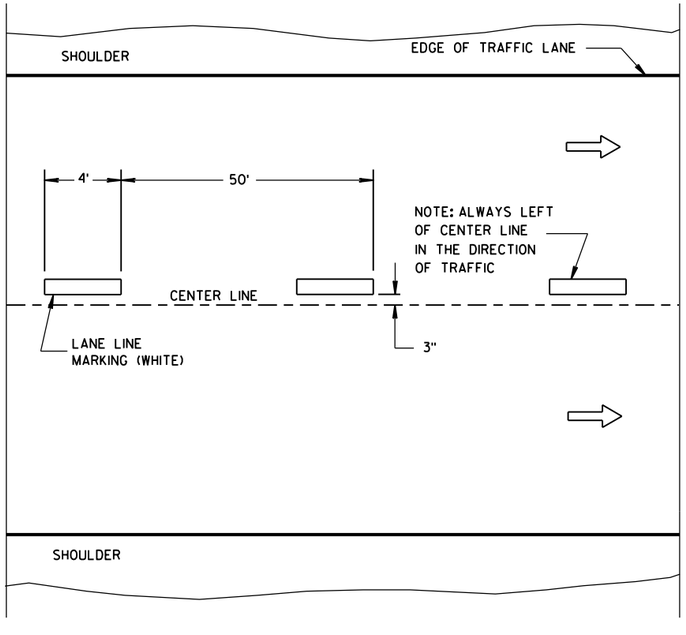
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

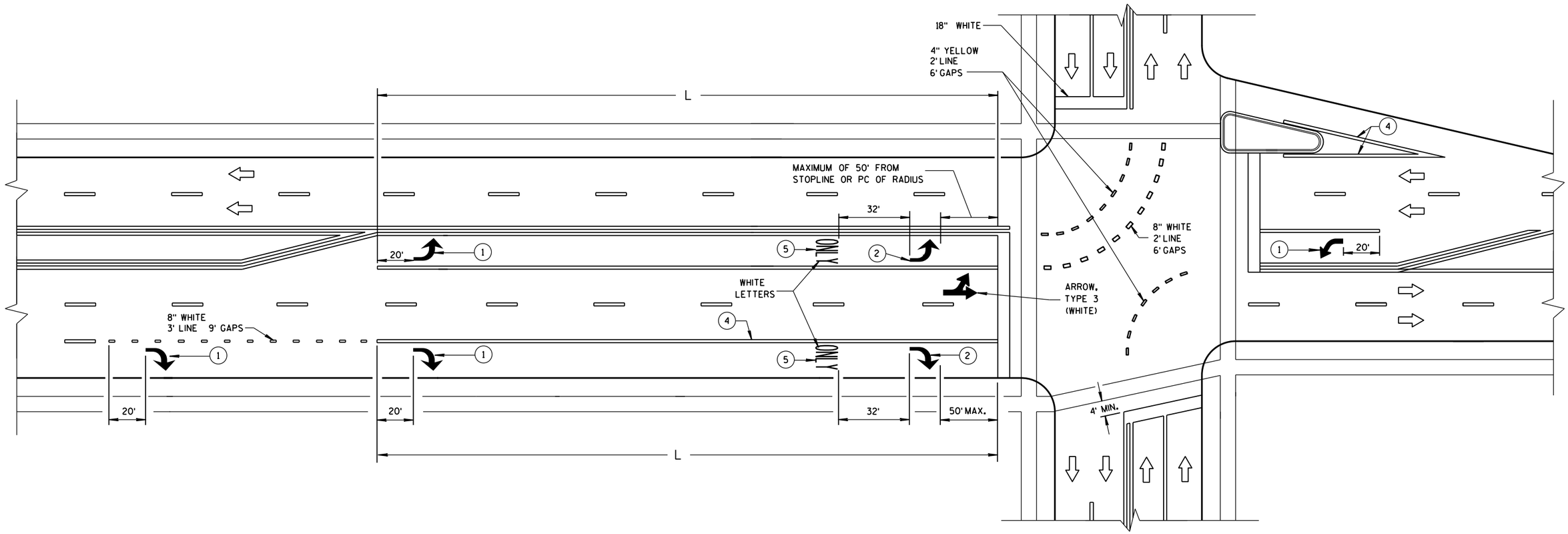
LONGITUDINAL MARKING (MAINLINE)

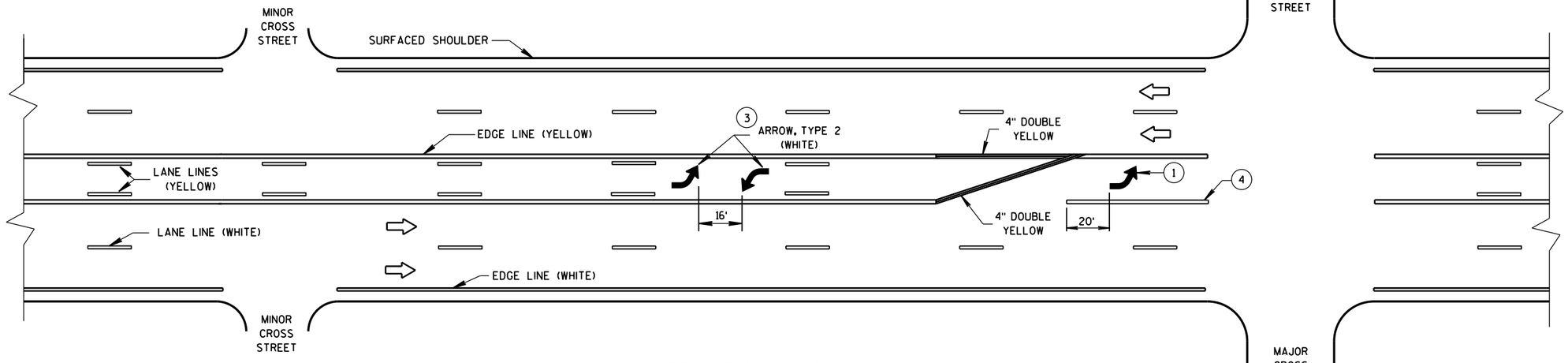
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

S.D.D. 15 C 8-17a

6





GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

TWO WAY LEFT TURN LANE

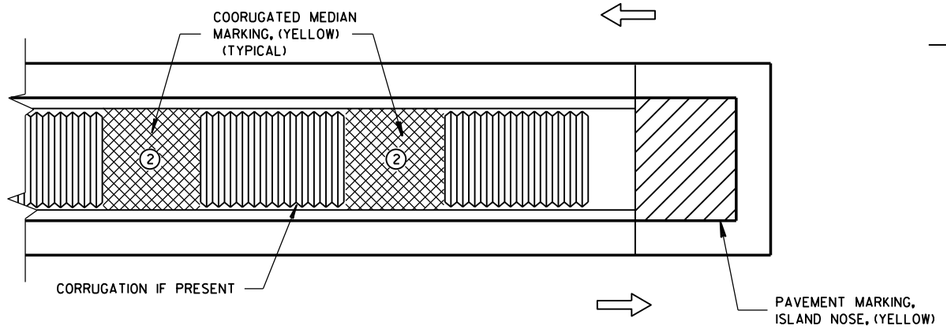
PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

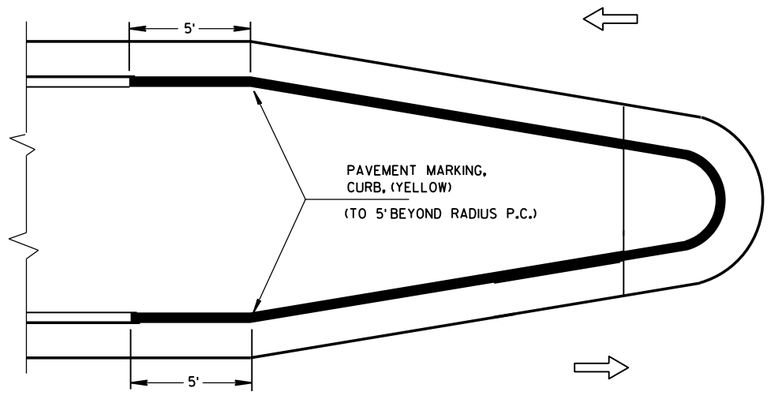
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S.D.D. 15 C 8-17b

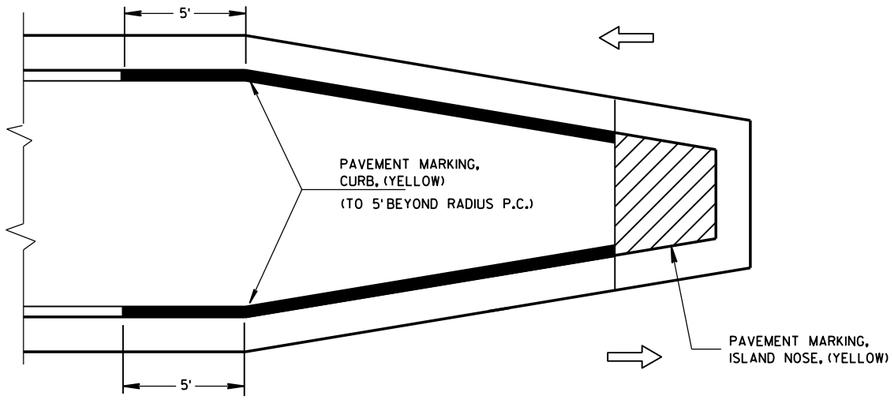
S.D.D. 15 C 8-17b



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

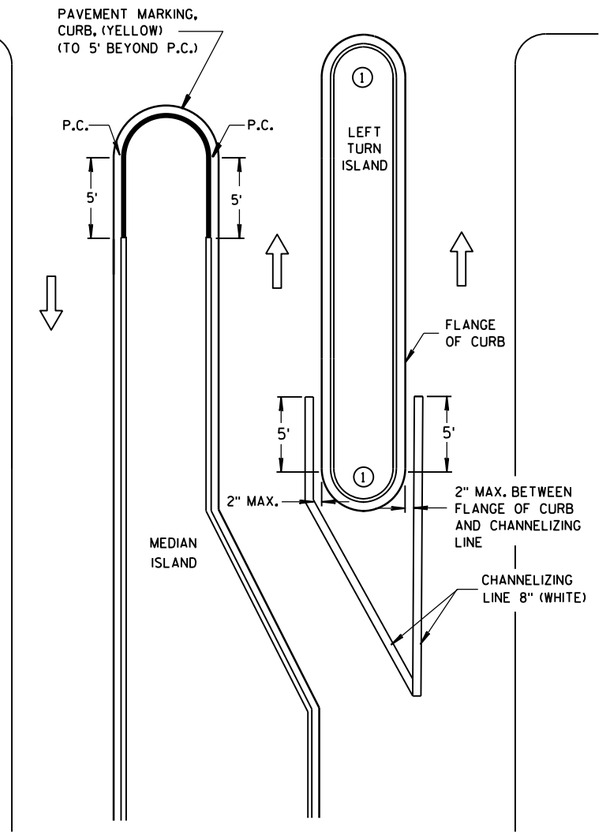


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

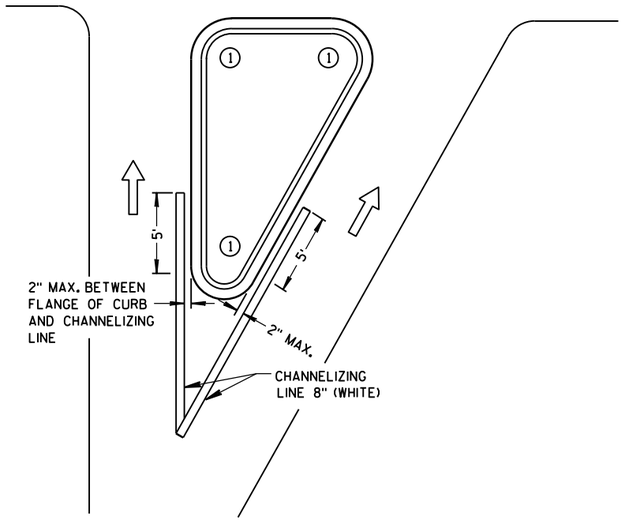


LEFT TURN & MEDIAN ISLAND

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 TRANSPOR

6

S.D.D. 15 C 8-17c

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

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

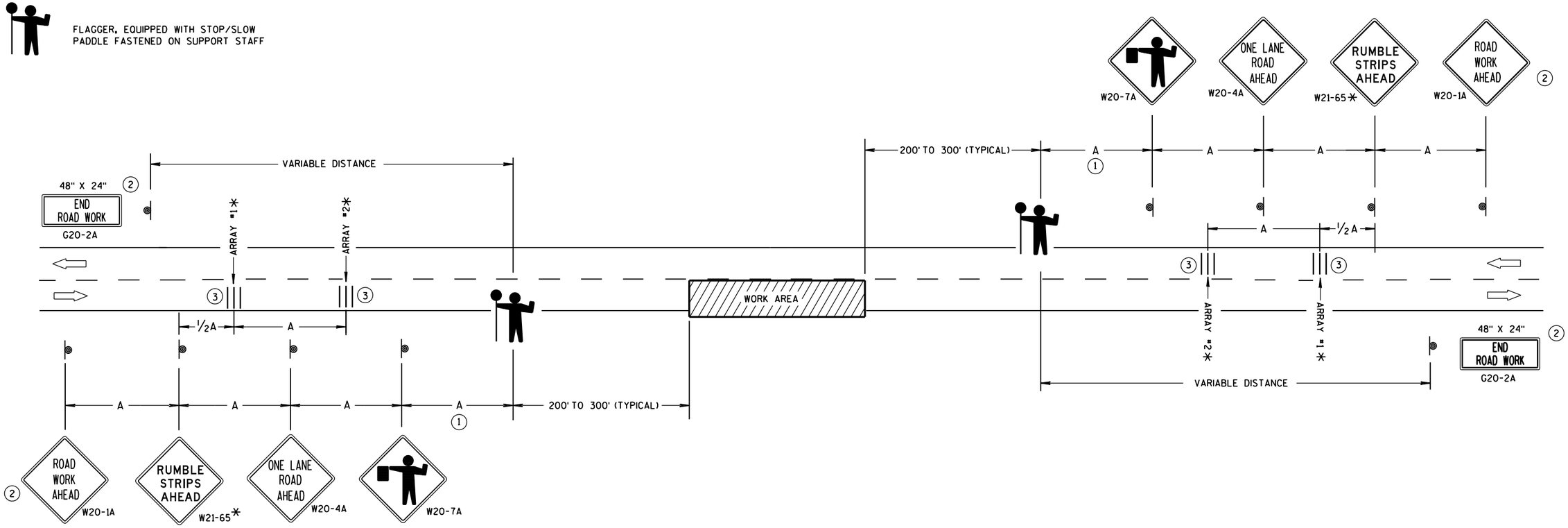
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



W03-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

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.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

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, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

(1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 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.

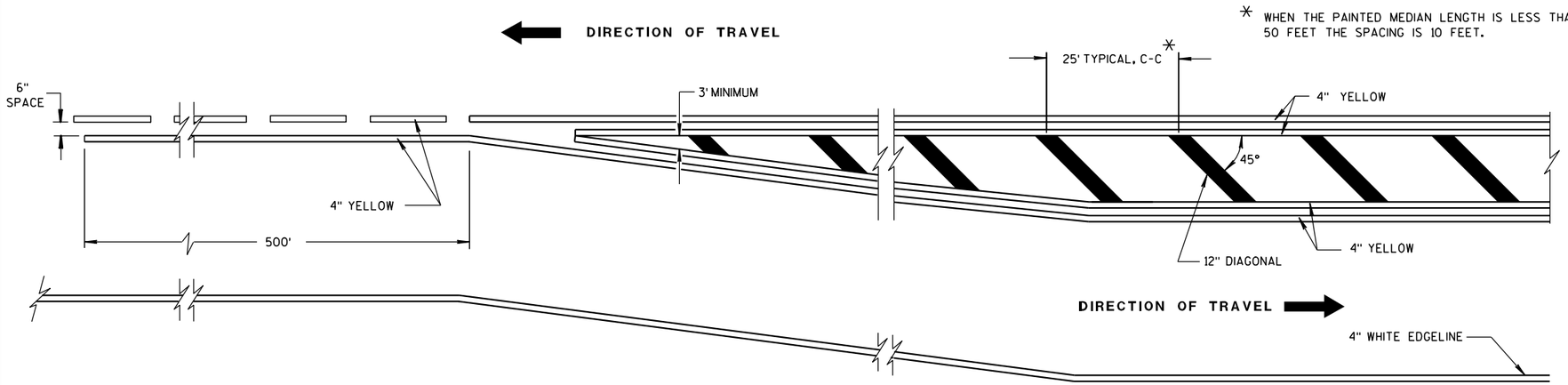
(3) EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — /S/ Andrew Heldtke
DATE — WORK ZONE ENG
FHWA

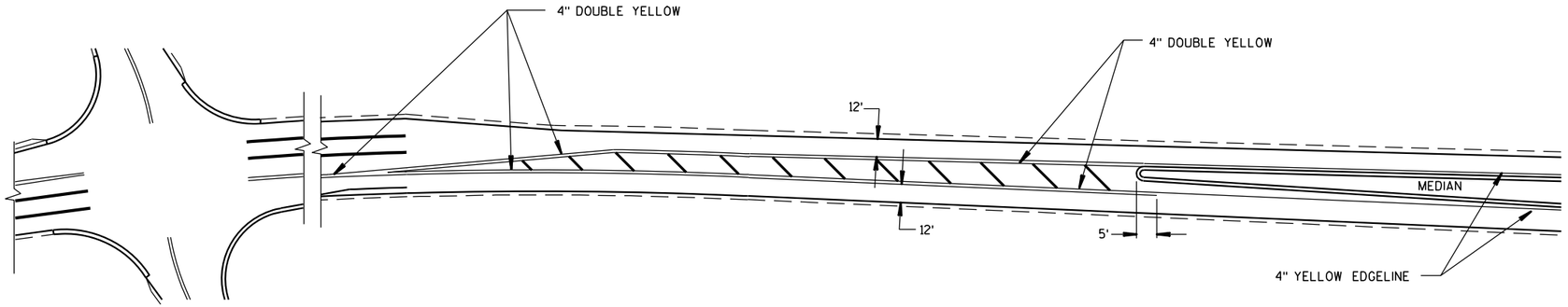
6
S.D.D. 15 C 12-5



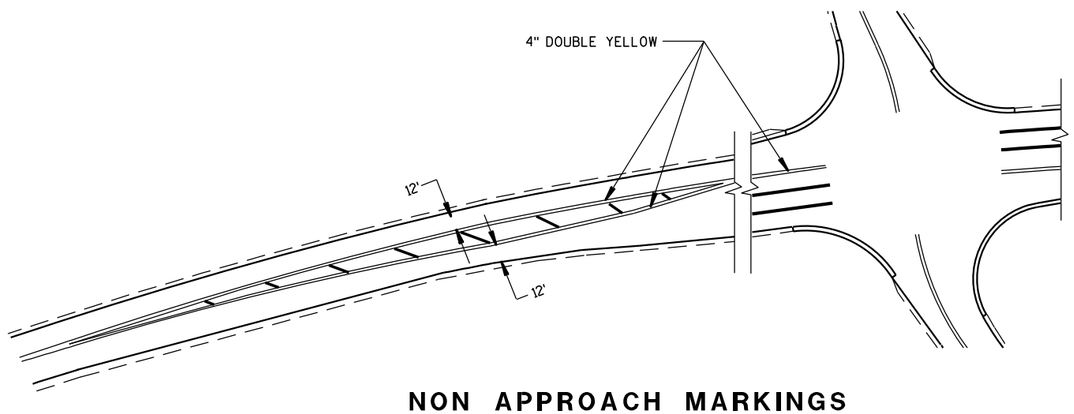
MEDIAN ISLAND DETAIL

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

6

6

S.D.D. 15 C 18-3

S.D.D. 15 C 18-3

MEDIAN ISLAND MARKING

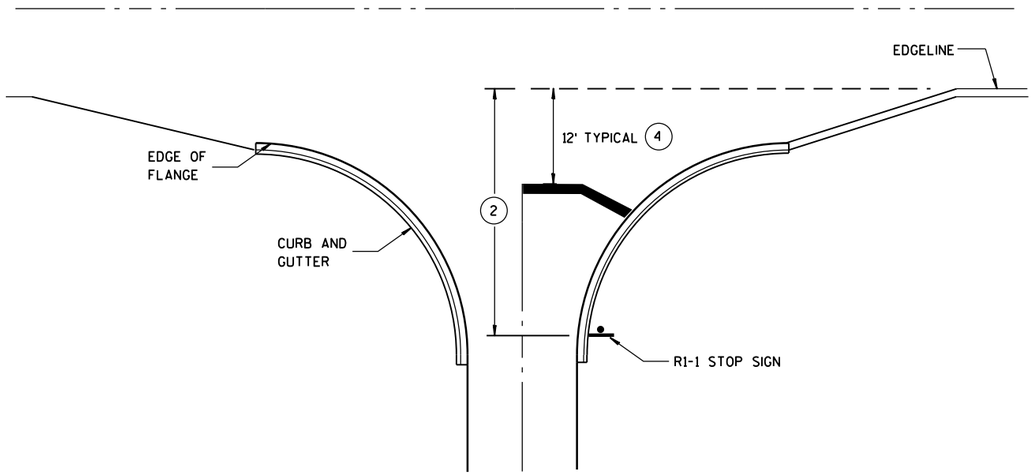
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

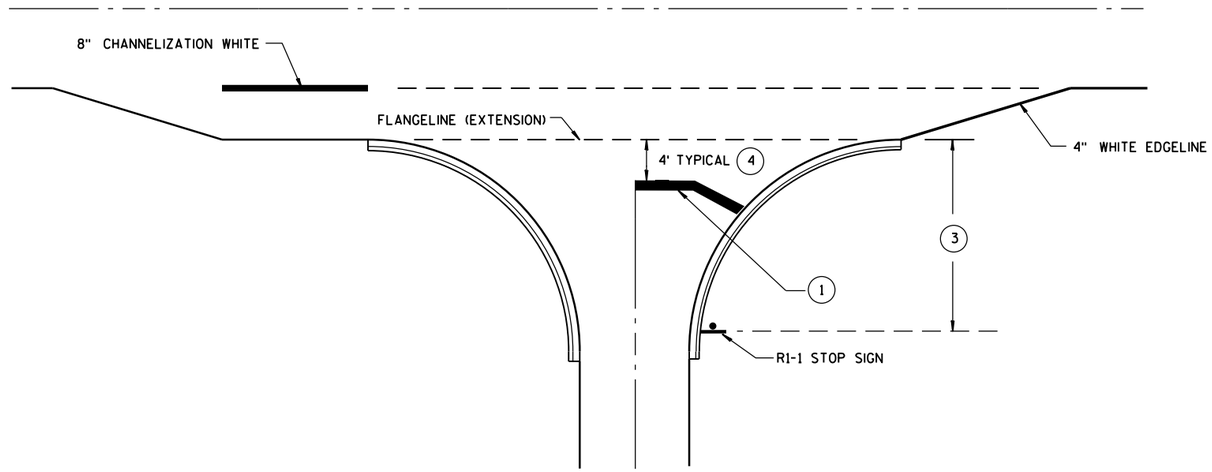
2-5-09 DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER 244 IGN

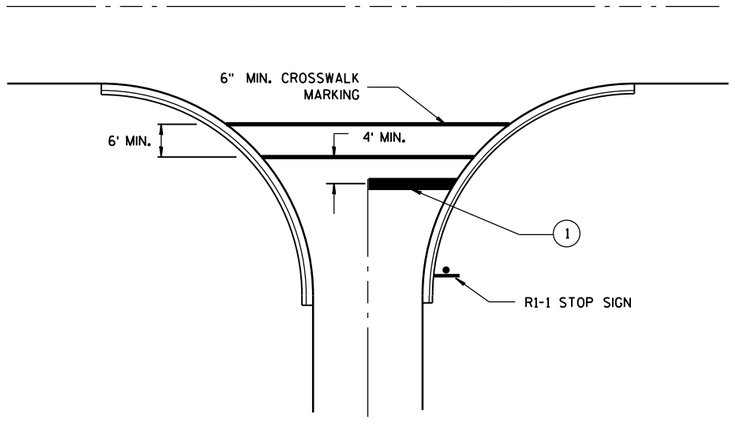
FHWA



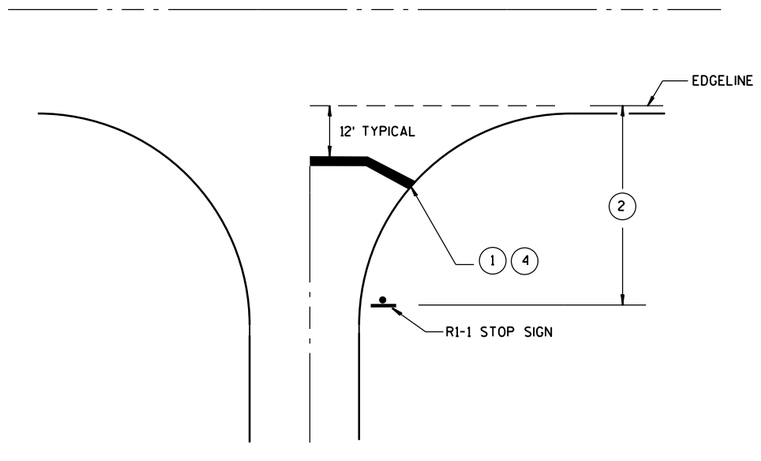
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

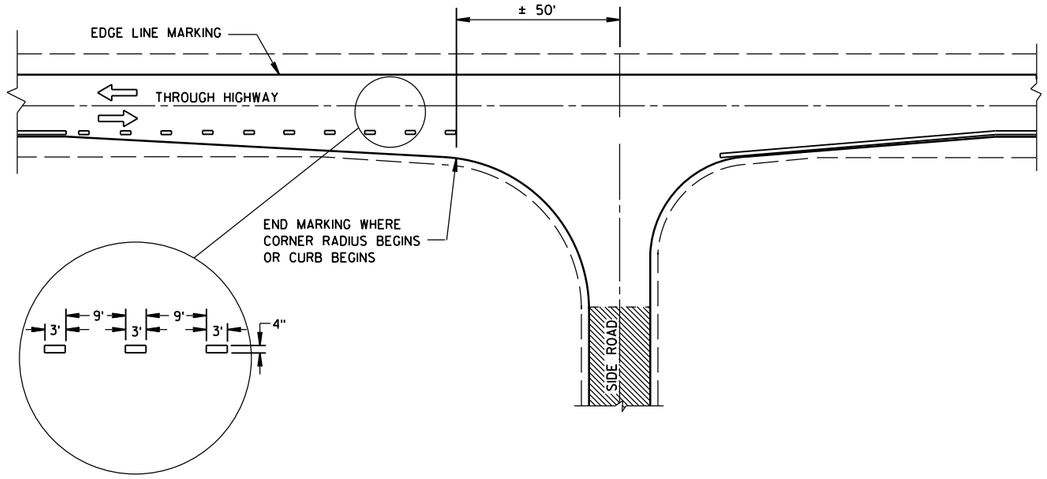
4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 245 NEER

FHWA

6

S.D.D. 15 C 33-2



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

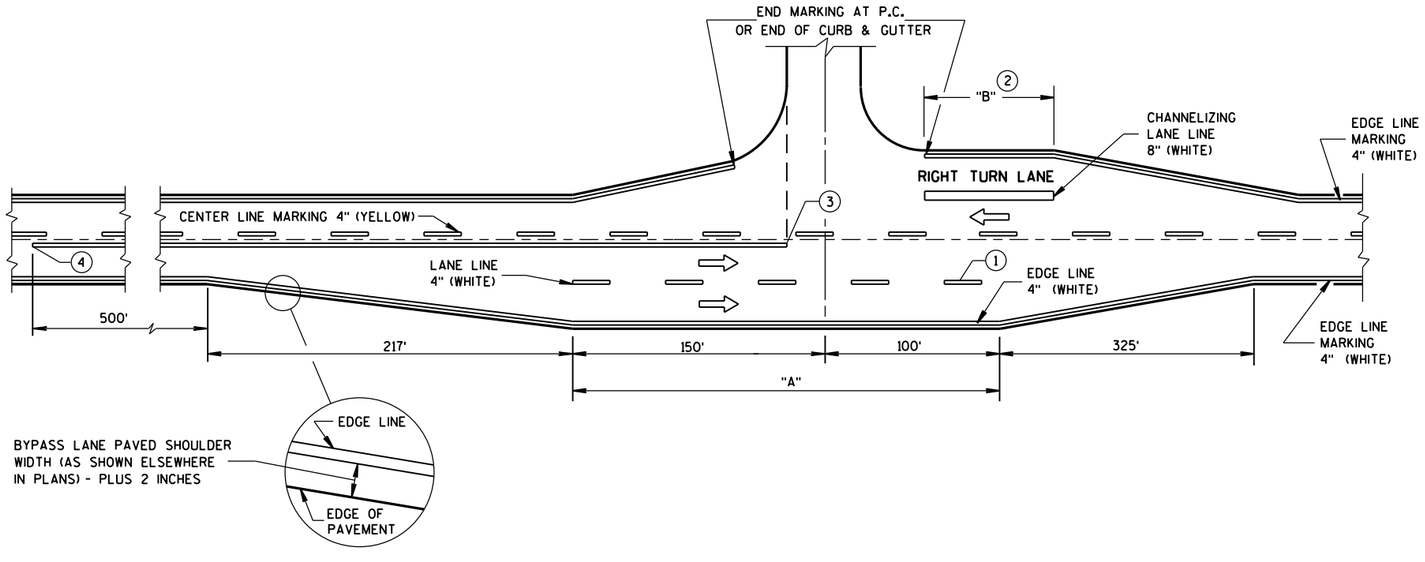
(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(4) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 C 35-1a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- REMOVING PAVEMENT MARKING
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

L, TAPER LENGTH (MPH)							
SPEED (MPH)	W, LATERAL OFFSET (FT)						
	10	11	12	13	14	15	16
45	450	495	540	585	630	675	720
50	500	550	600	650	700	750	800
55	550	605	660	715	770	825	880
60	600	660	720	780	840	900	960
65	650	715	780	845	910	975	1040
70	700	770	840	910	980	1050	1120



W057-52
48"x36"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).



OR



LOCATED 2600 FEET IN ADVANCE OF R2-1 SIGN AND 500 FEET BEYOND THE "ROAD WORK 1 MILE" SIGN.



OR



R2-1
48"x60"
(BLACK AND WHITE)

LOCATED 500 FEET BEYOND W20-5G SIGN.

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.

* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

GENERAL NOTES

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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) CLEARANCE TO EXISTING SIGNS.

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 OR AS APPROVED BY THE ENGINEER.

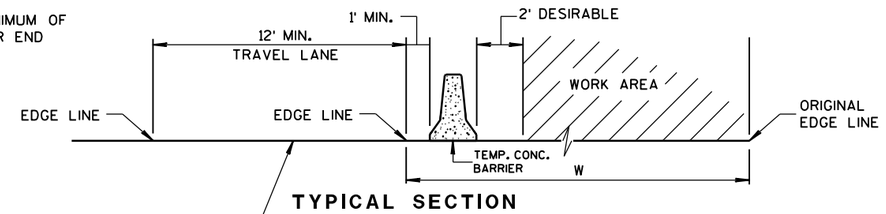
(1) CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

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.

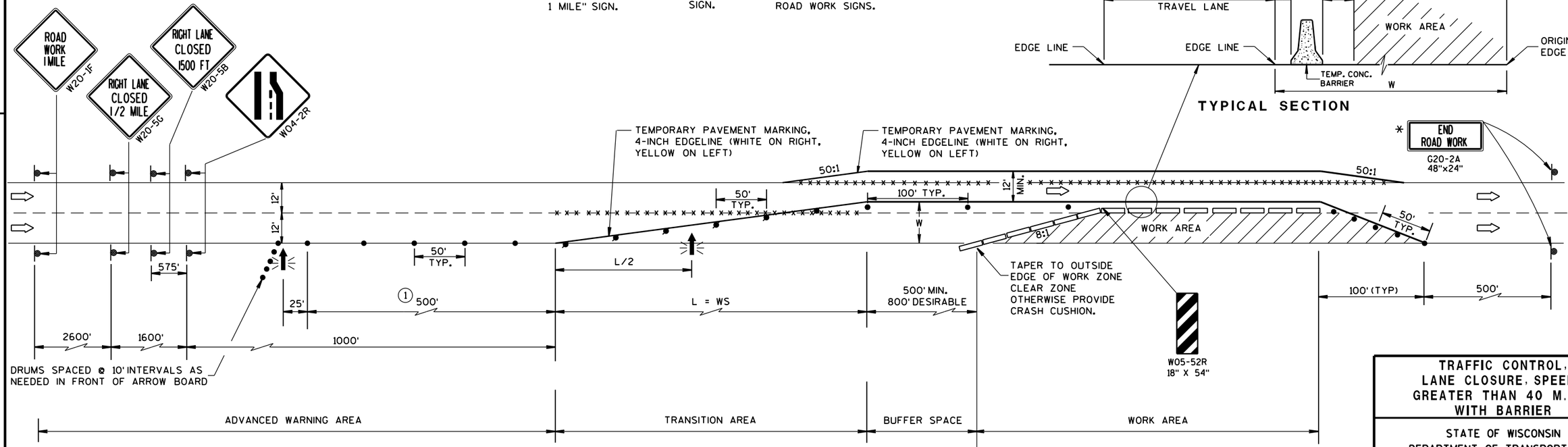
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE 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.



TYPICAL SECTION



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

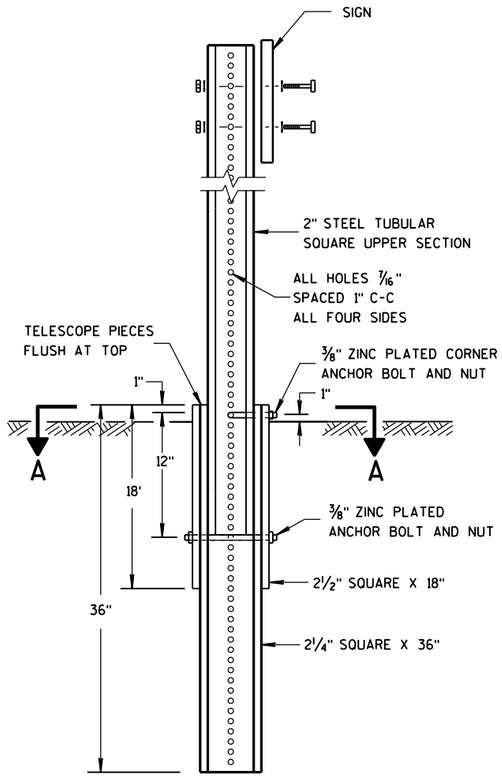
APPROVED
Sept., 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZOI SAFETY ENGIN
FHWA

6

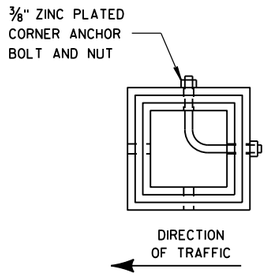
S.D.D. 15 D 3-4

6

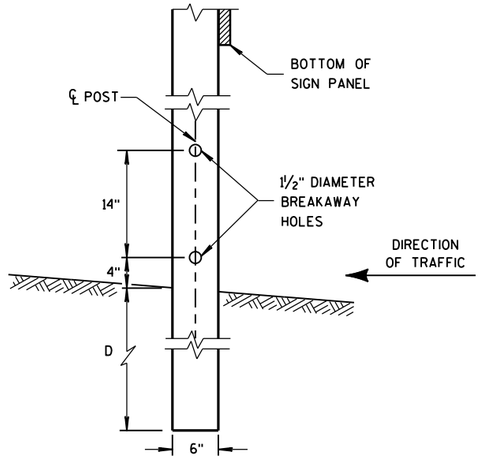
S.D.D. 15 D 3-4



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



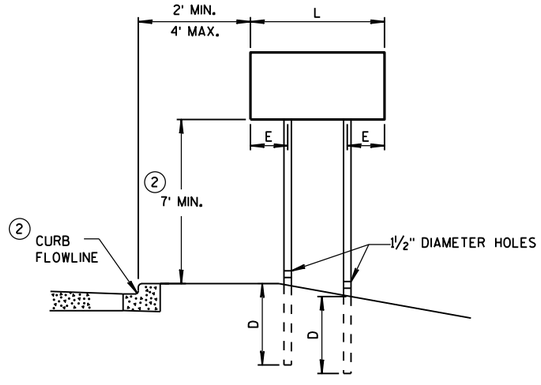
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

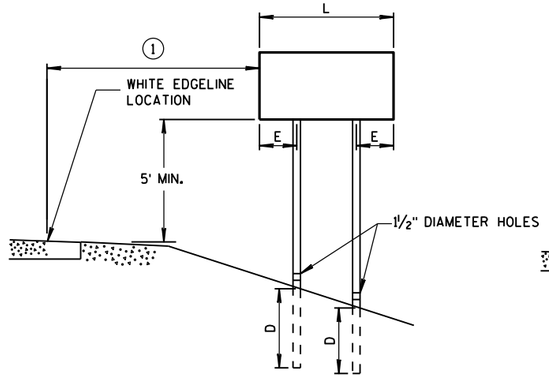
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

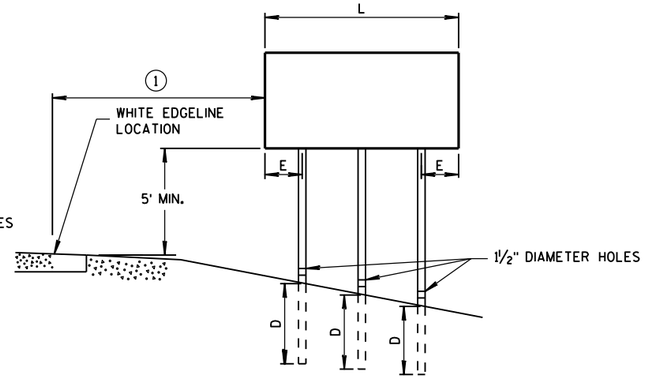
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

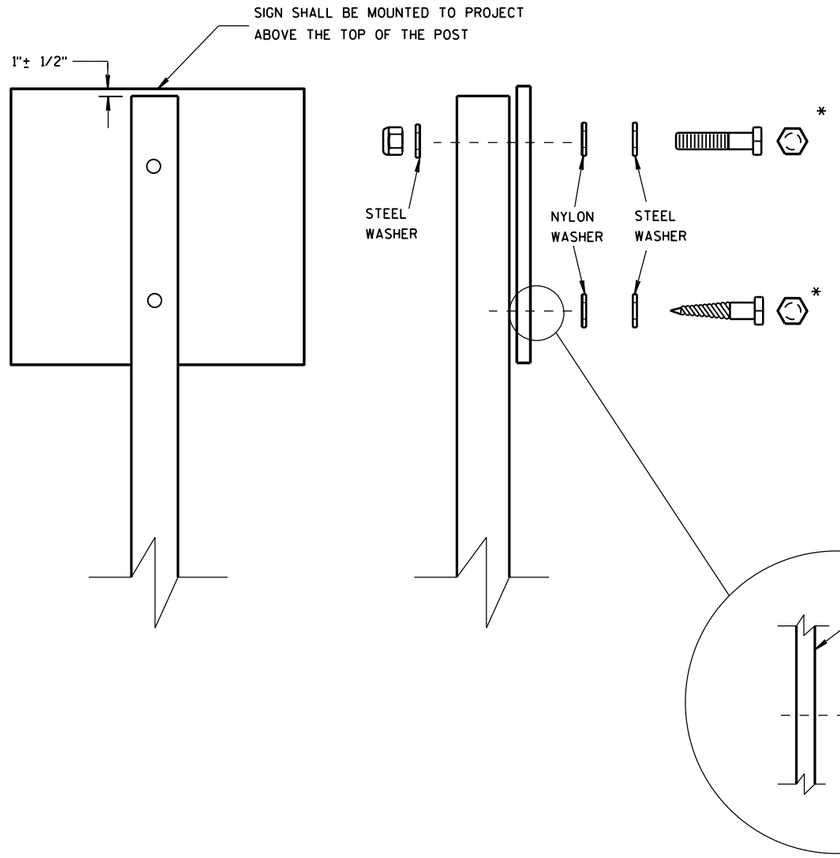
SEE NOTE (3)

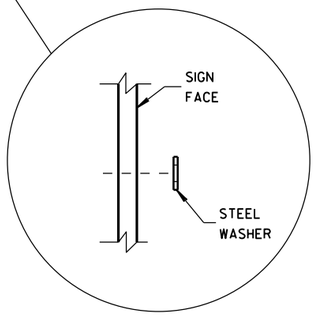
TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

STATE OF WISCONSIN DEPARTMENT OF TRANSPO

6

S.D.D. 15 D 38-1a





WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-1b

S.D.D. 15 D 38-1b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

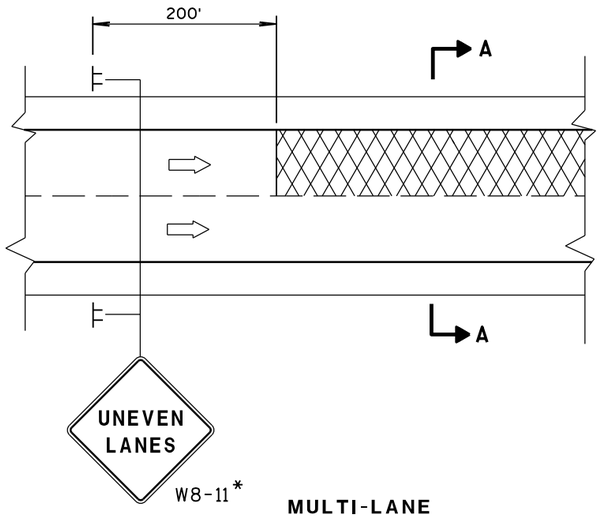
APPROVED

Feb. 2015
DATE

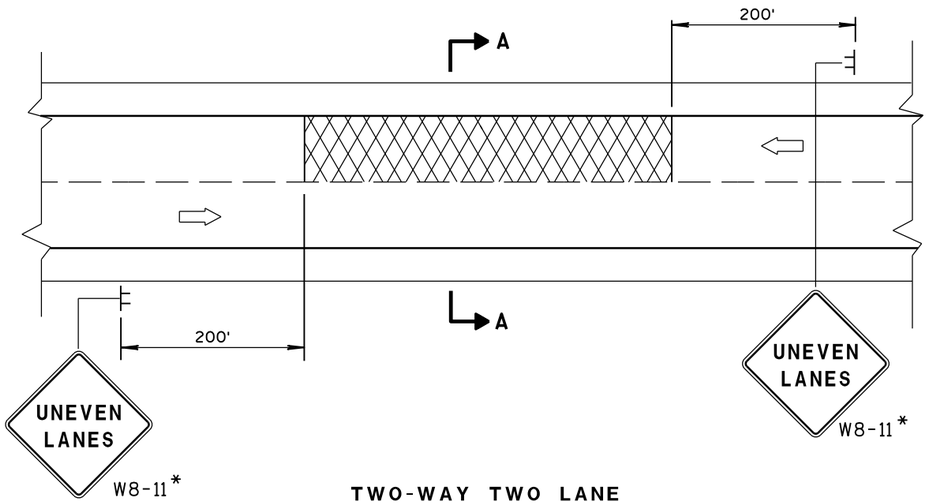
/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

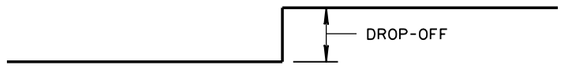
SIGN



MULTI-LANE

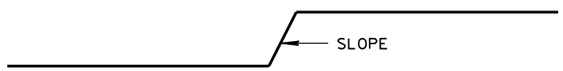


TWO-WAY TWO LANE

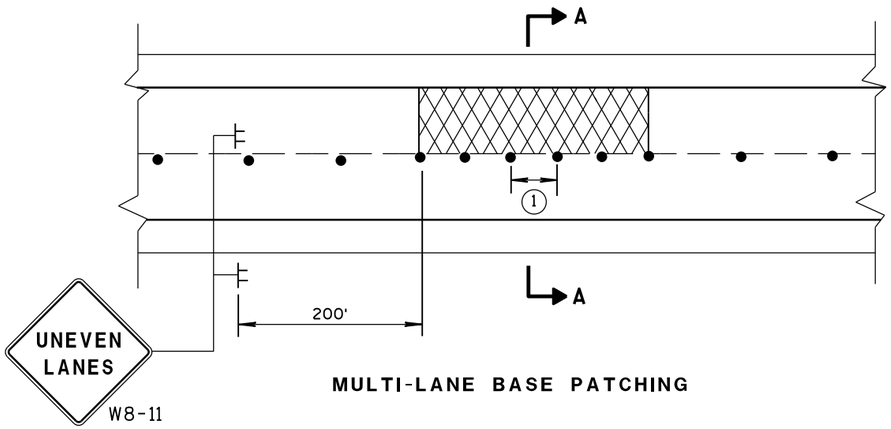


SECTION A-A

OR

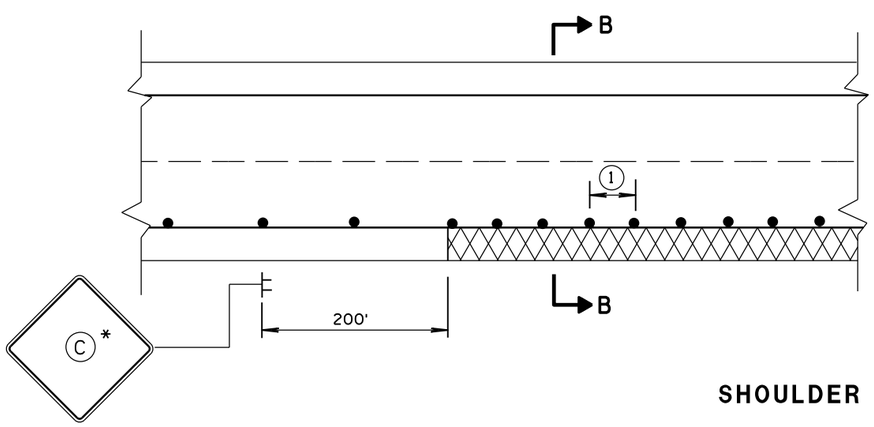


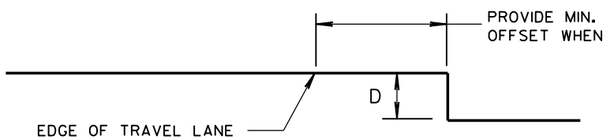
SECTION A-A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS





SECTION B-B

SHOULDER DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY ½ MILE.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER W08-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP-OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGI
FHWA

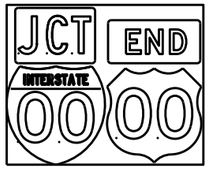
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S.D.D. 15 D 39-1

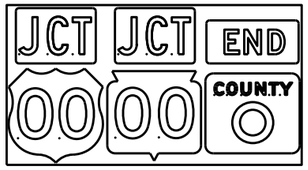
TYPICAL ASSEMBLIES



J1-1



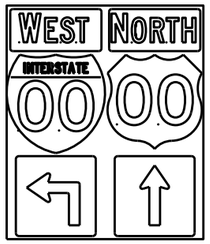
J1-2



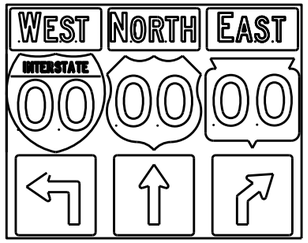
J1-3



J2-1



J2-2

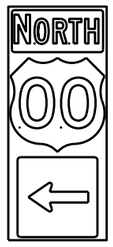


J2-3

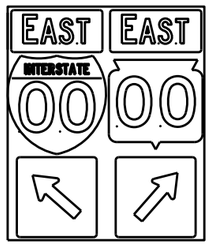


JV

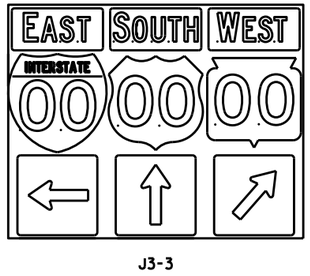
(Typical Vertical J-Assembly
See Note 10 and 11)



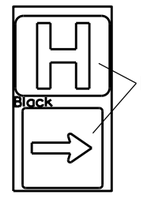
J3-1



J3-2



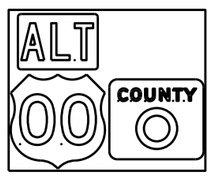
J3-3



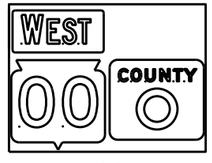
JH-1



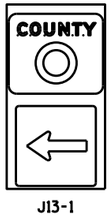
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

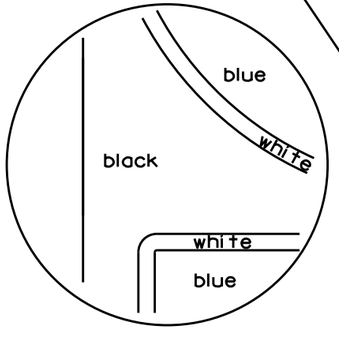


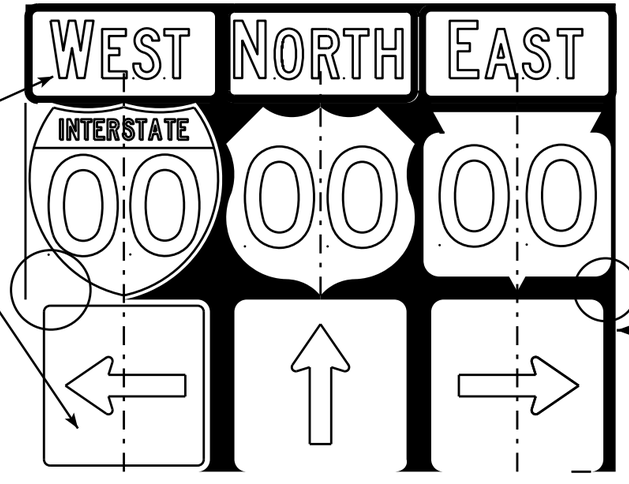
J23-1

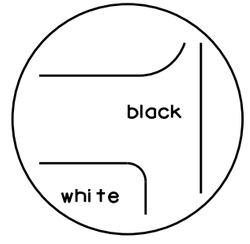


J22-1

[blue background with interstate]







[black background]

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

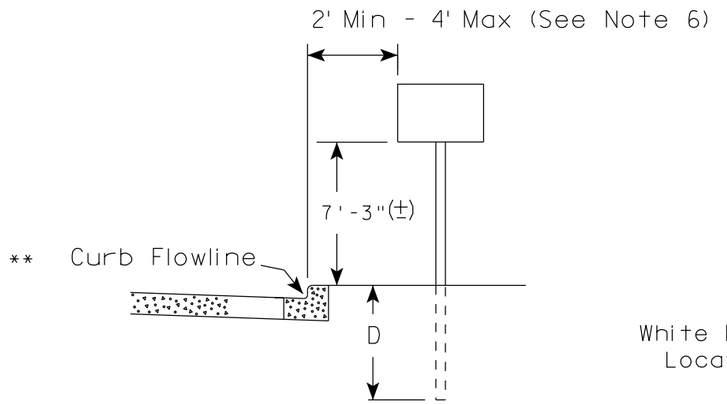
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

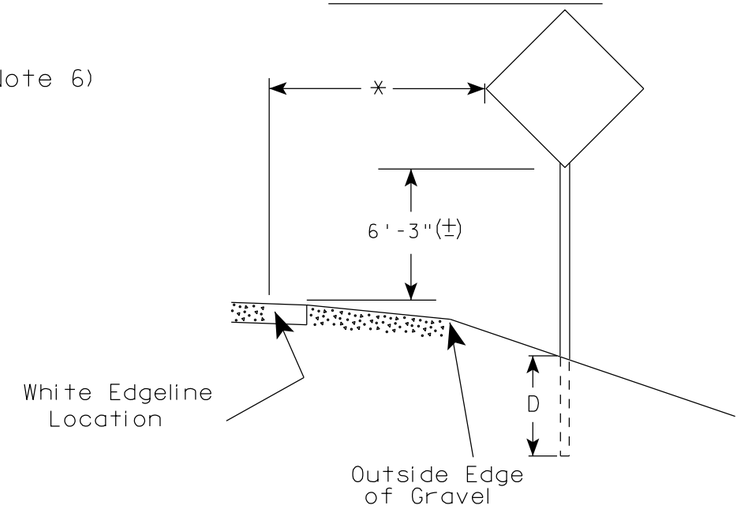
PROJECT NO: | SHEET NO: E

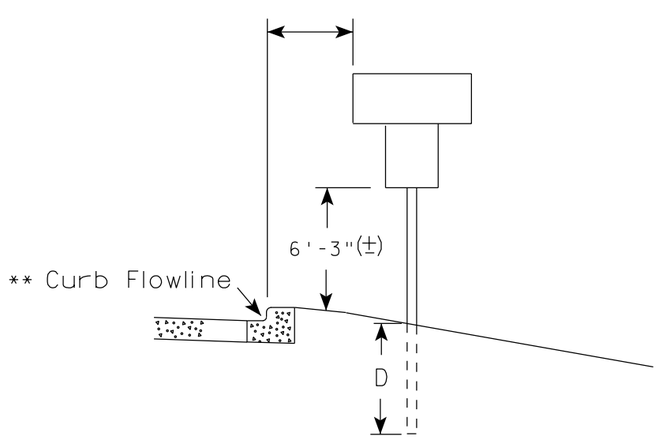
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :
WISDOT/CADDS SHEET 42

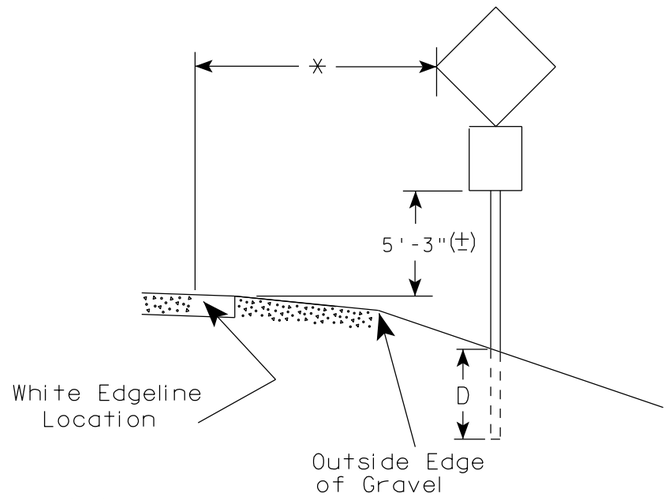
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet or 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 (A2-1S) 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 signs shall be mounted at a height of 5'-3" (±) or as directd 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), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

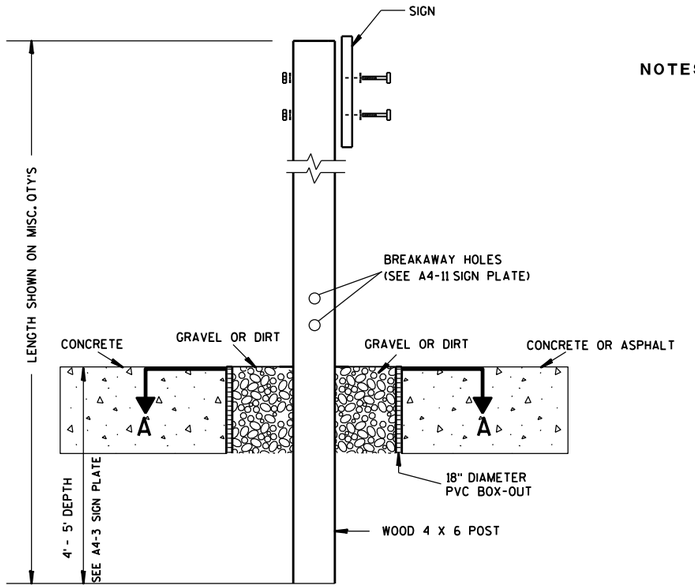
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

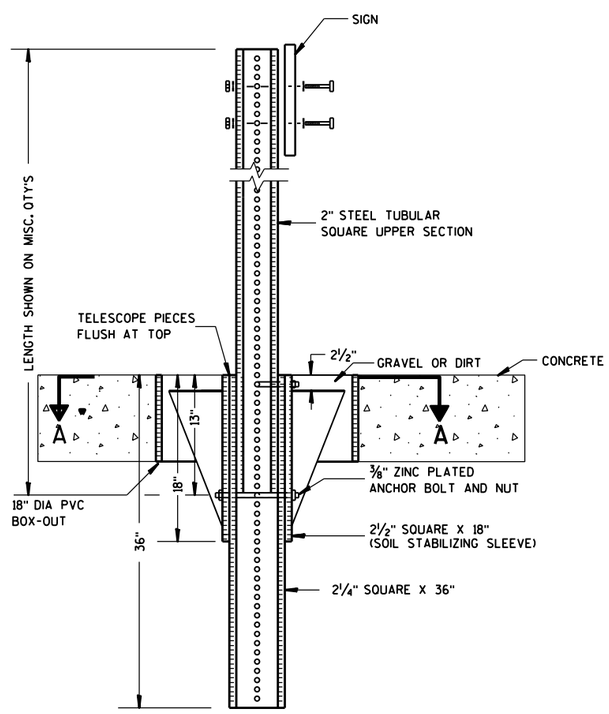
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

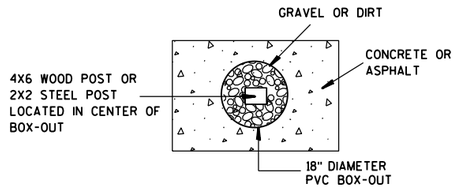
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

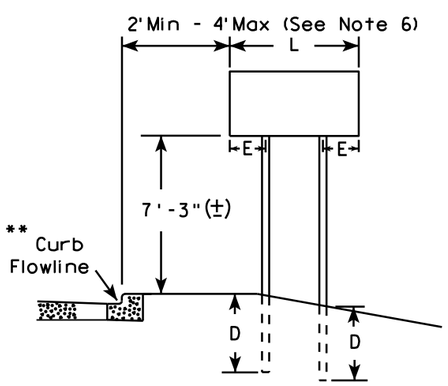
APPROVED Matthew R Rauch
for State Traffic Engineer

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

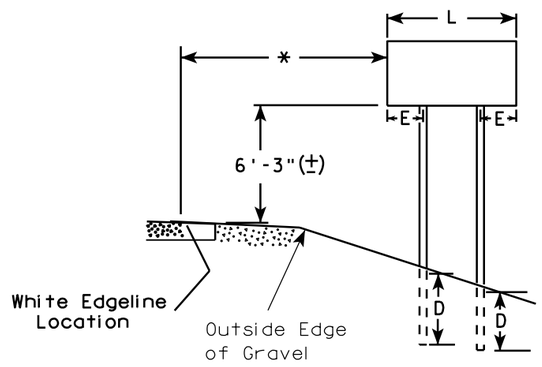
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

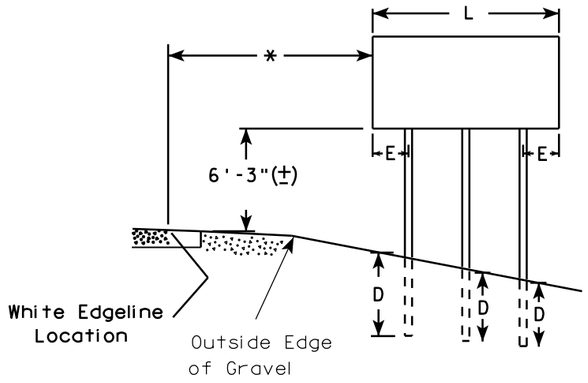
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

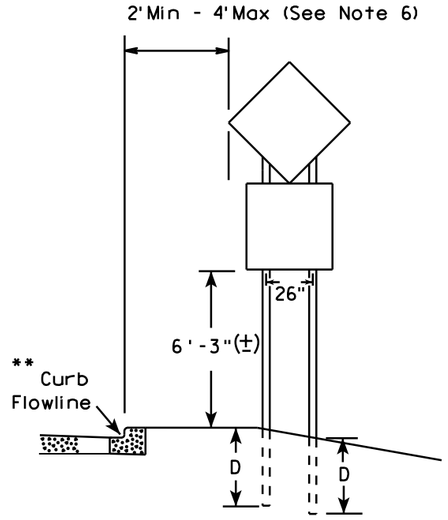
URBAN AREA



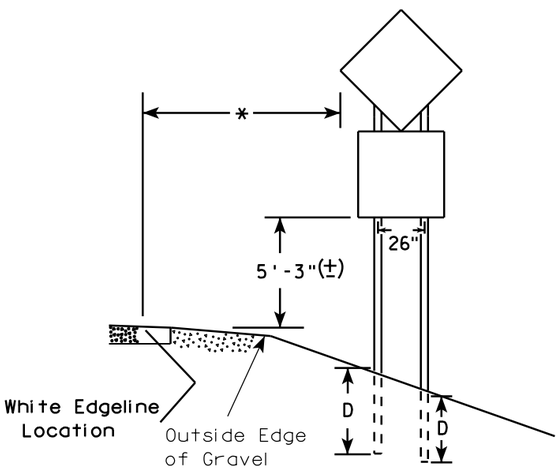
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



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 (A2-1S) 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 signs 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), In Road Object Markers (W5-54) & End of Road Markers (W5-56) 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 and less than 20 S.F. 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'

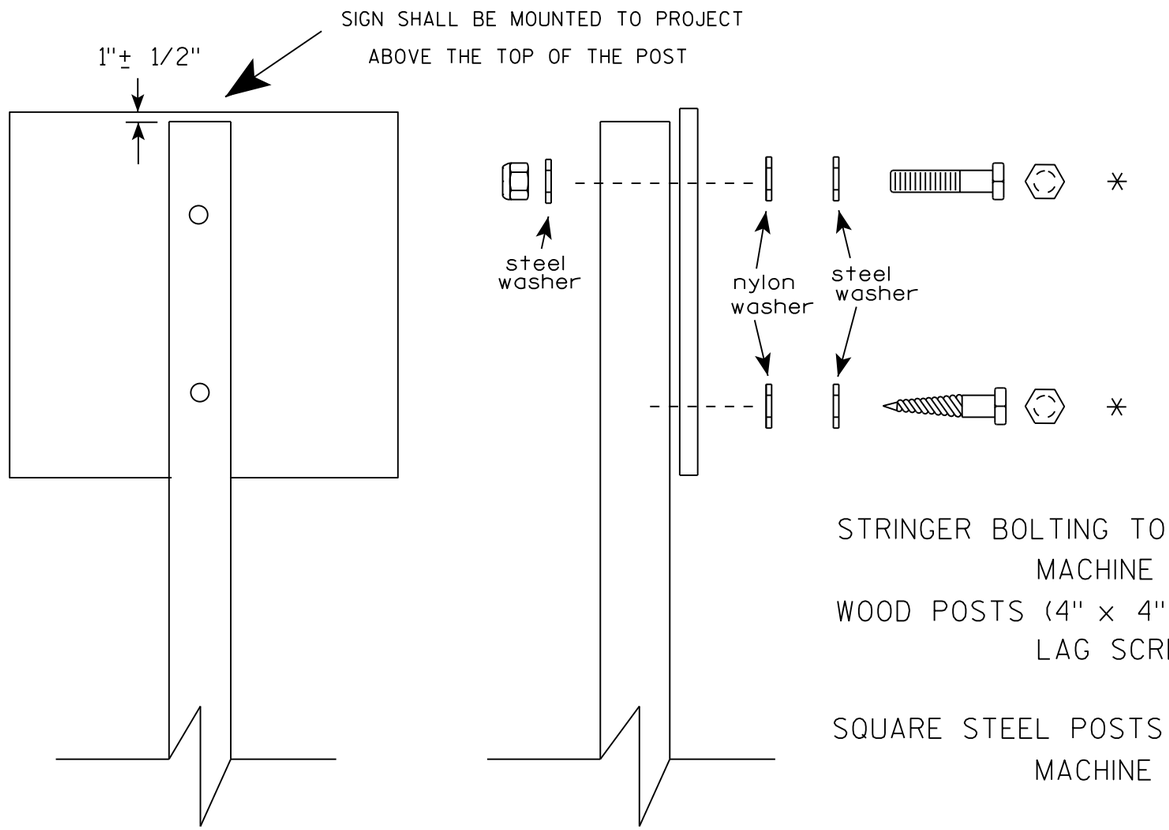
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. AA-1-254 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

* 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

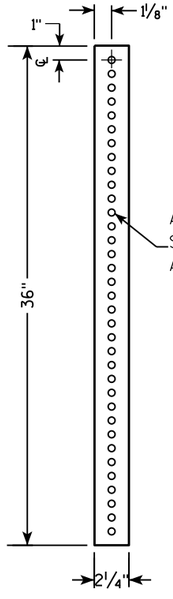
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

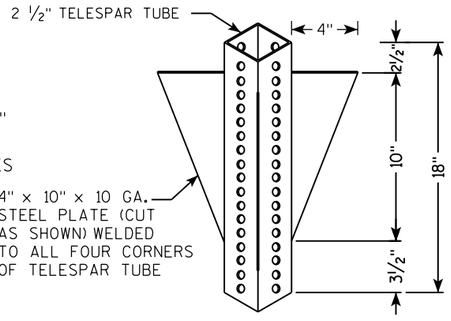
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

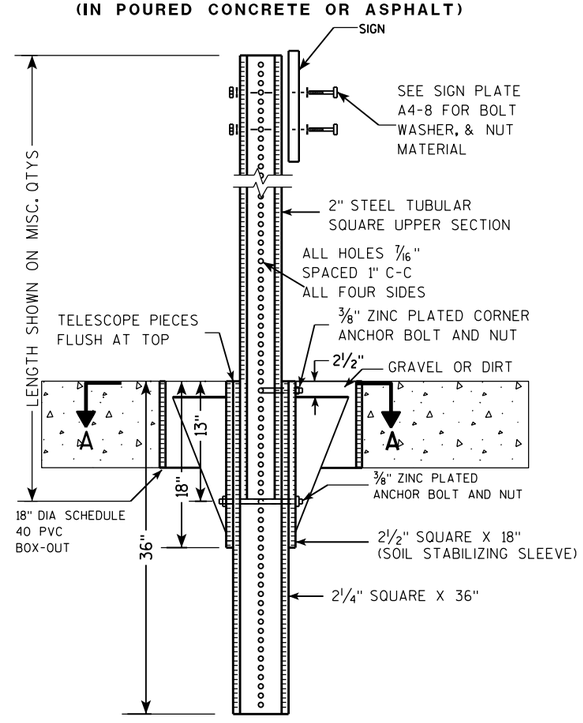
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



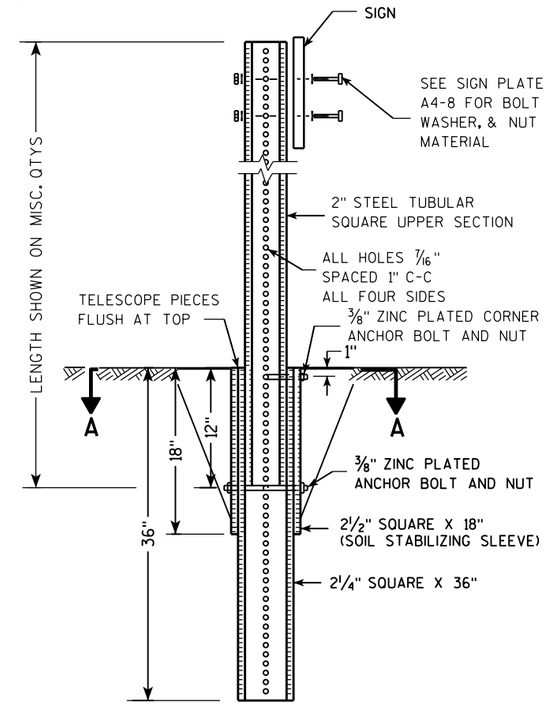
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

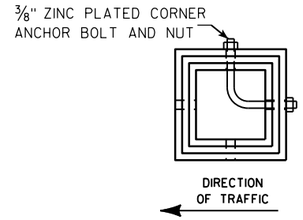


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

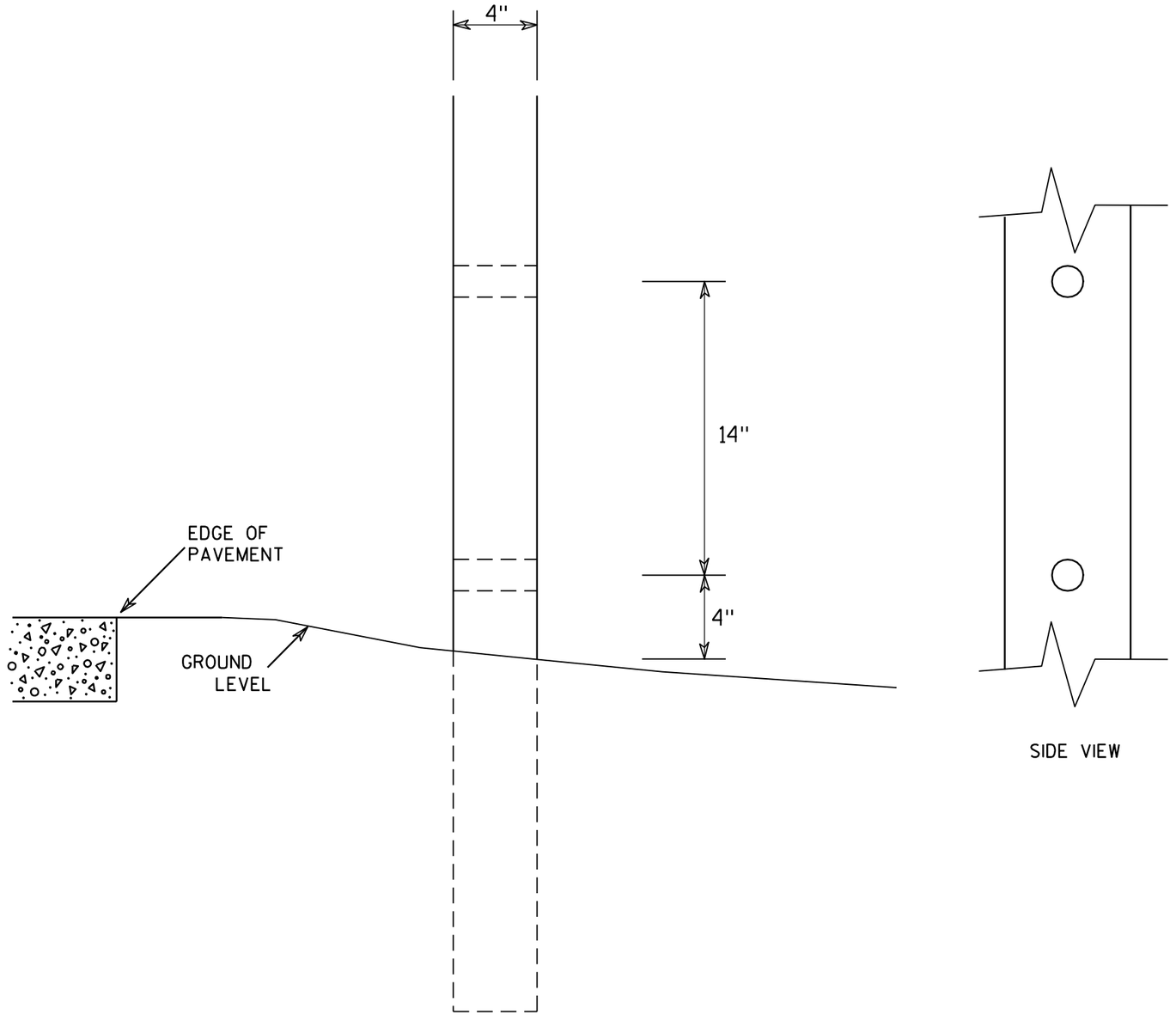
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 256 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



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.

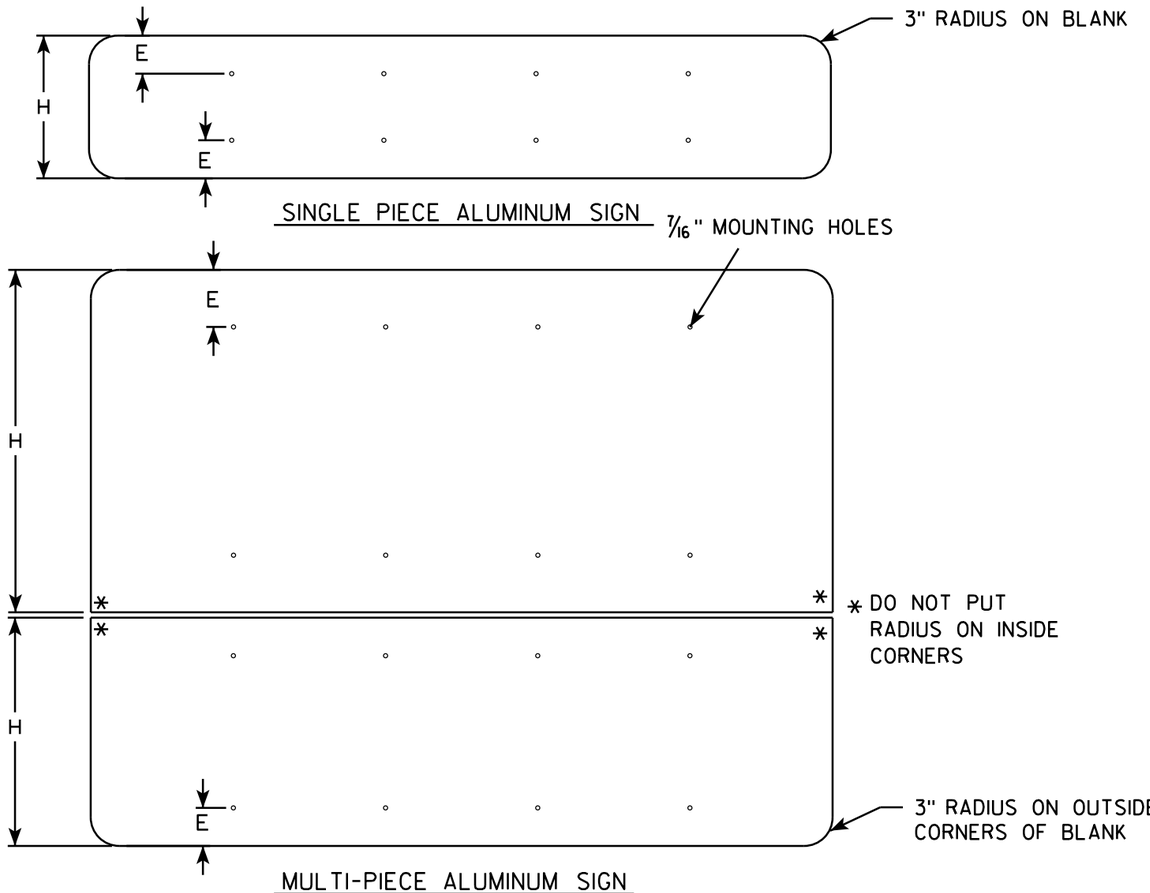
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

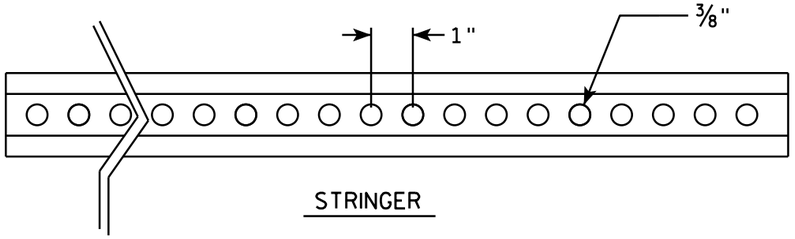
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 257	E



GENERAL NOTES

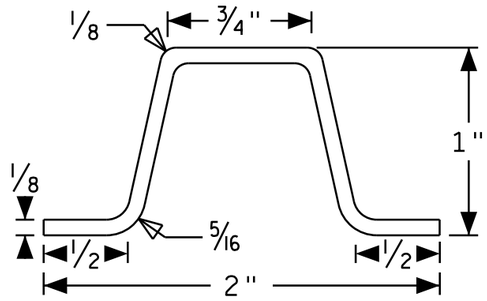
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

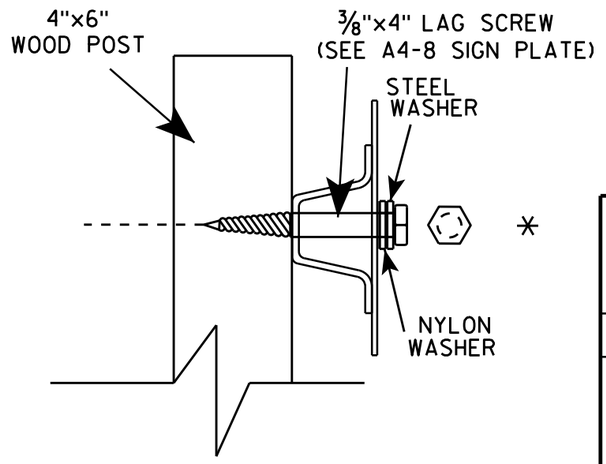


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

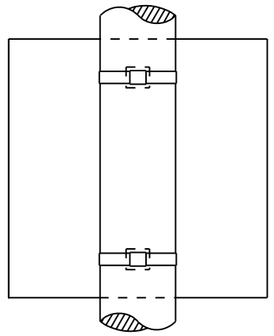
DATE 4/26/16 PLATE NO A4-18.1

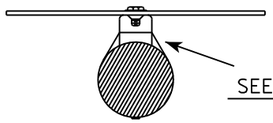
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

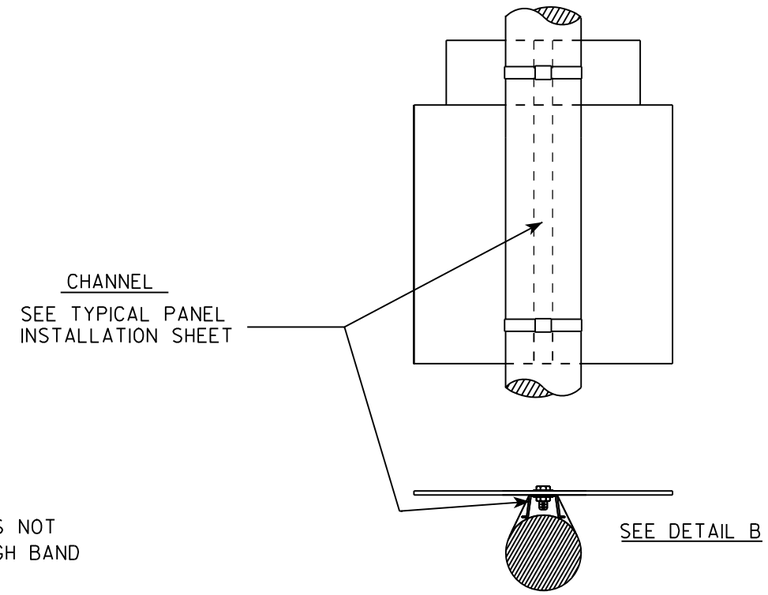
BANDING

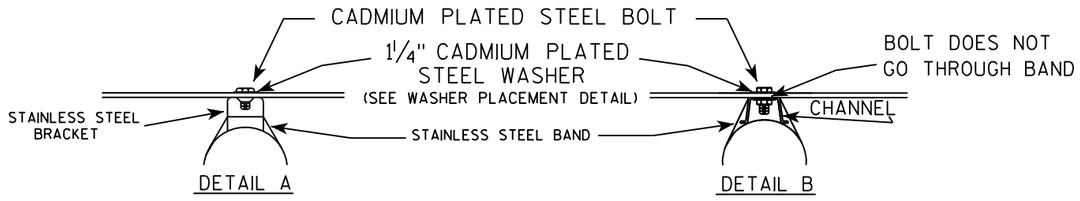
SINGLE SIGN



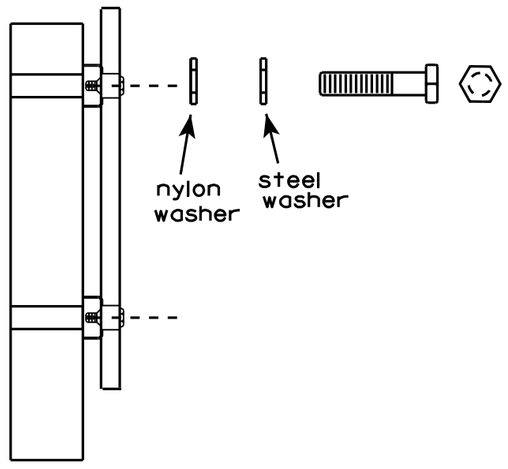


"J" ASSEMBLY





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.

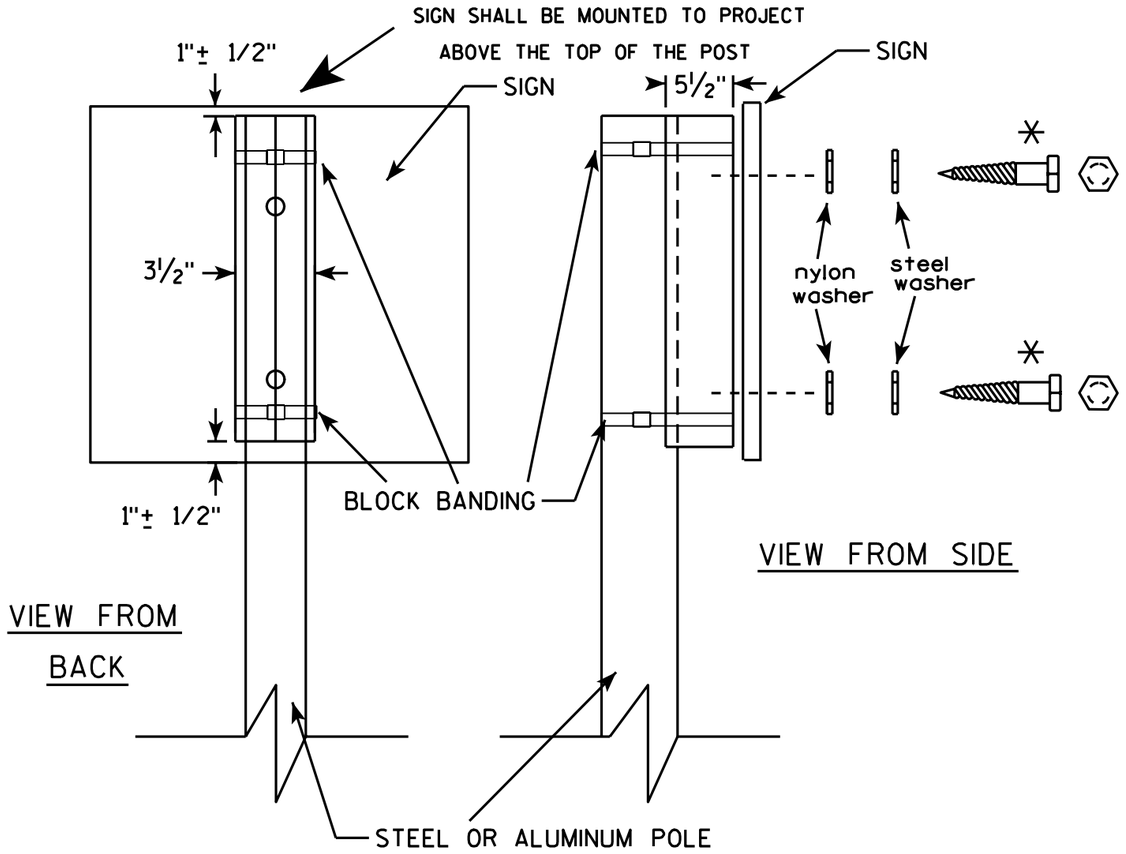
STANDARD SIGN
SIGN BANDING DETAILS

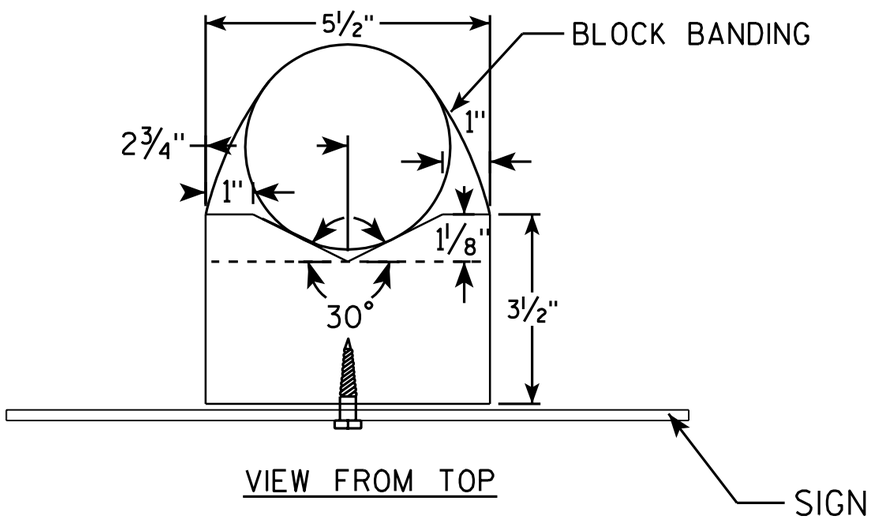
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 259	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

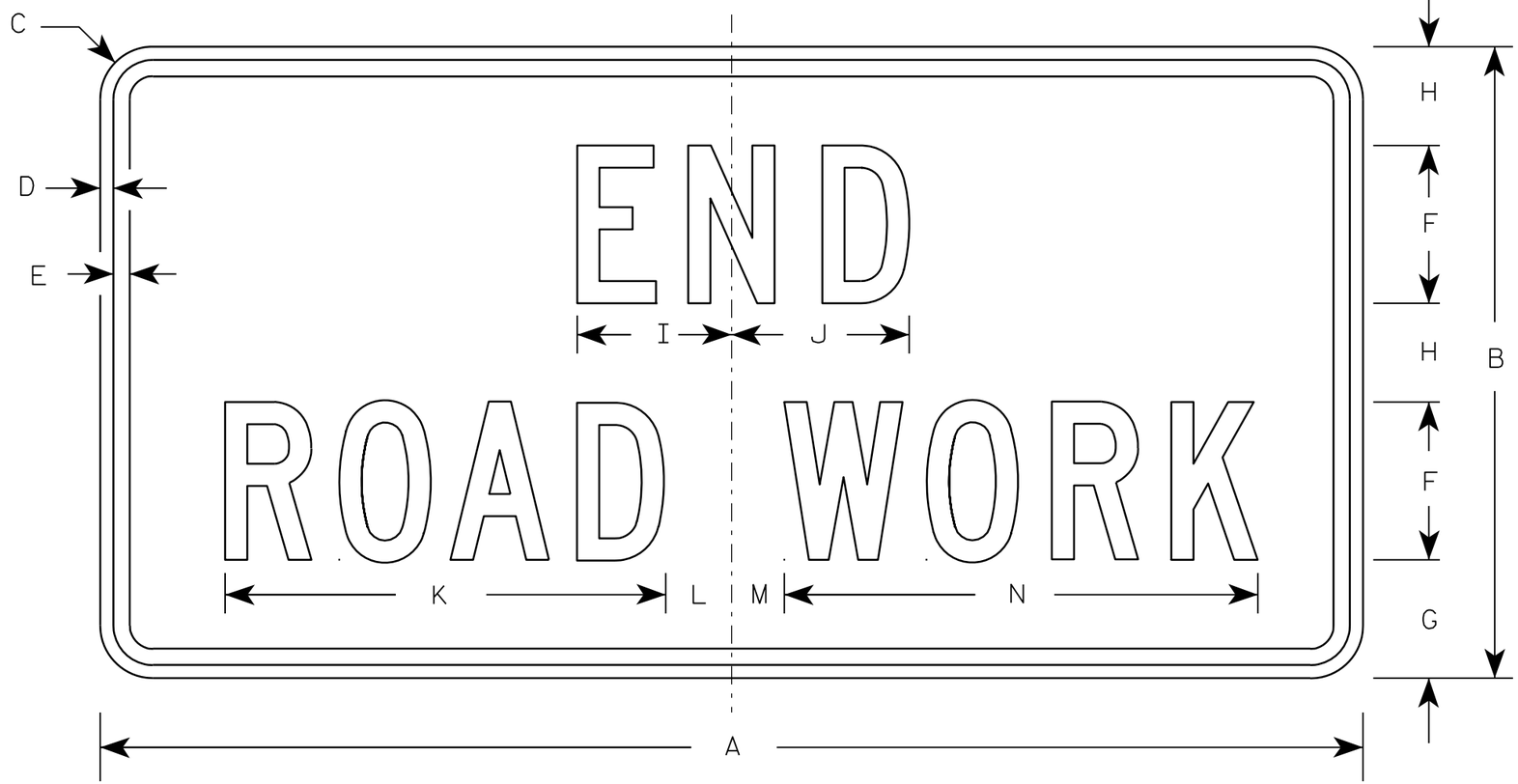
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 260 E

FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

WISDOT/CADDS SHEET 42



G20-2A

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 - 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.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 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	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 261	E

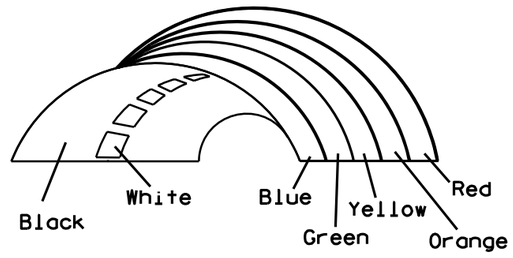


* VARIES

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - (See Note 5)
3. Message Series - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

STANDARD SIGN
I55-56

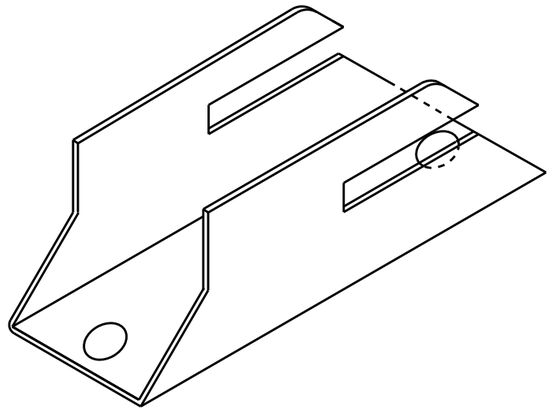
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

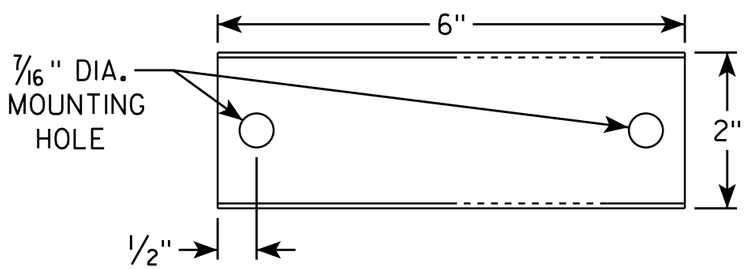
DATE 4/27/11 PLATE NO. 155-56.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 262

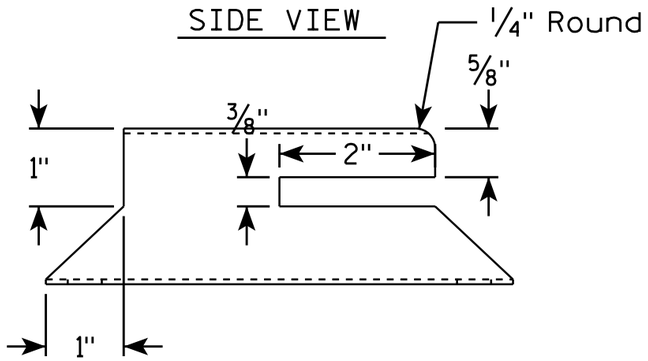
ISOMETRIC VIEW



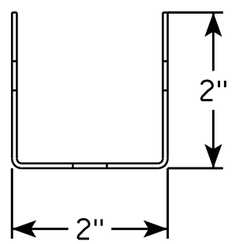
TOP VIEW



SIDE VIEW



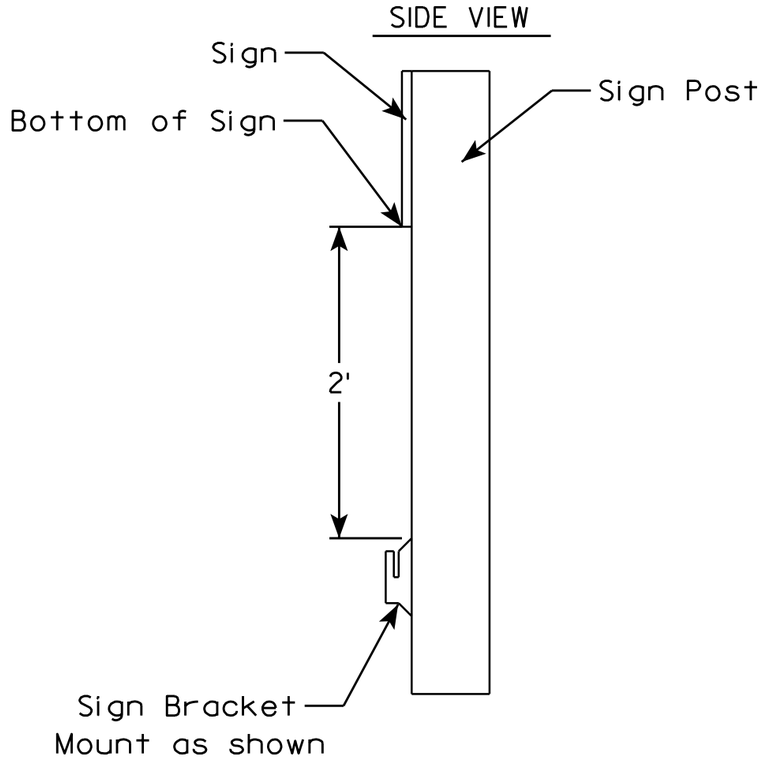
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



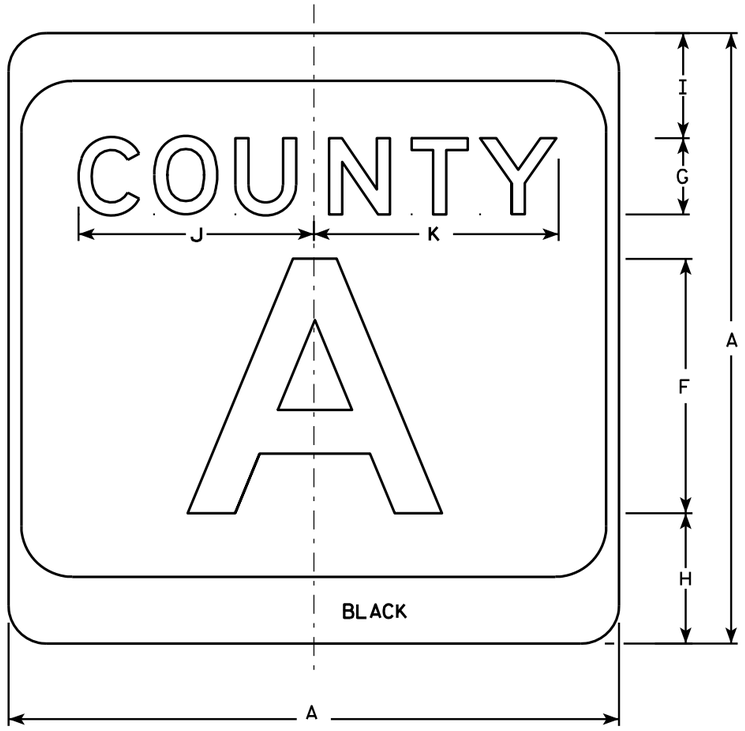
ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

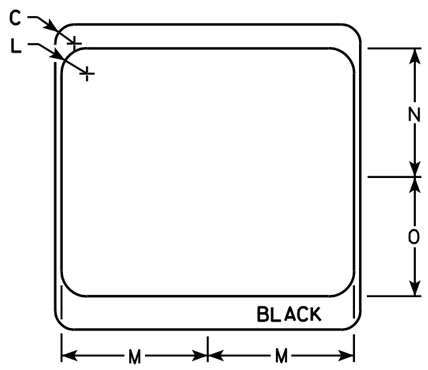
APPROVED Matthew R Rauch
for State Traffic Engineer

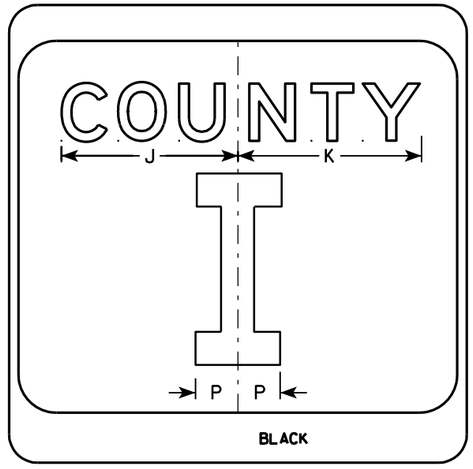
DATE 4/26/16 PLATE I55-56B.2

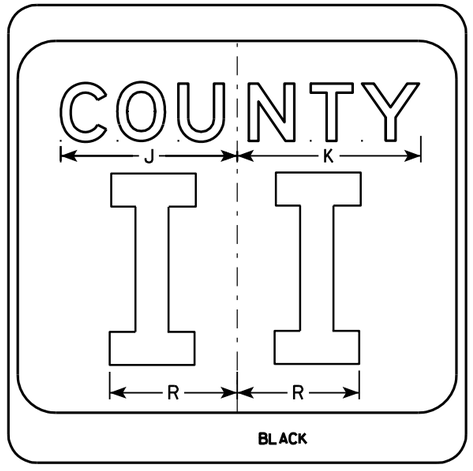
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

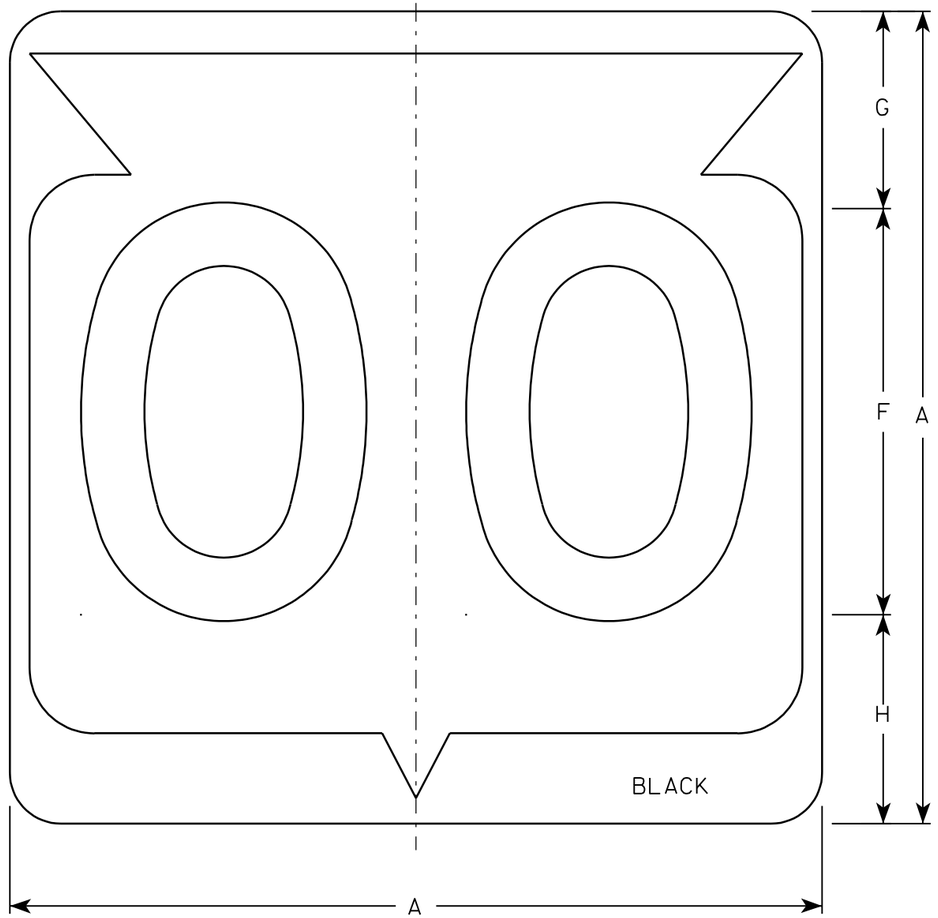
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

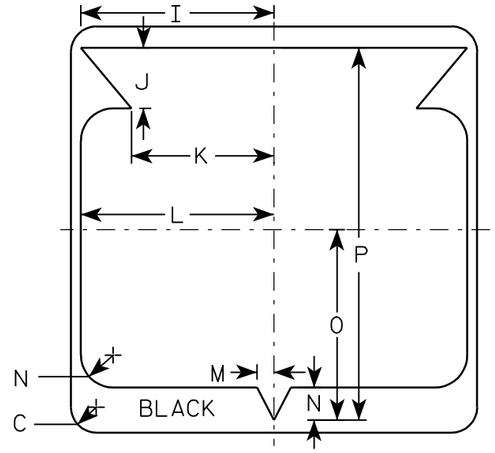
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 264 | E



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

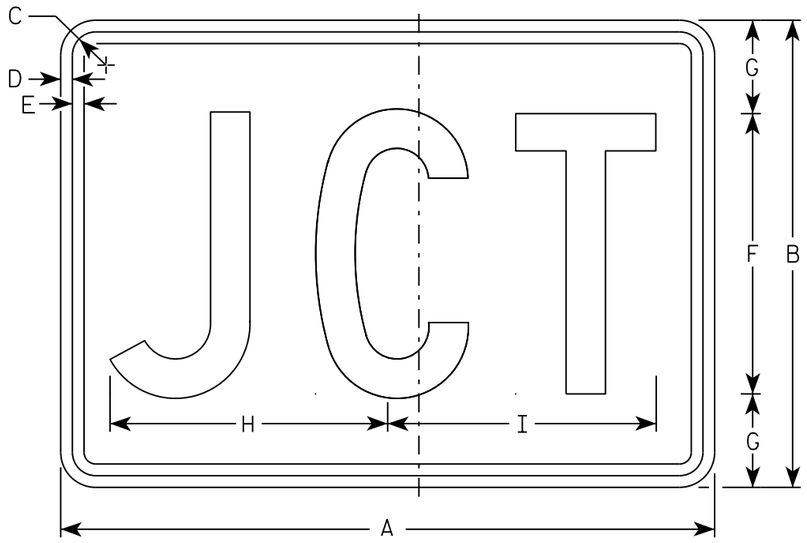
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

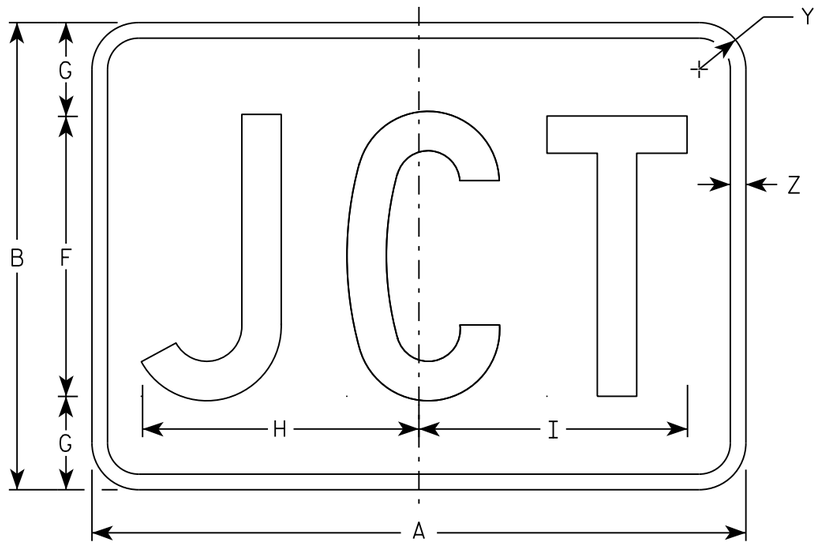
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 265	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
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
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

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	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
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
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
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

STANDARD SIGN
M2-1

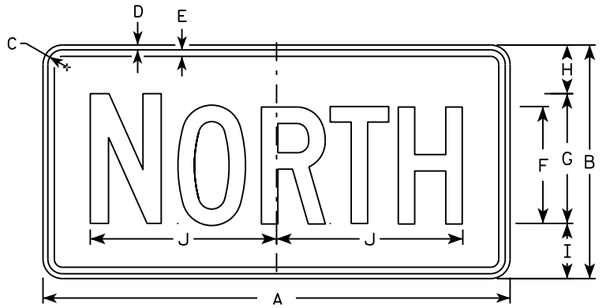
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

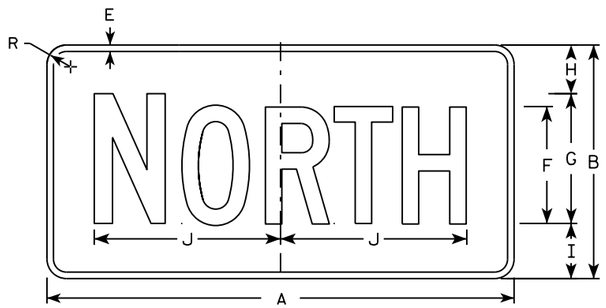
DATE 10/15/15 PLATE 266 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



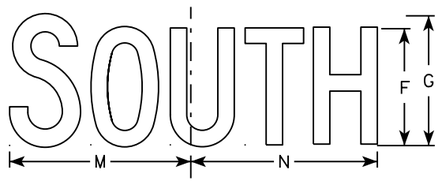
MB3-1
MK3-1
MN3-1



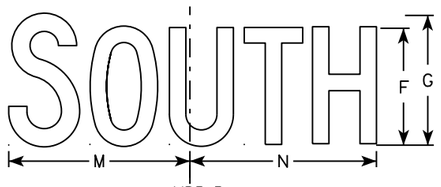
M3-2
MM3-2
MP3-2



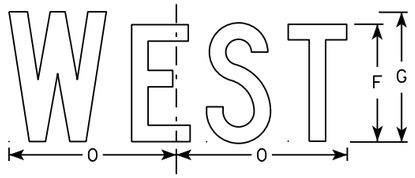
MB3-2
MK3-2
MN3-2



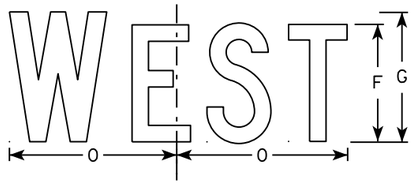
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
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
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
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

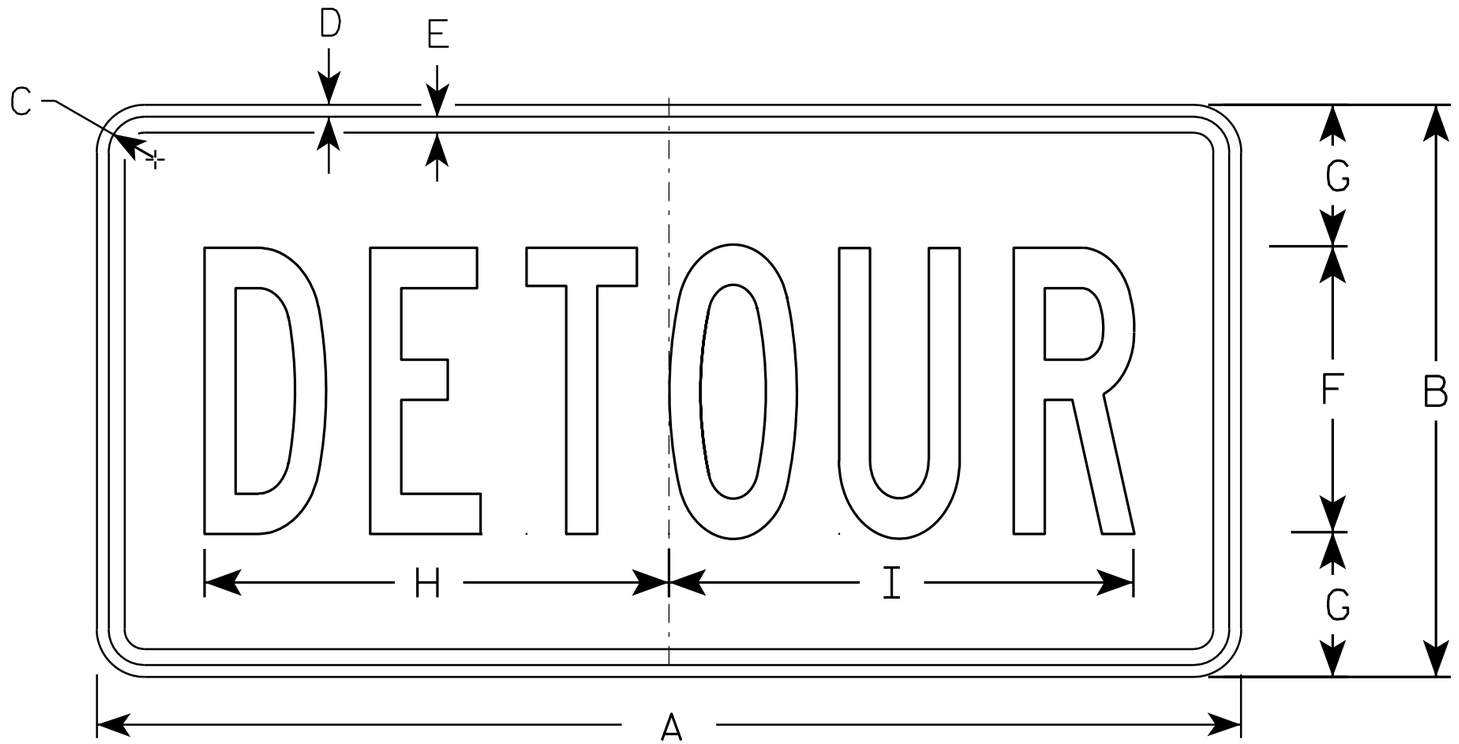
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

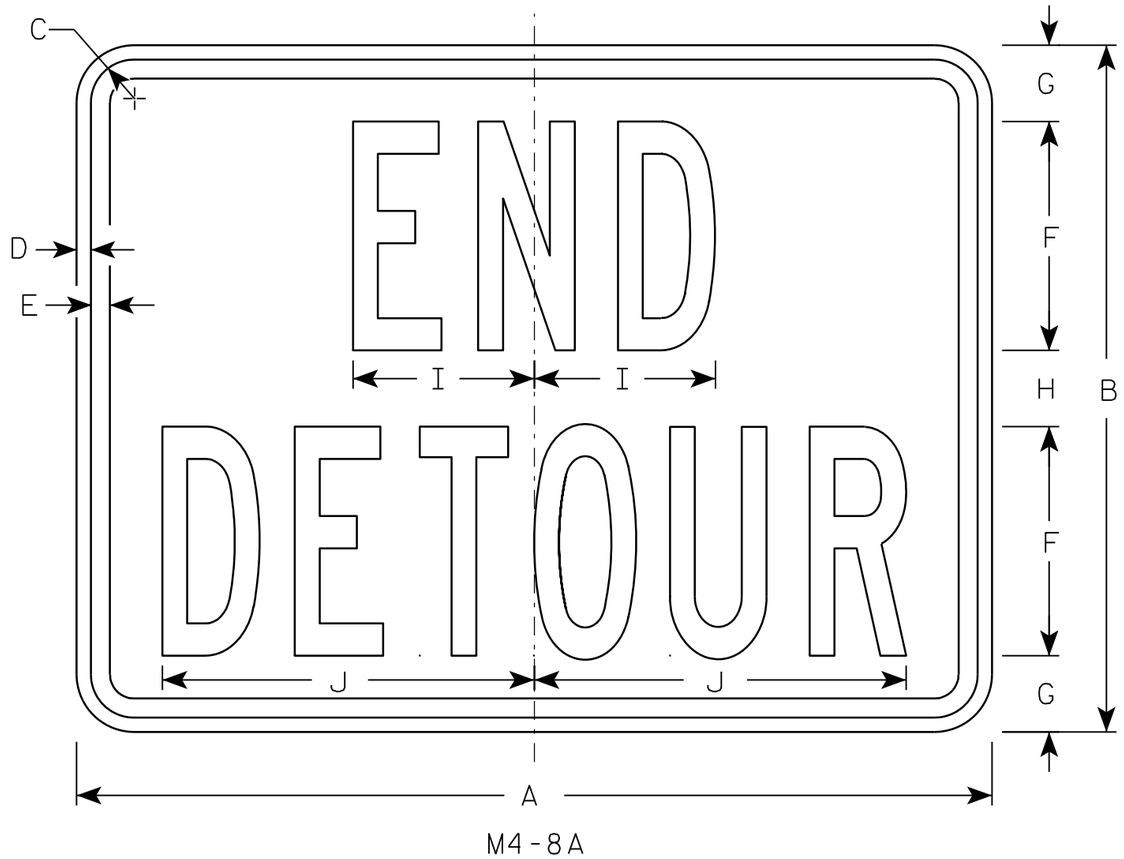
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 268	E



M4-8A

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 - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

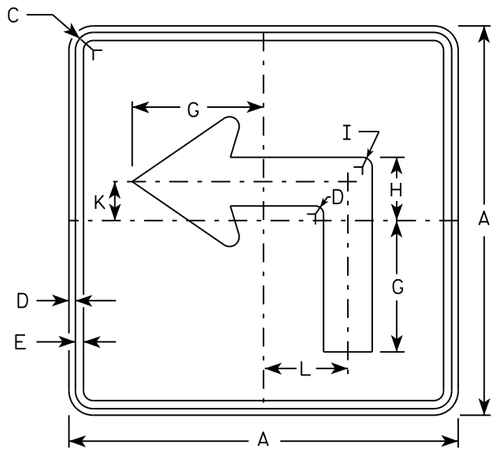
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

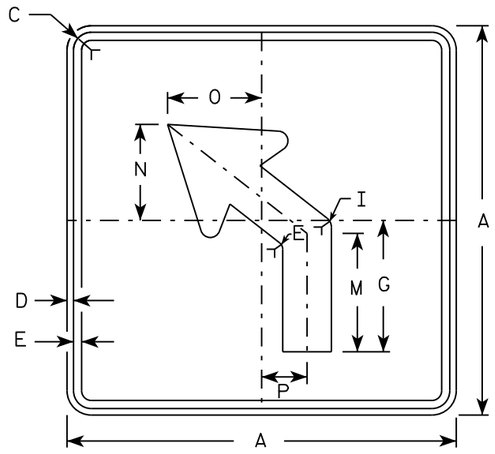
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

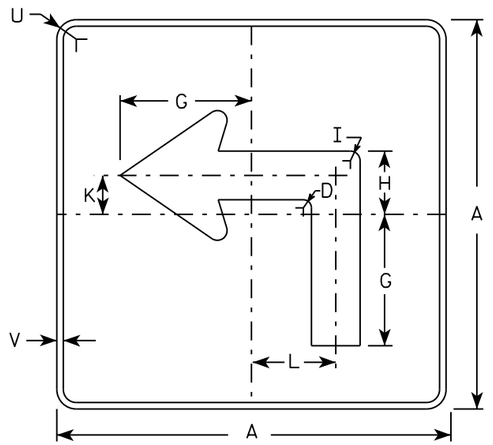
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 269	E



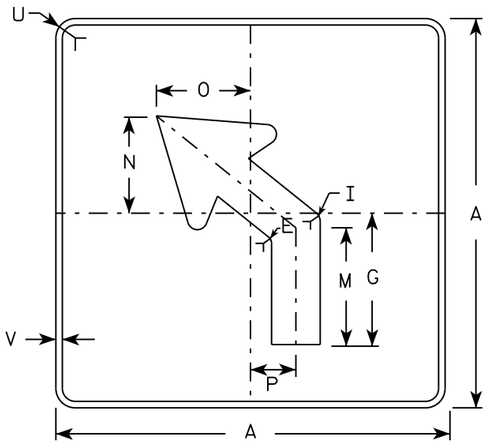
M5-1L
MM5-1L
MO5-1L
MP5-1L



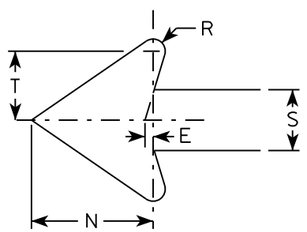
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
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
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   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
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 7/8	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 7/8	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 7/8	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

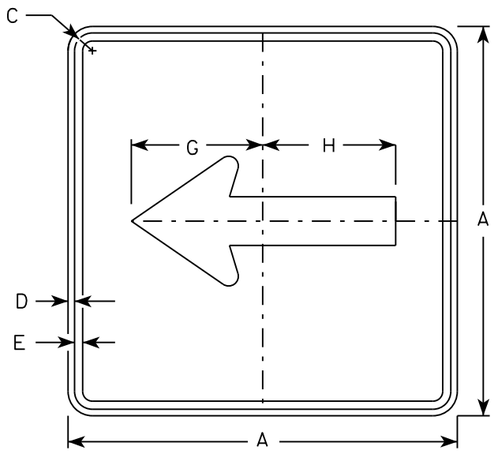
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

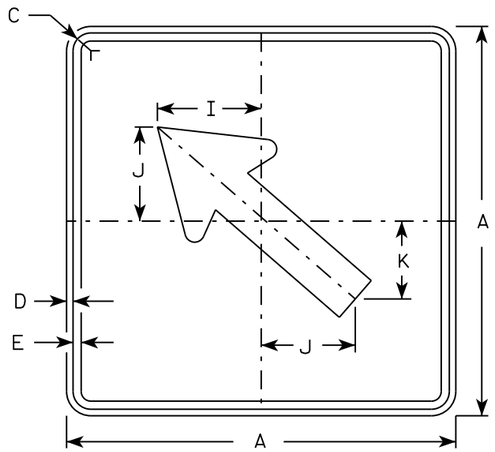
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



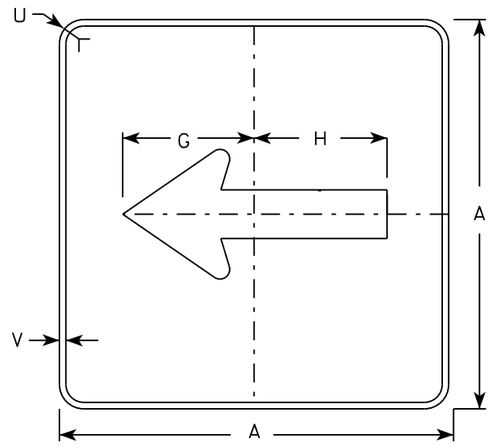
M6-1
MM6-1
MO6-1
MP6-1



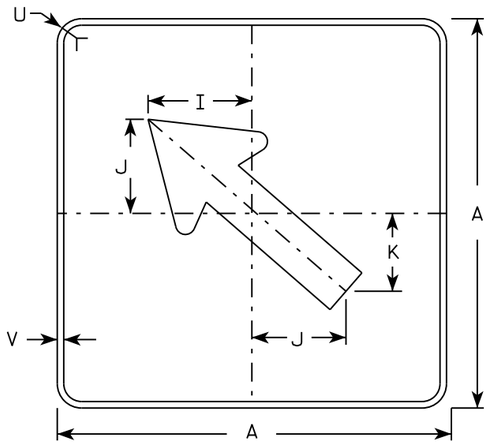
M6-2
MM6-2
MO6-2
MP6-2

NOTES

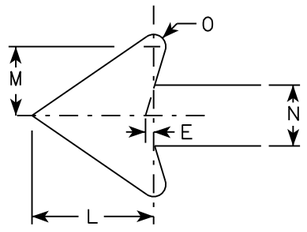
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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

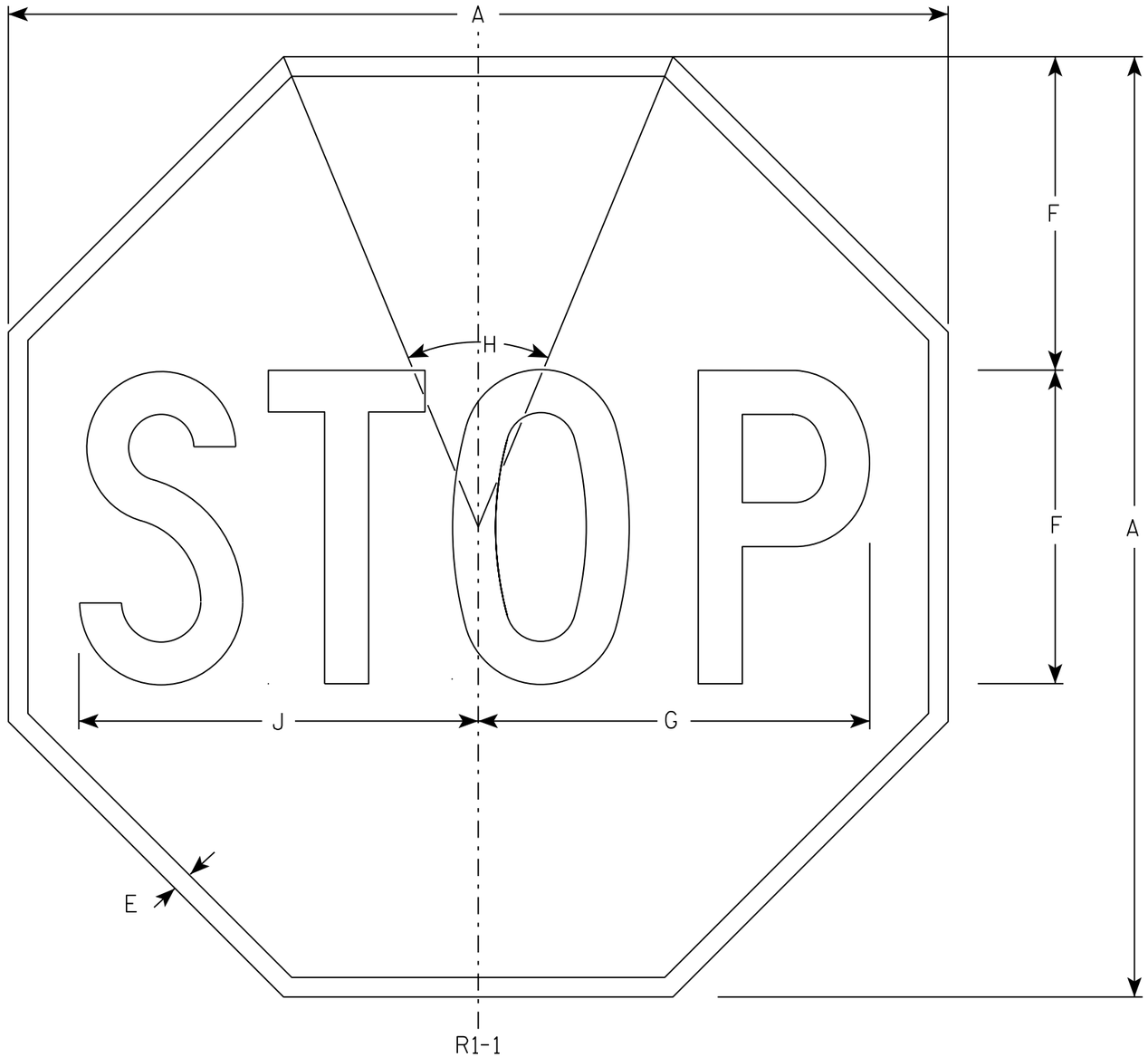
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 271 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R1-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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	30				5/8	10	12 1/2	45°		12 3/4																	5.18
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

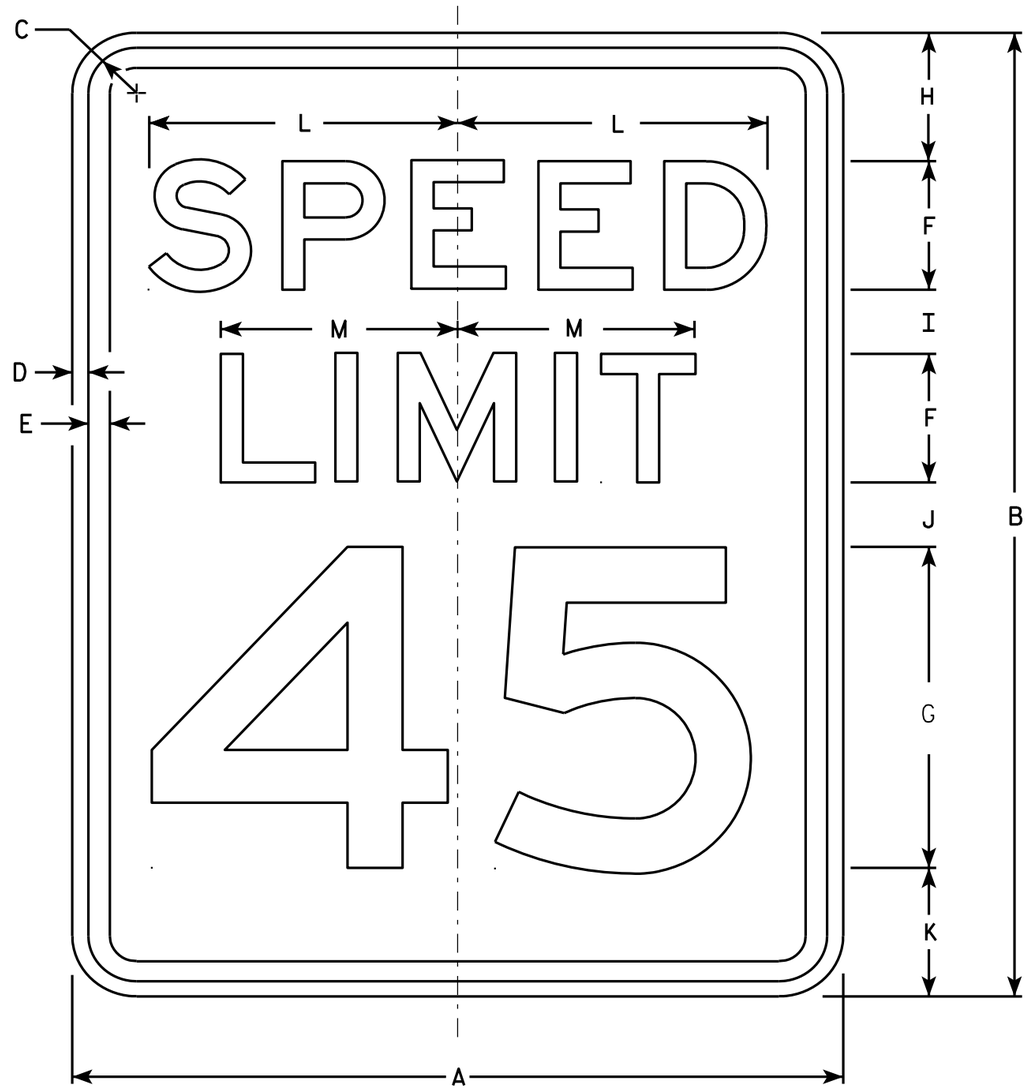
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 272 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



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

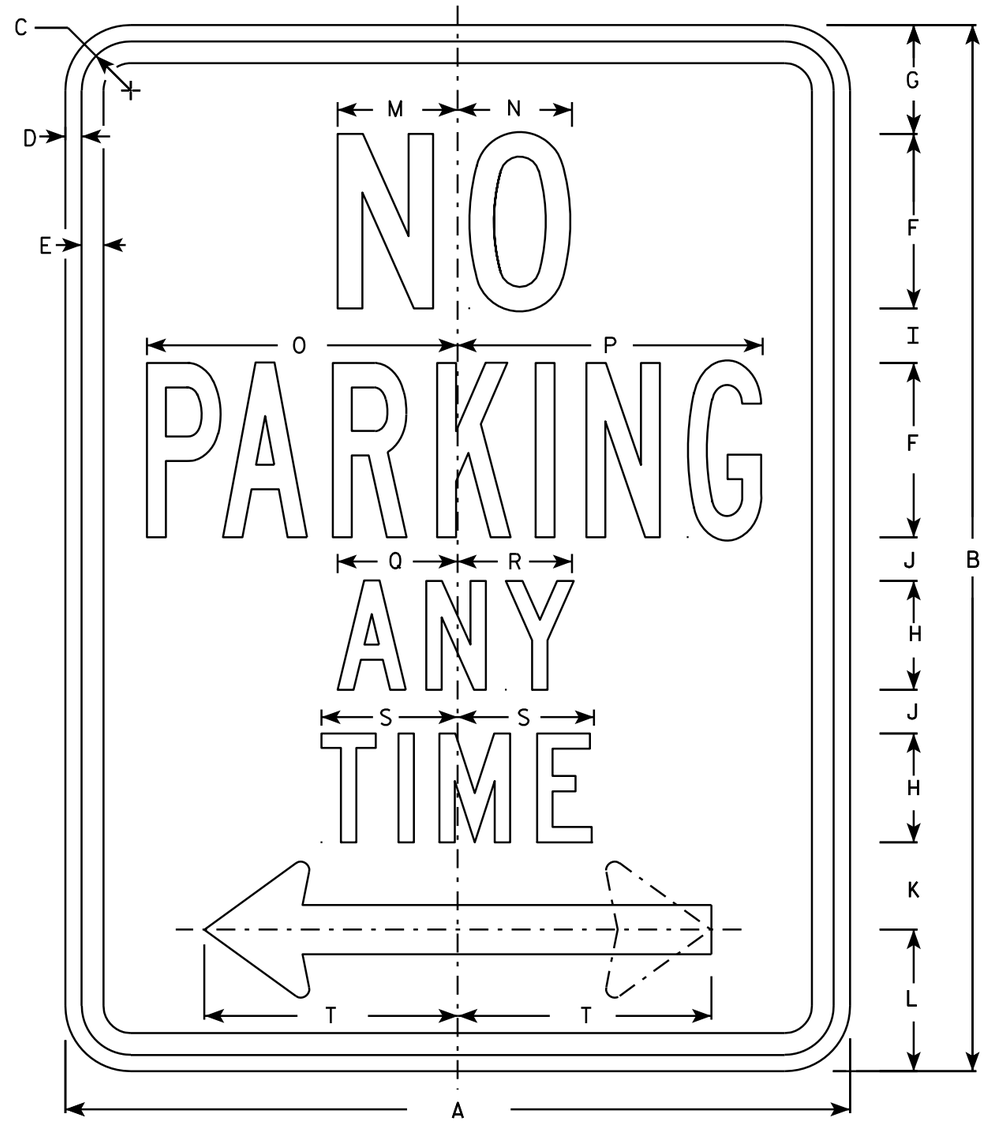
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

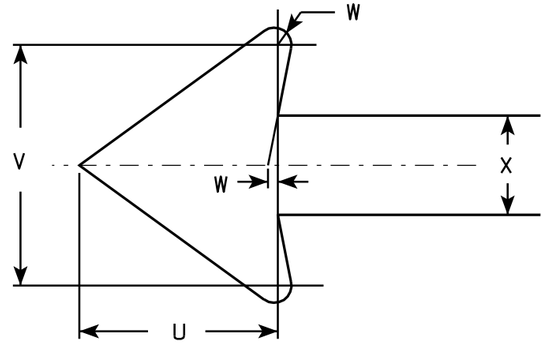
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 273 | E



R7-1

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 - Red
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. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

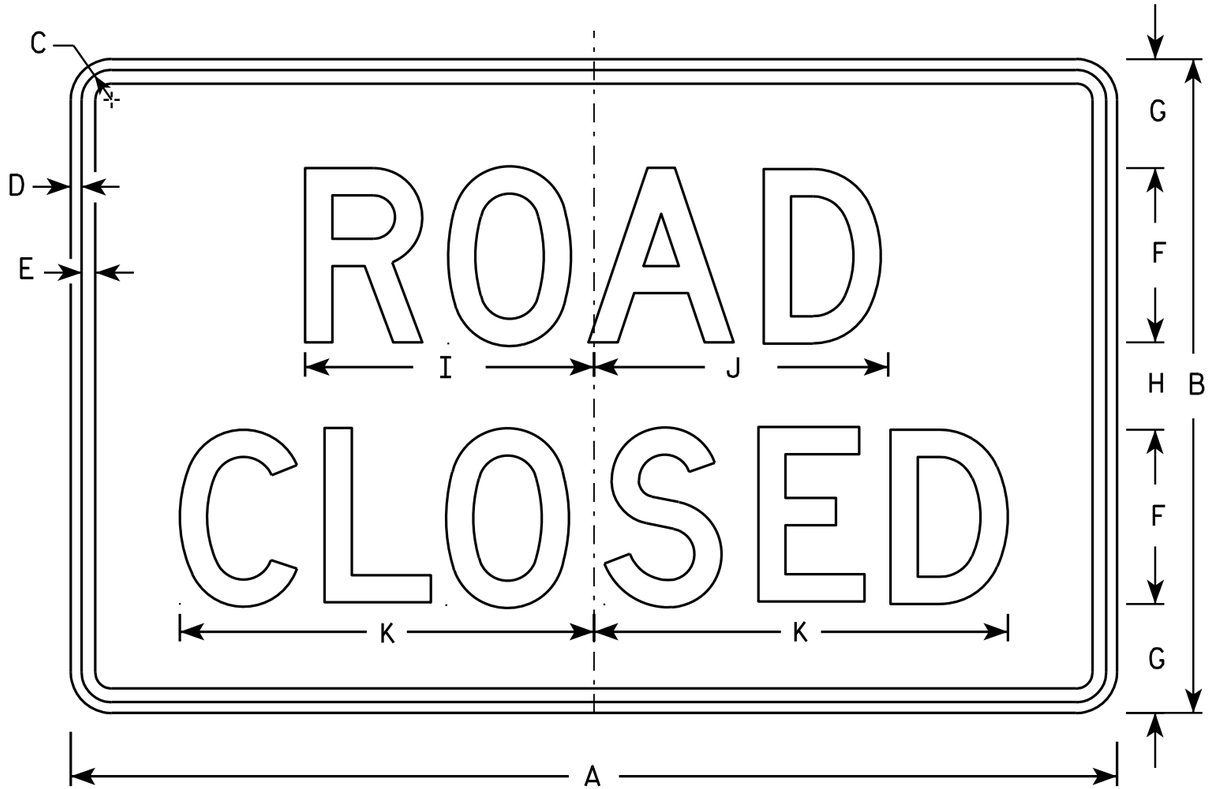
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 274	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.DGN PLOT DATE : 31-MAR-2011 09:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000

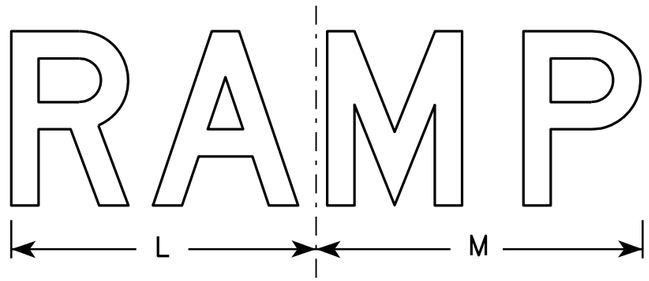
WISDOT/CADDS SHEET 42



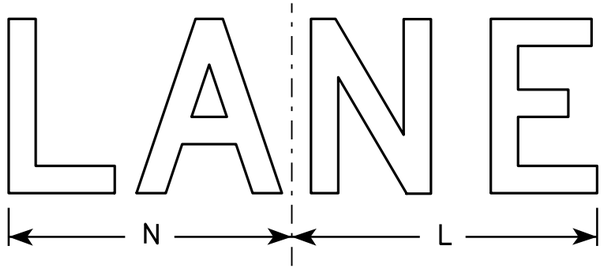
R11-2

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. Modify the message as required.



