MAD JULY 2014

PROJECT ID: 1390-04-94

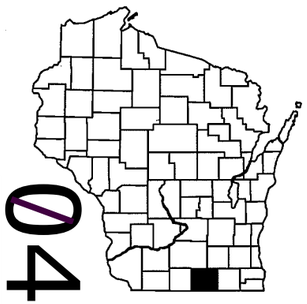
WITH: 1390-04-95

COUNTY: ROCK

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 = 136



04

N

DESIGN DESIGNATION

A.A.D.T.	(2014)	= 2150
A.A.D.T.	(2034)	= 2600
D.H.V.		= 4.3%
D.D.		= 59/41
T.		= 5.0%
DESIGN SPEED		= 60 MPH
ESALS		= 226,300

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

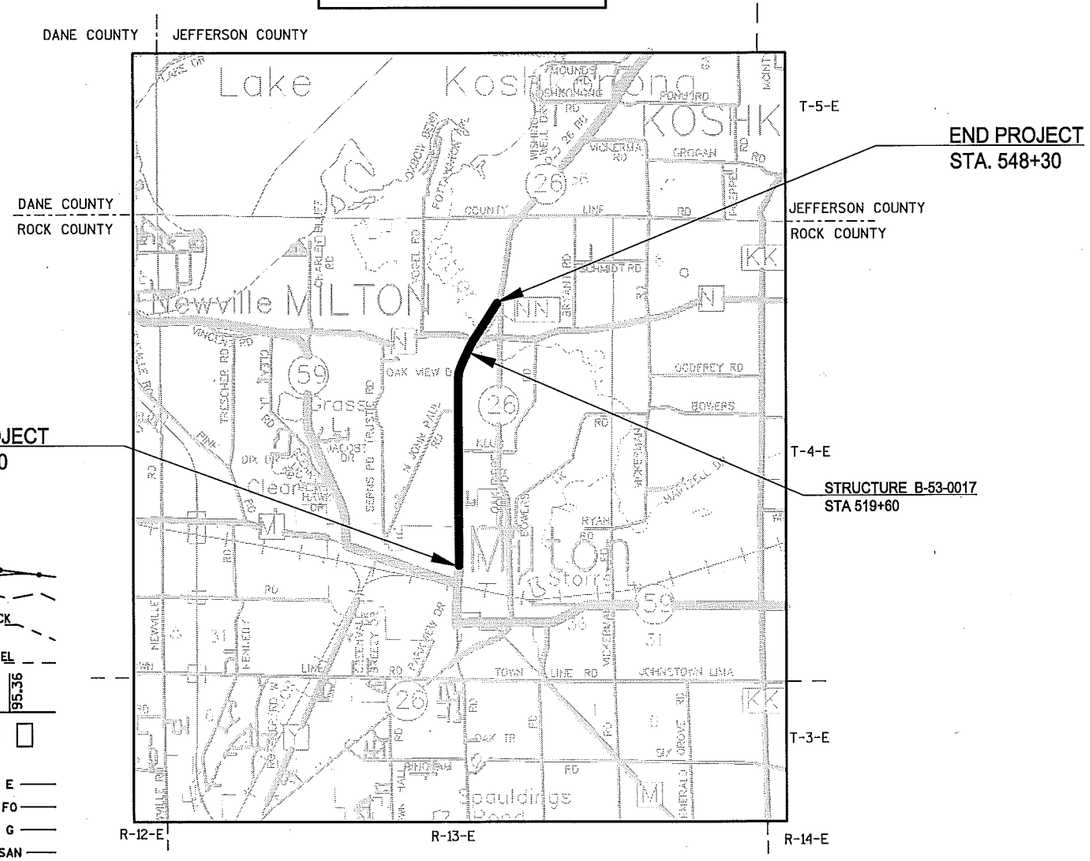
JANESVILLE - FORT ATKINSON

E. MADISON AVENUE - CTH N

STH 26 (OLD)
ROCK COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1390-04-94	———	—

STATE PROJECT NUMBER
1390-04-94



LAYOUT
SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 3.672 MILES

ORIGINAL PLANS PREPARED BY

PEOPLE WHO CARE, CREATING QUALITY TRANSPORTATION TODAY AND TOMORROW

WISDOT SOUTHWEST REGION – MADISON OFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	-
Designer	MARC SCHWEIGER
Project Manager	JEREMY HALL
Regional Examiner	-
Regional Supervisor	TERI SCHOPP

APPROVED FOR THE DEPARTMENT
DATE: 1/31/14 Teri Schopp (Signature)

E

GENERAL NOTES

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

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

APPLY TACK COAT TO MILLED SURFACES AND BETWEEN LAYERS. THE RATE OF APPLICATION IS 0.025 GALLONS PER SQUARE YARD OR AS DIRECTED BY THE ENGINEER.

THE LOCATION OF STOP LINES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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

PAVING LIMITS AT INTERSECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER AND SHALL HAVE BUTT JOINTS.

EXISTING SHOULDER AGGREGATE SHALL BE INCORPORATED INTO THE NEW SHOULDERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD.

EROSION CONTROL ITEMS IN THE MISC. QUAN. ARE SUGGESTED. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. MAINTAIN EROSION CONTROL ITEMS UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. PROTECT WETLANDS AND OTHER WATERWAYS THAT ARE PRESENT WITHIN THE PROJECT LIMITS.

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO "DIGGERS HOTLINE" AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

IF UTILITY CONFLICTS OCCUR DURING CONSTRUCTION, ADJUSTMENTS WILL BE COORDINATED BY CONTRACTOR. IF THERE ARE CONFLICTS WITH SIGNS OR OTHER WORK UNDER PROJECT, THE CONTRACTOR WILL WORK AROUND THE UTILITY FACILITIES.

CONTRACTOR WILL NOT PLACE BORROW/WASTE MATERIAL OR ANY PERSONNEL, EQUIPMENT, AND/OR SUPPLIES IN THE ENVIRONMENTALLY SENSITIVE AREAS SHOWN ON THE PLANS. REMOVAL AND REPLACEMENT OF ANY SIGNS BEHIND THE BACK OF CURB NEAR THE MILTON CEMETERY REQUIRE A CERTIFIED ARCHAEOLOGIST TO BE PRESENT.

HMA PAVEMENT 3.5" THICK SHALL BE PLACED IN TWO LAYERS, A 1-3/4" LOWER LAYER AND A 1-3/4" UPPER LAYER. THE 12.5 MM MIX GRADATION CAN BE USED FOR THE LOWER LAYER AND UPPER LAYER.

BEAM GUARD WILL BE REPLACED THE SAME DAY IT IS REMOVED.

PRIOR TO PLACEMENT OF BEAM GUARD THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED.

EXCAVATION BELOW SUBGRADE (EBS) IS PAID FOR AS EXCAVATION COMMON. EXACT LOCATIONS FOR EBS WILL BE DETERMINED BY THE ENGINEER.

DNR CONTACT

Eric Heggelund
3911 Fish Hatchery Road
Fitchburg, WI 53711
(608)-275-3301
Eric.Heggelund@wisconsin.gov

UTILITY/MUNICIPALITY

Alliant Energy - Electric/Gas/Petroleum
Jason Hogan
Suite 1000
4902 N Biltmore Lane
Madison, WI 53718
(608) 458-4871
jasonhogan@alliantenergy.com

Century Link - Communication Line
Dennis Haag
144 N. Pearl St.
P0.0 Box 70
Berlin, WI 54923
(920) 361-0040
dennis.haag@centurytel.com

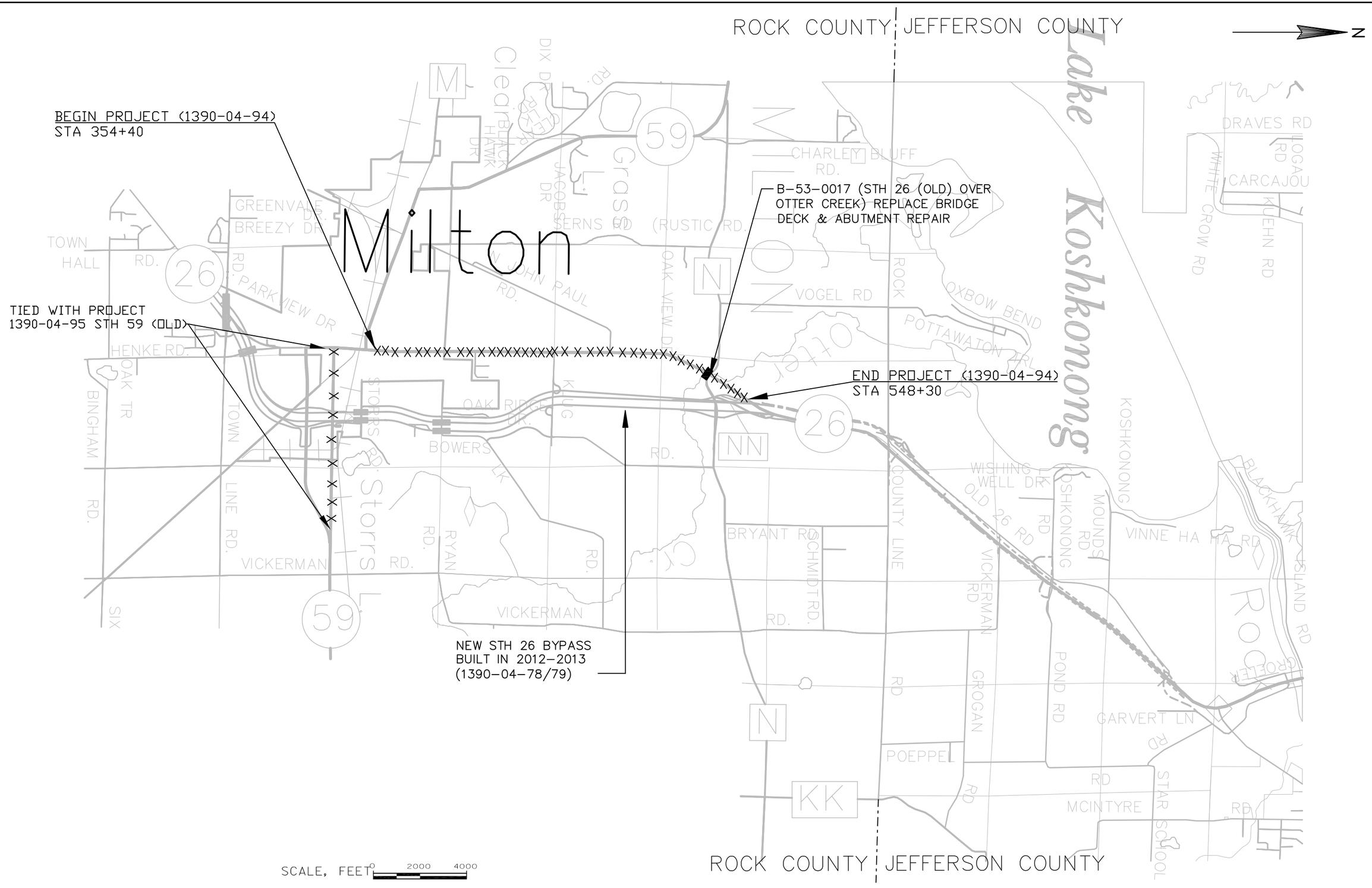
Charter Communications - Communications Line
Brandon Storm
2701 Daniels St.
Madison, WI 53718
(608) 274-3822
brandon.storm@chartercom.com

City of Milton - Water/Sewer
David Sauer
430 E. High St., Ste 3
Milton, WI 53563
(608) 868-6900
cityofmilton@charter.net

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

2

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	GENERAL NOTES	SHEET E

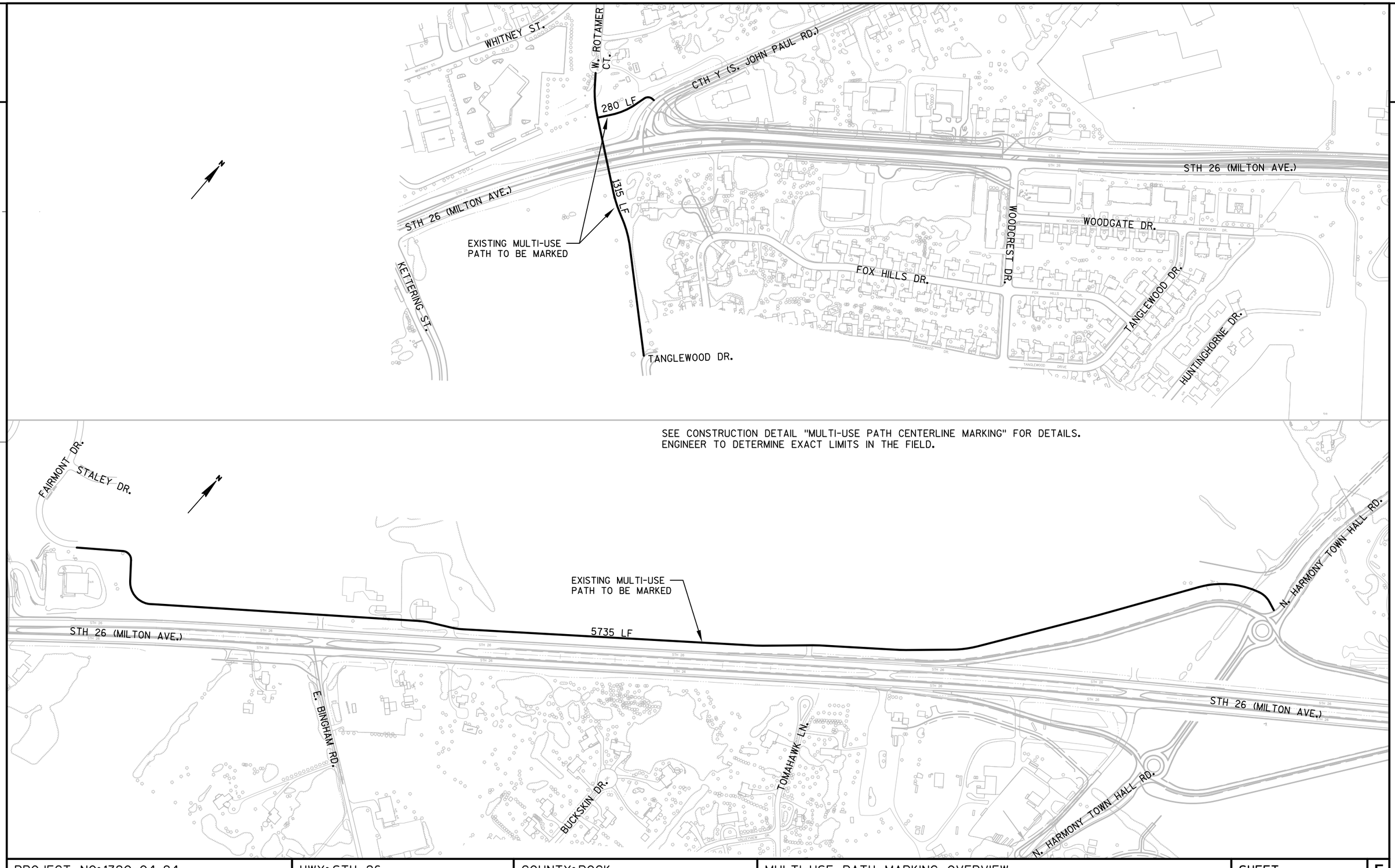


PROJECT NO:1390-04-94	HWY:STH 26 (OLD)	COUNTY:ROCK	PROJECT OVERVIEW	SHEET 3	E

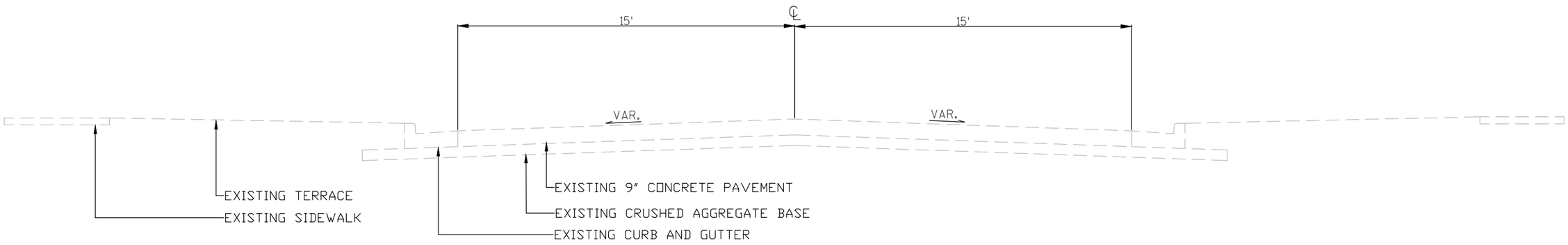
FILE NAME : PLOT DATE : PLOT BY : PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2



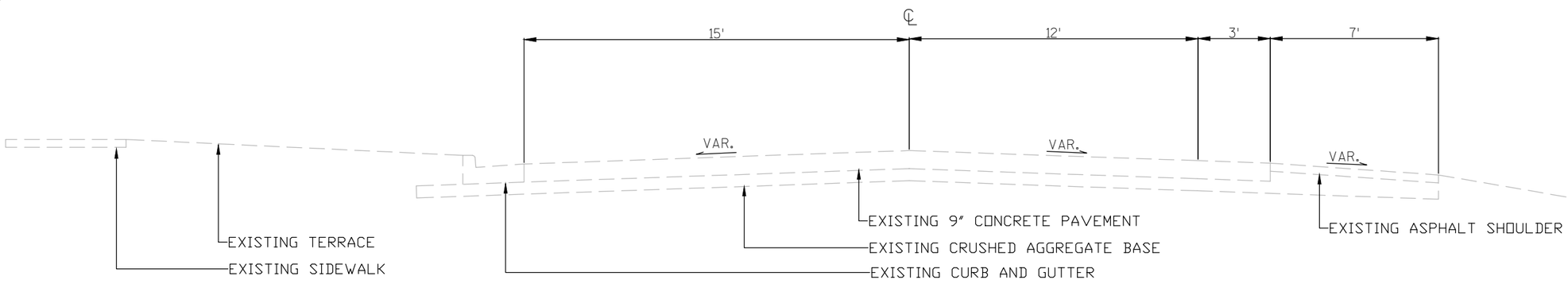
PROJECT NO:1390-04-94	HWY: STH 26	COUNTY:ROCK	MULTI-USE PATH MARKING OVERVIEW	SHEET	E



TYPICAL EXISTING SECTION

STH 26 (OLD)

STA. 354+40 - STA. 361+00



TYPICAL EXISTING SECTION

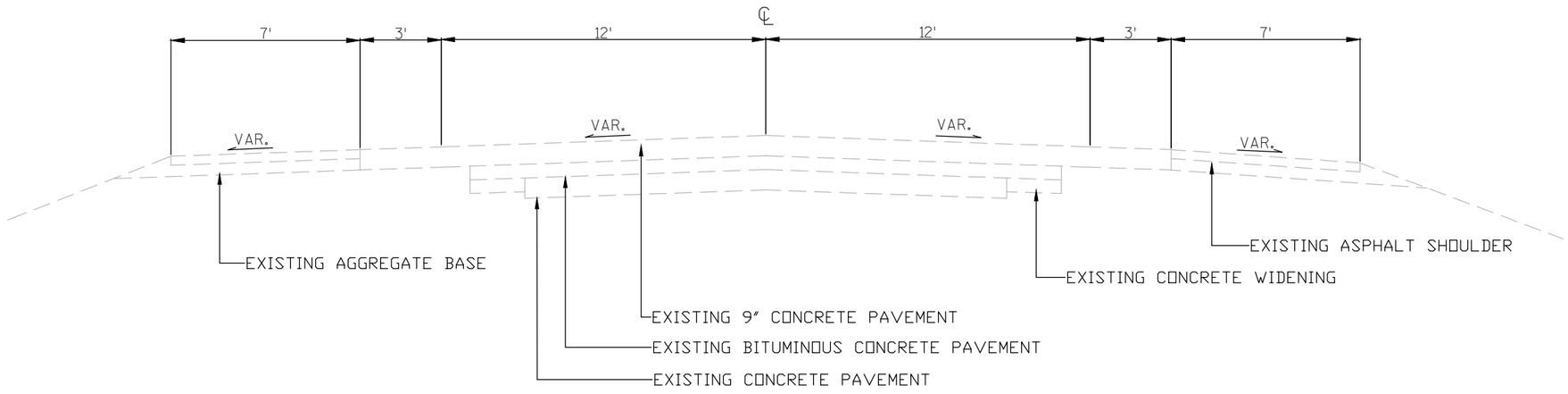
STH 26 (OLD)

STA. 361+00 - STA. 366+55

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\STH 26 13900410 020301_TS.DWG PLOT DATE : 1/13/2014 10:57 AM PLOT BY : SCHWEIGER, MARC D PLOT NAME : ---------- PLOT SCALE : 1 INCH = 5 FEET
WISDOT/CADDS SHEET 5

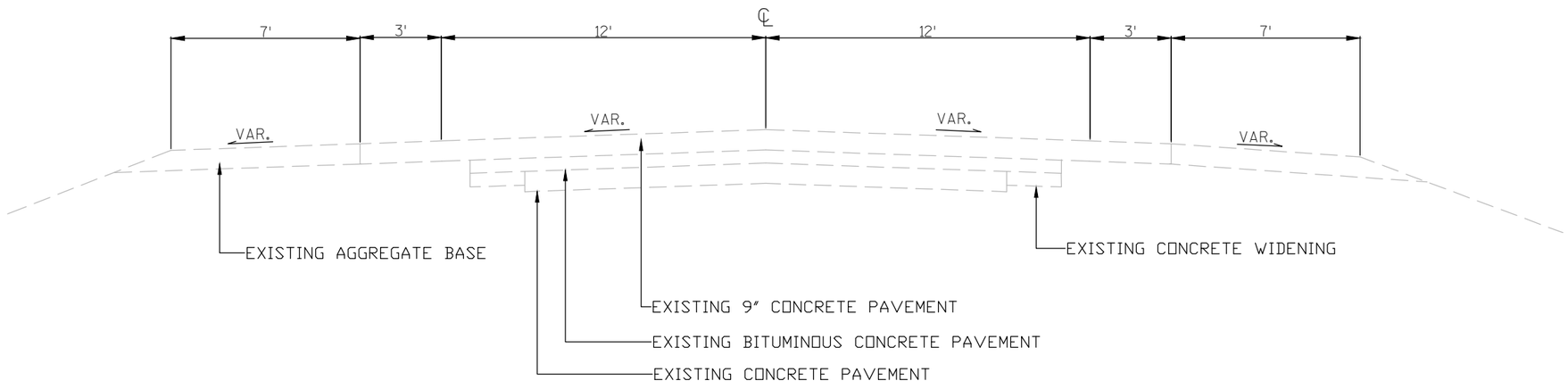
2



TYPICAL EXISTING SECTION

STH 26 (OLD)

STA. 366+55 - STA. 382+00



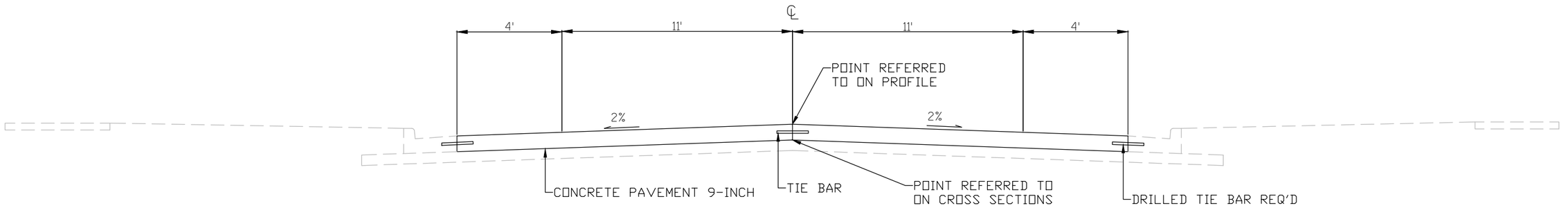
TYPICAL EXISTING SECTION

STH 26 (OLD)

STA. 382+00 - STA. 548+30

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 6	E

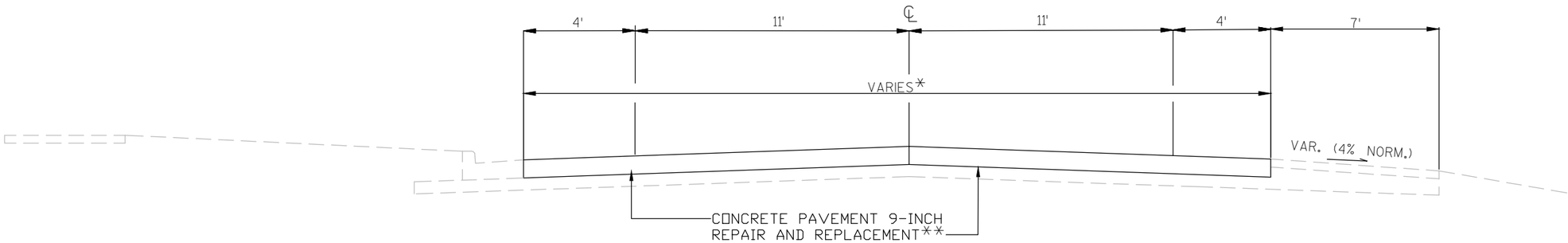
FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\STH 26 13900410 020301_TS.DWG PLOT DATE : 1/13/2014 10:57 AM PLOT BY : SCHWEIGER, MARC D PLOT NAME : _____ PLOT SCALE : 1 INCH = 5 FEET
WISDOT/CADDS SHEET 5



TYPICAL FINISHED SECTION

STH 26 (OLD)

STA. 354+40 - STA. 361+00



TYPICAL FINISHED SECTION

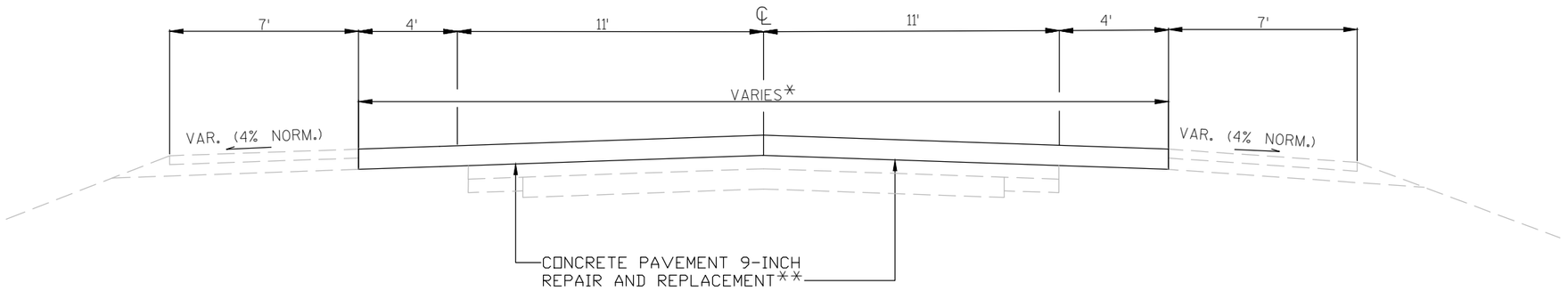
STH 26 (OLD)

STA. 361+00 - STA. 366+55

*PAVEMENT REPAIR/REPLACEMENT WIDTH VARIES FROM 1/2 WIDTH TO FULL WIDTH. SEE PLAN DETAIL SHEETS FOR APPROXIMATE LOCATIONS AND SIZES. ENGINEER WILL DETERMINE EXACT LOCATIONS IN THE FIELD. MATCH EXISTING PAVEMENT CROSS SLOPES NEAR THE REPAIR/REPLACEMENT AREA.

**SEE S.D.D. "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR DETAILS.

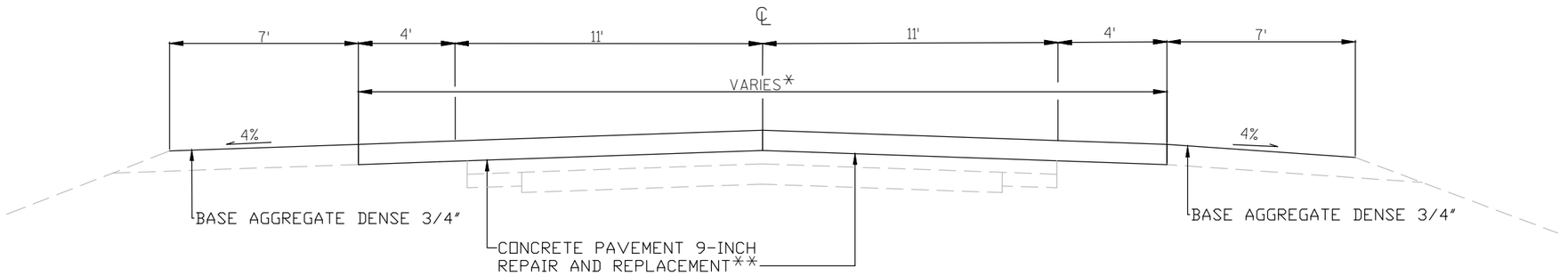
PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 7	E



TYPICAL FINISHED SECTION

STH 26 (OLD)

STA. 366+55 - STA. 382+00



TYPICAL FINISHED SECTION

STH 26 (OLD)

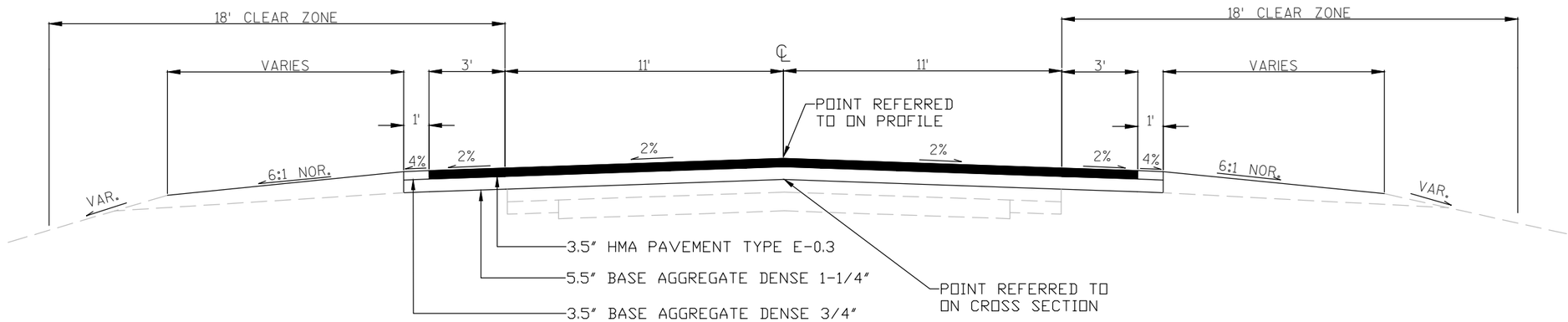
STA. 382+00 - STA. 532+80

*PAVEMENT REPAIR/REPLACEMENT WIDTH VARIES FROM 1/2 WIDTH TO FULL WIDTH. SEE PLAN DETAIL SHEETS FOR APPROXIMATE LOCATIONS AND SIZES. ENGINEER WILL DETERMINE EXACT LOCATIONS IN THE FIELD. MATCH EXISTING PAVEMENT CROSS SLOPES NEAR THE REPAIR/REPLACEMENT AREA.

**SEE S.D.D. "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR DETAILS.

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 8	E

2



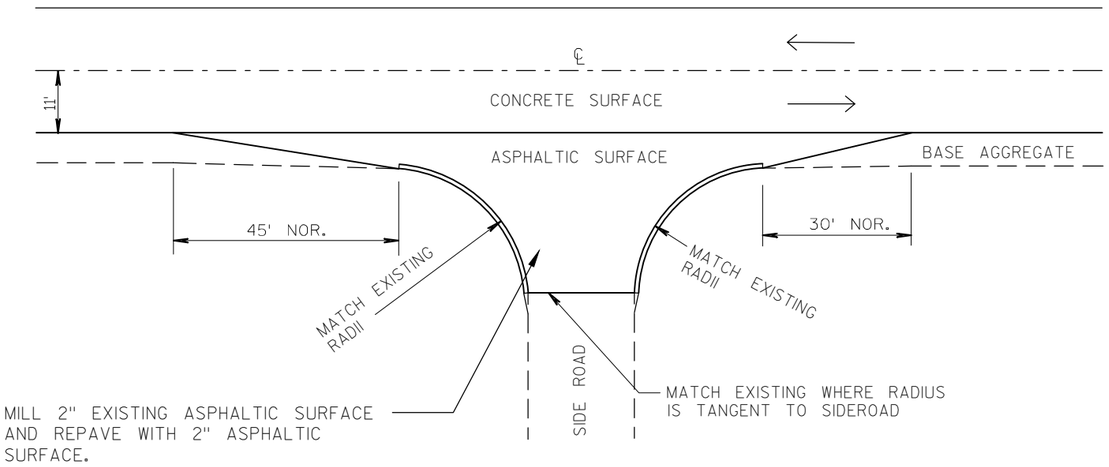
TYPICAL FINISHED SECTION

STH 26 (OLD)

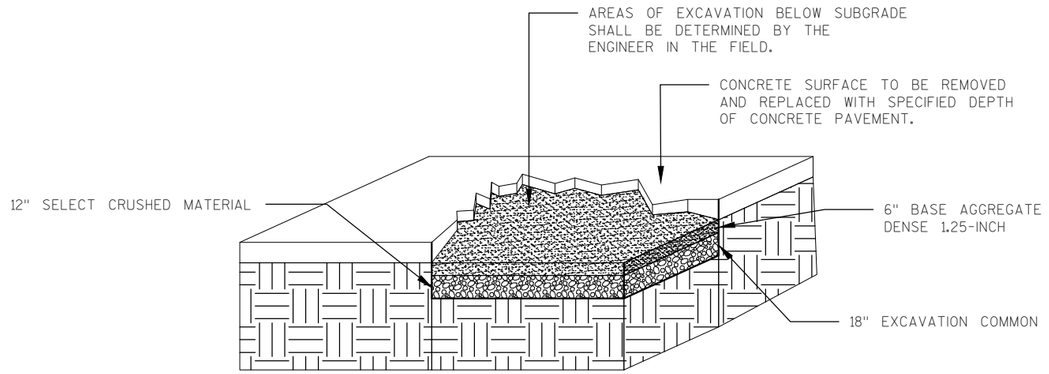
STA. 532+80 - STA. 548+30

STH 26 (OLD)

PC/PT	STATION	CURVE RADIUS	S.E.	SUPER TRANSITION (FT)	SUPER RUNOFF (FT)	NORMAL CROWN STATION	FLAT (HIGHSIDE) STATION	REVERSE CROWN -2% STATION	FULL SUPER STATION
PC	542+92.9	6440'	2.00%	106	53	542+04.57	542+57.57	543+10.57	543+10.57
PT	549+00	6440'	2.00%	N/A	N/A	N/A	N/A	549+00	549+00



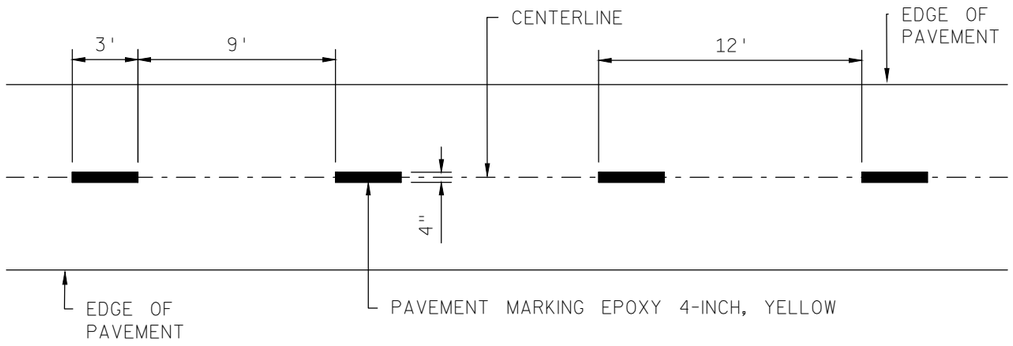
SIDE ROAD DETAIL, SPECIAL



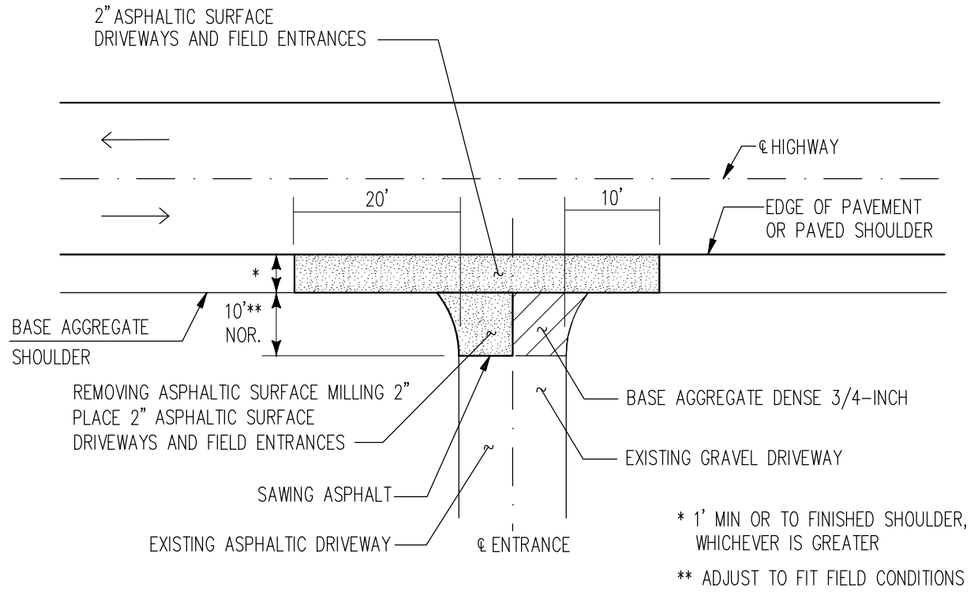
EXCAVATION BELOW SUBGRADE (EBS) DETAIL

EXCAVATION BELOW SUPGRADE TO BE PAID FOR AS EXCAVATION COMMON. BASE AGGREGATE DENSE 1.25-INCH AND SELECT CRUSHED MATERIAL TO BE PAID FOR SEPERATELY.

*ANY CONCRETE PAVEMENT ENCOUNTERED IN THE EBS AREA WILL BE PAID FOR AS REMOVING CONCRETE AND SAWING CONCRETE SEPERATELY.

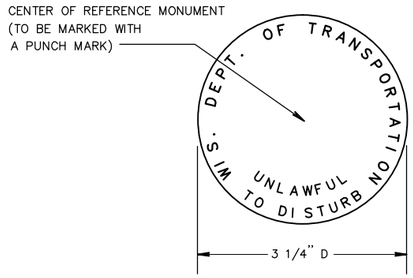


MULTI–USE PATH CENTERLINE MARKING

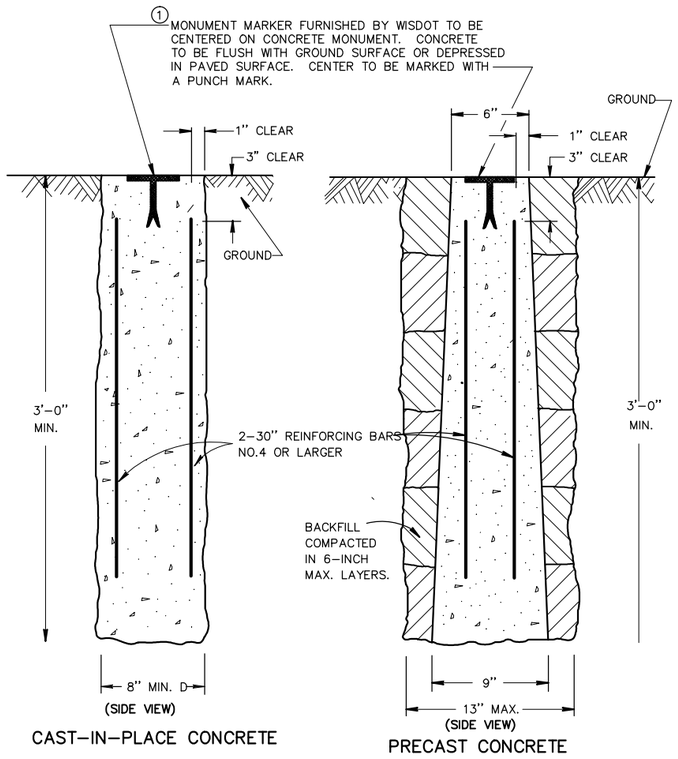


RURAL DRIVEWAY DETAIL

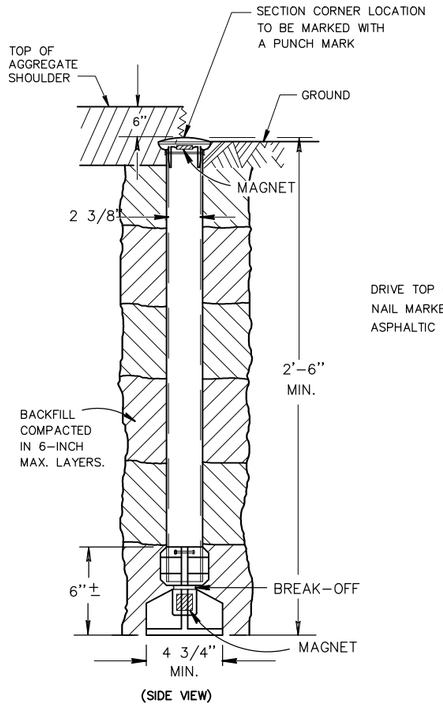
2



① WIS DOT MONUMENT MARKER LOGO

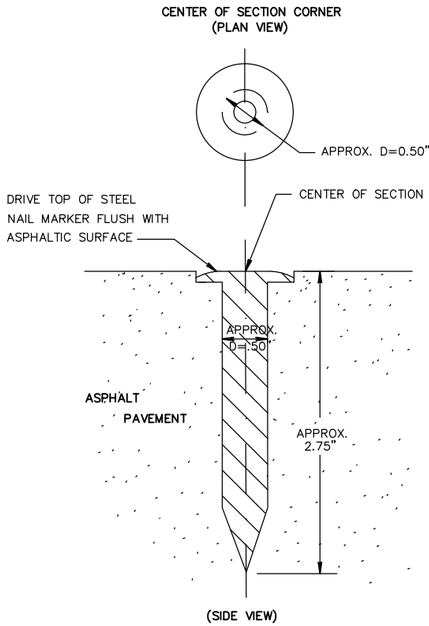


LANDMARK REFERENCE MONUMENTS (TIES ONLY)



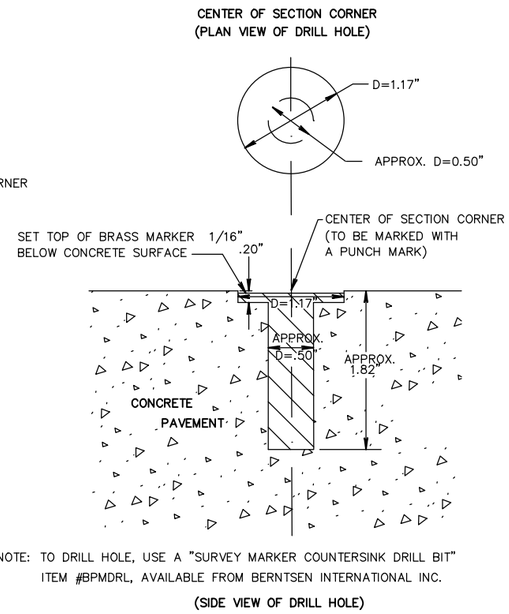
OUTSIDE OF PAVEMENT

① BERNSTEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



IN ASPHALTIC PAVEMENT

① BERNSTEN SNM1 STEEL NAIL MARKER



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

IN CONCRETE PAVEMENT

① BERNSTEN BP -1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

GENERAL NOTES

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

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

① THE DISTRICT SURVEY COORDINATOR WILL SUPPLY.

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT SPECIAL DETAIL

2

2

STA 445+85 - 450+35 LT, REMOVING GUARDRAIL
STA 445+87.5 - 446+37.5 LT, MGS GUARDRAIL TERMINAL EAT
STA 446+37.5 - 448+87.5 LT, MGS GUARDRAIL 3
STA 448+87.5 - 449+37.5 LT, MGS GUARDRAIL TERMINAL EAT

N

EAT POST #1
STA 445+87.5
22.00' RT

EAT POST #9
STA 446+37.5
21.00' RT

EAT POST #9
STA 448+87.5
21.00' RT

EAT POST #1
STA 449+37.5
22.00' RT

446 448 450 452

N. JANESVILLE ST.
(OLD STH 26)

EAT POST #1
STA 445+62.5
22.00' RT

EAT POST #9
STA 446+12.5
21.00' RT

EAT POST #9
STA 451+37.5
21.00' RT

EAT POST #1
STA 451+87.5
22.00' RT

STA 445+90 - 452+75 RT, REMOVING GUARDRAIL
STA 445+62.5 - 446+12.5 RT, MGS GUARDRAIL TERMINAL EAT
STA 446+12.5 - 451+37.5 RT, MGS GUARDRAIL 3
STA 451+37.5 - 451+87.5 RT, MGS GUARDRAIL TERMINAL EAT

PROJECT NO: 1390-04-94	HWY: STH 26	COUNTY: ROCK	CONSTRUCTION DETAILS - BEAM GUARD	SHEET 12	E

STA 518+65 - 519+55 LT, REMOVING GUARDRAIL
STA 518+37.5 - 518+87.5 LT, CLASS A GUARDRAIL TERMINAL EAT
STA 518+87.5 - 519+35 LT, CLASS A BEAM GUARD
STA 519+35 - 519+55 LT, STEEL PLATE THRIE BEAM TRANSITION

STA 519+80 - 521+00 LT, REMOVING GUARDRAIL
STA 519+80 - 520+00 LT, STEEL PLATE THRIE BEAM TRANSITION
STA 520+00 - 520+45 LT, CLASS A BEAM GUARD
STA 520+45 - 520+60 LT, STEEL PLATE SHORT RADIUS TERMINAL
STA 520+60 - 520+90 LT, CLASS A BEAM GUARD
STA 520+90 - 521+00 LT, STEEL PLATE THRIE BEAM TRANSITION

STEEL THRIE BEAM
STRUCTURE APPROACH

DRILL THROUGH PARAPET
FOR THRIE BEAM CONNECTION

E. CTH N

N

STEEL THRIE BEAM
SRUCTURE APPROACH
STA 519+80
18.00' LT

STEEL
PLATE BEAM
GUARD
SHORT
RADIUS - 32'

EAT POST 9
STA 518+87.5
19.50' LT

STEEL THRIE BEAM
STRUCTURE APPROACH
STA 519+35
18.00' LT

ENVIRONMENTALLY SENSITIVE AREA

ENVIRONMENTALLY
SENSITIVE AREA

EAT POST #1
STA 518+37.5
21.00' LT

33':1' TAPER

CONC. SHLD.

APPROACH SLAB FOR B-53-0017
SEE SDD 13B2 "CONCRETE PAVEMENT
APPROACH SLAB" FOR DETAILS

SEE "STH 26 (OLD) & CTH N
BLOW UP 2" FOR DETAILS

ASPHALT SHOULDERS

18.60'

18'

516 N. JANESVILLE ST. (OLD STH 26) 518 520 522

96':1' TAPER

EAT POST 9
STA 516+77.5
20.50' RT

CONC. SHLD.

APPROACH SLAB FOR B-53-0017
SEE SDD 13B2 "CONCRETE PAVEMENT
APPROACH SLAB" FOR DETAILS

STEEL THRIE BEAM
STRUCTURE APPROACH
STA 519+15
18.00' RT

EAT POST #1
STA 516+27.5
21.00' RT

SLOPE INTERCEPT
INCLUDES: FILL OF 0.5',
2' BEHIND BEAM GUARD
AND SLOPE OF 4:1 TO
EXISTING SURFACE.

SEE "STH 26 (OLD) & CTH N
BLOW UP" FOR DETAILS.

ENVIRONMENTALLY SENSITIVE AREA

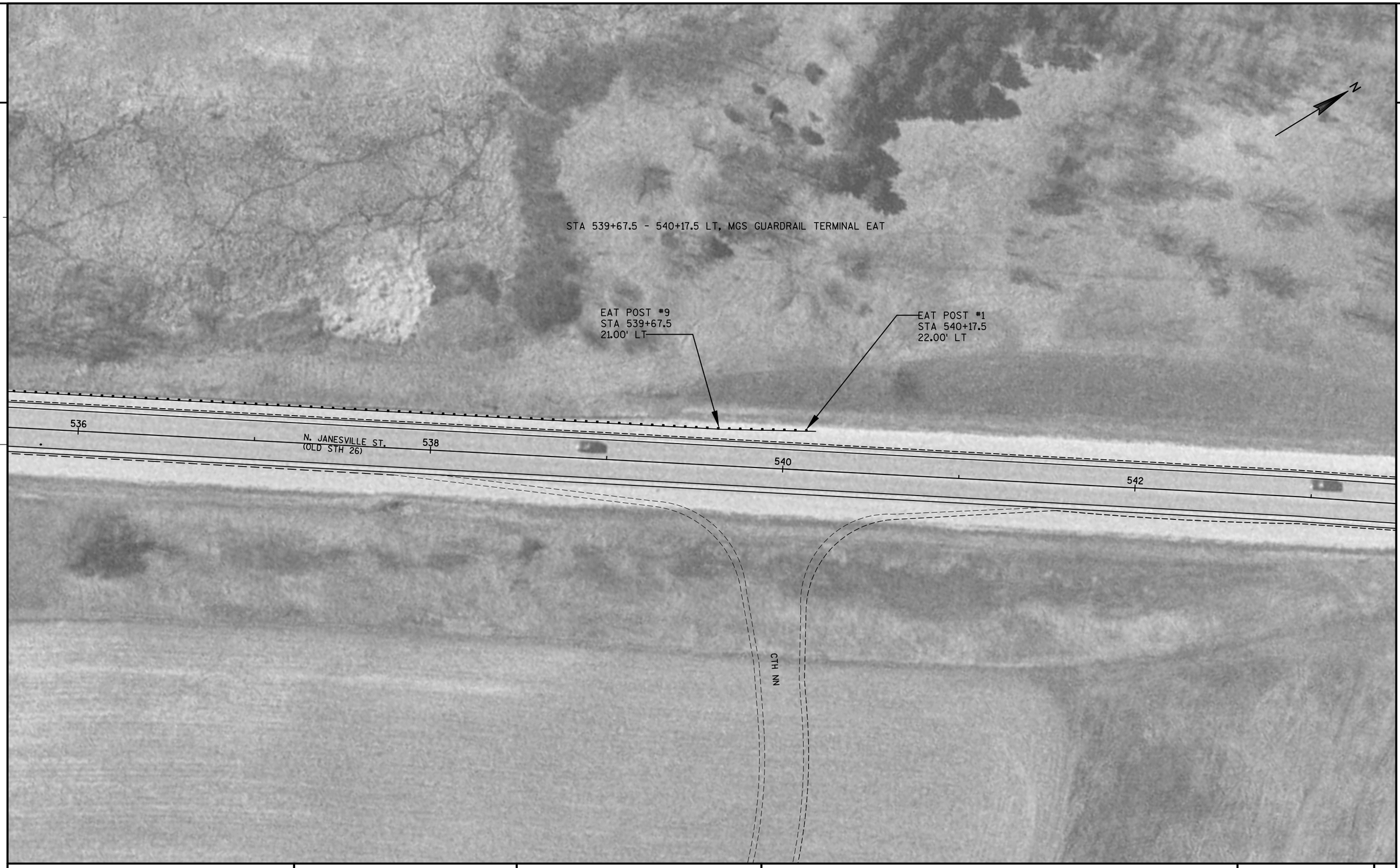
E. CTH N

STA 518+75 - 519+35 RT, REMOVING GUARDRAIL
STA 516+27.5 - 516+77.5 RT, CLASS A GUARDRAIL TERMINAL EAT
STA 516+77.5 - 519+15 RT, CLASS A GUARD RAIL
STA 519+15 - 519+35 RT, STEEL THRIE BEAM STRUCTURE APPROACH

STA 519+60 - 520+15 RT, REMOVING GUARDRAIL
STA 519+60 - 519+80 RT, STEEL THRIE BEAM STRUCTURE APPROACH
STA 519+80 - 520+10 RT, STEEL BEAM GUARD SHORT RADIUS
STA 519+80 - 520+10 RT, STEEL BEAM GUARD SHORT RADIUS TERMINAL

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CONSTRUCTION DETAILS - BEAM GUARD	SHEET 13	E

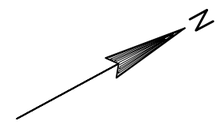
PROJECT NO:1390-04-94	HWY: STH 26 (OLD)	COUNTY:ROCK	CONSTRUCTION DETAILS - BEAM GUARD	SHEET 14	E



PROJECT NO:1390-04-94	HWY: STH 26 (OLD)	COUNTY:ROCK	CONSTRUCTION DETAILS - BEAM GUARD	SHEET 15	E

2

STH 26 (OLD)



18'

BRIDGE B-53-0017
OVER OTTER CREEK

18'

SEE SDD 14B20 FOR NORMAL STEEL THRIE BEAM STRUCTURE APPROACH.

SEE CONSTRUCTIONL DETAILS-
BEAM GUARD FOR THIS SECTION.

STEEL PLATE BEAM GUARD
SHORT RADIUS - 32'

STEEL THRIE BEAM
STRUCTURE APPROACH

SEE SDD 14B27 FOR POST SPACING AND OTHER DETAILS PERTAINING TO STEEL PLATE SHORT RADIUS- 32'.

SEE SDD 14B27 FOR SHORT RADIUS TERMINAL DETAILS.

STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINAL

CTH N

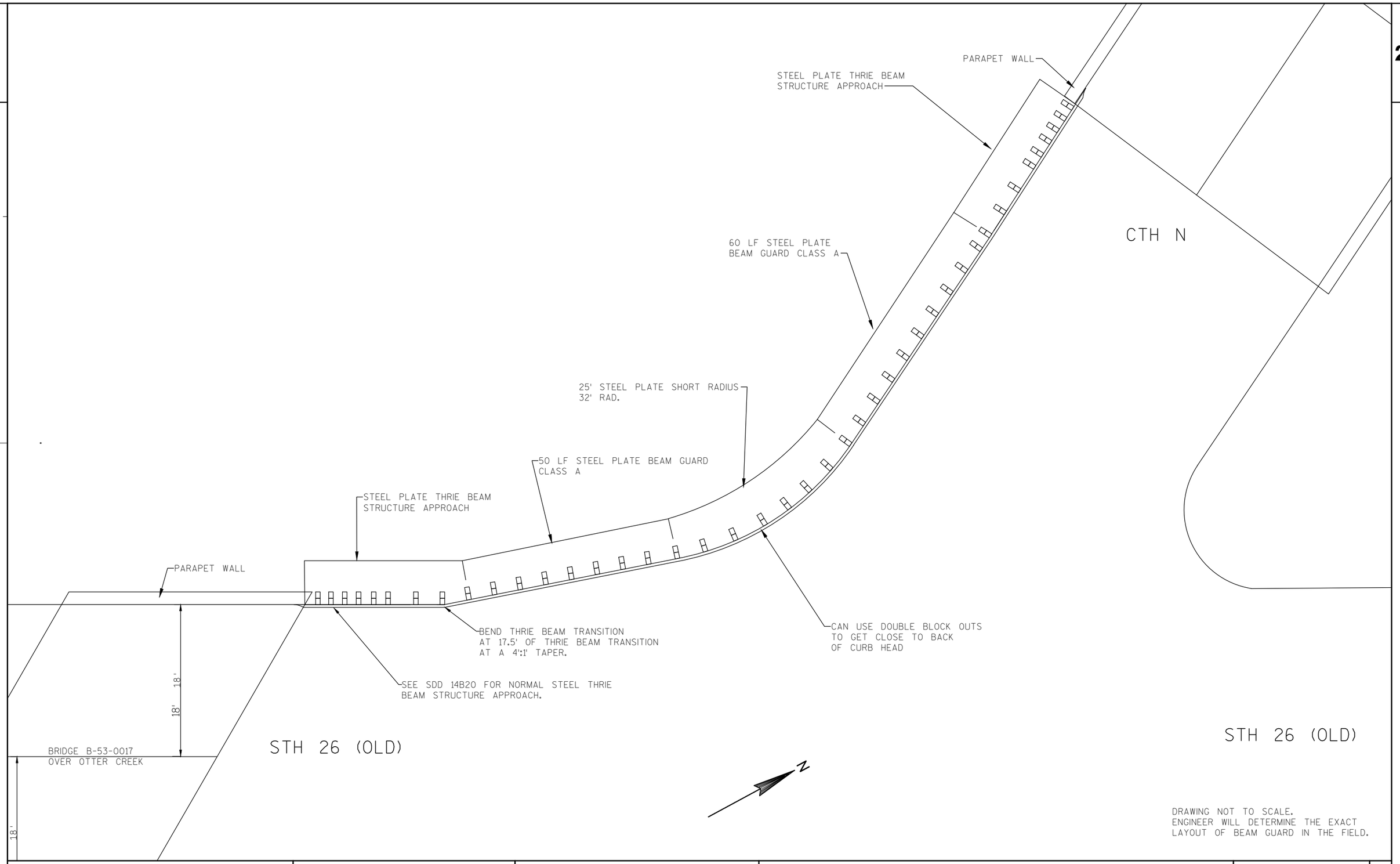
DRAWING NOT TO SCALE.
ENGINEER WILL DETERMINE THE EXACT LAYOUT OF BEAM GUARD IN THE FIELD.