R11-2R



R11-2L

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	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

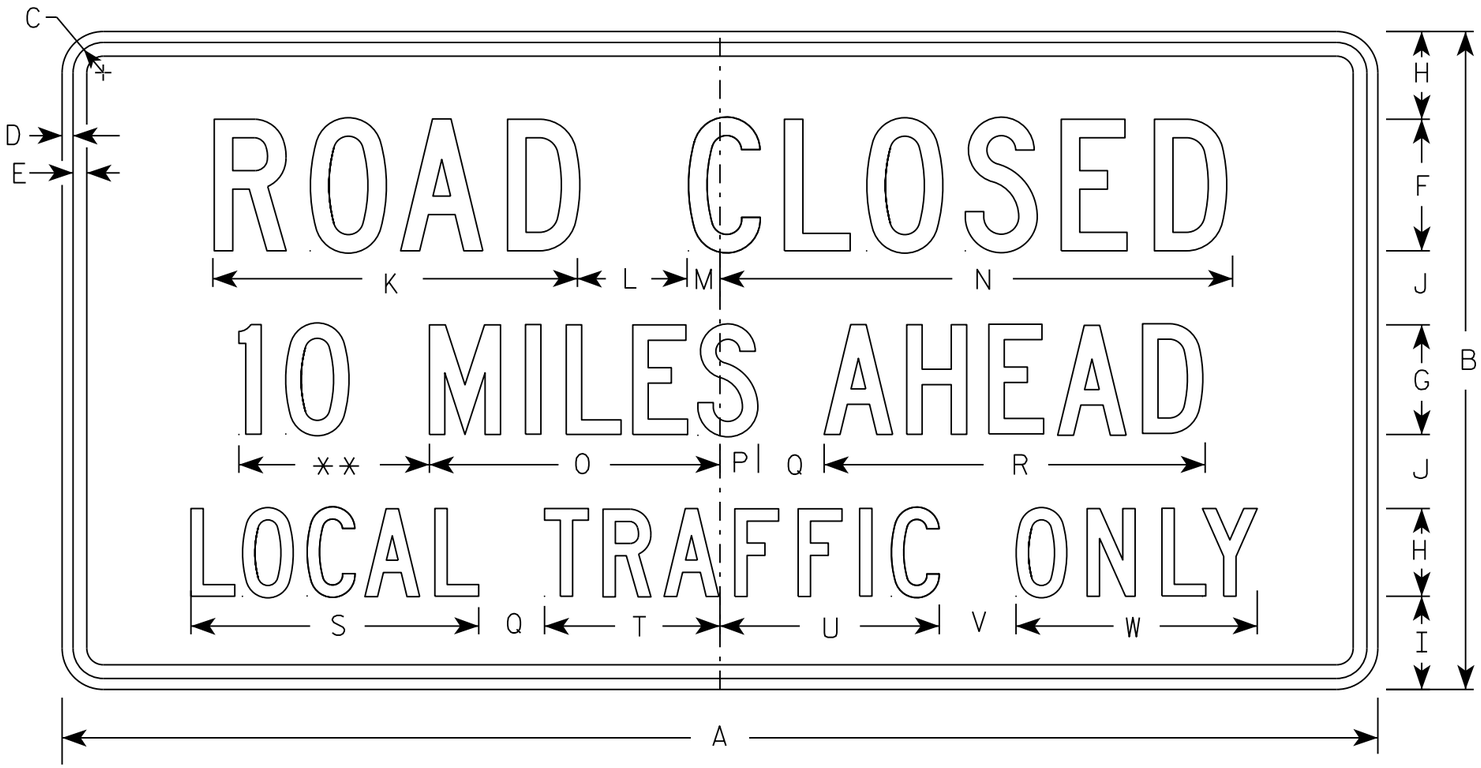
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 275 | E

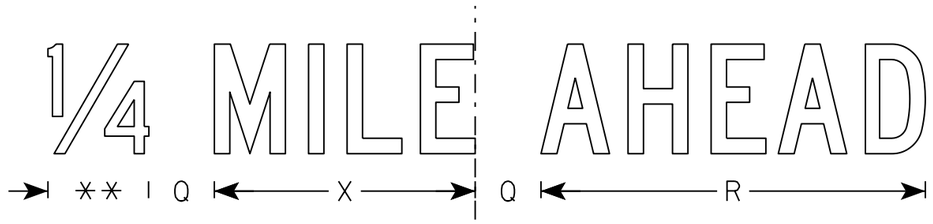
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   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.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 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.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

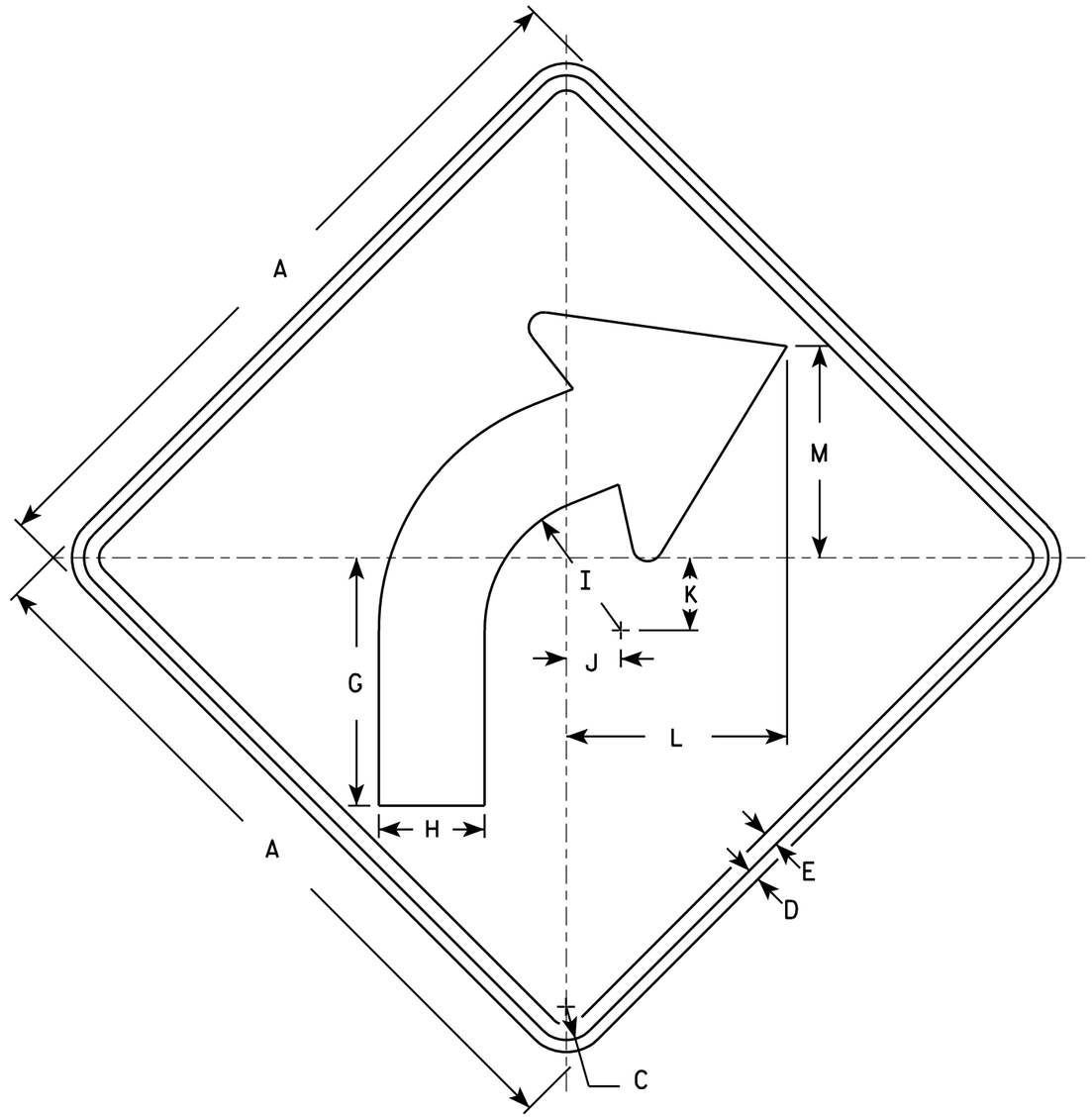
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

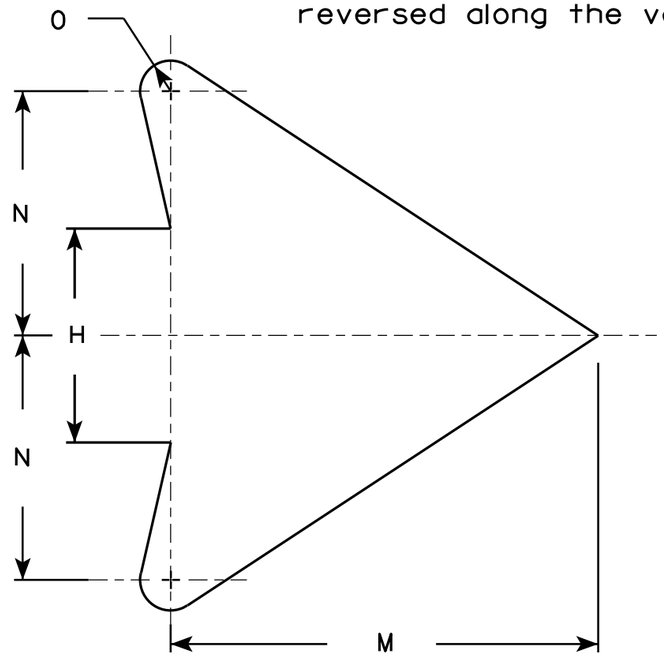
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 276	E

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. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



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		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

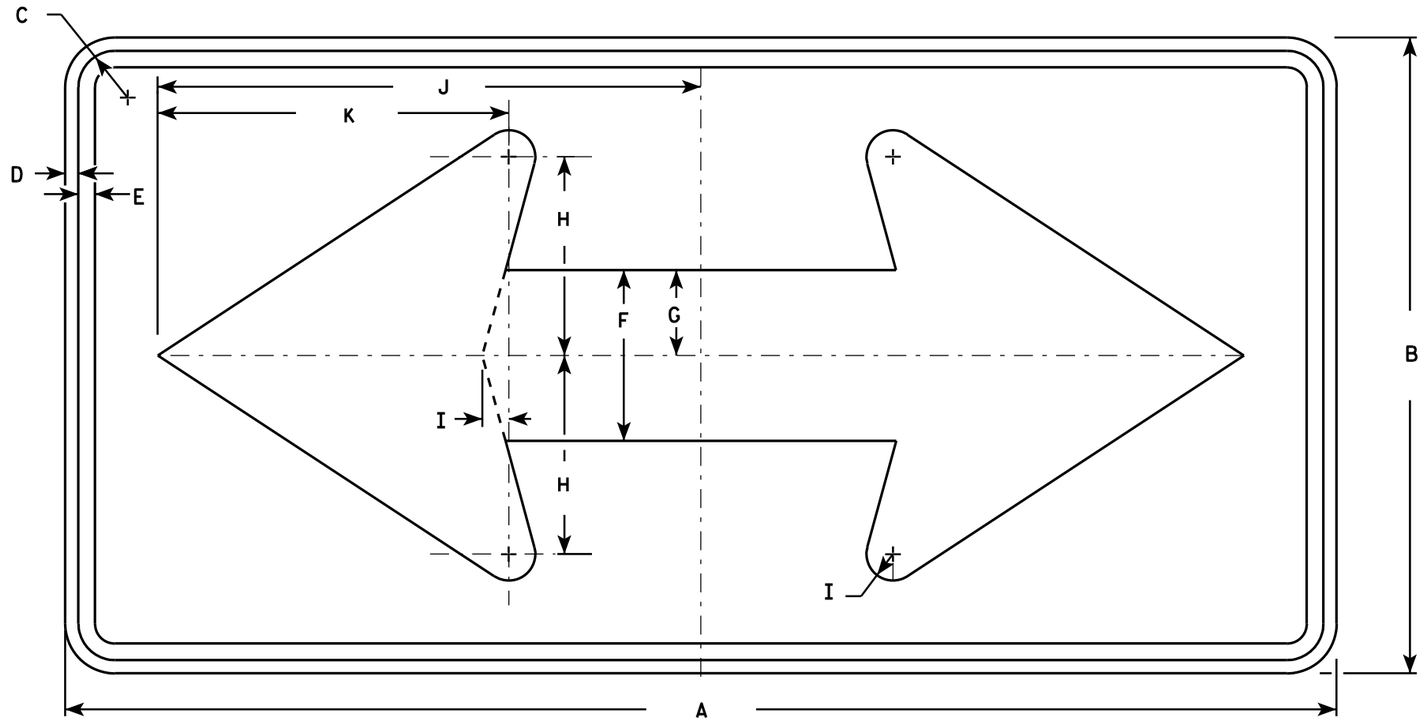
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 277	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

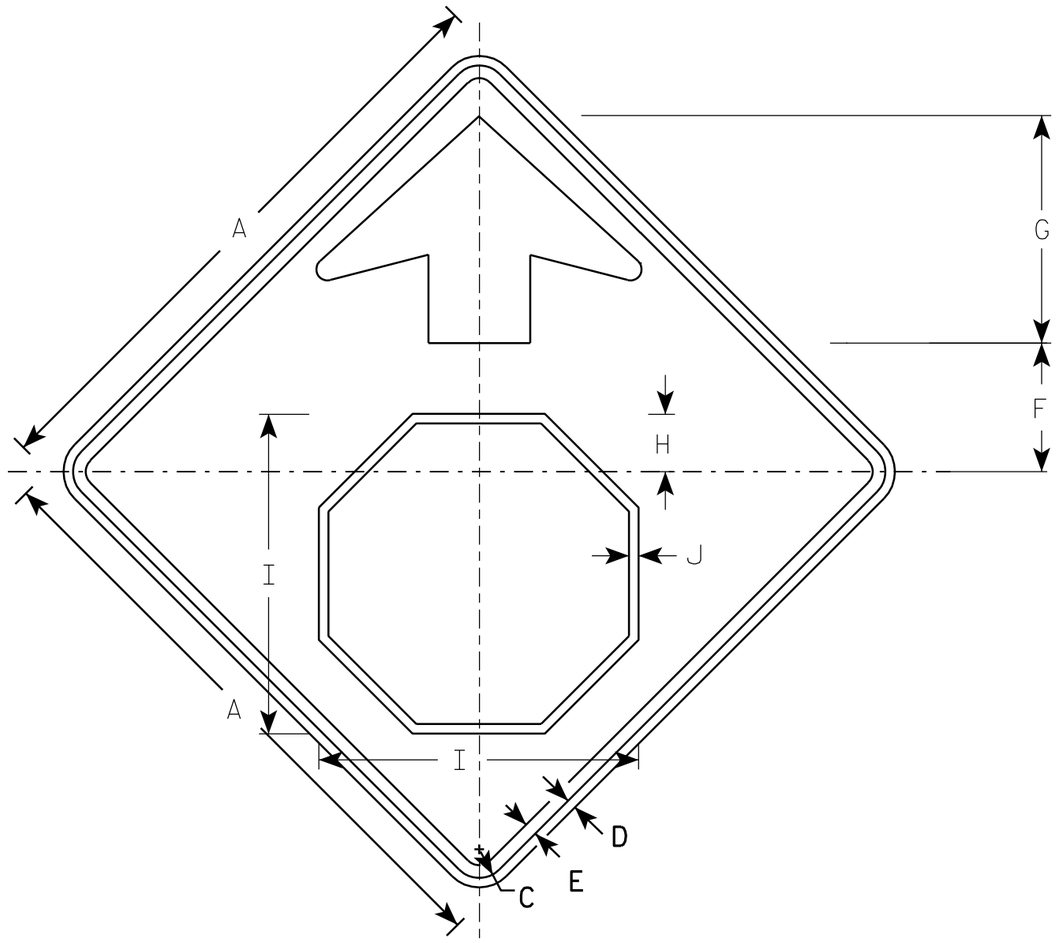
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

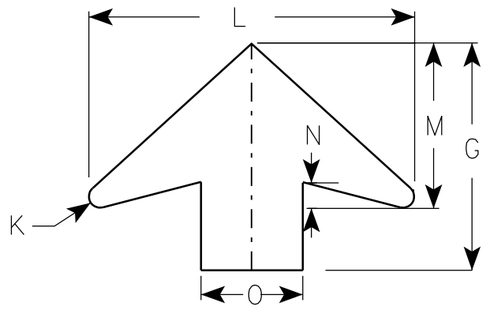
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 278 | E



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

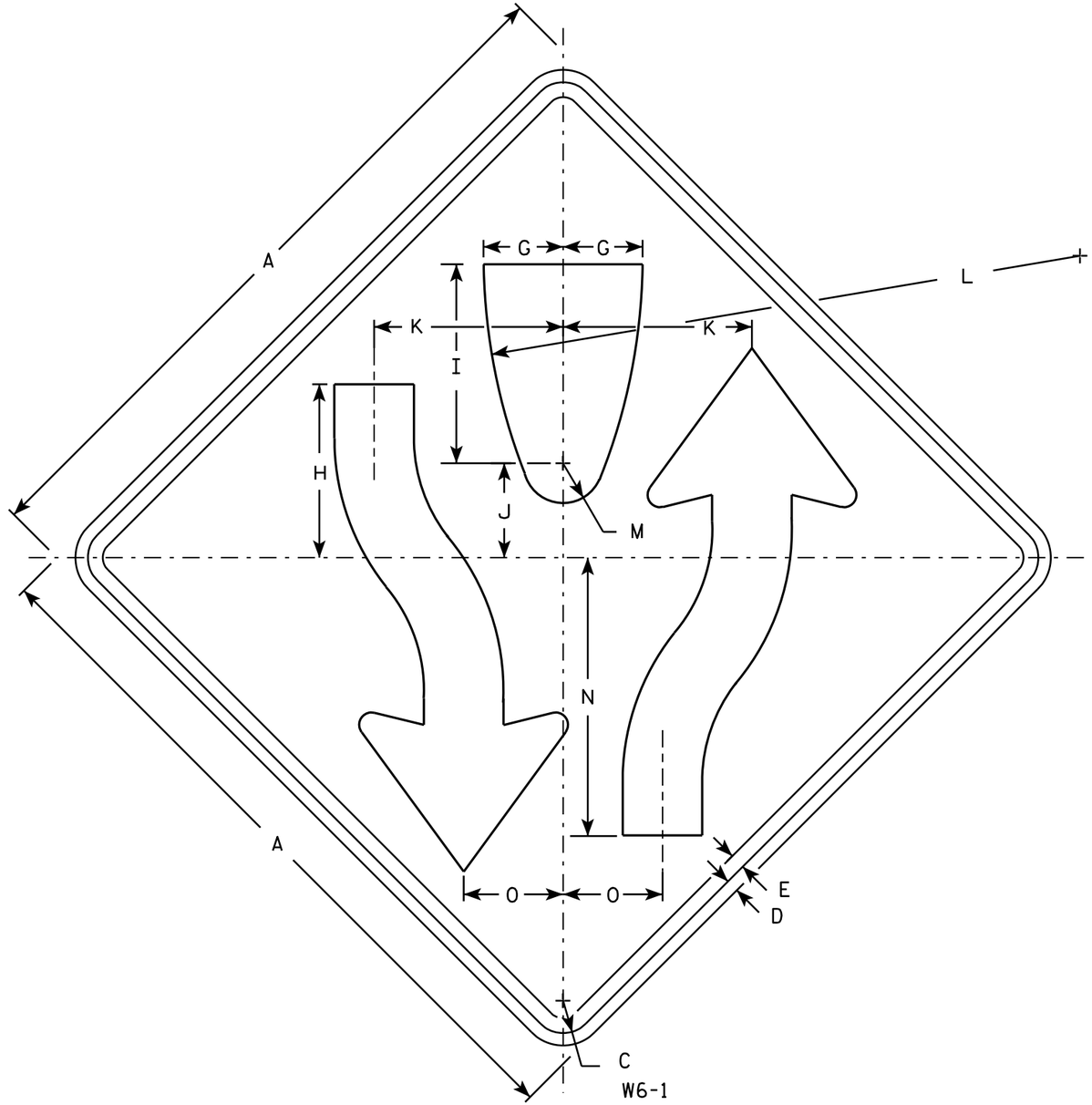
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

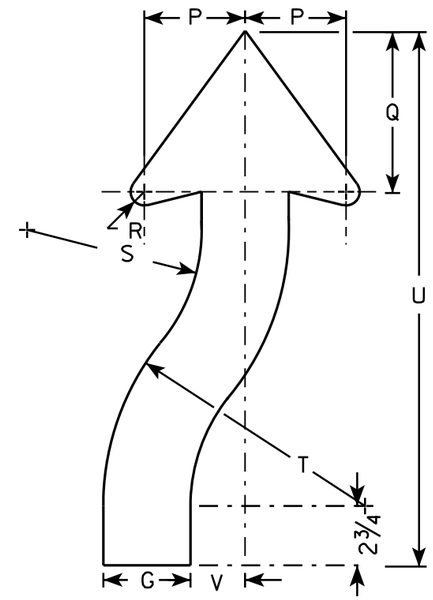
PROJECT NO:

SHEET NO: 279 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

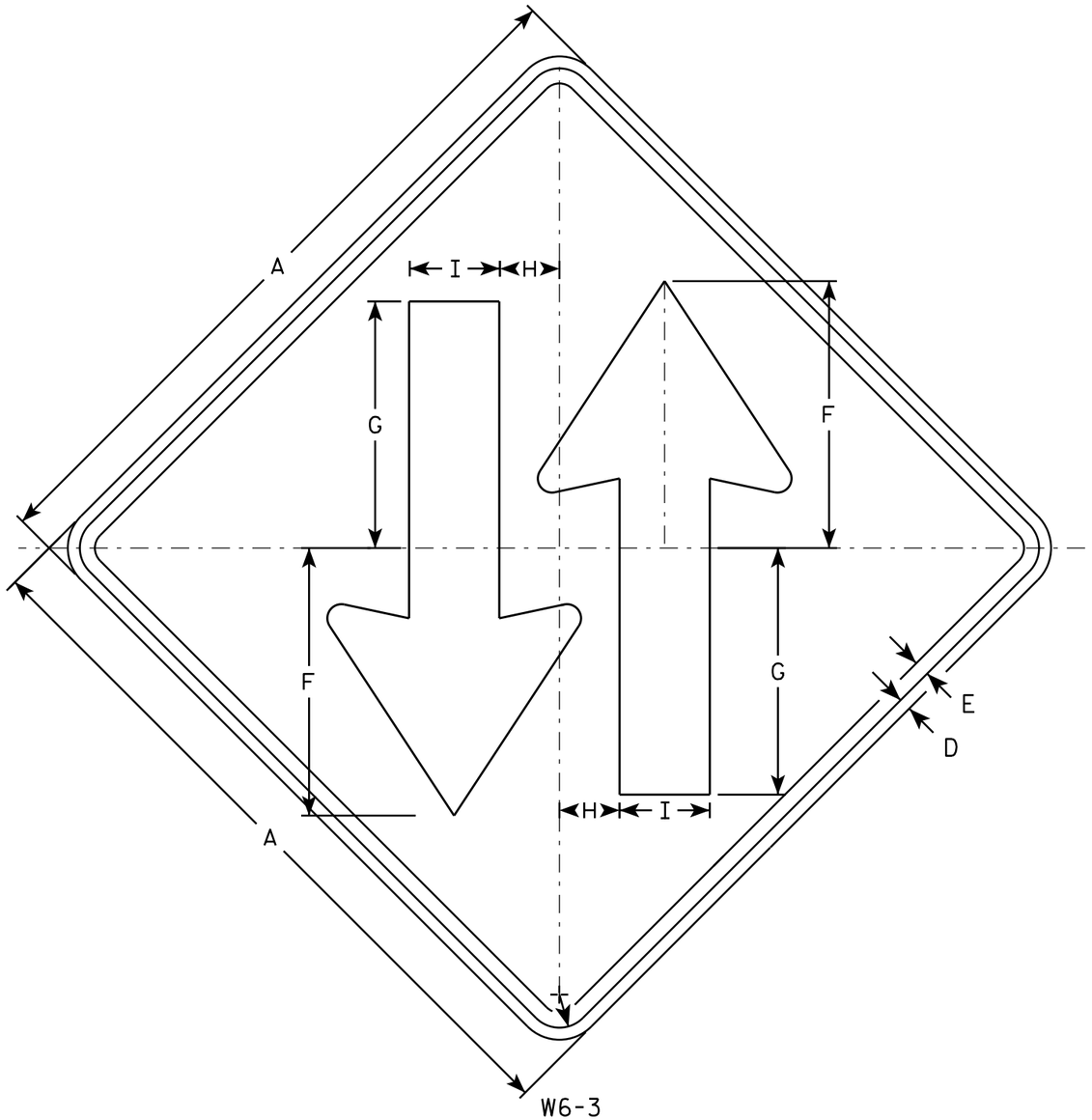
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 280	E

7

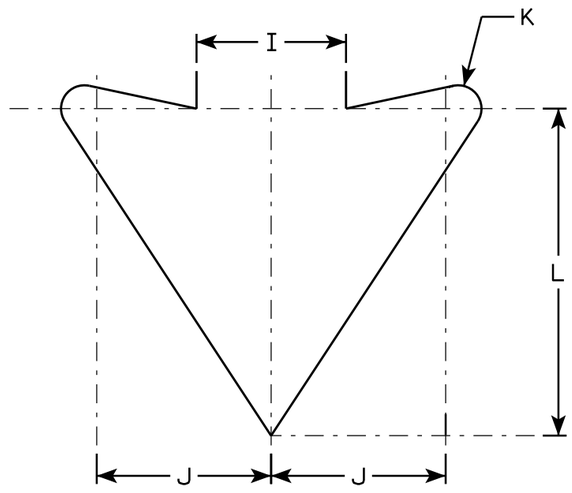
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



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	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN
W6-3

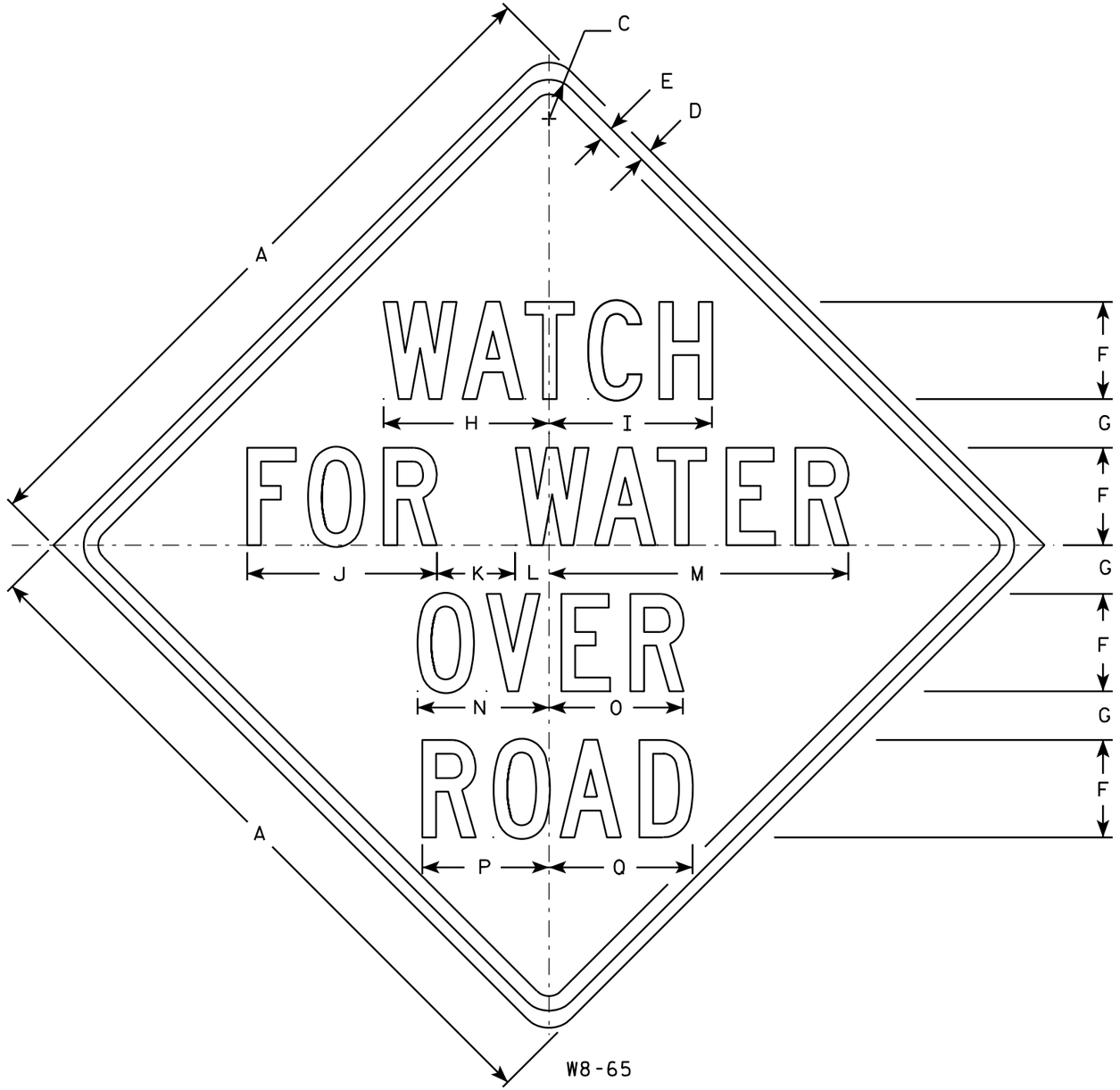
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/16 PLATE W6-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000 WISDOT/CADDS SHEET 42



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	36		1 5/8	5/8	3/4	5	2 1/2	8 1/2	8 3/8	9 3/4	4	1 3/4	15 3/8	6 3/4	6 7/8	6 1/2	7 3/8										9.0
2M	36		1 5/8	5/8	3/4	5	2 1/2	8 1/2	8 3/8	9 3/4	4	1 3/4	15 3/8	6 3/4	6 7/8	6 1/2	7 3/8										9.0
3																											
4																											
5																											

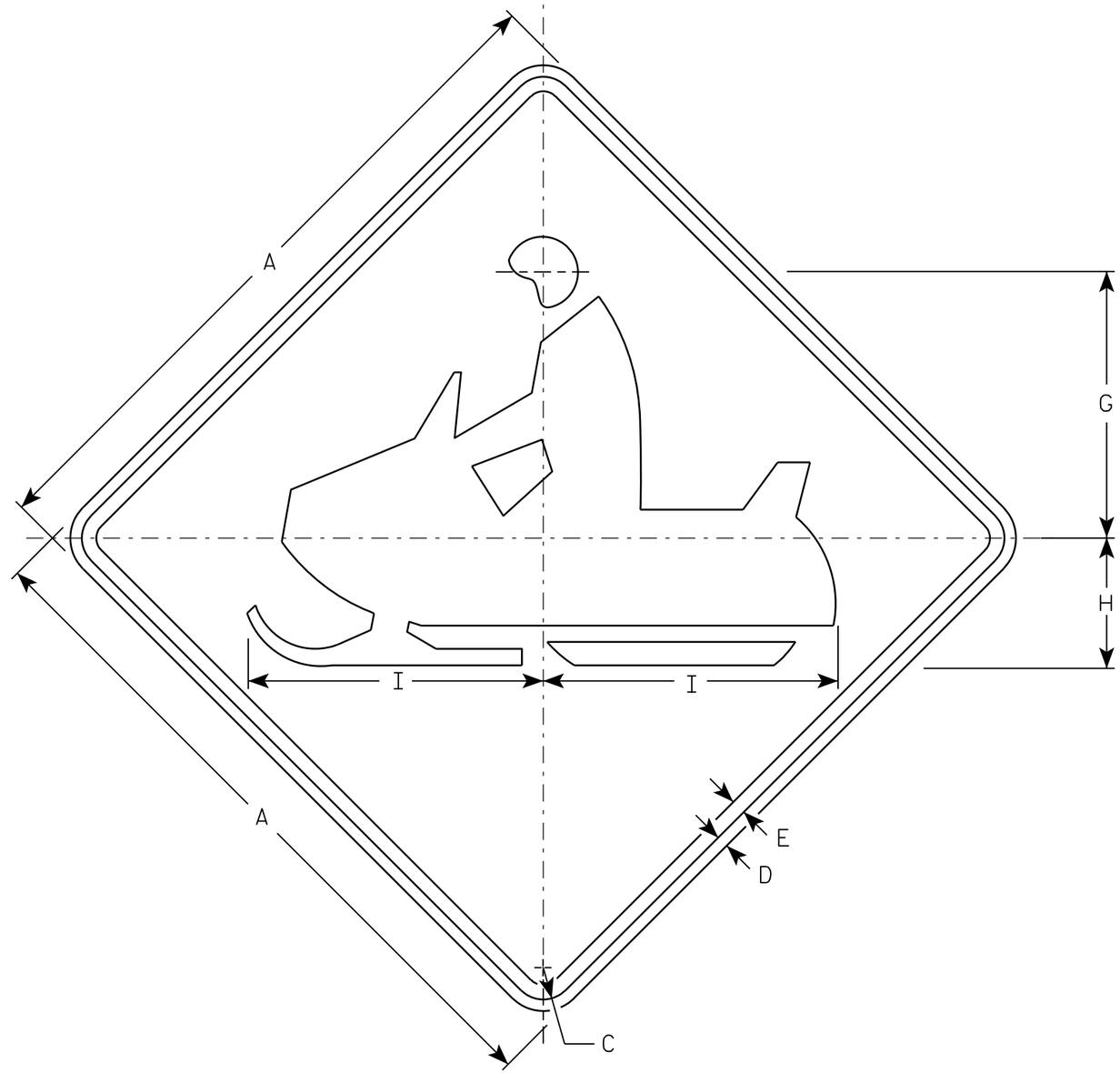
STANDARD SIGN
W8-65

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/18/13 PLATE NO. W8-65.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 282 | 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

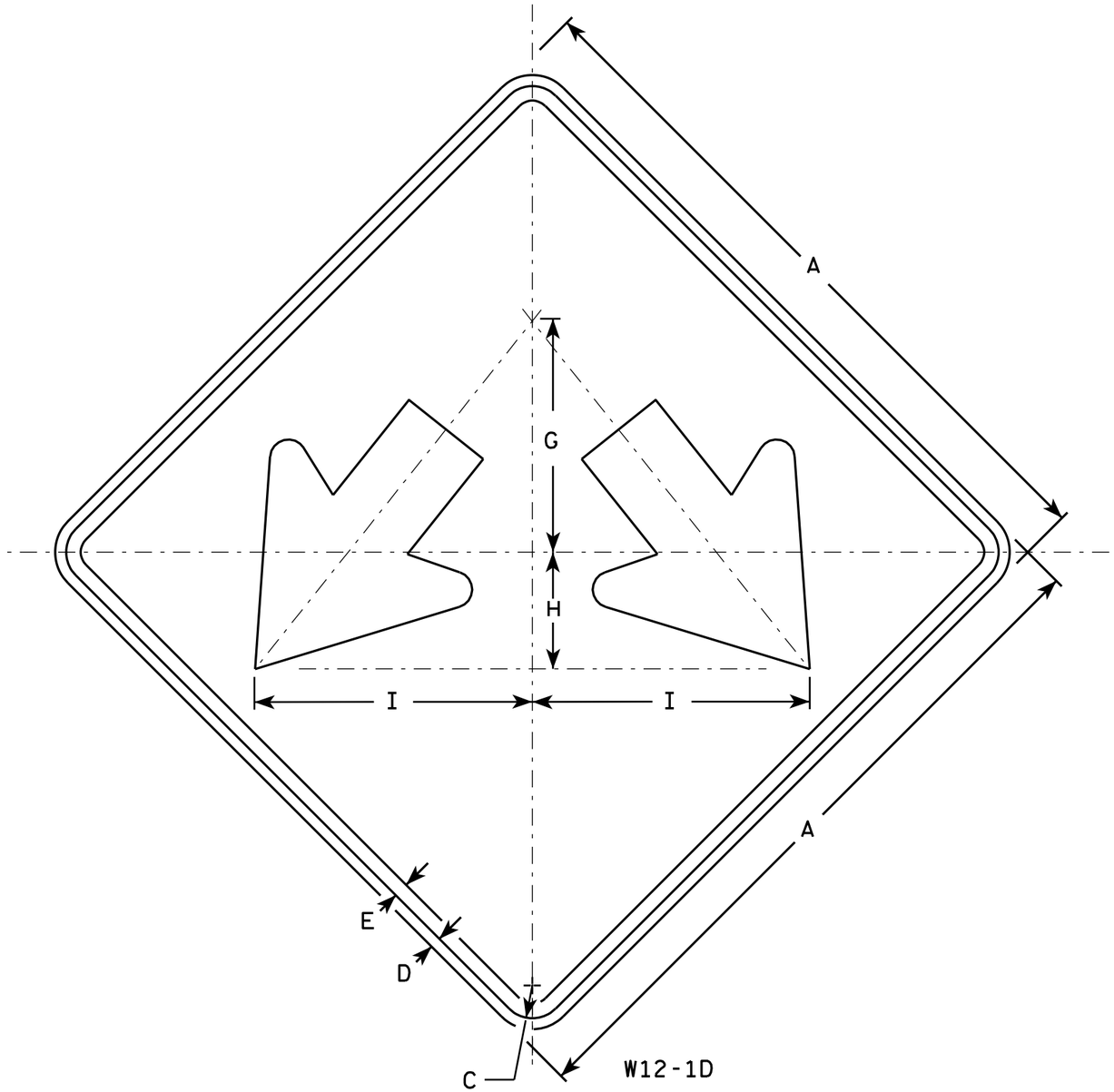
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-6.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 283 | E

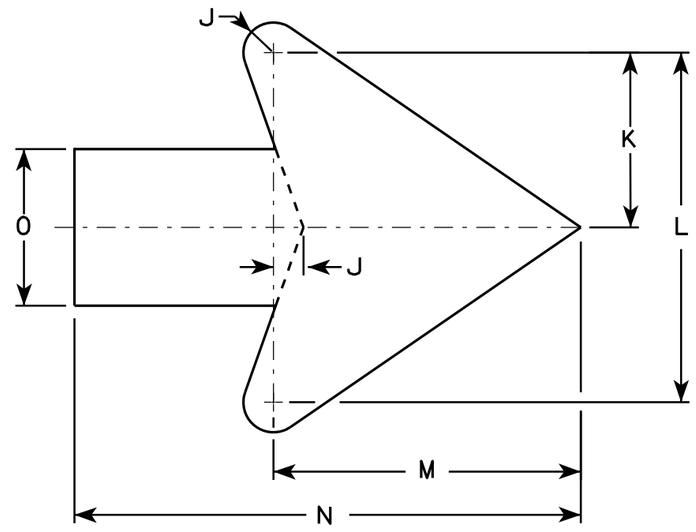
7

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



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: 284	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W121D.DGN PLOT DATE : 13-MAR-2013 13:26 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 4.713802:1.000000

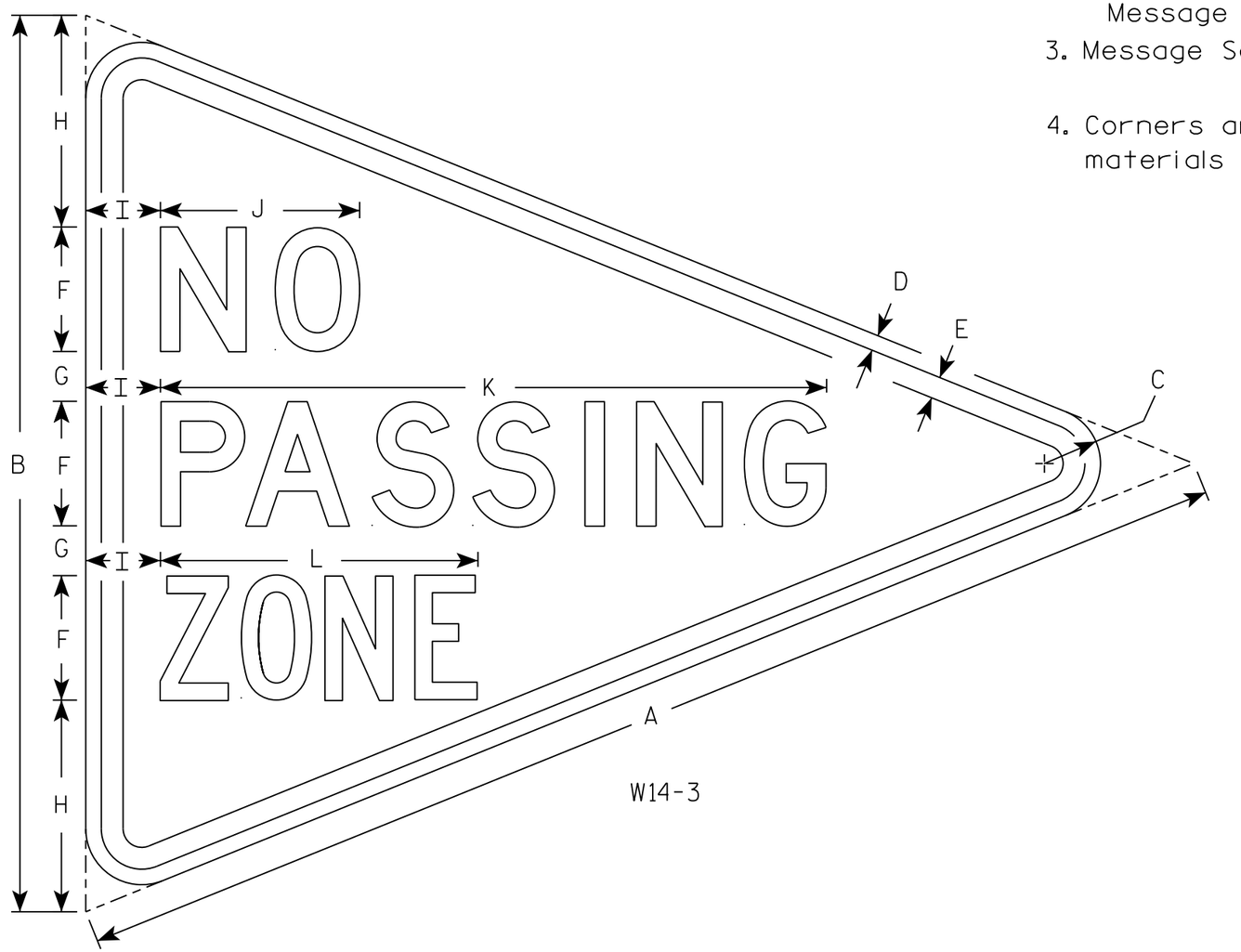
WISDOT/CADDS SHEET 42

7

7

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



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															5.56
2M																											
3																											
4																											
5																											

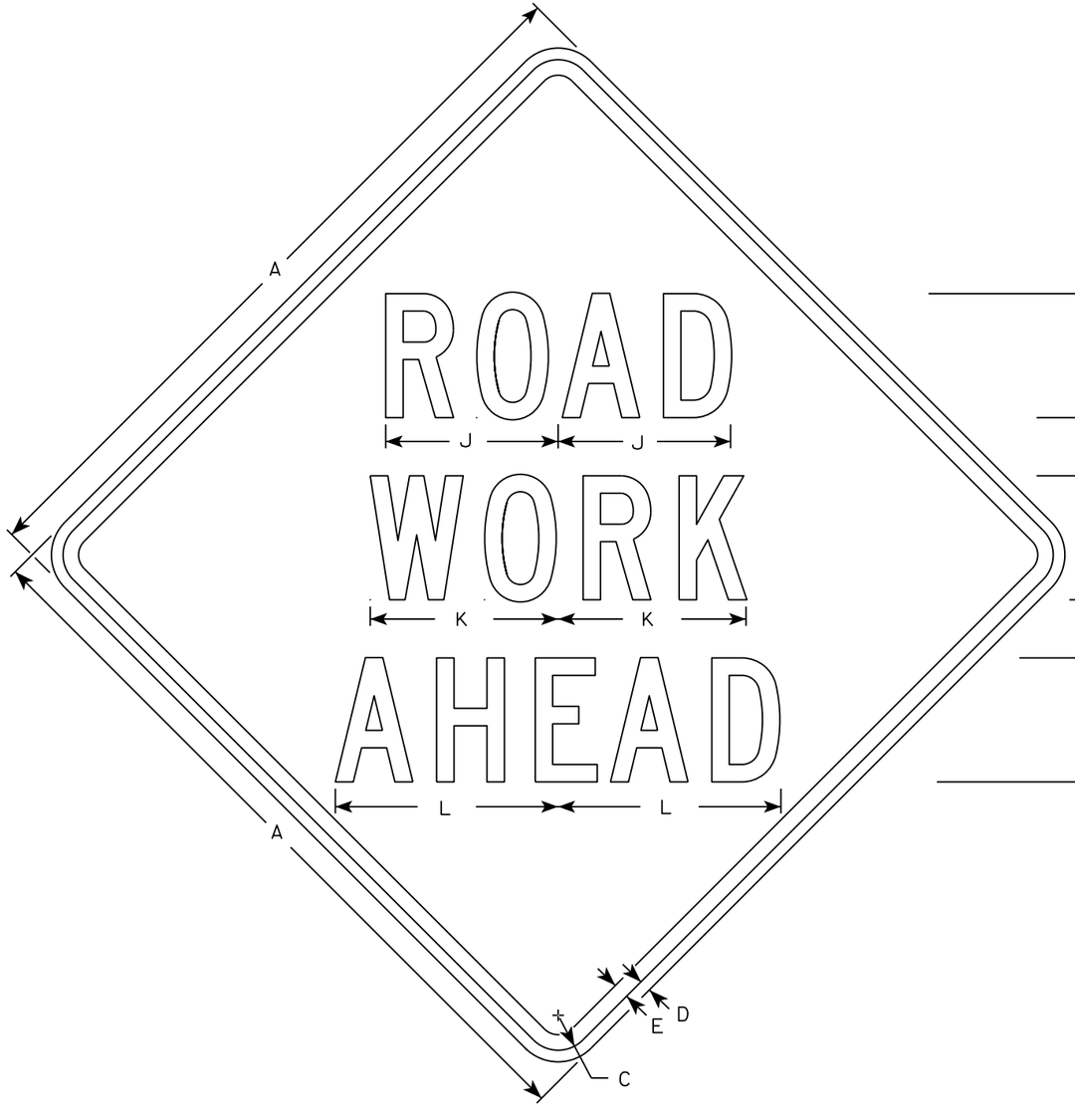
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

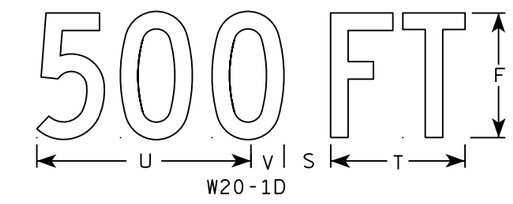
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

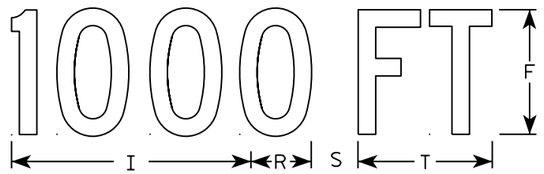
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 285 | E



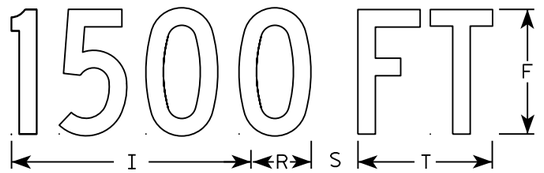
W20-1A



W20-1D



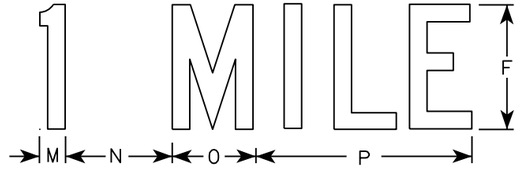
W20-1C



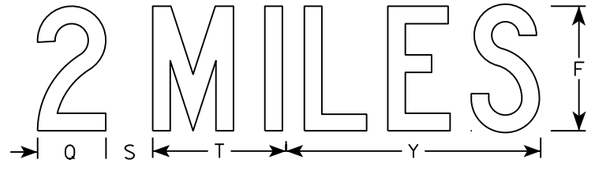
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

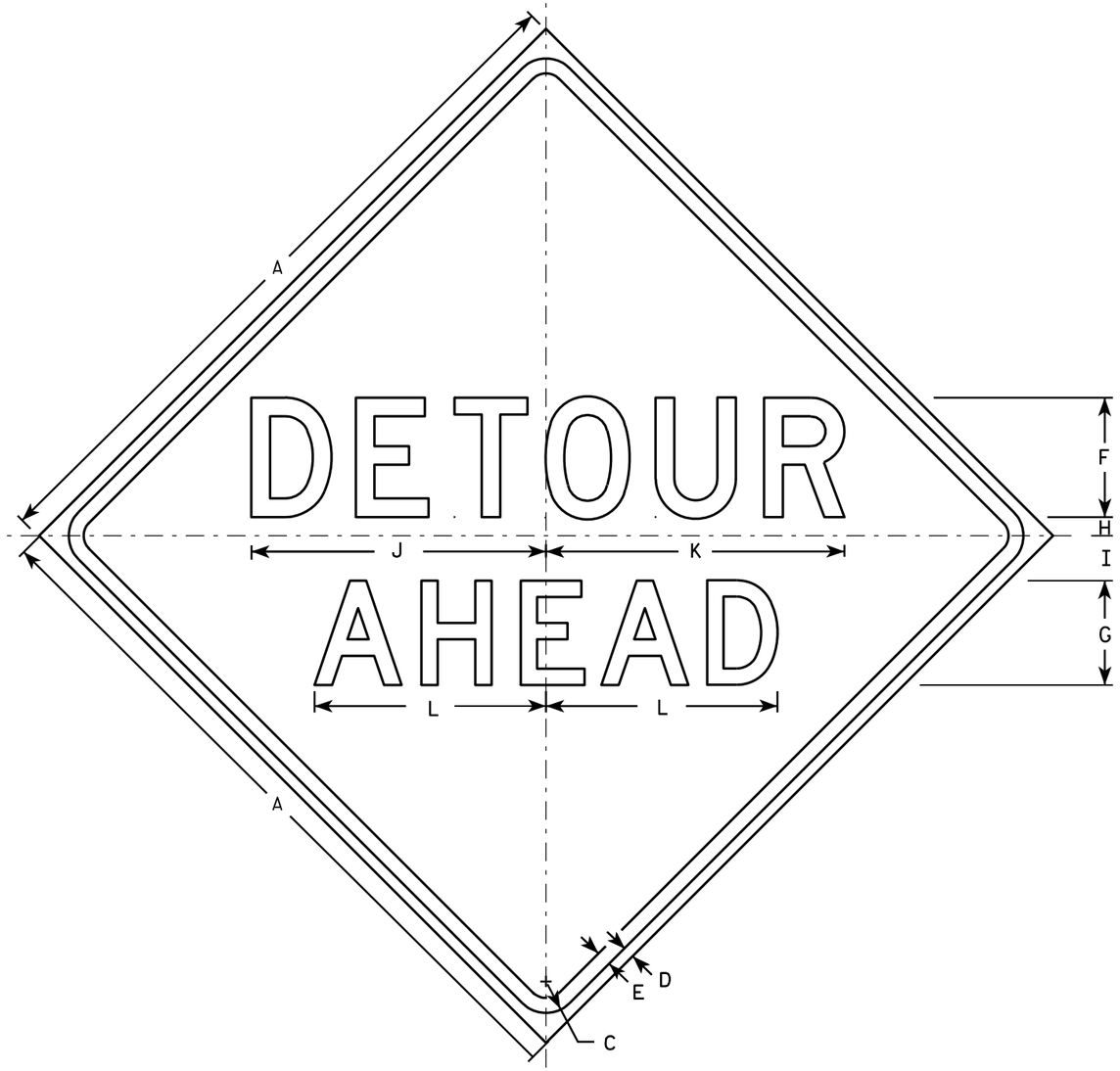
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

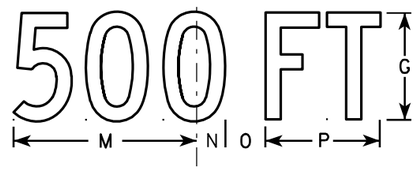
PROJECT NO:

SHEET NO: E

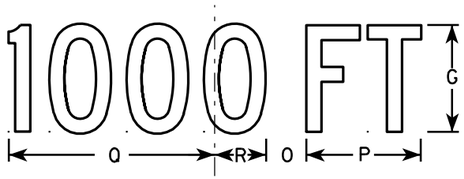
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



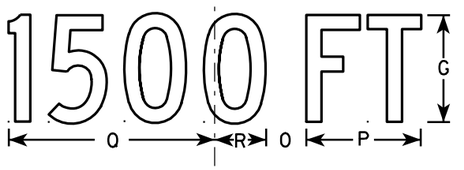
W20-2A



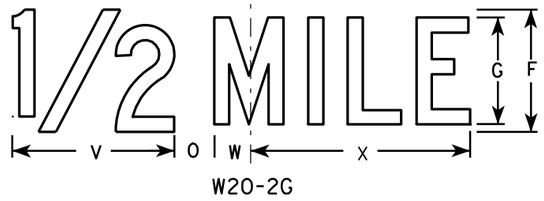
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

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 - 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. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

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	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

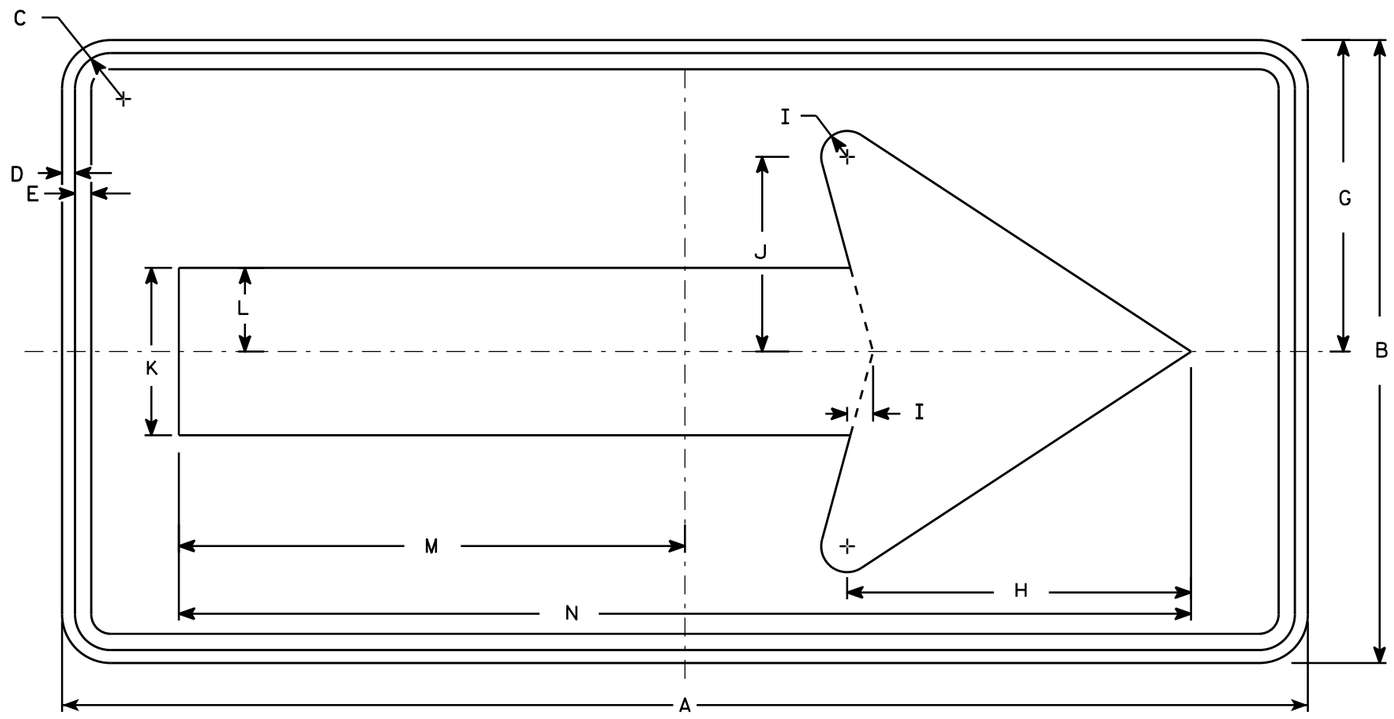
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 287 | E



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

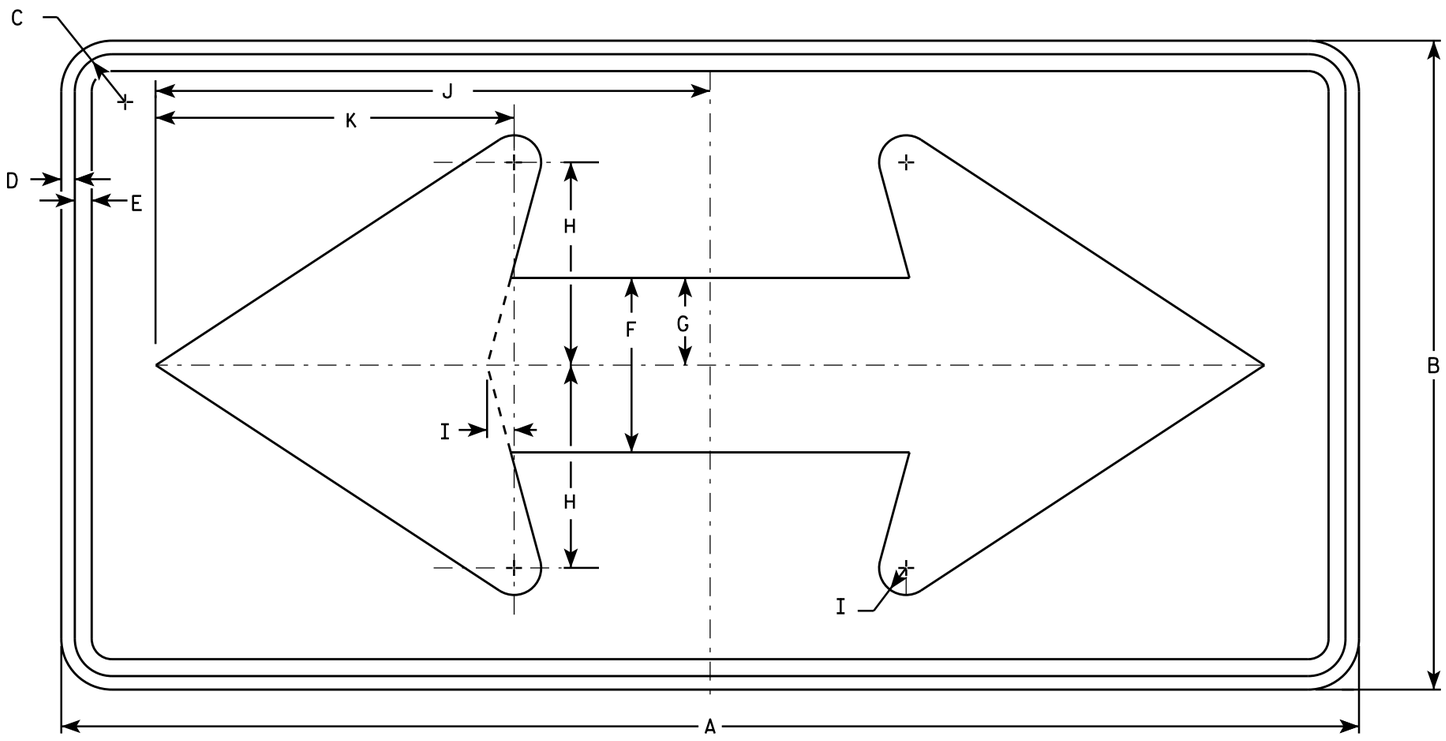
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W01-7

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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																											
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	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

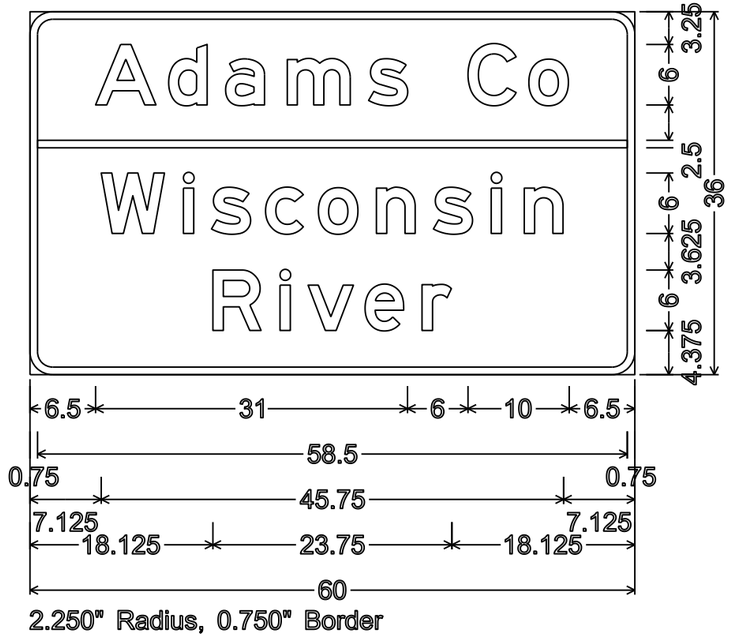
STANDARD SIGN
W01-7

WISCONSIN DEPT OF TRANSPORTATION

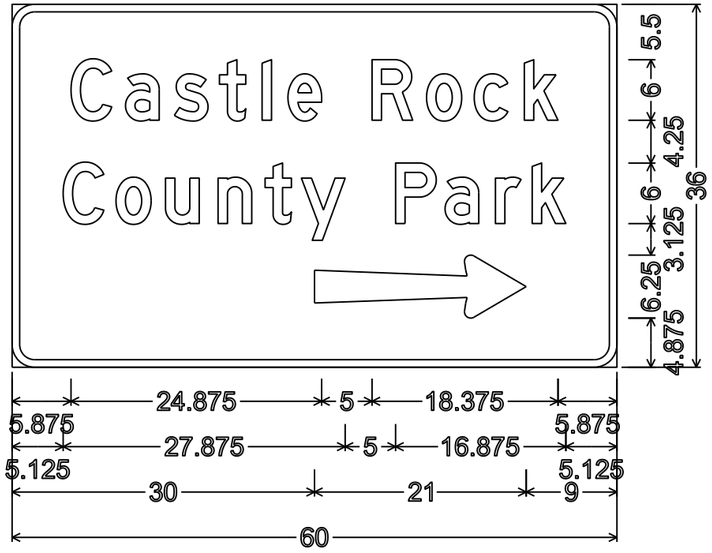
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE 1289 W01-7.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



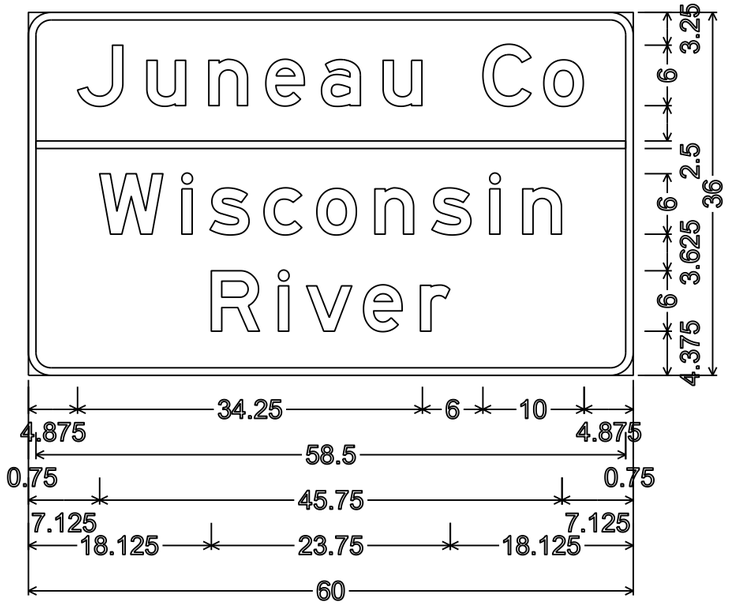
2.250" Radius, 0.750" Border



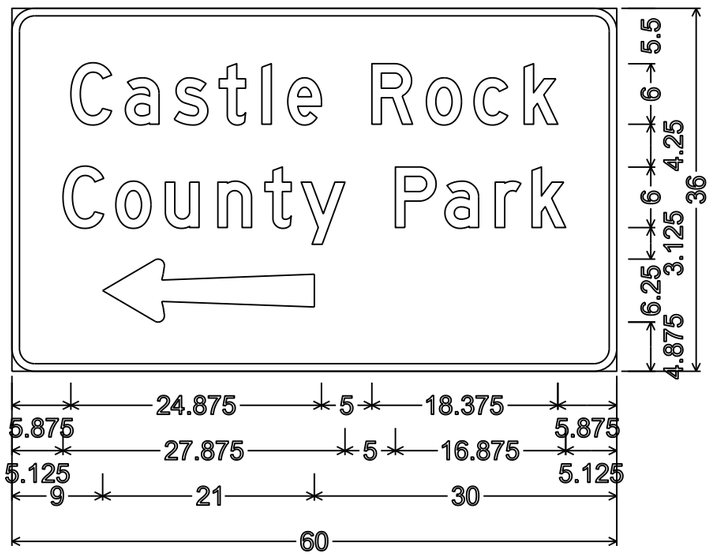
D7-68R;
2.250" Radius, 0.750" Border, White on Brown;
"Castle" D; "Rock" D; "County" D;"Park" D

NOTES

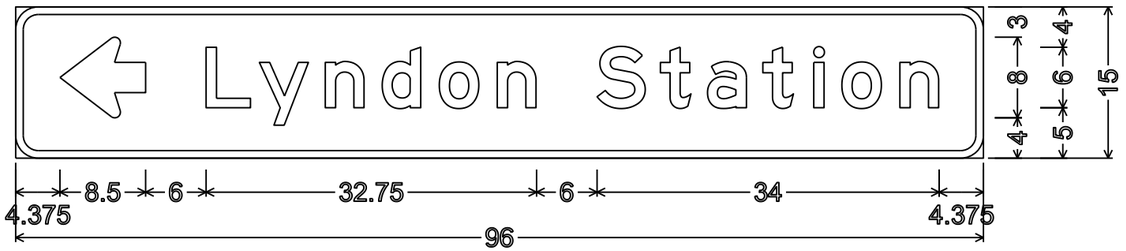
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - E except as noted



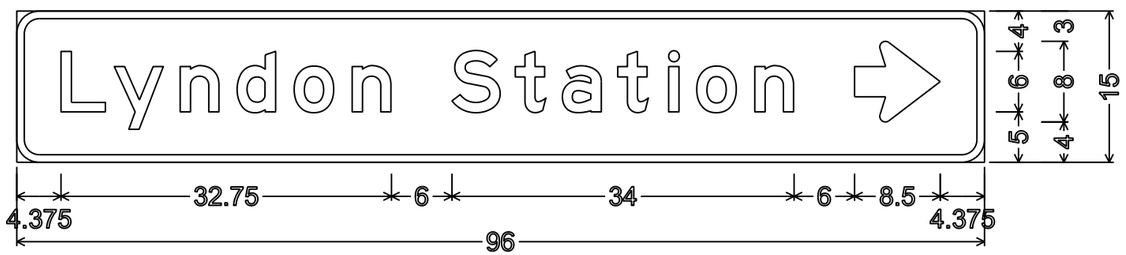
2.250" Radius, 0.750" Border



D7-68L;
2.250" Radius, 0.750" Border, White on Brown;
"Castle" D; "Rock" D; "County" D;"Park" D



2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border

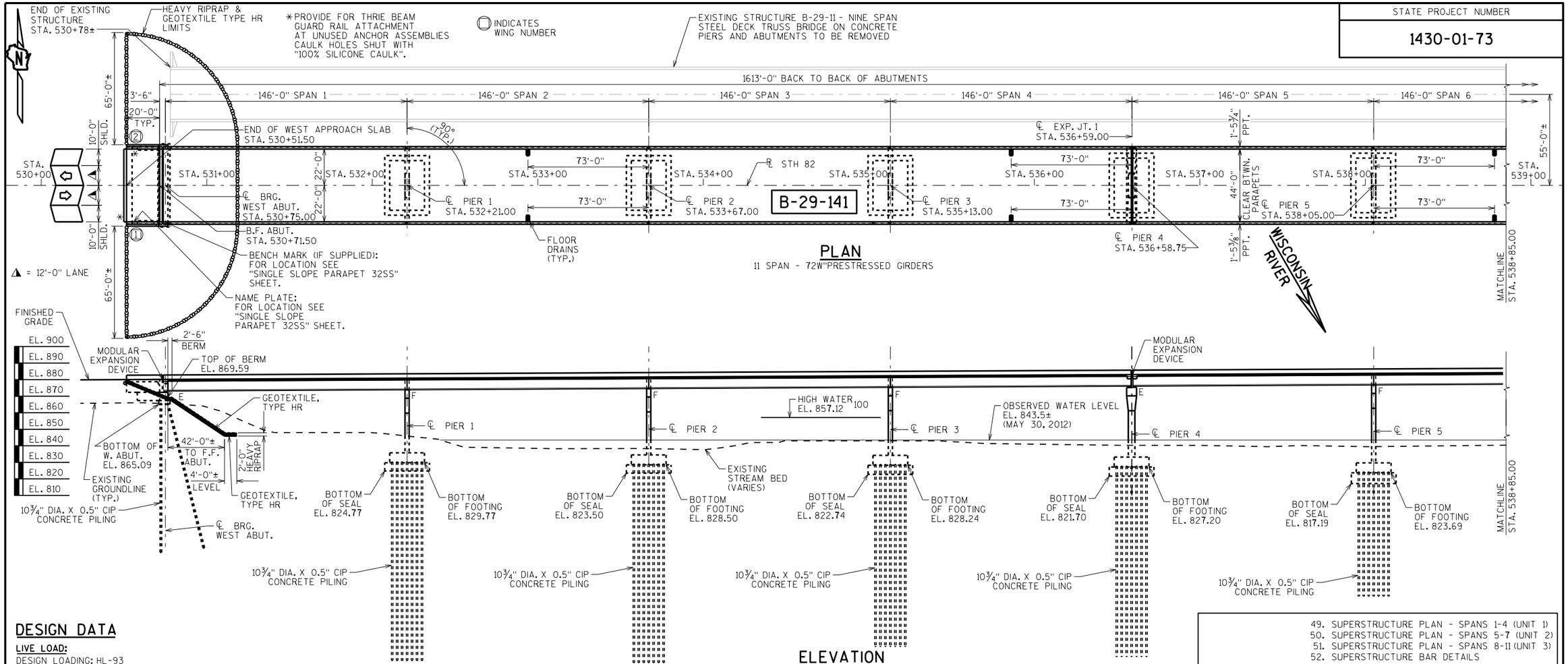
7

7

PROJECT NO:1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	PERMANENT SIGNING	SHEET NO: 290	E

STATE PROJECT NUMBER

1430-01-73



PLAN

11 SPAN - 72W"PRESTRESSED GIRDERS

ELEVATION

(NORMAL TO ℄ STH 82 - LOOKING UPSTREAM OF WISCONSIN RIVER)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.07
OPERATING RATING FACTOR: RF = 1.39
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

STRUCTURE IS RATED FOR A POLYMER OVERLAY OF 5 POUNDS PER SQUARE FOOT THAT WILL BE APPLIED TO THE ENTIRE BRIDGE DECK.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE & STRUCTURAL APPROACH 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.
STAINLESS, GRADE 60 — fy = 60,000 P.S.I.

72W" 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.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 79,000 C.F.S.
VEL. = 3.5 F.P.S.
$HW._{100}$ = EL. 857.12
WATERWAY AREA = 21,200 SQ. FT.
DRAINAGE AREA = 7,220 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY

Q_2 = 31,500 C.F.S.
$HW._2$ = EL. 849.12

TRAFFIC VOLUME

STH 82

A.A.D.T. = 6,300 (2035)
R.D.S. = 60 M.P.H.

FOUNDATION DATA

W. ABUTMENT TO BE SUPPORTED ON 10¾" DIA. X 0.5" C.I.P. CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS✳✳ PER PILE AS DETERMINED BY THE PDA METHOD.
ESTIMATED 90'-0" LONG AT THE W. ABUTMENT

PIERS 1 & 2 TO BE SUPPORTED ON 10¾" DIA. X 0.5" C.I.P. CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS✳✳✳ PER PILE AS DETERMINED BY THE PDA METHOD.
ESTIMATED 120'-0" LONG AT PIER 1
ESTIMATED 120'-0" LONG AT PIER 2

PIERS 3 - 7 TO BE SUPPORTED ON 10¾" DIA. X 0.5" C.I.P. CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS✳✳ PER PILE AS DETERMINED BY THE PDA METHOD.
ESTIMATED 110'-0" LONG AT PIER 3
ESTIMATED 115'-0" LONG AT PIER 4
ESTIMATED 75'-0" LONG AT PIER 5
ESTIMATED 80'-0" LONG AT PIER 6
ESTIMATED 85'-0" LONG AT PIER 7

PIER 8 TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS✳ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 75'-0" LONG AT PIER 8

PIERS 9 & 10 TO BE SUPPORTED ON HP12X53 STEEL PILING PLACED IN PREBORED HOLES CORED INTO ROCK AND DO NOT REQUIRE DRIVING. THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS 220 TONS MULTIPLIED BY A RESISTANCE FACTOR OF 0.5.
ESTIMATED 35'-0" LONG AT PIER 9
ESTIMATED 20'-0" LONG AT PIER 10

E. ABUTMENT TO BE SUPPORTED ON HP12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS✳ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 20'-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.

✳✳ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PDA METHOD TO DETERMINE DRIVEN PILE CAPACITY.

✳✳✳ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MINUS 10 TONS MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PDA METHOD TO DETERMINE DRIVEN PILE CAPACITY. THE REDUCTION OF 10 TONS ACCOUNTS FOR LOSS OF CAPACITY DUE TO SCOUR.

LIST OF DRAWINGS

1. GENERAL PLAN 1
2. GENERAL PLAN 2
3. CROSS SECTION & PROFILE GRADE LINE
4. QUANTITIES
5. SUBSURFACE EXPLORATION (UNIT 1)
6. SUBSURFACE EXPLORATION (UNIT 2)
7. SUBSURFACE EXPLORATION (UNIT 3)
8. WEST ABUTMENT
9. WEST ABUTMENT DETAILS
10. EAST ABUTMENT
11. EAST ABUTMENT DETAILS
12. PIER 1
13. PIER 1 SEAL & FOOTING DETAILS
14. PIER 1 SHAFT & CAP DETAILS
15. PIER 2
16. PIER 2 SEAL & FOOTING DETAILS
17. PIER 2 SHAFT & CAP DETAILS
18. PIER 3
19. PIER 3 SEAL & FOOTING DETAILS
20. PIER 3 SHAFT & CAP DETAILS
21. PIER 4
22. PIER 4 FOOTING & SHAFT DETAILS
23. PIER 4 CAP DETAILS
24. PIER 5
25. PIER 5 SEAL & FOOTING DETAILS
26. PIER 5 SHAFT & CAP DETAILS
27. PIER 6
28. PIER 6 SEAL & FOOTING DETAILS
29. PIER 6 SHAFT & CAP DETAILS
30. PIER 7
31. PIER 7 FOOTING & SHAFT DETAILS
32. PIER 7 CAP DETAILS
33. PIER 8
34. PIER 8 DETAILS
35. PIER 9
36. PIER 9 DETAILS
37. PIER 10
38. PIER 10 DETAILS
39. ABUTMENT BEARINGS
40. PIER 4 WEST SIDE & PIER 7 EAST SIDE BEARINGS
41. PIER 4 EAST SIDE & PIER 7 WEST SIDE BEARINGS
42. 72W" PRESTRESSED GIRDER DETAILS 1
43. 72W" PRESTRESSED GIRDER DETAILS 2
44. STEEL DIAPHRAGM
45. SUPERSTRUCTURE CROSS SECTIONS
46. SUPERSTRUCTURE DETAILS
47. ABUT. MODULAR EXPANSION JOINT DETAILS
48. PIER MODULAR EXPANSION JOINT DETAILS
49. SUPERSTRUCTURE PLAN - SPANS 1-4 (UNIT 1)
50. SUPERSTRUCTURE PLAN - SPANS 5-7 (UNIT 2)
51. SUPERSTRUCTURE PLAN - SPANS 8-11 (UNIT 3)
52. SUPERSTRUCTURE BAR DETAILS
53. DECK POURING SEQUENCE
54. FLOOR DRAIN TYPE "WF"
55. STRUCTURAL APPROACH SLAB
56. STRUCTURAL APPROACH SLAB & BAR DETAILS
57. SINGLE SLOPE PARAPET 32SS
58. COVER PLATE DETAILS FOR PARAPET JOINTS

STRUCTURE DESIGN CONTACTS:
NICK RICE (608) 266-5092
AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED William C. Dreher 8/17/17
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-29-141

STH 82 OVER THE WISCONSIN RIVER

COUNTY	TOWN
JUNEAU	MARION

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
NAR	DMB	JPH	NAR

GENERAL PLAN 1

SHEET 1 OF 58

291

I.D. 1430-01-03A

DATE: JUNE 2017

SCALE = 30.00

STATE PROJECT NUMBER

1430-01-73

✳ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

(1) INDICATES WING NUMBER

◭ = 12'-0" LANE

EXISTING STRUCTURE B-29-11 - NINE SPAN STEEL DECK TRUSS BRIDGE ON CONCRETE PIERS AND ABUTMENTS TO BE REMOVED.

END OF EXISTING STRUCTURE STA. 546+18±

1613'-0" BACK TO BACK OF ABUTMENTS

146'-0" SPAN 6 | 146'-0" SPAN 7 | 146'-0" SPAN 8 | 146'-0" SPAN 9 | 146'-0" SPAN 10 | 146'-0" SPAN 11 | 3'-6"

10'-0" SHLD. | 55'-0"± | 10'-0" SHLD.

1'-5⅜" PPT. | 44'-0" CLEAR BTWN. PARAPETS | 22'-0" | 1'-5⅜" PPT.

℄ EXP. JT. 2 STA. 540+97.00

90° (TYP.)

STA. 539+00 | STA. 540+00 | STA. 541+00 | STA. 542+00 | STA. 543+00 | STA. 544+00 | STA. 545+00 | STA. 546+00 | STA. 547+00

73'-0" | 73'-0" | 73'-0" | 73'-0"

B-29-141

℄ PIER 6 STA. 539+51.00

℄ PIER 7 STA. 540+97.25

℄ PIER 8 STA. 542+43.00

℄ STH 82

℄ PIER 9 STA. 543+89.00

℄ PIER 10 STA. 545+35.00

15'-0"±

END OF EAST APPROACH SLAB STA. 547+04.50

B.F. ABUT. STA. 546+84.50

℄ BRG. EAST ABUT. STA. 546+81.00

20'-0" TYP.

15'-0"±

HEAVY RIPRAP & GEOTEXTILE, TYPE HR LIMITS

MATCHLINE STA. 538+85.00

WISCONSIN RIVER

PLAN

11 SPAN - 72W"PRESTRESSED GIRDERS

EL. 900 | EL. 890 | EL. 880 | EL. 870 | EL. 860 | EL. 850 | EL. 840 | EL. 830 | EL. 820 | EL. 810

MODULAR EXPANSION DEVICE

℄ PIER 6 | ℄ PIER 7 | ℄ PIER 8 | ℄ PIER 9 | ℄ PIER 10

HIGH WATER EL. 857.12 100

OBSERVED WATER EL. 843.5± (MAY 30, 2012)

EXISTING STREAM BED

BOTTOM OF SEAL EL. 818.43 | BOTTOM OF FOOTING EL. 824.43

10¾" DIA. X 0.5" CIP CONCRETE PILING

BOTTOM OF SEAL EL. 815.89 | BOTTOM OF FOOTING EL. 822.39

10¾" DIA. X 0.5" CIP CONCRETE PILING

BOTTOM OF SEAL EL. 817.88 | BOTTOM OF FOOTING EL. 822.88

HP 12 X 53 STEEL PILING

BOTTOM OF SEAL EL. 817.62 | BOTTOM OF FOOTING EL. 822.62

HP 12 X 53 STEEL PILING

APPROXIMATE TOP OF ROCK AT ℄ STRUCT.

☆BOTTOM OF SEAL EL. 828.84

HP 12 X 53 STEEL PILING

BOTTOM OF FOOTING EL. 831.34

APPROXIMATE TOP OF ROCK AT ℄ STRUCT.

EXISTING GROUNDLINE (TYP.)

2'-6" BERM

℄ BRG. EAST ABUT.

TOP OF BERM EL. 877.61

MODULAR EXPANSION DEVICE

FINISHED GRADE

2'-0" HEAVY RIPRAP

BOTTOM OF E. ABUT. EL. 873.11

15'-0"± TO F.F. ABUT.

HP 12 X 53 STEEL PILING

GEOTEXTILE, TYPE HR

ELEVATION

(NORMAL TO ℄ STH 82 - LOOKING UPSTREAM OF WISCONSIN RIVER)

☆IT IS ANTICIPATED THAT ROCK EXCAVATION WILL BE REQUIRED TO OBTAIN THE PLAN SEAL & FOOTING ELEVATIONS. SEE 'PIER 10' SHEETS FOR DETAILS.

PARAPET

PLACE HEAVY RIPRAP EVEN WITH THE TOP OF WING TIP

HEAVY RIPRAP

2'-0" SHOULDER SLOPE

2.5 MIN.

1

2'-0"

APPROACH SLAB

WING WALL

APPROACH SLAB FOOTING

GEOTEXTILE, TYPE HR (TYP.)

TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

GENERAL PLAN 2

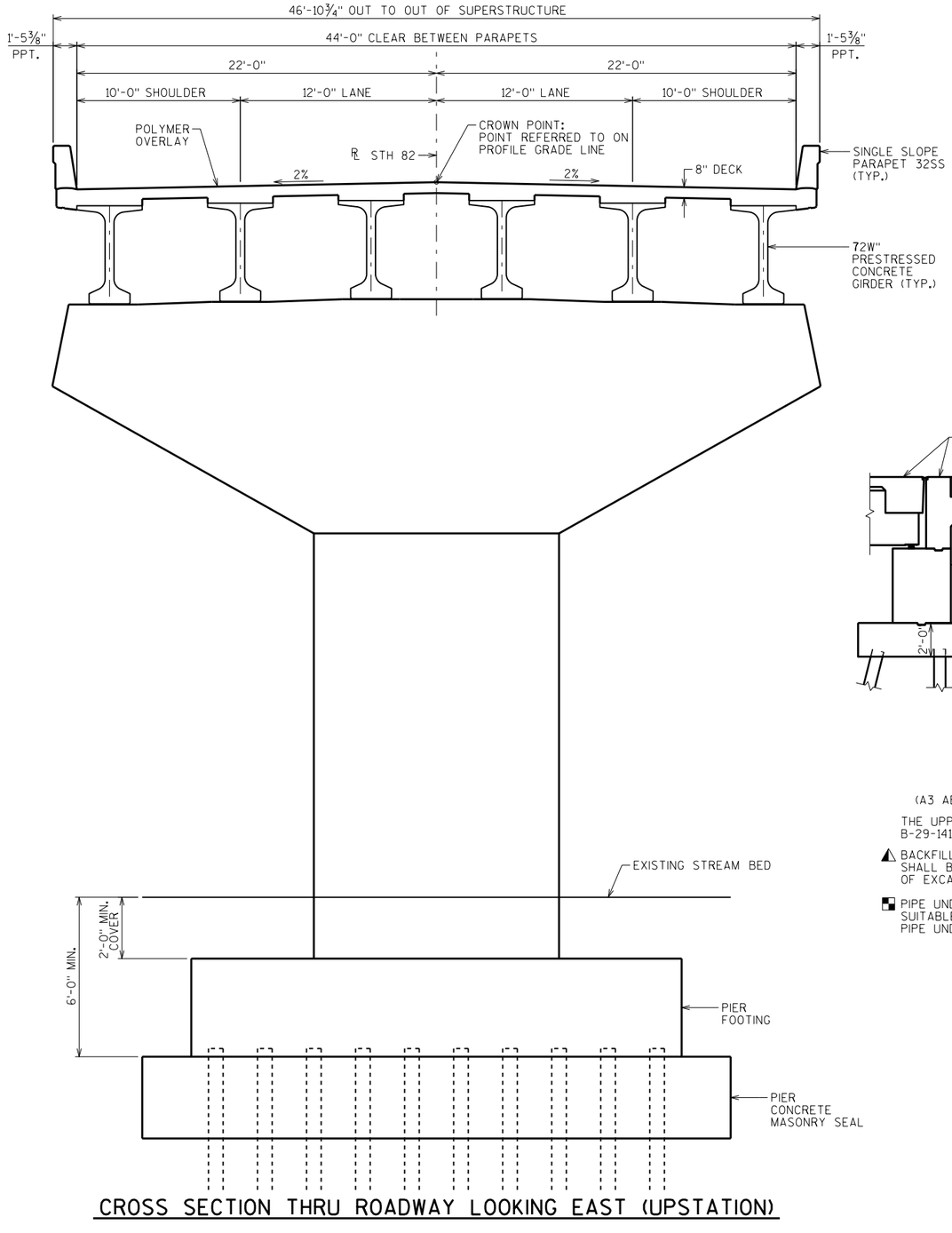
SHEET 2

292

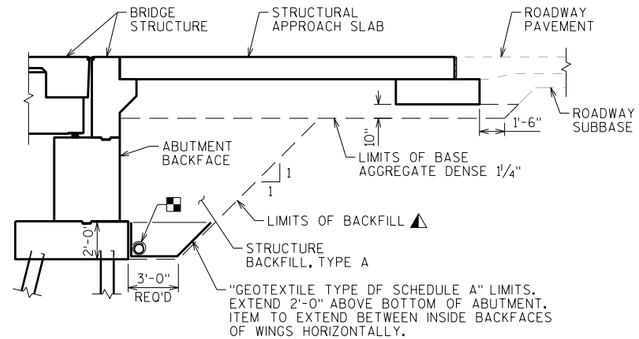
SCALE = 30.00

8

8



CROSS SECTION THRU ROADWAY LOOKING EAST (UPSTATION)



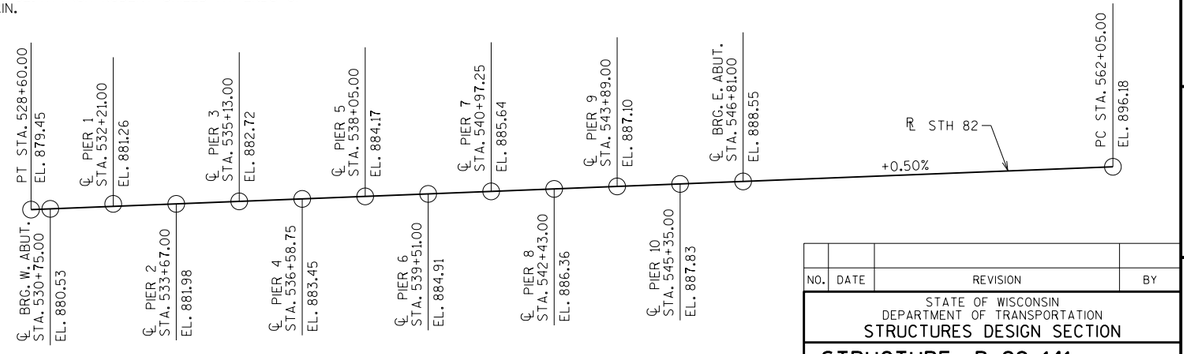
TYPICAL SECTION THRU ABUTMENT

(A3 ABUTMENT WITH STRUCTURAL APPROACH)

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-29-141" SHALL BE THE EXISTING GROUNDLINE.

◭ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

▪ PIPE UNDERDRAIN WRAPPED (6 INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



STH 82 PROFILE GRADE LINE

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.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-29-141" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE 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. ALSO EXCLUDED IS THE "BASE AGGREGATE DENSE 1 1/4-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED APPROACH SLAB SURFACES, TOP OF ABUTMENT PAVING BLOCK AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT BACKWALL AND PAVING BLOCK.

PIGMENTED PROTECTIVE SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1& 2 AND THE ABUTMENT DETAILS.

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.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "72W" PRESTRESSED GIRDER DETAILS 2" SHEET.

THE EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

AT ABUTMENTS AND PIER(S), CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

THE HW2 ELEVATION OF 849.12 WAS USED TO DETERMINE THE CONCRETE SEAL THICKNESS AT THE PIERS.

CONTRACTOR TO INSTALL 10¾" DIA. X 0.5" C.I.P. CONCRETE PILING WITHIN THE COFFERDAMS AT PIERS 1-7 TO A MINIMUM DISTANCE OF TEN FEET BELOW THE BASE OF THE COFFERDAM WITH A VIBRATORY HAMMER.

AT PIER 9, PRE-BORE A MINIMUM OF 5 FT. INTO ROCK. ROCK DEPTHS ARE HIGHLY VARIABLE & ARE EXPECTED TO DROP OFF TO THE SOUTHWEST.

IT IS ANTICIPATED THAT ROCK EXCAVATION WILL BE REQUIRED TO OBTAIN THE PLAN SEAL & FOOTING ELEVATIONS AT PIER 10. THE PILES AT PIER 10 SHALL BE PRE-BORED A MINIMUM OF 5 FT. INTO ROCK. ROCK DEPTHS ARE HIGHLY VARIABLE & ARE EXPECTED TO DROP OFF TO THE SOUTHWEST. SEE 'PIER 10' SHEETS FOR MORE DETAILS.

POLYMER OVERLAY TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK SURFACES, EXCEPT AT THE EXPANSION JOINTS, TOP OF ABUTMENT PAVING BLOCK AND APPROACH SLAB SURFACES.

STATE PROJECT NUMBER

1430-01-73

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

CROSS SECTION & PROFILE GRADE LINE

SHEET 3

293

SCALE = 4.00

8

8

STATE PROJECT NUMBER

1430-01-73

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER-STRUCTURE	WEST APPROACH SLAB	WEST ABUTMENT	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	PIER 6	PIER 7	PIER 8	PIER 9	PIER 10	EAST ABUTMENT	EAST APPROACH SLAB	TOTAL
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 539+11	LS	———	———	———	———	———	———	———	———	———	———	———	———	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-29-141	LS	———	———	———	———	———	———	———	———	———	———	———	———	———	———	———	1
206.5000	COFFERDAMS B-29-141	LS	———	———	———	———	———	———	———	———	———	———	———	———	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	———	———	400	———	———	———	———	———	———	———	———	———	———	400	———	800
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	———	150	———	———	———	———	———	———	———	———	———	———	———	———	150	300
501.1000.S	ICE HOT WEATHER CONCRETING	LB	22,210	480	1,005	1,650	1,665	1,680	2,385	1,845	1,845	2,500	1,320	1,335	1,255	1,015	480	42,670
502.0100	CONCRETE MASONRY BRIDGES	CY	2.961	64	134	220	222	224	318	246	246	333	176	178	167	135	64	5,688
502.1100	CONCRETE MASONRY SEAL	CY	———	———	———	172	172	189	205	242	224	243	117	117	59	———	———	1,740
502.3110.S	EXPANSION DEVICE MODULAR B-29-141	LS	———	———	———	———	———	———	———	———	———	———	———	———	———	———	———	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	———	99	21	———	———	———	———	———	———	———	———	———	———	21	99	240
502.3210	PIGMENTED SURFACE SEALER	SY	1,334	18	———	———	———	———	———	———	———	———	———	———	———	———	18	1,370
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	———	———	94	———	———	———	———	———	———	———	———	———	———	94	———	188
503.0172	PRESTRESSED GIRDER TYPE I 72W-INCH	LF	9,622	———	———	———	———	———	———	———	———	———	———	———	———	———	———	9,622
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	———	———	6,165	29,095	29,600	29,855	8,160	39,310	39,310	8,160	39,235	39,655	26,535	6,165	———	301,245
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	717,000	10,690	7,030	———	———	———	31,570	———	———	33,520	———	———	———	7,060	10,690	817,560
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	1,600	———	———	———	———	———	———	———	———	———	———	———	———	———	———	1,600
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	96	———	———	———	———	———	———	———	———	———	———	———	———	———	———	96
506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	36	———	———	———	———	———	———	———	———	———	———	———	———	———	———	36
506.4000	STEEL DIAPHRAGMS B-29-141	EACH	110	———	———	———	———	———	———	———	———	———	———	———	———	———	———	110
509.5100.S	POLYMER OVERLAY	SY	7,860	———	———	———	———	———	———	———	———	———	———	———	———	———	———	7,860
514.0450	FLOOR DRAINS TYPE WF	EACH	10	———	———	———	———	———	———	———	———	———	———	———	———	———	———	10
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	———	15	———	———	———	———	———	———	———	———	———	———	15	———	30
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	———	———	———	———	———	———	———	———	———	———	———	990	600	———	———	1,590
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	———	———	———	———	———	———	———	———	———	———	3,000	1,400	800	400	———	5,600
550.2108	PILING CIP CONCRETE 10 3/4 X 0.50-INCH	LF	———	———	2,790	8,400	8,400	7,700	8,855	5,775	6,160	6,545	———	———	———	———	———	54,625
606.0300	RIPRAP HEAVY	CY	———	———	745	———	———	———	———	———	———	———	———	———	———	155	———	900
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	———	100	———	———	———	———	———	———	———	———	———	———	100	———	200
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4	———	———	———	———	———	———	———	———	———	———	———	———	———	———	4
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	———	———	45	———	———	———	———	———	———	———	———	———	———	45	———	90
645.0120	GEOTEXTILE TYPE HR	SY	———	———	1,120	———	———	———	———	———	———	———	———	———	———	230	———	1,350
SPV.0060	PILE DYNAMIC ANALYZER (PDA) TESTING	EACH	———	———	2	2	2	2	2	2	2	2	———	———	———	———	———	16
SPV.0060	PILE DYNAMIC ANALYZER (PDA) RESTRIKES	EACH	———	———	2	2	2	2	2	2	2	2	———	———	———	———	———	16
SPV.0060	CASE PILE WAVE ANALYSIS PROGRAM (CAPWAP) EVALUATION	EACH	———	———	1	1	1	1	1	1	1	1	———	———	———	———	———	8
SPV.0105	COFFERDAMS B-29-141 PIER 10	LS	———	———	———	———	———	———	———	———	———	———	———	———	———	———	———	1
	NON-BID ITEMS																	
	BRIDGE SEAT PROTECTION	LS	———	———	———	———	———	———	———	———	———	———	———	———	———	———	———	1
	FILLER	SIZE	———	———	———	———	———	———	———	———	———	———	———	———	———	———	———	½", ¾", 1½"

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

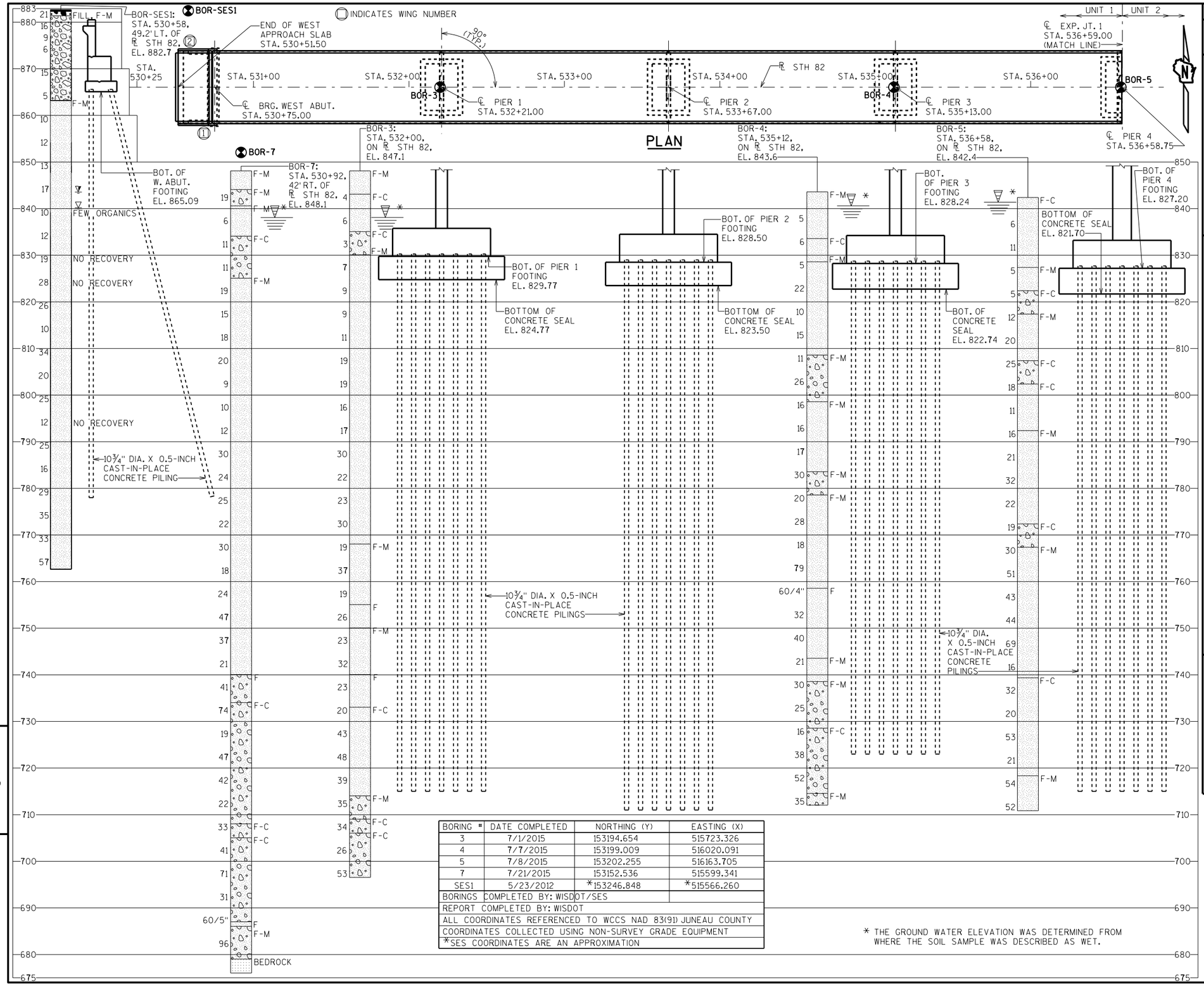
DRAWN BY JPH | PLANS CK'D. NAR

QUANTITIES

SHEET 4

294

SCALE = 1.00



BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
3	7/1/2015	153194.654	515723.326
4	7/7/2015	153199.009	516020.091
5	7/8/2015	153202.255	516163.705
7	7/21/2015	153152.536	515599.341
SES1	5/23/2012	*153246.848	*515566.260
BORINGS COMPLETED BY: WISDOT/SES			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) JUNEAU COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			
*SES COORDINATES ARE AN APPROXIMATION			

* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

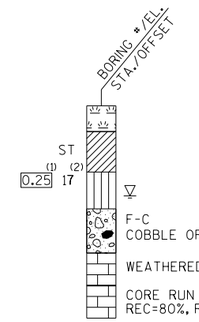
STATE PROJECT NUMBER

1430-01-73

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

SUBSURFACE EXPLORATION (UNIT 1)

SHEET 5

295

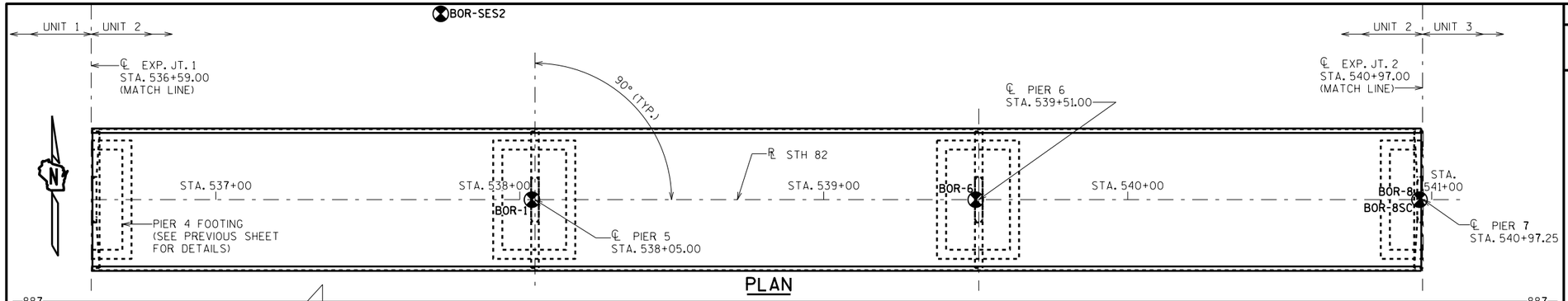
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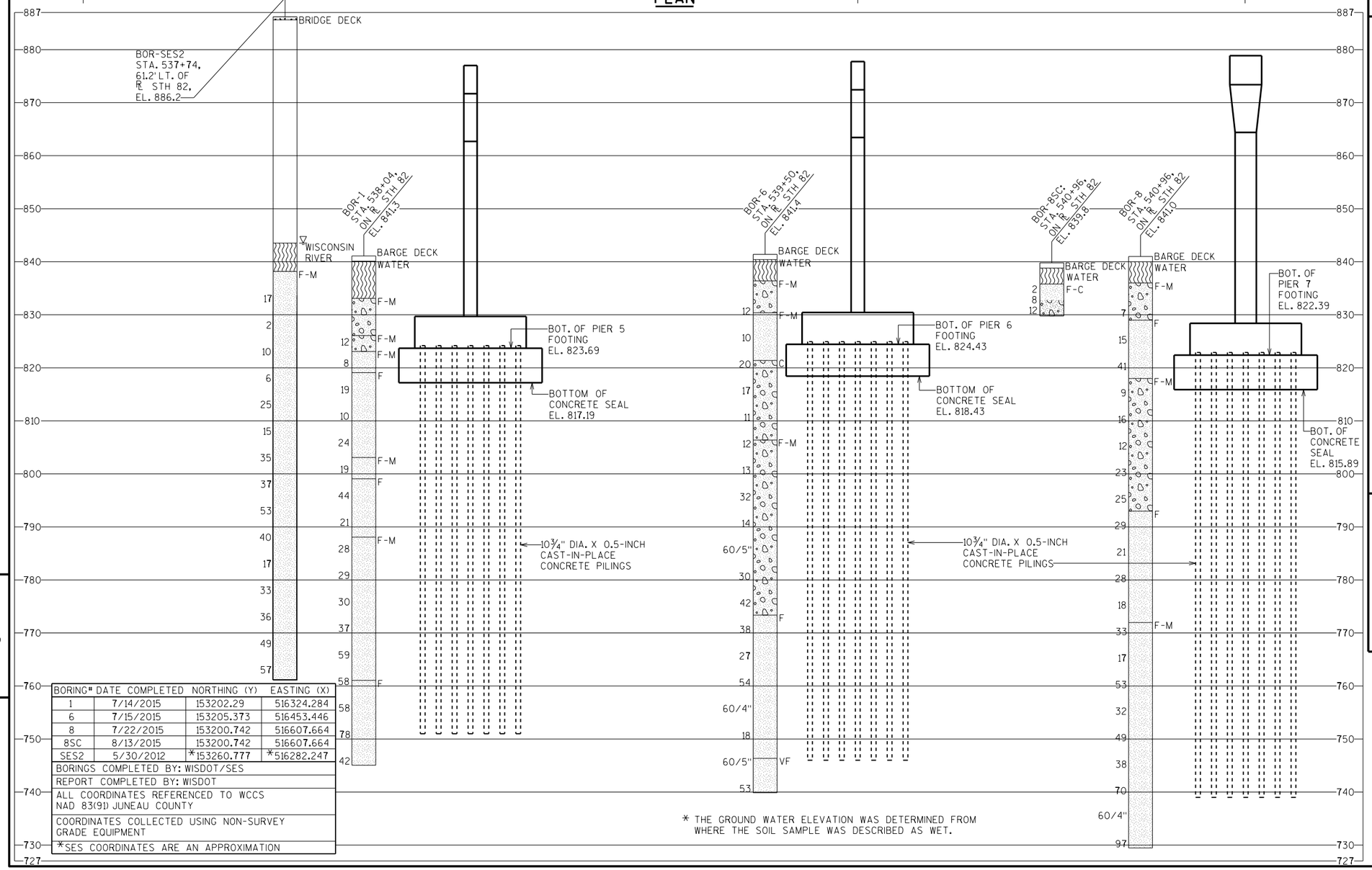
STATE PROJECT NUMBER

1430-01-73

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META





BORING*	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	7/14/2015	153202.29	516324.284
6	7/15/2015	153205.373	516453.446
8	7/22/2015	153200.742	516607.664
8SC	8/13/2015	153200.742	516607.664
SES2	5/30/2012	*153260.777	*516282.247

BORINGS COMPLETED BY: WISDOT/SES

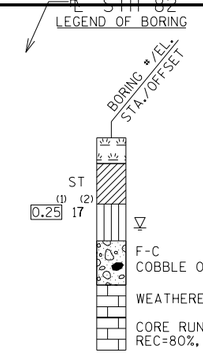
REPORT COMPLETED BY: WISDOT

ALL COORDINATES REFERENCED TO WCCS
NAD 83(91) JUNEAU COUNTY

COORDINATES COLLECTED USING NON-SURVEY
GRADE EQUIPMENT

*SES COORDINATES ARE AN APPROXIMATION

* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.



LEGEND OF BORING

(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

SUBSURFACE EXPLORATION (UNIT 2)

SHEET 6

296

SCALE = 20.00

8

8

STATE PROJECT NUMBER

1430-01-73

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

INDICATES WING NUMBER

BOR-SES3

UNIT 2 | UNIT 3

℄ EXP. JT. 2
STA. 540+97.00
(MATCH LINE)

N

STA. 541+00 | STA. 542+00 | STA. 543+00 | STA. 544+00 | STA. 545+00 | STA. 546+00 | STA. 547+00 | STA. 548+00

BOR-9SC | BOR-9 | BOR-11 | BOR-10 | BOR-2A | BOR-2 | BOR-2B | BOR-10A

(TYP.) 90°

℄ PIER 7
STA. 540+97.25

PIER 7 FOOTING
(SEE PREVIOUS SHEET
FOR DETAILS)

℄ PIER 8
STA. 542+43.00

℄ PIER 9
STA. 543+89.00

℄ STH 82

℄ PIER 10
STA. 545+35.00

END OF EAST
APPROACH SLAB
STA. 547+04.50

℄ BRG. EAST ABUT.
STA. 546+81.00

PLAN

BOR-SES3: STA. 544+57, 62.1' LT. OF ℄ STH 82, EL. 888.2

BOR-2A: STA. 546+80, 15' LT. OF ℄ STH 82, EL. 868.9

BOR-2: STA. 546+80, ON ℄ STH 82, EL. 868.4

BOR-2B: STA. 546+80, 15' RT. OF ℄ STH 82, EL. 868.9

BRIDGE DECK

BOT. OF E. ABUT. FOOTING EL. 873.11

HP 12-INCH X 53 LB STEEL PILINGS

BEDROCK

BEDROCK
NO CORE RUN
4'-9'
REC=50%, RQD=0%
NO CORE RUN
9'-14'
REC=100%, RQD=0%

BEDROCK

BOR-9SC: STA. 542+43, ON ℄ STH 82, EL. 841.8

BOR-9: STA. 542+43, ON ℄ STH 82, EL. 839.8

BOR-11: STA. 543+89, ON ℄ STH 82, EL. 841.0

BOR-10: STA. 545+35, ON ℄ STH 82, EL. 838.6

BOR-10A: STA. 545+35, 30' RT. OF ℄ STH 82, EL. 836.6

BOT. OF PIER 10 FOOTING EL. 831.34

BARGE DECK
WATER
1
4
42
F-C

BARGE DECK
WATER
F-M
7
15
36
F-M
8
F-C
30
VF
F
10
12
F-C
25
20
F-M
37
21
14
21
40
60/3" F
F
60/4" WEATHERED
60/1" BEDROCK
60/1"

BOT. OF PIER 8 FOOTING EL. 822.88

BOT. OF CONCRETE SEAL EL. 817.88

HP 12-INCH X 53 LB STEEL PILINGS

BARGE DECK
WATER
F-M
27
18
18
F-M
11
24
20
17
16
F-M
55
53
60/2"
WEATHERED
NO CORE RUN 49'-54'
REC=40%, RQD=0%

BOT. 60/1" OF PIER 9 FOOTING EL. 822.62

BOT. OF CONCRETE SEAL EL. 817.62

HP 12-INCH X 53 LB STEEL PILINGS

WISCONSIN RIVER
HIGHLY
WEATHERED
NO CORE RUN
53.25'-63.25'
REC=15%, ROD=0%

HP 12-INCH X 53 LB STEEL PILINGS

COBBLES
F-M
24
F
110
BEDROCK
NO CORE RUN 10'-15'
REC=40%, ROD=0%

BOT. OF CONCRETE SEAL EL. 828.84

BOULDERS/COBBLES
F-M
F

890 | 880 | 870 | 860 | 850 | 840 | 830 | 820 | 810 | 800 | 790 | 780 | 770 | 760 | 750 | 740 | 735

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
2	6/23/2015	153195.155	517186.47
9	7/23/2015	153206.472	516752.312
10	7/30/2015	153200.6	517042.342
11	8/13/2015	153200.331	516897.991
2A	6/23/2015	153201.993	517181.709
2B	6/23/2015	153201.719	517180.775
9SC	8/13/2015	153206.472	516752.312
10A	7/30/2015	153179.7	517055.8
SES3	5/23/2012	*153263.488	*516965.205

BORINGS COMPLETED BY: WISDOT/SES

REPORT COMPLETED BY: WISDOT

ALL COORDINATES REFERENCED TO WCCS NAD 83(91) JUNEAU COUNTY

COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT

*SES COORDINATES ARE AN APPROXIMATION

* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

LEGEND OF BORING

BORING #/EL.
STA./OFFSET

ST
0.25 (1) 17 (2)

F-C
COBBLE OR BOULDER

WEATHERED LIMESTONE

CORE RUN #1 - 24'-29'
REC=80%, RQD=72%

(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

SUBSURFACE EXPLORATION (UNIT 3)

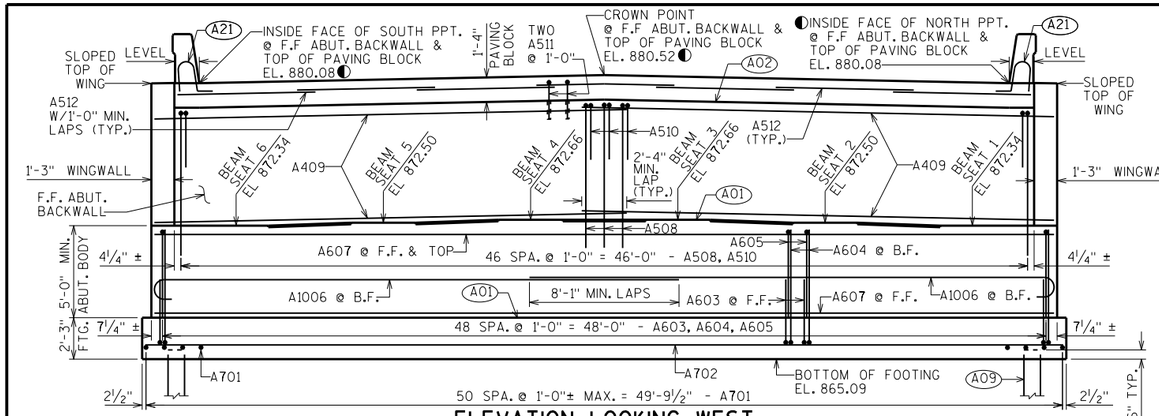
SHEET 7

297

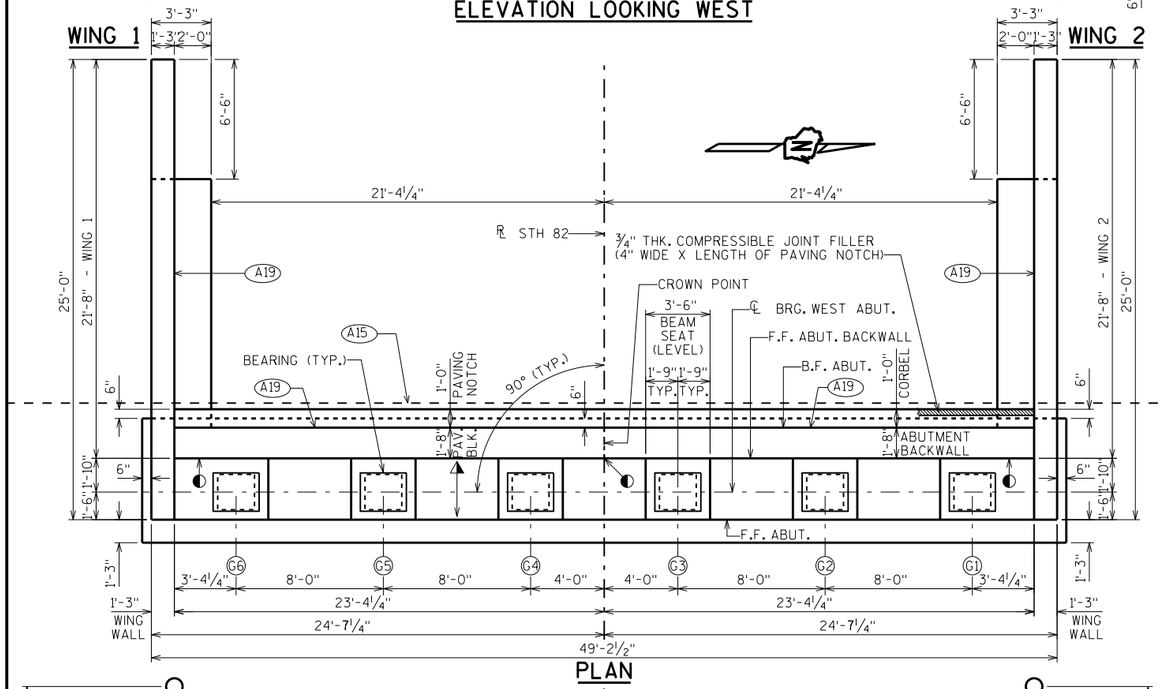
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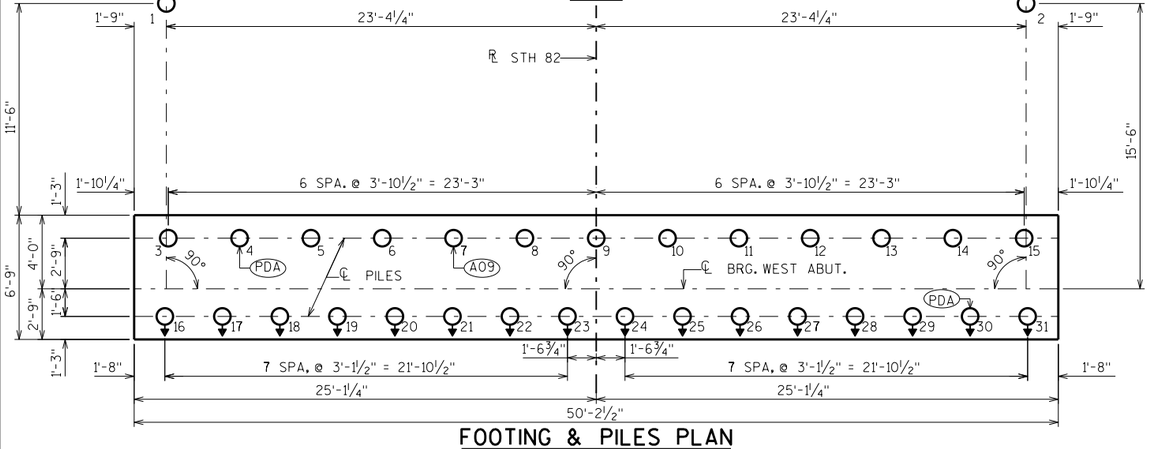
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ELEVATION LOOKING WEST



PLAN



FOOTING & PILES PLAN

(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.

(A09) SUPPORT ABUTMENT ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

* THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PARAPET & BAR DETAILS SEE 'PARAPET' SHEET.

(PDA) PILE DYNAMIC ANALYZER TESTING AND RESTRIKES REQ'D AT THIS PILE

▲ SLOPE 1" DOWN BETWEEN BEAM SEATS (TYP.)

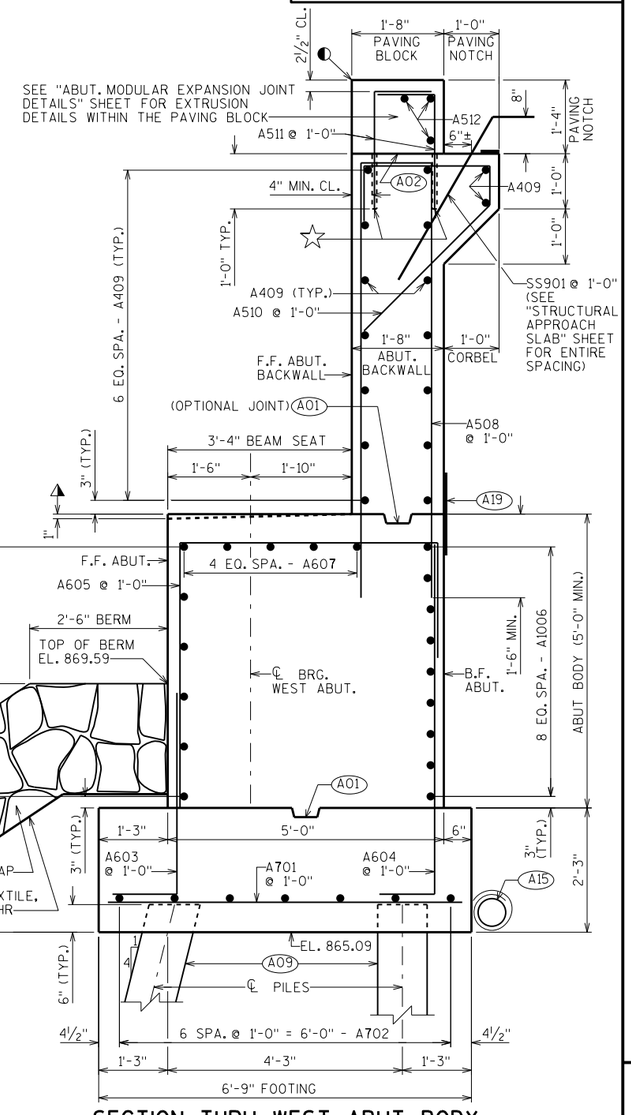
◐ THE TOP OF PAVING BLOCK ELEVATIONS ARE GIVEN HERE AT THE F.F. BACKWALL.

☆ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE AND SPACE AT 1'-0". PLACE ADHESIVE ANCHORS AFTER MODULAR JOINT IS IN PLACE. AVOID DRILLING INTO REINFORCEMENT.

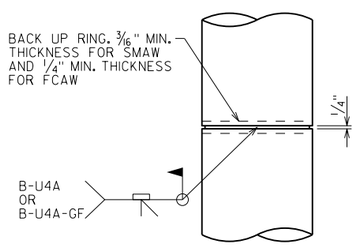
INDICATES PILE BATTERED 1:4 IN DIRECTION SHOWN

STATE PROJECT NUMBER

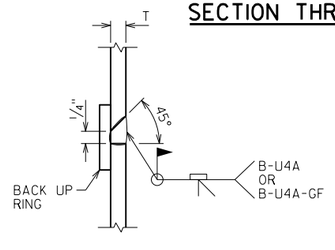
1430-01-73



SECTION THRU WEST ABUT. BODY



CAST-IN-PLACE 'PIPE PILE'



C.I.P. PILE WELD DETAIL

PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

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WEST ABUTMENT

SHEET 8

298

SCALE = 4.00

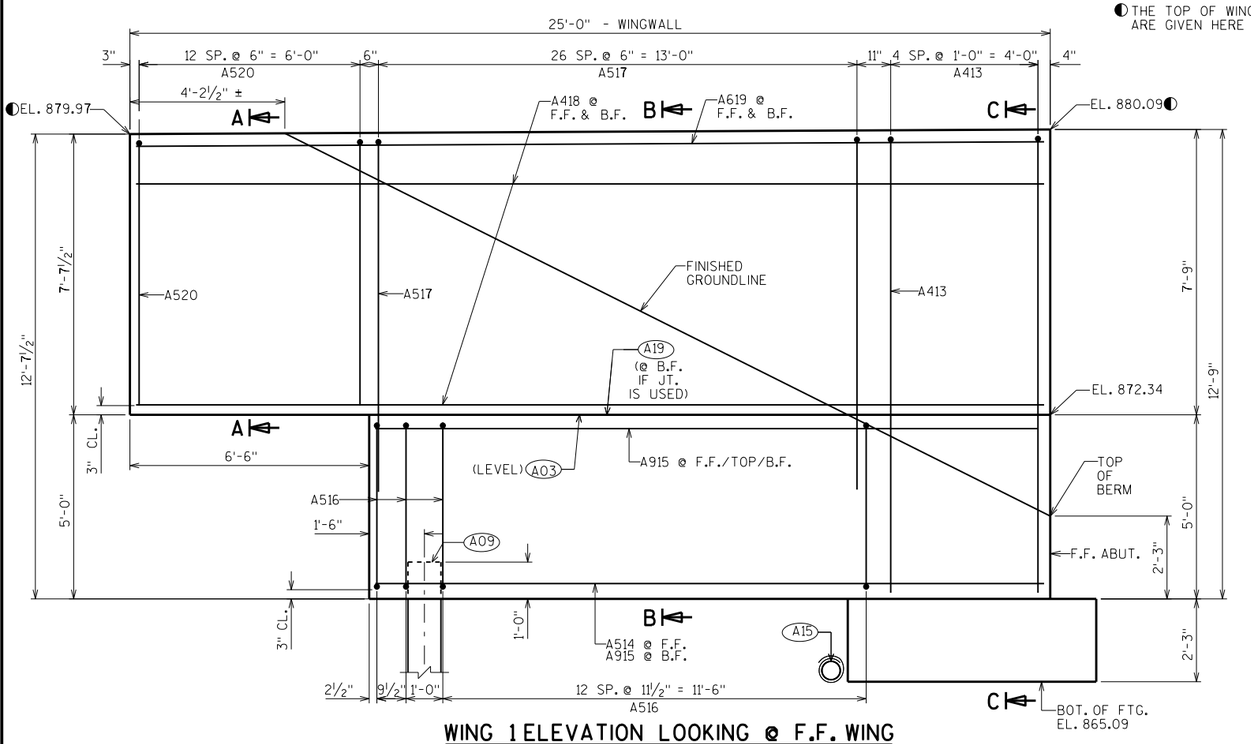
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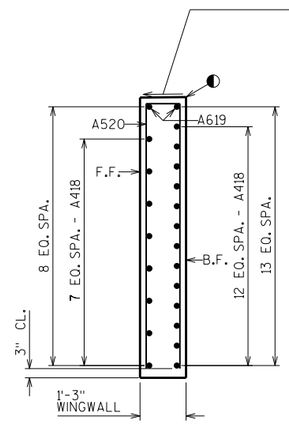
1430-01-73

◐ THE TOP OF WING ELEVATIONS ARE GIVEN HERE AT THE B.F. WING

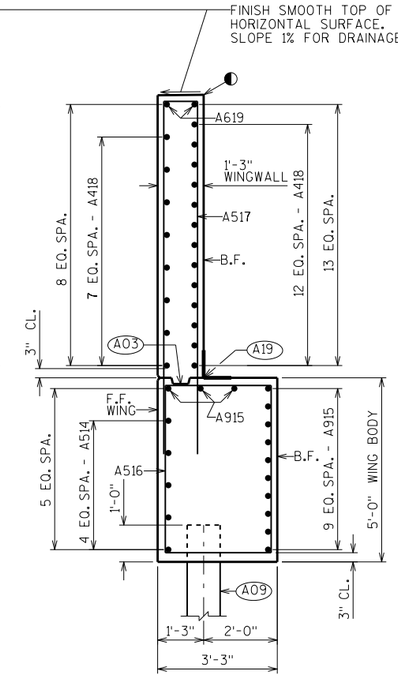


WING 1 ELEVATION LOOKING @ F.F. WING

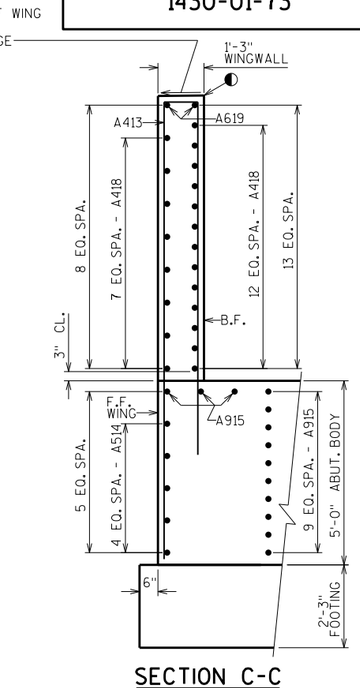
(WING 2 SIMILAR WITH EXACT SAME DIMENSIONS/ELEVATIONS)



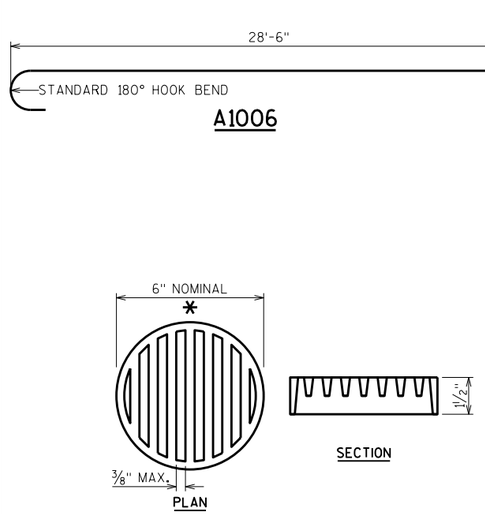
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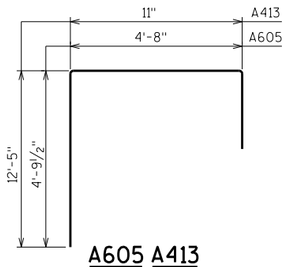
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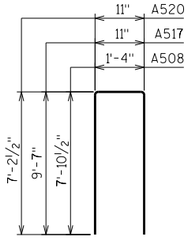
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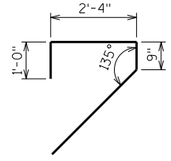
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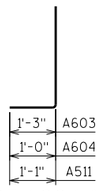
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A508 A517 A520



A510



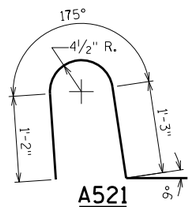
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RODENT SHIELD DETAIL

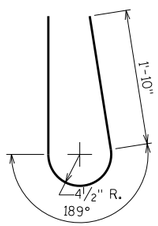
* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

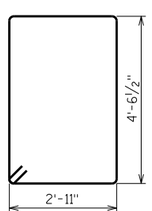
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



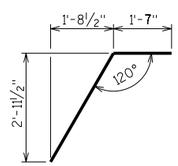
A521



A522



A516



SS901

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	LOCATION
A701		51	6'-5"		FOOTING-BOTTOM-HORIZ.-TRANS.
A702		7	49'-10"		FOOTING-BOTTOM-HORIZ.-LONGIT.
A603		49	4'-10"	X	FOOTING/BODY-F.F.-VERT.-TRANS.
A604		49	7'-3"	X	FOOTING/BODY-B.F.-VERT.-TRANS.
A605		49	11'-4"	X	BODY-F.F.-VERT.-TRANS.
A1006		18	30'-0"	X	BODY-B.F.-HORIZ.-LONGIT.
A607		10	48'-10"		BODY-F.F. & TOP-HORIZ.-LONGIT.
A508	X	47	16'-10"	X	BACKWALL/BODY-VERT.-TRANS.
A409	X	32	25'-8"		BACKWALL/CORBEL-F.F. & B.F.-HORIZ.-LONGIT.
A510	X	47	6'-11"	X	BACKWALL/CORBEL-TOP-VERT.-TRANS.
A511	X	94	3'-1"	X	BACKWALL/PAVING BLOCK-F.F. & B.F.-VERT.-TRANS.
A512	X	21	7'-7"		PAVING BLOCK-B.F.-TOP & BOT.-HORIZ.-LONGIT.
A413	X	10	22'-9"	X	WINGS 1&2-WINGWALL/ABUT. BODY-VERT.
A514	X	10	18'-2"		WINGS 1&2-BODY-F.F.-BOT.-HORIZ.
A915	X	26	18'-0"		WINGS 1&2-BODY-B.F. & TOP-HORIZ.
A516	X	30	15'-7"	X	WINGS 1&2-BODY-VERT.-STIRRUP
A517	X	54	19'-10"	X	WINGS 1&2-WINGWALL/BODY-VERT.
A418	X	42	24'-8"		WINGS 1&2-WINGWALL-F.F. & B.F.-HORIZ.
A619	X	4	24'-8"		WINGS 1&2-WINGWALL-F.F. & B.F.-TOP-HORIZ.
A520	X	26	15'-1"	X	WINGS 1&2-WINGWALL-VERT.-AT ENDS
A521	X	6	4'-5"	X	ABUT. PARAPET/PAVING BLOCK-VERT.
A522	X	6	5'-0"	X	ABUT. PARAPET-VERTICAL

ADHESIVE ANCHORED →

SS901		47	5'-0"	X	APPROACH SLAB/CORBEL/BACKWALL-VERT.

↑ STAINLESS STEEL REINFORCEMENT

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2" × 6". (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

(A09) SUPPORT ABUTMENT ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

* THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

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STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

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WEST ABUTMENT DETAILS

SHEET 9

299

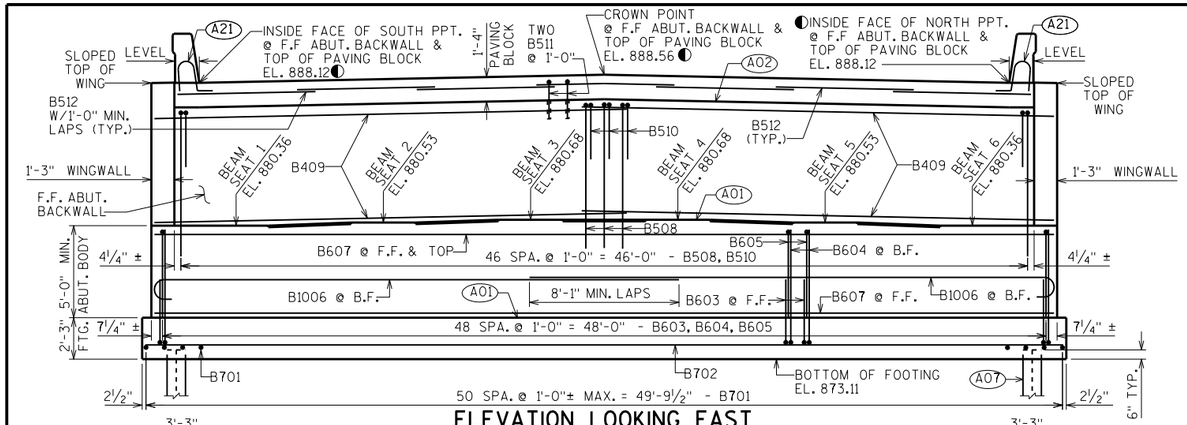
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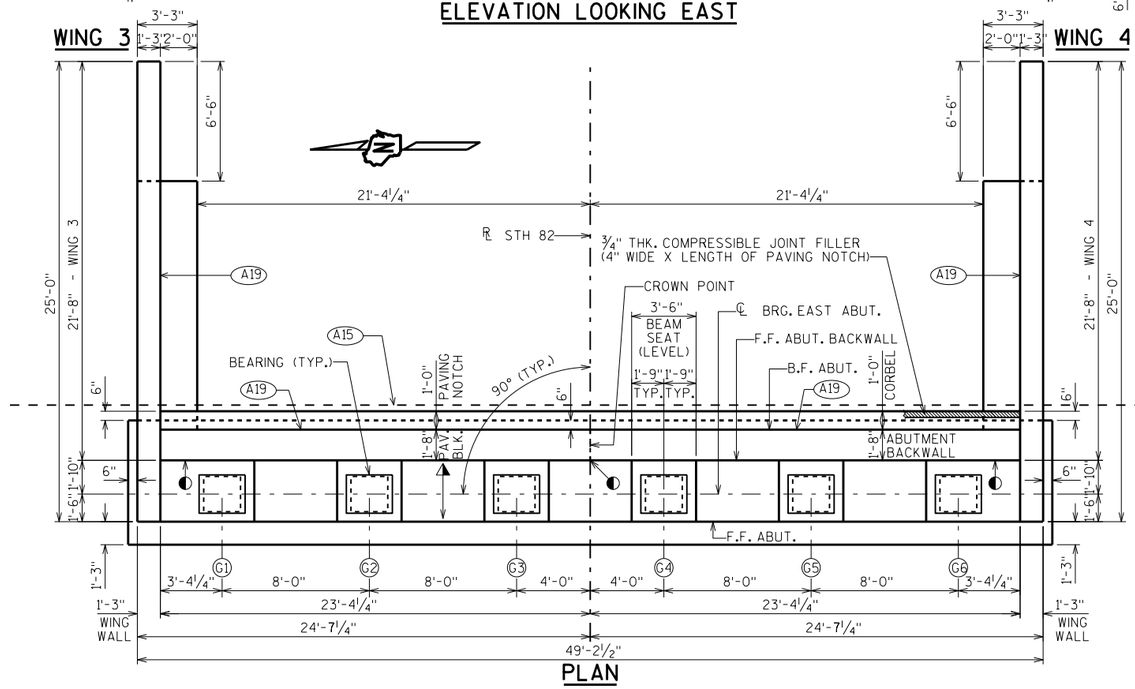
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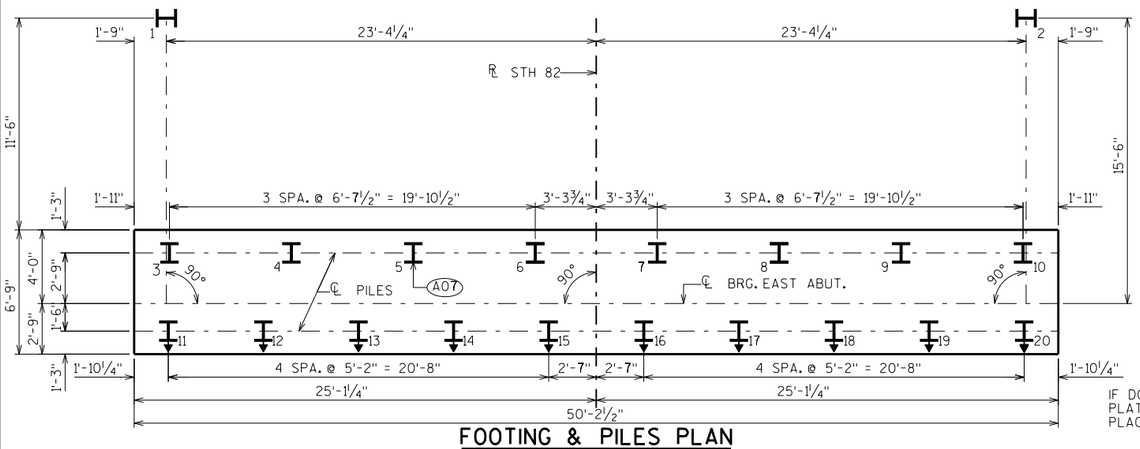
1430-01-73



ELEVATION LOOKING EAST



PLAN



FOOTING & PILES PLAN

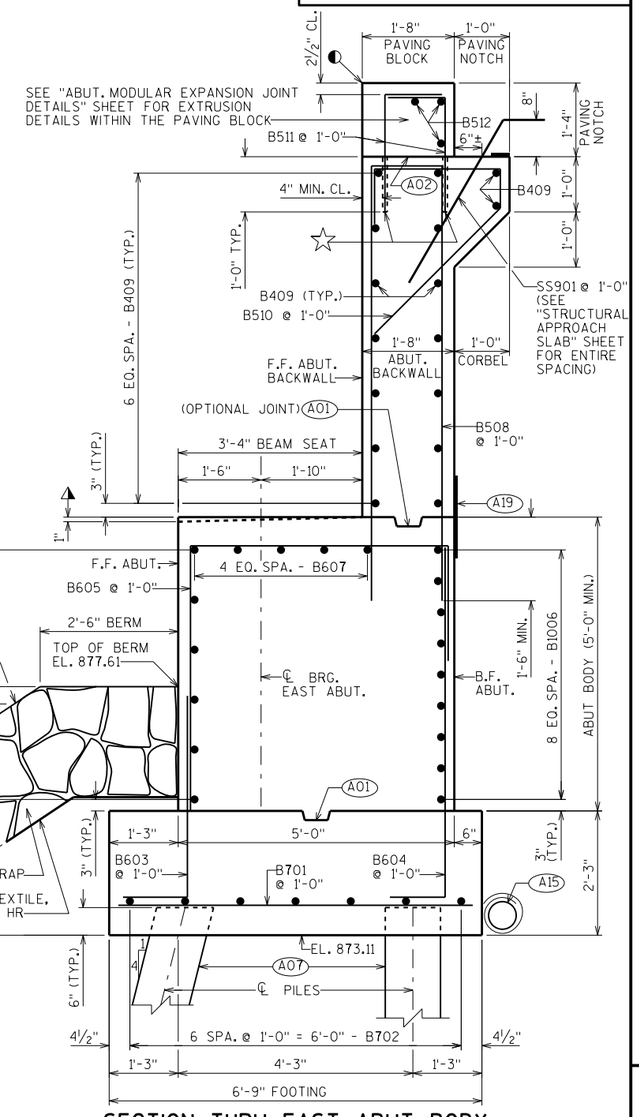
A01	CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2" x 6".
A02	CONSTRUCTION JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.
A07	SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 20'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.
A15	PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
A19	18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
A21	FOR PARAPET & BAR DETAILS SEE 'PARAPET' SHEET.

△ SLOPE 1" DOWN BETWEEN BEAM SEATS (TYP.)

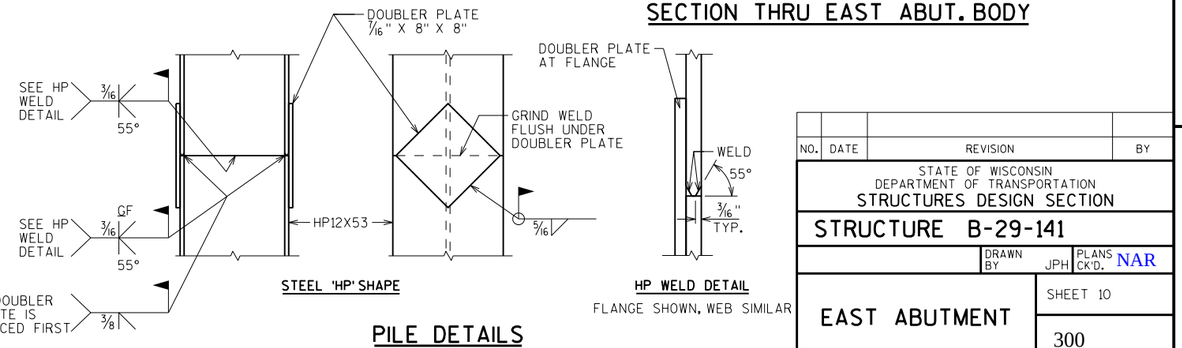
◐ THE TOP OF PAVING BLOCK ELEVATIONS ARE GIVEN HERE AT THE F.F. BACKWALL.

☆ ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE AND SPACE AT 1'-0". PLACE ADHESIVE ANCHORS AFTER MODULAR JOINT IS IN PLACE. AVOID DRILLING INTO REINFORCEMENT.

INDICATES PILE BATTERED 1:4 IN DIRECTION SHOWN



SECTION THRU EAST ABUT. BODY



STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

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STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

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EAST ABUTMENT

SHEET 10

300

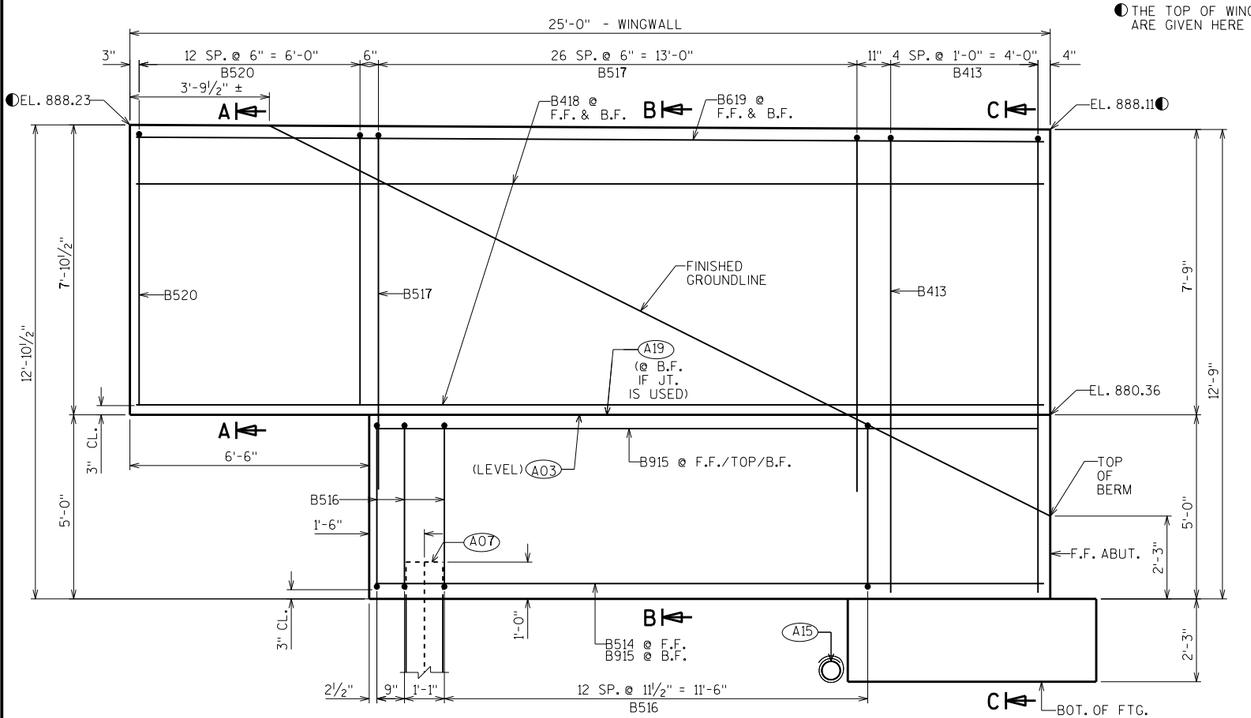
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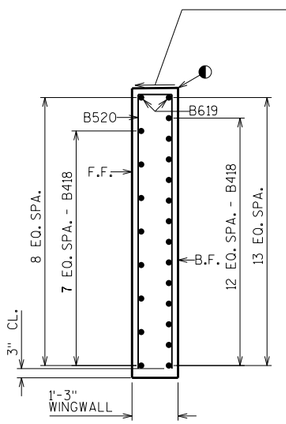
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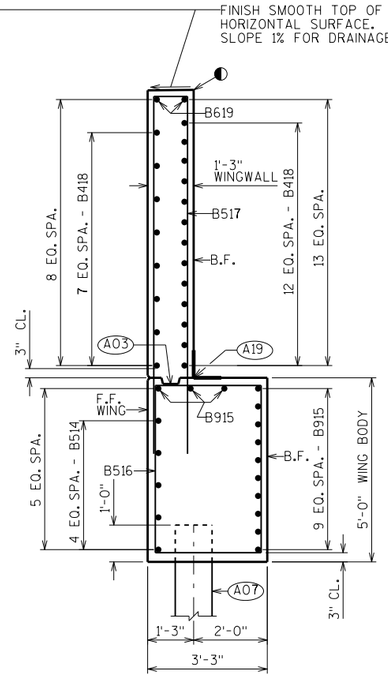
WING 3 ELEVATION LOOKING @ F.F. WING

(WING 4 SIMILAR WITH EXACT SAME DIMENSIONS/ELEVATIONS)

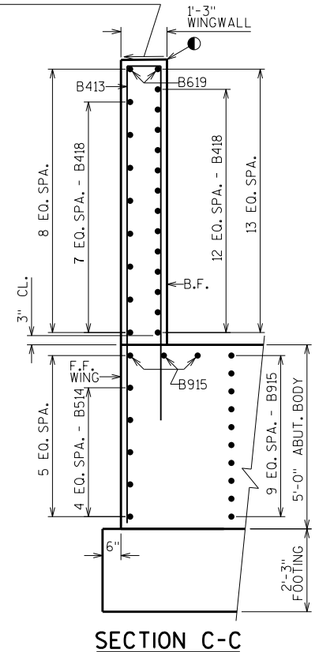
◐ THE TOP OF WING ELEVATIONS ARE GIVEN HERE AT THE B.F. WING



SECTION A-A



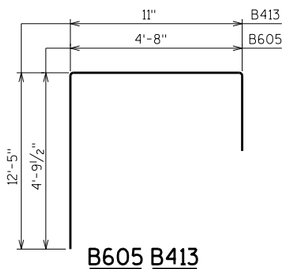
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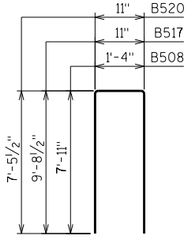
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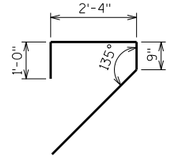
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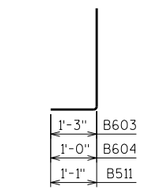
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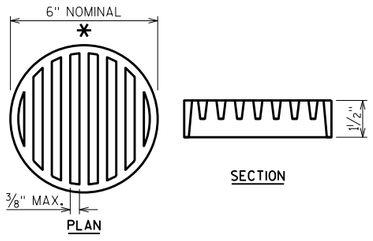


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B603 B604 B511

ADHESIVE ANCHORED

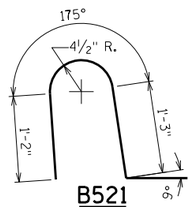


RODENT SHIELD DETAIL

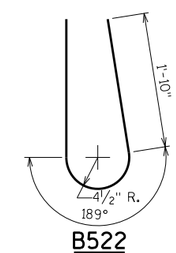
* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

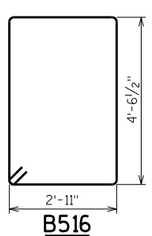
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



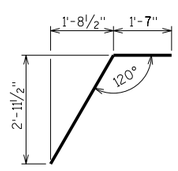
B521



B522



B516



SS901

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	LOCATION
B701		51	6'-5"		FOOTING-BOTTOM-HORIZ.-TRANS.
B702		7	49'-10"		FOOTING-BOTTOM-HORIZ.-LONGIT.
B603		49	4'-10"	X	FOOTING/BODY-F.F.-VERT.-TRANS.
B604		49	7'-3"	X	FOOTING/BODY-B.F.-VERT.-TRANS.
B605		49	11'-4"	X	BODY-F.F.-VERT.-TRANS.
B1006		18	30'-0"	X	BODY-B.F.-HORIZ.-LONGIT.
B607		10	48'-10"		BODY-F.F. & TOP-HORIZ.-LONGIT.
B508	X	47	16'-11"	X	BACKWALL/BODY-VERT.-TRANS.
B409	X	32	25'-8"		BACKWALL/CORBEL-F.F. & B.F.-HORIZ.-LONGIT.
B510	X	47	6'-11"	X	BACKWALL/CORBEL-TOP-VERT.-TRANS.
B511	X	94	3'-1"	X	BACKWALL/PAVING BLOCK-F.F. & B.F.-VERT.-TRANS.
B512	X	21	7'-7"		PAVING BLOCK-B.F.-TOP & BOT.-HORIZ.-LONGIT.
B413	X	10	22'-10"	X	WINGS 3&4-WINGWALL/ABUT. BODY-VERT.
B514	X	10	18'-2"		WINGS 3&4-BODY-F.F.-BOT.-HORIZ.
B915	X	26	18'-0"		WINGS 3&4-BODY-B.F. & TOP-HORIZ.
B516	X	30	15'-7"	X	WINGS 3&4-BODY-VERT.-STIRRUP
B517	X	54	20'-1"	X	WINGS 3&4-WINGWALL/BODY-VERT.
B418	X	42	24'-8"		WINGS 3&4-WINGWALL-F.F. & B.F.-HORIZ.
B619	X	4	24'-8"		WINGS 3&4-WINGWALL-F.F. & B.F.-TOP-HORIZ.
B520	X	26	15'-7"	X	WINGS 3&4-WINGWALL-VERT.-AT ENDS
B521	X	6	4'-5"	X	ABUT. PARAPET/PAVING BLOCK-VERT.
B522	X	6	5'-0"	X	ABUT. PARAPET-VERTICAL
SS901		47	5'-0"	X	APPROACH SLAB/CORBEL/BACKWALL-VERT.

STAINLESS STEEL REINFORCEMENT

A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2" x 6". (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

A07 SUPPORT ABUTMENT ON HP 12 x 53 STEEL PILING, ESTIMATED 20'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

EAST ABUTMENT DETAILS

SHEET 11

301

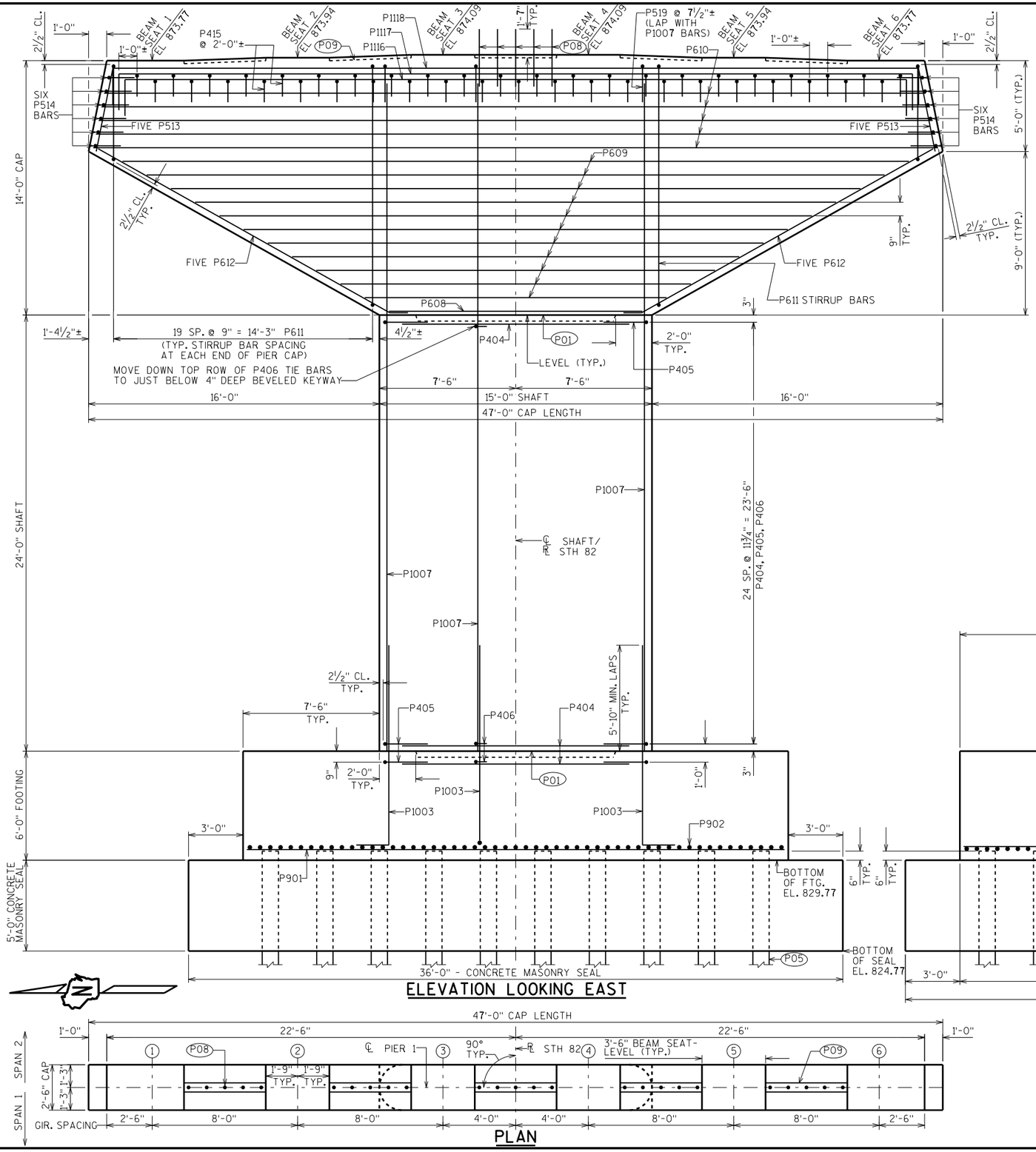
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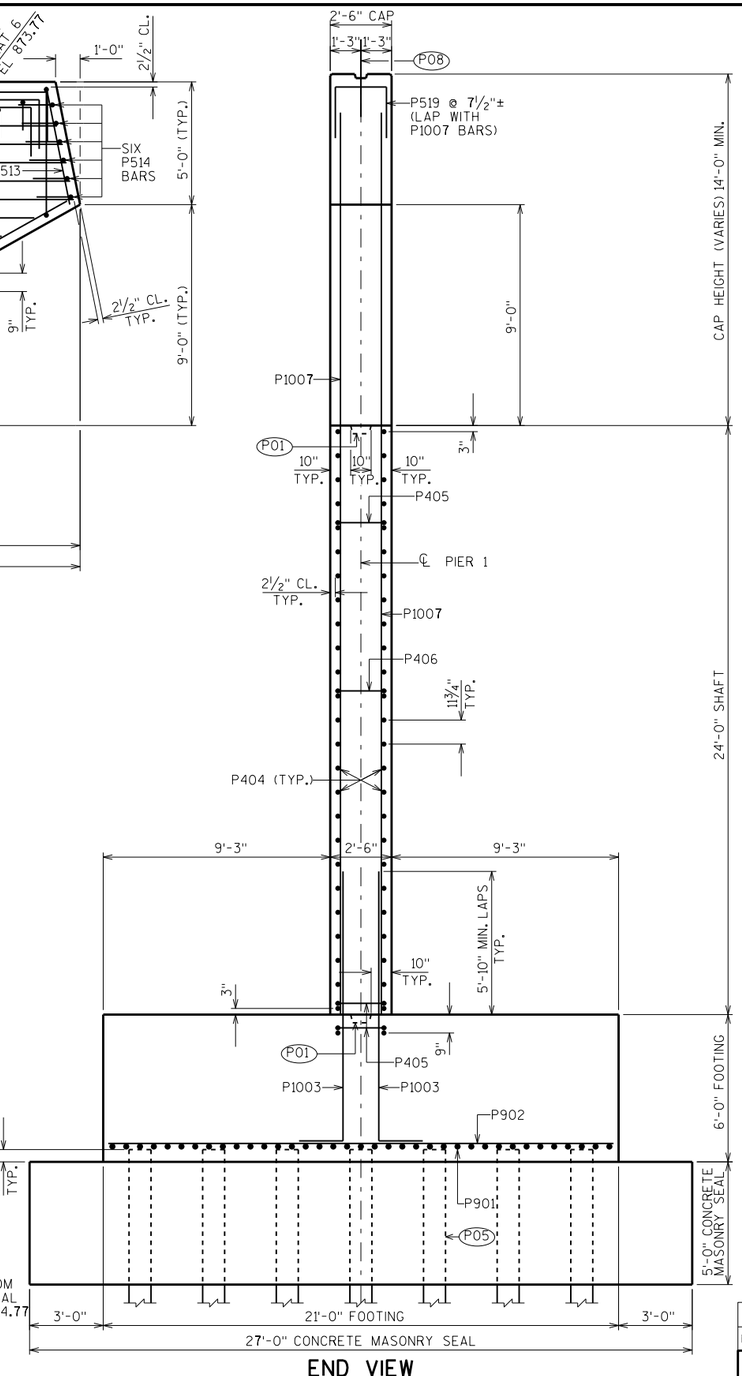
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STATE PROJECT NUMBER

1430-01-73



ELEVATION LOOKING EAST



END VIEW

PLAN

P01 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

P05 SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 120'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

*THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MINUS 10 TONS MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

P08 P720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

P09 KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY	JPH	PLANS CK'D.	NAR

PIER 1

SHEET 12

302

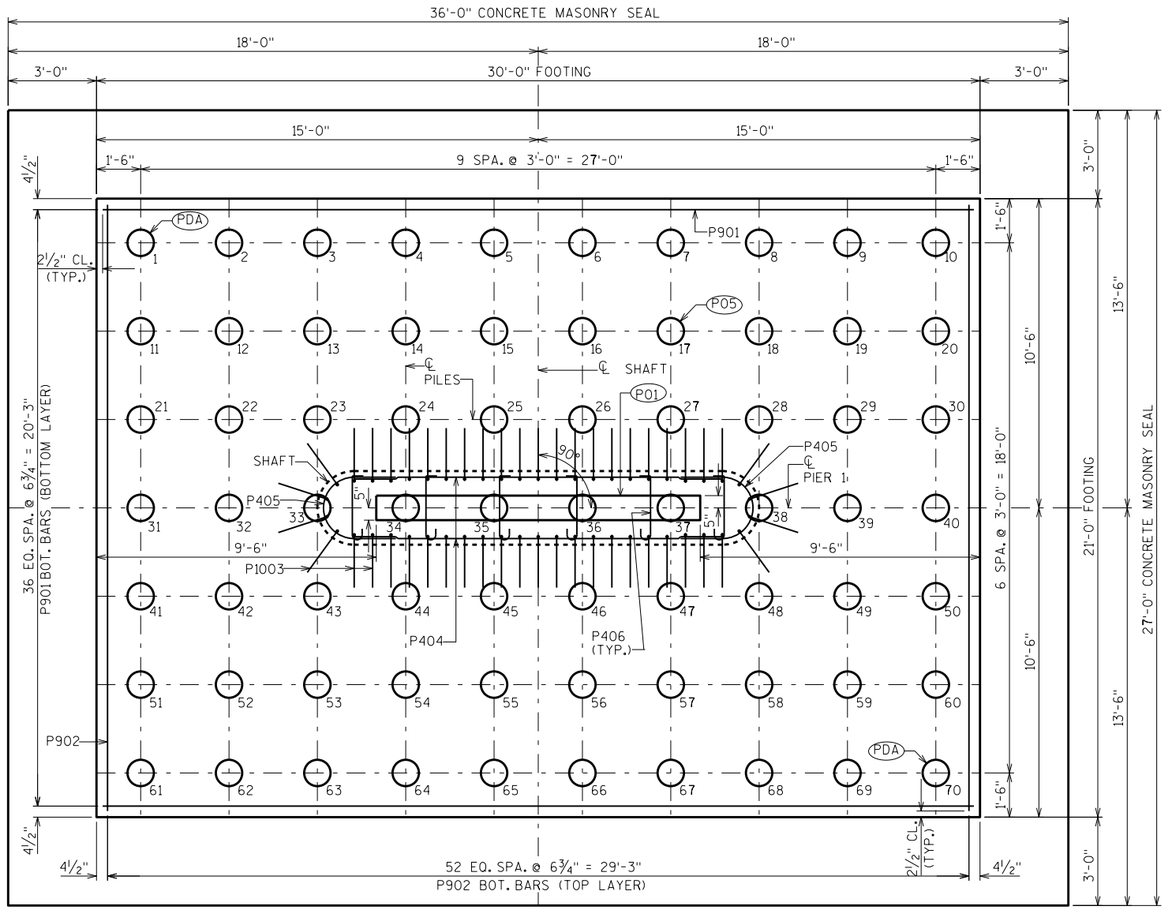
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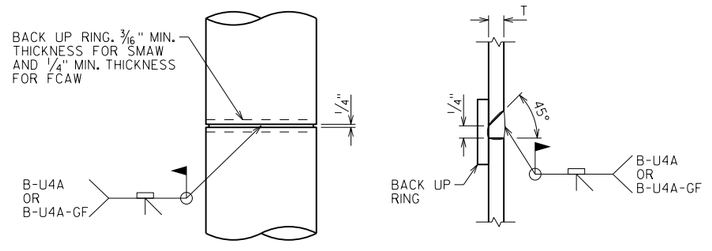
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STATE PROJECT NUMBER

1430-01-73



CONCRETE MASONRY SEAL/FOOTING/PILE PLAN



CAST-IN-PLACE 'PIPE PILE' C.I.P. PILE WELD DETAIL

PILE DETAILS

(P01) 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P05) SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 120'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

* THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MINUS 10 TONS MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

(PDA) PILE DYNAMIC ANALYZER TESTING AND RESTRIKES REQUIRED AT THIS PILE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 1 SEAL & FOOTING DETAILS

SHEET 13

303

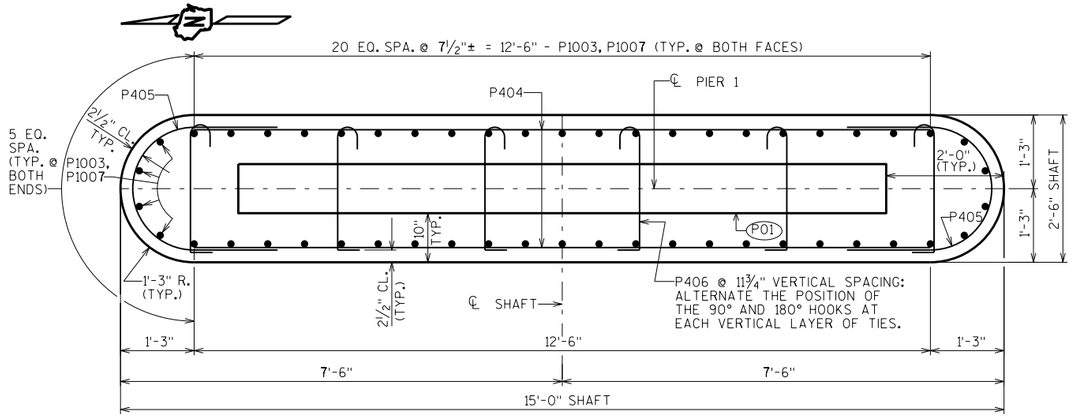
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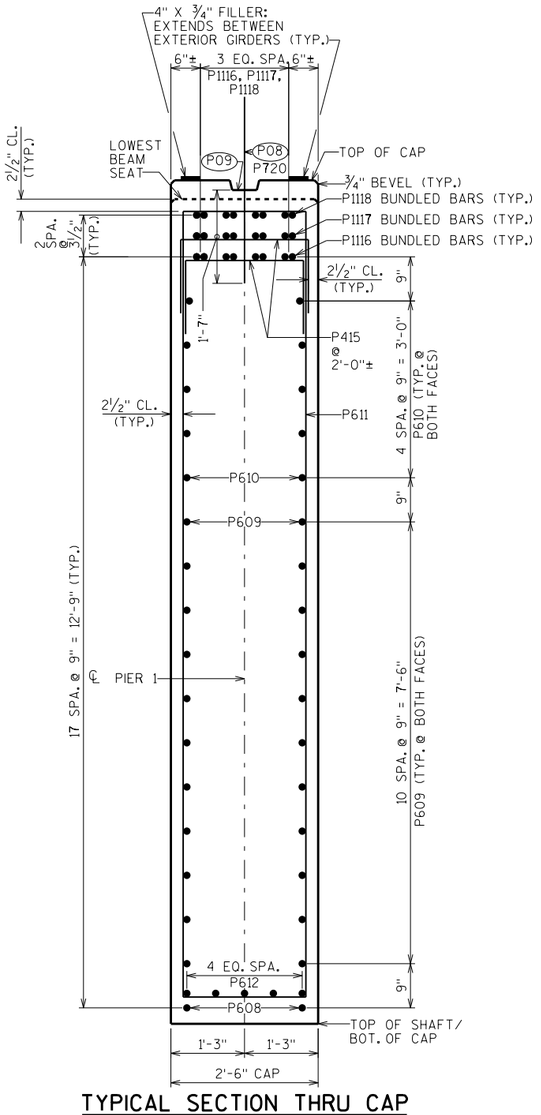
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STATE PROJECT NUMBER

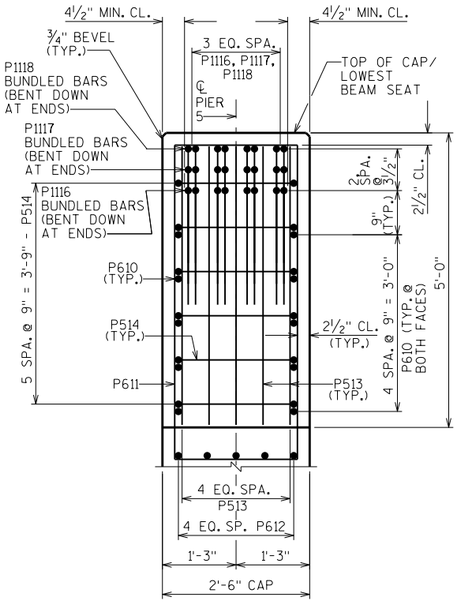
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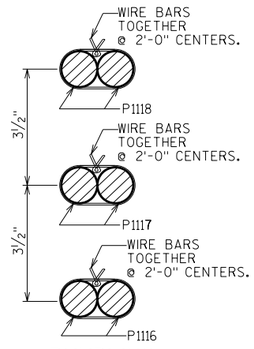
SECTION THRU SHAFT



TYPICAL SECTION THRU CAP



CAP AT ENDS



BUNDLING DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

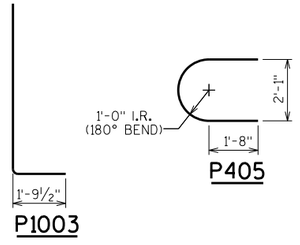
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
P901		37	29'-7"			FOOTING-BOTTOM-HORIZ.-LONGIT.-BOTTOM LAYER
P902		53	20'-7"			FOOTING-BOTTOM-HORIZ.-TRANSVERSE-TOP LAYER
P1003		50	12'-9"	X		FOOTING/SHAFT-VERT.-AT ALL FACES
P404		52	12'-6"			FOOTING/SHAFT-HORIZ.-AT BOTH FACES
P405		52	6'-7"	X		FOOTING/SHAFT-HORIZ.-AT BOTH ENDS
P406		156	3'-2"	X		FOOTING/SHAFT-HORIZ.-TIE BARS
P1007		50	36'-9"			SHAFT/CAP-VERT.-AT ALL FACES
P608		2	14'-9"			CAP-BOTTOM-HORIZ.-BOTH FACES
⚠ P609		22	30'-9"		X	CAP-HORIZ.-BOTH FACES
⚠ P610		10	45'-10"		X	CAP-HORIZ.-BOTH FACES
⚠ P611		40	23'-9"	X	X	CAP-VERT.-STIRRUPS-AT ENDS
P612		10	19'-2"	X		CAP-BOTTOM-VERT.-AT ENDS
P513		10	4'-10"			CAP-VERT.-AT ENDS
P514		12	4'-8"	X		CAP-HORIZ.-AT ENDS
P415		43	4'-5"	X		CAP-TOP-VERT.-BAR CHAIRS
P1116		8	46'-5"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
P1117		8	47'-1"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
P1118		8	47'-9"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
P519		25	6'-0"	X		CAP-TOP-VERT.-ABOVE SHAFT
P720		25	3'-2"			CAP-TOP-VERT.-CENTER-BTWN. BEAM SEATS

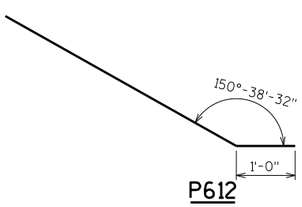
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

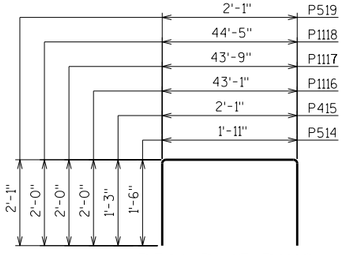
BAR SERIES TABLE

BAR MARK	NUMBER REQUIRED	LENGTH
P609	2 SERIES OF 11 BARS	17'-5" TO 44'-1"
P610	2 SERIES OF 5 BARS	45'-3" TO 46'-5"
P611	2 SERIES OF 20 BARS	15'-9" TO 31'-9"

BUNDLE AND TAG EACH SERIES SEPARATELY.