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CONSTRUCTION DETAILS: STH 26 (OLD) & CTH N BLOW UP	SHEET 16	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\TITLE PAGE, OVERVIEW, GEN NOTES, TRAFFIC CON\STH 26 021001_CD.DWG PLOT DATE : 1/29/2014 2:23 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : ---------- PLOT SCALE : 0.001086

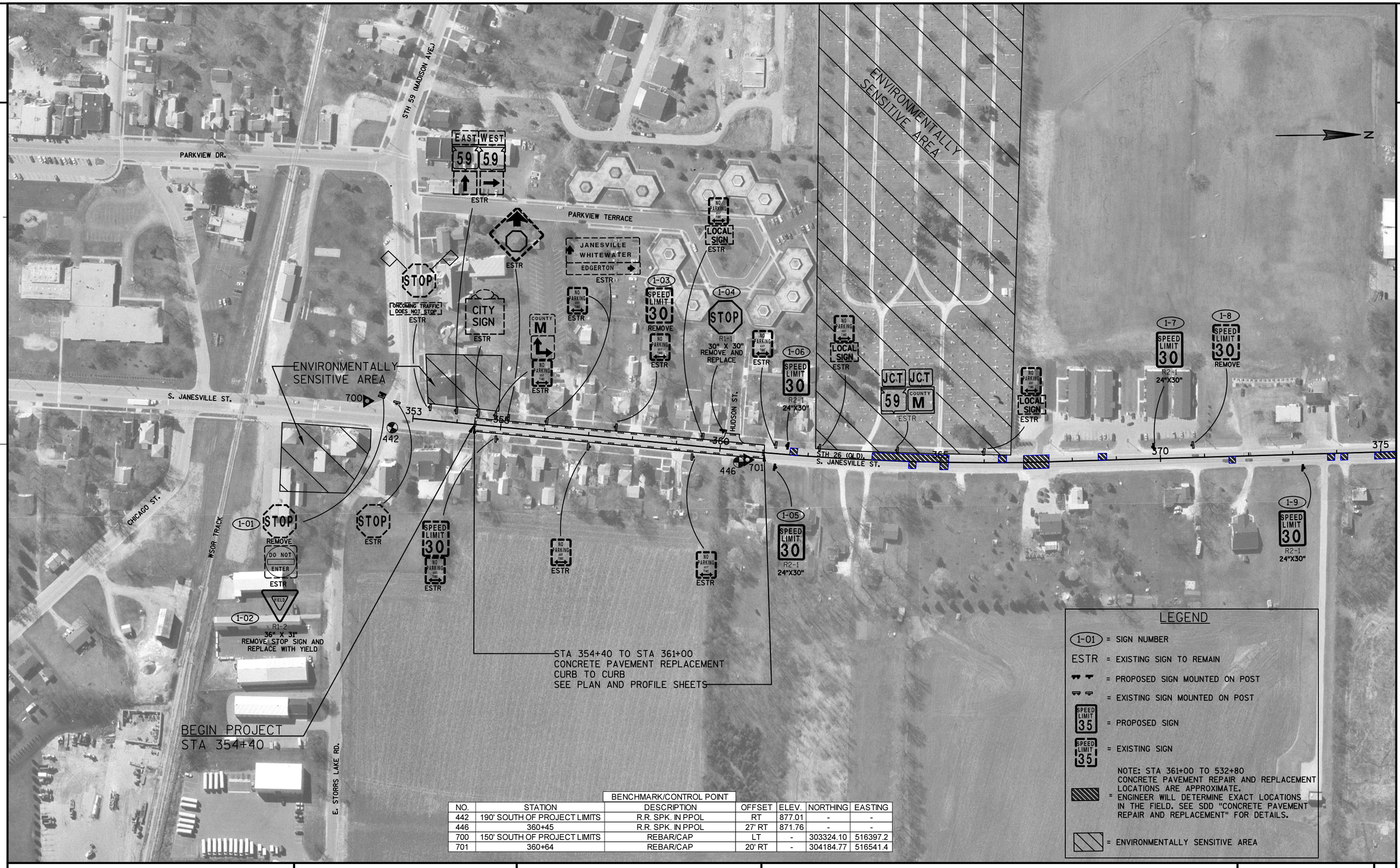
WISDOT/CADDS SHEET 42

2



DRAWING NOT TO SCALE.
ENGINEER WILL DETERMINE THE EXACT LAYOUT OF BEAM GUARD IN THE FIELD.

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CONSTRUCTION DETAILS: STH 26 (OLD) & CTH N BLOW UP 2	SHEET 17	E



BENCHMARK/CONTROL POINT							
NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
442	190' SOUTH OF PROJECT LIMITS	R.R. SPK. IN PPOL	RT	877.01	-	-
446	360+45	R.R. SPK. IN PPOL	27' RT	871.76	-	-
700	150' SOUTH OF PROJECT LIMITS	REBAR/CAP	LT	-	303324.10	516397.2
701	360+64	REBAR/CAP	20' RT	-	304184.77	516541.4

LEGEND

- (1-01) = SIGN NUMBER
- ESTR = EXISTING SIGN TO REMAIN
- = PROPOSED SIGN MOUNTED ON POST
- = EXISTING SIGN MOUNTED ON POST
- SPEED LIMIT 35 = PROPOSED SIGN
- SPEED LIMIT 35 = EXISTING SIGN
- NOTE: STA 361+00 TO 532+80 CONCRETE PAVEMENT REPAIR AND REPLACEMENT LOCATIONS ARE APPROXIMATE. ENGINEER WILL DETERMINE EXACT LOCATIONS IN THE FIELD. SEE SDD "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR DETAILS.
- = ENVIRONMENTALLY SENSITIVE AREA

PROJECT NO:1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\ALIPROFS-STH 26.DWG PLOT DATE : 1/29/2014 1:19 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

ENVIRONMENTALLY SENSITIVE AREA

N

2-01 NO PASSING ZONE W14-3 48" X 36" REMOVE AND REPLACE

LOCAL SIGN ESTR

2-02 SPEED LIMIT 30 R2-1 24"X30"

2-07 SPEED LIMIT 30 W3-5 36" X 36"

2-05 REDUCER SPEED AHEAD 30 M.P.H. REMOVE

2-06

LOCAL SIGN LOCAL SIGN ESTR

2-08 SPEED LIMIT 45 R2-1 24"X30"

LOCAL SIGN LOCAL SIGN ESTR

MILTON POPULATION 5545 ESTR

2-11 SPEED LIMIT 45 REMOVE

SPEED LIMIT 45 ESTR

375 380 385 STH 26 390 395 400 405

2-03 STOP R1-1 30" X 30" REMOVE AND REPLACE

E. NELSON AVE.

2-04 SPEED LIMIT 45 R2-1 24"X30" REMOVE AND REPLACE

PARK PL.

FAIRWAY DR.

BOWERS LAKE RD.

2-09 STOP R1-1 30" X 30" REMOVE AND REPLACE

2-10 SPEED LIMIT 45 R2-1 24"X30"

SPEED LIMIT 55 ESTR

2-12 NO PASSING ZONE W14-3 48" X 36" REMOVE AND REPLACE

ENVIRONMENTALLY SENSITIVE AREA

LEGEND

- 1-01 = SIGN NUMBER
- ESTR = EXISTING SIGN TO REMAIN
- = PROPOSED SIGN MOUNTED ON POST
- = EXISTING SIGN MOUNTED ON POST
- SPEED LIMIT 35 = PROPOSED SIGN
- SPEED LIMIT 35 = EXISTING SIGN
- = NOTE: STA 361+00 TO 532+80 CONCRETE PAVEMENT REPAIR AND REPLACEMENT LOCATIONS ARE APPROXIMATE. ENGINEER WILL DETERMINE EXACT LOCATIONS IN THE FIELD. SEE SDD "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR DETAILS.
- = ENVIRONMENTALLY SENSITIVE AREA

PROJECT NO:1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET	E

2

ENVIRONMENTALLY SENSITIVE AREA

N

3-01
NO PASSING ZONE
W14-3
48" X 36"
REMOVE AND REPLACE

3-02
SPEED LIMIT 45
W3-5
36" X 36"
REMOVE AND REPLACE

3-05
S3-1
30"X30"

3-04
SCHOOL BUS STOP AHEAD
REMOVE

3-07
NO PASSING ZONE
W14-3
48" X 36"
REMOVE AND REPLACE

405 410 415 420 STH 26 425 430 435

E. EAGLE DR.

3-03
STOP
R1-1
30" X 30"
REMOVE AND REPLACE

N. BIRDIE ST.

3-06
NO PASSING ZONE
W14-3
48" X 36"
REMOVE AND REPLACE

ENVIRONMENTALLY SENSITIVE AREA

LEGEND

- 1-01 = SIGN NUMBER
- ESTR = EXISTING SIGN TO REMAIN
- = PROPOSED SIGN MOUNTED ON POST
- = EXISTING SIGN MOUNTED ON POST
- SPEED LIMIT 35 = PROPOSED SIGN
- SPEED LIMIT 35 = EXISTING SIGN
- = NOTE: STA 361+00 TO 532+80 CONCRETE PAVEMENT REPAIR AND REPLACEMENT LOCATIONS ARE APPROXIMATE. ENGINEER WILL DETERMINE EXACT LOCATIONS IN THE FIELD. SEE SDD "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR DETAILS.
- = ENVIRONMENTALLY SENSITIVE AREA

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\ALIPROFS-STH 26.DWG PLOT DATE : 1/29/2014 1:19 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

ENVIRONMENTALLY SENSITIVE AREA

N

435 440 445 450 455 460 465

STH 26

E. KLUG RD.

KLUG RD.
ESTR

JOHN PAUL RD
ESTR

4-01
STOP
R1-1
30" X 30"
REMOVE AND REPLACE

STA 445+85 - STA 450+35
REMOVING GUARDRAIL REQ'D

STA 446+37.5 - STA 448+87.5 LT
250' MGS REQ'D
2 MGS ENERGY ABSORBING
TERMINALS REQ'D

SEE CONSTRUCTION DETAILS
SHEETS FOR MORE INFORMATION

STA 445+90 - STA 452+75
REMOVING GUARDRAIL REQ'D

STA 446+125 - STA 451+75 RT
525' MGS REQ'D
2 MGS ENERGY ABSORBING
TERMINALS REQ'D

SEE CONSTRUCTION DETAILS
SHEETS FOR MORE INFORMATION

ENVIRONMENTALLY SENSITIVE AREA

LEGEND

1-01 = SIGN NUMBER

ESTR = EXISTING SIGN TO REMAIN

= PROPOSED SIGN MOUNTED ON POST

= EXISTING SIGN MOUNTED ON POST

SPEED LIMIT 35 = PROPOSED SIGN

SPEED LIMIT 35 = EXISTING SIGN

= NOTE: STA 361+00 TO 532+80 CONCRETE PAVEMENT REPAIR AND REPLACEMENT LOCATIONS ARE APPROXIMATE. ENGINEER WILL DETERMINE EXACT LOCATIONS IN THE FIELD. SEE SDD "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR DETAILS.

= ENVIRONMENTALLY SENSITIVE AREA

PROJECT NO:1390-04-94	HWY:STH 26 (OLD)	COUNTY:ROCK	PLAN DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\ALIPROFS-STH 26.DWG PLOT DATE : 1/29/2014 1:19 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

2

N

5-01
STOP
R1-1
30" X 30"
REMOVE AND
REPLACE

N. JOHN PAUL RD.

JOHN PAUL RD
ESTR

5-03
NO
PASSING
ZONE
W14-3
48" X 36"
REMOVE AND
REPLACE

465 470 475 STH 26 480 485 490 495

5-02
NO
PASSING
ZONE
W14-3
48" X 36"
REMOVE AND
REPLACE

5-04
W1-2R
30" X 30"
REMOVE AND
REPLACE

LEGEND

1-01 = SIGN NUMBER

ESTR = EXISTING SIGN TO REMAIN

= PROPOSED SIGN MOUNTED ON POST

= EXISTING SIGN MOUNTED ON POST

SPEED LIMIT 35 = PROPOSED SIGN

SPEED LIMIT 35 = EXISTING SIGN

= NOTE: STA 361+00 TO 532+80
CONCRETE PAVEMENT REPAIR AND REPLACEMENT
LOCATIONS ARE APPROXIMATE.
ENGINEER WILL DETERMINE EXACT LOCATIONS
IN THE FIELD. SEE SDD "CONCRETE PAVEMENT
REPAIR AND REPLACEMENT" FOR DETAILS.

= ENVIRONMENTALLY SENSITIVE AREA

PROJECT NO:1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\ALIPROFS-STH 26.DWG PLOT DATE : 1/29/2014 1:19 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

LEGEND

- (1-01) = SIGN NUMBER
- ESTR = EXISTING SIGN TO REMAIN
- = PROPOSED SIGN MOUNTED ON POST
- = EXISTING SIGN MOUNTED ON POST
- SPEED LIMIT 35 = PROPOSED SIGN
- SPEED LIMIT 35 = EXISTING SIGN
- NOTE: STA 361+00 TO 532+80 CONCRETE PAVEMENT REPAIR AND REPLACEMENT LOCATIONS ARE APPROXIMATE. = ENGINEER WILL DETERMINE EXACT LOCATIONS IN THE FIELD. SEE SDD "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR DETAILS.
- = ENVIRONMENTALLY SENSITIVE AREA
- ------ = INDICATES EXISTING FEATURES NOT SURVEYED

STA 518+65 - STA 519+55
REMOVING GUARDRAIL REQ'D

STA 518+87.5 - STA 519+37.5 LT
50' STEEL PLATE BEAM GUARD CLASS A REQ'D
1 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL REQ'D
1 STEEL THRIE BEAM STRUCTURE APPROACH REQ'D

SEE CONSTRUCTION DETAILS
SHEETS FOR MORE INFORMATION

EXISTING STRUCTURE B53-0017
DECK PLACEMENT
AND ABUTMENT REPAIR

STA 519+80 - STA 521+00
REMOVING GUARDRAIL REQ'D

STA 520+00 - STA 520+45 LT &
STA 520+60 - STA 520+90 LT
105' STEEL PLATE BEAM GUARD CLASS A REQ'D
1 STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
32' REQ'D
2 STEEL PLATE THRIE BEAM TRANSITION REQ'D

SEE CONSTRUCTION DETAIL
SHEETS FOR MORE INFORMATION

ENVIRONMENTALLY SENSITIVE AREA

E. COUNTY RD. N

N

6-01 W1-2L 30" X 30" REMOVE AND REPLACE

ESTR

6-02 SPEED LIMIT 55 R2-1 24"X30"

6-05 W5-52L 12" X 36" REMOVE AND REPLACE

6-06 W5-52R 12" X 36" REMOVE AND REPLACE

STOP ESTR

COUNTY N ESTR

END CONSTRUCTION

094

710 478 505 500 495 510 STH 26 515 520 525 711

EDGERTON
WHITEWATER
ESTR

6-03 W5-52R 12" X 36" REMOVE AND REPLACE

6-04 W5-52L 12" X 36" REMOVE AND REPLACE

STOP ESTR

REMOVE AND SALVAGE TROMBONE POLES/ARMS

479

6-07 6-08 STOP REMOVE

NO OUTLET ESTR

TO 26 COUNTY N ESTR

END CONSTRUCTION

JCT COUNTY N ESTR

ESTR

BENCHMARK/CONTROL POINT

NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
094	521+10	CHIS. SQUARE ON CONC. CURB	141' LT	818.86	-	-
478	504+73	R.R. SPK. IN PPOL	35' LT	867.90	-	-
479	525+98	R.R. SPK. IN PPOL	58' RT	810.6	-	-
710	503+96	REBAR/CAP	28' LT	-	318487.63	516851.7
711	521+18	REBAR/CAP	34' RT	-	319997.06	517679.6

STA 518+75 - STA 519+35
REMOVING GUARDRAIL REQ'D

STA 516+77.5 - STA 519+15 RT
237.5' STEEL PLATE BEAM GUARD CLASS A REQ'D
1 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINALS REQ'D
1 STEEL THRIE BEAM STRUCTURE APPROACH REQ'D

SEE CONSTRUCTION DETAILS
SHEETS FOR MORE INFORMATION

ENVIRONMENTALLY SENSITIVE AREA

OTTER CREEK

STA 519+60 - STA 520+15
REMOVING GUARDRAIL REQ'D

1 STEEL THRIE BEAM STRUCTURE APPROACH -REQ'D
1 STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL 32' - REQ'D
1 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL REQ'D

SEE CONSTRUCTION DETAILS
SHEETS FOR MORE INFORMATION

PROJECT NO:1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\ALIPROFS-STH 26.DWG PLOT DATE : 1/29/2014 1:20 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

LEGEND

- 1-01 = SIGN NUMBER
- ESTR = EXISTING SIGN TO REMAIN
- = PROPOSED SIGN MOUNTED ON POST
- = EXISTING SIGN MOUNTED ON POST
- SPEED LIMIT 35 = PROPOSED SIGN
- SPEED LIMIT 35 = EXISTING SIGN
- NOTE: STA 361+00 TO 532+80 CONCRETE PAVEMENT REPAIR AND REPLACEMENT LOCATIONS ARE APPROXIMATE. ENGINEER WILL DETERMINE EXACT LOCATIONS IN THE FIELD. SEE SDD "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR DETAILS.
- = ENVIRONMENTALLY SENSITIVE AREA
- = INDICATES EXISTING FEATURES NOT SURVEYED

BENCHMARK/CONTROL POINT

NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
479	525+98	R.R. SPK. IN PPOL	58' RT	810.6	-	-
480	531+86	CHIS. SQUARE ON CATTLE PASS	30' RT	815.1	-	-
481	544+61	R.R SPK. IN BEAM GUARD POST	24' RT	843.5	-	-
4815	547+86	CHIS. SQUARE ON CATTLE PASS	32' RT	846.5	-	-
712	539+64	REBAR/CAP	29' LT	-	321566.32	518650.3

STA 532+80 TO STA 548+30
CONCRETE PAVEMENT REPLACEMENT
WITH ASPHALTIC PAVEMENT
SEE PLAN AND PROFILE SHEETS

STA 532+50 - STA 538+85
REMOVING GUARDRAIL REQ'D

STA 532+62.5 - STA 539+67.5 LT
705' MGS REQ'D
2 MGS ENERGY ABSORBING TERMINALS REQ'D

SEE CONSTRUCTION DETAILS
SHEETS FOR MORE INFORMATION

ENVIRONMENTALLY SENSITIVE AREA

ESTR

WHITEWATER
EDGERTON
ESTR

JCT COUNTY N
ESTR

7-01
NO PASSING ZONE
W14-3
48" X 36"
REMOVE AND REPLACE

PERIMETER CONTROL LOGS
LOCATION TO BE DETERMINED
BY THE ENGINEER.

DEAD END
ESTR

STA 544+85 - STA 548+00
REMOVING GUARDRAIL REQ'D

ESTR
ESTR
ESTR

525
530
535
540
545
550

STH 26 (OLD)
S. JANESVILLE ST.

712

479
480
481
4815

NO OUTLET
ESTR

STOP
ESTR

DEAD END
ESTR

STA 544+40 - STA 548+20
REMOVING GUARDRAIL REQ'D

END PROJECT
STA 548+30

E. COUNTY RD. N

N. COUNTY RD. NN

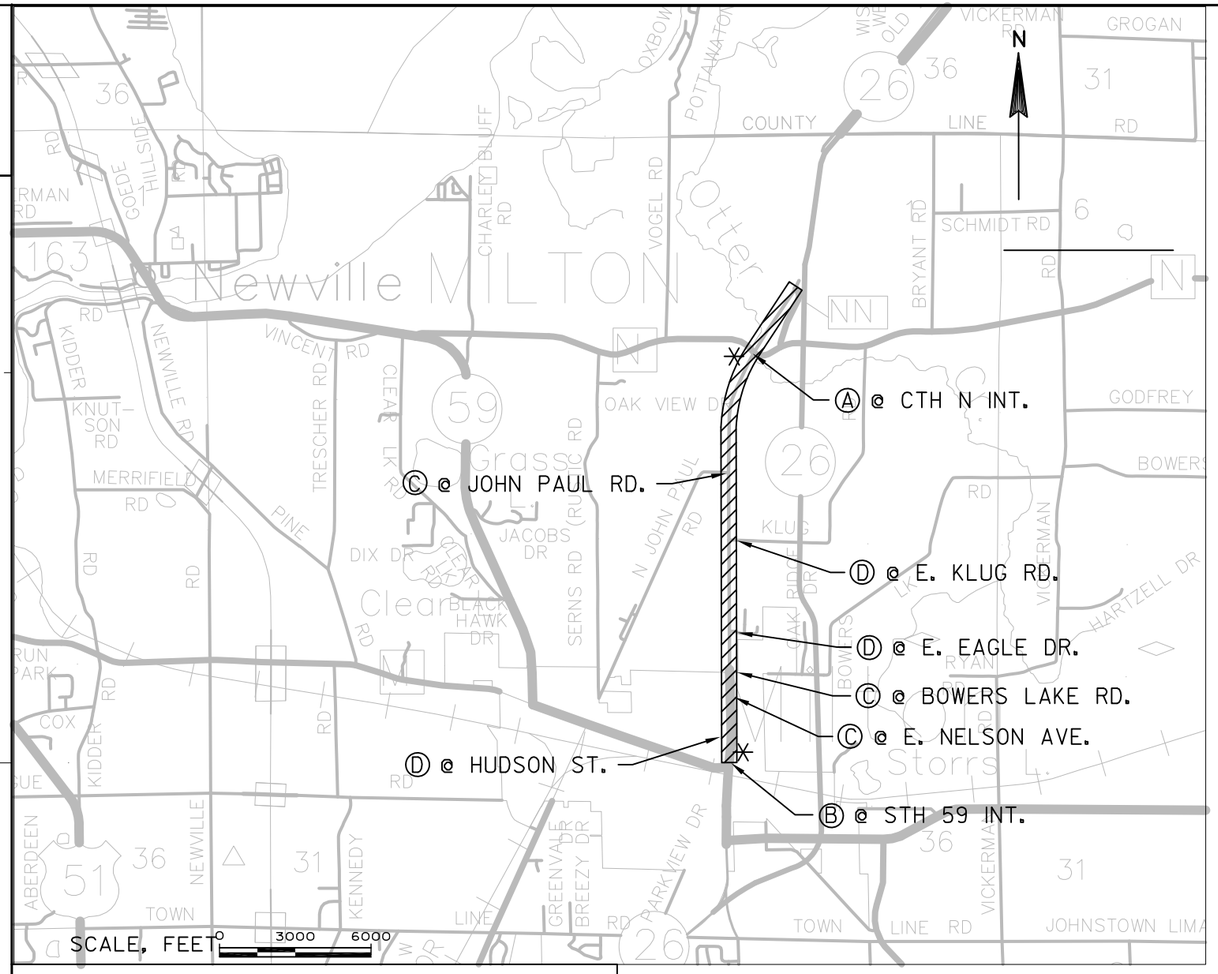
NEW STH 26 SOUTH

NEW STH 26 NORTH

N

PROJECT NO:1390-04-94	HWY:STH 26 (OLD)	COUNTY:ROCK	PLAN DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\ALIPROFS-STH 26.DWG PLOT DATE : 1/29/2014 1:20 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:200 FT



LEGEND

▨ = WORK ZONE

✳ = PLACE PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) AT THE LIMITS OF THE PROJECT FOR 10 WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION AND FOR THE DURATION OF THE STH 26 (OLD) PROJECT.

DETAIL Ⓐ USE STANDARD DETAIL DRAWING 15C3 DETAIL 3, "PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS".

NOTE: CTH N WILL REMAIN OPEN TO THROUGH TRAFFIC. AREAS OF CONCRETE REPAIR/REPLACEMENT WITHIN THE INTERSECTION WILL BE CONSTRUCTED SO THAT 2-WAY TRAFFIC WILL NOT BE IMPEDED.

DETAIL Ⓑ USE STANDARD DETAIL DRAWING 15C2 SHEET A DETAIL C, "MAINLINE CLOSURE, NO POSTED DETOUR".

NOTE: TRAFFIC AT THE STH 59 & S. JANESVILLE ST. INTERSECTION WILL REMAIN OPEN AT ALL TIMES.

DETAIL Ⓒ USE STANDARD DETAIL DRAWING 15C3 DETAIL 4, "CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT".

DETAIL Ⓓ USE ONE W20-1 "ROAD WORK AHEAD" SIGN AT THE INTERSECTION OF THE DEADEND SIDEROAD AND STH 26 (OLD).

NOTE:
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. ADJUSTMENTS TO FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER.

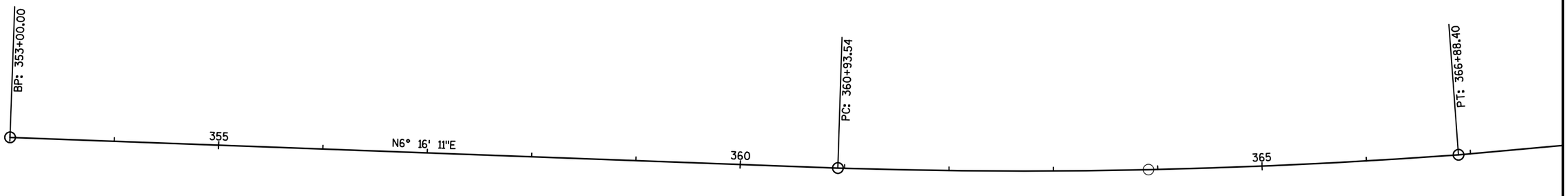
ANY SIGN TEMPORARY OR EXISTING, WHICH CONFILCTS WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED.

ANY "STOP" SIGNS WHICH ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	TRAFFIC CONTROL - STH 26 (OLD) CLOSED TO THROUGH TRAFFIC	SHEET 25 E

2

N

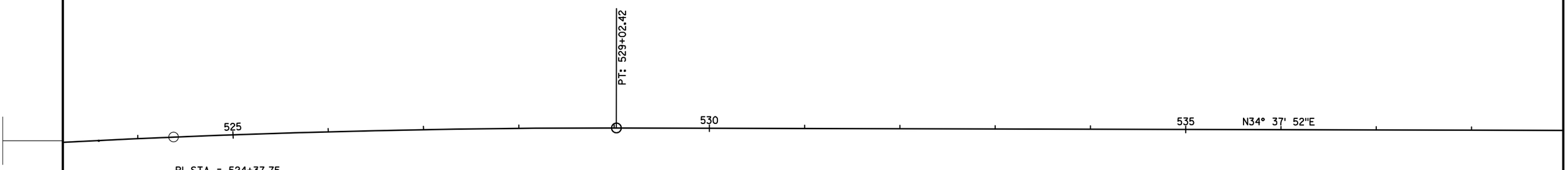


PI STA = 354+40.00
Y = 303566.115
X = 516452.481

PI STA = 363+91.25
Y = 304511.846
X = 516554.744
DELTA = 6°02'51"
D = 1°01'00"
T = 297.71'
L = 594.86'
R = 5635.82'
PC STA = 360+93.54
PT STA = 366+88.40

PROJECT NO:1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	ALIGNMENT LAYOUT DETAILS	SHEET 26	E

2



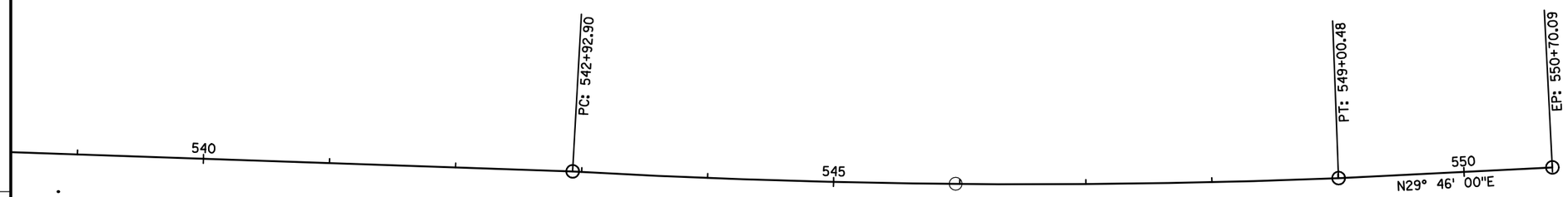
PI STA = 524+37.75
Y = 320291.941
X = 517806.273
DELTA = 4°49'50"
D = 0°31'10"
T = 465.22'
L = 929.89'
R = 11029.49'
PC STA = 519+72.52
PT STA = 529+02.42

STA = 532+80.00
Y = 320986.006
X = 518284.382

PROJECT NO:1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	ALIGNMENT LAYOUT DETAILS	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\ALIGNMENT LAYOUT DETAILS.DWG PLOT DATE : 1/10/2014 9:44 AM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



PI STA = 545+96.91
Y = 322065.831
X = 519038.110
DELTA = 5°24'06"
D = 0°53'21"
T = 304.02'
L = 607.58'
R = 6444.67'
PC STA = 542+92.90
PT STA = 549+00.48

STA = 548+30.00
Y = 322267.331
X = 519156.168

PROJECT NO:1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	ALIGNMENT LAYOUT DETAILS	SHEET 28	E

DATE 30APR14 — E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1390-04-94 QUANTITY
0010	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STATION) 01. 519+59.40	LS	1.000	1.000
0020	204.0100	REMOVING PAVEMENT	SY	8,010.000	8,010.000
0030	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	3,268.000	3,268.000
0040	204.0150	REMOVING CURB & GUTTER	LF	30.000	30.000
0050	204.0165	REMOVING GUARDRAIL	LF	2,973.000	2,973.000
0060	205.0100	EXCAVATION COMMON	CY	2,268.000	2,268.000
0070	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-53-0017	LS	1.000	1.000
0080	210.0100	BACKFILL STRUCTURE	CY	40.000	40.000
0090	211.0200	PREPARE FOUNDATION FOR CONCRETE PAVEMENT (PROJECT) 01. 1390-04-94	LS	1.000	1.000
0100	213.0100	FINISHING ROADWAY (PROJECT) 01. 1390-04-94	EACH	1.000	1.000
0120	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	3,500.000	3,500.000
0130	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	2,435.000	2,435.000
0140	312.0110	SELECT CRUSHED MATERIAL	TON	320.000	320.000
0150	415.0090	CONCRETE PAVEMENT 9-INCH	SY	2,200.000	2,200.000
0160	415.0410	CONCRETE PAVEMENT APPROACH SLAB	SY	200.000	200.000
0170	416.0610	DRILLED TIE BARS	EACH	779.000	779.000
0180	416.0620	DRILLED DOWEL BARS	EACH	2,640.000	2,640.000
0190	416.1710	CONCRETE PAVEMENT REPAIR	SY	262.000	262.000
0200	416.1720	CONCRETE PAVEMENT REPLACEMENT	SY	9,263.000	9,263.000
0210	440.4410.S	INCENTIVE IRI RIDE	DOL	1,175.000	1,175.000
0220	455.0105	ASPHALTIC MATERIAL PG58-28	TON	57.200	57.200
0230	455.0605	TACK COAT	GAL	214.360	214.360
0240	460.1100	HMA PAVEMENT TYPE E-0.3	TON	945.000	945.000
0250	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	610.000	610.000
0260	465.0105	ASPHALTIC SURFACE	TON	354.000	354.000
0270	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	26.000	26.000
0280	502.0100	CONCRETE MASONRY BRIDGES	CY	37.000	37.000
0290	502.3200	PROTECTIVE SURFACE TREATMENT	SY	140.000	140.000
0300	502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	72.000	72.000
0310	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	10,650.000	10,650.000
0320	509.1500	CONCRETE SURFACE REPAIR	SF	30.000	30.000
0330	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	17.000	17.000
0340	517.0900.S	PREPARATION AND COATING OF TOP FLANGES (STRUCTURE) 01. B-53-0017	LS	1.000	1.000
0350	517.1800.S	STRUCTURE REPAINTING RECYCLED ABRASIVE (STRUCTURE) 01. B-53-0017	LS	1.000	1.000
0360	517.4500.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS (STRUCTURE) 01. B-53-0017	LS	1.000	1.000
0370	517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH	1.000	1.000
0380	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	30.000	30.000
0410	611.8110	ADJUSTING MANHOLE COVERS	EACH	6.000	6.000
0420	614.0010	BARRIER SYSTEM GRADING SHAPING FINISHING	EACH	7.000	7.000
0430	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4.000	4.000
0440	614.0200	STEEL THRIE BEAM STRUCTURE APPROACH	LF	103.250	103.250
0450	614.0305	STEEL PLATE BEAM GUARD CLASS A	LF	393.850	393.850
0460	614.0345	STEEL PLATE BEAM GUARD SHORT RADIUS	LF	75.000	75.000

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DATE 30APR14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1390-04-94 QUANTITY
0470	614.0370	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	EACH	2.000	2.000
0480	614.0390	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL	EACH	1.000	1.000
0490	614.2300	MGS GUARDRAIL 3	LF	1,480.000	1,480.000
0500	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	6.000	6.000
0510	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1390-04-94	EACH	1.000	1.000
0530	619.1000	MOBILIZATION	EACH	0.700	0.700
0540	625.0100	TOPSOIL	SY	90.000	90.000
0550	628.1504	SILT FENCE	LF	750.000	750.000
0560	628.1520	SILT FENCE MAINTENANCE	LF	750.000	750.000
0570	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	4.000	4.000
0580	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	4.000	4.000
0590	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	90.000	90.000
0600	628.7015	INLET PROTECTION TYPE C	EACH	6.000	6.000
0610	629.0210	FERTILIZER TYPE B	CWT	0.028	0.028
0620	630.0120	SEEDING MIXTURE NO. 20	LB	2.400	2.400
0630	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	1.000	1.000
0640	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	30.000	30.000
0650	637.2210	SIGNS TYPE II REFLECTIVE H	SF	81.030	81.030
0660	637.2230	SIGNS TYPE II REFLECTIVE F	SF	96.500	96.500
0670	638.2602	REMOVING SIGNS TYPE II	EACH	32.000	32.000
0680	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	26.000	26.000
0690	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1390-04-94	EACH	1.000	1.000
0710	643.0300	TRAFFIC CONTROL DRUMS	DAY	7,500.000	7,500.000
0720	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	1,140.000	1,140.000
0730	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	1,500.000	1,500.000
0740	643.0900	TRAFFIC CONTROL SIGNS	DAY	1,560.000	1,560.000
0750	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	140.000	140.000
0770	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	63,235.000	63,235.000
0780	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	200.000	200.000
0810	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	176.000	176.000
0830	648.0100	LOCATING NO-PASSING ZONES	MI	3.670	3.670
0840	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	1,550.000	1,550.000
0850	650.5000	CONSTRUCTION STAKING BASE	LF	1,550.000	1,550.000
0870	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-53-0017	LS	1.000	1.000
0880	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	660.000	660.000
0900	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1390-04-94	LS	1.000	1.000
0920	690.0150	SAWING ASPHALT	LF	620.000	620.000
0930	690.0250	SAWING CONCRETE	LF	6,685.000	6,685.000
0940	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	500.000	500.000
0950	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	500.000	500.000
0960	SPV.0060	SPECIAL 01. LANDMARK REFERENCE MONUMENTS SPECIAL	EACH	6.000	6.000
0970	SPV.0090	SPECIAL 01. PERIMETER CONTROL LOGS	LF	820.000	820.000
0980	SPV.0105	SPECIAL 01. REMOVING AND SALVAGING TROMBONE POLES & ARMS	LS	1.000	1.000
0990	SPV.0105	SPECIAL 02. CONCRETE PAVEMENT JOINT LAYOUT	LS	1.000	1.000

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EARTHWORK SUMMARY

From/To Station	Location	205.0100 Common Excavation (1)	Salvaged/ Unusable Pavement Material (3)	Available Material (4)	Unexpanded Fill	Expanded Fill (5)	Mass Ordinate +/- (6)	Waste	Borrow (7) paid for as item 305.0120
		Cut (2)				Factor 1.20			Factor 1.20
354+40 - 361+00	MAINLINE STH 26	598	598	0	0	0	0	0	0
519+25 - 520+00	B53-0017 APPROACH SLABS	55	55	0	0	0	0	0	0
532+80 - 548+30	MAINLINE STH 26	1375	1375	0	157	189	-189	0	189
UNDISTRIBUTED 5% EBS (8)		240	240	0	240	288	-288	0	288
TOTALS		**2268**	**2268**	**0**	**397**	**477**	**-477**	**0**	**477**

1) Common excavation is the sum of the Cut. Item 205. 0100
2) Salvaged/Unusable Pavement Material is included in Cut.
3) Salvaged/Unusable Pavement Material
   (Assumed 9" concrete STH 26 / Unusable EBS Material)
4) Available Material = Cut- Salvaged/Unusable Pavement Material
5) Expanded fill factor = 1.20
6) The Mass Ordinate + or - Qty calculated. Plus quantity indicates an excess of material, minus indicates a shortage of material.
7) Borrow will be paid for as item 305.0120 Base Aggregate Dense 1-1/4 INCH.
8) 5% of Concrete Repair/Replacement Areas. See construction details for more information.

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REMOVING PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 REMOVING PAVEMENT SY	204.0120 REMOVING ASPHALT SURFACE MILLING SY	204.0150 REMOVING CURB & GUTTER LF	REMARKS
0010	354+40	-	361+00	MAINLINE	2200	-	-	CURB TO CURB REPLACEMENT
0010	-	-	360+50	HUDSON ST.	-	48	-	-
0010	-	-	381+50	NELSON AVE.	-	414	-	-
0010	-	-	390+75	BOWERS LAKE RD.	-	447	-	-
0010	-	-	407+50	EAGLE DR.	-	382	-	-
0010	-	-	443+85	KLUG RD.	-	460	-	-
0010	-	-	470+65	JOHN PAUL RD.	-	489	-	-
0010	519+20	-	519+46	B-53-0017	20	-	-	APPROACH SLAB
0010	519+72	-	519+98	B-53-0017	20	-		APPROACH SLAB
0010	-	-	521+00	CTH N WEST	-	542	-	-
0010	-	-	520+75	CTH N EAST	-	371	-	-
0010	532+80	-	548+30	MAINLINE	5170	-	-	NORTH PORTION
0010	354+40	-	548+30	DRIVEWAYS	-	115	-	-
0010	354+40	-	548+30	MAINLINE	600	-	-	PAVEMENT ENCOUNTERED DURING EBS
0010	354+40	-	382+00	UNDISTRIBUTED	-	-	30	CURB & GUTTER REPLACEMENT
				TOTAL	**8010**	**3268**	**30**	

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	REMARKS
0010	445+90	-	452+75	RT	685	-
0010	445+85	-	450+35	LT	450	-
0010	518+75	-	519+35	RT	60	-
0010	518+88	-	519+55	LT	68	-
0010	519+60	-	520+15	RT	55	-
0010	519+80	-	521+00	LT	325	PARAPET TO PARAPET
0010	532+50	-	538+85	LT	635	-
0010	544+40	-	548+20	RT	380	-
0010	544+85	-	548+00	LT	315	-
				TOTAL	**2973**	

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PREPARE FOUNDATION FOR CONCRETE PAVEMENT (1390-04-94)

CATEGORY	LOCATION	211.0200 PREPARE FOUNDATION FOR CONCRETE PAVEMENT (1390-04-94) LS	REMARKS
0010	MAINLINE	1	STA 354+40 - STA 361+00 AND B-53-0017 APPROACH SLABS

BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE 1-1/4- INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	REMARKS
0010	382+00	-	532+80	RT/LT SHOULDERS	3250	-	-	-
0010	354+40	-	361+00	MAINLINE	-	125	-	REPLACE LOST MATERIAL
0010	532+80	-	548+30	MAINLINE	175	2150	-	-
0010	354+40	-	548+30	DRIVEWAYS	75	-	-	-
0010				UNDISTRIBUTED EBS	-	160	320	-
				TOTAL	**3500**	**2435**	**320**	

CONCRETE PAVING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	415.0090 CONCRETE PAVEMENT 9-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	SPV.0105.02 CONCRETE PAVEMENT JOINT LAYOUT LS	REMARKS
0010	354+40	-	361+00	STH 26 (OLD) SOUTH	2200	-	56	-	-	-	-	-	MAINLINE SOUTH
0010	361+00	-	374+50	MAINLINE	-	-	106	316	74	665	-	-	CONCRETE PANEL REPLACEMENT
0010	374+50	-	405+00	MAINLINE	-	-	181	728	79	2400	-	-	CONCRETE PANEL REPLACEMENT
0010	405+00	-	435+00	MAINLINE	-	-	57	280	26	605	-	-	CONCRETE PANEL REPLACEMENT
0010	435+00	-	465+00	MAINLINE	-	-	71	364	0	1907	-	-	CONCRETE PANEL REPLACEMENT
0010	465+00	-	495+00	MAINLINE	-	-	184	504	60	2087	-	-	CONCRETE PANEL REPLACEMENT
0010	495+00	-	525+00	MAINLINE	-	200	124	448	23	1599	-	1	APPROACH SLABS/PANEL REPLACE
0010	354+40	-	382+00	UNDISTRIBUTED	-	-	-	-	-	-	30	-	CURB AND GUTTER REPLACEMENT
				TOTAL	**2200**	**200**	**779**	**2640**	**262**	**9263**	**30**	**1**	

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BEAM GUARD

CATEGORY	STATION	-	STATION	LOCATION	614.0200 STEEL THRIE BEAM STRUCTURE APPROACH LF	614.0305 STEEL PLATE BEAM GUARD CLASS A LF	614.0345 STEEL PLATE BEAM GUARD SHORT RADIUS LF	614.0370 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL EACH	614.0390 STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL EACH	614.2300 MGS GUARDRAIL 3 LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	REMARKS
0010	445+62.5	-	451+87.5	RT	-	-	-	-	-	525	2	-
0010	445+87.5	-	449+37.5	LT	-	-	-	-	-	250	2	-
0010	516+27.5	-	519+35	RT	20.65	237	-	1	-	-	-	-
0010	518+37.5	-	519+55	LT	20.65	46.85	-	1	-	-	-	-
0010	519+60	-	520+10	RT	20.65	-	50	-	1	-	-	-
0010	519+80	-	521+00	LT	41.30	110	25	-	-	-	-	1-25' CURVED BEAM
0010	532+12.5	-	540+17.5	LT	-	-	-	-	-	705	2	-
			TOTAL		**103.25**	**393.85**	**75**	**2**	**1**	**1480**	**6**	

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CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (B-53-0017) LS	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (1390-04-94) LS
0010	354+40	-	548+30	MAINLINE	-	-	-	-	1
0010	354+40	-	361+00	STH 26 (OLD) SOUTH	-	-	-	660	-
0010	532+80	-	548+30	STH 26 (OLD) NORTH	1550	1550	-	-	-
				TOTAL 0010	**1550**	**1550**	**-**	**660**	**1**
0020	519+45	-	519+70	OTTER CREEK	-	-	1	-	-
				TOTAL 0020	**-**	**-**	**1**	**-**	**-**

EROSION CONTROL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7015 INLET PROTECTION TYPE C EACH	SPV.0090.01 PERIMETER CONTROL LOGS LF	REMARKS
0010	354+40	-	361+00	STH 26 (OLD) SOUTH	-	-	-	-	6	-	SOUTH PORTION
0010	532+80	-	541+00	STH 26 (OLD) NORTH	-	-	-	-	-	820	WEST SIDE OF ROAD ONLY
0010	354+40	-	532+80	UNDISTRIBUTED	750	750	4	4	-	-	-
				TOTAL	**750**	**750**	**4**	**4**	**6**	**820**	

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HMA PAVEMENT ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0605 TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
0010	-	-	360+50	HUDSON ST.	-	1.2	-	5	-
0010	-	-	381+50	NELSON AVE.	-	10.3	-	46	-
0010	-	-	390+75	BOWERS LAKE RD.	-	11.2	-	50	-
0010	-	-	407+50	EAGLE DR.	-	9.6	-	43	-
0010	-	-	443+85	KLUG RD.	-	11.5	-	52	-
0010	-	-	470+65	JOHN PAUL RD.	-	12.2	-	55	-
0010	-	-	521+00	CTH N WEST	-	13.6	-	61	-
0010	-	-	520+75	CTH N EAST	-	9.3	-	42	-
0010	532+80	-	548+30	MAINLINE	57	132.6	945	-	-
0010	354+40	-	548+30	DRIVEWAYS	-	2.9	-	-	26
				TOTAL	**57.2**	**214.36**	**945**	**354**	**26**

BARRIER SYSTEM GRADING SHAPING FINISHING

CATEGORY	STATION	TO	STATION	LOCATION	BORROW (CY)*	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH
0010	445+62.5	-	451+87.5	RT	-	1
0010	445+87.5	-	449+37.5	LT	16	1
0010	516+27.5	-	519+35	RT	-	1
0010	518+37.5	-	519+55	LT	-	1
0010	519+60	-	520+10	RT	-	1
0010	519+80	-	521+00	LT	18	1
0010	532+12.5	-	540+17.5	LT	3	1
				TOTAL	**37**	**7**

*BORROW WILL USE 1-1/4" BASE AGGREGATE DENSE.
FOR INFORMATIONAL PURPOSES ONLY.
ITEM IS PAID FOR PER EACH BARRIER SYSTEM.

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PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH YELLOW LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH WHITE LF	646.0126 PAVEMENT MARKING EPOXY 8-INCH LF	647.0566 PAVEMENT MARKING STOP LINE EPOXY 18-INCH LF	648.0100 LOCATING NO-PASSING ZONES MI
0010	354+40	-	548+30	MAINLINE	24400	37000	200	176	3.67
0010	-		-	MULTI-USE PATH	1835	-	-	-	-
				TOTAL	**63235**		**200**	**176**	**3.67**

ADJUSTING MANHOLE COVERS

CATEGORY	STATION	TO	STATION	LOCATION	611.8110 ADJUSTING MANHOLE COVERS EACH
0010	354+40	-	385+00	MAINLINE	6

TRAFFIC CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	* DAYS	643.0100 TRAFFIC CONTROL 1390-04-94 EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS NO.	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY
0010	354+40	-	548+30	PROJECT	60.00	1	-	1140	1500	1560	2	140
0010	354+40	-	548+30	UNDISTRIBUTED	-	-	7500	-	-	-		-
				TOTAL		**1**	**7500**	**1140**	**1500**	**1560**		**140**

SAWING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
0010	354+40	-	548+30	SIDEROADS	400	-	-
0010	354+40	-	548+30	MAINLINE ENDS	-	100	-
0010	354+40	-	361+00	BETWEEN GUTTER AND PAVEMENT	-	1320	SOUTH CONC. REPLACEMENT
0010	361+00	-	374+50	MAINLINE	-	592	-
0010	374+50	-	405+00	MAINLINE	-	1270	-
0010	405+00	-	435+00	MAINLINE	-	434	-
0010	435+00	-	465+00	MAINLINE	-	547	-
0010	465+00	-	495+00	MAINLINE	-	952	-
0010	519+20	-	519+98	APPROACH SLABS	20	72	-
0010	495+00	-	525+00	MAINLINE	-	768	-
0010	354+40	-	548+30	ASPH. SHLD/DRIVEWAYS	200	-	-
0010	354+40	-	548+30	MAINLINE	-	600	PAVEMENT ENCOUNTERED DURING EBS
0010	354+40	-	382+00	UNDISTRIBUTED	-	30	CURB AND GUTTER REPLACEMENT
				TOTAL	**620**	**6685**	

LANDMARK REFERENCE MONUMENTS SPECIAL

CATEGORY	LOCATION	DESCRIPTION	SPV.0060.01 LANDMARK REFERENCE MONUMENTS SPECIAL EACH
0010	SEC 27 EAST, T4N, R13E	QUARTER CORNER	1
0010	SEC 22 SOUTHEAST, T4N, R13E	SECTION CORNER	1
0010	SEC 22 EAST, T4N, R13E	QUARTER CORNER	1
0010	SEC 15 SOUTHEAST, T4N, R13E	SECTION CORNER	1
0010	SEC 15 EAST, T4N, R13E	QUARTER CORNER	1
0010	SEC 15 NORTHEAST, T4N, R13E	SECTION CORNER	1
		TOTAL	**6**

REMOVING AND SALVAGING TROMBONE POLES & ARMS

CATEGORY	LOCATION	SPV.0105.01 REMOVING AND SALVAGING TROMBONE POLES & ARMS LS	REMARKS
0010	CTH N/STH 26 (OLD) INTERSECTION	1	NE & SW CTH N/STH 26 (OLD)

RESTORATION ITEMS

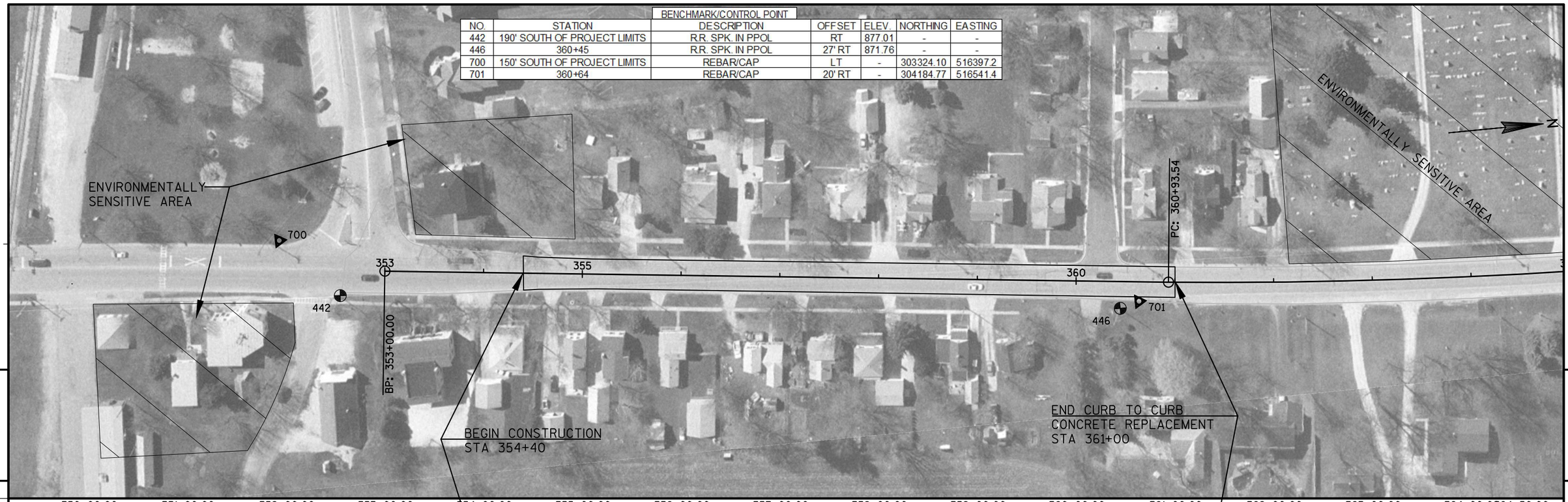
CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO.20 LB	REMARKS
0010	354+40	-	548+30	UNDISTRIBUTED	90	90	0.028	2.40	BY B-53-0017

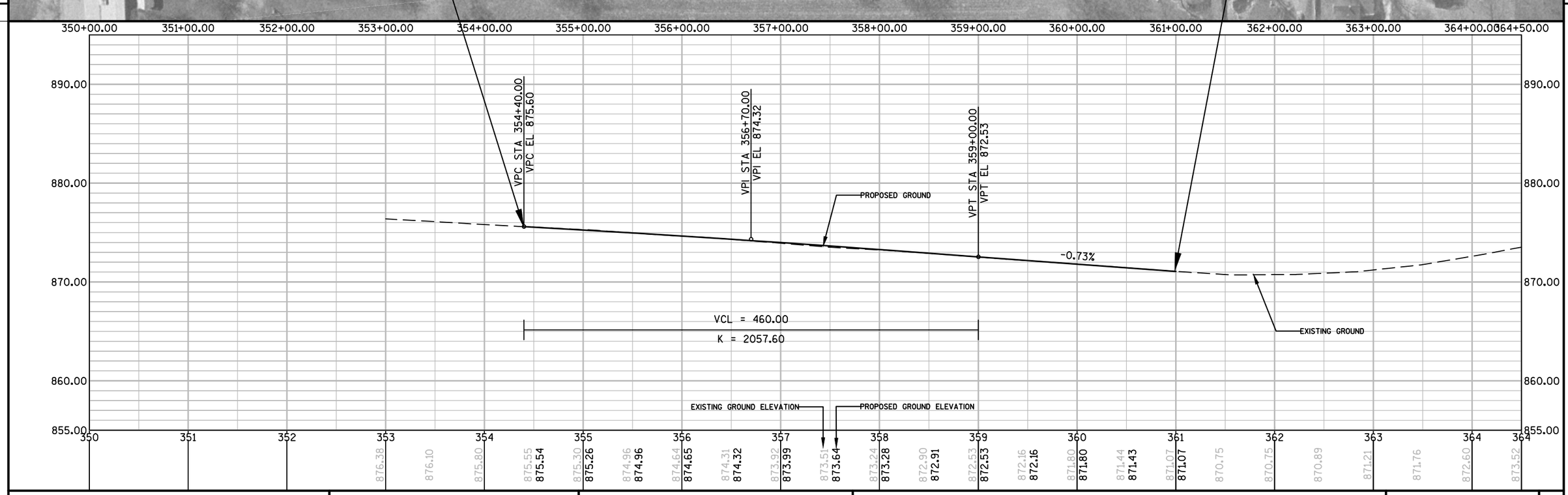
PERMANENT SIGNING

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE		SIZE		634.0614 POSTS WOOD 4X6-INCH 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	SIGN MESSAGE
0010	1-01	-	LT	-	-	X	-	-	-	-	-	1	-	STOP
0010	1-02	-	LT	R1-2	36	X	31	-	-	3.88	-	-	-	YIELD
0010	1-03	357+65	LT	-	-	X	-	-	-	-	-	1	-	SPEED LIMIT 30
0010	1-04	360+00	LT	R1-1	30	X	30	1	-	5.18	-	1	1	STOP
0010	1-05	361+25	RT	R2-1	24	X	30	-	1	5.0	-	-	-	SPEED LIMIT 30
0010	1-06	361+50	LT	R2-1	24	X	30	-	1	5.0	-	-	-	SPEED LIMIT 30
0010	1-07	369+90	LT	R2-1	24	X	30	-	1	5.0	-	-	-	SPEED LIMIT 30
0010	1-08	370+80	LT	-	-	X	-	-	-	-	-	1	1	SPEED LIMIT 30
0010	1-09	373+25	RT	R2-1	24	X	30	-	1	5.0	-	-	-	SPEED LIMIT 30
0010	2-01	377+75	LT	W14-3	48	X	36	-	1	-	6.0	1	1	NO PASSING ZONE
0010	2-02	380+00	LT	R2-1	24	X	30	-	1	5.0	-	-	-	SPEED LIMIT 30
0010	2-03	380+50	RT	R1-1	30	X	30	-	1	6.25	-	1	1	STOP
0010	2-04	381+80	RT	R2-1	24	X	30	-	1	5.0	-	1	1	SPEED LIMIT 45
0010	2-05	383+80	LT	-	-	X	-	-	-	-	-	1	1	REDUCED SPEED AHEAD
0010	2-06	383+80	LT	-	-	X	-	-	-	-	-	1	-	30 MPH
0010	2-07	383+80	LT	W3-5	36	X	36	-	1	-	9.0	1	1	30 MPH AHEAD SYMBOL
0010	2-08	388+50	LT	R2-1	24	X	30	-	1	5.0	-	-	-	SPEED LIMIT 45
0010	2-09	391+10	RT	R1-1	30	X	30	-	1	5.18	-	1	1	STOP
0010	2-10	391+90	RT	R2-1	24	X	30	-	1	5.0	-	-	-	SPEED LIMIT 45
0010	2-11	393+80	LT	-	-	X	-	-	-	-	-	1	1	SPEED LIMIT 45
0010	2-12	403+70	RT	W14-3	48	X	36	-	1	-	6.0	1	1	NO PASSING ZONE
0010	3-01	405+85	LT	W14-3	48	X	36	-	1	-	6.0	1	1	NO PASSING ZONE
0010	3-02	405+85	LT	W3-5	36	X	36	-	-	-	9.0	1	-	45 MPH AHEAD, SAME POST AS ABOVE
0010	3-03	407+75	RT	R1-1	30	X	30	-	1	5.18	-	1	1	STOP
0010	3-04	412+20	LT	-	-	X	-	-	-	-	-	1	1	SCHOOL BUS STOP AHEAD
0010	3-05	412+20	LT	S3-1	30	X	30	-	1	-	6.0	-	-	SCHOOL BUS STOP AHEAD SYMBOL
0010	3-06	431+60	RT	W14-3	48	X	36	-	1	-	6.0	1	1	NO PASSING ZONE
0010	3-07	431+60	LT	W14-3	48	X	36	-	1	-	6.0	1	1	NO PASSING ZONE
0010	4-01	444+20	RT	R1-1	30	X	30	-	1	5.18	-	1	1	STOP
0010	5-01	470+50	LT	R1-1	30	X	30	-	1	5.18	-	1	1	STOP
0010	5-02	478+20	RT	W14-3	48	X	36	-	1	-	6.0	1	1	NO PASSING ZONE
0010	5-03	483+70	LT	W14-3	48	X	36	-	1	-	6.0	1	1	NO PASSING ZONE
0010	5-04	486+85	RT	W1-2R	30	X	30	-	1	-	6.25	1	1	ARROW
0010	6-01	509+25	LT	W1-2L	30	X	30	-	1	-	6.25	1	1	ARROW
0010	6-02	515+90	LT	R2-1	24	X	30	-	1	5.0	-	-	-	SPEED LIMIT 55
0010	6-03	519+25	RT	W5-52R	12	X	36	-	1	-	3.0	1	1	DELINEATOR
0010	6-04	519+70	RT	W5-52L	12	X	36	-	1	-	3.0	1	1	DELINEATOR
0010	6-05	519+40	LT	W5-52L	12	X	36	-	1	-	3.0	1	1	DELINEATOR
0010	6-06	519+85	LT	W5-52R	12	X	36	-	1	-	3.0	1	1	DELINEATOR
0010	6-07	520+60	RT	-	-	X	-	-	-	-	-	1	-	STOP
0010	6-08	520+75	LT	-	-	X	-	-	-	-	-	1	-	STOP
0010	7-01	536+00	LT	W14-3	48	X	36	-	1	-	6.0	1	1	NO PASSING ZONE
					TOTAL			1	30	81.03	96.50	32	26	

BENCHMARK/CONTROL POINT

NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
442	190' SOUTH OF PROJECT LIMITS	R.R. SPK. IN PPOL	RT	877.01	-	-
446	360+45	R.R. SPK. IN PPOL	27' RT	871.76	-	-
700	150' SOUTH OF PROJECT LIMITS	REBAR/CAP	LT	-	303324.10	516397.2
701	360+64	REBAR/CAP	20' RT	-	304184.77	516541.4





PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	PLAN AND PROFILE: STH 26 (OLD) SOUTH PORTION	SHEET 37	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\STH26-SOUTH-ALIPROF.DWG PLOT DATE : 1/14/2014 11:22 AM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

BENCHMARK/CONTROL POINT						
NO.	STATION	DESCRIPTION	OFFSET	ELEV.	NORTHING	EASTING
479	525+98	R.R. SPK. IN PPOL	58' RT	810.6	-	-
480	531+86	CHIS. SQUARE ON CATTLE PASS	30' RT	815.1	-	-
481	544+61	R.R SPK. IN BEAM GUARD POST	24' RT	843.5	-	-
4815	547+86	CHIS. SQUARE ON CATTLE PASS	32' RT	846.5	-	-
712	539+64	REBAR/CAP	29' LT	-	321566.32	518650.3

ENVIRONMENTALLY SENSITIVE AREA

PT: 529+02.42

SLOPE INTERCEPT

PC: 542+92.90

PT: 549+00.48

EP: 550+70.09

N

525 530 535 540 545 550 555

STH 26 (OLD), N. JANESVILLE ST.

479 480 481 4815 712

SLOPE INTERCEPT

MATCH CTH NN EXISTING PAVEMENT

CTH NN

STH 26 MILTON BYPASS

BEGIN ASPHALT REPLACEMENT STA 532+80

END CONSTRUCTION STA 548+30

5 5

860.00 850.00 840.00 830.00 820.00 810.00 800.00 790.00 785.00

PROPOSED GROUND

1.08%

2.43%

VPC STA 540+00.00
VPC EL 835.27

VPI STA 543+50.00
VPI EL 842.61

VPT STA 547+00.00
VPT EL 847.27

VCL = 180.00
K = 143.10

VCL = 700.00
K = 912.36

EXISTING GROUND

VPC STA 532+80.00
VPC EL 818.71

VPI STA 533+70.00
VPI EL 819.86

VPT STA 534+60.00
VPT EL 822.14

EXISTING GROUND ELEVATION

PROPOSED GROUND ELEVATION

526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555
817.79	817.86	817.68	817.77	817.72	817.72	817.78	820.46	820.74	821.72	822.77	823.11	824.24	824.33	825.50	825.54	826.77	826.76	828.02	827.97	829.34	829.19	830.56	830.41	831.71	831.62	832.83	832.84	834.05	834.06
835.22	835.27	836.24	836.31	837.24	837.31	838.15	838.29	839.01	839.25	839.91	840.17	840.92	841.07	841.84	841.94	842.76	842.78	843.69	843.60	844.39	844.39	845.15	845.15	846.05	845.88	846.61	846.59	847.33	847.27
848.01	847.81	848.18	848.35	848.82	849.53	850.02	850.42	850.90																					

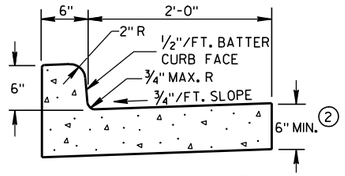
PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	PLAN AND PROFILE: STH 26 (OLD) NORTH PORTION	SHEET E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\STH26-NORTH-ALIPROF.DWG PLOT DATE : 1/14/2014 2:07 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

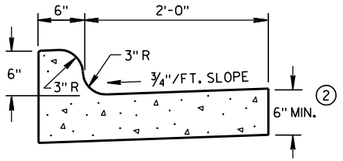
Standard Detail Drawing List

08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
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"
12A03-10	NAME PLATE (STRUCTURES)
13B02-06	CONCRETE PAVEMENT APPROACH SLAB
13C01-16	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-11A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-11B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-11C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B15-07A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-07B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-07C	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
14B20-11G	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL
14B24-07A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-07B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-07C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B27-01A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C06-06	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-16D	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING

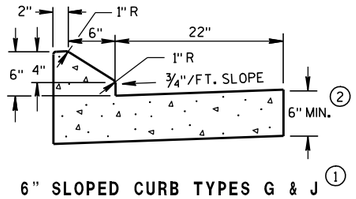
6



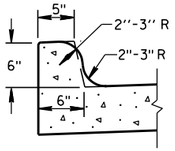
TYPES A & D (1)



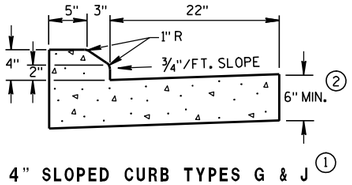
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

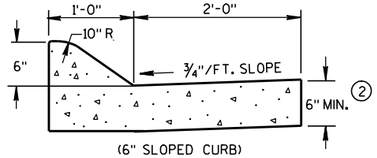


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

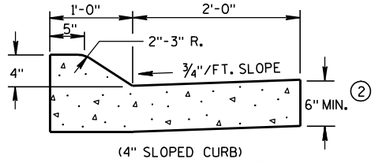


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

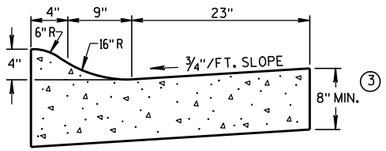


(6" SLOPED CURB)



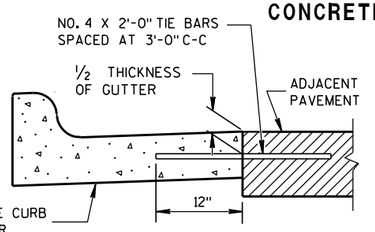
(4" SLOPED CURB)

TYPES A & D (1)

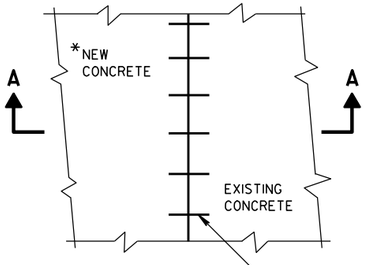


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

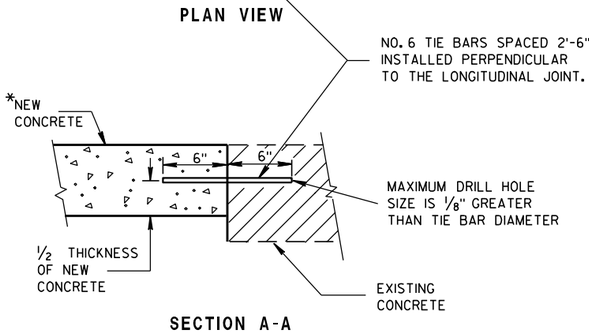


TYPICAL TIE BAR LOCATION (1)



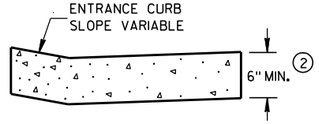
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

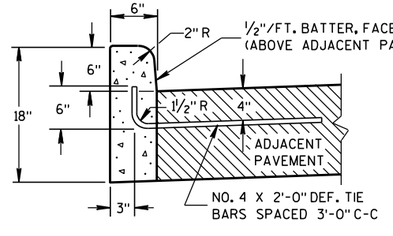


SECTION A-A

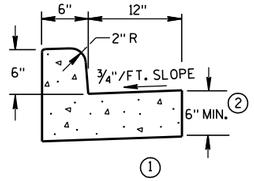
TIE BARS DRILLED INTO EXISTING PAVEMENT



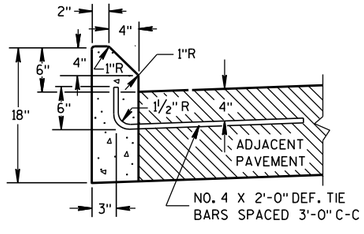
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D

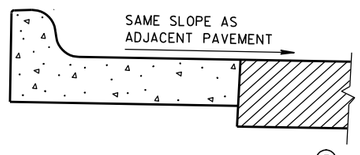


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES G & J

CONCRETE CURB



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

GENERAL NOTES

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

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

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

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

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

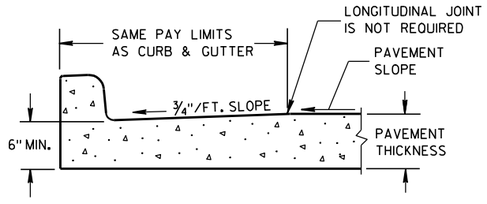
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

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

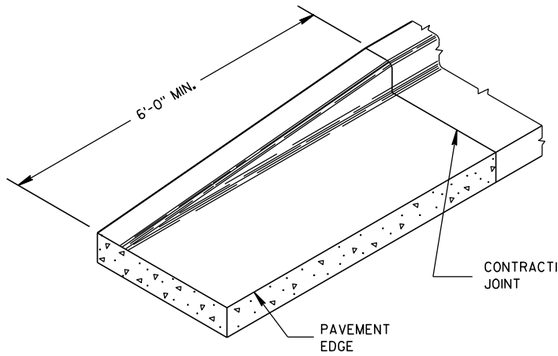
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

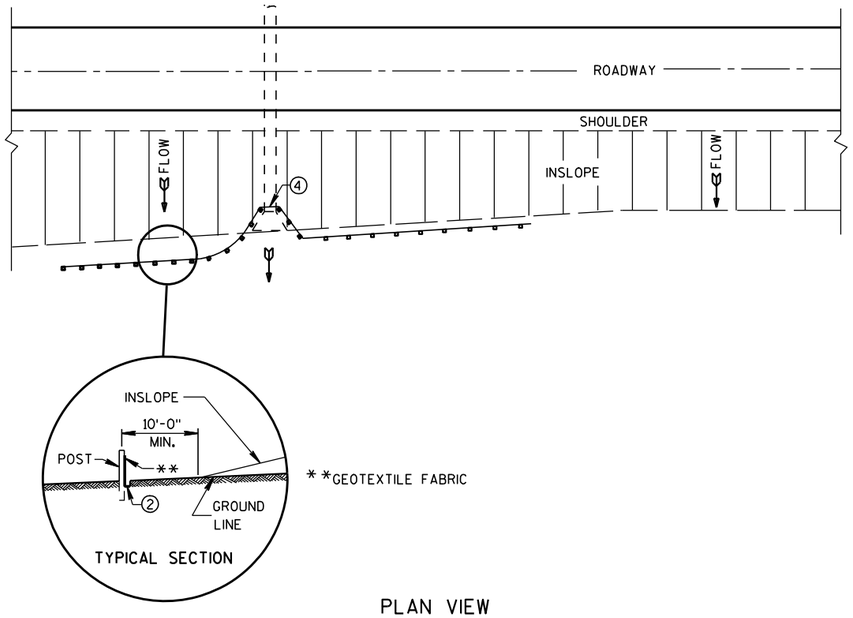
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

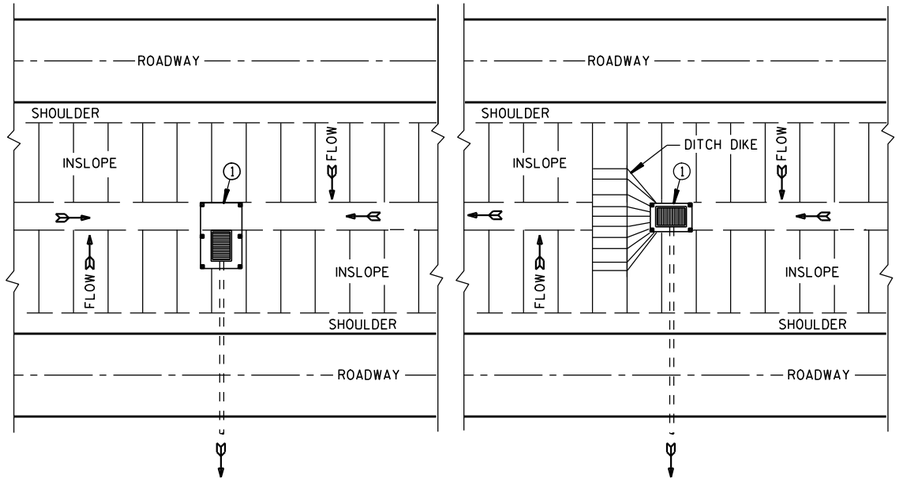
6

S.D.D. 8 D 1-17



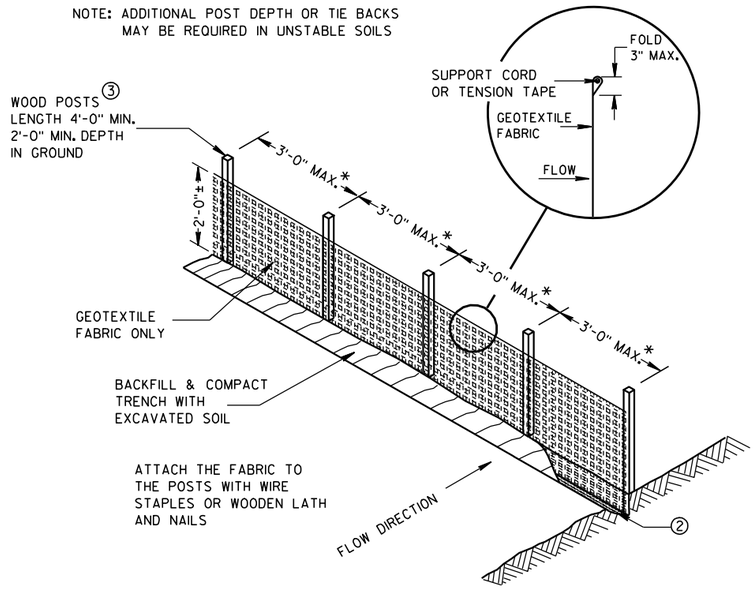
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



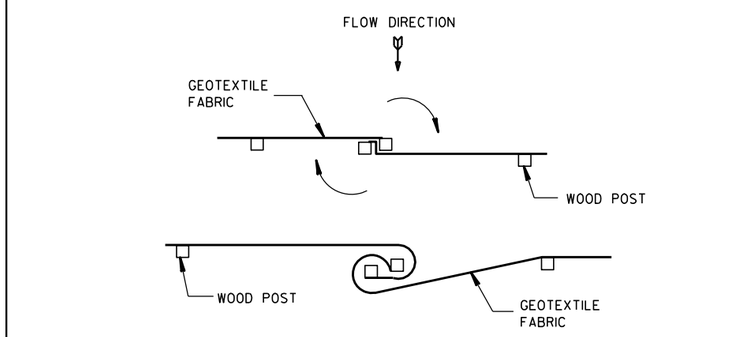
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

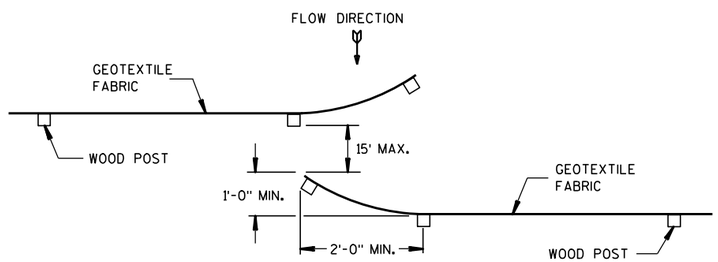


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE



TWIST METHOD



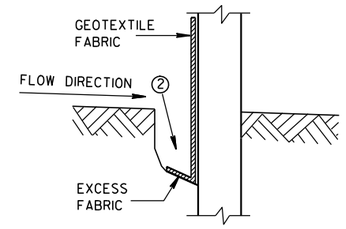
HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5

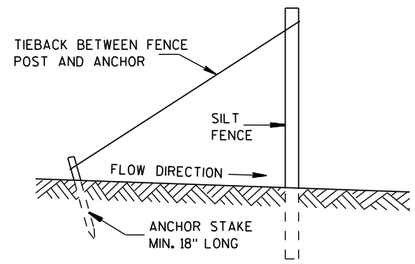
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

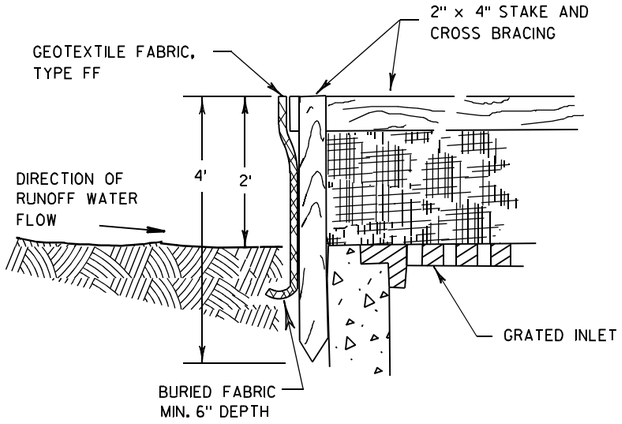
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

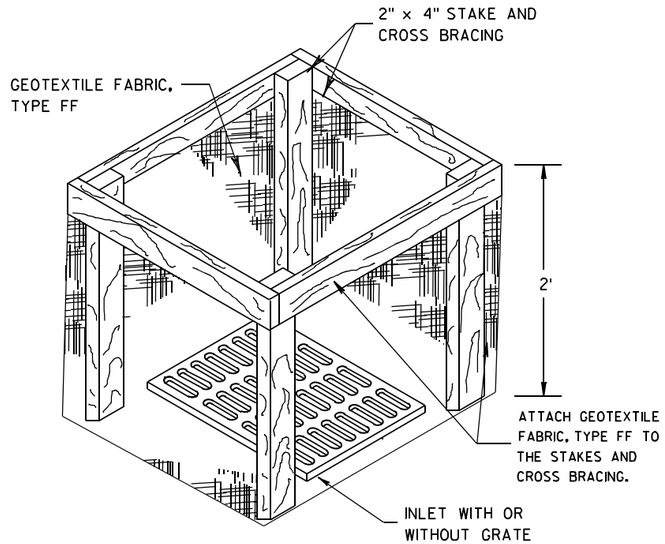
6

S.D.D. 8 E 9-6

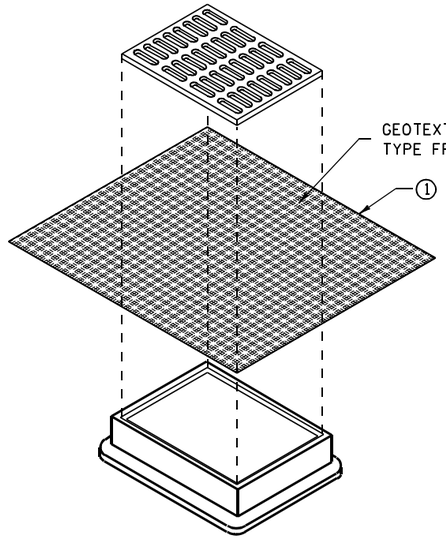
6

S.D.D. 8 E 9-6



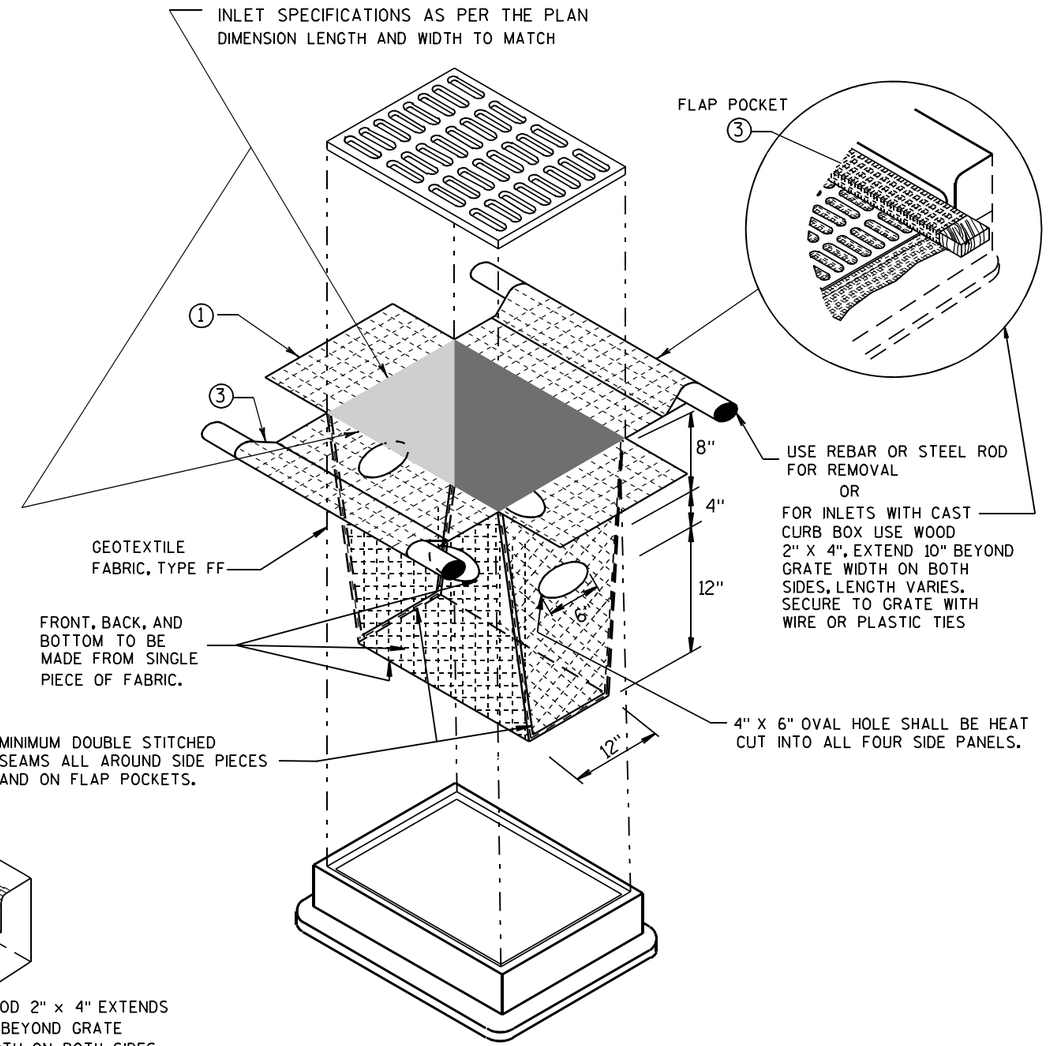


INLET PROTECTION, TYPE A



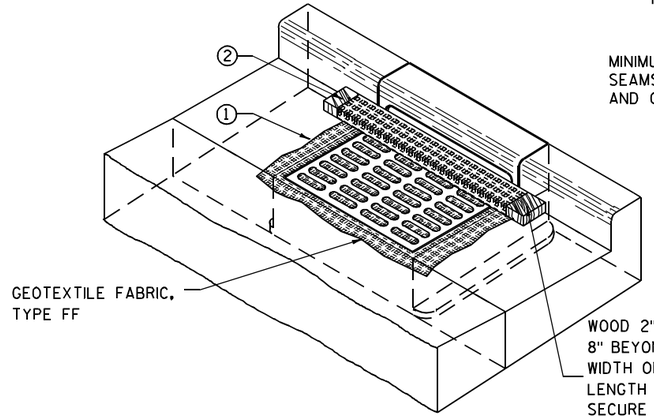
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

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.

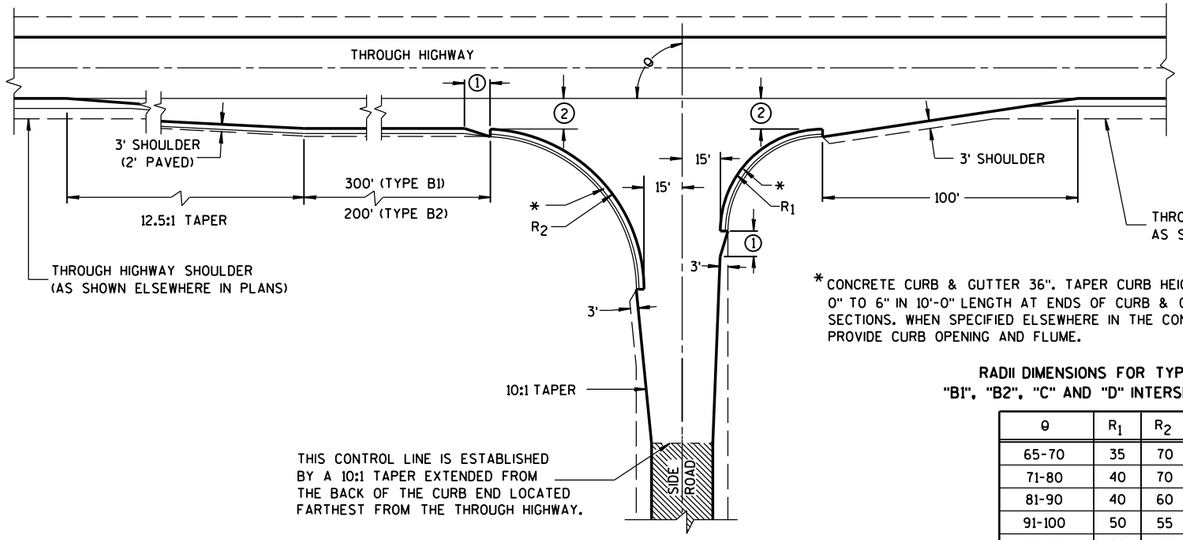
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

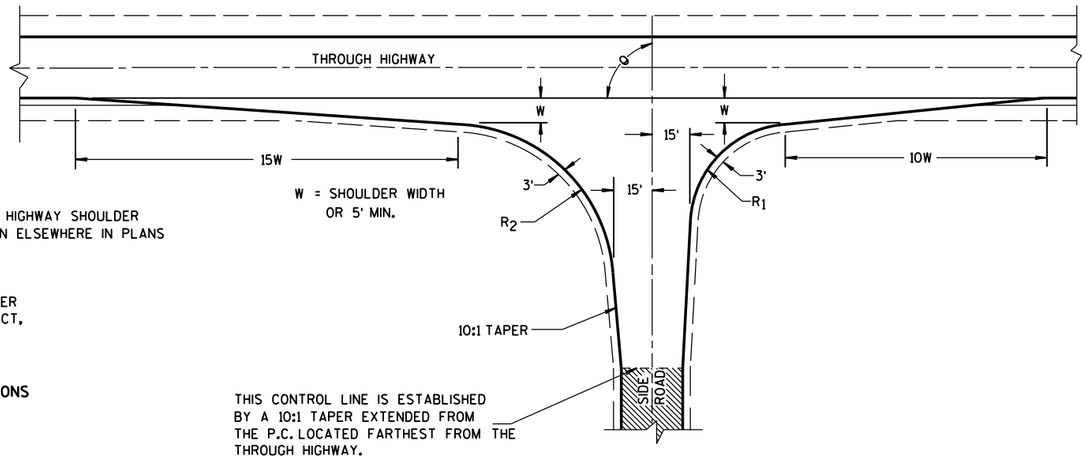


TYPE "B1" AND "B2"

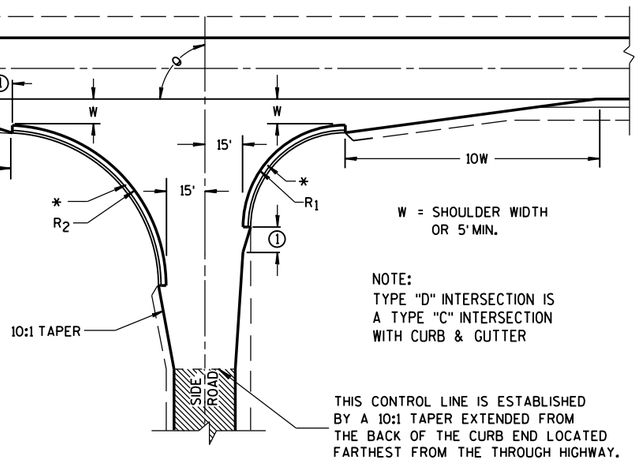
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

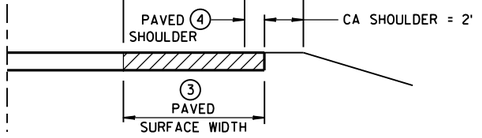
(1) 10-FT TYPICAL.

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

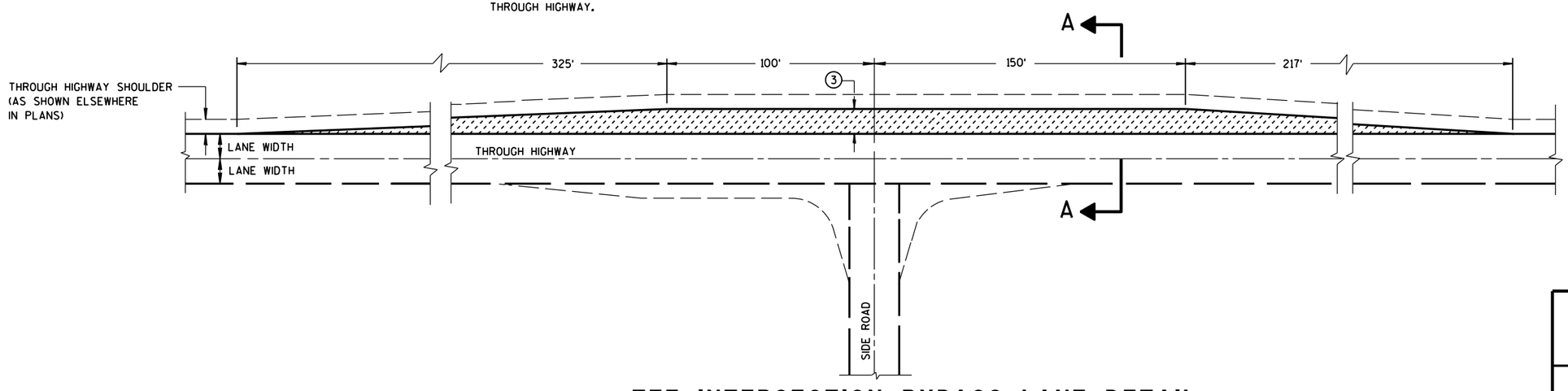
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(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)

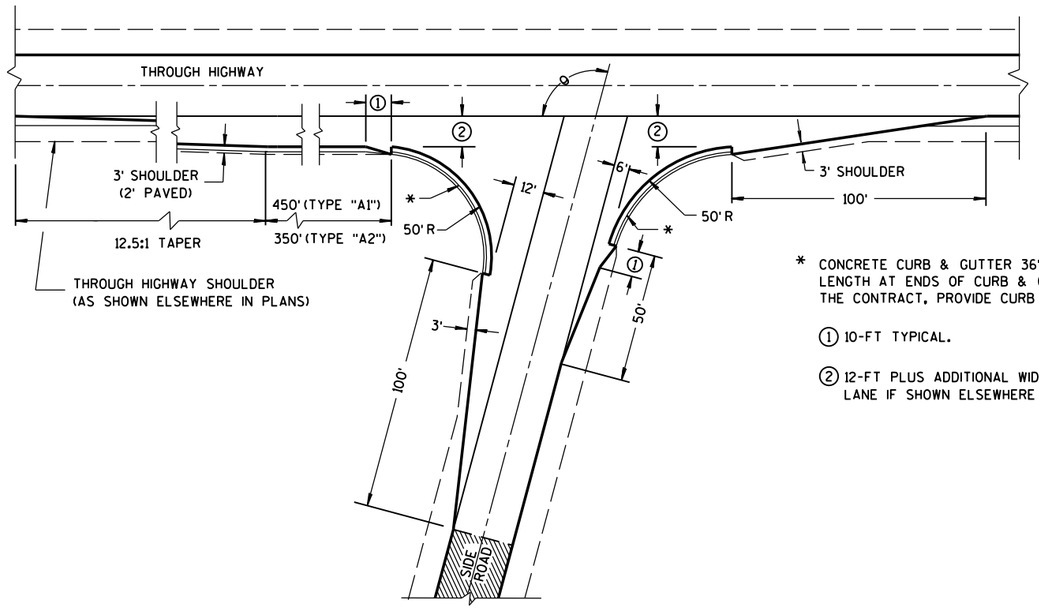


TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 9 A 1-13a



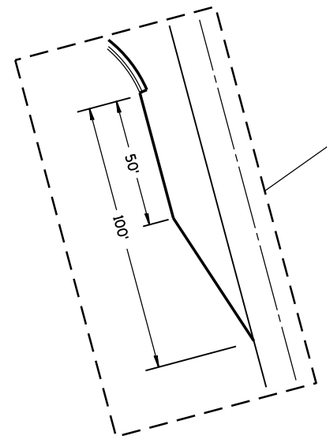
θ = MORE THAN 80°

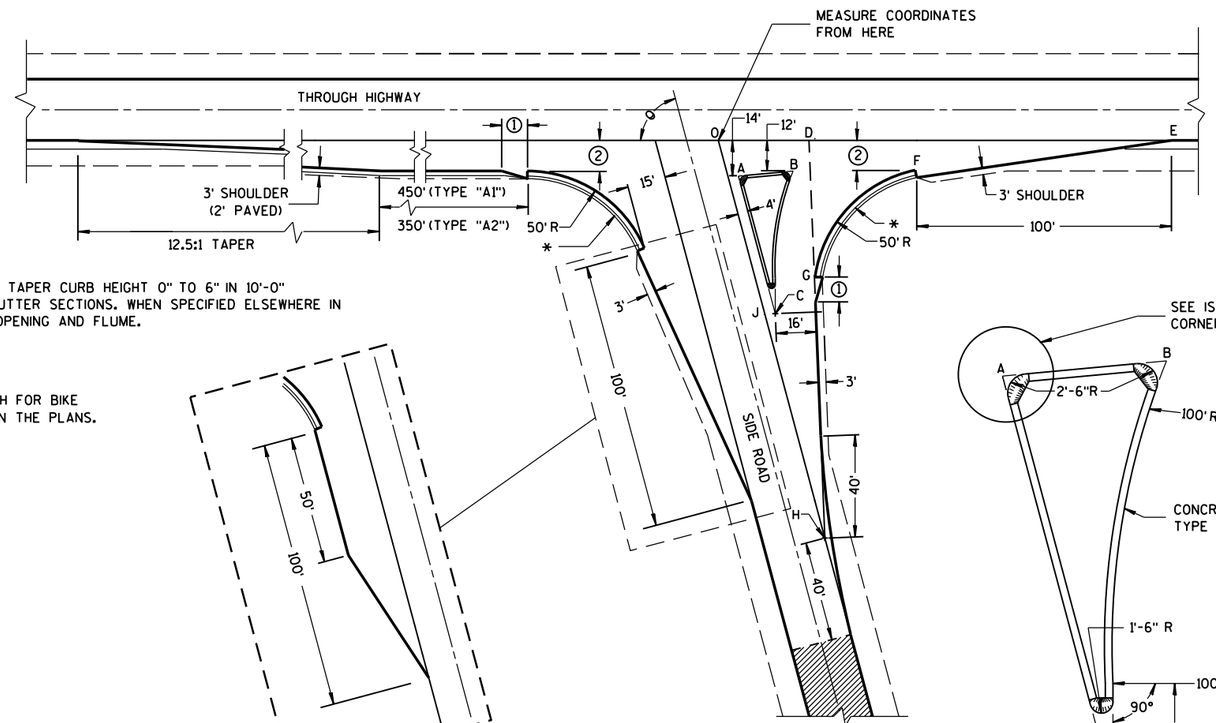
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

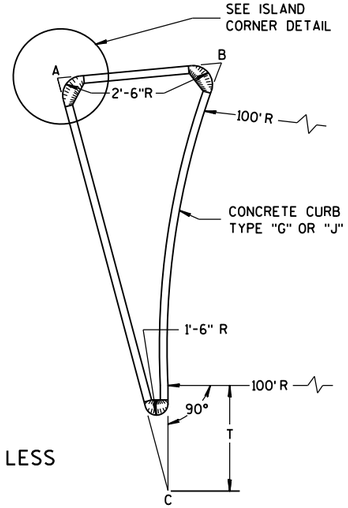
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

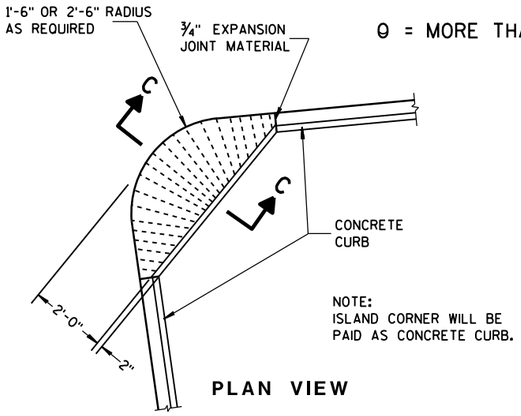




θ = ACUTE ANGLES 80° OR LESS

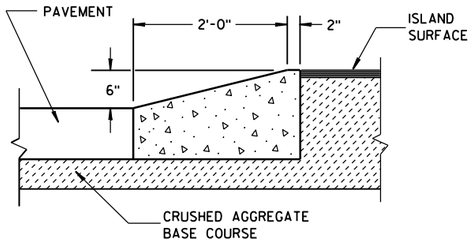


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



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

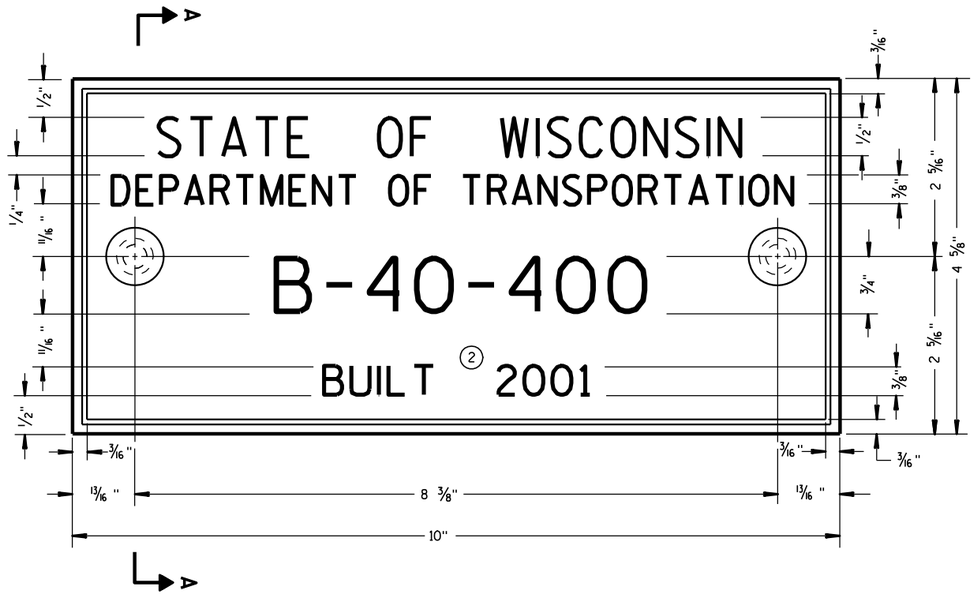
AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

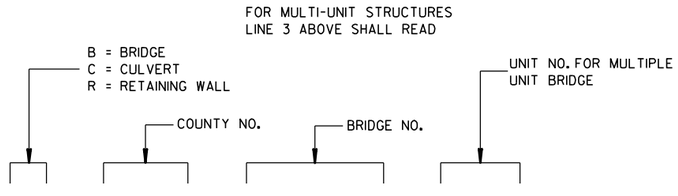
S.D.D. 9 A 1-13b

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



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

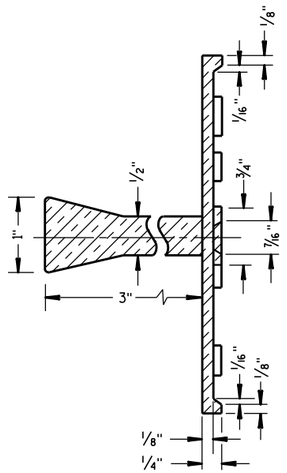
GENERAL NOTES

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.

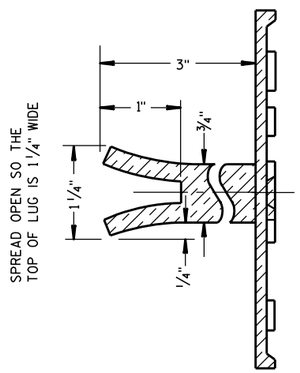
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

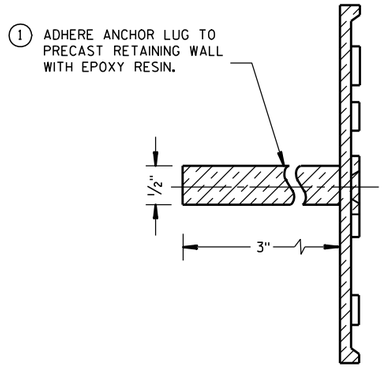
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

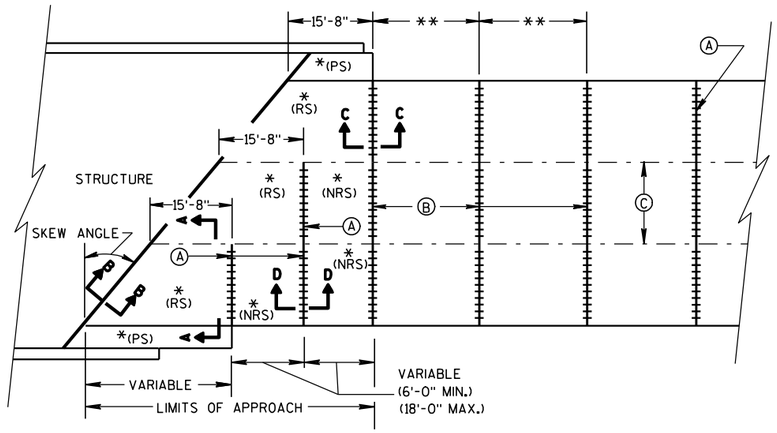
3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

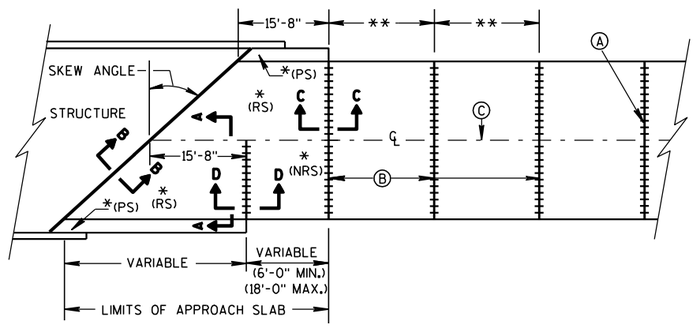
FHWA

6

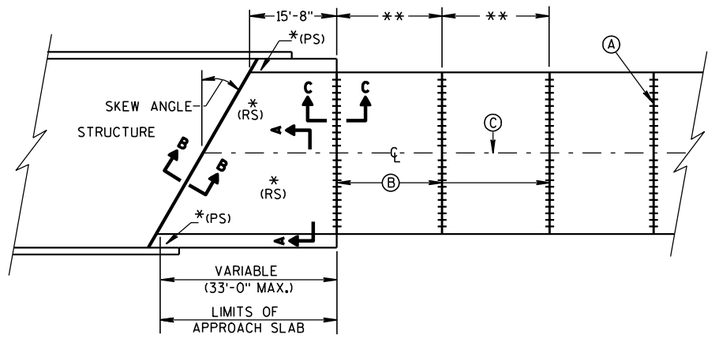
S.D.D. 12 A 3-10



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



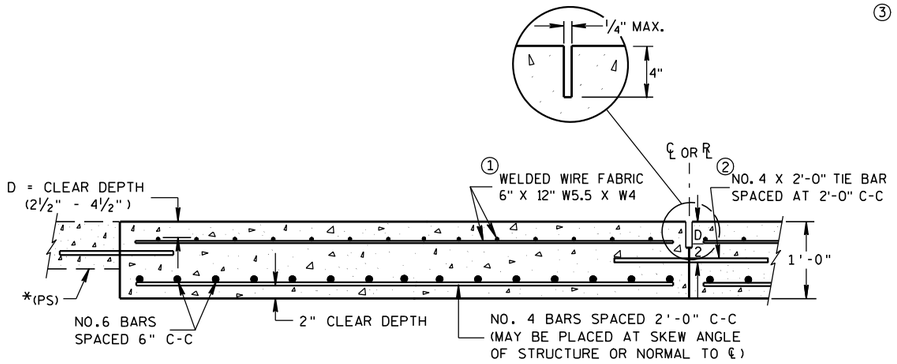
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

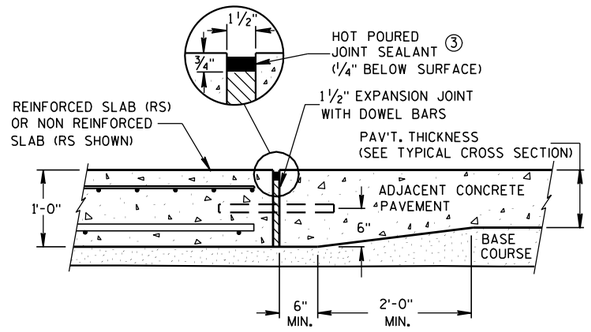
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING
(SEE SDD 13C4, SDD 13C11, & SDD 13C13)

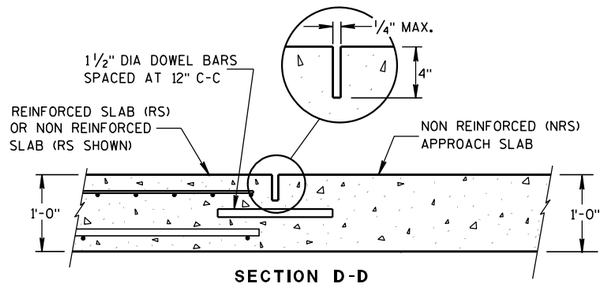
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
Ⓑ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄
Ⓒ STANDARD LONGITUDINAL JOINT AND TIE BARS.



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

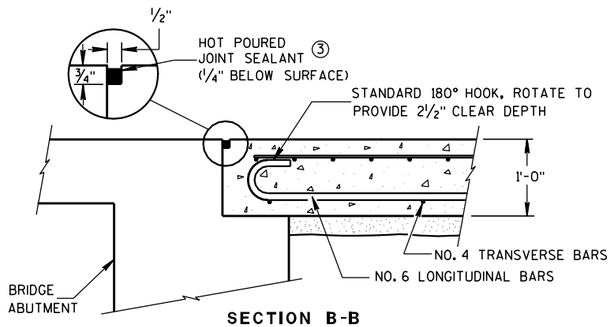
APPROACH SLABS ABUTTING AN HMA PAVEMENT OVER BASE COURSE DO NOT NEED TO BE DOWELED.

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

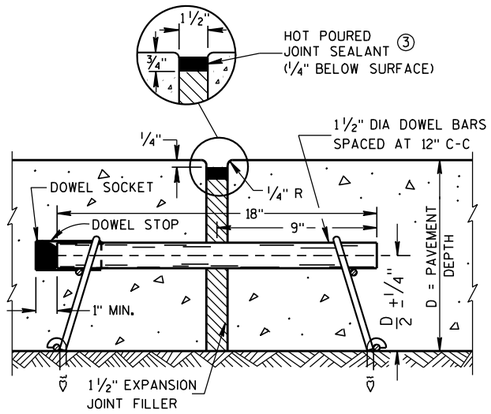
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

③ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/11/2009 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE — NEER
FHWA

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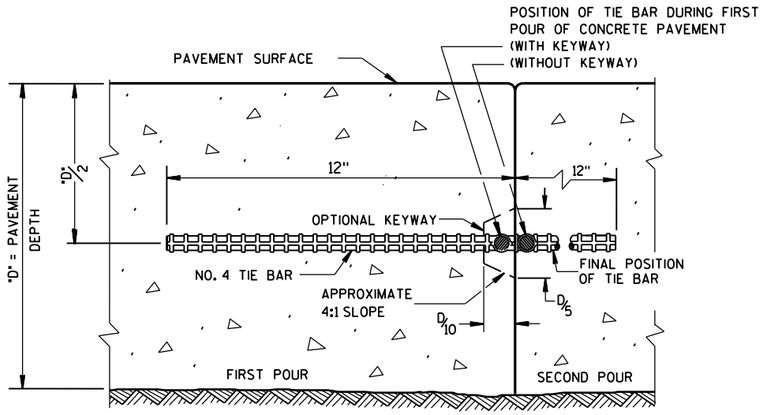
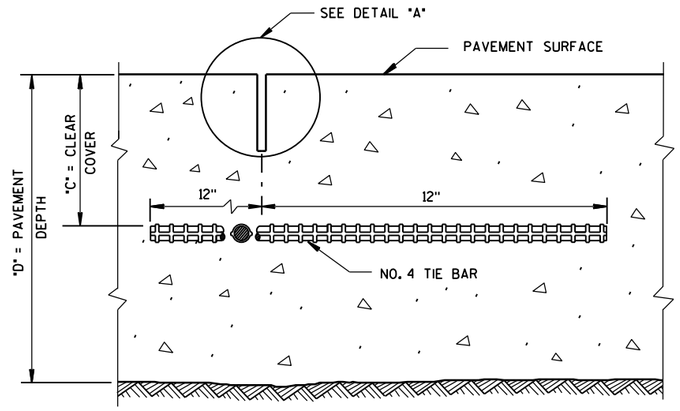
S.D.D. 13 B 2-6



CONSTRUCTION JOINT



SAWED JOINT

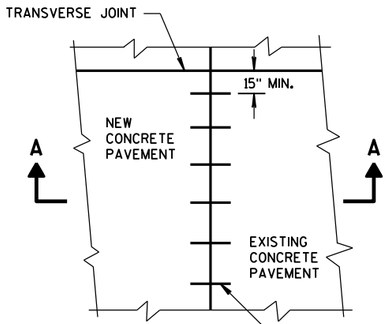
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

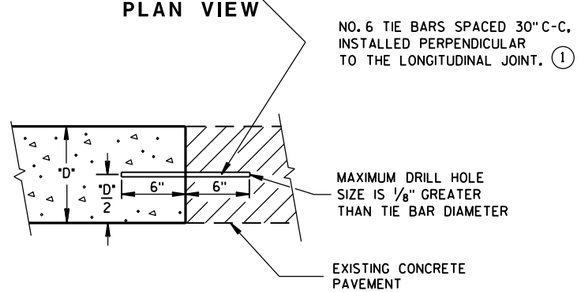
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

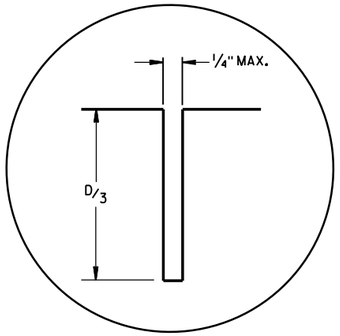


PLAN VIEW



SECTION A-A

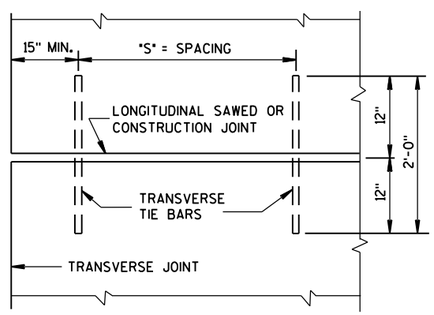
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥ 30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE

FHWA

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S.D.D. 13 C 1-16

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S.D.D. 13 C 1-16

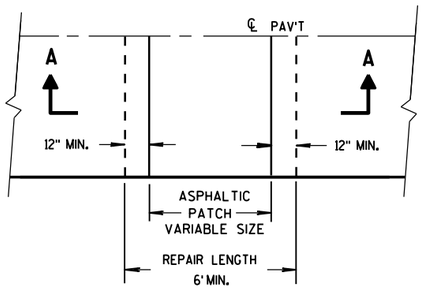
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES. ADDITIONAL SAW CUTS ARE NOT PAID FOR BY THE DEPARTMENT.