P514 P415 P1116 P1117 P1118 P519

(P01) 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P08) P720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 1 SHAFT & CAP DETAILS

SHEET 14

304

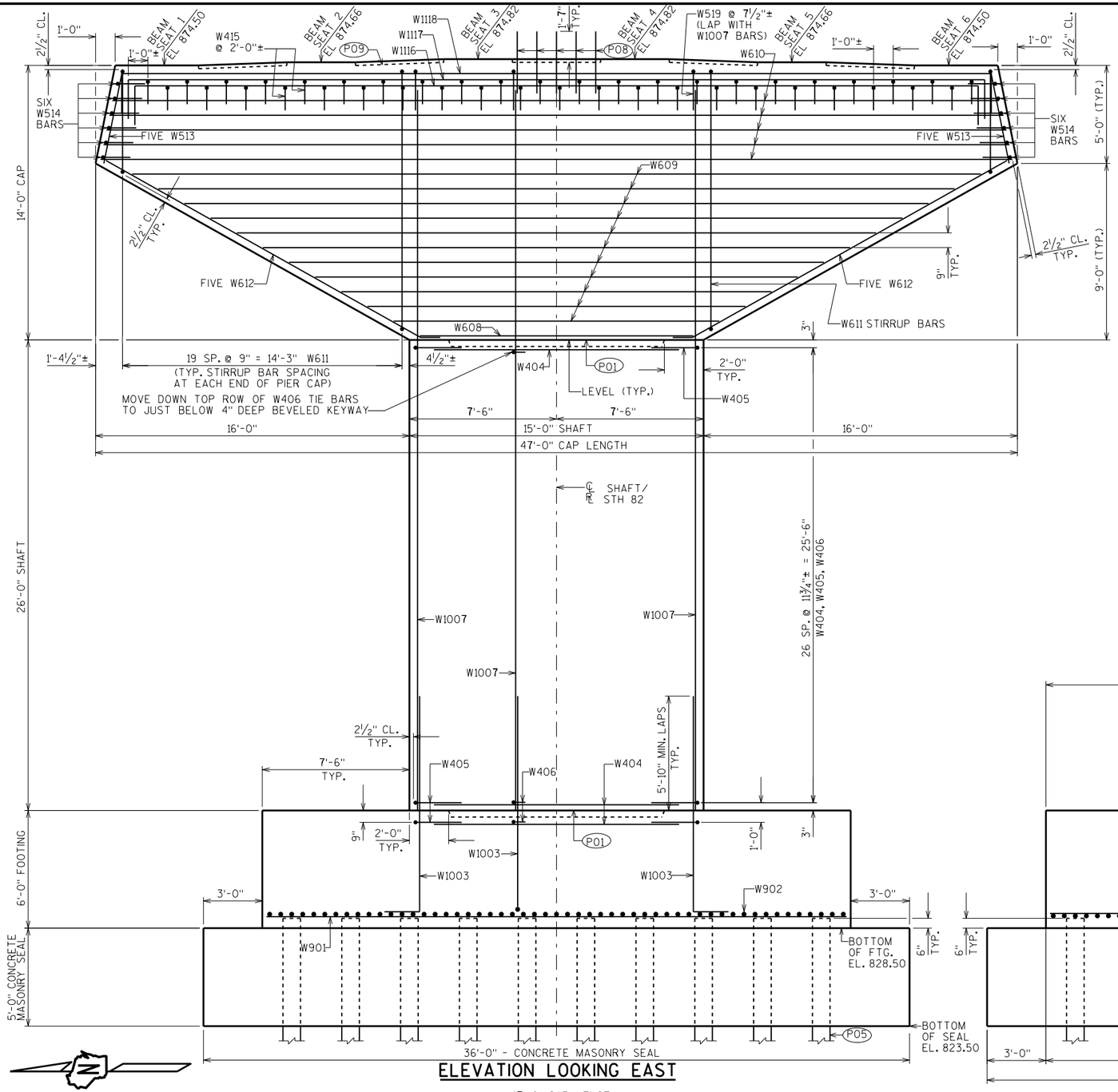
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8

STATE PROJECT NUMBER

1430-01-73



(P01) 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P05) SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 120'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

*THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MINUS 10 TONS MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

(P08) W720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY	PLANS CK'D.
JPH	NAR

PIER 2

SHEET 15

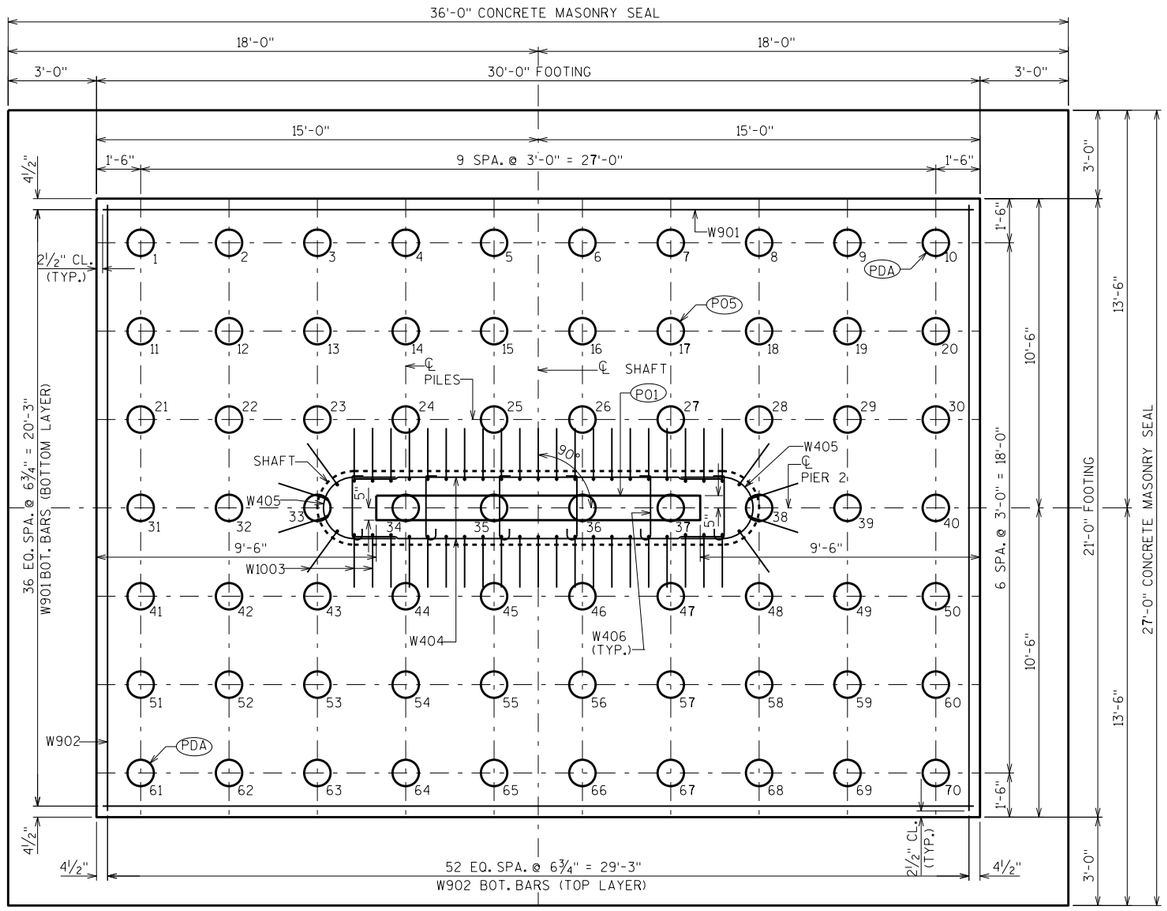
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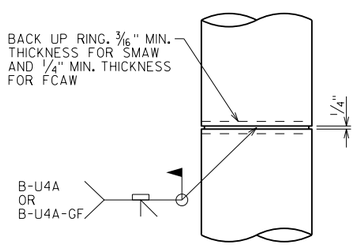
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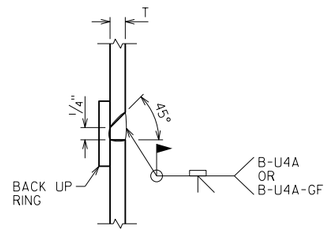
STATE PROJECT NUMBER
1430-01-73



CONCRETE MASONRY SEAL/FOOTING/PILE PLAN



CAST-IN-PLACE 'PIPE PILE'



C.I.P. PILE WELD DETAIL

PILE DETAILS

(P01) 11'-0" × 10" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P05) SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 120'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

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(PDA) PILE DYNAMIC ANALYZER TESTING AND RESTRIKES REQUIRED AT THIS PILE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 2 SEAL & FOOTING DETAILS

SHEET 16

306

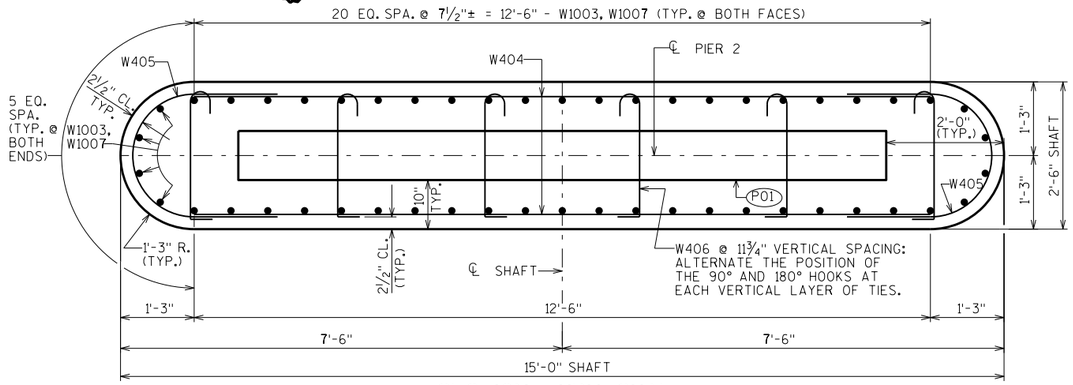
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8

STATE PROJECT NUMBER

1430-01-73



SECTION THRU SHAFT

BILL OF BARS

NOTE:
THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

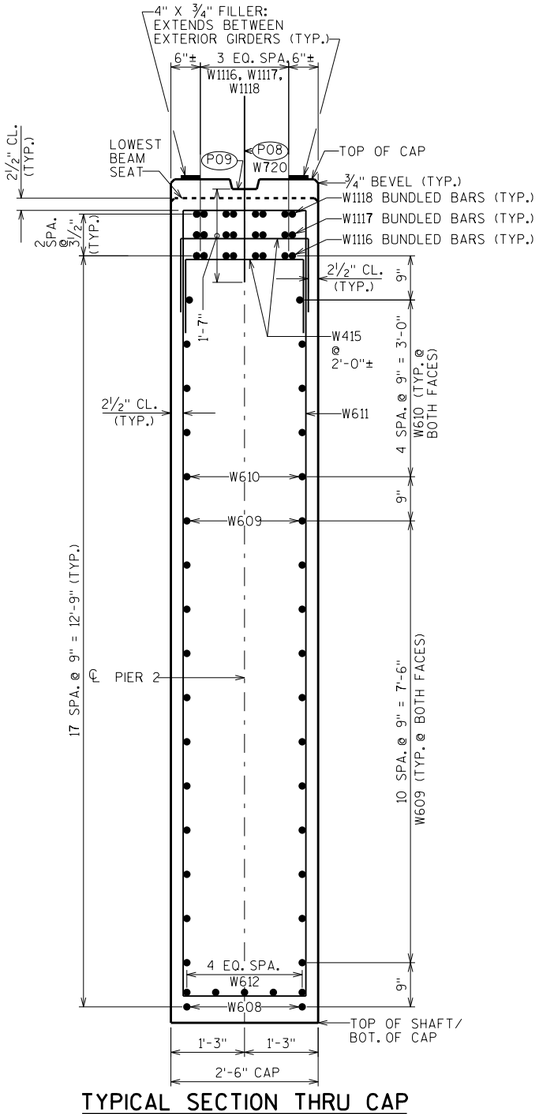
	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	W901		37	29'-7"			FOOTING-BOTTOM-HORIZ.-LONGIT.-BOTTOM LAYER
	W902		53	20'-7"			FOOTING-BOTTOM-HORIZ.-TRANSVERSE-TOP LAYER
	W1003		50	12'-9"	X		FOOTING/SHAFT-VERT.-AT ALL FACES
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	W608		2	14'-9"			CAP-BOTTOM-HORIZ.-BOTH FACES
⚠1	W609		22	30'-9"		X	CAP-HORIZ.-BOTH FACES
⚠1	W610		10	45'-10"		X	CAP-HORIZ.-BOTH FACES
⚠1	W611		40	23'-9"	X	X	CAP-VERT.-STIRRUPS-AT ENDS
	W612		10	19'-2"	X		CAP-BOTTOM-VERT.-AT ENDS
	W513		10	4'-10"			CAP-VERT.-AT ENDS
	W514		12	4'-8"	X		CAP-HORIZ.-AT ENDS
	W415		43	4'-5"	X		CAP-TOP-VERT.-BAR CHAIRS
	W1116		8	46'-5"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
	W1117		8	47'-1"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
	W1118		8	47'-9"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
	W519		25	6'-0"	X		CAP-TOP-VERT.-ABOVE SHAFT
	W720		25	3'-2"			CAP-TOP-VERT.-CENTER-BTWN. BEAM SEATS

⚠1 LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

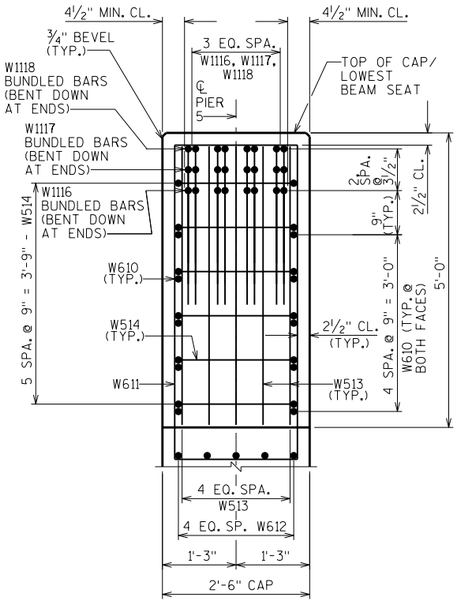
BAR SERIES TABLE

BAR MARK	NUMBER REQUIRED	LENGTH
W609	2 SERIES OF 11 BARS	17'-5" TO 44'-1"
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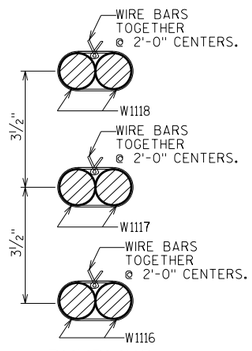
BUNDLE AND TAG EACH SERIES SEPARATELY.



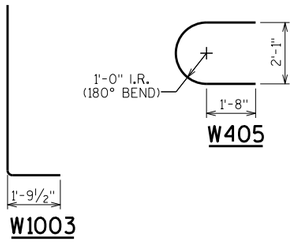
TYPICAL SECTION THRU CAP



CAP AT ENDS

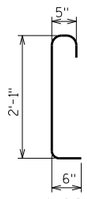


BUNDLING DETAIL

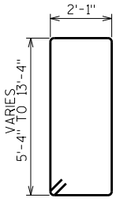


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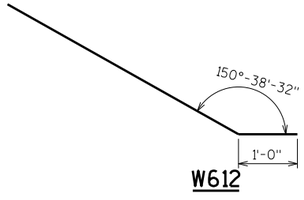
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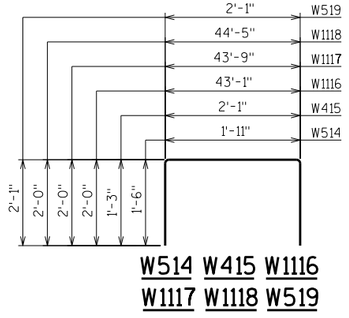
W406



W611



W612



W514 W415 W1116 W1117 W1118 W519

P01 11'-0" × 10" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

P08 W720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

P09 KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" × 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 2 SHAFT & CAP DETAILS

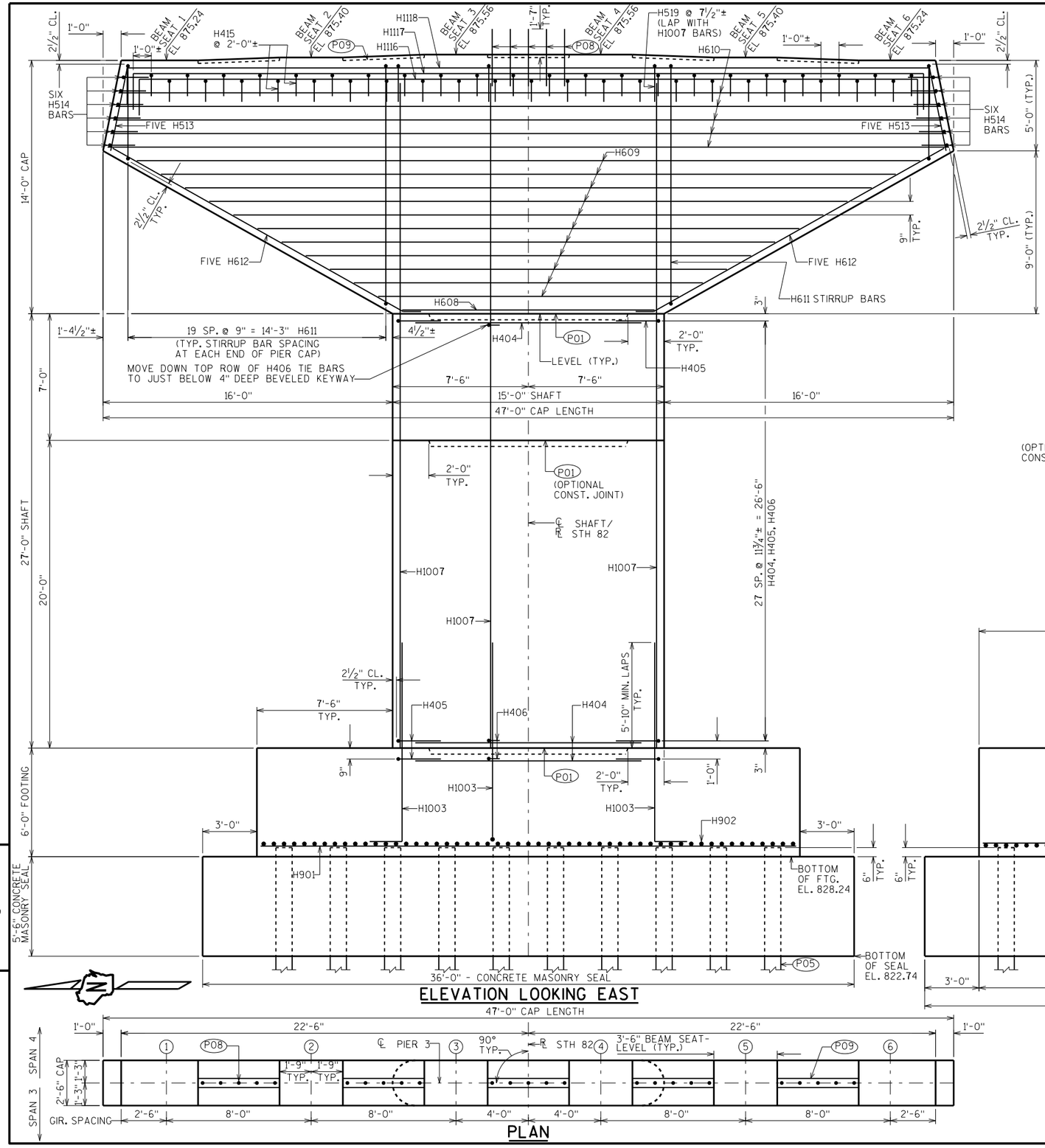
SHEET 17

307

SCALE = 2.50

STATE PROJECT NUMBER

1430-01-73



P01 11'-0" × 10" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

P05 SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 110'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

*THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

P08 H720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

P09 KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" × 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 3

SHEET 18

308

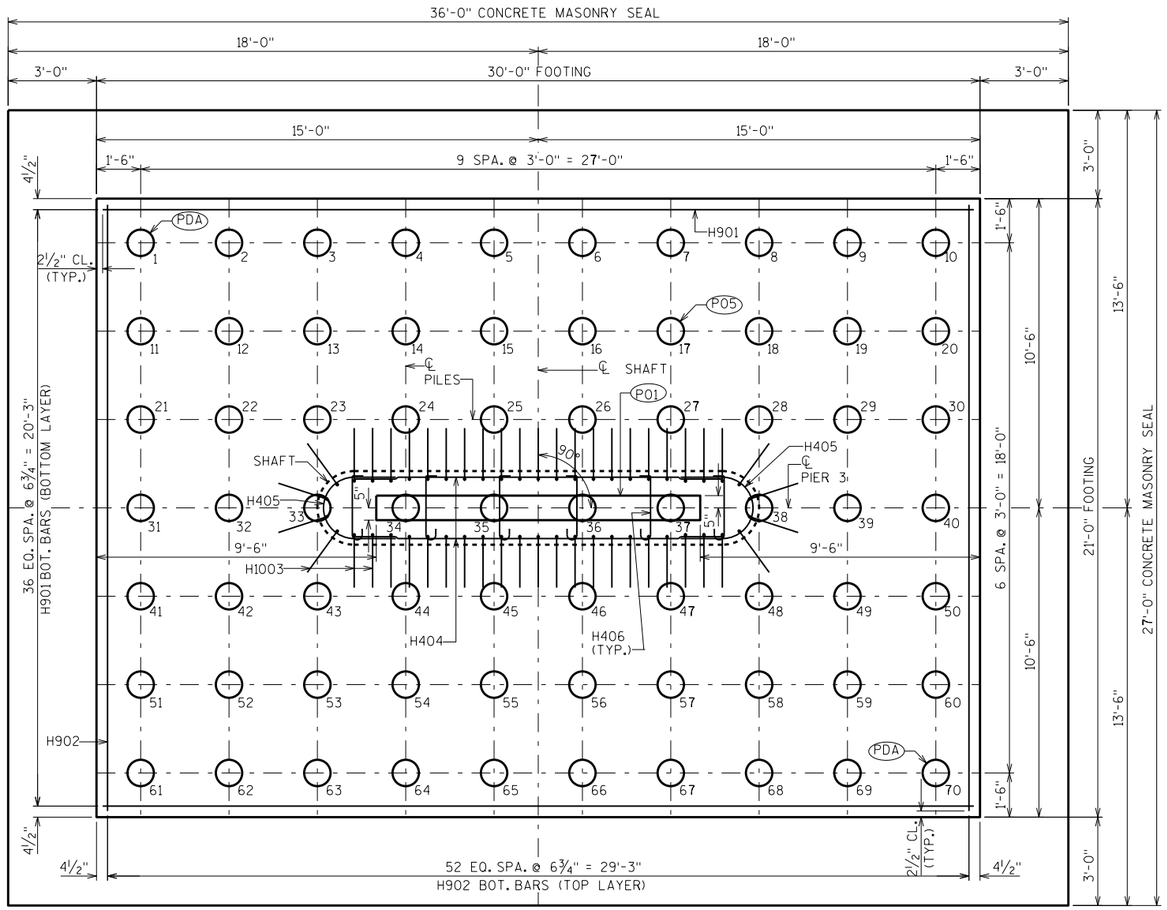
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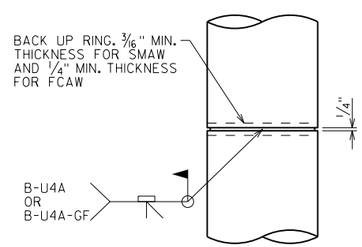
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STATE PROJECT NUMBER

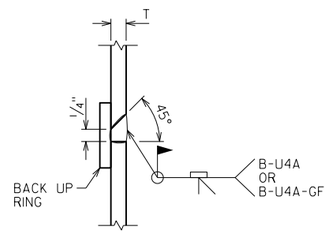
1430-01-73



CONCRETE MASONRY SEAL/FOOTING/PILE PLAN



CAST-IN-PLACE 'PIPE PILE'



C.I.P. PILE WELD DETAIL

PILE DETAILS

(P01) 11'-0" × 10" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P05) SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 110'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

* THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

(PDA) PILE DYNAMIC ANALYZER TESTING AND RESTRIKES REQUIRED AT THIS PILE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 3 SEAL & FOOTING DETAILS

SHEET 19

309

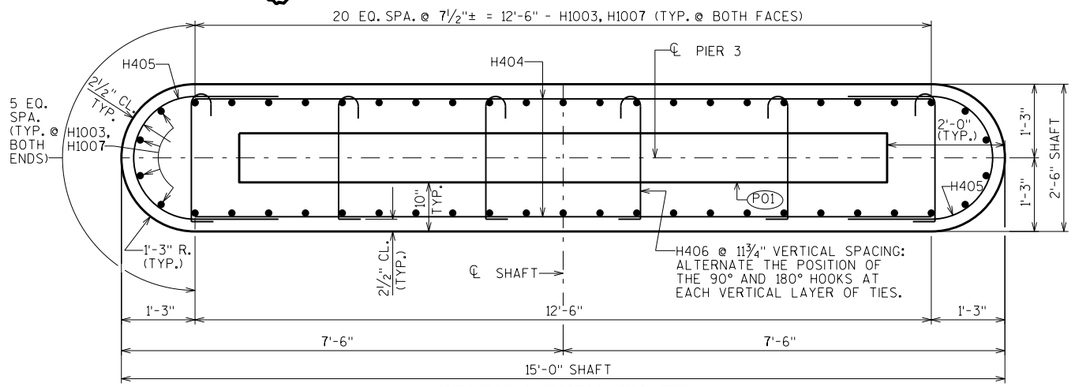
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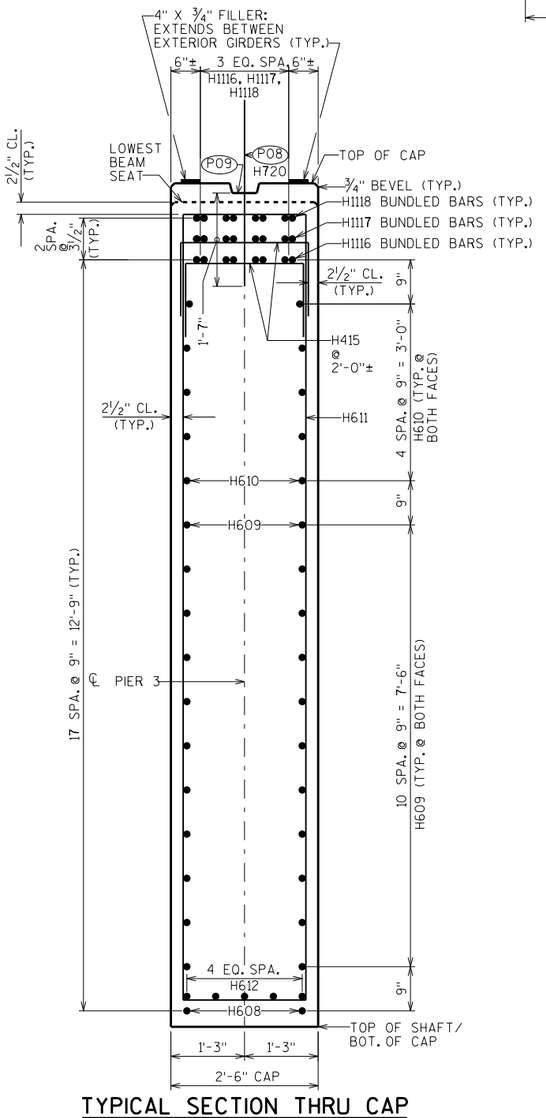
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STATE PROJECT NUMBER

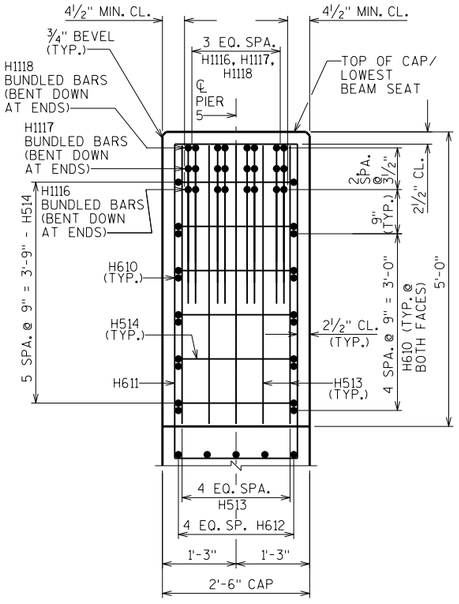
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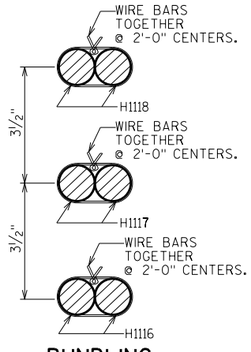
SECTION THRU SHAFT



TYPICAL SECTION THRU CAP



CAP AT ENDS



BUNDLING DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

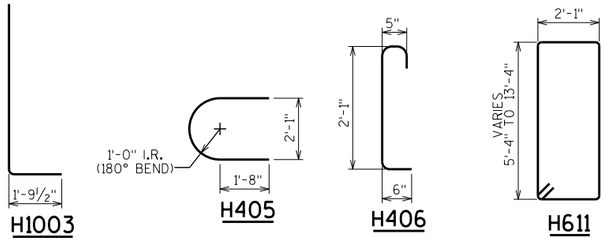
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
H901		37	29'-7"			FOOTING-BOTTOM-HORIZ.-LONGIT.-BOTTOM LAYER
H902		53	20'-7"			FOOTING-BOTTOM-HORIZ.-TRANSVERSE-TOP LAYER
H1003		50	12'-9"	X		FOOTING/SHAFT-VERT.-AT ALL FACES
H404		58	12'-6"			FOOTING/SHAFT-HORIZ.-AT BOTH FACES
H405		58	6'-7"	X		FOOTING/SHAFT-HORIZ.-AT BOTH ENDS
H406		174	3'-2"	X		FOOTING/SHAFT-HORIZ.-TIE BARS
H1007		50	39'-9"			SHAFT/CAP-VERT.-AT ALL FACES
H608		2	14'-9"			CAP-BOTTOM-HORIZ.-BOTH FACES
⚠ H609		22	30'-9"		X	CAP-HORIZ.-BOTH FACES
⚠ H610		10	45'-10"		X	CAP-HORIZ.-BOTH FACES
⚠ H611		40	23'-9"	X	X	CAP-VERT.-STIRRUPS-AT ENDS
H612		10	19'-2"	X		CAP-BOTTOM-VERT.-AT ENDS
H513		10	4'-10"			CAP-VERT.-AT ENDS
H514		12	4'-8"	X		CAP-HORIZ.-AT ENDS
H415		43	4'-5"	X		CAP-TOP-VERT.-BAR CHAIRS
H1116		8	46'-5"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
H1117		8	47'-1"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
H1118		8	47'-9"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
H519		25	6'-0"	X		CAP-TOP-VERT.-ABOVE SHAFT
H720		25	3'-2"			CAP-TOP-VERT.-CENTER-BTWN. BEAM SEATS

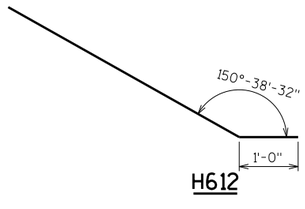
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

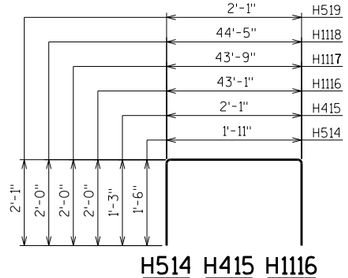
BAR SERIES TABLE

BAR MARK	NUMBER REQUIRED	LENGTH
H609	2 SERIES OF 11 BARS	17'-5" TO 44'-1"
H610	2 SERIES OF 5 BARS	45'-3" TO 46'-5"
H611	2 SERIES OF 20 BARS	15'-9" TO 31'-9"

BUNDLE AND TAG EACH SERIES SEPARATELY.







H514 H415 H1116
H1117 H1118 H519

(P01) 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P08) H720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 3 SHAFT & CAP DETAILS

SHEET 20

310

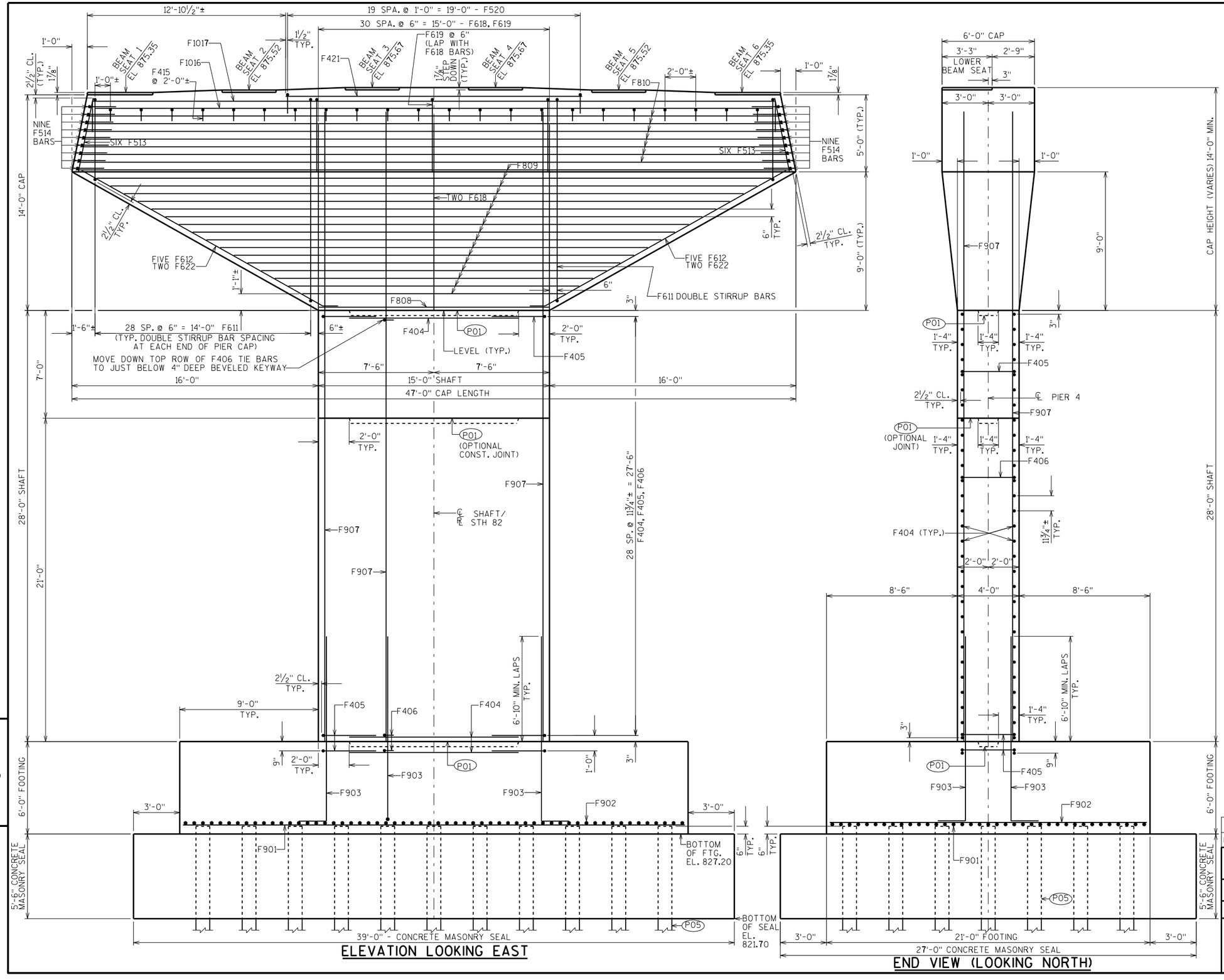
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8

STATE PROJECT NUMBER

1430-01-73



(P01) 11'-0" x 16" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P05) SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 115'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

*THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 4

SHEET 21

311

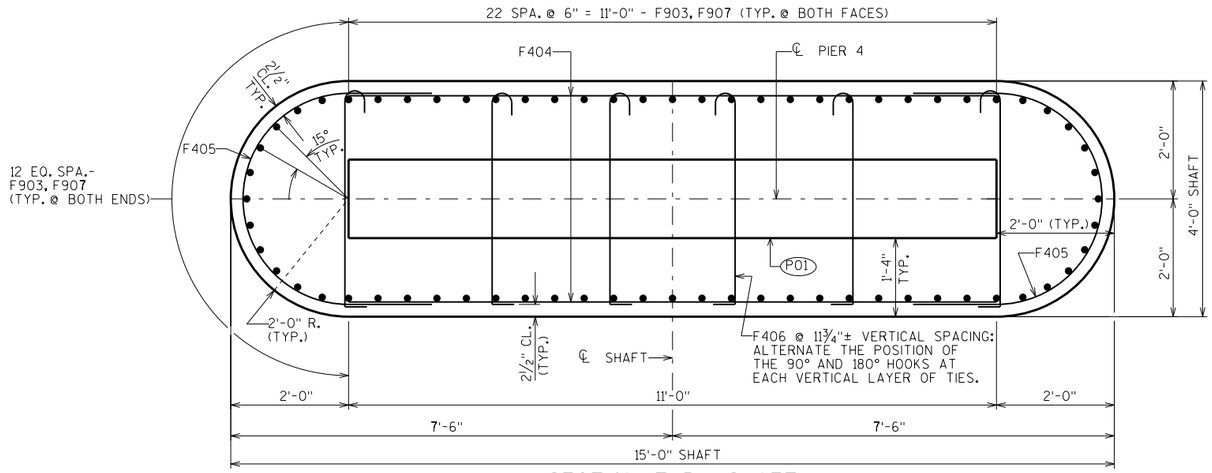
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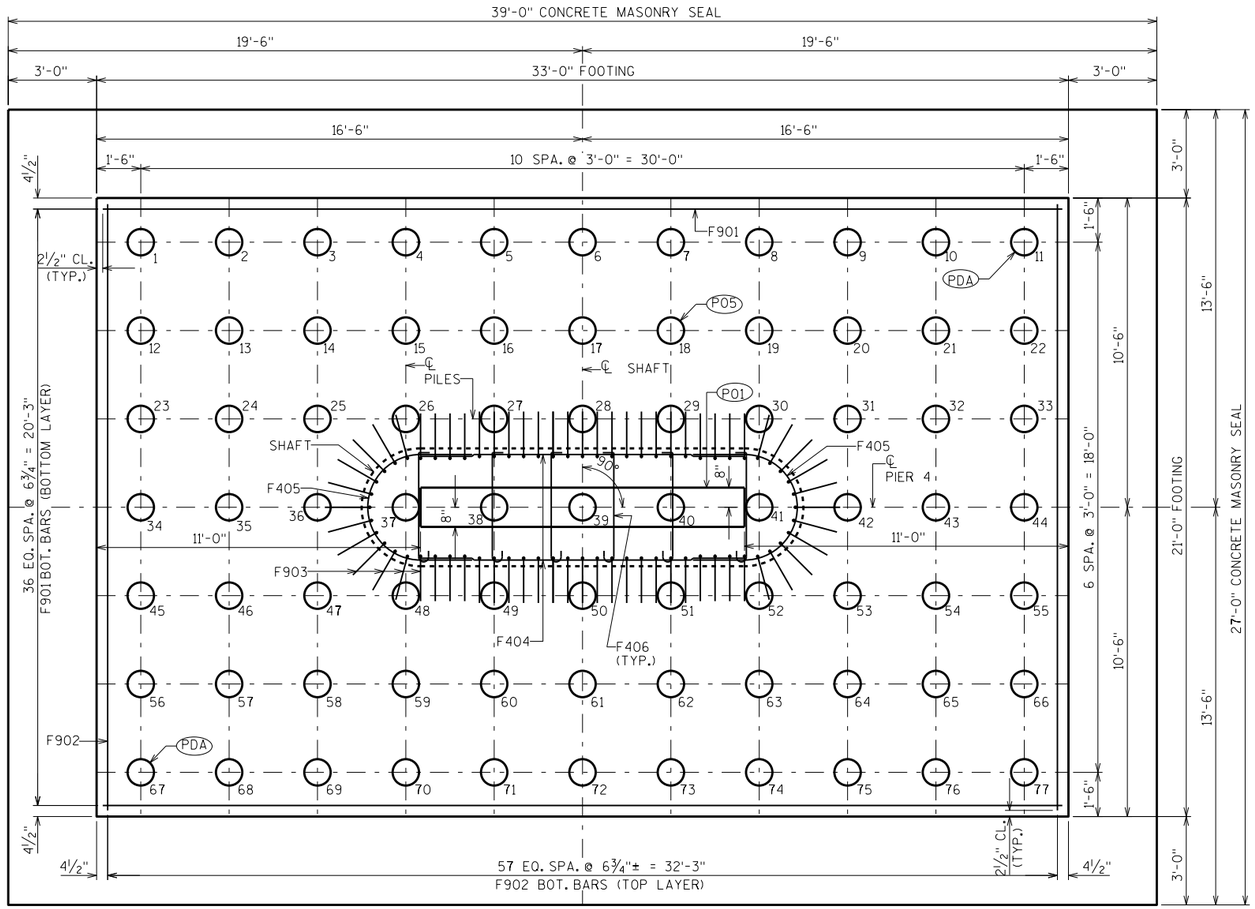
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STATE PROJECT NUMBER

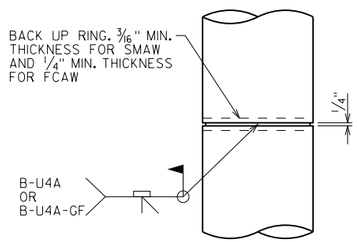
1430-01-73



SECTION THRU SHAFT



CONCRETE MASONRY SEAL/FOOTING/PILE PLAN



CAST-IN-PLACE 'PIPE PILE'

C.I.P. PILE WELD DETAIL

PILE DETAILS

(P01) 11'-0" × 16" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P05) SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 115'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

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(PDA) PILE DYNAMIC ANALYZER TESTING AND RESTRIKES REQUIRED AT THIS PILE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 4 FOOTING & SHAFT DETAILS

SHEET 22

312

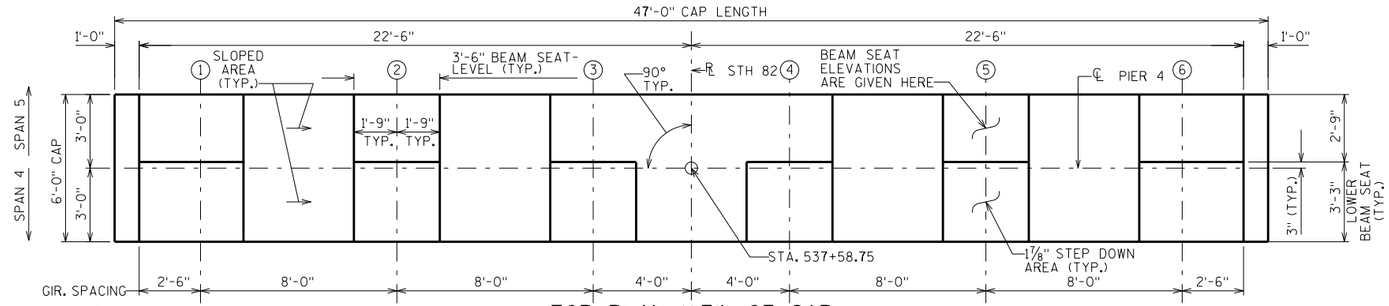
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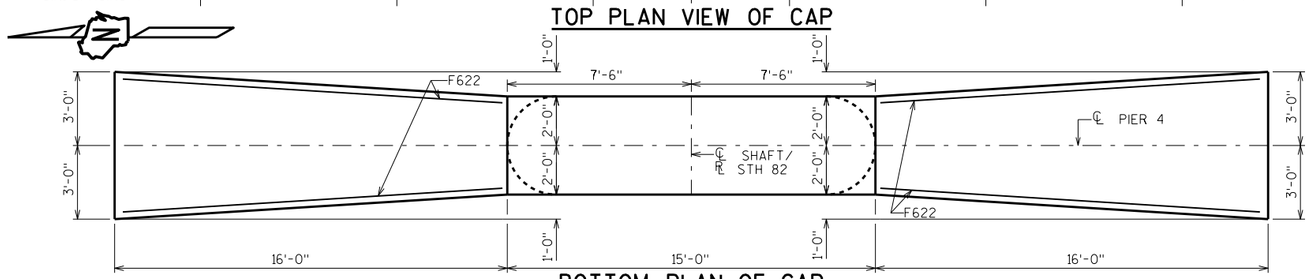
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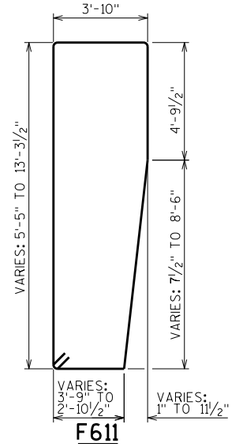
1430-01-73



TOP PLAN VIEW OF CAP



BOTTOM PLAN OF CAP



F611

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

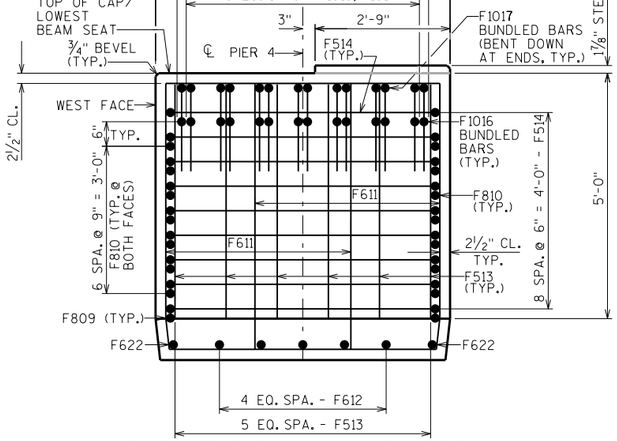
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
F901		37	32'-7"			FOOTING-BOTTOM-HORIZ.-LONGIT.-BOTTOM LAYER
F902		58	20'-7"			FOOTING-BOTTOM-HORIZ.-TRANSVERSE-TOP LAYER
F903	X	68	13'-6"	X		FOOTING/SHAFT-VERT.-AT ALL FACES
F404	X	60	11'-0"			FOOTING/SHAFT-HORIZ.-AT BOTH FACES
F405	X	60	9'-2"	X		FOOTING/SHAFT-HORIZ.-AT BOTH ENDS
F406	X	180	4'-8"	X		FOOTING/SHAFT-HORIZ.-TIE BARS
F907	X	68	40'-10"			SHAFT/CAP-VERT.-AT ALL FACES
F808	X	2	14'-11"			CAP-BOTTOM-HORIZ.-BOTH FACES
⚠ F809	X	34	31'-7"		X	CAP-HORIZ.-BOTH FACES
⚠ F810	X	14	45'-9"		X	CAP-HORIZ.-BOTH FACES
⚠ F611	X	116	26'-10"	X	X	CAP-VERT.-STIRRUPS-AT ENDS
F612	X	10	19'-0"	X		CAP-BOTTOM-VERT.-AT ENDS
F513	X	12	4'-10"			CAP-VERT.-AT ENDS
F514	X	18	8'-10"	X		CAP-HORIZ.-AT ENDS
F415	X	22	6'-9"	X		CAP-TOP-VERT.-BAR CHAIRS
F1016	X	14	44'-0"			CAP-TOP-HORIZ.-BUNDLED BARS
F1017	X	14	47'-5"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
F618	X	62	12'-2"	X		CAP-VERT.-BOTH FACES-ABOVE SHAFT
F619	X	31	14'-10"	X		CAP-TOP-VERT.-ABOVE SHAFT
F520	X	20	8'-0"	X		CAP-TOP-VERT.-BETWEEN BEAM SEATS 2 & 5
F421	X	7	19'-3"			CAP-TOP-HORIZ.-BETWEEN BEAM SEATS 2 & 5
F622	X	4	18'-0"			CAP-BOTTOM-VERT.-BOTH FACES-AT ENDS

⚠ 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

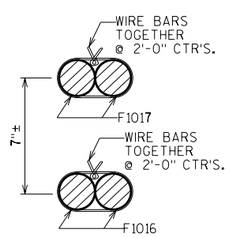
BAR MARK	NUMBER REQUIRED	LENGTH
F809	2 SERIES OF 17 BARS	17'-4" TO 45'-10"
F810	2 SERIES OF 7 BARS	45'-2" TO 46'-4"
F611	4 SERIES OF 29 BARS	19'-4" TO 34'-4"

BUNDLE AND TAG EACH SERIES SEPARATELY.

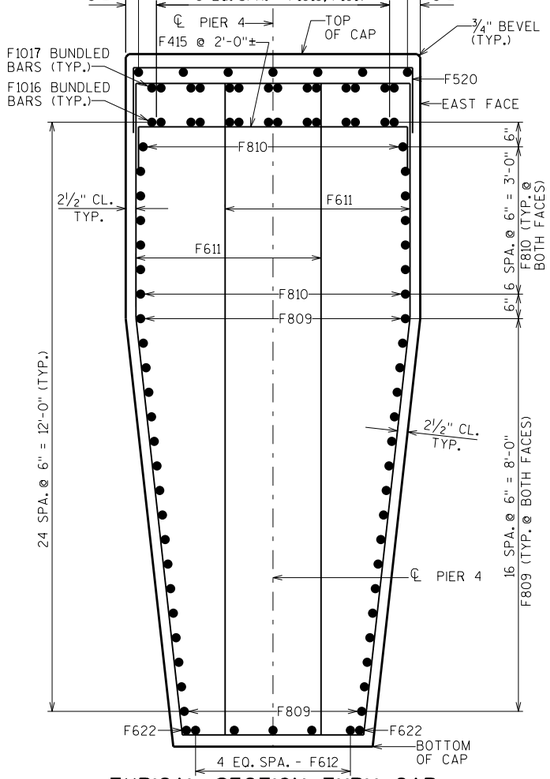


CAP AT ENDS LOOKING NORTH

(SHOWING DOUBLE STIRRUPS)

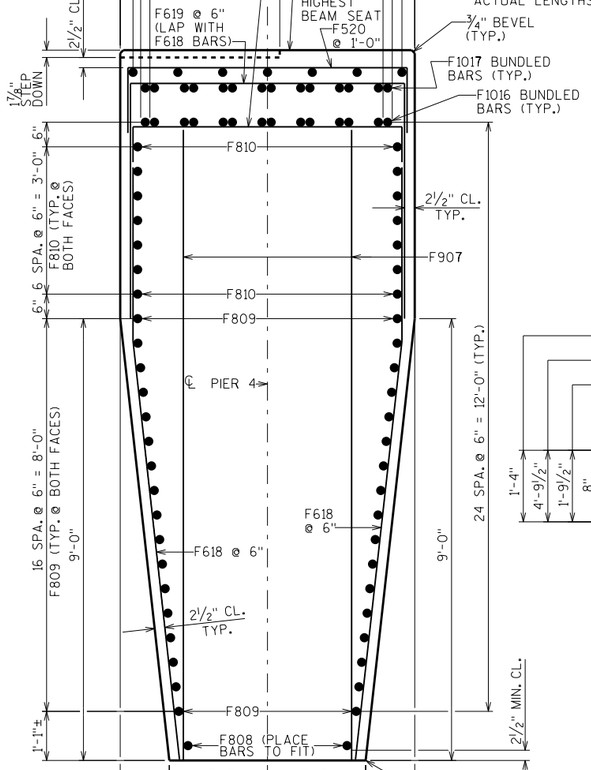


BUNDLING DETAIL



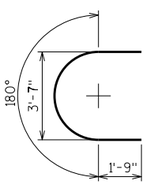
TYPICAL SECTION THRU CAP OUTSIDE OF SHAFT AREA LOOKING NORTH

(SHOWING DOUBLE STIRRUPS)

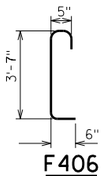


TYPICAL SECTION THRU CAP ABOVE SHAFT AREA - LOOKING NORTH

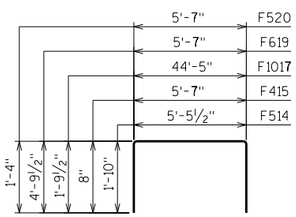
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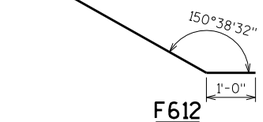
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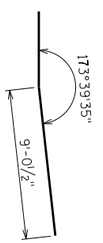
F406



F514 F415 F1017 F619 F520



F612



F618

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 4 CAP DETAILS

SHEET 23

313

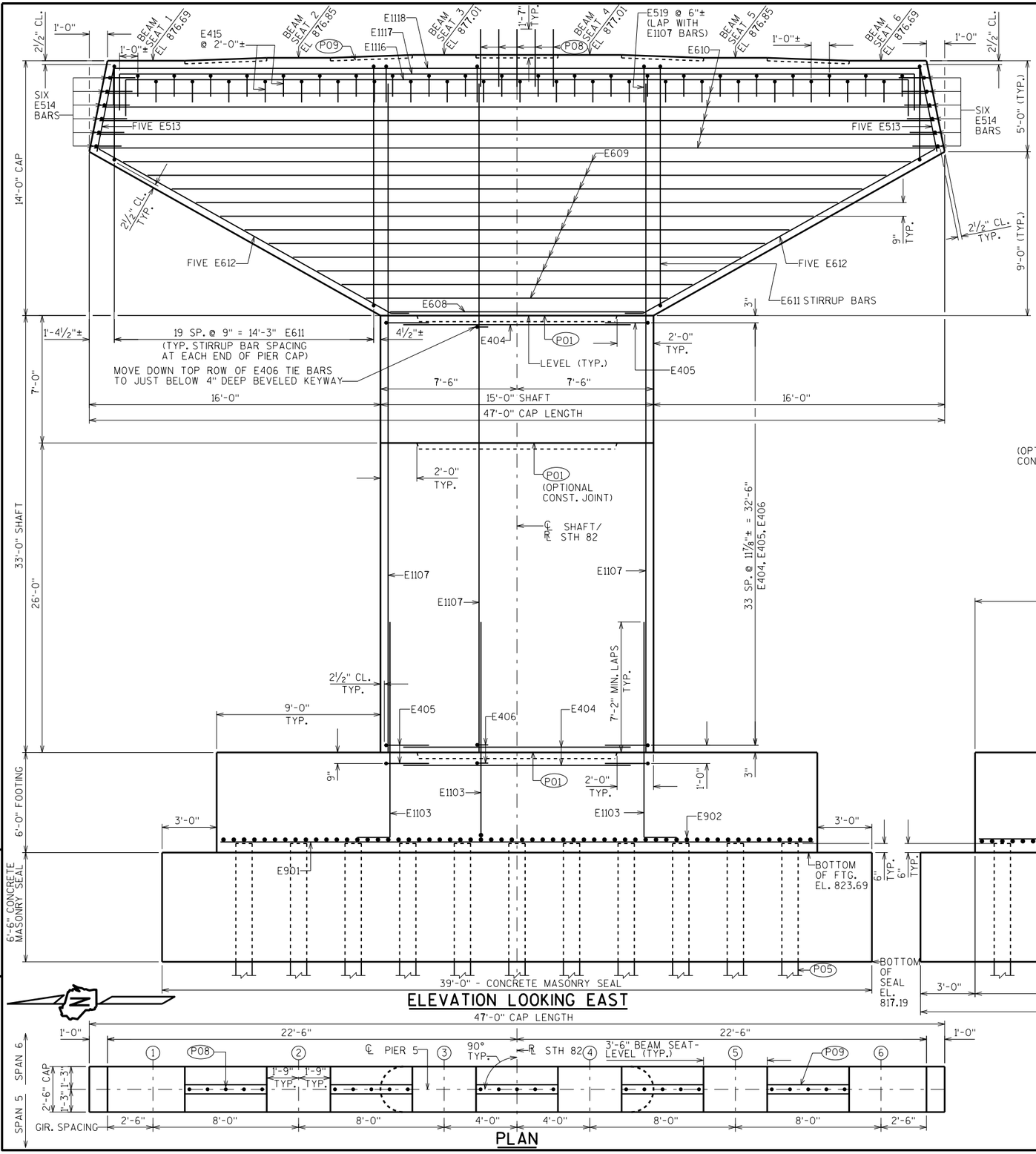
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8

STATE PROJECT NUMBER

1430-01-73



P01 11'-0" × 10" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

P05 SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

*THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

P08 E720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

P09 KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 5

SHEET 24

314

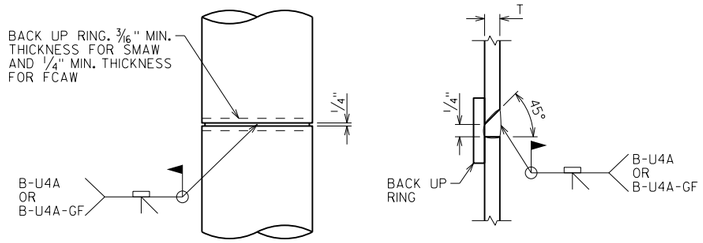
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STATE PROJECT NUMBER

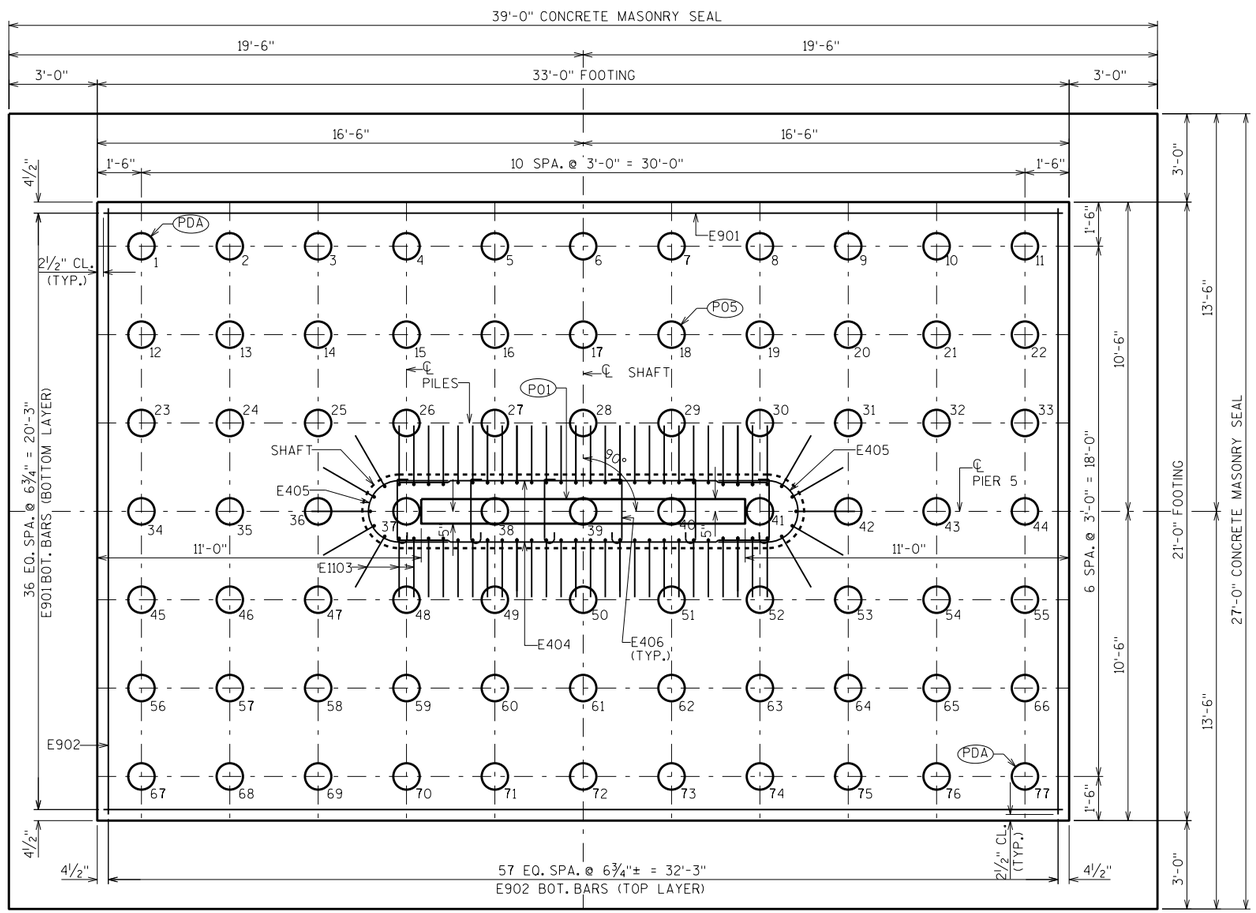
1430-01-73



CAST-IN-PLACE 'PIPE PILE'

C.I.P. PILE WELD DETAIL

PILE DETAILS



CONCRETE MASONRY SEAL/FOOTING/PILE PLAN

(P01) 11'-0" × 10" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P05) SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

*THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

(PDA) PILE DYNAMIC ANALYZER TESTING AND RESTRIKES REQUIRED AT THIS PILE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 5 SEAL & FOOTING DETAILS

SHEET 25

315

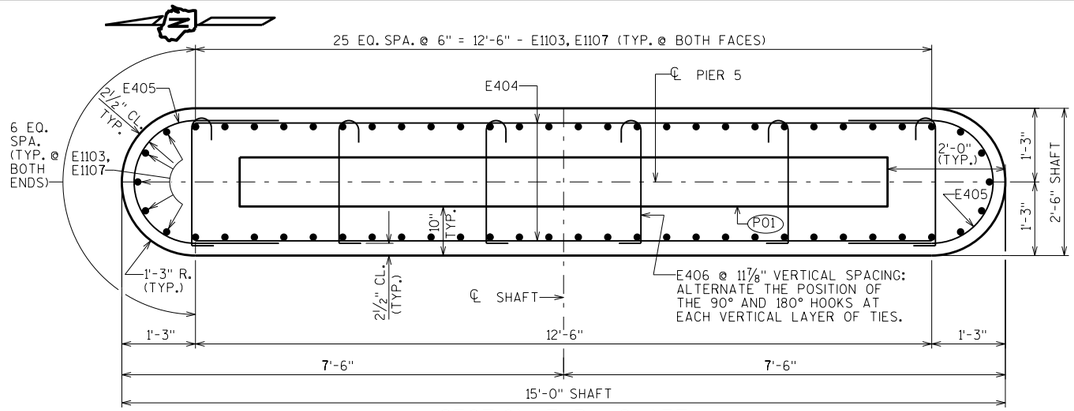
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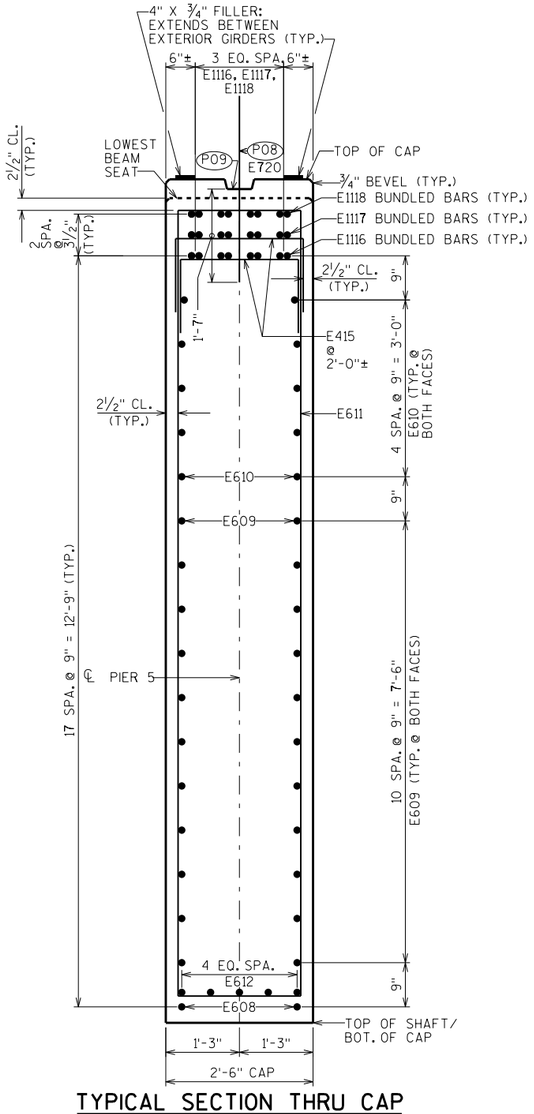
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STATE PROJECT NUMBER

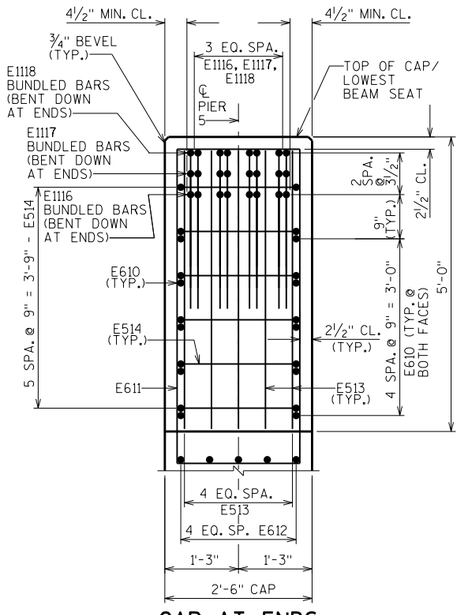
1430-01-73



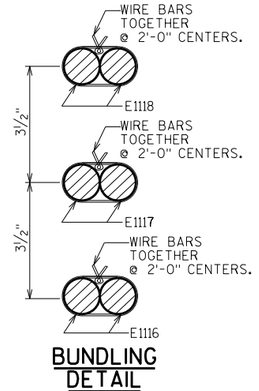
SECTION THRU SHAFT



TYPICAL SECTION THRU CAP



CAP AT ENDS



BUNDLING DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

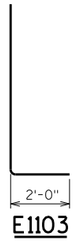
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
E901		37	32'-7"			FOOTING-BOTTOM-HORIZ.-LONGIT.-BOTTOM LAYER
E902		58	20'-7"			FOOTING-BOTTOM-HORIZ.-TRANSVERSE-TOP LAYER
E1103		62	14'-3"	X		FOOTING/SHAFT-VERT.-AT ALL FACES
E404		70	12'-6"			FOOTING/SHAFT-HORIZ.-AT BOTH FACES
E405		70	6'-7"	X		FOOTING/SHAFT-HORIZ.-AT BOTH ENDS
E406		210	3'-2"	X		FOOTING/SHAFT-HORIZ.-TIE BARS
E1107		62	45'-9"			SHAFT/CAP-VERT.-AT ALL FACES
E608		2	14'-9"			CAP-BOTTOM-HORIZ.-BOTH FACES
⚠ E609		22	30'-9"		X	CAP-HORIZ.-BOTH FACES
⚠ E610		10	45'-10"		X	CAP-HORIZ.-BOTH FACES
⚠ E611		40	23'-9"	X	X	CAP-VERT.-STIRRUPS-AT ENDS
E612		10	19'-2"	X		CAP-BOTTOM-VERT.-AT ENDS
E513		10	4'-10"			CAP-VERT.-AT ENDS
E514		12	4'-8"	X		CAP-HORIZ.-AT ENDS
E415		43	4'-5"	X		CAP-TOP-VERT.-BAR CHAIRS
E1116		8	46'-5"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
E1117		8	47'-1"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
E1118		8	47'-9"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
E519		30	6'-0"	X		CAP-TOP-VERT.-ABOVE SHAFT
E720		25	3'-2"			CAP-TOP-VERT.-CENTER-BTWN. BEAM SEATS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

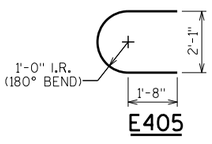
BAR SERIES TABLE

BAR MARK	NUMBER REQUIRED	LENGTH
E609	2 SERIES OF 11 BARS	17'-5" TO 44'-1"
E610	2 SERIES OF 5 BARS	45'-3" TO 46'-5"
E611	2 SERIES OF 20 BARS	15'-9" TO 31'-9"

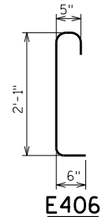
BUNDLE AND TAG EACH SERIES SEPARATELY.



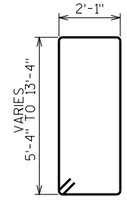
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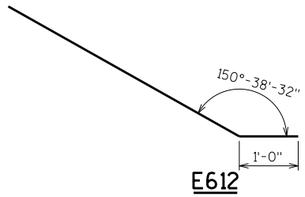
E405



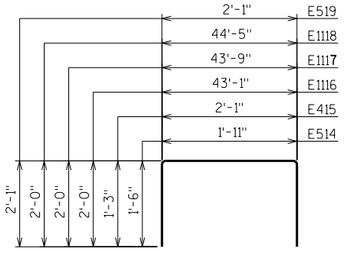
E406



E611



E612



E514 E415 E1116 E1117 E1118 E519

P01 11'-0" × 10" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

P08 E720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

P09 KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" × 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 5 SHAFT & CAP DETAILS

SHEET 26

316

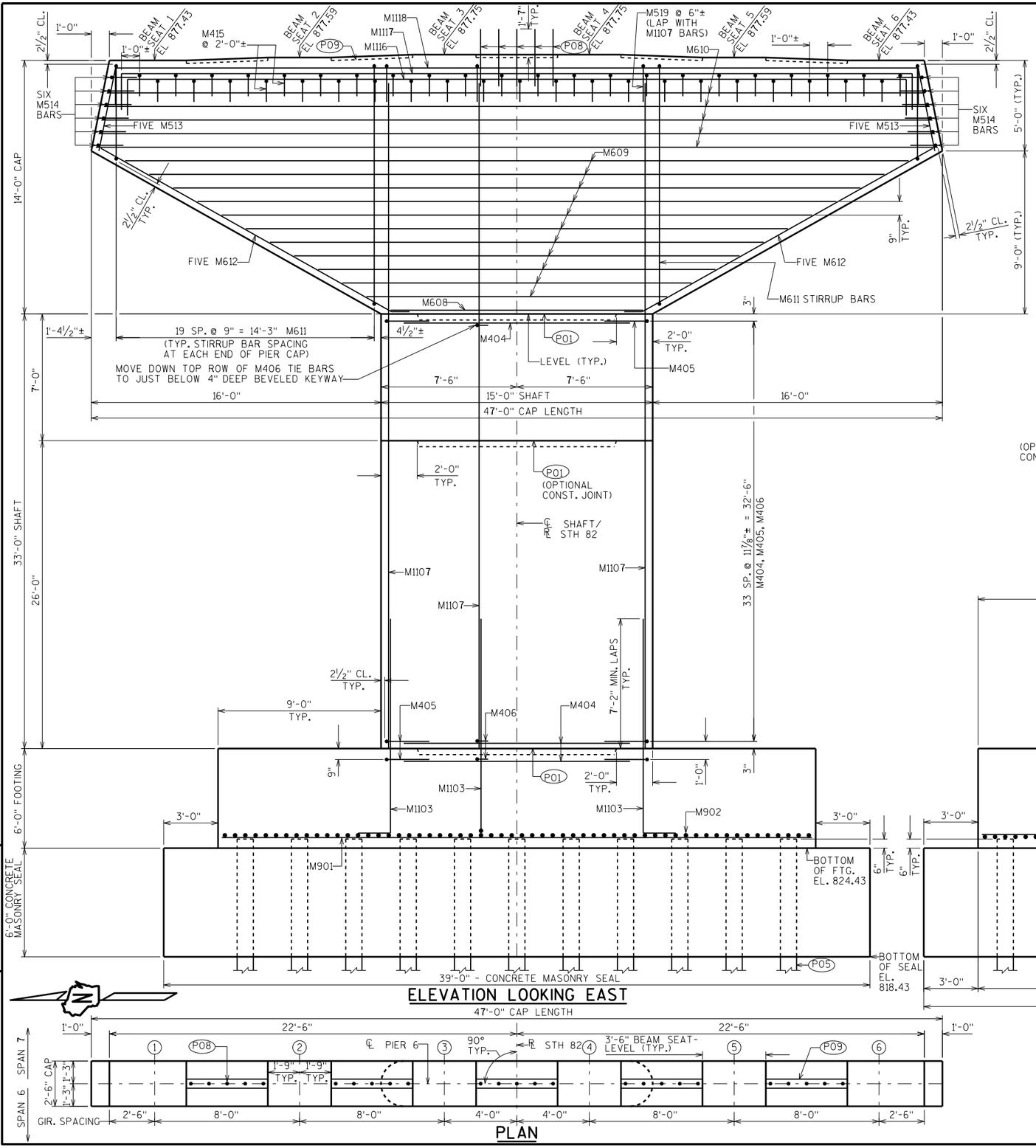
SCALE = 2.50

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8

STATE PROJECT NUMBER

1430-01-73



P01 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

P05 SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 80'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

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P08 M720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

P09 KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 6

SHEET 27

317

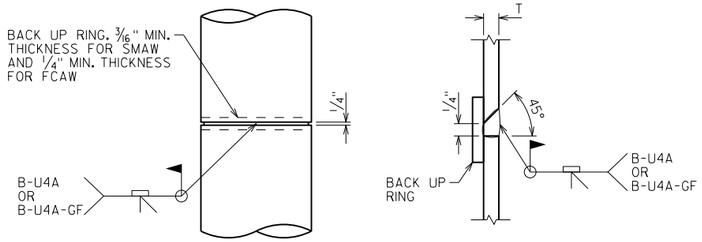
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STATE PROJECT NUMBER

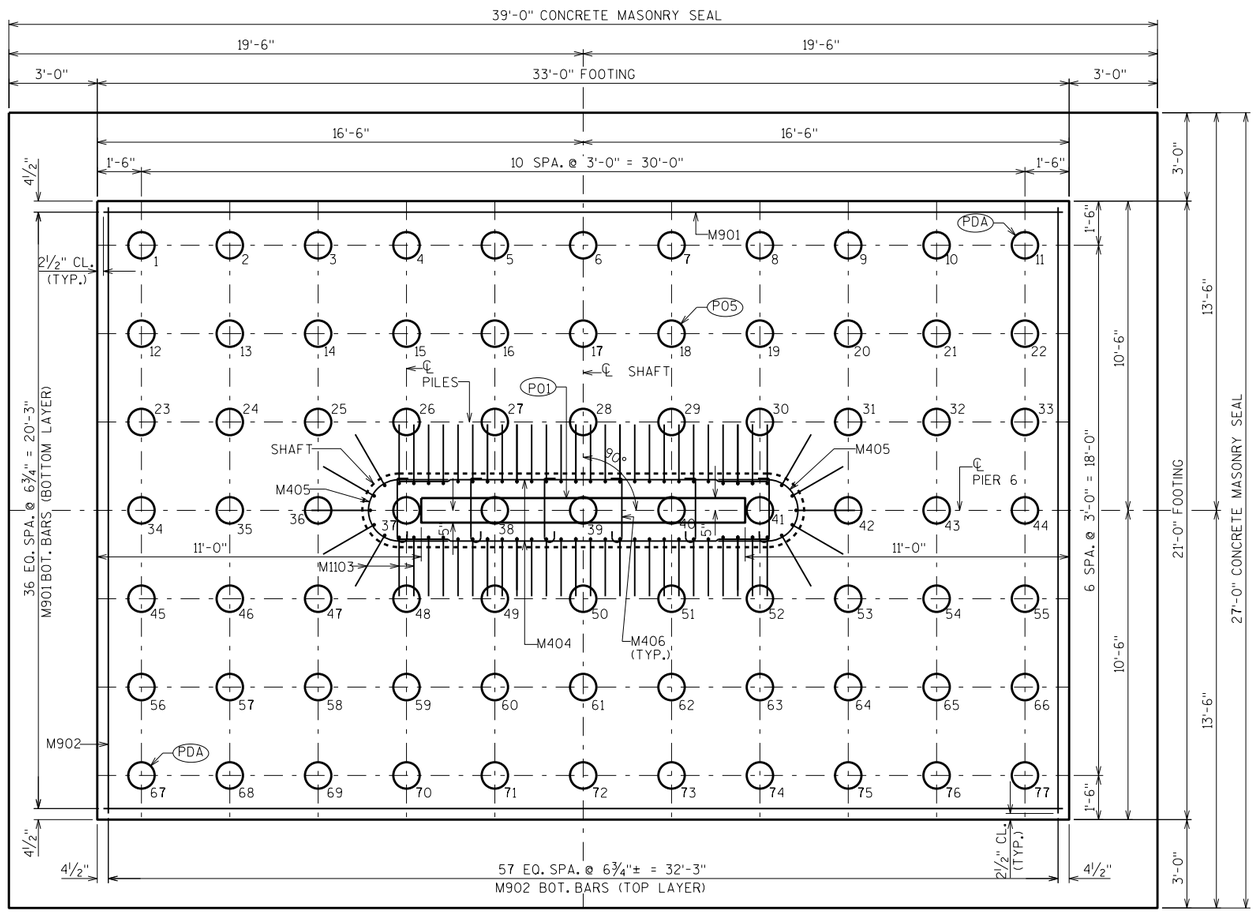
1430-01-73



CAST-IN-PLACE 'PIPE PILE'

C.I.P. PILE WELD DETAIL

PILE DETAILS



CONCRETE MASONRY SEAL/FOOTING/PILE PLAN

(P01) 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P05) SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 80'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

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(PDA) PILE DYNAMIC ANALYZER TESTING AND RESTRIKES REQUIRED AT THIS PILE

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 6 SEAL & FOOTING DETAILS

SHEET 28

318

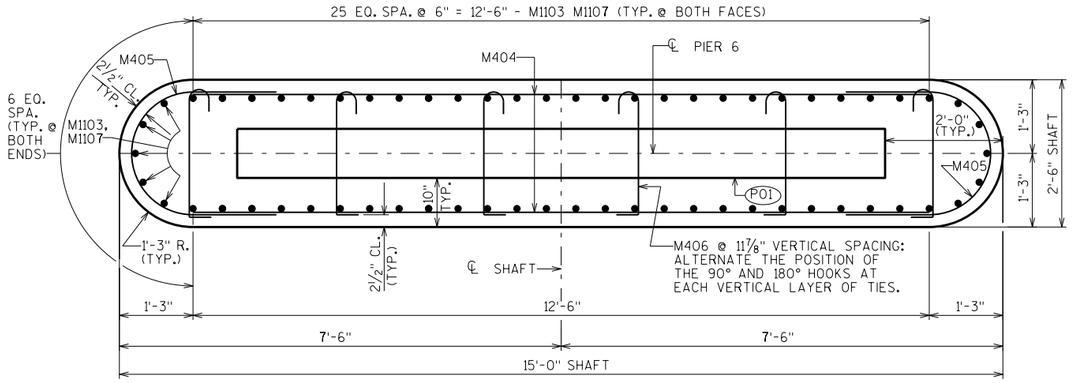
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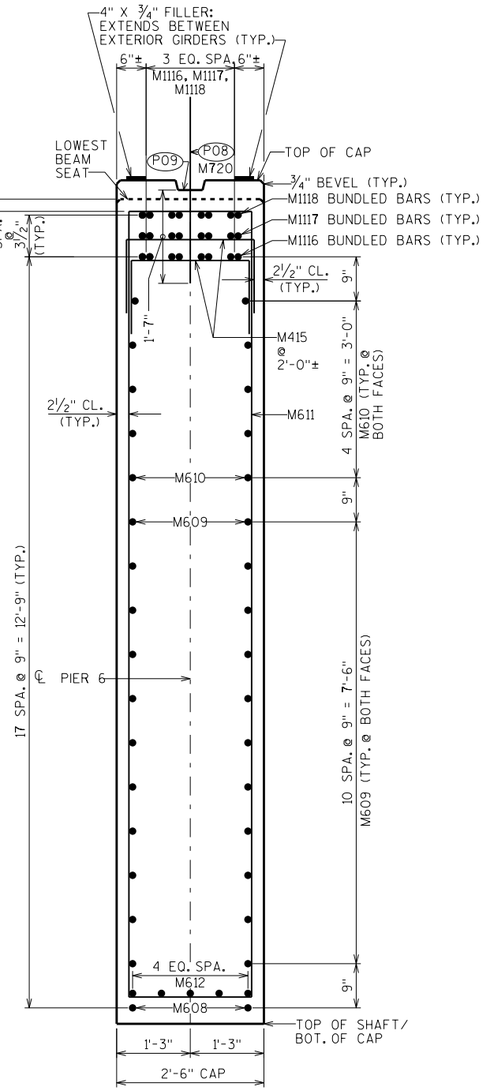
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STATE PROJECT NUMBER

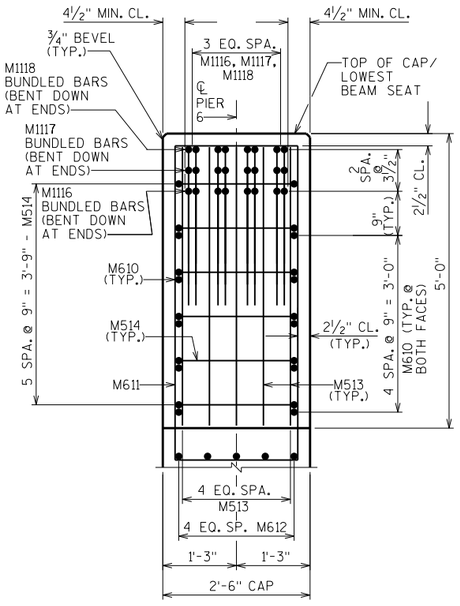
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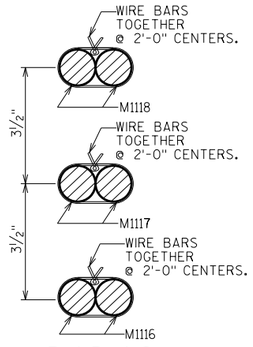
SECTION THRU SHAFT



TYPICAL SECTION THRU CAP



CAP AT ENDS



BUNDLING DETAIL

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

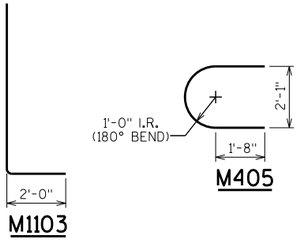
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
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⚠ M609		22	30'-9"		X	CAP-HORIZ.-BOTH FACES
⚠ M610		10	45'-10"		X	CAP-HORIZ.-BOTH FACES
⚠ M611		40	23'-9"	X	X	CAP-VERT.-STIRRUPS-AT ENDS
M612		10	19'-2"	X		CAP-BOTTOM-VERT.-AT ENDS
M513		10	4'-10"			CAP-VERT.-AT ENDS
M514		12	4'-8"	X		CAP-HORIZ.-AT ENDS
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M1118		8	47'-9"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
M519		30	6'-0"	X		CAP-TOP-VERT.-ABOVE SHAFT
M720		25	3'-2"			CAP-TOP-VERT.-CENTER-BTWN. BEAM SEATS

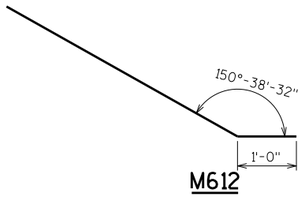
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

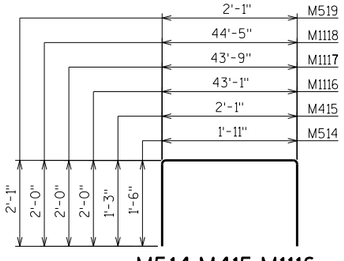
BAR SERIES TABLE

BAR MARK	NUMBER REQUIRED	LENGTH
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BUNDLE AND TAG EACH SERIES SEPARATELY.







(P01) 11'-0" × 10" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P08) M720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" × 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 6 SHAFT & CAP DETAILS

SHEET 29

319

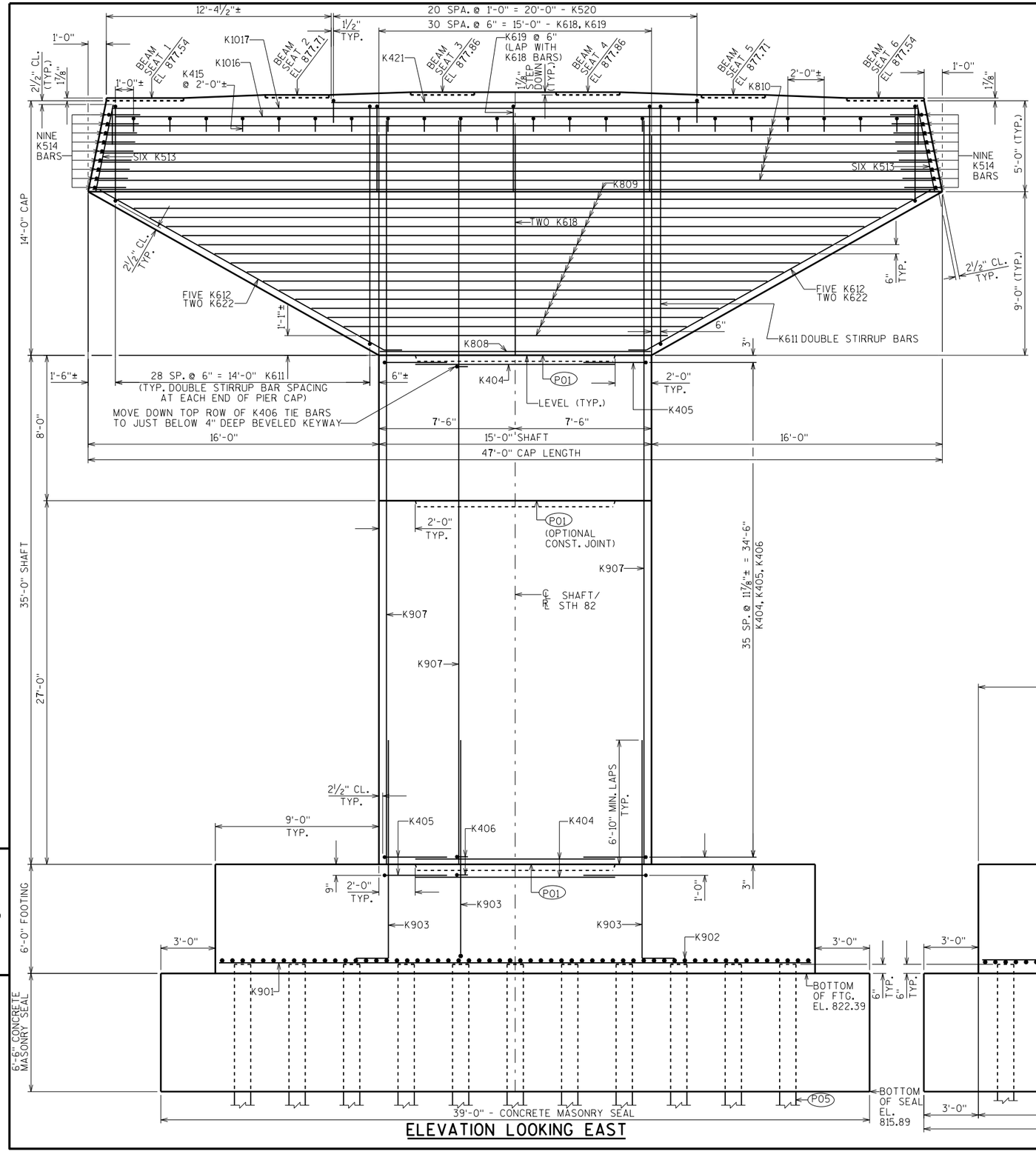
SCALE = 2.50

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8

STATE PROJECT NUMBER

1430-01-73



P01 11'-0" x 16" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

P05 SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 85'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY	PLANS CK'D.
JPH	NAR

PIER 7

SHEET 30

320

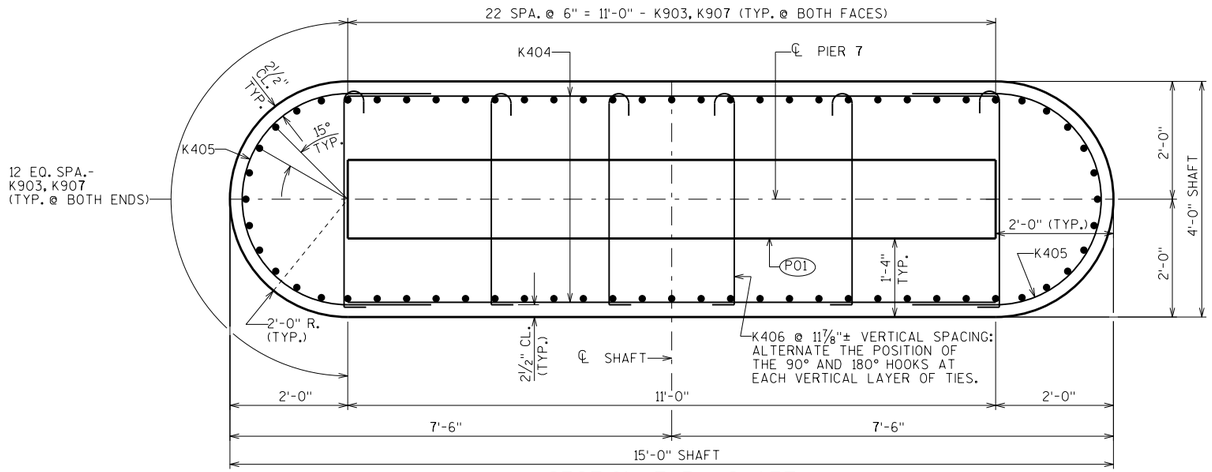
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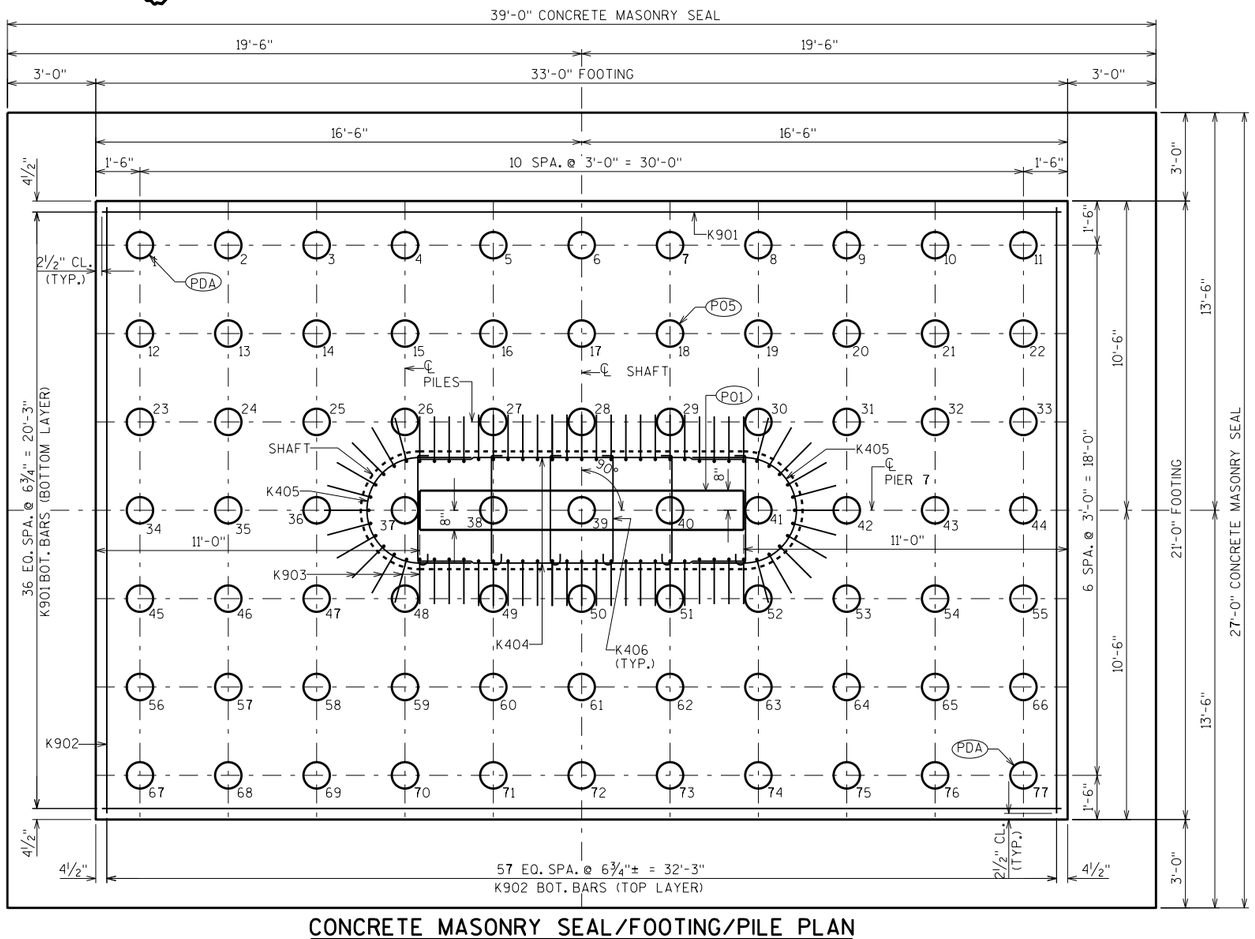
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STATE PROJECT NUMBER

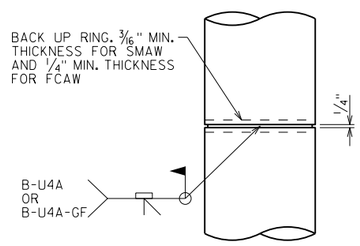
1430-01-73



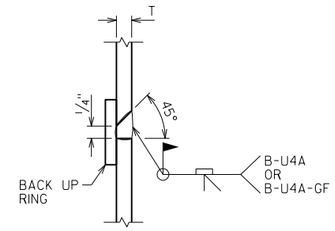
SECTION THRU SHAFT



CONCRETE MASONRY SEAL/FOOTING/PILE PLAN



CAST-IN-PLACE 'PIPE PILE'



C.I.P. PILE WELD DETAIL

PILE DETAILS

(P01) 11'-0" x 16" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P05) SUPPORT PIER ON 10¾" DIA. X 0.5" CIP CONCRETE PILING, ESTIMATED 85'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS * PER PILE AS DETERMINED BY THE PILE DRIVING ANALYZER.

*THE FACTORED AXIAL COMPRESSION RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.65 USING THE PILE DRIVING ANALYZER TO DETERMINE DRIVEN PILE CAPACITY.

(PDA) PILE DYNAMIC ANALYZER TESTING AND RESTRIKES REQUIRED AT THIS PILE

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

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PIER 7 FOOTING & SHAFT DETAILS

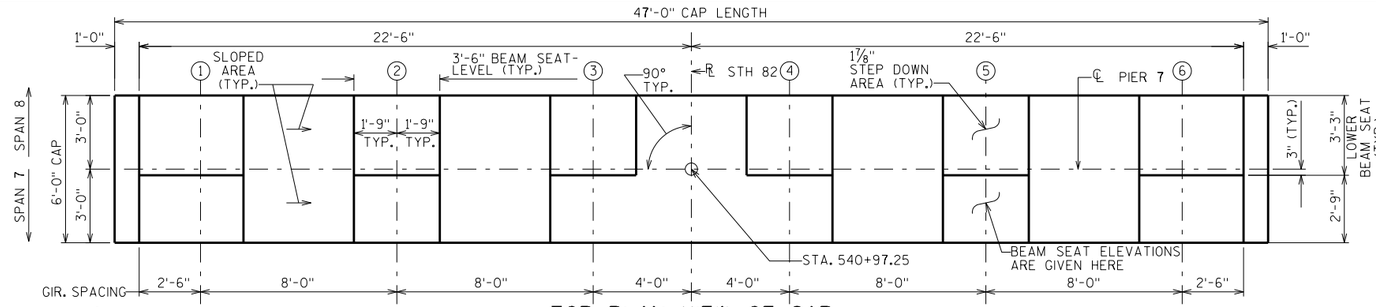
SHEET 31

321

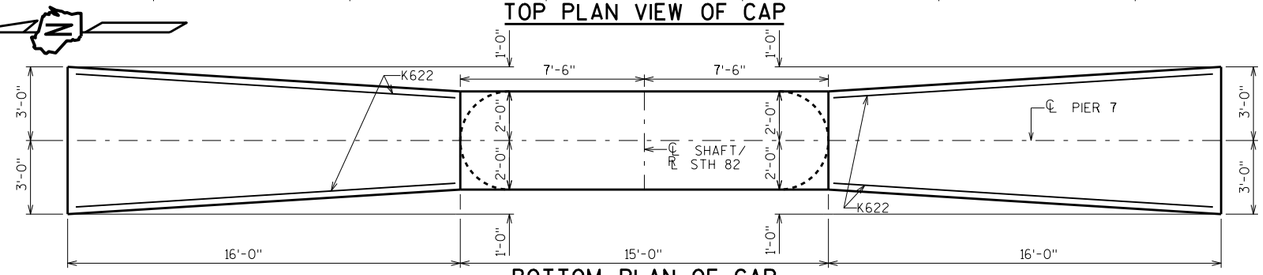
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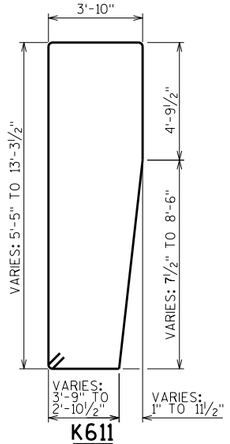
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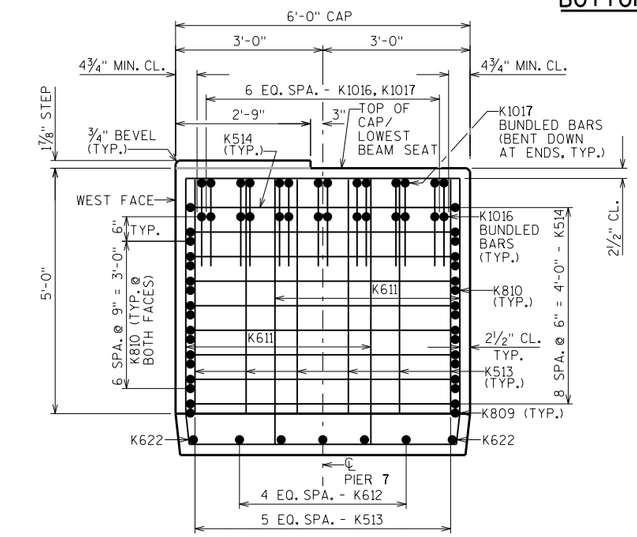
TOP PLAN VIEW OF CAP



BOTTOM PLAN OF CAP

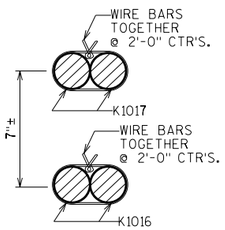


K611

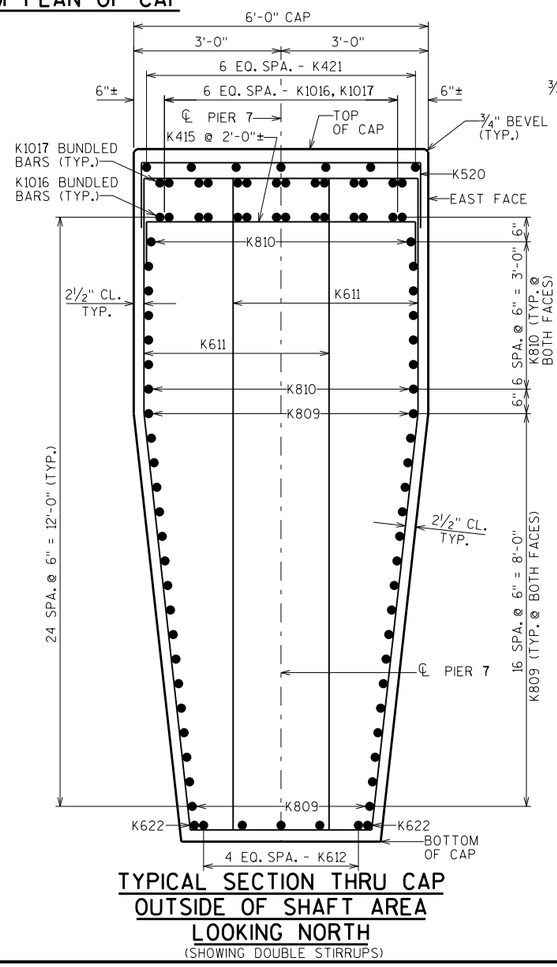


CAP AT ENDS LOOKING NORTH

(SHOWING DOUBLE STIRRUPS)

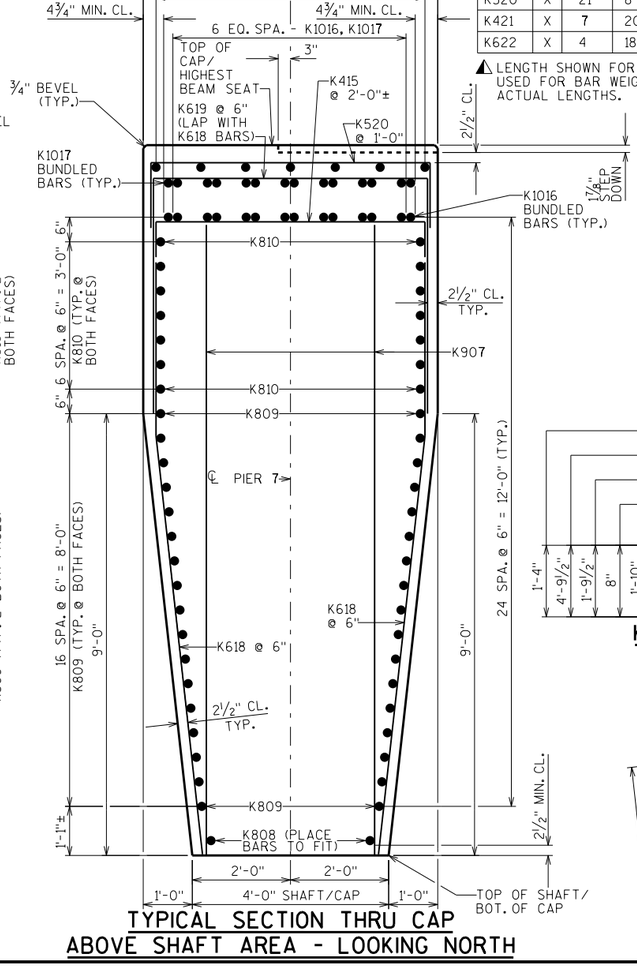


BUNDLING DETAIL



TYPICAL SECTION THRU CAP OUTSIDE OF SHAFT AREA LOOKING NORTH

(SHOWING DOUBLE STIRRUPS)



TYPICAL SECTION THRU CAP ABOVE SHAFT AREA - LOOKING NORTH

STATE PROJECT NUMBER

1430-01-73

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

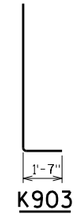
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
K901		37	32'-7"			FOOTING-BOTTOM-HORIZ.-LONGIT.-BOTTOM LAYER
K902		58	20'-7"			FOOTING-BOTTOM-HORIZ.-TRANSVERSE-TOP LAYER
K903	X	68	13'-6"	X		FOOTING/SHAFT-VERT.-AT ALL FACES
K404	X	74	11'-0"			FOOTING/SHAFT-HORIZ.-AT BOTH FACES
K405	X	74	9'-2"	X		FOOTING/SHAFT-HORIZ.-AT BOTH ENDS
K406	X	222	4'-8"	X		FOOTING/SHAFT-HORIZ.-TIE BARS
K907	X	68	47'-10"			SHAFT/CAP-VERT.-AT ALL FACES
K808	X	2	14'-11"			CAP-BOTTOM-HORIZ.-BOTH FACES
⚠ K809	X	34	31'-7"		X	CAP-HORIZ.-BOTH FACES
⚠ K810	X	14	45'-9"		X	CAP-HORIZ.-BOTH FACES
⚠ K611	X	116	26'-10"	X	X	CAP-VERT.-STIRRUPS-AT ENDS
K612	X	10	19'-0"	X		CAP-BOTTOM-VERT.-AT ENDS
K513	X	12	4'-10"			CAP-VERT.-AT ENDS
K514	X	18	8'-10"	X		CAP-HORIZ.-AT ENDS
K415	X	22	6'-9"	X		CAP-TOP-VERT.-BAR CHAIRS
K1016	X	14	44'-0"			CAP-TOP-HORIZ.-BUNDLED BARS
K1017	X	14	47'-5"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
K618	X	62	12'-2"	X		CAP-VERT.-BOTH FACES-ABOVE SHAFT
K619	X	31	14'-10"	X		CAP-TOP-VERT.-ABOVE SHAFT
K520	X	21	8'-0"	X		CAP-TOP-VERT.-BETWEEN BEAM SEATS 2 & 5
K421	X	7	20'-3"			CAP-TOP-HORIZ.-BETWEEN BEAM SEATS 2 & 5
K622	X	4	18'-0"			CAP-BOTTOM-VERT.-BOTH FACES-AT ENDS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

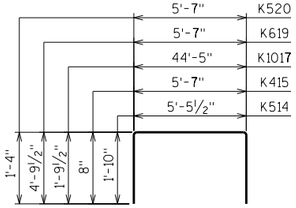
BAR SERIES TABLE

BAR MARK	NUMBER REQUIRED	LENGTH
K809	2 SERIES OF 17 BARS	17'-4" TO 45'-10"
K810	2 SERIES OF 7 BARS	45'-2" TO 46'-4"
K611	4 SERIES OF 29 BARS	19'-4" TO 34'-4"

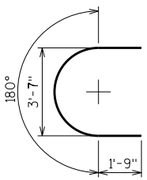
BUNDLE AND TAG EACH SERIES SEPARATELY.



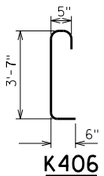
K903



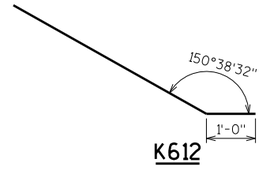
K514 K415 K1017 K619 K520



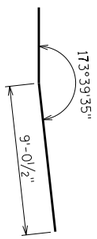
K405



K406



K612



K618

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

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PIER 7 CAP DETAILS

SHEET 32

322

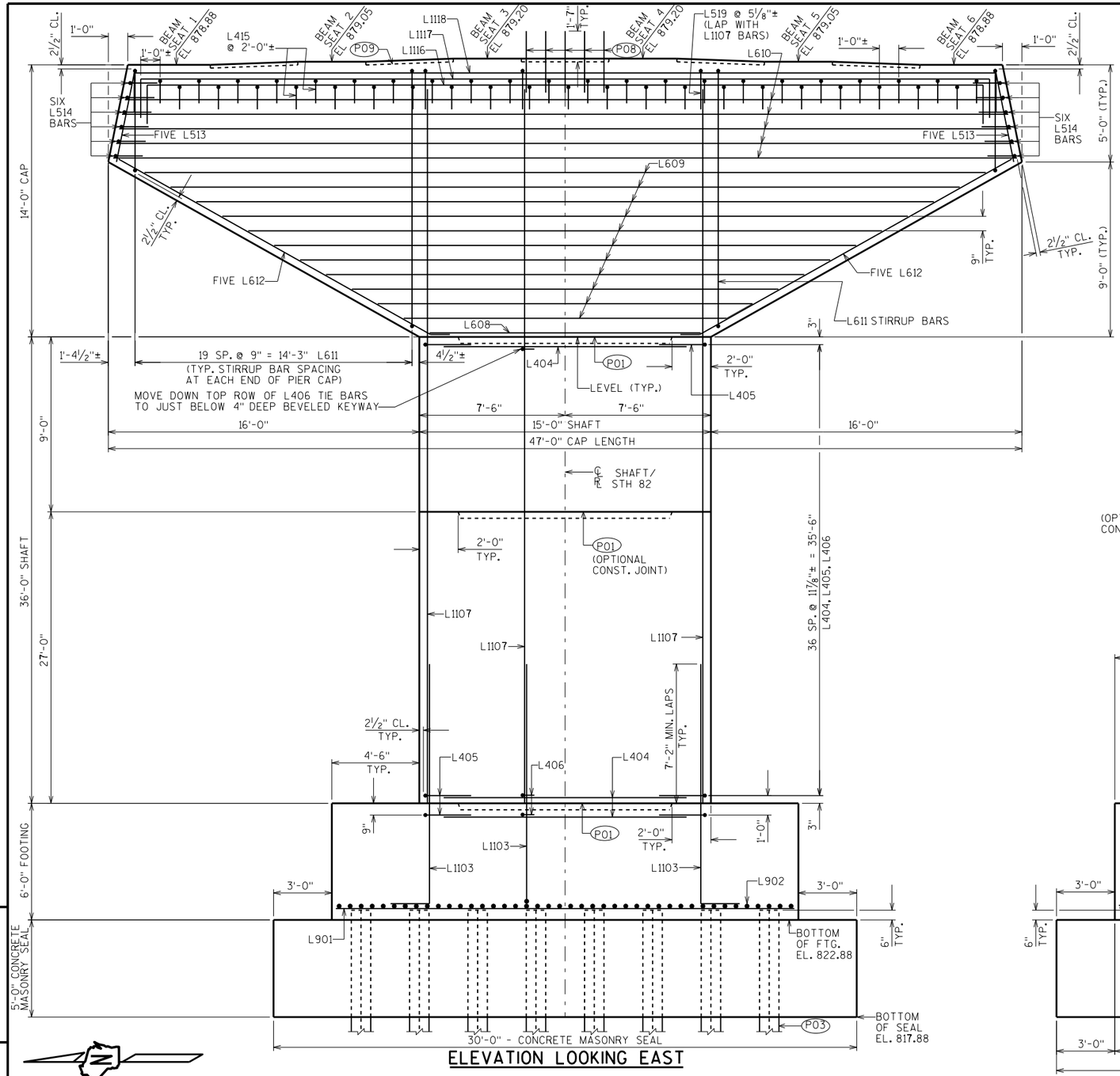
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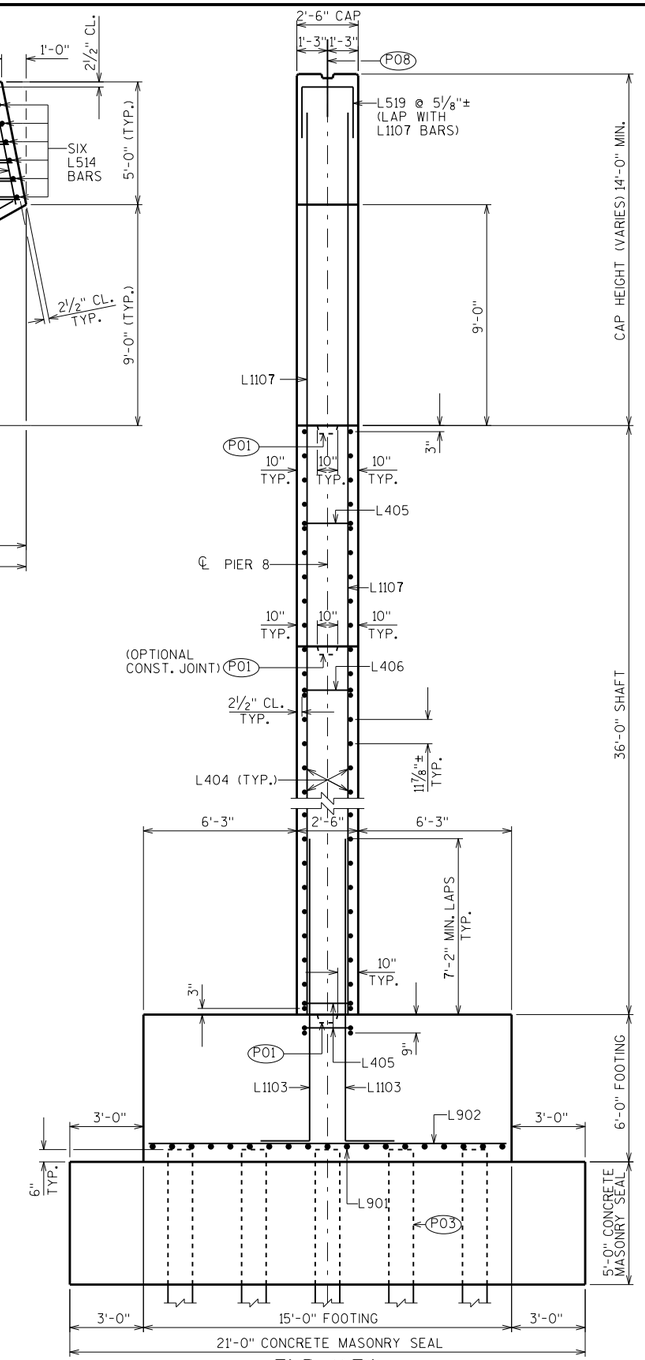
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STATE PROJECT NUMBER

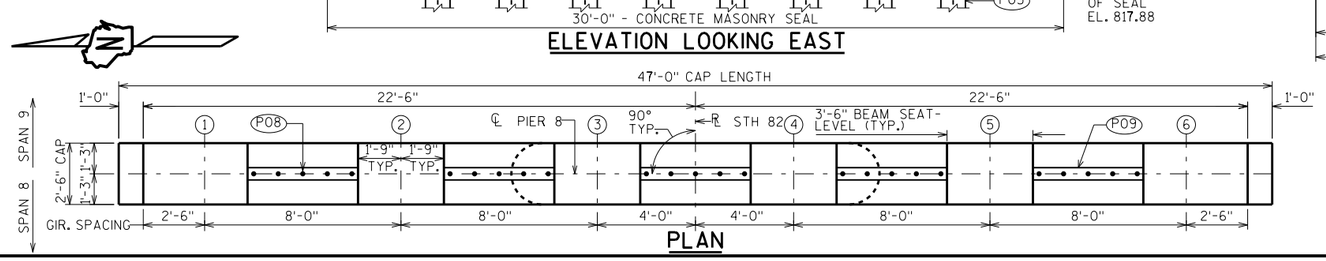
1430-01-73



ELEVATION LOOKING EAST



END VIEW



PLAN

P01 11'-0" × 10" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

P03 SUPPORT PIER ON HP 12 × 53 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

P08 L720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

P09 KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" × 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

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PIER 8

SHEET 33

323

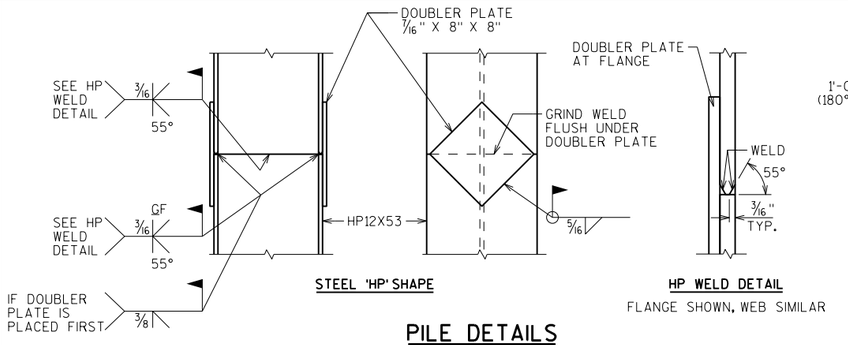
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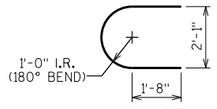
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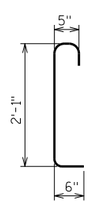
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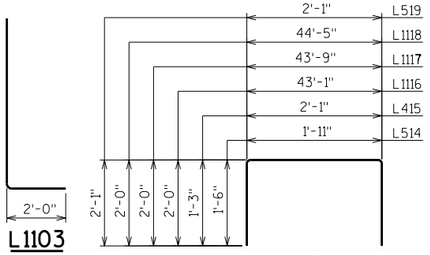
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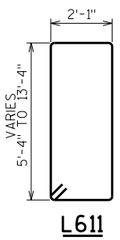
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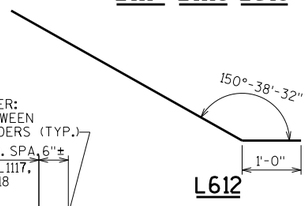












BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

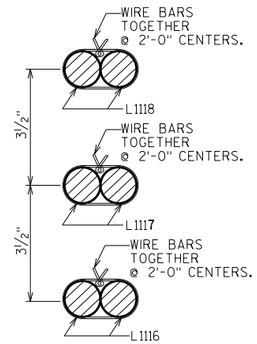
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
L901		19	23'-7"			FOOTING-BOTTOM-HORIZ.-LONGIT.-BOTTOM LAYER
L902		42	14'-7"			FOOTING-BOTTOM-HORIZ.-TRANSVERSE-TOP LAYER
L1103		72	14'-3"	X		FOOTING/SHAFT-VERT.-AT ALL FACES
L404		76	12'-6"			FOOTING/SHAFT-HORIZ.-AT BOTH FACES
L405		76	6'-7"	X		FOOTING/SHAFT-HORIZ.-AT BOTH ENDS
L406		228	3'-2"	X		FOOTING/SHAFT-HORIZ.-TIE BARS
L1107		72	48'-9"			SHAFT/CAP-VERT.-AT ALL FACES
L608		2	14'-9"			CAP-BOTTOM-HORIZ.-BOTH FACES
⚠ L609		22	30'-9"		X	CAP-HORIZ.-BOTH FACES
⚠ L610		10	45'-10"		X	CAP-HORIZ.-BOTH FACES
⚠ L611		40	23'-9"	X	X	CAP-VERT.-STIRRUPS-AT ENDS
L612		10	19'-2"	X		CAP-BOTTOM-VERT.-AT ENDS
L513		10	4'-10"			CAP-VERT.-AT ENDS
L514		12	4'-8"	X		CAP-HORIZ.-AT ENDS
L415		43	4'-5"	X		CAP-TOP-VERT.-BAR CHAIRS
L1116		8	46'-5"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
L1117		8	47'-1"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
L1118		8	47'-9"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
L519		34	6'-0"	X		CAP-TOP-VERT.-ABOVE SHAFT
L720		25	3'-2"			CAP-TOP-VERT.-CENTER-BTWN. BEAM SEATS

⚠ 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

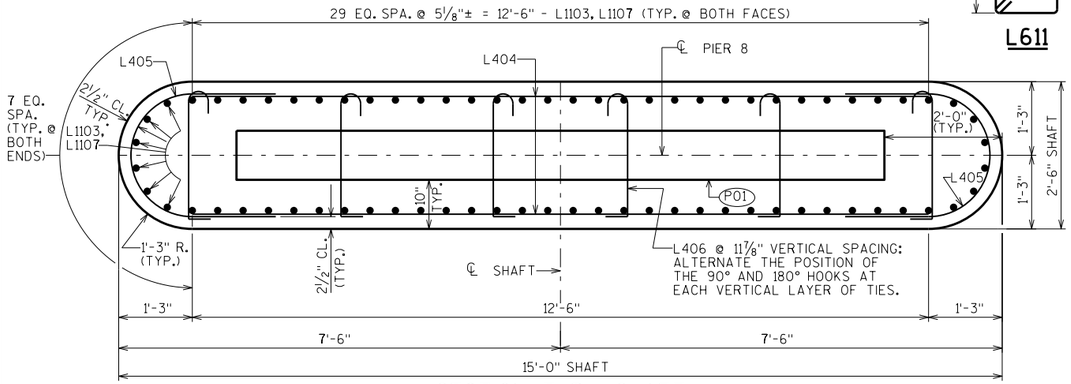
BAR MARK	NUMBER REQUIRED	LENGTH
L609	2 SERIES OF 11 BARS	17'-5" TO 44'-1"
L610	2 SERIES OF 5 BARS	45'-3" TO 46'-5"
L611	2 SERIES OF 20 BARS	15'-9" TO 31'-9"

BUNDLE AND TAG EACH SERIES SEPARATELY.

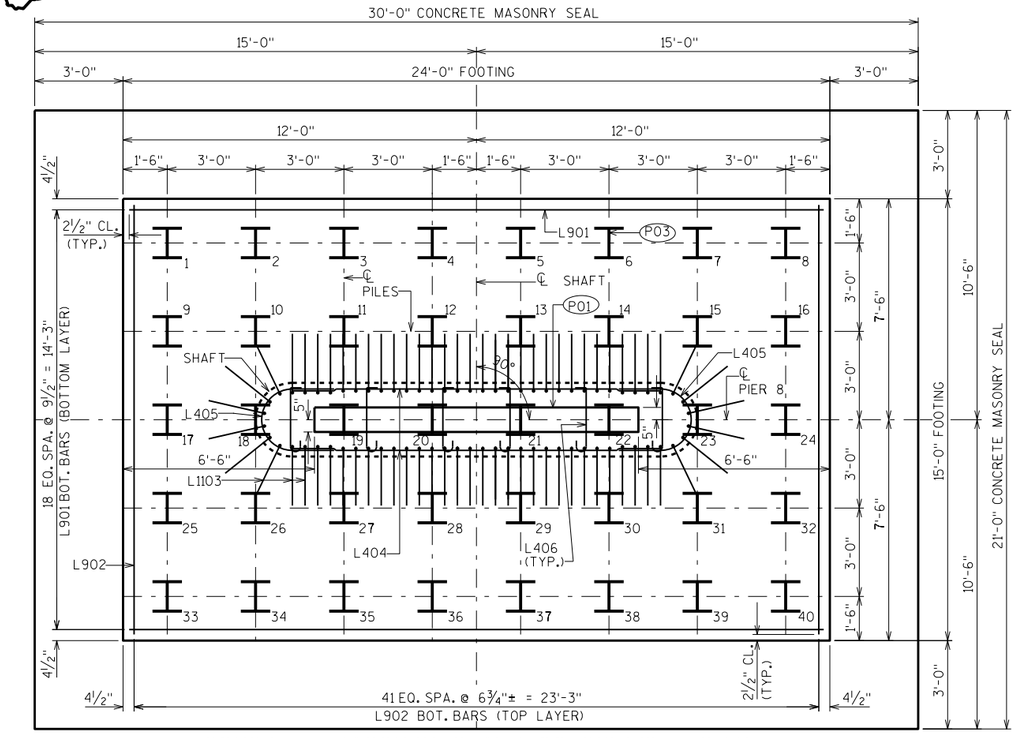


BUNDLING DETAIL

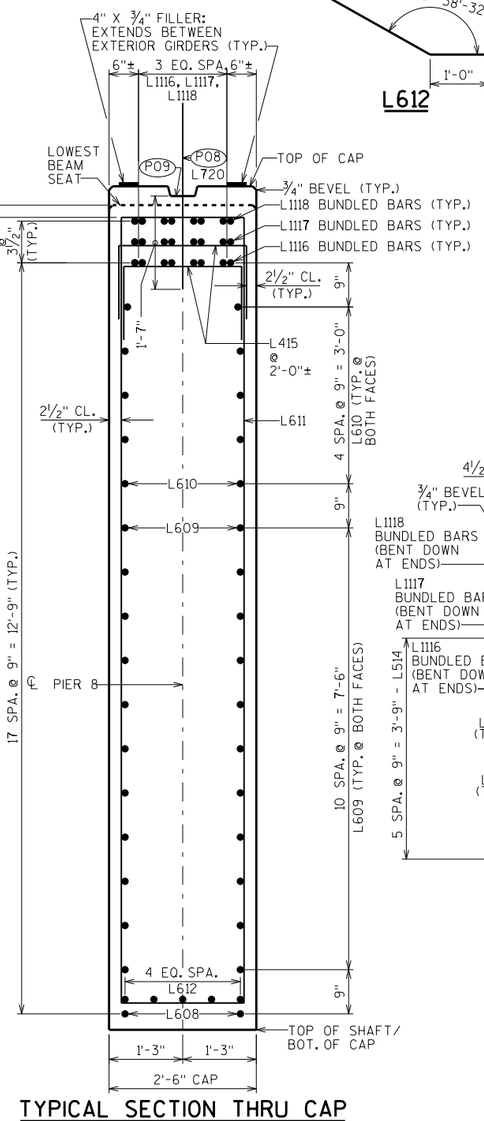
PILE DETAILS



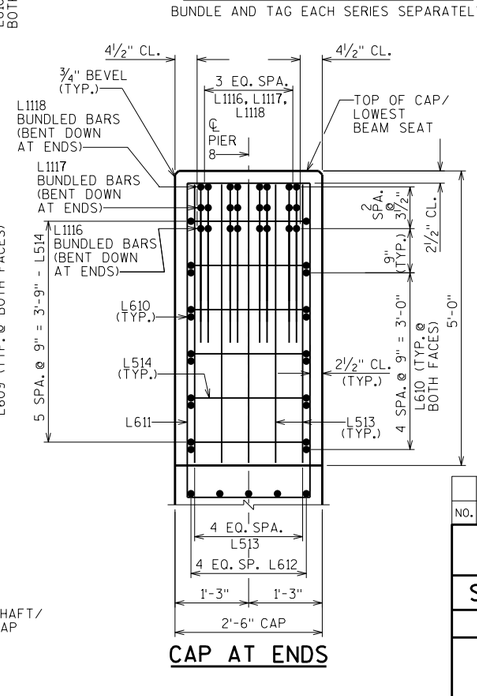
SECTION THRU SHAFT



CONCRETE MASONRY SEAL/FOOTING/PILE PLAN



TYPICAL SECTION THRU CAP



CAP AT ENDS

(P01) 11'-0" × 10" × 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P03) SUPPORT PIER ON HP 12 × 53 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P08) L720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" × 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 8 DETAILS

SHEET 34

324

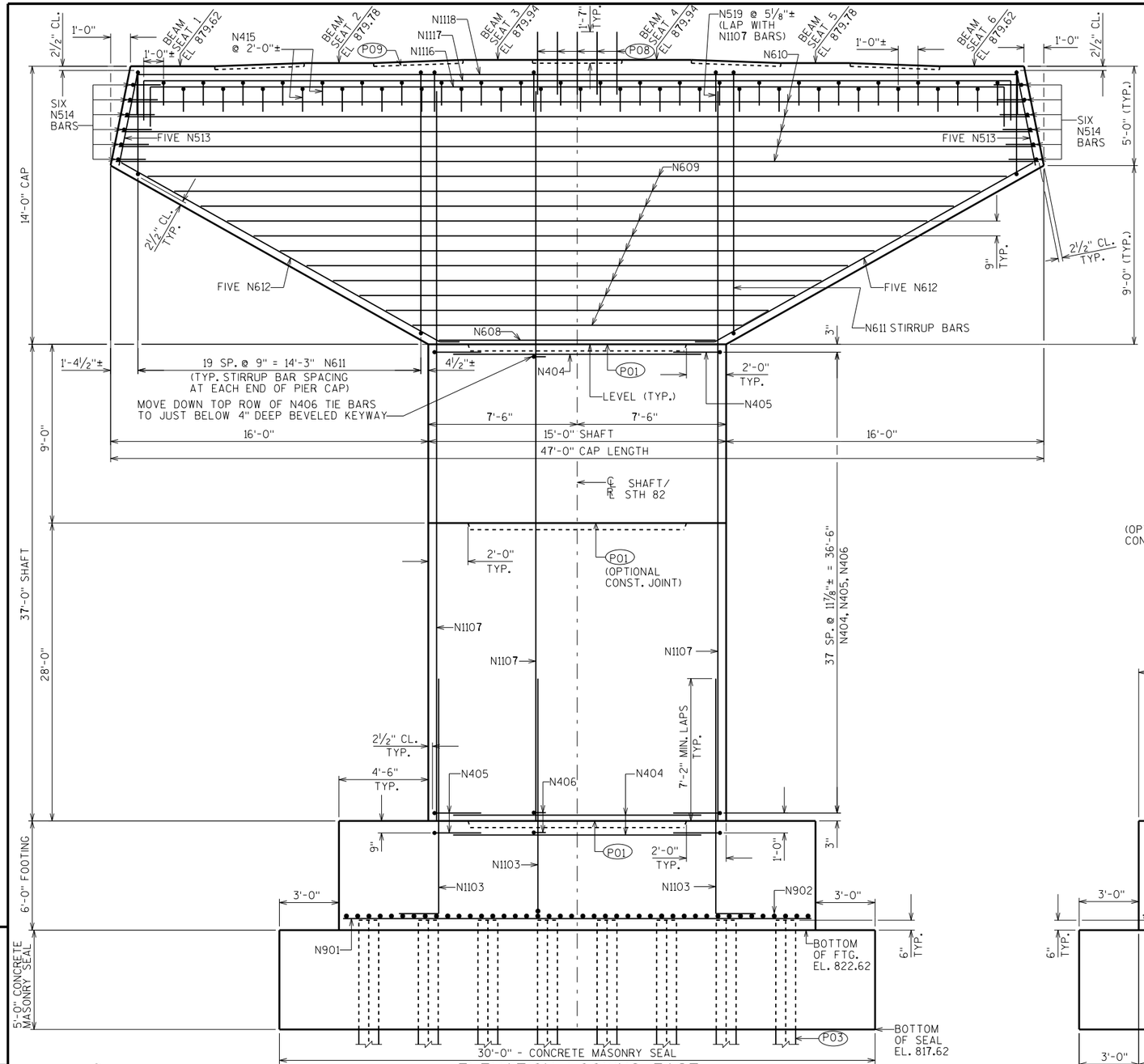
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STATE PROJECT NUMBER

1430-01-73



P01 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

P03 SUPPORT PIER ON HP 12 x 53 STEEL PILING, PLACED IN PRE-BORED HOLES CORED 5 FEET INTO ROCK. NO DRIVING IS REQUIRED. ESTIMATED 35'-0" LONG.

P08 N720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

P09 KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 9

SHEET 35

325

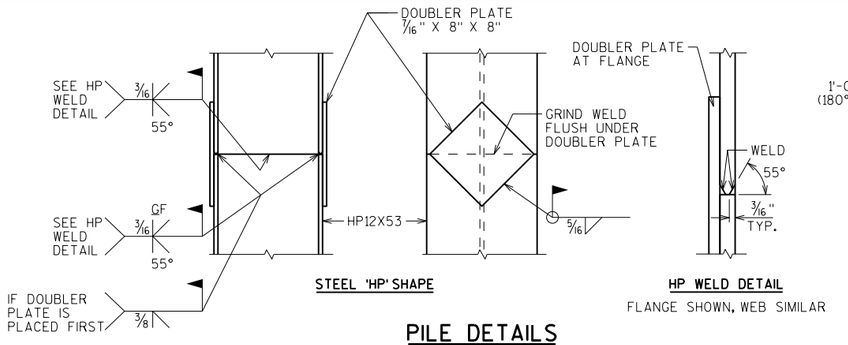
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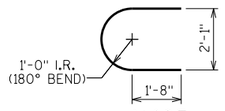
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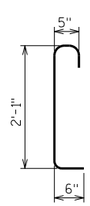
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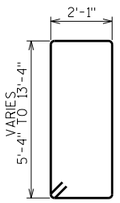
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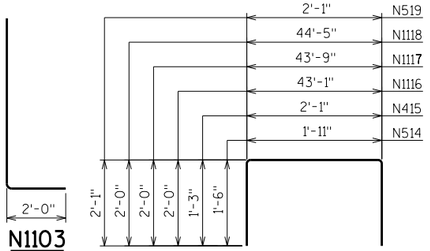
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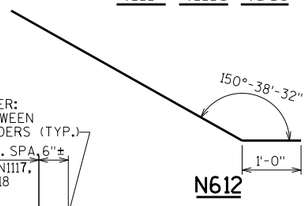




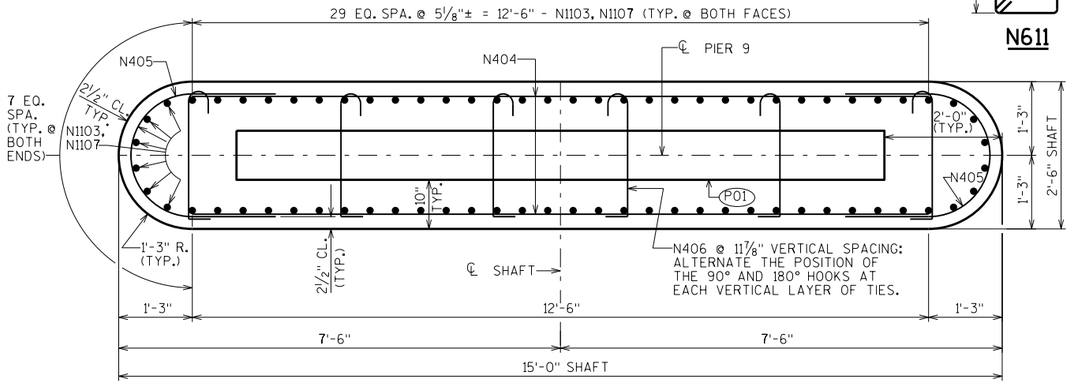




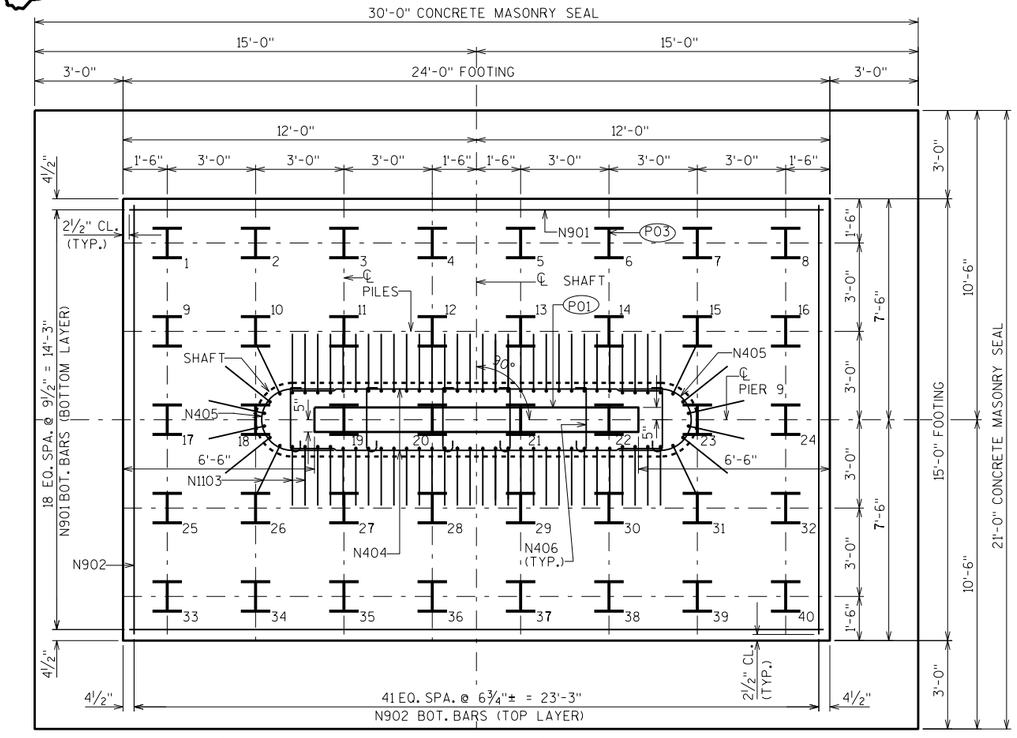




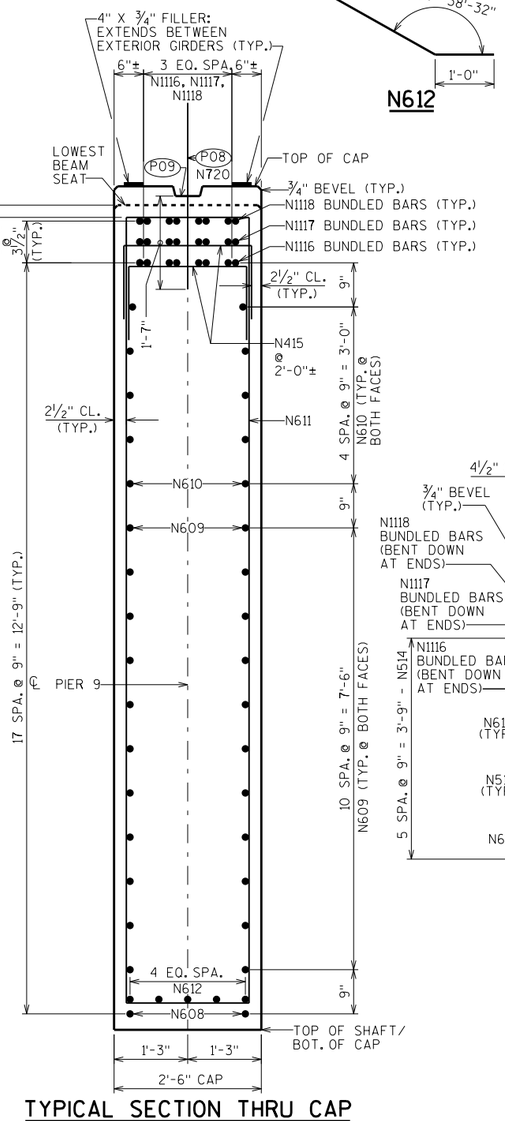
PILE DETAILS



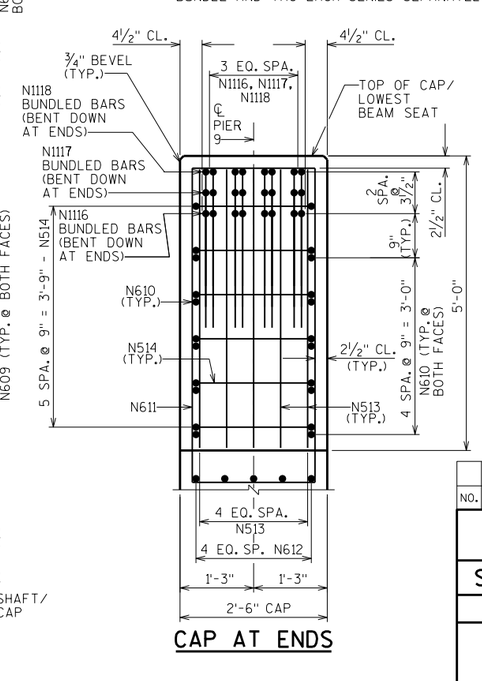
SECTION THRU SHAFT



CONCRETE MASONRY SEAL/FOOTING/PILE PLAN



TYPICAL SECTION THRU CAP



CAP AT ENDS

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

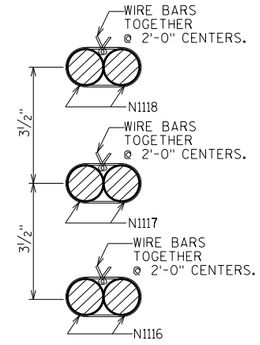
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
N901		19	23'-7"			FOOTING-BOTTOM-HORIZ.-LONGIT.-BOTTOM LAYER
N902		42	14'-7"			FOOTING-BOTTOM-HORIZ.-TRANSVERSE-TOP LAYER
N1103		72	14'-3"	X		FOOTING/SHAFT-VERT.-AT ALL FACES
N404		78	12'-6"			FOOTING/SHAFT-HORIZ.-AT BOTH FACES
N405		78	6'-7"	X		FOOTING/SHAFT-HORIZ.-AT BOTH ENDS
N406		234	3'-2"	X		FOOTING/SHAFT-HORIZ.-TIE BARS
N1107		72	49'-9"			SHAFT/CAP-VERT.-AT ALL FACES
N608		2	14'-9"			CAP-BOTTOM-HORIZ.-BOTH FACES
⚠ N609		22	30'-9"		X	CAP-HORIZ.-BOTH FACES
⚠ N610		10	45'-10"		X	CAP-HORIZ.-BOTH FACES
⚠ N611		40	23'-9"	X	X	CAP-VERT.-STIRRUPS-AT ENDS
N612		10	19'-2"	X		CAP-BOTTOM-VERT.-AT ENDS
N513		10	4'-10"			CAP-VERT.-AT ENDS
N514		12	4'-8"	X		CAP-HORIZ.-AT ENDS
N415		43	4'-5"	X		CAP-TOP-VERT.-BAR CHAIRS
N1116		8	46'-5"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
N1117		8	47'-1"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
N1118		8	47'-9"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
N519		34	6'-0"	X		CAP-TOP-VERT.-ABOVE SHAFT
N720		25	3'-2"			CAP-TOP-VERT.-CENTER-BTWN. BEAM SEATS

⚠ 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

BAR MARK	NUMBER REQUIRED	LENGTH
N609	2 SERIES OF 11 BARS	17'-5" TO 44'-1"
N610	2 SERIES OF 5 BARS	45'-3" TO 46'-5"
N611	2 SERIES OF 20 BARS	15'-9" TO 31'-9"

BUNDLE AND TAG EACH SERIES SEPARATELY.



BUNDLING DETAIL

(P01) 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, PLACED IN PRE-BORED HOLES CORED 5 FEET INTO ROCK. NO DRIVING IS REQUIRED. ESTIMATED 35'-0" LONG.

(P08) N720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 9 DETAILS

SHEET 36

326

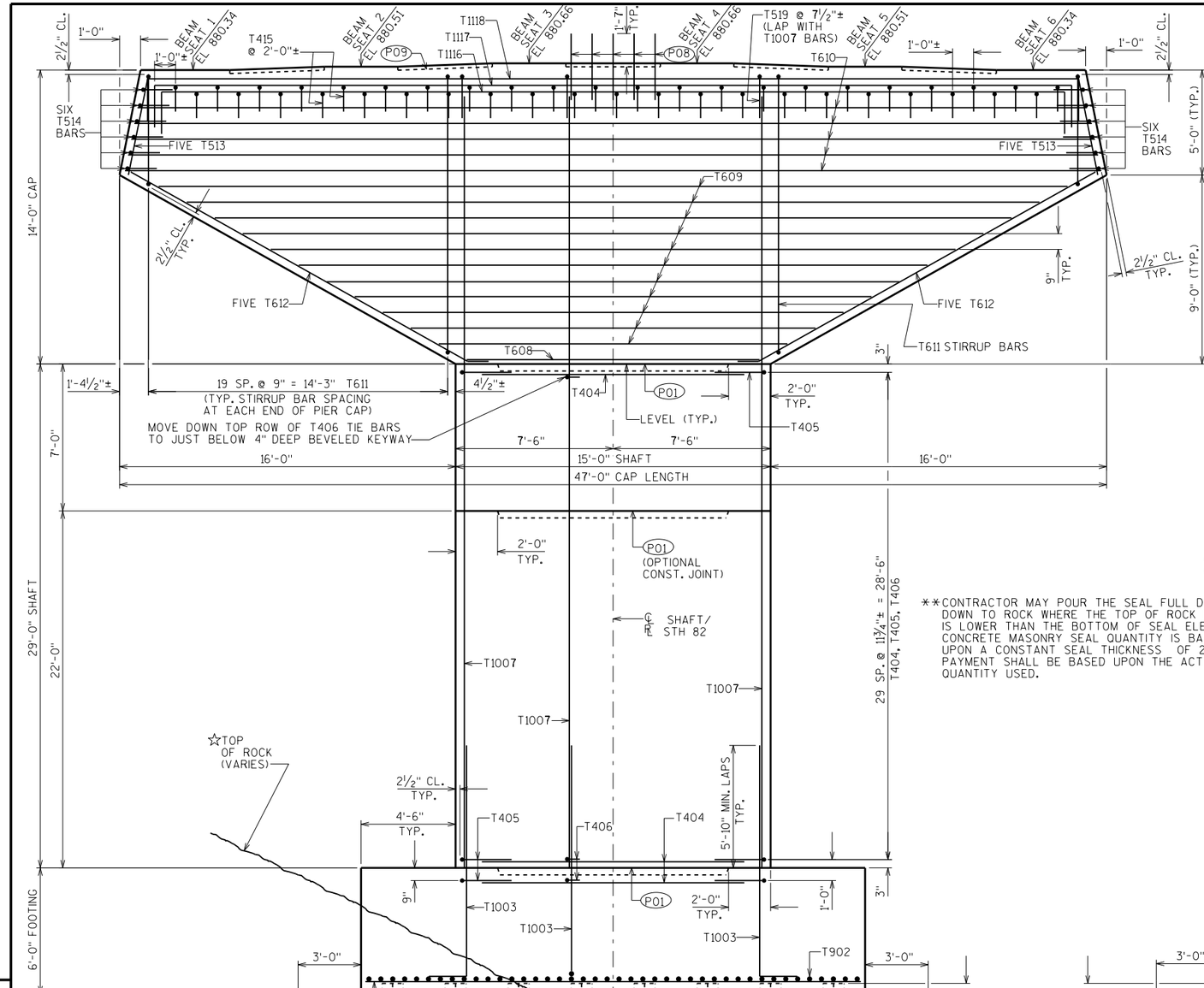
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STATE PROJECT NUMBER

1430-01-73



**CONTRACTOR MAY POUR THE SEAL FULL DEPTH DOWN TO ROCK WHERE THE TOP OF ROCK ELEVATION IS LOWER THAN THE BOTTOM OF SEAL ELEVATION. CONCRETE MASONRY SEAL QUANTITY IS BASED UPON A CONSTANT SEAL THICKNESS OF 2'-6". PAYMENT SHALL BE BASED UPON THE ACTUAL QUANTITY USED.