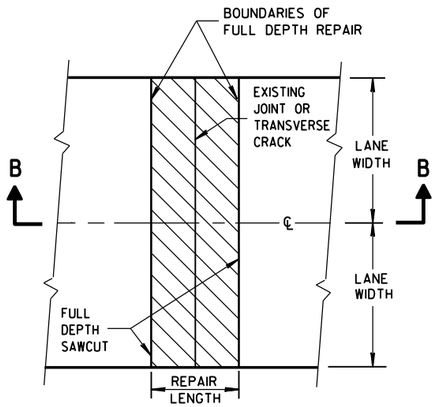
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

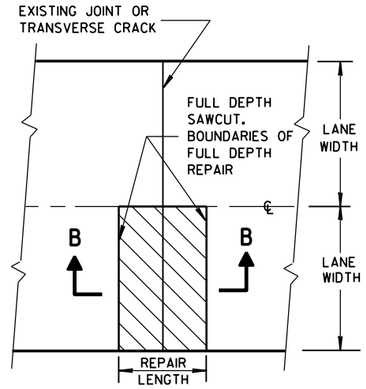
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW



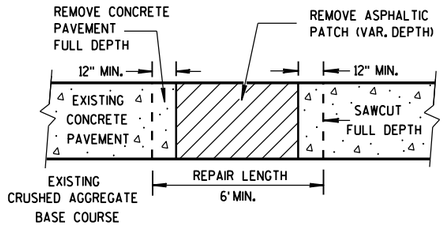
PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

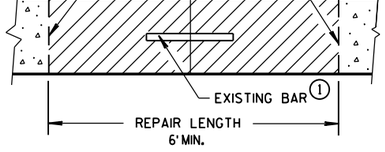
FULL DEPTH CONCRETE PAVEMENT REMOVAL

(SEE NOTE)



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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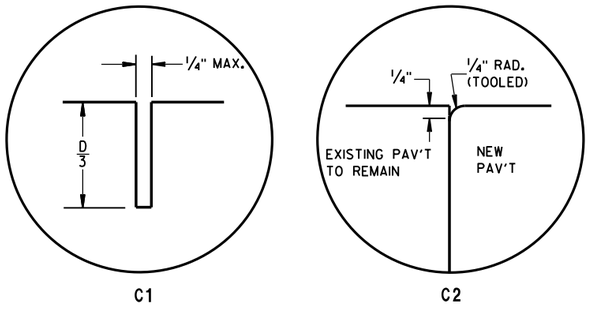
S.D.D. 13 C 9-11a

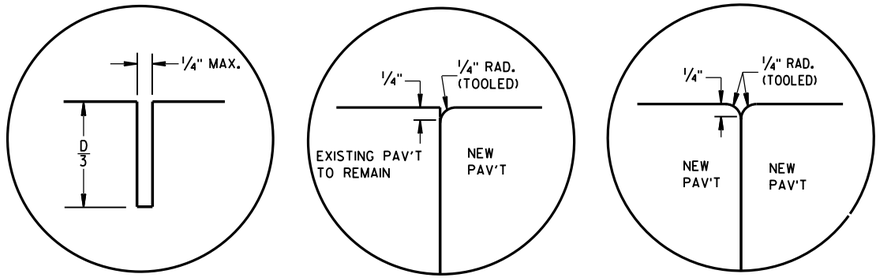


C1 C2

TRANSVERSE JOINTS

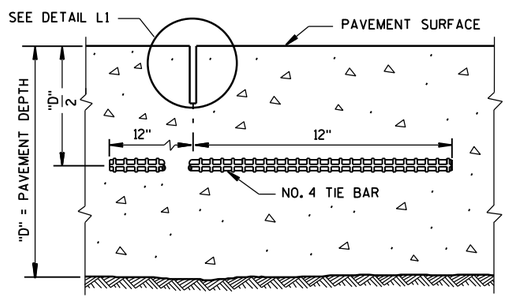
TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥ 30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

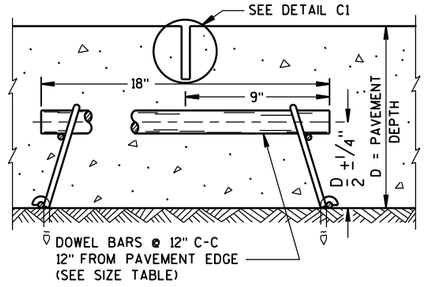
CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

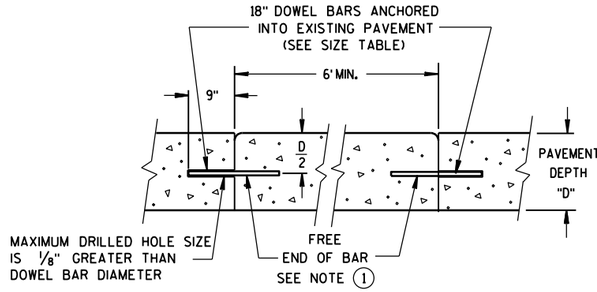
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

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

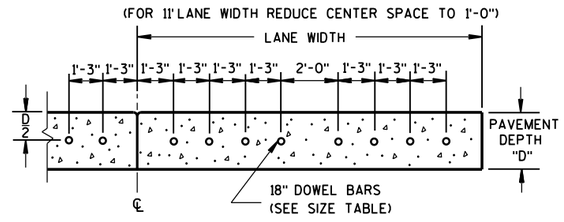


SECTION F-F

CONTRACTION JOINT



SECTION D-D

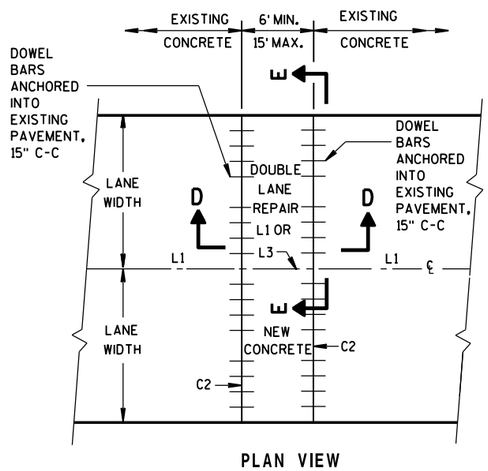


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

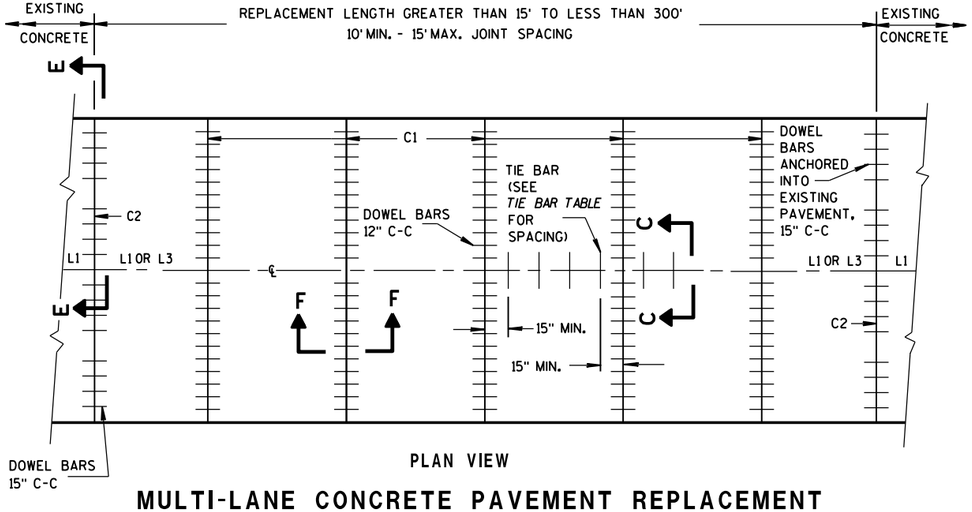
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6",6 1/2"	NONE	12'
7",7 1/2"	1"	14'
8",8 1/2"	1 1/4"	15'
9",9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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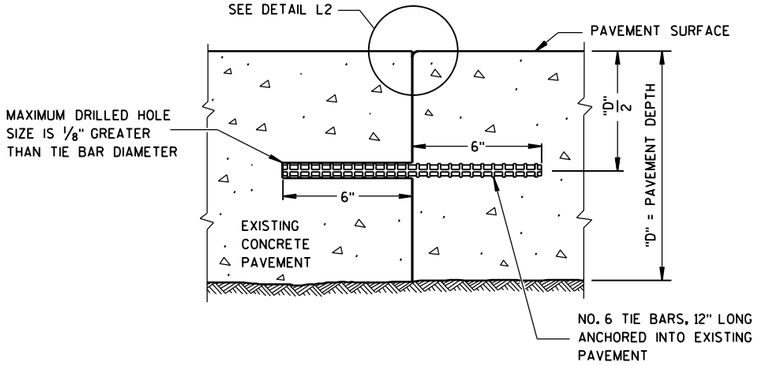
S.D.D. 13 C 9-11b



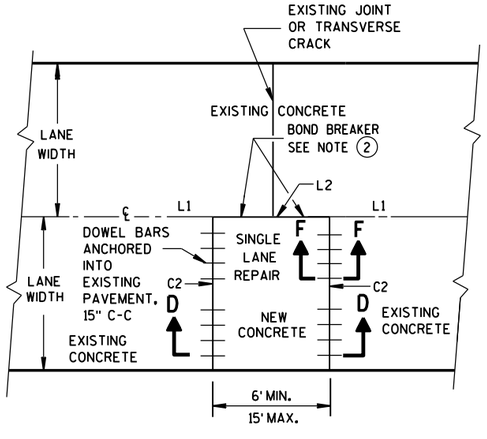
SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

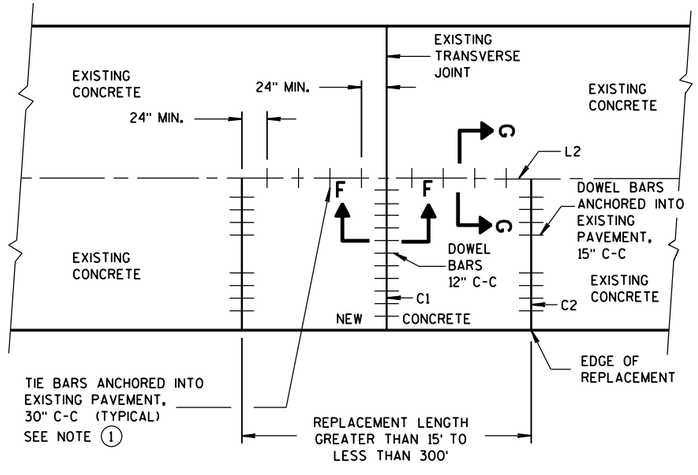
1. WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES AND TO SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

2. USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12-2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE

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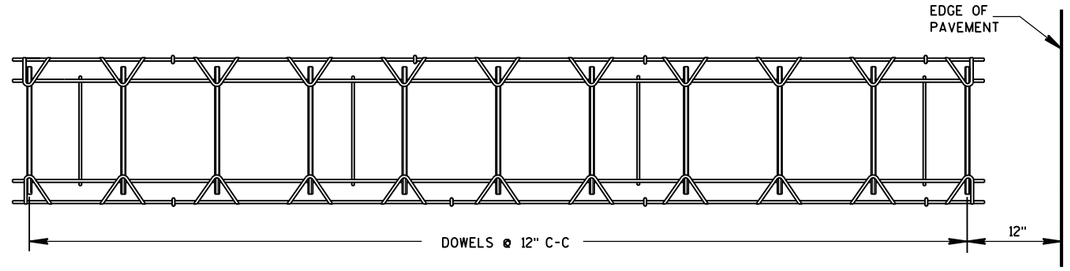
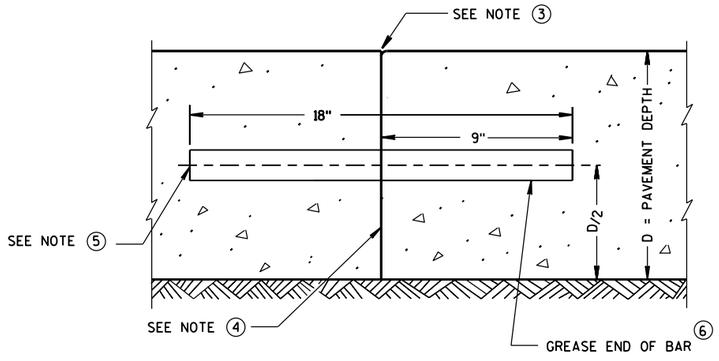
S.D.D. 13 C 9-11c



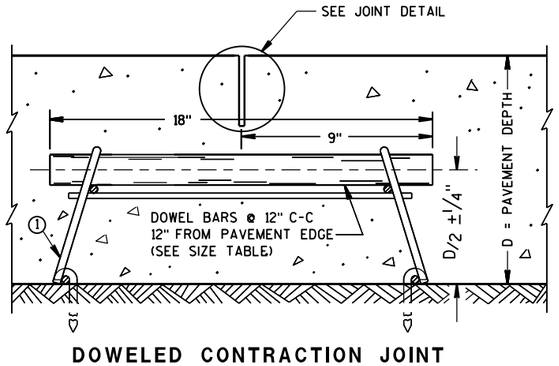
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



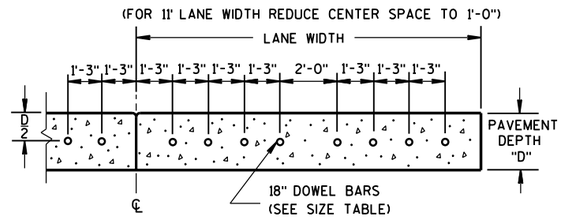
TRANSVERSE CONSTRUCTION JOINT



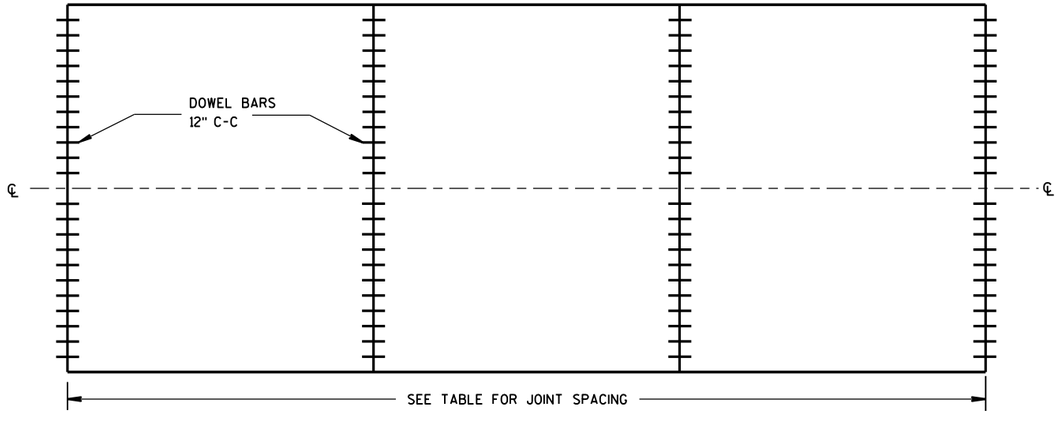
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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

CONSTRUCTION JOINTS

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

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

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

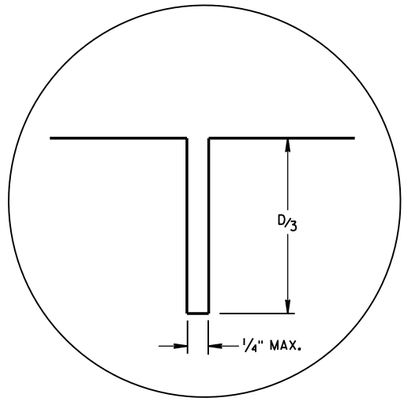
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

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

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

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

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



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE
FHWA

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S.D.D. 13 C 13-8

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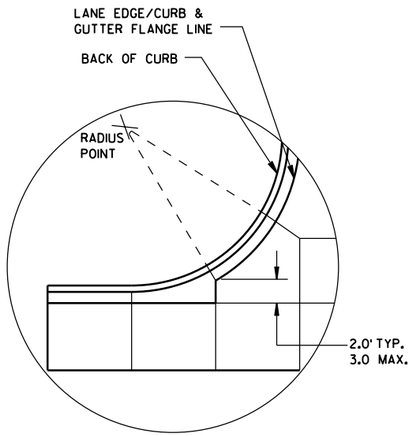
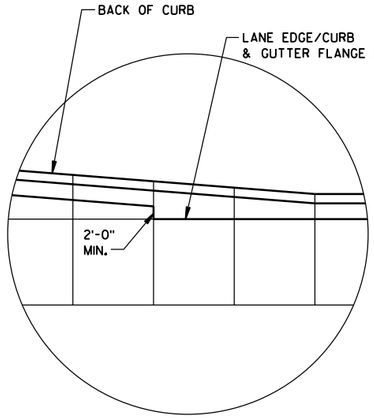
S.D.D. 13 C 13-8



DETAIL "A"



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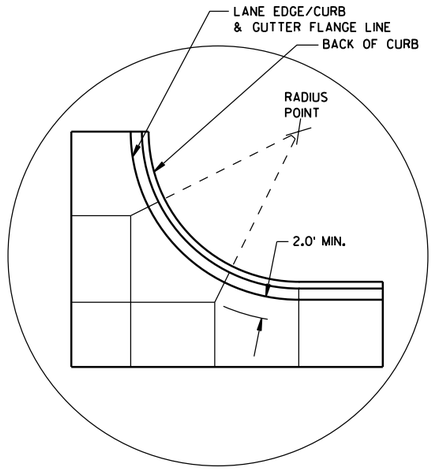

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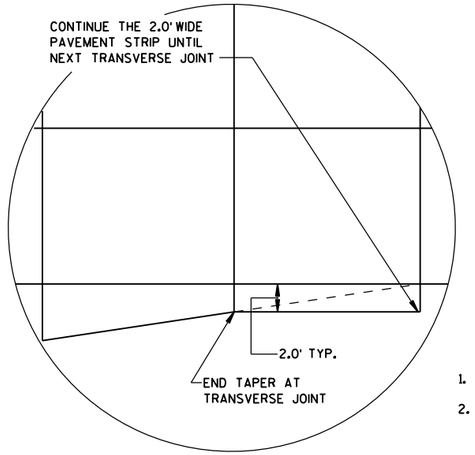


DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

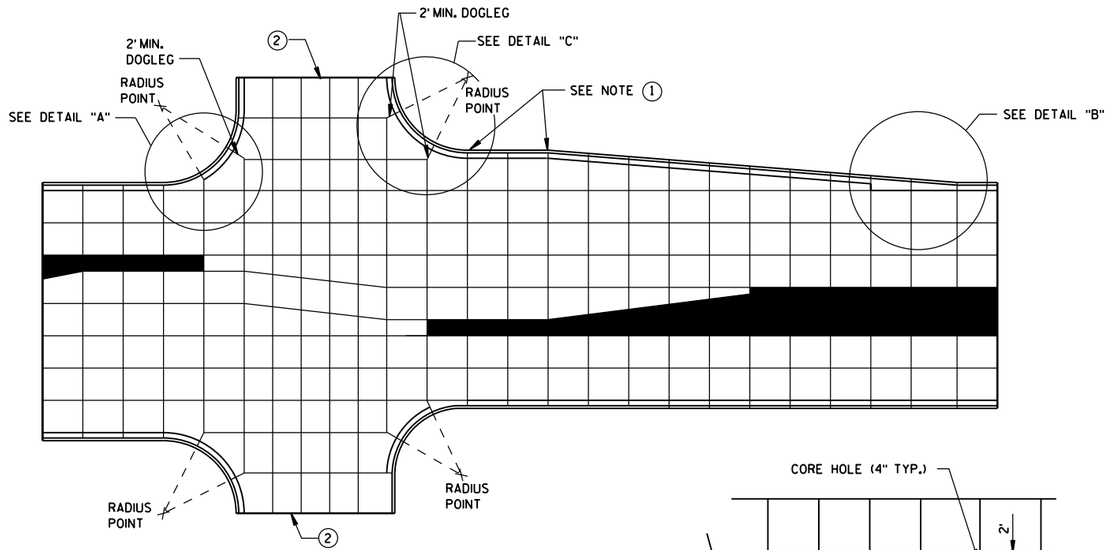
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

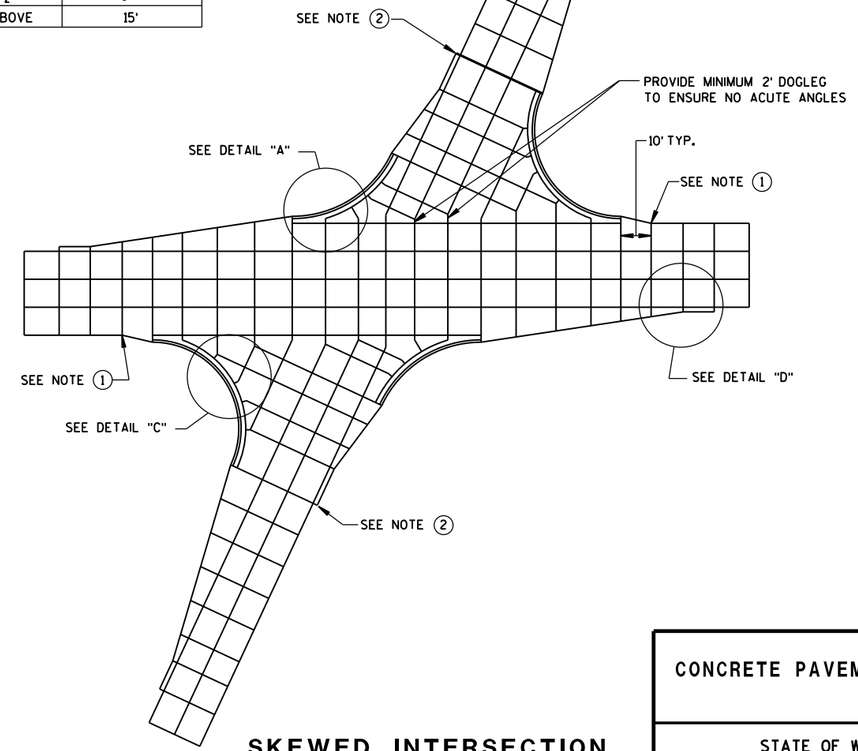
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



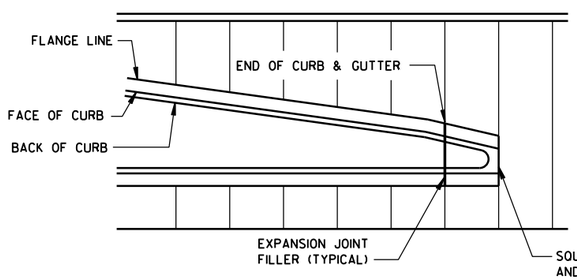
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

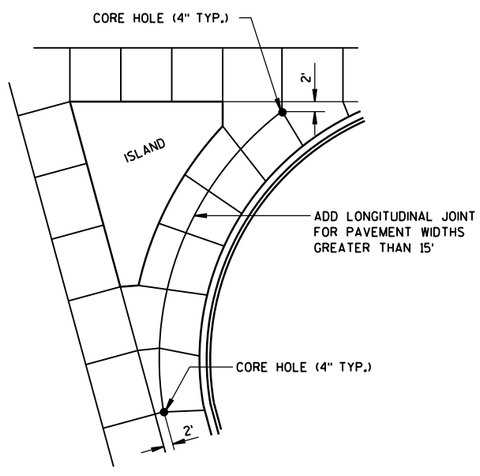
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

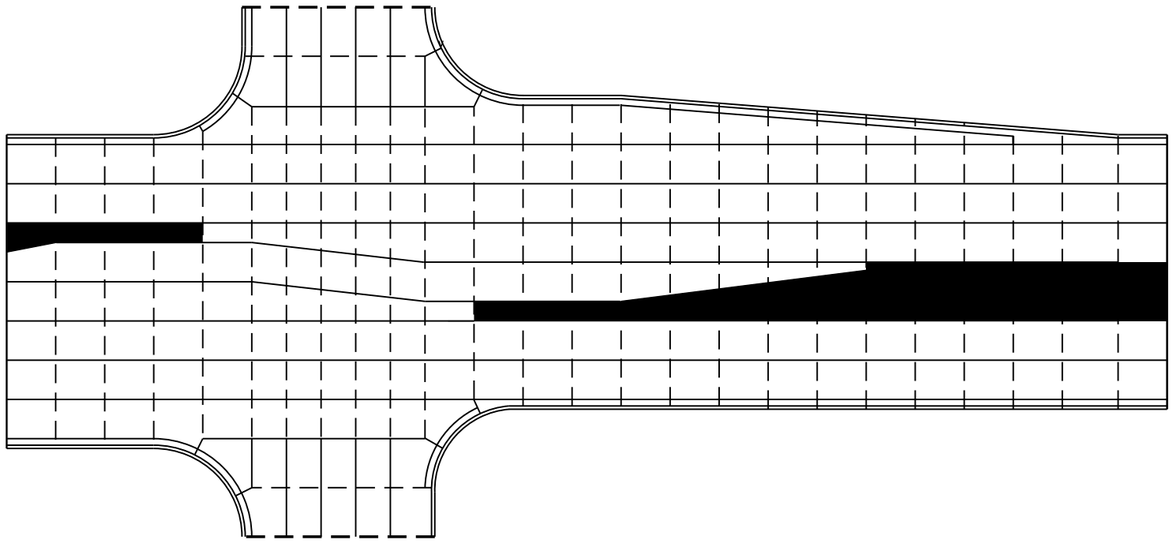
6
S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

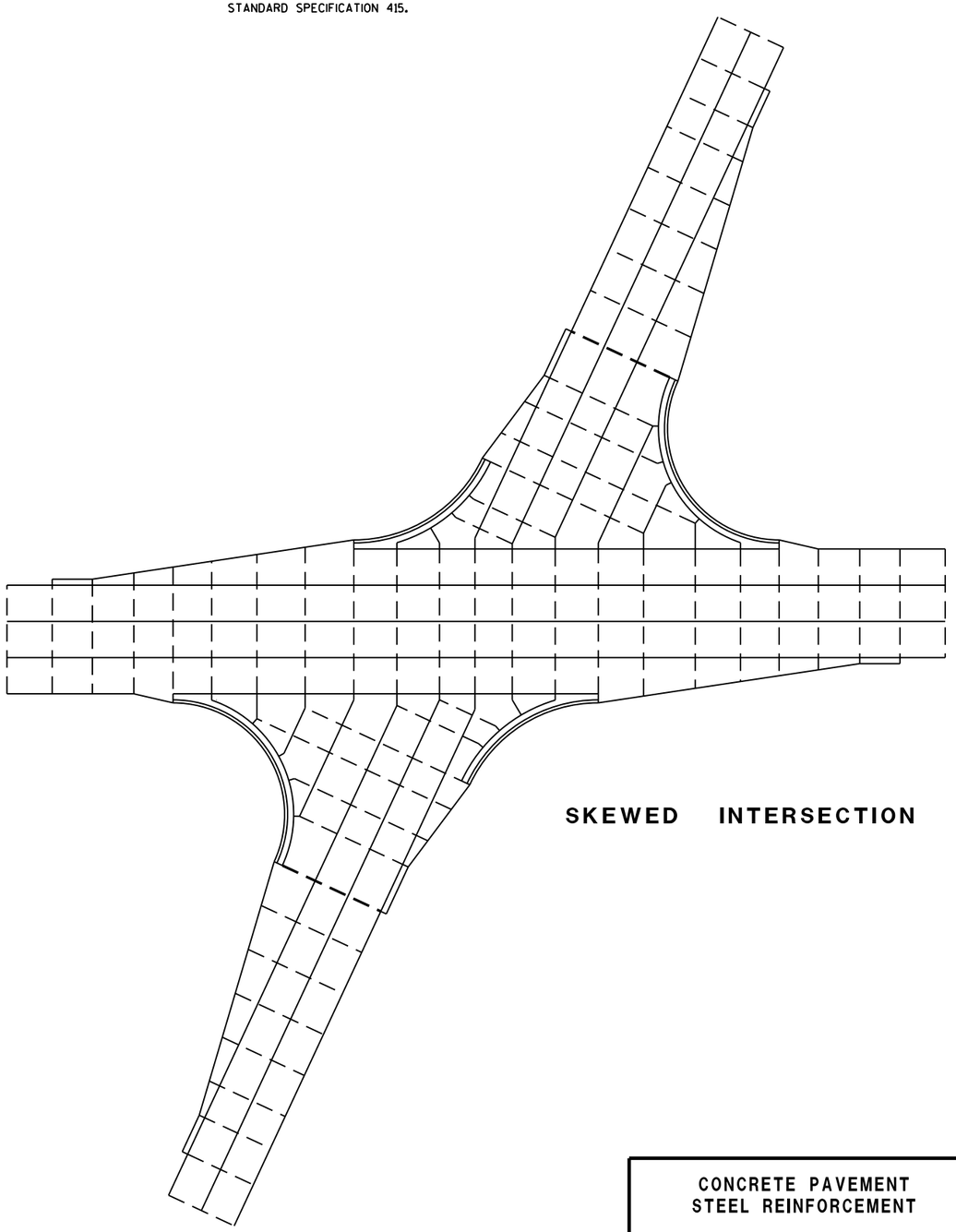
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

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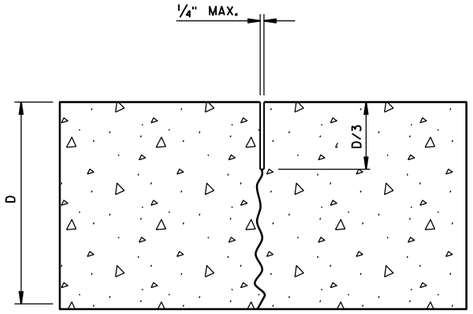
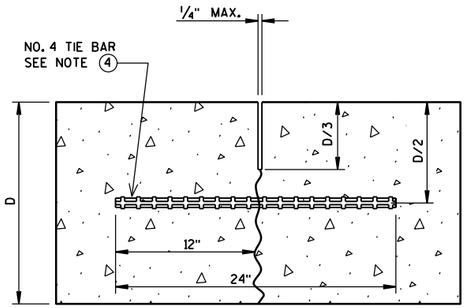
S.D.D. 13 C 18-2b



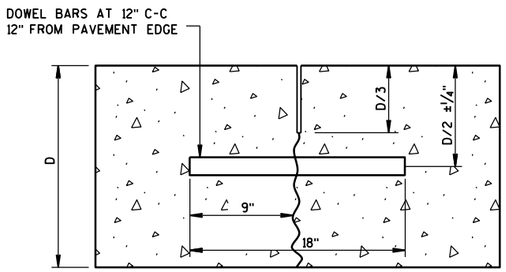
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

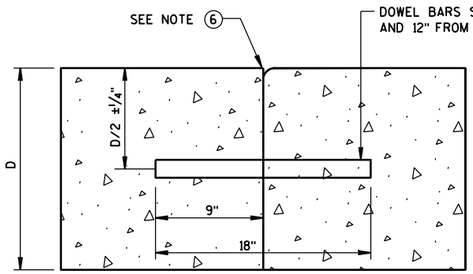
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF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



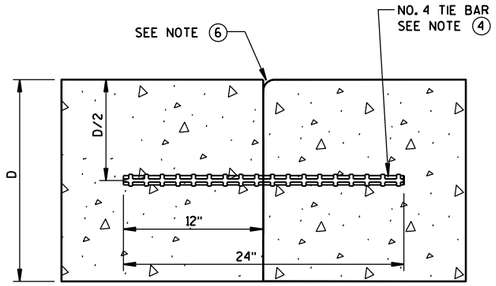
DOWELED-TRANSVERSE

CONTRACTION JOINTS

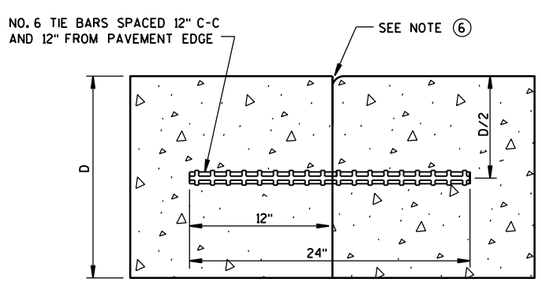
SEE NOTE (2)



DOWELED TRANSVERSE

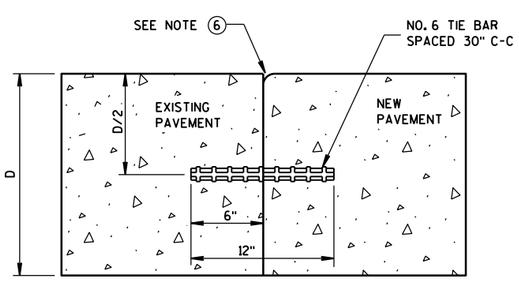


TIED LONGITUDINAL



TIED TRANSVERSE

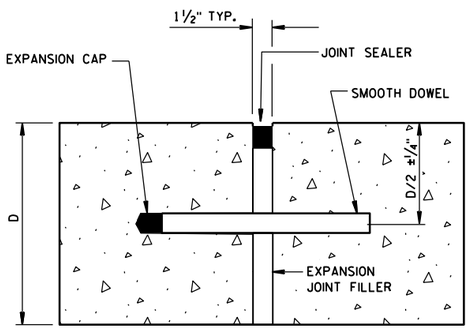
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

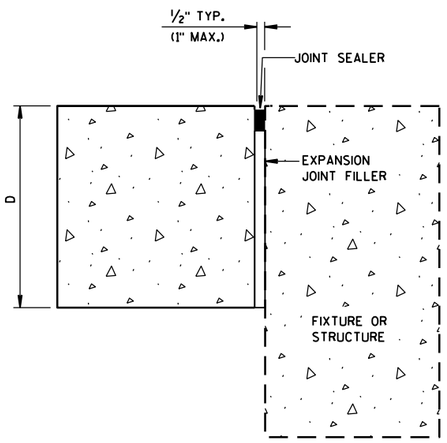
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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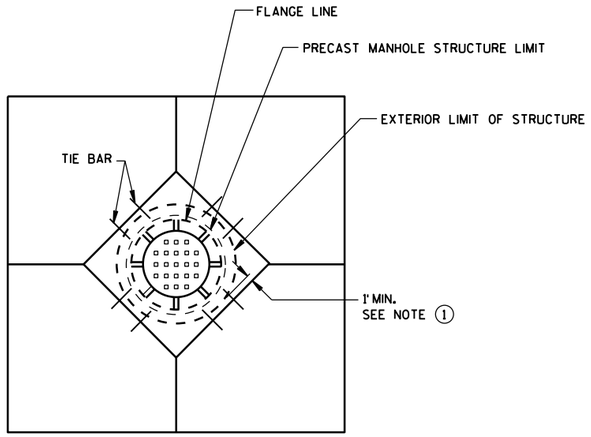
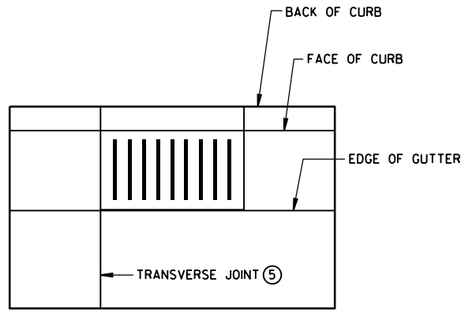
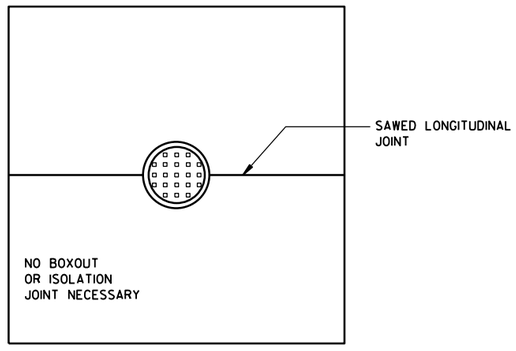
S.D.D. 13 C 18-2c



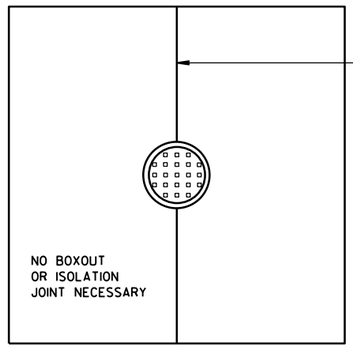
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



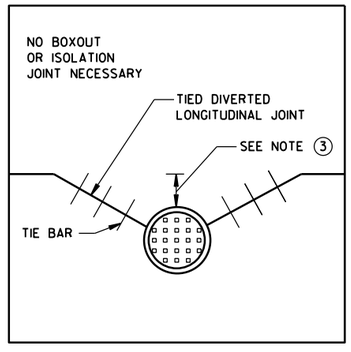
INLET WITH TRANSVERSE JOINT



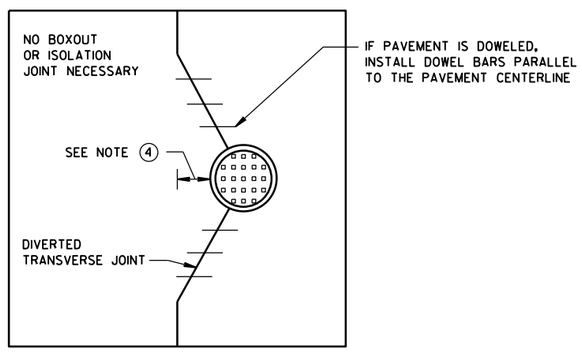
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

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

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

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

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-3-2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE

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GENERAL NOTES

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

(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.

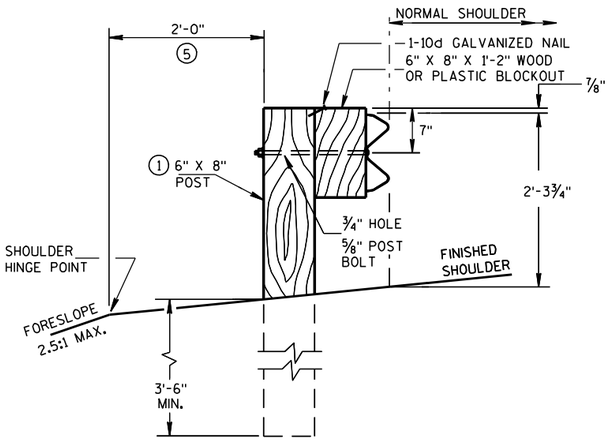
(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

(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).

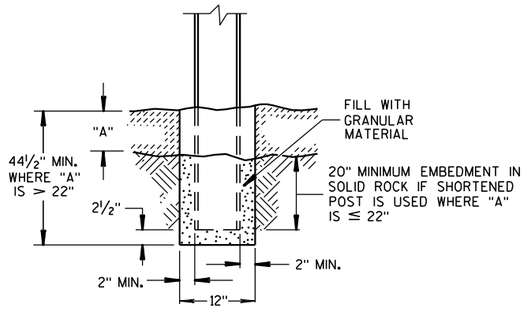
(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

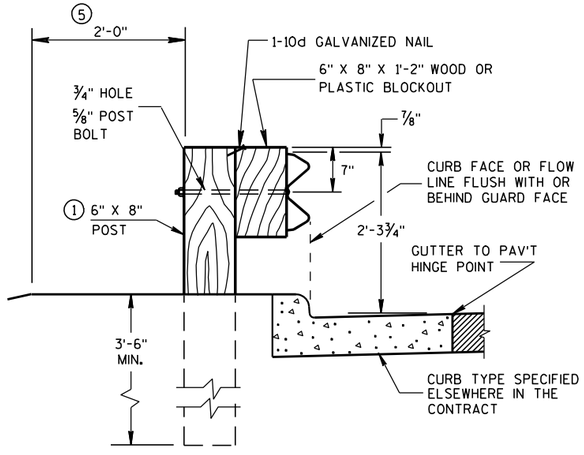
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



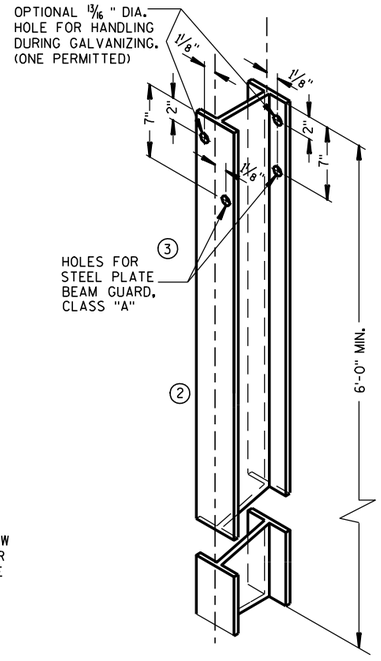
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)

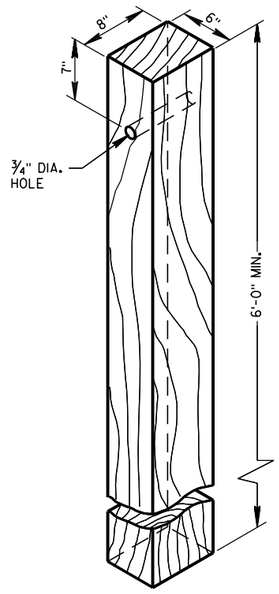


END VIEW
LOCATED ALONG A CURBED ROADWAY

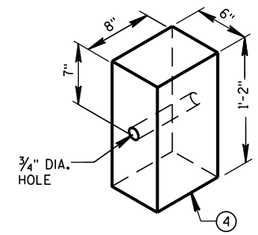


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

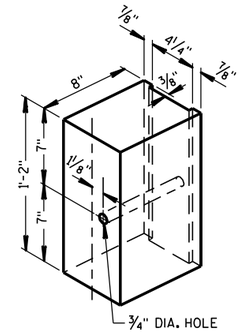
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



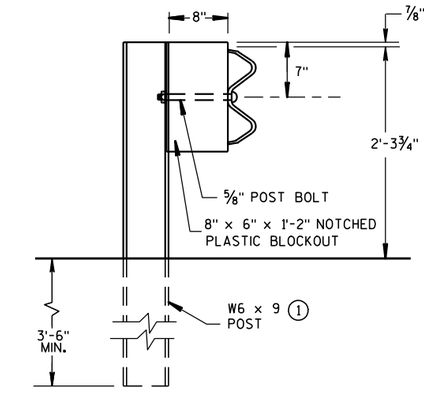
WOOD POST
(6"X8") NOMINAL



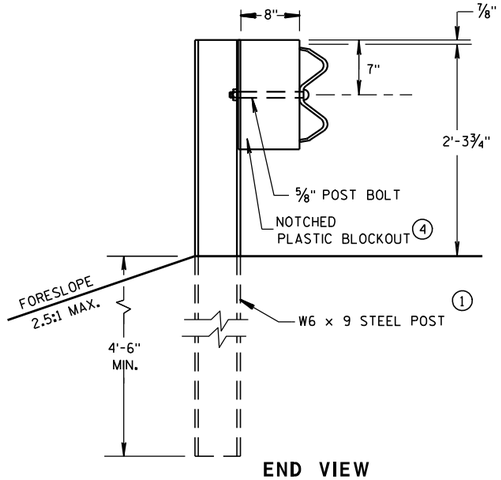
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



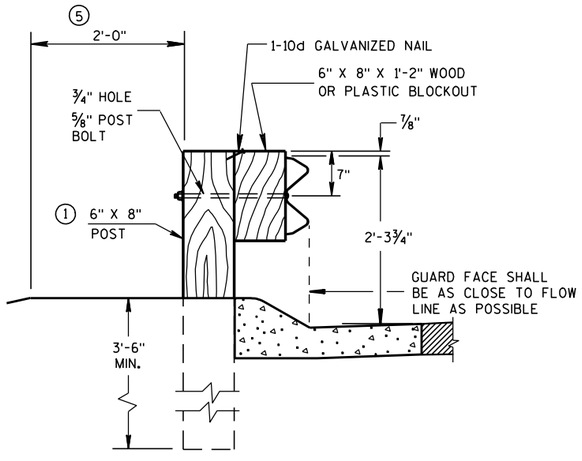
TYPICAL NOTCHED (1)
PLASTIC BLOCKOUT
FOR STEEL POSTS



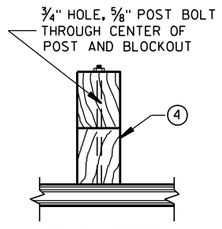
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



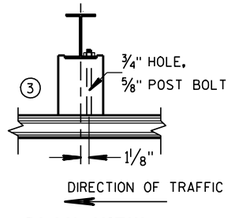
END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

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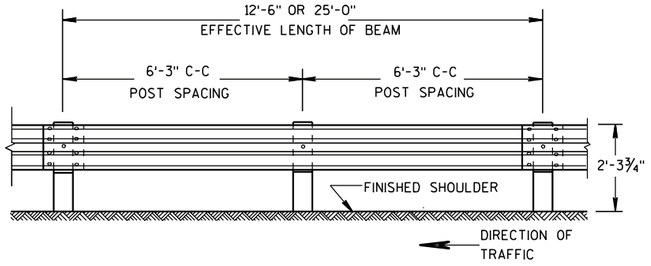
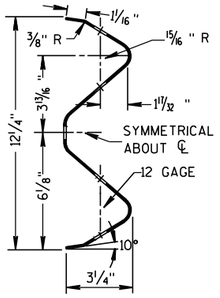
S.D.D. 14 B 15-7a

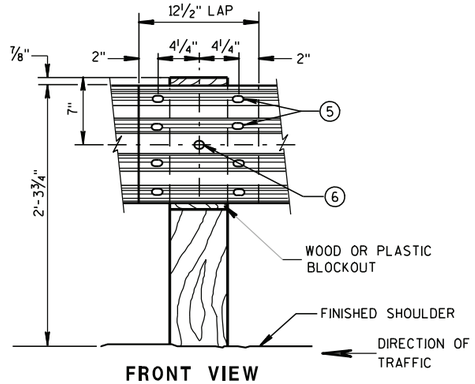


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM

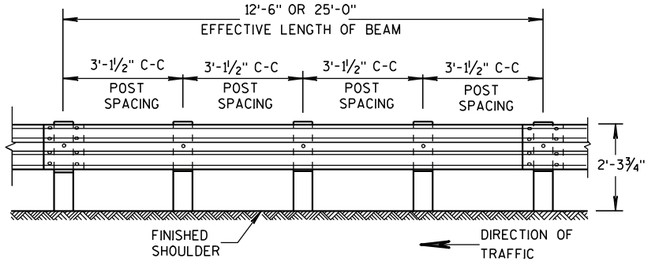


FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

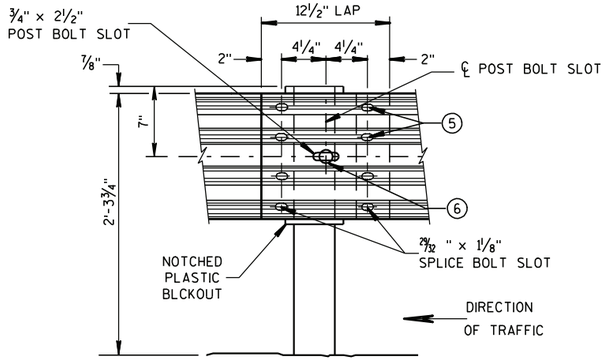
GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 8 - 5/8" Φ X 2 " BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
6. 5/8" Φ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.



FRONT VIEW

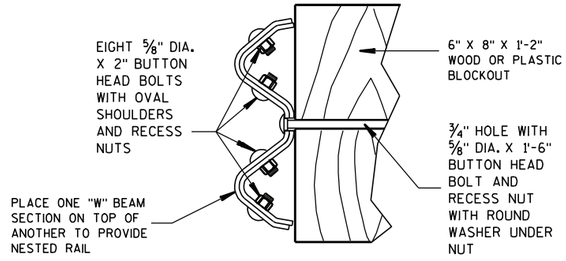
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

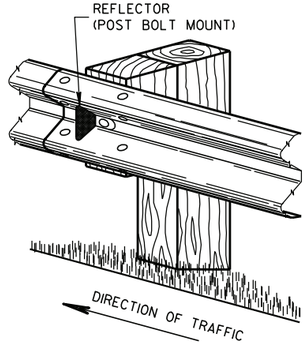


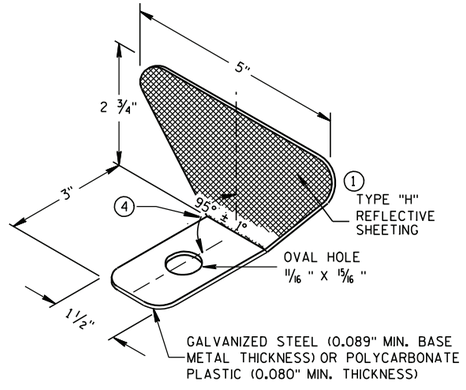
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING (2)

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (3)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 (4)	





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (1)

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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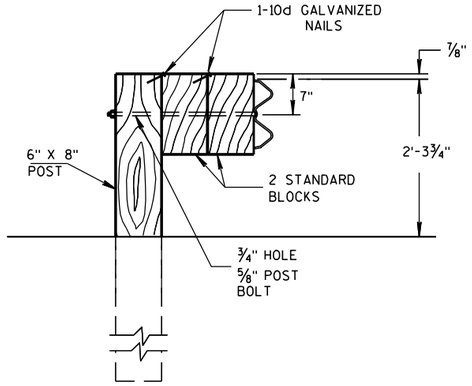
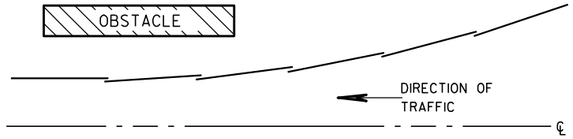
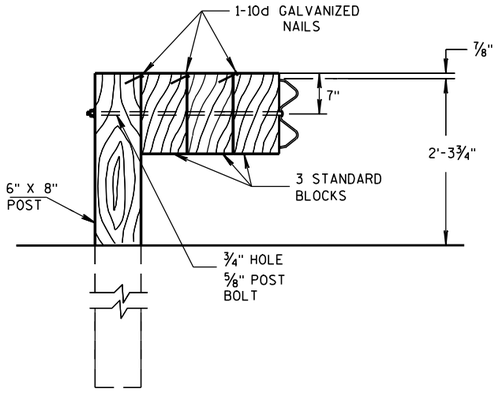


DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

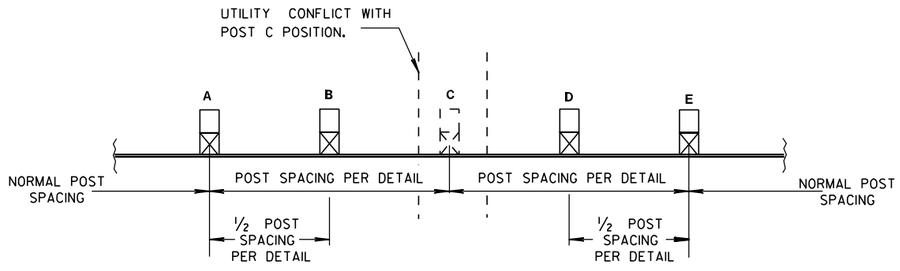


PLAN VIEW
BEAM LAPPING DETAIL



DETAIL FOR TRIPLE BLOCKS

TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

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.

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/11	/S/ Jerry H. Zogg	
DATE	ROADWAY STANDARDS ENGINEER	ENT

FHWA

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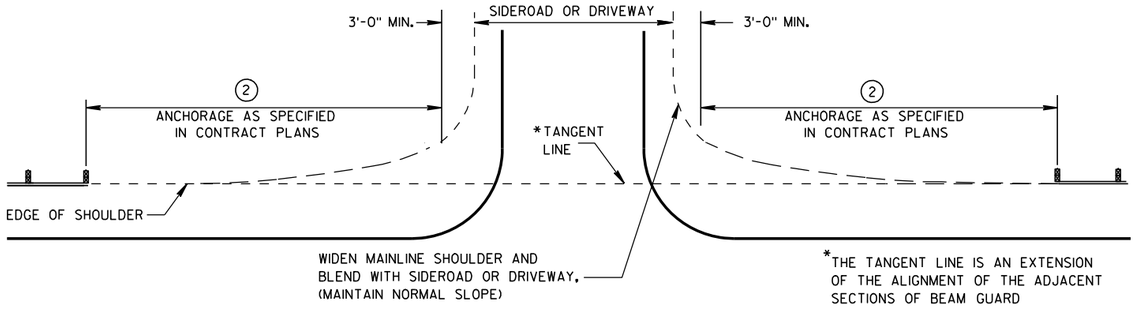
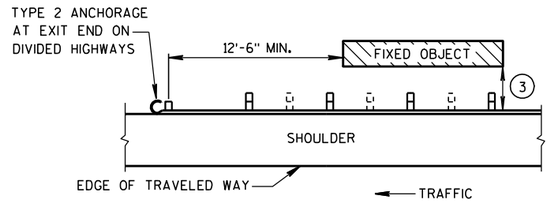


BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC

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.

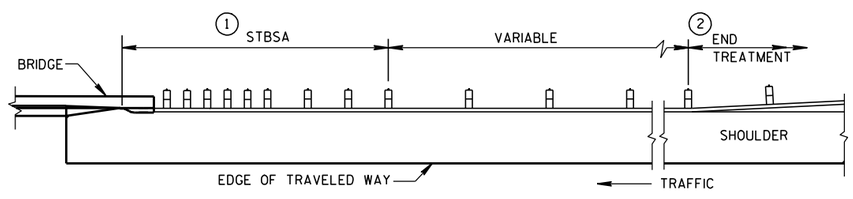
THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

(1) STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.

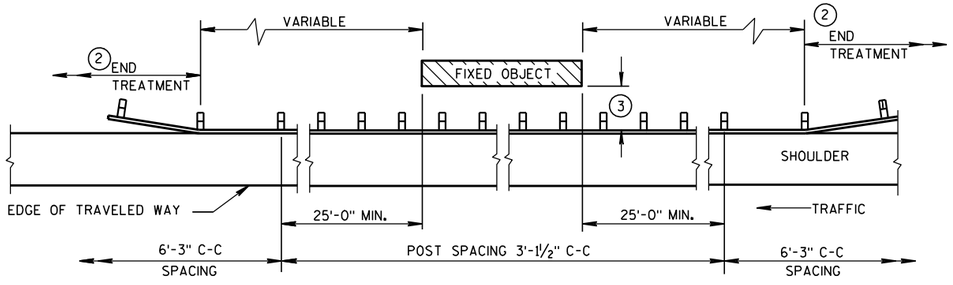
(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(3)

MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT	POST SPACING
3'-6"	3' - 1½"
4'-6"	6' - 3"

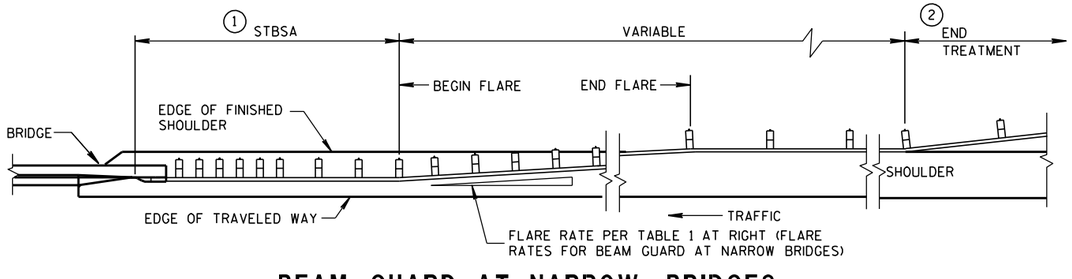


BEAM GUARD AT FULL WIDTH BRIDGES



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)

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

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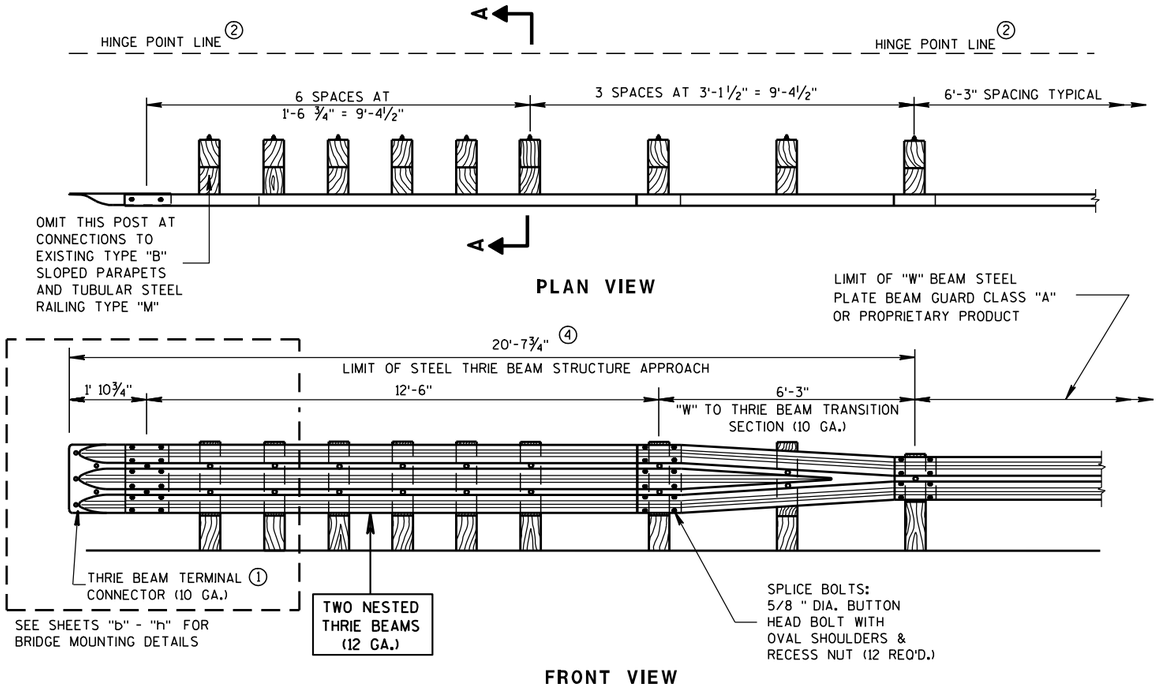


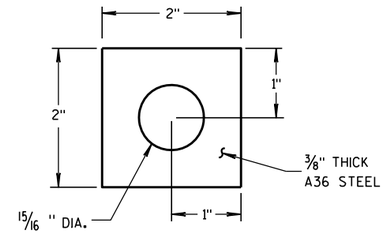


PLATE WASHER DETAIL

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.

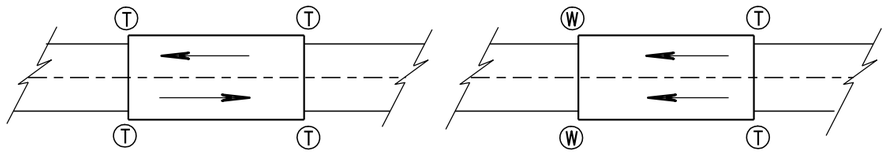
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

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.



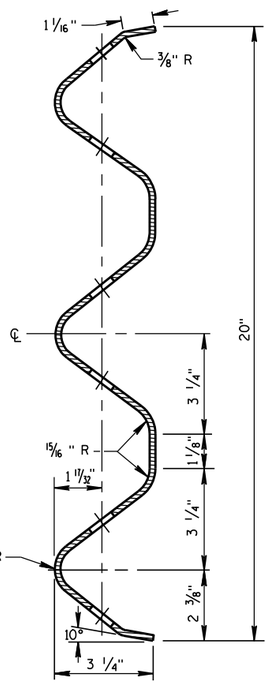
TWO WAY TRAFFIC

ONE WAY TRAFFIC

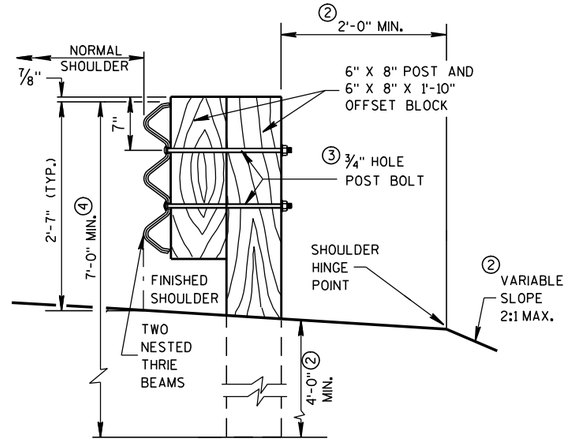
T THRIE BEAM CONNECTION

W W-BEAM CONNECTION WHEN REQUIRED

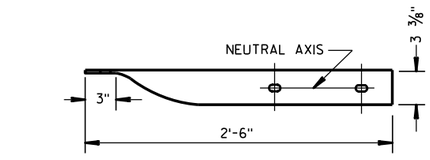
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

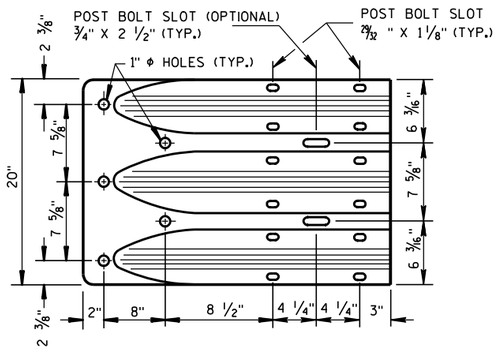


SECTION THRU THRIE BEAM RAIL ELEMENT

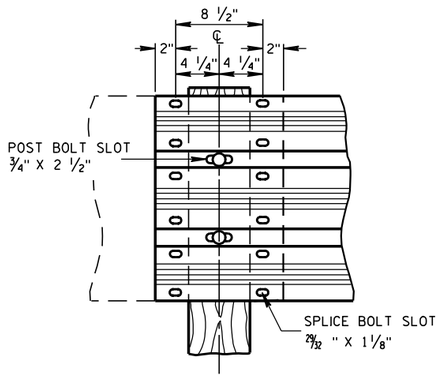


SECTION A-A





THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE

STEEL THRIE BEAM STRUCTURE APPROACH

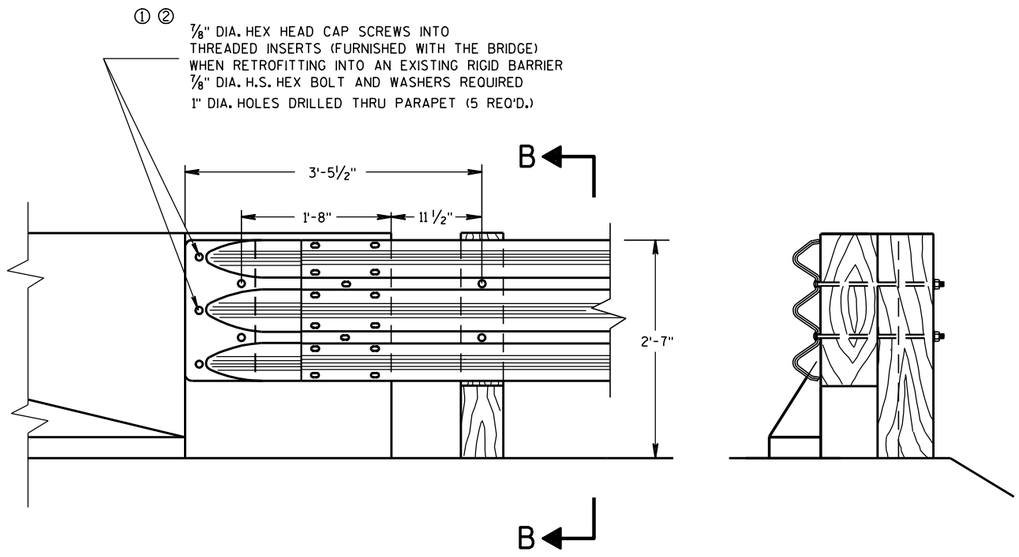
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

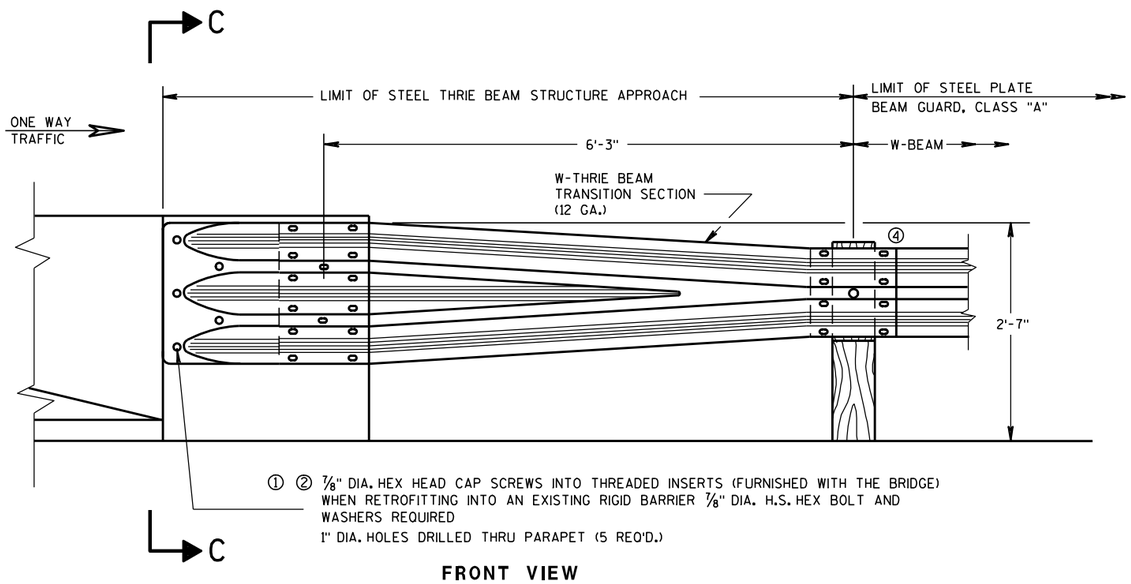
FHWA



FRONT VIEW

SECTION B-B

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



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.

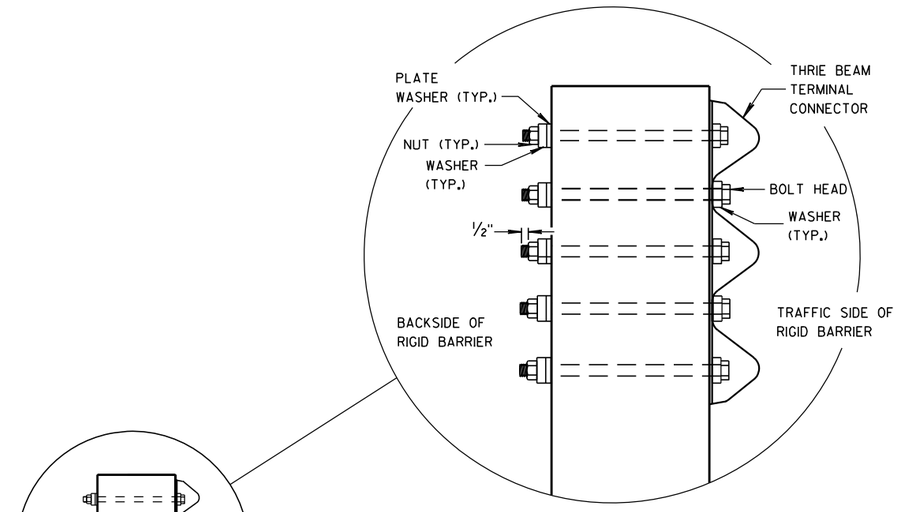
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

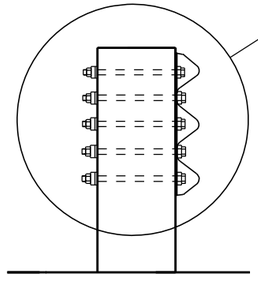
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. 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. [illegible]
ROADWAY STANDARDS [illegible]
ENGINEER

FHWA

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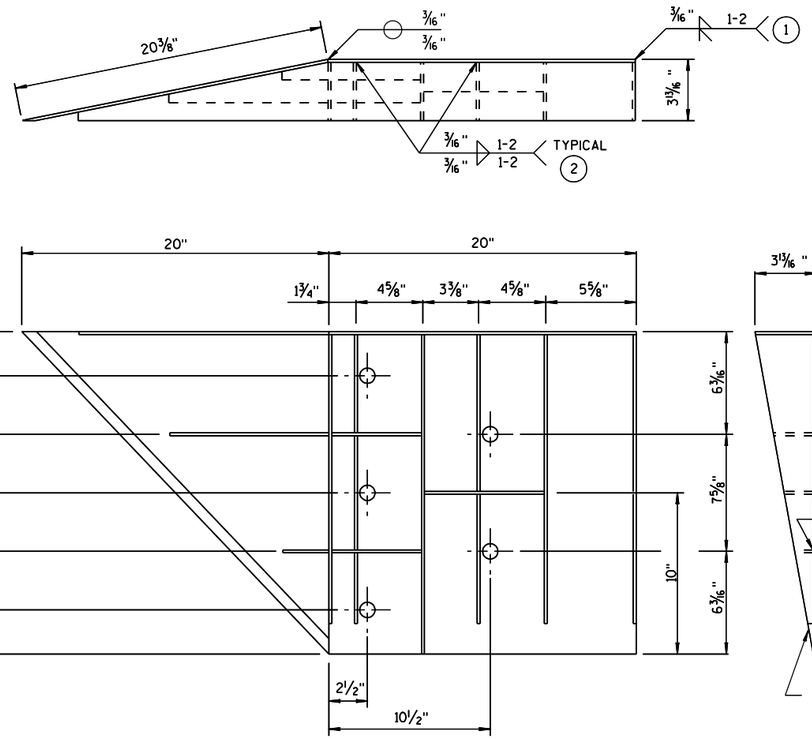
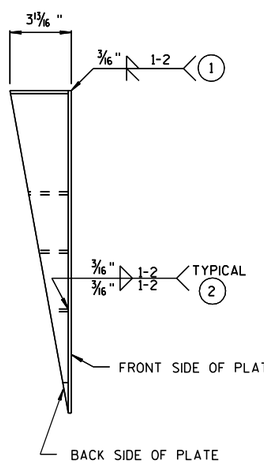
S.D.D. 14 B 20-11b





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

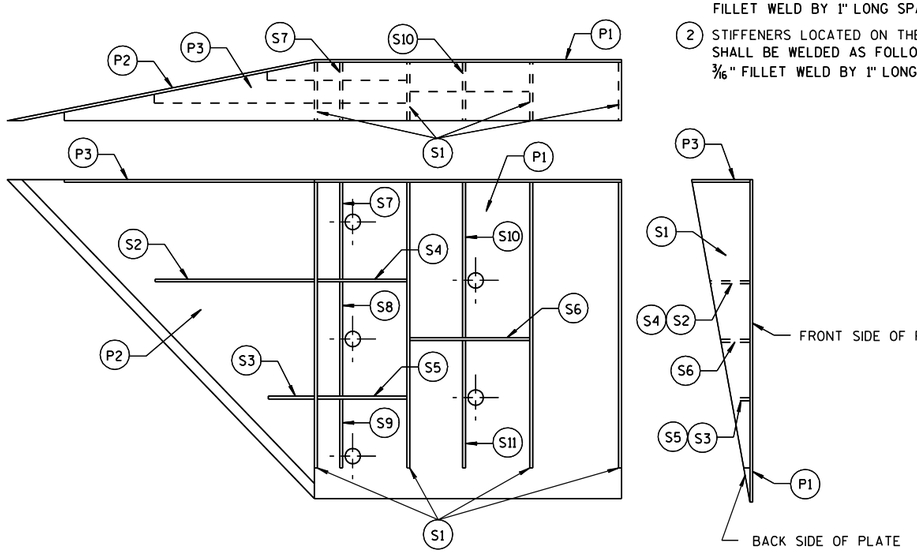


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE ⅜" THICK.

ALL STIFFENERS ARE ¼" 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 ⅜" 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:
⅜" 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"	⅜"
P2	1		20" x 20" x 28⁹⁄₁₆"	⅜"
P3	1		39" x 3⅝" x 20" x 19⁵⁄₁₆"	⅜"
S1	4		18⁷⁄₁₆" x 3⅝" x 18¾"	¼"
S2	1		10¼" x 2⅞" x 10⅜" x ½"	¼"
S3	1		3" x 1⅛" x 3⅛" x ½"	¼"
S4	1		6⅛" x 2⅞"	¼"
S5	1		6⅛" x 1⅛"	¼"
S6	1		7¾" x 1¾"	¼"
S7	1		2⁹⁄₁₆" x 6" x 3⅝" x 5⅞"	¼"
S8	1		1⁵⁄₃₂" x 7½" x 2½" x 7⅜"	¼"
S9	1		6⅛" x 6⅜" x 1³⁄₃₂"	¼"
S10	1		1⅞" x 9⅞" x 3⅝" x 9¹¹⁄₁₆"	¼"
S11	1		8½" x 8¾" x 1¹³⁄₁₆"	¼"

STEEL THRIE BEAM STRUCTURE APPROACH

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6 S.D.D. 14 B 20-11g

6 S.D.D. 14 B 20-11g

BILL OF MATERIALS

NOTE NO.	QTY.	DESCRIPTION
(1)	4	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
(2)	**	STEEL TUBE: OPTION 1 - QUANITY OF 4 TS 8" X 6" X 0.188", 4'-6" LONG OR OPTION 2 - QUANITY OF 2 TS 8" X 6" X 0.188", 6'-0" AND 2 TS 8" X 6" X 0.188", 4'-6" LONG
(3)	2	SOIL PLATE: 2'-0" X 1'-6" X ¼" **
(4)	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
(5)	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
(6)	1	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
(7)	1	BEARING PLATE
(8)	1	BCT CABLE ASSEMBLY
(9)	1	CABLE ANCHOR BOX
(10)	1	STRUT & YOKE
(11)	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6½" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS
(12)	3	STEEL PLATE BEAM: 12 GA. 13'-6½"
(13)	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
(14)	1	REFLECTIVE SHEETING TYPE H: 18" X 18"
(15)	1	E.A.T. MARKER POST

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS. IF NONE ARE AVAILABLE, INSTALL ⅝" ϕ X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

(A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL),AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

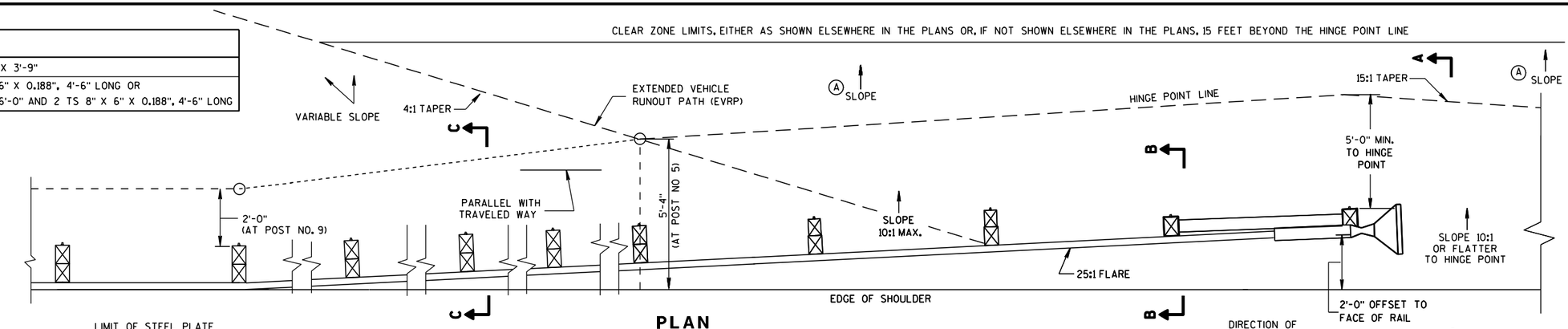
(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

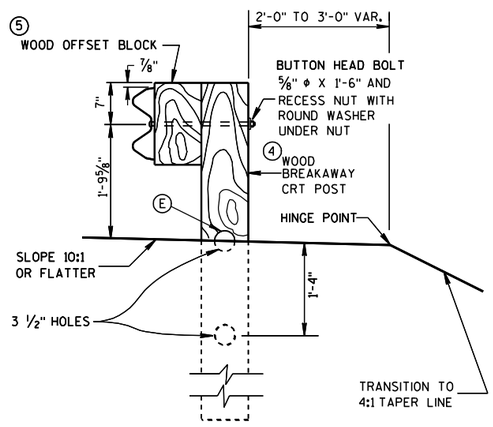
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

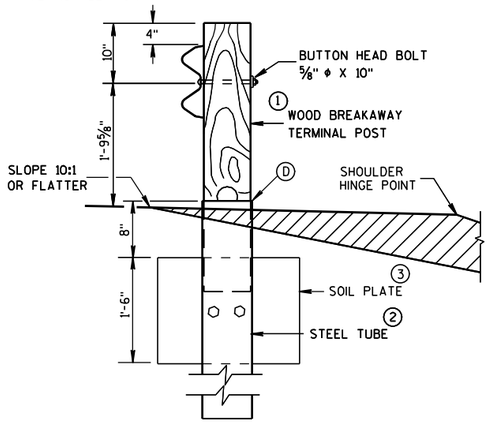
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

** SDD SHOWS 4 - 54 INCH STEEL TUBES WITH SOIL PLATES INSTALLED ON POST 1 AND POST 2. POST 3 AND 4 DO NOT NEED SOIL PLATES. AN ALTERNATIVE INSTALLATION WOULD CONSIST OF 2 - 72 INCH STEEL TUBES ON POST 1 AND POST 2 AND 54 INCH SOIL TUBES ON POSTS 3 AND 4. THE ALTERNATIVE INSTALLATION DOES NOT REQUIRE SOIL PLATES.

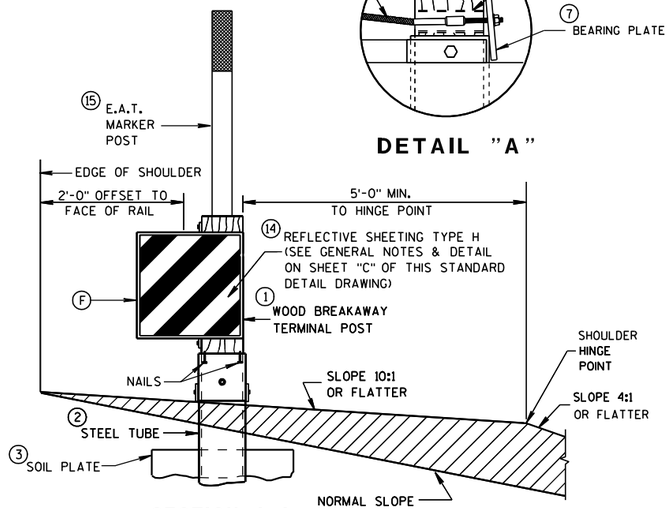




SECTION C-C
TYPICAL AT POST NOS. 6, 8

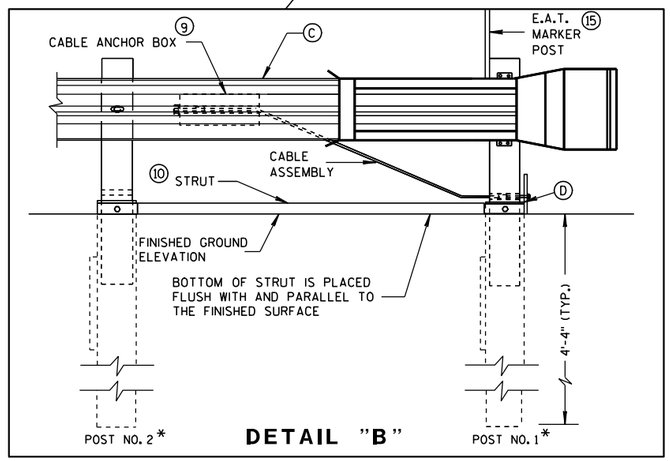


SECTION B-B
TYPICAL AT POST NO. 2*



DETAIL "A"

SECTION A-A
TYPICAL AT POST NO. 1*



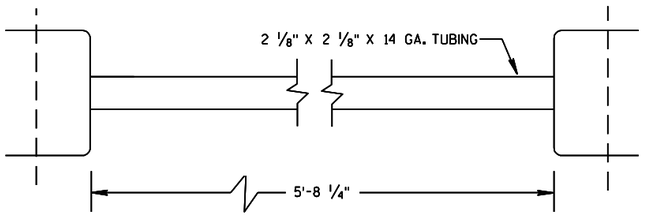
DETAIL "B"

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

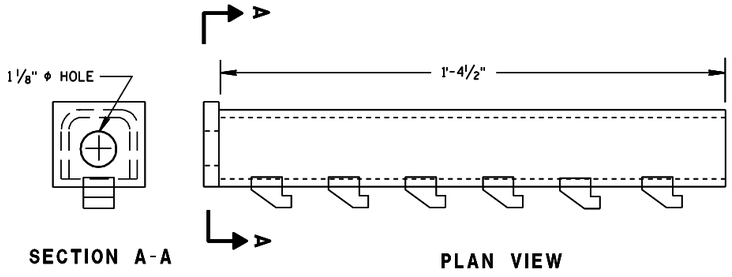
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

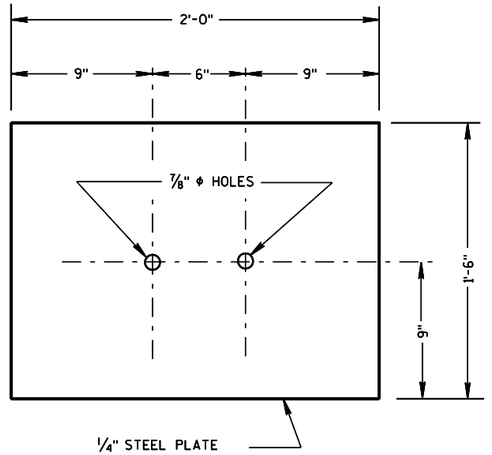
S.D.D. 14 B 24-7a



⑩ STRUT DETAIL (SKT-350)

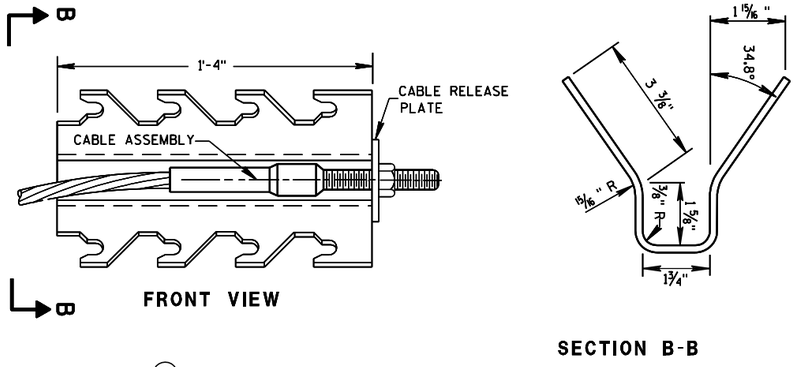


⑨ CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



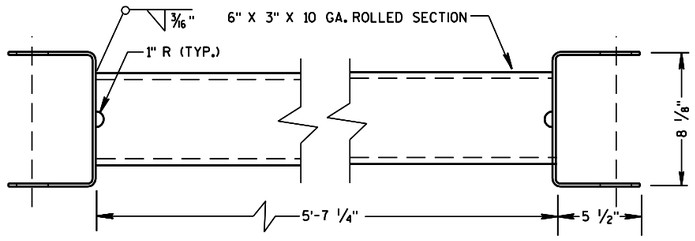
③ SOIL PLATE

(SKT-350, ET-2000/ET-2000 PLUS)



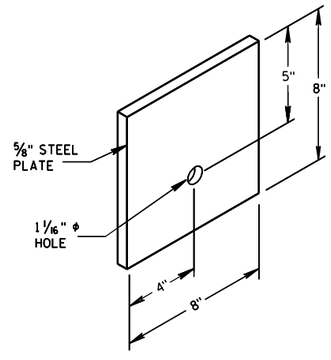
⑨ CABLE ANCHOR BOX (SKT-350)

(SKT-350)



⑩ STRUT DETAIL (ET-2000/ET-2000 PLUS)

(ET-2000/ET-2000 PLUS)



⑦ STEEL BEARING PLATE

(SKT-350, ET-2000/ET-2000 PLUS)

6

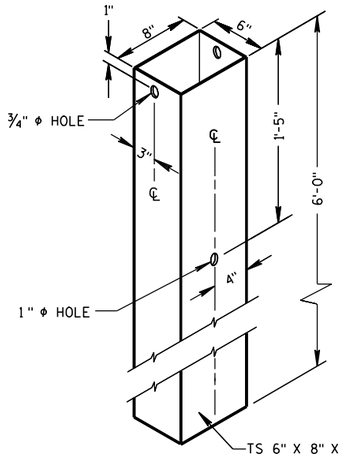
6

S.D.D. 14 B 24-7b

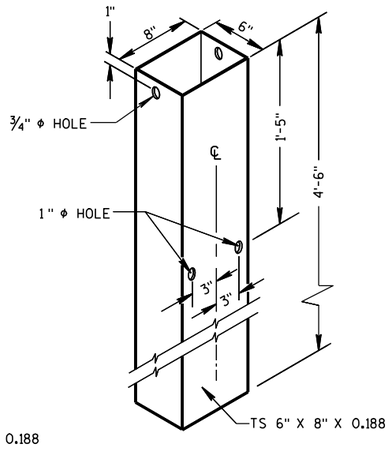
S.D.D. 14 B 24-7b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

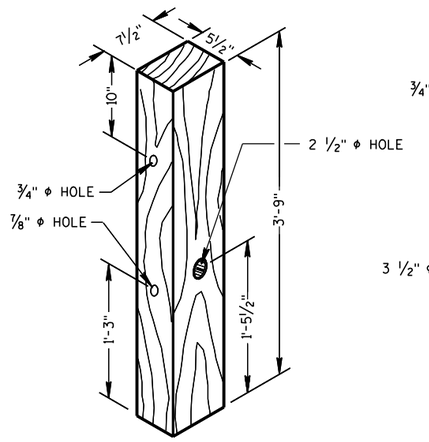
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



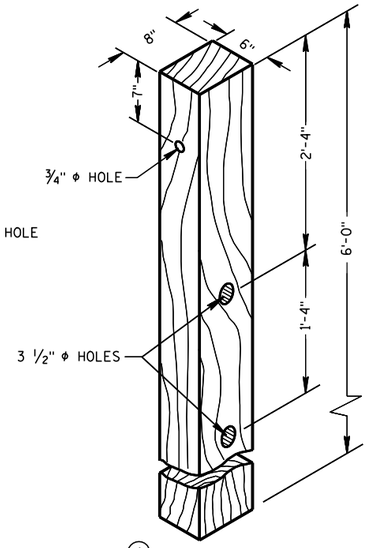
(2) 72" STEEL TUBE
(POSTS NO. 1-4



(2) 54" STEEL TUBE
(POSTS NO. 1-4



(1) TERMINAL POST
(POSTS NO. 1-4



(4) CRT POST
(POSTS NO'S 5-8

WOOD BREAKAWAY POSTS

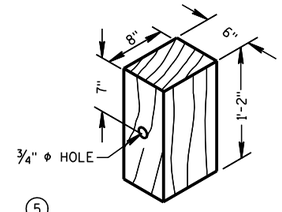
GENERAL NOTES

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

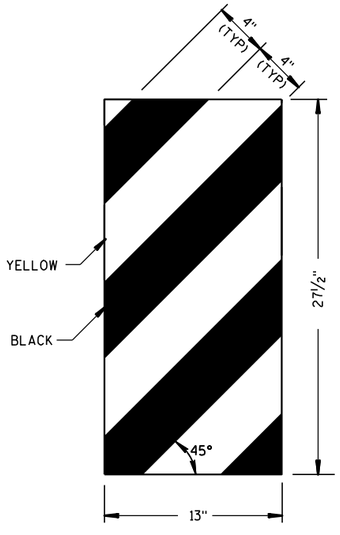
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

SEE APPROVED PRODUCTS LIST FOR ACCEPTABLE E. A. T. MARKER POST.

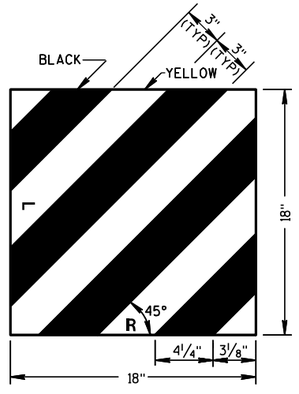
(G) ½" DIA. X 3" LAG BOLT WITH WASHER.



(5) WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

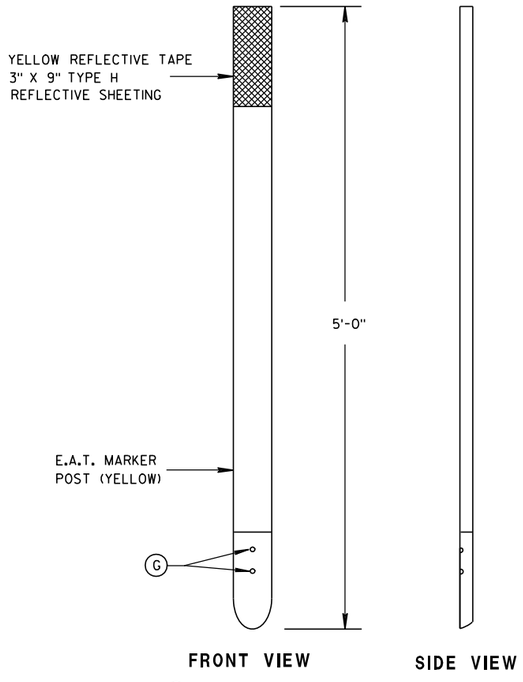


ET-2000 PLUS ONLY

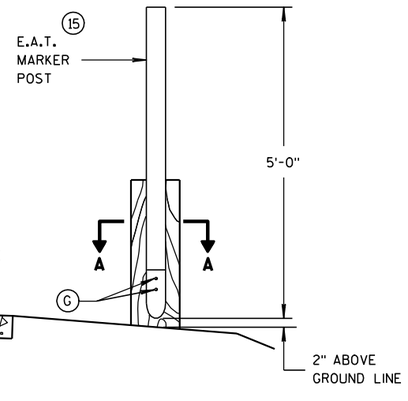


ET-2000 AND SKT-350

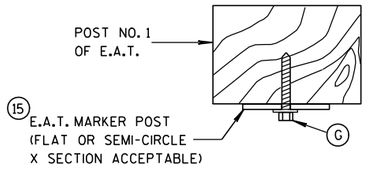
(14) REFLECTIVE SHEETING DETAILS



(15) E.A.T. MARKER POST



TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

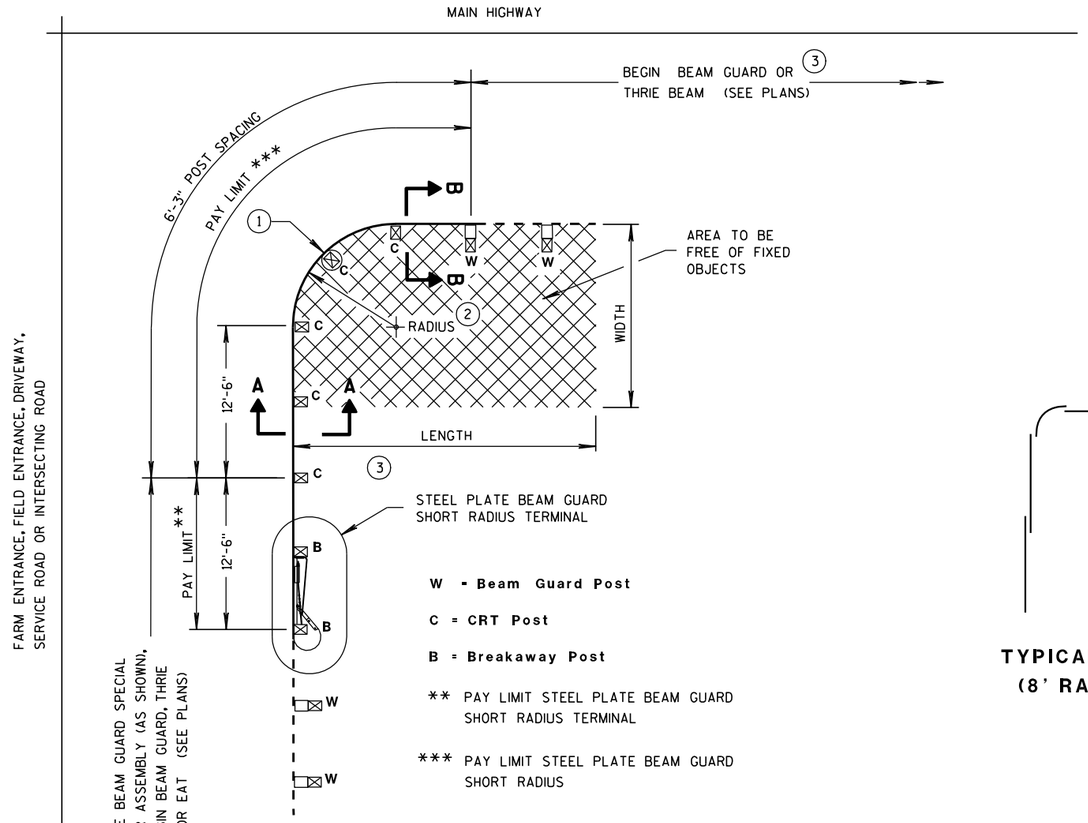
APPROVED
4-12-10
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
65
FHWA

6

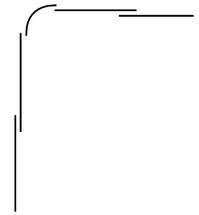
S.D.D. 14 B 24-7c

6

S.D.D. 14 B 24-7c



TYPICAL LAYOUT
(8' RADIUS SHOWN)



TYPICAL LAP SPLICES
(8' RADIUS SHOWN)

GENERAL NOTES

ALL ANGLES, CHANNELS, AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 AND THE STRUCTURAL TUBING SHALL CONFORM TO ASTM A 500. WELDING SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123. PUNCHING, DRILLING, CUTTING, OR WELDING WILL NOT BE PERMITTED AFTER GALVANIZING. FURNISH AND INSTALL HARDWARE PER STANDARD SPECIFICATION 614.2. UNLESS NOTED OTHERWISE.

SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

(1) ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.

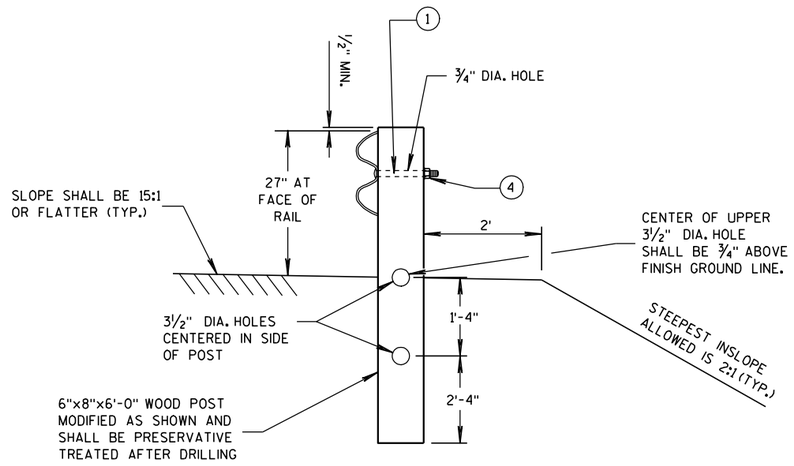
(2) RADIUS FROM 8' - 36'. SEE PLAN.

(3) HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.

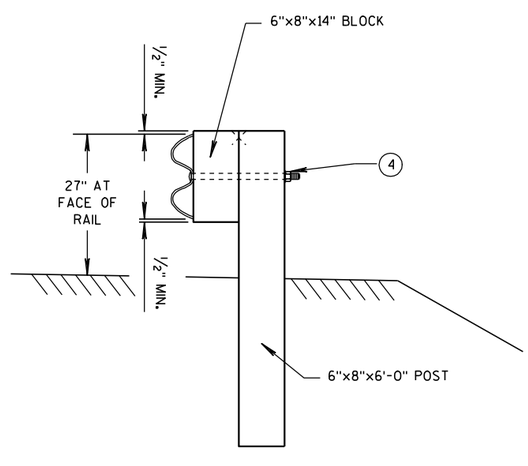
(4) 5/8" ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

RADIUS	NUMBER OF CRT POSTS	*NUMBER AND LENGTH OF CURVED RAILS	REQUIRED AREA FREE OF FIXED OBJECTS (LENGTH x WIDTH)
8'	5	1 at 12.5'	25' x 15'
16'	7	1 at 25'	30' x 15'
24'	9	1 at 25' and 1 at 12.5'	40' x 20'
32'	11	2 at 25'	50' x 20'

* THE NUMBER OF RAILS IS BASED ON A 90° INTERSECTION. SEE PLAN FOR NON 90° INSTALLATIONS.



SECTION A-A
(CRT POST)



SECTION B-B
(BEAM GUARD POST)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

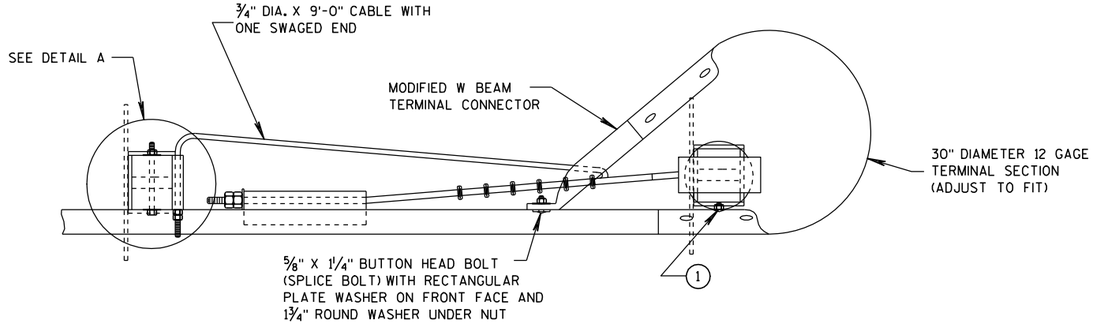
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

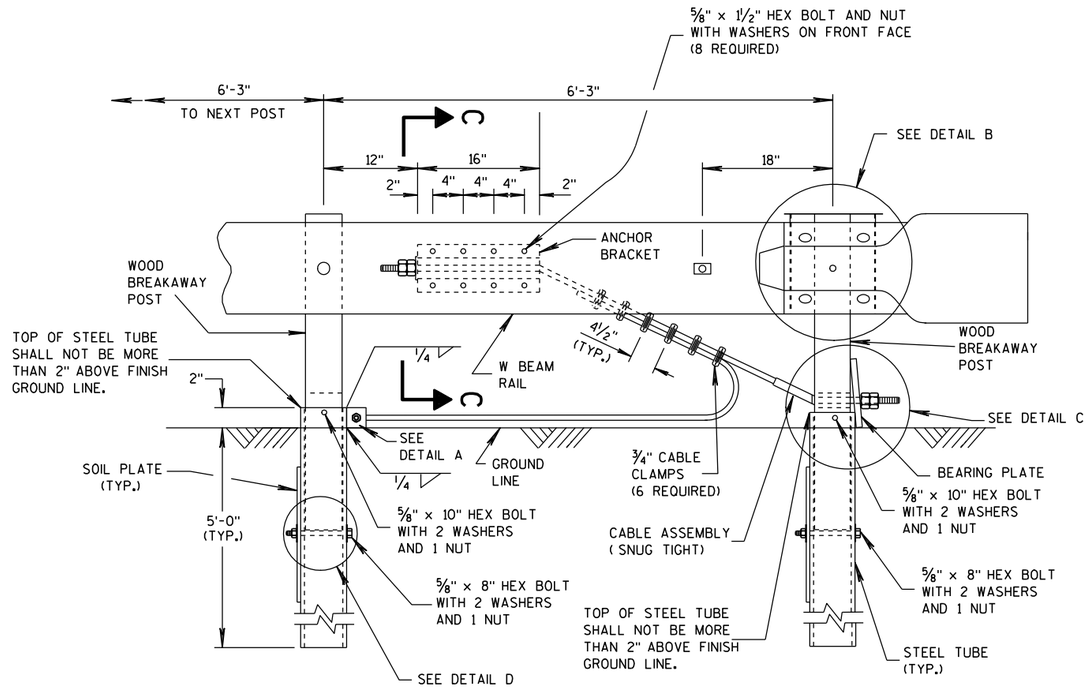
S.D.D. 14 B 27-1a

6

S.D.D. 14 B 27-1a



PLAN VIEW



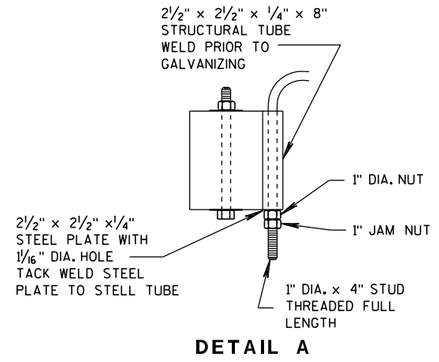
ELEVATION VIEW

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

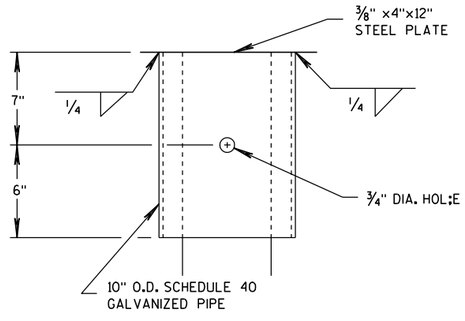
GENERAL NOTES

(1) ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A ⅝" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.

INSTALL GALVANIZED ¾" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED PLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.



DETAIL A



DETAIL B

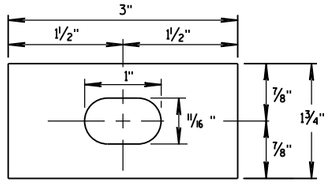
(BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

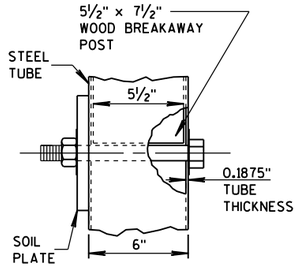
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

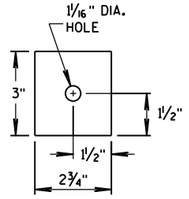
S.D.D. 14 B 27-1b



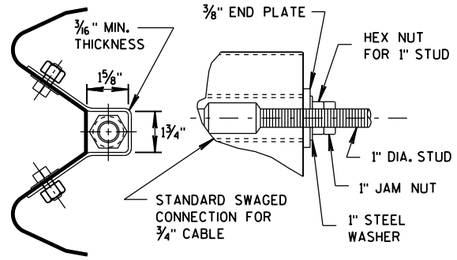
RECTANGULAR PLATE WASHER



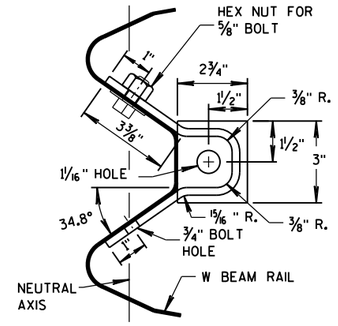
DETAIL D



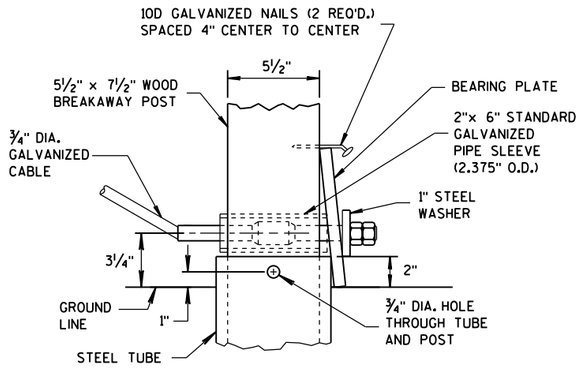
END PLATE



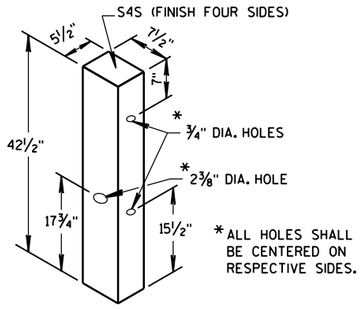
SECTION C-C
(END PLATE REMOVED)



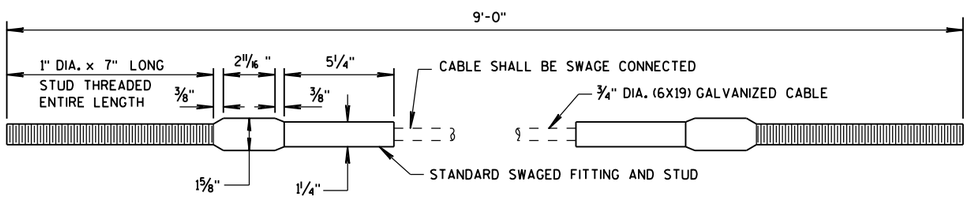
ANCHOR BRACKET



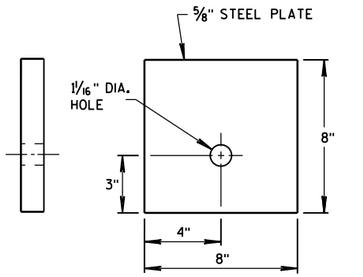
DETAIL C



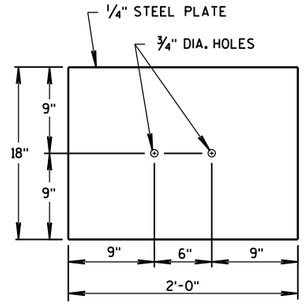
WOOD BREAKAWAY POST



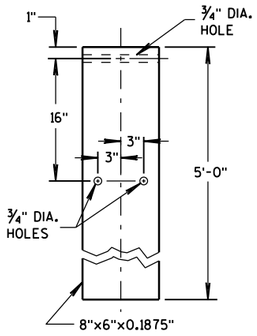
CABLE ASSEMBLY



BEARING PLATE



SOIL PLATE



STEEL TUBE

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/08 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 27-1c

6

S.D.D. 14 B 27-1c

GENERAL NOTES

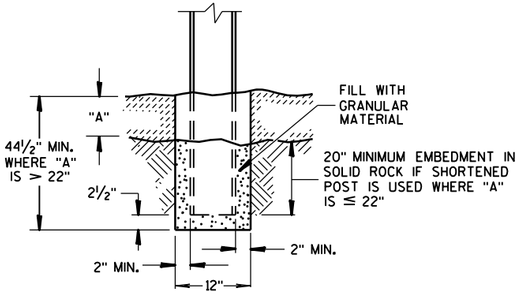
1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

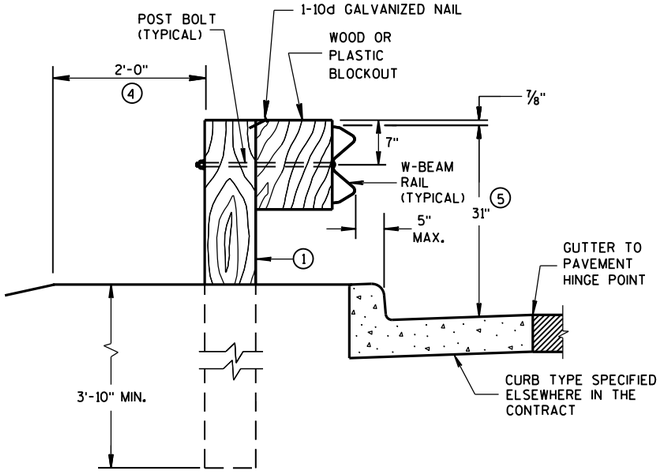
3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

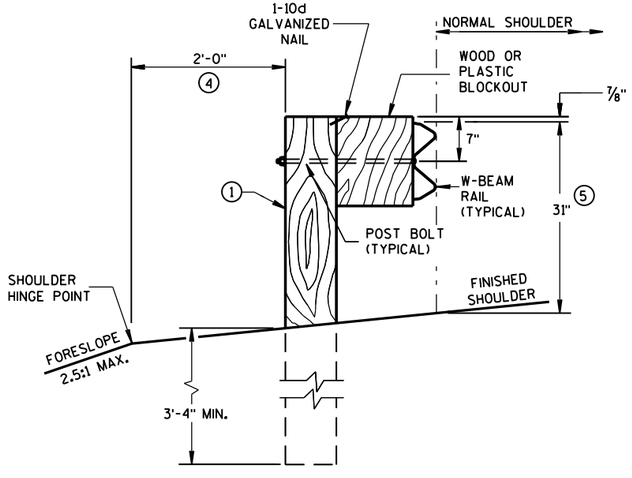
5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".



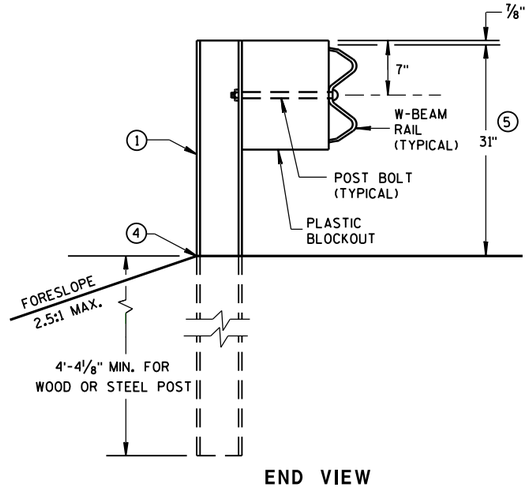
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ③



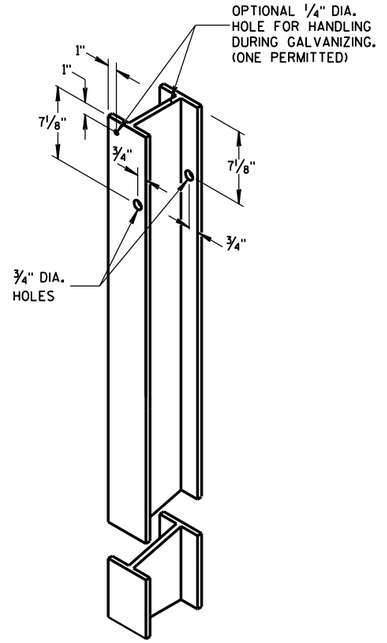
END VIEW
LOCATED ALONG A CURBED ROADWAY



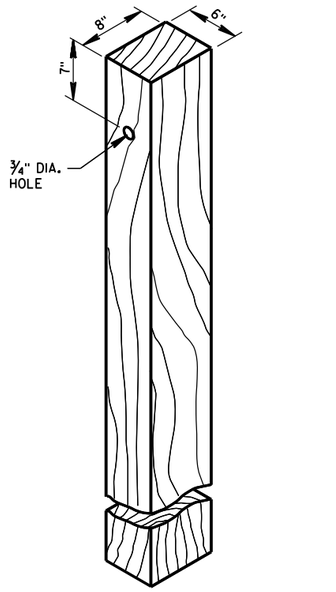
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



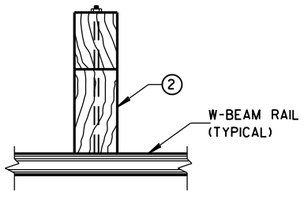
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



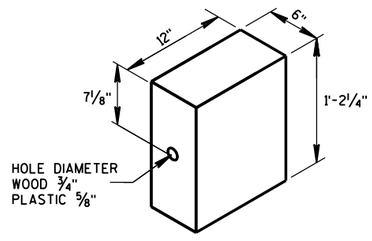
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



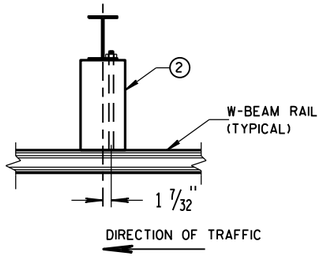
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

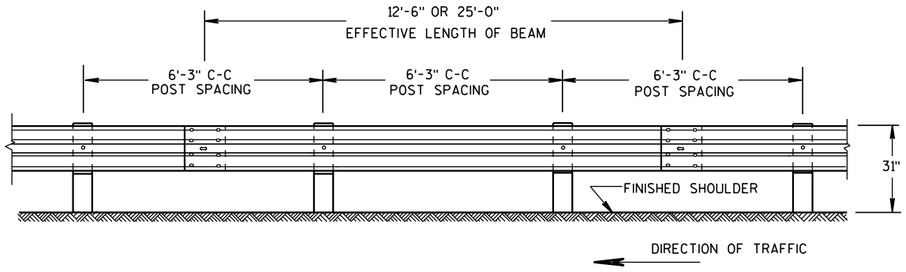


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

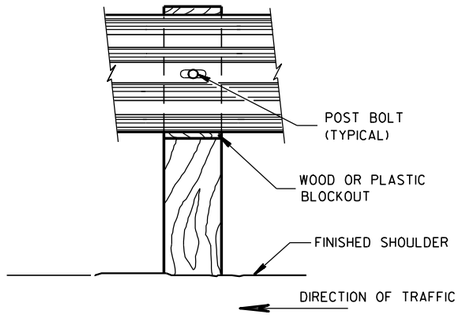
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 42-2a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



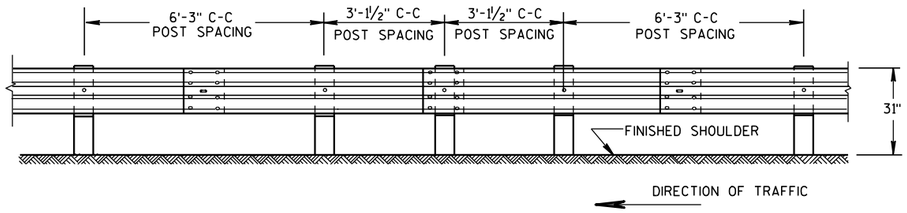
FRONT VIEW AT WOOD POST

GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

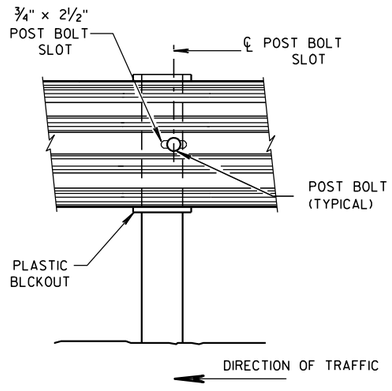
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

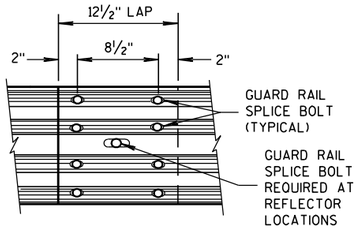


FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

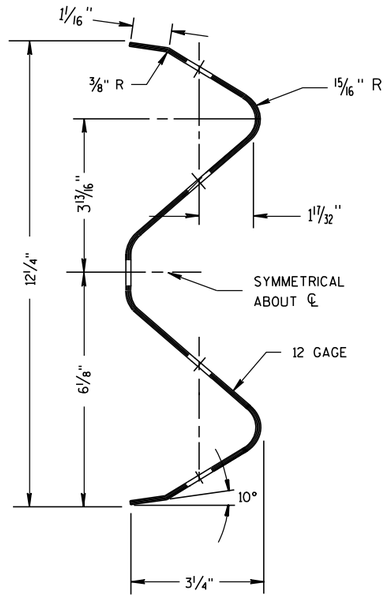


FRONT VIEW AT STEEL POST

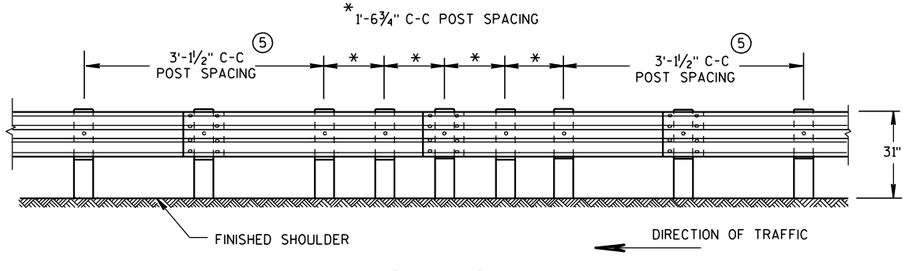


FRONT VIEW

MID-SPAN BEAM SPLICE

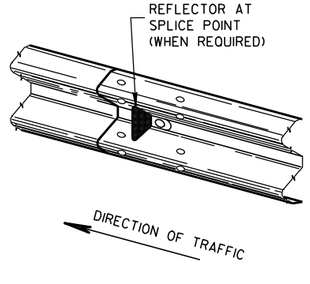


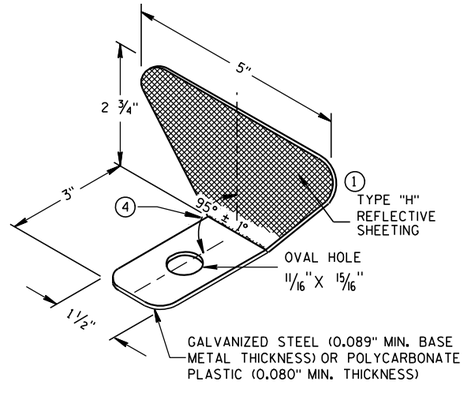
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①

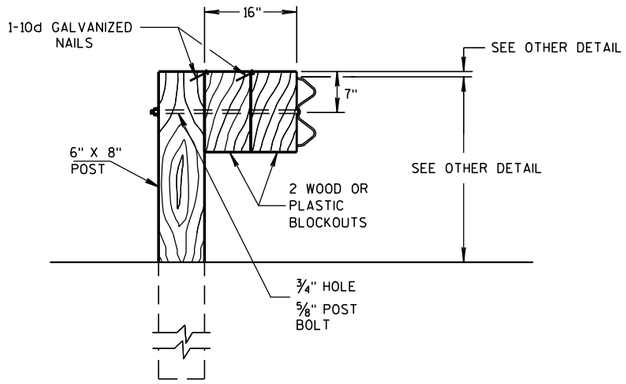
REFLECTOR SPACING ②

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1 ③	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2 ④	3

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

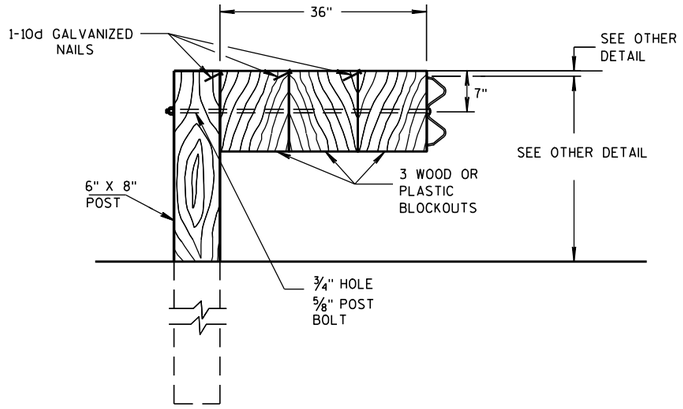
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 42-2b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

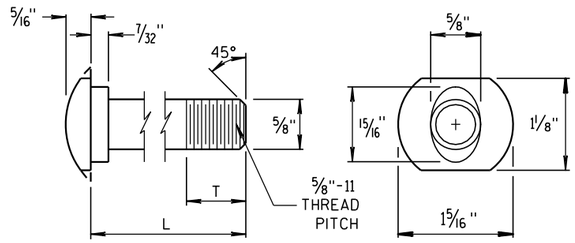


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

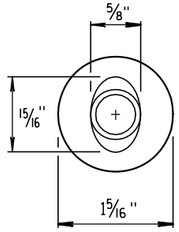
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

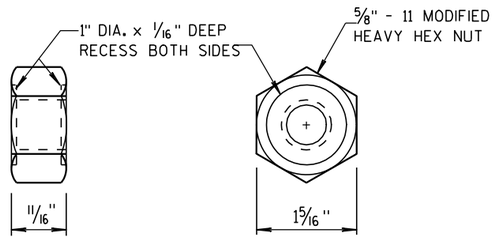


POST BOLT TABLE

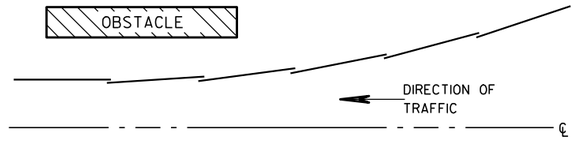
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

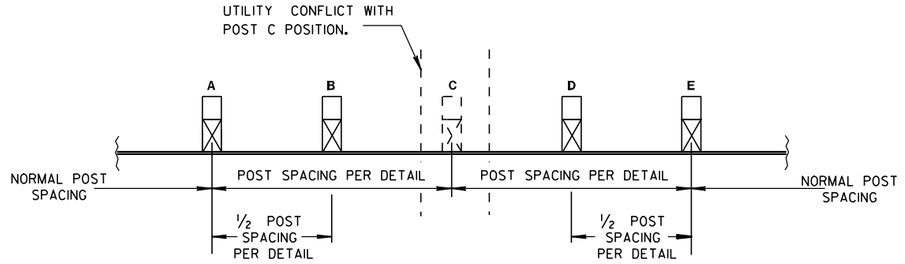


POST BOLT AND RECESS NUT

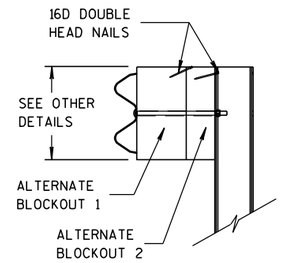


PLAN VIEW

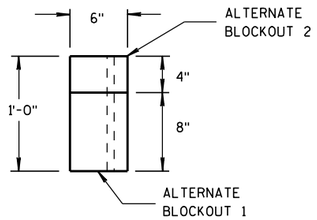
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
11/15/2011 DATE	/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
FHWA	ENT

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL),AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

SEE SDD 14B42 FOR MORE INFORMATION.