☆IT IS ANTICIPATED THAT ROCK EXCAVATION WILL BE REQUIRED TO OBTAIN THE PLAN SEAL & FOOTING ELEVATIONS. SEE NEXT SHEET FOR APPROXIMATE TOP OF ROCK ELEVATIONS AT THE SEAL CORNERS.

(P01) 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, PLACED IN PRE-BORED HOLES CORED 5 FEET INTO ROCK. NO DRIVING IS REQUIRED. ESTIMATED 20'-0" LONG.

(P08) T720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 10

SHEET 37

327

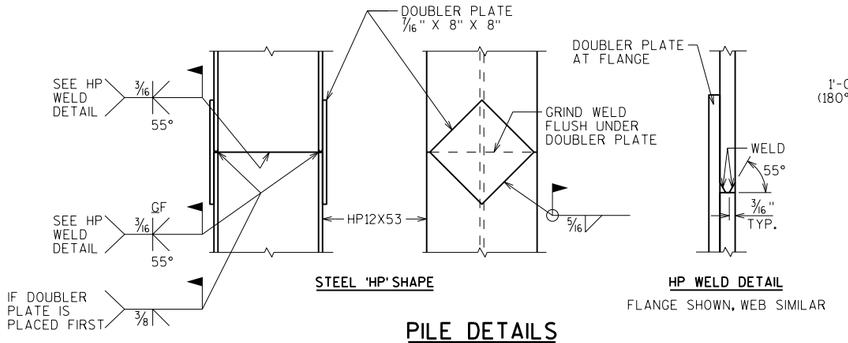
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STATE PROJECT NUMBER

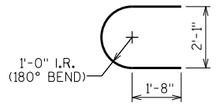
1430-01-73



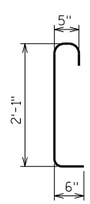
STEEL 'HP' SHAPE

HP WELD DETAIL

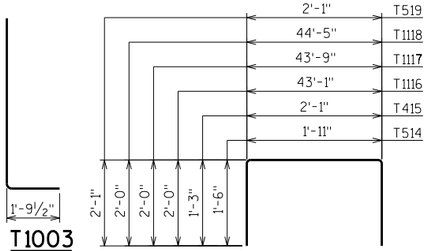
FLANGE SHOWN, WEB SIMILAR



T405

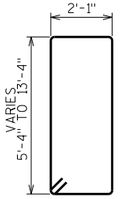


T406

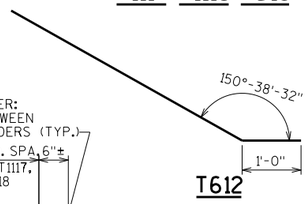


T1003

T514 T415 T1116
T1117 T1118 T519

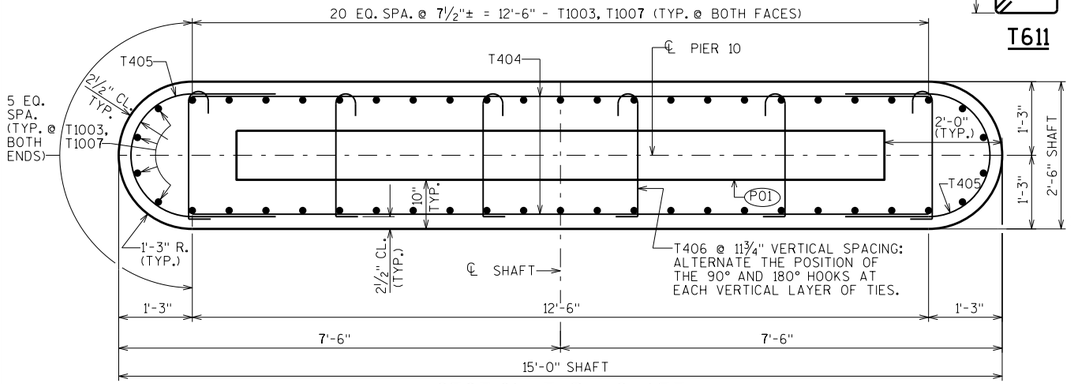


T611

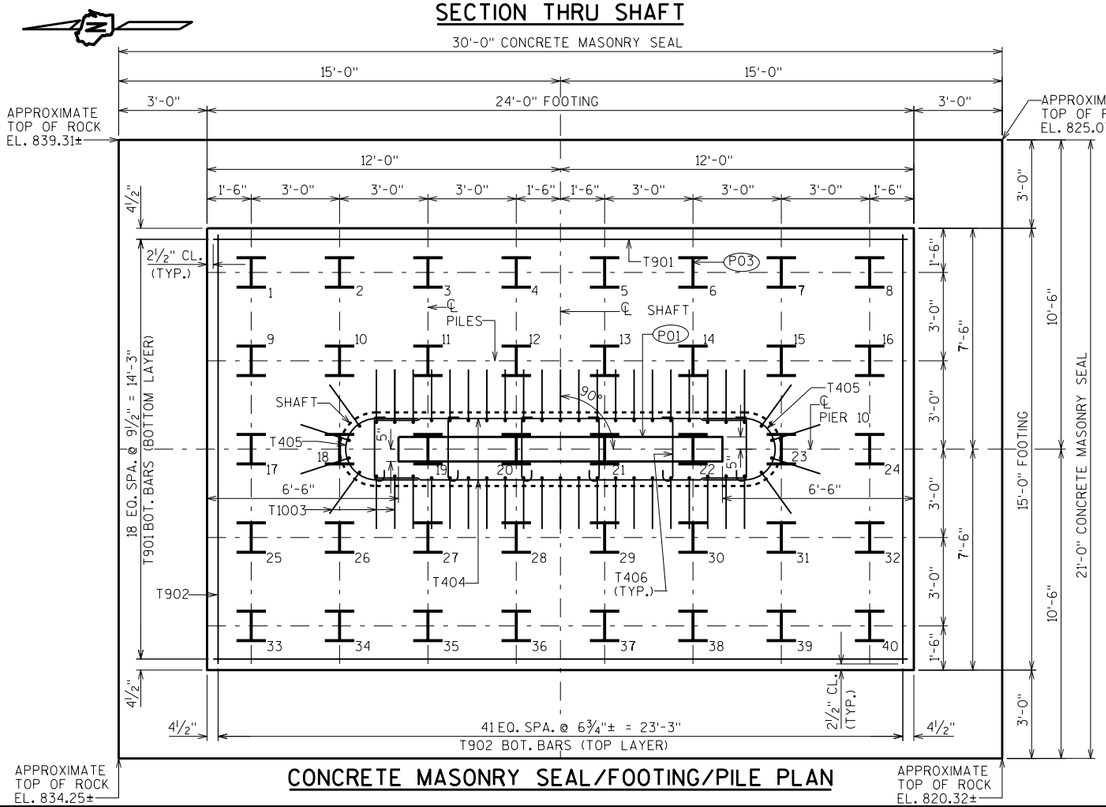


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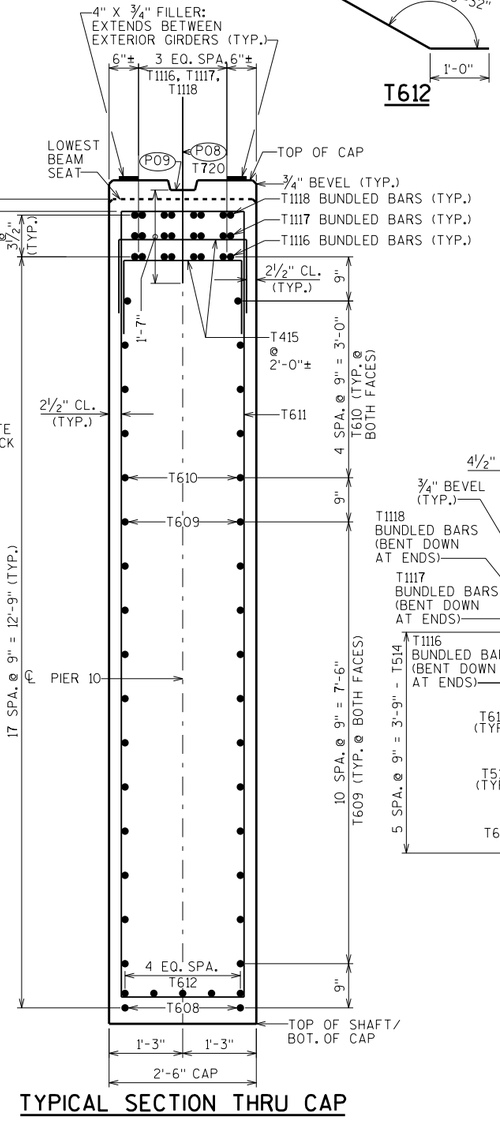
PILE DETAILS



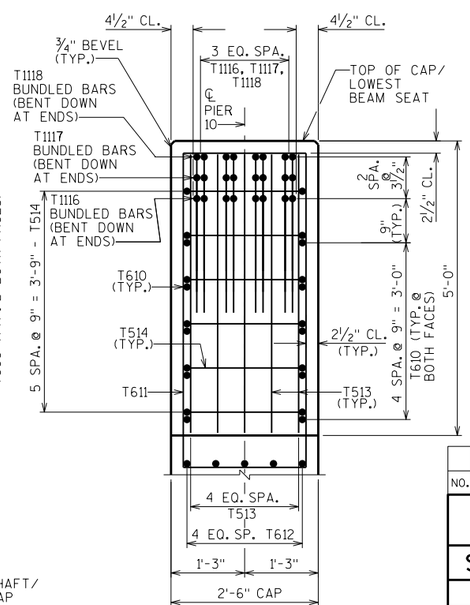
SECTION THRU SHAFT



CONCRETE MASONRY SEAL/FOOTING/PILE PLAN



TYPICAL SECTION THRU CAP



CAP AT ENDS

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

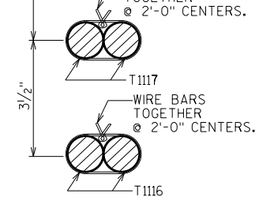
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T901		19	23'-7"			FOOTING-BOTTOM-HORIZ.-LONGIT.-BOTTOM LAYER
T902		42	14'-7"			FOOTING-BOTTOM-HORIZ.-TRANSVERSE-TOP LAYER
T1003		50	12'-9"	X		FOOTING/SHAFT-VERT.-AT ALL FACES
T404		62	12'-6"			FOOTING/SHAFT-HORIZ.-AT BOTH FACES
T405		62	6'-7"	X		FOOTING/SHAFT-HORIZ.-AT BOTH ENDS
T406		186	3'-2"	X		FOOTING/SHAFT-HORIZ.-TIE BARS
T1007		50	41'-9"			SHAFT/CAP-VERT.-AT ALL FACES
T608		2	14'-9"			CAP-BOTTOM-HORIZ.-BOTH FACES
⚠ T609		22	30'-9"		X	CAP-HORIZ.-BOTH FACES
⚠ T610		10	45'-10"		X	CAP-HORIZ.-BOTH FACES
⚠ T611		40	23'-9"	X	X	CAP-VERT.-STIRRUPS-AT ENDS
T612		10	19'-2"	X		CAP-BOTTOM-VERT.-AT ENDS
T513		10	4'-10"			CAP-VERT.-AT ENDS
T514		12	4'-8"	X		CAP-HORIZ.-AT ENDS
T415		43	4'-5"	X		CAP-TOP-VERT.-BAR CHAIRS
T1116		8	46'-5"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
T1117		8	47'-1"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
T1118		8	47'-9"	X		CAP-TOP-HORIZ. & VERT.-BUNDLED BARS
T519		25	6'-0"	X		CAP-TOP-VERT.-ABOVE SHAFT
T720		25	3'-2"			CAP-TOP-VERT.-CENTER-BTWN. BEAM SEATS

⚠ 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

BAR MARK	NUMBER REQUIRED	LENGTH
T609	2 SERIES OF 11 BARS	17'-5" TO 44'-1"
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T611	2 SERIES OF 20 BARS	15'-9" TO 31'-9"

BUNDLE AND TAG EACH SERIES SEPARATELY.



BUNDLING DETAIL

(P01) 11'-0" x 10" x 4" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, PLACED IN PRE-BORED HOLES CORED 5 FEET INTO ROCK. NO DRIVING IS REQUIRED. ESTIMATED 20'-0" LONG.

(P08) T720 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-7" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2" x 6" BETWEEN BEAM SEATS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 10 DETAILS

SHEET 38

328

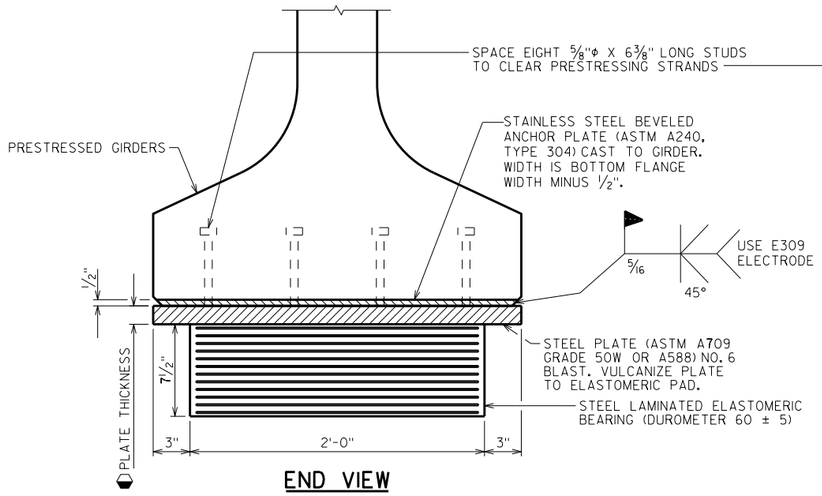
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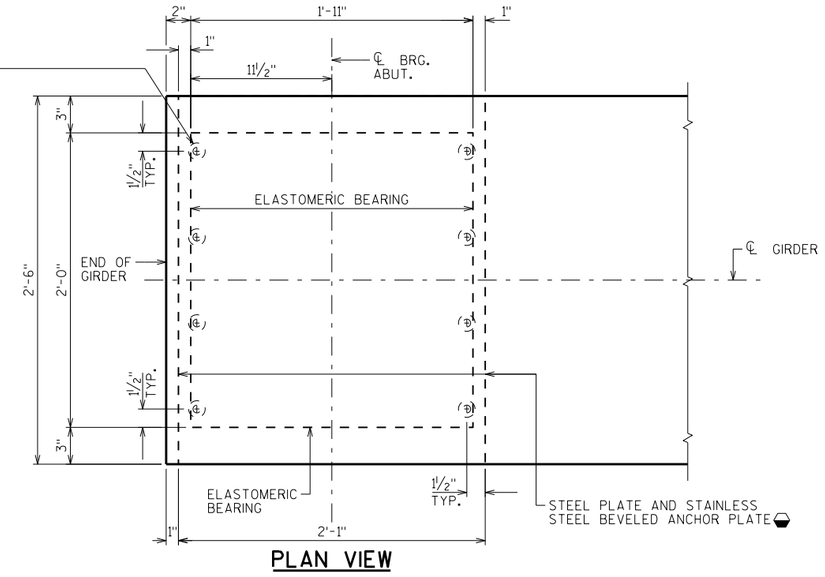
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STATE PROJECT NUMBER

1430-01-73



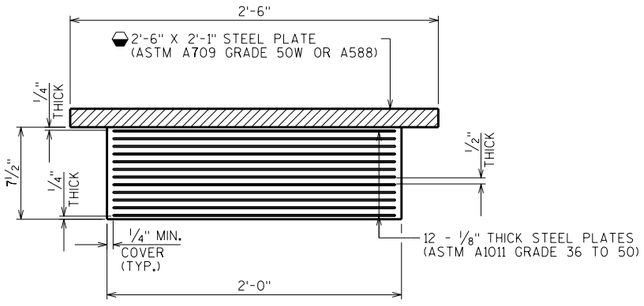
END VIEW



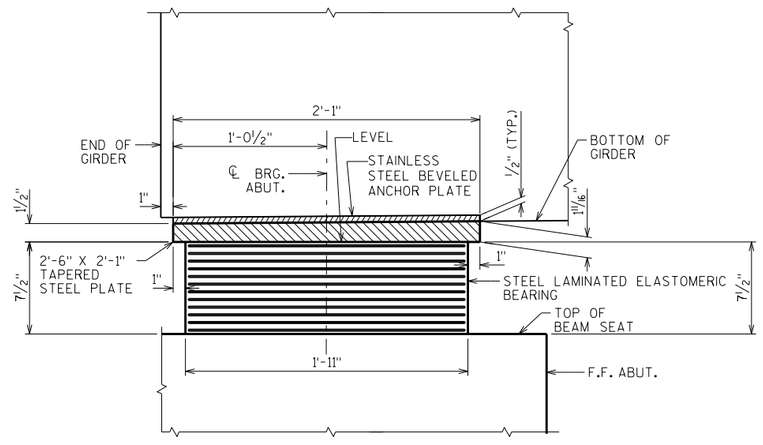
PLAN VIEW

STEEL PLATE THICKNESS VARIES FROM 1 1/2" TO 1 11/16" @ WEST ABUT.

STEEL PLATE THICKNESS IS A CONSTANT 1 1/2" @ EAST ABUT.



SECTION THRU ELASTOMERIC BEARING



SIDE ELEVATION VIEW @ WEST ABUT. LOOKING NORTH

DETAIL SIMILAR AT EAST ABUT. BUT WITH A CONSTANT STEEL PLATE THICKNESS OF 1 1/2"

BEARING NOTES

BEARINGS SHALL NOT BE PLACED AT A TEMPERATURE GREATER THAN 70° F.

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED", EACH.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED 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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

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ABUTMENT BEARINGS

SHEET 39

329

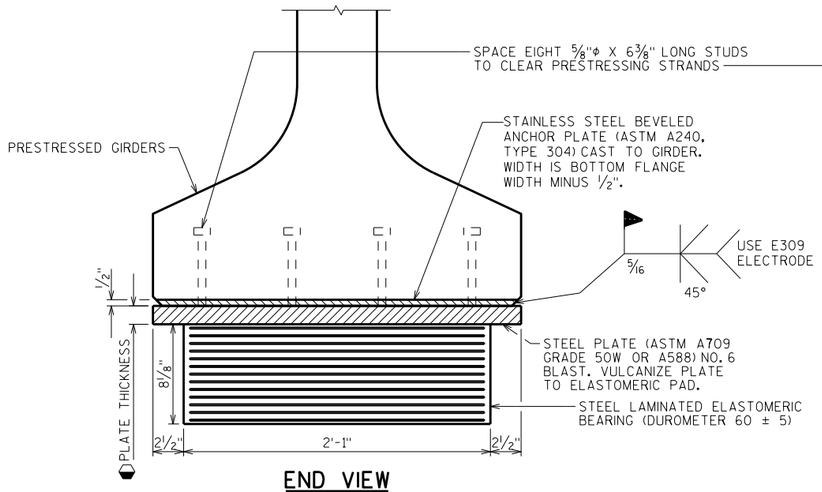
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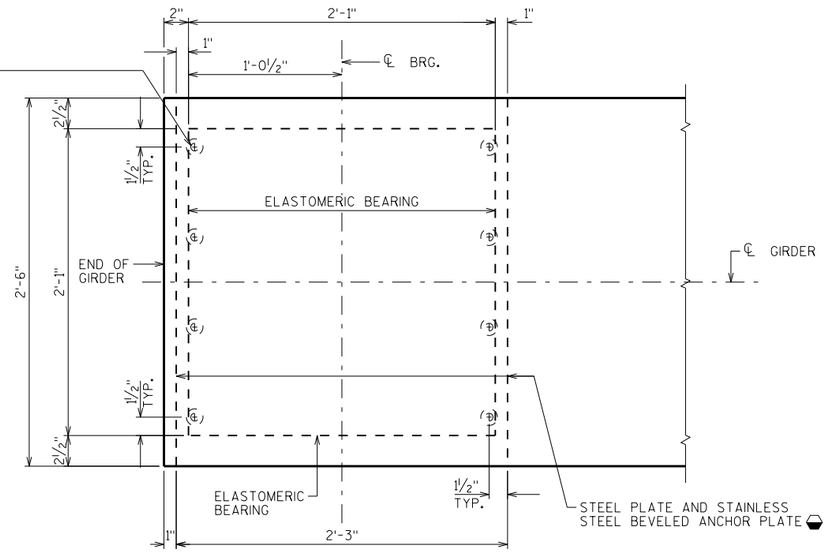
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STATE PROJECT NUMBER

1430-01-73



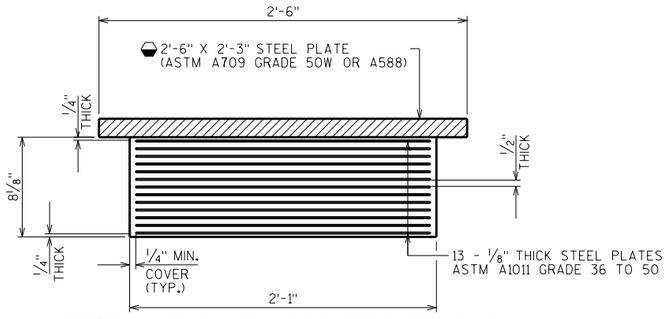
END VIEW



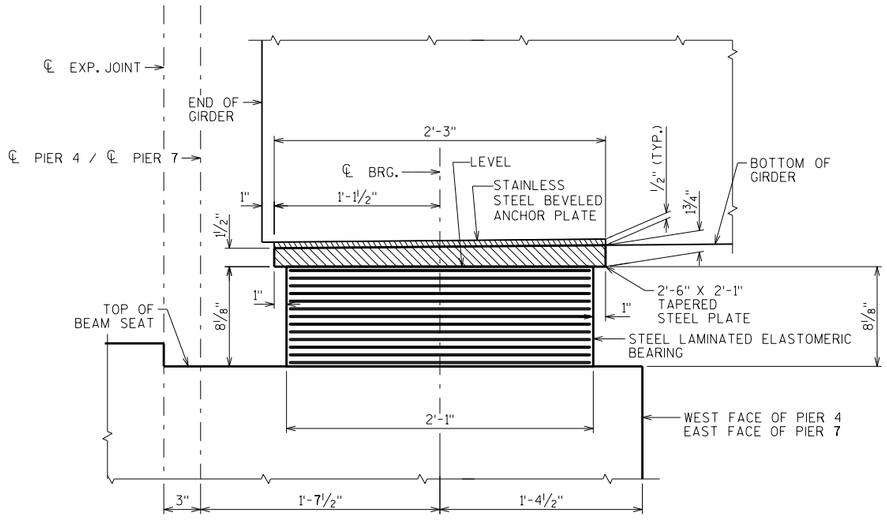
PLAN VIEW

◓ STEEL PLATE THICKNESS IS A CONSTANT 1 1/2" @ PIER 4 WEST SIDE.

STEEL PLATE THICKNESS VARIES FROM 1 1/2" TO 1 3/4" @ PIER 7 EAST SIDE.



SECTION THRU ELASTOMERIC BEARING



SIDE ELEVATION VIEW @ PIER 7 EAST SIDE LOOKING NORTH

DETAIL SIMILAR AT PIER 4 WEST SIDE BUT WITH A CONSTANT STEEL PLATE THICKNESS OF 1 1/2"

BEARING NOTES

BEARINGS SHALL NOT BE PLACED AT A TEMPERATURE GREATER THAN 70° F.

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED", EACH.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED 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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 4 WEST SIDE & PIER 7 EAST SIDE BEARINGS

SHEET 40

330

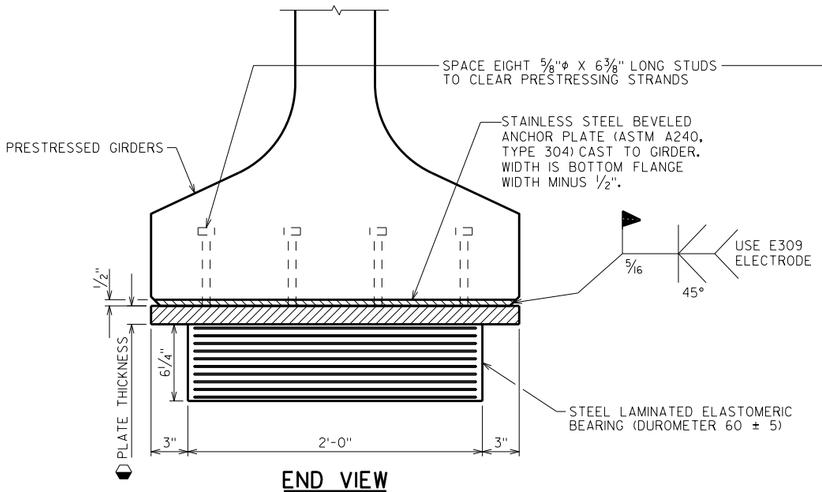
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STATE PROJECT NUMBER

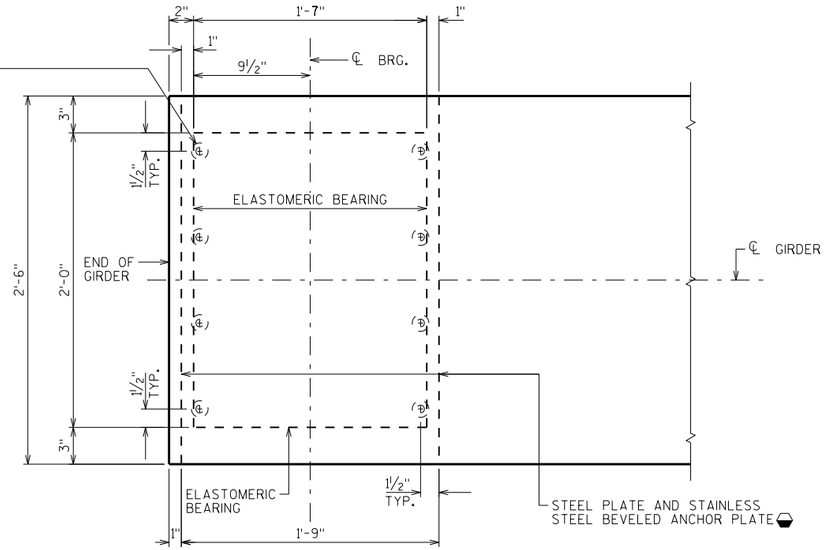
1430-01-73



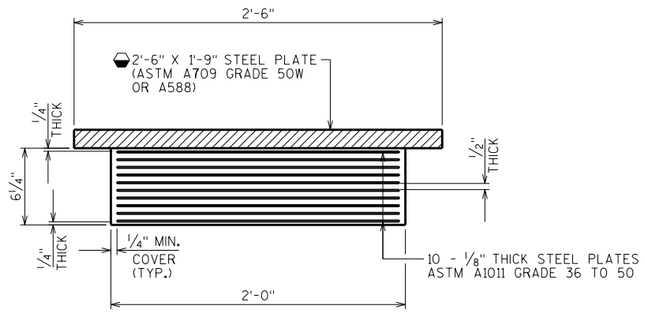
END VIEW

STEEL PLATE THICKNESS VARIES FROM 1½" TO 1 11/16" @ PIER 4 EAST SIDE.

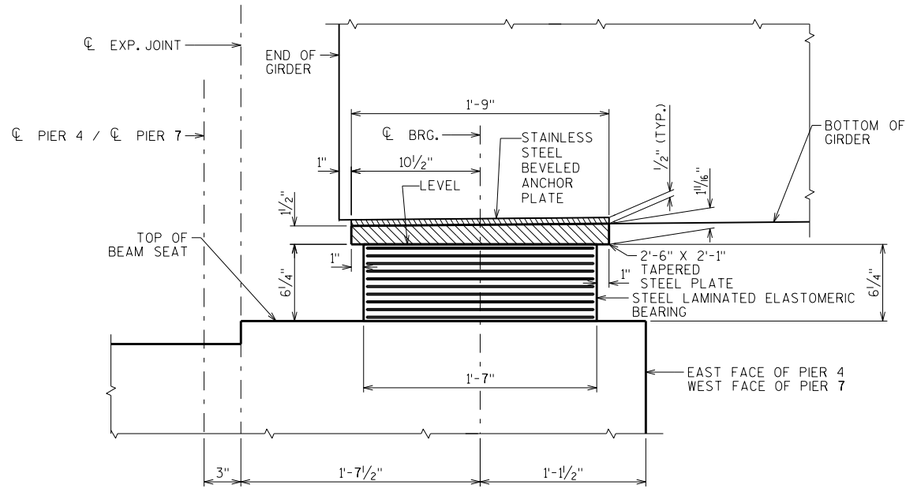
STEEL PLATE THICKNESS IS A CONSTANT 1½" @ PIER 7 WEST SIDE.



PLAN VIEW



SECTION THRU ELASTOMERIC BEARING



SIDE ELEVATION VIEW @ PIER 4 EAST SIDE LOOKING NORTH

DETAIL SIMILAR AT PIER 7 WEST SIDE BUT WITH A CONSTANT STEEL PLATE THICKNESS OF 1½"

BEARING NOTES

BEARINGS SHALL NOT BE PLACED AT A TEMPERATURE GREATER THAN 70° F.

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED", EACH.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED 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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

PIER 4 EAST SIDE & PIER 7 WEST SIDE BEARINGS

SHEET 41

331

8

8

SCALE = 0.50

STATE PROJECT NUMBER
1430-01-73

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 15" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, 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.

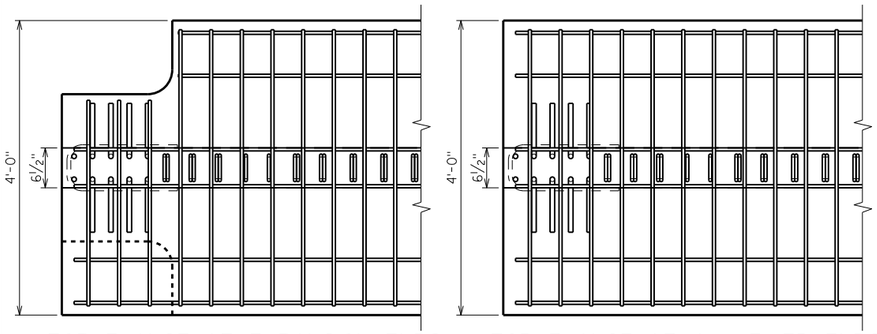
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE ( )-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

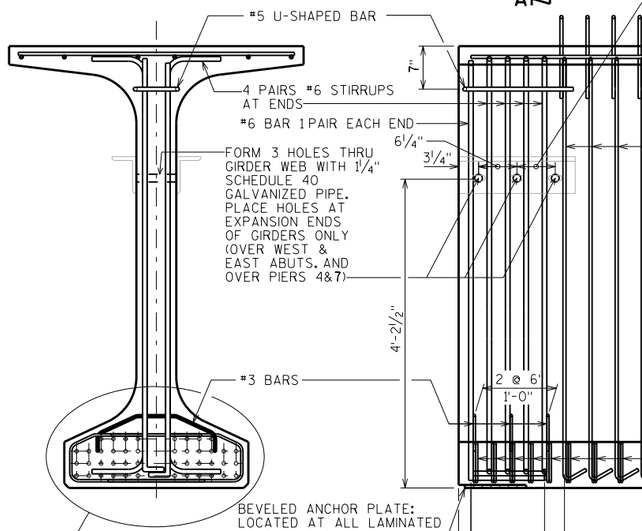
FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.



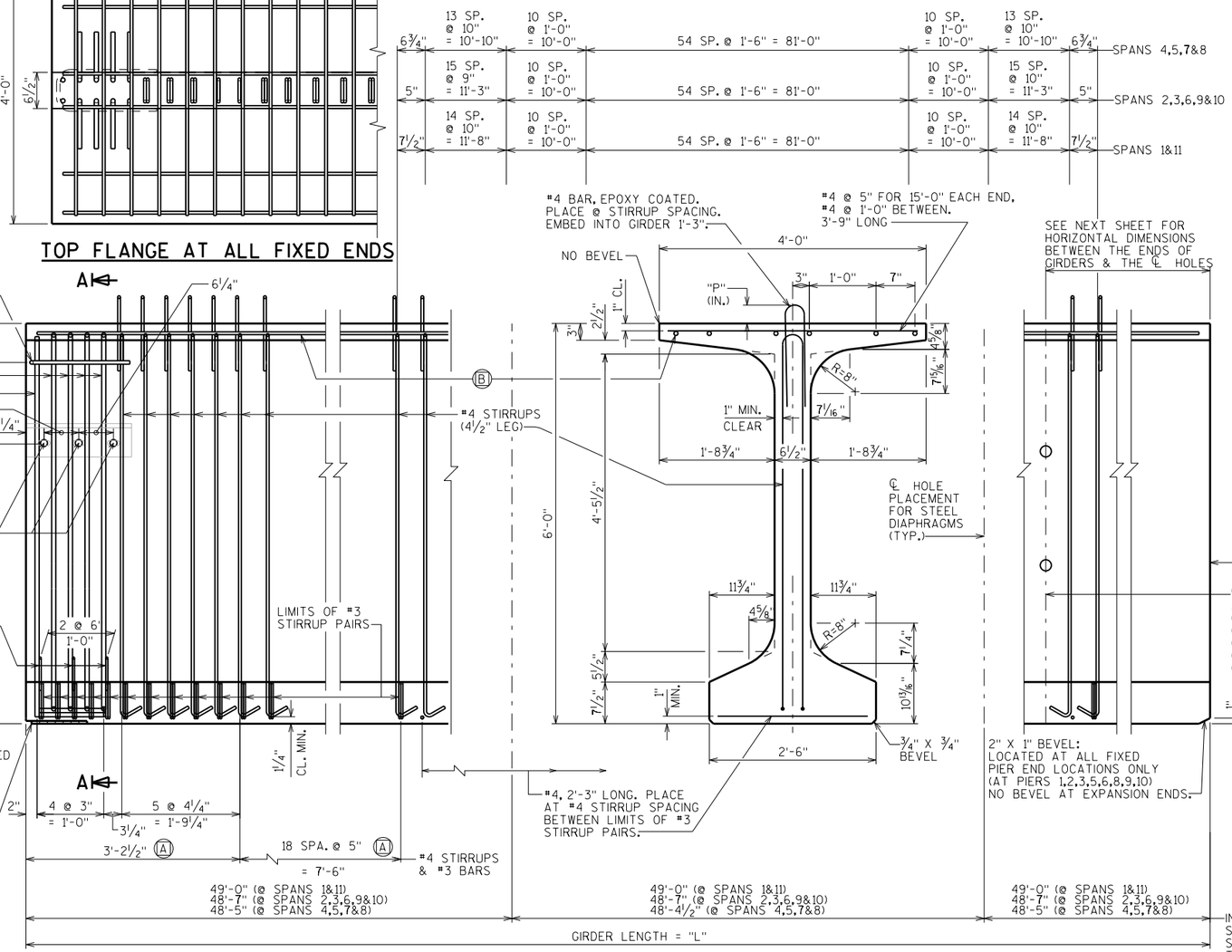
TOP FLANGE AT EXPANSION ENDS

SEE NEXT SHEET FOR ALL BLOCKOUT DETAILS

TOP FLANGE AT ALL FIXED ENDS



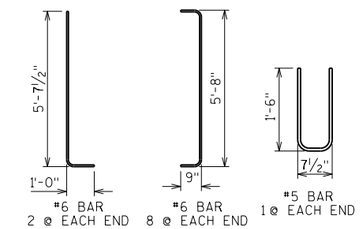
SECTION A-A

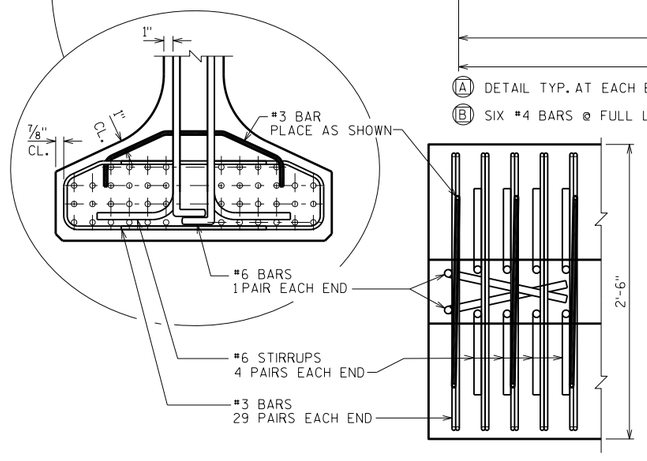


Ⓐ DETAIL TYP. AT EACH END

Ⓑ SIX #4 BARS @ FULL LENGTH WITH 1'-11" MIN. LAPS

SIDE VIEW & TYP. SECTION IN SPAN





BOTTOM FLANGE

✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (p.s.i.)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	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	1-6	147'-0"	0.8	1.5	2.1	2.5	2.6	2.4	2.1	1.5	0.8	8,000	8½"	7½"	8½"	0.6	44	6,400	67	20.5	23.5	5		
2	1-6	145'-9"	0.8	1.5	2.0	2.4	2.5	2.4	2.0	1.5	0.8	8,000	8½"	7½"	8½"	0.6	40	6,400	67	20.5	23.5	5		
3	1-6	145'-9"	0.8	1.5	2.0	2.4	2.5	2.4	2.0	1.5	0.8	8,000	8½"	7½"	8½"	0.6	40	6,400	67	20.5	23.5	5		
4	1-6	145'-2½"	0.8	1.5	2.1	2.4	2.6	2.5	2.1	1.5	0.8	8,000	8½"	7½"	8½"	0.6	44	6,400	67	20.5	23.5	5		
5	1-6	145'-2½"	0.8	1.5	2.1	2.5	2.6	2.4	2.1	1.5	0.8	8,000	8½"	7½"	8½"	0.6	44	6,800	67	20.5	23.5	5		
6	1-6	145'-9"	0.8	1.5	2.0	2.4	2.5	2.4	2.0	1.5	0.8	8,000	8½"	7½"	8½"	0.6	40	6,800	67	20.5	23.5	5		
7	1-6	145'-2½"	0.8	1.5	2.1	2.4	2.6	2.5	2.1	1.5	0.8	8,000	8½"	7½"	8½"	0.6	44	6,800	67	20.5	23.5	5		
8	1-6	145'-2½"	0.8	1.5	2.1	2.5	2.6	2.4	2.1	1.5	0.8	8,000	8½"	7½"	8½"	0.6	44	6,400	67	20.5	23.5	5		
9	1-6	145'-9"	0.8	1.5	2.0	2.4	2.5	2.4	2.0	1.5	0.8	8,000	8½"	7½"	8½"	0.6	40	6,400	67	20.5	23.5	5		
10	1-6	145'-9"	0.8	1.5	2.0	2.4	2.5	2.4	2.0	1.5	0.8	8,000	8½"	7½"	8½"	0.6	40	6,400	67	20.5	23.5	5		
11	1-6	147'-0"	0.8	1.5	2.1	2.4	2.6	2.5	2.1	1.5	0.8	8,000	8½"	7½"	8½"	0.6	44	6,400	67	20.5	23.5	5		

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

72W" PRESTRESSED GIRDER DETAILS 1

SHEET 42

332

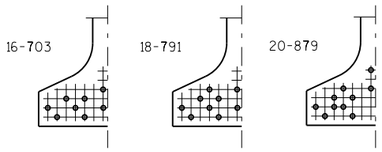
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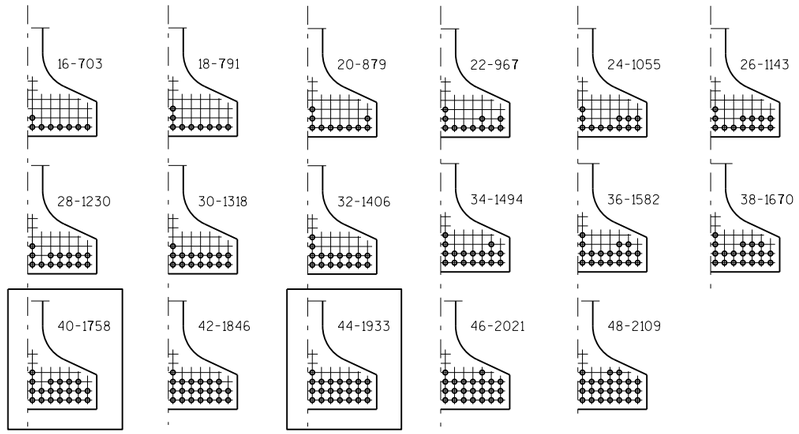
STATE PROJECT NUMBER

1430-01-73



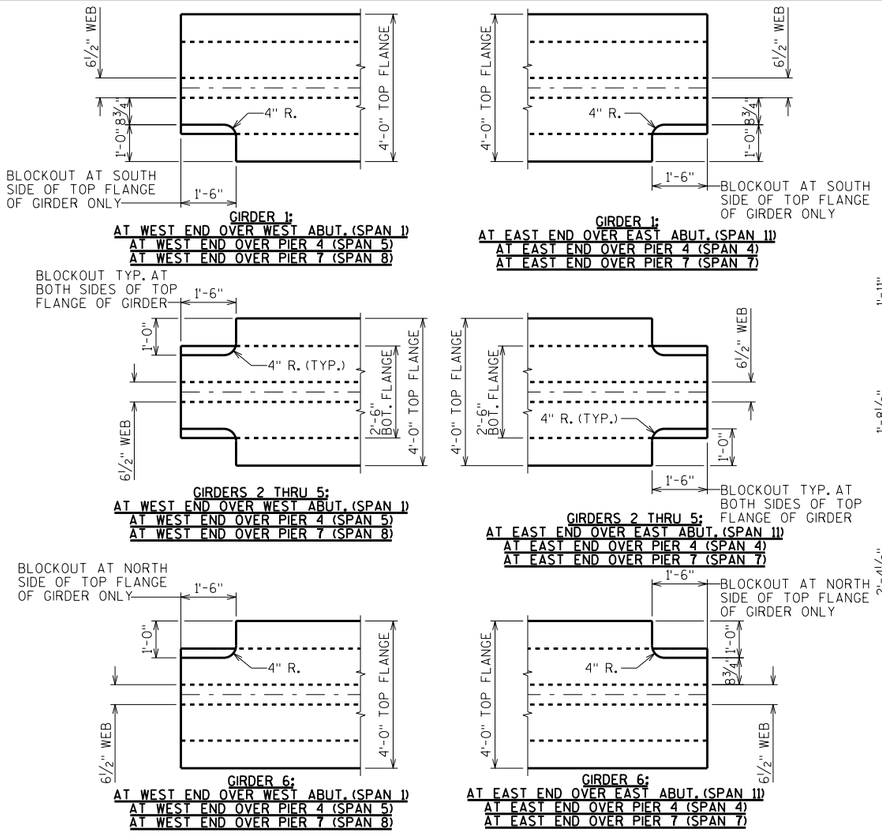
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS



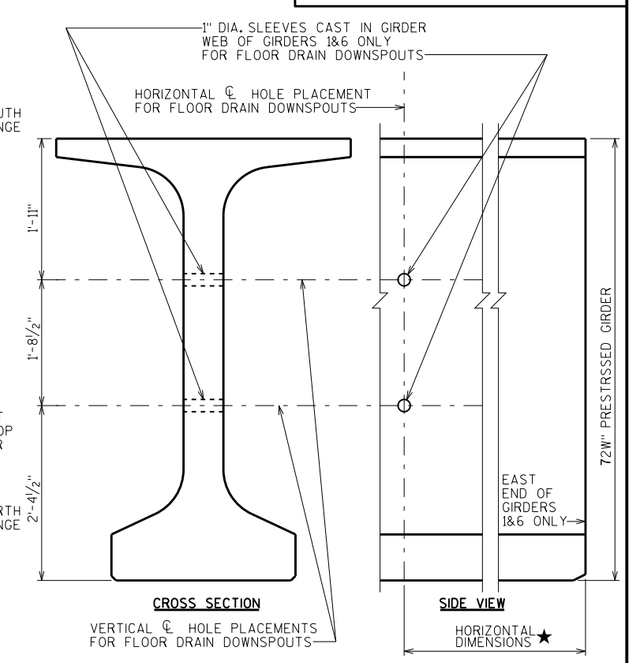
ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS



TOP FLANGE OF GIRDERS FORMING DETAILS AT EXPANSION ENDS

NOTE:
PRIOR TO CASTING GIRDERS, PRESTRESSED GIRDER FABRICATOR SHALL COORDINATE WITH JOINT MANUFACTURER FOR NECESSARY DETAILS TO FORM THE BLOCKOUT TO ALLOW FOR PLACEMENT OF JOINT SUPPORT BOX ASSEMBLY. USE DIMENSIONS SHOWN ABOVE UNLESS JOINT MANUFACTURER REQUIRES LARGER BLOCKOUTS.

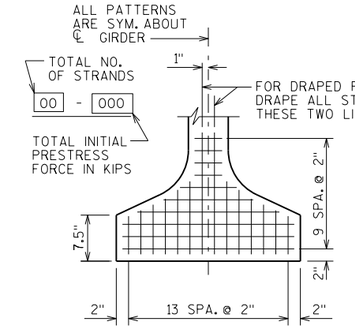


HOLE/SLEEVE LOCATIONS IN GIRDER WEB FOR FLOOR DRAINS DETAIL

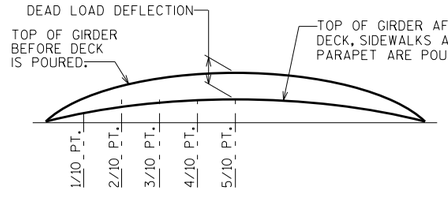
NOTE:
SEE 'SUPERSTRUCTURE PLAN' SHEETS FOR FLOOR DRAIN LOCATIONS.
FOR FLOOR DRAIN DOWNSPOUT DETAILS SEE 'FLOOR DRAIN' SHEET.

SLEEVES - HORIZONTAL DIMENSIONS ★

SPAN 2	IN GIRDER 1, 72'-10½" FROM EAST END OF GIRDER IN GIRDER 6, 72'-10½" FROM EAST END OF GIRDER
SPAN 4	IN GIRDER 1, 72'-4" FROM EAST END OF GIRDER IN GIRDER 6, 72'-4" FROM EAST END OF GIRDER
SPAN 6	IN GIRDER 1, 72'-10½" FROM EAST END OF GIRDER IN GIRDER 6, 72'-10½" FROM EAST END OF GIRDER
SPAN 8	IN GIRDER 1, 72'-10½" FROM EAST END OF GIRDER IN GIRDER 6, 72'-10½" FROM EAST END OF GIRDER
SPAN 10	IN GIRDER 1, 72'-10½" FROM EAST END OF GIRDER IN GIRDER 6, 72'-10½" FROM EAST END OF GIRDER



TYP. STRAND PATTERN



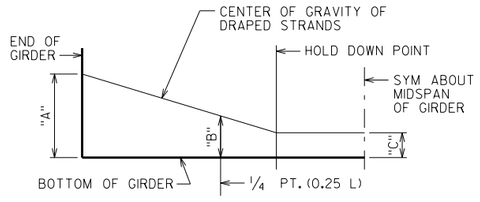
DEAD LOAD DEFLECTION DIAGRAM

*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.

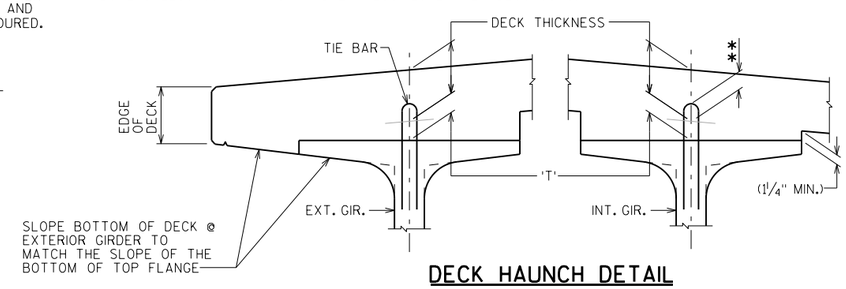
SPAN	CAMBER (IN.) *
1	4.38
2	3.68
3	3.68
4	4.38
5	4.27
6	3.60
7	4.27
8	4.38
9	3.68
10	3.68
11	4.38

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



DRAPED STRAND PROFILE



DECK 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 DECK 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
\- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE:
AN AVERAGE HAUNCH ('T') OF 4" WAS USED FOR COMPUTING THE QUANTITY "CONCRETE MASONRY BRIDGES" FOR THE SUPERSTRUCTURE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

72W" PRESTRESSED GIRDER DETAILS 2

SHEET 43

333

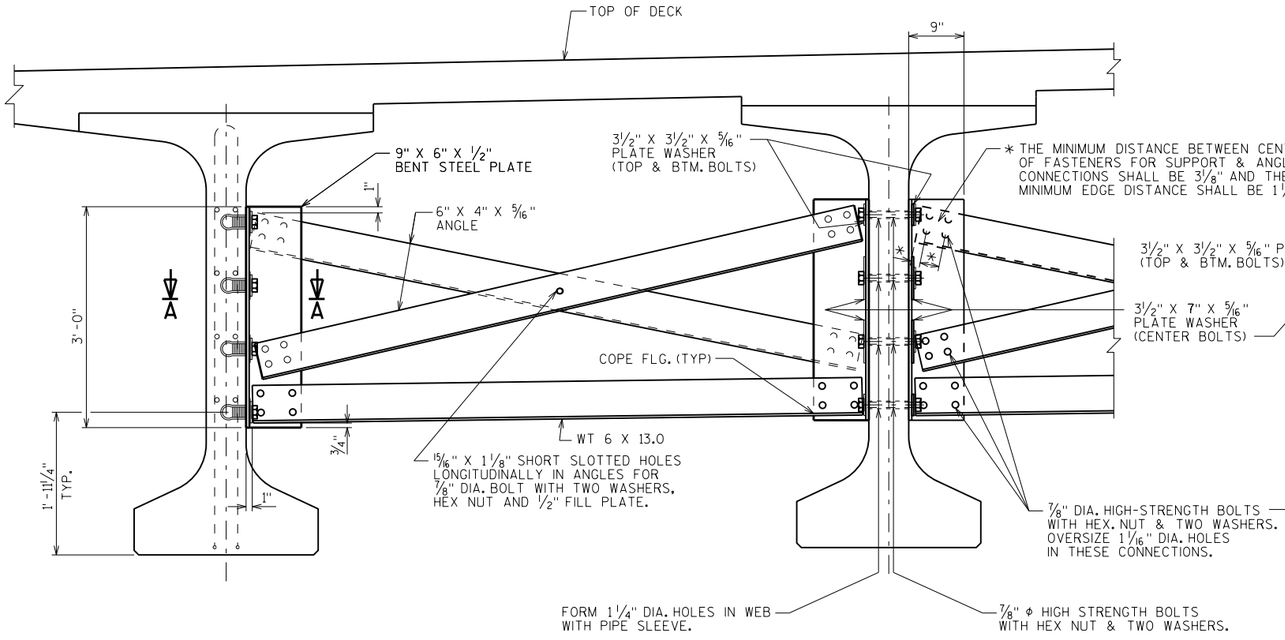
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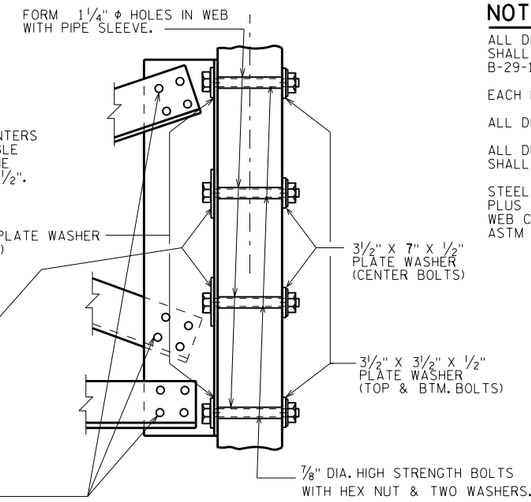
STATE PROJECT NUMBER

1430-01-73



PART TRANSVERSE SECTION AT DIAPHRAGM

(72W" PRESTRESSED GIRDER)



SECTION AT INTERIOR GIRDERS (FOR STAGGERED DIAPHRAGMS)

NOTES

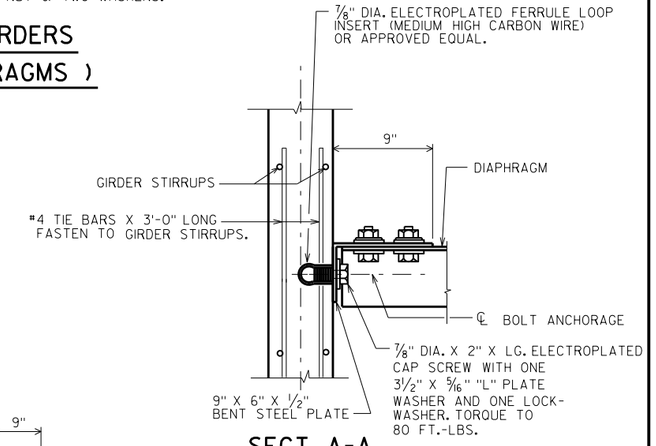
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-29-141", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

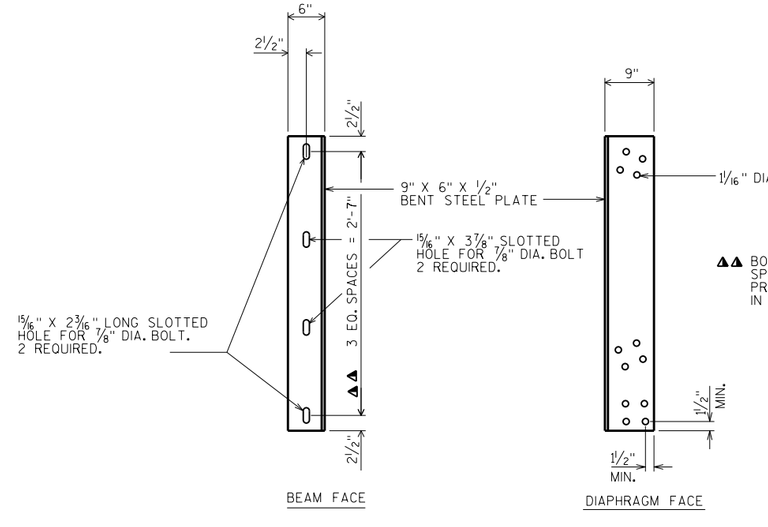
STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.



SECT. A-A

(FOR EXTERIOR ATTACHMENT)

"L" = 3 1/2"; TOP AND BOTTOM BOLTS
"L" = 7"; CENTER BOLTS



▲▲ BOLT HOLES SHALL BE SPACED SO AS TO MISS PRESTRESSED STRANDS IN CONCRETE BEAMS.

DIAPHRAGM SUPPORT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

STEEL DIAPHRAGM

SHEET 44

334

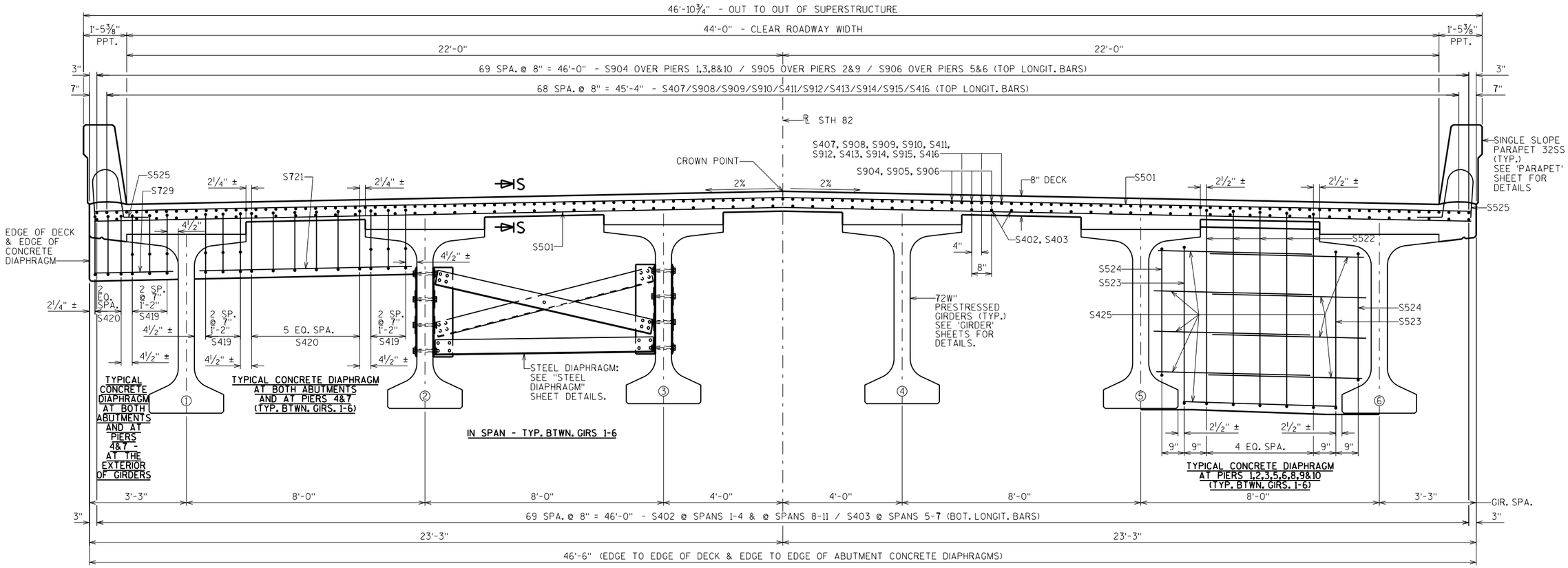
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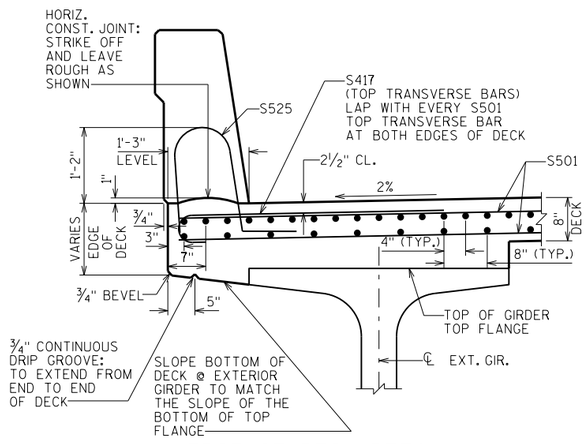
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STATE PROJECT NUMBER

1430-01-73

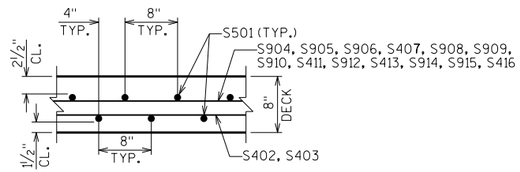


CROSS SECTION THRU BRIDGE LOOKING EAST



EDGE OF DECK DETAIL

(TYP. AT BOTH EDGES)



SECTION S-S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

SUPERSTRUCTURE CROSS SECTIONS

SHEET 45

335

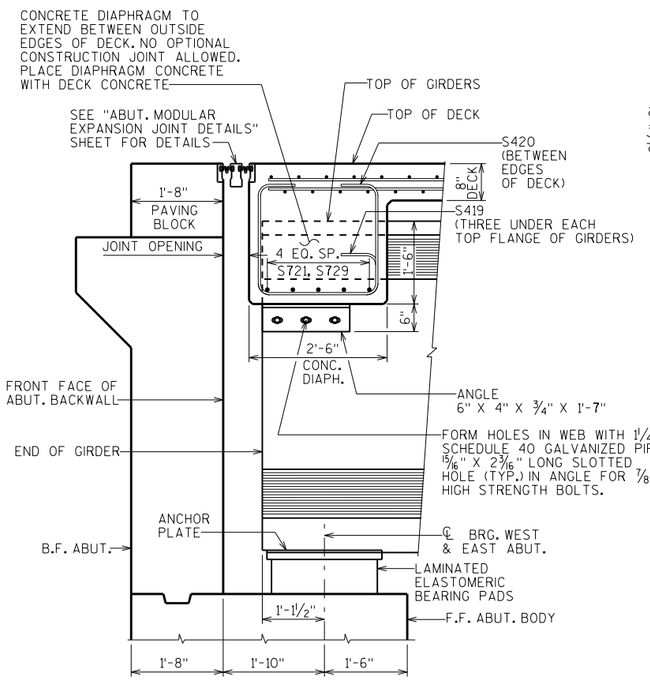
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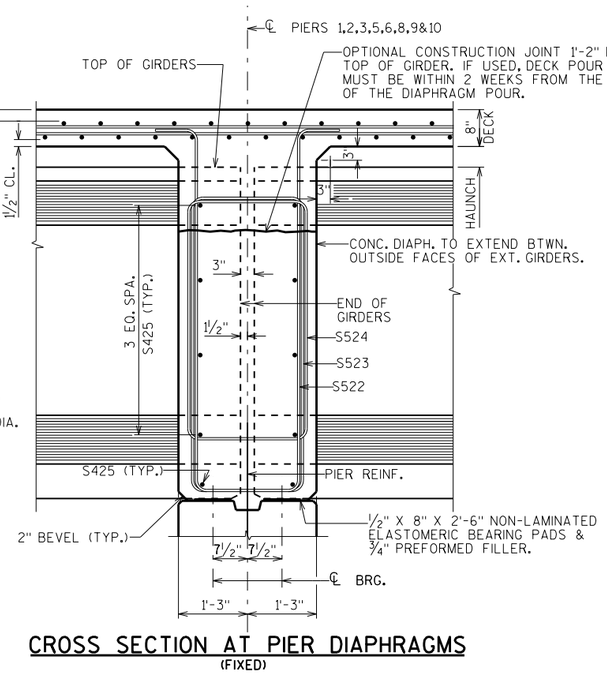
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STATE PROJECT NUMBER

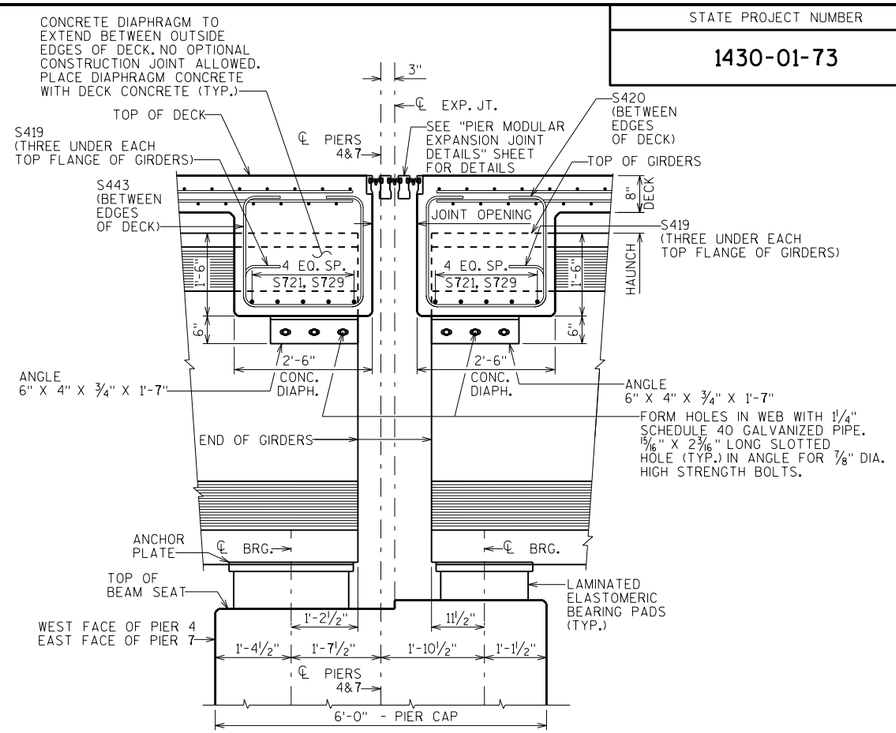
1430-01-73



CROSS SECTION AT ABUT. DIAPHRAGMS
(EXPANSION)

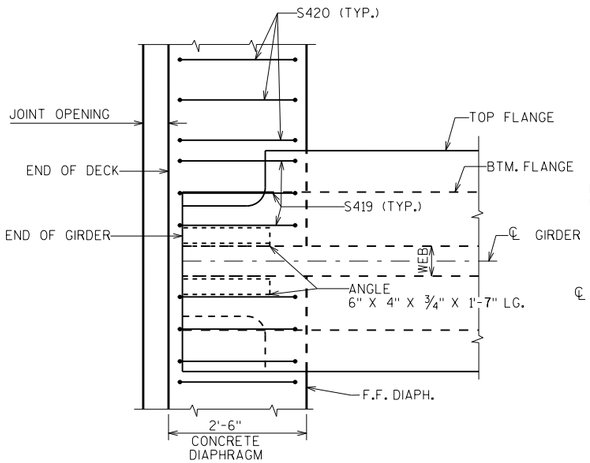


CROSS SECTION AT PIER DIAPHRAGMS
(FIXED)

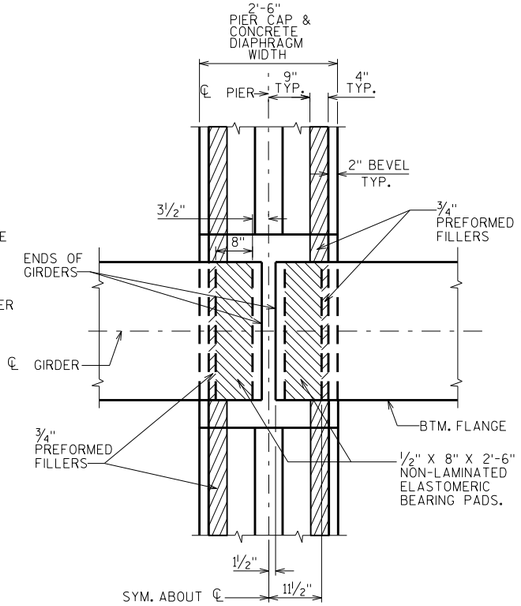


CROSS SECTION AT PIER DIAPHRAGMS
(EXPANSION)

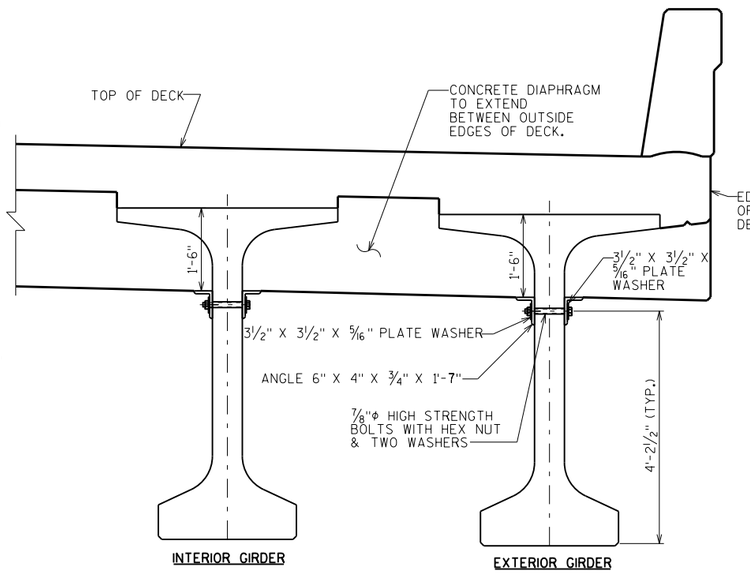
PARTIAL LONGITUDINAL SECTION



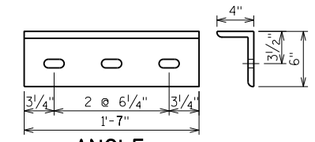
PLAN VIEW OF WEST ABUT./EAST ABUT./ PIER 4/PIER 7 DIAPHRAGMS



PLAN VIEW OF PIERS 1,2,3,5,6,8,9&10 DIAPHRAGMS



PART TRANSVERSE SECTION AT DIAPHRAGM EXPANSION ENDS



ANGLE
6" X 4" X 3/4" X 1'-7"

PROVIDE 3 1/2" X 3 1/2" X 5/16" PLATE WASHERS AT ALL LOCATIONS.

NOTES

ALL DIAPHRAGM SUPPORT HARDWARE SHALL BE INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

DIAPHRAGM SUPPORT ANGLES SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM SUPPORT HARDWARE INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM SUPPORT ANGLE TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

SUPERSTRUCTURE DETAILS

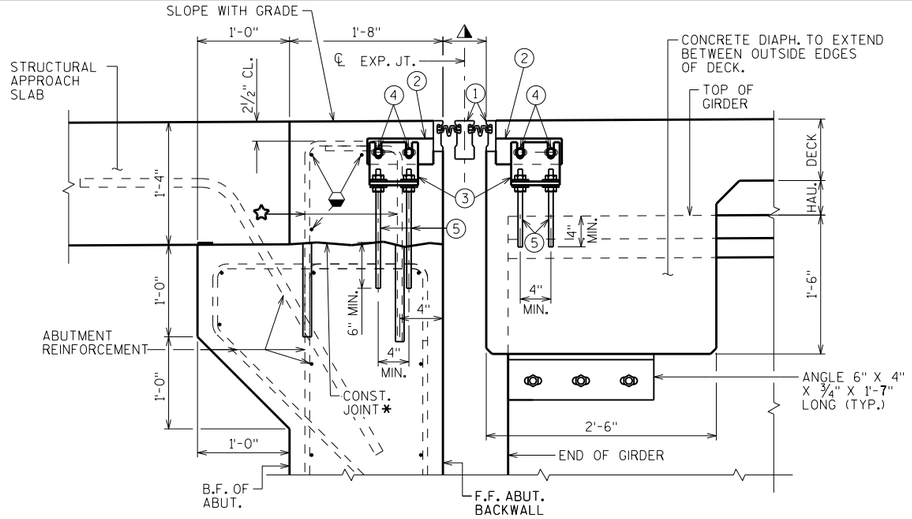
SHEET 46

336

8

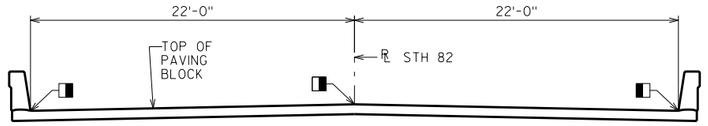
8

SCALE = 1.33



SECTION THRU JOINT ⌀ ABUTMENT

NORMAL TO ℄ SUBSTRUCTURE

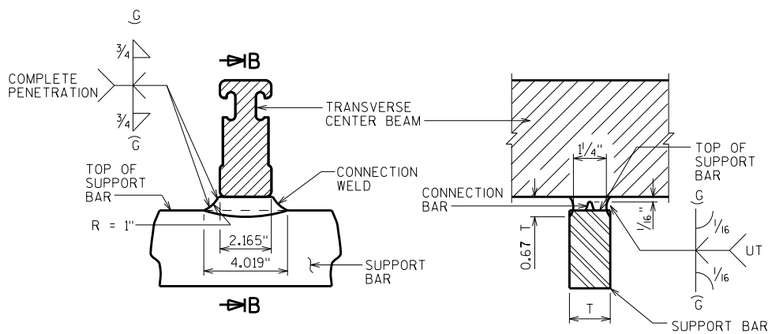


CROSS SECTION ⌀ F.F. ABUTMENT BACKWALL

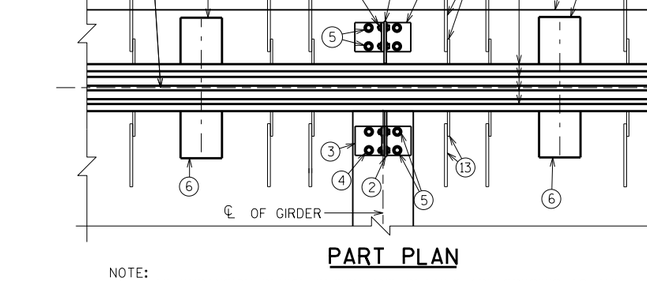
W. ABUTMENT SHOWN
E. ABUTMENT SIMILAR

F.F. BACKWALL ELEVATIONS

ABUTMENT	LOCATION	ELEV.
W. ABUT.	GUTTER	880.08
	CROWN PT.	880.52
	GUTTER	880.08
E. ABUT.	GUTTER	888.12
	CROWN PT.	888.56
	GUTTER	888.12



MODULAR EXPANSION JOINT CONNECTION DETAIL AND WELD SPECIFICATION

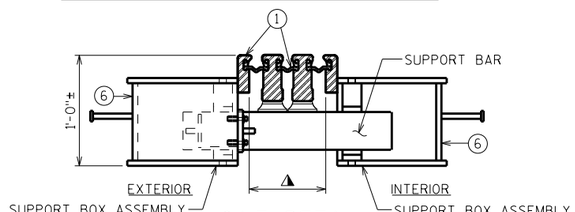


SECTION B-B

PART PLAN

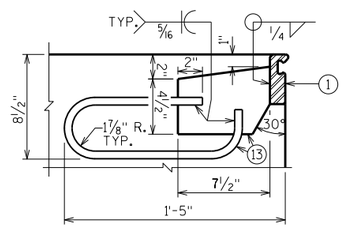
NOTE:
MODULAR EXPANSION DEVICE DESIGN AND DETAILS ARE SPECIFIC TO THE MANUFACTURER SELECTED FROM THOSE LISTED IN THE SPECIAL PROVISIONS.

SUPPORT BOXES ARE SHOWN FOR GENERAL INFORMATION AND LOCATION MAY VARY ACCORDING TO FABRICATOR DESIGN. SPACE SUPPORT BOXES TO MISS GIRDER TOP FLANGES WHEN POSSIBLE, BUT NOT TO EXCEED MAXIMUM SPACING PER SPECIAL PROVISIONS.



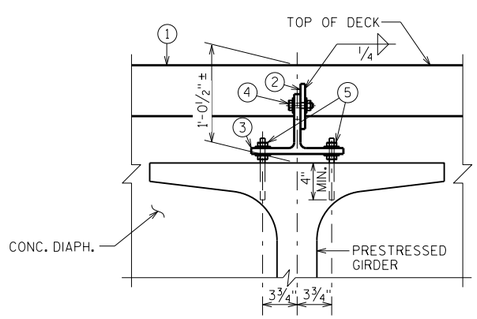
JOINT DETAIL

AT SUPPORT BAR & SUPPORT BOX ASSEMBLY



ANCHORAGE DETAIL

PLACE ADJACENT TO SUPPORT BOXES IN PAVING BLOCK ⌀ ABUT. & IN DECK ⌀ CONC. DIAPH.



SECTION A-A

GENERAL NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE GLAND.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

NO EXPANSION JOINT PROTRUSIONS PERMITTED ABOVE ROADWAY SURFACE, ON PARAPET ROADWAY FACE OR ABOVE SIDEWALK SURFACE (FOR RAISED SIDEWALK).

THE EXPANSION JOINT SEALS SHALL BE PLACED, BONDED & SEALED AS RECOMMENDED BY THE MANUFACTURER. FORM WORK SHALL BE PLACED BETWEEN THE SUPPORT BOXES TO PREVENT CONCRETE INTRUSION INTO THE SUPPORT BOX. A TECHNICAL REPRESENTATIVE OF THE MANUFACTURER SHALL BE PRESENT DURING INSTALLATION. PRIOR TO SETTING THE JOINT ASSEMBLY INTO POSITION, THE PROJECT ENGINEER SHALL DETERMINE THE PROPER JOINT OPENING.

EXPANSION JOINT EXTRUSIONS SHALL BE FABRICATED TO CONFORM TO ROADWAY CROWN & GRADE. FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST BARS, PLATES, WT-SECTION, ANCHORAGE LOOP, & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THIS ASSEMBLY SHALL BE HOT DIPPED GALVANIZED. 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.

COST OF FURNISHING & PLACING OF THE EXPANSION JOINTS COMPLETE WITH PARAPET PLATES & SIDEWALK PLATES SHALL BE PAID FOR UNDER THE PRICE BID FOR "EXPANSION DEVICE MODULAR B-29-141".

BAR STEEL REINF. IN DECK AND CONC. DIAPHRAGM SHALL BE RESPACED AS NECESSARY TO ALLOW PLACEMENT OF JOINT ASSEMBLY. TOP TRANSVERSE BARS, ADJACENT TO MOD. JT., TO BE CUT AND PLACED BETWEEN JT. SUPPORT SYSTEM.

STATE PROJECT NUMBER

1430-01-73

LEGEND

1. MODULAR EXPANSION JOINT DEVICE, 2 CELLS.
2. ½" PLATE, ONE PER GIRDER MIN. PROVIDE 2 - 1" X 2" MIN. SLOTTED HOLES PLACED HORIZONTALLY FOR NO. 4.
3. WT 6 X 29 (OR EQUIVALENT BUILT UP T-SECTION). ONE PER GIRDER. PROVIDE 2 - 1" X 3" MIN. SLOTTED HOLES PLACED VERTICALLY IN WEB OF WT FOR BOLTS NO. 4.
4. ¾" ⌀ HIGH STRENGTH BOLTS WITH NUTS & WASHERS. (A325 GALV.)
5. ¾" ⌀ THREADED ROD WITH 2 NUTS & WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES. (GALV.)
6. SUPPORT BOX ASSEMBLY FOR SUPPORT BAR (SPA. PER MANUFACTURER). FABRICATE BOX FROM ½" PLATES.
7. ⅜" BULKHEAD PLATE. WELD TO NO. 1, NO. 8 AND NO. 14. WHEN CONDUIT IS PRESENT IN PARAPET OR SIDEWALK, ACCOMMODATE FOR BY PROVIDING OPENING IN NO. 7.
8. INSIDE PLATE. FABRICATE FROM ⅜" PLATE.
9. OUTSIDE PLATE. FABRICATE FROM ⅝" PLATE.
10. ⅞" SQUARE BAR. WELD TO NO. 8 AS SHOWN.
11. ¾" ⌀ X 4" LONG STUDS. WELD TO NO. 8 , NO. 7 & NO. 14 AS SHOWN.
12. ¾" ⌀ X 2" STAINLESS STEEL FLAT CTSK. SLOTTED HEAD CAP SCREWS WITH ANTI-SEIZE LUBRICANT. RECESS 1/16" BELOW PLATE SURFACE.
13. ½" PLATE WITH ⅝" ⌀ LOOP ANCHOR FABRICATED AS SHOWN. SPACED AT MANUFACTURER'S SPEC.
14. INSIDE PLATE. FABRICATE FROM ⅝" PLATE
15. ADIPRENE BUTTON. SEE DETAIL. SET IN OUTSIDE PLATE.

* POUR CONC. ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONC. IS IN PLACE. STRIKE OFF & LEAVE ROUGH.

⚠ MANUFACTURER'S RECOMMENDED JOINT OPENING BASED ON THE TEMPERATURE ON THE DAY OF PLACEMENT PER TEMPERATURE TABLE. THE MODULAR EXPANSION DEVICE SHALL HAVE THE NUMBER OF CELLS AS INDICATED IN ①.

✿ A511 & B511 COATED BARS: ADHESIVE ANCHORS NO. 5 BAR. EMBED 1'-0" IN CONCRETE AND SPACE AT 1'-0". PLACE ADHESIVE ANCHORS AFTER MODULAR JOINT IS IN PLACE. AVOID DRILLING INTO REINFORCEMENT. SEE 'ABUTMENT' SHEETS FOR MORE DETAILS.

◒ A512 & B512 COATED BARS: 7'-7" LONG, 1'-0" MIN. LAPS, CUT IN FIELD TO CLEAR JOINT SUPPORT SYSTEM AS REQUIRED.

TEMP. TABLE

TEMPERATURE TABLE FOR SETTING JOINT OPENINGS TO BE DETERMINED BY JOINT MANUFACTURER WITH THE FOLLOWING DESIGN DATA:

1. 0.23 IN. OF MOVEMENT PER 10° F
2. MEDIAN TEMPERATURE OF 45° F
3. TEMP. RANGE IN TABLE FROM (5°F) TO (85°F)
4. ADJUST INITIAL JOINT OPENINGS BY A REDUCTION OF 1.13 IN., WHICH ACCOUNTS FOR SHRINKAGE (CREEP) OF THE SUPERSTRUCTURE OVER TIME , TO PRODUCE FINAL JOINT OPENINGS FOR TABLE.

A TABLE OF JOINT OPENINGS BASED ON ABOVE DATA SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY SAD/JPH | PLANS CK'D. NAR

ABUT. MODULAR EXPANSION JOINT DETAILS

SHEET 47

337

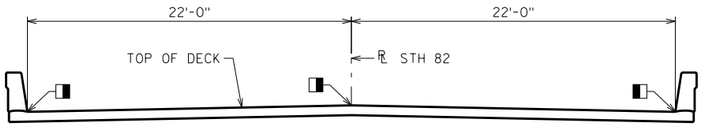
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8

SCALE = 1.00

STATE PROJECT NUMBER

1430-01-73

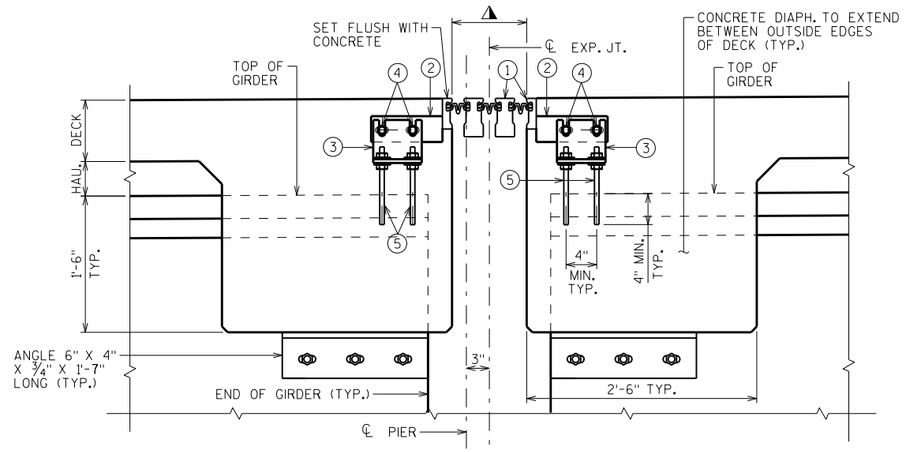


CROSS SECTION @ PIER

PIER 4 SHOWN
PIER 7 SIMILAR

TOP OF DECK ELEVATIONS @ EXPANSION DEVICES

PIER	LOCATION	ELEV.
PIER 4	GUTTER	883.01
	CROWN PT.	883.45
	GUTTER	883.01
PIER 7	GUTTER	885.20
	CROWN PT.	885.64
	GUTTER	885.20



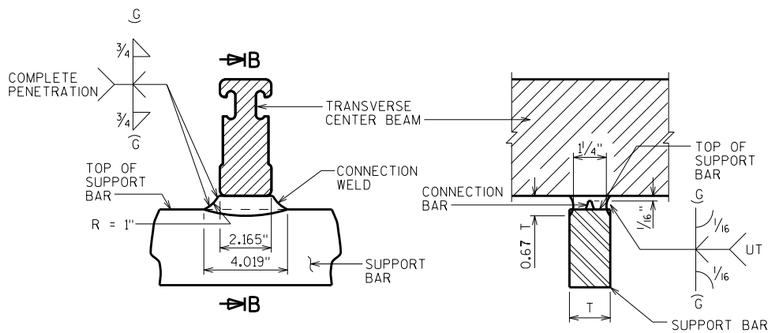
SECTION THRU JOINT @ PIER

NORMAL TO ℄ SUBSTRUCTURE

LEGEND

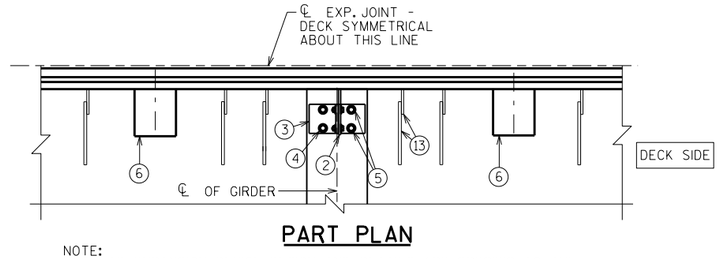
1. MODULAR EXPANSION JOINT DEVICE, 3 CELLS.
2. 1/2" PLATE, ONE PER GIRDER MIN. PROVIDE 2 - 1" X 2" MIN. SLOTTED HOLES PLACED HORIZONTALLY FOR NO. 4.
3. WT 6 X 29 (OR EQUIVALENT BUILT UP T-SECTION). ONE PER GIRDER. PROVIDE 2 - 1" X 3" MIN. SLOTTED HOLES PLACED VERTICALLY IN WEB OF WT FOR BOLTS NO. 4.
4. 3/4" Φ HIGH STRENGTH BOLTS WITH NUTS & WASHERS. (A325 GALV.)
5. 3/4" Φ THREADED ROD WITH 2 NUTS & WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES. (GALV.)
6. SUPPORT BOX ASSEMBLY FOR SUPPORT BAR (SPA. PER MANUFACTURER). FABRICATE BOX FROM 1/2" PLATES.
7. 3/8" BULKHEAD PLATE. WELD TO NO. 1, NO. 8 AND NO. 14. WHEN CONDUIT IS PRESENT IN PARAPET OR SIDEWALK, ACCOMMODATE FOR BY PROVIDING OPENING IN NO. 7.
8. INSIDE PLATE. FABRICATE FROM 3/8" PLATE.
9. OUTSIDE PLATE. FABRICATE FROM 5/8" PLATE.
10. 7/8" SQUARE BAR. WELD TO NO. 8 AS SHOWN.
11. 3/4" Φ X 4" LONG STUDS. WELD TO NO. 8 , NO. 7 & NO. 14 AS SHOWN.
12. 3/4" Φ X 2" STAINLESS STEEL FLAT CTSK. SLOTTED HEAD CAP SCREWS WITH ANTI-SEIZE LUBRICANT. RECESS 1/16" BELOW PLATE SURFACE.
13. 1/2" PLATE WITH 5/8" Φ LOOP ANCHOR FABRICATED AS SHOWN. SPACED AT MANUFACTURER'S SPEC.
14. INSIDE PLATE. FABRICATE FROM 5/8" PLATE
15. ADIPRENE BUTTON. SEE DETAIL. SET IN OUTSIDE PLATE.

⚠ MANUFACTURER'S RECOMMENDED JOINT OPENING BASED ON THE TEMPERATURE ON THE DAY OF PLACEMENT PER TEMPERATURE TABLE. THE MODULAR EXPANSION DEVICE SHALL HAVE THE NUMBER OF CELLS AS INDICATED IN ①.



MODULAR EXPANSION JOINT CONNECTION DETAIL AND WELD SPECIFICATION

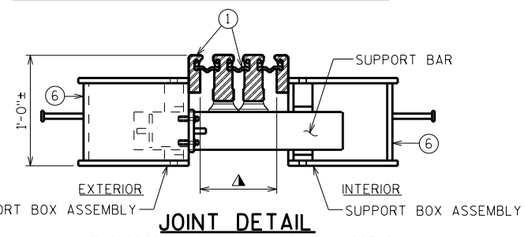
SECTION B-B



PART PLAN

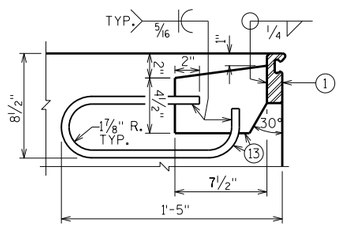
NOTE:
MODULAR EXPANSION DEVICE DESIGN AND DETAILS ARE SPECIFIC TO THE MANUFACTURER SELECTED FROM THOSE LISTED IN THE SPECIAL PROVISIONS.

SUPPORT BOXES ARE SHOWN FOR GENERAL INFORMATION AND LOCATION MAY VARY ACCORDING TO FABRICATOR DESIGN. SPACE SUPPORT BOXES TO MISS GIRDER TOP FLANGES WHEN POSSIBLE, BUT NOT TO EXCEED MAXIMUM SPACING PER SPECIAL PROVISIONS.



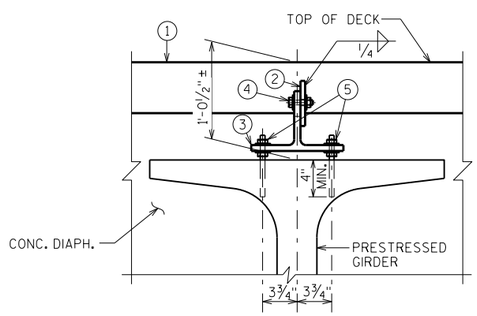
JOINT DETAIL

AT SUPPORT BAR & SUPPORT BOX ASSEMBLY



ANCHORAGE DETAIL

PLACE ADJACENT TO SUPPORT BOXES IN DECK @ CONC. DIAPH.



SECTION A-A

GENERAL NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE GLAND.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

NO EXPANSION JOINT PROTRUSIONS PERMITTED ABOVE ROADWAY SURFACE, ON PARAPET ROADWAY FACE OR ABOVE SIDEWALK SURFACE (FOR RAISED SIDEWALK).

THE EXPANSION JOINT SEALS SHALL BE PLACED, BONDED & SEALED AS RECOMMENDED BY THE MANUFACTURER. FORM WORK SHALL BE PLACED BETWEEN THE SUPPORT BOXES TO PREVENT CONCRETE INTRUSION INTO THE SUPPORT BOX. A TECHNICAL REPRESENTATIVE OF THE MANUFACTURER SHALL BE PRESENT DURING INSTALLATION. PRIOR TO SETTING THE JOINT ASSEMBLY INTO POSITION, THE PROJECT ENGINEER SHALL DETERMINE THE PROPER JOINT OPENING.

EXPANSION JOINT EXTRUSIONS SHALL BE FABRICATED TO CONFORM TO ROADWAY CROWN & GRADE. FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

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COST OF FURNISHING & PLACING OF THE EXPANSION JOINTS COMPLETE WITH PARAPET PLATES & SIDEWALK PLATES SHALL BE PAID FOR UNDER THE PRICE BID FOR "EXPANSION DEVICE MODULAR B-29-141".

BAR STEEL REINF. IN DECK AND CONC. DIAPHRAGM SHALL BE RESPACED AS NECESSARY TO ALLOW PLACEMENT OF JOINT ASSEMBLY. TOP TRANSVERSE BARS, ADJACENT TO MOD. JT., TO BE CUT AND PLACED BETWEEN JT. SUPPORT SYSTEM.

TEMP. TABLE

TEMPERATURE TABLE FOR SETTING JOINT OPENINGS TO BE DETERMINED BY JOINT MANUFACTURER WITH THE FOLLOWING DESIGN DATA:

1. 0.42 IN. OF MOVEMENT PER 10° F
2. MEDIAN TEMPERATURE OF 45° F
3. TEMP. RANGE IN TABLE FROM (5°F) TO (85°F)
4. ADJUST INITIAL JOINT OPENINGS BY A REDUCTION OF 2.12 IN., WHICH ACCOUNTS FOR SHRINKAGE (CREEP) OF THE SUPERSTRUCTURE OVER TIME , TO PRODUCE FINAL JOINT OPENINGS FOR TABLE.

A TABLE OF JOINT OPENINGS BASED ON ABOVE DATA SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY SAD/JPH | PLANS CK'D. NAR

PIER MODULAR EXPANSION JOINT DETAILS

SHEET 48

338

SCALE = 1.00

8

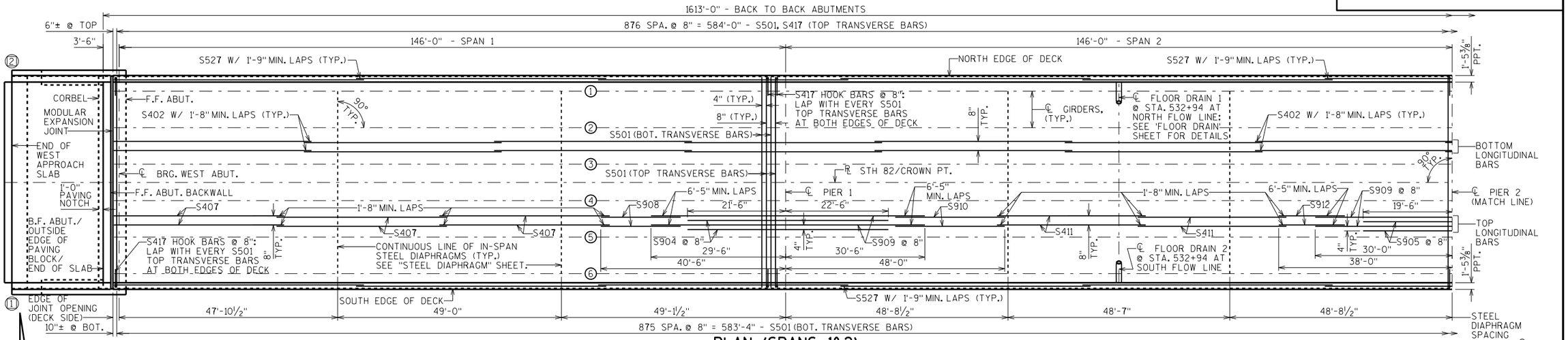
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STATE PROJECT NUMBER

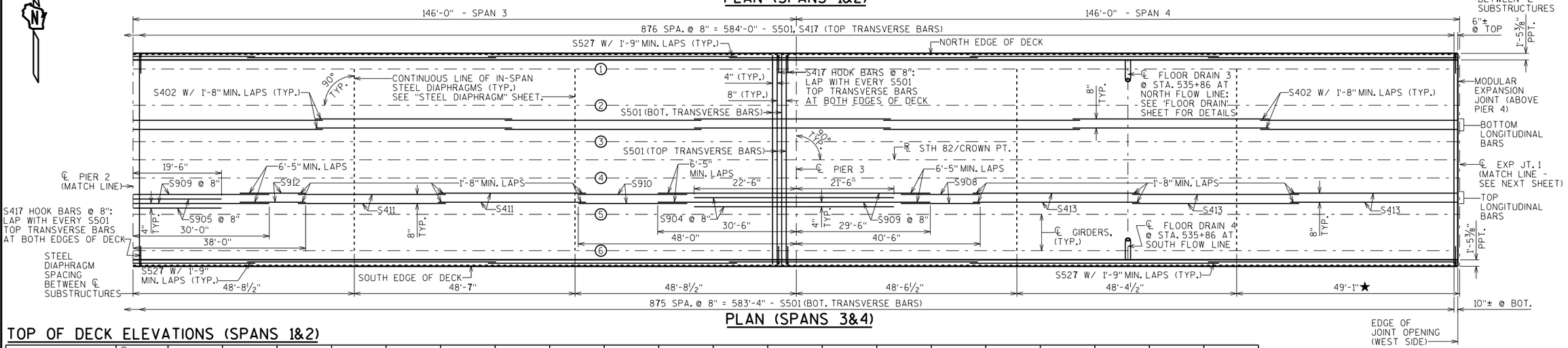
1430-01-73

(2) INDICATES WING NUMBER

(1) INDICATES GIRDER NUMBER



PLAN (SPANS 1&2)



PLAN (SPANS 3&4)

TOP OF DECK ELEVATIONS (SPANS 1&2)

	℄ 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
N. EDGE OF DECK	880.09	880.16	880.23	880.30	880.38	880.45	880.52	880.60	880.67	880.74	880.82	880.89	880.96	881.03	881.11	881.18	881.25	881.33	881.40	881.47	881.54
℄ GIRDER 1	880.13	880.20	880.27	880.34	880.42	880.49	880.56	880.64	880.71	880.78	880.85	880.93	881.00	881.07	881.15	881.22	881.29	881.37	881.44	881.51	881.58
℄ GIRDER 2	880.29	880.36	880.43	880.50	880.58	880.65	880.72	880.80	880.87	880.94	881.02	881.09	881.16	881.23	881.31	881.38	881.45	881.53	881.60	881.67	881.74
℄ GIRDER 3	880.45	880.52	880.59	880.66	880.74	880.81	880.88	880.96	881.03	881.10	881.17	881.25	881.32	881.39	881.47	881.54	881.61	881.69	881.76	881.83	881.90
℞ STH 82/CROWN PT.	880.53	880.60	880.67	880.74	880.82	880.89	880.96	881.04	881.11	881.18	881.26	881.33	881.40	881.47	881.55	881.62	881.69	881.77	881.84	881.91	881.98
℄ GIRDER 4	880.45	880.52	880.59	880.66	880.74	880.81	880.88	880.96	881.03	881.10	881.17	881.25	881.32	881.39	881.47	881.54	881.61	881.69	881.76	881.83	881.90
℄ GIRDER 5	880.29	880.36	880.43	880.50	880.58	880.65	880.72	880.80	880.87	880.94	881.02	881.09	881.16	881.23	881.31	881.38	881.45	881.53	881.60	881.67	881.74
℄ GIRDER 6	880.13	880.20	880.27	880.34	880.42	880.49	880.56	880.64	880.71	880.78	880.85	880.93	881.00	881.07	881.15	881.22	881.29	881.37	881.44	881.51	881.58
S. EDGE OF DECK	880.09	880.16	880.23	880.30	880.38	880.45	880.52	880.60	880.67	880.74	880.82	880.89	880.96	881.03	881.11	881.18	881.25	881.33	881.40	881.47	881.54

TOP OF DECK ELEVATIONS (SPANS 3&4)

	℄ 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. PIER 4W
N. EDGE OF DECK	881.54	881.62	881.69	881.76	881.84	881.91	881.98	882.06	882.13	882.20	882.28	882.35	882.42	882.49	882.57	882.64	882.71	882.79	882.86	882.93	883.01
℄ GIRDER 1	881.58	881.66	881.73	881.80	881.88	881.95	882.02	882.10	882.17	882.24	882.32	882.39	882.46	882.53	882.61	882.68	882.75	882.83	882.90	882.97	883.04
℄ GIRDER 2	881.74	881.82	881.89	881.96	882.04	882.11	882.18	882.26	882.33	882.40	882.48	882.55	882.62	882.69	882.77	882.84	882.91	882.99	883.06	883.13	883.21
℄ GIRDER 3	881.90	881.98	882.05	882.12	882.20	882.27	882.34	882.42	882.49	882.56	882.64	882.71	882.78	882.85	882.93	883.00	883.07	883.15	883.22	883.29	883.36
℞ STH 82/CROWN PT.	881.98	882.06	882.13	882.20	882.28	882.35	882.42	882.50	882.57	882.64	882.72	882.79	882.86	882.93	883.01	883.08	883.15	883.23	883.30	883.37	883.45
℄ GIRDER 4	881.90	881.98	882.05	882.12	882.20	882.27	882.34	882.42	882.49	882.56	882.64	882.71	882.78	882.85	882.93	883.00	883.07	883.15	883.22	883.29	883.36
℄ GIRDER 5	881.74	881.82	881.89	881.96	882.04	882.11	882.18	882.26	882.33	882.40	882.48	882.55	882.62	882.69	882.77	882.84	882.91	882.99	883.06	883.13	883.21
℄ GIRDER 6	881.58	881.66	881.73	881.80	881.88	881.95	882.02	882.10	882.17	882.24	882.32	882.39	882.46	882.53	882.61	882.68	882.75	882.83	882.90	882.97	883.04
S. EDGE OF DECK	881.54	881.62	881.69	881.76	881.84	881.91	881.98	882.06	882.13	882.20	882.28	882.35	882.42	882.49	882.57	882.64	882.71	882.79	882.86	882.93	883.01

★ MEASURED TO ℄ EXP JT. 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

SUPERSTRUCTURE PLAN - SPANS 1-4 (UNIT 1)

SHEET 49

339

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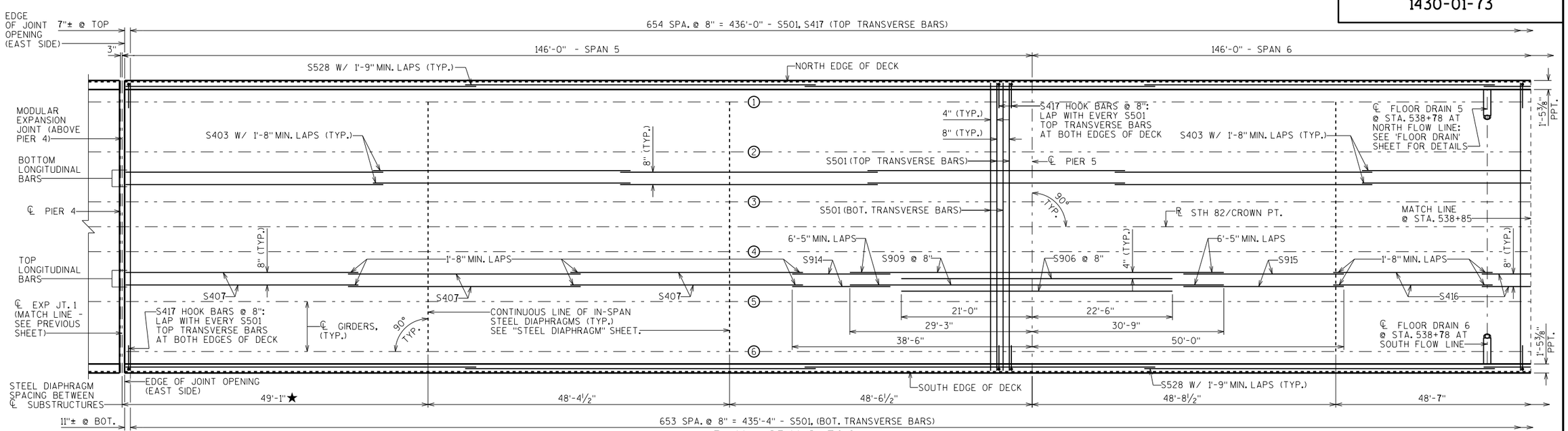
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STATE PROJECT NUMBER

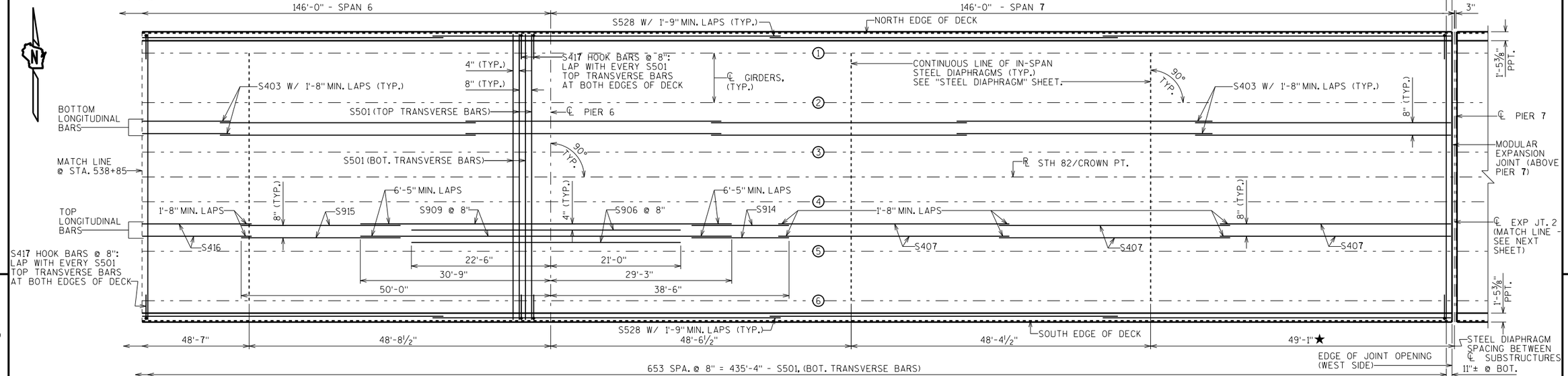
1430-01-73

○ INDICATES GIRDER NUMBER

★MEASURED TO ℄ EXP JT.



PLAN (SPANS 5&6)



PLAN (SPANS 6&7)

TOP OF DECK ELEVATIONS (SPANS 5-7)

	℄ BRG. PIER 4E	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 5	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 6	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. PIER 7W
N. EDGE OF DECK	883.01	883.08	883.15	883.22	883.30	883.37	883.44	883.52	883.59	883.66	883.73	883.81	883.88	883.95	884.03	884.10	884.17	884.25	884.32	884.39	884.47	884.54	884.61	884.68	884.76	884.83	884.90	884.98	885.05	885.12	885.20
℄ GIRDER 1	883.04	883.12	883.19	883.26	883.34	883.41	883.48	883.56	883.63	883.70	883.77	883.85	883.92	883.99	884.07	884.14	884.21	884.29	884.36	884.43	884.51	884.58	884.65	884.72	884.80	884.87	884.94	885.02	885.09	885.16	885.23
℄ GIRDER 2	883.21	883.28	883.35	883.42	883.50	883.57	883.64	883.72	883.79	883.86	883.93	884.01	884.08	884.15	884.23	884.30	884.37	884.45	884.52	884.59	884.67	884.74	884.81	884.88	884.96	885.03	885.10	885.18	885.25	885.32	885.40
℄ GIRDER 3	883.36	883.44	883.51	883.58	883.66	883.73	883.80	883.88	883.95	884.02	884.09	884.17	884.24	884.31	884.39	884.46	884.53	884.61	884.68	884.75	884.83	884.90	884.97	885.04	885.12	885.19	885.26	885.34	885.41	885.48	885.55
℞ STH 82/CROWN PT.	883.45	883.52	883.59	883.66	883.74	883.81	883.88	883.96	884.03	884.10	884.17	884.25	884.32	884.39	884.47	884.54	884.61	884.69	884.76	884.83	884.91	884.98	885.05	885.12	885.20	885.27	885.34	885.42	885.49	885.56	885.64
℄ GIRDER 4	883.36	883.44	883.51	883.58	883.66	883.73	883.80	883.88	883.95	884.02	884.09	884.17	884.24	884.31	884.39	884.46	884.53	884.61	884.68	884.75	884.83	884.90	884.97	885.04	885.12	885.19	885.26	885.34	885.41	885.48	885.55
℄ GIRDER 5	883.21	883.28	883.35	883.42	883.50	883.57	883.64	883.72	883.79	883.86	883.93	884.01	884.08	884.15	884.23	884.30	884.37	884.45	884.52	884.59	884.67	884.74	884.81	884.88	884.96	885.03	885.10	885.18	885.25	885.32	885.40
℄ GIRDER 6	883.04	883.12	883.19	883.26	883.34	883.41	883.48	883.56	883.63	883.70	883.77	883.85	883.92	883.99	884.07	884.14	884.21	884.29	884.36	884.43	884.51	884.58	884.65	884.72	884.80	884.87	884.94	885.02	885.09	885.16	885.23
S. EDGE OF DECK	883.01	883.08	883.15	883.22	883.30	883.37	883.44	883.52	883.59	883.66	883.73	883.81	883.88	883.95	884.03	884.10	884.17	884.25	884.32	884.39	884.47	884.54	884.61	884.68	884.76	884.83	884.90	884.98	885.05	885.12	885.20

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

SUPERSTRUCTURE PLAN - SPANS 5-7 (UNIT 2)

SHEET 50

340

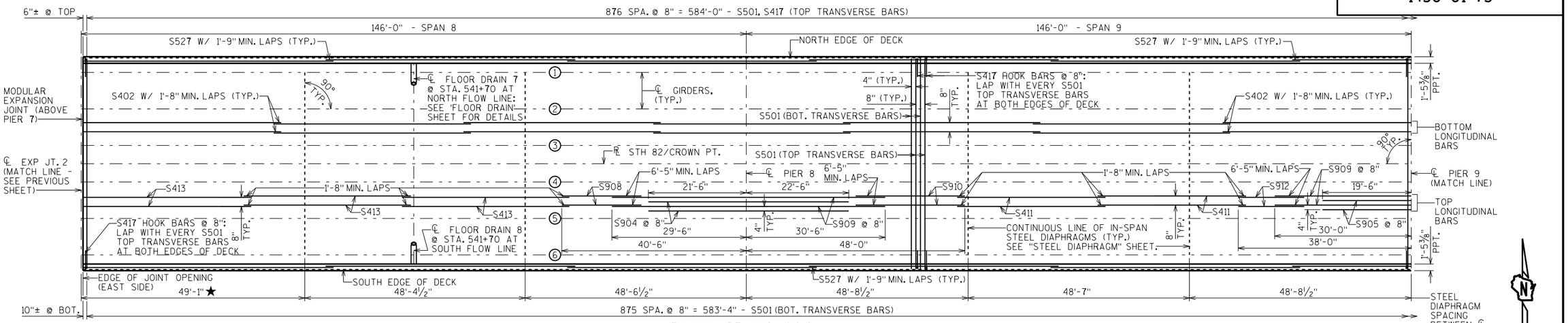
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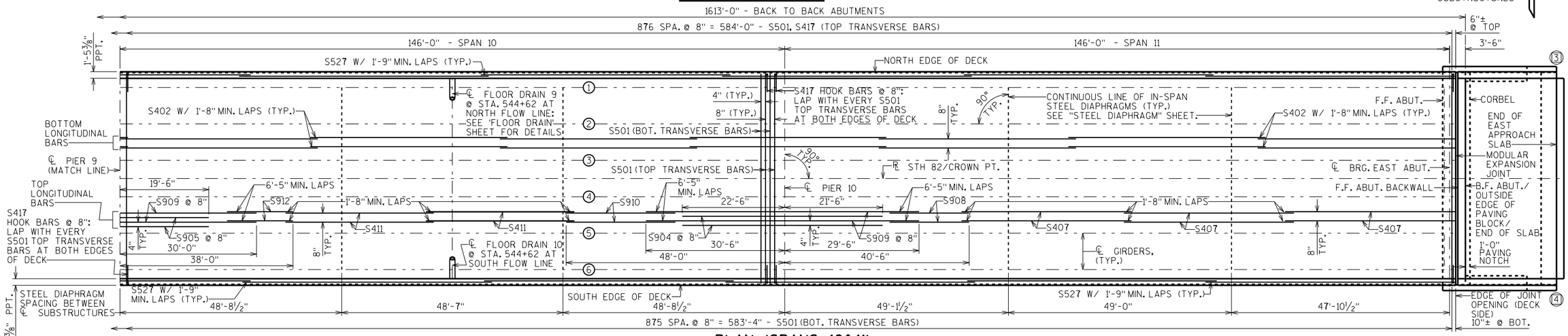
1430-01-73

INDICATES WING NUMBER

INDICATES GIRDER NUMBER ★MEASURED TO ℄ EXP JT. 2



PLAN (SPANS 8&9)



PLAN (SPANS 10&11)

TOP OF DECK ELEVATIONS (SPANS 8&9)

	℄ BRG. PIER 7E	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 8	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 9
N. EDGE OF DECK	885.20	885.27	885.34	885.41	885.49	885.56	885.63	885.71	885.78	885.85	885.92	886.00	886.07	886.14	886.22	886.29	886.36	886.44	886.51	886.58	886.66
℄ GIRDER 1	885.23	885.31	885.38	885.45	885.53	885.60	885.67	885.75	885.82	885.89	885.96	886.04	886.11	886.18	886.26	886.33	886.40	886.48	886.55	886.62	886.70
℄ GIRDER 2	885.40	885.47	885.54	885.61	885.69	885.76	885.83	885.91	885.98	886.05	886.13	886.20	886.27	886.34	886.42	886.49	886.56	886.64	886.71	886.78	886.86
℄ GIRDER 3	885.55	885.63	885.70	885.77	885.85	885.92	885.99	886.07	886.14	886.21	886.28	886.36	886.43	886.50	886.58	886.65	886.72	886.80	886.87	886.94	887.02
℞ STH 82/CROWN PT.	885.64	885.71	885.78	885.85	885.93	886.00	886.07	886.15	886.22	886.29	886.36	886.44	886.51	886.58	886.66	886.73	886.80	886.88	886.95	887.02	887.10
℄ GIRDER 4	885.55	885.63	885.70	885.77	885.85	885.92	885.99	886.07	886.14	886.21	886.28	886.36	886.43	886.50	886.58	886.65	886.72	886.80	886.87	886.94	887.02
℄ GIRDER 5	885.40	885.47	885.54	885.61	885.69	885.76	885.83	885.91	885.98	886.05	886.13	886.20	886.27	886.34	886.42	886.49	886.56	886.64	886.71	886.78	886.86
℄ GIRDER 6	885.23	885.31	885.38	885.45	885.53	885.60	885.67	885.75	885.82	885.89	885.96	886.04	886.11	886.18	886.26	886.33	886.40	886.48	886.55	886.62	886.70
S. EDGE OF DECK	885.20	885.27	885.34	885.41	885.49	885.56	885.63	885.71	885.78	885.85	885.92	886.00	886.07	886.14	886.22	886.29	886.36	886.44	886.51	886.58	886.66

TOP OF DECK ELEVATIONS (SPANS 10&11)

	℄ PIER 9	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 10	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. E. ABUT.
N. EDGE OF DECK	886.66	886.73	886.80	886.87	886.95	887.02	887.09	887.17	887.24	887.31	887.39	887.46	887.53	887.60	887.68	887.75	887.82	887.90	887.97	888.04	888.11
℄ GIRDER 1	886.70	886.77	886.84	886.91	886.99	887.06	887.13	887.21	887.28	887.35	887.42	887.50	887.57	887.64	887.72	887.79	887.86	887.94	888.01	888.08	888.15
℄ GIRDER 2	886.86	886.93	887.00	887.07	887.15	887.22	887.29	887.37	887.44	887.51	887.59	887.66	887.73	887.80	887.88	887.95	888.02	888.10	888.17	888.24	888.32
℄ GIRDER 3	887.02	887.09	887.16	887.23	887.31	887.38	887.45	887.53	887.60	887.67	887.74	887.82	887.89	887.96	888.04	888.11	888.18	888.26	888.33	888.40	888.47
℞ STH 82/CROWN PT.	887.10	887.17	887.24	887.31	887.39	887.46	887.53	887.61	887.68	887.75	887.83	887.90	887.97	888.04	888.12	888.19	888.26	888.34	888.41	888.48	888.55
℄ GIRDER 4	887.02	887.09	887.16	887.23	887.31	887.38	887.45	887.53	887.60	887.67	887.74	887.82	887.89	887.96	888.04	888.11	888.18	888.26	888.33	888.40	888.47
℄ GIRDER 5	886.86	886.93	887.00	887.07	887.15	887.22	887.29	887.37	887.44	887.51	887.59	887.66	887.73	887.80	887.88	887.95	888.02	888.10	888.17	888.24	888.32
℄ GIRDER 6	886.70	886.77	886.84	886.91	886.99	887.06	887.13	887.21	887.28	887.35	887.42	887.50	887.57	887.64	887.72	887.79	887.86	887.94	888.01	888.08	888.15
S. EDGE OF DECK	886.66	886.73	886.80	886.87	886.95	887.02	887.09	887.17	887.24	887.31	887.39	887.46	887.53	887.60	887.68	887.75	887.82	887.90	887.97	888.04	888.11

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

SUPERSTRUCTURE PLAN - SPANS 8-11 (UNIT 3)

SHEET 51

341

SCALE = 11.00

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8

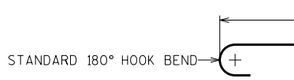
STATE PROJECT NUMBER

1430-01-73

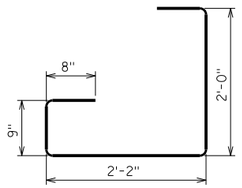
BILL OF BARS

NOTE:
THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

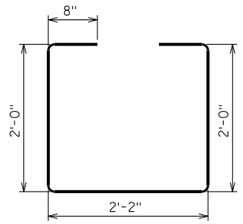
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
S501	X	4815	46'-2"		DECK-TOP & BOTTOM-HORIZONTAL-TRANSVERSE
S402	X	1960	43'-4"		DECK-BOT.-HORIZ.-LONGITUDINAL-@ SPANS 1-4 & SPANS 8-11
S403	X	770	41'-4"		DECK-BOT.-HORIZ.-LONGITUDINAL-@ SPANS 5-7
S904	X	280	44'-0"		DECK-TOP-HORIZ.-LONGIT.-OVER PIERS 1,3,8&10
S905	X	140	39'-0"		DECK-TOP-HORIZ.-LONGIT.-OVER PIERS 2&9
S906	X	140	43'-6"		DECK-TOP-HORIZ.-LONGIT.-OVER PIERS 5&6
S407	X	828	37'-4"		DECK-TOP-HORIZ.-LONGIT.-@ SPANS 1,5,7&11
S908	X	276	17'-6"		DECK-TOP-HORIZ.-LONGIT.-@ SPAN 1/PIER 1, SPAN 4/PIER 3, SPAN 8/PIER 8 & SPAN 11/PIER 10
S909	X	552	60'-0"		DECK-TOP-HORIZ.-LONGIT.-OVER PIERS 1,2,3,5,6,8,9&10
S910	X	276	24'-0"		DECK-TOP-HORIZ.-LONGIT.-@ SPAN 2/PIER 1, SPAN 3/PIER 3, SPAN 9/PIER 8 & SPAN 10/PIER 10
S411	X	552	32'-7"		DECK-TOP-HORIZ.-LONGIT.-@ SPANS 2,3,9&10
S912	X	276	14'-6"		DECK-TOP-HORIZ.-LONGIT.-@ SPAN 2/PIER 2, SPAN 3/PIER 2, SPAN 9/PIER 9 & SPAN 10/PIER 9
S413	X	414	36'-9"		DECK-TOP-HORIZ.-LONGIT.-@ SPANS 4&8
S914	X	138	15'-9"		DECK-TOP-HORIZ.-LONGIT.-@ SPAN 5/PIER 5 & SPAN 7/PIER 6
S915	X	138	25'-9"		DECK-TOP-HORIZ.-LONGIT.-@ SPAN 6/PIER 5 & SPAN 6/PIER 6
S416	X	138	25'-7"		DECK-TOP-HORIZ.-LONGIT.-@ SPAN 6
S417	X	4818	4'-8"	X	DECK-TOP-VERTICAL-TRANS.-BOTH EDGES-END TO END
S518	X	70	5'-0"		DECK-TOP & BOT.-HORIZ.-LONGIT.-AROUND DRAINS ONLY
S419	X	216	5'-11"	X	WEST & EAST ABUTMENTS AND PIERS 4&7 DIAPHRAGMS/DECK-VERT.-UNDER GIR. FLANGES
S420	X	216	7'-2"	X	WEST & EAST ABUTMENTS AND PIERS 4&7 DIAPHRAGMS/DECK-VERT.-BTWN. EDGES OF DECK
S721	X	150	7'-1"		WEST & EAST ABUTMENTS AND PIERS 4&7 DIAPHRAGMS-BOT.-HORIZ.-BTWN. GIRS.
S522	X	200	16'-4"	X	PIERS 1/2/3/5/6/8/9/10 DIAPHRAGMS/DECK-VERT.-BTWN. GIR FLANGES
S523	X	80	15'-8"	X	PIERS 1/2/3/5/6/8/9/10 DIAPHRAGMS/DECK-VERT.-UNDER GIR. FLANGES-STIRRUPS
S524	X	80	13'-8"	X	PIERS 1/2/3/5/6/8/9/10 DIAPHRAGMS/DECK-VERT.-UNDER GIR. FLANGES-STIRRUPS
S425	X	720	5'-2"		PIERS 1/2/3/5/6/8/9/10 DIAPHRAGMS-HORIZ.-BOTH FACES-BTWN. GIRS.
S525	X	4820	4'-5"	X	DECK/PARAPETS-VERT.-TRANS.-END TO END
S526	X	4820	5'-0"	X	PARAPETS-VERT.-TRANS.-END TO END OF DECK
S527	X	264	54'-10"		PARAPETS-HORIZ.-LONGIT.-BOTH FACES-@ SPANS 1-4 & SPANS 8-11
S528	X	96	56'-3"		PARAPETS-HORIZ.-LONGIT.-BOTH FACES-@ SPANS 5-7
S729	X	60	2'-8"		WEST & EAST ABUTMENTS AND PIERS 4&7 DIAPHRAGMS-BOT.-HORIZ.-AT EXTERIOR OF GIRDERS



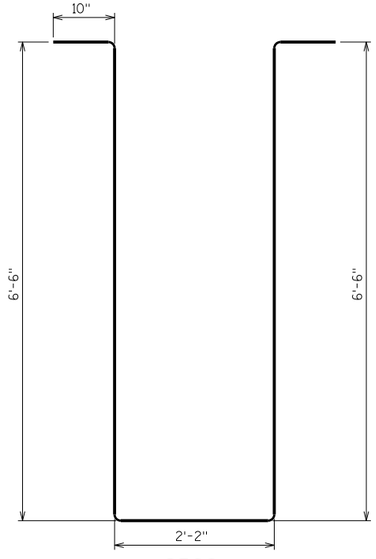
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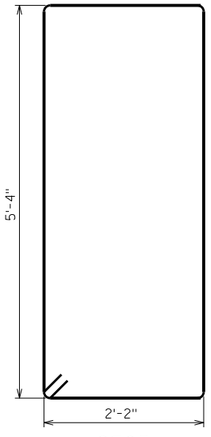
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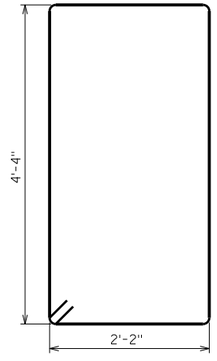
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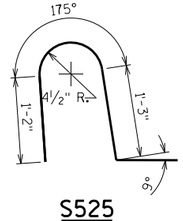
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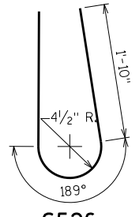
S523



S524



S525



S526

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

SUPERSTRUCTURE BAR DETAILS

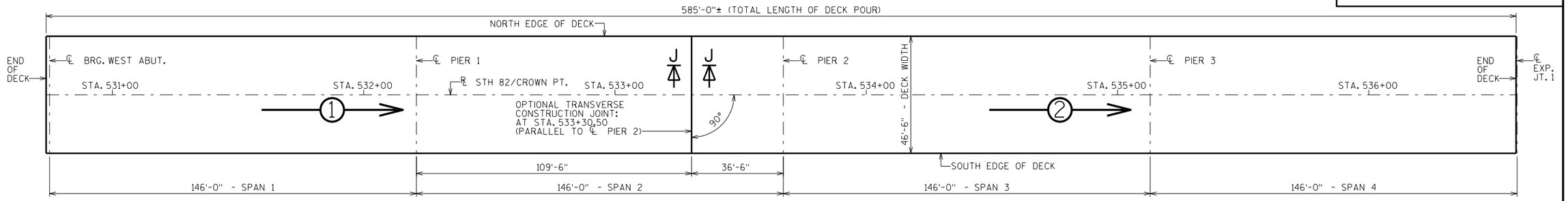
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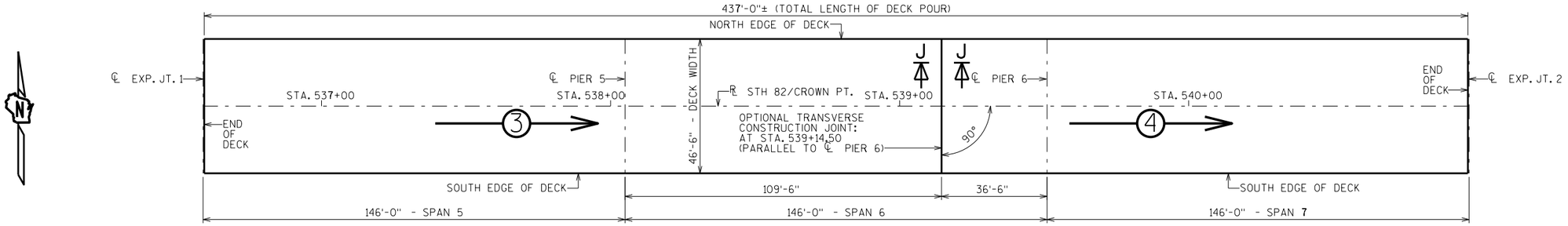
STATE PROJECT NUMBER

1430-01-73



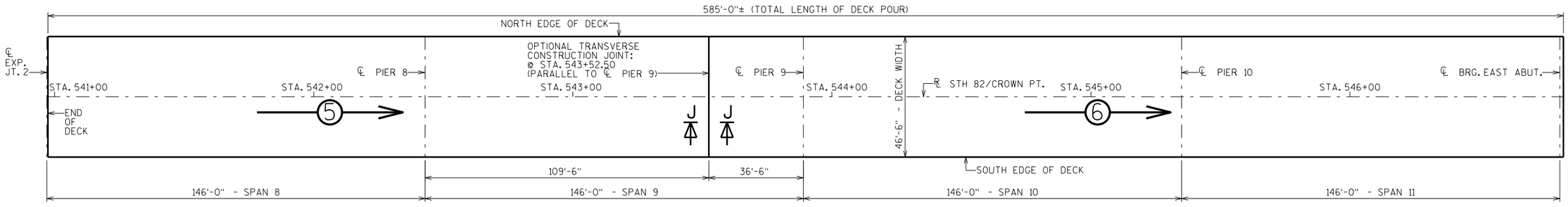
PLAN VIEW OF DECK POURING SEQUENCE - UNIT 1

(SHOWING PLACEMENT OF OPTIONAL TRANSVERSE CONSTRUCTION JOINT FOR WEST TO EAST POUR)



PLAN VIEW OF DECK POURING SEQUENCE - UNIT 2

(SHOWING PLACEMENT OF OPTIONAL TRANSVERSE CONSTRUCTION JOINT FOR WEST TO EAST POUR)

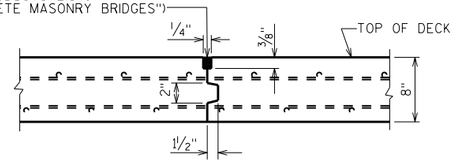


PLAN VIEW OF DECK POURING SEQUENCE - UNIT 3

(SHOWING PLACEMENT OF OPTIONAL TRANSVERSE CONSTRUCTION JOINT FOR WEST TO EAST POUR)

8

ROUTE OUT 1/4" X 3/8" DEEP AT JOINT.
FILL IN WITH LOW VISCOSITY CRACK SEALER
PER THE APPROVED PRODUCTS LIST.
(INCIDENTAL TO "CONCRETE MASONRY BRIDGES")



SECTION J-J

(OPTIONAL TRANSVERSE CONSTRUCTION JOINT)



INDICATES POUR NUMBER AND DIRECTION OF POUR

NOTES:

IF OPTIONAL JOINTS ARE PROVIDED, TWO OR MORE SEQUENTIAL POURS MAY BE COMBINED AND PLACED IN ONE CONTINUOUS OPERATION. TWO OR MORE ALTERNATE DECK POURS (E.G. 1 & 3) MAY BE PLACED ON THE SAME DAY.

DECK POURS 2, 4 & 6 CANNOT BE DONE BEFORE DECK POURS 1, 3 & 5.

THE CONTRACTOR MAY SUBMIT AN ALTERNATE POURING SEQUENCE SUBJECT TO THE APPROVAL OF THE STRUCTURES DESIGN SECTION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

DECK POURING SEQUENCE

SHEET 53

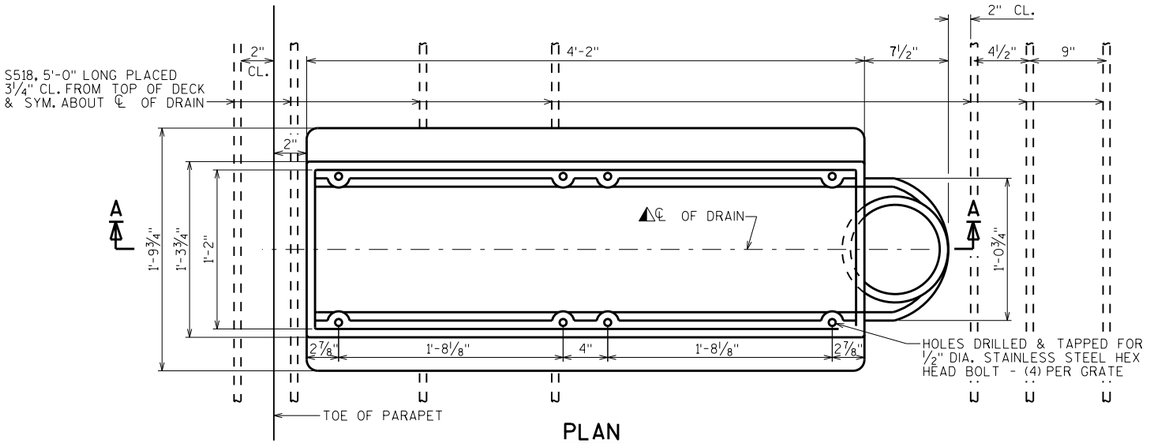
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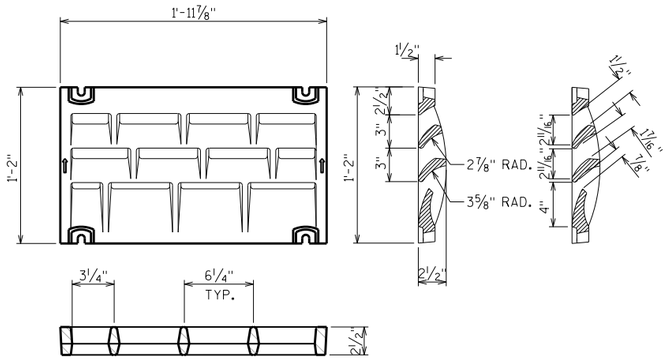
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STATE PROJECT NUMBER

1430-01-73



PLAN



GRATE CASTING DETAILS

ATTACH GRATES TO FRAME FOR SHIPMENT

NOTES

ALL MATERIAL FOR TYPE "WF" CASTING AND 8" DIA. CONNECTION PIPE, EXCLUDING GRATE HOLD DOWN SCREWS, SHALL BE GRAY IRON CONFORMING TO ASTM A48, CLASS 30.

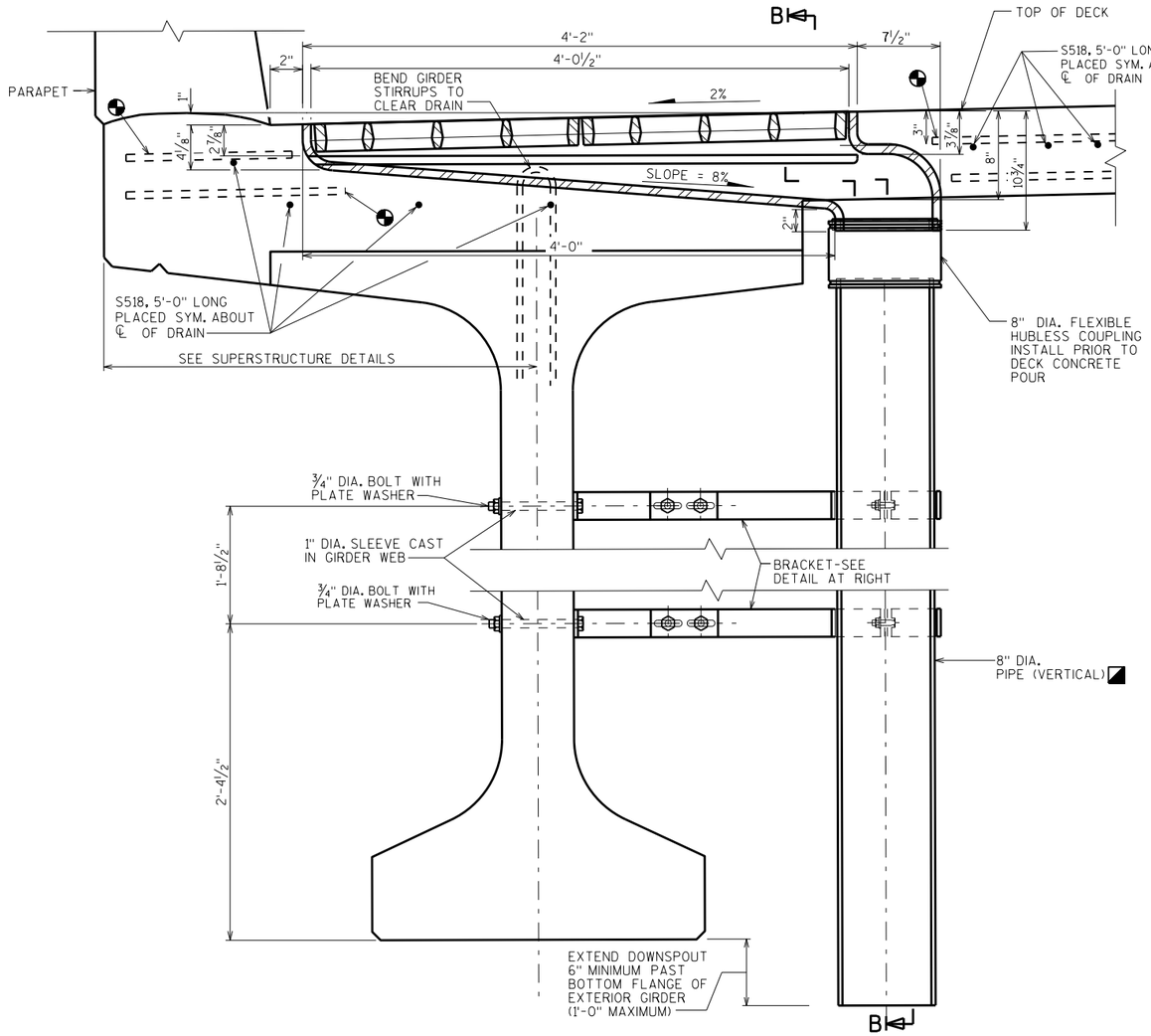
MATERIAL FOR BRACKETS SHALL CONFORM TO ASTM A36.

THE CONTRACTOR MAY PROPOSE AN ALTERNATE TYPE OF BRACKET. THE PROPOSED ALTERNATE DETAILS SHALL BE SUBMITTED AND SUBJECT TO THE APPROVAL OF THE ENGINEER.

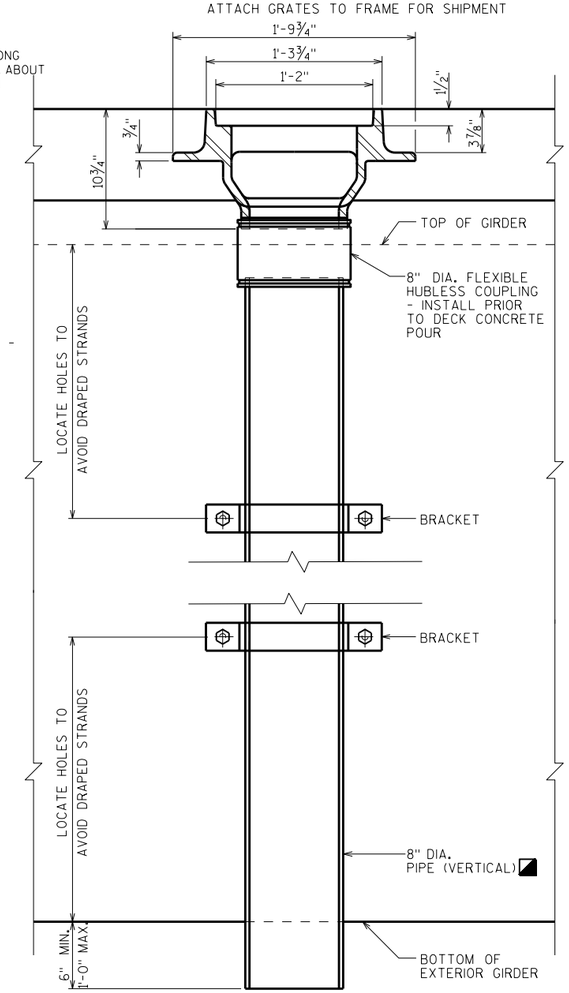
◪ 8" DIA. DOWNSPOUTS SHALL BE REINFORCED THERMOSETTING RESIN PIPE (RTRP).

◓ TRANSVERSE & LONGITUDINAL DECK BAR REINFORCEMENT TO BE CUT A MAXIMUM OF 1" CLEAR FROM DRAIN FRAME. DISPLACE BARS WHERE POSSIBLE.

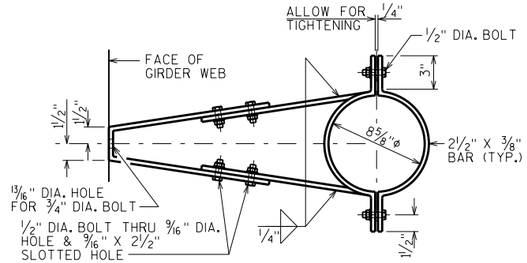
◭ FOR FLOOR DRAIN LOCATIONS, SEE 'SUPERSTRUCTURE PLAN' SHEETS



SECTION A-A



SECTION B-B



BRACKET DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY SAD/JPH | PLANS CK'D. NAR

FLOOR DRAIN TYPE "WF"

SHEET 54

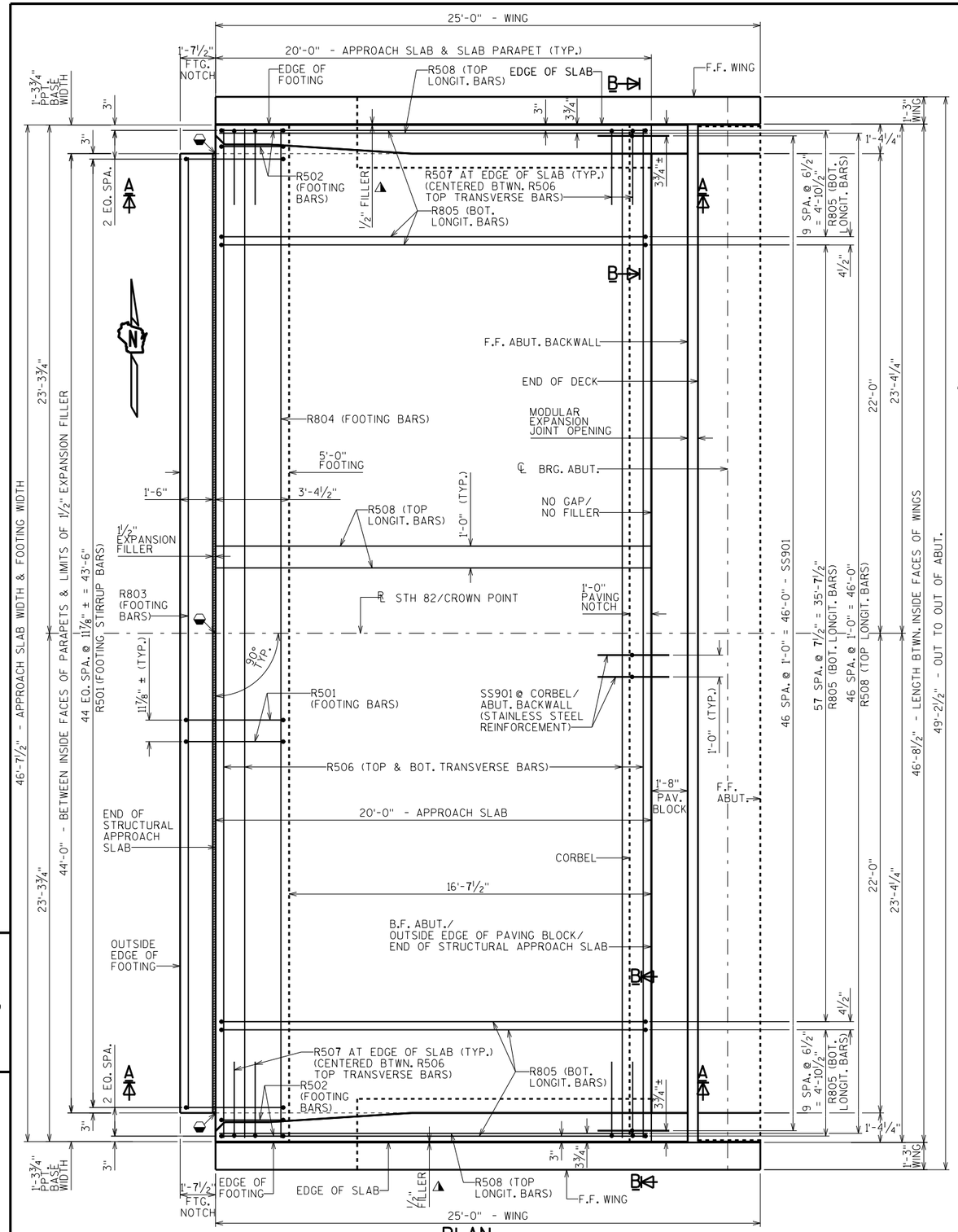
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SCALE = 0.55

8

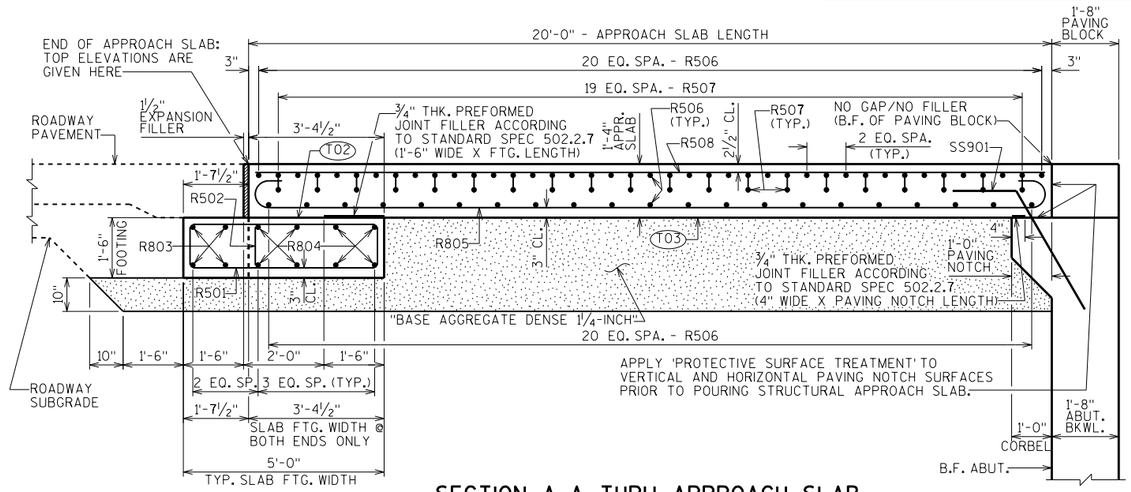
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STATE PROJECT NUMBER
1430-01-73



PLAN

WEST APPROACH SLAB SHOWN / EAST APPROACH SLAB SIMILAR

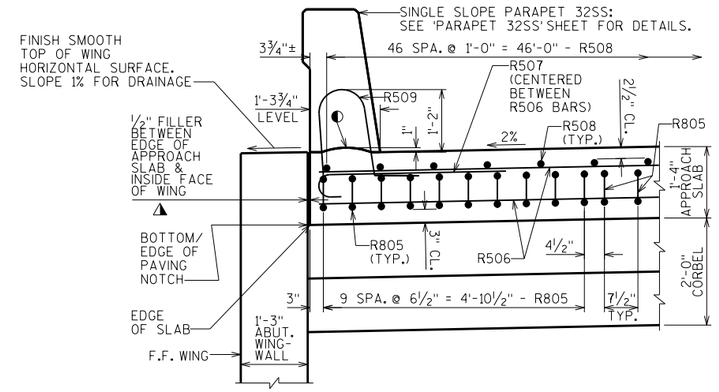


SECTION A-A THRU APPROACH SLAB

WEST APPROACH SLAB SHOWN
EAST APPROACH SLAB SIMILAR

TOP OF SLAB ELEVATIONS

	STH 82 STATION	OFFSET FROM ℄ STH 82	ELEVATION
END OF WEST APPROACH SLAB	530+51.50	22' LT.	879.97
	530+51.50	0'	880.41
	530+51.50	22' RT	879.97
END OF EAST APPROACH SLAB	547+04.50	22' LT.	888.23
	547+04.50	0'	888.67
	547+04.50	22' RT	888.23



SECTION B-B (EDGE OF SLAB DETAIL)

NOTES

ALLOWABLE SOIL BEARING PRESSURE: 2.000 P.S.F.

THE EXISTING SOIL MAY REMAIN IN PLACE IF THE REGION SOILS ENGINEER DETERMINES THAT THE EXISTING SOIL BEARING PRESSURE MEETS THE REQUIREMENT ABOVE.