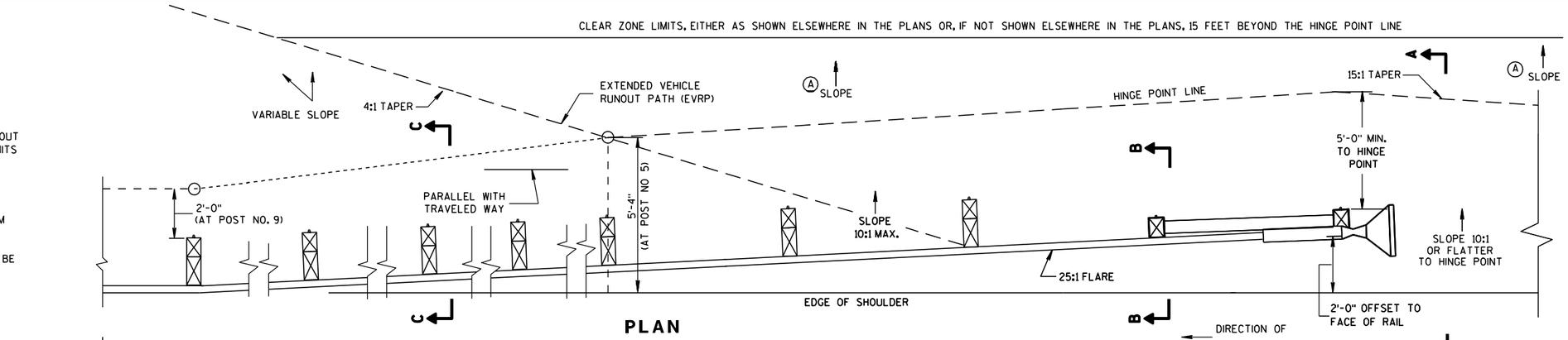
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

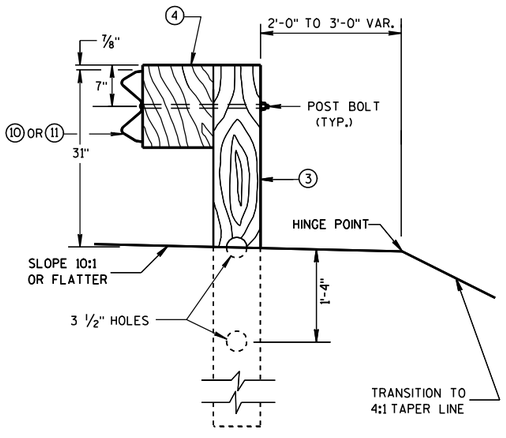
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

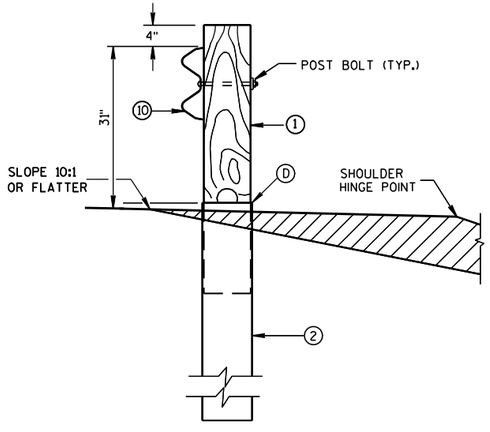
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE (± ¾")

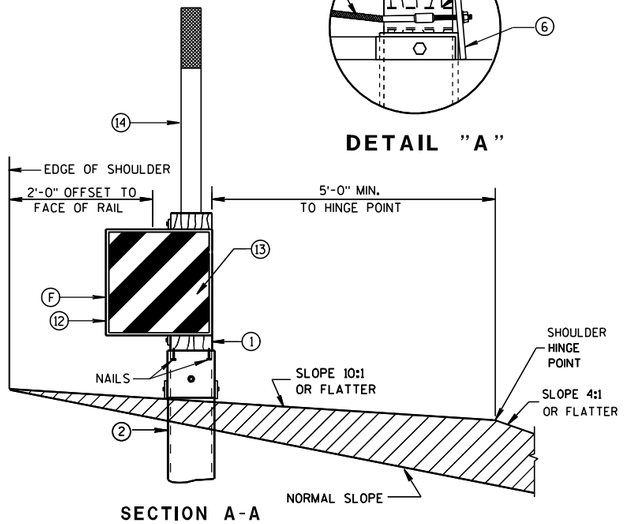




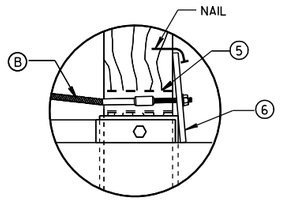
SECTION C-C
TYPICAL AT POST NOS. 3-9



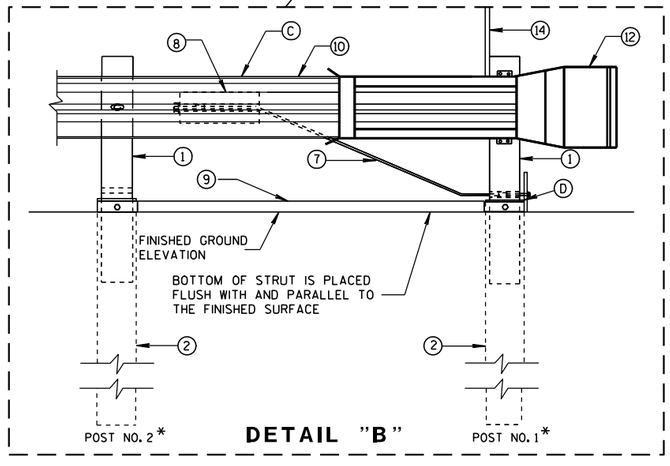
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"

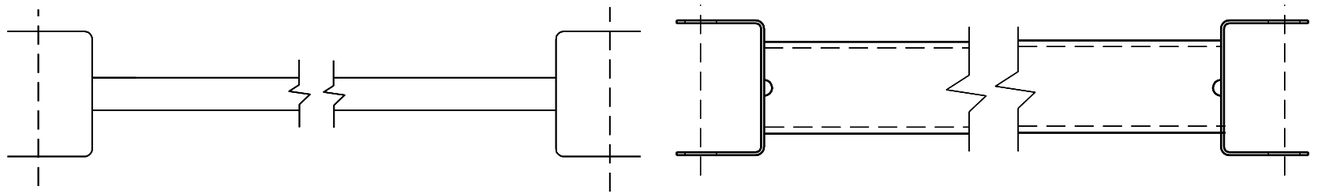


DETAIL "B"

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

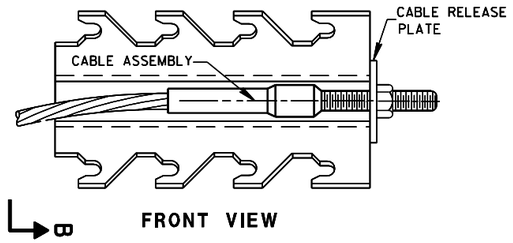
6
S.D.D. 14 B 44-1a



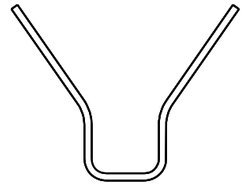
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

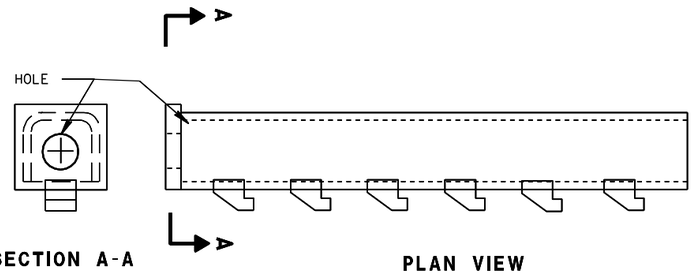
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE H (ONLY THE SHEETING IS SUPPLIED BY THE MANUFACTURER)
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



FRONT VIEW



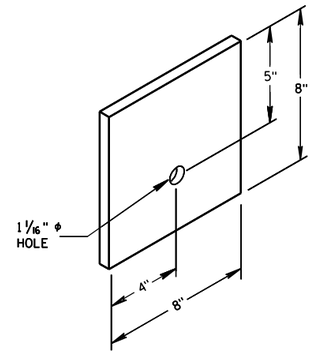
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



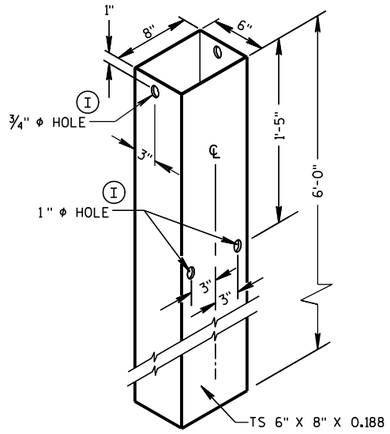
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

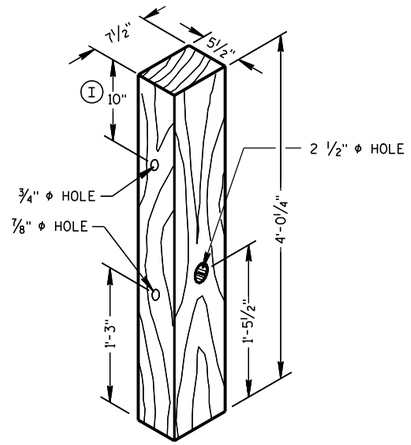
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 44-1b

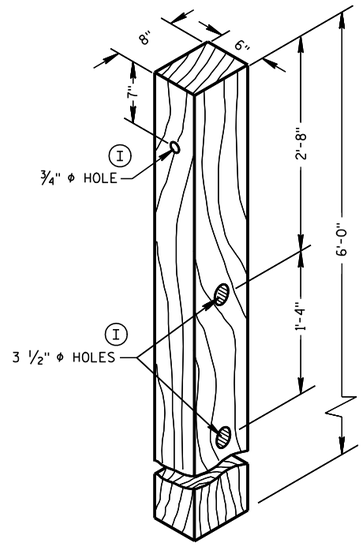


FOUNDATION TUBE (2)



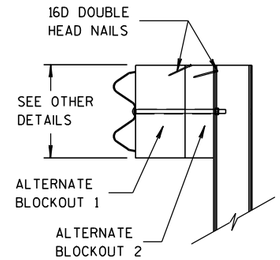
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

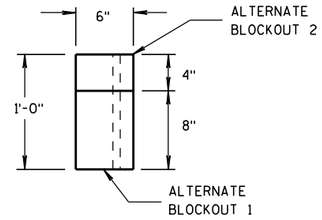


POSTS NUMBER 3-9

WOOD CRT POST (3)

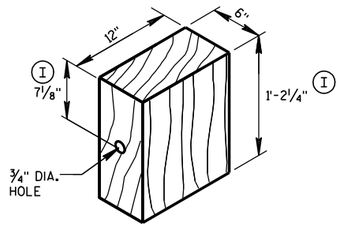


SIDE VIEW



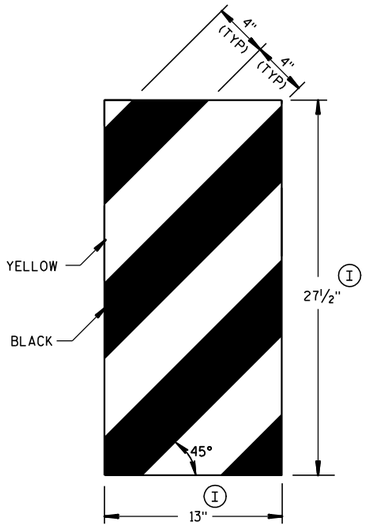
TOP VIEW

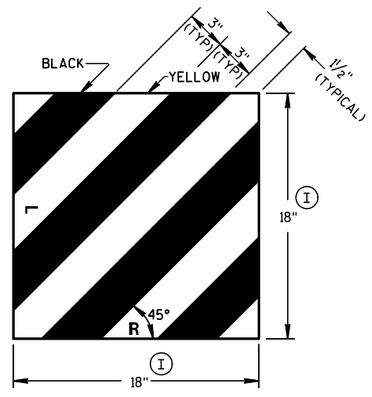
ALTERNATE WOOD BLOCKOUT DETAIL



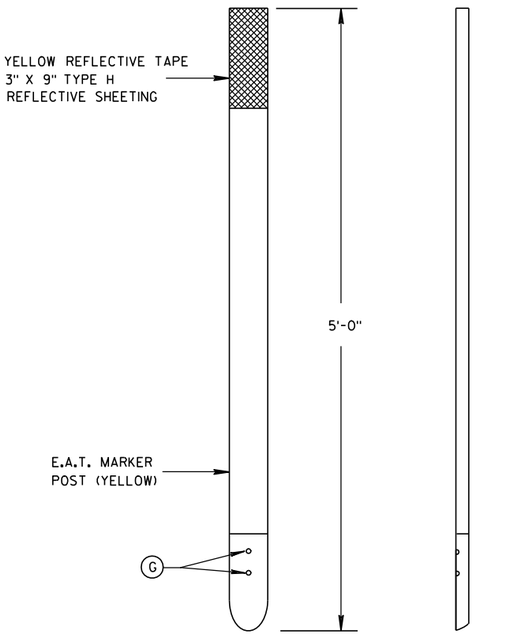
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





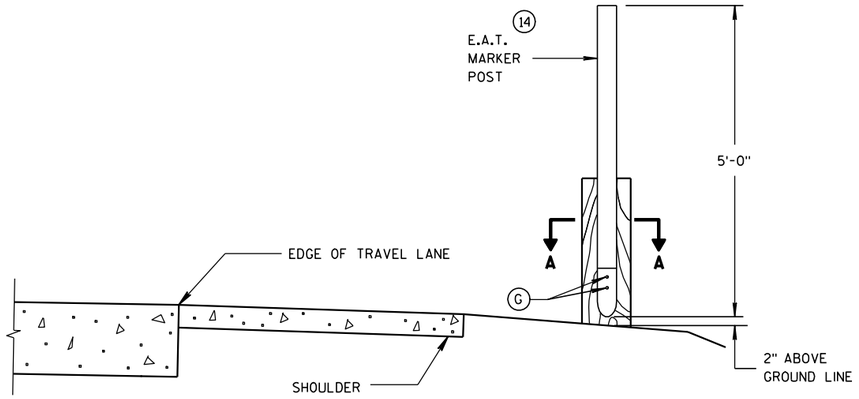
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

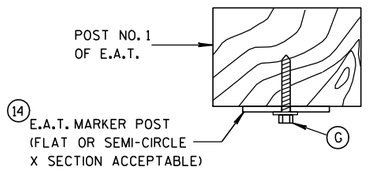
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

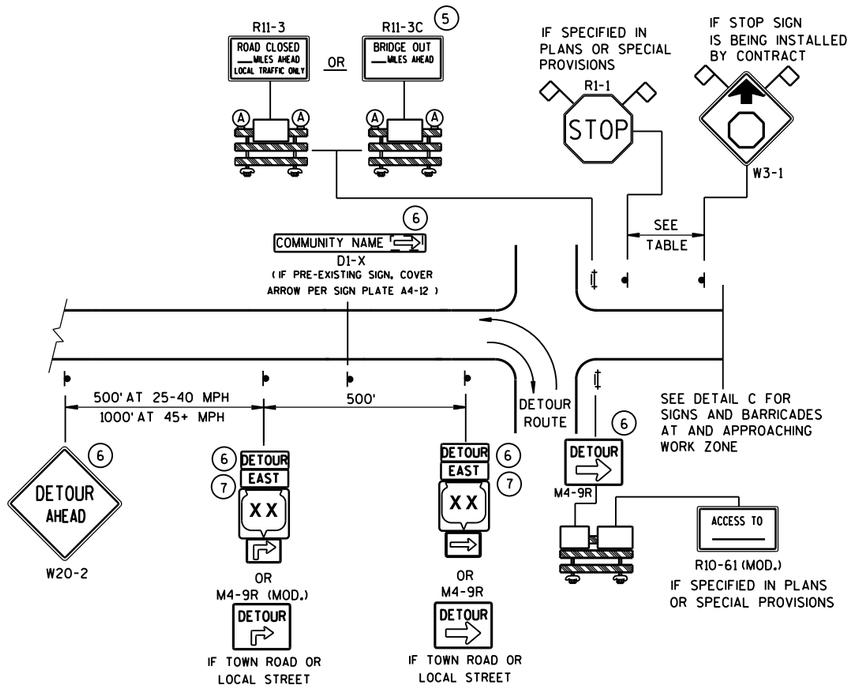
APPROVED
5/23/2011 — DATE
/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER
74 — [illegible]ENT
FHWA

6

S.D.D. 14 B 44-1c

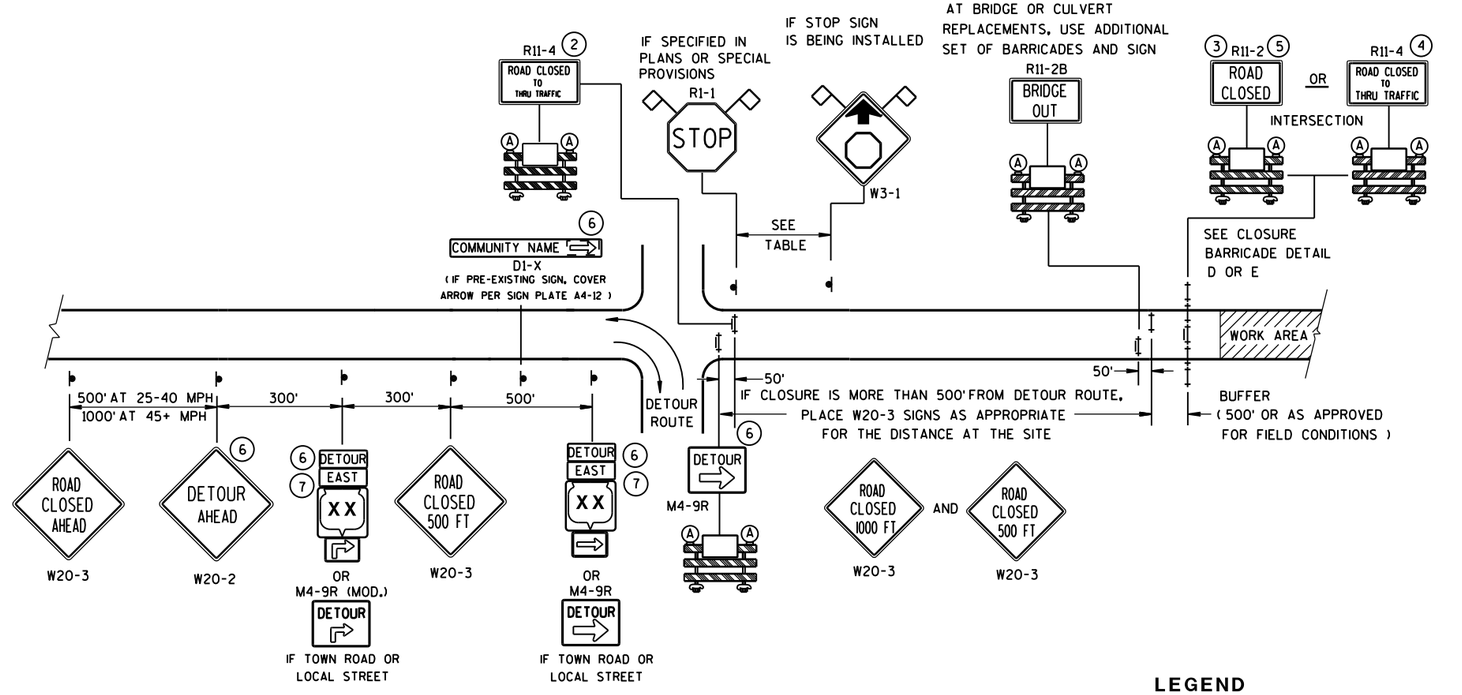
6

S.D.D. 14 B 44-1c



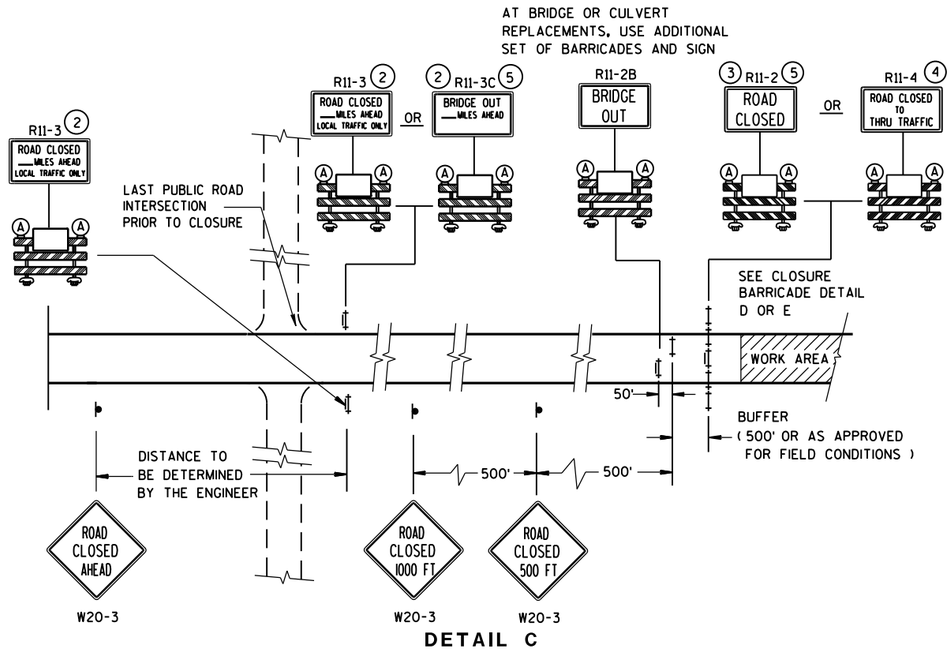
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**"
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

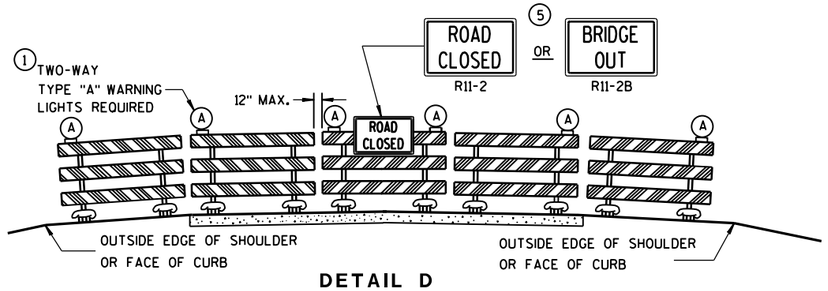
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

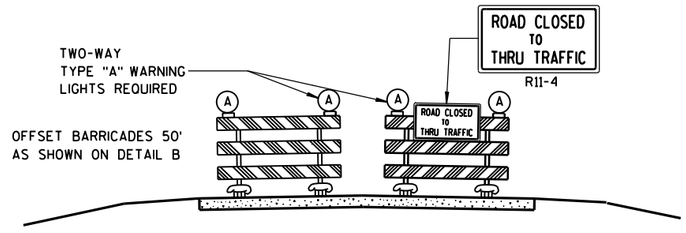
S.D.D. 15 C 2-5a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

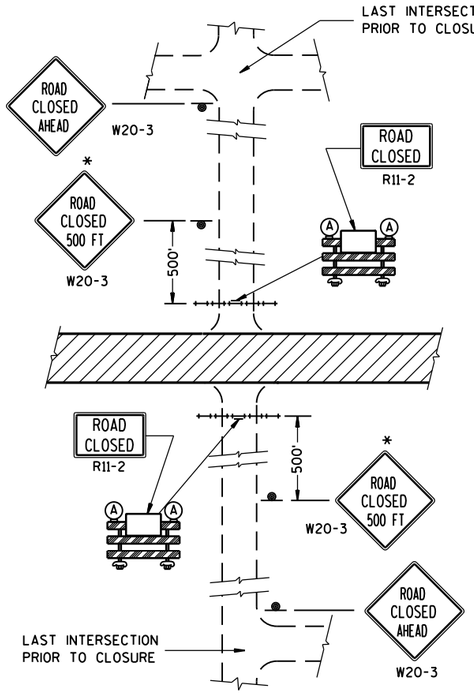
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

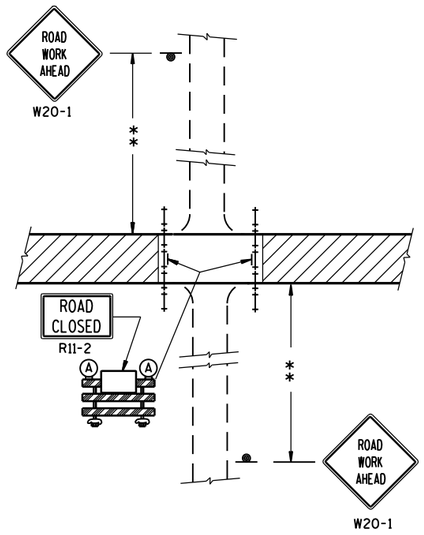
6

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



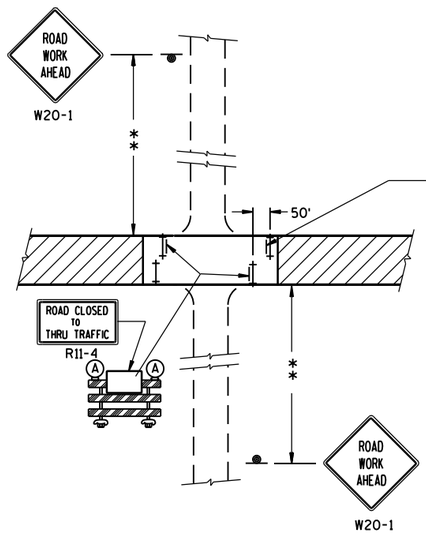
DETAIL 1

(NO ACCESS TO PROJECT)



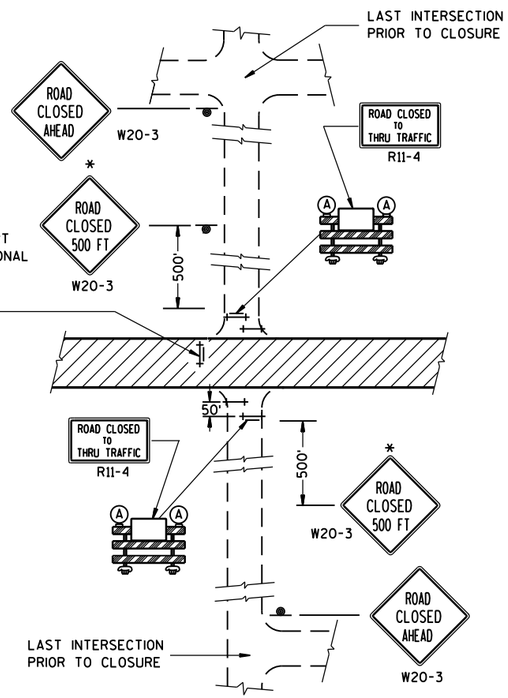
DETAIL 2

(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

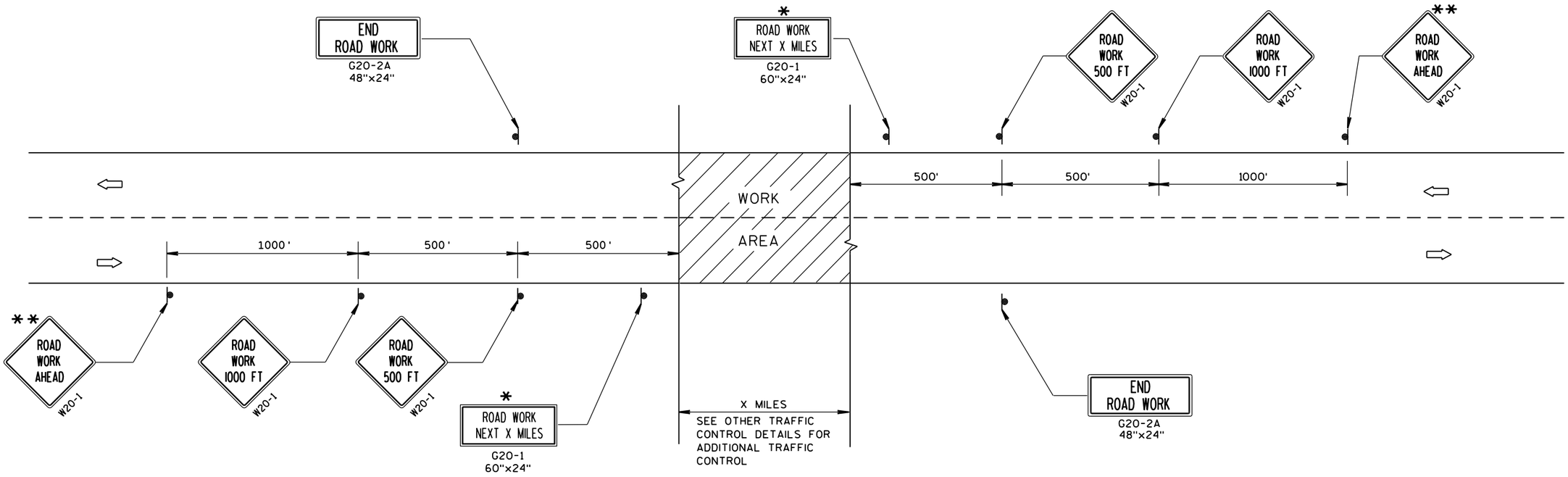
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

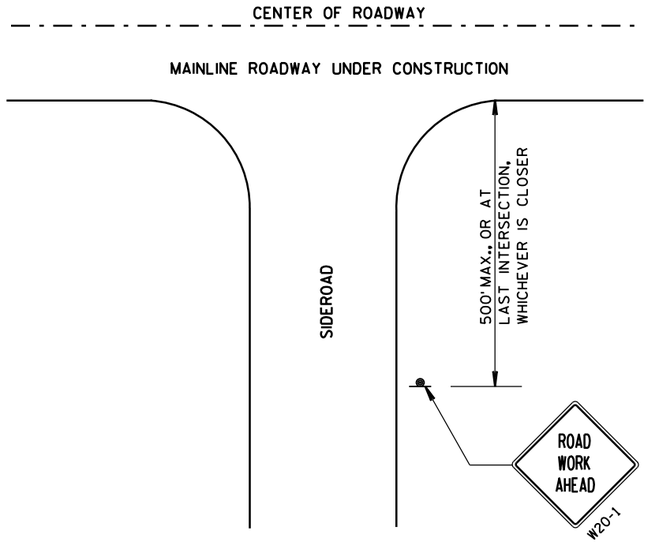
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



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

8/2013 — DATE

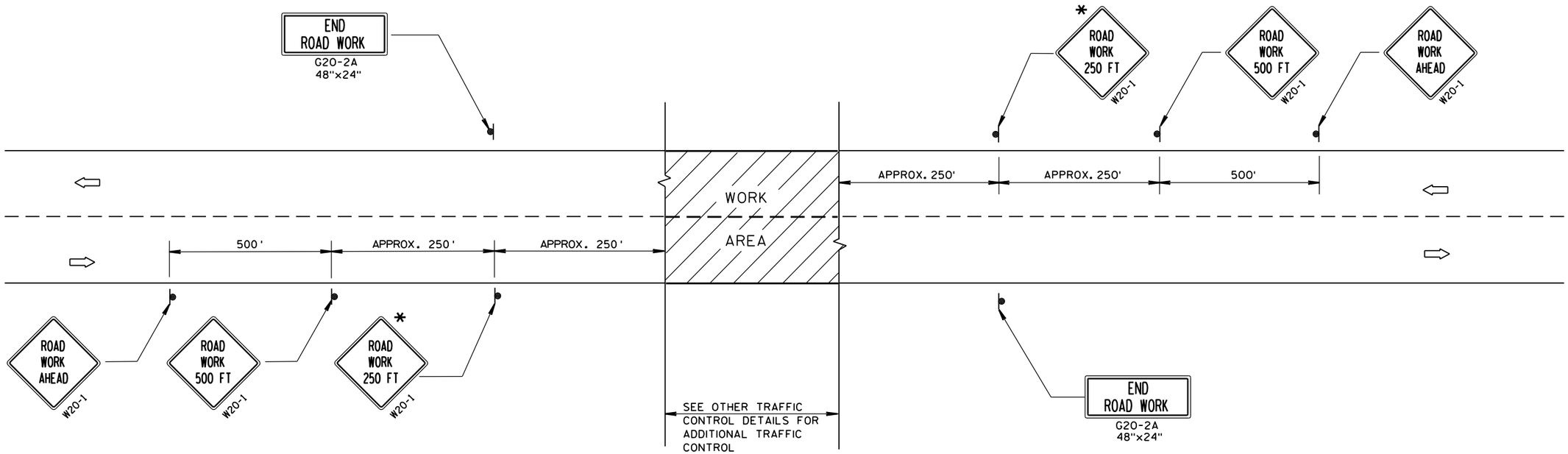
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 4-2

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

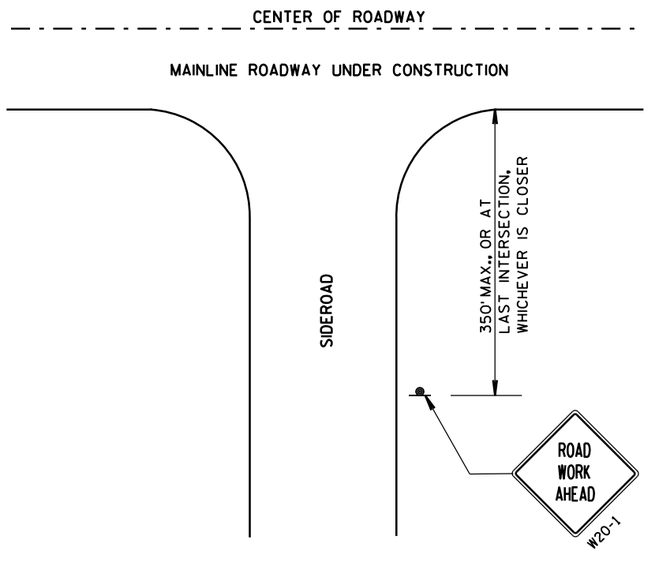
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

SIGN

FHWA

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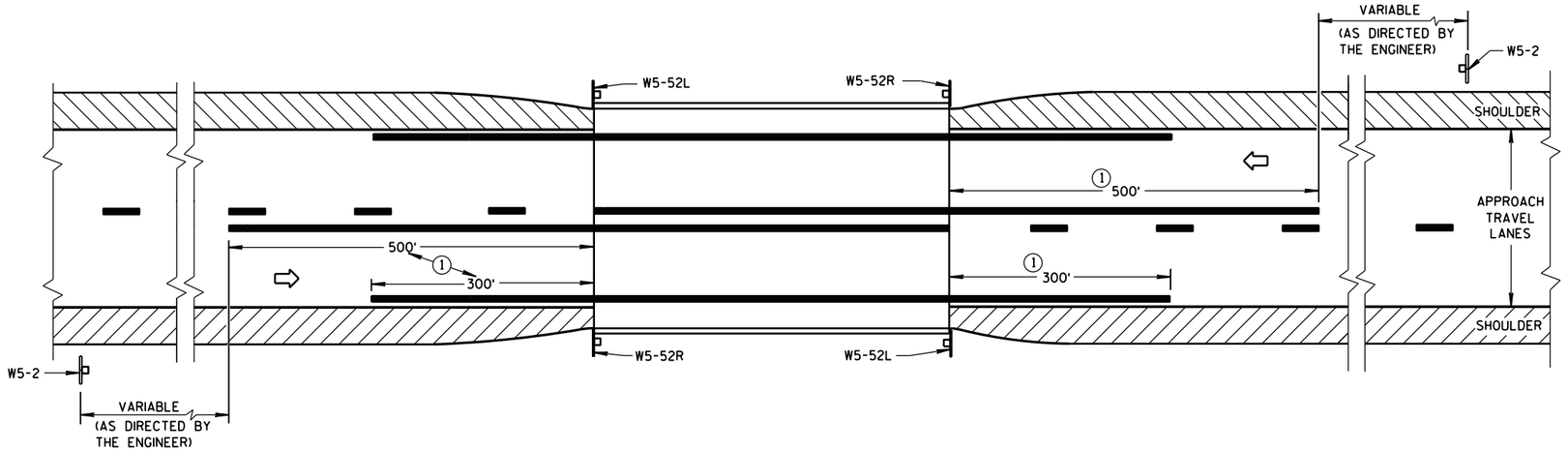
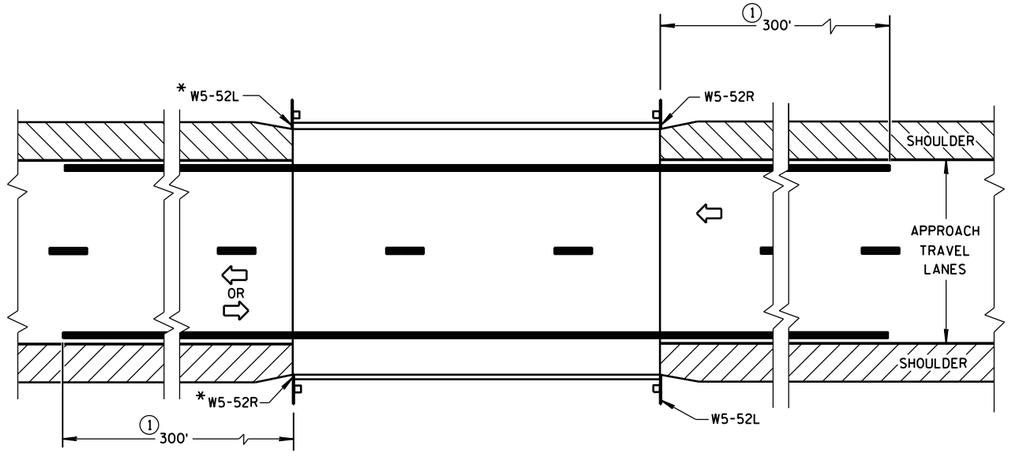
S.D.D. 15 C 5-2



SITUATION 1

WARRANTING CRITERIA:

BRIDGE WIDTH IS AT LEAST 18 FEET BUT LESS THAN 24 FEET



*OMIT ON ONE-WAY TRAVELLED WAYS

SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.

GENERAL NOTES

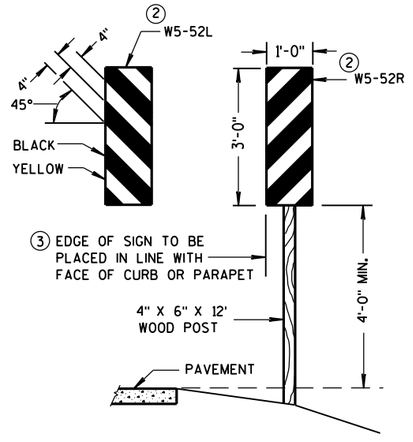
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

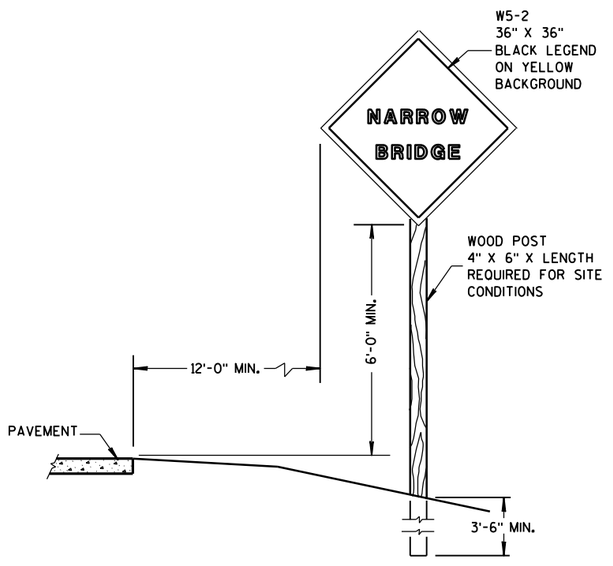
(1) MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.

(2) FACE OF OBJECT MARKERS W5-52R, AND W5-52L SHALL BE COVERED WITH TYPE F REFLECTIVE SHEETING.

(3) LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.



OBJECT MARKER PLACEMENT



SIGN PLACEMENT

SIGNING & MARKING
FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/4/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

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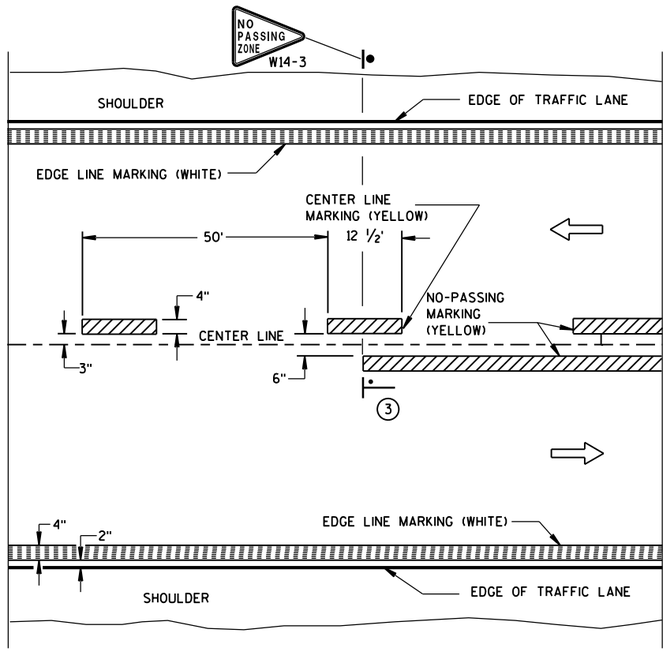
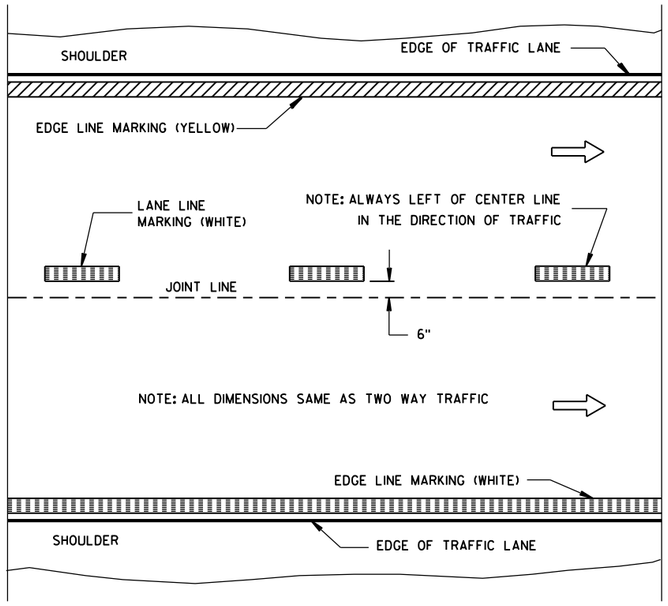
S.D.D. 15 C 6-6

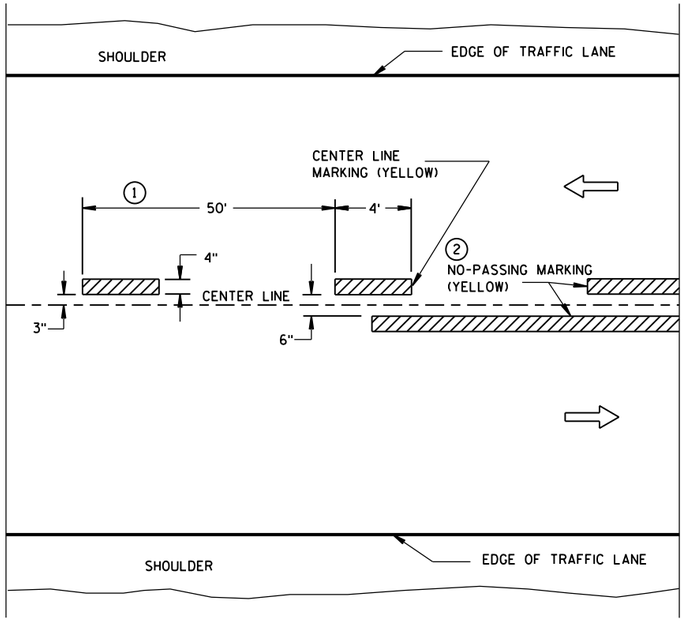


TWO WAY TRAFFIC

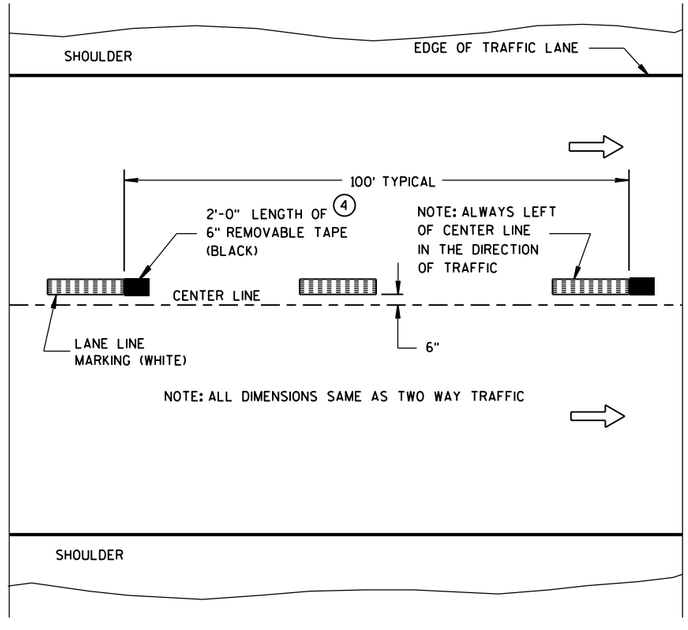


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

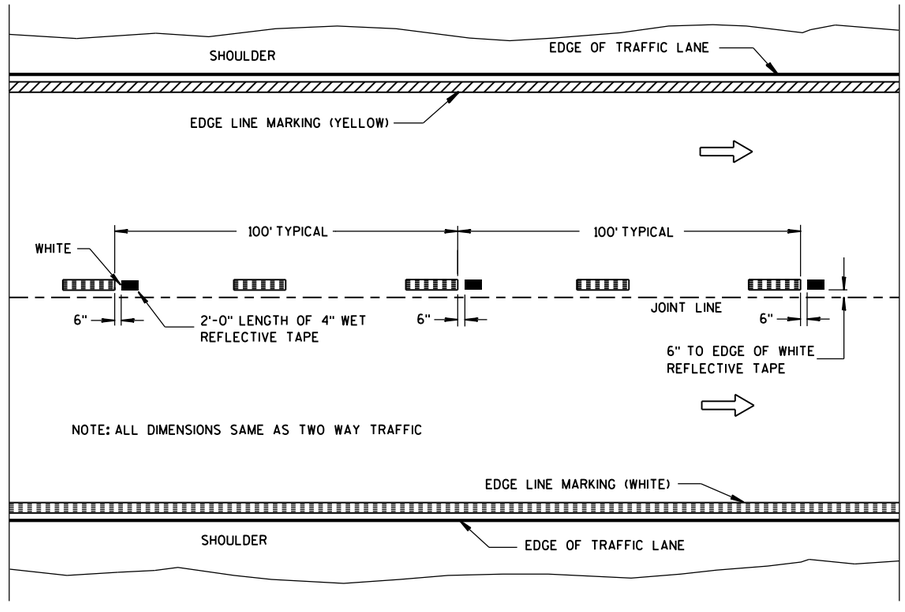
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

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

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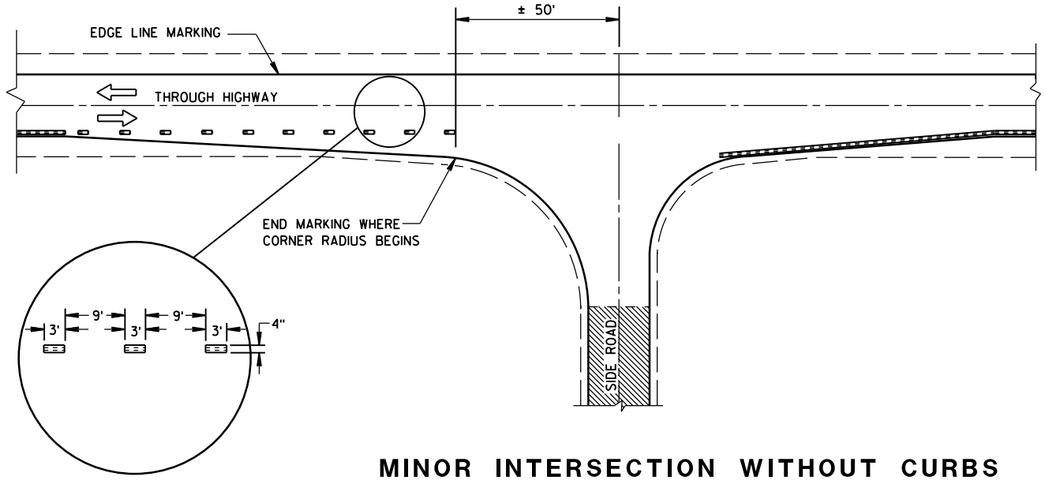
S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

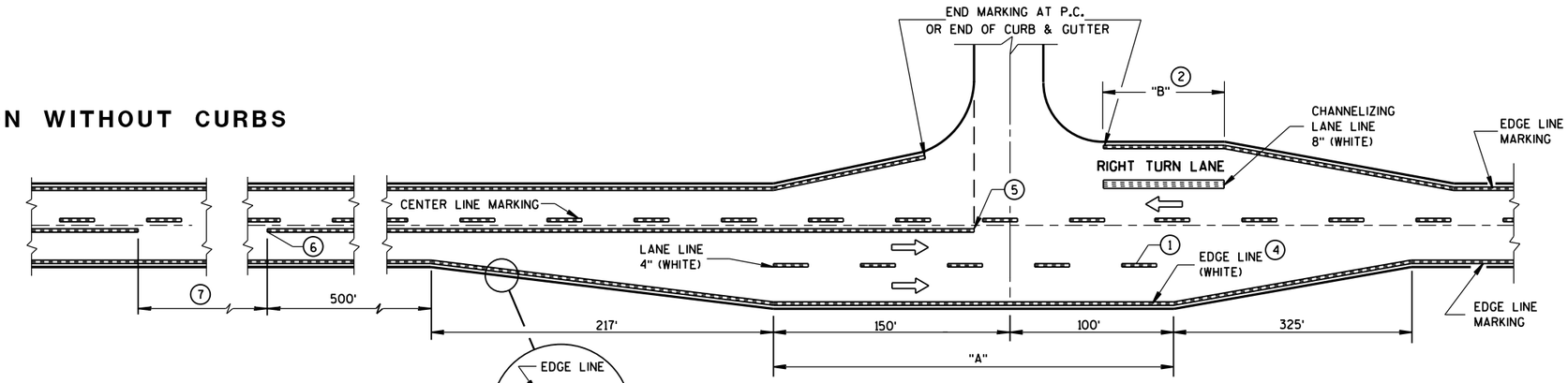
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

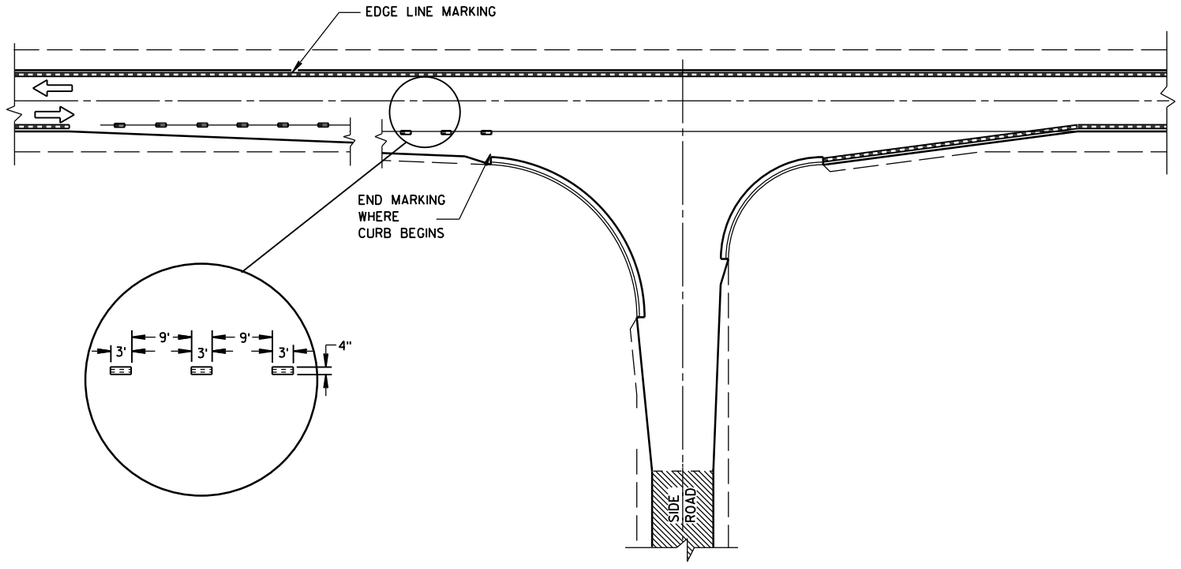
(7)

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



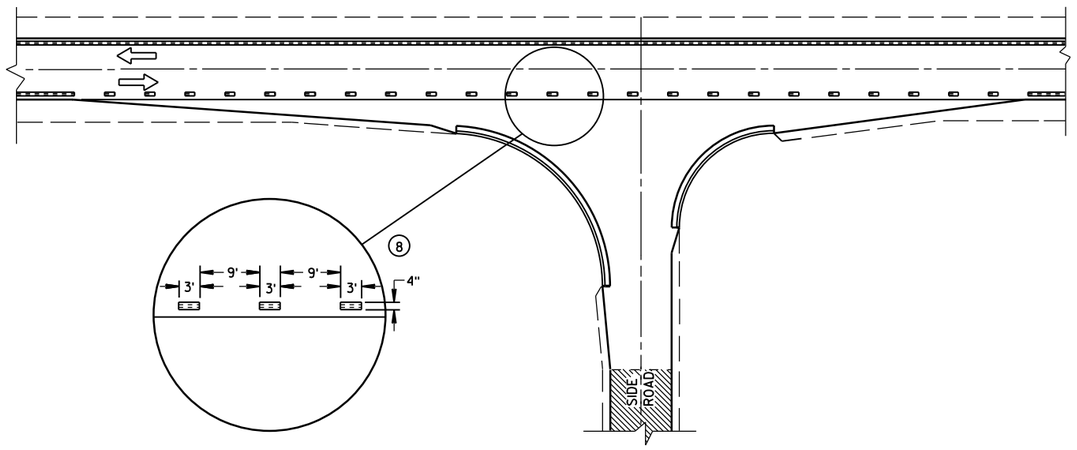
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

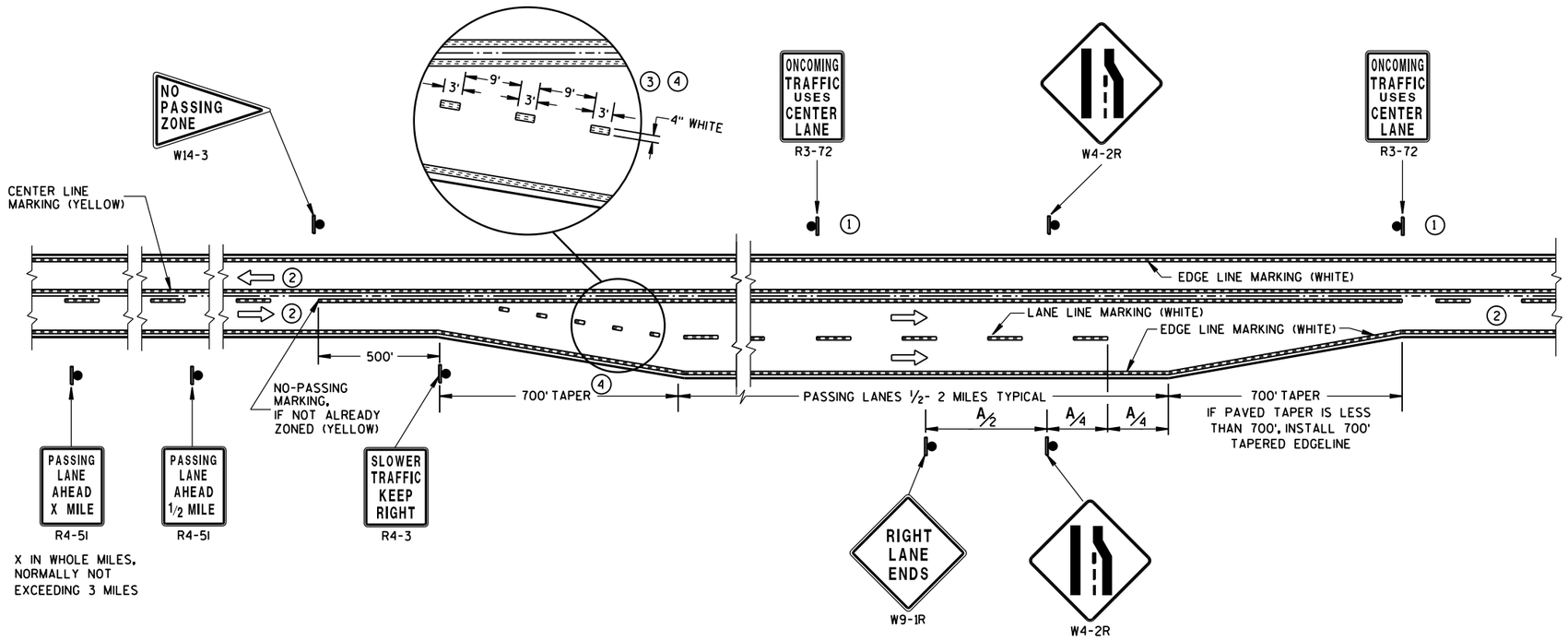
(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

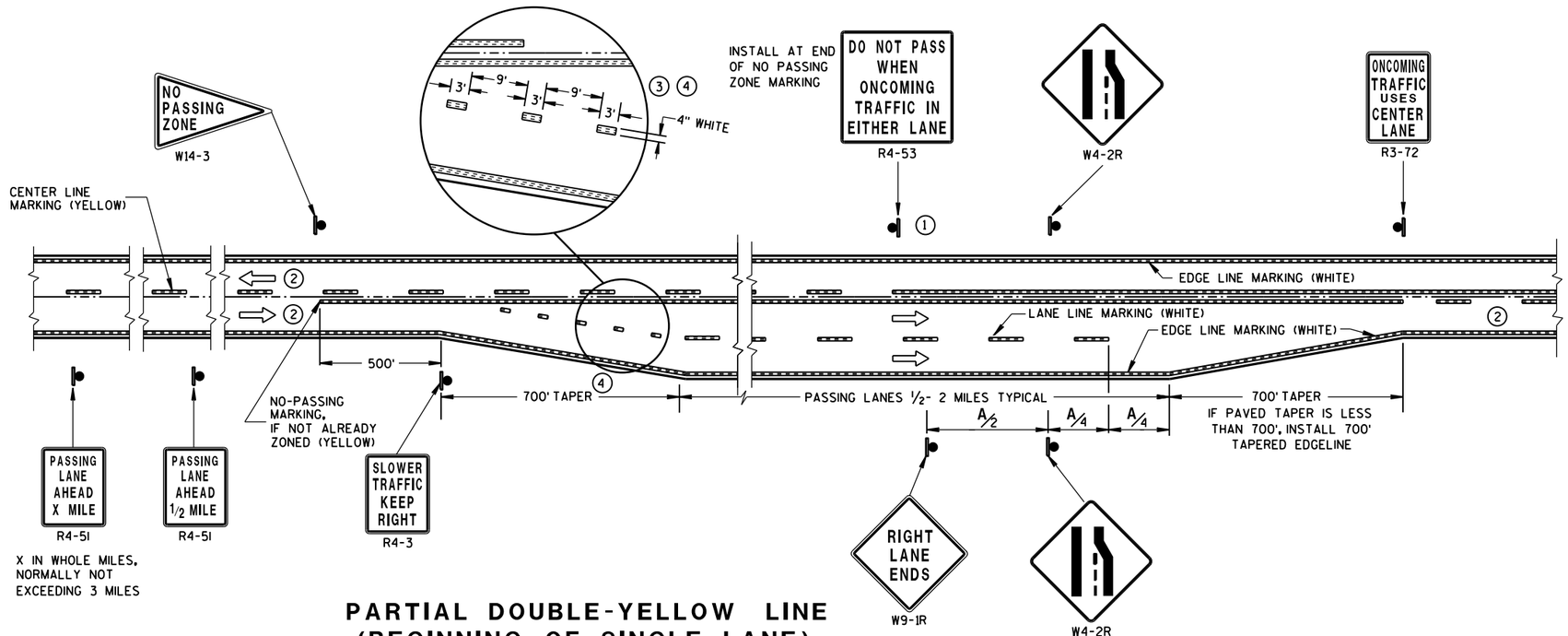
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

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



SOLID DOUBLE-YELLOW LINE
(THROUGHOUT ENTIRE PASSING/CLIMBING LANE)



PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3'LINE 9'GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

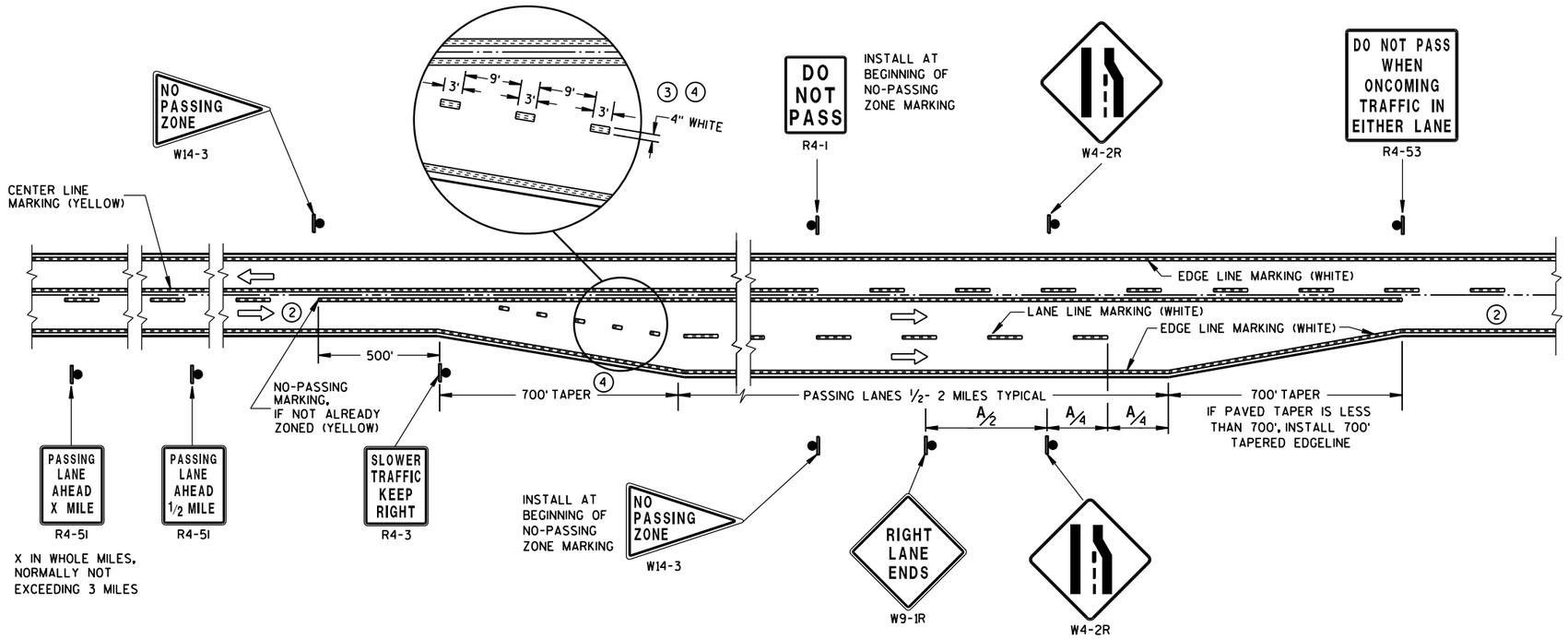
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

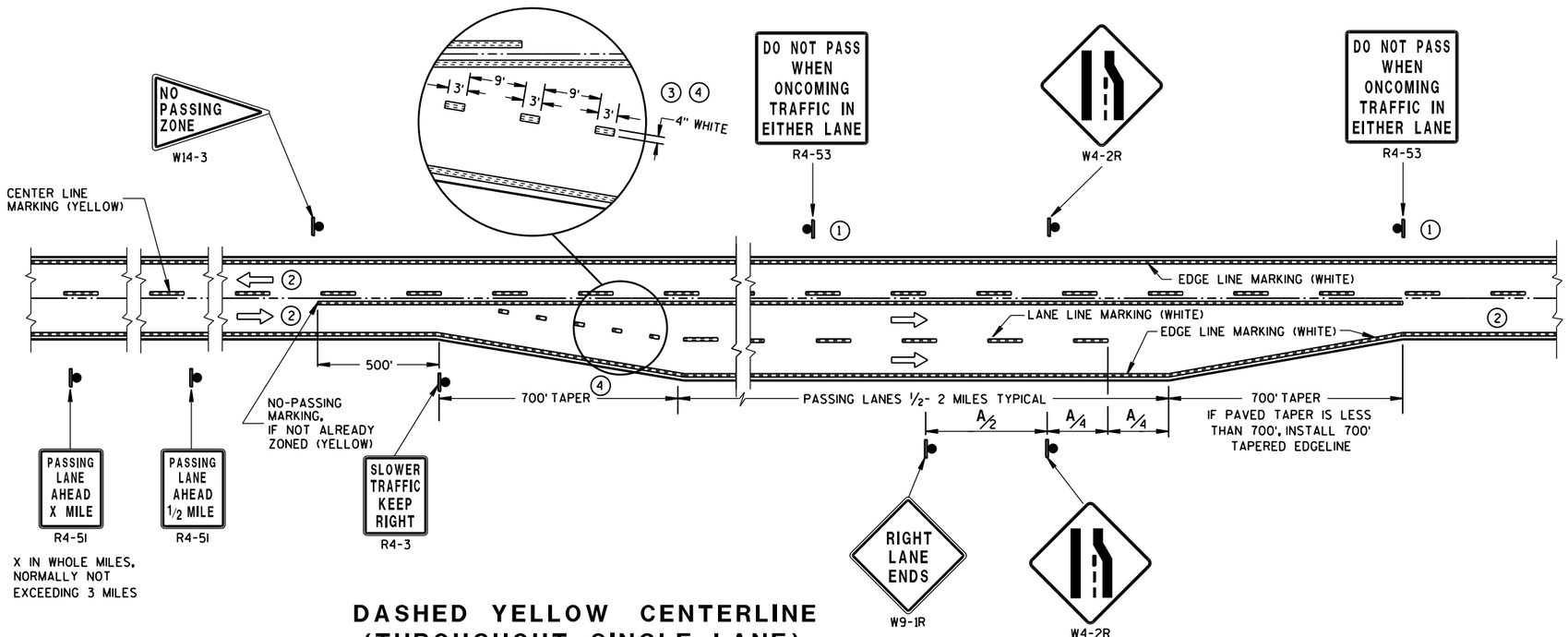
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



SOLID DOUBLE-YELLOW LINE (END OF SINGLE LANE)



DASHED YELLOW CENTERLINE (THROUGHOUT SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1/2 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3'LINE 9'GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

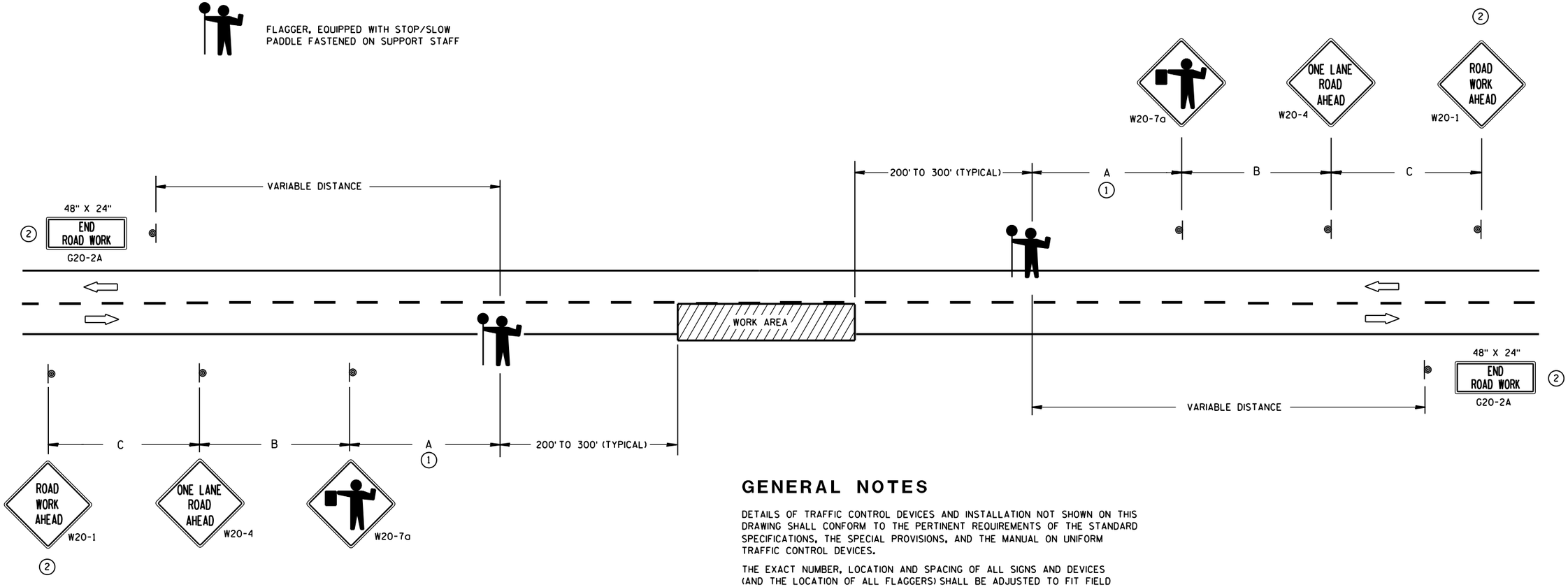
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

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

W3-4

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



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

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

GENERAL NOTES

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

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

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

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

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

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 15 C 12-4

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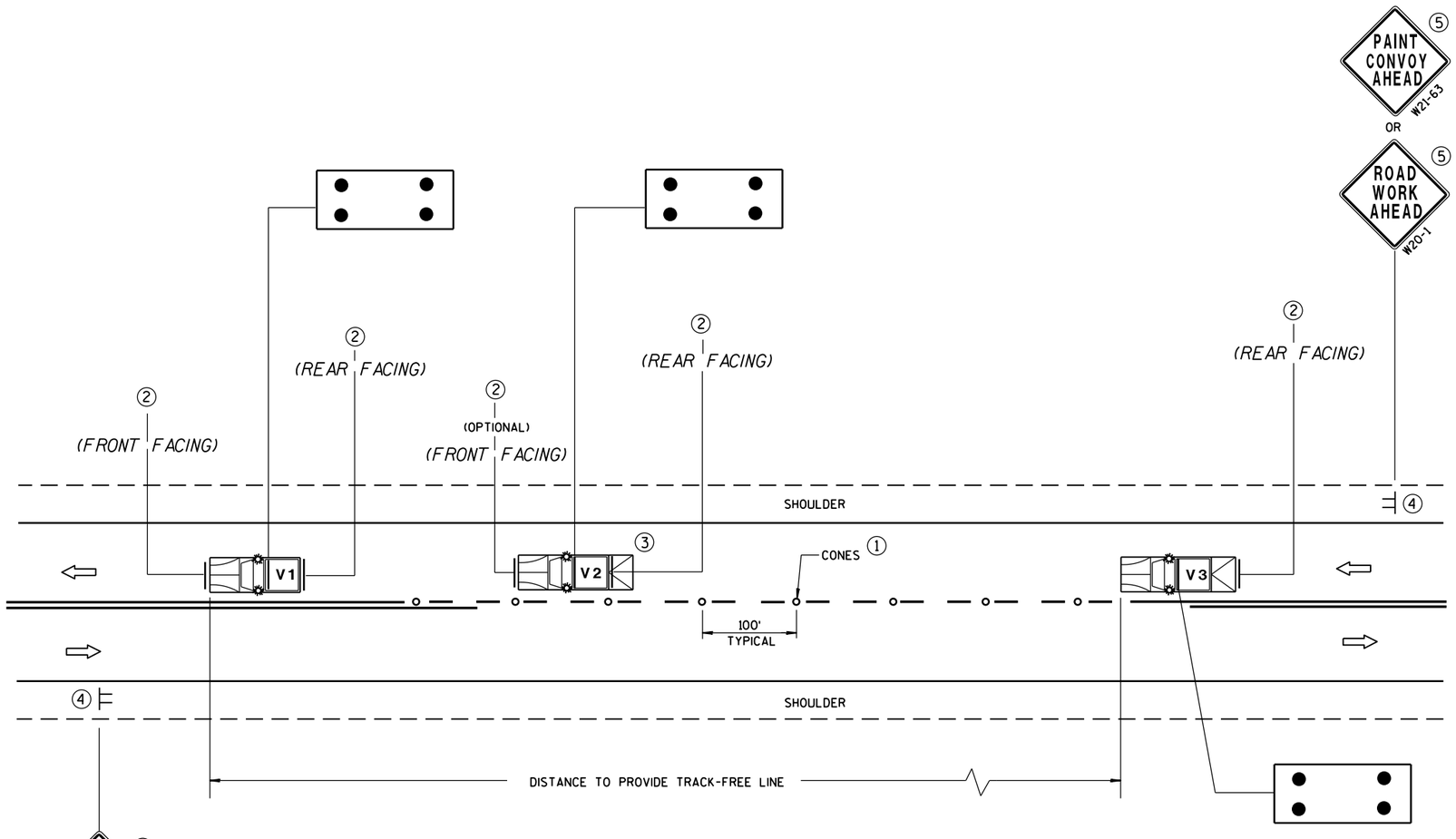
S.D.D. 15 C 12-4



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

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

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

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

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

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

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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

LEGEND

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

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC E
FHWA	

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

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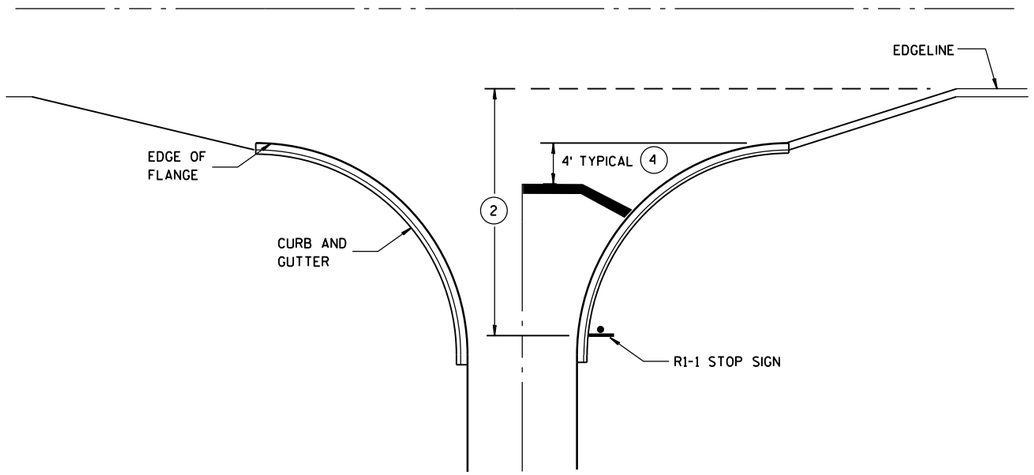
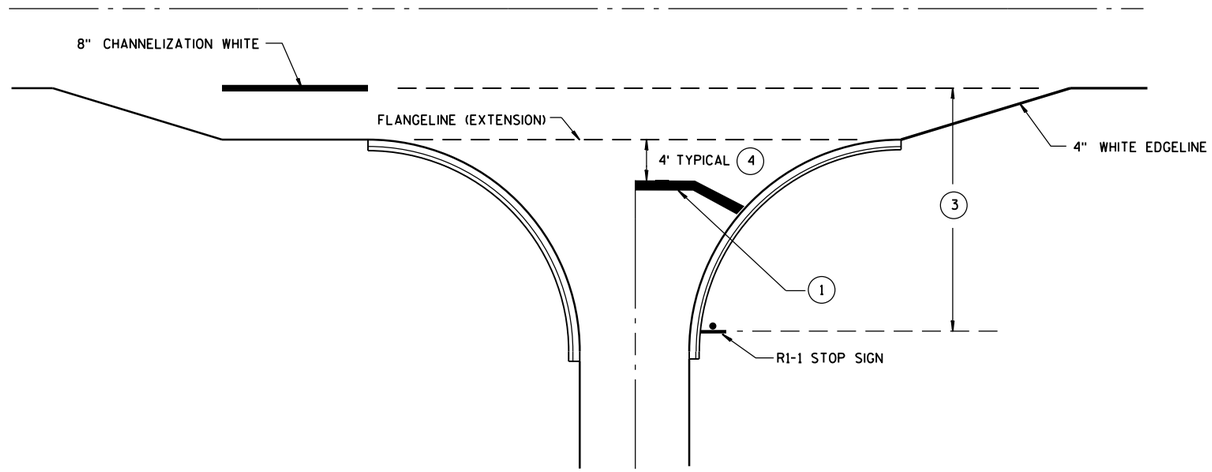
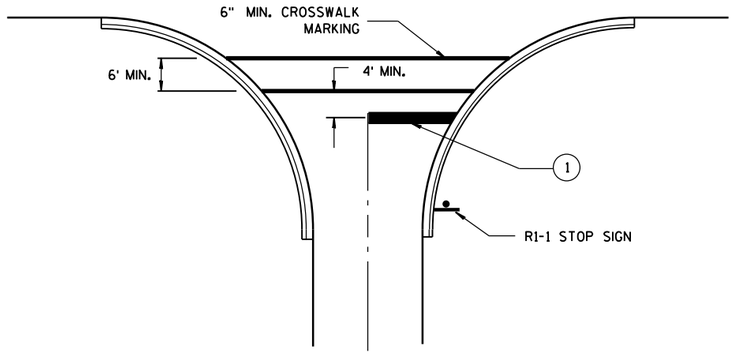
S.D.D. 15 C 19-2a



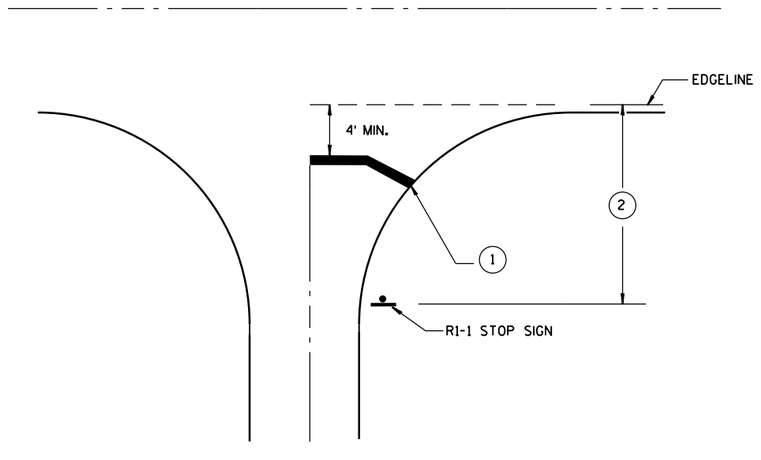
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

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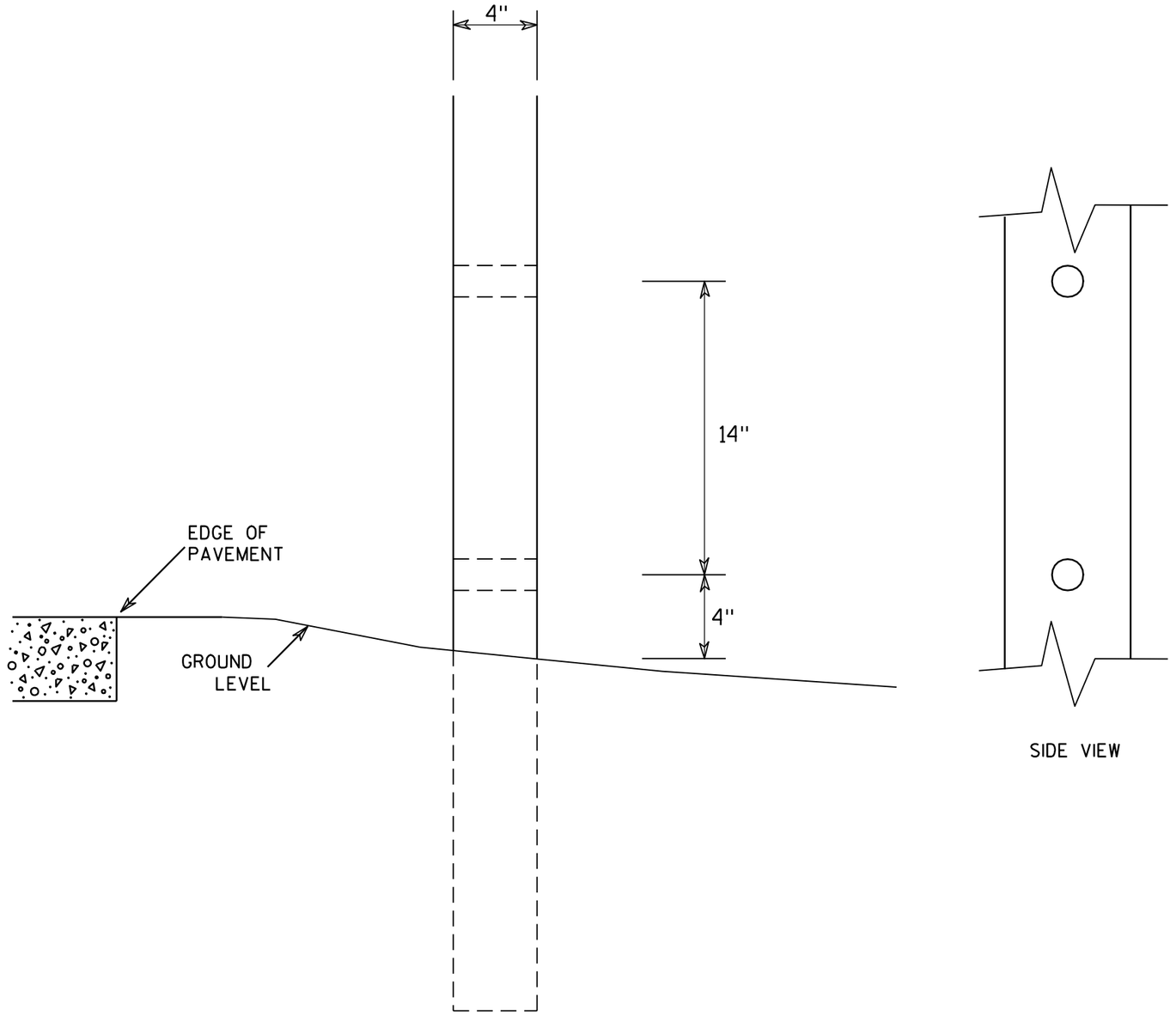
S.D.D. 15 C 33-1



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.

7

7

4 X 6 WOOD POST MODIFICATIONS

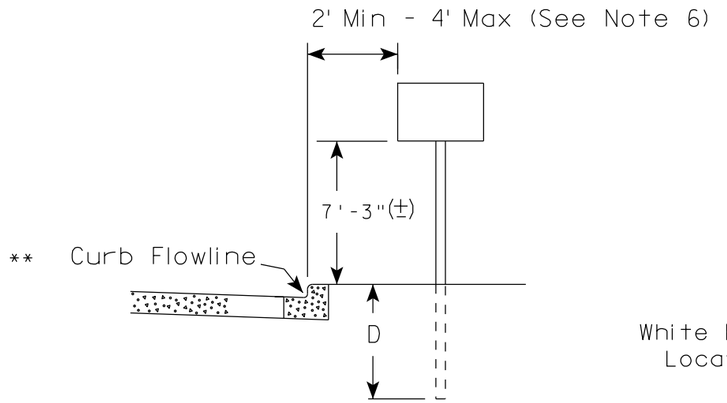
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

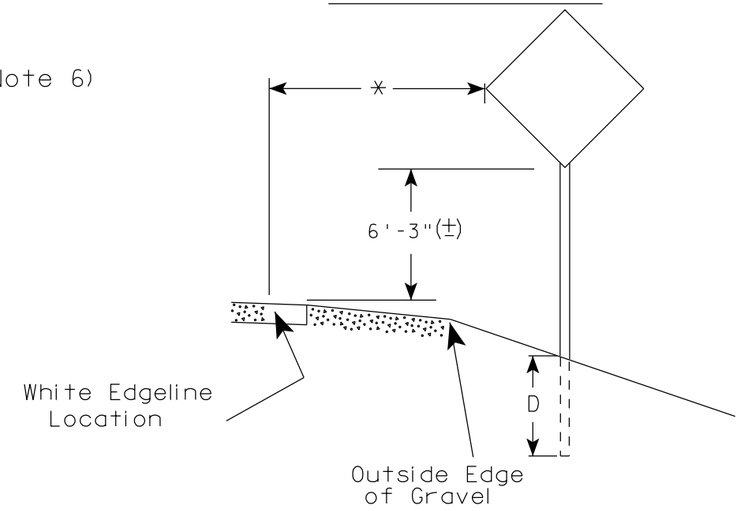
DATE 3/27/97 PLATE NO. A4-11.2

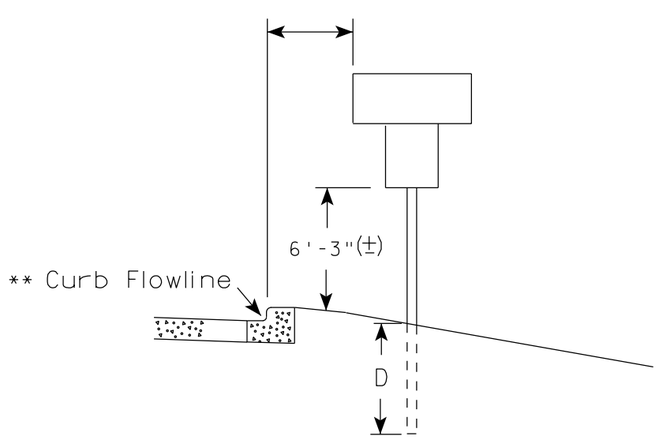
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 88	E

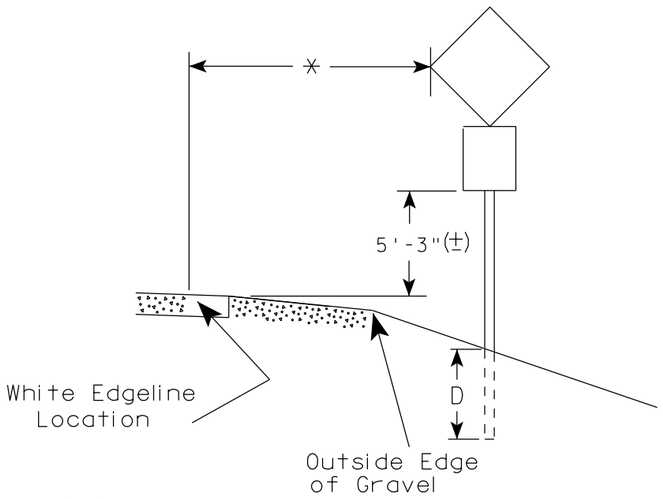
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

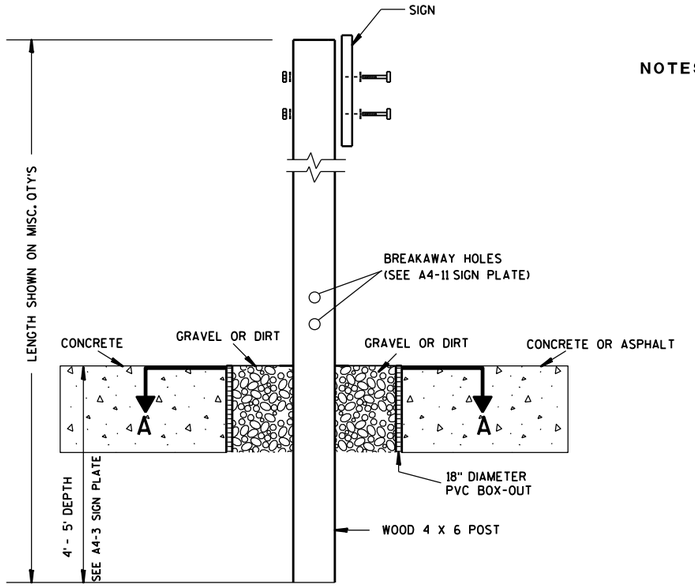
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-3.18

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

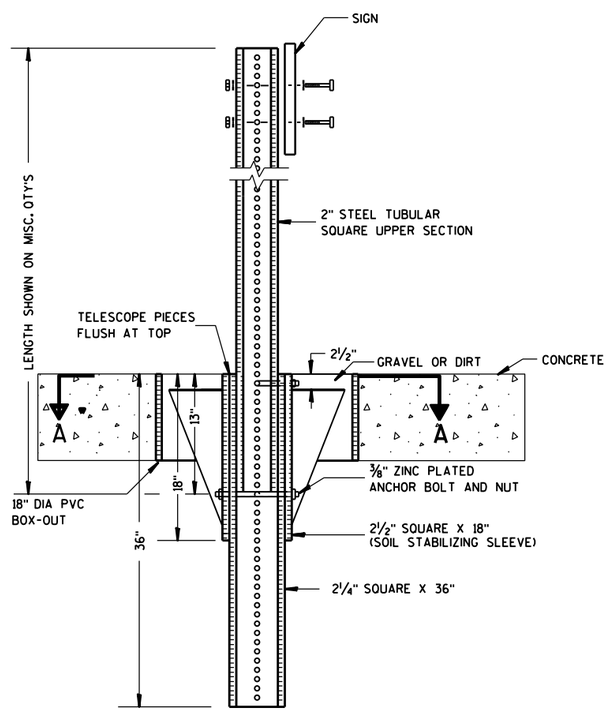
7



ELEVATION VIEW

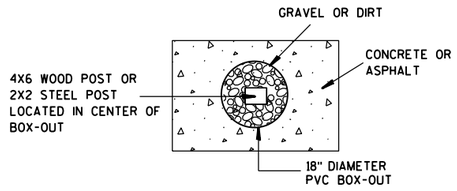
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

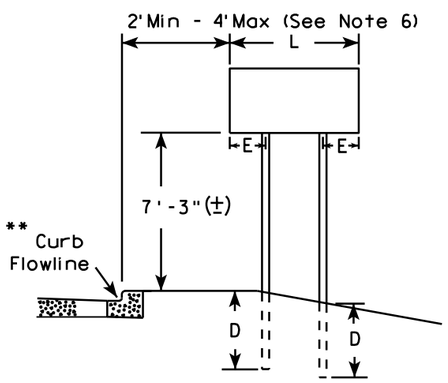
WISCONSIN DEPT OF TRANSPORTATION

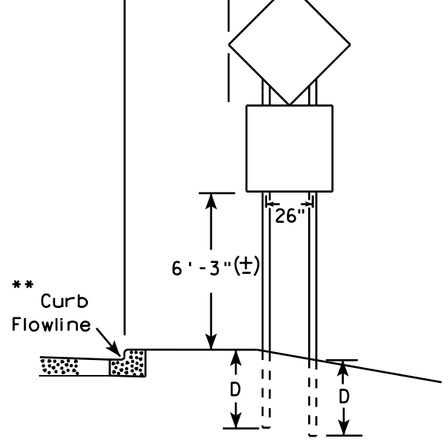
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

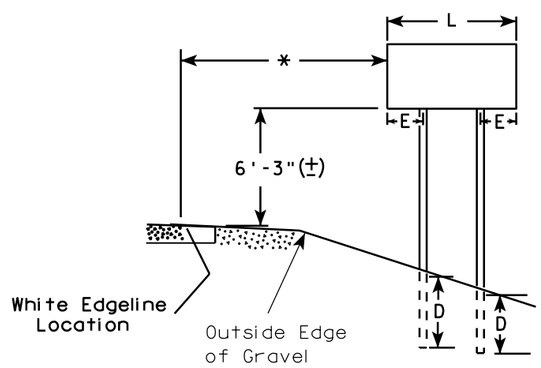
URBAN AREA

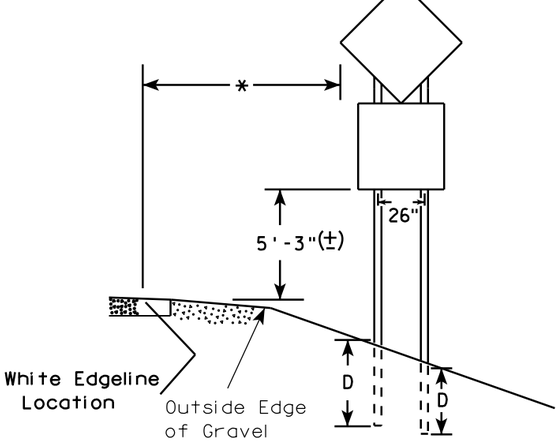




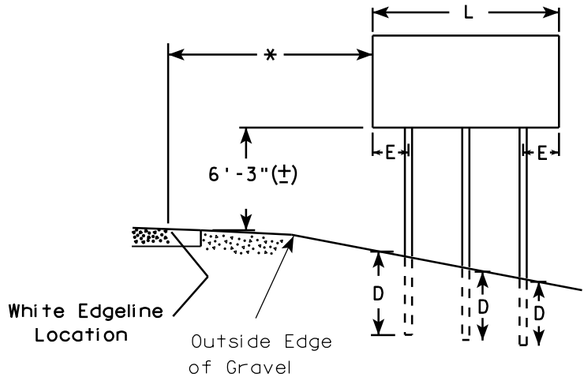
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

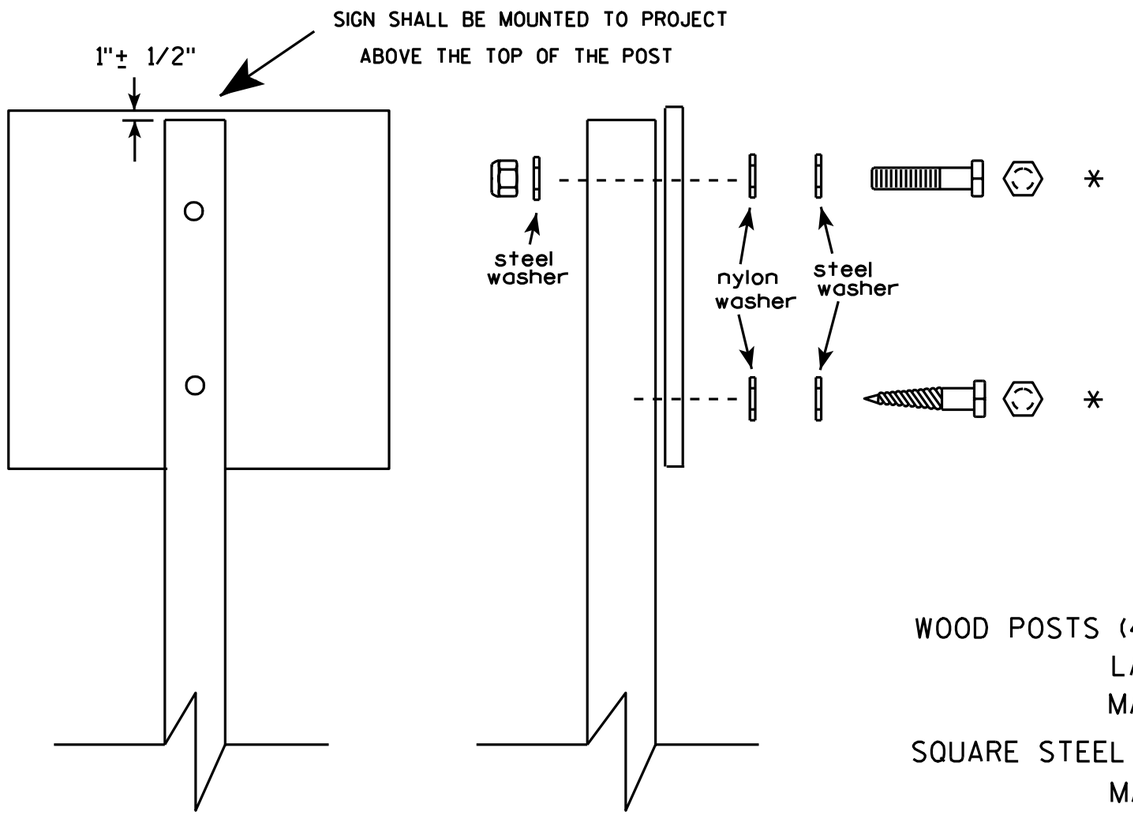
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-4 12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 30-SEP-2013 13:27 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000

WISDOT/CADDS SHEET 42



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

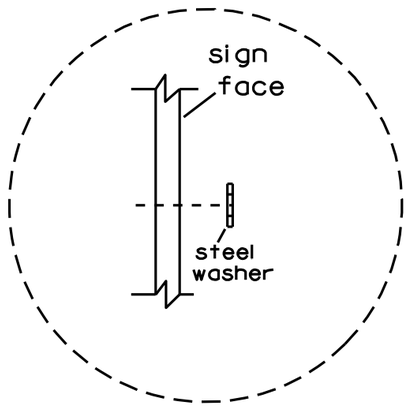
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

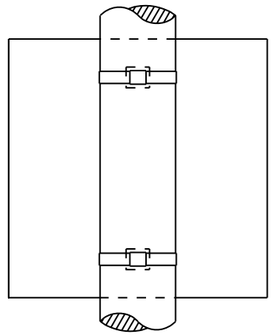
7

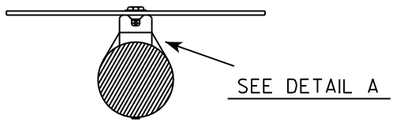
PROJECT NO:

SHEET NO: 92 E

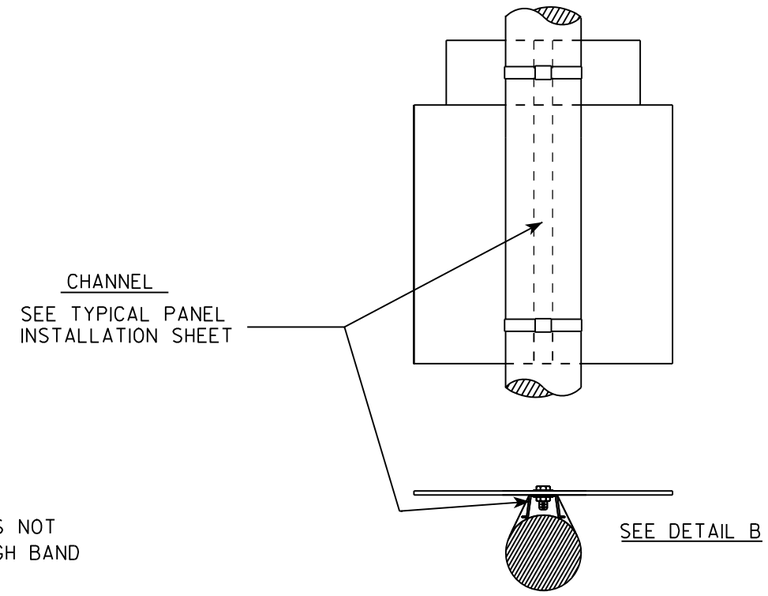
BANDING

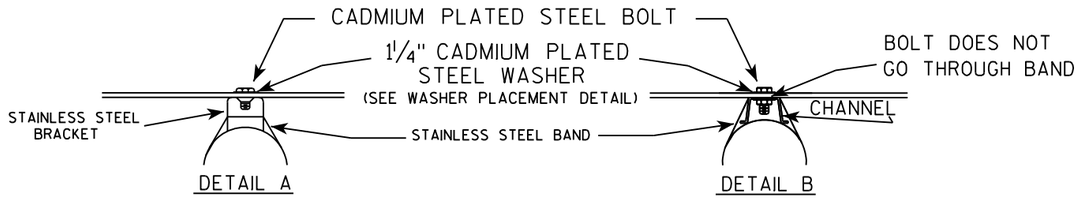
SINGLE SIGN



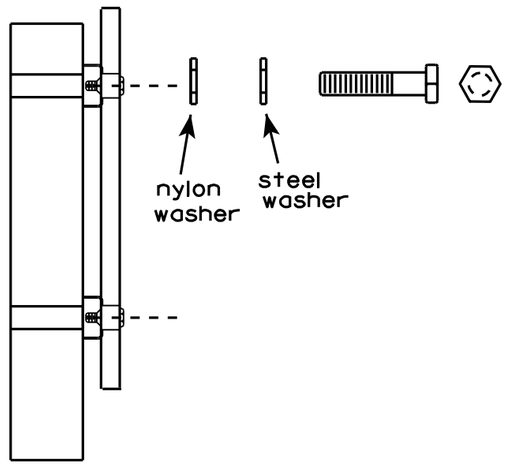


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

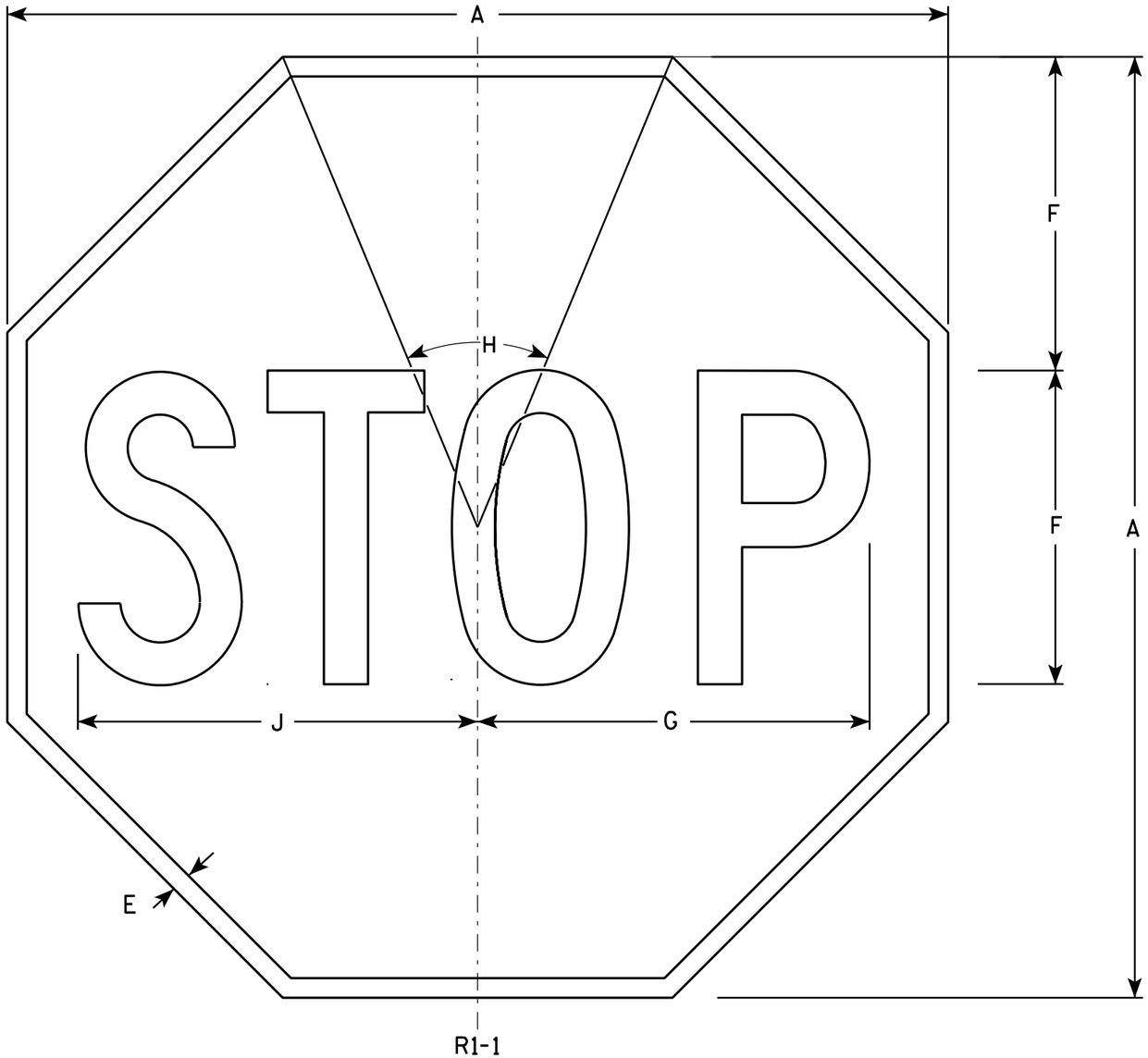
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 93	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

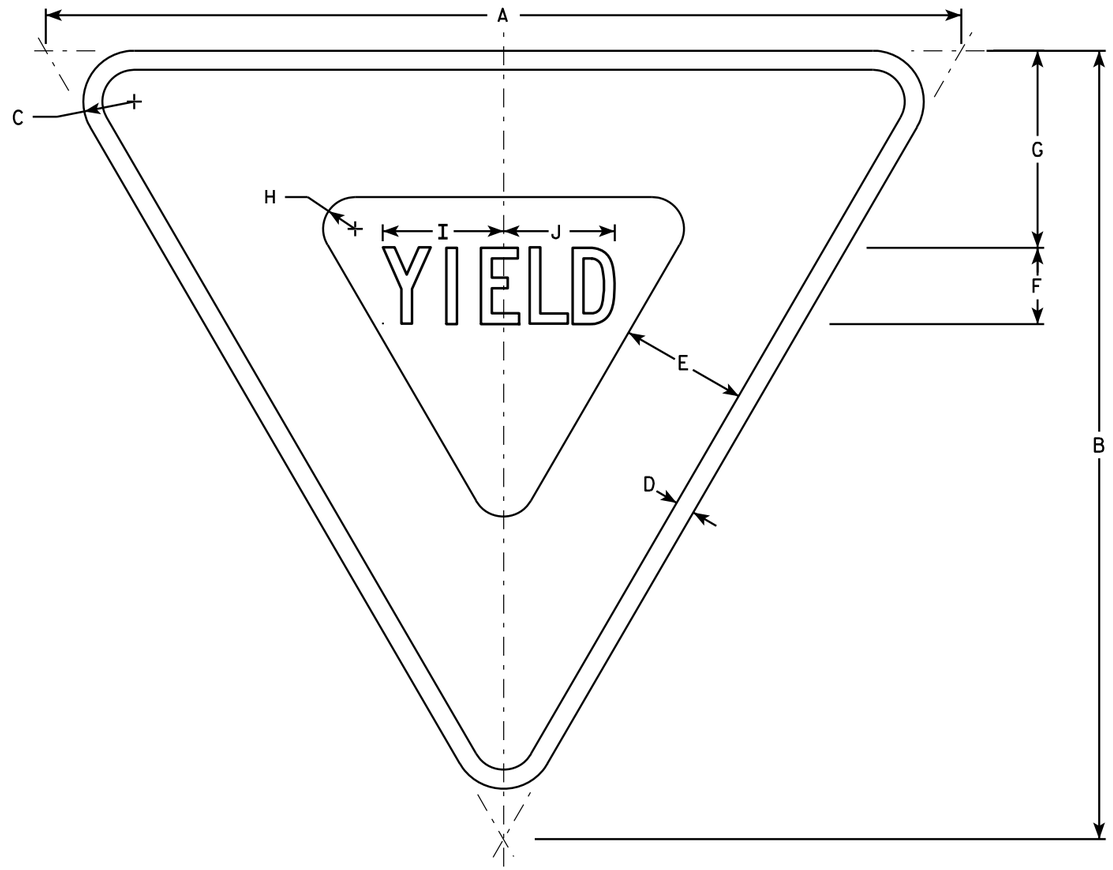
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 94	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11.DGN PLOT DATE : 02-DEC-2010 15:09 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 4.469282:1.000000

WISDOT/CADDS SHEET 42

7

7



R1-2

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 - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6	24	21	1 1/2	3/8	3	2	4 3/4	7/8	3 1/4	3																	1.75
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