◐ HORIZ. CONST. JOINT: STRIKE OFF AND LEAVE ROUGH AS SHOWN

⚠ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

STRUCTURAL APPROACH SLAB

SHEET 55

345

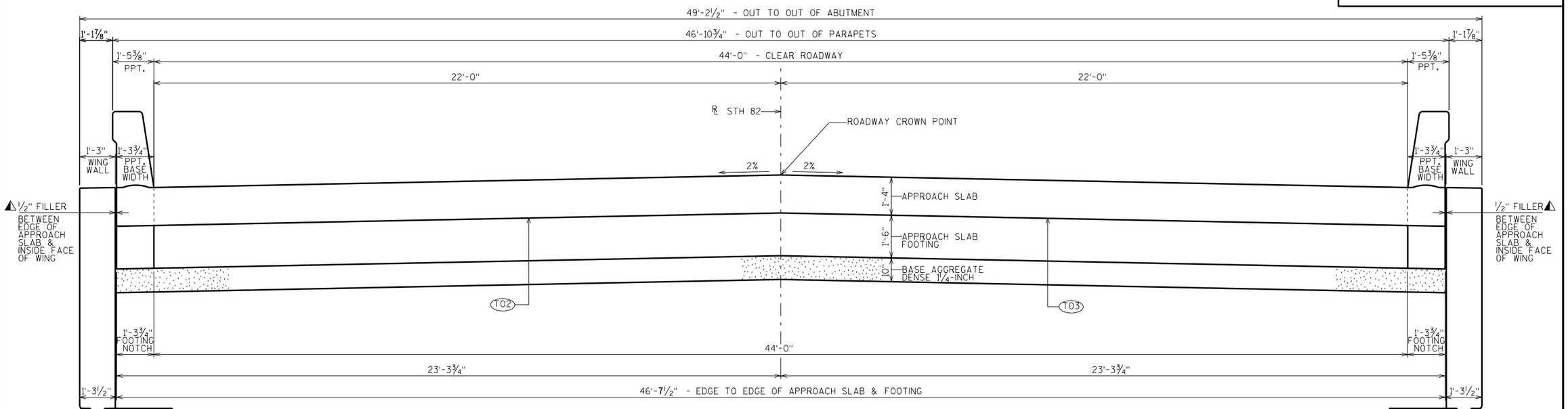
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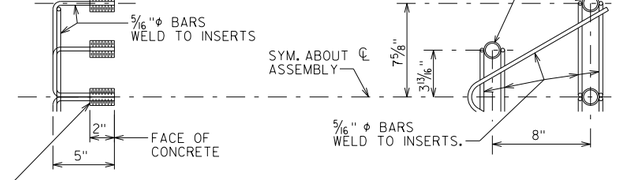
SCALE = 2.75

STATE PROJECT NUMBER

1430-01-73



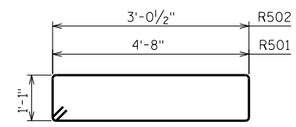
CROSS SECTION THRU APPROACH SLABS LOOKING EAST



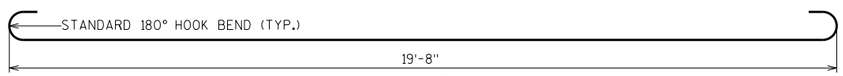
DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

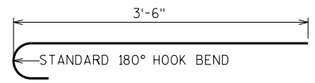
ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



R501 R502



R805

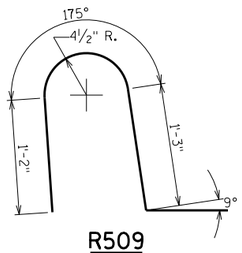


R507

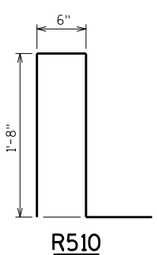
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

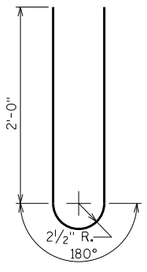
BAR MARK	COAT	NO. REQUIRED. WEST SLAB	NO. REQUIRED. EAST SLAB	LENGTH	BENT	LOCATION
R501	X	45	45	12'-2"	X	FOOTING-VERTICAL-LONGITUDINAL-STIRRUP BAR
R502	X	4	4	8'-11"	X	FOOTING-VERTICAL-LONGITUDINAL-STIRRUP BAR-AT ENDS ONLY
R803	X	4	4	43'-8"		FOOTING-TOP & BOTTOM-OUTSIDE FACE-HORIZONTAL-TRANSVERSE
R804	X	8	8	46'-3"		FOOTING-TOP & BOTTOM-INSIDE FACE-HORIZONTAL-TRANSVERSE
R805	X	78	78	21'-6"	X	SLAB-BOTTOM-VERTICAL-LONGITUDINAL
R506	X	42	42	46'-3"		SLAB-TOP & BOTTOM-HORIZONTAL-TRANSVERSE
R507	X	40	40	4'-1"	X	SLAB-TOP-VERTICAL-TRANSVERSE-AT BOTH EDGES
R508	X	47	47	19'-8"		SLAB-TOP-HORIZONTAL-LONGITUDINAL
R509	X	34	34	4'-5"	X	PARAPETS/SLAB-VERTICAL-TRANSVERSE
R510	X	34	34	4'-4"	X	PARAPETS/SLAB-VERTICAL-TRANSVERSE
R511	X	22	22	4'-9"	X	PARAPETS-VERTICAL-TRANSVERSE-@ ENDS
R512	X	24	24	2'-9"	X	PARAPETS/SLAB-INSIDE FACE-VERTICAL-TRANSVERSE
R513	X	12	12	4'-10"	X	PARAPETS-VERTICAL-TRANSVERSE
R514	X	34	34	5'-0"	X	PARAPETS-VERTICAL-TRANSVERSE
R515	X	2	2	21'-0"	X	PARAPETS-BOT.-INSIDE FACE-HORIZONTAL-LONGITUDINAL
R516	X	10	10	21'-0"		PARAPETS-BOTH FACES-HORIZONTAL-LONGITUDINAL



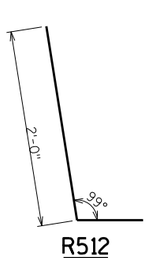
R509



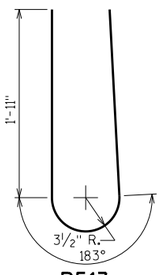
R510



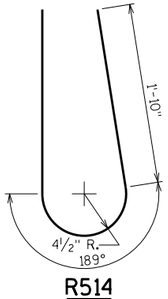
R511



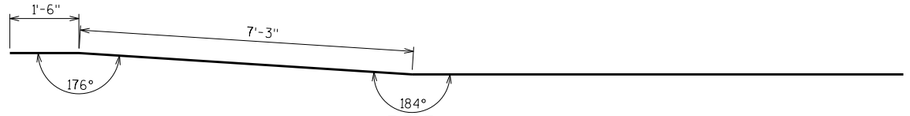
R512



R513



R514



R515

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

▲ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

STRUCTURAL APPROACH SLAB & BAR DETAILS

SHEET 56

346

SCALE = 1.75

8

8

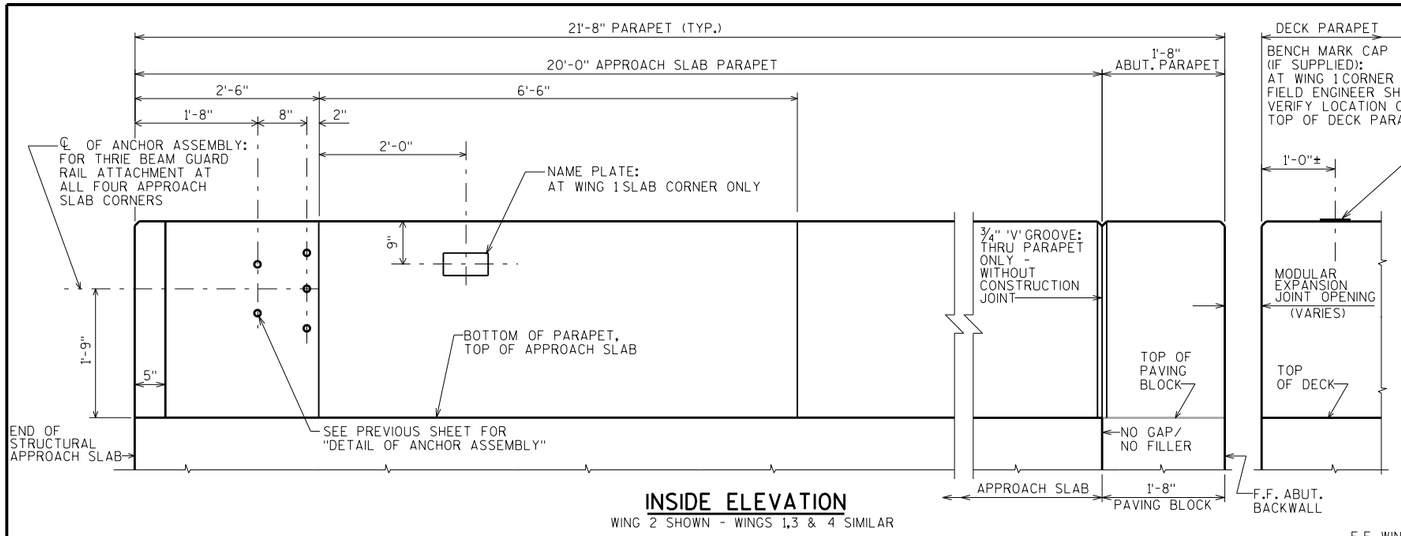
STATE PROJECT NUMBER

1430-01-73

NOTES:
SEE THE "STRUCTURAL APPROACH SLAB & BAR DETAILS" SHEET FOR THE BILL OF BARS AND BAR DETAILS FOR THE SLAB PARAPET R-BARS.

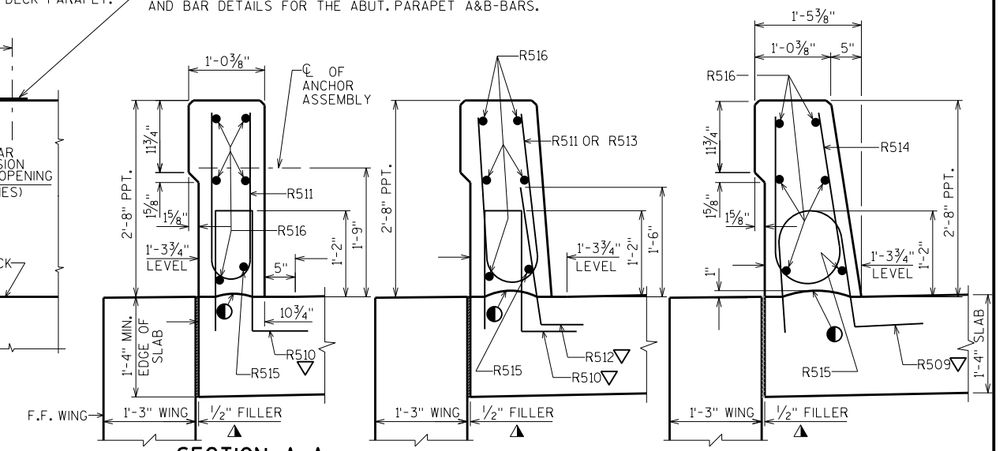
SEE THE "SUPERSTRUCTURE BAR DETAILS" SHEET FOR THE BILL OF BARS AND BAR DETAILS FOR THE DECK PARAPET S-BARS.

SEE THE 'ABUTMENT DETAILS' SHEETS FOR THE BILL OF BARS AND BAR DETAILS FOR THE ABUT. PARAPET A&B-BARS.



INSIDE ELEVATION

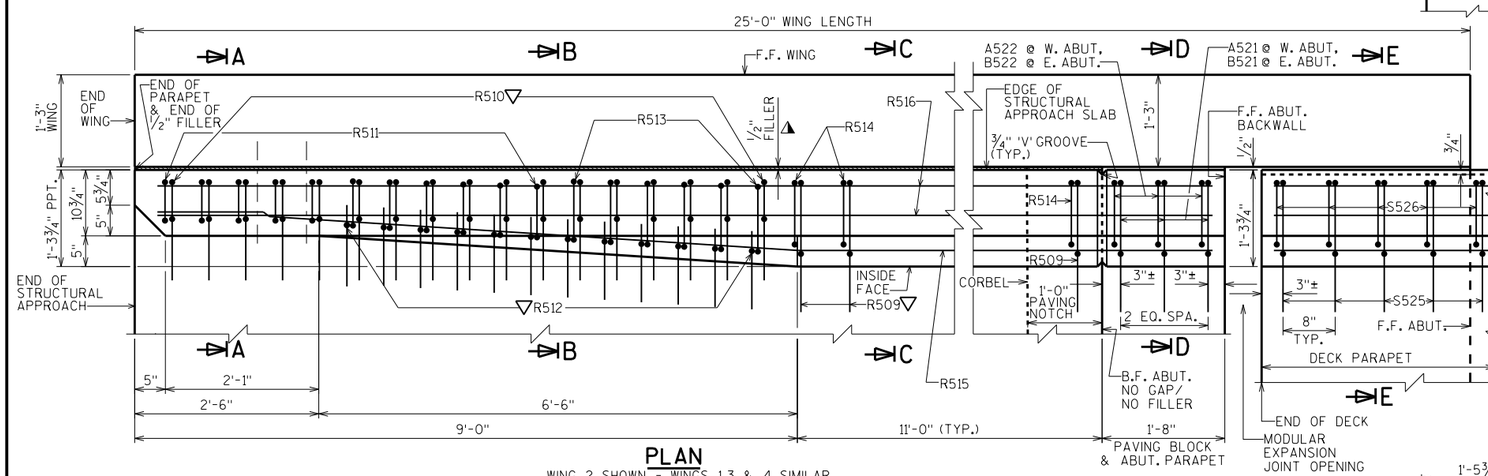
WING 2 SHOWN - WINGS 1,3 & 4 SIMILAR



SECTION A-A

SECTION B-B

SECTION C-C

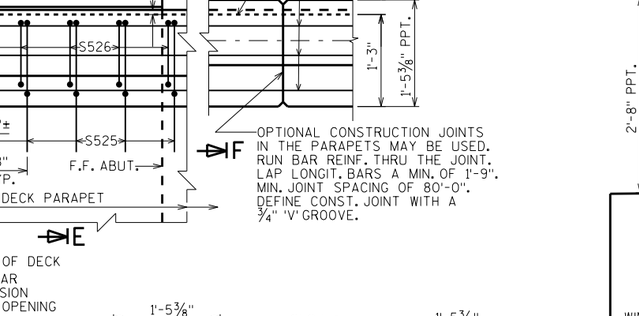


PLAN

WING 2 SHOWN - WINGS 1,3 & 4 SIMILAR
(TOP OF PARAPET ON APPROACH SLAB NOT SHOWN FOR CLARITY)

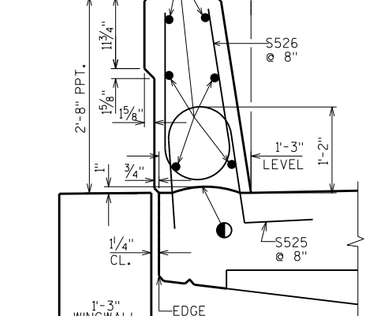
OUTSIDE ELEVATION

(WING NOT SHOWN FOR CLARITY)



SECTION D-D (ON ABUT.)

SECTION F-F (ON DECK)



SECTION E-E (ON DECK @ WINGWALL)

◐ HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

▽ R509, R510, & R512 PARAPET BARS TO BE TIED TO SLAB STEEL BEFORE SLAB IS POURED. USE CARE TO PLACE R512 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▲ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING AND NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY JPH | PLANS CK'D. NAR

SINGLE SLOPE PARAPET 32SS

SHEET 57

347

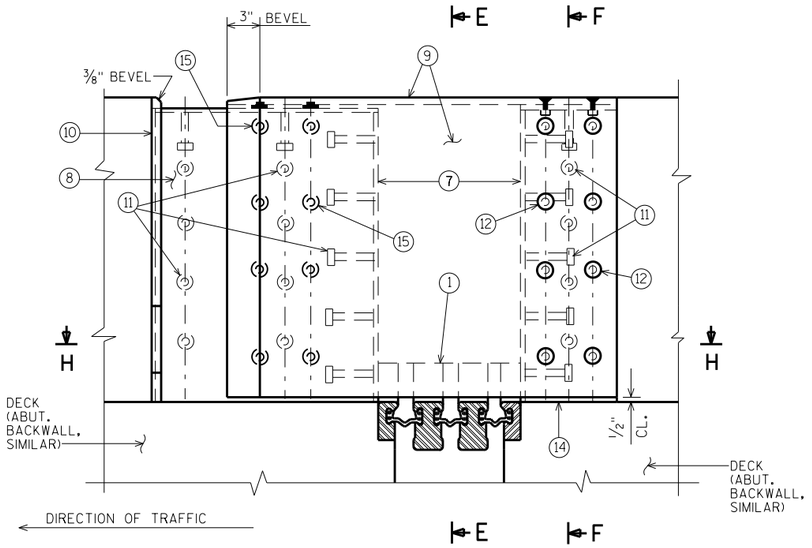
SCALE = 1.00

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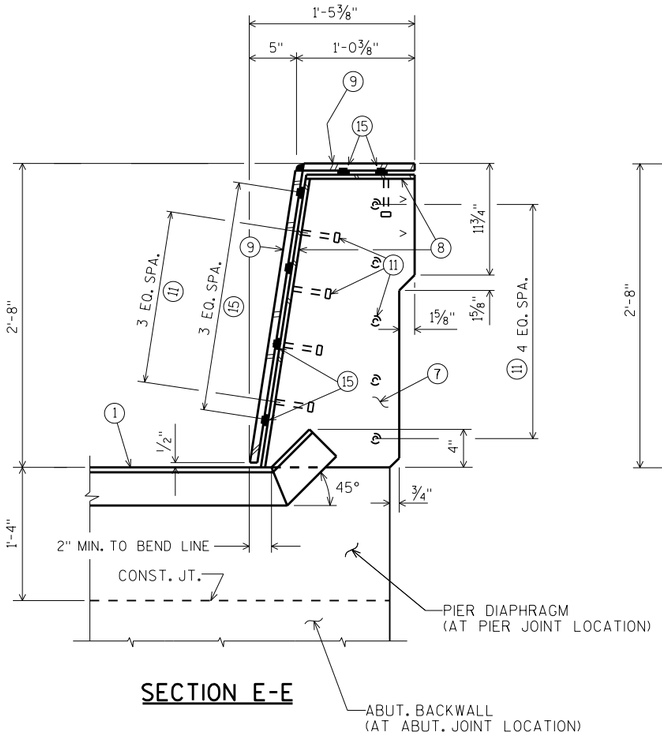
STATE PROJECT NUMBER

1430-01-73

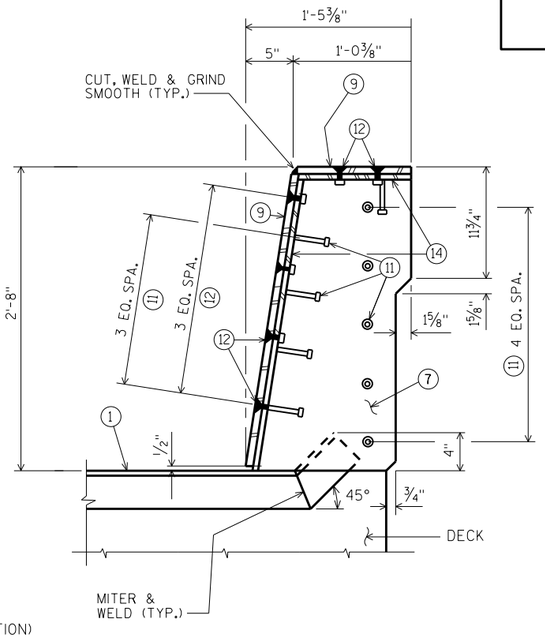


ELEVATION OF SINGLE SLOPE PARAPET

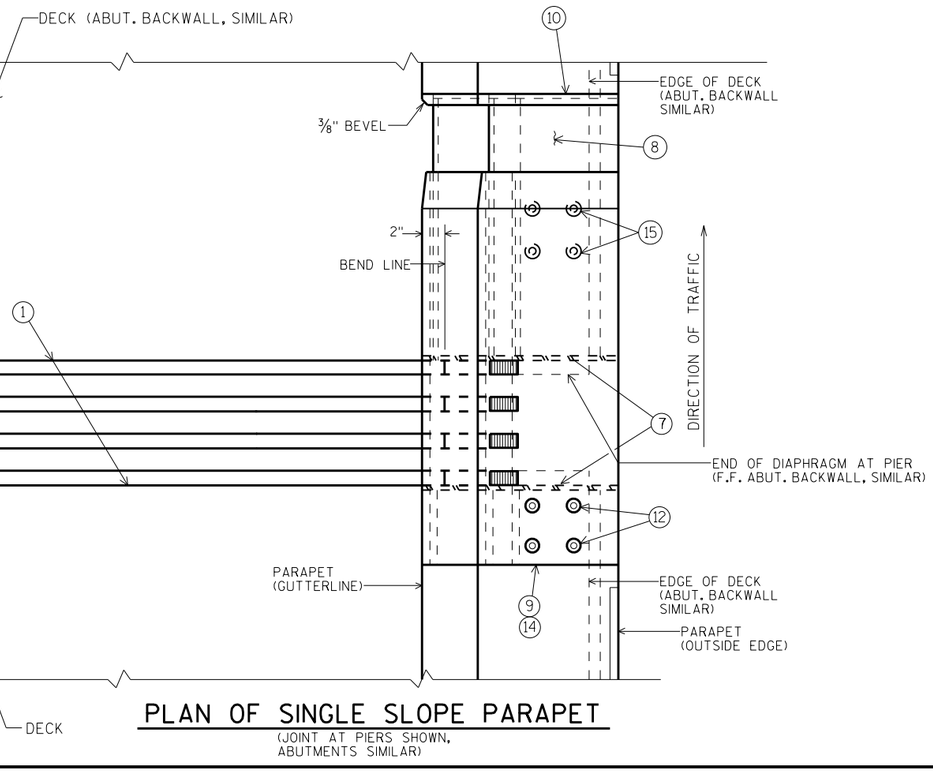
(JOINT AT PIERS SHOWN, ABUTMENTS SIMILAR)



SECTION E-E

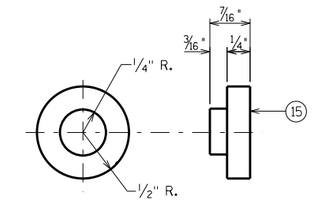


SECTION F-F

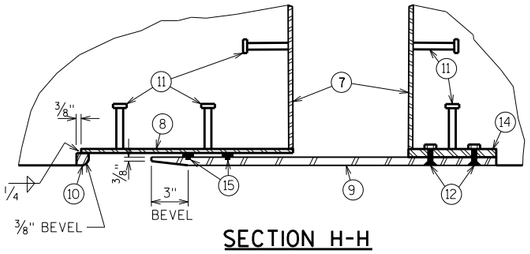


PLAN OF SINGLE SLOPE PARAPET

(JOINT AT PIERS SHOWN, ABUTMENTS SIMILAR)



ADIPRENE BUTTON DETAIL



SECTION H-H

LEGEND

(1) MODULAR EXPANSION JOINT DEVICE, 2 CELLS.

(7) 3/8" BULKHEAD PLATE. WELD TO NO. 1, NO. 8 AND NO. 14. WHEN CONDUIT IS PRESENT IN PARAPET OR SIDEWALK, ACCOMMODATE FOR BY PROVIDING OPENING IN NO. 7.

(8) INSIDE PLATE. FABRICATE FROM 3/8" PLATE.

(9) OUTSIDE PLATE. FABRICATE FROM 5/8" PLATE.

(10) 7/8" SQUARE BAR. WELD TO NO. 8 AS SHOWN.

(11) 3/4" Φ X 4" LONG STUDS. WELD TO NO. 8 , NO. 7 & NO. 14 AS SHOWN.

(12) 3/4" Φ X 2" STAINLESS STEEL FLAT CTSK. SLOTTED HEAD CAP SCREWS WITH ANTI-SEIZE LUBRICANT. RECESS 1/16" BELOW PLATE SURFACE.

(14) INSIDE PLATE. FABRICATE FROM 5/8" PLATE

(15) ADIPRENE BUTTON. SEE DETAIL. SET IN OUTSIDE PLATE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-141

DRAWN BY SAD/JPH | PLANS CK'D. NAR

COVER PLATE DETAILS FOR PARAPET JOINTS

SHEET 58

348

SCALE = 1.00

8

8

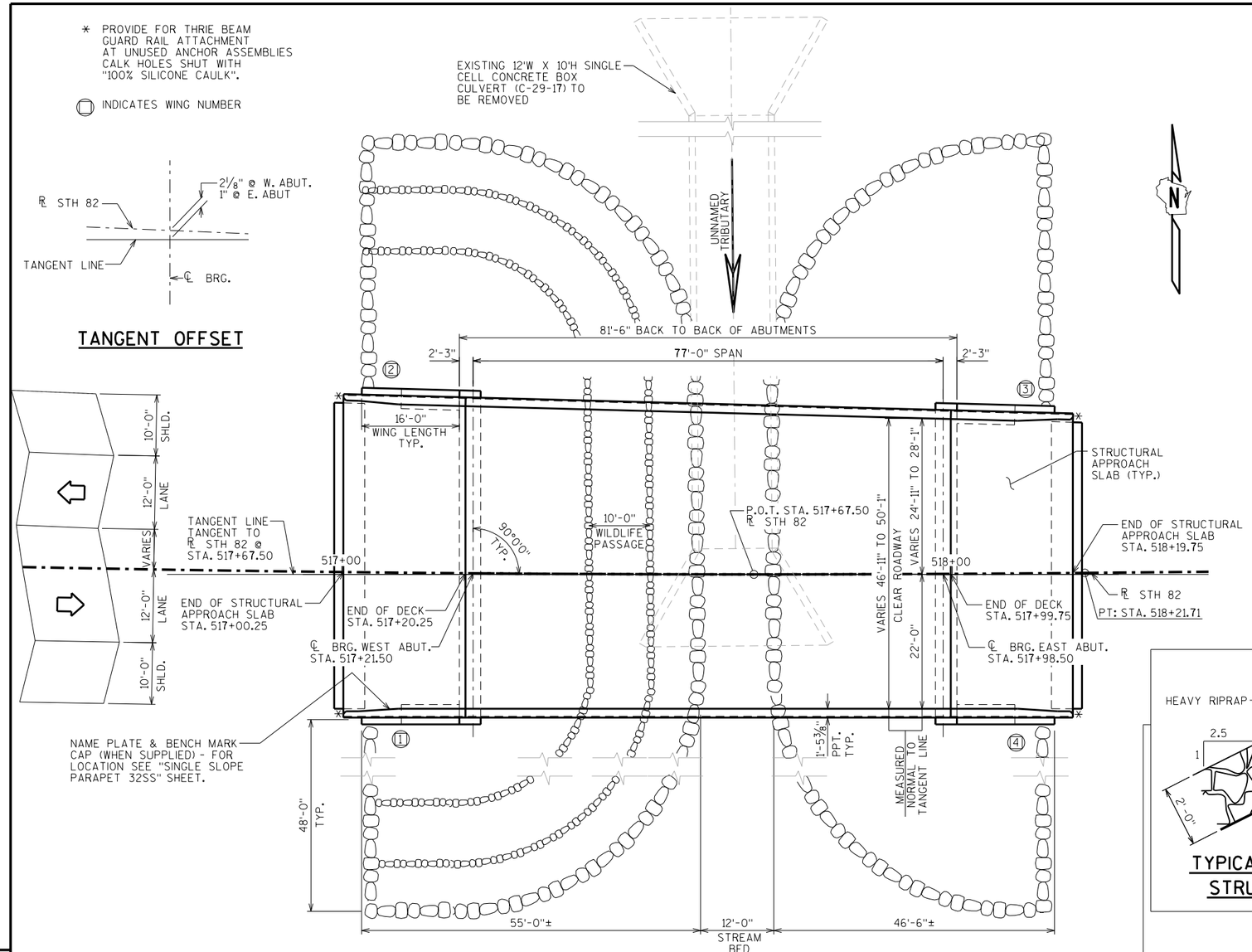
STATE PROJECT NUMBER

1430-01-73

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT AT UNUSED ANCHOR ASSEMBLIES CALK HOLES SHUT WITH "100% SILICONE CAULK".

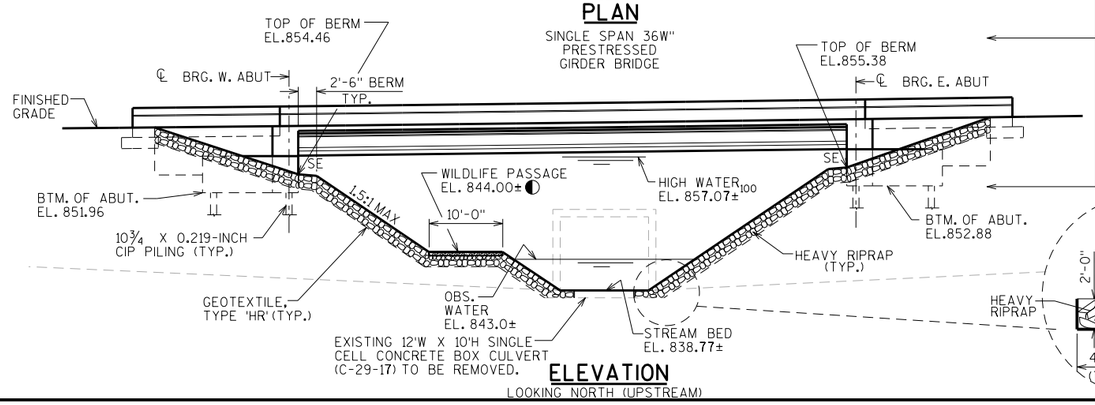
(2) INDICATES WING NUMBER

TANGENT OFFSET



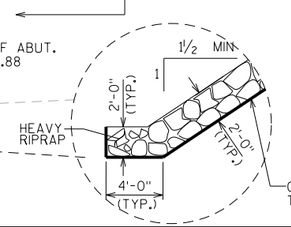
PLAN

SINGLE SPAN 36W" PRESTRESSED GIRDER BRIDGE

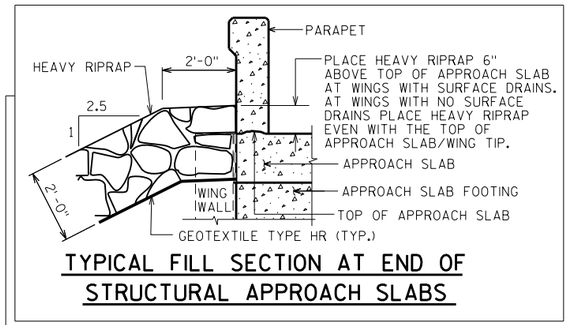


ELEVATION

LOOKING NORTH (UPSTREAM)



◐ FILL RIPRAP VOIDS AT WILDLIFE PASSAGE WITH SELECT CRUSHED MATERIAL.



TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING; HL-93
INVENTORY RATING FACTOR: RF=1.15
OPERATING RATING FACTOR: RF=1.49
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY SUPERSTRUCTURE — 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.
36W" 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 10¾ X 0.219-INCH CIP CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS ✱✱ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 90'LONG AT W. ABUT., 60'LONG AT E. ABUT.

✱✱ 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.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} =4,850 C.F.S.
VEL. = 5.1 F.P.S.
HW.= EL. 857.07
WATERWAY AREA= 859 SQ. FT.
DRAINAGE AREA= 7220 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 8

2 YEAR FREQUENCY

Q_2 =1,390 C.F.S.
$HW._2$= EL. 848.92
$VEL._2$= EL. 3.9 F.P.S

TRAFFIC VOLUME

STH 82

A.D.T.=6300 (2035)
R.D.S.=60 M.P.H.

CURVE DATA

STH 82

P.I. = 499+69.69
Δ = 36°56'39"
D = 0°57'41"
T = 1990.95'
L = 3842.98'
R = 5960.0'
S.E. = VARIES
P.C. = 479+78.74
P.T. = 518+21.71

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. EAST ABUTMENT
7. EAST ABUTMENT DETAILS
8. 36W" PRESTRESSED GIRDER DETAILS 1
9. 36W" PRESTRESSED GIRDER DETAILS 2
10. STEEL DIAPHRAGMS
11. SUPERSTRUCTURE CROSS SECTION
12. SUPERSTRUCTURE PLAN
13. SUPERSTRUCTURE DETAILS
14. W. STRUCTURAL APPROACH SLAB
15. E. STRUCTURAL APPROACH SLAB
16. SINGLE SLOPE PARAPET 32SS
17. ALTERNATE CONSTRUCTION JOINT

STRUCTURE DESIGN CONTACTS:

NICK RICE (608) 266-5092
AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION

BUREAU OF STRUCTURES

ACCEPTED William C. Dreher 8/17/17
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-29-148

STH 82 OVER UNNAMED TRIBUTARY

COUNTY: JUNEAU — TOWN/~~CITY/VILLAGE~~: MARION

DESIGN SPEC.: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
NAR	MJK	MJH	SEW

GENERAL PLAN

SHEET 1 OF 17

349

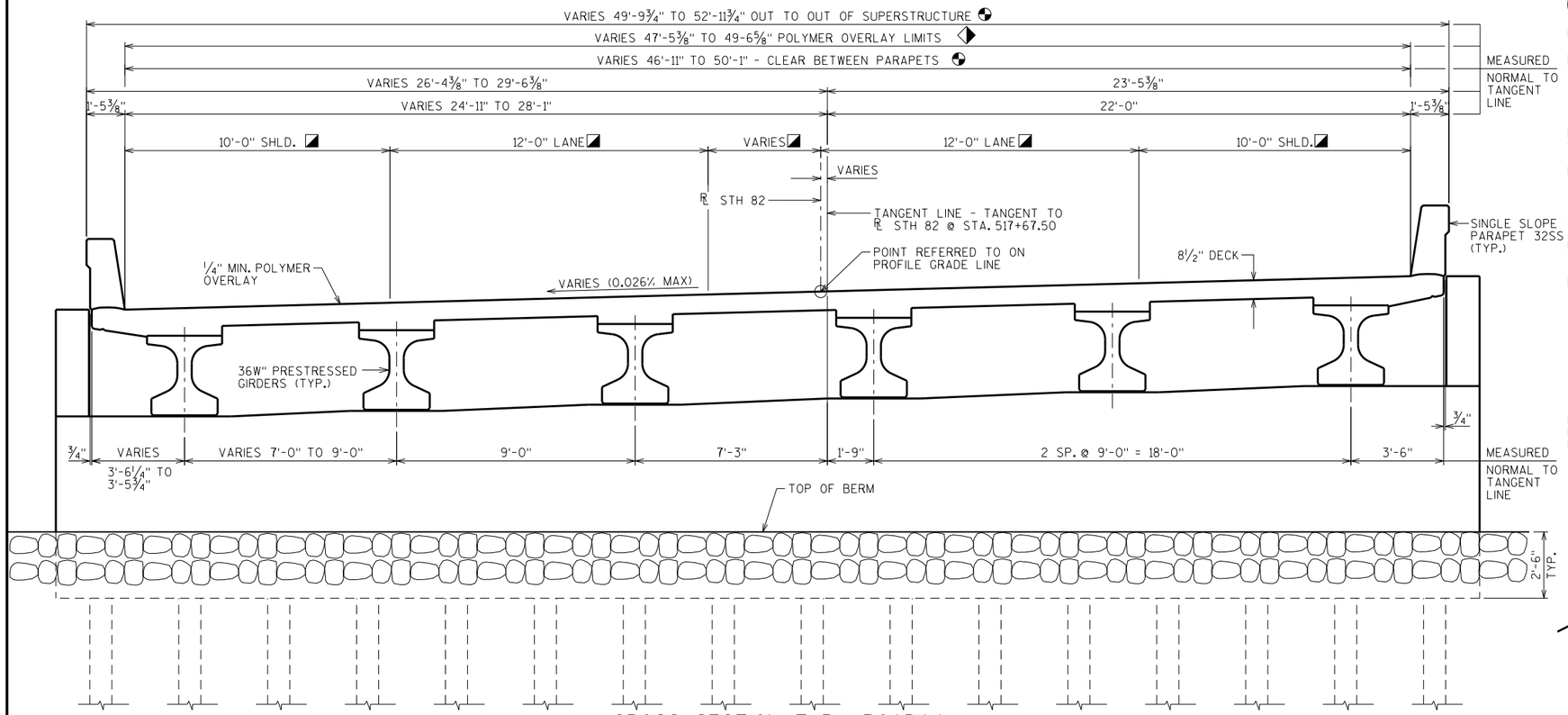
I.D. 1430-01-03B

DATE: APRIL 2017

SCALE = 10.00

STATE PROJECT NUMBER

1430-01-73



CROSS SECTION THRU ROADWAY

LOOKING EAST

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 STRUCTURAL BACKFILL.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

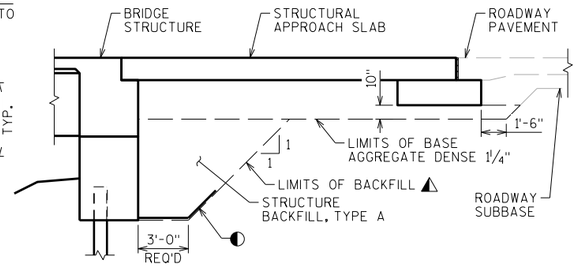
PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE TOP OF STRUCTURAL APPROACH SLABS.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON STRUCTURAL APPROACH SLABS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE 'HR' TO THE EXTENT SHOWN ON THE "GENERAL PLAN" SHT. AND IN THE ABUTMENT DETAILS.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-29-148" SHALL BE THE EXISTING GROUNDLINE.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.



TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

TOTAL ESTIMATED QUANTITIES

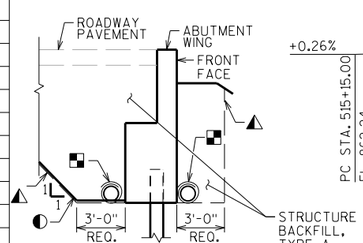
BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST APPROACH SLAB	WEST ABUT.	EAST ABUT.	EAST APPROACH SLAB	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA.517+64.50	LS	———	———	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-29-148	LS	———	———	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	———	———	338	332	———	670
305.0120	BASE AGGREGATE DENSE 1¼-INCH	TON	———	165	———	———	155	320
501.1000.S	ICE HOT WEATHER CONCRETING	LB	349	124	150	143	119	885
502.0100	CONCRETE MASONRY BRIDGES	CY	186	66	80	76	63	471
502.3200	PROTECTIVE SURFACE TREATMENT	SY	———	112	———	———	105	217
502.3210	PIGMENTED SURFACE SEALER	SY	100	———	———	———	———	100
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	468	———	———	———	———	468
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	———	———	4,345	4,225	———	8,570
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	29,720	11,990	2,055	2,045	11,525	57,335
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	1,735	———	———	———	———	1,735
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	12	———	———	———	———	12
506.4000	STEEL DIAPHRAGMS B-29-148	EACH	5	———	———	———	———	5
509.5100.S	POLYMER OVERLAY	SY	428	———	———	———	———	428
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	———	19	18	———	37
★ 550.2102	PILING CIP CONCRETE 10¾ X 0.219-INCH	LF	———	———	1,620	1,080	———	2,700
606.0300	RIPRAP HEAVY	CY	———	———	410	360	———	770
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	———	120	125	———	245
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4	———	———	———	———	4
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	———	———	65	65	———	130
645.0120	GEOTEXTILE TYPE HR	SY	———	———	590	540	———	1,130
SPV.0195	SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR	TON	———	———	123	———	———	123
	NON-BID ITEMS							
	FILLER	SIZE	———	———	———	———	———	½", 1½" & ¾"

★ ASTM A252 GRADE 3 STEEL WITH A YIELD STRESS OF 45 KSI IS REQUIRED

SUPER ELEVATION TRANSITION

STATION	LEFT OF R/L	RIGHT OF R/L
517+98.72'	2.60%	2.60%
518+14.64'	2.00%	2.00%
518+67.72'	2.00%	0.00%

NOTE: THE RIGHT EDGE OF DECK IS HIGHER WHEN LOOKING UPSTATION.



TYPICAL SECTION THRU WING

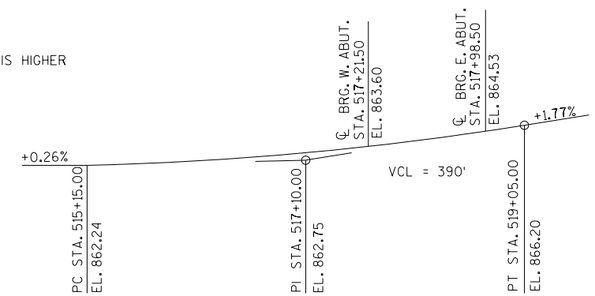
◐ "GEOTEXTILE TYPE OF SCHEDULE A" LIMITS. EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

◆ MEASURED NORMAL AT PAVING NOTCH

◪ MEASURED NORMAL TO ℄ STH 82. SEE ROADWAY PLANS FOR LANE & SHLD. CONFIGURATION

◔ MEASURED AT THE ENDS OF STRUCTURAL APPROACH SLABS

◩ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



PROFILE GRADE LINE STH 82

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

DRAWN BY MJH | PLANS CK'D. SEW

CROSS SECTION & QUANTITIES

SHEET 2

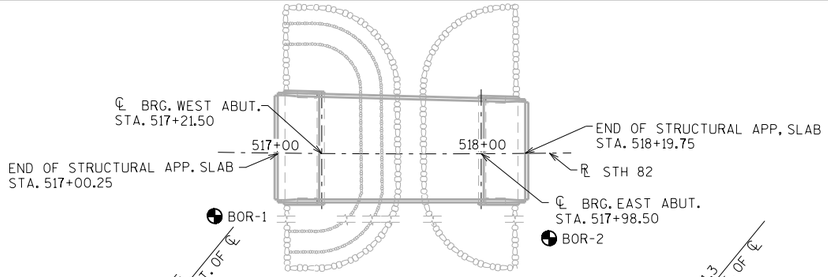
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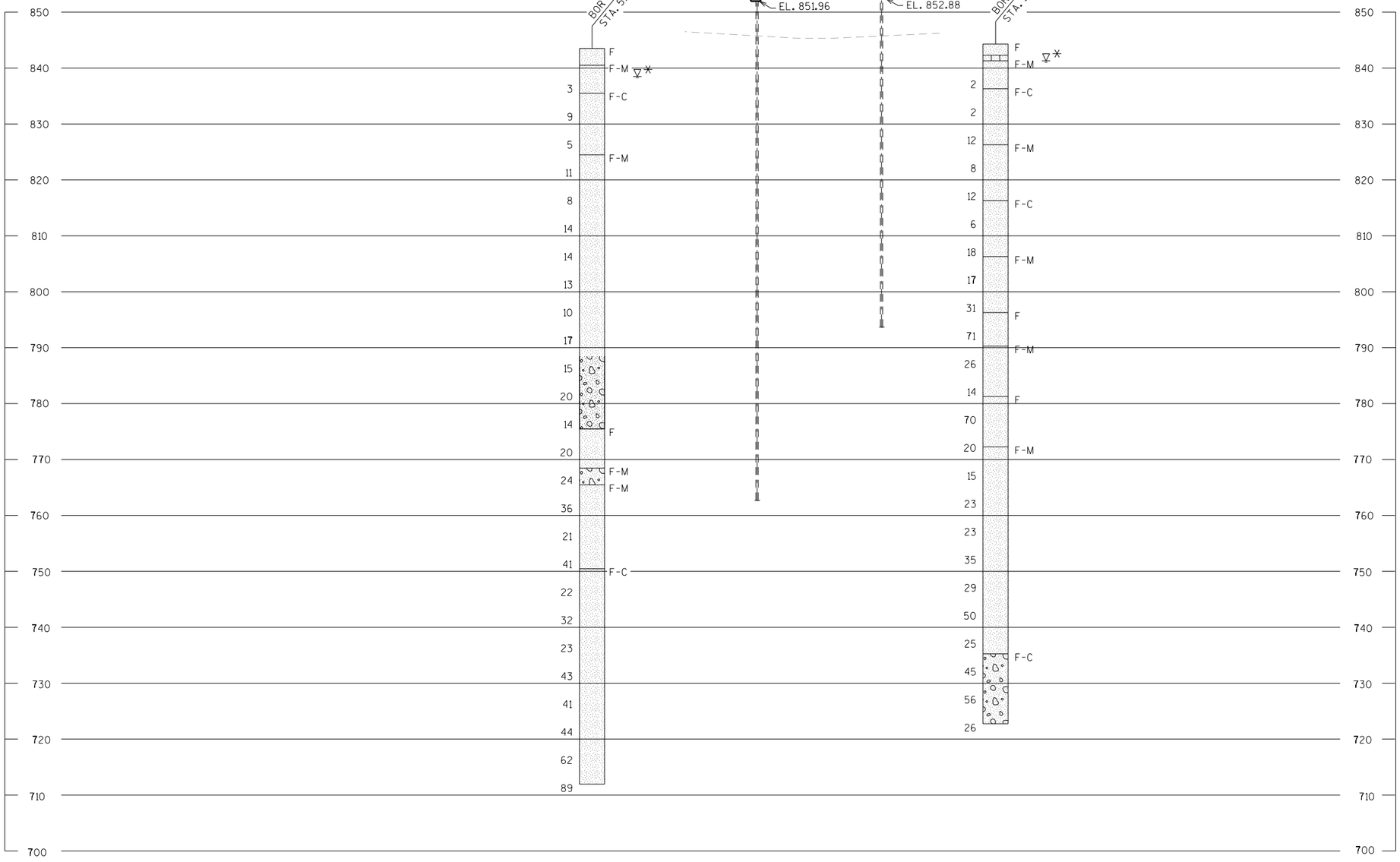
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8

SCALE = 2.50

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	8/4/2015	153176.0	514199.4
2	7/29/2015	153172.4	514343.7
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) JUNEAU COUNTY			





* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

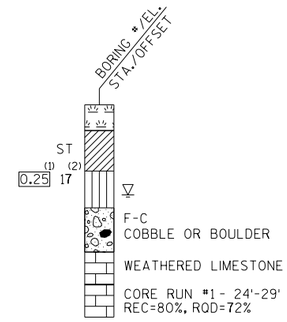
STATE PROJECT NUMBER

1430-01-73

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

DRAWN BY MJH | PLANS CK'D. SEW

SUBSURFACE EXPLORATION

SHEET 3

351

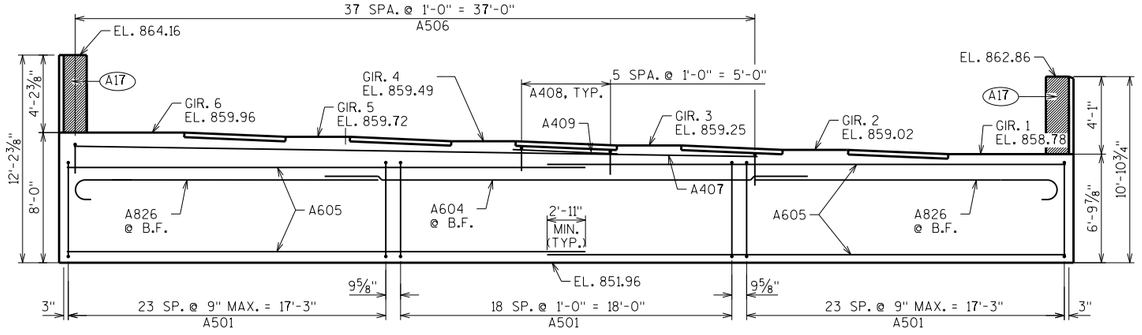
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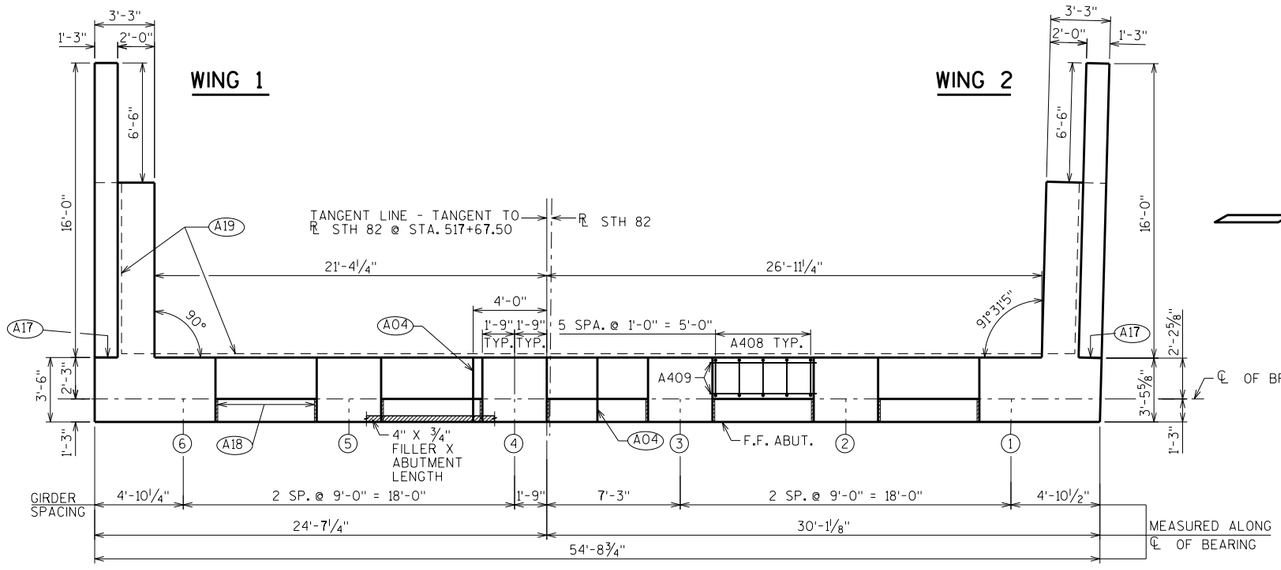
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STATE PROJECT NUMBER

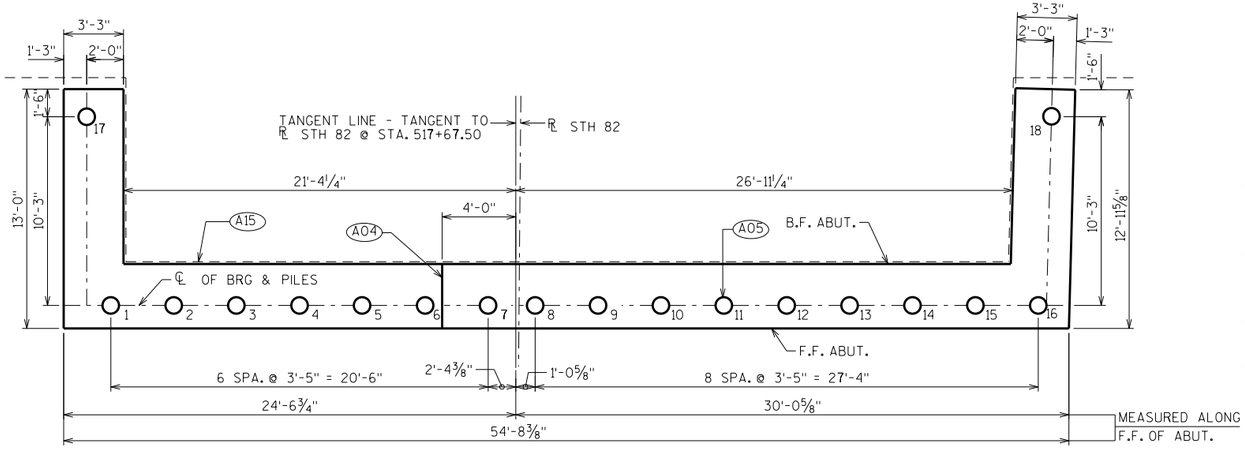
1430-01-73



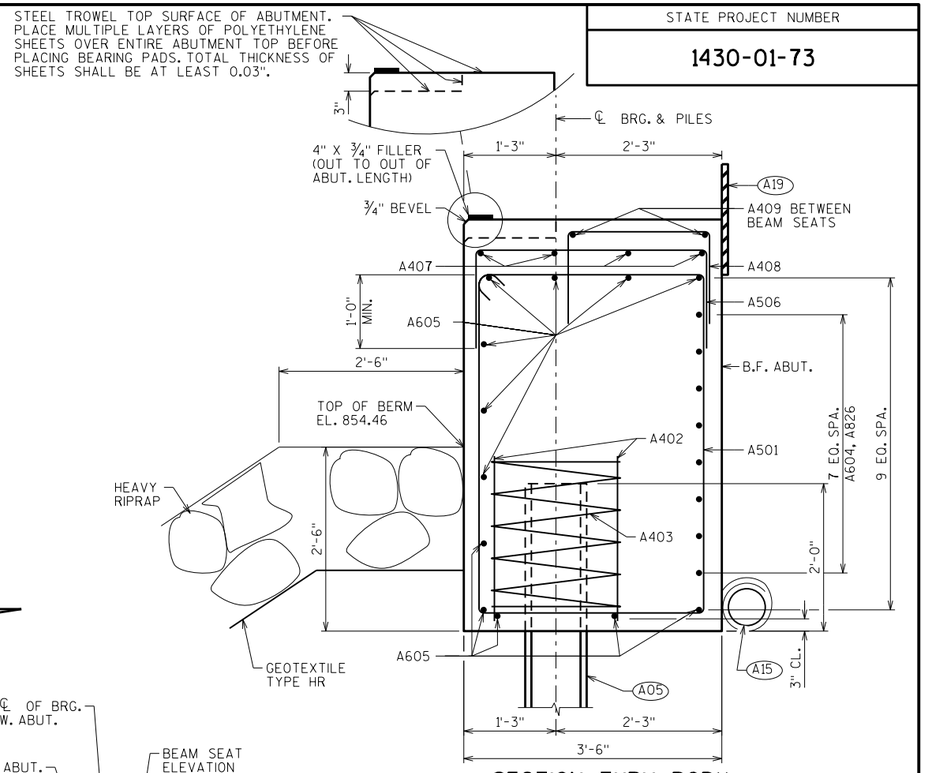
ELEVATION



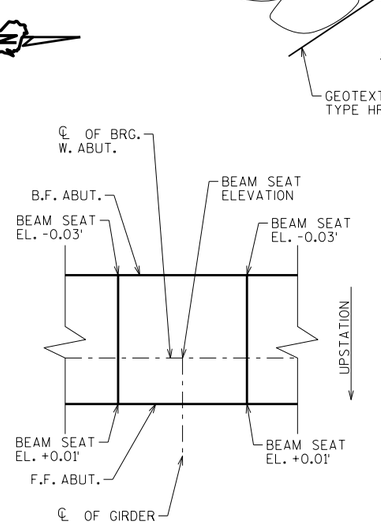
PLAN



PILE PLAN



SECTION THRU BODY



SLOPED BEAM SEAT DETAIL

○ INDICATES GIRDER NUMBER

(A04) VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 X 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

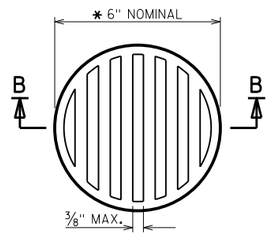
(A05) SUPPORT ABUTMENT ON 10 3/4"DIA. X 0.219" CIP CONCRETE PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



RODENT SHIELD DETAIL

SECTION B-B

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

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 EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

DRAWN BY MJH | PLANS CK'D. SEW

WEST ABUTMENT

SHEET 4

352

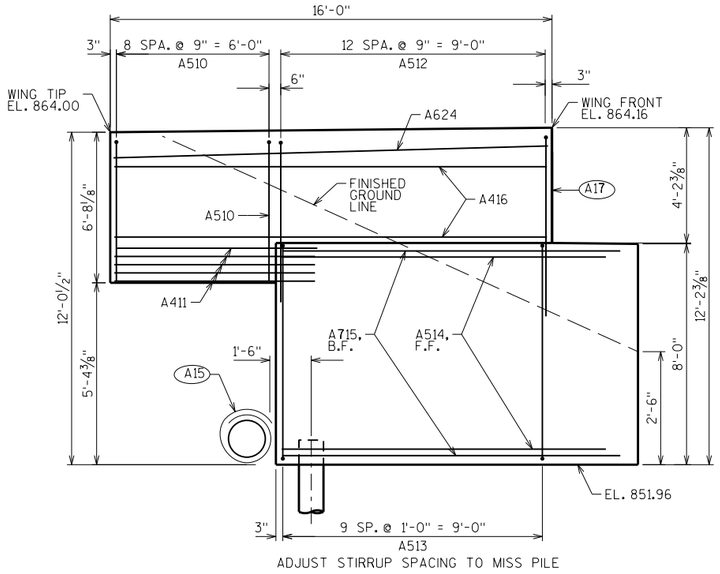
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8

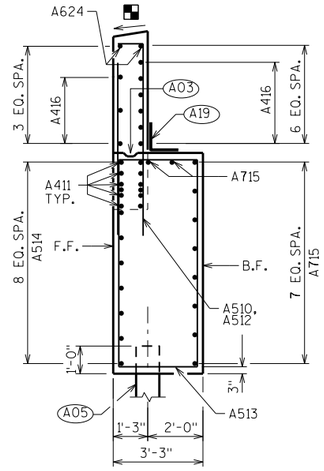
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STATE PROJECT NUMBER

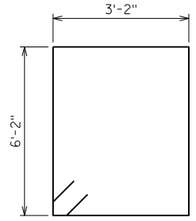
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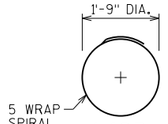
WING 1 ELEVATION



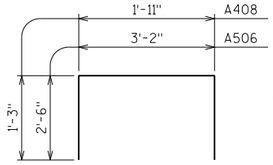
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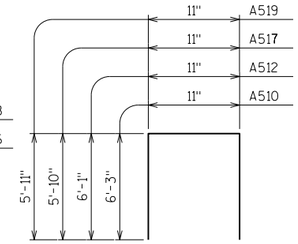
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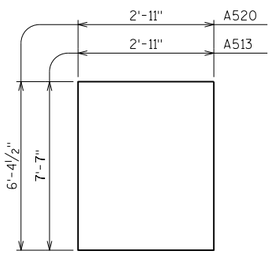
A403



A506, A408



A510, A512, A517, A519



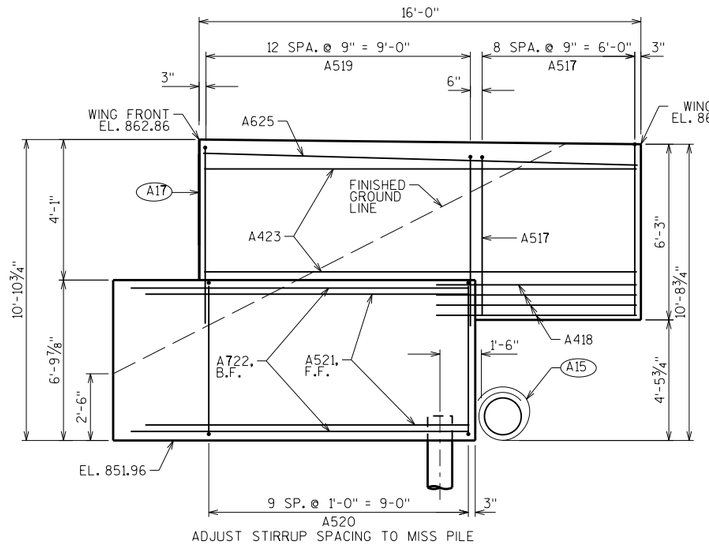
A513, A520



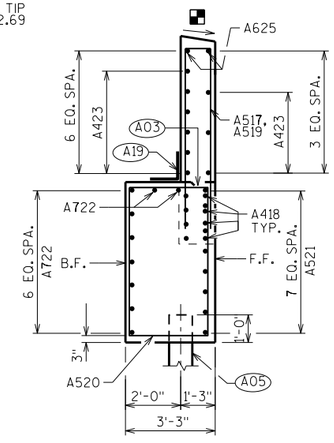
A826

BILL OF BARS

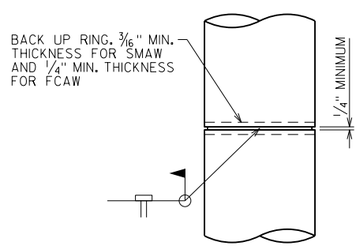
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
A501		67	19'-4"	X	BODY - STIRRUPS
A402		32	2'-3"		PILES - 2 PER BODY PILE
A403		16	28'-0"	X	PILES - 1 PER BODY PILE
A604		8	28'-5"		BODY - HORIZONTAL - BF
A605		24	28'-9"		BODY - HORIZONTAL
A506		38	7'-11"	X	BODY - UNDER BEAM SEATS 3-6
A407		4	37'-3"		BODY - UNDER BEAM SEATS 3-6
A408		30	4'-3"	X	BODY - VERTICAL BTWN. BEAM SEATS
A409		10	7'-6"		BODY - HORIZONTAL BTWN. BEAM SEATS
A510	X	9	13'-2"	X	WING 1 - VERTICAL - UPPER WING
A411	X	10	7'-9"		WING 1 - HORIZONTAL - UPPER WING
A512	X	13	12'-10"	X	WING 1 - VERTICAL - UPPER WING
A513	X	10	21'-8"	X	WING 1 - STIRRUP - LOWER WING
A514	X	9	11'-2"		WING 1 - HORIZONTAL - F.F. - LOWER WING
A715	X	10	12'-1"		WING 1 - HORIZONTAL - B.F. - LOWER WING
A416	X	9	15'-7"		WING 1 - HORIZONTAL - UPPER WING
A517	X	9	12'-4"	X	WING 2 - VERTICAL - UPPER WING
A418	X	8	7'-9"		WING 2 - HORIZONTAL - UPPER WING
A519	X	13	12'-6"	X	WING 2 - VERTICAL - UPPER WING
A520	X	10	19'-3"	X	WING 2 - STIRRUP - LOWER WING
A521	X	8	11'-2"		WING 2 - HORIZONTAL - F.F. - LOWER WING
A722	X	9	12'-2"		WING 2 - HORIZONTAL - B.F. - LOWER WING
A423	X	9	15'-7"		WING 2 - HORIZONTAL - UPPER WING
A624	X	2	15'-7"		WING 1 - HORIZONTAL - UPPER WING
A625	X	2	15'-7"		WING 2 - HORIZONTAL - UPPER WING
A826		16	16'-11"	X	BODY- HORIZONTAL - BF



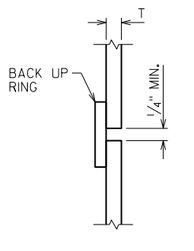
WING 2 ELEVATION



WING 2 SECTION



CAST-IN-PLACE 'PIPE PILE'



C.I.P. PILE WELD DETAIL

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).

(A05) SUPPORT ABUTMENT ON 10¾"DIA. X 0.219" CIP CONCRETE PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

SLOPE 0.01% FOR DRAINAGE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

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WEST ABUTMENT DETAILS

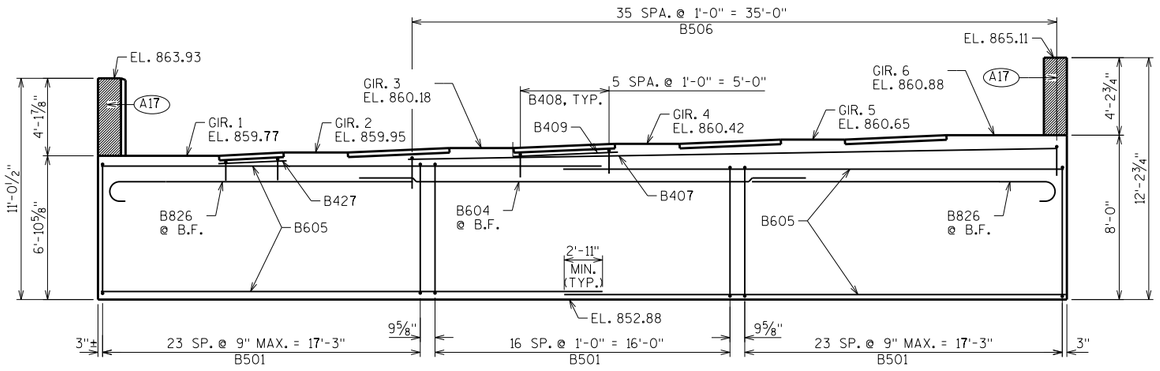
SHEET 5

353

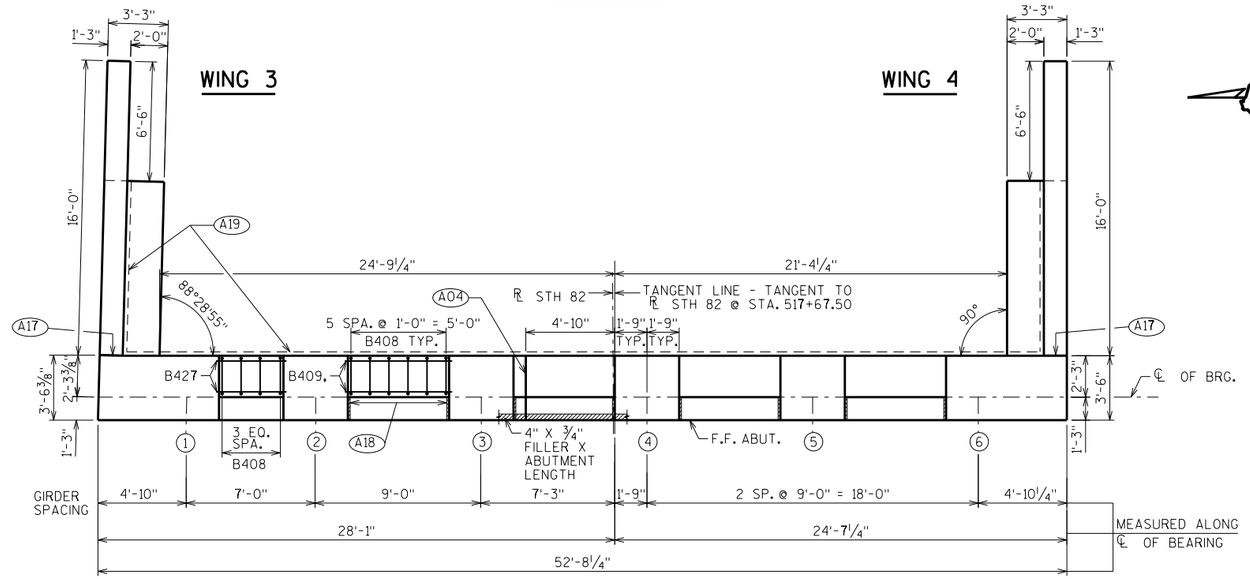
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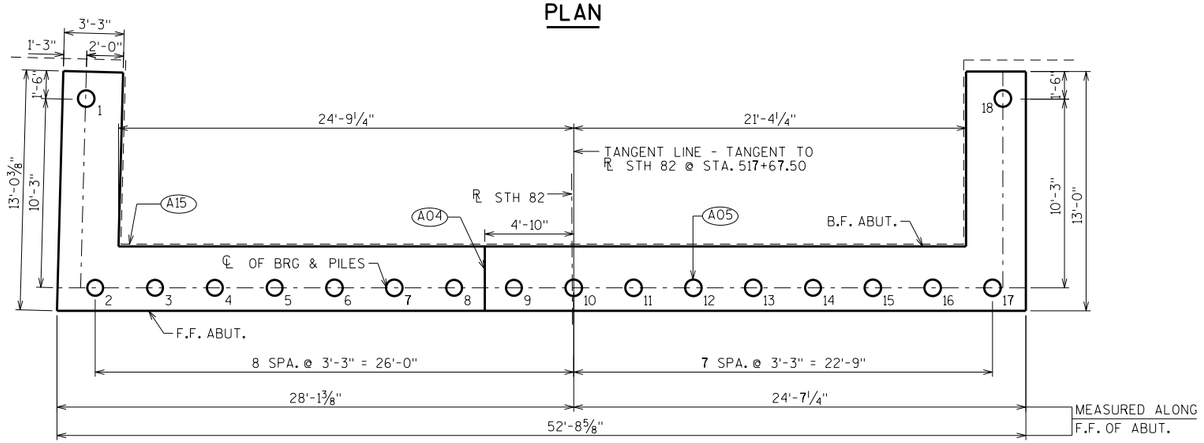
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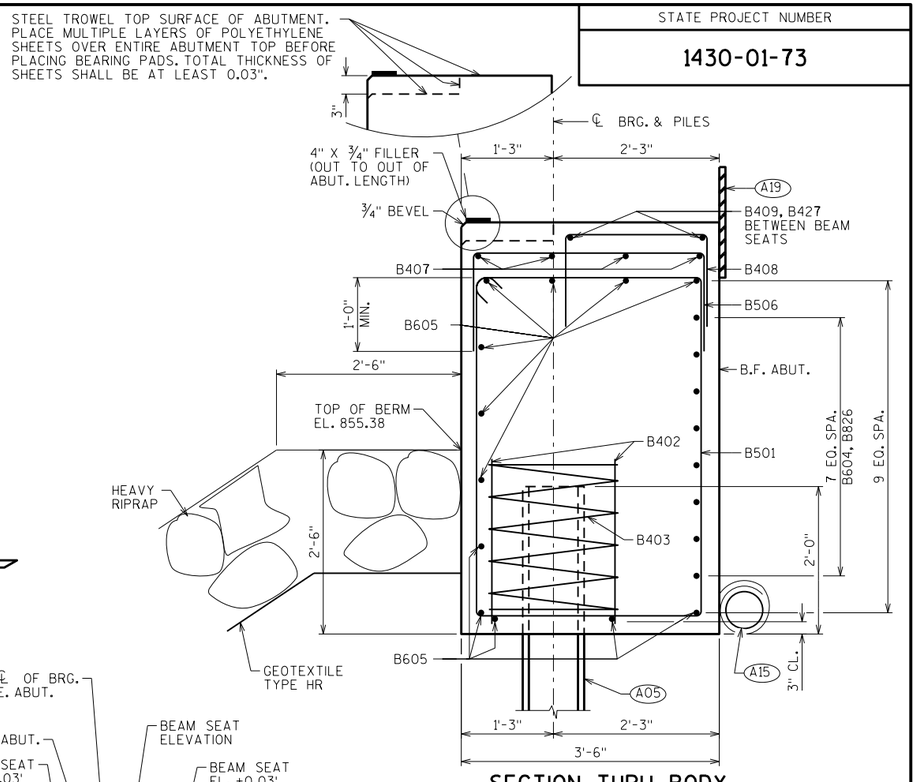
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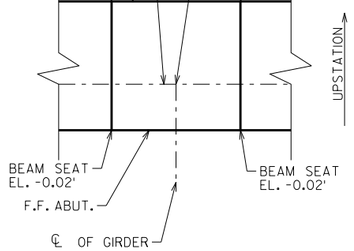
PLAN



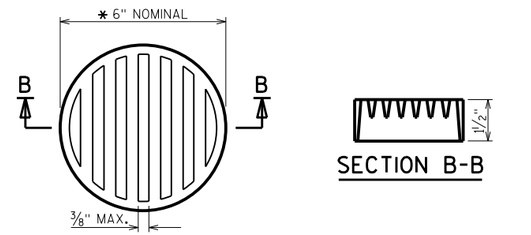
PILE PLAN



SECTION THRU BODY



SLOPED BEAM SEAT DETAIL



SECTION B-B

RODENT SHIELD DETAIL

◯	INDICATES GIRDER NUMBER
A04	VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 X 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.
A05	SUPPORT ABUTMENT ON 10¾"DIA. X 0.219" CIP CONCRETE PILING, ESTIMATED 60'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE. PILE POINTS REQUIRED.
A15	PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
A17	1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
A18	3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.
A19	18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

SLOPED BEAM SEAT DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

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 EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

RODENT SHIELD DETAIL

STATE PROJECT NUMBER

1430-01-73

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

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EAST ABUTMENT

SHEET 6

354

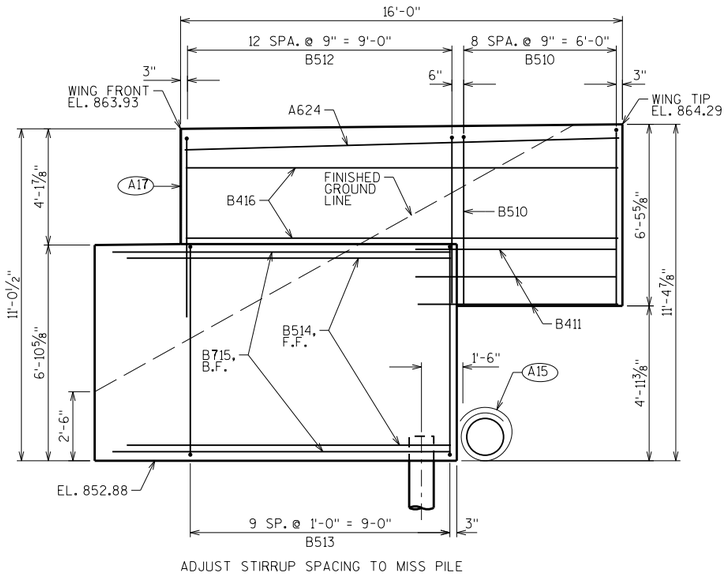
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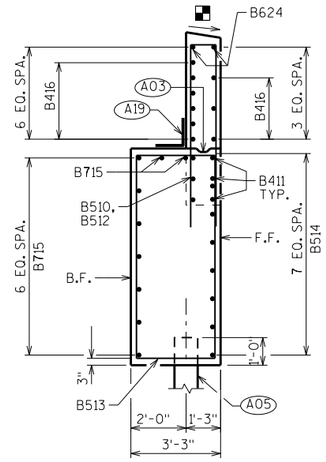
STATE PROJECT NUMBER

1430-01-73

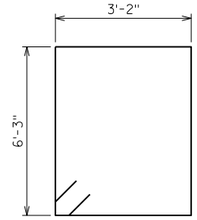


ADJUST STIRRUP SPACING TO MISS PILE

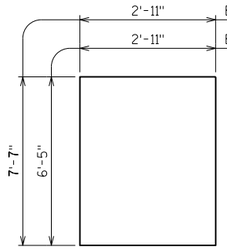
WING 3 ELEVATION



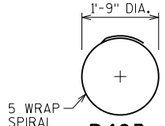
WING 3 SECTION



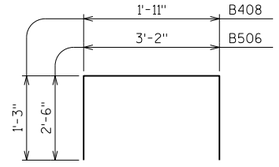
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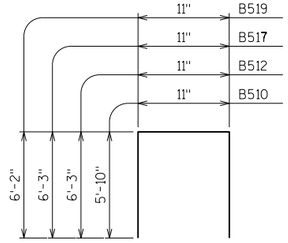
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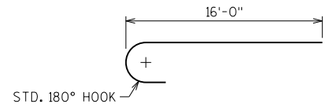
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B506, B408



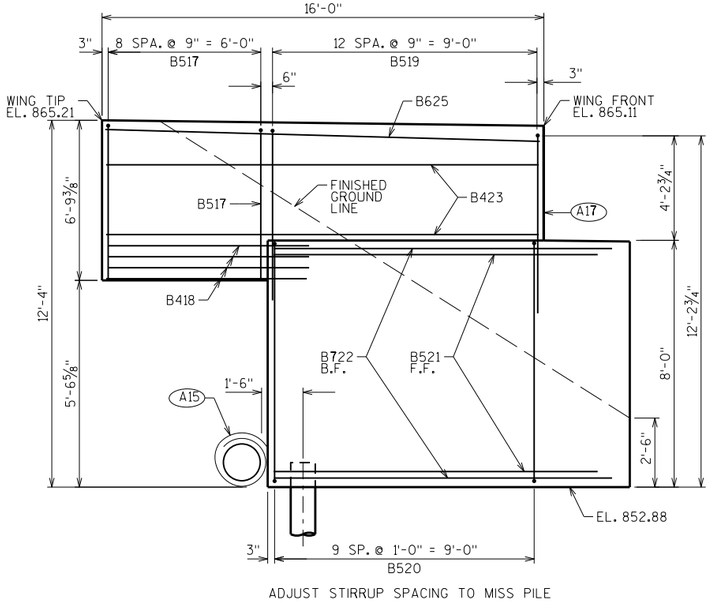
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B826

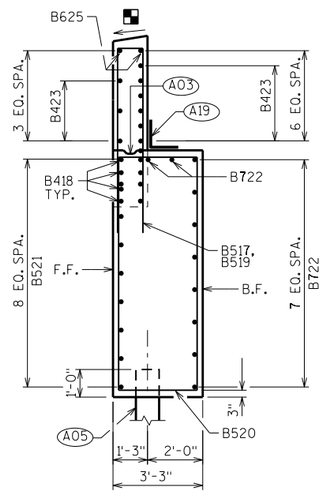
BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
B501		65	19'-6"	X	BODY - STIRRUPS
B402		32	2'-3"		PILES - 2 PER BODY PILE
B403		16	28'-0"	X	PILES - 1 PER BODY PILE
B604		8	26'-5"		BODY - HORIZONTAL - BF
B605		24	27'-9"		BODY - HORIZONTAL
B506		36	7'-11"	X	BODY - UNDER BEAM SEATS 3-6
B407		4	35'-3"		BODY - UNDER BEAM SEATS 3-6
B408		28	4'-3"	X	BODY - VERTICAL BTWN. BEAM SEATS
B409		8	7'-6"		BODY - HORIZONTAL BTWN. BEAM SEATS 2-6
B510	X	9	12'-4"	X	WING 3 - VERTICAL - UPPER WING
B411	X	6	7'-9"		WING 3 - HORIZONTAL - UPPER WING
B512	X	13	13'-2"	X	WING 3 - VERTICAL - UPPER WING
B513	X	10	19'-4"	X	WING 3 - STIRRUP - LOWER WING
B514	X	8	11'-2"		WING 3 - HORIZONTAL - F.F. - LOWER WING
B715	X	9	12'-1"		WING 3 - HORIZONTAL - B.F. - LOWER WING
B416	X	9	15'-7"		WING 3 - HORIZONTAL - UPPER WING
B517	X	9	13'-2"	X	WING 4 - VERTICAL - UPPER WING
B418	X	8	7'-9"		WING 4 - HORIZONTAL - UPPER WING
B519	X	13	13'-0"	X	WING 4 - VERTICAL - UPPER WING
B520	X	10	21'-8"	X	WING 4 - STIRRUP - LOWER WING
B521	X	9	11'-2"		WING 4 - HORIZONTAL - F.F. - LOWER WING
B722	X	10	12'-2"		WING 4 - HORIZONTAL - B.F. - LOWER WING
B423	X	9	15'-7"		WING 4 - HORIZONTAL - UPPER WING
B624	X	2	15'-7"		WING 3 - HORIZONTAL - UPPER WING
B625	X	2	15'-7"		WING 4 - HORIZONTAL - UPPER WING
B826		16	16'-11"	X	BODY- HORIZONTAL - BF
B427		2	5'-6"		BODY- HORIZONTAL BTWN. BEAMS SEATS 1+2

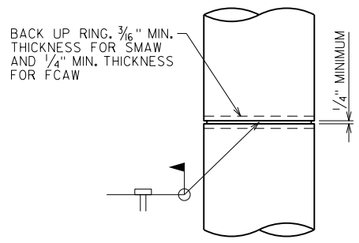


ADJUST STIRRUP SPACING TO MISS PILE

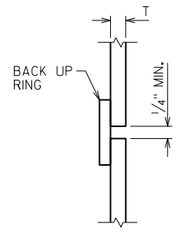
WING 4 ELEVATION



WING 4 SECTION



CAST-IN-PLACE 'PIPE PILE'



C.I.P. PILE WELD DETAIL

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).

(A05) SUPPORT ABUTMENT ON 10 3/4"DIA. X 0.219" CIP CONCRETE PILING, ESTIMATED 60'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

SLOPE 0.01% FOR DRAINAGE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

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EAST ABUTMENT DETAILS

SHEET 7

355

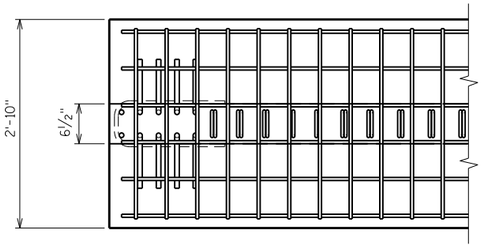
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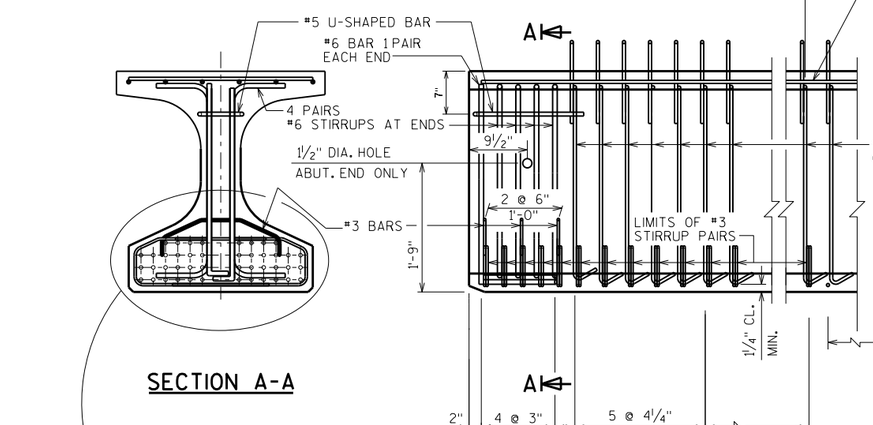
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STATE PROJECT NUMBER

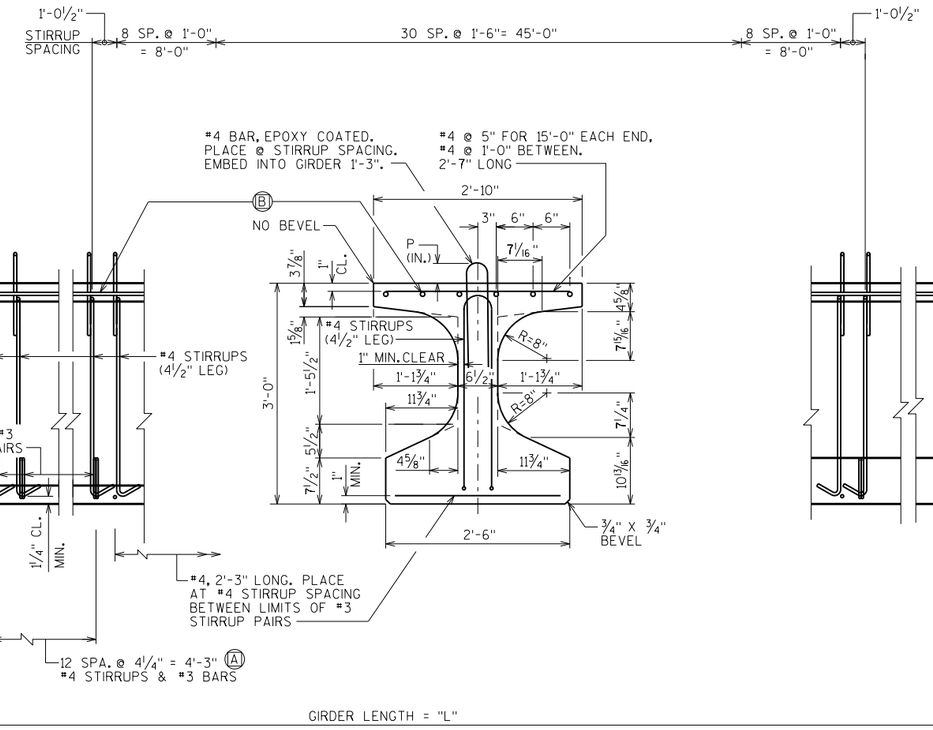
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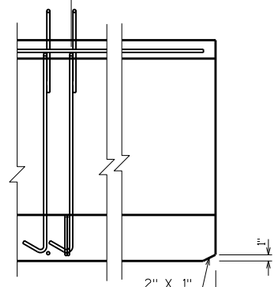


TOP FLANGE



SECTION A-A

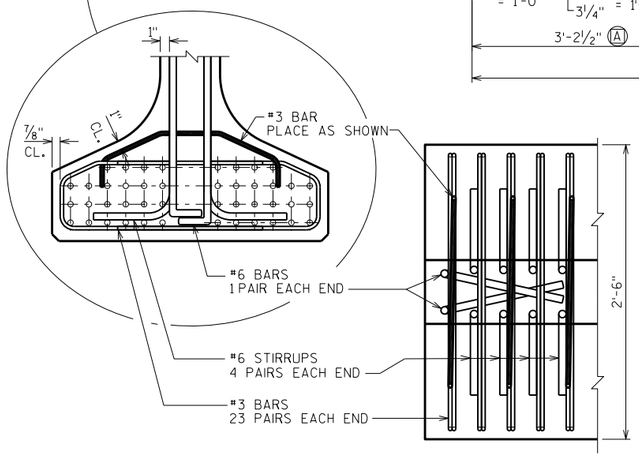




SIDE VIEW & TYPICAL SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"



BOTTOM FLANGE

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

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.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, 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.

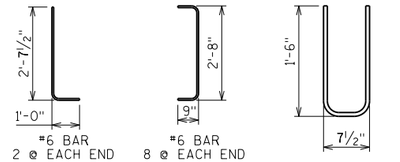
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

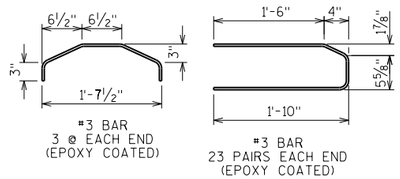
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 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.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.





✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.)									CONC. STRGTH. f'c (p.s.i.)	"P" 1ST ⅓ OF GIRDER	"P" MID ⅓ OF GIRDER	"P" END ⅓ OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN						UNDRAPED PATTERN	
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳
1	1	78'-0"	0.4	0.8	1.1	1.3	1.3	1.3	1.1	0.8	0.4	8,000	9"	8"	9"	0.6"	30	6,400	32	11	14	4		
1	2, 6	78'-0"	0.4	0.8	1.1	1.3	1.4	1.3	1.1	0.8	0.4	8,000	9"	8"	9"	0.6"	30	6,400	32	11	14	4		
1	3, 4, 5	78'-0"	0.5	0.9	1.2	1.4	1.4	1.4	1.2	0.9	0.5	8,000	9"	8"	9"	0.6"	30	6,400	32	11	14	4		

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

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36W" PRESTRESSED GIRDER DETAILS 1

SHEET 8

356

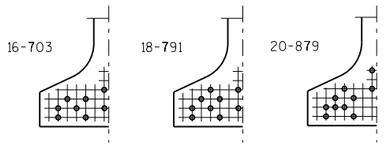
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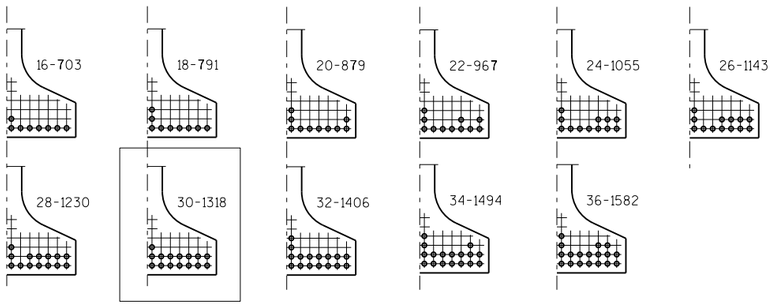
STATE PROJECT NUMBER

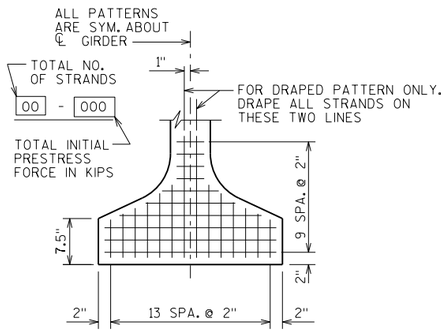
1430-01-73



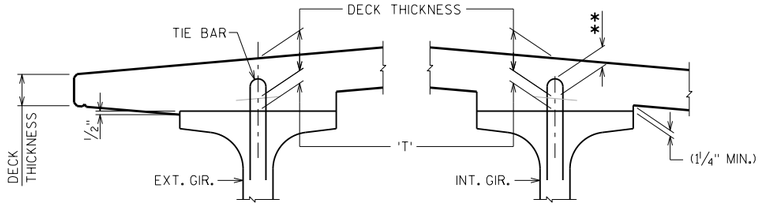
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS





TYP. STRAND PATTERN



DECK 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 DECK 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.

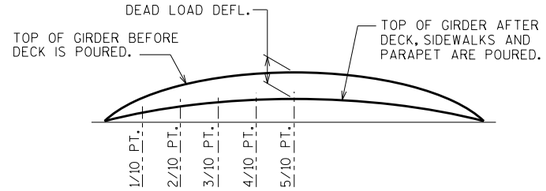
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

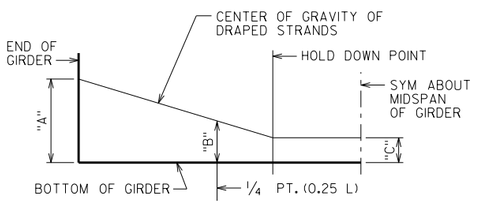
NOTE: AN AVERAGE HAUNCH ('T') OF 4" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

*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	3.16

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

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STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

DRAWN BY MJH | PLANS CK'D. SEW

36W" PRESTRESSED GIRDER DETAILS 2

SHEET 9

357

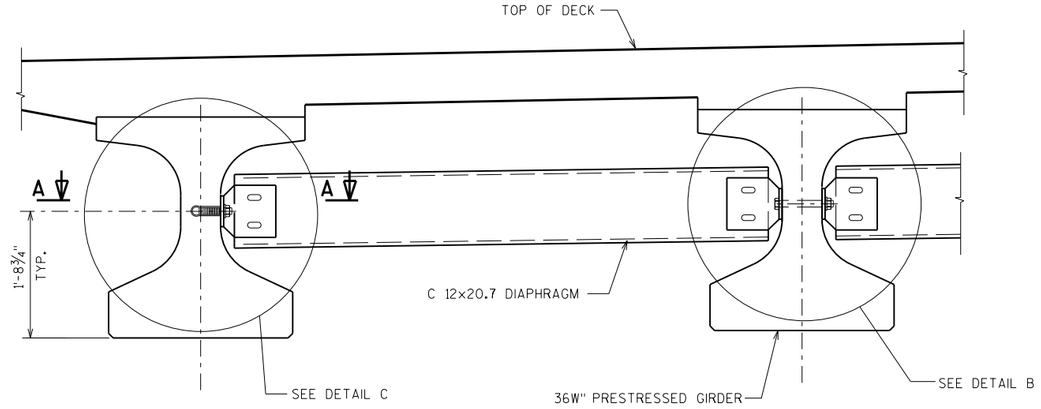
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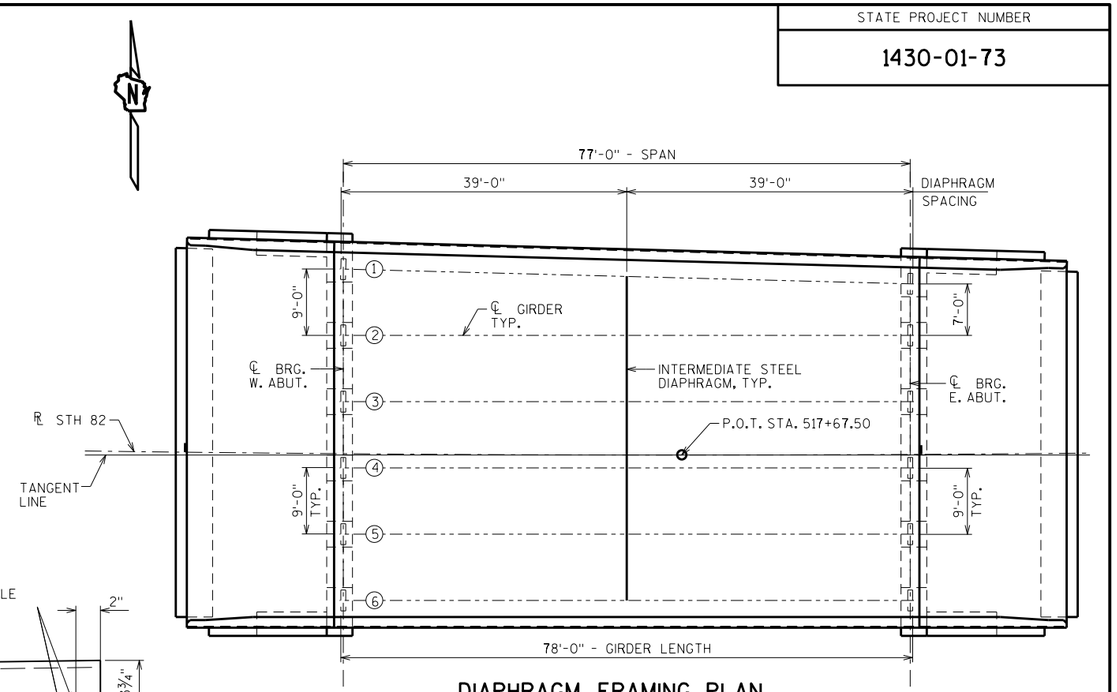
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STATE PROJECT NUMBER

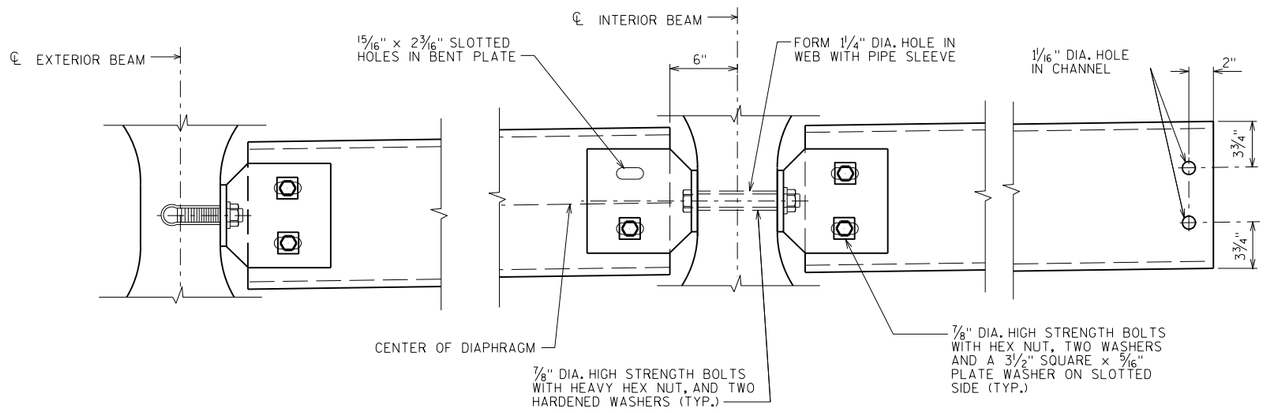
1430-01-73



PART TRANSVERSE SECTION AT DIAPHRAGM

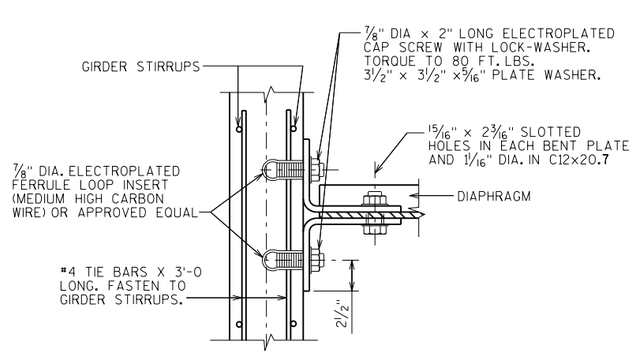


DIAPHRAGM FRAMING PLAN



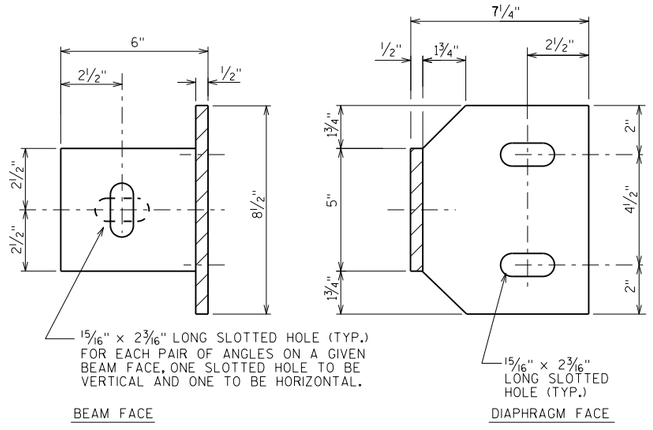
DETAIL C

DETAIL B



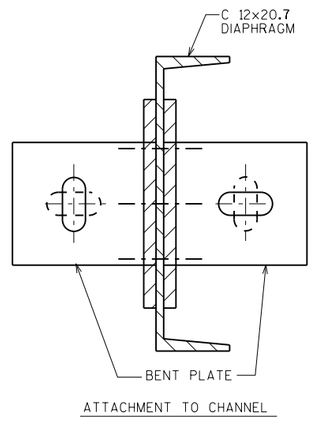
SECTION A-A

(FOR EXTERIOR ATTACHMENT)



BEAM FACE

DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-29-148", 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.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHAL BE SNUG-TIGHT PLUS ¼ TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THEREQUIREMENTS FOR ASTM A325 OR ASTM A449.

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STRUCTURE B-29-148

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STEEL DIAPHRAGMS

SHEET 10

358

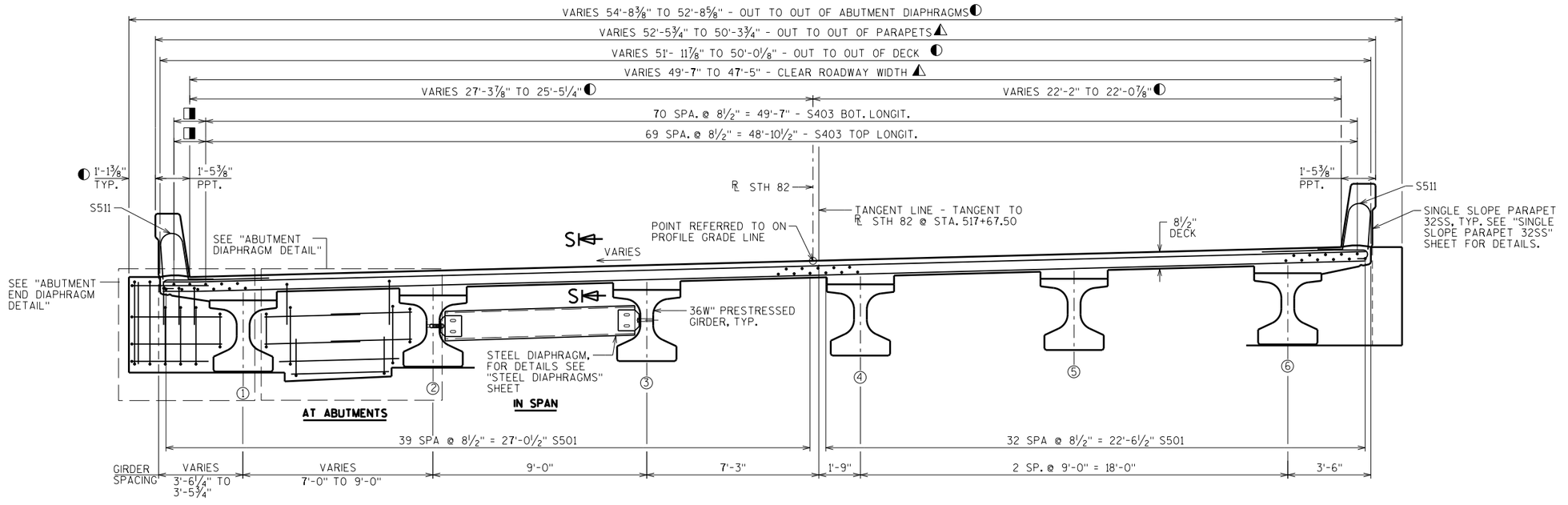
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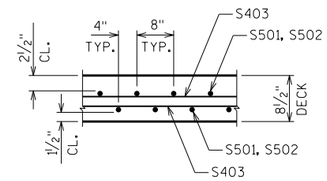
STATE PROJECT NUMBER

1430-01-73

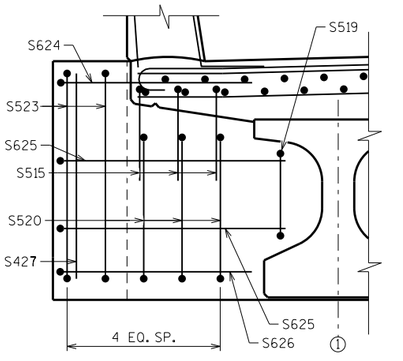


CROSS SECTION THRU ROADWAY

LOOKING EAST
(MEASUREMENTS TAKEN NORMAL TO TANGENT LINE)

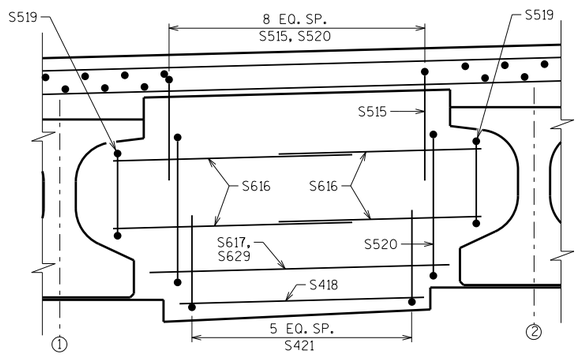


SECTION S-S



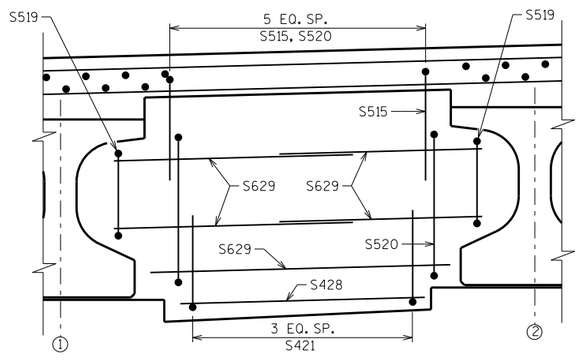
ABUTMENT END DIAPHRAGM DETAIL

(TYP. AT ALL FOUR CORNERS)



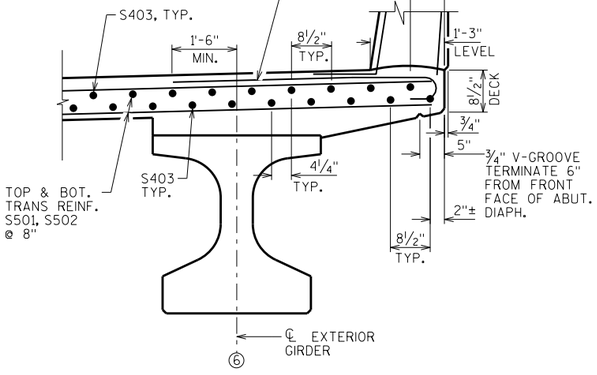
ABUTMENT DIAPHRAGM DETAIL

TYPICAL BETWEEN GIRDERS 1- 6 W. ABUT.
TYPICAL BETWEEN GIRDERS 2- 6 E. ABUT.



EAST ABUTMENT DIAPHRAGM DETAIL

(BETWEEN GIRDERS 1 & 2)



EDGE OF DECK DETAIL

(TYP. AT BOTH EDGES)

TOP OF DECK ELEVATIONS

	W. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	E. ABUT.
EDGE OF DECK	862.89	862.89	863.07	863.16	863.25	863.35	863.45	863.55	863.66	863.76	863.87
GIRDER 1	862.95	863.04	863.13	863.22	863.31	863.41	863.51	863.61	863.72	863.83	863.94
GIRDER 2	863.19	863.27	863.35	863.44	863.53	863.62	863.71	863.81	863.91	864.01	864.12
GIRDER 3	863.42	863.50	863.59	863.67	863.76	863.85	863.95	864.05	864.14	864.25	864.35
GIRDER 4	863.66	863.74	863.82	863.91	864.00	864.09	864.18	864.28	864.38	864.48	864.58
GIRDER 5	863.89	863.97	864.06	864.14	864.23	864.32	864.42	864.51	864.61	864.71	864.82
GIRDER 6	864.13	864.21	864.29	864.38	864.47	864.56	864.65	864.75	864.85	864.95	865.05
EDGE OF DECK	864.18	864.26	864.35	864.43	864.52	864.61	864.71	864.80	864.90	865.00	865.11

◨ SEE "NORTH LONGITUDINAL REINFORCING DETAIL" ON SHEET 12 FOR DETAILS.
◐ MEASURED AT F.F. OF ABUT.
◭ MEASURED AT B.F. OF ABUT.
◯ INDICATES GIRDER NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

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SUPERSTRUCTURE CROSS SECTION

SHEET 11

359

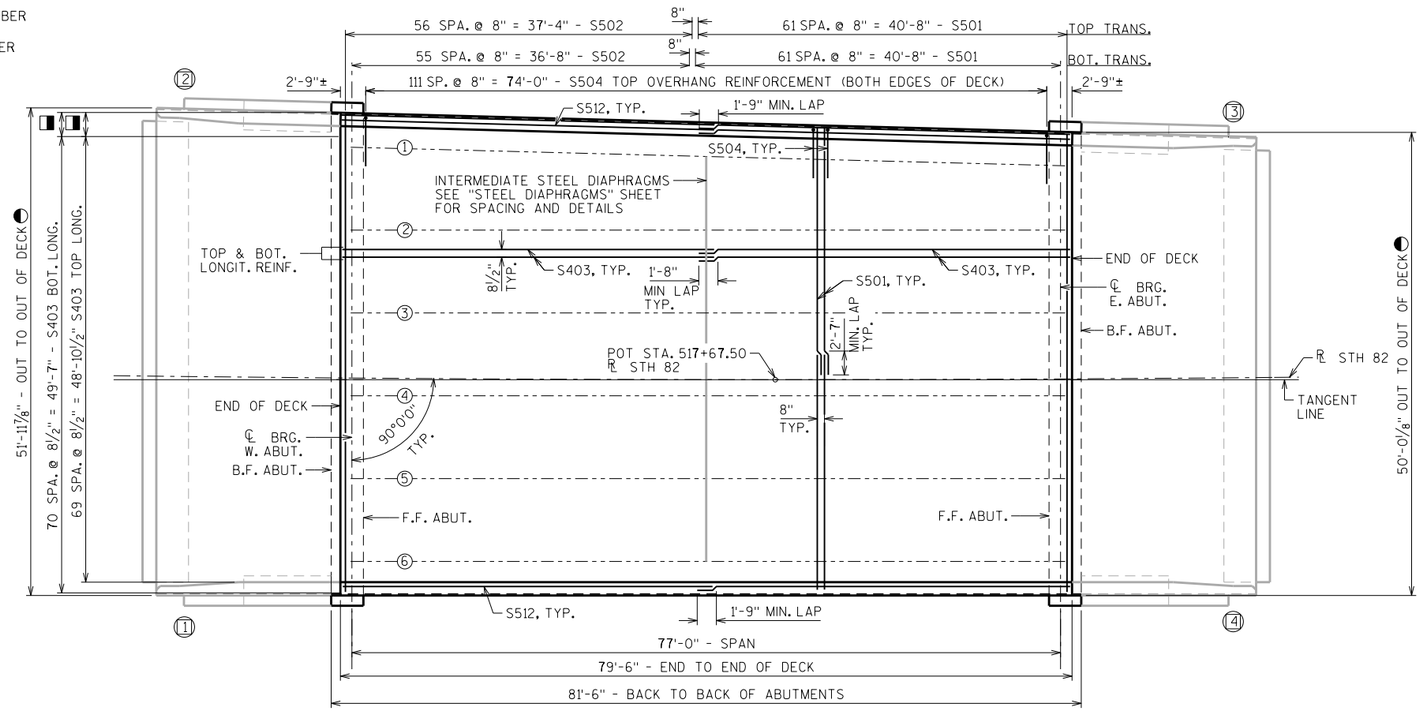
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STATE PROJECT NUMBER

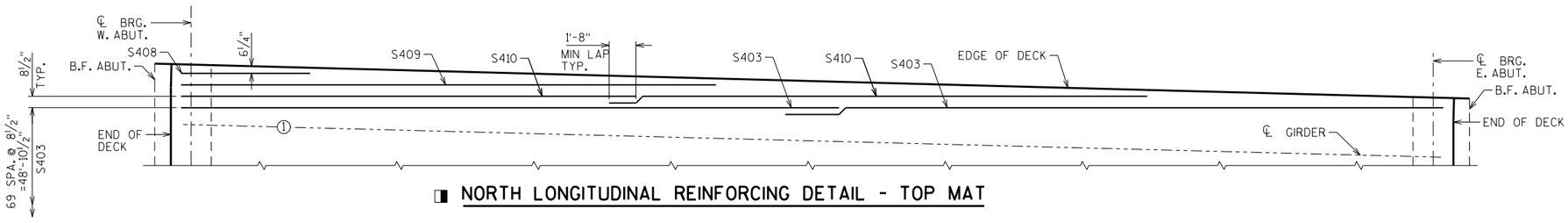
1430-01-73

○ INDICATES GIRDER NUMBER

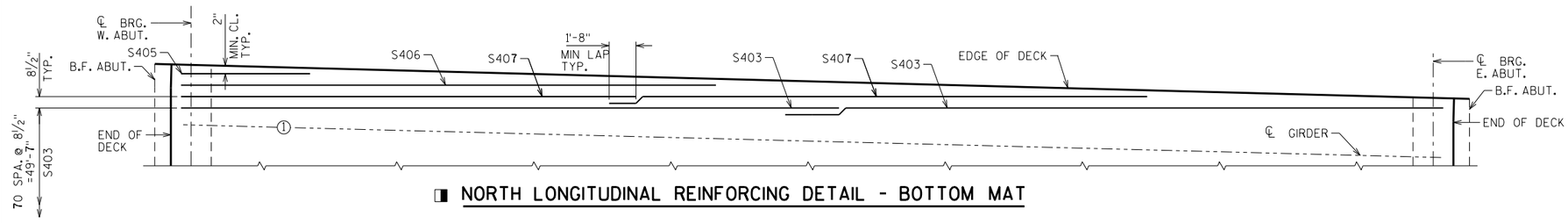
▢ INDICATES WING NUMBER



PLAN



NORTH LONGITUDINAL REINFORCING DETAIL - TOP MAT



NORTH LONGITUDINAL REINFORCING DETAIL - BOTTOM MAT

◨ SEE "NORTH LONGITUDINAL REINFORCING DETAIL" FOR DETAILS

◐ MEASURED AT F.F. ABUT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

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SUPERSTRUCTURE PLAN

SHEET 12

360

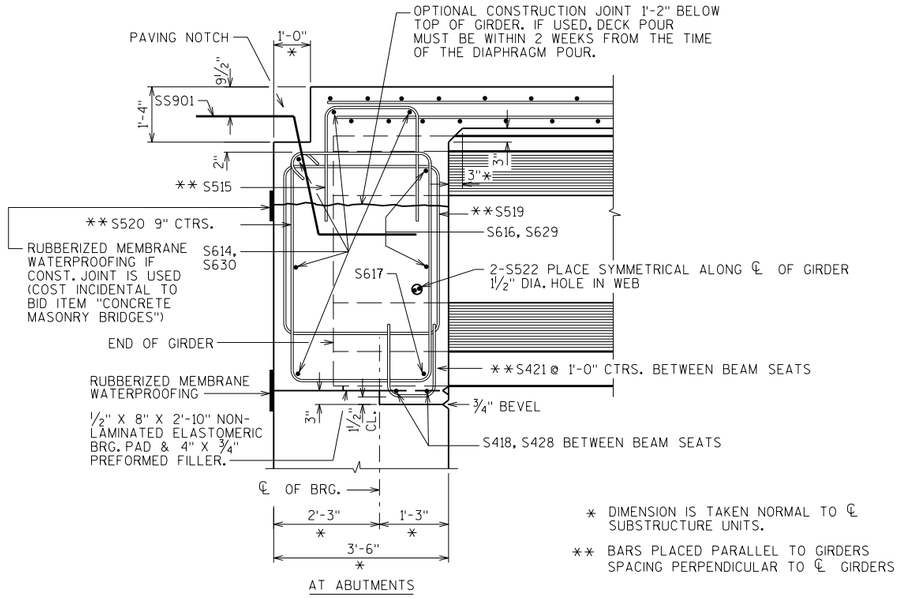
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STATE PROJECT NUMBER

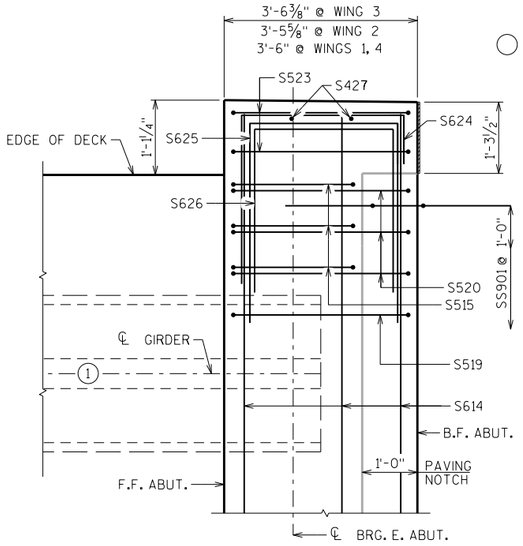
1430-01-73



PART LONGIT. SECTION

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS



PLAN - EXTERIOR ABUTMENT DIAPHRAGM

WING 3 SHOWN
OTHER WINGS SIMILAR

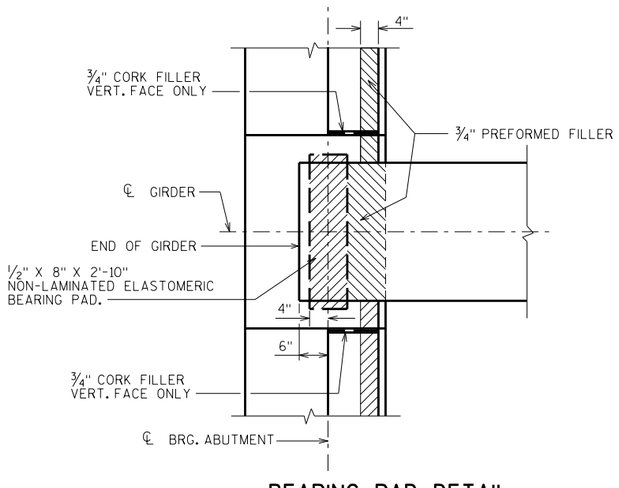
○ INDICATES GIRDER NUMBER

BILL OF BARS

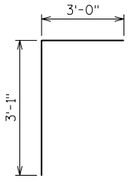
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S501	X	248	26'-8"			DECK-TOP & BOT. HORIZ.-TRANS. EAST HALF
S502	X	226	27'-2"			DECK-TOP & BOT. HORIZ.-TRANS. WEST HALF
S403	X	282	40'-5"			DECK-TOP & BOT.-HORIZ.-LONGIT.
S504	X	224	5'-5"	X		DECK-TOP VERT.-TRANS-HOOK BARS
S405	X	1	8'-0"			DECK-BOT.-TRANS.-N. EDGE
S406	X	1	26'-3"			DECK-BOT.-TRANS.-N. EDGE
S407	X	2	27'-4"			DECK-BOT.-TRANS.-N. EDGE
S408	X	1	12'-10"			DECK-TOP.-TRANS.-N. EDGE
S409	X	1	39'-7"			DECK-TOP.-TRANS.-N. EDGE
S410	X	2	34'-0"			DECK-TOP.-TRANS.-N. EDGE
S511	X	238	4'-5"	X		PARAPET/DECK-VERT.-TRANS.
S512	X	24	40'-6"			PARAPET-HORIZ.-LONGIT.
S513	X	238	5'-0"	X		PARAPET-VERT.-TRANS.
S614	X	5	52'-1"			E. ABUT. DIAPH.-HORIZ.
S515	X	99	6'-9"	X		ABUT. DIAPH.-VERT.-BTWN. GIR. & AT EXTERIORS
S616	X	36	5'-0"			ABUT. DIAPH.-HORIZ.-BTWN. GIR.
S617	X	9	6'-0"			ABUT. DIAPH.-HORIZ.-BTWN. GIR.
S418	X	18	5'-2"			ABUT. DIAPH.-HORIZ.-BTWN. GIR.
S519	X	24	10'-0"	X		ABUT. DIAPH.-STIRRUP-AT GIR.
S520	X	99	11'-10"	X		ABUT. DIAPH.-STIRRUP-BTWN. GIR. & AT EXTERIORS
S421	X	58	3'-3"	X		ABUT. DIAPH.-VERT.-BTWN. GIR.
S522	X	24	6'-0"			ABUT. DIAPH.-HORIZ.-THRU GIR.
S523	X	8	14'-4"	X		ABUT. DIAPH.-STIRRUP-EXTERIORS-WINGS
S624	X	4	6'-8"	X		ABUT. DIAPH.-HORIZ.-EXTERIORS-WINGS
S625	X	8	10'-4"	X		ABUT. DIAPH.-HORIZ.-EXTERIORS-WINGS
S626	X	4	9'-0"	X		ABUT. DIAPH.-HORIZ.-EXTERIORS-WINGS
S427	X	8	3'-8"			ABUT. DIAPH.-VERT.-EXTERIORS-WINGS
S428	X	2	3'-2"			E. ABUT. DIAP.-BTWN GIRDERS 1+2
S629	X	5	4'-0"			E. ABUT. DIAP.-BTWN GIRDERS 1+2
S630	X	5	54'-1"			W. ABUT. DIAP.-HORIZ.
SS901		102	5'-0"	X		ABUT. DIAPH./APPROACH SLAB TIE

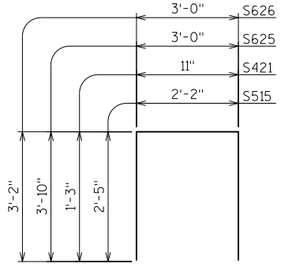
STAINLESS STEEL



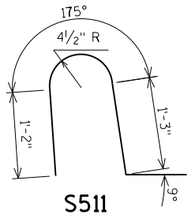
BEARING PAD DETAIL



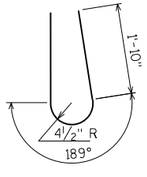
S624



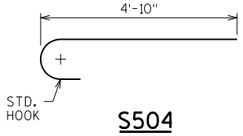
S515, S421, S625, S626



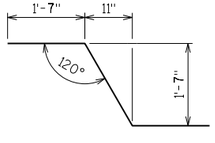
S511



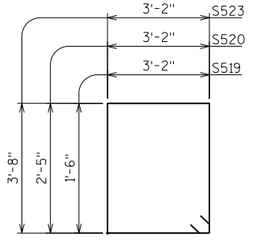
S513



S504



SS901



S519, S520, S523

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

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SUPERSTRUCTURE DETAILS

SHEET 13

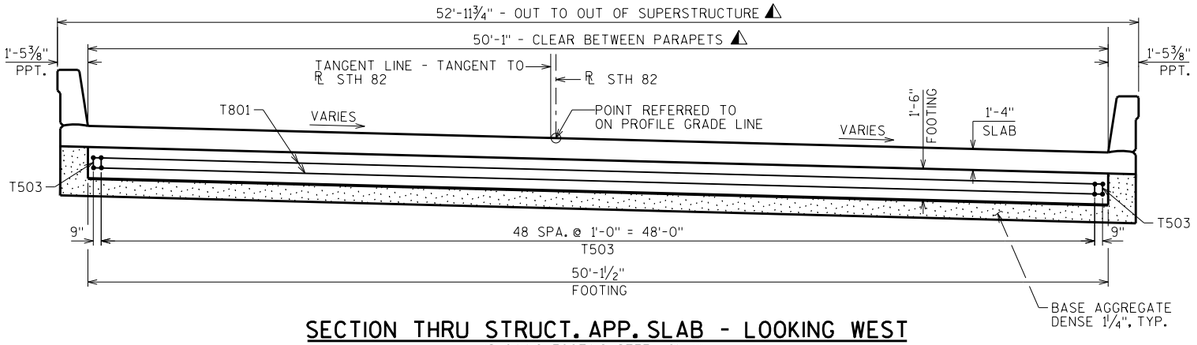
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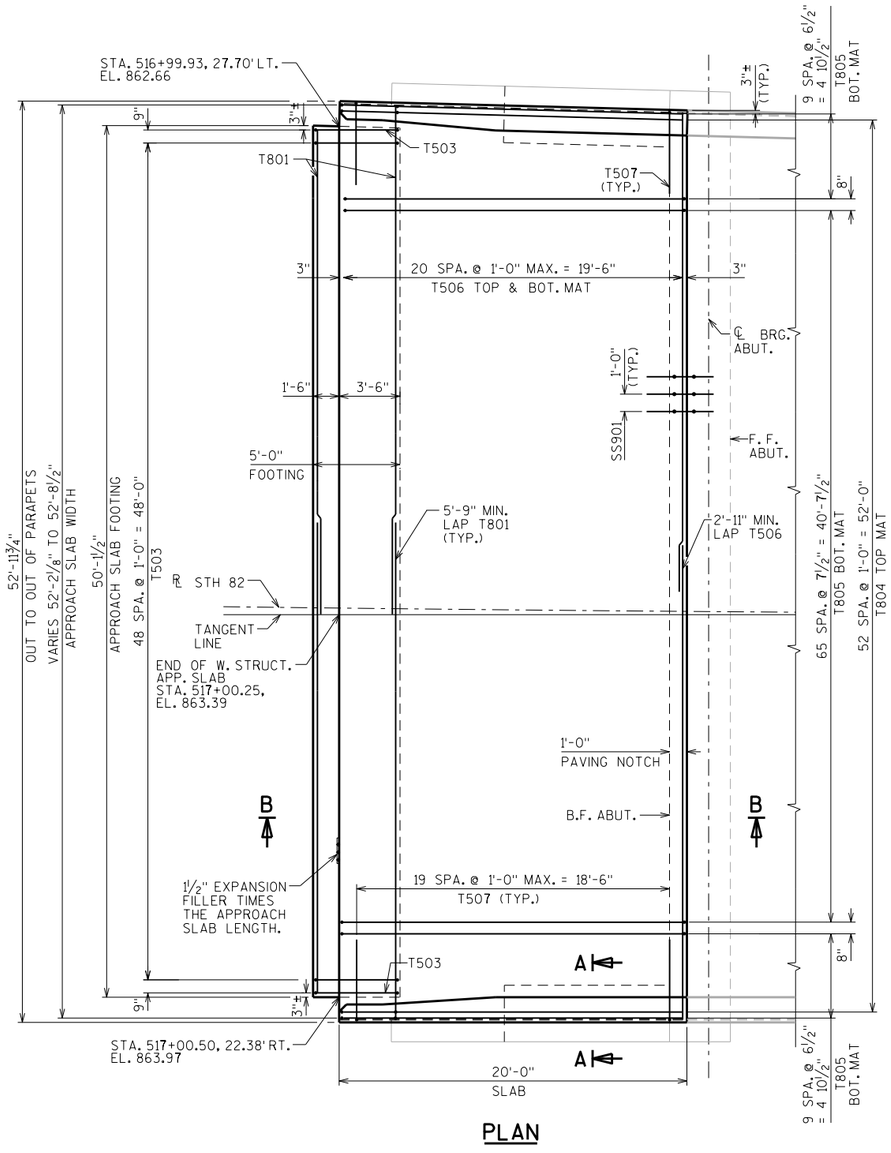
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STATE PROJECT NUMBER
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SECTION THRU STRUCT. APP. SLAB - LOOKING WEST

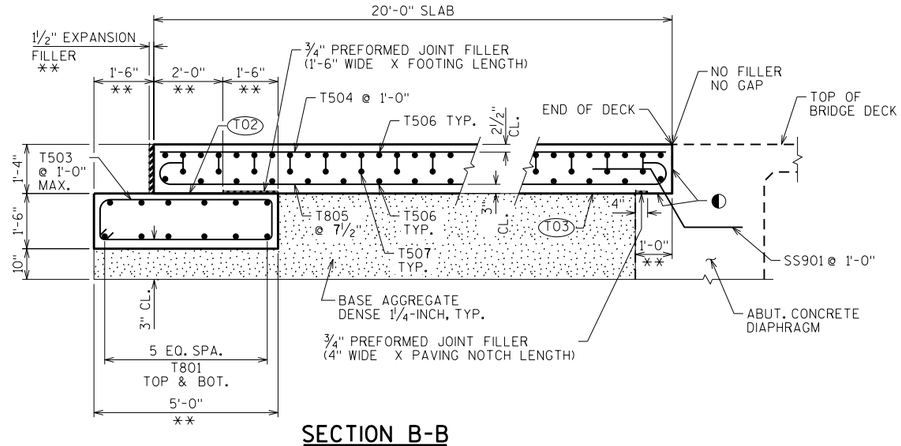
(SHOWING FOOTING STEEL ONLY)



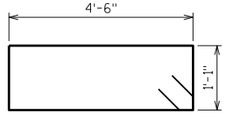
PLAN

BILL OF BARS

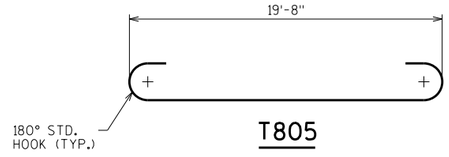
BAR MARK	COAT	NO. REQ'D. WEST SLAB	LENGTH	BENT	LOCATION
T801	X	24	27'-9"		FOOTING - HORIZONTAL
T503	X	51	11'-10"	X	FOOTING - STIRRUP
T504	X	53	19'-8"		APPROACH SLAB - LONGITUDINAL - TOP
T805	X	86	21'-6"	X	APPROACH SLAB - LONGITUDINAL - BOTTOM
T506	X	84	27'-8"		APPROACH SLAB - TRANSVERSE - TOP & BOTTOM
T507	X	40	4'-1"	X	APPROACH SLAB - TRANSVERSE - TOP EDGES OF SLAB



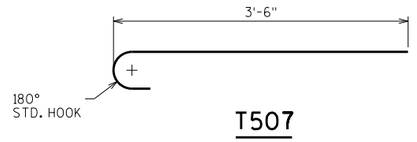
SECTION B-B



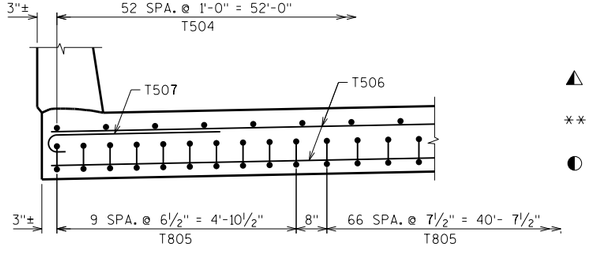
T503



T805



T507



SECTION A-A

▲ MEASURED AT END OF STRUCTURAL APPROACH SLAB.

** DIMENSION MEASURED NORMAL TO ABUTMENT BODY

◐ APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCUTRAL APPROACH SLAB.

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE SUBGRADE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

DRAWN BY MJH | PLANS CK'D. SEW

W. STRUCTURAL APPROACH SLAB

SHEET 14

362

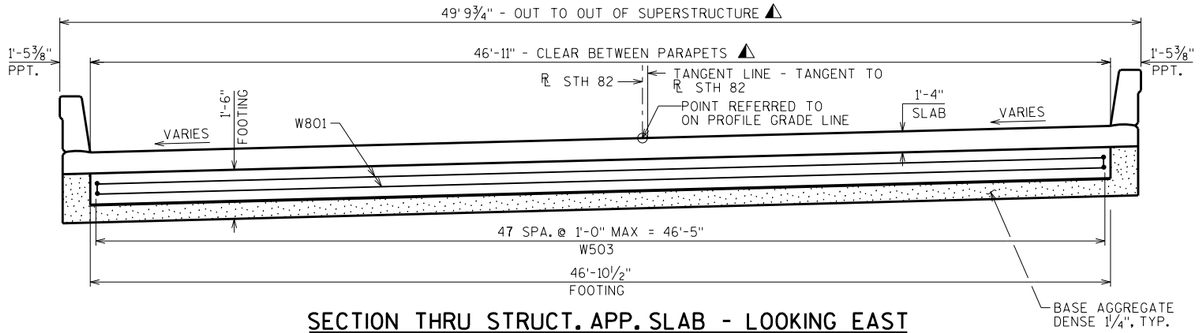
SCALE = 7.00

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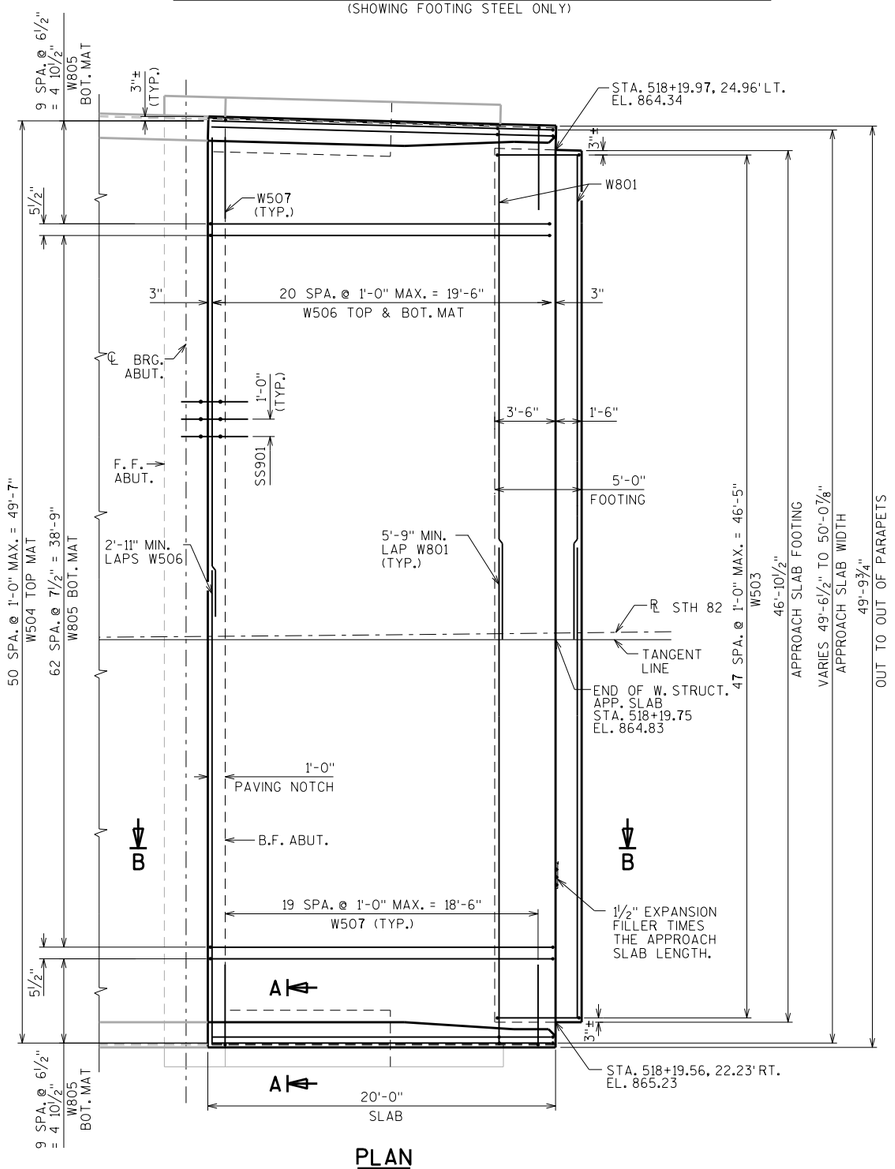
STATE PROJECT NUMBER

1430-01-73



SECTION THRU STRUCT. APP. SLAB - LOOKING EAST

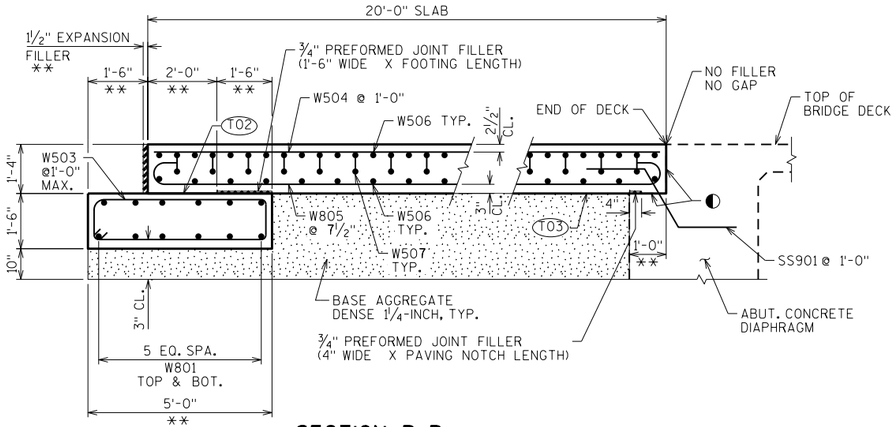
(SHOWING FOOTING STEEL ONLY)



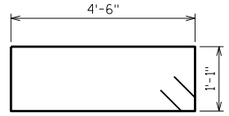
PLAN

BILL OF BARS

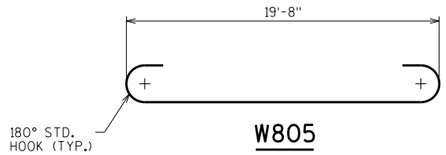
BAR MARK	COAT	NO. REQ'D. EAST SLAB	LENGTH	BENT	LOCATION
W801	X	24	26'-2"		FOOTING - HORIZONTAL
W503	X	48	11'-10"	X	FOOTING - STIRRUP
W504	X	51	19'-8"		APPROACH SLAB - LONGITUDINAL - TOP
W805	X	83	21'-6"	X	APPROACH SLAB - LONGITUDINAL - BOTTOM
W506	X	84	26'-4"		APPROACH SLAB - TRANSVERSE - TOP & BOTTOM
W507	X	40	4'-1"	X	APPROACH SLAB - TRANSVERSE - TOP EDGES OF SLAB



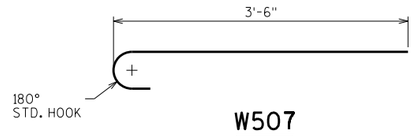
SECTION B-B



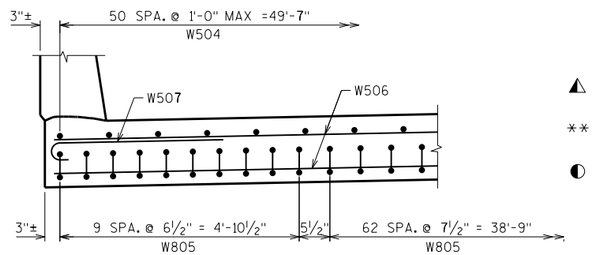
W503



W805



W507



SECTION A-A

◭ MEASURED AT END OF STRUCTURAL APPROACH SLAB.

** DIMENSION MEASURED NORMAL TO ABUTMENT BODY

◐ APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCUTRAL APPROACH SLAB.

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE SUBGRADE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

DRAWN BY MJH | PLANS CK'D. SEW

E. STRUCTURAL APPROACH SLAB

SHEET 15

363

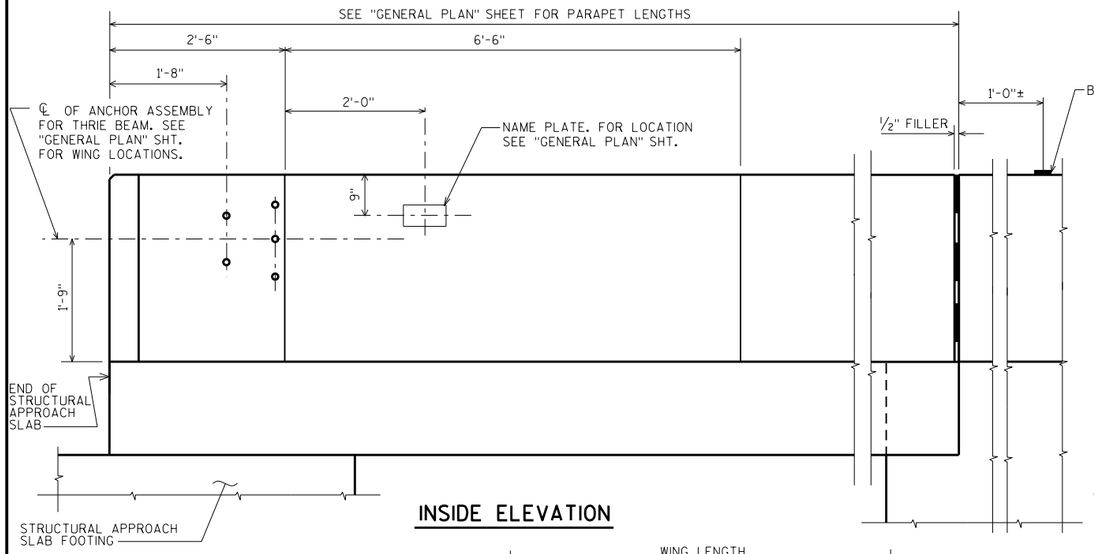
SCALE = 7.00

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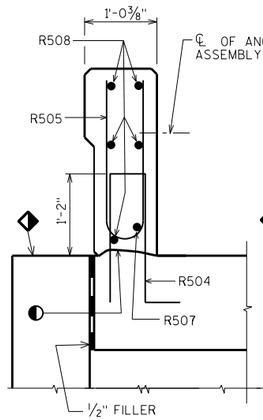
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STATE PROJECT NUMBER

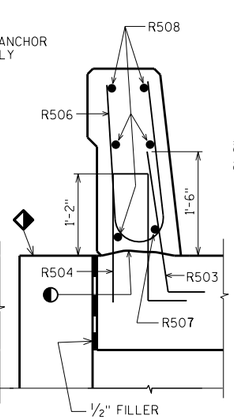
1430-01-73



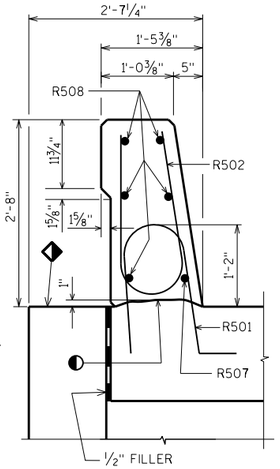
INSIDE ELEVATION



SECTION A



SECTION B

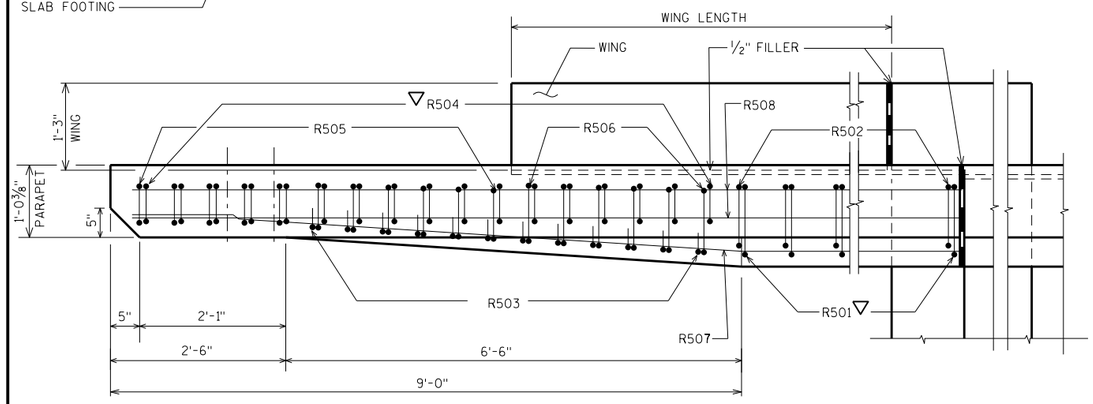


SECTION C

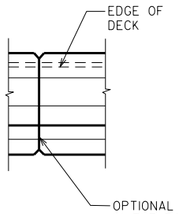
BILL OF BARS

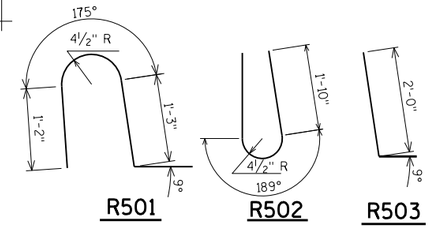
FOR STRUCTURAL APPROACH SLAB PARAPETS

BAR MARK	COAT	W. APP.	E. APP.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	34	34	4'-5"	X		PARAPET VERT.
R502	X	34	34	5'-0"	X		PARAPET VERT.
R503	X	24	24	2'-9"	X		PARAPET VERT.
R504	X	34	34	4'-4"	X		PARAPET VERT.
R505	X	22	22	4'-9"	X		PARAPET VERT.
R506	X	12	12	4'-10"	X		PARAPET VERT.
R507	X	2	2	19'-6"	X		PARAPET HORIZ.
R508	X	10	10	19'-6"			PARAPET HORIZ.

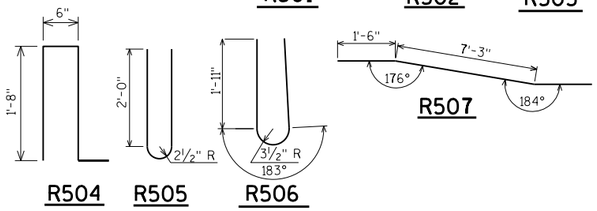


PLAN

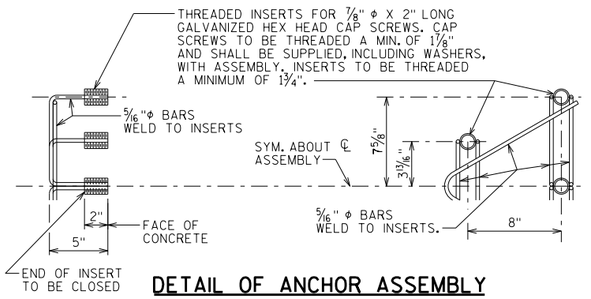




R501 R502 R503



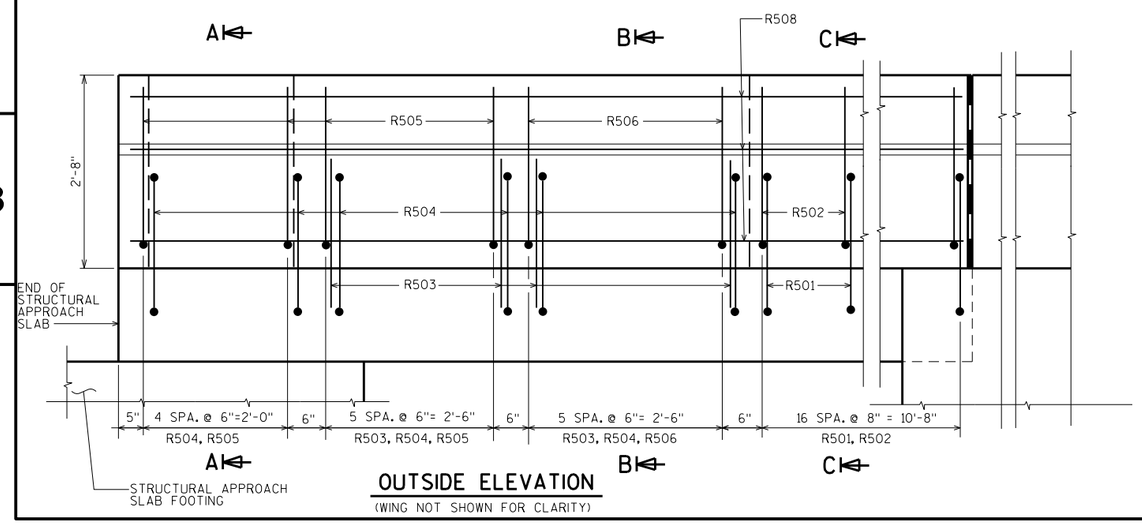
R504 R505 R506 R507



DETAIL OF ANCHOR ASSEMBLY

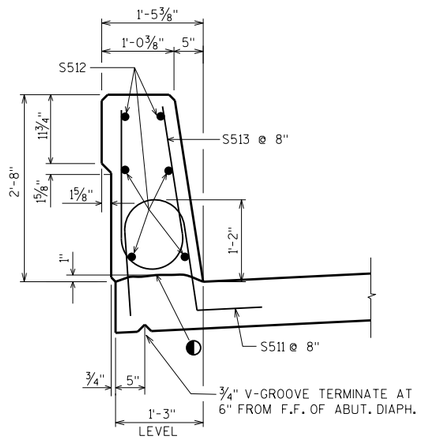
NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



OUTSIDE ELEVATION

(WING NOT SHOWN FOR CLARITY)



SECTION THRU PARAPET ON BRIDGE

◆ SLOPE FOR DRAINAGE

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

▽ R501 AND R504 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-29-148

DRAWN BY MJH | PLANS CK'D. SEW

SINGLE SLOPE PARAPET 32SS

SHEET 16

364

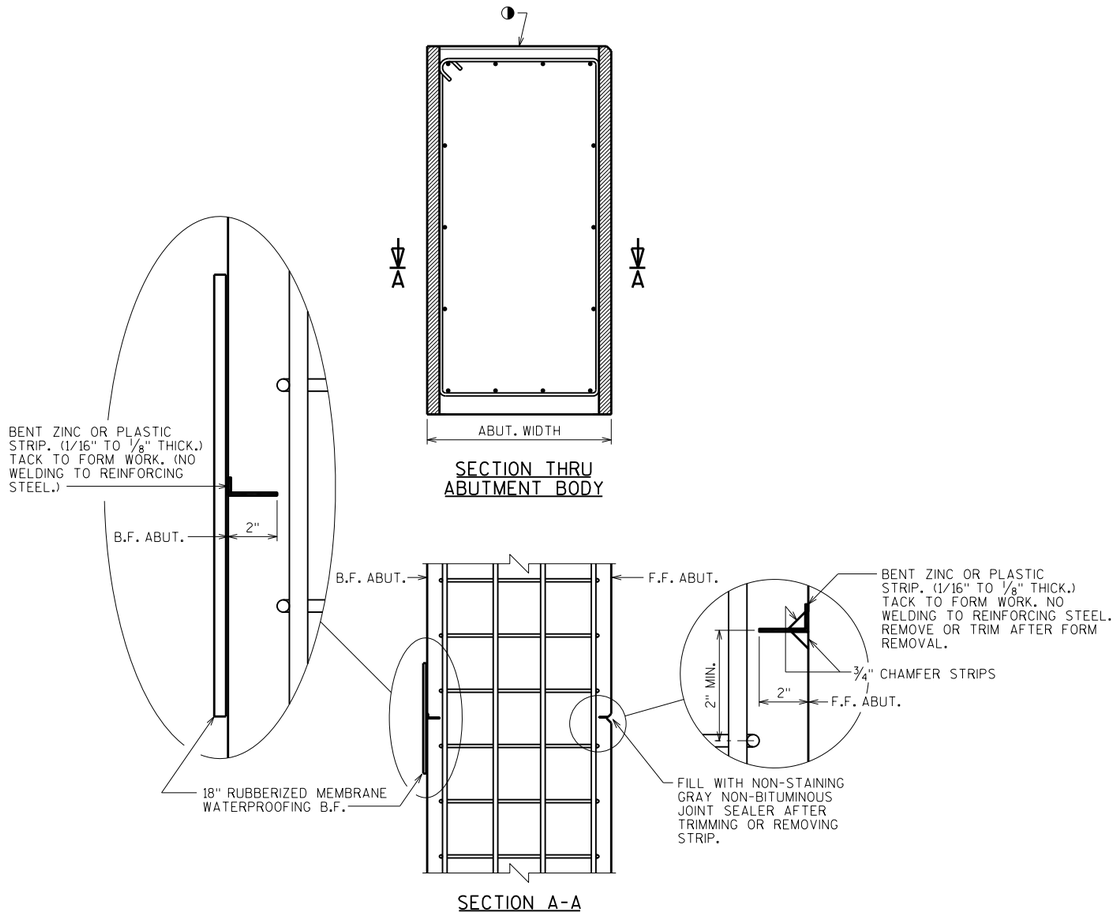
SCALE = 1.05

8

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STATE PROJECT NUMBER

1430-01-73



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-29-148

DRAWN BY MJH | PLANS CK'D. SEW

ALTERNATE CONSTRUCTION JOINT

SHEET 17

365

SCALE = 1.00

8

8

PROJECT ID 1430-01-73

STAGE 1 - CTH Z STA. 10+74'Z' to STA. 35+45'Z'

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
10+74'Z'	0	734	0	0	0	0	0	0	0	0	0
11+00'Z'	26	567	87	0	626	42	0	626	52	0	574
11+11'Z'	11	1003	14	0	321	21	0	948	78	0	870
11+47'Z'	36	1595	0	0	1746	10	0	2694	90	0	2604
11+50'Z'	3	1651	0	0	159	0	0	2853	90	0	2763
11+76'Z'	26	782	37	543	1189	18	266	4042	-253	292	4295
11+84'Z'	7	904	39	567	226	10	149	4268	-445	456	4713
12+00'Z'	16	1185	36	590	632	23	350	4901	-898	841	5799
12+09'Z'	9	1200	60	700	400	16	216	5301	-1176	1079	6476
12+50'Z'	41	1318	30	1133	1909	69	1390	7210	-3001	2608	10210
13+00'Z'	50	1530	35	1632	2637	60	2560	9847	-6446	5424	16293
13+50'Z'	50	986	31	2944	2330	61	4237	12177	-12195	10084	24372
14+00'Z'	50	1114	24	3250	1944	51	5735	14121	-20018	16393	34139
14+14'Z'	14	1189	0	3240	615	6	1733	14737	-22393	18299	37129
14+40'Z'	25	1307	0	3308	1175	0	3081	15911	-26629	21689	42540
14+47'Z'	7	1339	0	3327	356	0	892	16267	-27855	22669	44122
14+50'Z'	3	1348	0	3335	145	0	360	16412	-28349	23065	44761
14+76'Z'	26	1385	0	3403	1322	0	3260	17734	-32833	26651	50566
15+00'Z'	24	1319	0	3413	1195	0	3013	18929	-36975	29966	55904
15+12'Z'	12	1235	0	3445	587	0	1577	19516	-39144	31701	58661
15+49'Z'	36	993	0	3540	1497	0	4695	21014	-45600	36866	66614
15+50'Z'	1	987	0	3542	47	0	168	21061	-45831	37050	66892
15+71'Z'	21	931	0	3584	753	0	2796	21814	-49676	40126	71490
16+00'Z'	29	897	0	3630	975	0	3849	22789	-54968	44360	77757
16+19'Z'	19	904	0	3662	634	0	2566	23423	-58496	47182	81919
16+50'Z'	31	883	0	3717	1026	0	4236	24449	-64321	51842	88769
16+67'Z'	17	903	0	3750	555	0	2323	25004	-67515	54397	92519
16+84'Z'	18	909	0	3793	588	0	2449	25592	-70883	57091	96475
17+00'Z'	16	909	0	3834	528	0	2213	26120	-73925	59525	100045
17+15'Z'	15	947	0	3837	502	0	2075	26622	-76779	61808	103401
17+17'Z'	2	950	0	3838	84	0	340	26706	-77246	62182	103952
17+50'Z'	33	982	0	3850	1181	0	4698	27887	-83706	67350	111593
18+00'Z'	50	928	0	3873	1768	0	7151	29655	-93539	75216	123193
18+50'Z'	50	904	0	3783	1696	0	7089	31351	-103286	83014	134637
19+00'Z'	50	1349	0	3097	2086	0	6370	33437	-112045	90021	145482
19+50'Z'	50	1264	0	3083	2419	0	5722	35856	-119913	96316	155769
20+00'Z'	50	1687	0	2826	2733	0	5471	38589	-127436	102334	166025
20+50'Z'	50	419	0	4237	1951	0	6539	40539	-136428	109528	176967
21+00'Z'	50	-118	0	4005	279	0	7631	40819	-146921	117922	187739
21+37'Z'	37	-258	0	3626	-257	0	5219	40562	-154097	123663	194659
21+50'Z'	13	-195	0	3783	-110	0	1793	40452	-156562	125635	197014
22+00'Z'	50	364	0	3028	156	0	6306	40608	-165234	132572	205842
22+50'Z'	50	303	0	2214	617	0	4854	41226	-171907	137911	213133
23+00'Z'	50	404	0	1599	655	0	3531	41880	-176762	141795	218642

PROJECT ID 1430-01-73

STAGE 1 - CTH Z STA. 10+74'Z' to STA. 35+45'Z'

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
23+50'Z'	50	680	0	691	1004	0	2120	42884	-179677	144127	222562
24+00'Z'	50	898	0	0	1461	0	640	44346	-180557	144831	224903
24+50'Z'	50	440	89	0	1239	83	0	45584	-180454	144831	226038
25+00'Z'	50	168	226	0	563	292	0	46148	-180089	144831	226236
25+50'Z'	50	76	170	0	226	366	0	46374	-179631	144831	226005
25+81'Z'	31	42	259	0	66	243	0	46440	-179327	144831	225767
26+00'Z'	19	36	248	0	28	182	0	46468	-179099	144831	225567
26+50'Z'	50	24	208	0	56	422	0	46525	-178572	144831	225096
27+00'Z'	50	15	120	0	36	303	0	46561	-178193	144831	224754
27+50'Z'	50	16	72	0	28	177	0	46589	-177971	144831	224560
28+00'Z'	50	29	41	0	41	105	0	46630	-177840	144831	224470
28+50'Z'	50	50	23	0	73	59	0	46703	-177766	144831	224469
29+00'Z'	50	50	14	0	93	34	0	46795	-177724	144831	224519
29+24'Z'	24	50	10	0	44	11	0	46840	-177711	144831	224550
29+26'Z'	2	51	10	0	4	1	0	46844	-177710	144831	224554
29+50'Z'	24	41	8	0	40	8	0	46884	-177700	144831	224585
29+57'Z'	7	34	7	0	9	2	0	46894	-177698	144831	224591
29+74'Z'	18	26	11	0	20	6	0	46913	-177690	144831	224603
30+00'Z'	26	20	16	0	22	13	0	46935	-177674	144831	224610
30+50'Z'	50	13	25	0	31	38	0	46967	-177627	144831	224594
31+00'Z'	50	17	20	0	29	41	0	46995	-177576	144831	224571
31+50'Z'	50	16	20	0	31	37	0	47027	-177530	144831	224556
32+00'Z'	50	14	25	0	28	42	0	47055	-177478	144831	224532
32+50'Z'	50	13	32	0	25	53	0	47080	-177412	144831	224491
33+00'Z'	50	17	26	0	28	54	0	47107	-177345	144831	224452
33+50'Z'	50	21	20	0	35	42	0	47143	-177292	144831	224434
33+52'Z'	2	21	19	0	2	2	0	47144	-177290	144831	224434
34+00'Z'	48	39	5	0	54	21	0	47198	-177263	144831	224461
34+48'Z'	48	30	5	0	61	8	0	47259	-177252	144831	224512
34+50'Z'	2	30	5	0	2	0	0	47262	-177252	144831	224514
35+00'Z'	50	30	4	0	56	8	0	47318	-177242	144831	224560
35+45'Z'	45	29	3	0	50	6	0	47368	-177235	144831	224602
				Column totals	47368	3043	131665				

PROJECT ID 1430-01-73

STAGE 1 - DRIVEWAY DE STA. 00+40'DE' to 1+58'DE'

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
00+40'DE'	0	0	56	0	0	0	0	0	0	0	0
00+45'DE'	5	0	21	0	0	7	0	0	9	0	-9
00+50'DE'	5	141	0	0	13	2	0	13	11	0	1
00+60'DE'	10	169	0	0	57	0	0	71	11	0	57
00+70'DE'	10	230	0	0	74	0	0	145	11	0	128
00+80'DE'	10	271	0	0	93	0	0	238	11	0	216
00+90'DE'	10	271	0	0	100	0	0	338	11	0	312
1+00'DE'	10	87	0	0	66	0	0	404	11	0	372
1+10'DE'	10	64	0	0	28	0	0	432	11	0	393
1+20'DE'	10	45	0	0	20	0	0	453	11	0	405
1+30'DE'	10	32	0	0	14	0	0	467	11	0	411
1+40'DE'	10	23	0	0	10	0	0	477	11	0	411
1+49'DE'	9	19	0	0	7	0	0	484	11	0	407
1+50'DE'	1	18	0	0	1	0	0	485	11	0	396
1+58'DE'	8	16	0	0	5	0	0	490	11	0	388
			Column totals		490	9	0				

PROJECT ID 1430-01-73

STAGE 1 - DRIVEWAY DF STA. 00+50'DF' to 2+37'DF'

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
00+50'DF'	0	211	0	0	0	0	0	0	0	0	0
1+00'DF'	50	1557	0	0	1637	0	0	1637	0	0	1637
1+50'DF'	50	541	0	0	1943	0	0	3579	0	0	3579
1+82'DF'	32	195	0	0	436	0	0	4015	0	0	4015
2+00'DF'	18	125	0	0	106	0	0	4122	0	0	4122
2+37'DF'	37	47	0	0	118	0	0	4239	0	0	4239
			Column totals		4239	0	0				

PROJECT ID 1430-01-73

STAGE 1 - DITCH A STA. 00+00'A' to STA. 1+75'A'

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
00+00'A'	0	3	0	0	0	0	0	0	0	0	0
00+8'A'	8	43	0	0	7	0	0	7	0	0	7
00+25'A'	17	55	0	0	31	0	0	38	0	0	38
00+30'A'	5	73	0	0	11	0	0	49	0	0	49
00+50'A'	20	132	0	0	78	0	0	126	0	0	126
00+75'A'	25	156	0	0	133	0	0	260	0	0	260
1+00'A'	25	186	0	0	158	0	0	418	0	0	418
1+25'A'	25	208	0	0	183	0	0	601	0	0	601
1+35'A'	10	219	0	0	75	0	0	676	0	0	676
1+50'A'	15	219	0	0	126	0	0	802	0	0	802
1+60'A'	10	54	0	0	52	0	0	853	0	0	853
1+75'A'	15	0	1	0	15	0	0	868	0	0	868
1+75'A'	0	0	1	0	0	0	0	868	0	0	868
				Column totals	868	0	0				

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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EARTHWORK DATA SHEET	SHEET 369	E

PROJECT ID 1430-01-73

STAGE 1 - CTH Z TEMP. RAMP STA. 10+66'Z' to STA. 11+54'Z'

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
10+66'Z'	0	156	0	0	0	0	0	0	0	0	0
10+75'Z'	9	153	0	0	53	0	0	53	0	0	53
10+75'Z'	0	153	0	0	1	0	0	54	0	0	54
11+00'Z'	25	11	181	0	76	84	0	130	105	0	25
11+11'Z'	11	167	47	0	37	47	0	167	163	0	4
11+25'Z'	14	303	0	0	122	12	0	288	178	0	110
11+47'Z'	22	740	0	0	432	0	0	720	178	0	542
11+50'Z'	3	803	0	0	75	0	0	796	178	0	618
11+54'Z'	4	913	0	0	140	0	0	936	178	0	758
				Column totals	936	143	0				

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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EARTHWORK DATA SHEET	SHEET 370	E

PROJECT ID 1430-01-73

STAGE 2 West - STH 82 STA. 488+00 to STA. 530+52

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
488+00	0	7	68	0	0	0	0	0	0	0	0
489+00	100	7	65	0	27	245	0	27	306	0	-279
490+00	100	7	71	0	26	251	0	53	620	0	-567
491+00	100	6	105	0	24	326	0	77	1027	0	-951
492+00	100	7	103	0	24	385	0	101	1509	0	-1408
493+00	100	8	120	0	28	413	0	129	2025	0	-1896
494+00	100	9	136	0	32	474	0	161	2618	0	-2457
495+00	100	11	160	0	37	549	0	198	3304	0	-3106
496+00	100	9	163	0	37	598	0	234	4051	0	-3816
496+47	47	9	179	0	16	294	0	250	4419	0	-4169
496+84	37	8	188	0	12	254	0	262	4736	0	-4474
497+00	16	8	195	0	5	113	0	267	4878	0	-4612
497+97	97	7	249	0	27	794	0	294	5871	0	-5577
498+00	3	7	249	0	1	32	0	295	5910	0	-5616
499+00	100	1	264	0	15	949	0	309	7097	0	-6787
500+00	100	4	272	0	8	993	0	318	8338	0	-8020
501+00	100	4	296	0	13	1053	0	331	9654	0	-9323
501+34	34	0	267	0	3	350	0	333	10092	0	-9758
501+44	10	0	356	0	0	115	0	333	10236	0	-9902
502+00	56	0	0	0	0	372	0	333	10700	0	-10367
503+00	100	0	287	0	0	532	0	333	11365	0	-11032
503+76	76	6	337	0	8	881	0	341	12467	0	-12125
504+00	24	6	341	0	5	299	0	346	12840	0	-12494
504+32	32	7	338	0	7	403	0	354	13343	0	-12990
505+00	68	8	349	0	19	865	0	372	14425	0	-14052
506+00	100	10	376	0	33	1344	0	406	16105	0	-15699
507+00	100	9	431	0	36	1494	0	442	17972	0	-17531
508+00	100	6	506	0	28	1736	0	470	20142	0	-19672
509+00	100	2	550	0	15	1957	0	485	22588	0	-22103
510+00	100	3	561	0	10	2058	0	494	25161	0	-24666
511+00	100	3	615	0	10	2178	0	504	27883	0	-27379
512+00	100	4	819	0	13	2654	0	517	31201	0	-30684
513+00	100	5	840	0	17	3073	0	534	35042	0	-34508
513+08	8	5	844	0	1	263	0	535	35370	0	-34835
513+66	58	7	901	0	13	1871	0	548	37709	0	-37161
514+00	34	9	927	0	10	1140	0	558	39133	0	-38576
514+12	12	9	944	0	4	400	0	562	39633	0	-39072
514+24	12	10	935	0	4	435	0	566	40177	0	-39611
514+36	12	10	919	0	5	426	0	570	40709	0	-40139
514+59	22	11	918	0	9	760	0	579	41660	0	-41081
514+61	3	11	919	0	1	87	0	580	41769	0	-41189
514+84	23	12	941	0	10	777	0	590	42740	0	-42150
515+00	16	13	931	0	7	557	0	597	43437	0	-42840
515+09	9	14	925	0	4	310	0	602	43825	0	-43223

PROJECT ID 1430-01-73

STAGE 2 West - STH 82 STA. 488+00 to STA. 530+52

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
516+00	91	26	945	0	67	3150	0	669	47763	0	-47094
516+79	79	52	1119	0	114	3019	0	783	51537	0	-50754
516+84	5	55	1169	0	10	212	0	793	51801	0	-51008
516+85	1	47	1224	0	3	64	0	796	51881	0	-51085
516+98	13	4	1484	0	12	653	0	808	52697	0	-51889
518+22	123	0	1231	0	10	6199	0	818	60446	0	-59628
518+35	13	0	1179	0	0	587	0	818	61180	0	-60362
518+68	33	0	1110	0	0	1392	0	818	62920	0	-62102
519+00	32	0	1129	0	0	1339	0	818	64593	0	-63775
519+21	21	0	1134	0	0	871	0	818	65682	0	-64865
520+00	79	0	1210	0	0	3438	0	818	69980	0	-69162
521+00	100	0	1307	0	0	4660	0	818	75805	0	-74987
522+00	100	0	1396	0	0	5005	0	818	82061	0	-81244
523+00	100	0	1499	0	0	5361	0	818	88763	0	-87945
524+00	100	0	1494	0	0	5542	0	818	95691	0	-94873
525+00	100	0	1538	0	0	5614	0	818	102708	0	-101890
526+00	100	0	1601	0	0	5813	0	818	109974	0	-109156
527+00	100	0	1625	0	0	5974	0	818	117441	0	-116623
528+00	100	0	1741	0	0	6234	0	818	125234	0	-124416
528+60	60	0	1674	0	0	3795	0	818	129978	0	-129159
529+00	40	0	1655	0	0	2466	0	819	133060	0	-132241
530+00	100	0	1633	0	1	6088	0	819	140670	0	-139851
530+30	30	0	1632	0	0	1809	0	819	142931	0	-142112
530+35	5	0	1632	0	0	302	0	819	143309	0	-142489
530+37	2	0	1630	0	0	96	0	819	143428	0	-142609
530+52	15	0	1622	0	0	903	0	819	144557	0	-143738
				Column totals	819	115646	0				

PROJECT ID 1430-01-73

STAGE 2 West - CTH HH STA. 8+50 to STA. 9+16

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
8+50'HH'	0	0	81	0	0	0	0	0	0	0	0
8+68'HH'	18	0	94	0	0	58	0	0	72	0	-72
9+00'HH'	32	0	135	0	0	136	0	0	243	0	-243
9+16'HH'	16	0	270	0	0	120	0	0	393	0	-393
				Column totals	0	314	0				

PROJECT ID 1430-01-73

STAGE 2 East - STH 82 STA. 547+20 to STA. 581+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
547+20	0	2	1244	0	0	0	0	0	0	0	0
547+20	0	2	1224	0	0	4	0	0	4	0	-4
547+27	7	3	1098	0	1	299	0	1	378	0	-377
547+33	6	5	997	0	1	232	0	2	668	0	-666
547+70	37	3	832	0	5	1253	0	7	2235	0	-2228
547+95	25	8	728	0	5	722	0	12	3137	0	-3125
548+00	5	13	726	0	2	147	0	14	3322	0	-3308
548+20	20	19	653	0	11	498	0	26	3945	0	-3919
548+45	25	2	662	0	10	609	0	35	4706	0	-4670
548+55	10	3	633	0	1	240	0	36	5005	0	-4969
548+57	3	3	625	0	0	58	0	36	5078	0	-5042
548+82	25	9	540	0	6	540	0	42	5753	0	-5711
548+87	5	11	526	0	2	96	0	44	5873	0	-5829
549+00	13	16	506	0	7	250	0	51	6186	0	-6135
549+07	7	21	505	0	5	132	0	55	6352	0	-6296
549+36	29	43	454	0	34	507	0	89	6985	0	-6896
549+54	18	30	512	0	24	322	0	113	7387	0	-7274
549+69	15	22	544	0	15	300	0	128	7762	0	-7634
549+82	13	17	589	0	9	275	0	137	8105	0	-7968
550+00	18	12	675	0	9	420	0	147	8630	0	-8484
550+25	25	11	845	0	11	711	0	158	9519	0	-9362
550+36	10	10	921	0	4	338	0	162	9942	0	-9780
551+00	64	6	1484	0	19	2869	0	180	13528	0	-13347

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PROJECT ID 1430-01-73

STAGE 2 East - STH 82 STA. 547+20 to STA. 581+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
551+78	78	7	2006	0	19	5021	0	199	19804	0	-19605
551+88	10	8	2057	0	3	746	0	202	20736	0	-20534
552+00	12	9	2096	0	4	953	0	206	21928	0	-21722
552+50	50	8	2154	0	16	3935	0	222	26847	0	-26626
553+00	50	6	2120	0	13	3957	0	235	31794	0	-31559
554+00	100	4	1784	0	19	7228	0	254	40828	0	-40575
554+47	47	4	1616	0	7	2989	0	260	44565	0	-44304
554+97	50	4	1384	0	7	2764	0	267	48020	0	-47752
555+00	3	4	1372	0	0	141	0	268	48196	0	-47928
555+28	28	4	1251	0	4	1345	0	272	49877	0	-49605
555+51	23	4	1152	0	3	1024	0	275	51157	0	-50882
556+00	49	4	876	0	8	1851	0	283	53471	0	-53188
556+04	4	4	848	0	1	133	0	283	53638	0	-53354
556+21	17	5	724	0	3	488	0	286	54247	0	-53961
556+38	17	12	1138	0	6	590	0	292	54985	0	-54693
556+58	20	16	1111	0	10	816	0	302	56005	0	-55703
556+78	20	28	1108	0	16	821	0	318	57031	0	-56713
556+82	4	31	1112	0	4	168	0	323	57242	0	-56919
557+00	18	46	1120	0	26	756	0	349	58187	0	-57838
558+00	100	6	1359	0	97	4591	0	446	63925	0	-63480
559+00	100	11	1569	0	31	5423	0	477	70704	0	-70227
560+00	100	15	1395	0	48	5489	0	524	77566	0	-77041
561+00	100	38	901	0	98	4251	0	622	82879	0	-82257
562+00	100	105	211	0	265	2058	0	888	85451	0	-84563
563+00	100	723	0	0	1534	390	0	2422	85939	0	-83517
564+00	100	1528	2	0	4169	4	0	6591	85944	0	-79353
565+00	100	1227	0	1106	5101	4	2048	11692	83133	2253	-71440
566+00	100	881	4	1798	3904	7	5378	15596	75747	8169	-60151
567+00	100	483	0	3032	2527	7	8944	18123	63457	18007	-45334
568+00	100	225	0	3587	1312	0	12257	19434	46603	31491	-27169
569+00	100	318	1	3653	1007	2	13407	20441	28170	46239	-7729
570+00	100	416	0	3667	1359	2	13556	21801	9534	61150	12266
571+00	100	103	1	3517	961	2	13304	22762	-8755	75784	31517
572+00	100	793	6	1872	1660	13	9980	24422	-22461	86761	46883
573+00	100	-19	9	817	1434	27	4980	25856	-29274	92239	55129
574+00	100	159	66	0	258	139	1513	26114	-31180	93903	57294
575+00	100	61	53	0	407	221	0	26520	-30905	93903	57425
575+25	25	117	64	0	82	54	0	26603	-30837	93903	57439
576+00	75	-349	27	792	-322	127	1100	26280	-32191	95113	58471
576+61	61	154	23	781	-221	56	1787	26059	-34578	97079	60637
576+85	24	74	17	908	102	18	753	26161	-35591	97907	61751
577+00	15	80	13	912	42	8	492	26202	-36257	98448	62459
577+05	5	168	11	857	23	2	164	26226	-36480	98629	62705
577+39	34	372	6	649	339	11	944	26564	-37765	99667	64329

PROJECT ID 1430-01-73

STAGE 2 East - STH 82 STA. 547+20 to STA. 581+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
577+92	53	572	6	607	934	12	1244	27498	-39460	101036	66959
578+00	8	1103	6	0	237	2	86	27736	-39576	101130	67312
578+46	46	716	4	0	1544	8	0	29279	-39566	101130	68845
579+00	54	197	6	0	916	11	0	30196	-39553	101130	69748
580+00	100	11	14	0	386	37	0	30582	-39506	101130	70088
581+00	100	14	34	0	46	88	0	30628	-39397	101130	70025
				Column totals	30628	69613	91936				

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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EARTHWORK DATA SHEET	SHEET 375	E

PROJECT ID 1430-01-73

STAGE 3 West - STH 82 STA. 478+50 to STA. 507+50

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
478+50	0	1	0	0	0	0	0	0	0	0	0
478+80	30	1	0	0	1	0	0	1	0	0	1
479+00	20	1	0	0	1	0	0	2	0	0	2
479+33	33	1	0	0	1	0	0	3	0	0	3
479+50	17	1	0	0	1	0	0	3	0	0	3
479+79	29	1	0	0	1	0	0	4	0	0	4
479+86	7	1	0	0	0	0	0	4	0	0	4
480+00	14	0	0	0	0	0	0	5	0	0	5
480+02	2	0	0	0	0	0	0	5	0	0	5
480+50	48	0	0	0	0	0	0	5	0	0	5
481+00	50	0	0	0	0	0	0	5	0	0	5
481+50	50	0	0	0	0	0	0	5	0	0	5
482+00	50	0	0	0	0	0	0	5	0	0	5
482+50	50	0	0	0	0	0	0	5	0	0	5
483+00	50	0	5	0	0	4	0	5	5	0	0
483+50	50	0	4	0	0	8	0	6	15	0	-10
484+00	50	0	4	0	0	8	0	6	25	0	-19
484+50	50	0	5	0	0	8	0	6	35	0	-29
485+00	50	0	4	0	0	8	0	6	45	0	-40
485+50	50	0	3	0	0	6	0	6	53	0	-48
486+00	50	0	7	0	0	9	0	6	64	0	-59
486+50	50	0	6	0	0	12	0	6	79	0	-74
487+00	50	0	6	0	0	12	0	6	94	0	-88
487+50	50	0	9	0	0	14	0	6	111	0	-105
488+00	50	0	11	0	0	19	0	6	135	0	-129
488+50	50	0	12	0	0	22	0	6	162	0	-156
489+00	50	0	14	0	0	24	0	6	191	0	-186
489+50	50	0	8	0	0	20	0	6	216	0	-210
490+00	50	0	7	0	0	14	0	6	233	0	-227
490+50	50	0	2	0	0	8	0	6	243	0	-237
491+00	50	0	2	0	0	3	0	6	247	0	-241
491+50	50	0	8	0	0	9	0	6	258	0	-252
492+00	50	0	15	0	0	21	0	6	285	0	-279
492+50	50	0	9	0	0	22	0	6	313	0	-307
493+00	50	0	7	0	0	15	0	6	331	0	-325
493+50	50	0	8	0	0	14	0	6	349	0	-342
494+00	50	0	7	0	0	14	0	6	367	0	-360
494+50	50	0	10	0	0	15	0	6	386	0	-379
495+00	50	0	20	0	0	27	0	6	420	0	-413
495+50	50	0	29	0	0	45	0	6	475	0	-469
496+00	50	0	36	0	0	60	0	6	550	0	-543
496+50	50	0	24	0	0	55	0	7	619	0	-612
497+00	50	0	40	0	0	60	0	7	693	0	-687
497+50	50	0	42	0	0	76	0	7	788	0	-781

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PROJECT ID 1430-01-73

STAGE 3 West - STH 82 STA. 478+50 to STA. 507+50

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
498+00	50	1	30	0	0	67	0	7	871	0	-864
498+50	50	0	37	0	1	62	0	8	949	0	-941
499+00	50	0	32	0	0	64	0	8	1030	0	-1022
499+00	0	0	32	0	0	0	0	8	1030	0	-1022
499+50	50	0	23	0	0	51	0	8	1094	0	-1086
500+00	50	0	11	0	0	32	0	8	1134	0	-1126
500+50	50	0	12	0	0	21	0	8	1161	0	-1152
501+00	50	0	7	0	0	17	0	8	1182	0	-1173
501+50	50	8	0	0	7	6	0	15	1189	0	-1174
502+00	50	4	0	0	10	0	0	25	1189	0	-1164
502+50	50	0	5	0	3	4	0	29	1195	0	-1166
503+00	50	0	4	0	0	8	0	29	1205	0	-1176
503+50	50	0	5	0	0	8	0	29	1215	0	-1186
504+00	50	0	5	0	0	9	0	29	1227	0	-1198
504+50	50	0	6	0	0	10	0	29	1239	0	-1211
505+00	50	0	7	0	0	12	0	29	1254	0	-1225
505+50	50	0	7	0	0	13	0	29	1270	0	-1242
506+00	50	0	13	0	0	18	0	29	1293	0	-1265
506+50	50	0	16	0	0	27	0	29	1327	0	-1298
507+00	50	0	15	0	0	29	0	29	1363	0	-1334
507+50	50	0	13	0	0	26	0	29	1395	0	-1367
			Column totals		29	1116	0				

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PROJECT ID 1430-01-73

STAGE 3 East - STH 82 STA. 552+00 to STA. 592+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
552+00	0	1	0	0	0	0	0	0	0	0	0
552+50	50	3	0	0	4	0	0	4	0	0	4
553+00	50	4	0	0	7	0	0	11	0	0	11
553+50	50	2	0	0	6	0	0	16	0	0	16
554+00	50	3	0	0	4	0	0	20	0	0	20
554+50	50	3	0	0	5	0	0	26	0	0	26
554+97	47	2	0	0	5	0	0	31	0	0	31
555+00	3	2	0	0	0	0	0	31	0	0	31
555+50	50	1	0	0	3	0	0	34	0	0	34
555+51	1	1	0	0	0	0	0	34	0	0	34
556+00	49	0	0	0	1	0	0	34	0	0	34
556+04	4	0	0	0	0	0	0	34	0	0	34
556+38	34	0	1	0	0	0	0	34	1	0	33
556+50	12	0	1	0	0	0	0	34	1	0	33
556+58	8	0	1	0	0	0	0	34	1	0	33
556+82	24	0	1	0	0	1	0	34	2	0	32
557+00	18	0	1	0	0	0	0	34	3	0	31
557+50	50	0	1	0	0	1	0	34	4	0	30
558+00	50	2	0	0	2	1	0	36	5	0	31
558+50	50	2	0	0	3	0	0	39	5	0	34
559+00	50	2	0	0	3	0	0	43	5	0	37
559+50	50	1	0	0	3	0	0	45	5	0	40
560+00	50	2	0	0	3	0	0	48	5	0	43
560+50	50	1	0	0	3	0	0	51	5	0	46
561+00	50	0	0	0	2	0	0	53	5	0	47
561+50	50	2	0	0	2	0	0	55	5	0	49
562+00	50	1	0	0	3	0	0	58	5	0	52
562+50	50	1	0	0	2	0	0	59	5	0	54
563+00	50	0	0	0	1	0	0	60	5	0	55
563+50	50	0	0	0	0	0	0	60	5	0	55
564+00	50	0	0	0	0	0	0	60	5	0	55
564+50	50	0	0	0	0	0	0	60	5	0	55
565+00	50	0	0	0	0	0	0	60	5	0	55
565+50	50	0	0	0	0	0	0	60	5	0	55
566+00	50	0	0	0	0	0	0	60	5	0	55
566+50	50	0	0	0	0	0	0	60	5	0	55
566+72	22	0	0	0	0	0	0	60	5	0	55
567+00	28	0	0	0	0	0	0	60	5	0	55
567+50	50	0	0	0	0	0	0	60	5	0	55
568+00	50	0	0	0	0	0	0	60	5	0	55
568+50	50	0	0	0	0	0	0	60	5	0	55
569+00	50	0	0	0	0	0	0	60	5	0	55
569+50	50	0	0	0	0	0	0	60	5	0	55
570+00	50	0	0	0	0	0	0	60	5	0	55

PROJECT ID 1430-01-73

STAGE 3 East - STH 82 STA. 552+00 to STA. 592+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
570+50	50	0	0	0	0	0	0	60	5	0	55
571+00	50	0	0	0	0	0	0	60	5	0	55
571+50	50	0	0	0	0	0	0	60	5	0	55
572+00	50	0	0	0	0	0	0	60	5	0	55
572+50	50	0	0	0	0	0	0	60	5	0	55
573+00	50	0	0	0	0	0	0	60	5	0	55
573+50	50	0	0	0	0	0	0	60	5	0	55
574+00	50	0	0	0	0	0	0	60	5	0	55
574+50	50	0	0	0	0	0	0	61	5	0	55
575+00	50	0	0	0	0	0	0	61	5	0	56
575+50	50	0	0	0	1	0	0	62	5	0	56
576+00	50	1	0	0	1	0	0	63	5	0	57
576+50	50	1	0	0	1	0	0	64	5	0	59
576+61	11	1	0	0	0	0	0	65	5	0	59
576+85	24	1	0	0	1	0	0	65	5	0	60
577+00	15	1	0	0	0	0	0	66	5	0	60
577+05	5	1	0	0	0	0	0	66	5	0	60
577+39	34	1	0	0	1	0	0	66	5	0	61
577+50	11	0	0	0	0	0	0	67	5	0	61
577+92	42	0	0	0	0	0	0	67	5	0	62
578+00	8	0	0	0	0	0	0	67	5	0	62
578+46	46	0	0	0	1	0	0	68	5	0	62
578+50	4	0	0	0	0	0	0	68	5	0	62
579+00	50	1	0	0	1	0	0	68	5	0	63
579+50	50	0	0	0	1	0	0	69	6	0	63
580+00	50	0	0	0	0	0	0	69	6	0	63
580+50	50	0	0	0	0	0	0	69	6	0	63
581+00	50	0	0	0	1	0	0	70	6	0	63
581+50	50	1	0	0	1	0	0	71	6	0	64
582+00	50	0	0	0	1	0	0	71	6	0	65
582+50	50	0	0	0	0	0	0	72	6	0	65
583+00	50	0	0	0	0	0	0	72	6	0	65
583+50	50	0	0	0	0	0	0	72	7	0	66
584+00	50	0	0	0	1	0	0	73	7	0	66
584+50	50	0	0	0	1	0	0	74	7	0	67
585+00	50	0	0	0	0	0	0	74	7	0	67
585+50	50	0	1	0	0	1	0	74	8	0	66
586+00	50	0	0	0	0	1	0	74	8	0	65
586+50	50	0	0	0	0	0	0	74	8	0	66
587+00	50	0	0	0	1	0	0	75	8	0	66
587+50	50	0	0	0	1	0	0	75	8	0	67
588+00	50	0	0	0	0	0	0	76	8	0	67
588+50	50	0	0	0	0	0	0	76	8	0	67
589+00	50	0	0	0	0	0	0	76	9	0	67

PROJECT ID 1430-01-73

STAGE 3 East - STH 82 STA. 552+00 to STA. 592+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
589+50	50	0	1	0	0	1	0	76	10	0	66
590+00	50	0	0	0	0	1	0	76	12	0	64
590+50	50	0	1	0	0	1	0	76	13	0	63
591+00	50	0	1	0	0	1	0	76	15	0	61
591+50	50	0	1	0	0	2	0	76	16	0	59
592+00	50	0	1	0	0	1	0	76	18	0	58
				Column totals	76	14	0				

PROJECT ID 1430-01-73

STAGE 4 West - STH 82 STA. 480+00 to STA. 503+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
480+00	0	31	0	0	0	0	0	0	0	0	0
480+60	60	37	16	0	75	18	0	75	23	0	52
481+00	40	40	12	0	57	21	0	132	49	0	83
482+00	100	40	5	0	148	31	0	280	88	0	192
483+00	100	39	10	0	146	27	0	426	122	0	304
484+00	100	39	22	0	144	59	0	570	196	0	374
485+00	100	33	30	0	133	97	0	703	317	0	386
486+00	100	0	35	0	61	122	0	765	469	0	296
487+00	100	0	53	0	0	163	0	765	673	0	91
487+49	49	0	8	0	0	54	0	765	741	0	23
488+00	51	0	0	0	0	7	0	765	750	0	14
489+00	100	0	0	0	0	0	0	765	750	0	14
490+00	100	0	0	0	0	0	0	765	750	0	14
491+00	100	0	0	0	0	0	0	765	750	0	14
492+00	100	0	0	0	0	0	0	765	750	0	14
493+00	100	0	0	0	0	0	0	765	750	0	14
494+00	100	0	0	0	0	0	0	765	750	0	14
495+00	100	0	0	0	0	0	0	765	750	0	14
496+00	100	0	0	0	0	0	0	765	750	0	14
496+47	47	0	0	0	0	0	0	765	750	0	14
496+84	37	0	0	0	0	0	0	765	750	0	14
497+00	16	0	0	0	0	0	0	765	750	0	14
497+97	97	0	0	0	0	0	0	765	750	0	14
498+00	3	0	0	0	0	0	0	765	750	0	14
499+00	100	0	0	0	0	0	0	765	750	0	14
500+00	100	0	0	0	0	0	0	765	750	0	14
501+00	100	0	0	0	0	0	0	765	750	0	14
501+34	34	0	3	0	0	2	0	765	753	0	12
501+44	10	0	10	0	0	2	0	765	756	0	9
502+00	56	0	89	0	0	104	0	765	885	0	-121
503+00	100	0	169	0	0	478	0	765	1483	0	-718
				Column totals	765	1186	0				

PROJECT ID 1430-01-73

STAGE 4 West - CTH HH STA. 7+50 to STA. 9+16

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
7+50'HH'	0	49	4	0	0	0	0	0	0	0	0
7+68'HH'	18	43	12	0	30	5	0	30	7	0	23
8+00'HH'	32	40	22	0	50	21	0	80	33	0	48
8+50'HH'	50	22	72	0	57	87	0	138	141	0	-4
8+68'HH'	18	16	145	0	12	71	0	150	231	0	-80
9+00'HH'	32	8	281	0	14	254	0	164	548	0	-384
9+16'HH'	16	4	351	0	3	188	0	167	783	0	-615
				Column totals	167	626	0				

PROJECT ID 1430-01-73

STAGE 4 East - STH 82 STA. 554+47 to STA. 590+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
554+47	0	9	0	0	0	0	0	0	0	0	0
554+97	50	29	0	0	36	0	0	36	0	0	36
555+00	3	29	0	0	3	0	0	39	0	0	39
555+28	28	25	0	0	27	0	0	66	0	0	66
555+51	23	23	0	0	20	0	0	86	0	0	86
556+00	49	26	0	0	45	0	0	131	0	0	131
556+04	4	26	0	0	4	0	0	135	0	0	135
556+21	17	29	0	0	17	0	0	152	0	0	152
556+38	17	31	0	0	19	0	0	171	0	0	171
556+58	20	33	0	0	23	0	0	194	0	0	194
556+78	20	36	0	0	26	0	0	220	0	0	220
556+82	4	37	0	0	6	0	0	226	0	0	226
557+00	18	39	0	0	26	0	0	251	0	0	251
558+00	100	12	0	0	94	0	0	346	0	0	346
559+00	100	0	0	0	22	0	0	368	0	0	368
560+00	100	0	0	0	0	0	0	368	0	0	368
561+00	100	0	0	0	0	0	0	368	0	0	368
562+00	100	0	0	0	0	0	0	368	0	0	368
563+00	100	0	0	0	0	0	0	368	0	0	368
564+00	100	0	0	0	0	0	0	368	0	0	368
565+00	100	0	0	0	0	0	0	368	0	0	368
566+00	100	0	0	0	0	0	0	368	0	0	368
567+00	100	0	0	0	0	0	0	368	0	0	368

PROJECT ID 1430-01-73

STAGE 4 East - STH 82 STA. 554+47 to STA. 590+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
568+00	100	0	0	0	0	0	0	368	0	0	368
569+00	100	0	0	0	0	0	0	368	0	0	368
570+00	100	0	0	0	0	0	0	368	0	0	368
571+00	100	0	0	0	0	0	0	368	0	0	368
572+00	100	0	0	0	0	0	0	368	0	0	368
573+00	100	0	0	0	0	0	0	368	0	0	368
574+00	100	0	0	0	0	0	0	368	0	0	368
575+00	100	0	0	0	0	0	0	368	0	0	368
576+00	100	0	0	0	0	0	0	368	0	0	368
576+61	61	0	0	0	0	0	0	368	0	0	368
576+85	24	0	0	0	0	0	0	368	0	0	368
577+00	15	0	0	0	0	0	0	368	0	0	368
577+05	5	0	0	0	0	0	0	368	0	0	368
577+39	34	0	0	0	0	0	0	368	0	0	368
577+92	53	0	0	0	0	0	0	368	0	0	368
578+00	8	0	0	0	0	0	0	368	0	0	368
578+46	46	0	0	0	0	0	0	368	0	0	368
579+00	54	0	0	0	0	0	0	368	0	0	368
580+00	100	0	0	0	0	0	0	368	0	0	368
581+00	100	0	0	0	0	0	0	368	0	0	368
582+00	100	0	0	0	0	0	0	368	0	0	368
583+00	100	0	0	0	0	0	0	368	0	0	368
584+00	100	0	0	0	0	0	0	368	0	0	368
584+72	72	0	0	0	0	0	0	368	0	0	368
585+00	28	0	0	0	0	0	0	368	0	0	368
586+00	100	0	5	0	0	9	0	368	11	0	357
586+56	56	36	0	0	38	5	0	406	17	0	389
587+00	44	36	0	0	59	0	0	464	17	0	447
588+00	100	37	0	0	135	0	0	600	17	0	583
589+00	100	42	0	0	145	0	0	744	17	0	728
589+60	60	43	0	0	94	0	0	838	17	0	821
590+00	40	47	0	0	66	0	0	904	17	0	887
				Column totals	904	14	0				

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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	EARTHWORK DATA SHEET	SHEET 383	E

PROJECT ID 1430-01-73

STAGE 5A West - STH 82 STA. 491+00 to STA. 516+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
491+00	0	3	0	0	0	0	0	0	0	0	0
492+00	100	6	0	0	16	0	0	16	0	0	16
493+00	100	7	0	0	24	0	0	40	0	0	40
494+00	100	8	0	0	29	0	0	68	0	0	68
495+00	100	9	0	0	32	0	0	100	0	0	100
496+00	100	0	0	0	17	0	0	117	0	0	117
496+47	47	0	0	0	0	0	0	117	0	0	117
496+84	37	0	0	0	0	0	0	117	0	0	117
497+00	16	0	0	0	0	0	0	117	0	0	117
497+97	97	0	0	0	0	0	0	117	0	0	117
498+00	3	0	0	0	0	0	0	117	0	0	117
499+00	100	0	0	0	0	0	0	117	0	0	117
500+00	100	0	0	0	0	0	0	117	0	0	117
501+00	100	0	0	0	0	0	0	117	0	0	117
501+34	34	0	0	0	0	0	0	117	0	0	117
501+44	10	0	0	0	0	0	0	117	0	0	117
502+00	56	0	0	0	0	0	0	117	0	0	117
503+00	100	0	0	0	0	0	0	117	0	0	117
503+76	76	0	0	0	0	0	0	117	0	0	117
504+00	24	0	0	0	0	0	0	117	0	0	117
504+32	32	0	0	0	0	0	0	117	0	0	117
505+00	68	0	0	0	0	0	0	117	0	0	117
506+00	100	0	0	0	0	0	0	117	0	0	117
507+00	100	0	0	0	0	0	0	117	0	0	117
508+00	100	0	0	0	0	0	0	117	0	0	117
509+00	100	0	0	0	0	0	0	117	0	0	117
510+00	100	0	0	0	0	0	0	117	0	0	117
511+00	100	20	0	0	37	0	0	153	0	0	153
512+00	100	26	0	0	84	0	0	237	0	0	237
513+00	100	33	0	0	109	0	0	346	0	0	346
513+08	8	34	0	0	11	0	0	357	0	0	357
513+66	58	40	0	0	80	0	0	436	0	0	436
514+00	34	40	0	0	50	0	0	486	0	0	486
514+12	12	41	0	0	17	0	0	504	0	0	504
514+24	12	42	0	0	19	0	0	523	0	0	523
514+36	12	43	0	0	20	0	0	543	0	0	543
514+59	22	45	0	0	37	0	0	579	0	0	579
514+61	3	46	0	0	4	0	0	584	0	0	584
514+84	23	51	0	0	40	0	0	624	0	0	624
515+00	16	54	0	0	31	0	0	655	0	0	655
515+09	9	56	0	0	18	0	0	673	0	0	673
516+00	91	10	0	0	110	0	0	784	0	0	784
				Column totals	784	0	0				

PROJECT ID 1430-01-73

STAGE 5B West - STH 82 STA. 480+00 to STA. 485+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
480+00	0	33	0	0	0	0	0	0	0	0	0
480+60	60	37	0	0	77	0	0	77	0	0	77
481+00	40	39	0	0	56	0	0	133	0	0	133
482+00	100	37	0	0	141	0	0	274	0	0	274
483+00	100	33	0	0	130	0	0	404	0	0	404
484+00	100	33	0	0	123	0	0	527	0	0	527
485+00	100	30	0	0	117	0	0	644	0	0	644
				Column totals	644	0	0				

PROJECT ID 1430-01-73

STAGE 5B East - STH 82 STA. 554+97 to STA. 590+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
554+97	0	10	0	0	0	0	0	0	0	0	0
555+00	3	11	0	0	1	0	0	1	0	0	1
555+28	28	15	0	0	13	0	0	15	0	0	15
555+51	23	18	0	0	14	0	0	29	0	0	29
556+00	49	24	0	0	38	0	0	67	0	0	67
556+04	4	24	0	0	4	0	0	71	0	0	71
556+21	17	27	0	0	16	0	0	86	0	0	86
556+38	17	29	0	0	18	0	0	104	0	0	104
556+58	20	28	0	0	21	0	0	125	0	0	125
556+78	20	30	0	0	22	0	0	147	0	0	147
556+82	4	31	0	0	5	0	0	151	0	0	151
557+00	18	33	0	0	22	0	0	173	0	0	173
558+00	100	46	0	0	147	0	0	320	0	0	320
559+00	100	0	0	0	85	0	0	405	0	0	405
560+00	100	0	0	0	0	0	0	405	0	0	405
561+00	100	0	0	0	0	0	0	405	0	0	405
562+00	100	0	0	0	0	0	0	405	0	0	405
563+00	100	0	0	0	0	0	0	405	0	0	405
564+00	100	0	0	0	0	0	0	405	0	0	405
565+00	100	0	0	0	0	0	0	405	0	0	405
566+00	100	0	0	0	0	0	0	405	0	0	405
567+00	100	0	0	0	0	0	0	405	0	0	405
568+00	100	0	0	0	0	0	0	405	0	0	405

PROJECT ID 1430-01-73

STAGE 5B East - STH 82 STA. 554+97 to STA. 590+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
569+00	100	0	0	0	0	0	0	405	0	0	405
570+00	100	0	0	0	0	0	0	405	0	0	405
571+00	100	0	0	0	0	0	0	405	0	0	405
572+00	100	0	0	0	0	0	0	405	0	0	405
573+00	100	0	0	0	0	0	0	405	0	0	405
574+00	100	0	0	0	0	0	0	405	0	0	405
575+00	100	0	0	0	0	0	0	405	0	0	405
576+00	100	0	0	0	0	0	0	405	0	0	405
576+61	61	0	0	0	0	0	0	405	0	0	405
576+85	24	0	0	0	0	0	0	405	0	0	405
577+00	15	0	0	0	0	0	0	405	0	0	405
577+05	5	0	0	0	0	0	0	405	0	0	405
577+39	34	0	0	0	0	0	0	405	0	0	405
577+92	53	0	0	0	0	0	0	405	0	0	405
578+00	8	0	0	0	0	0	0	405	0	0	405
578+46	46	0	0	0	0	0	0	405	0	0	405
579+00	54	0	0	0	0	0	0	405	0	0	405
580+00	100	0	0	0	0	0	0	405	0	0	405
581+00	100	0	0	0	0	0	0	405	0	0	405
582+00	100	0	43	0	0	80	0	405	100	0	305
583+00	100	0	34	0	0	143	0	405	279	0	126
584+00	100	0	31	0	0	120	0	405	429	0	-24
584+72	72	0	1	0	0	42	0	405	481	0	-76
585+00	28	0	0	0	0	0	0	405	481	0	-77
586+00	100	0	29	0	0	53	0	405	547	0	-143
586+56	56	62	0	0	64	30	0	469	584	0	-115
587+00	44	32	38	0	76	30	0	545	622	0	-78
588+00	100	29	46	0	112	155	0	657	817	0	-159
589+00	100	33	31	0	115	144	0	772	996	0	-224
589+60	60	33	29	0	74	68	0	846	1080	0	-234
590+00	40	35	16	0	50	33	0	896	1122	0	-226
				Column totals	896	898	0				

PROJECT ID 1430-01-73

STAGE 8 West - STH 82 STA. 480+00 to STA. 530+52

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
480+00	0	3	1	0	0	0	0	0	0	0	0
480+60	60	5	2	0	9	3	0	9	4	0	5
481+00	40	4	2	0	6	3	0	15	7	0	8
482+00	100	3	15	0	12	31	0	27	45	0	-18
483+00	100	4	12	0	11	50	0	39	108	0	-69
484+00	100	6	8	0	19	37	0	57	154	0	-97
485+00	100	7	11	0	25	35	0	82	198	0	-117
486+00	100	5	24	0	22	65	0	104	280	0	-176
487+00	100	5	28	0	18	97	0	122	401	0	-279
487+49	49	5	33	0	9	55	0	131	470	0	-339
488+00	51	4	37	0	9	67	0	140	554	0	-414
489+00	100	3	36	0	12	135	0	153	722	0	-570
490+00	100	4	30	0	12	122	0	165	875	0	-710
491+00	100	4	43	0	15	136	0	180	1045	0	-865
492+00	100	4	46	0	14	164	0	195	1250	0	-1056
493+00	100	4	41	0	14	160	0	209	1450	0	-1241
494+00	100	4	36	0	14	141	0	223	1627	0	-1404
495+00	100	3	27	0	13	116	0	236	1771	0	-1535
496+00	100	5	21	0	16	89	0	252	1882	0	-1630
496+47	47	4	20	0	8	35	0	260	1926	0	-1666
496+84	37	4	14	0	6	23	0	266	1955	0	-1689
497+00	16	8	11	0	4	7	0	270	1964	0	-1694
497+97	97	12	3	0	36	25	0	306	1996	0	-1690
498+00	3	12	5	0	2	0	0	308	1996	0	-1689
499+00	100	5	2	0	32	12	0	340	2011	0	-1672
500+00	100	6	4	0	21	10	0	361	2023	0	-1663
501+00	100	25	0	0	57	7	0	417	2031	0	-1614
501+34	34	212	0	0	147	0	0	564	2031	0	-1467
501+44	10	373	0	0	108	0	0	672	2031	0	-1359
502+00	56	228	0	0	628	0	0	1300	2031	0	-731
503+00	100	54	0	0	521	0	0	1822	2032	0	-210
503+76	76	55	0	0	153	0	0	1975	2032	0	-57
504+00	24	59	0	0	50	0	0	2025	2032	0	-7
504+32	32	66	0	0	75	0	0	2100	2032	0	68
505+00	68	79	0	0	182	0	0	2282	2032	0	250
506+00	100	97	0	0	325	0	0	2607	2032	0	576
507+00	100	104	0	0	373	0	0	2981	2032	0	949
508+00	100	118	0	0	411	0	0	3392	2032	0	1360
509+00	100	106	0	0	415	0	0	3807	2032	0	1775
510+00	100	130	0	0	437	0	0	4244	2032	0	2212
511+00	100	155	0	0	527	0	0	4771	2032	0	2739
512+00	100	191	0	0	640	0	0	5411	2032	0	3379
513+00	100	229	0	0	778	0	0	6189	2032	0	4156
513+08	8	233	0	0	72	0	0	6261	2032	0	4228

PROJECT ID 1430-01-73

STAGE 8 West - STH 82 STA. 480+00 to STA. 530+52

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
513+66	58	246	0	0	514	0	0	6774	2032	0	4742
514+00	34	252	0	0	311	0	0	7085	2032	0	5053
514+12	12	251	0	0	108	0	0	7192	2032	0	5160
514+24	12	252	0	0	116	0	0	7309	2032	0	5276
514+36	12	254	0	0	116	0	0	7425	2032	0	5393
514+59	22	357	0	0	253	0	0	7678	2032	0	5645
514+61	3	361	0	0	34	0	0	7712	2032	0	5680
514+84	23	413	1	0	323	0	0	8035	2033	0	6003
515+00	16	460	0	0	260	0	0	8295	2033	0	6263
515+09	9	485	0	0	158	0	0	8453	2033	0	6421
516+00	91	689	0	0	1979	0	0	10432	2033	0	8399
516+79	79	774	0	0	2141	0	0	12573	2033	0	10540
516+84	5	777	0	0	144	0	0	12716	2033	0	10684
516+85	1	778	0	0	41	0	0	12758	2033	0	10725
516+98	13	788	0	0	377	0	0	13135	2033	0	11102
518+22	123	1210	0	0	4561	0	0	17696	2033	0	15663
518+35	13	1243	0	0	598	0	0	18294	2033	0	16261
518+68	33	1306	0	0	1550	0	0	19844	2033	0	17811
519+00	32	1324	0	0	1572	0	0	21416	2033	0	19383
519+21	21	1323	0	0	1019	0	0	22435	2033	0	20402
520+00	79	1300	0	0	3848	0	0	26283	2034	0	24249
521+00	100	1408	0	0	5014	1	0	31296	2034	0	29262
522+00	100	1522	0	0	5426	0	0	36722	2035	0	34687
523+00	100	1571	0	0	5729	0	0	42451	2035	0	40416
524+00	100	1689	0	0	6036	0	0	48487	2036	0	46451
525+00	100	1822	0	0	6502	0	0	54989	2036	0	52953
526+00	100	1880	0	0	6856	0	0	61844	2036	0	59808
527+00	100	2018	0	0	7218	0	0	69063	2036	0	67027
528+00	100	2075	0	0	7580	0	0	76643	2037	0	74606
528+60	60	1007	0	0	3424	0	0	80066	2037	0	78030
529+00	40	770	0	0	1316	0	0	81382	2037	0	79345
530+00	100	776	0	0	2862	0	0	84244	2037	0	82207
530+30	30	776	0	0	860	0	0	85104	2037	0	83067
530+35	5	775	0	0	144	0	0	85247	2037	0	83211
530+37	2	775	0	0	45	0	0	85293	2037	0	83256
530+52	15	773	0	0	430	0	0	85723	2037	0	83686
				Column totals	85723	1629	0				

PROJECT ID 1430-01-73

STAGE 8 East - STH 82 STA. 547+05 to STA. 582+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
547+05	0	297	0	0	0	0	0	0	0	0	0
547+20	15	274	0	0	158	0	0	158	0	0	158
547+20	0	275	0	0	1	0	0	159	0	0	159
547+27	7	268	0	0	70	0	0	229	0	0	229
547+33	6	262	0	0	59	0	0	288	0	0	288
547+70	37	245	0	0	348	0	0	636	0	0	636
547+95	25	246	0	0	227	0	0	863	0	0	863
548+00	5	246	0	0	50	0	0	913	0	0	913
548+20	20	248	0	0	179	0	0	1092	0	0	1092
548+45	25	248	0	0	230	0	0	1322	0	0	1322
548+55	10	249	0	0	92	0	0	1414	0	0	1414
548+57	3	249	0	0	23	0	0	1437	0	0	1437
548+82	25	251	0	0	232	0	0	1668	0	0	1668
548+87	5	252	0	0	45	0	0	1714	0	0	1714
549+00	13	252	0	0	122	0	0	1836	0	0	1836
549+07	7	253	0	0	66	0	0	1902	0	0	1902
549+36	29	268	0	0	275	0	0	2177	0	0	2177
549+54	18	273	0	0	180	0	0	2358	0	0	2358
549+69	15	277	0	0	156	0	0	2514	0	0	2514
549+82	13	281	0	0	135	0	0	2649	0	0	2649
550+00	18	286	0	0	189	0	0	2838	0	0	2838
550+25	25	301	0	0	275	0	0	3113	0	0	3113
550+36	10	316	0	0	118	0	0	3231	0	0	3231
551+00	64	133	13	0	536	16	0	3766	20	0	3746
551+78	78	180	0	0	450	19	0	4217	44	0	4173
551+88	10	484	0	0	122	0	0	4339	44	0	4295
552+00	12	465	0	0	218	0	0	4556	44	0	4513
552+50	50	699	0	0	1078	0	0	5634	44	0	5590
553+00	50	602	0	0	1204	0	0	6839	44	0	6795
554+00	100	457	0	0	1961	0	0	8799	44	0	8756
554+47	47	343	1	0	703	1	0	9502	45	0	9458
554+97	50	207	23	0	507	22	0	10009	72	0	9937
555+00	3	198	26	0	21	3	0	10030	76	0	9954
555+28	28	122	80	0	164	54	0	10194	143	0	10050
555+51	23	90	140	0	90	94	0	10284	261	0	10023
556+00	49	35	343	0	114	441	0	10398	812	0	9586
556+04	4	30	363	0	5	55	0	10403	880	0	9523
556+21	17	16	428	0	14	246	0	10417	1187	0	9230
556+38	17	6	542	0	7	308	0	10425	1572	0	8853
556+58	20	0	0	0	2	197	0	10427	1818	0	8609
556+78	20	0	0	0	0	0	0	10427	1818	0	8609
556+82	4	0	0	0	0	0	0	10427	1818	0	8609
557+00	18	0	0	0	0	0	0	10427	1818	0	8609
558+00	100	192	75	0	356	139	0	10783	1992	0	8791

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PROJECT ID 1430-01-73

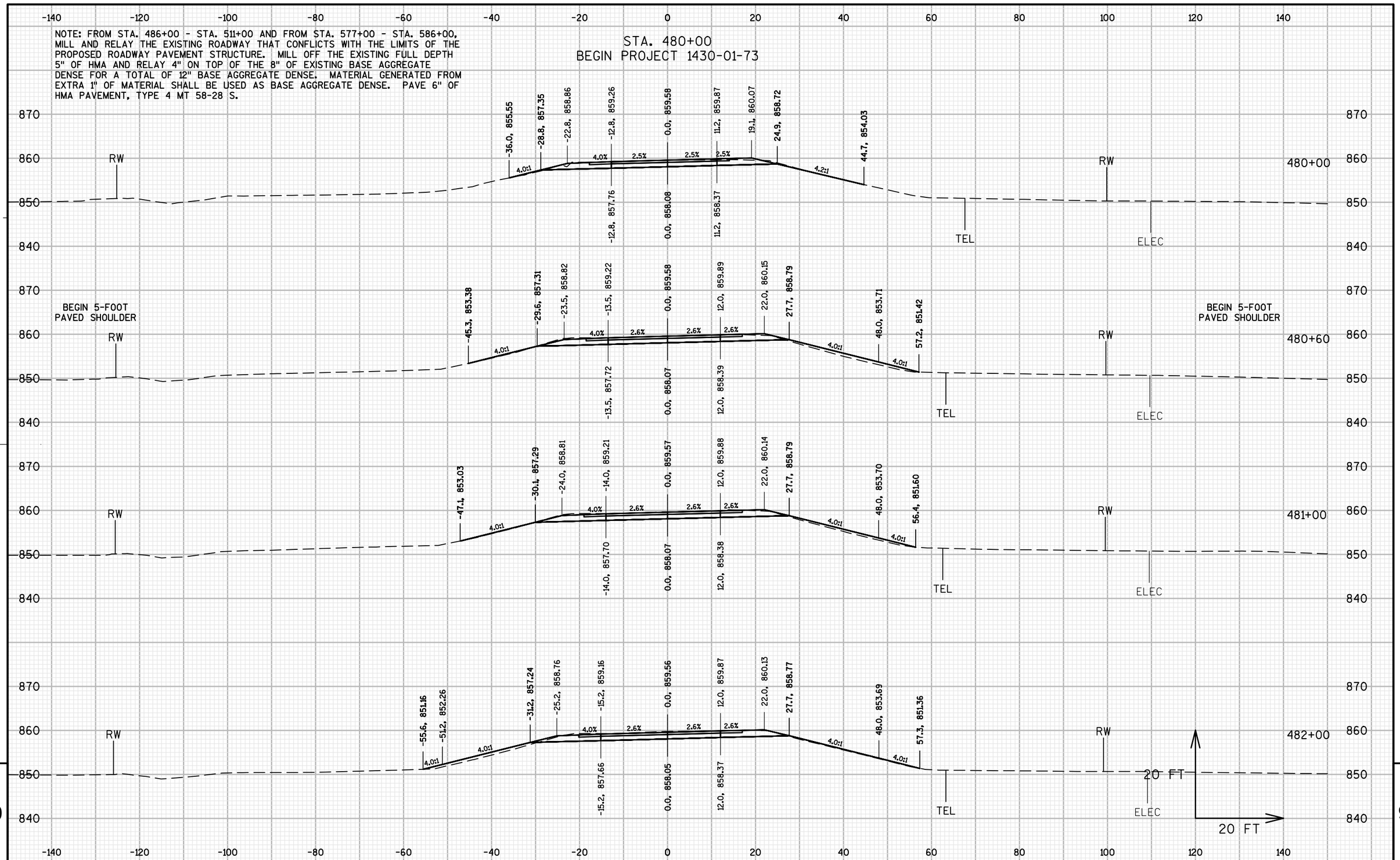
STAGE 8 East - STH 82 STA. 547+05 to STA. 582+00

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	Rock Exc	Cut	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	
559+00	100	414	0	0	1123	139	0	11905	2166	0	9739
560+00	100	512	0	0	1714	0	0	13619	2166	0	11454
561+00	100	251	0	0	1412	0	0	15032	2166	0	12866
562+00	100	200	0	0	835	0	0	15866	2166	0	13701
563+00	100	180	0	0	702	0	0	16569	2166	0	14403
564+00	100	143	0	0	597	0	0	17166	2166	0	15000
565+00	100	108	0	0	465	0	0	17631	2166	0	15465
566+00	100	100	0	0	386	0	0	18017	2166	0	15851
567+00	100	94	0	0	359	0	0	18376	2166	0	16210
568+00	100	75	0	0	312	0	0	18688	2166	0	16522
569+00	100	59	0	0	248	0	0	18936	2166	0	16770
570+00	100	57	0	0	214	0	0	19150	2166	0	16984
571+00	100	57	0	0	212	0	0	19362	2166	0	17195
572+00	100	56	0	0	210	0	0	19571	2166	0	17405
573+00	100	66	0	0	225	0	0	19797	2166	0	17630
574+00	100	218	0	0	526	0	0	20323	2166	0	18156
575+00	100	214	0	0	800	0	0	21122	2166	0	18956
575+25	25	212	8	0	197	4	0	21320	2171	0	19148
576+00	75	160	7	0	517	22	0	21836	2199	0	19638
576+61	61	164	0	0	368	8	0	22204	2209	0	19995
576+85	24	131	0	0	131	0	0	22336	2209	0	20127
577+00	15	88	5	0	59	1	0	22395	2211	0	20184
577+05	5	87	4	0	16	1	0	22411	2212	0	20200
577+39	34	104	0	0	120	3	0	22532	2215	0	20316
577+92	53	174	0	0	275	0	0	22807	2215	0	20592
578+00	8	178	0	0	50	0	0	22857	2215	0	20641
578+46	46	136	0	0	266	0	0	23123	2215	0	20908
579+00	54	76	13	0	213	13	0	23336	2232	0	21104
580+00	100	17	0	0	173	24	0	23509	2262	0	21247
581+00	100	6	0	0	44	0	0	23553	2262	0	21291
582+00	100	4	0	0	20	0	0	23573	2262	0	21311
				Column totals	23573	1810	0				

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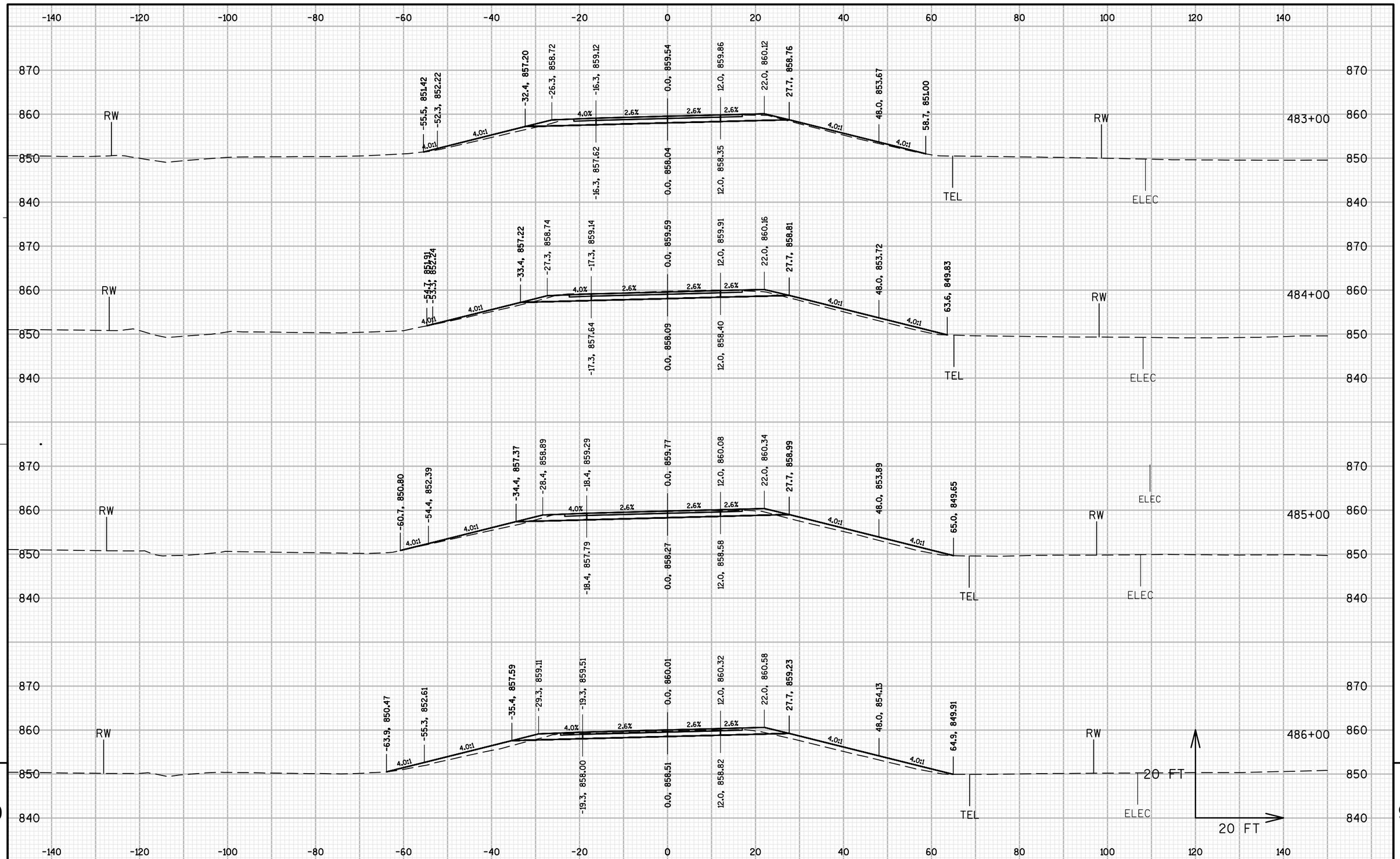
NOTE: FROM STA. 486+00 - STA. 511+00 AND FROM STA. 577+00 - STA. 586+00, MILL AND RELAY THE EXISTING ROADWAY THAT CONFLICTS WITH THE LIMITS OF THE PROPOSED ROADWAY PAVEMENT STRUCTURE. MILL OFF THE EXISTING FULL DEPTH 5" OF HMA AND RELAY 4" ON TOP OF THE 8" OF EXISTING BASE AGGREGATE DENSE FOR A TOTAL OF 12" BASE AGGREGATE DENSE. MATERIAL GENERATED FROM EXTRA 1" OF MATERIAL SHALL BE USED AS BASE AGGREGATE DENSE. PAVE 6" OF HMA PAVEMENT, TYPE 4 MT 58-28 S.



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 391 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 11:54 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

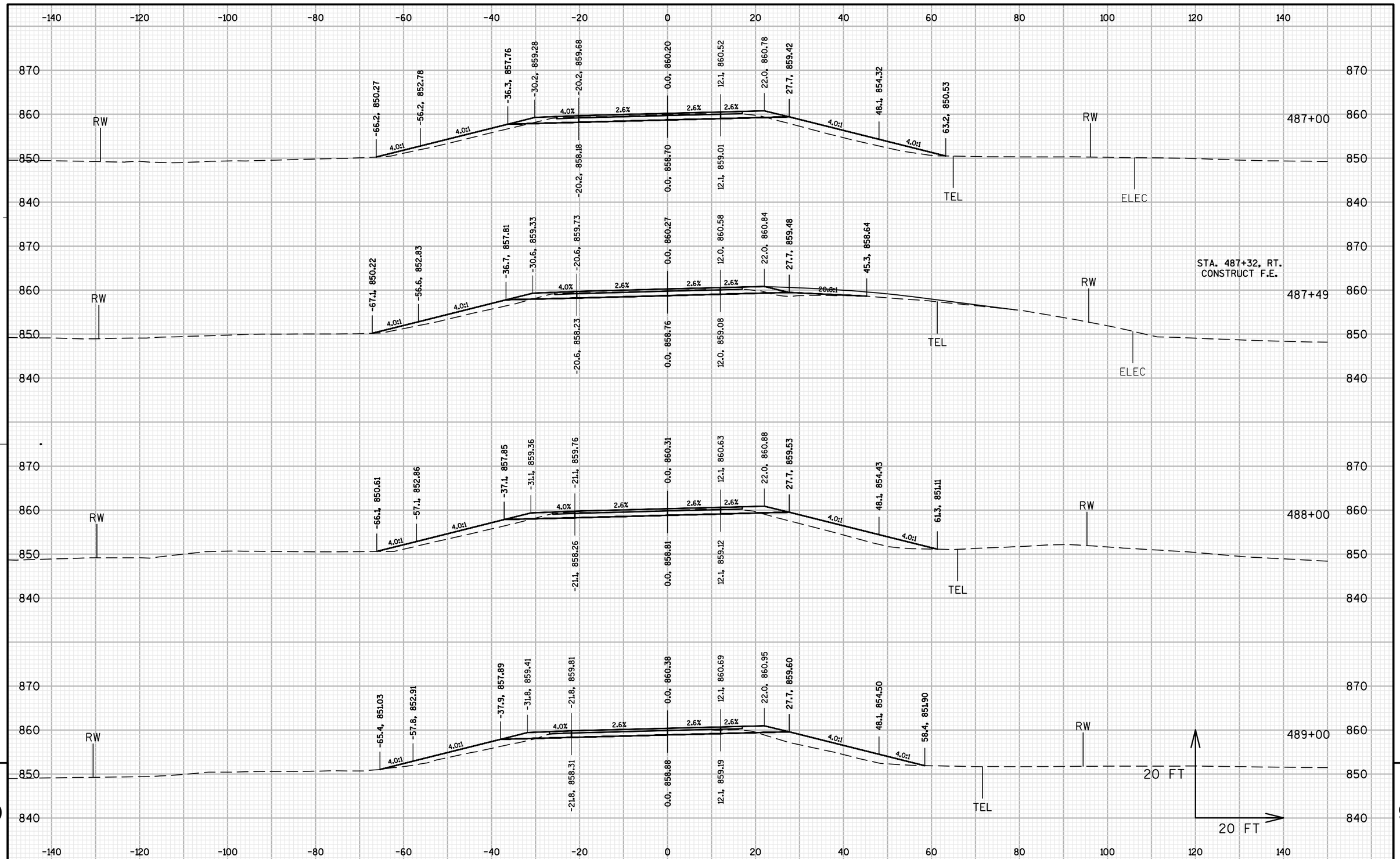
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET	E

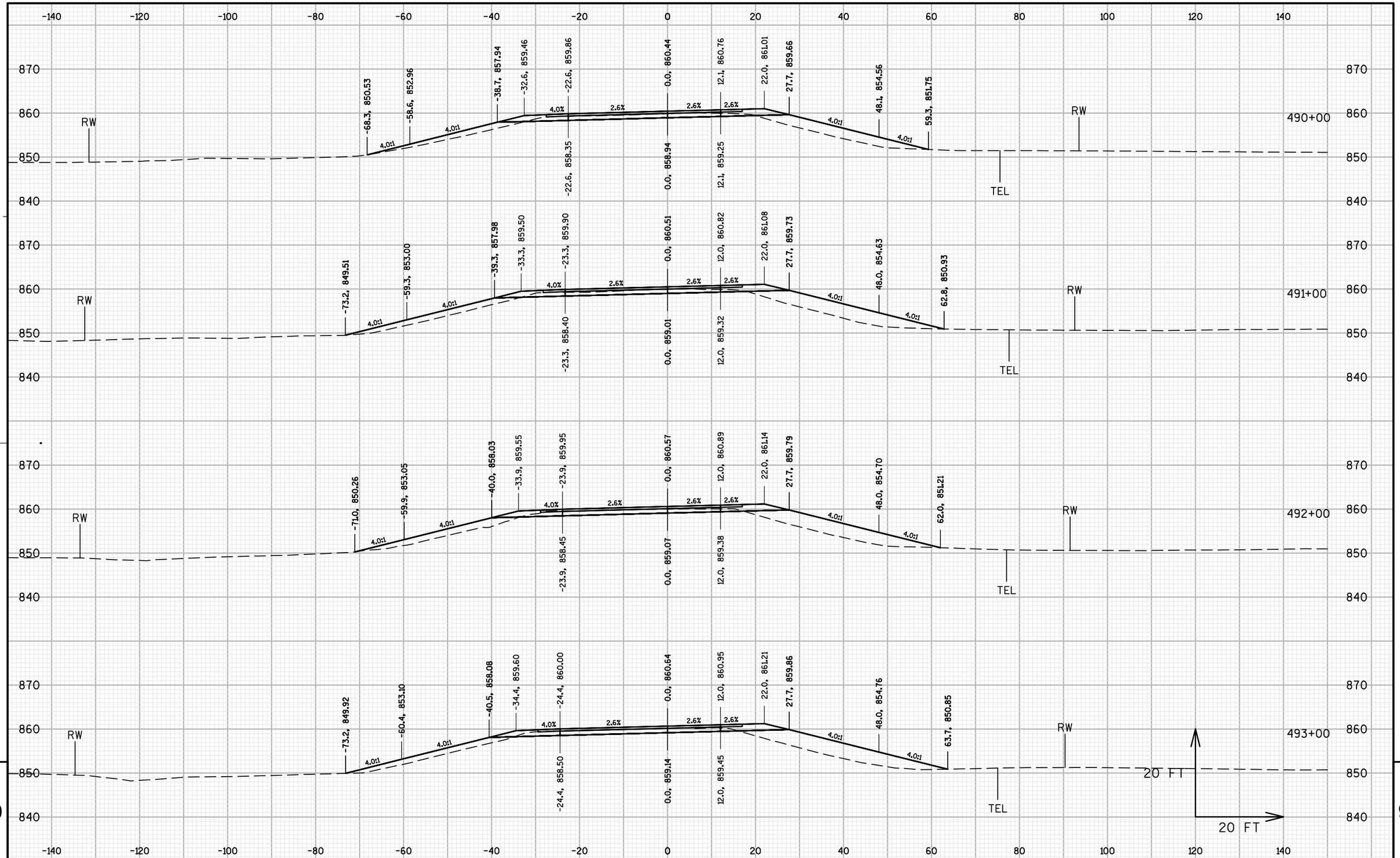
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WISDOT/CADDS SHEET 49

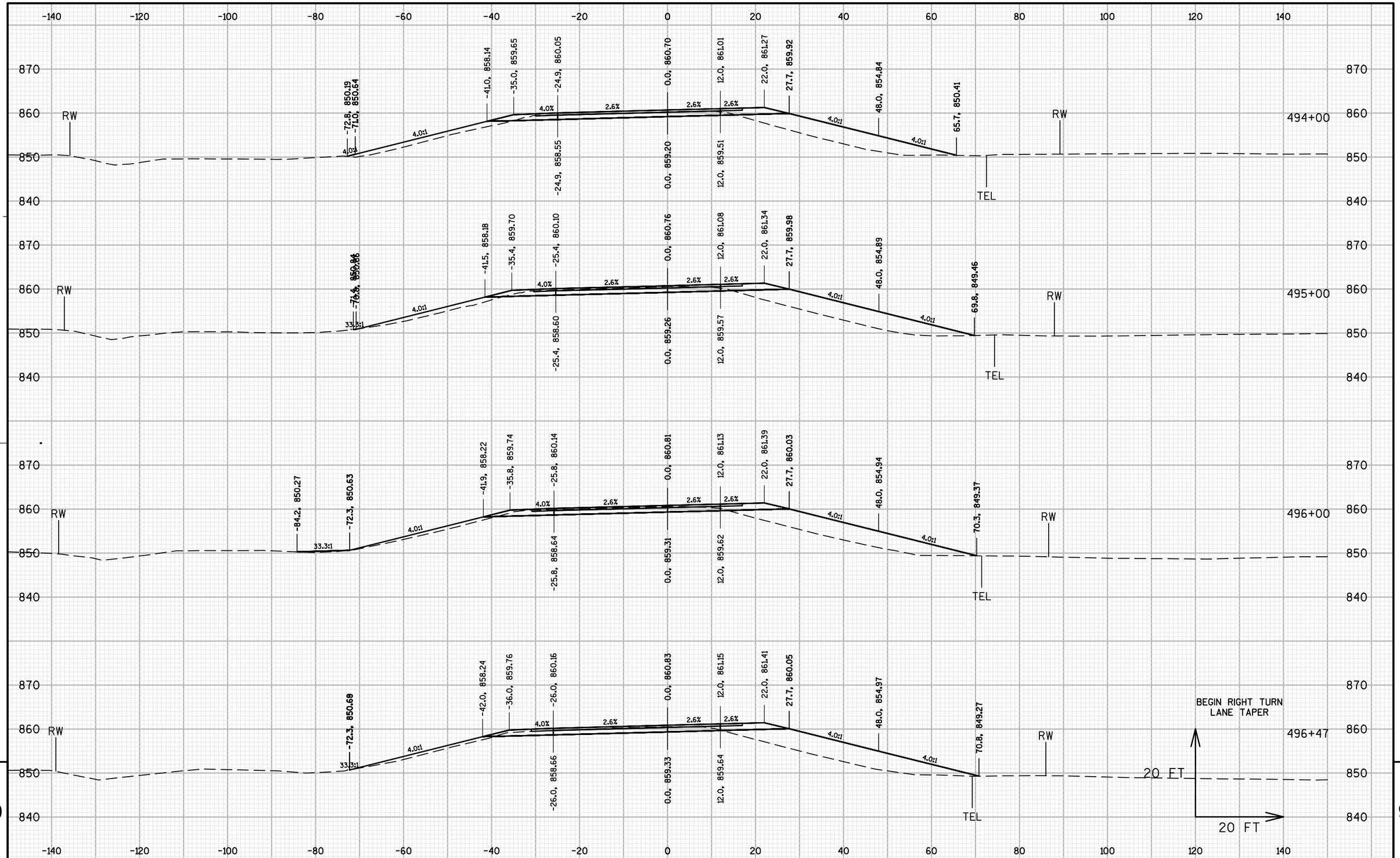


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 11:56 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

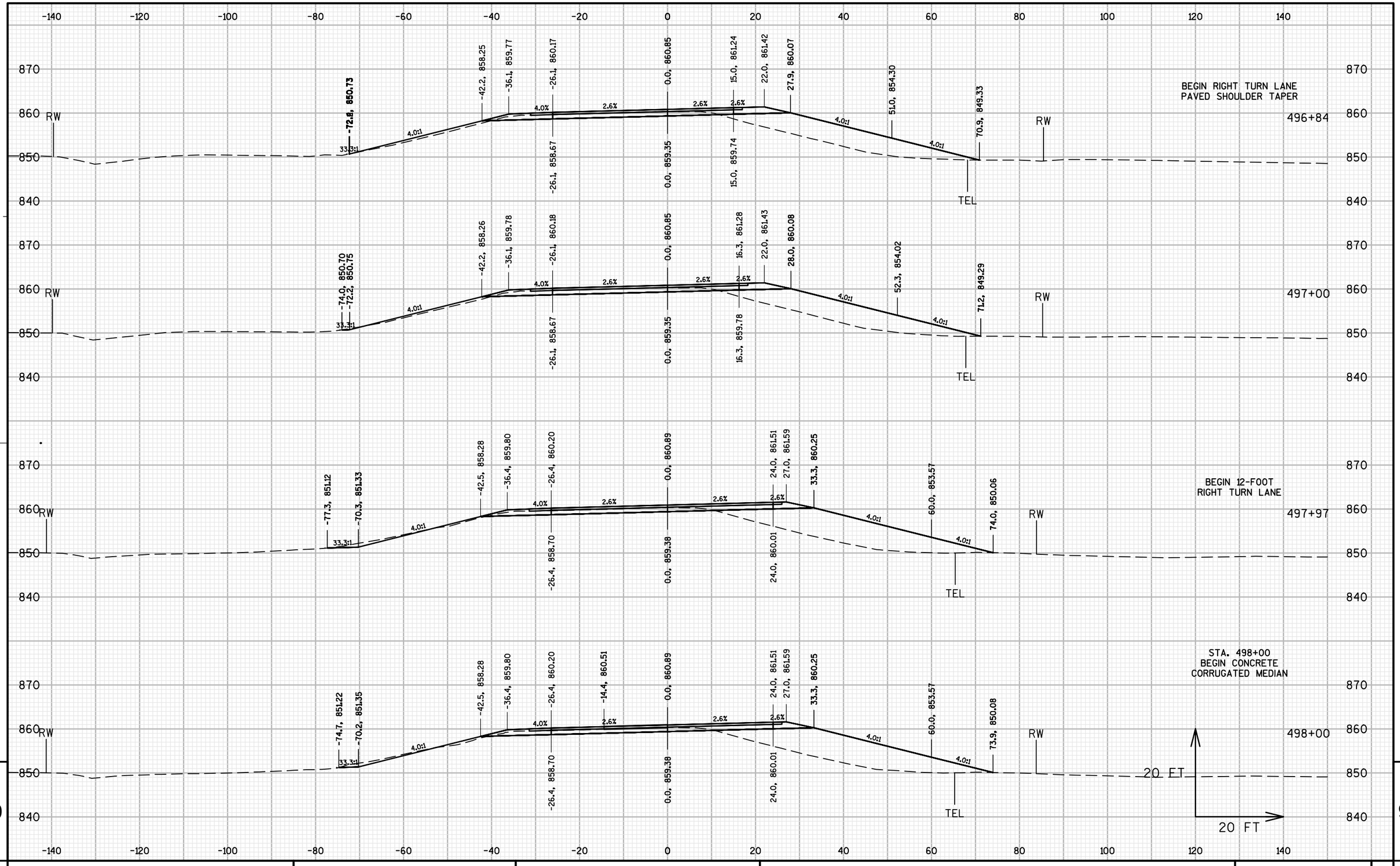


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 394 E



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET	E

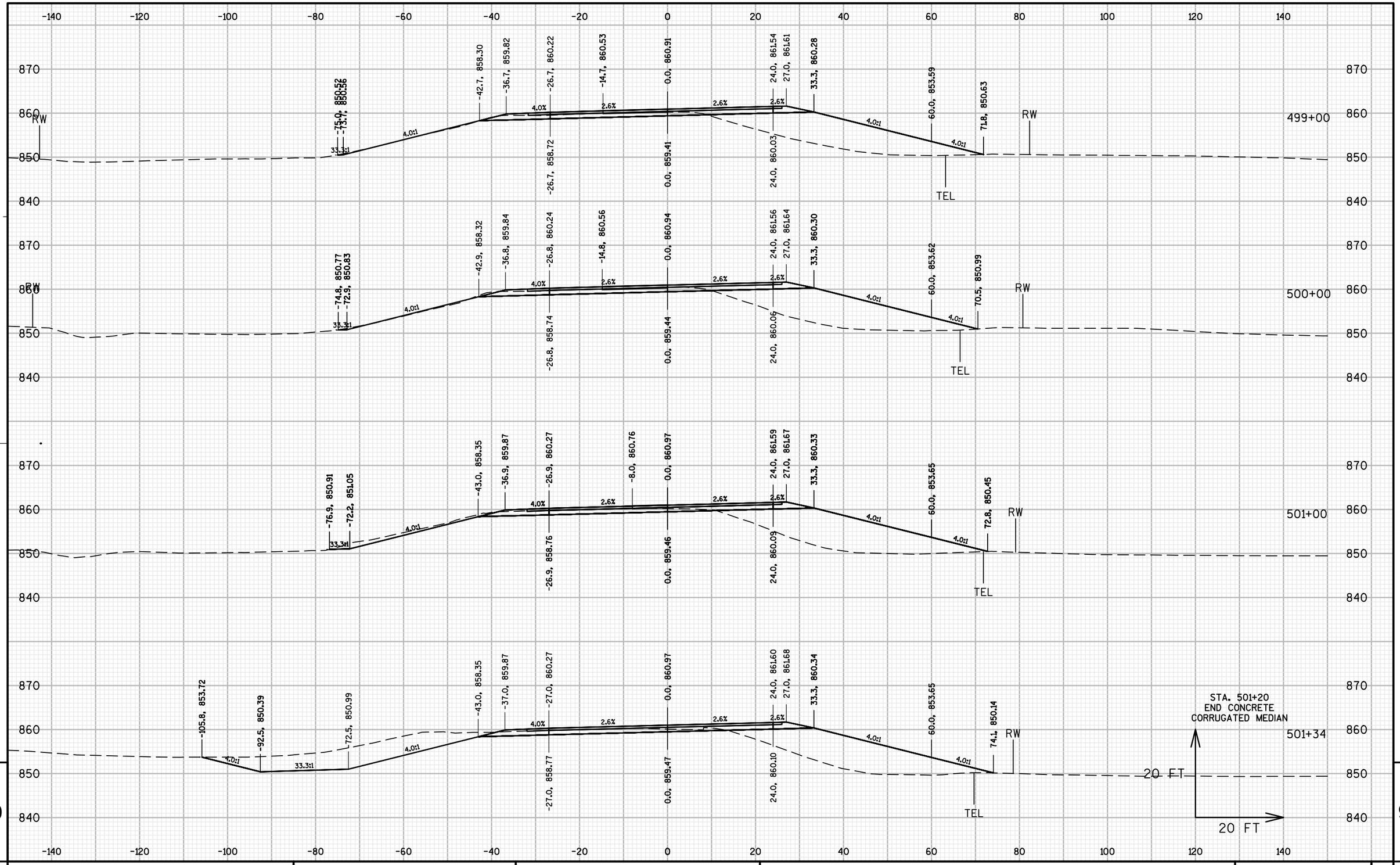
FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 11:57 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 11:58 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

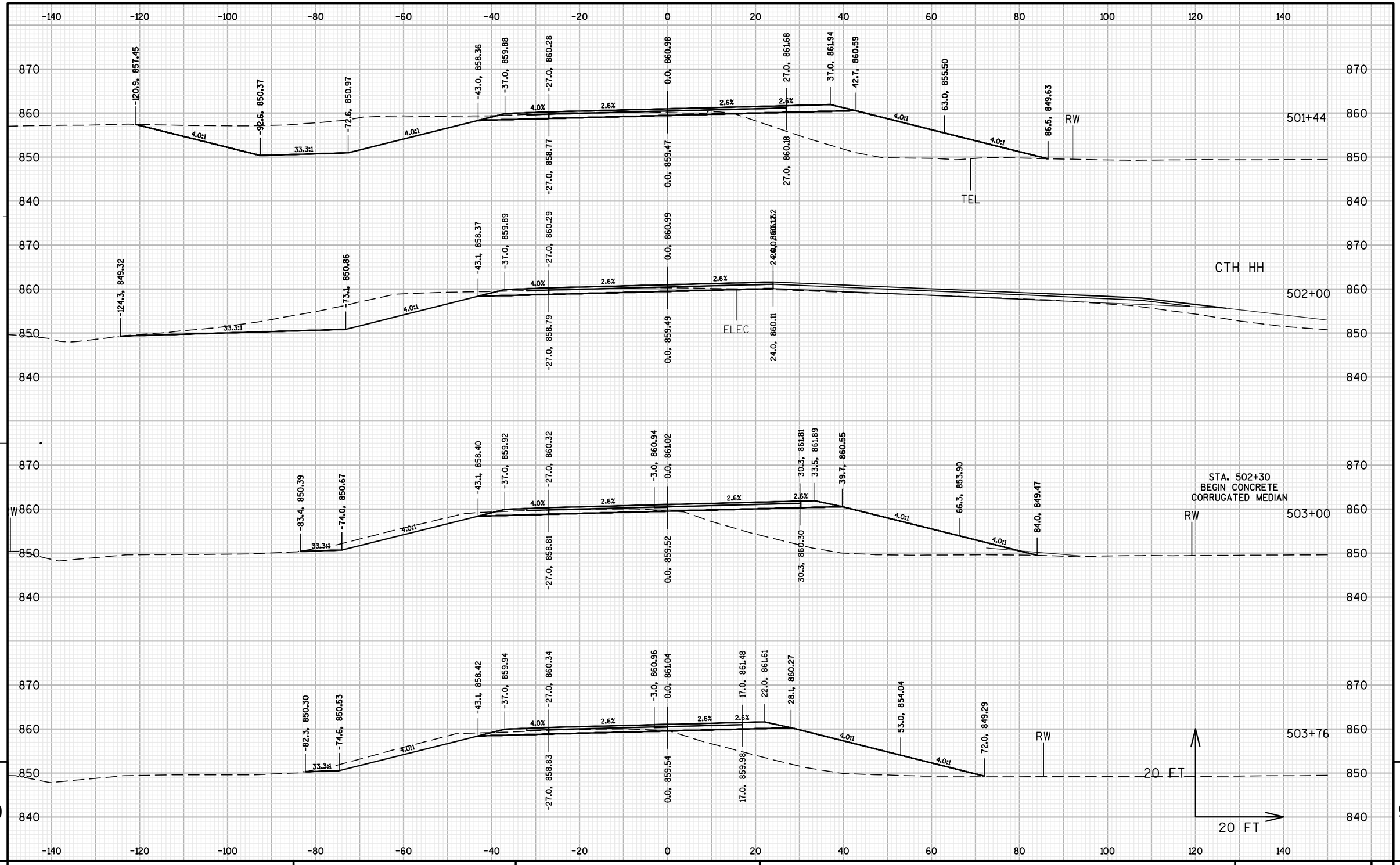
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 397	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 11:59 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

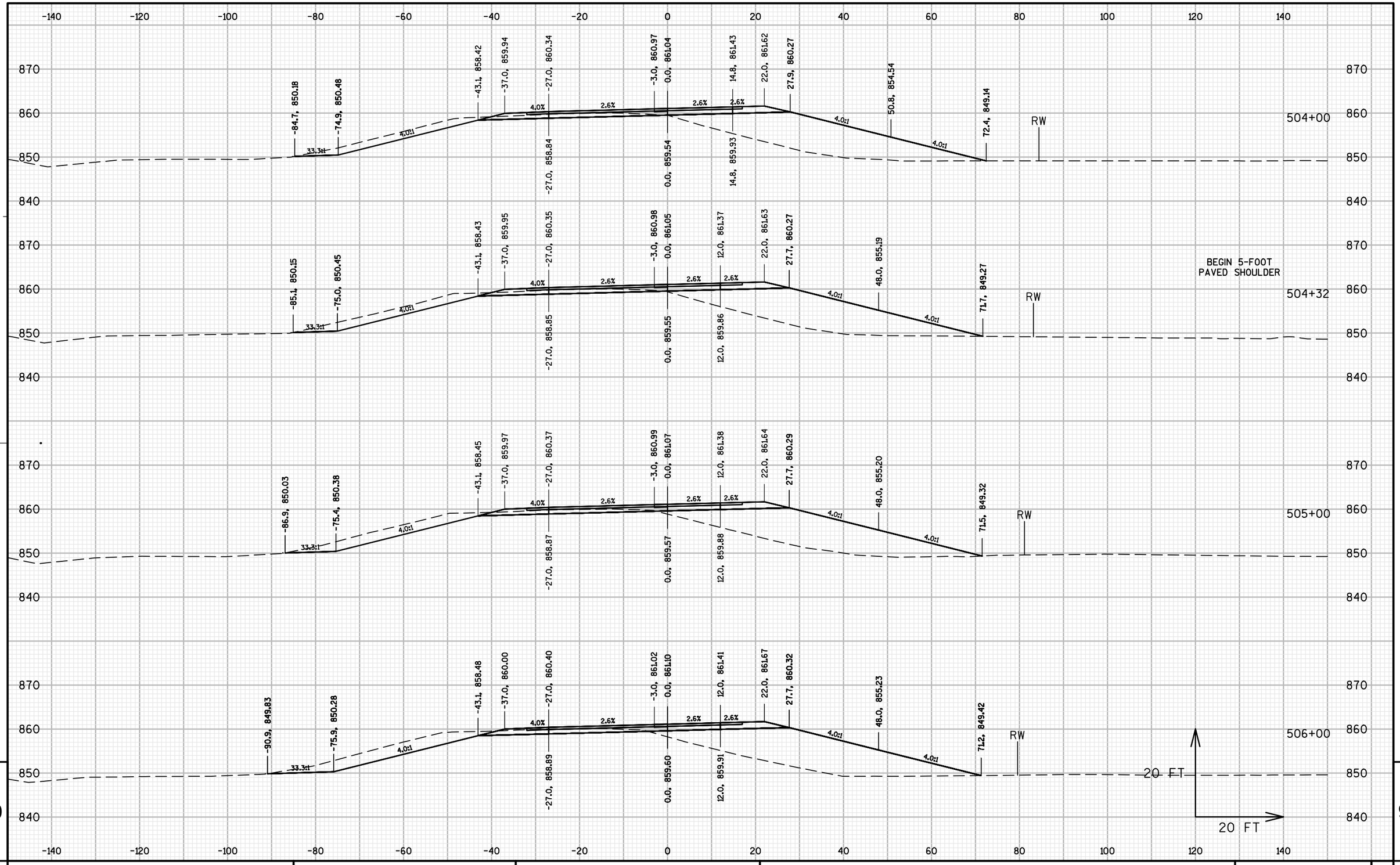
WISDOT/CADDS SHEET 49



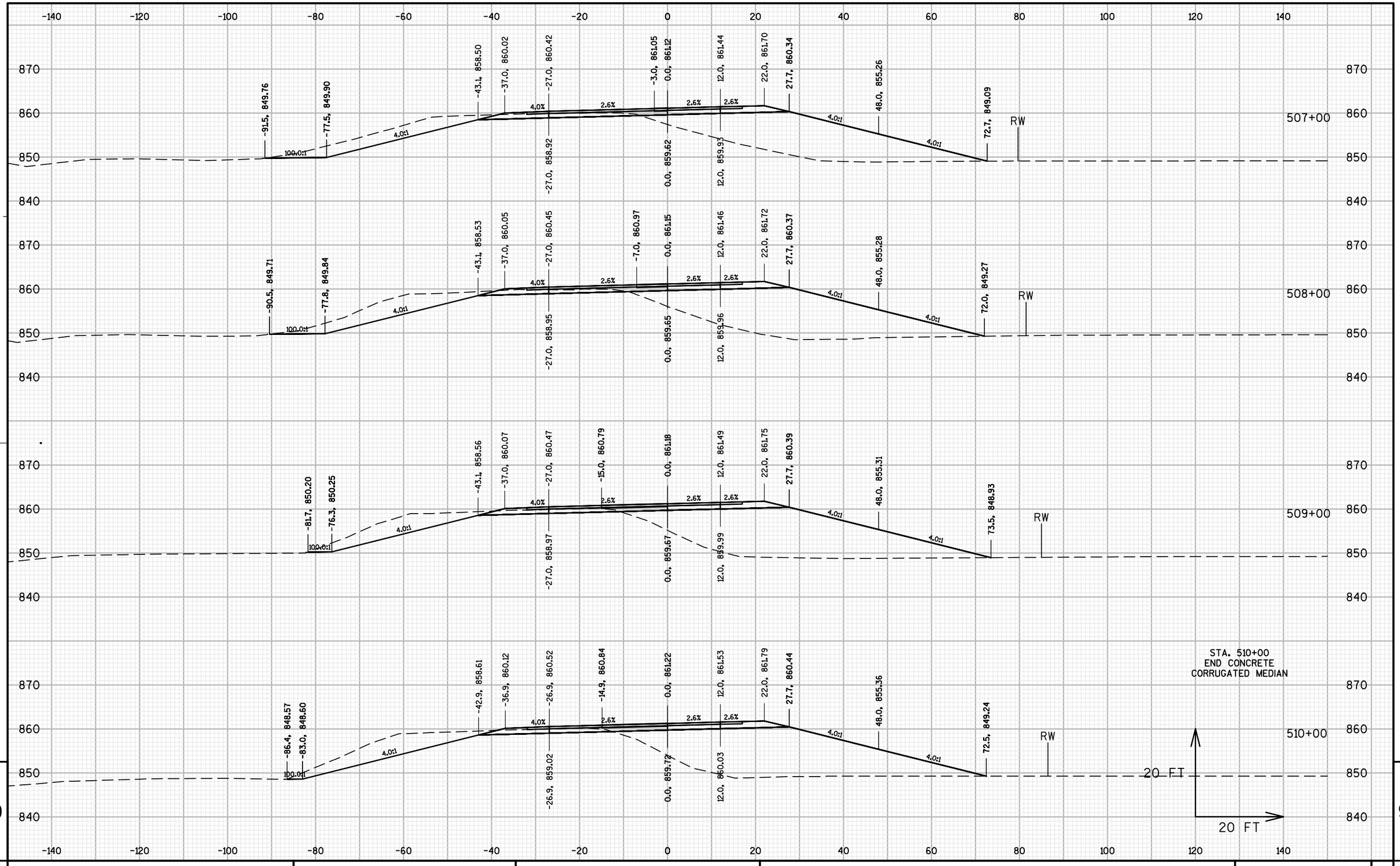
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 398	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:00 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

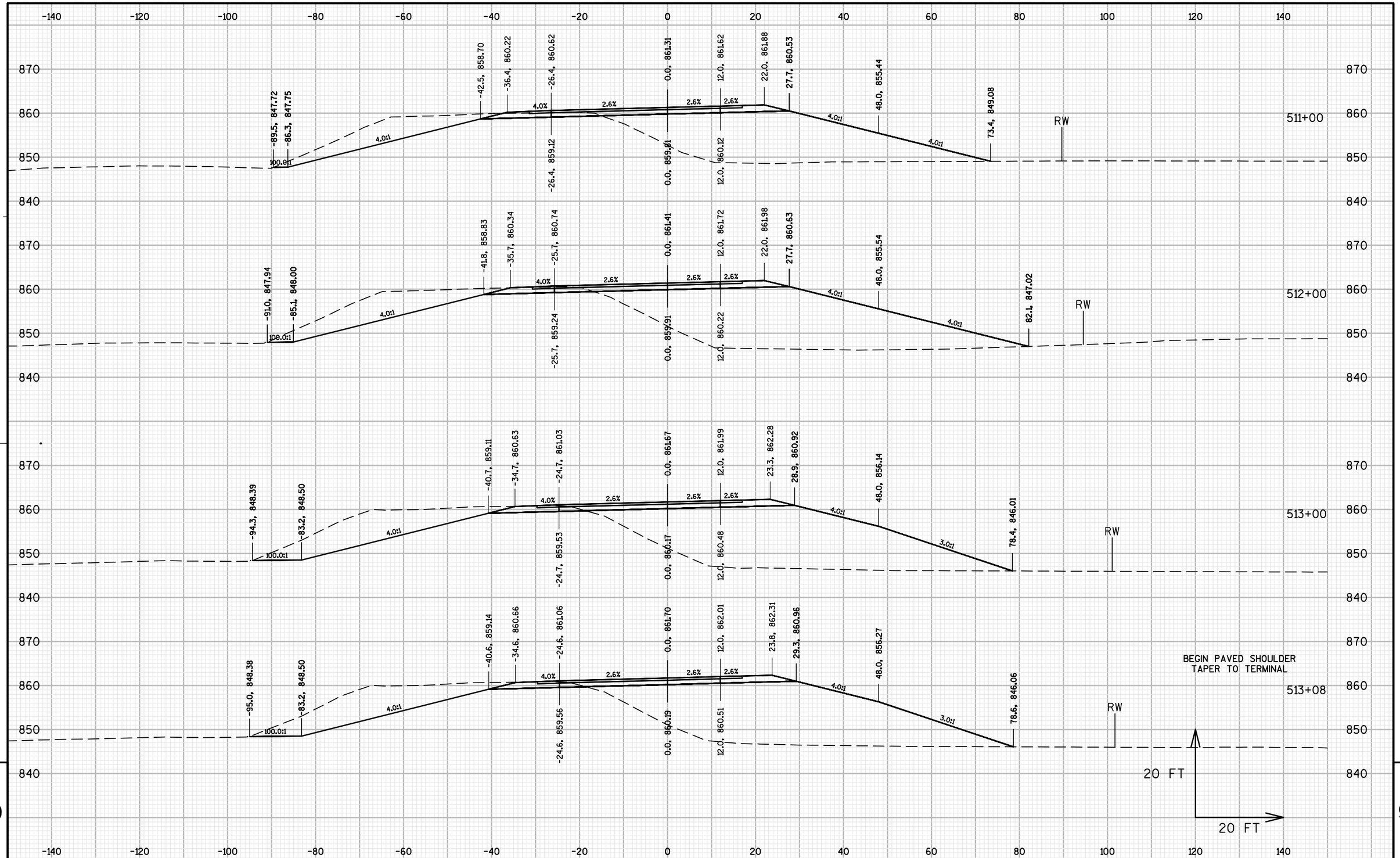
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 399	E



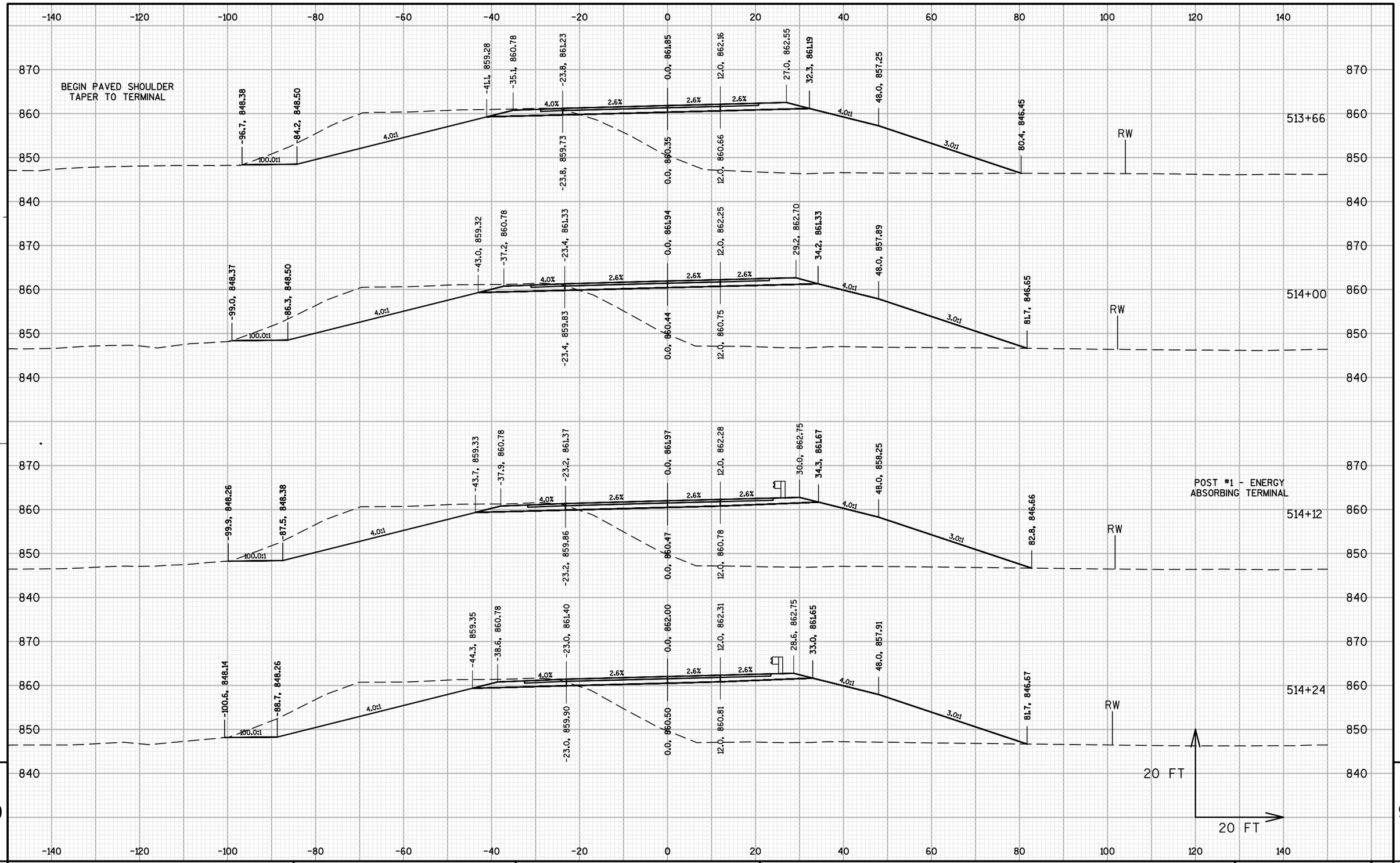
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 400 E



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 401	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:02 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 402 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:03 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

POST #1 - ENERGY ABSORBING TERMINAL

POST #5

514+36

POST #9

514+59

POST #5

514+61

POST #9

514+84

RW

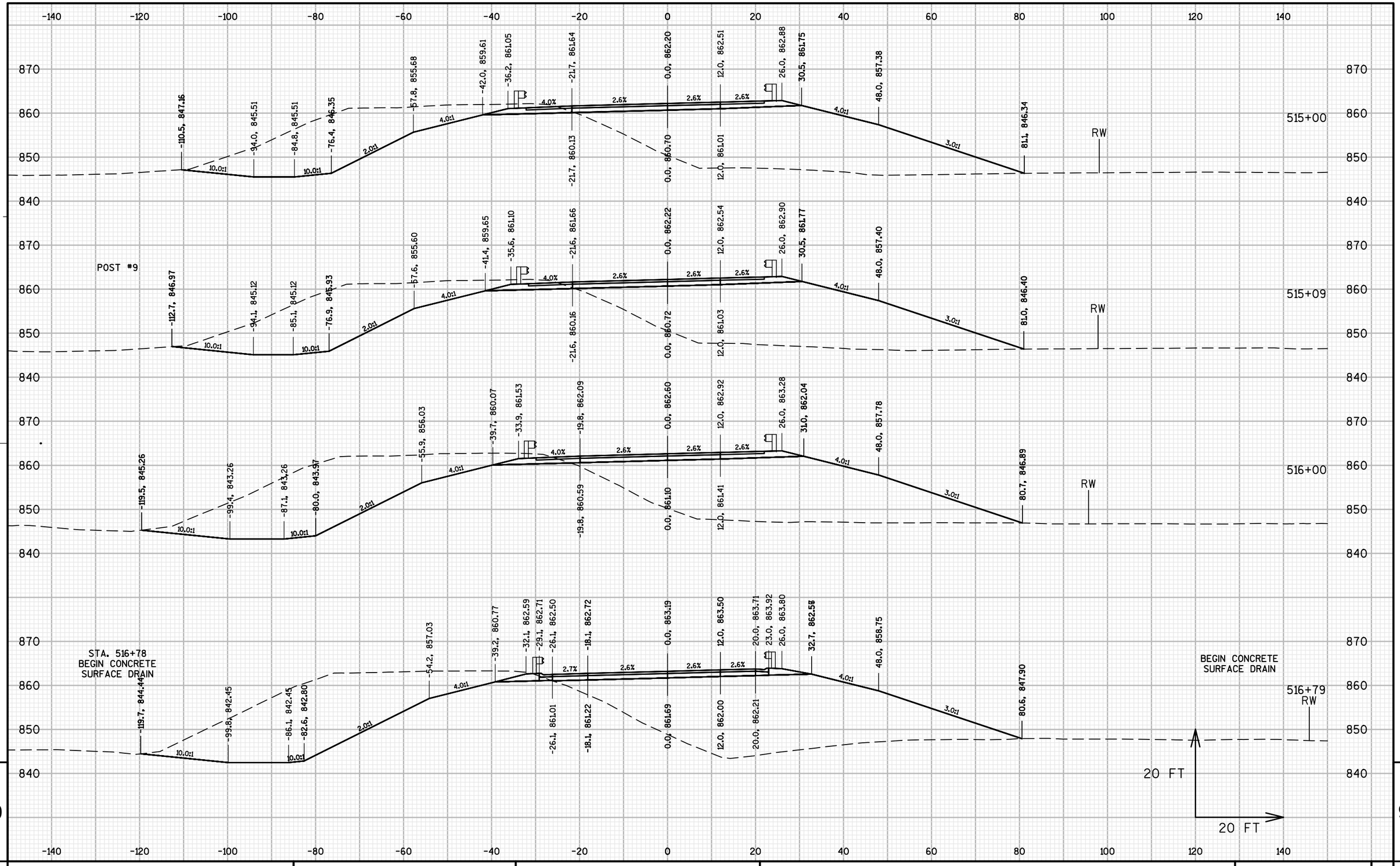
20 FT

20 FT

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 403	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:03 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



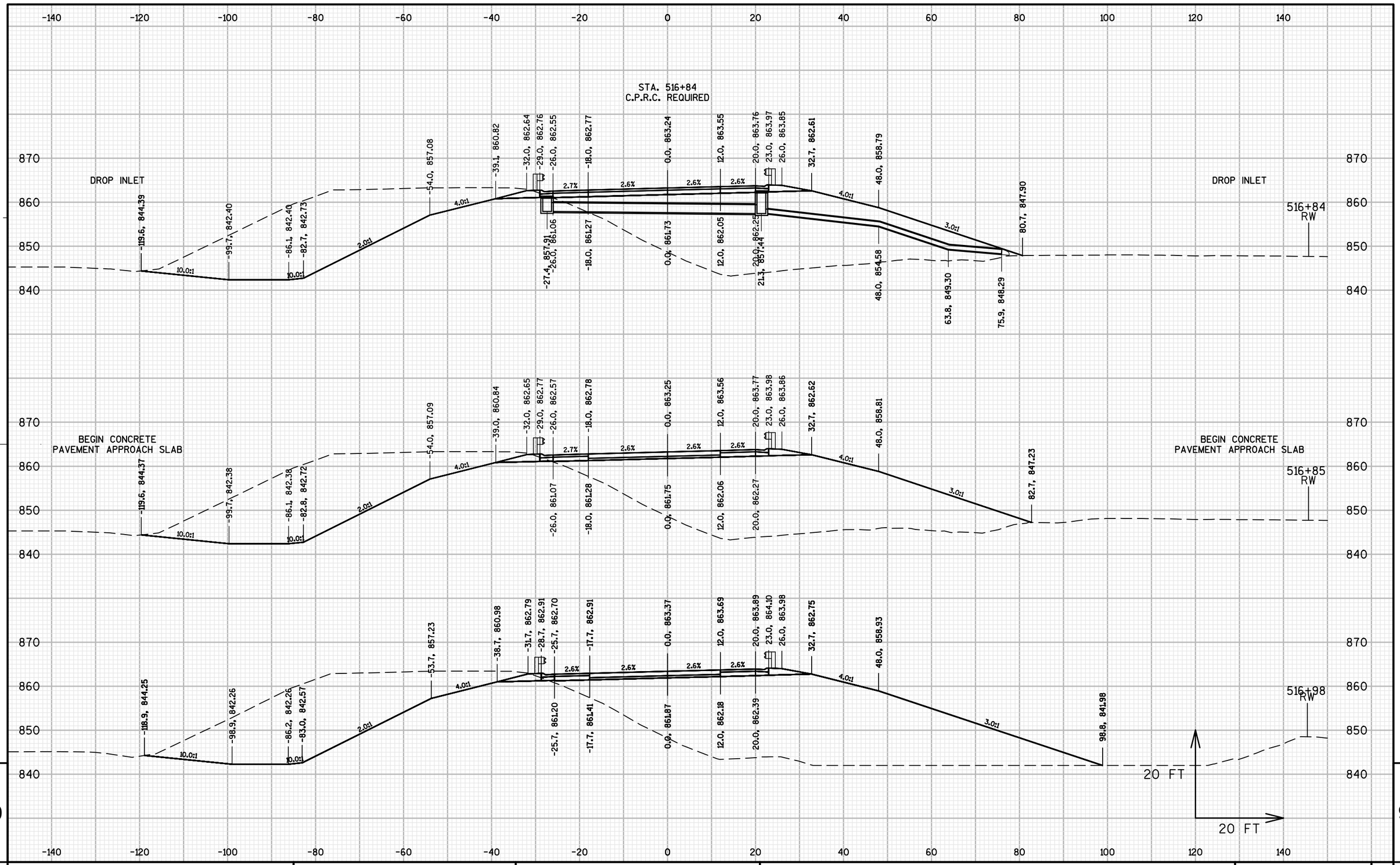
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9

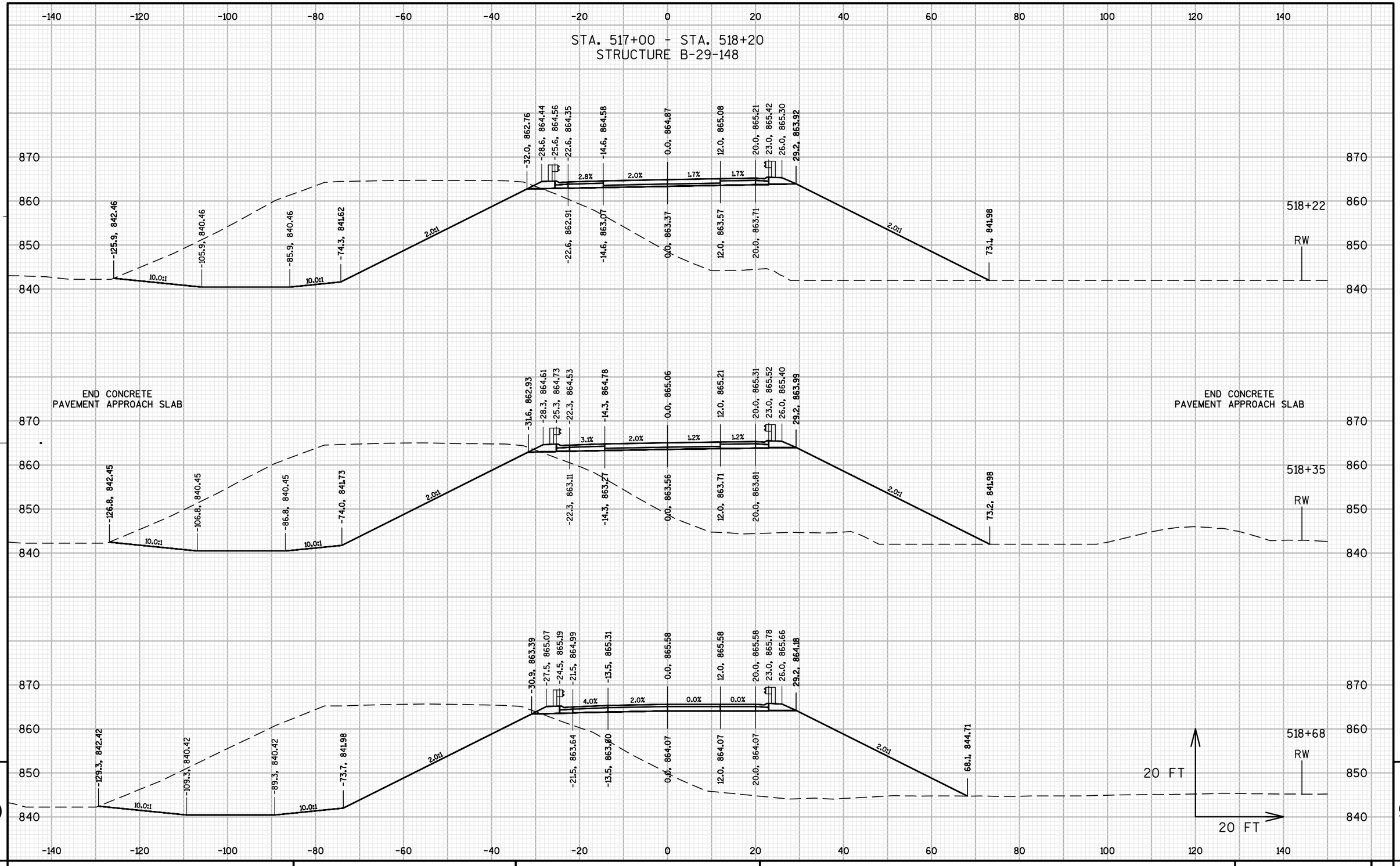
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 404	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:04 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 405	E



9

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 406	E

9

STA. 519+00
C.P.R.C. REQUIRED

DROP INLET

DROP INLET

519+00
RW

519+21
RW

520+00
RW

-130.2, 842.91
-110.2, 840.91
-90.2, 840.91
-72.9, 842.64
10.0:1
10.0:1
2.0:1
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-26.9, 865.63
-23.9, 865.75
-20.9, 865.54
-12.9, 865.86
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12.0, 865.98
20.0, 865.78
23.0, 865.99
26.0, 865.87
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2.0%
1.2%
2.4%
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20.0, 864.38
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27.7, 860.60
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58.1, 845.41
65.9, 844.76

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10.0:1
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2.0%
4.0%
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2.0:1
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2.0%
2.0%
4.0%
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2.0:1
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20 FT
20 FT

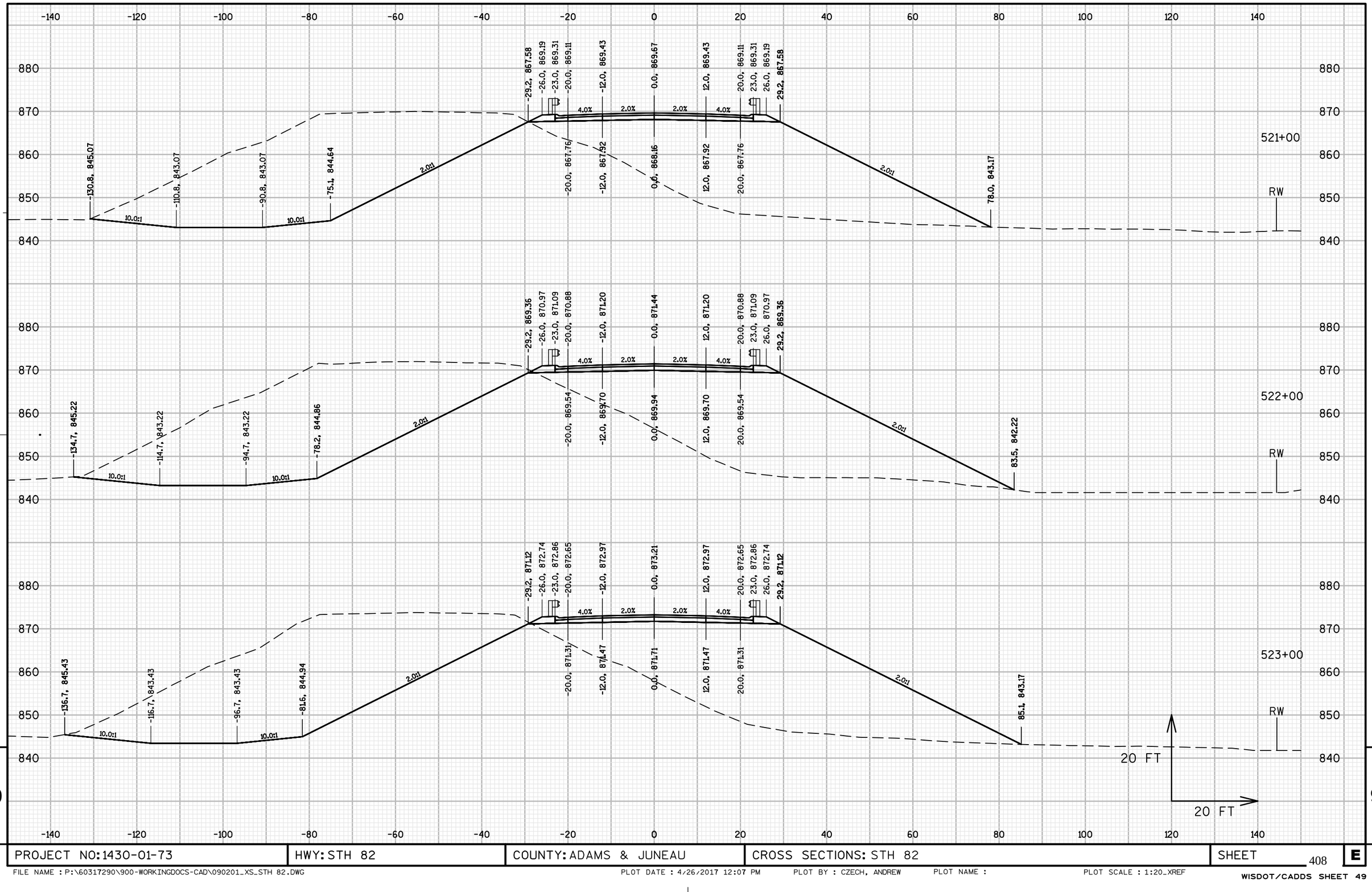
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840 850 860 870

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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 407	E

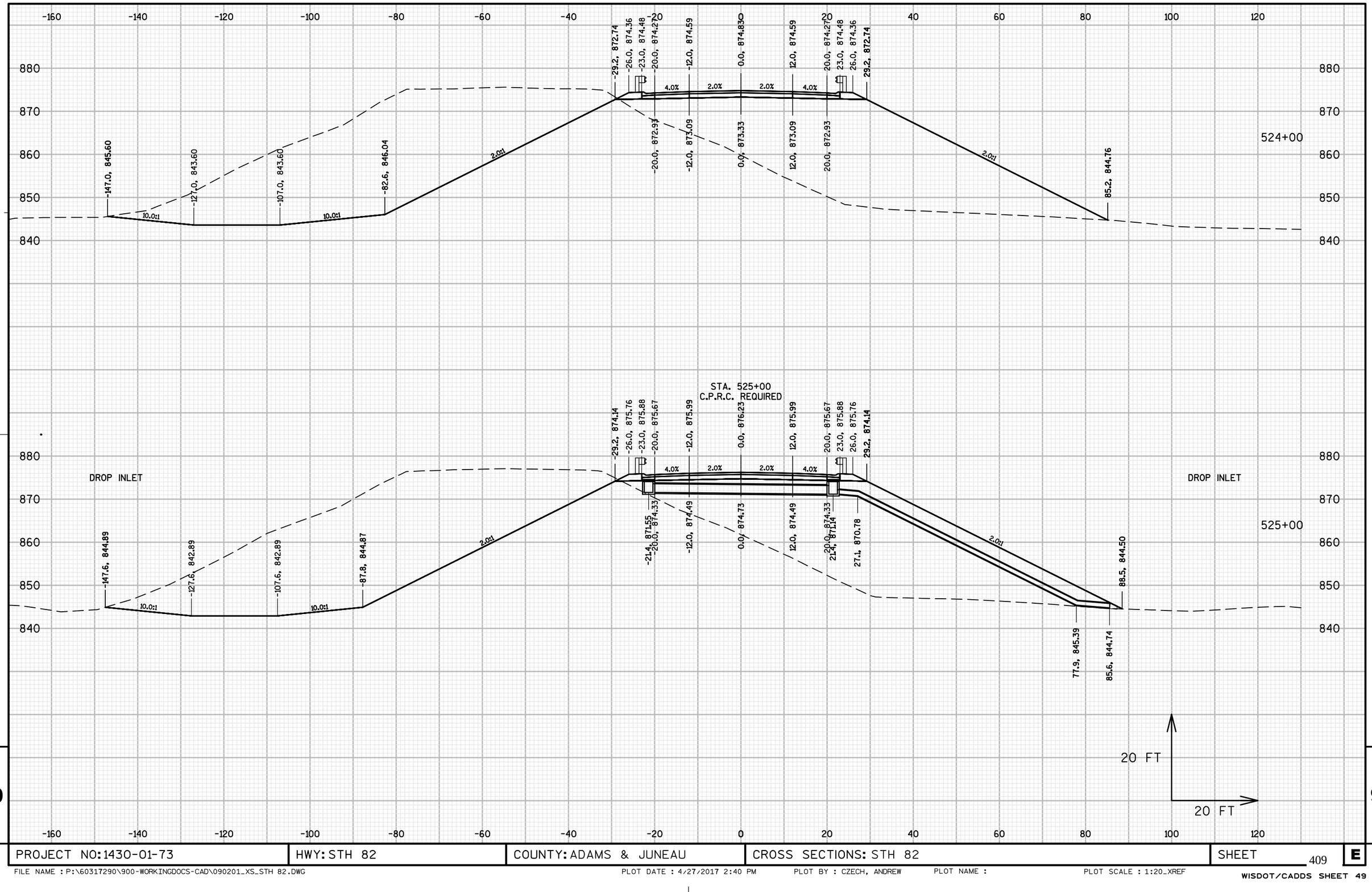
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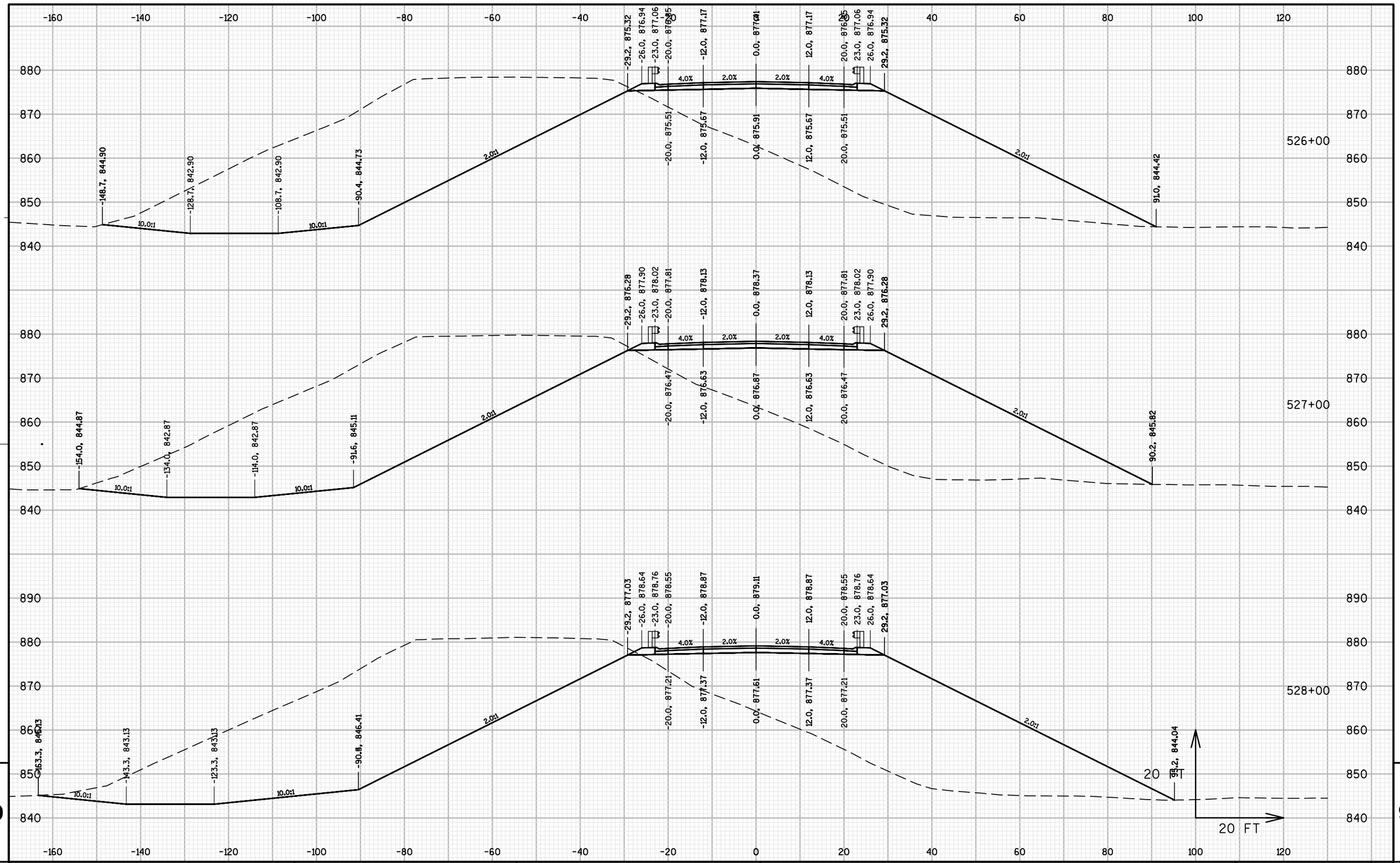
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 408	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:07 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

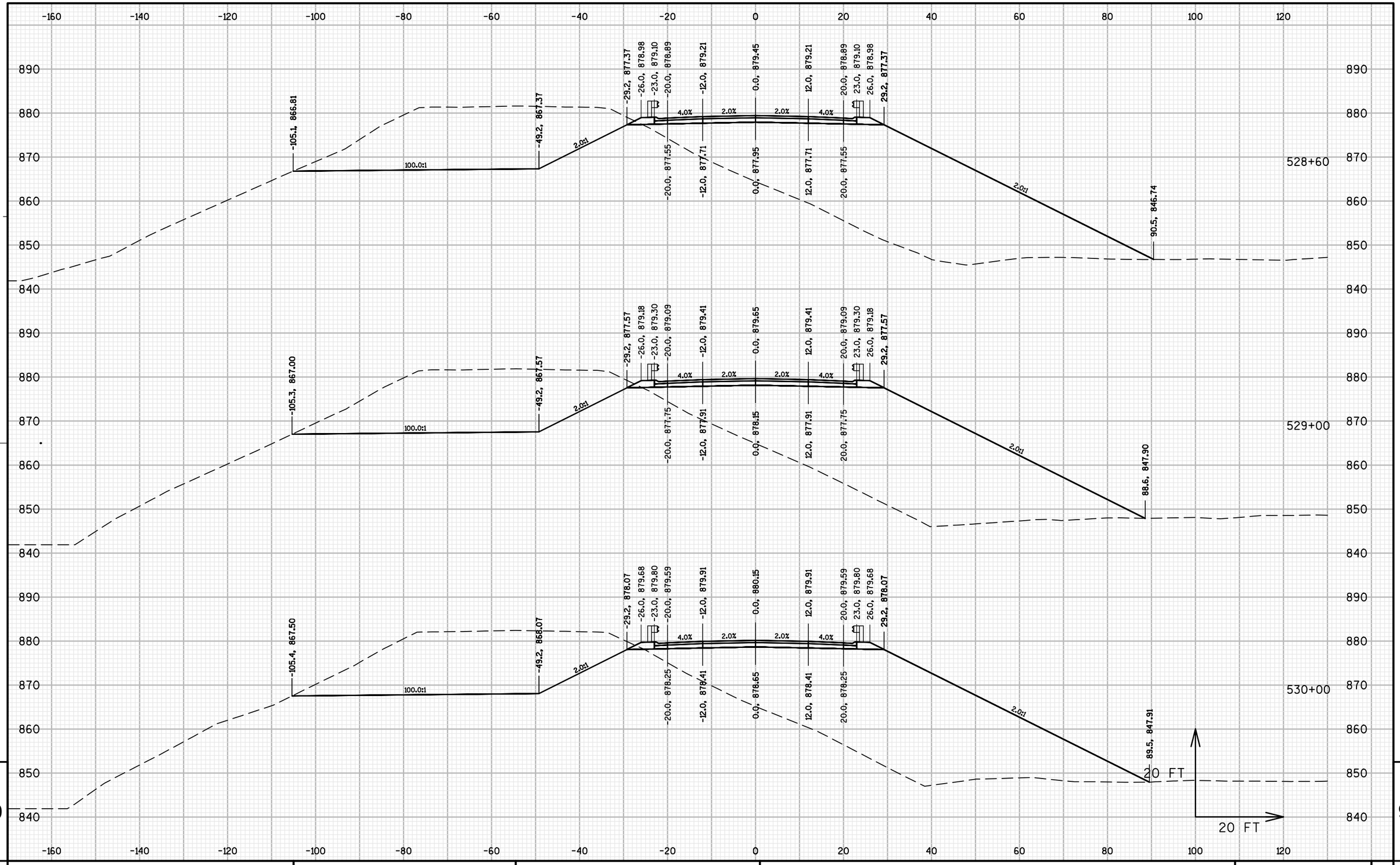
WISDOT/CADDS SHEET 49



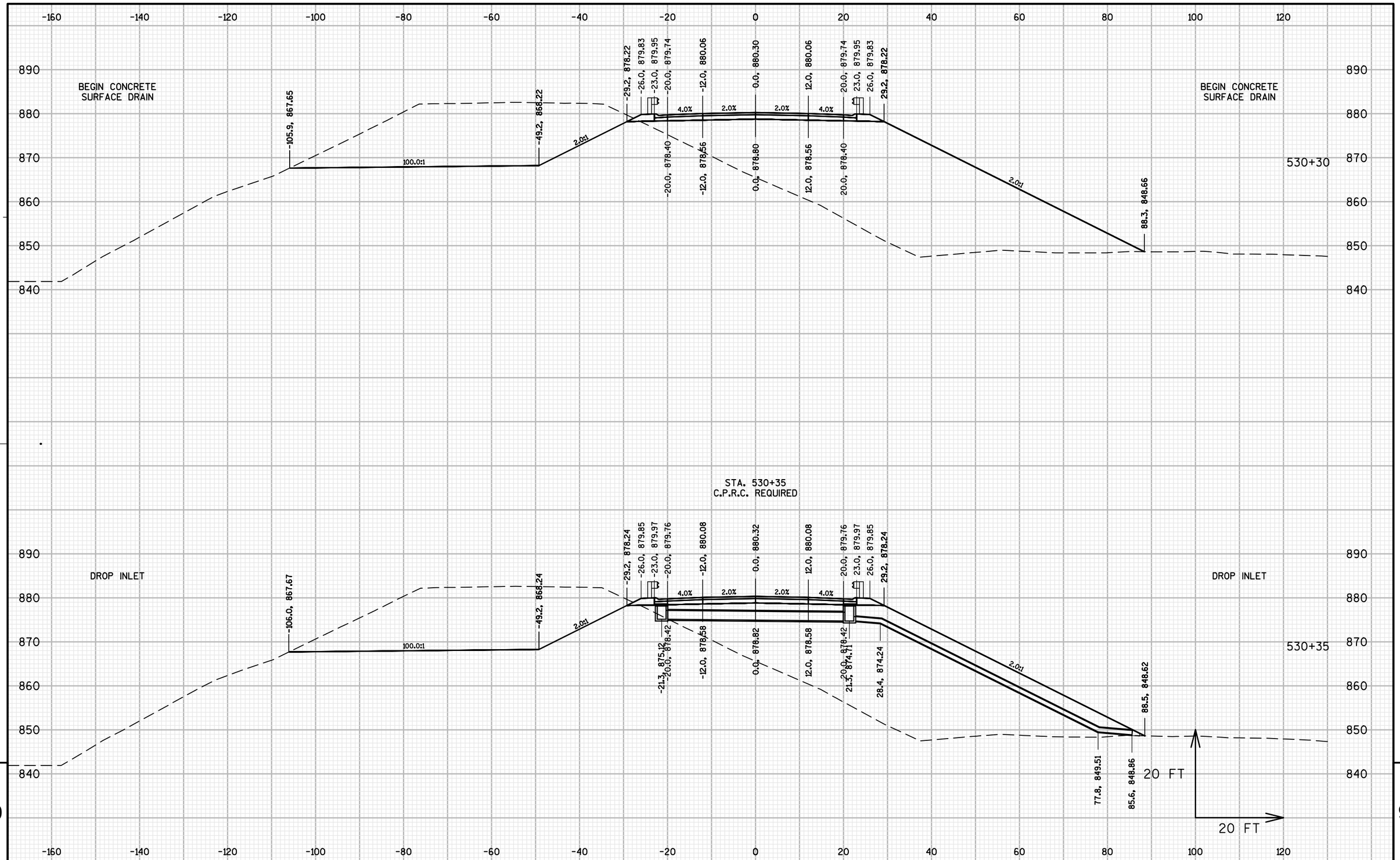
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 409 E



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 410	E



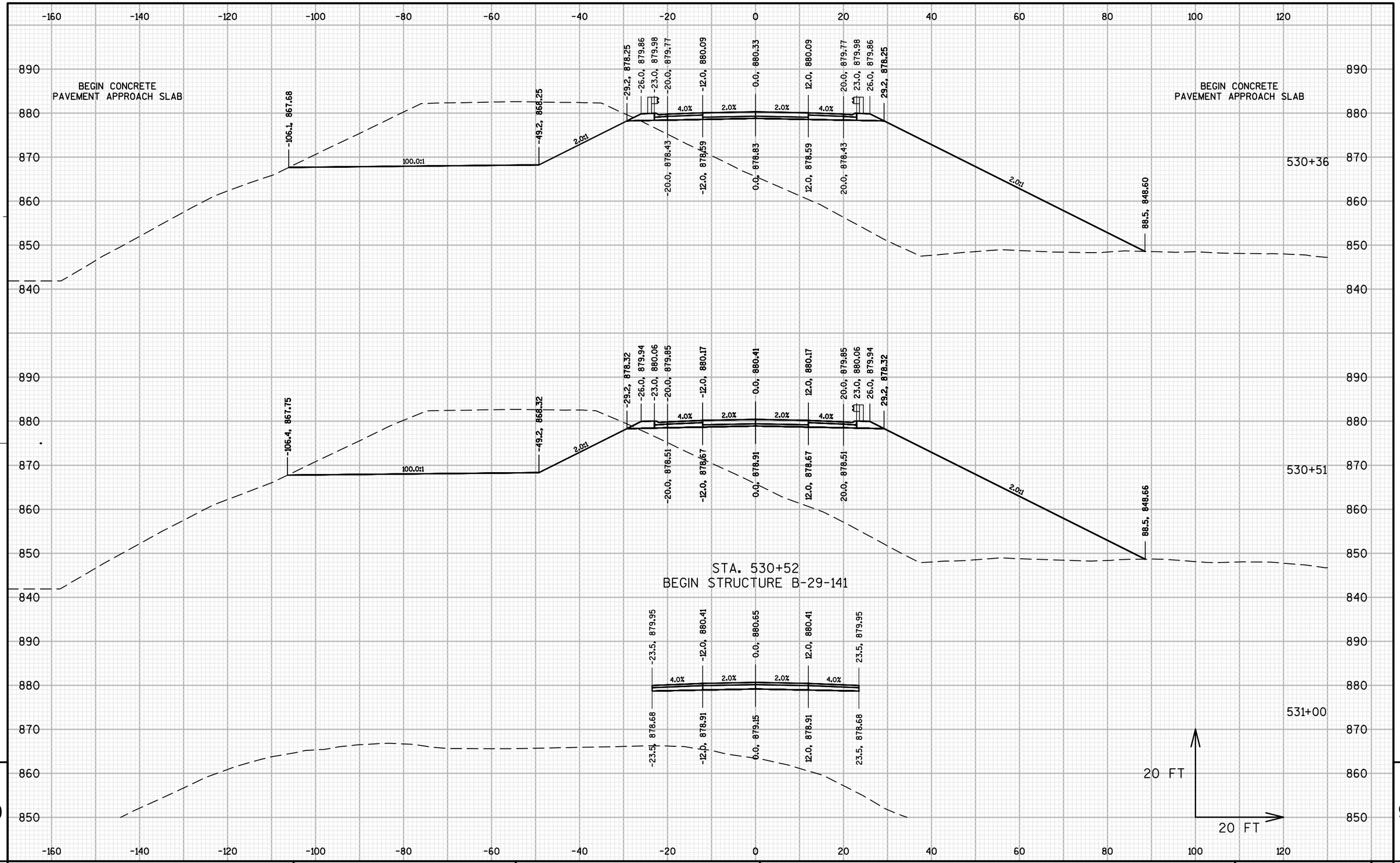
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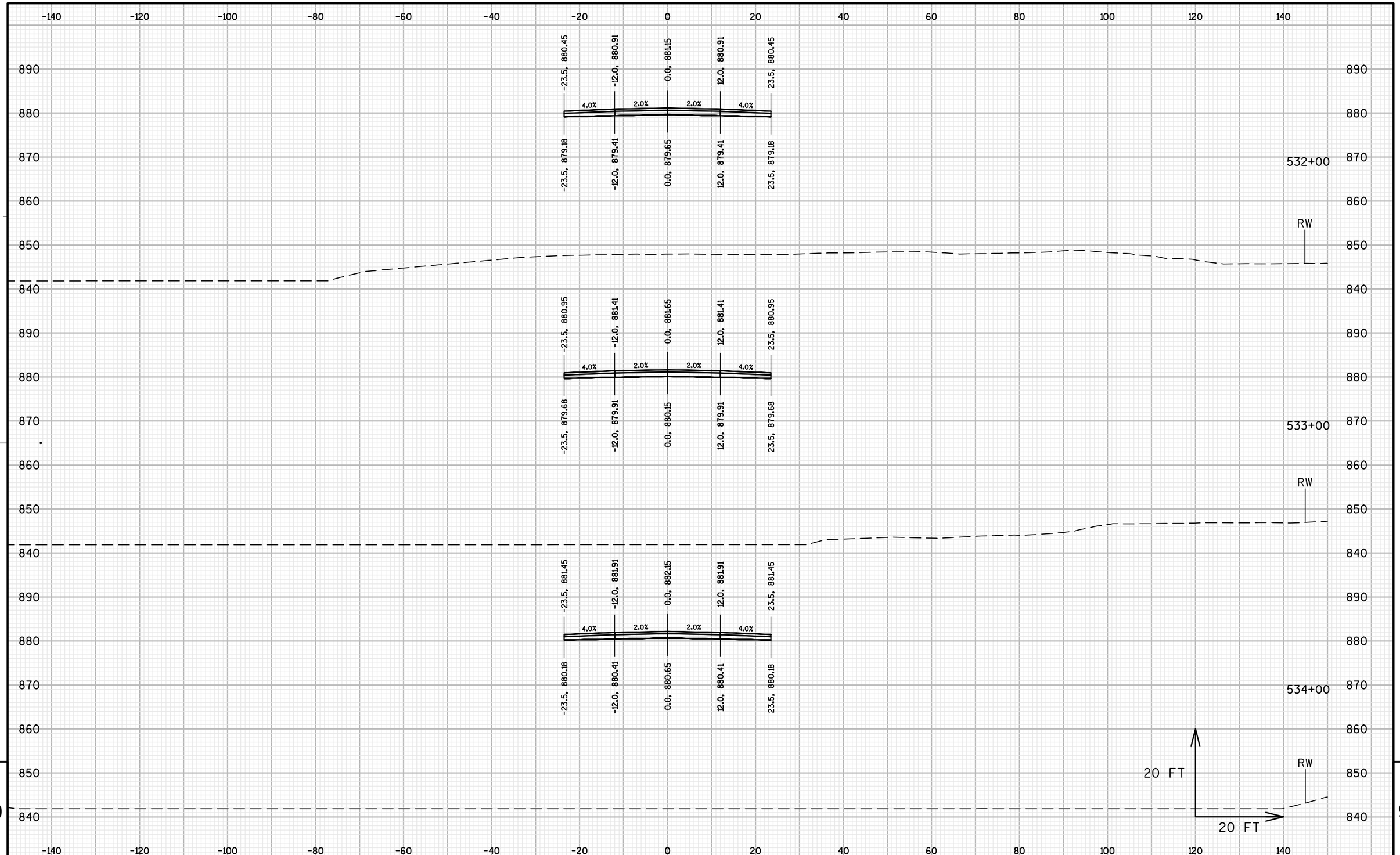
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FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/27/2017 2:41 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



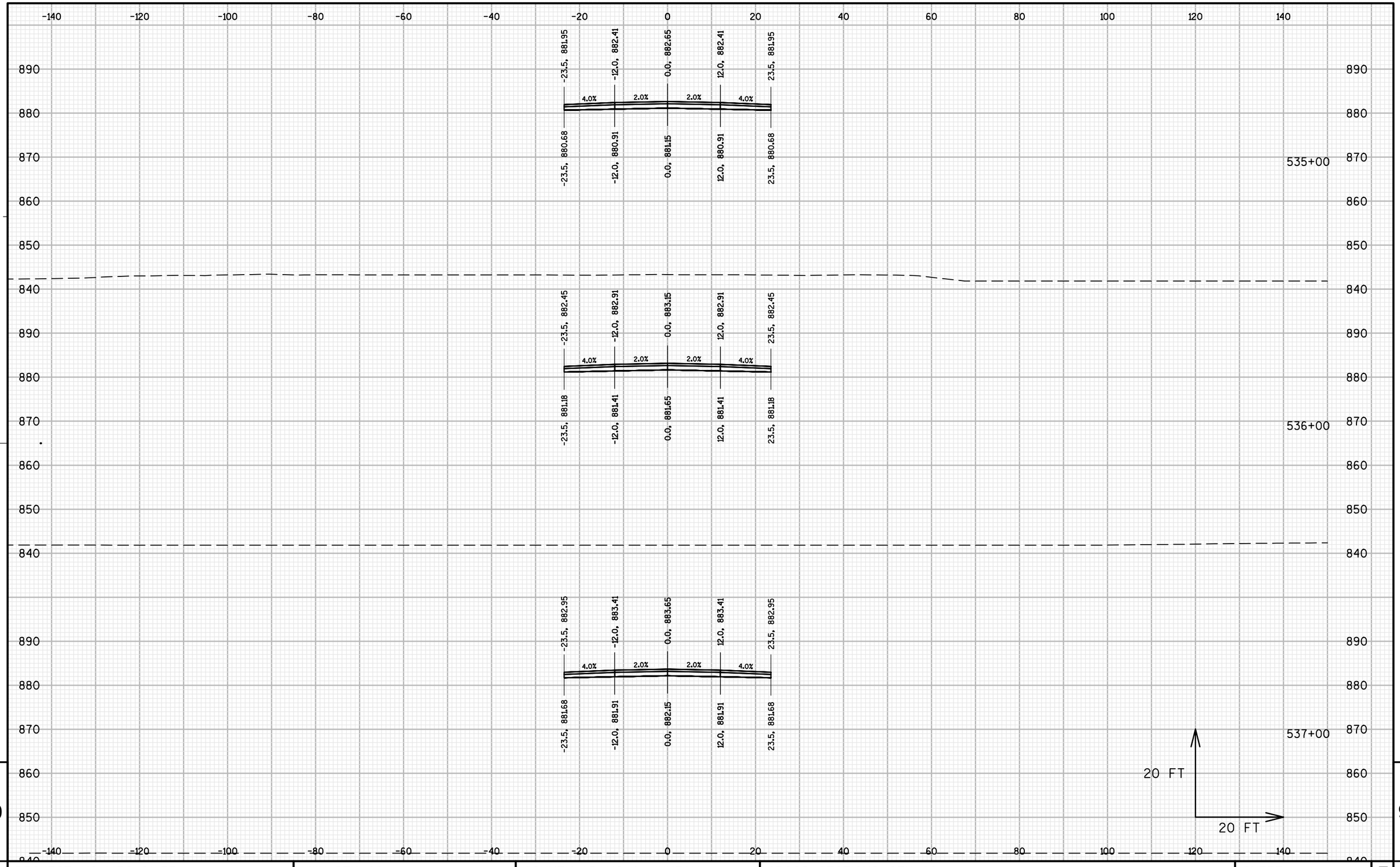
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 413	E



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 414	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:11 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



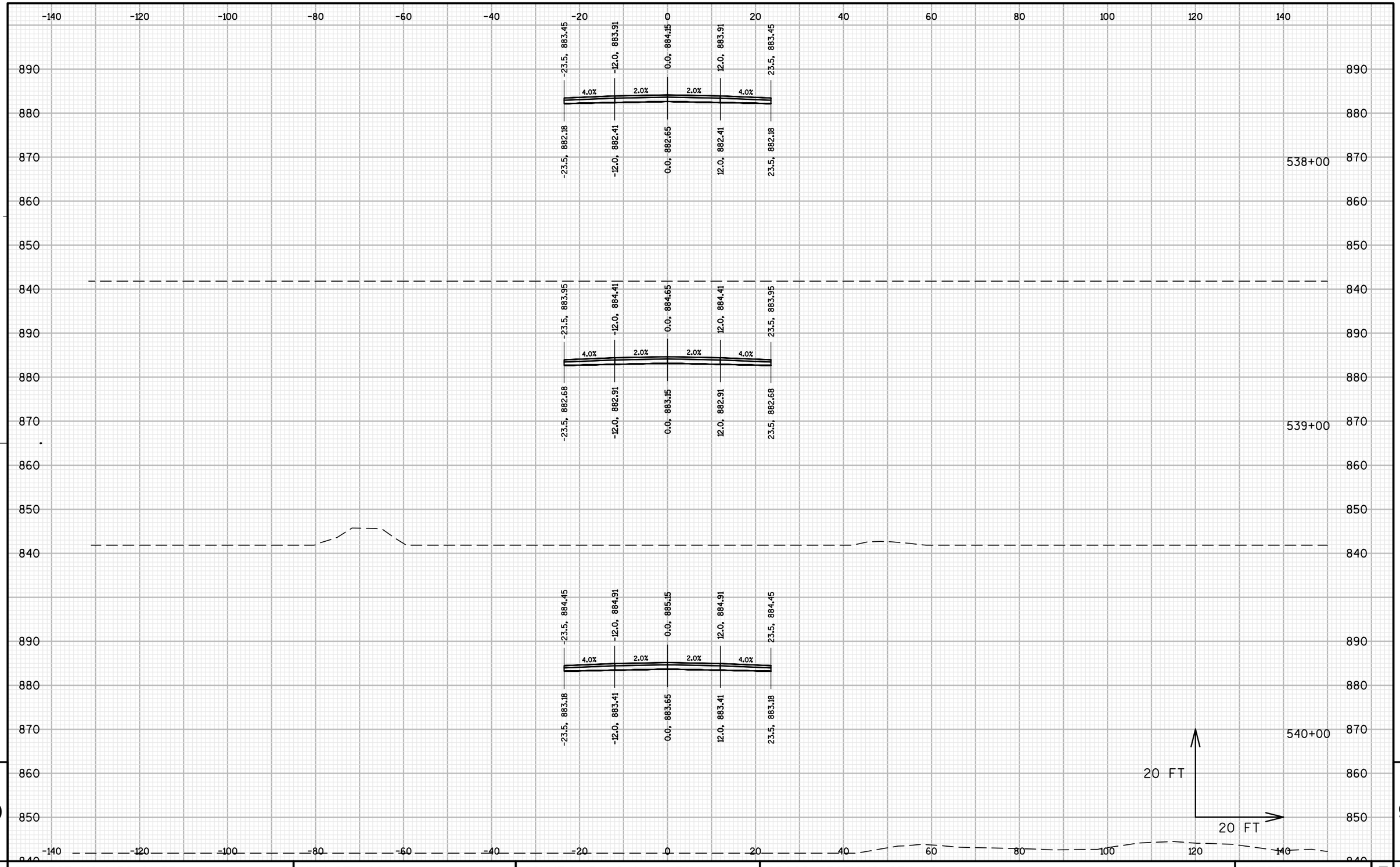
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 415	E

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WISDOT/CADDS SHEET 49

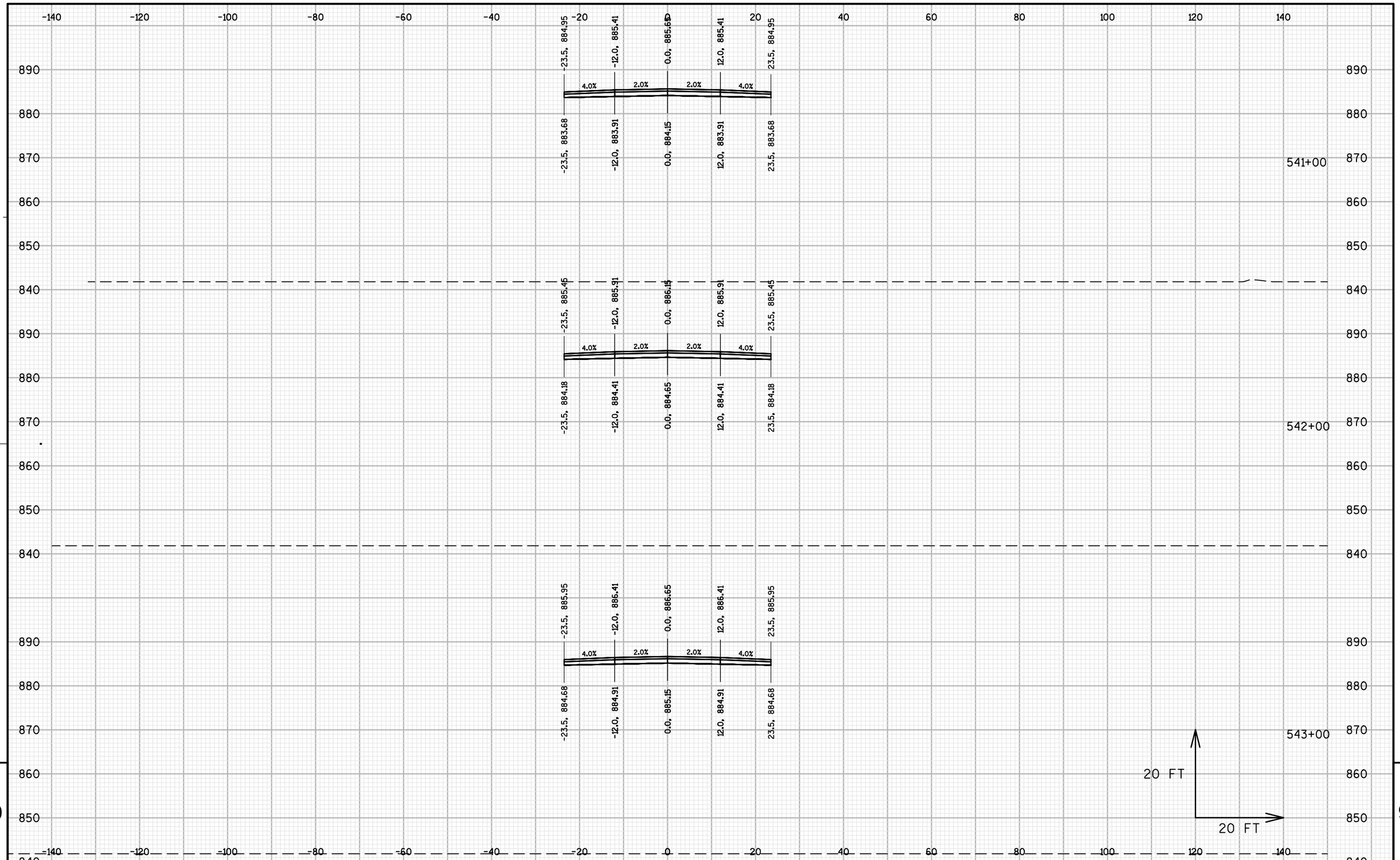


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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 416 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:13 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



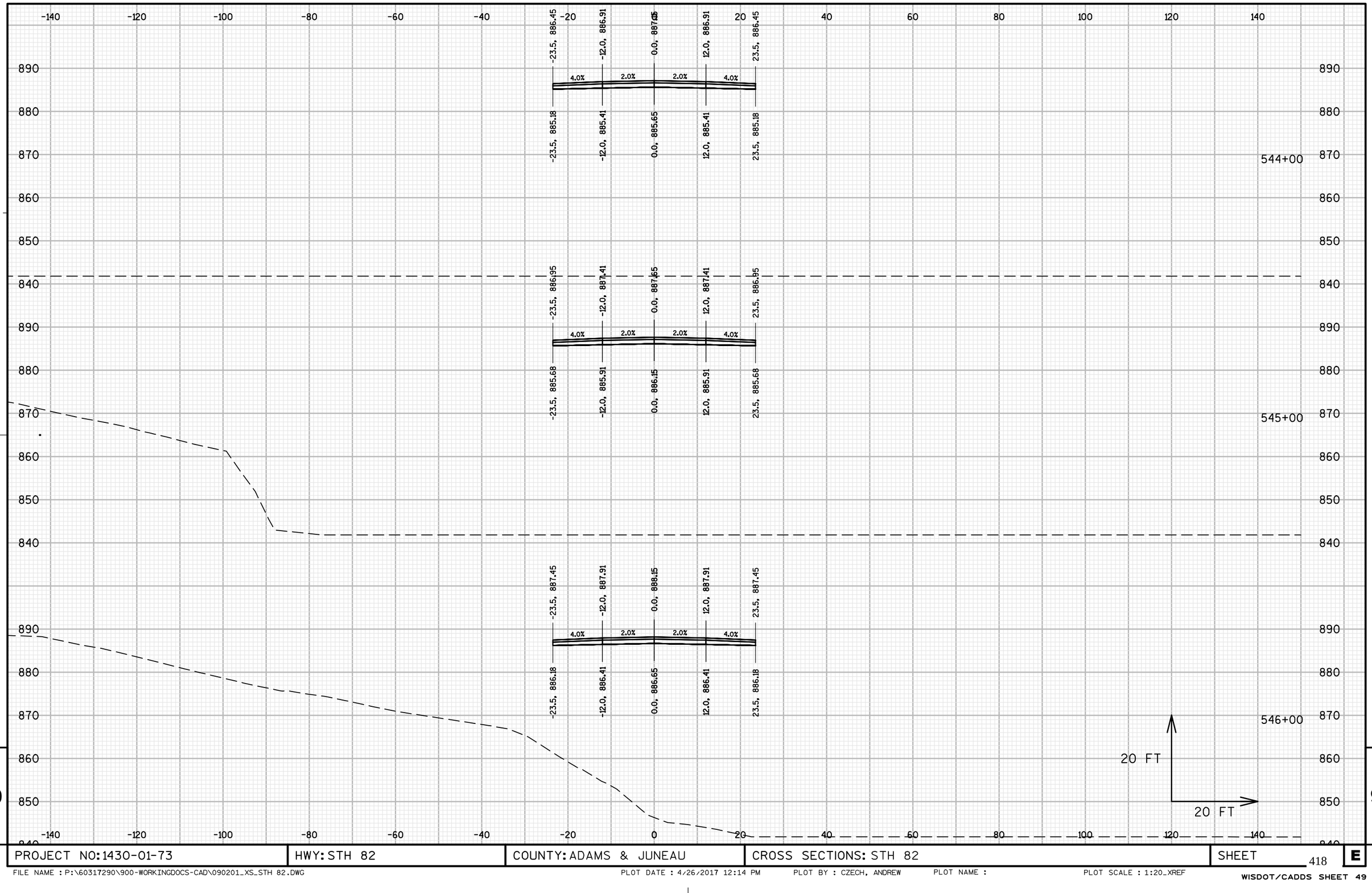
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 417	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:14 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



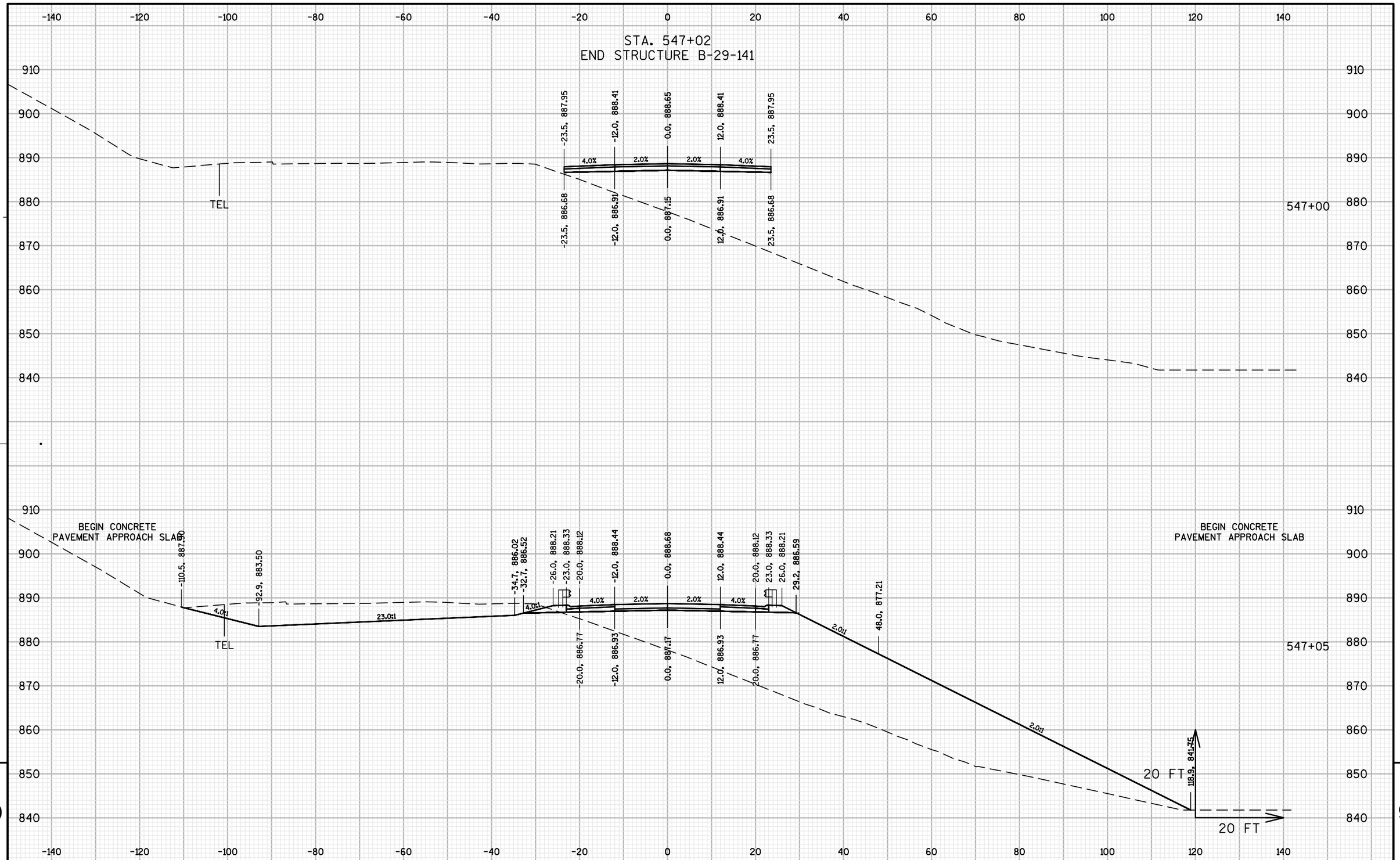
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 418	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:14 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

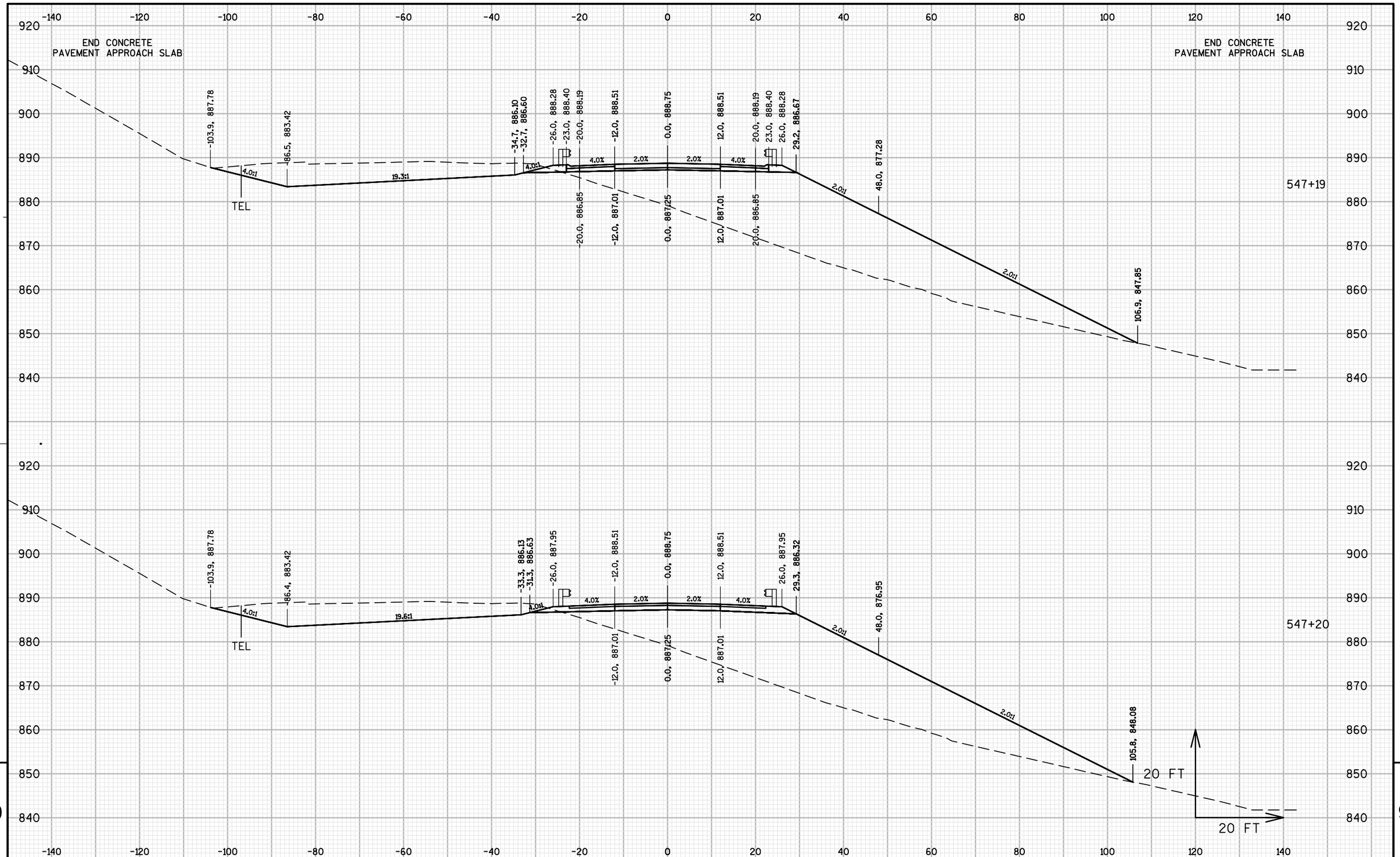
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 419 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:15 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

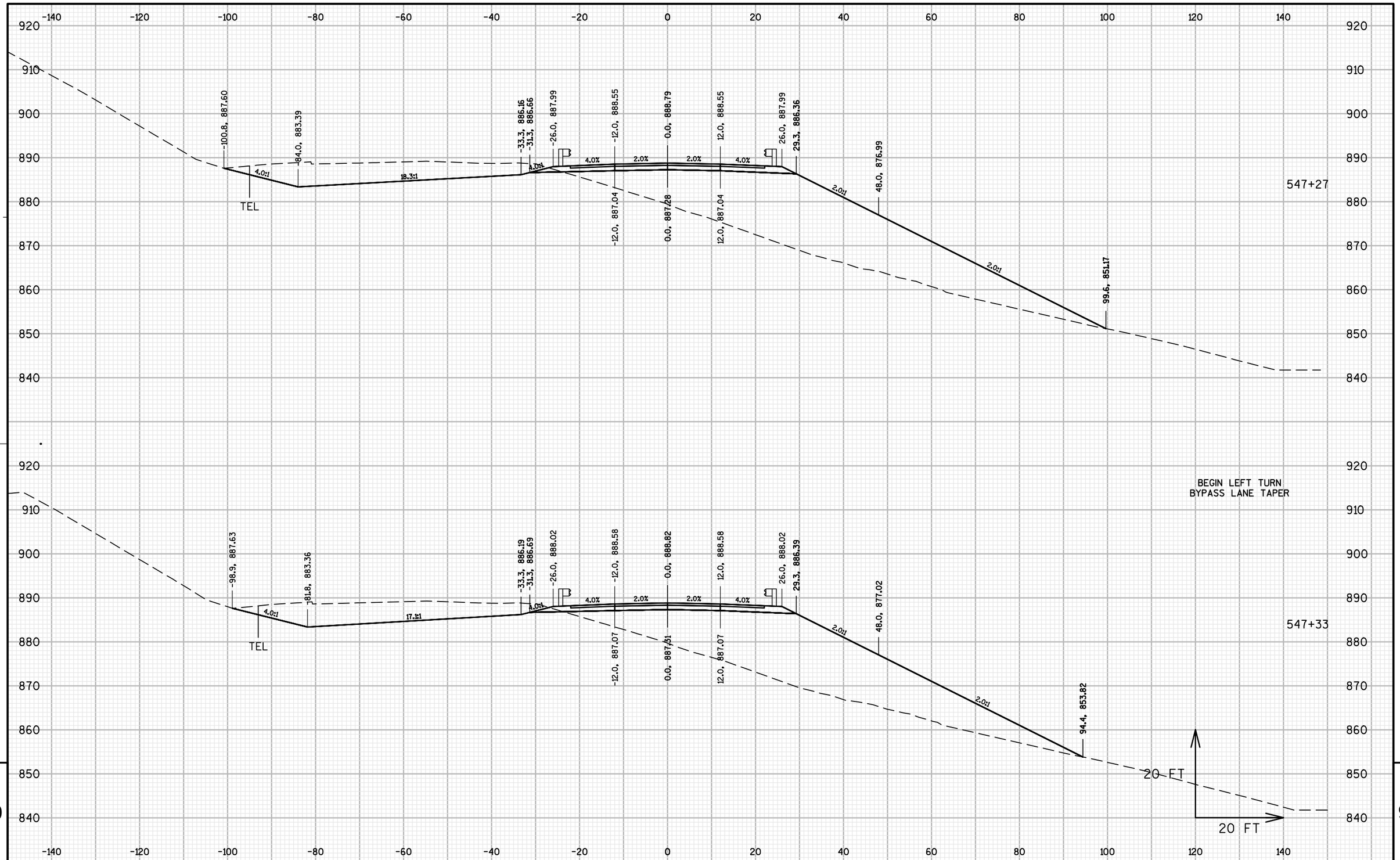
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 420 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:16 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

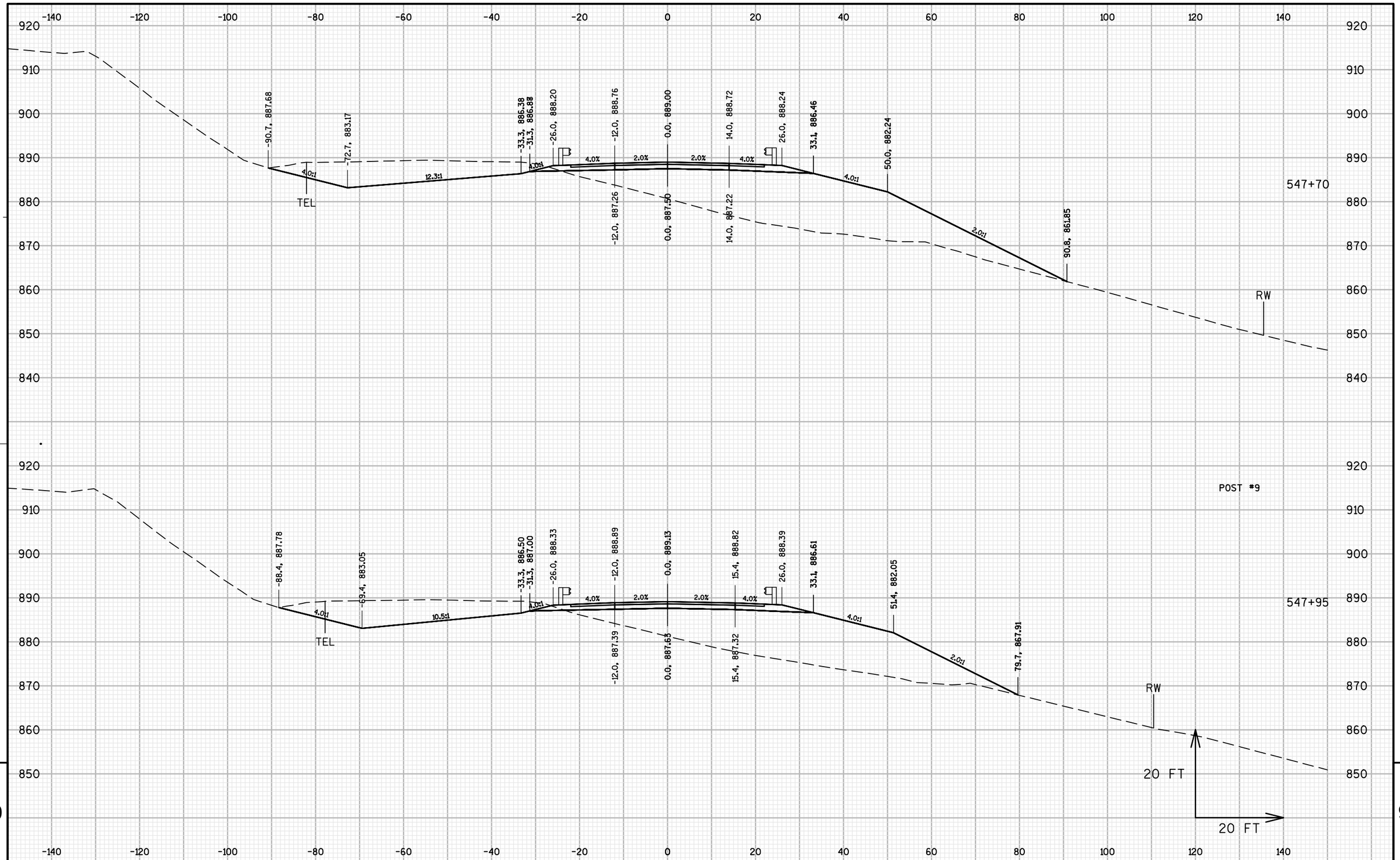
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 421 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:16 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

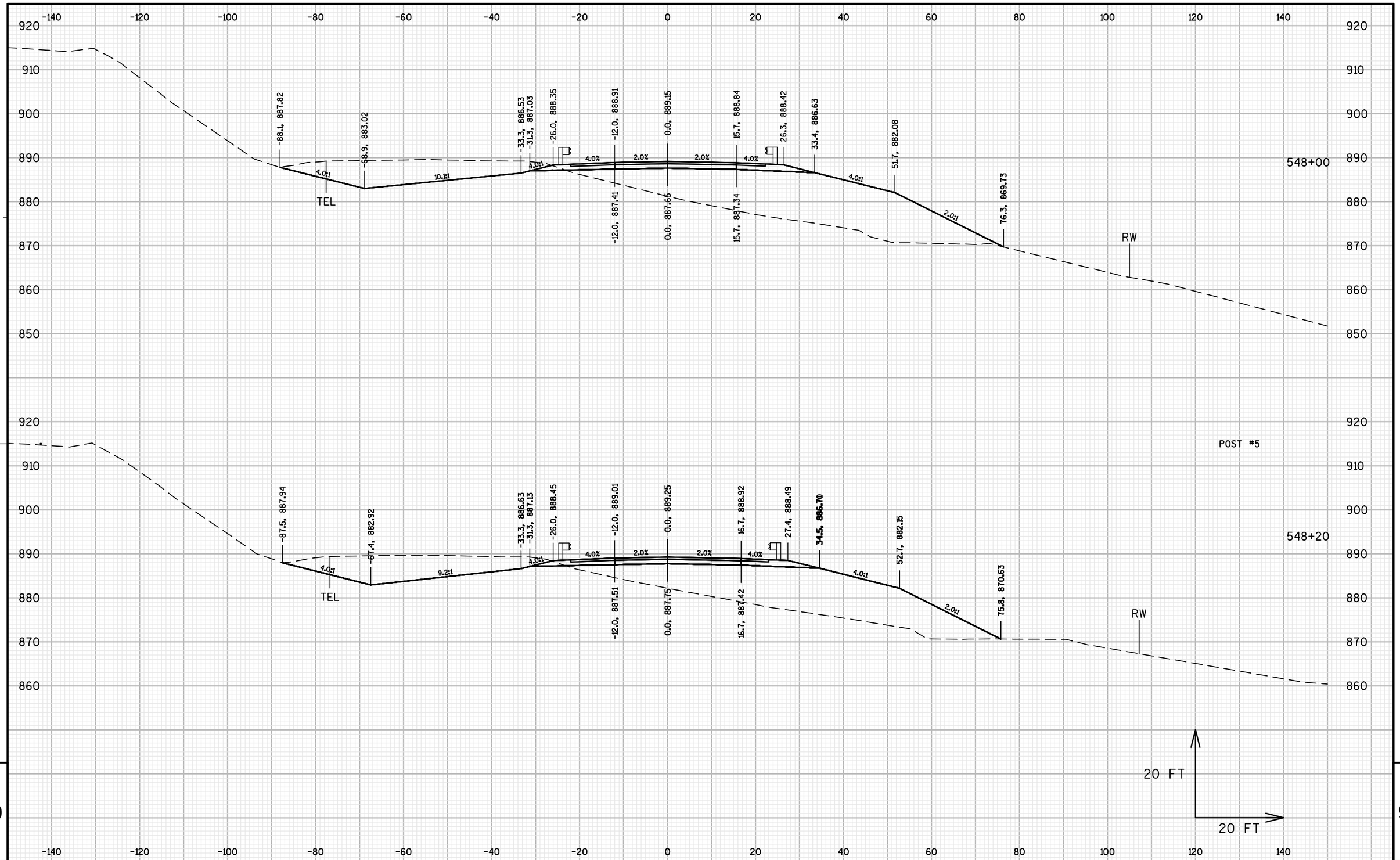
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:17 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

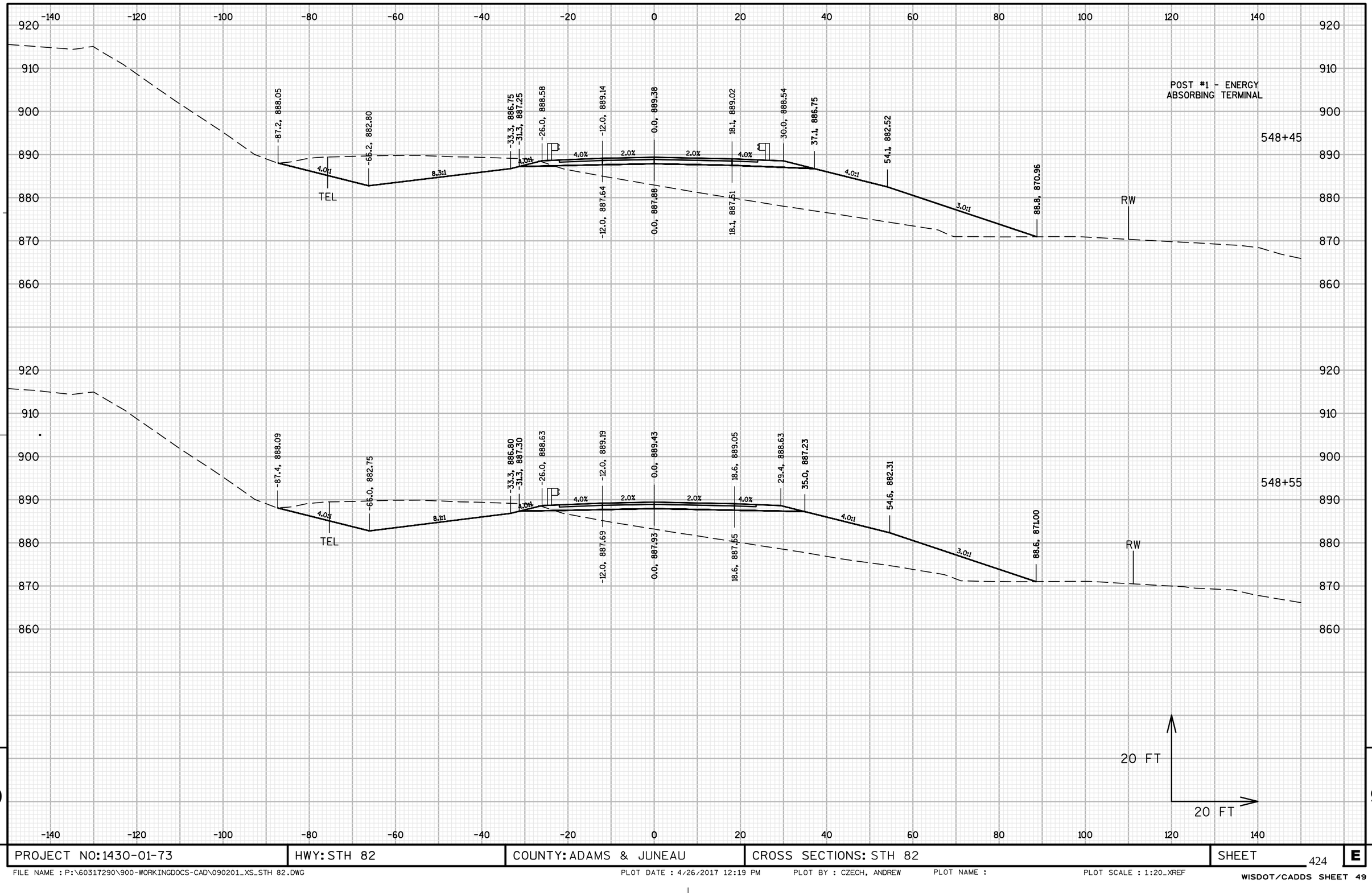
WISDOT/CADDS SHEET 49



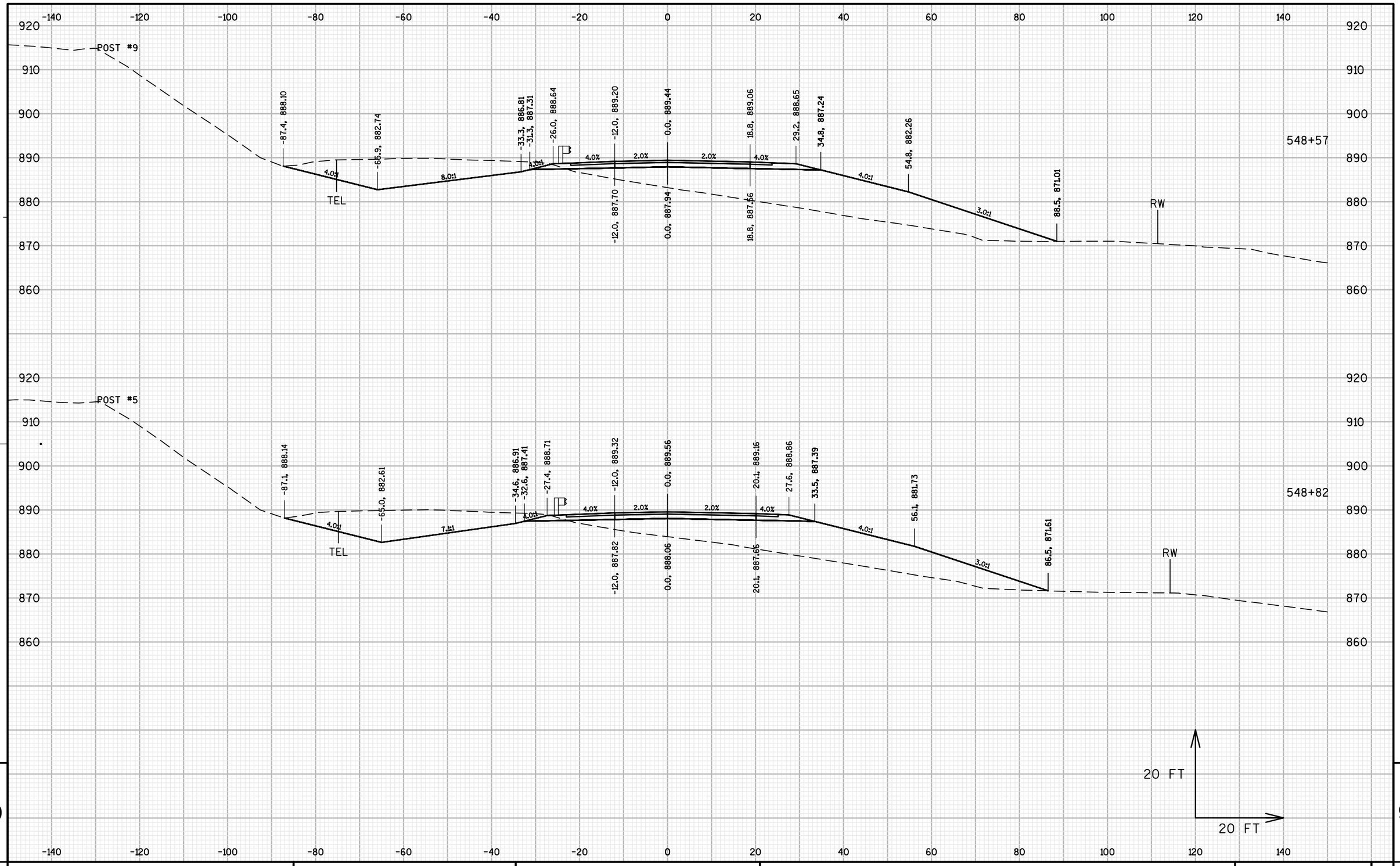
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 423	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:18 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



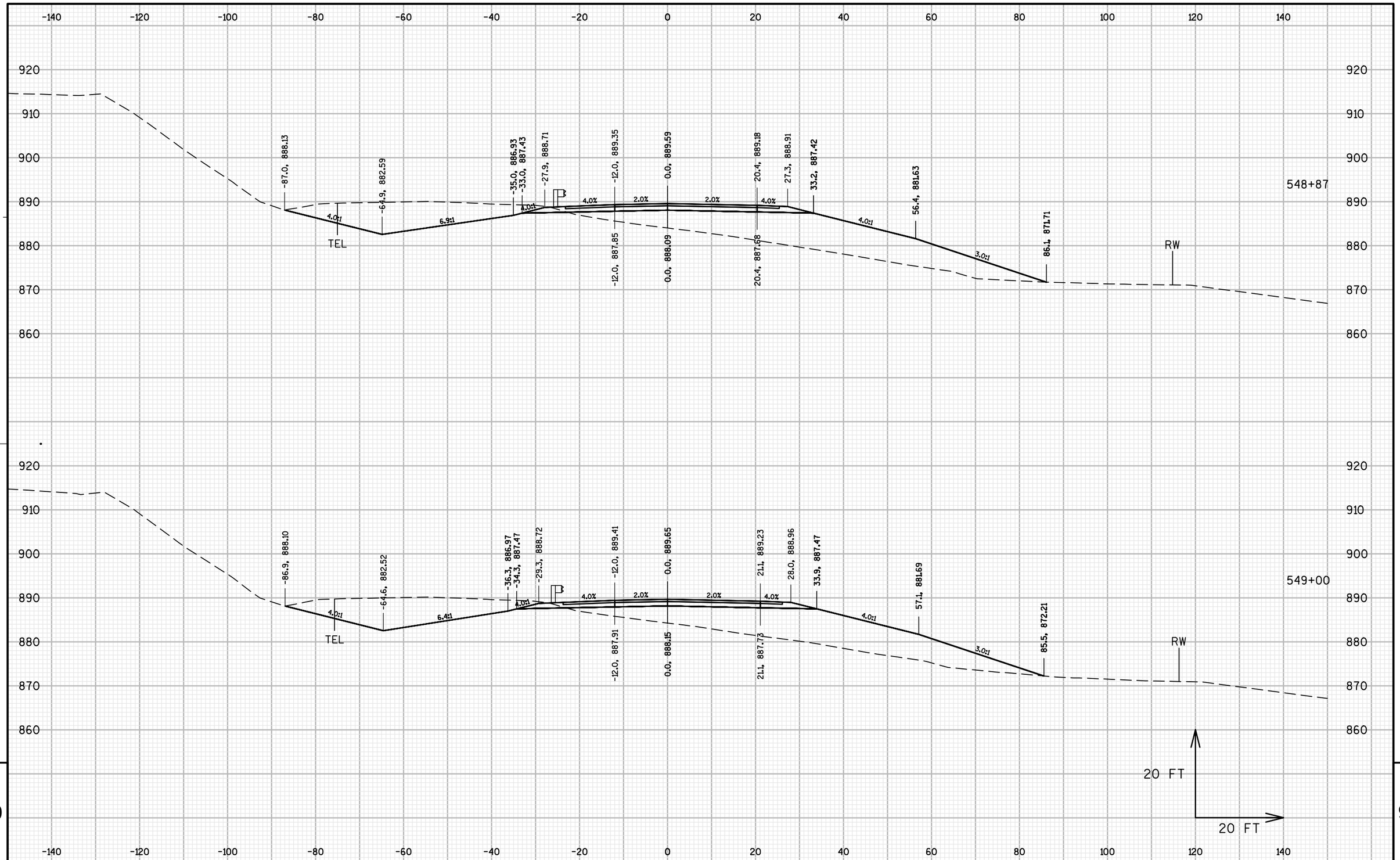
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 424 E



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 425	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:19 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

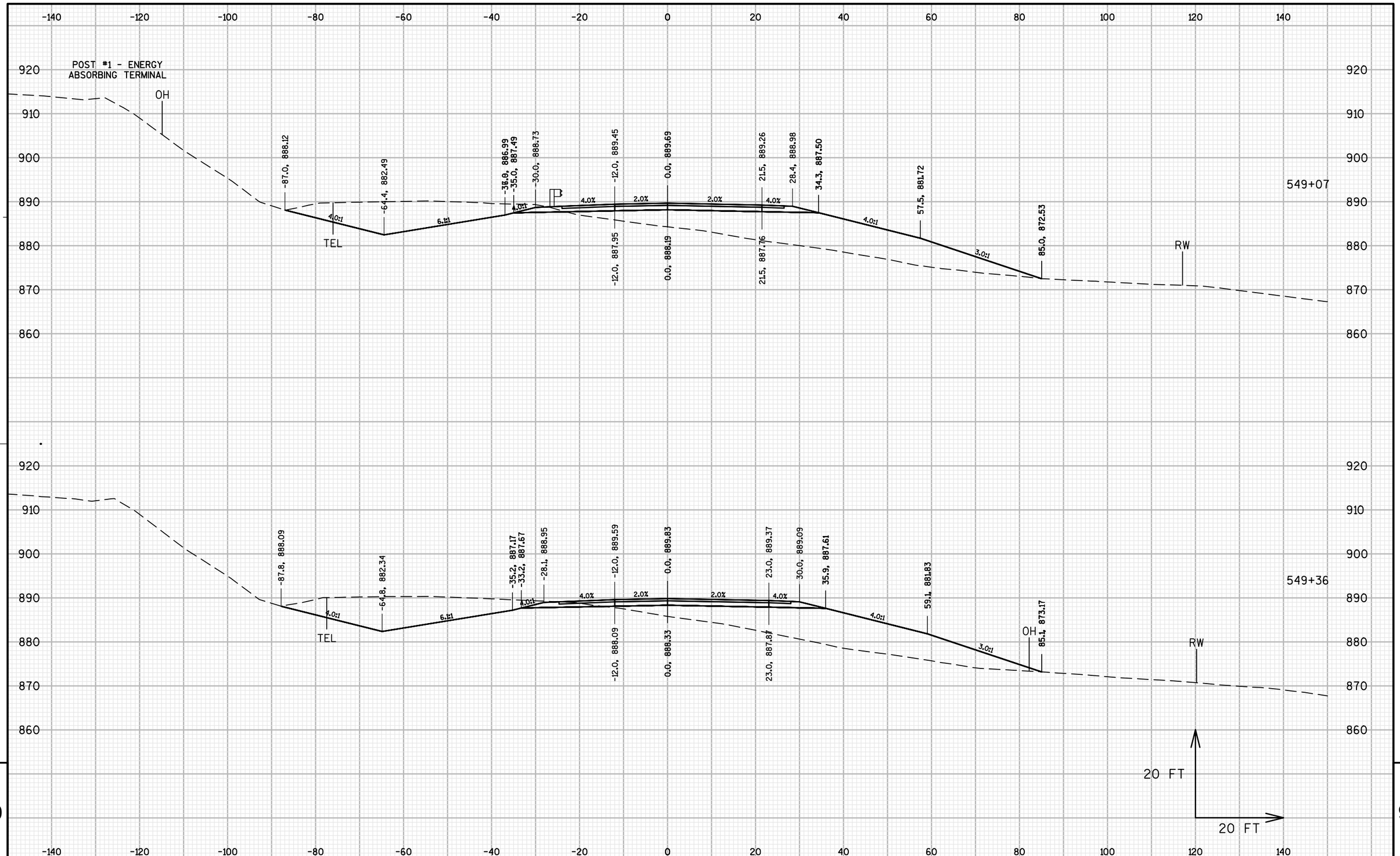
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 426 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:20 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

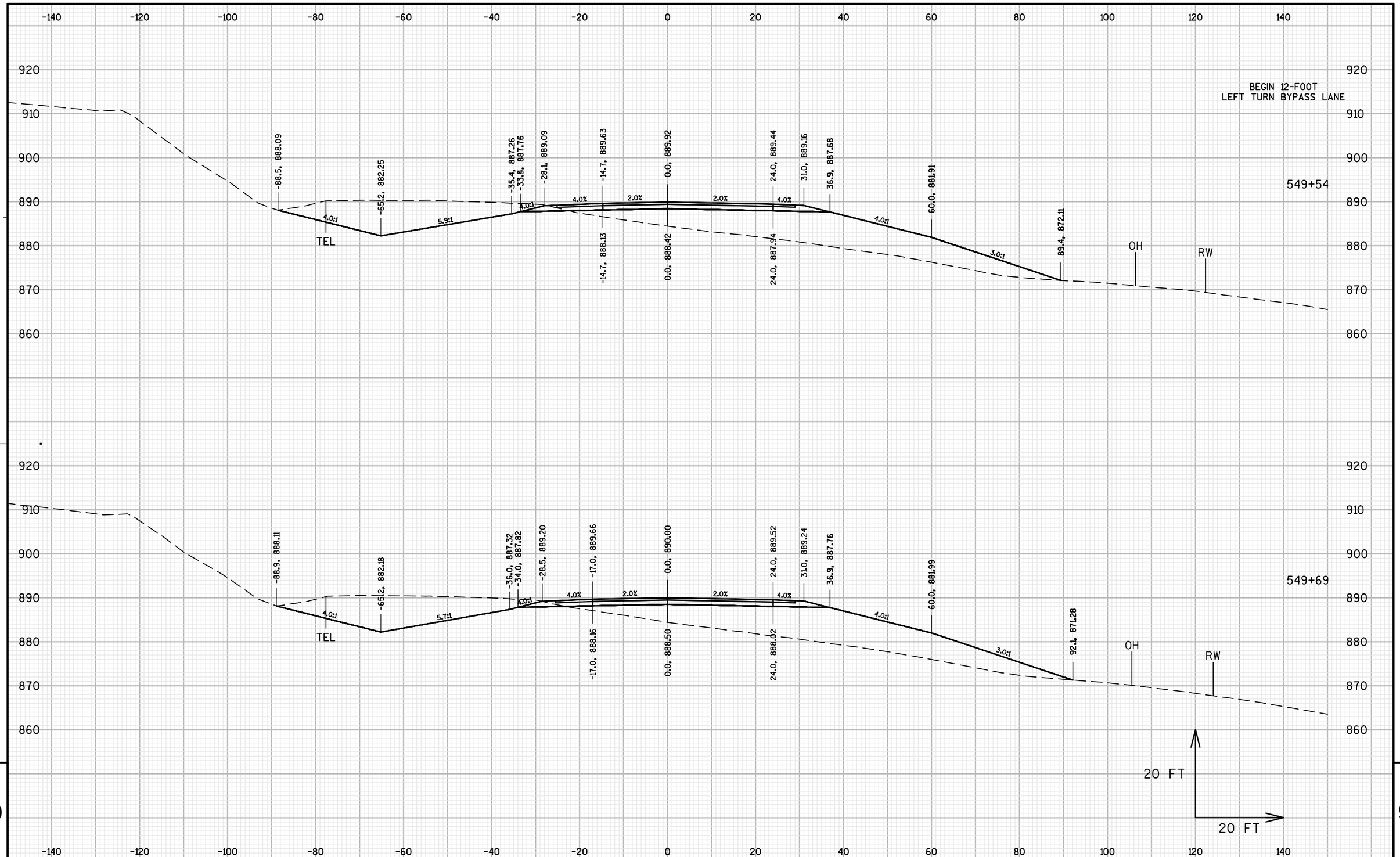
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 427 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:21 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

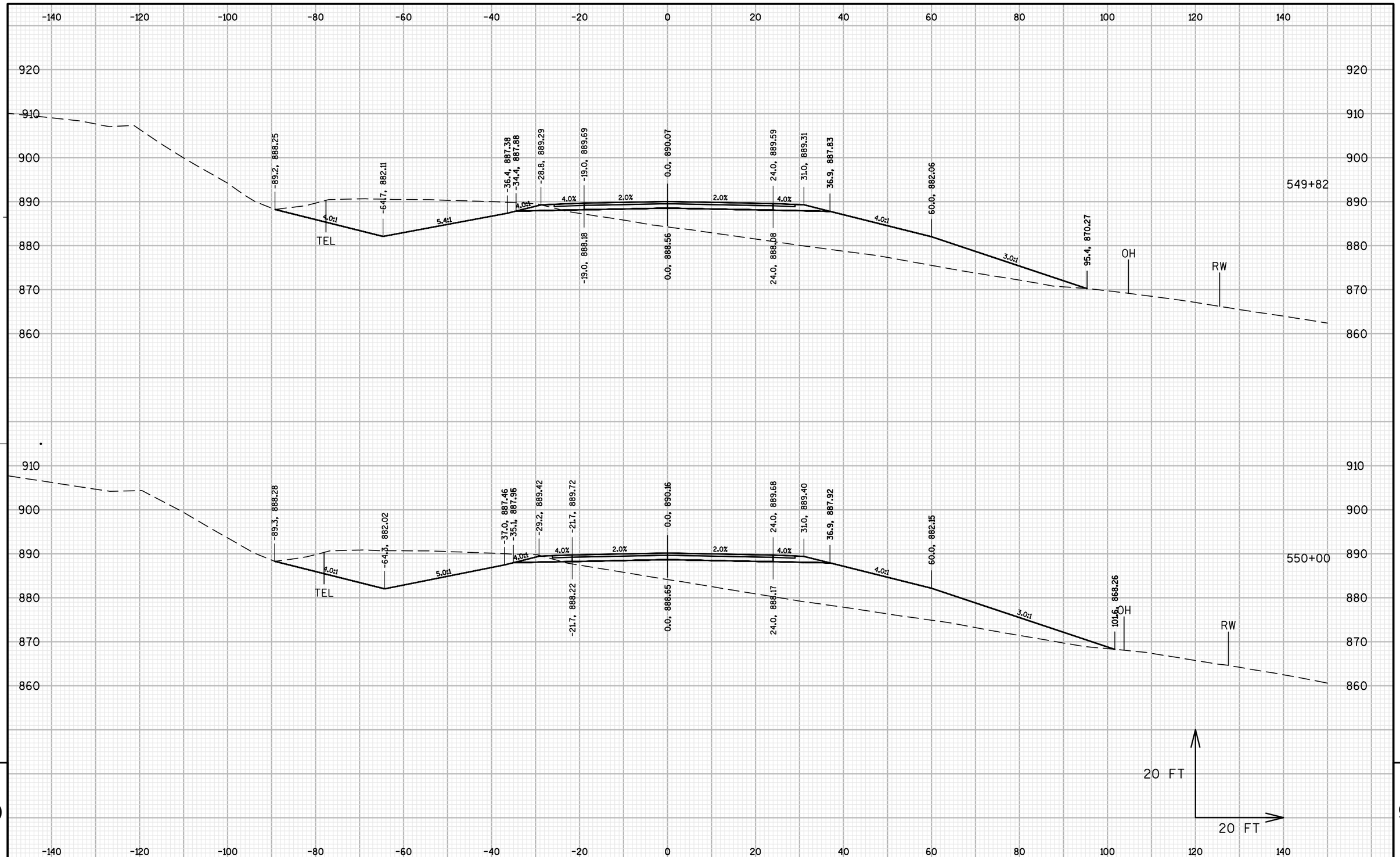
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 428 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:21 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

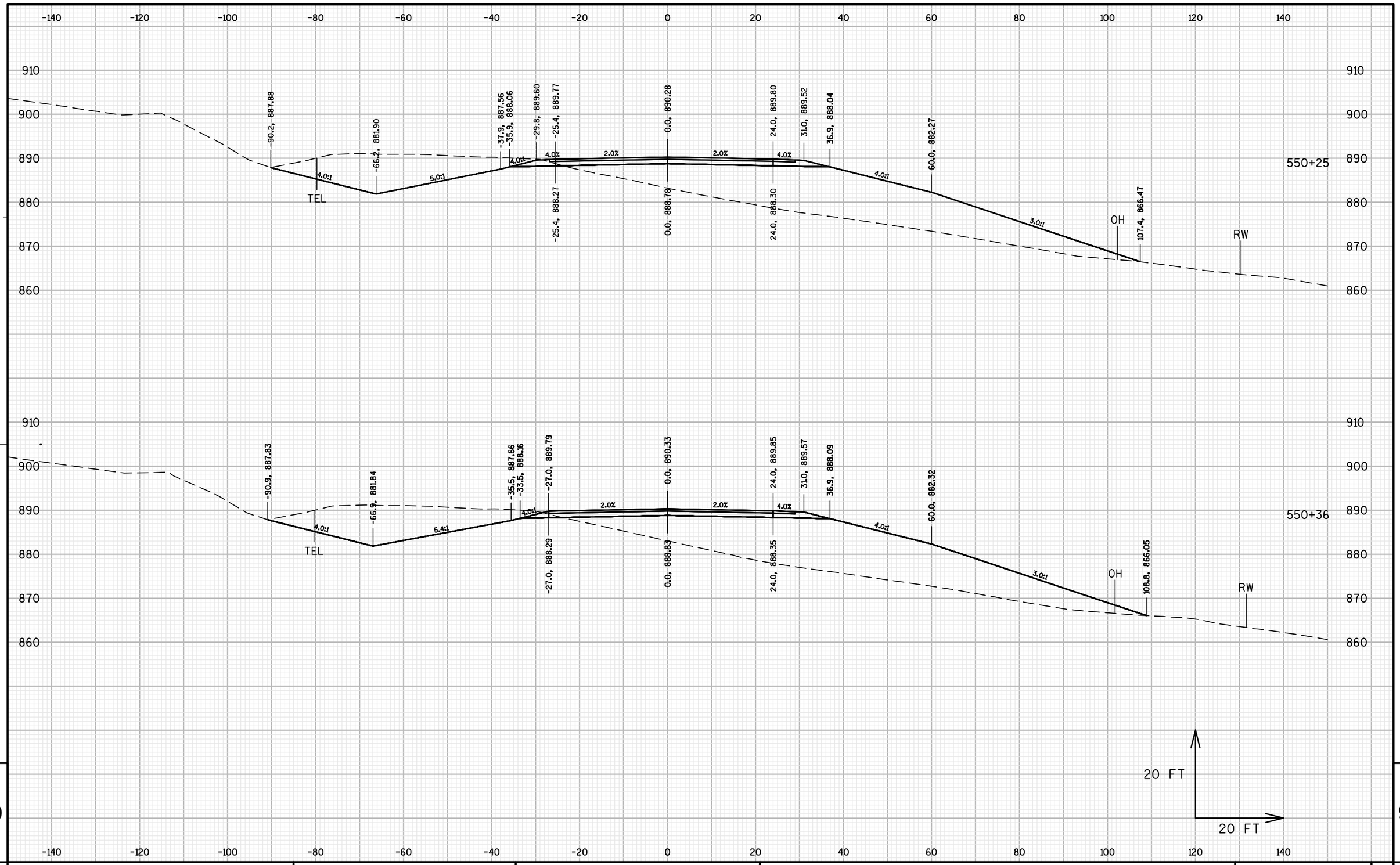
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 429	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:22 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

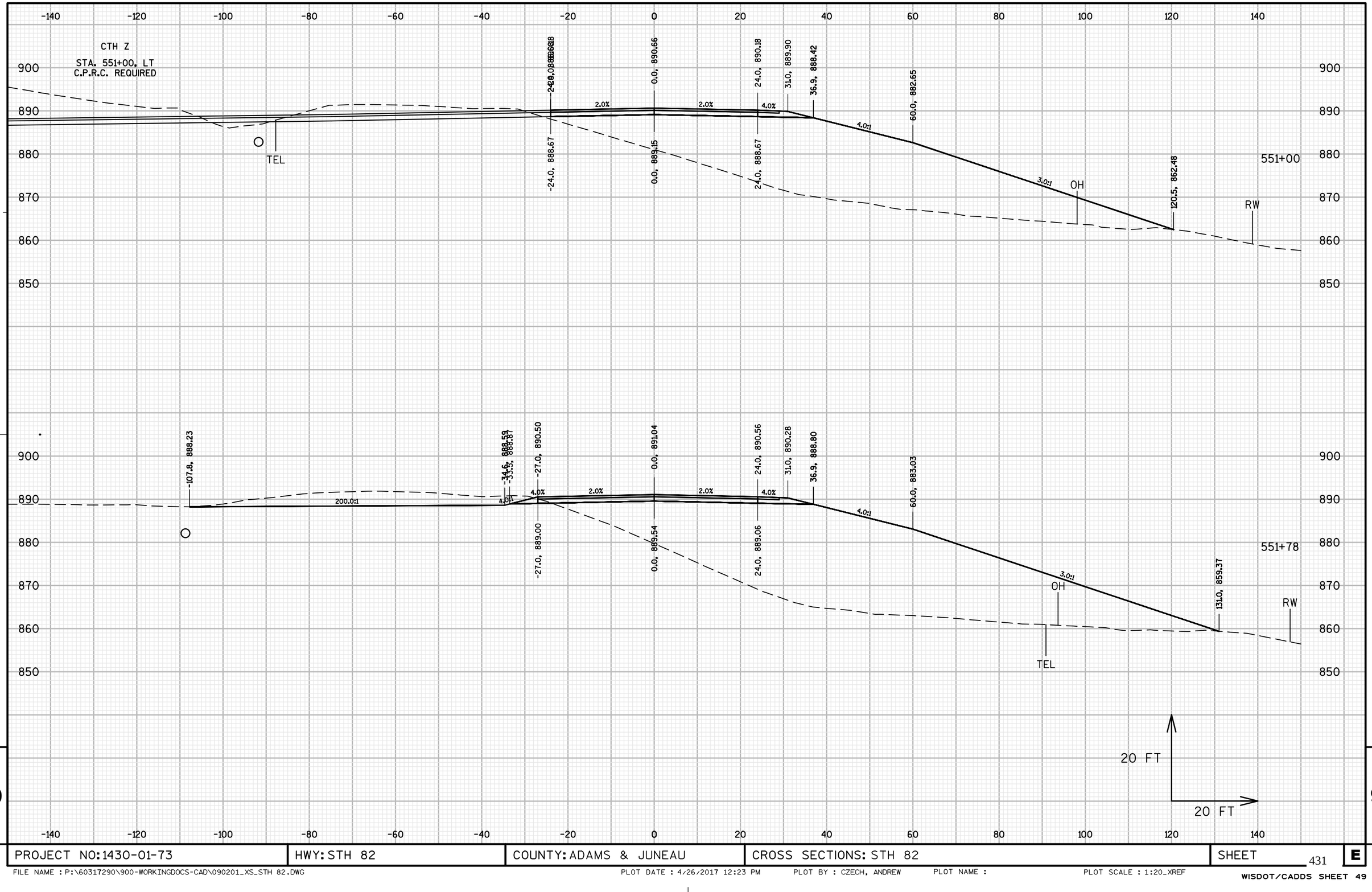


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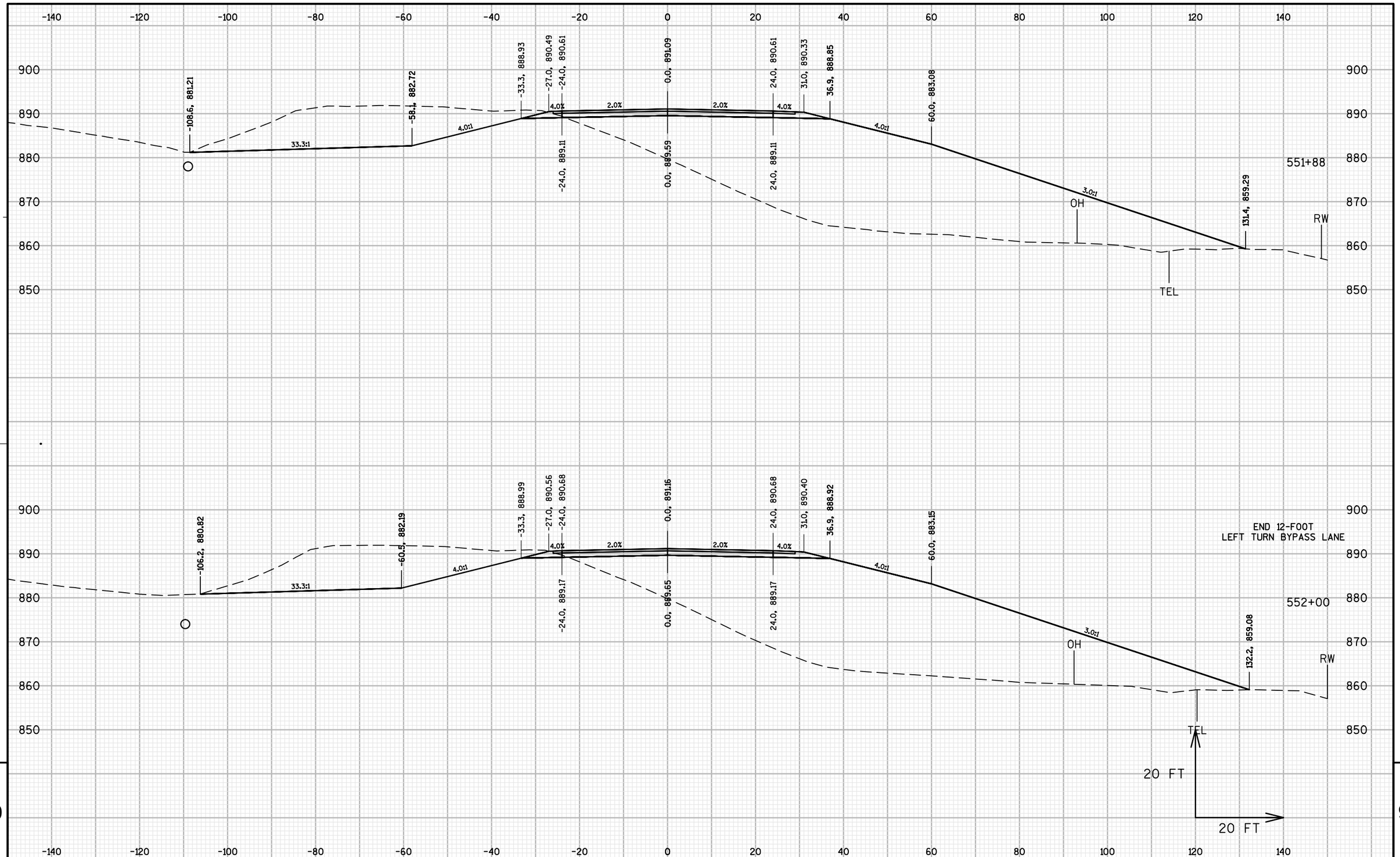
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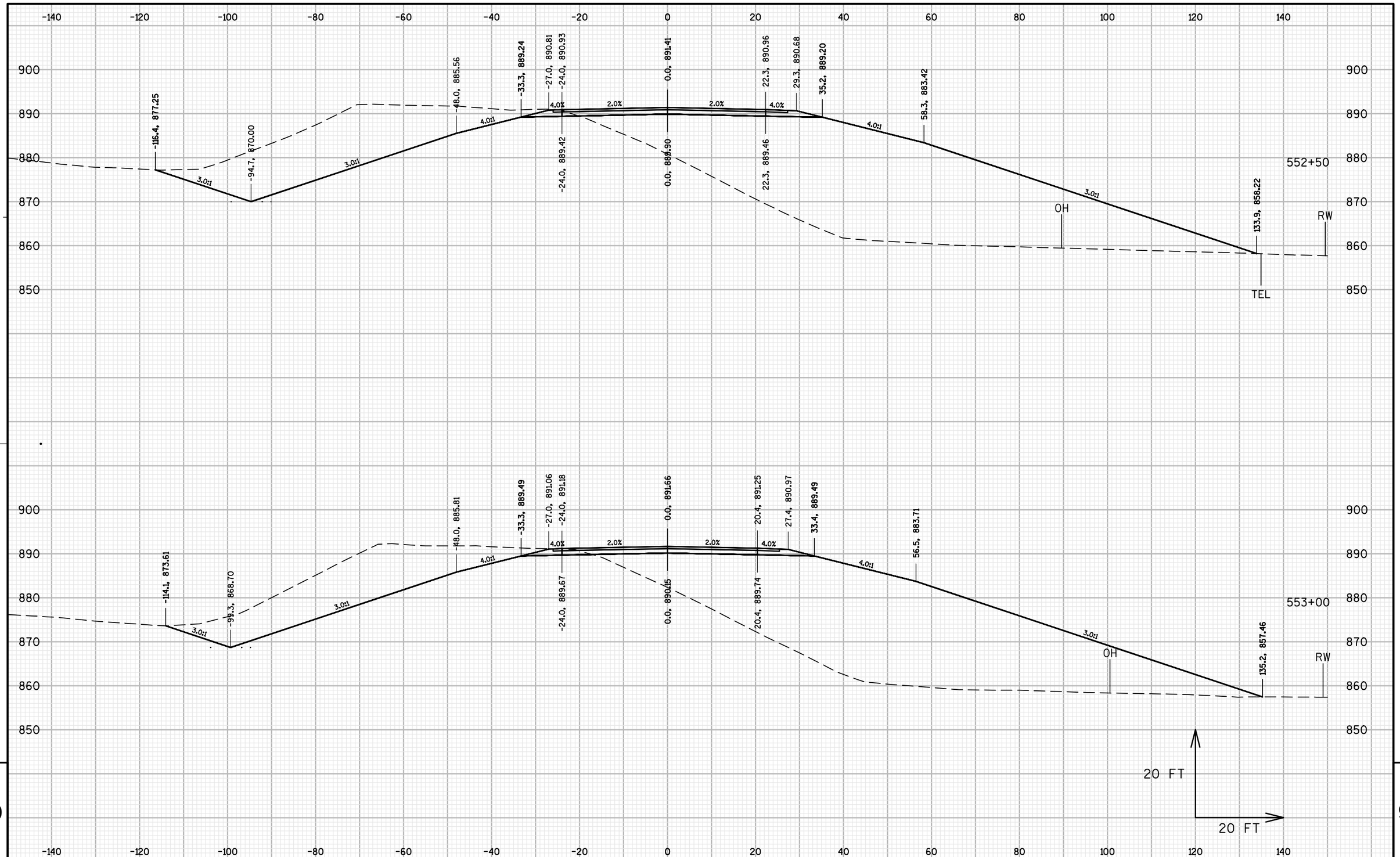
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 431	E

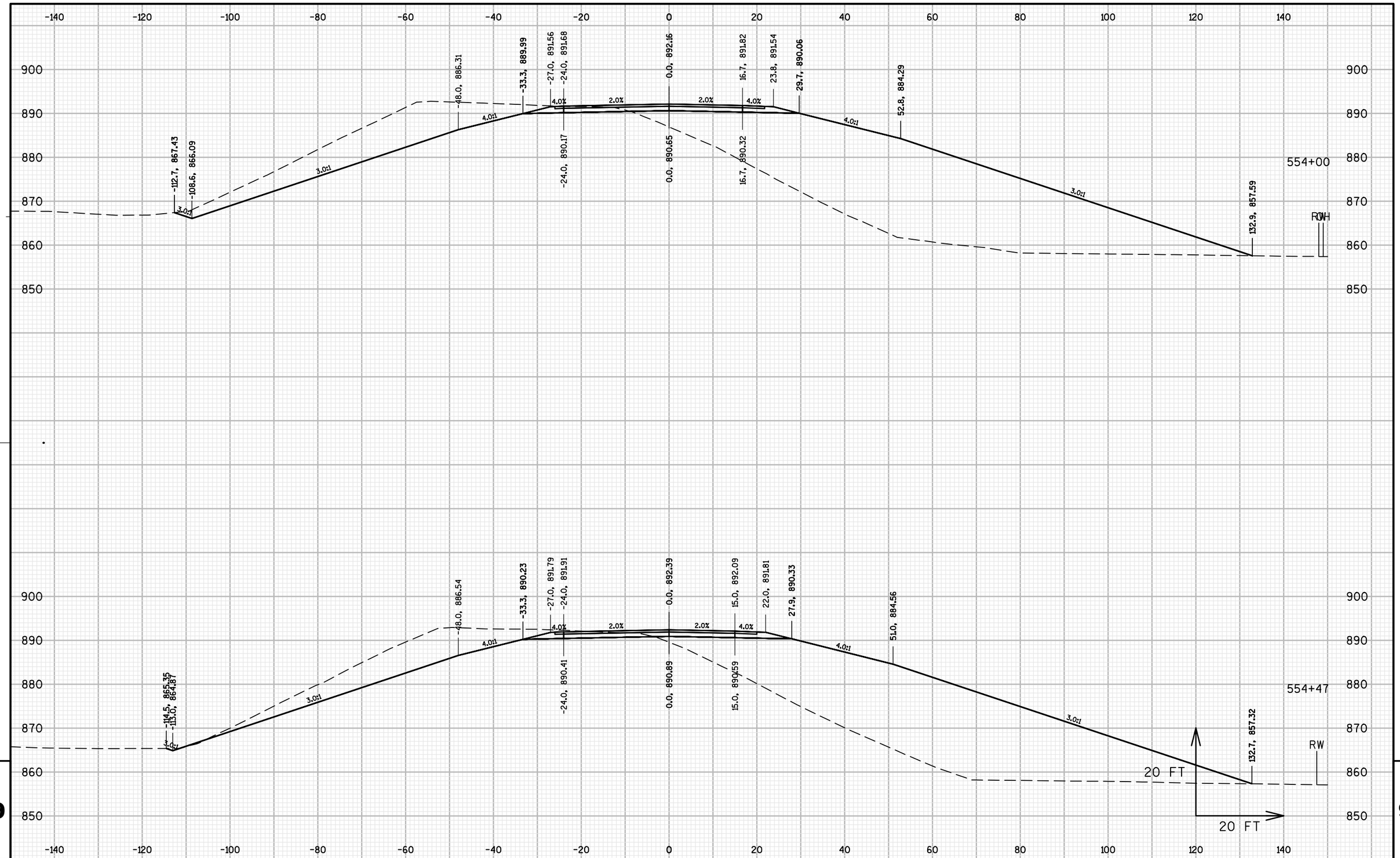


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 432	E



9 9

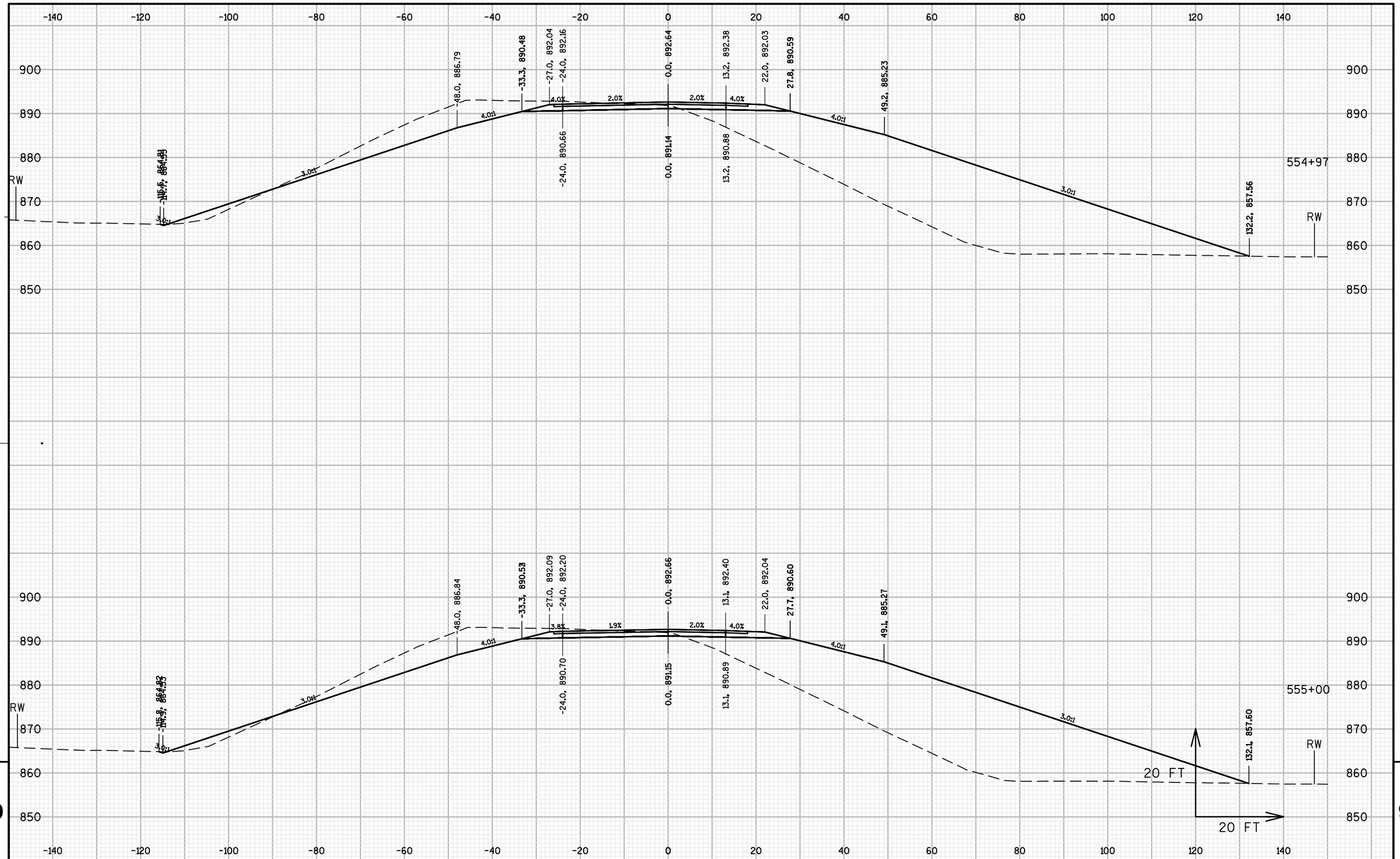
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 433	E



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 434	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:25 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

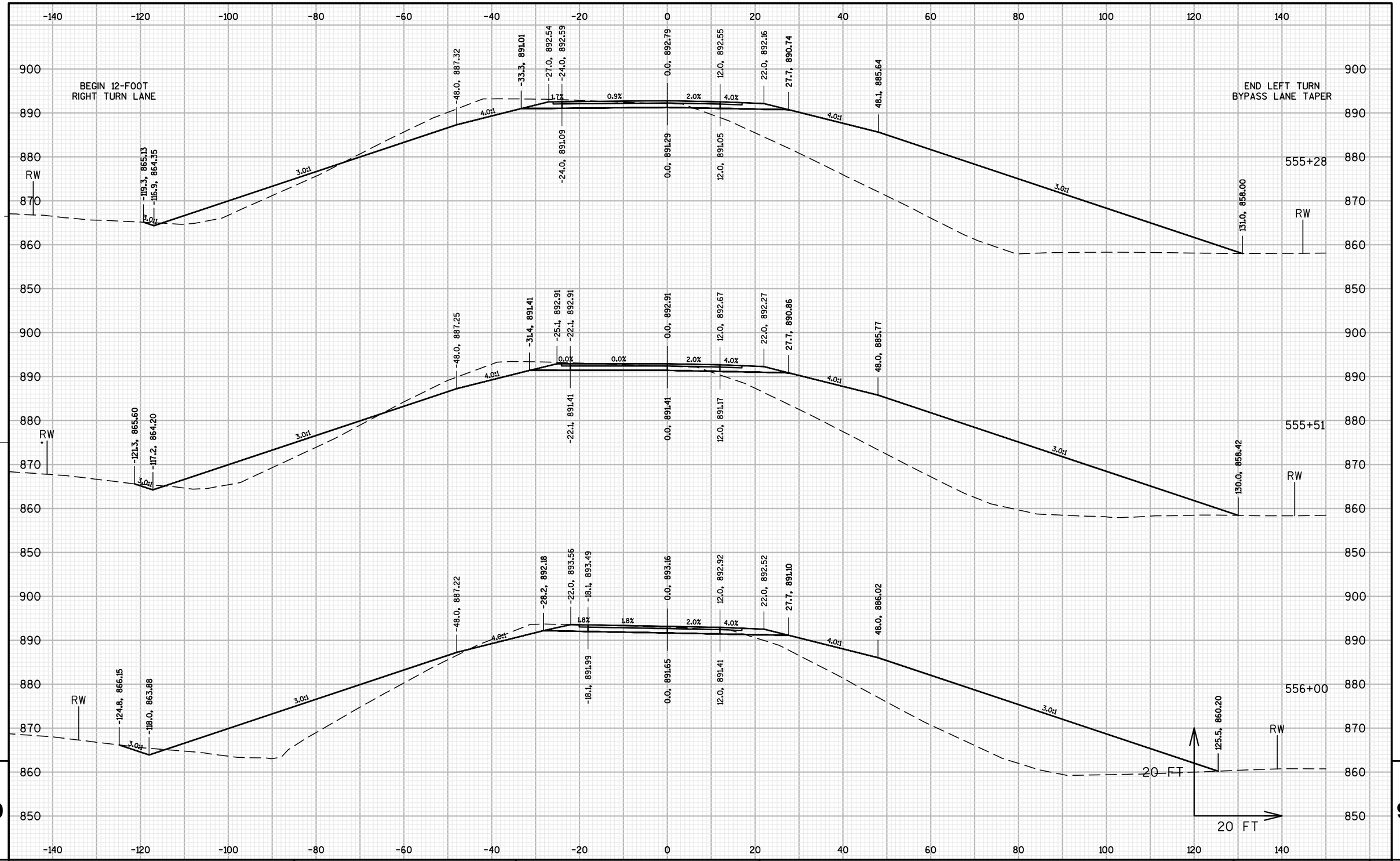
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 435 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:26 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

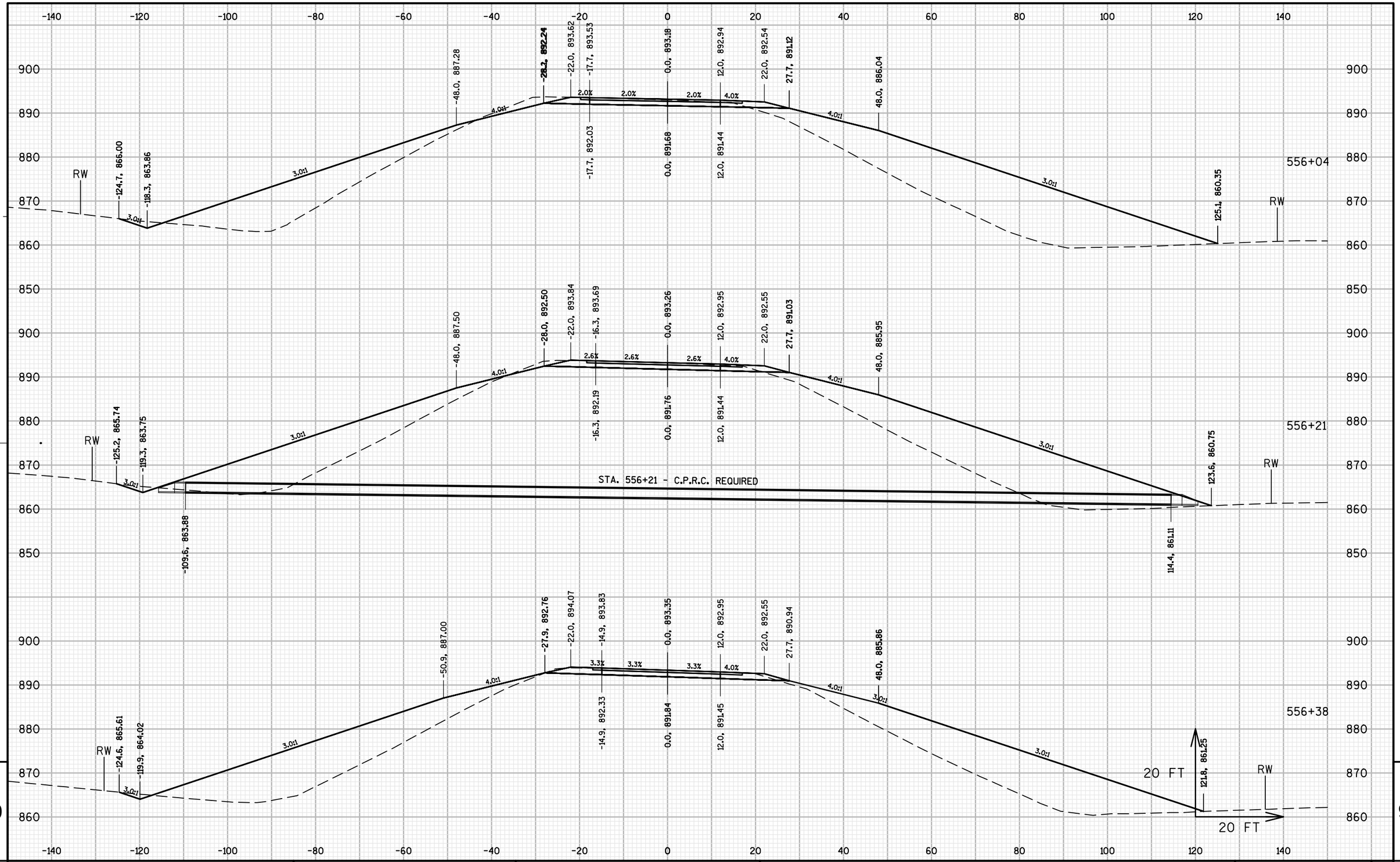
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 436	E

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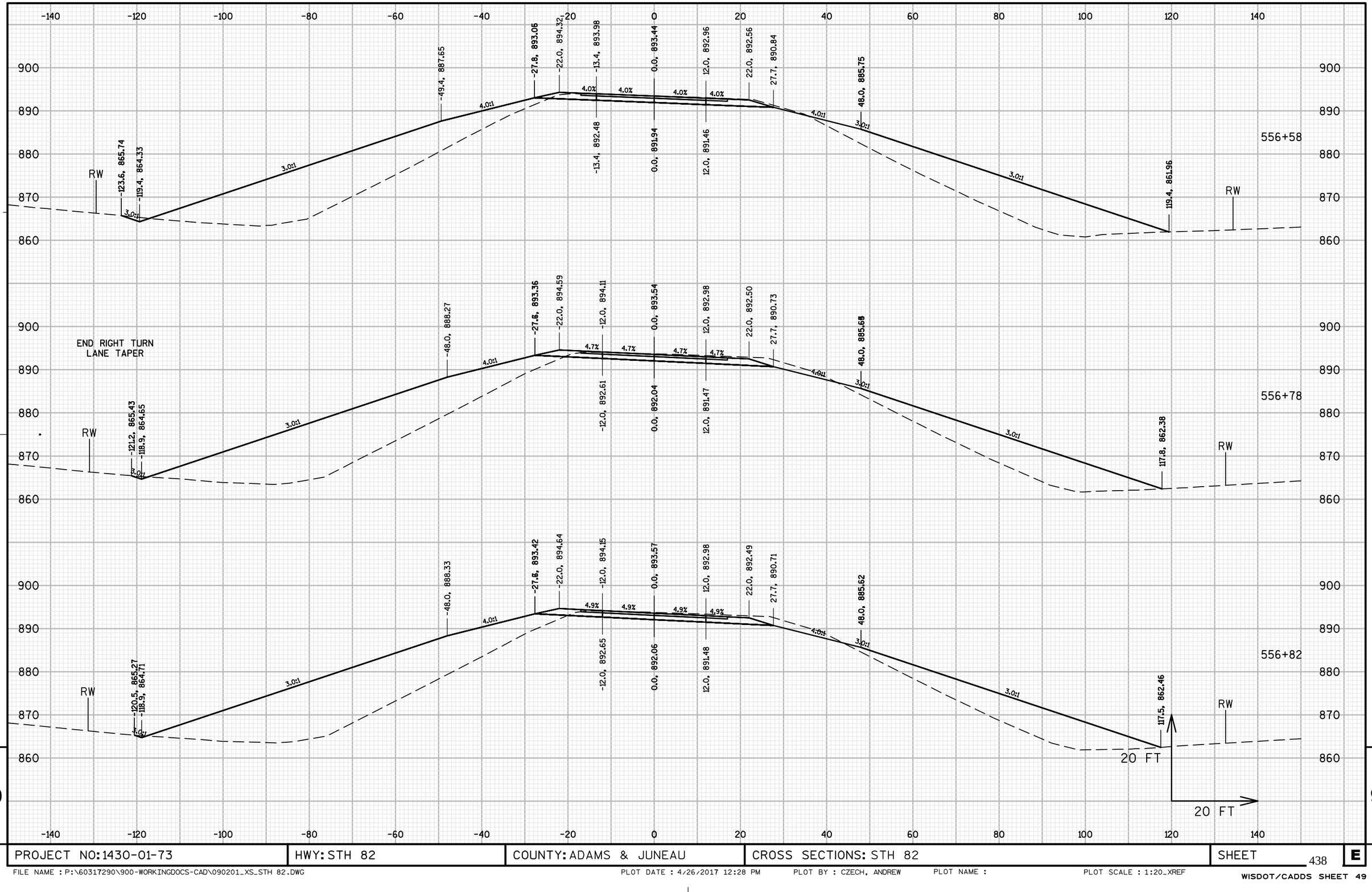
WISDOT/CADDS SHEET 49



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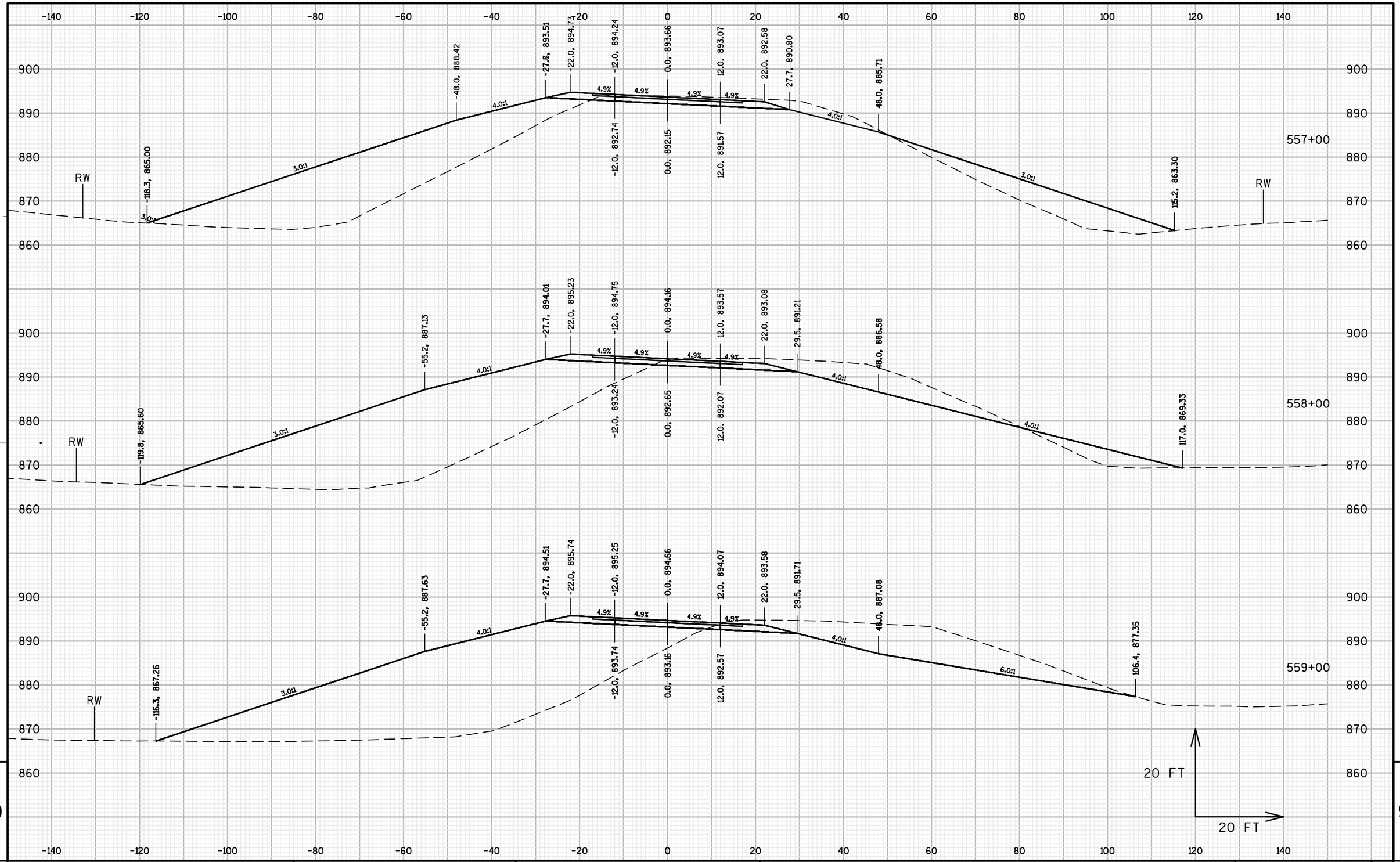
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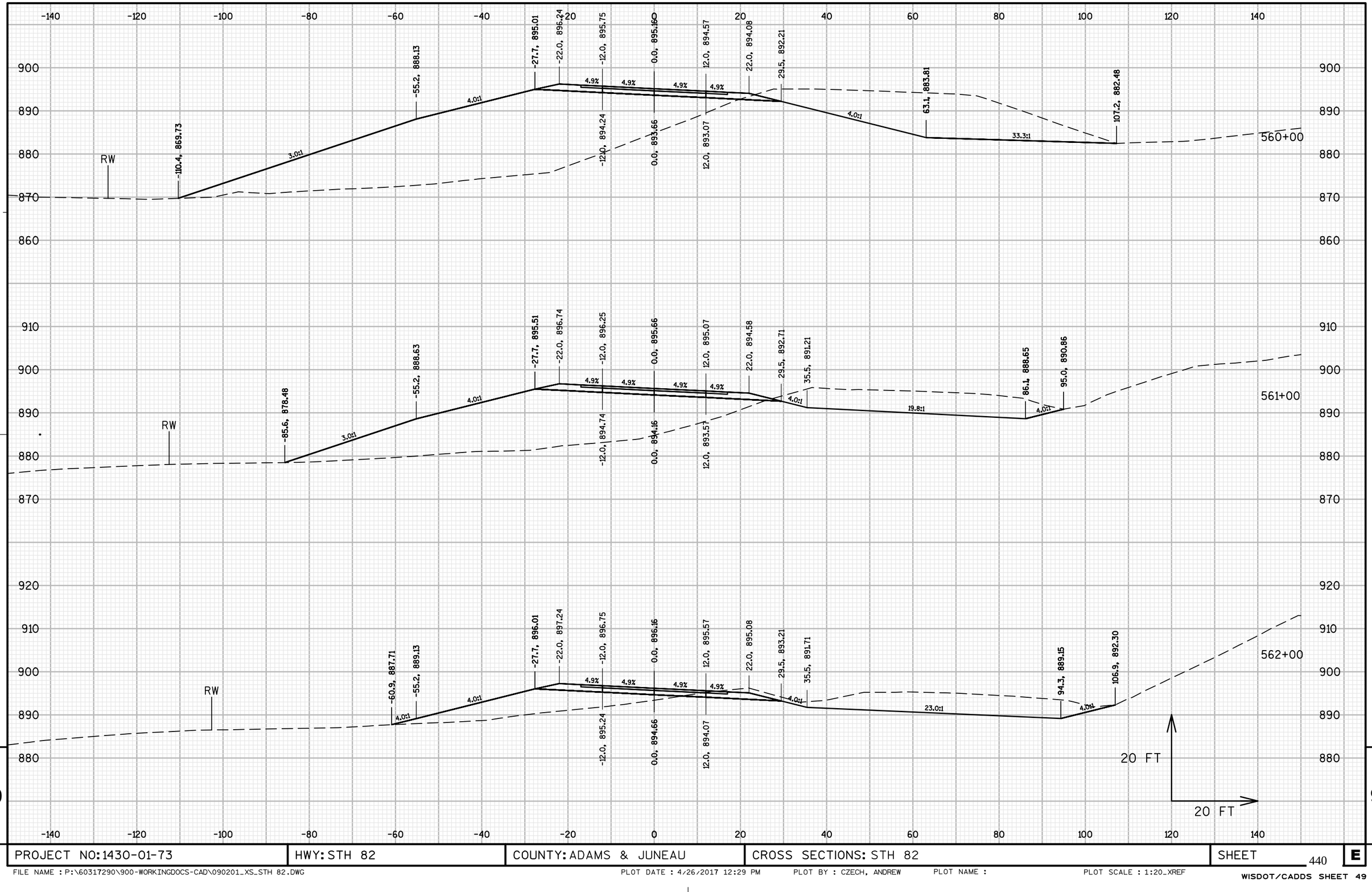
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 438 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:28 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

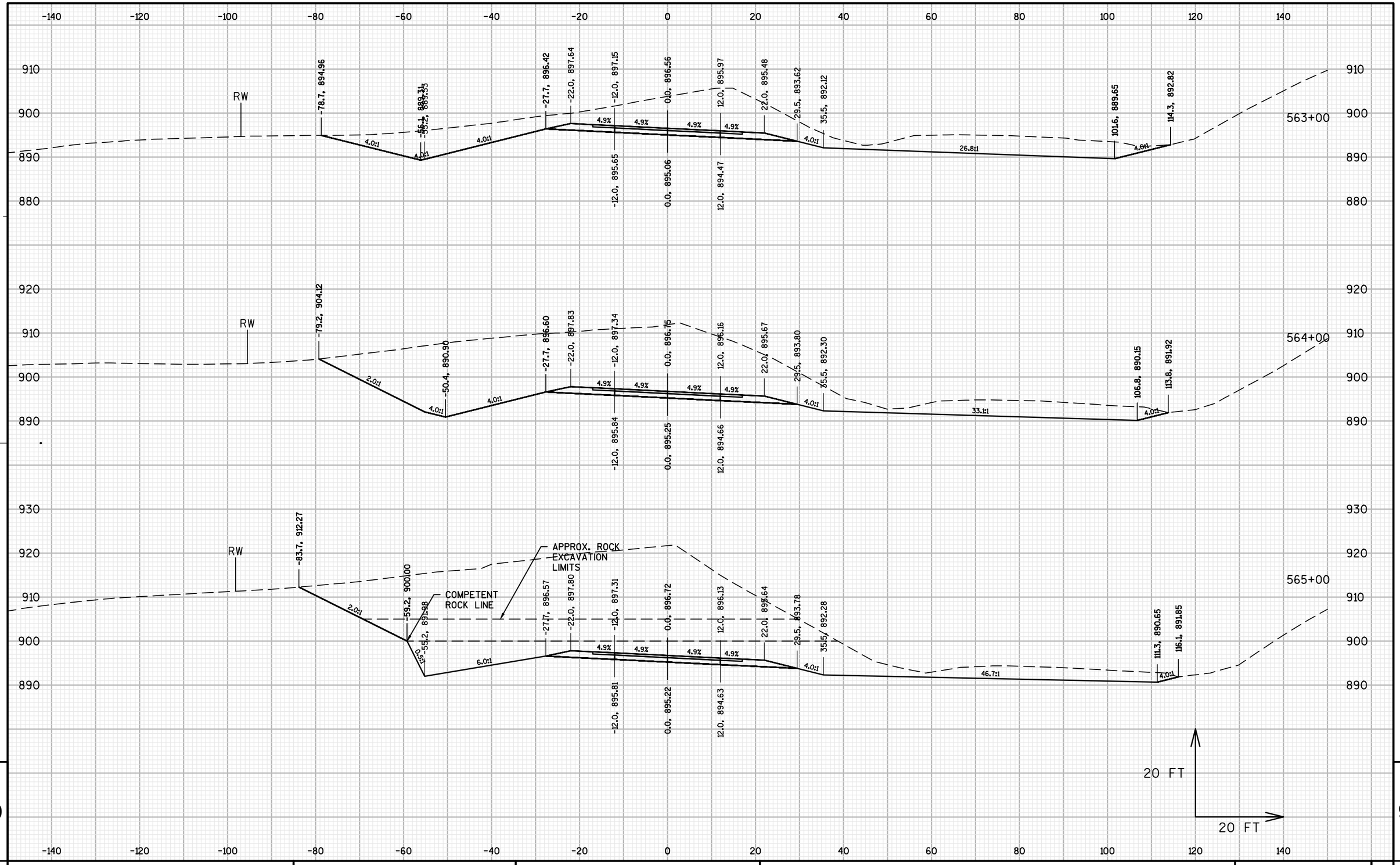


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 439	E



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 440	E

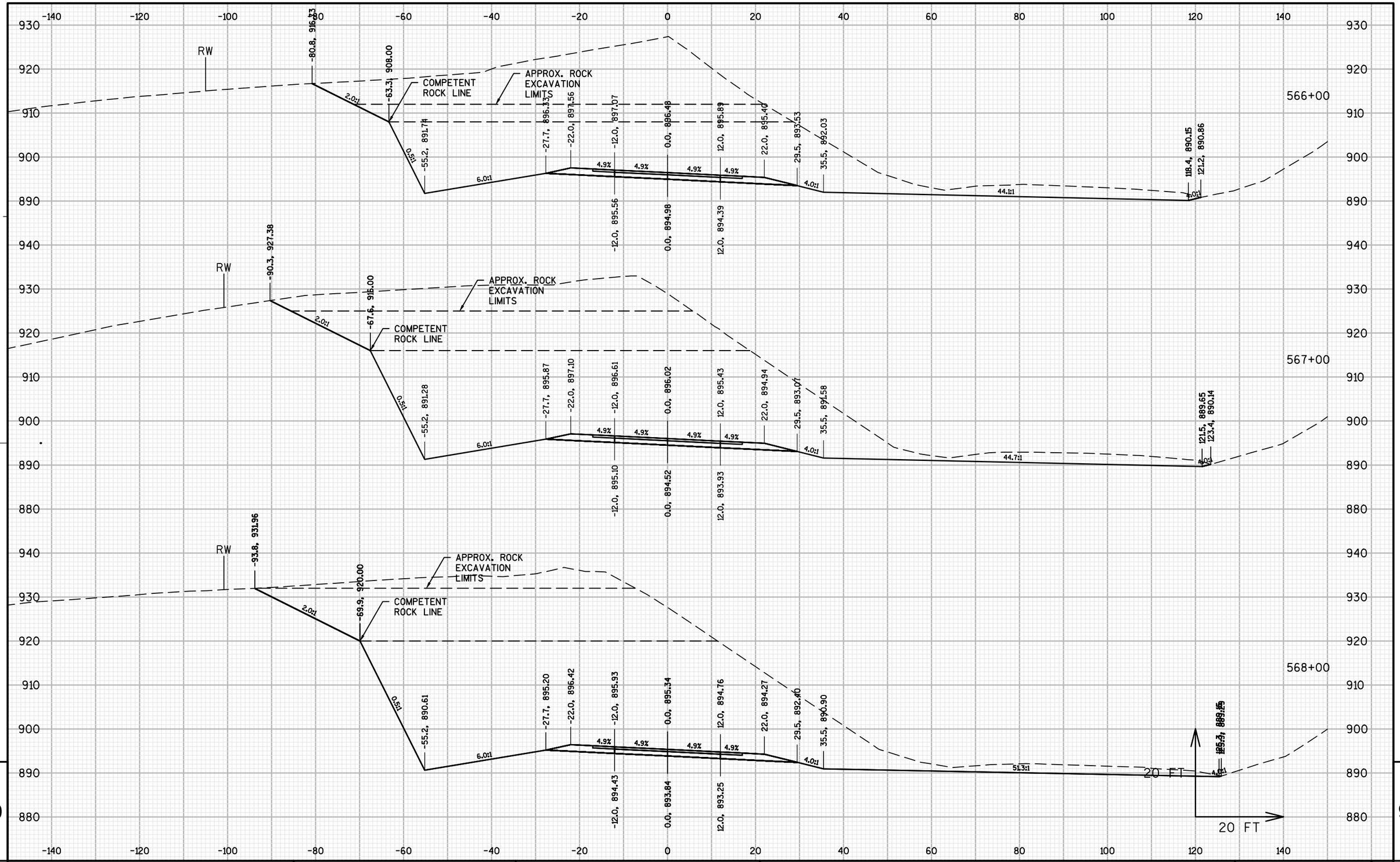
FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:29 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 441	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:30 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



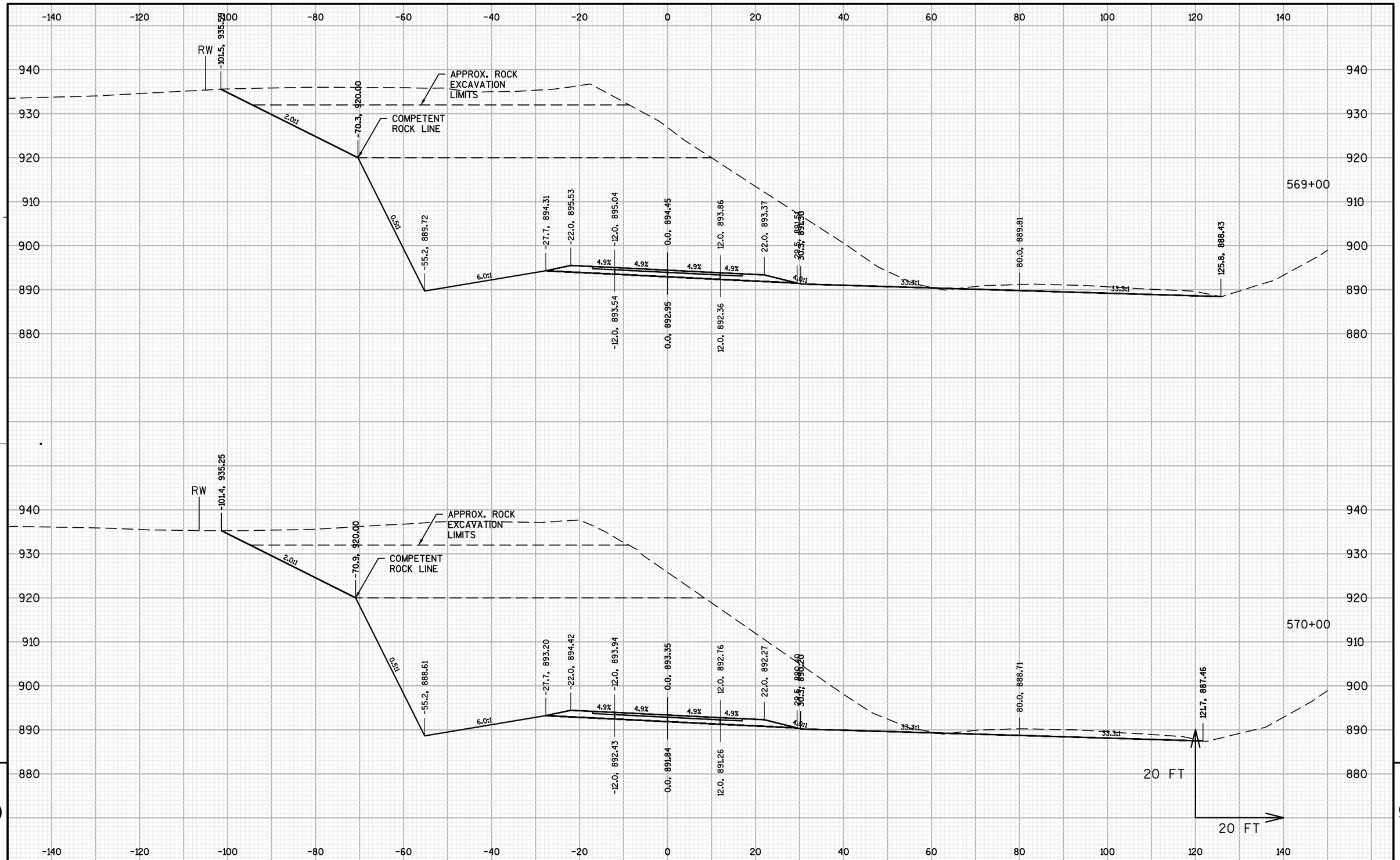
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 442	E

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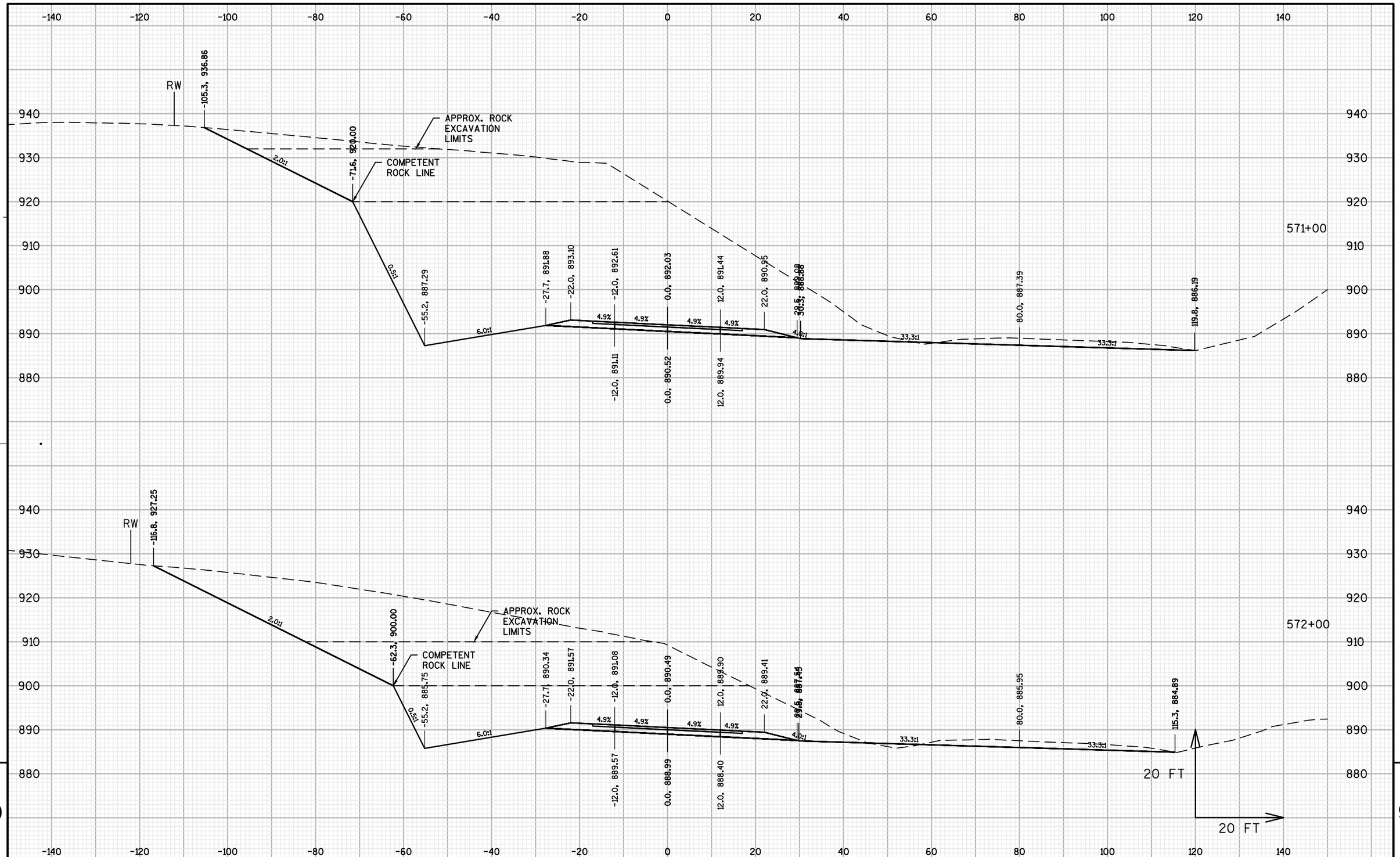
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 443	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:31 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

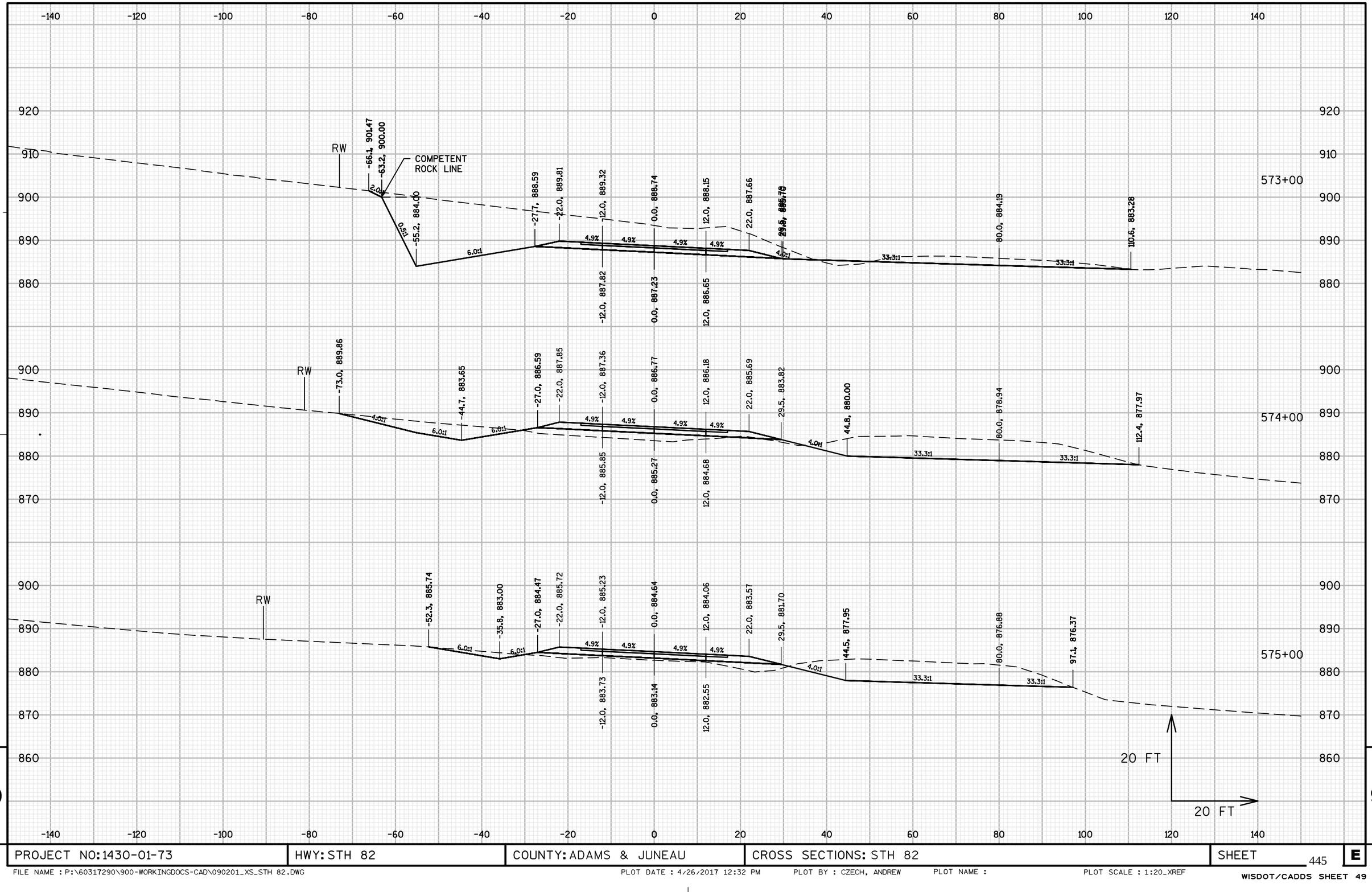
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 444	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:31 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

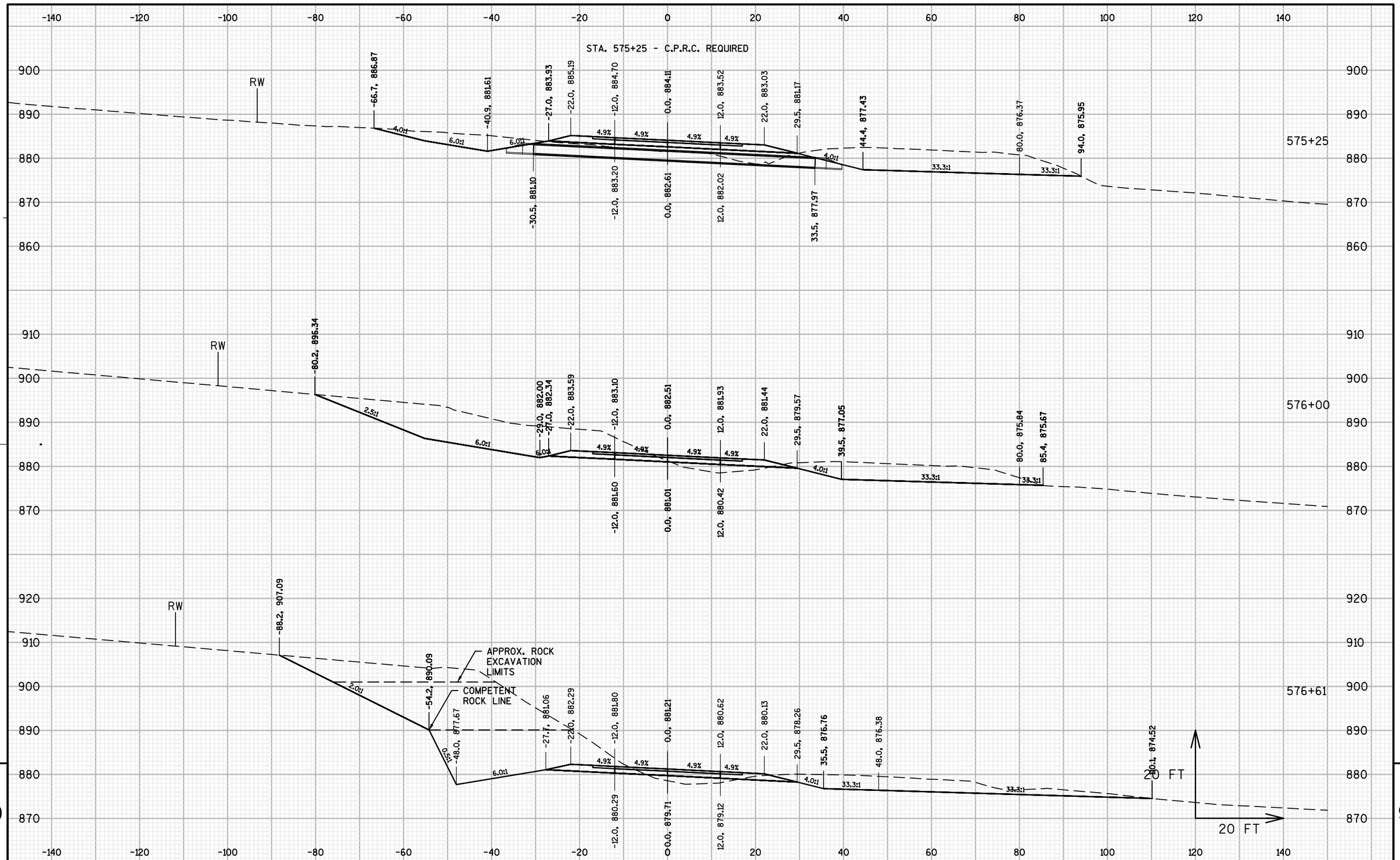


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 445	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:32 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49

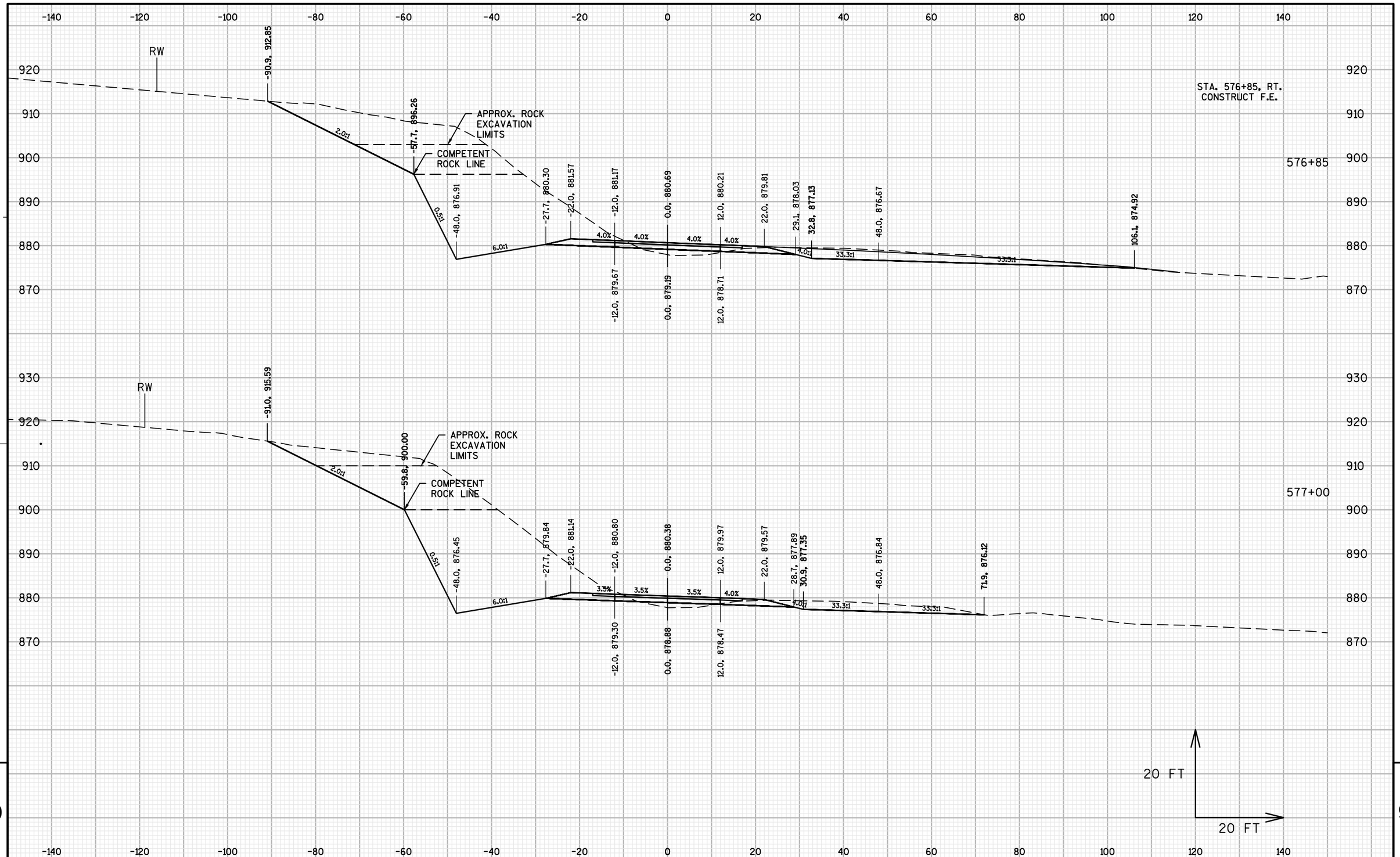
STA. 575+25 - C.P.R.C. REQUIRED



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 446	E

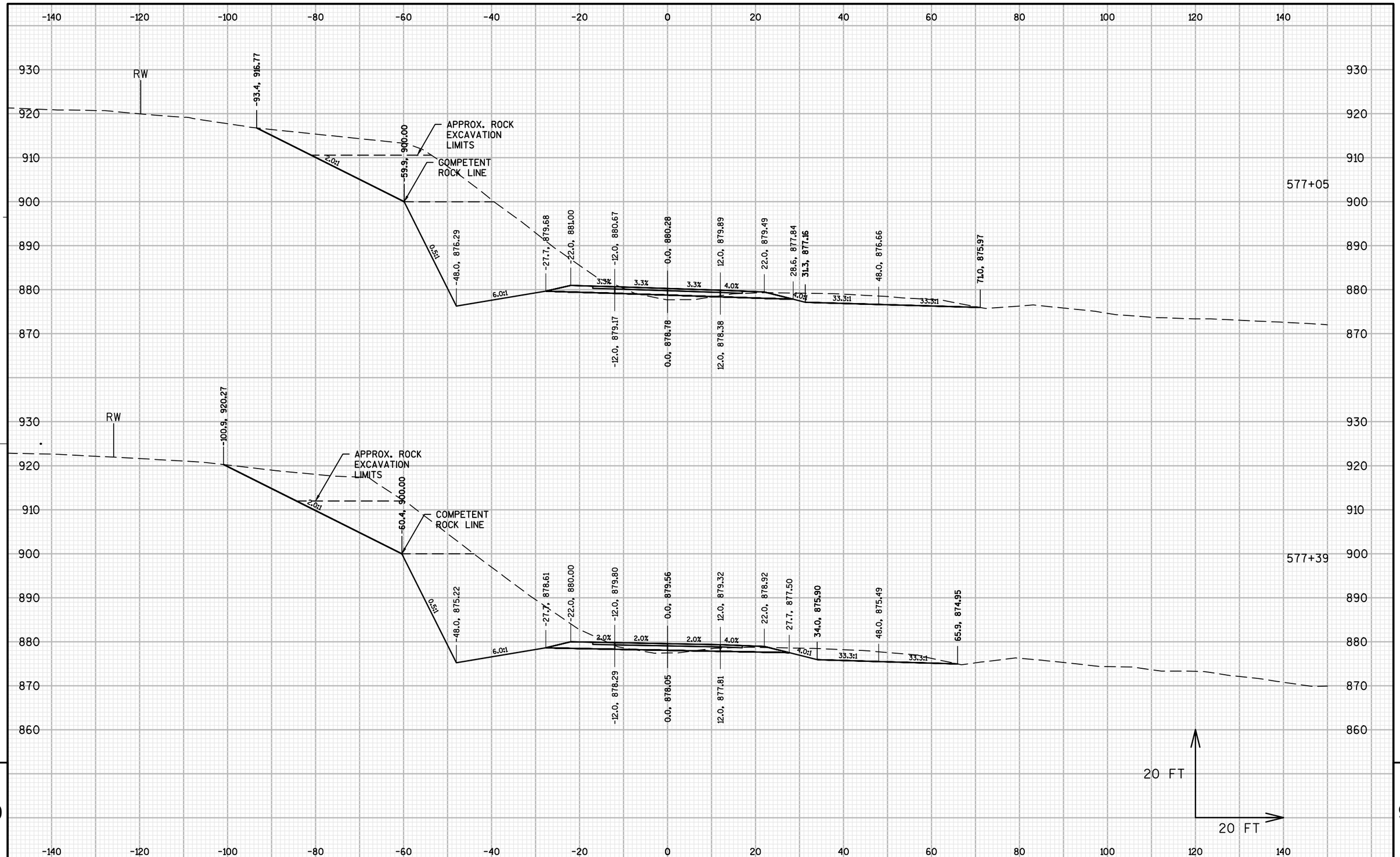
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WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 447	E

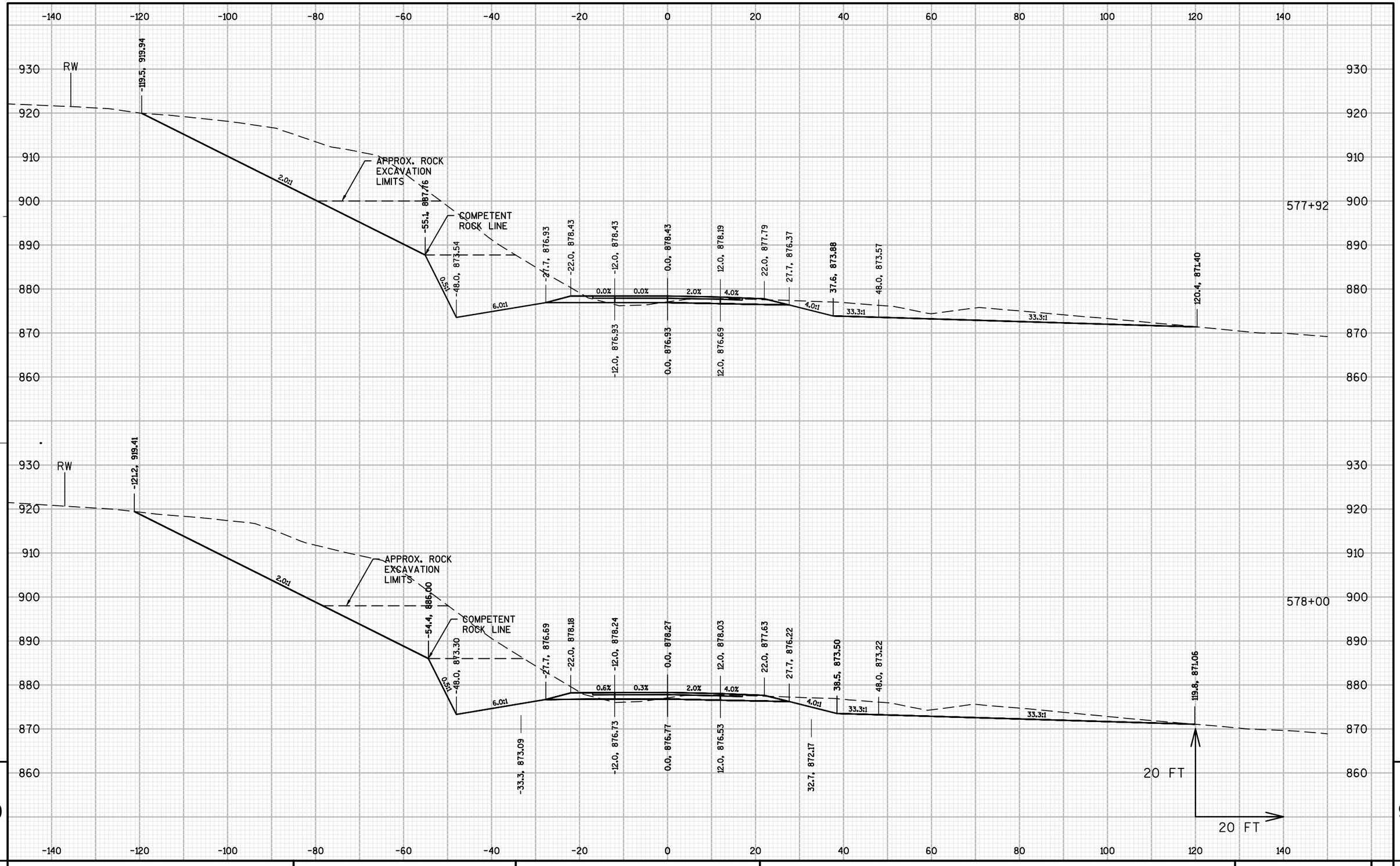
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 448 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:34 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

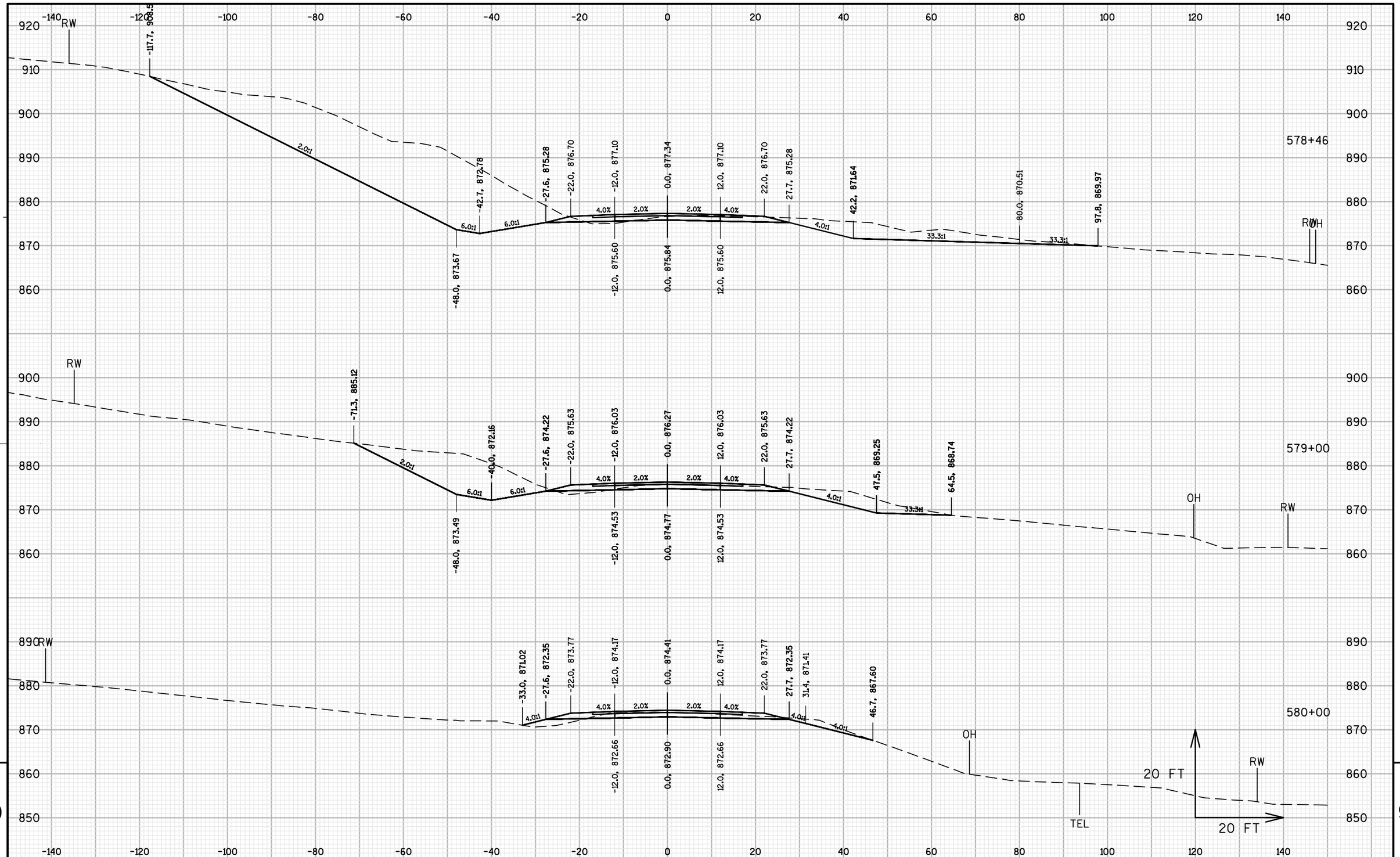
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 449	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:35 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

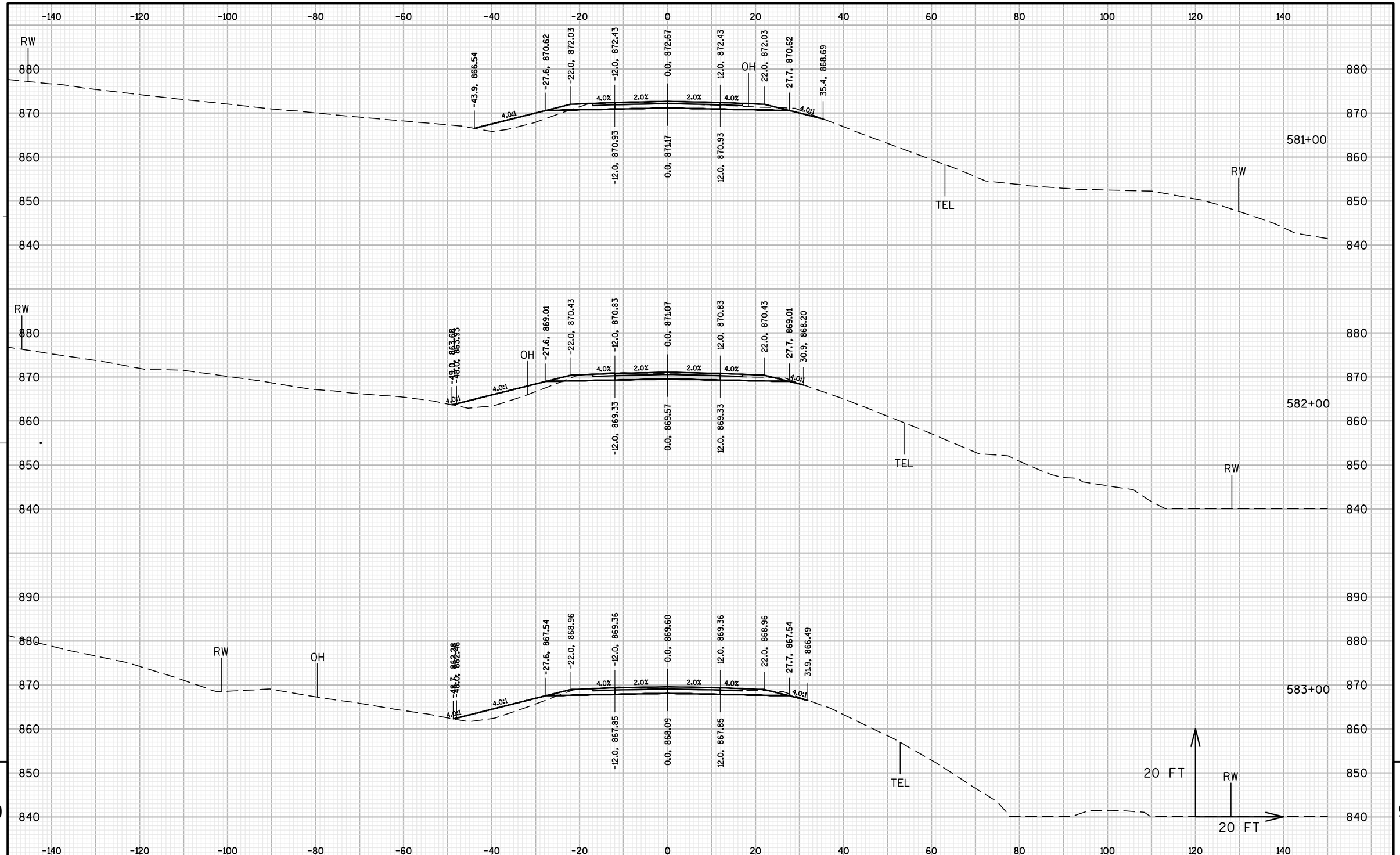
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 450 E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/28/2017 3:56 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

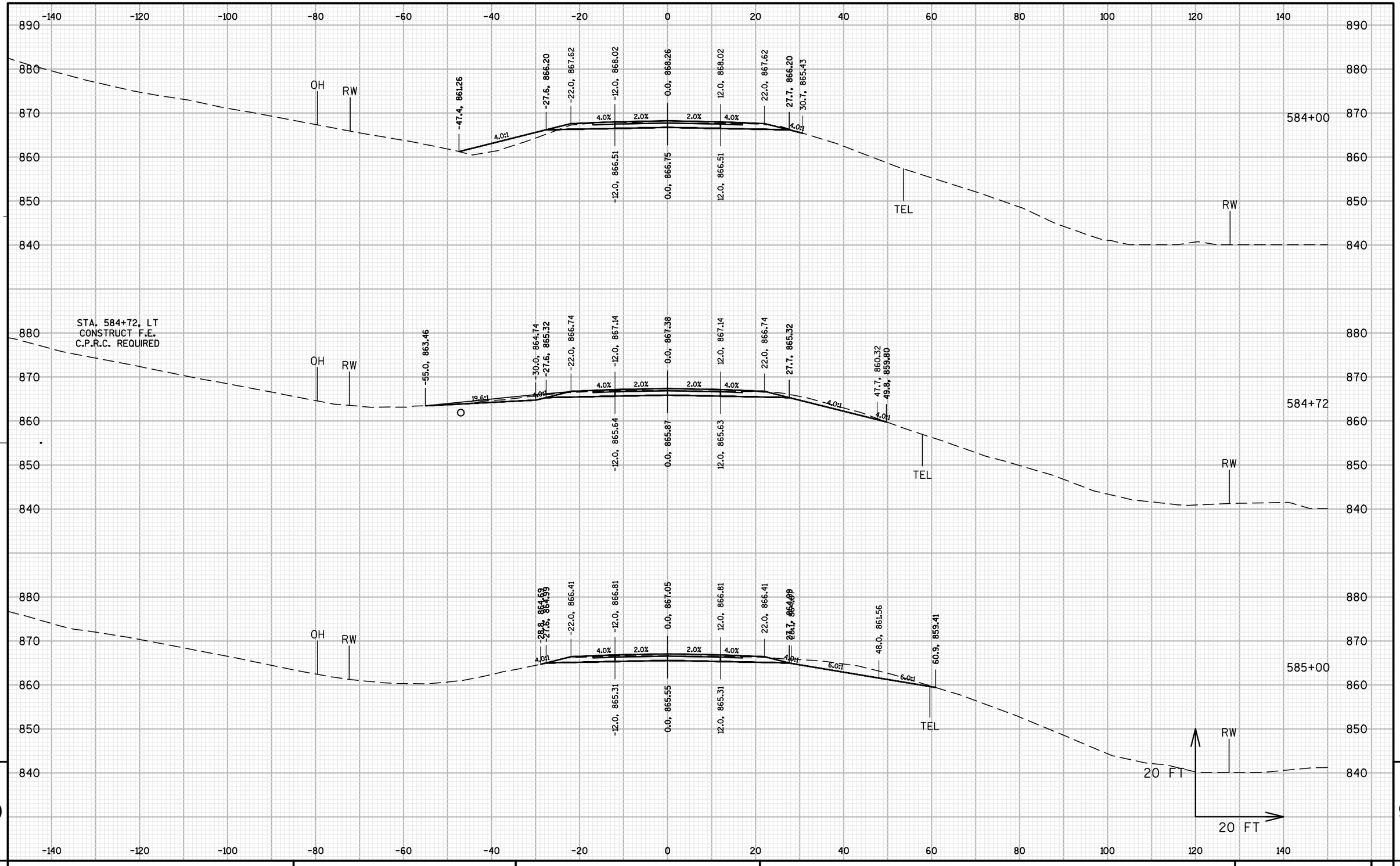
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 451	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:36 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

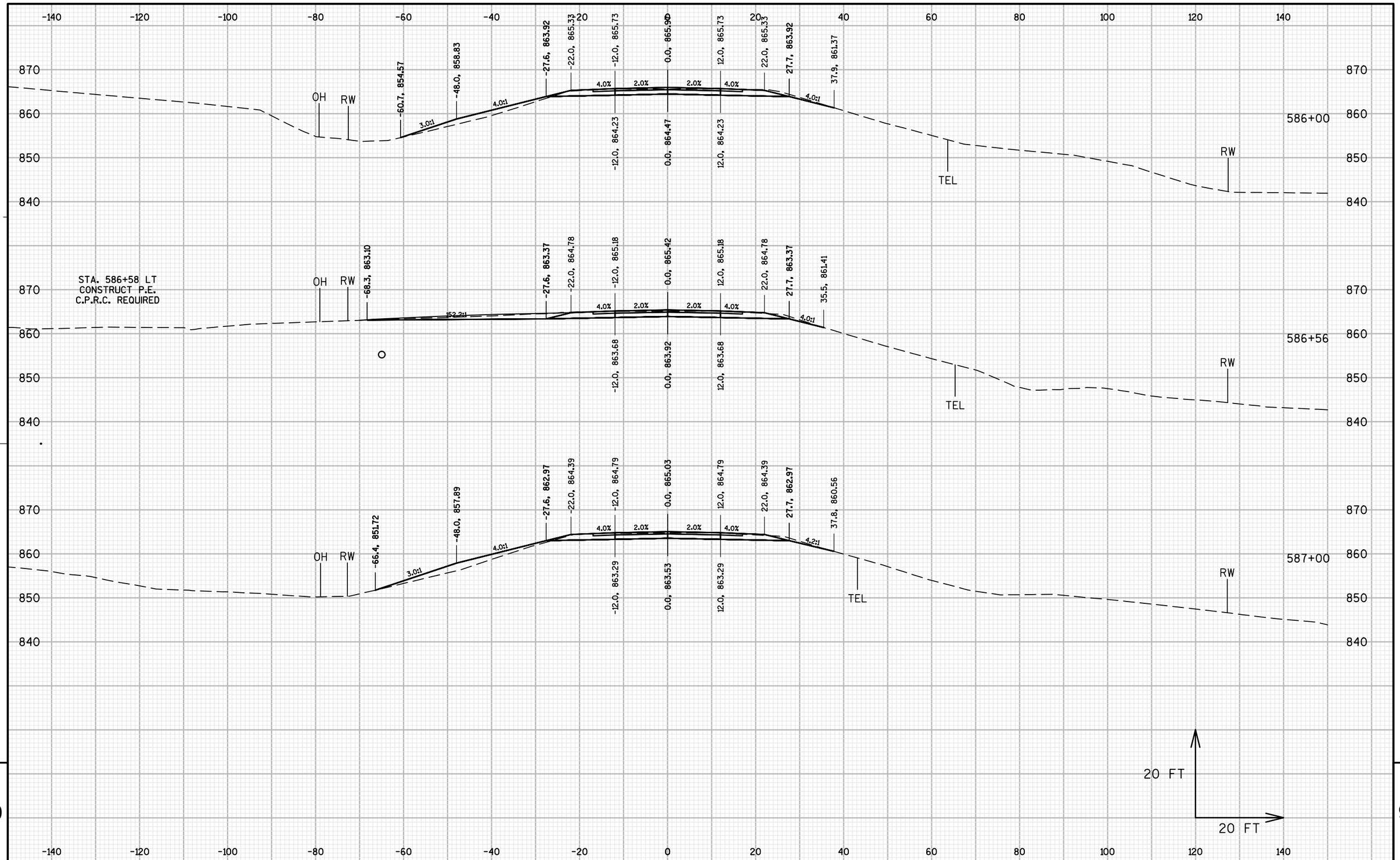
WISDOT/CADDS SHEET 49



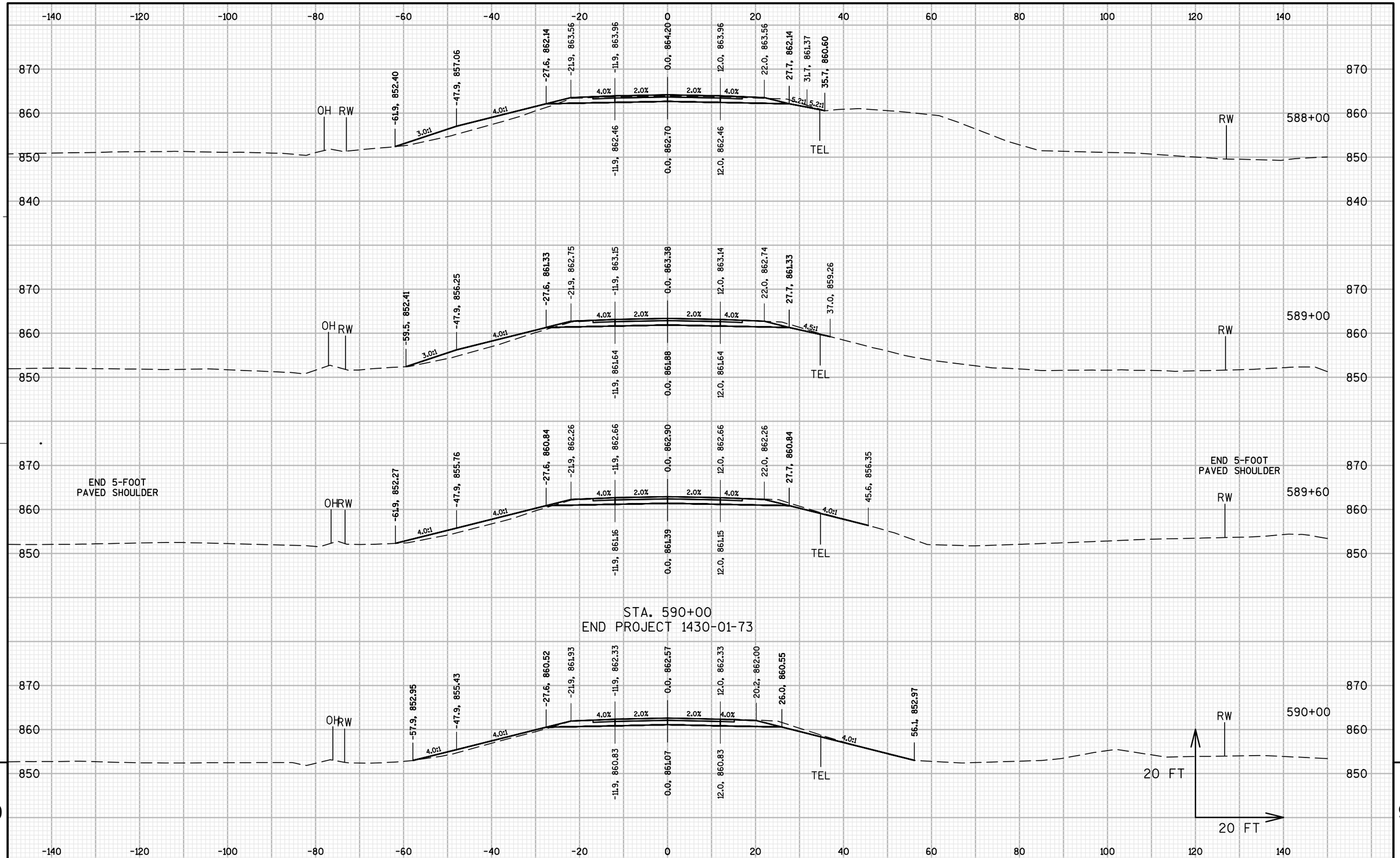
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 452	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_STH 82.DWG PLOT DATE : 4/26/2017 12:36 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1:20_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 453	E

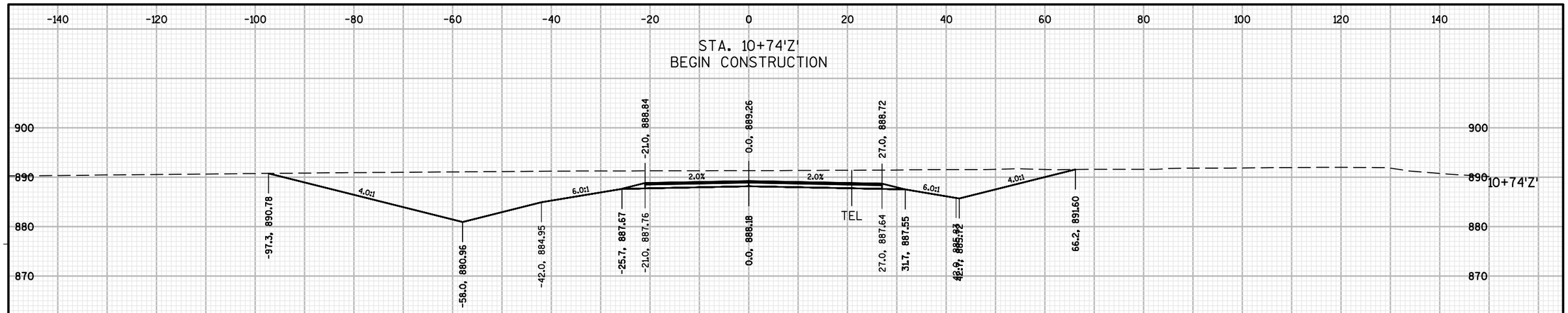


PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: STH 82	SHEET 454	E

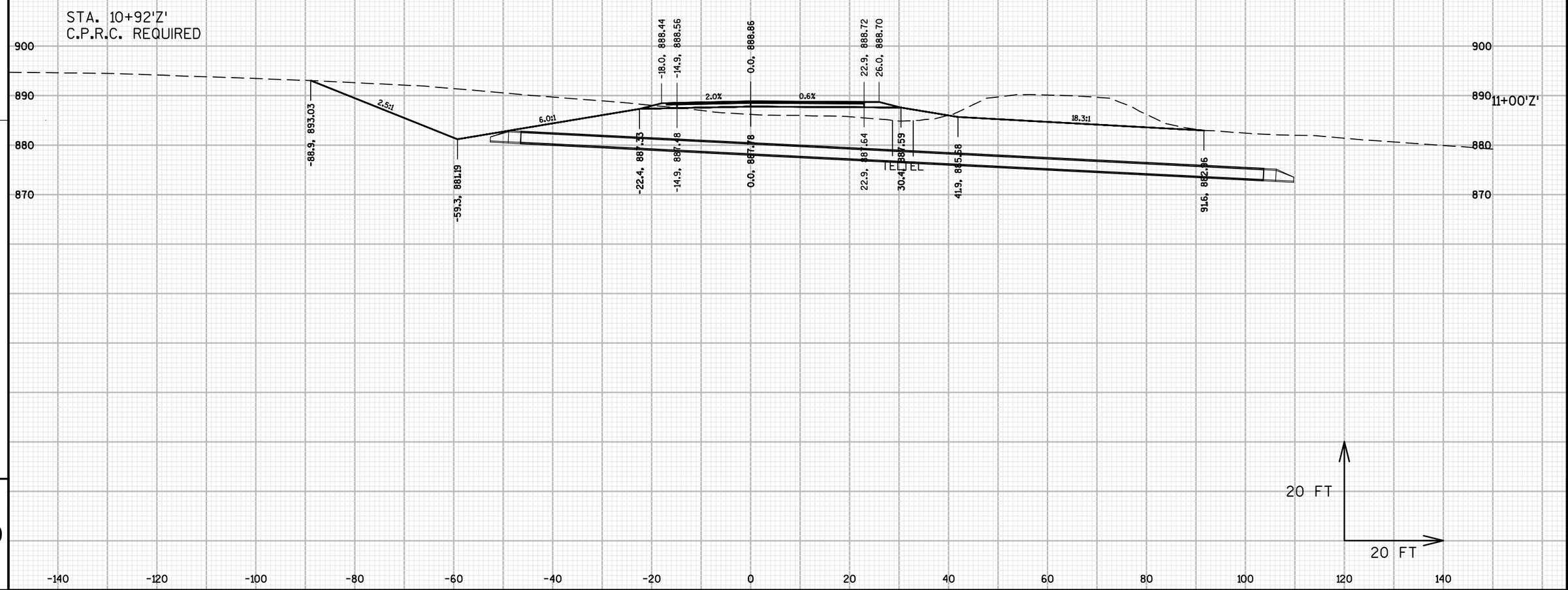
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WISDOT/CADDS SHEET 49

STA. 10+74'Z'
BEGIN CONSTRUCTION



STA. 10+92'Z'
C.P.R.C. REQUIRED

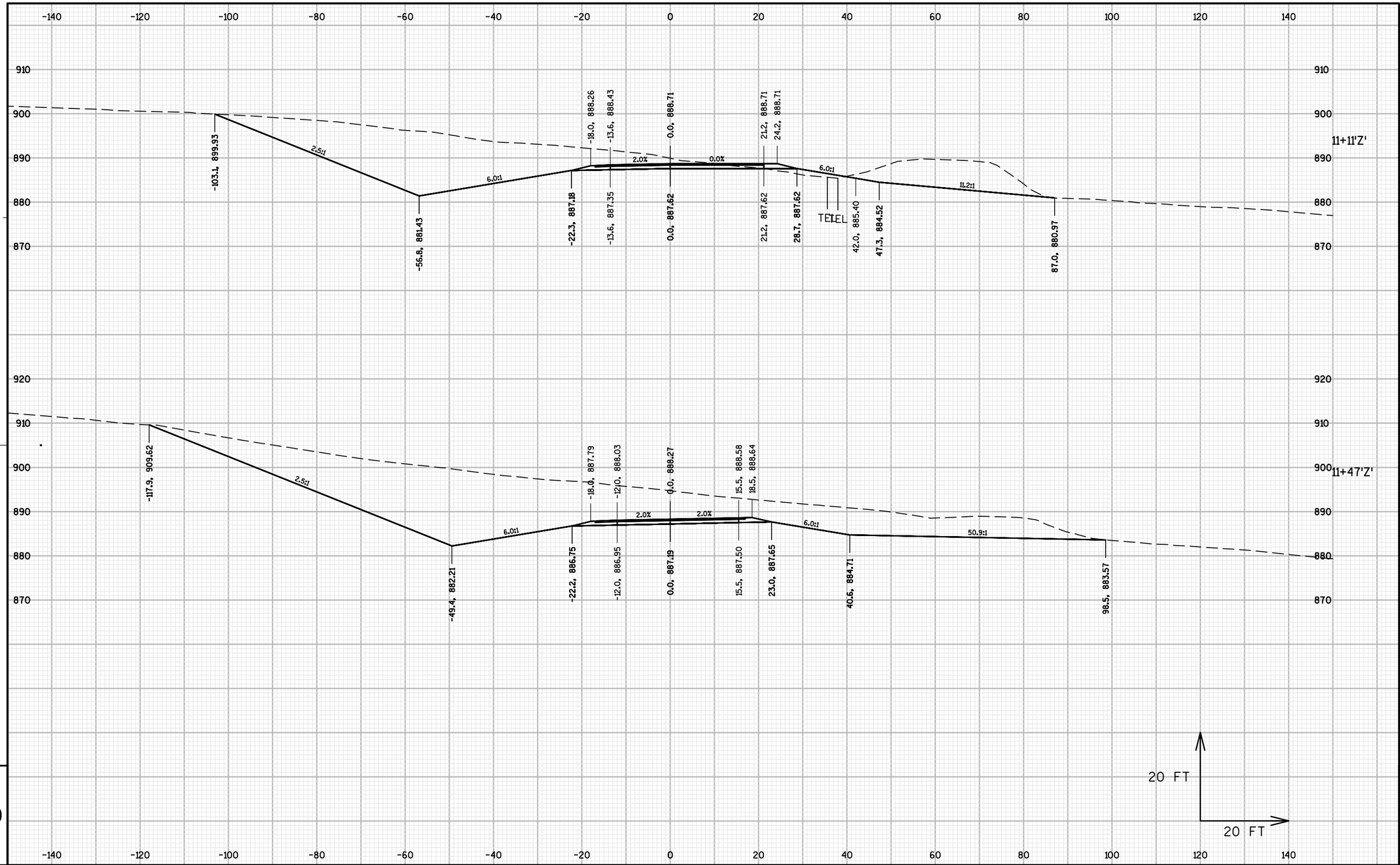


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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET 455	E

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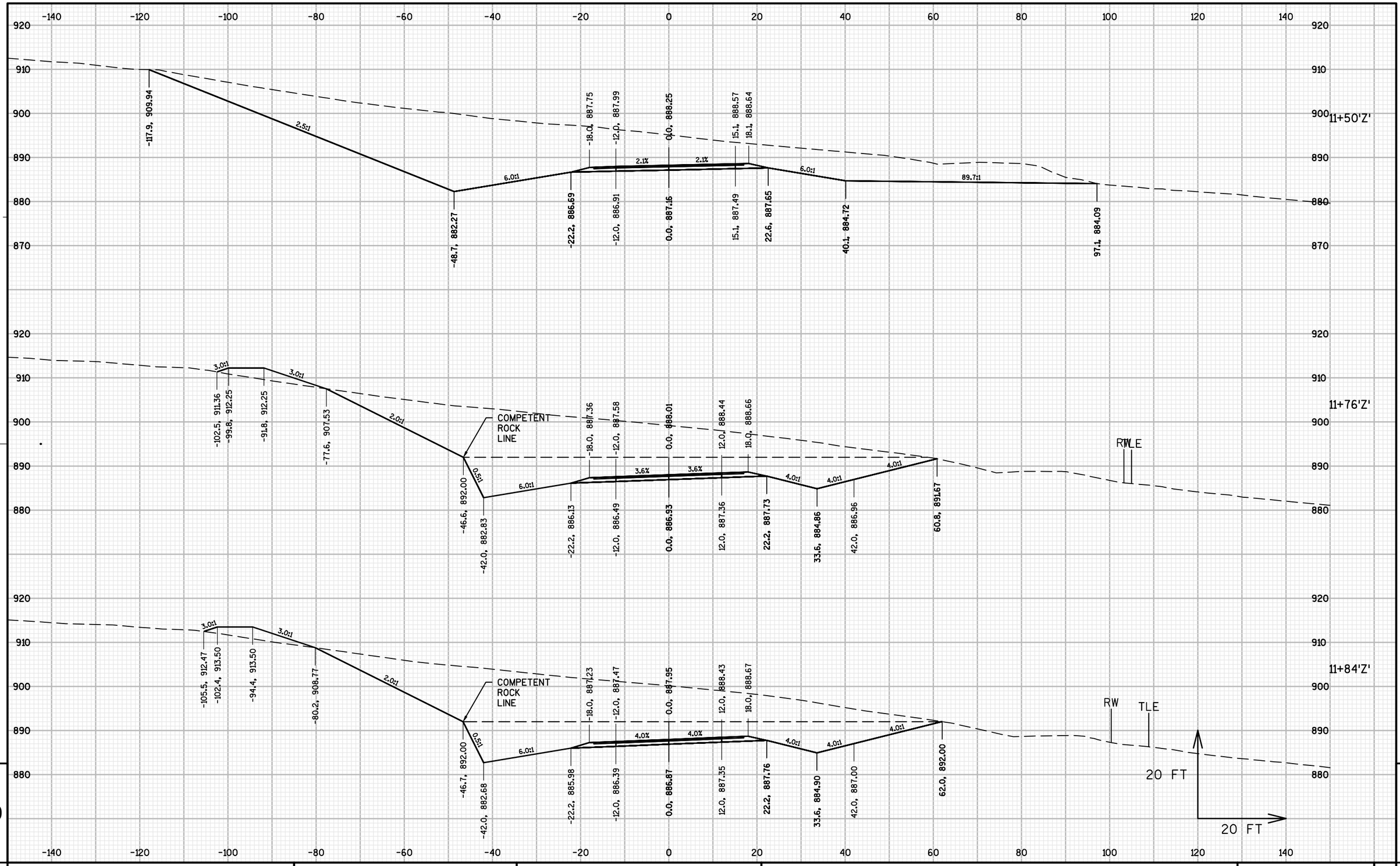
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

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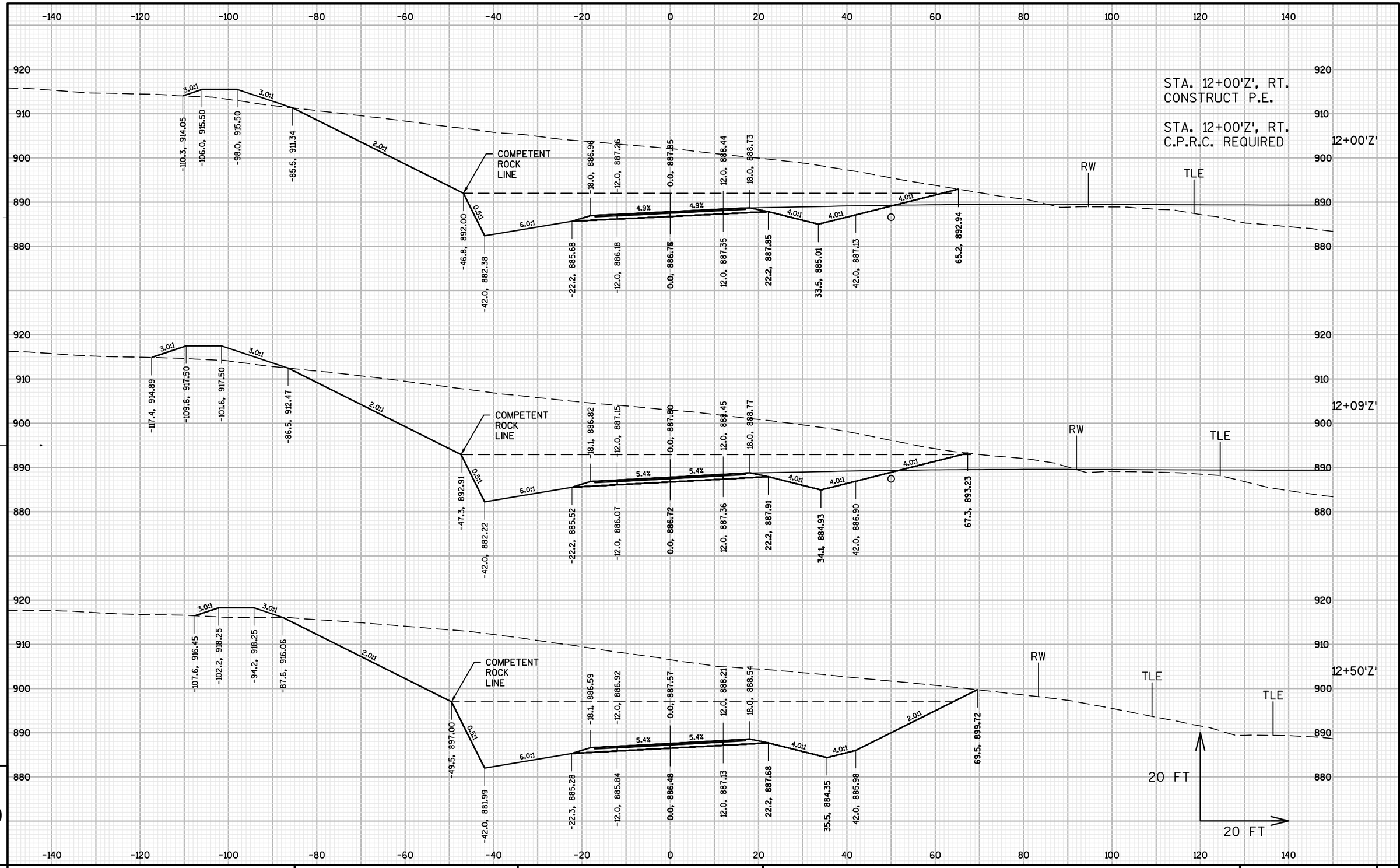
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

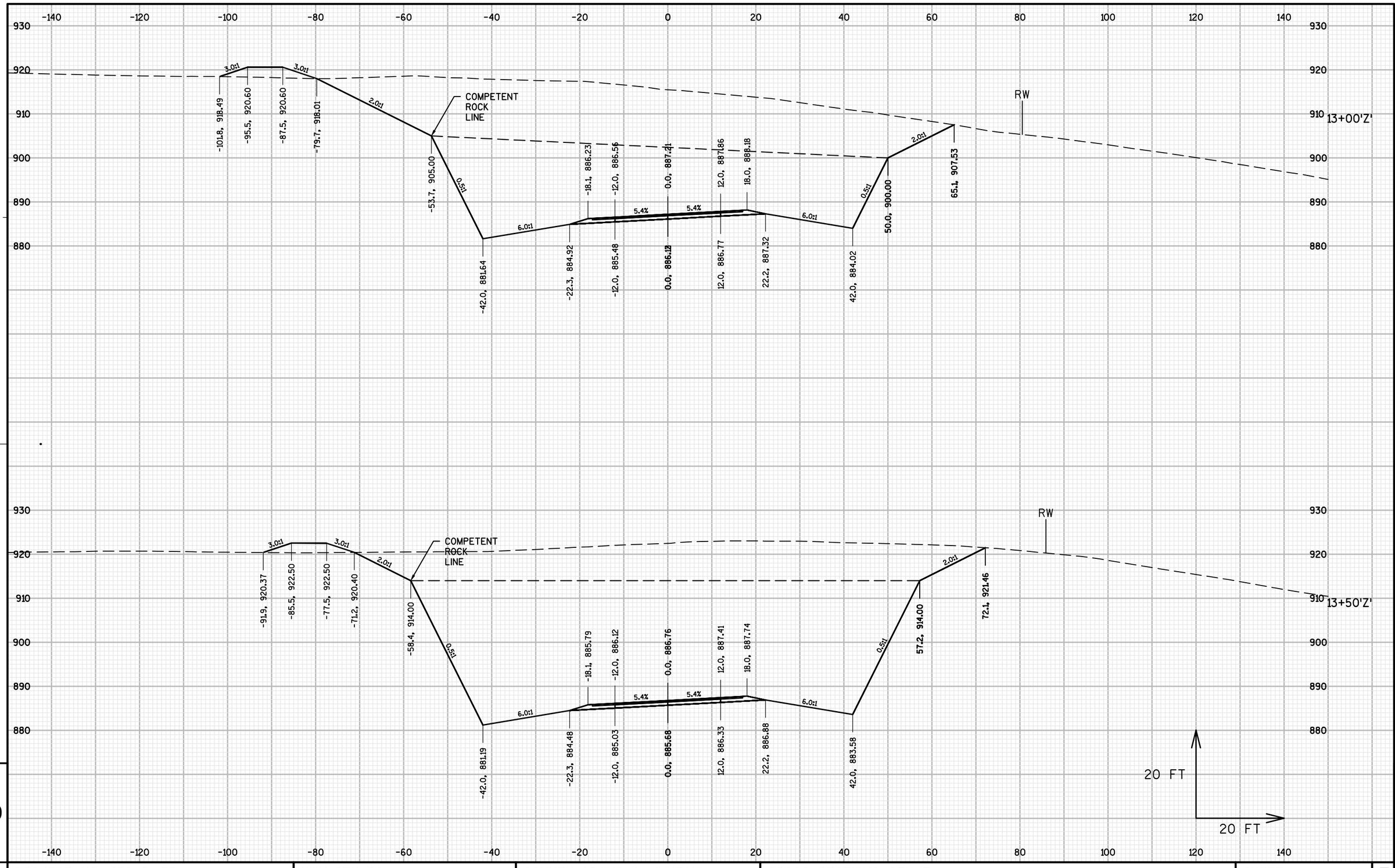
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WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET E

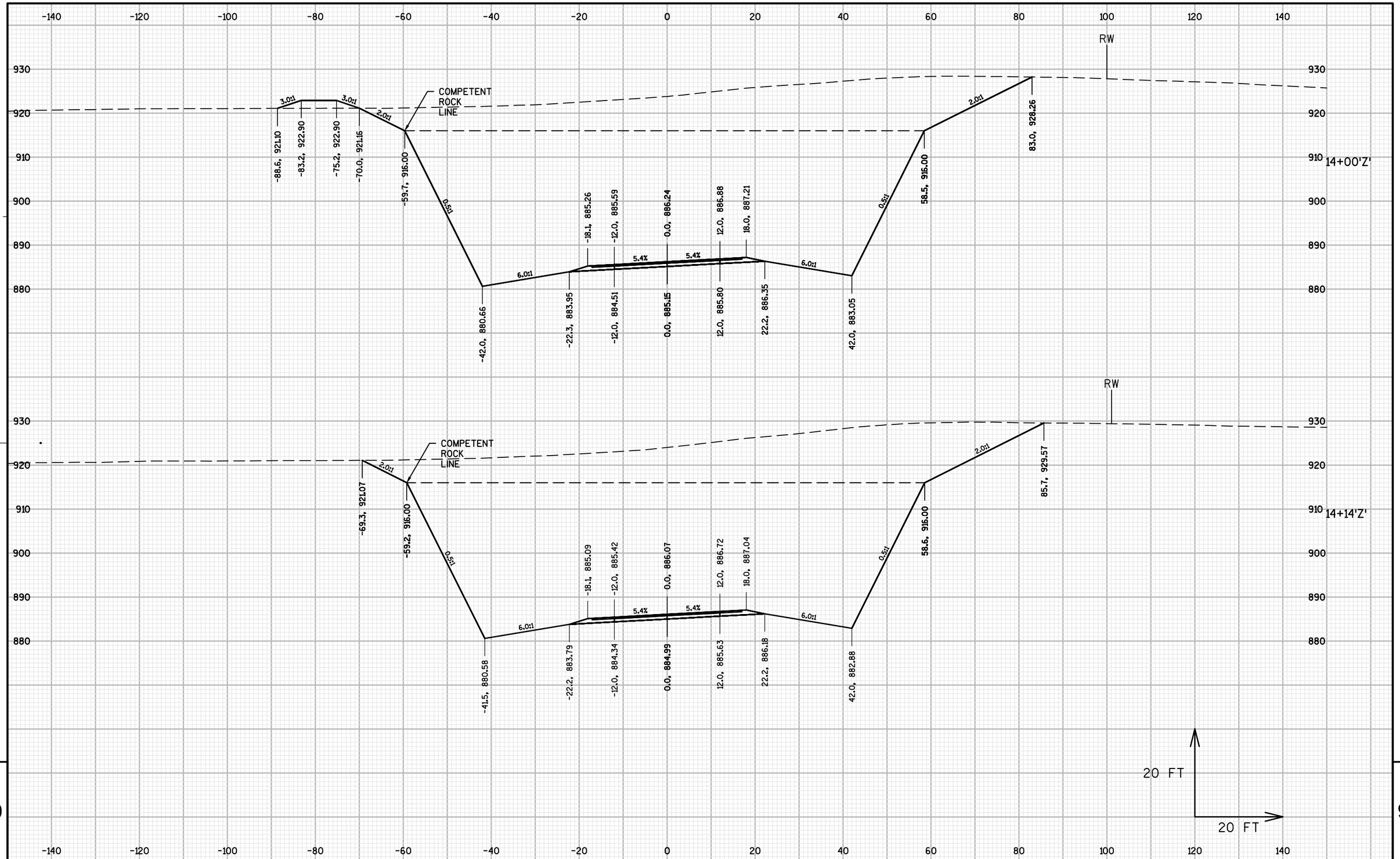
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

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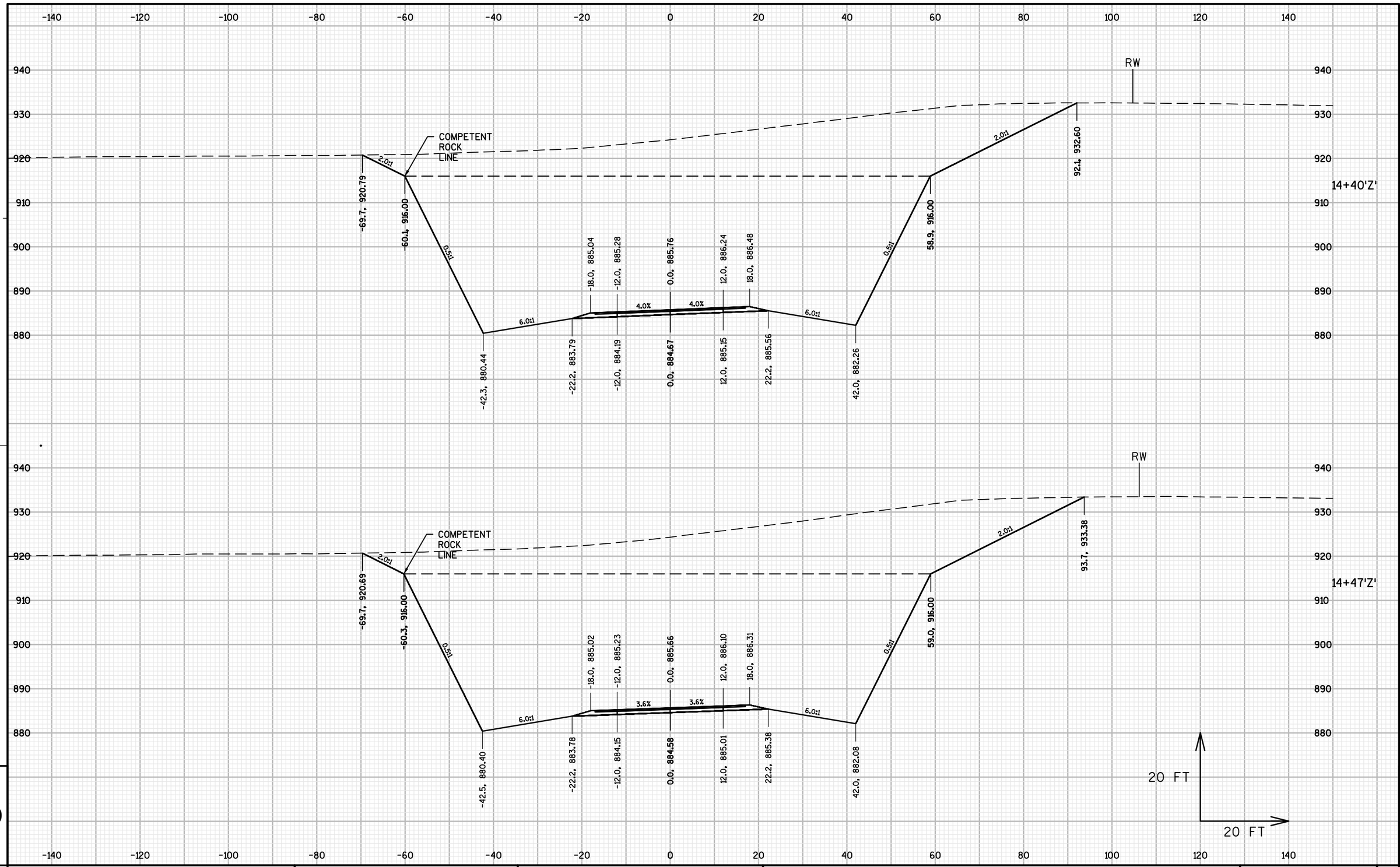
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

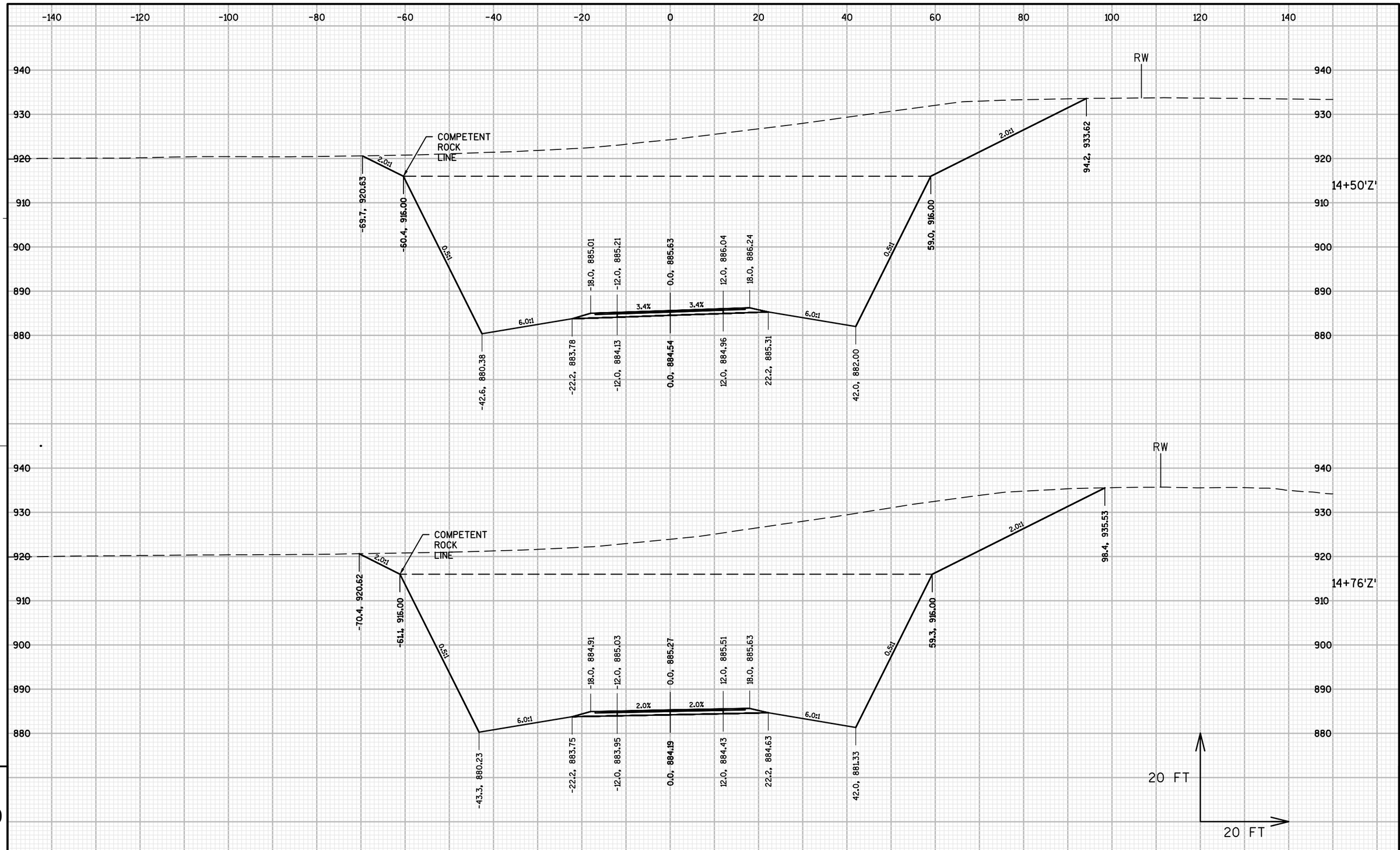
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WISDOT/CADDS SHEET 49



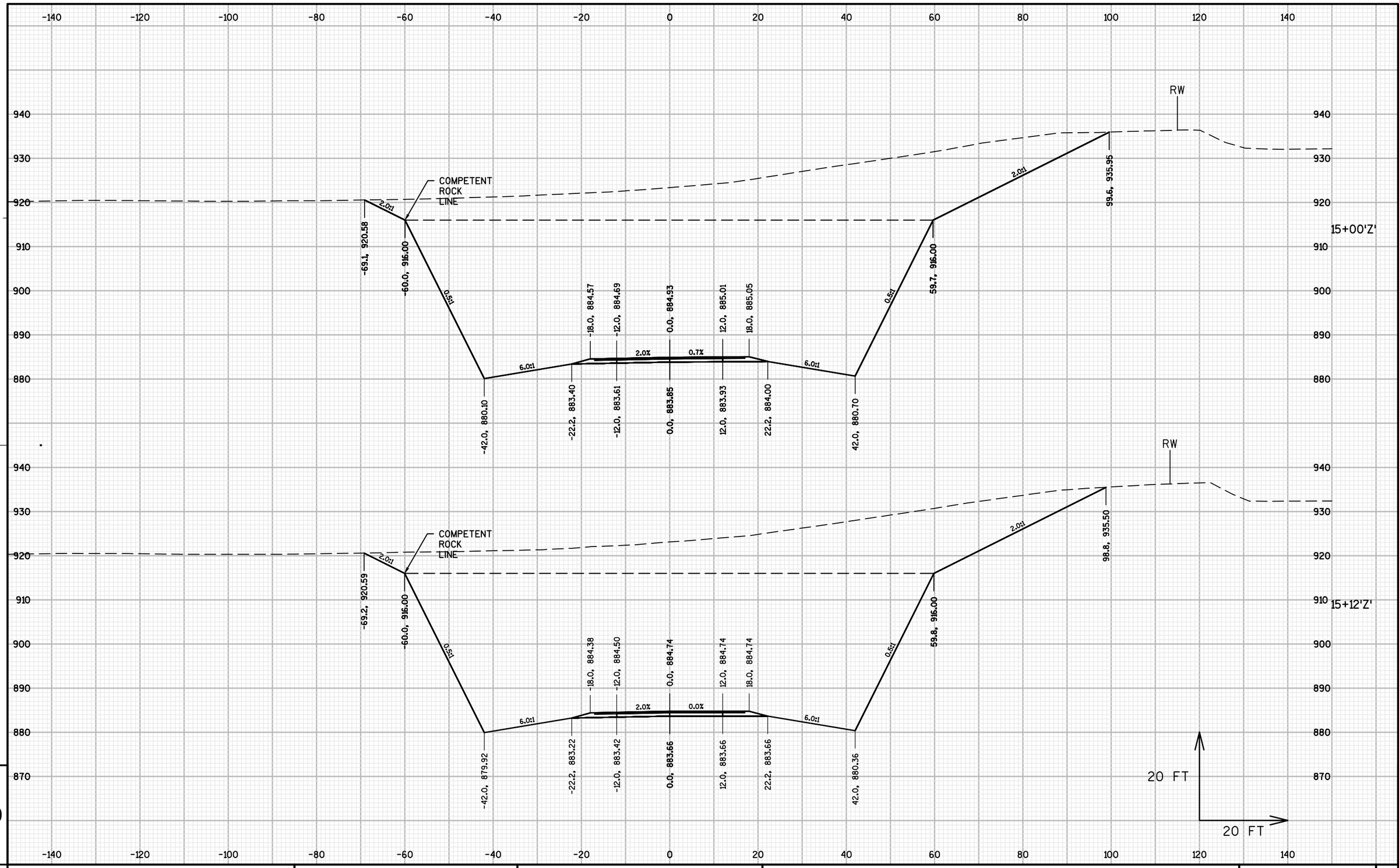
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET E

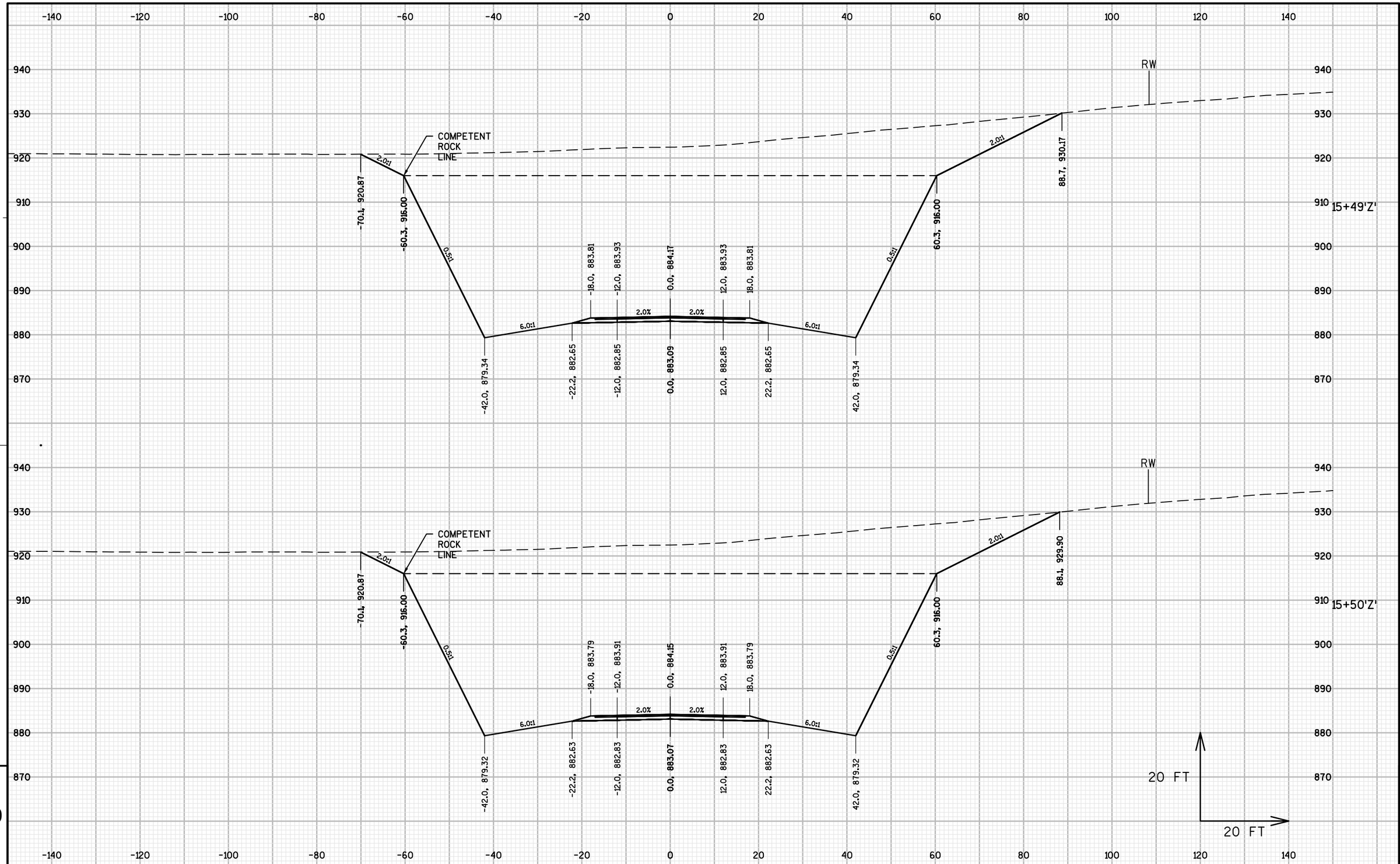
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

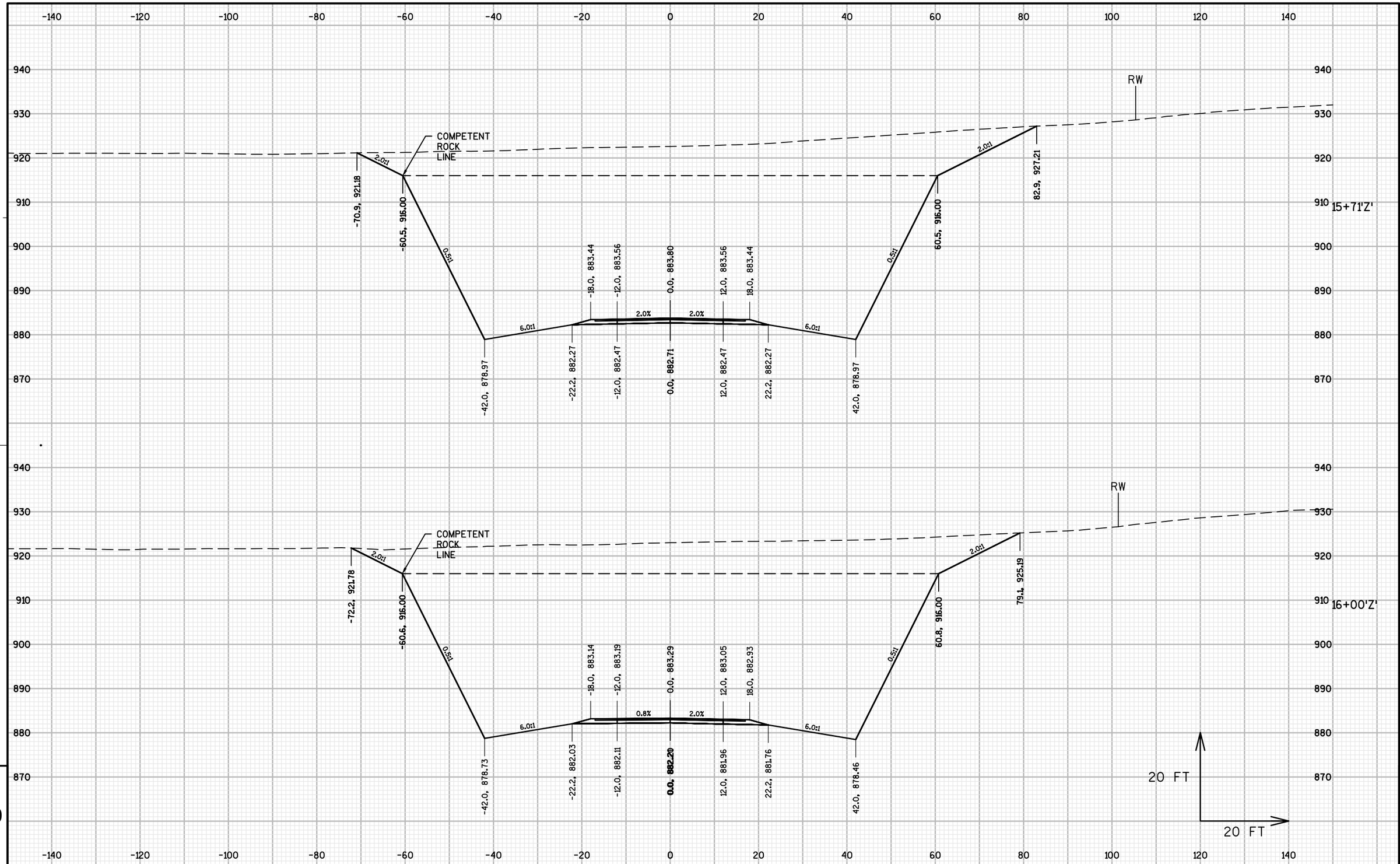
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WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

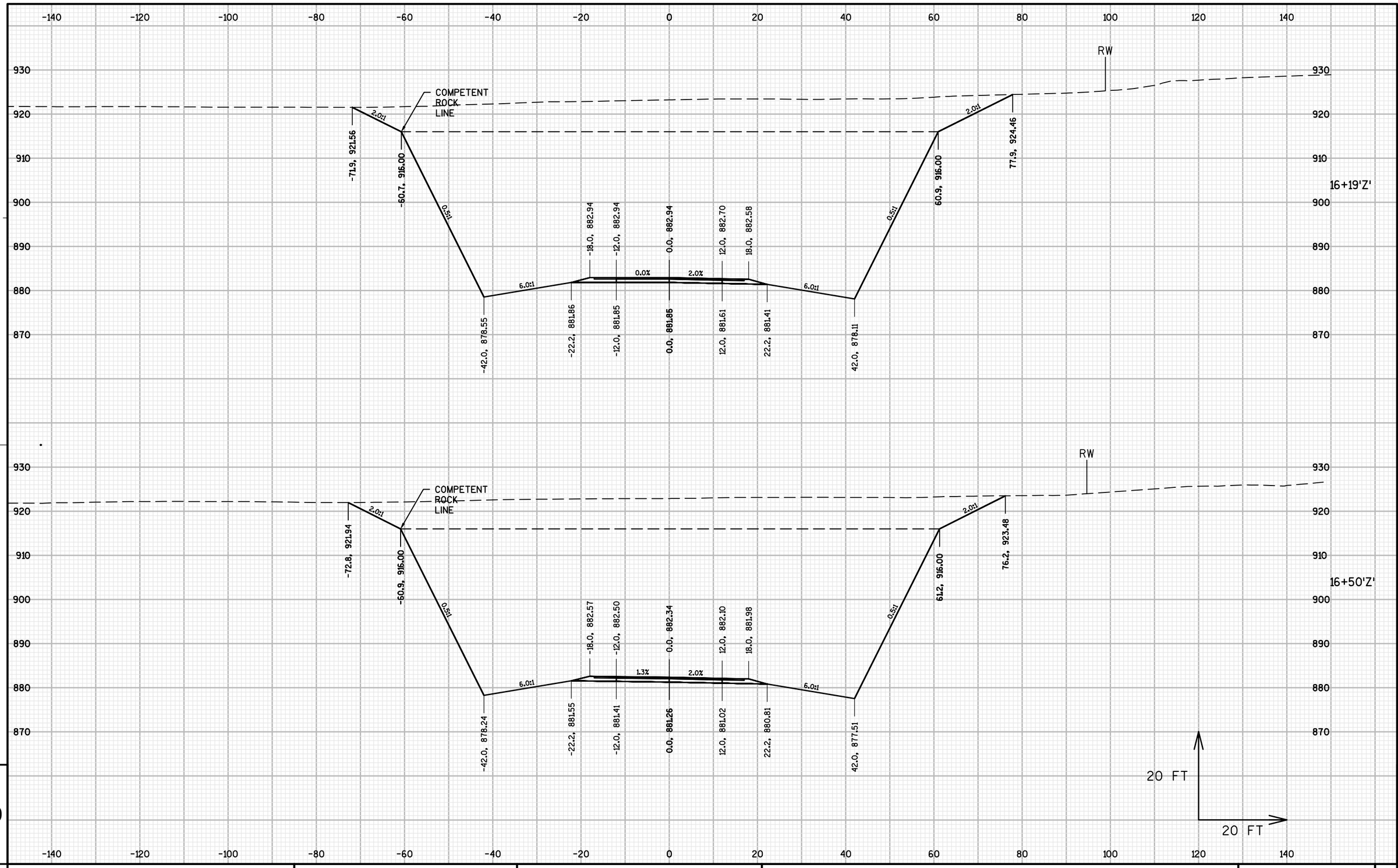
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

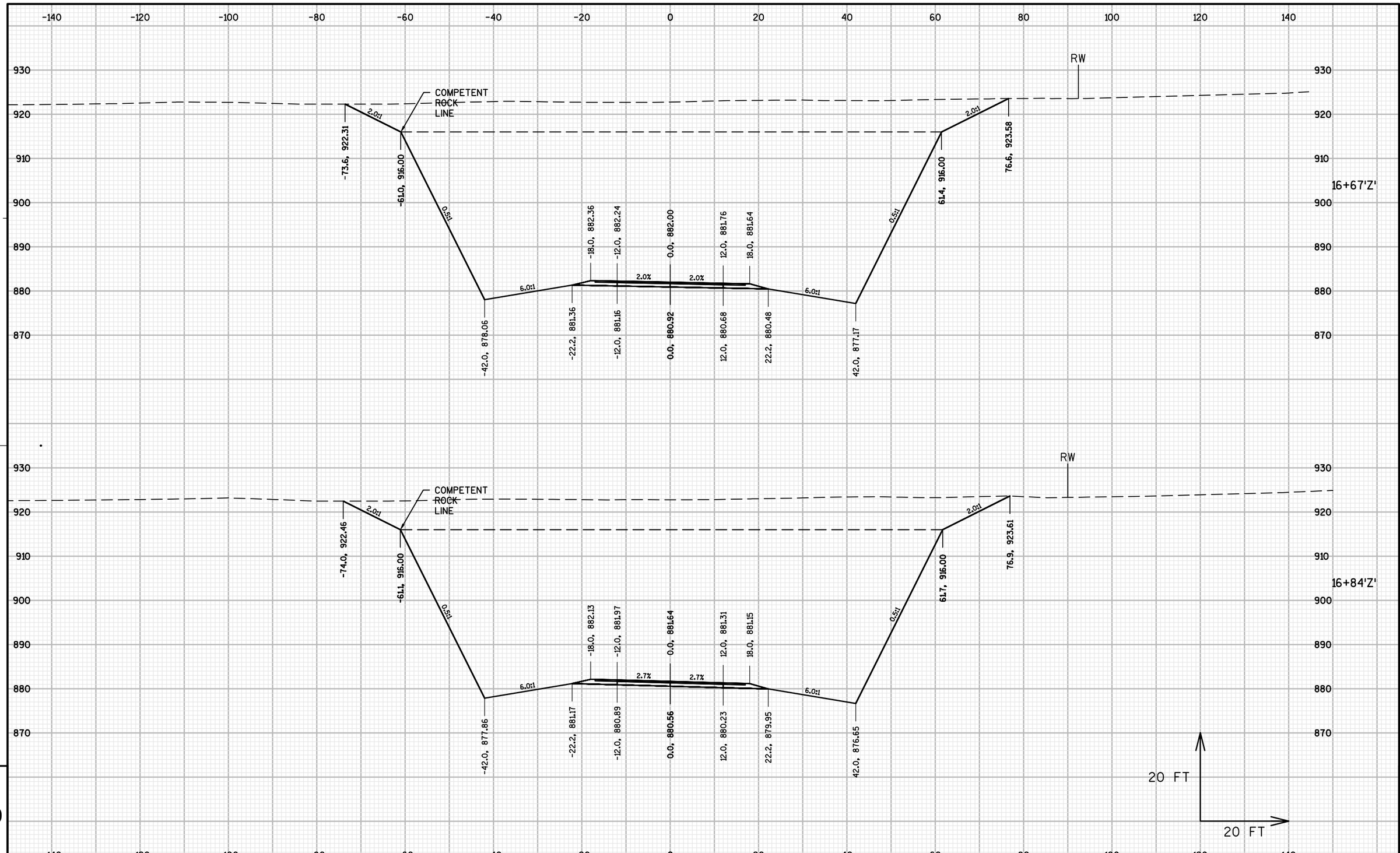
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WISDOT/CADDS SHEET 49



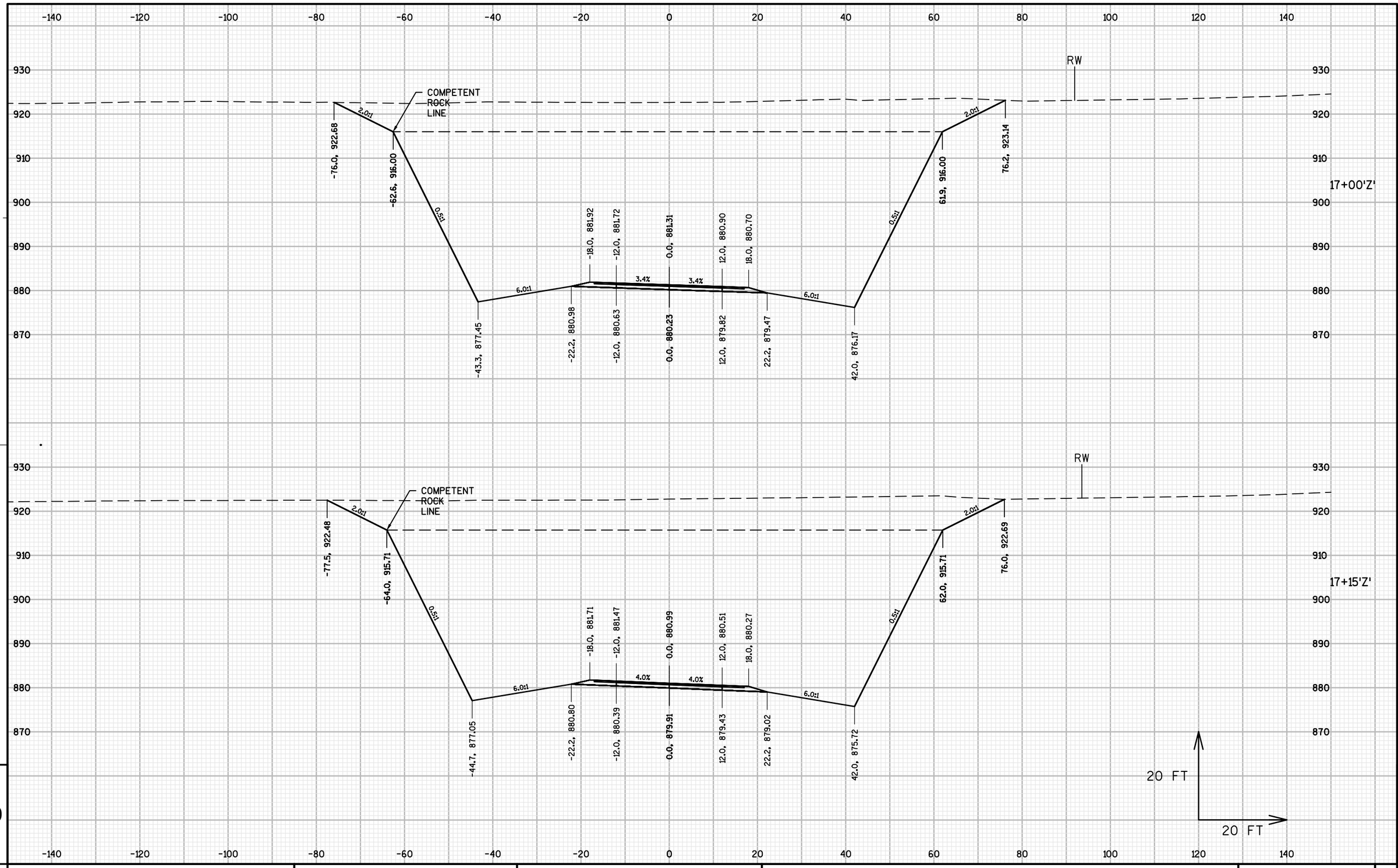
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

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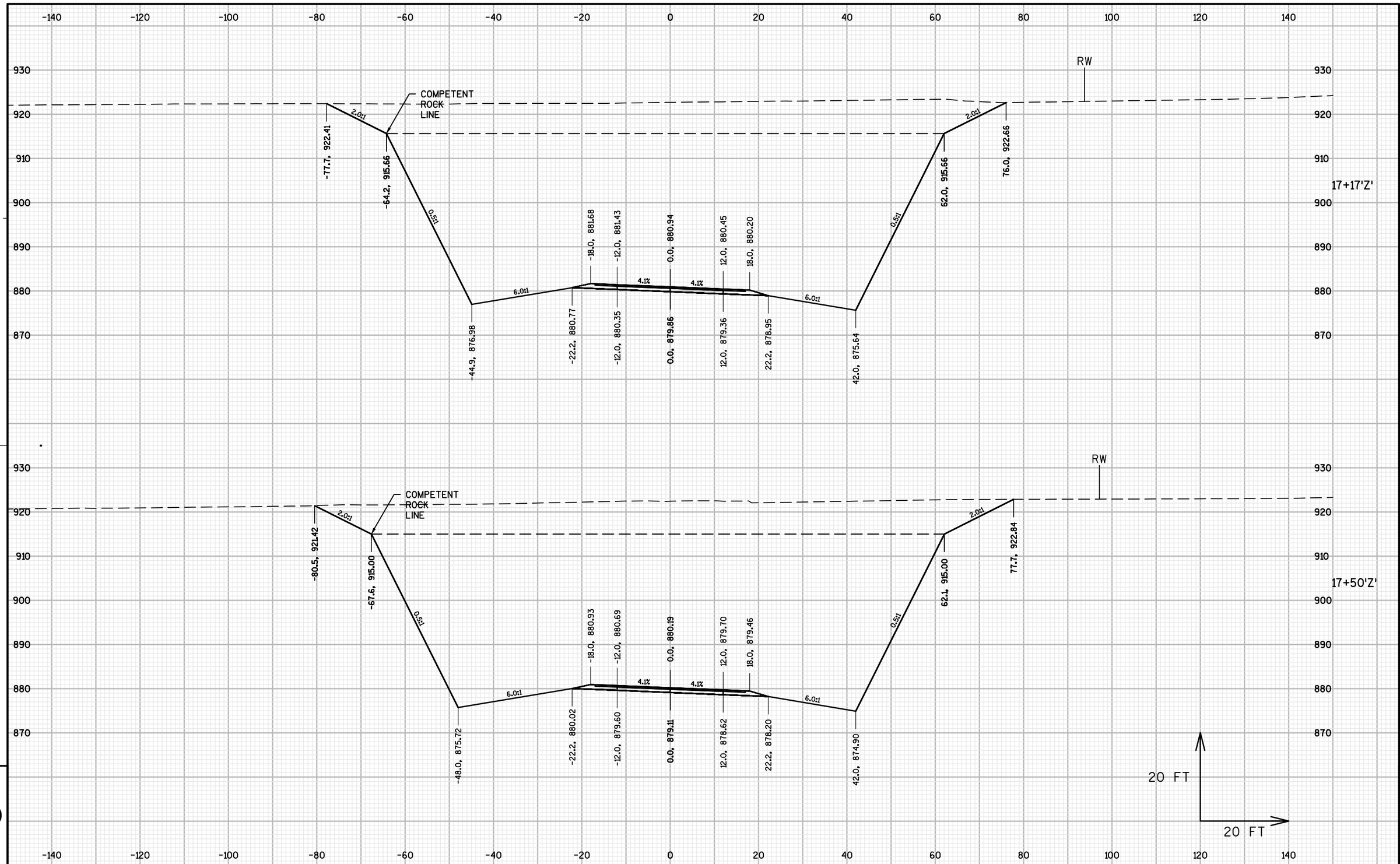


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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

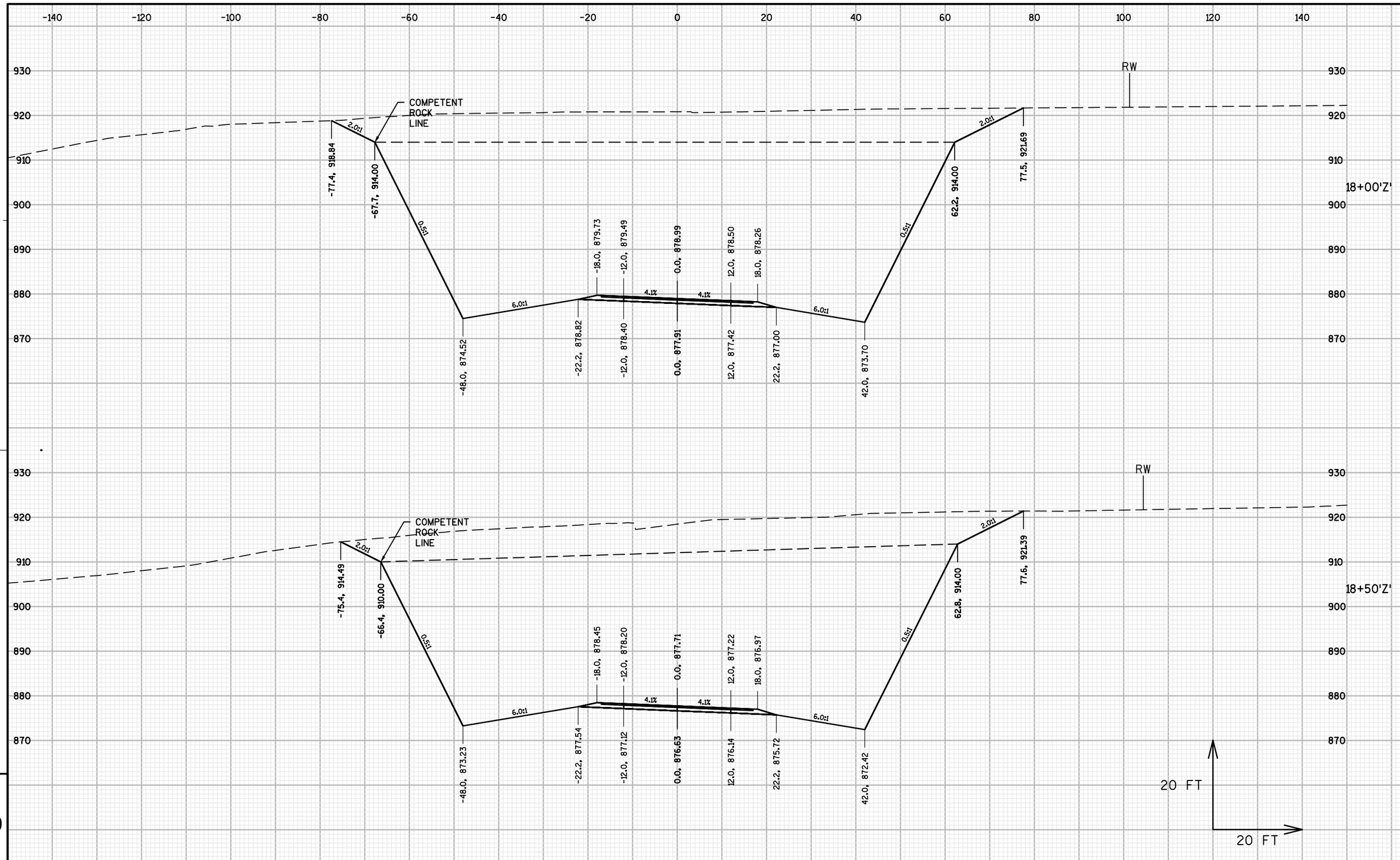
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WISDOT/CADDS SHEET 49



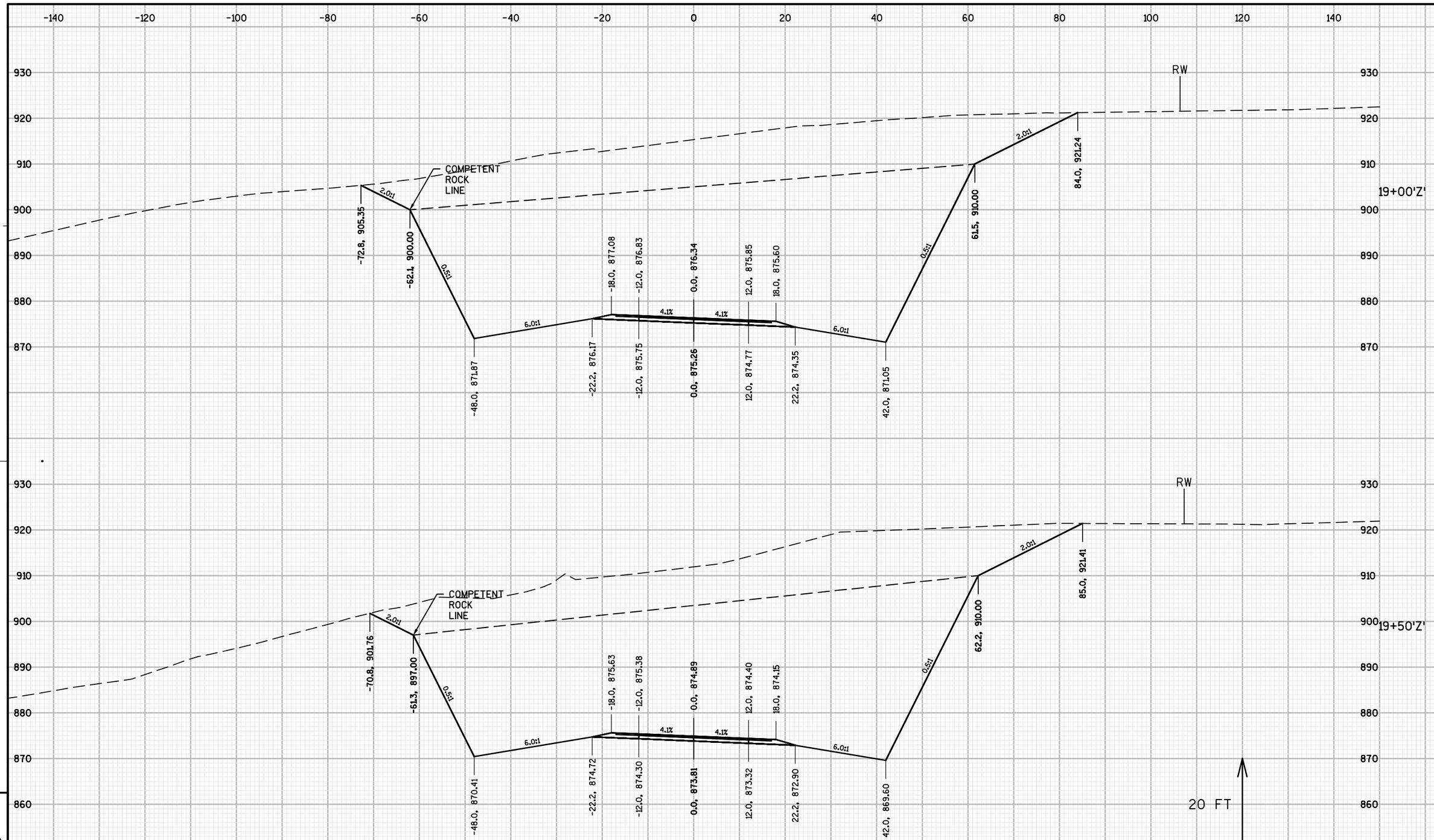
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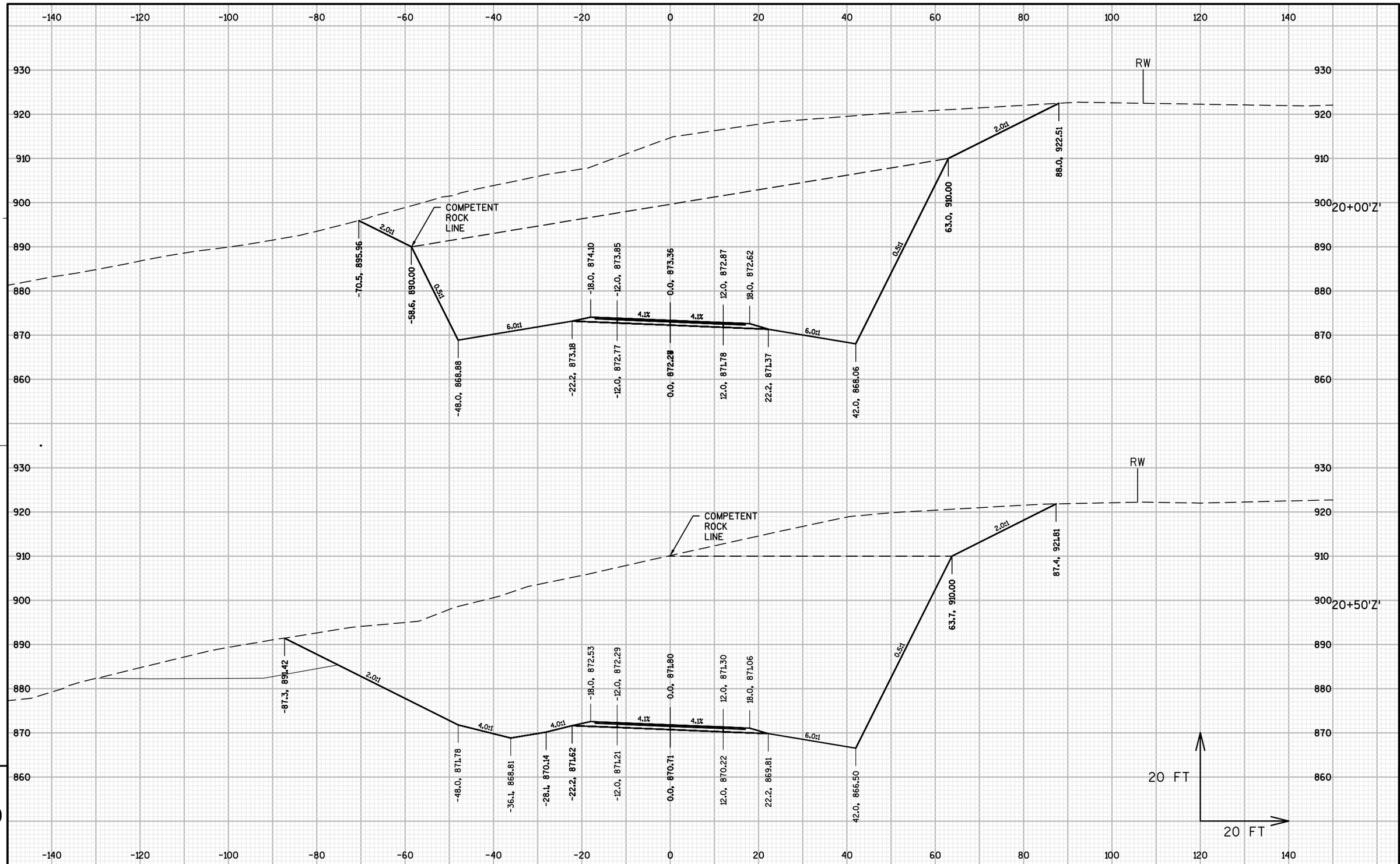
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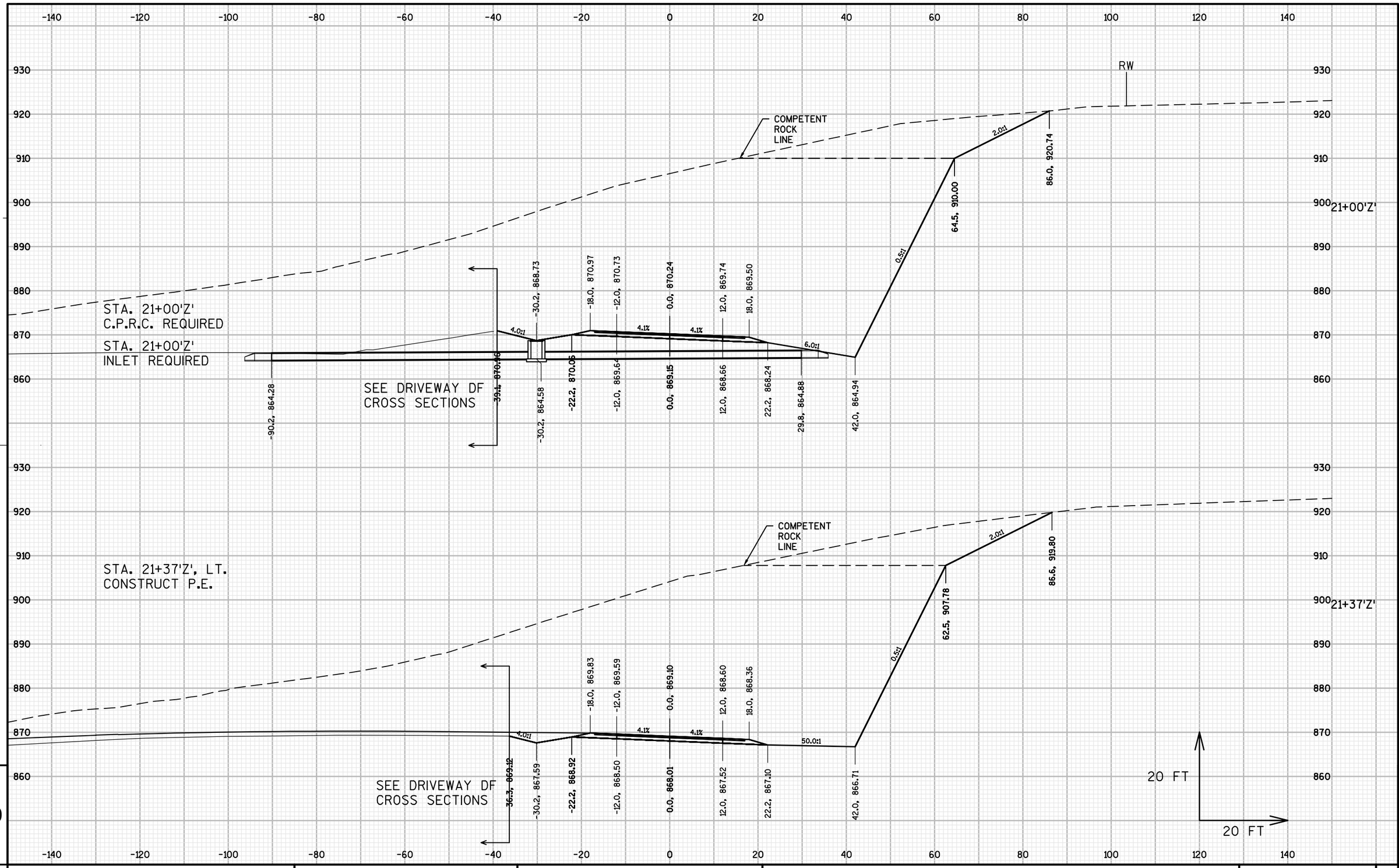
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET E

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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

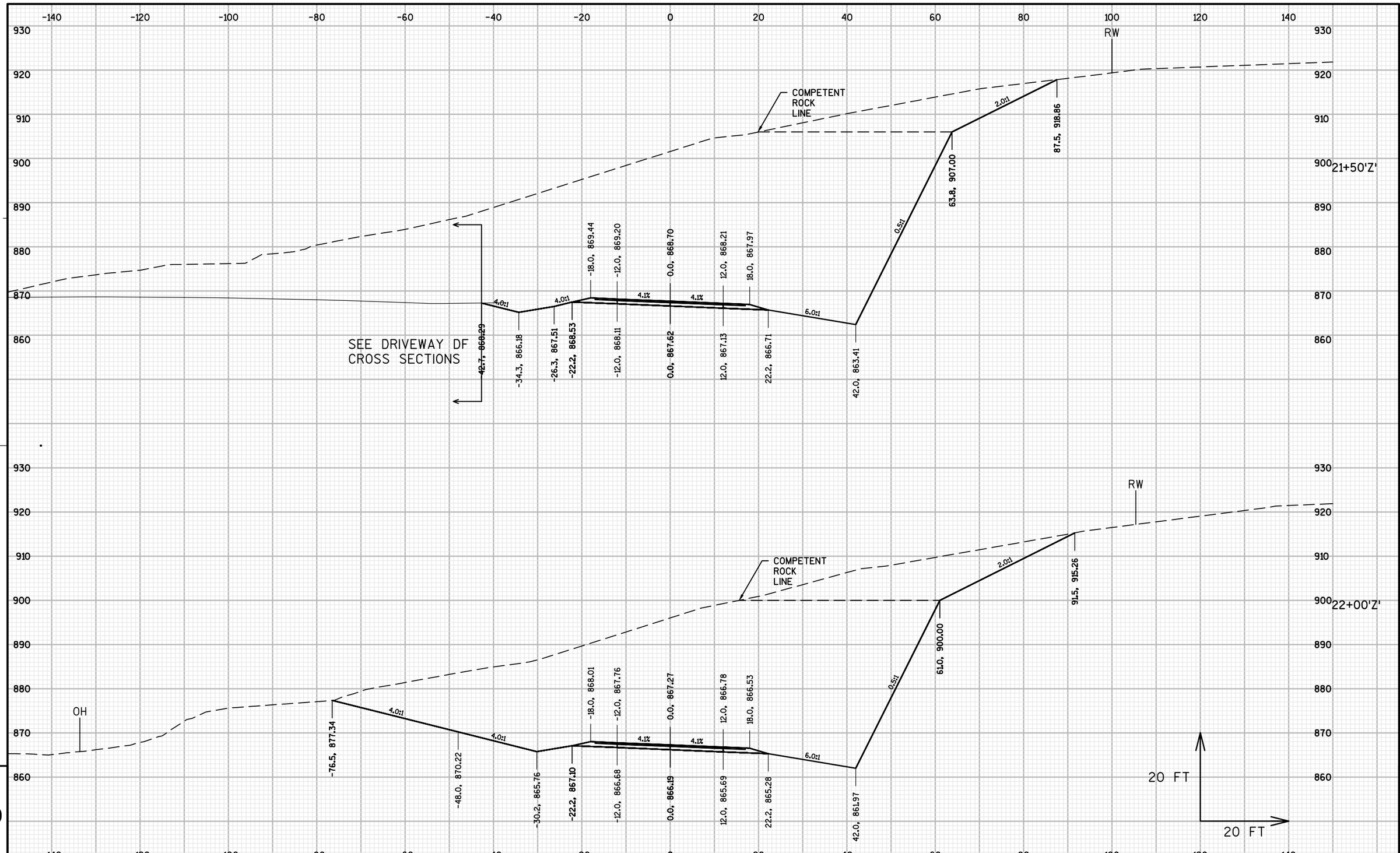
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET E

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WISDOT/CADDS SHEET 49

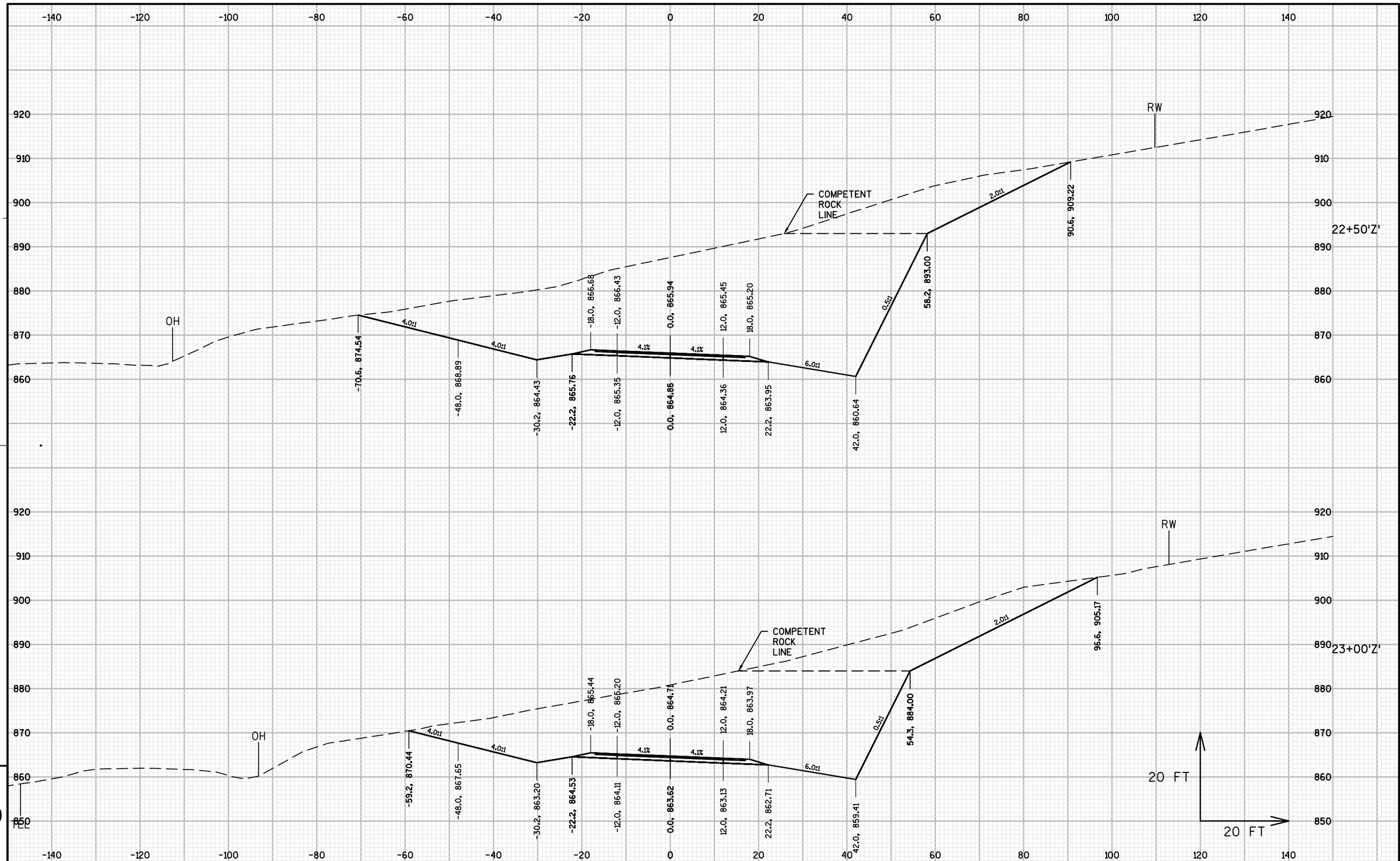


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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET E

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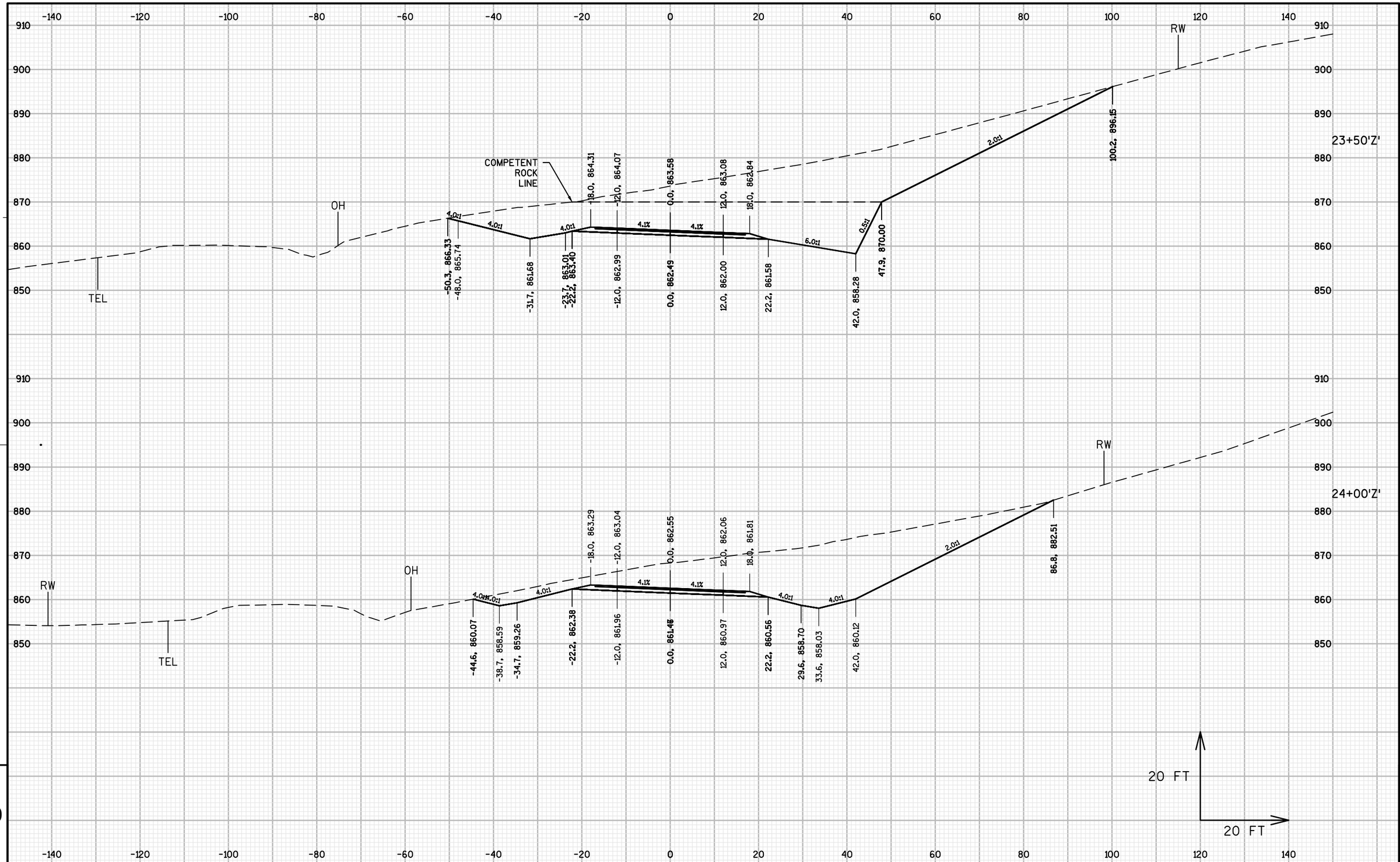
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

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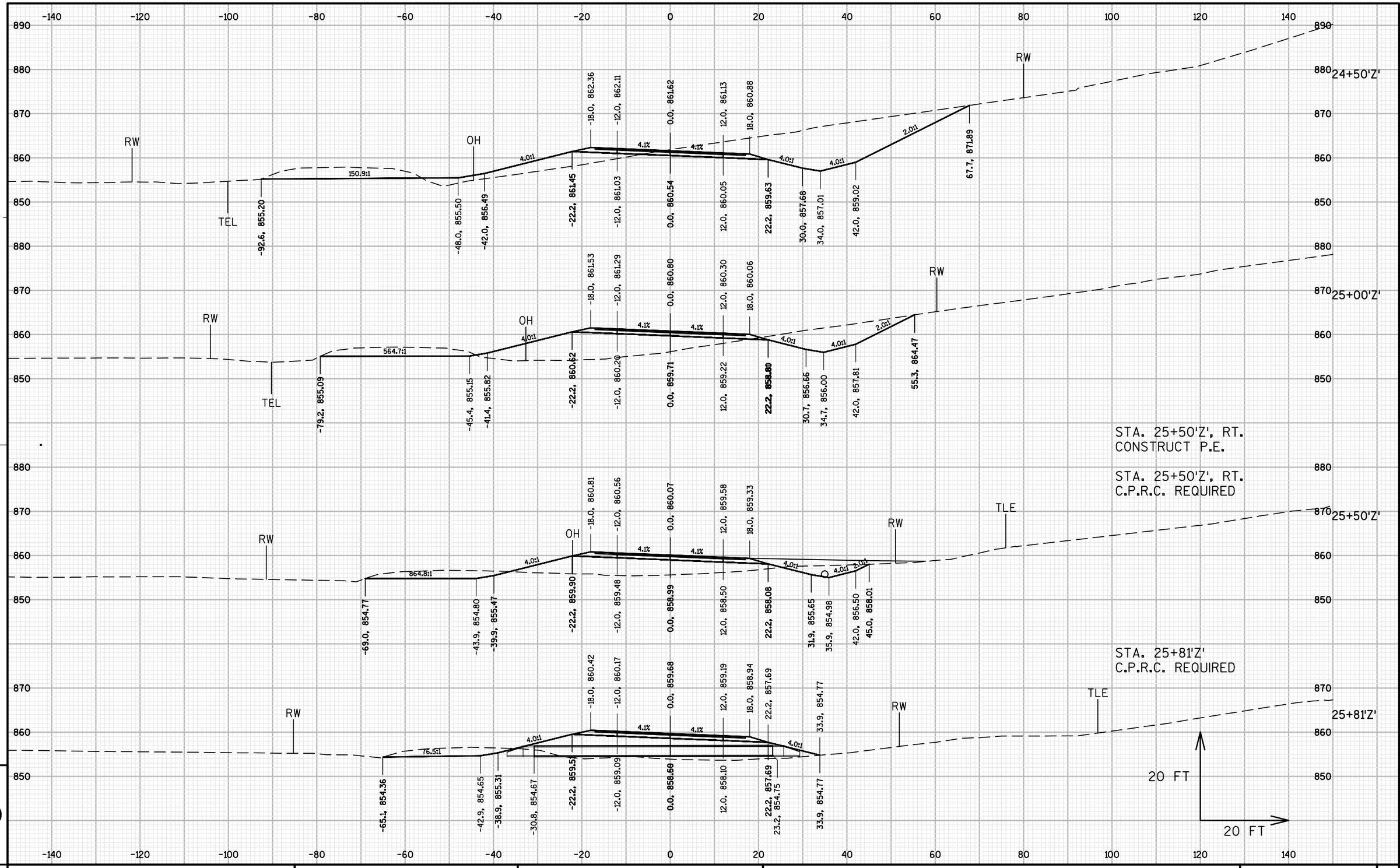
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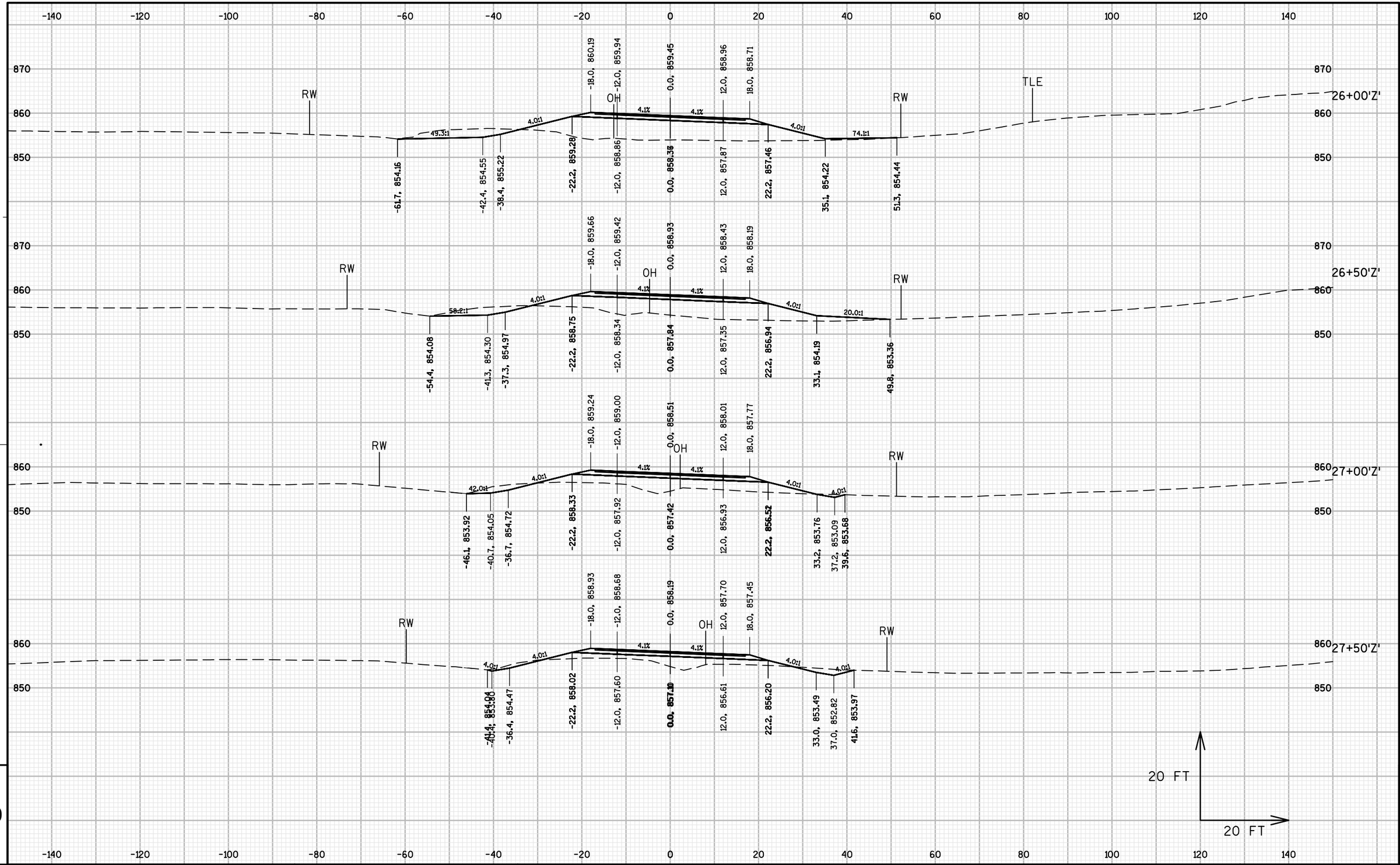
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WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET 477	E



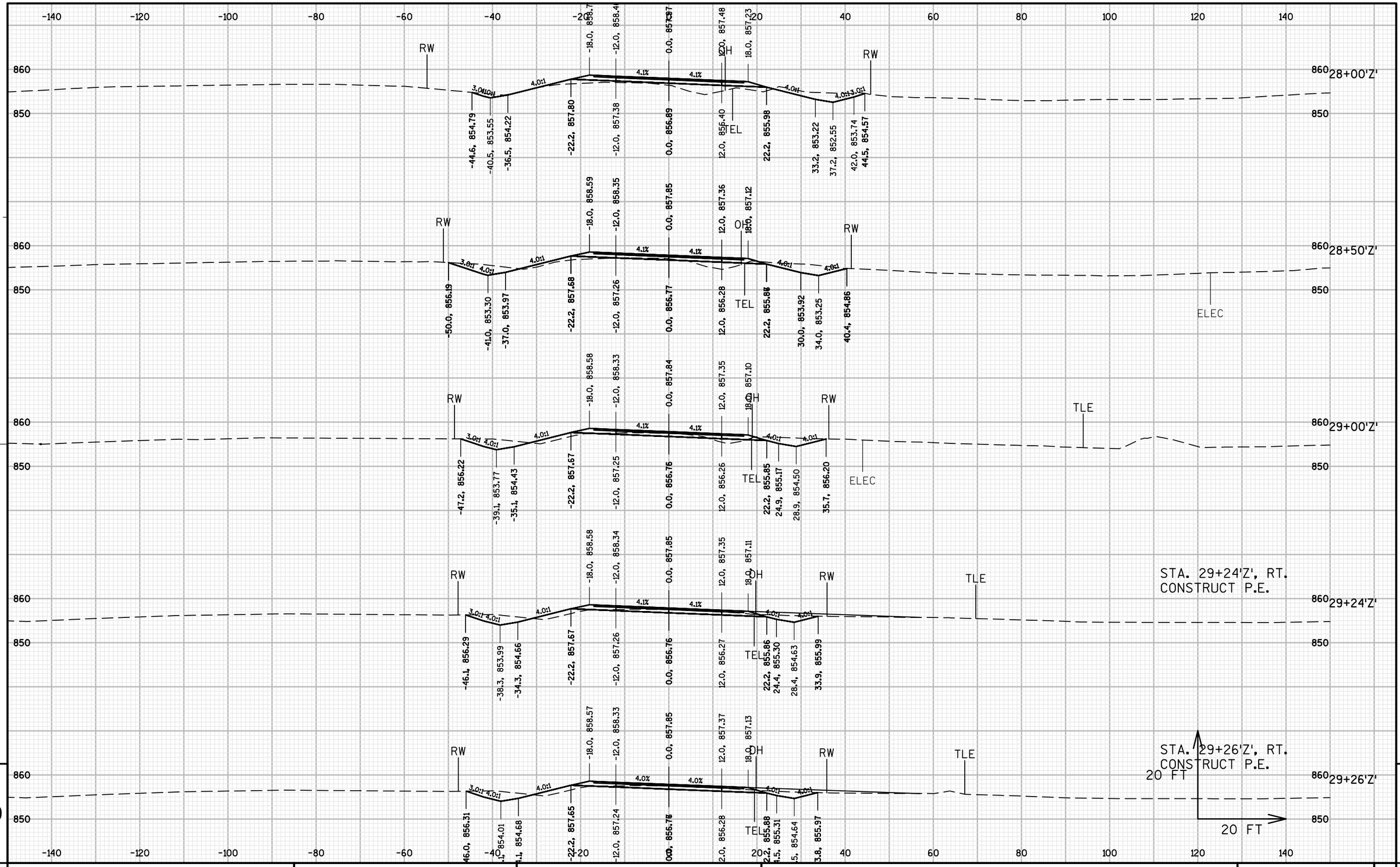
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET 478	E

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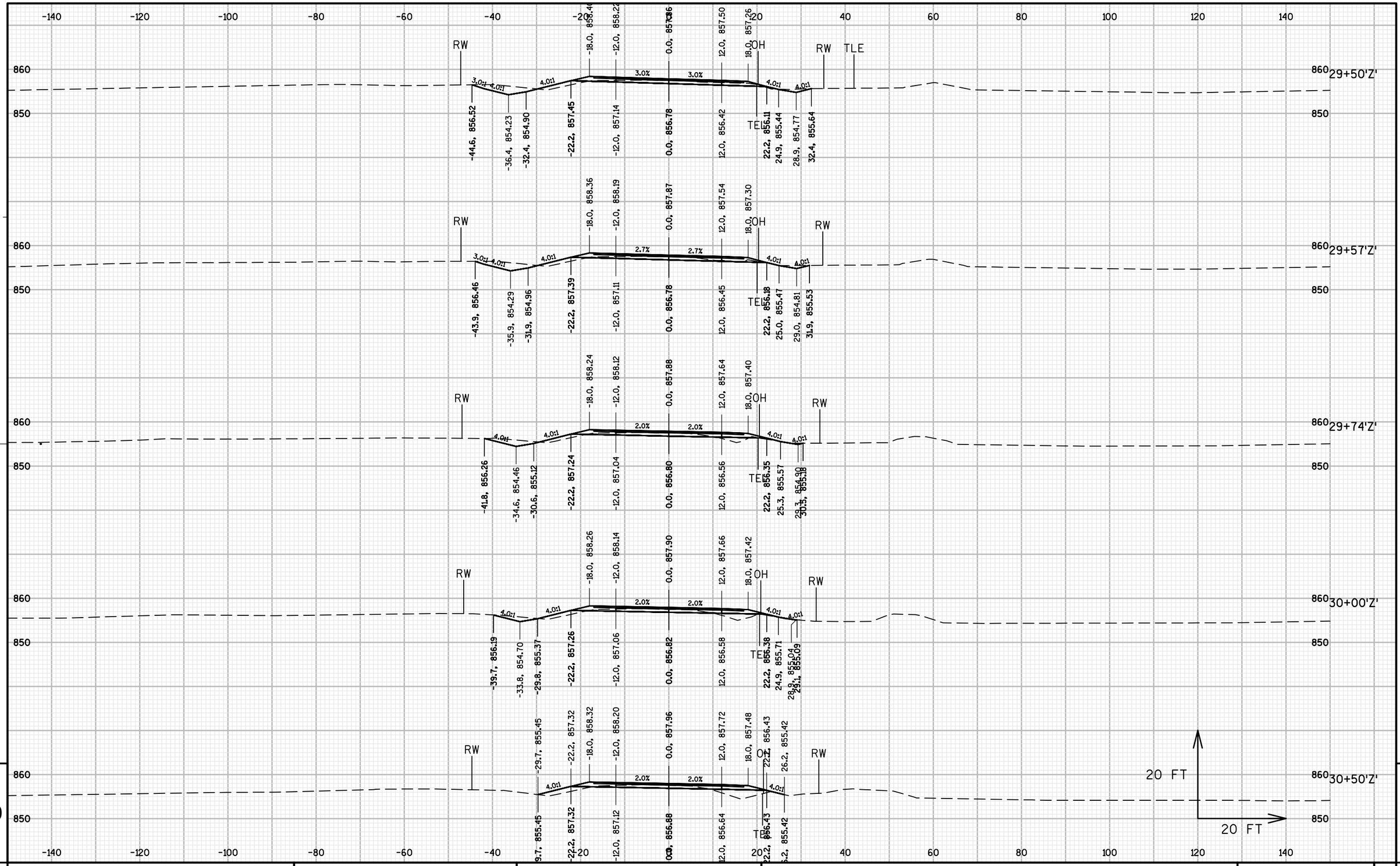
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_CTH Z.DWG PLOT DATE : 4/26/2017 12:00 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



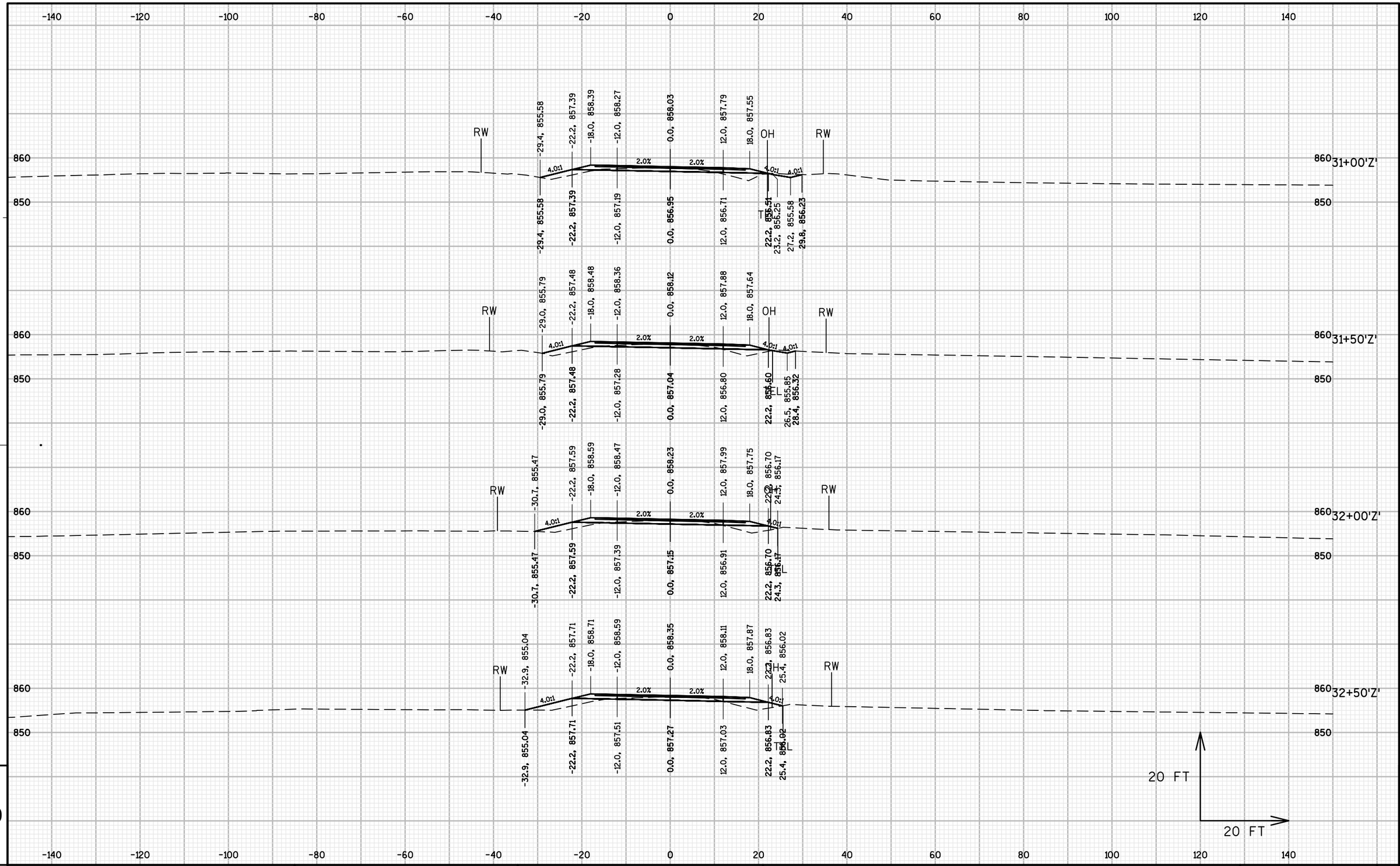
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

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WISDOT/CADDS SHEET 49



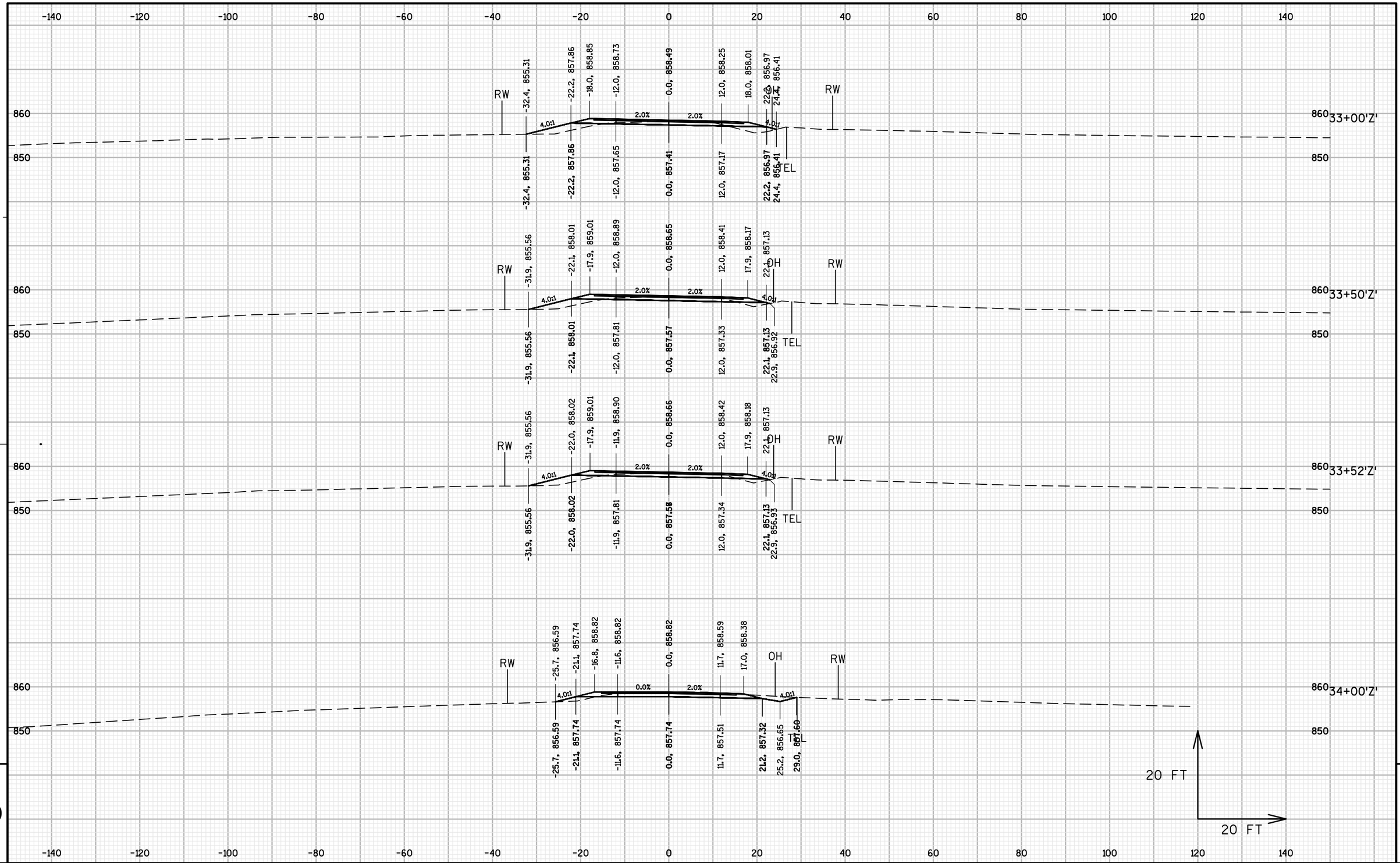
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

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WISDOT/CADDS SHEET 49



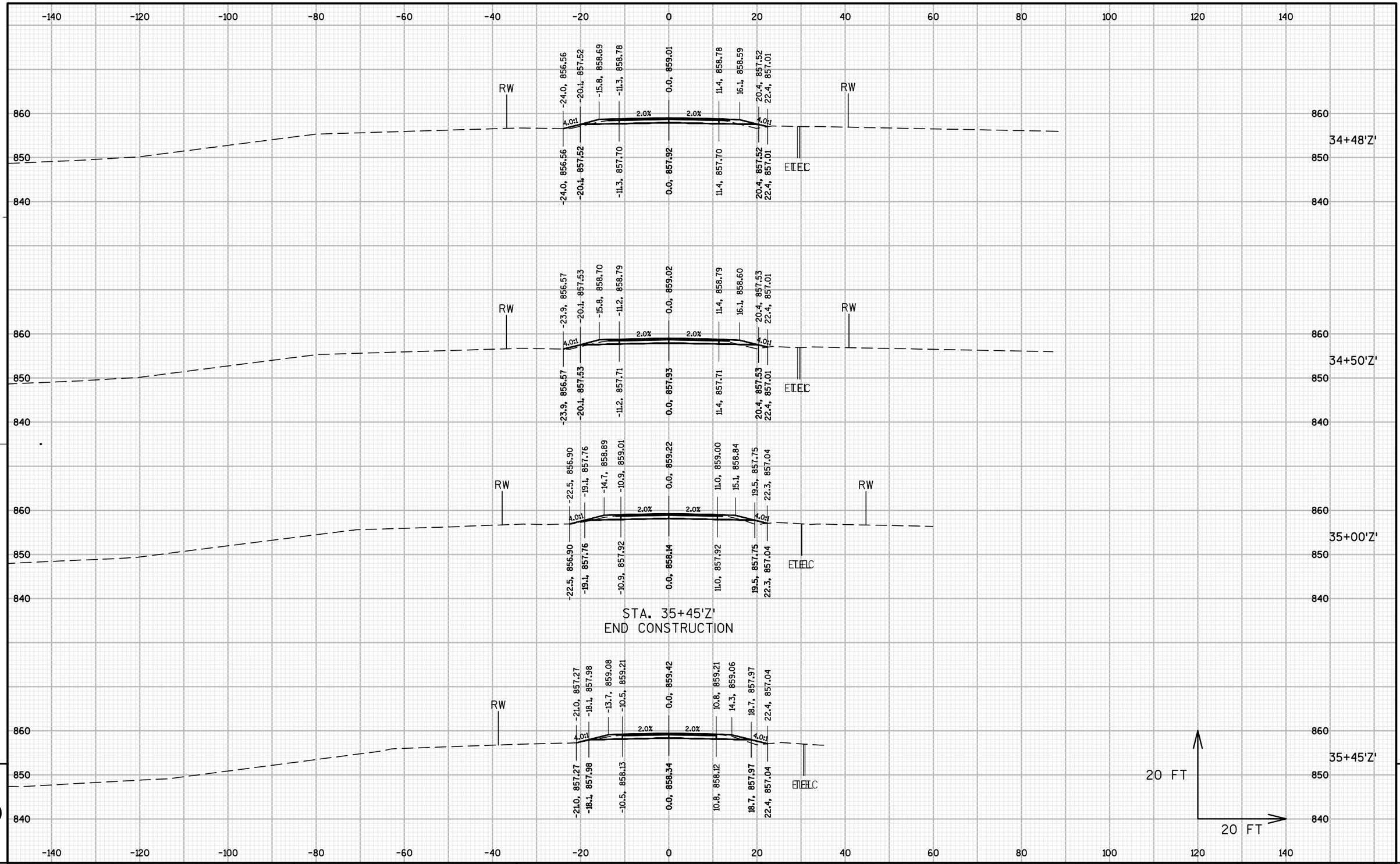
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH Z	SHEET	E

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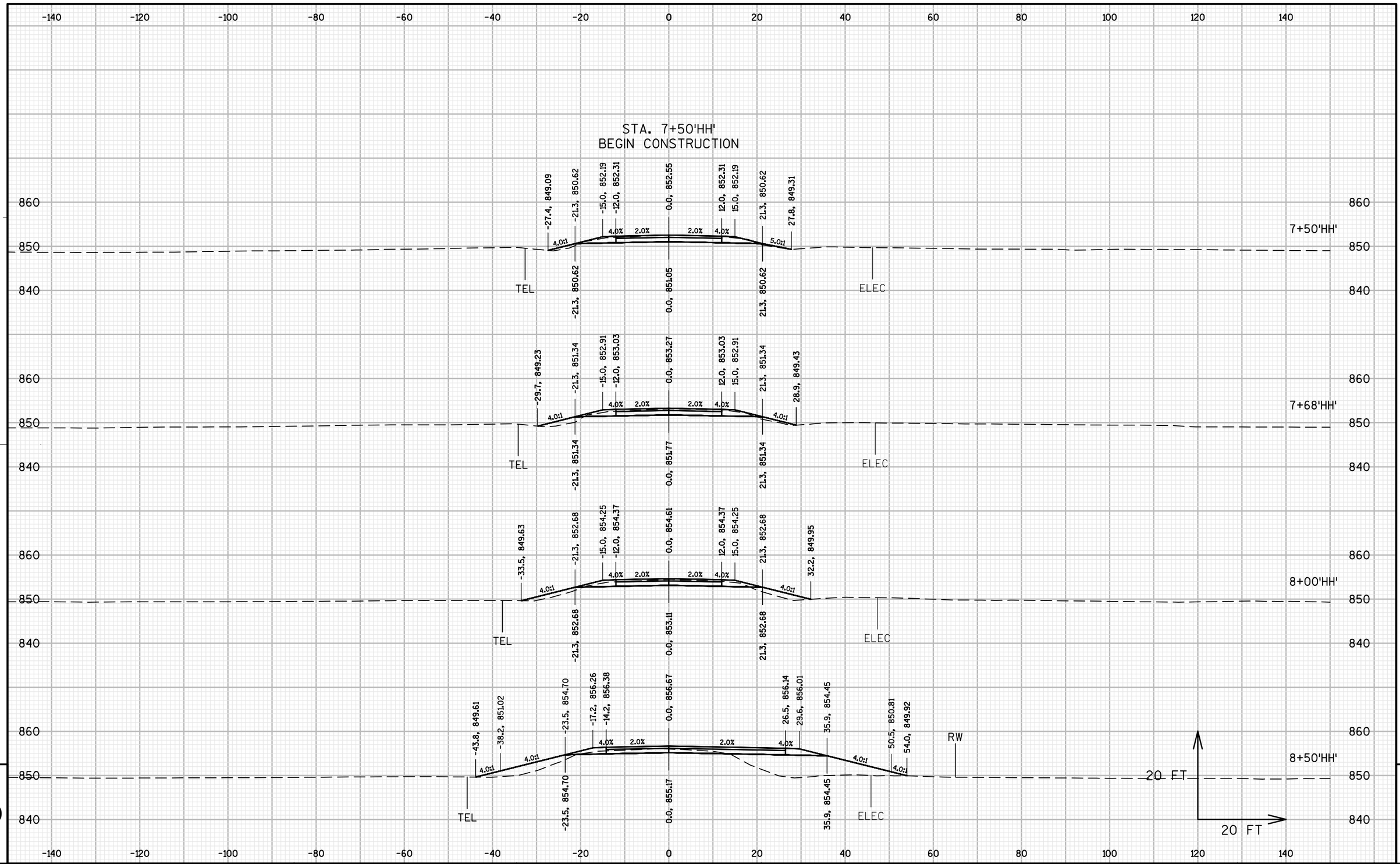
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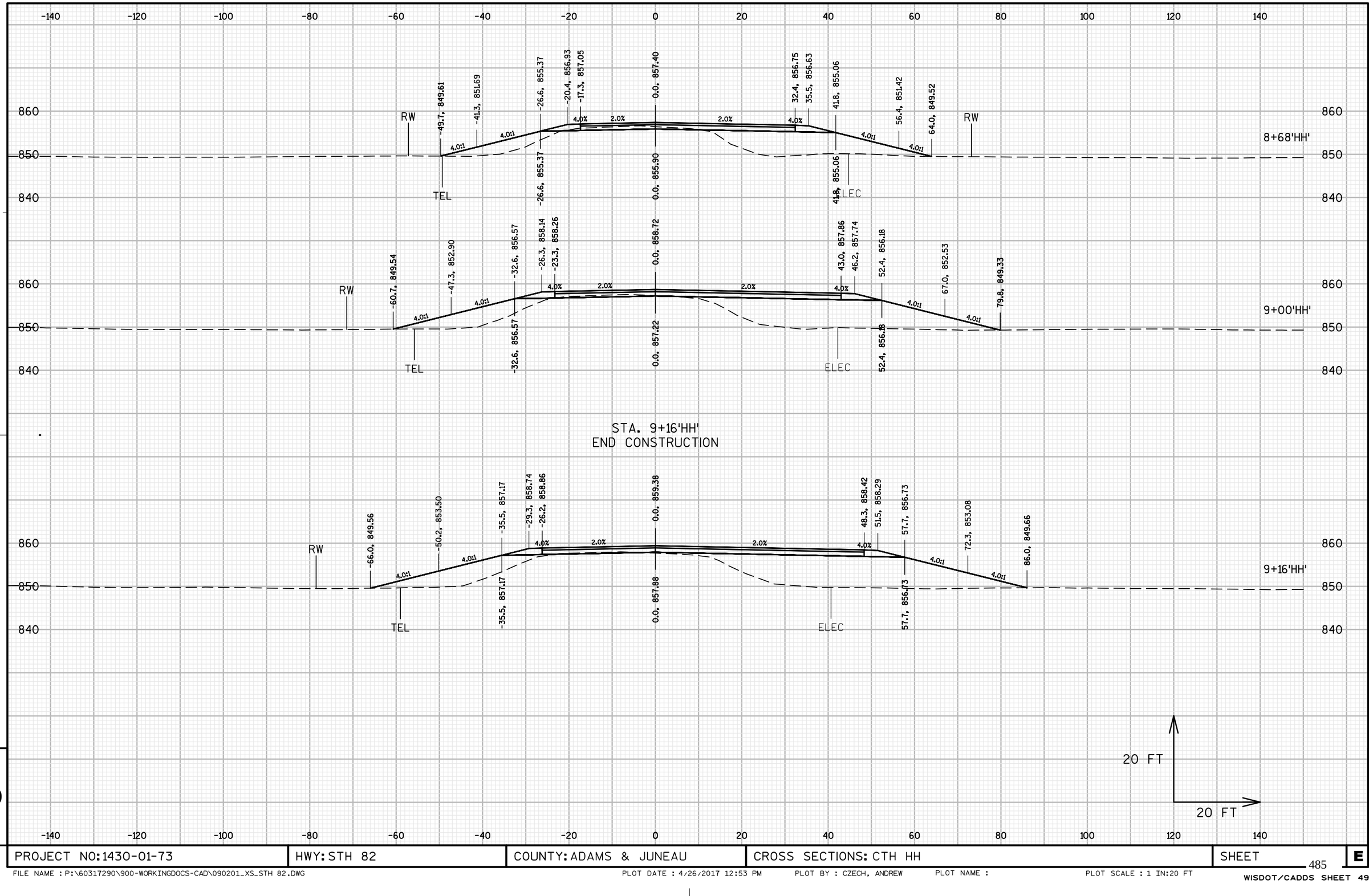
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WISDOT/CADDS SHEET 49



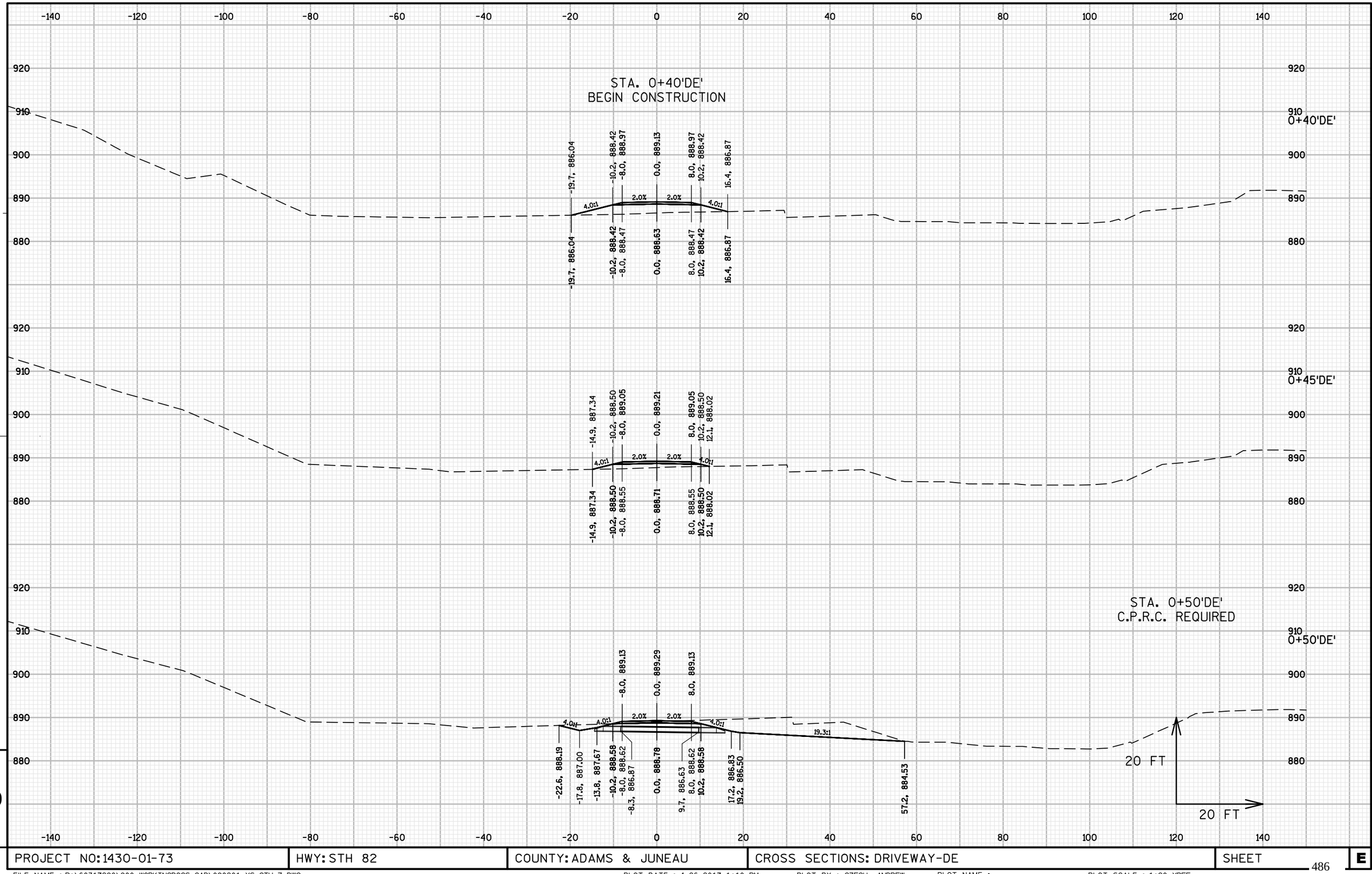
PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH HH	SHEET 484 E



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: CTH HH	SHEET E

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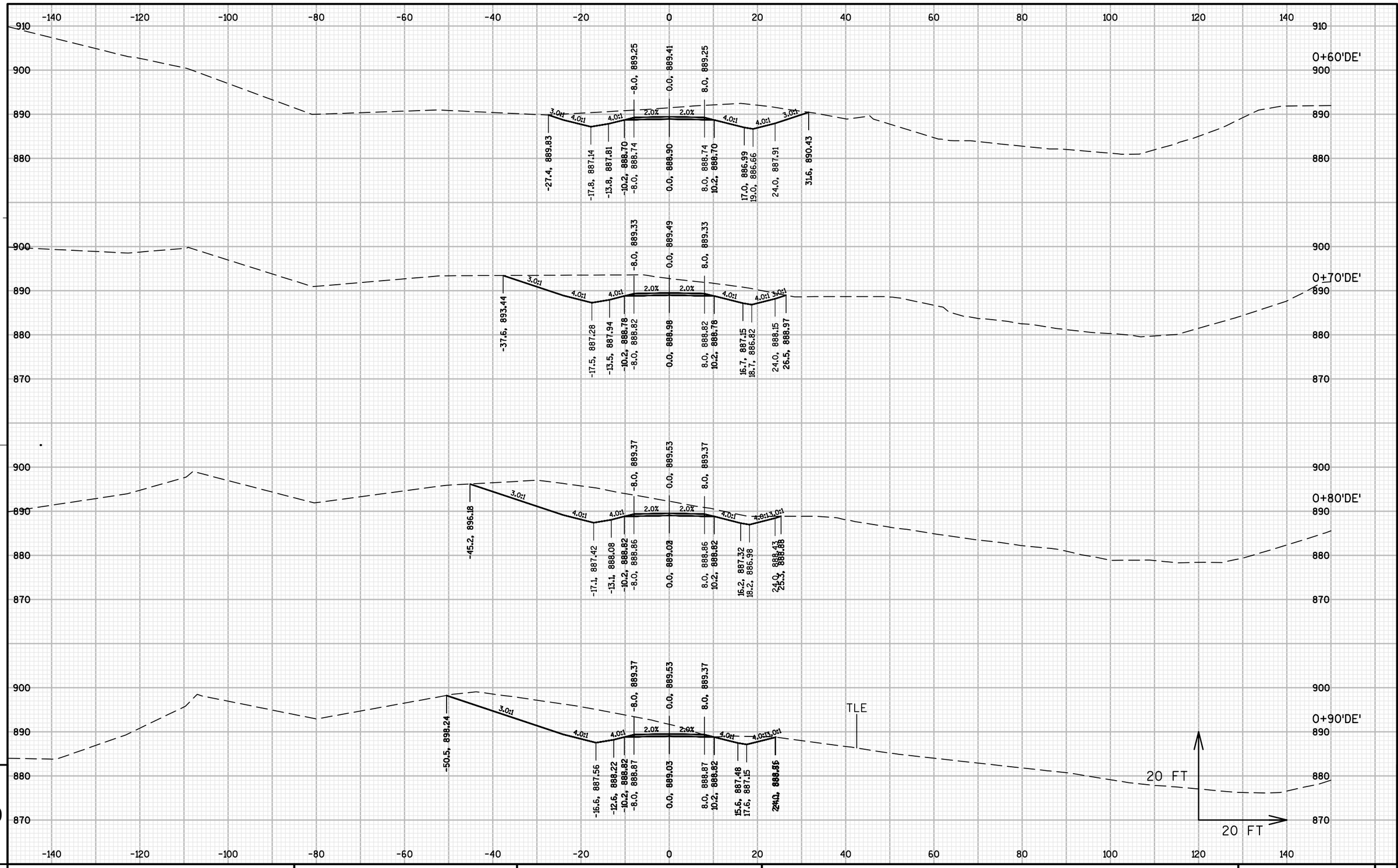
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DRIVEWAY-DE	SHEET	E

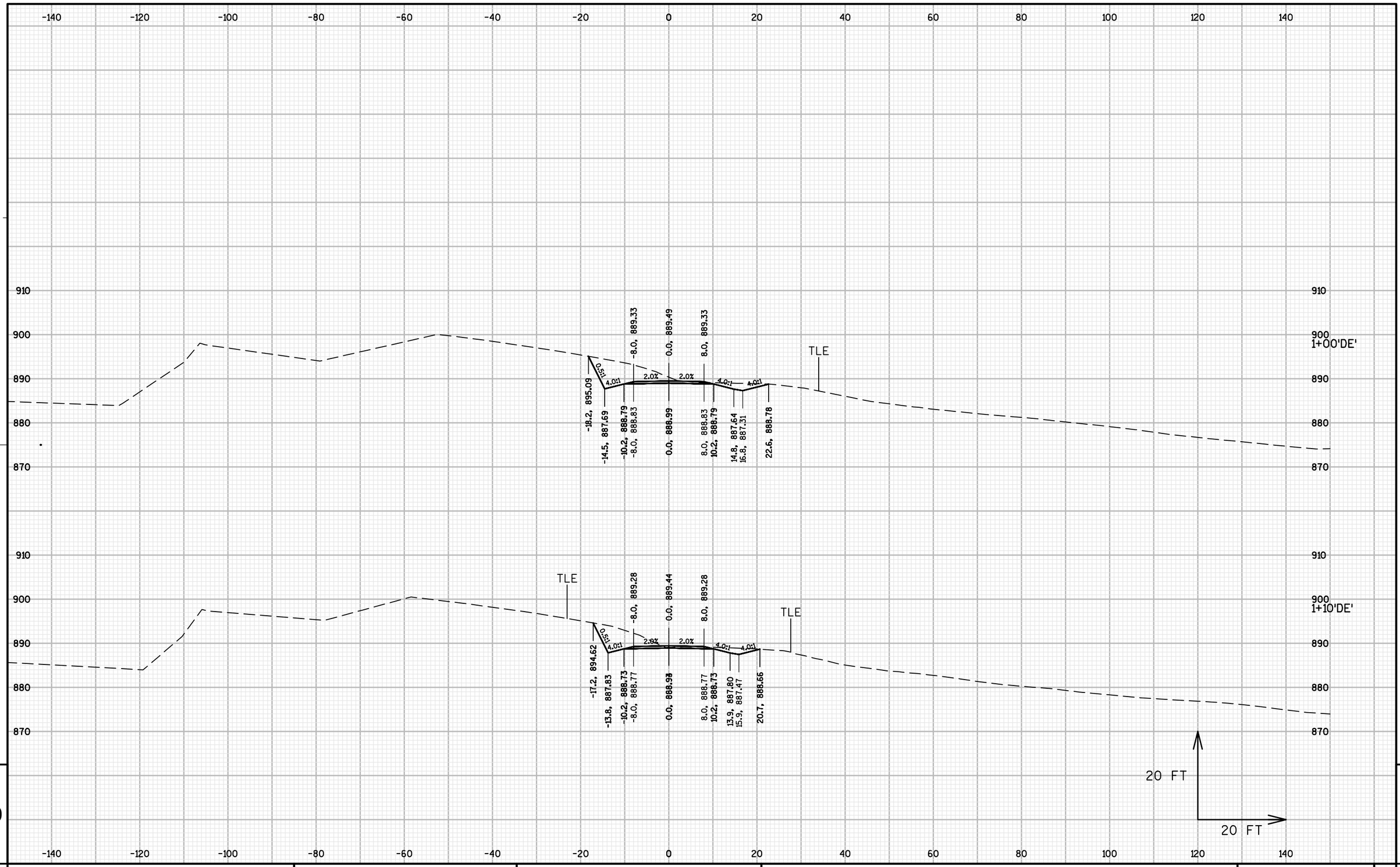
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WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DRIVEWAY-DE	SHEET	E

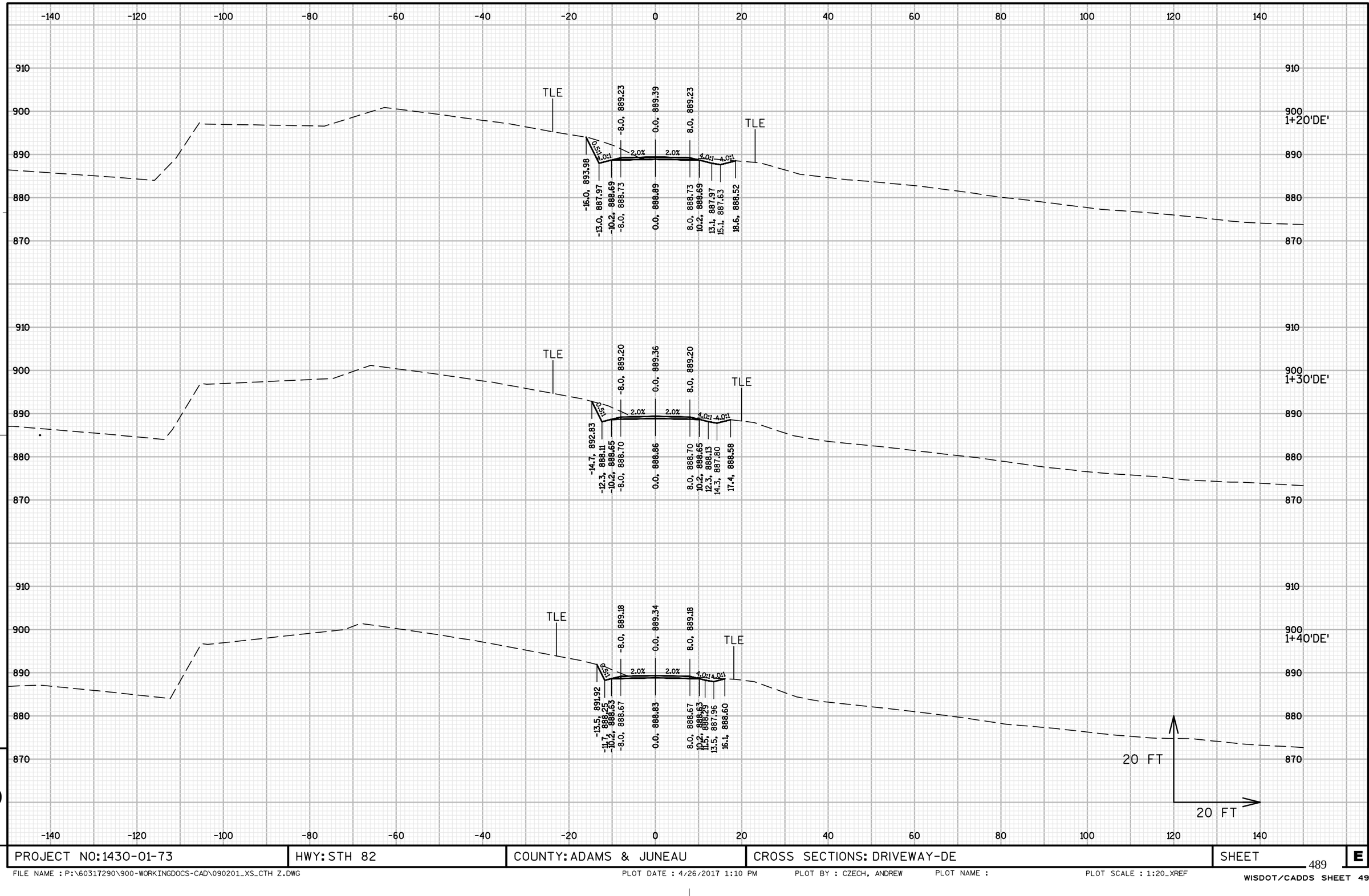
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DRIVEWAY-DE	SHEET E

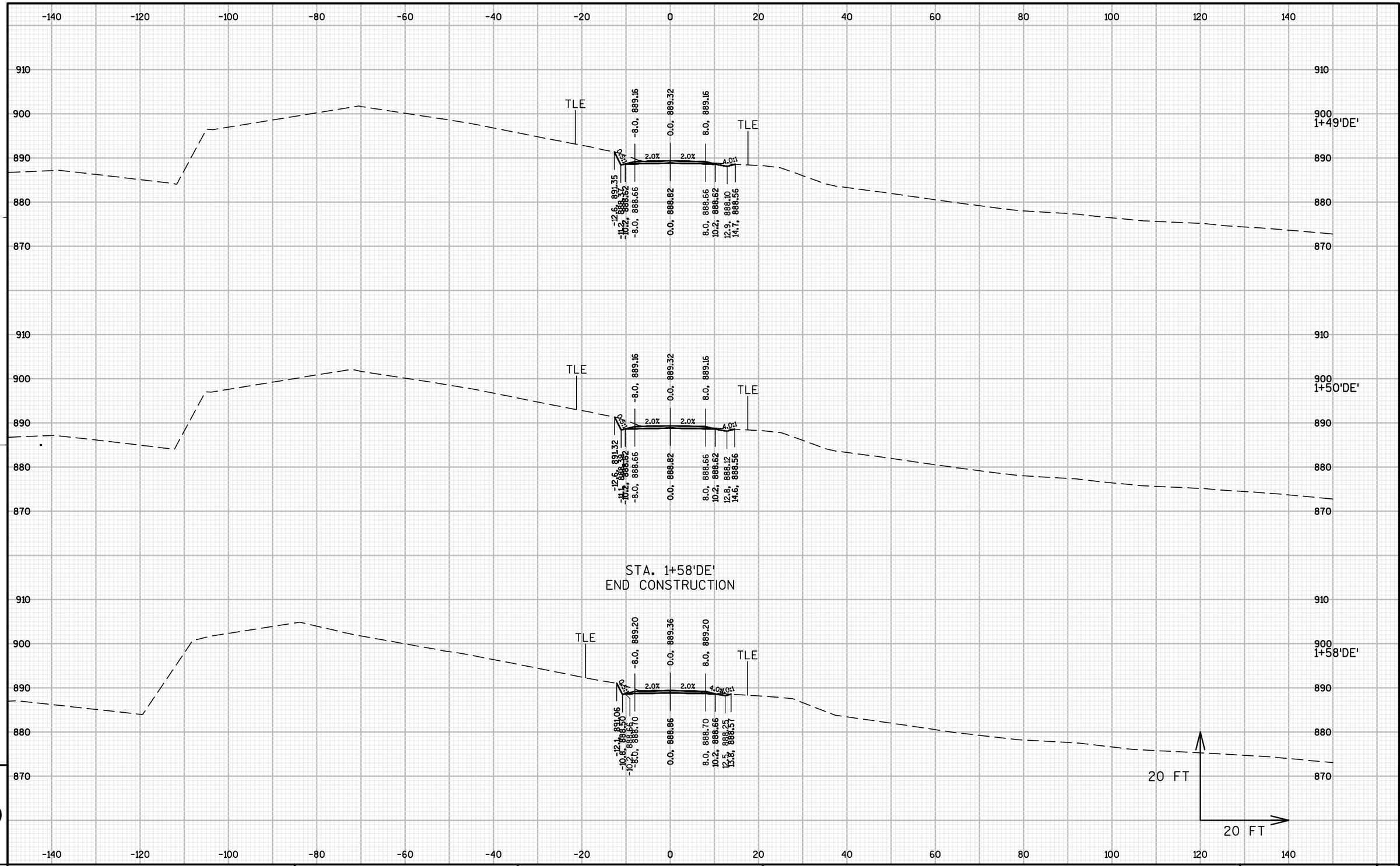
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WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DRIVEWAY-DE	SHEET	E

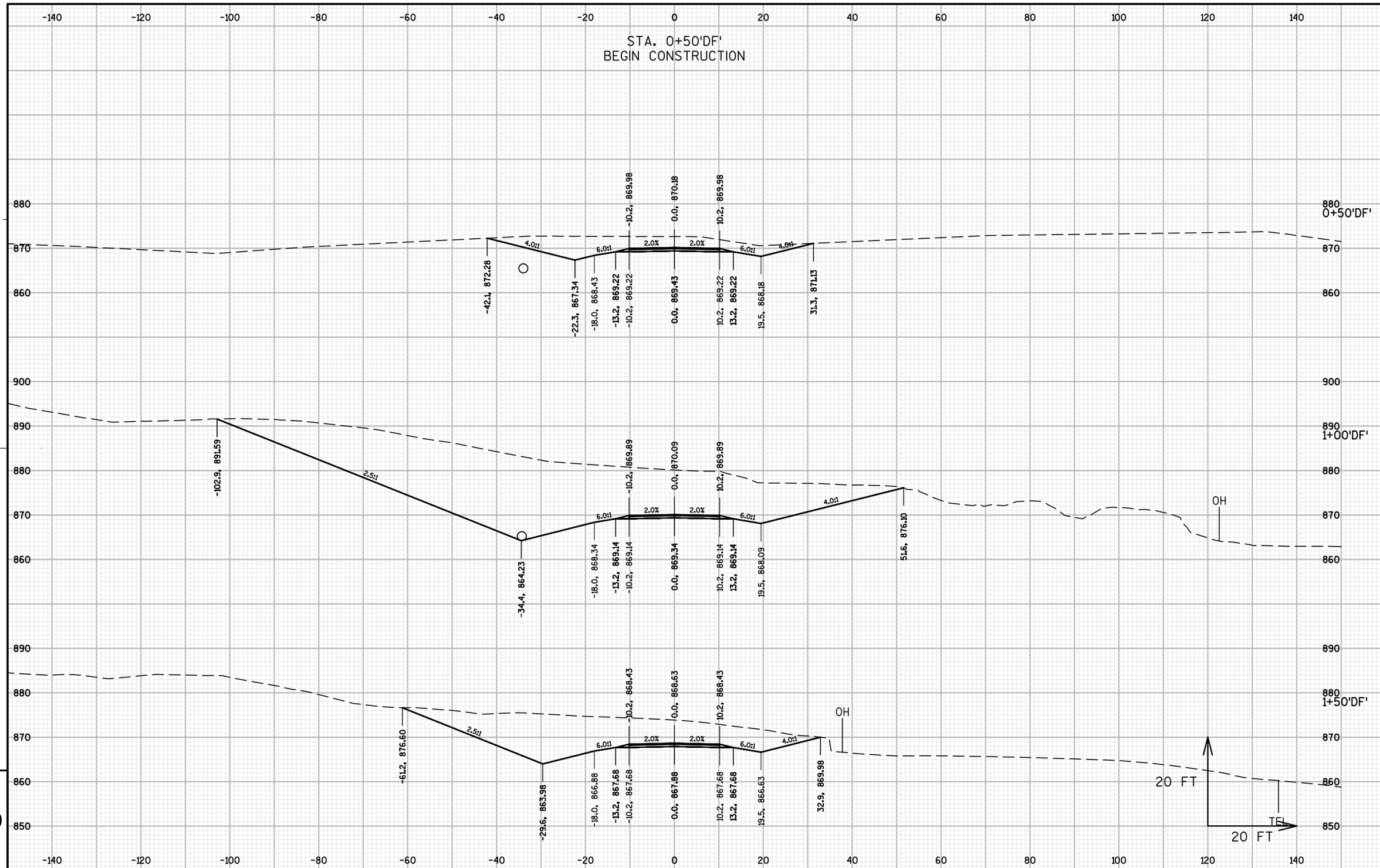
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DRIVEWAY-DE	SHEET E

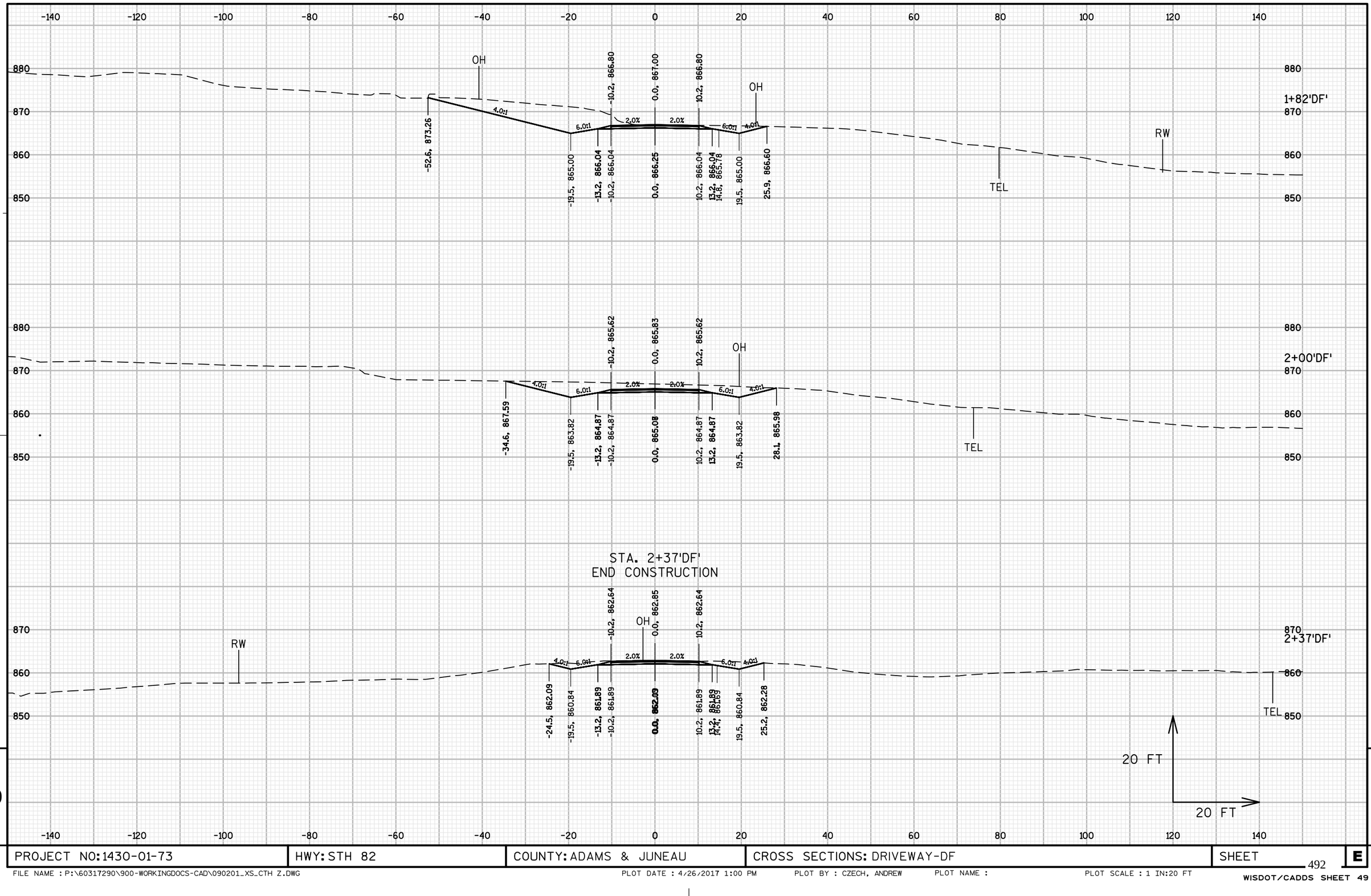
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STA. 0+50'DF'
BEGIN CONSTRUCTION



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DRIVEWAY-DF	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_CTH Z.DWG PLOT DATE : 4/26/2017 12:59 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DRIVEWAY-DF	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_CTH Z.DWG PLOT DATE : 4/26/2017 1:00 PM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

STA. 0+00'A'
BEGIN CONSTRUCTION

0+00'A'

0.0, 863.86
-13.1, 868.48
-4.0, 864.86
4.1, 864.90
2.5:1
4.0:1
4.0:1
OH
OH

0+08'A'

0.0, 863.59
-19.4, 870.63
-4.0, 864.59
4.0, 864.59
5.4, 865.17
2.5:1
4.0:1
4.0:1
2.5:1
OH
OH
TEL

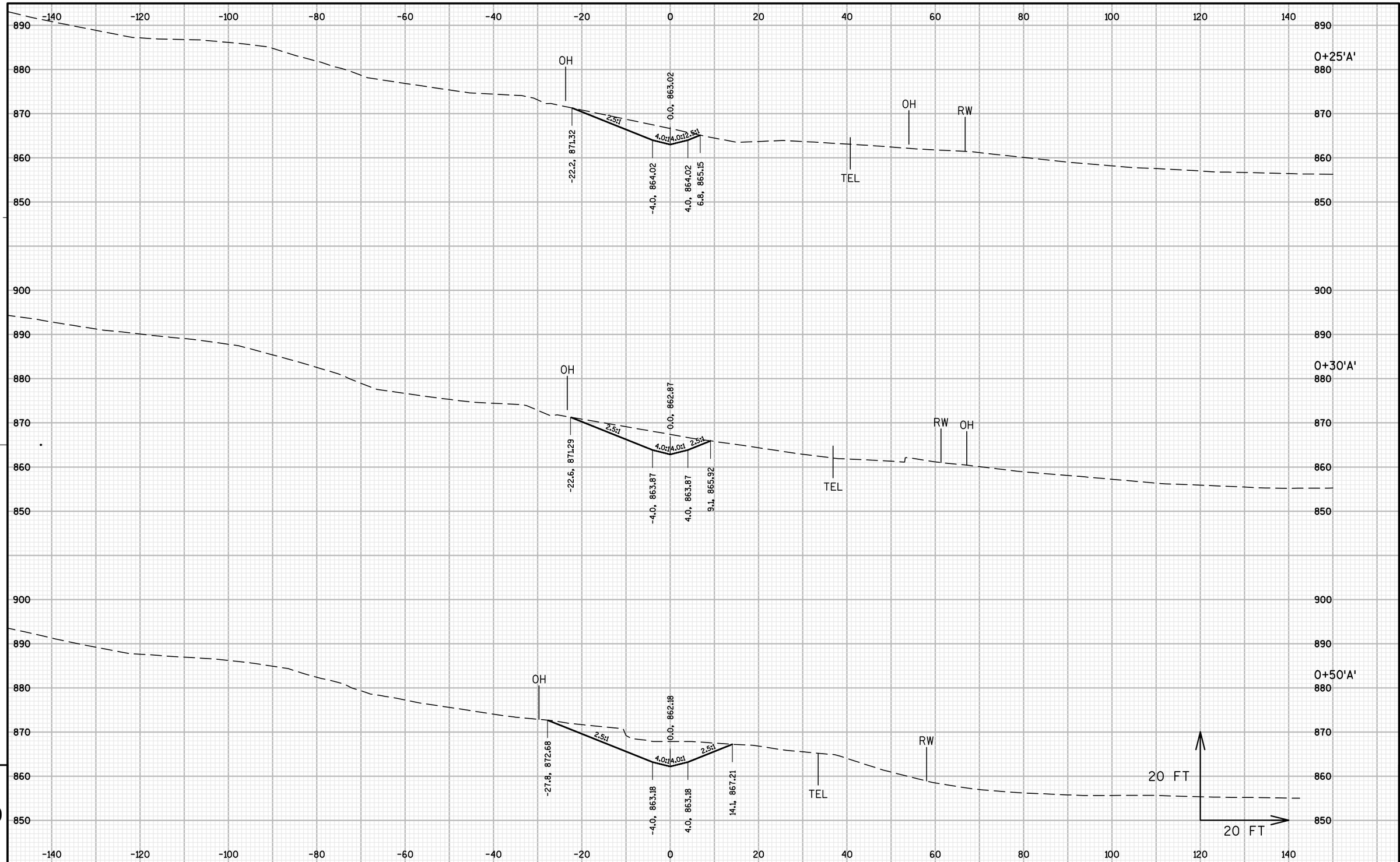
0+19'A'

0.0, 863.23
-21.4, 871.18
-4.0, 864.23
4.0, 864.23
5.2, 864.70
2.5:1
4.0:1
4.0:1
2.5:1
OH
OH
TEL
RW

20 FT
20 FT

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DITCH-A	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_CTH Z.DWG
PLOT DATE : 4/12/2017 9:12 AM
PLOT BY : CZECH, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



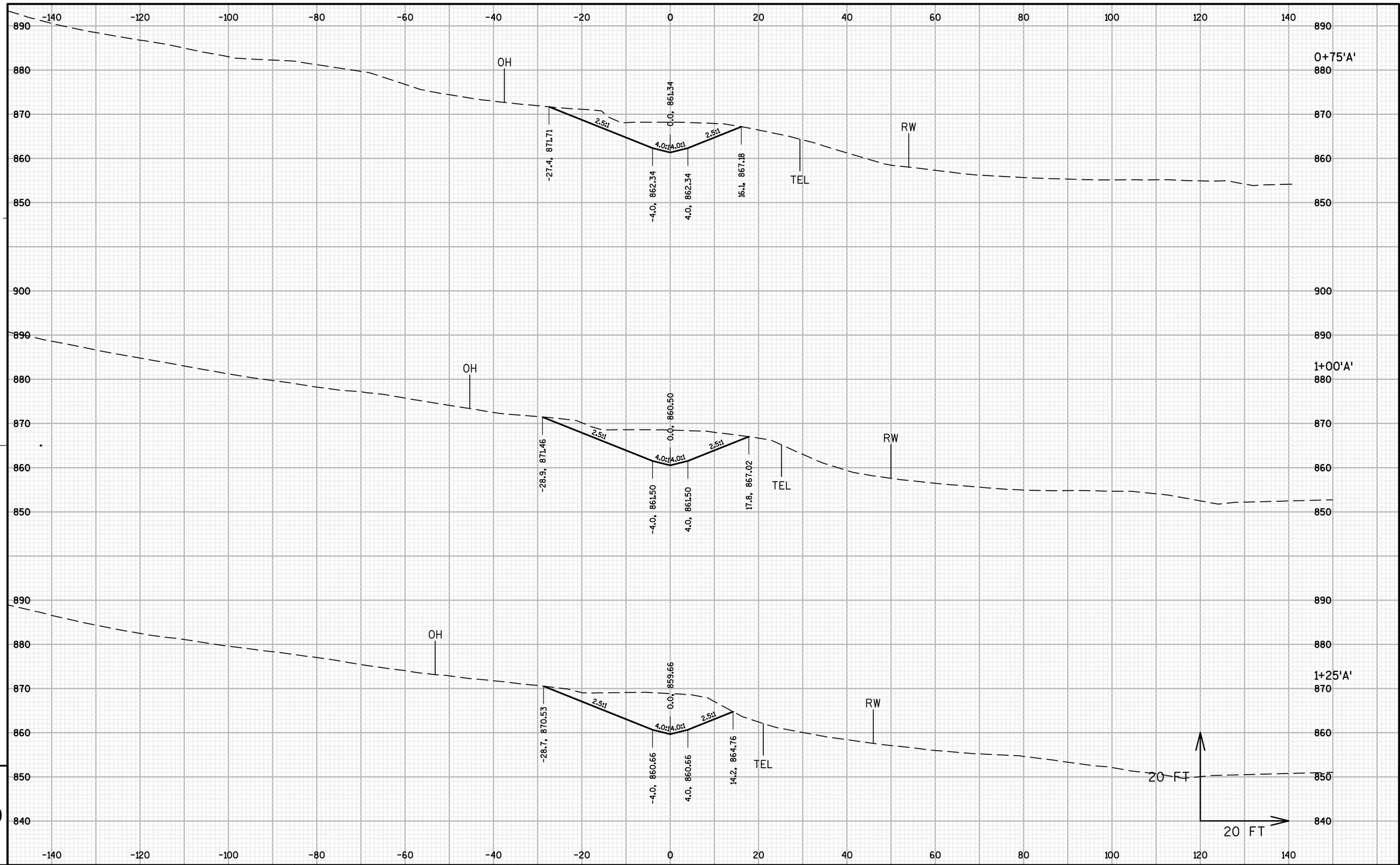
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PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DITCH-A	SHEET 494	E

9

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_CTH Z.DWG PLOT DATE : 4/12/2017 9:12 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT

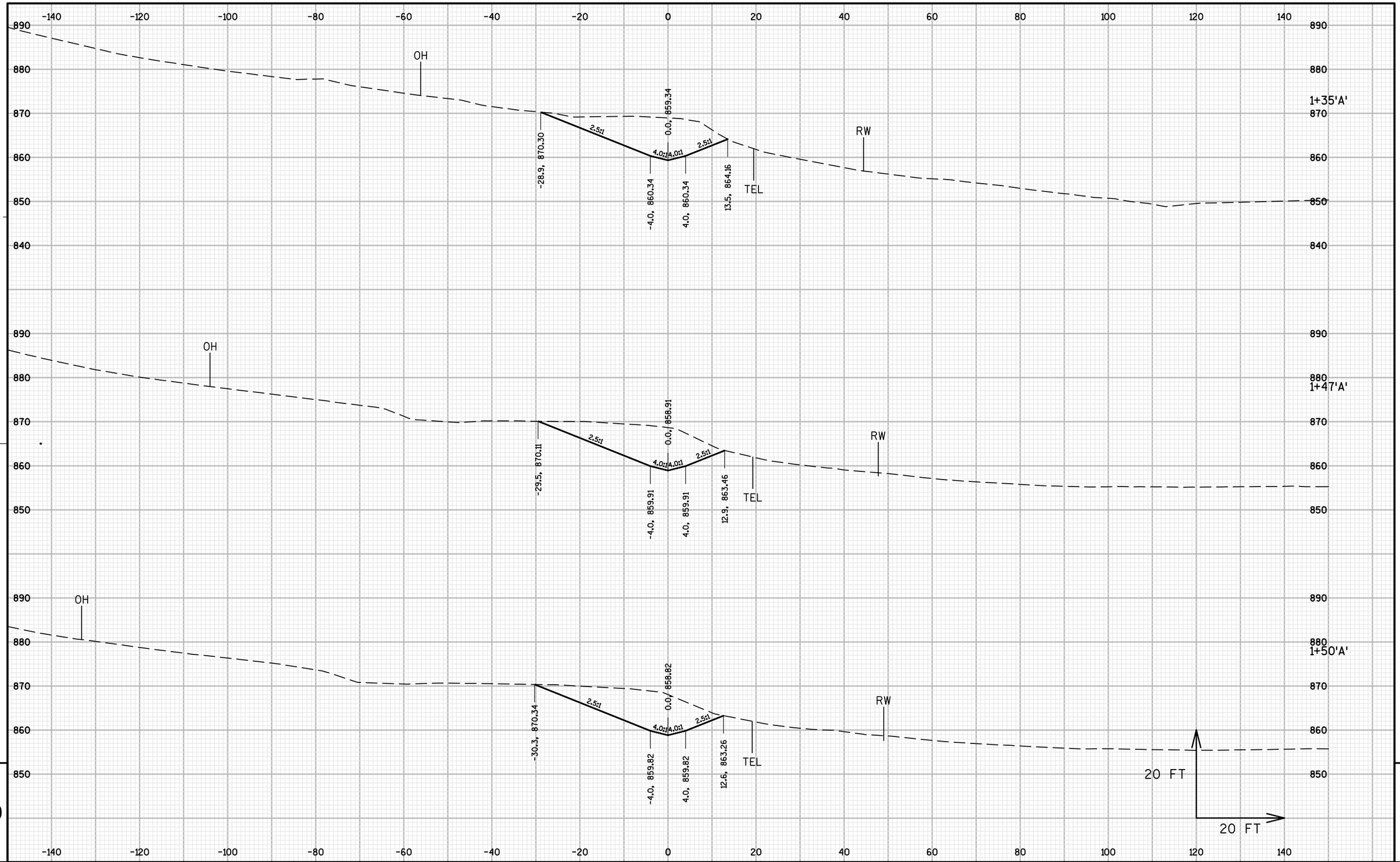
WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DITCH-A	SHEET	E

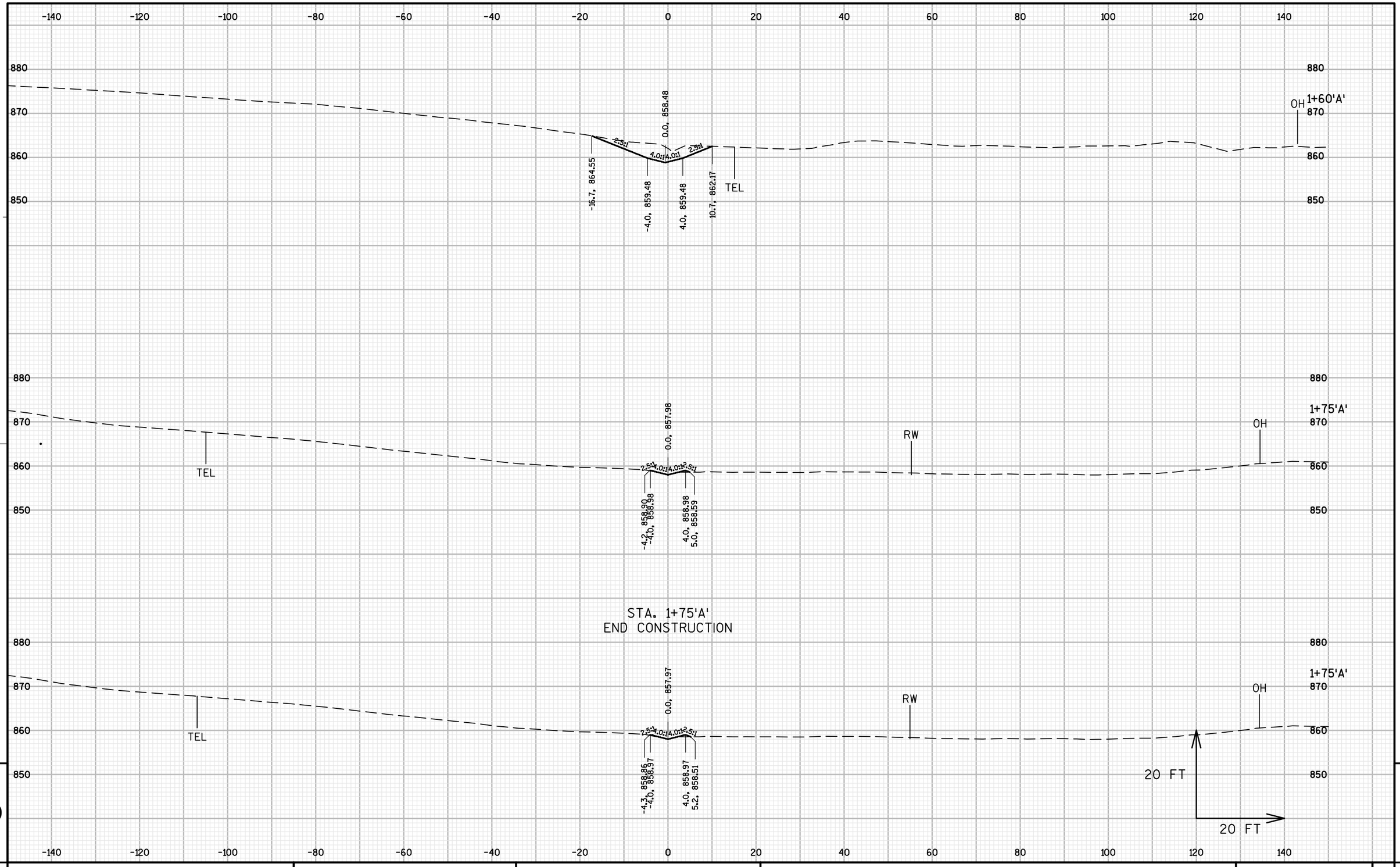
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WISDOT/CADDS SHEET 49



PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DITCH-A	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_CTH Z.DWG PLOT DATE : 4/12/2017 9:12 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

PROJECT NO: 1430-01-73	HWY: STH 82	COUNTY: ADAMS & JUNEAU	CROSS SECTIONS: DITCH-A	SHEET	E

FILE NAME : P:\60317290\900-WORKINGDOCS-CAD\090201_XS_CTH Z.DWG PLOT DATE : 4/12/2017 9:12 AM PLOT BY : CZECH, ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT

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Wisconsin Department of Transportation

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