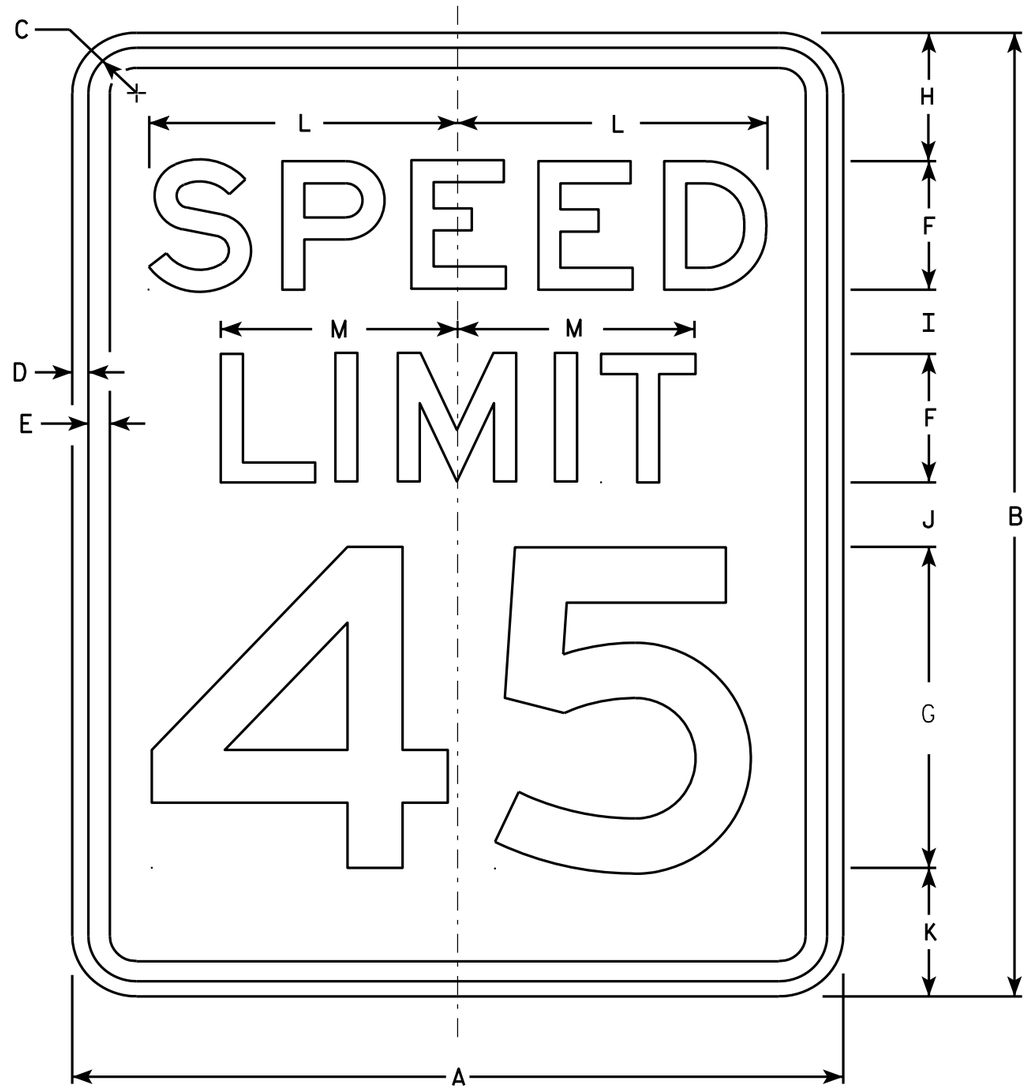
STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. R1-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 95 | E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

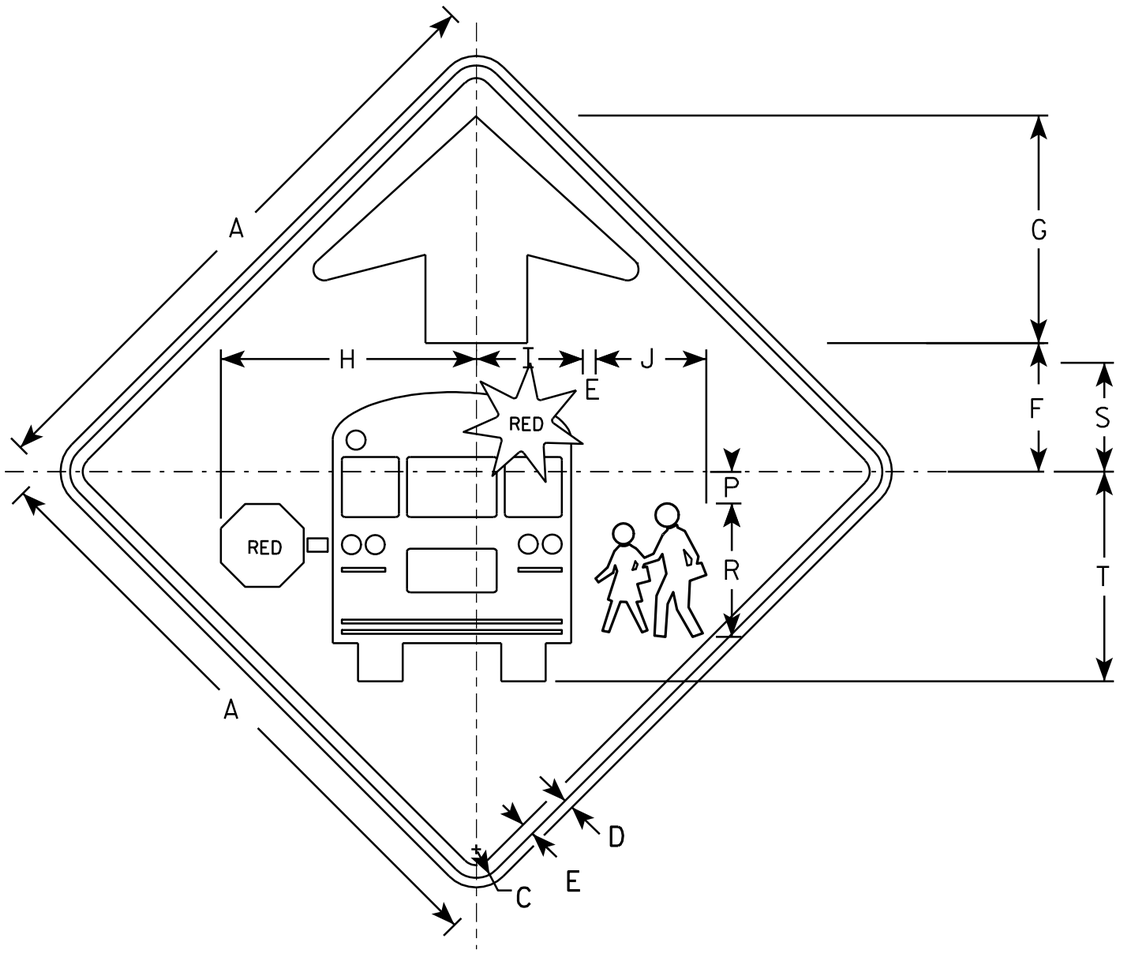
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

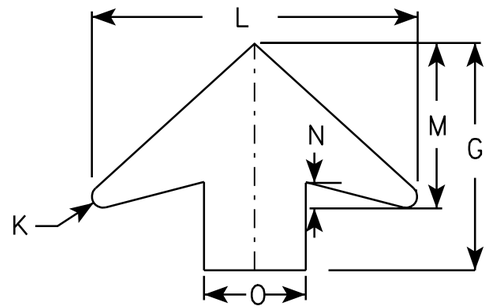
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 96 | E



S3-1

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-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
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	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN
S3-1

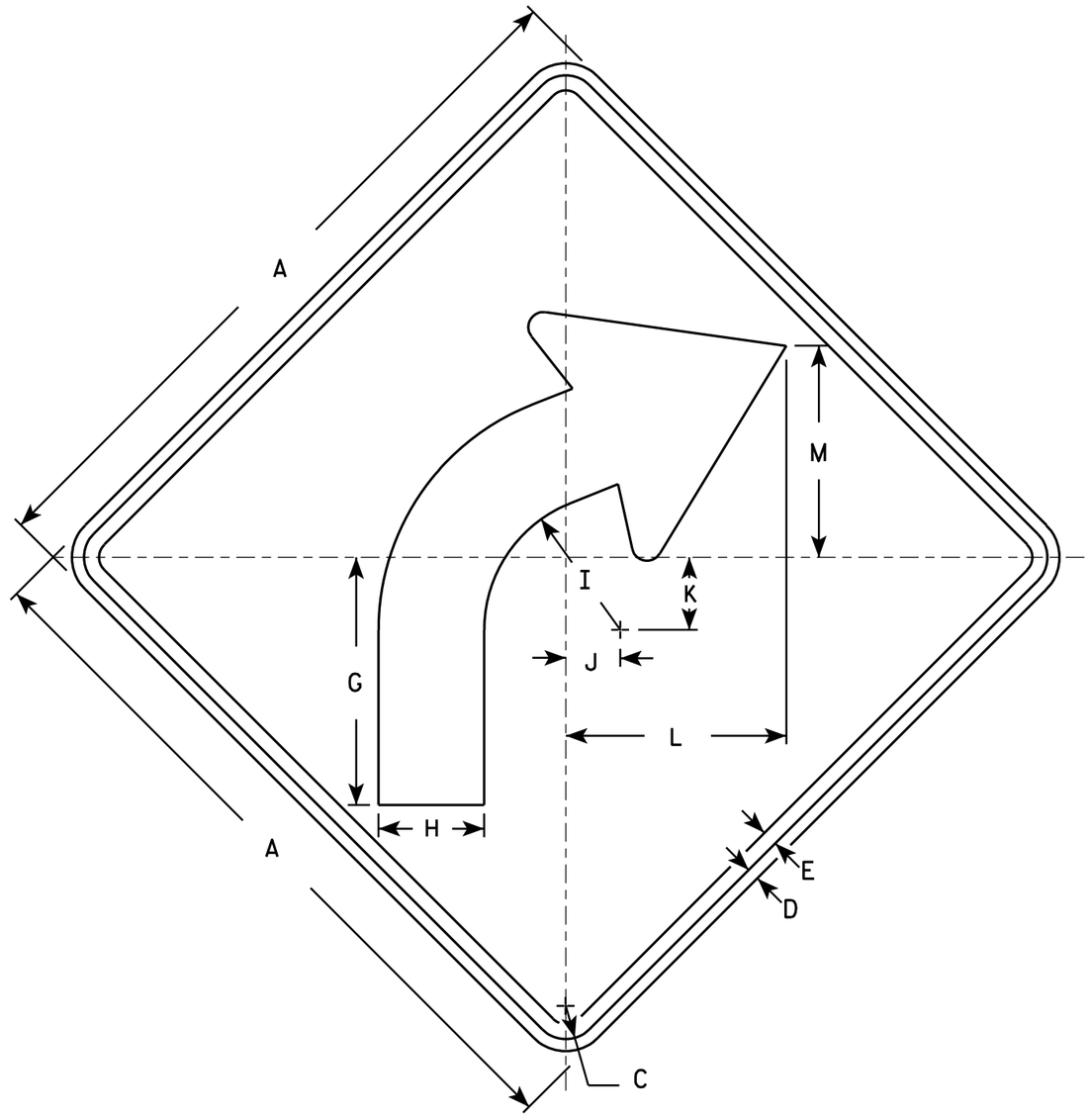
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

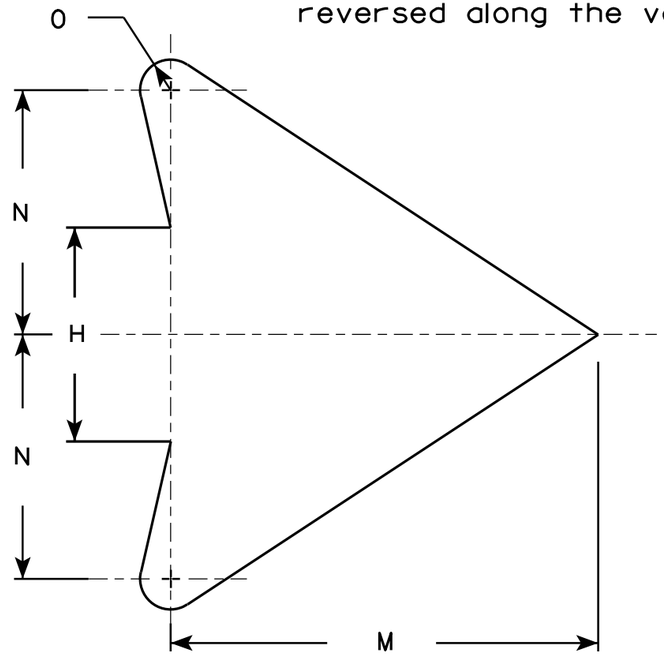
SHEET NO: 97 E



W1-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



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

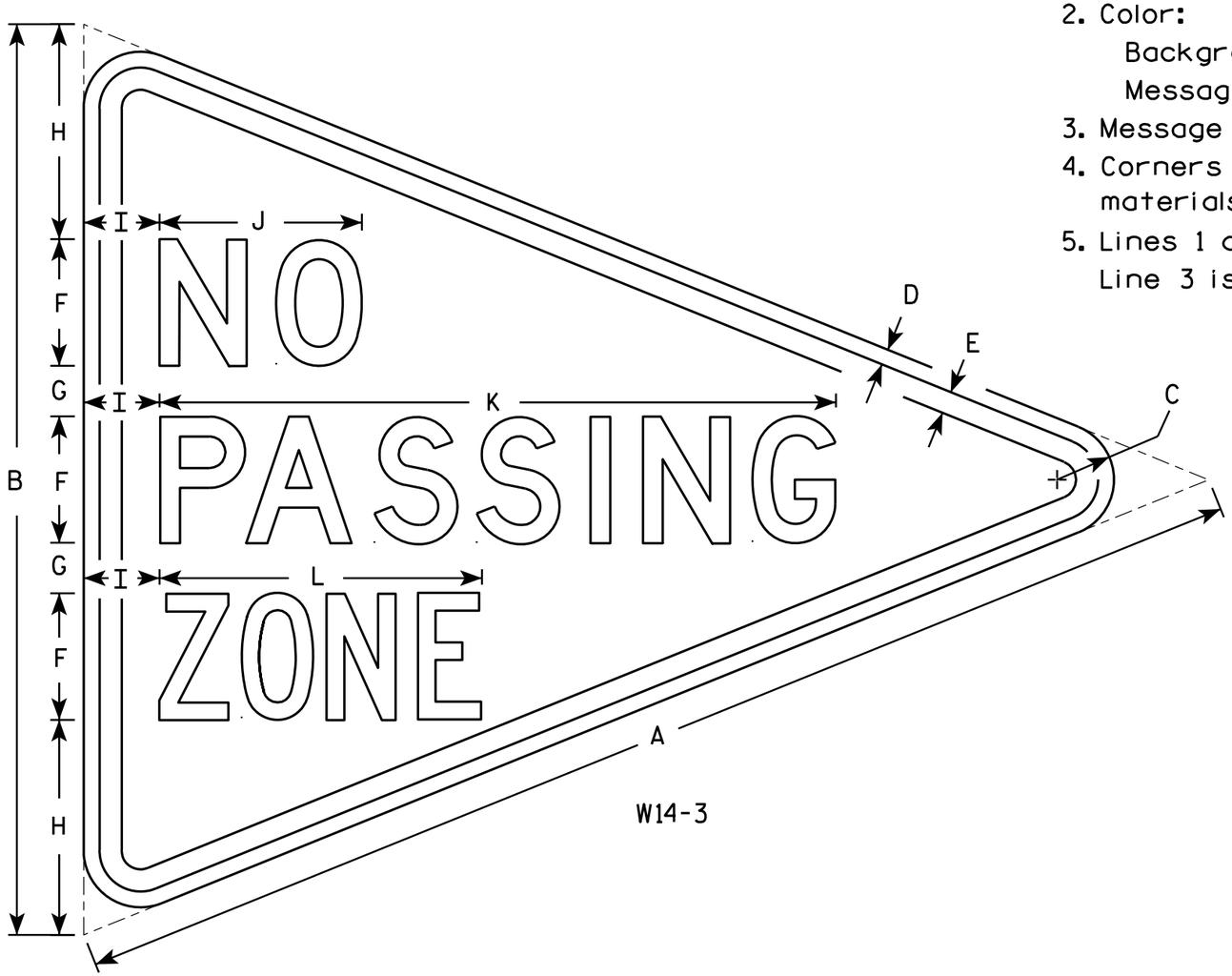
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 98	E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

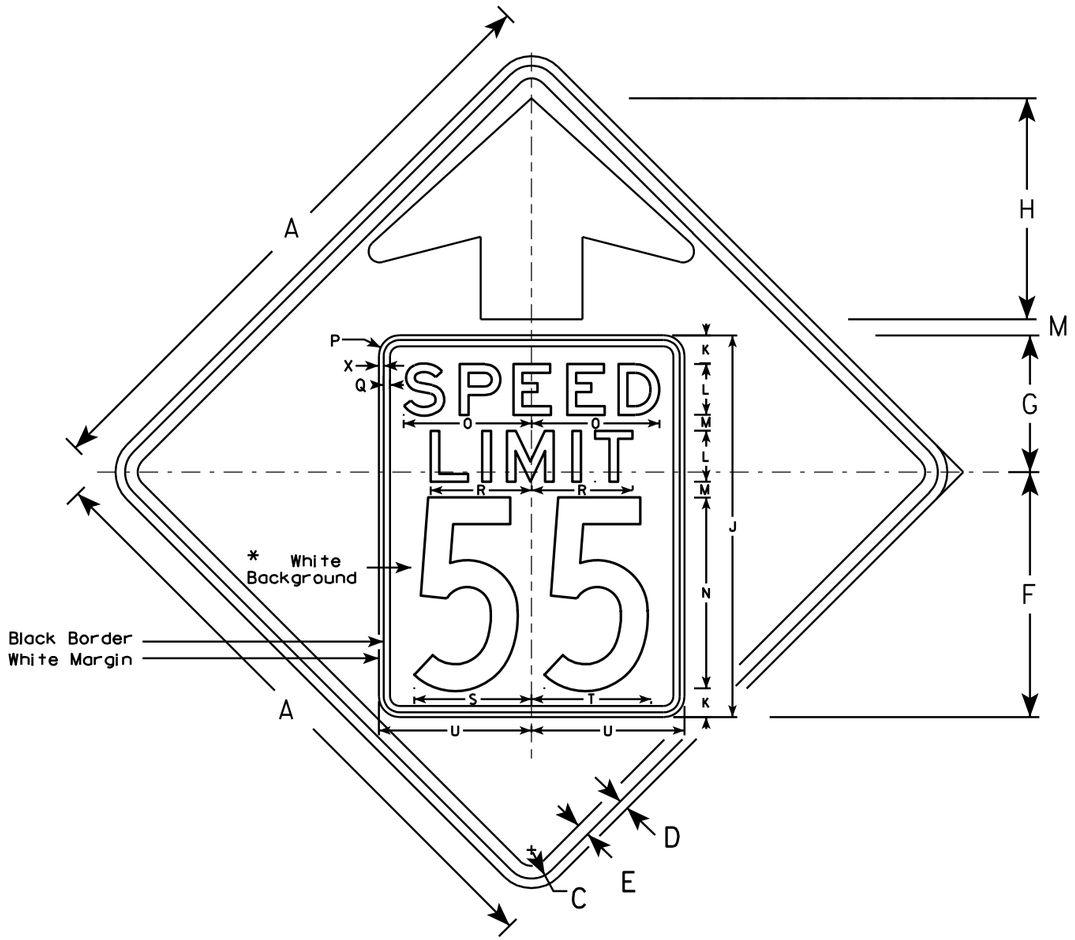
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 99	E

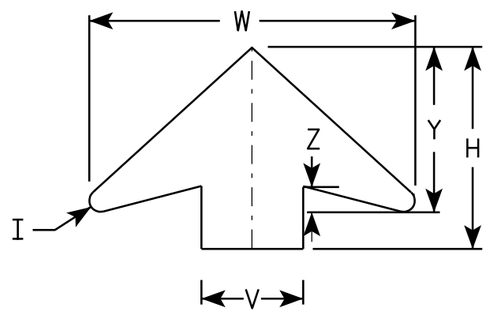


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

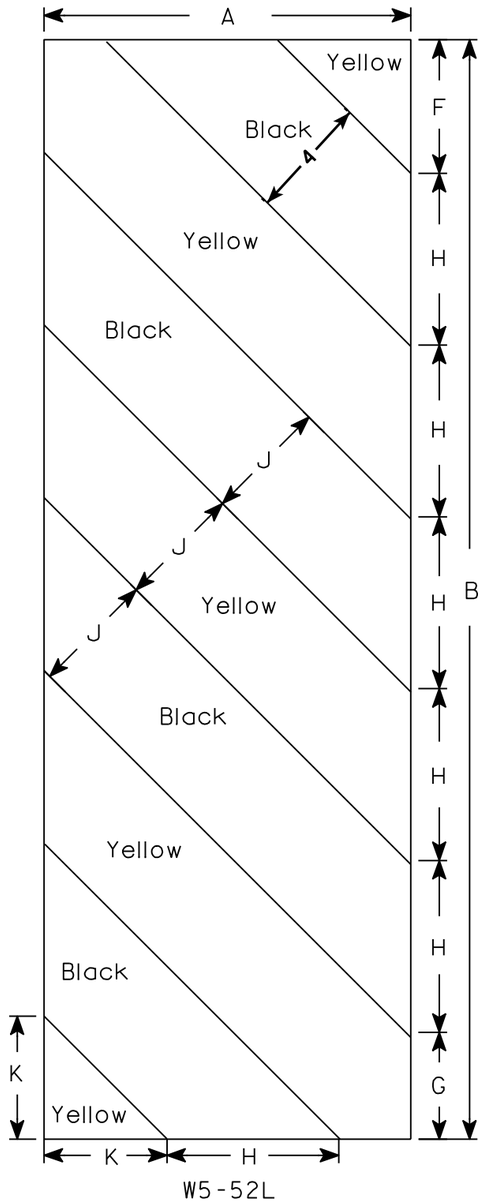
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

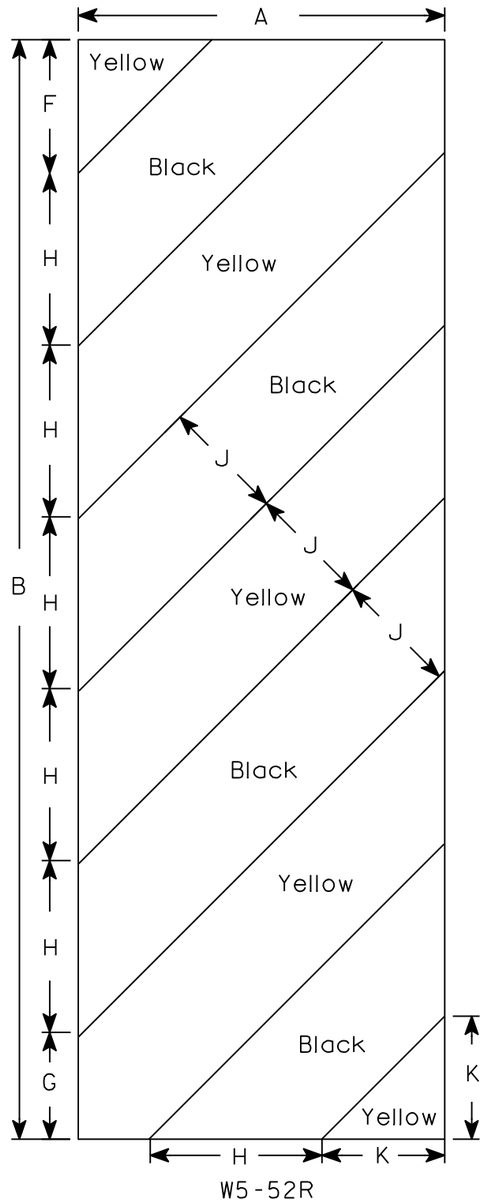
DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 100 E



W5-52L



W5-52R

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. Alternate colors of stripes as shown.

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	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 101 | E

FILE NAME : P:\152 STH 26 BRIDGES\STRUCTURES\B-53-17\01.GENPLAN_B-53-17.DGN
PLOT DATE : 1/22/2014

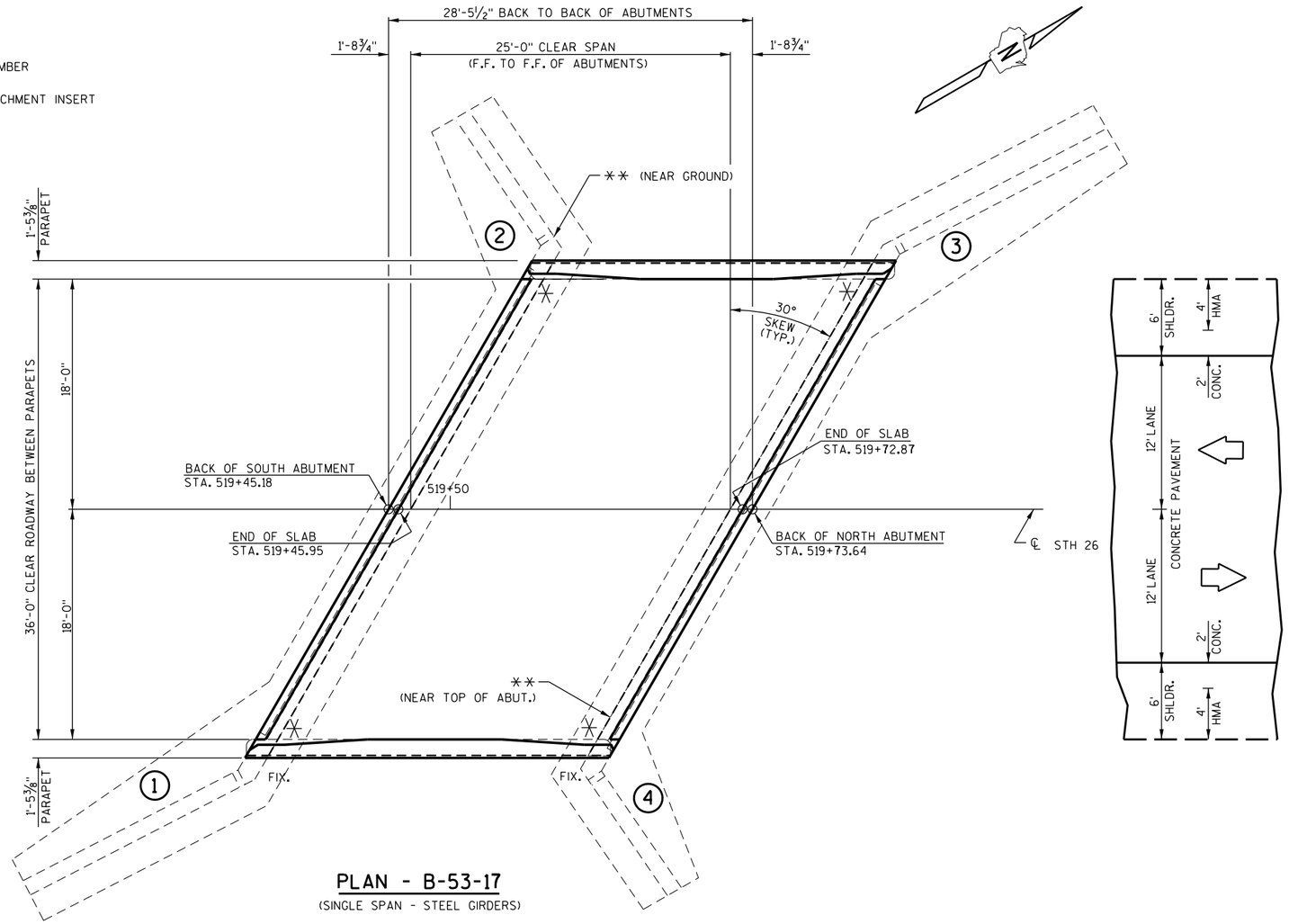
STATE PROJECT NUMBER

1390-04-94

LEGEND

(X) INDICATES WING NUMBER

⚹ LOCATION OF ATTACHMENT INSERT FOR THRIE BEAM.



PLAN - B-53-17

(SINGLE SPAN - STEEL GIRDERS)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

AT THE BACKFACE ABUTMENTS, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT DIAPHRAGM CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE, SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

THE EXISTING ABUTMENTS TO REMAIN IN PLACE AS SHOWN AND INCORPORATED INTO NEW CONSTRUCTION.

THE CONTRACTOR SHALL SUPPLY A NEW NAMEPLATE IN ACCORDANCE WITH SUBSECTION 502.3.11 OF THE STAND. SPECS. AND THE STAND. DETAIL DRAWINGS. NAMEPLATE TO SHOW ORIGINAL CONSTRUCTION YEAR.

THE EXISTING STRUCTURE (B-53-17) IS A SINGLE SPAN STEEL GIRDER BRIDGE, 28.5'± LONG AND 38.5' WIDE. THE EXISTING CONCRETE DECK SHALL BE REPLACED. THE STEEL GIRDERS SHALL BE RE-PAINTED. PAINT COLOR SHALL BE FEDERAL COLOR NUMBER 36473 (MEDIUM GREY).

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HS20

INVENTORY RATING: HS19

OPERATIONAL RATING: HS33

MAX. STANDARD PERMIT VEHICLE LOAD: 250 KIPS
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY — f'_c = 4,000 P.S.I.

HIGH-STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 — f_y = 60,000 P.S.I.

EXISTING STEEL GIRDERS — f_y = 36,000 P.S.I.

TRAFFIC DATA:

STH 26

A.D.T. (2014) = 2150

A.D.T. (2034) = 2600

DESIGN SPEED = 45 M.P.H.

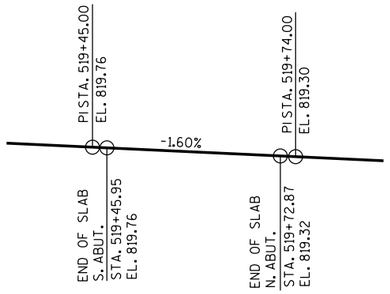
LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTIONS
3. SUPERSTRUCTURE
4. SUPERSTRUCTURE
5. SUPERSTRUCTURE
6. SUPERSTRUCTURE
7. SINGLE SLOPE PARAPET 32SS

TOTAL ESTIMATED QUANTITIES

	BID ITEM NO.	BID ITEMS	UNIT	TOTAL
	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 519+59.40	LS	1
	206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-53-17	LS	1
	210.0100	BACKFILL STRUCTURE	CY	40
	502.0100	CONCRETE MASONRY BRIDGES	CY	37
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	140
	502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EA	72
	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	10,650
**	509.1500	CONCRETE SURFACE REPAIR	SF	30
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	17
	517.0900.S	PREPARATION AND COATING OF TOP FLANGES B-53-17	LS	1
	517.1800.S	STRUCTURE REPAINTING RECYCLED ABRASIVE STRUCTURE B-53-17	LS	1
	517.4500.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECT WASTE MATERIALS STRUCTURE B-53-17	LS	1
	517.6001.S	PORTABLE DECONTAMINATION FACILITY	EA	1
	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EA	4
		NON - BID ITEMS		
		FILLER	SIZE	½" & ¾"

** ABUTMENTS AS DIRECTED BY ENGINEER AND AS SHOWN ABOVE.



PROFILE GRADE LINE, STH 26

NOTES: BENCH MARK IS CHISLED SQUARE AT WING 4, EL. 819.49.
VARIATIONS TO PROFILE GRADE LINE OVER ¼" MUST BE SUBMITTED FOR REVIEW BY THE BRIDGE SECTION.
NEW GRADE IS 1"± ABOVE EXISTING.

ROMENESKO ENGINEERING, INC.
CONTACT: TOM ROMENESKO, P.E.
7325 CEDAR CREST DRIVE
SAUK CITY, WI 53583
(608) 644-1502

BRIDGE OFFICE CONTACT:
WILLIAM DREHER, P.E.
(608) 266-8489

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
ROMENESKO ENGINEERING, INC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 02/03/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-53-17

STH 26 OVER OTTER CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
ROCK	MILTON

DESIGN SPEC. REHABILITATION N/A

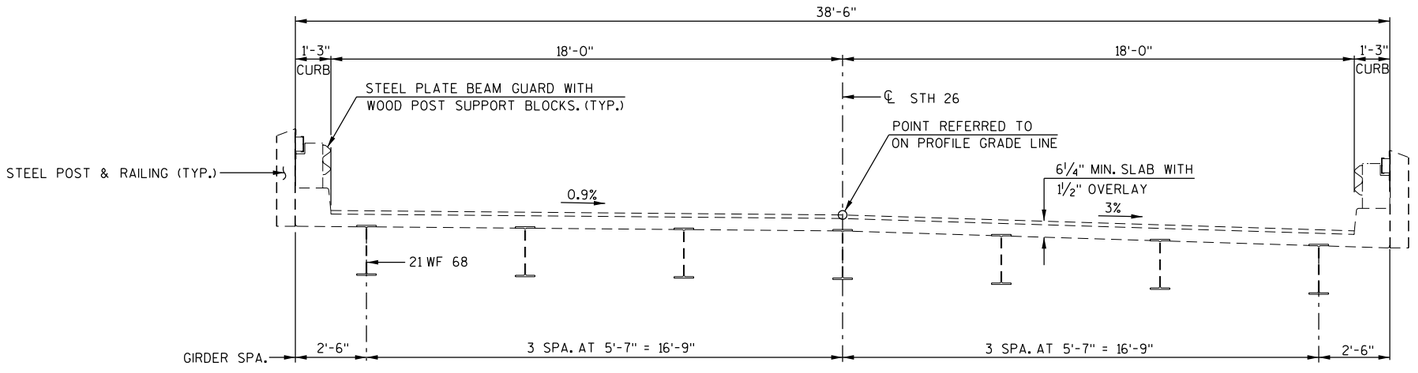
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
TR	VR	TAW	TR

GENERAL PLAN

SHEET 1 OF 7
102

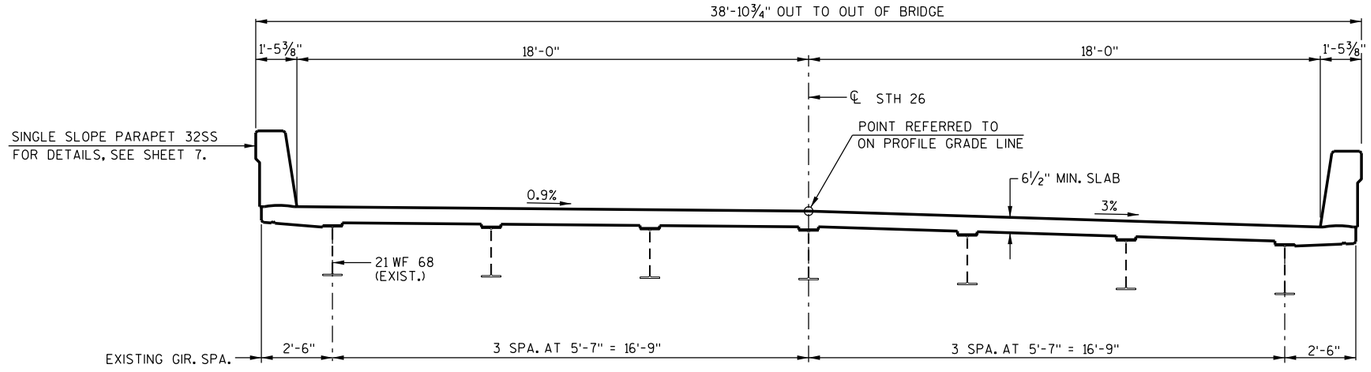
STATE PROJECT NUMBER

1390-04-94



EXISTING CROSS SECTION THRU ROADWAY - STH 26

(LOOKING NORTH)



PROPOSED CROSS SECTION THRU ROADWAY - STH 26

(LOOKING NORTH)

FILE NAME : P:\132 STH 26 Bridges\structures\B-53-17\02.sections.b-53-17.dgn
PLOT DATE : 9/16/2013

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-17

DRAWN BY TAW | PLANS CK'D. TR

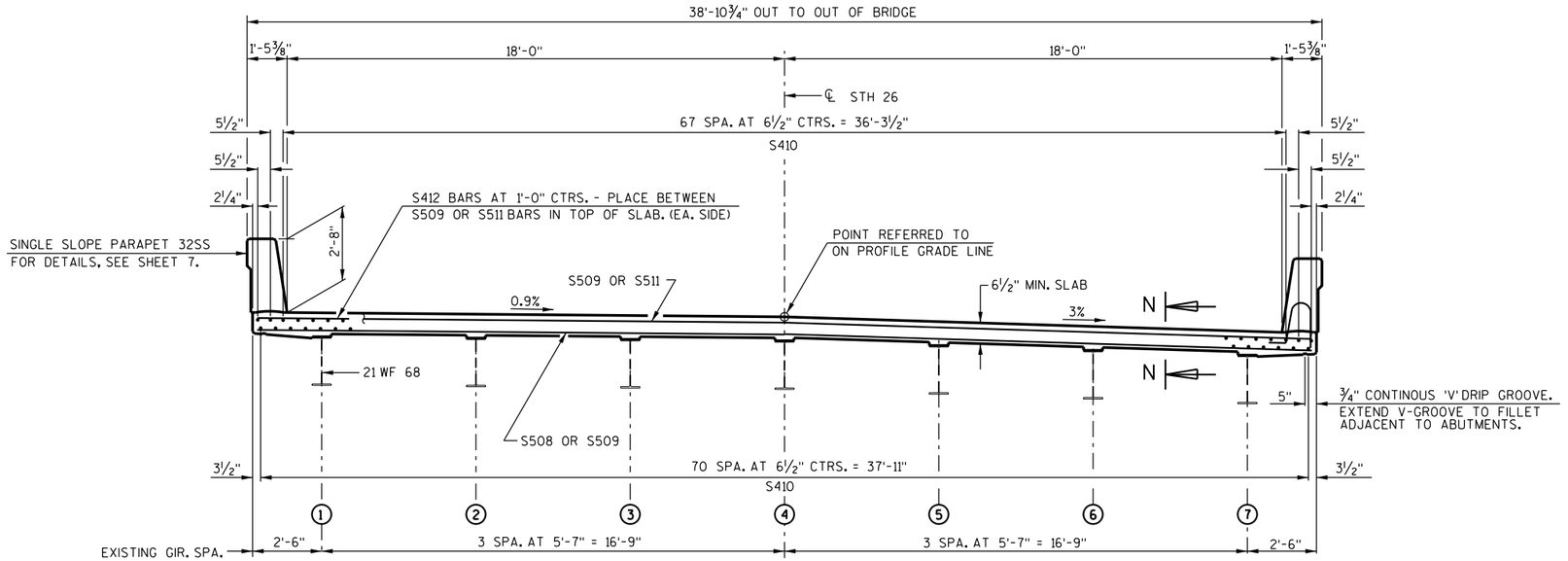
CROSS SECTIONS

SHEET 2 OF 7

103

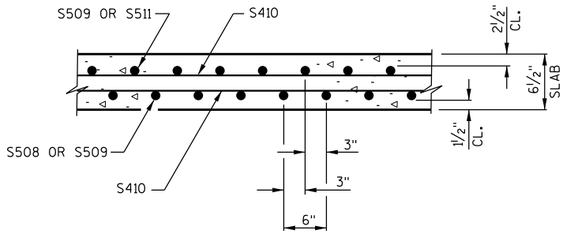
STATE PROJECT NUMBER

1390-04-94

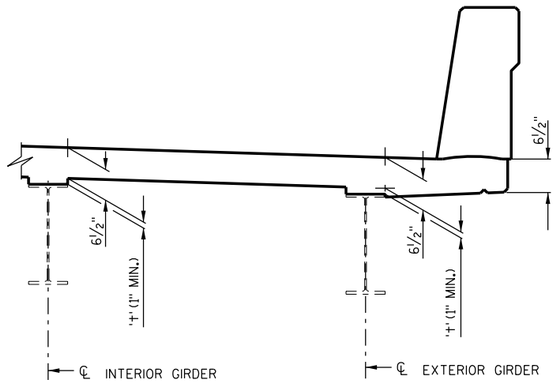


PROPOSED CROSS SECTION THRU ROADWAY - STH 26

(LOOKING NORTH)



SECTION N-N



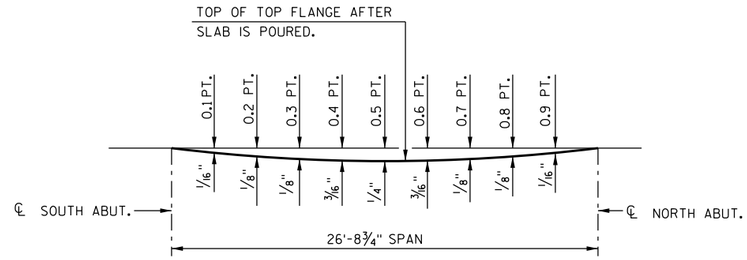
SLAB HAUNCH DETAIL

IF THE ½" MINIMUM HAUNCH HEIGHT '+' CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR IF THE 2" MINIMUM DECK EMBEDMENT OF THE SHEAR STUD CANNOT BE OBTAINED.

TO DETERMINE '+': ELEV. OF TOP OF GIRDERS AT ℄ OF SUBSTRUCTURE UNITS AND AT 0.1 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
\- TOP OF GIRDER ELEVATION
\+ DEADLOAD DEFLECTION
\- SLAB THICKNESS (6½")
= HAUNCH HEIGHT '+'

NOTES: SEE THIS SHEET FOR DEADLOAD DEFLECTIONS.



DEFLECTION DIAGRAM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-17

DRAWN BY TAW | PLANS CK'D. TR

SUPERSTRUCTURE

SHEET 3 OF 7

104

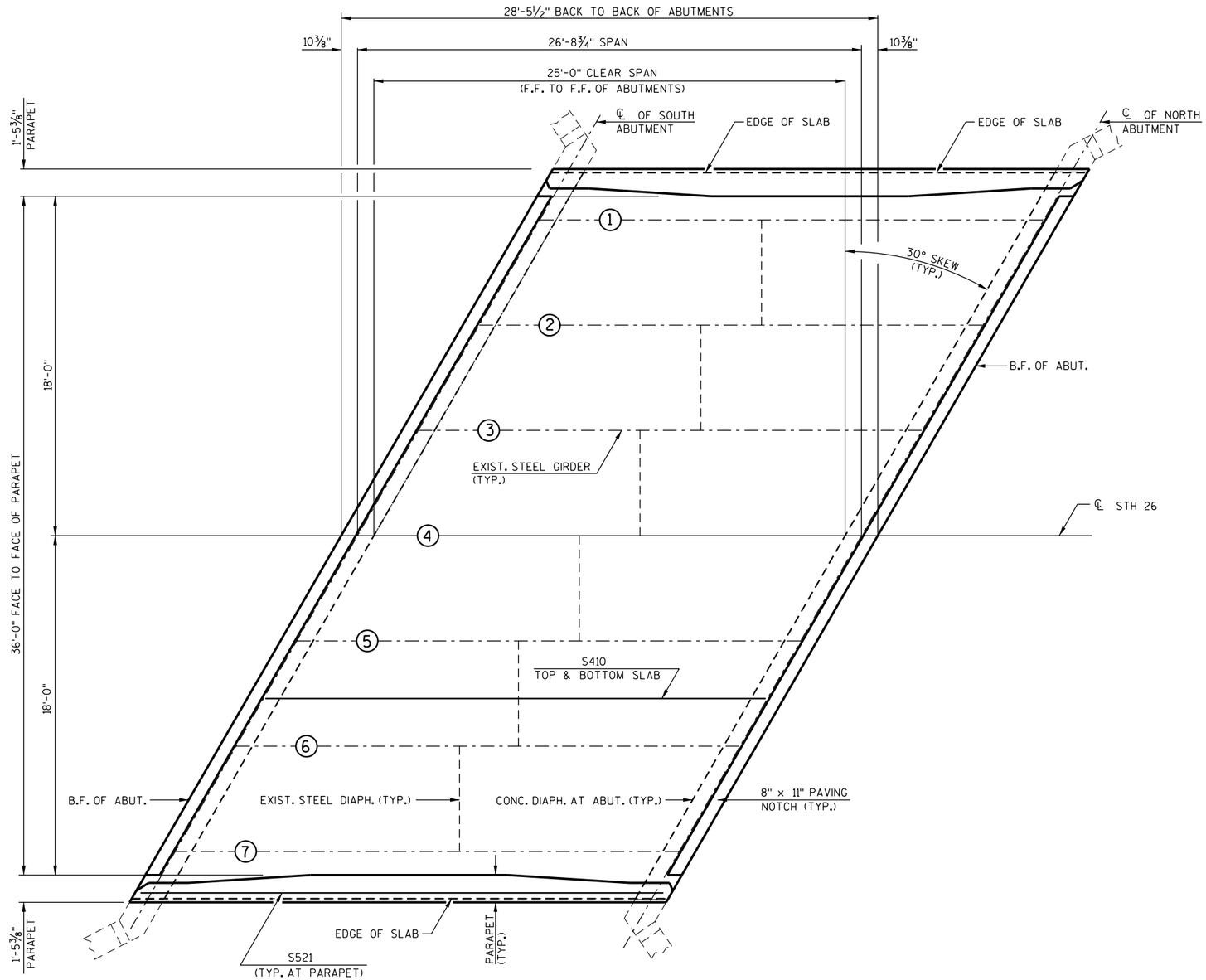
8

8

FILE NAME : P:\132 STH 26 Bridges\structures\B-53-17\03_super1_b-53-17.dgn
PLOT DATE : 1/12/2014

STATE PROJECT NUMBER

1390-04-94



PLAN - SUPERSTRUCTURE

TOP OF DECK ELEVATIONS

	℄ OF BRG. S. ABUT.	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF BRG. N. ABUT.
W. EOD	819.73	819.68	819.64	819.60	819.56	819.51	819.47	819.43	819.39	819.34	819.30
GIRDER 1	819.74	819.70	819.65	819.61	819.57	819.53	819.48	819.44	819.40	819.35	819.31
GIRDER 2	819.74	819.70	819.66	819.61	819.57	819.53	819.48	819.44	819.40	819.36	819.31
GIRDER 3	819.74	819.70	819.66	819.61	819.57	819.53	819.49	819.44	819.40	819.36	819.31
GIRDER 4	819.74	819.70	819.66	819.61	819.57	819.53	819.49	819.44	819.40	819.36	819.32
GIRDER 5	819.63	819.58	819.54	819.50	819.46	819.41	819.37	819.33	819.29	819.24	819.20
GIRDER 6	819.51	819.47	819.43	819.38	819.34	819.30	819.25	819.21	819.17	819.13	819.08
GIRDER 7	819.40	819.35	819.31	819.27	819.22	819.18	819.14	819.10	819.05	819.01	818.97
E. EOD	819.38	819.34	819.30	819.25	819.21	819.17	819.12	819.08	819.04	819.00	818.95

NOTES

1. ALL TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE PLACED PERPENDICULAR TO THE ℄ OF STH 26. SEE SHEET 5 FOR DETAILS.
2. THE TOP LONGITUDINAL BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS IN TRANSVERSE DIRECTION ON 4'-0" CENTERS.
3. THE BOTTOM TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS WITH A CENTER TO CENTER SPACING NOT TO EXCEED 4'-0". ONE LINE OF CONTINUOUS BAR CHAIRS SHALL BE PLACED NEAR EACH EDGE OF SLAB TO SUPPORT THE ENDS OF THE BOTTOM TRANSVERSE BAR STEEL.
4. EDGE OF DECK (EOD) ELEVATIONS ARE CALCULATED ASSUMING THE CROSS SLOPE IS FLAT UNDER THE PARAPETS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-17

DRAWN BY TAW | PLANS CK'D. TR

SUPERSTRUCTURE

SHEET 4 OF 7

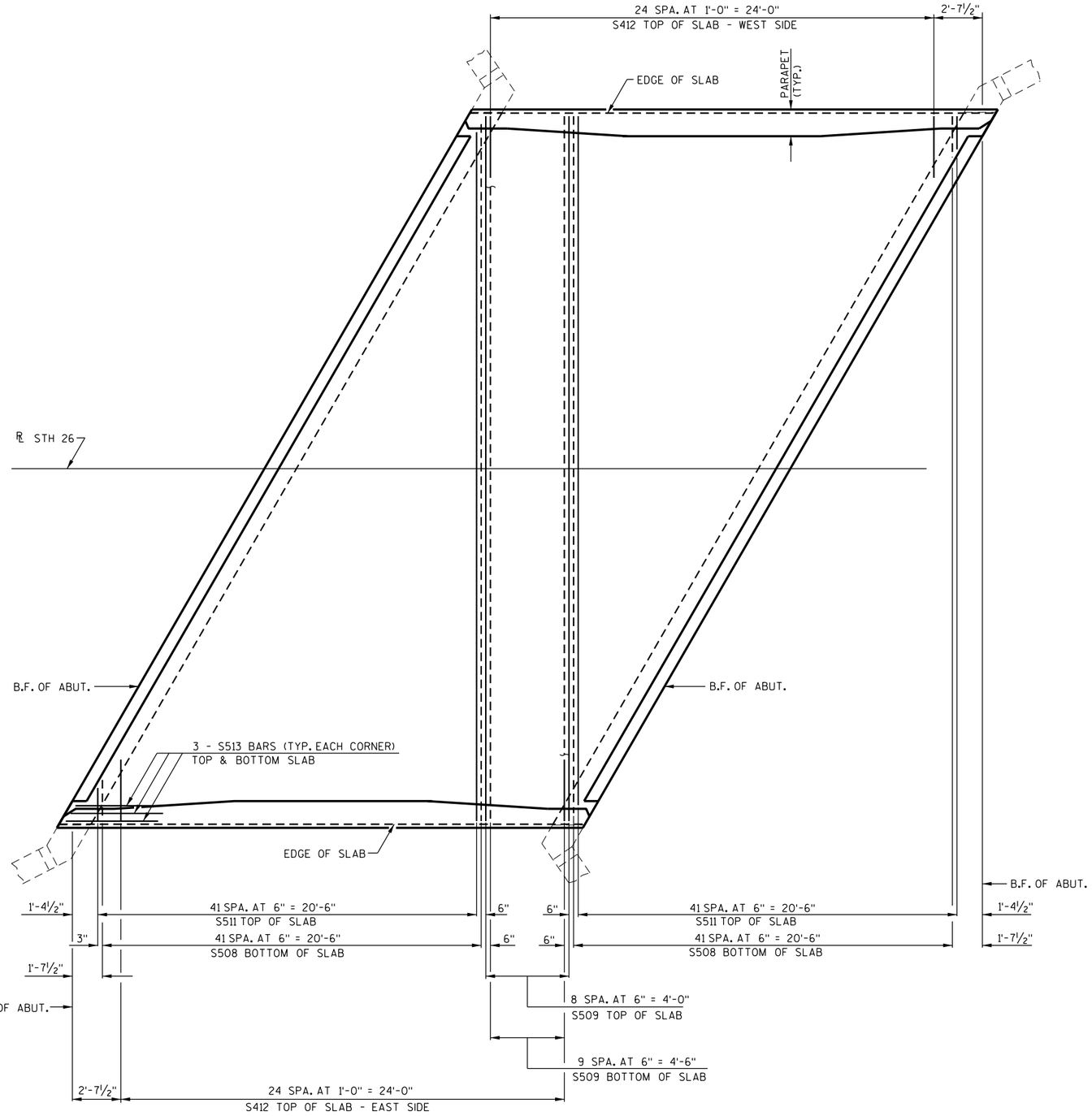
105

8

8

FILE NAME : P:\132 STH 26 Bridges\structures\B-53-17\04_super2.b-53-17.dgn
PLOT DATE : 1/10/2014

STATE PROJECT NUMBER
1390-04-94



PLAN - SUPERSTRUCTURE

FILE NAME : P:\132 STH 26 Bridges\structures\B-53-17\05_super3.b-53-17.dgn
PLOT DATE : 1/10/2014

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

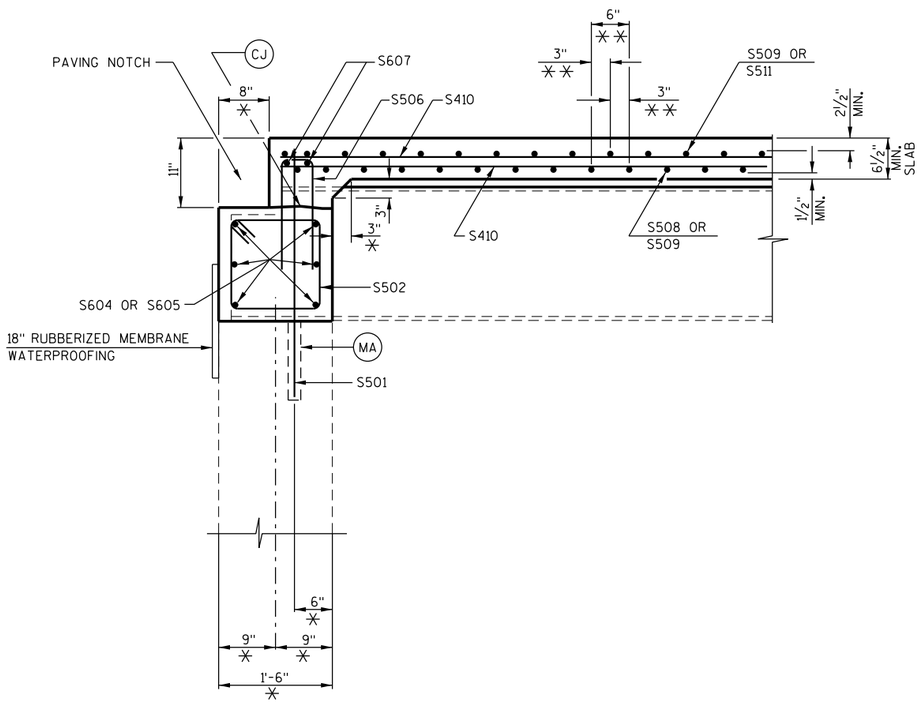
STRUCTURE B-53-17

DRAWN BY TAW | PLANS CK'D. TR

SUPERSTRUCTURE

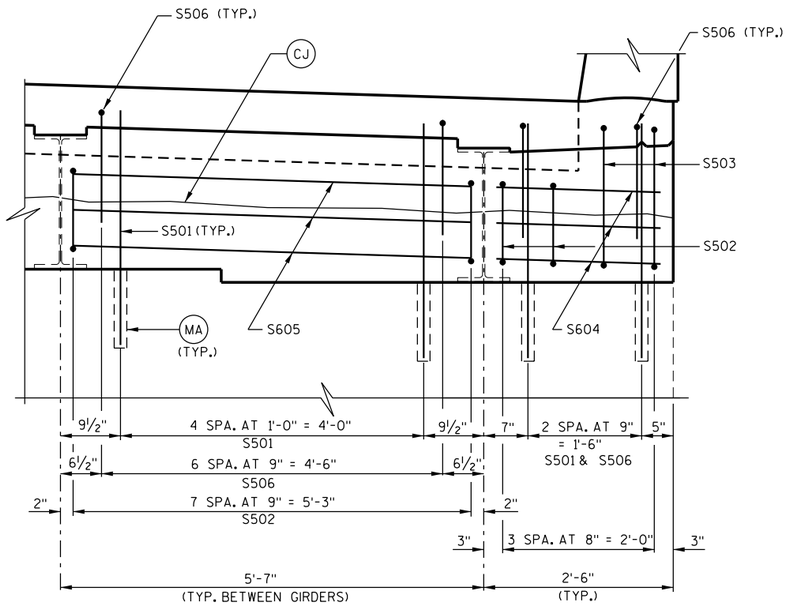
SHEET 5 OF 7

FOR TRANSVERSE BAR STEEL REINFORCEMENT LAYOUT DETAILS, SEE SHEET 5.



AT ABUTMENTS

PART LONGITUDINAL SECTION



ABUTMENT DIAPHRAGM DETAILS

(LOOKING NORTH AT NORTH ABUTMENT, SOUTH ABUTMENT SIMILAR)

LEGEND

✳ DIMENSIONS ARE GIVEN NORMAL TO ℄ OF SUBSTRUCTURE UNITS.

✳✳ DIMENSIONS ARE GIVEN PARALLEL TO THE GIRDER ℄.

(CJ) OPTIONAL CONSTRUCTION JOINT AT BOTTOM OF PAVING NOTCH. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF THE DIAPHRAGM POUR.

(MA) MASONRY ANCHORS TYPE L NO. 5 BARS. EMBED 1'-0" IN CONCRETE. USE WITH S501 BARS.

NOTES: ALL VERTICAL BAR STEEL REINFORCEMENT IN CONCRETE DIAPHRAGMS SHALL BE SPACED AND PLACED PARALLEL TO GIRDERS.

BILL OF BARS

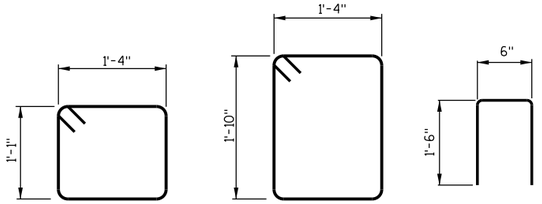
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
ALL BAR STEEL REINFORCEMENT IN THIS BILL SHALL BE EPOXY COATED.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	TOTAL WEIGHT = 10,650 LBS.
S501	72	3-1			ABUTMENT - TOP	VERT.
S502	104	5-5	X		ABUTMENT DIAPHRAGM	VERT.
S503	8	6-11	X		ABUTMENT DIAPHRAGM	VERT.
S604	24	2-6			ABUTMENT DIAPHRAGM - ENDS	HORIZ.
S605	72	6-0			ABUTMENT DIAPHRAGM - BETWEEN GIRDERS	HORIZ.
S506	96	3-3	X		ABUTMENT DIAPHRAGM - TOP	VERT.
S607	4	44-0			ABUTMENT DIAPHRAGM - TOP	TRANS.
S508	84	19-11		X	SLAB - BOTTOM	TRANS.
S509	19	38-2			SLAB - TOP & BOTTOM	TRANS.
S410	143	26-6			SLAB - TOP & BOTTOM	LONGIT.
S511	84	19-6		X	SLAB - TOP	TRANS.
S412	50	3-4			SLAB - TOP - AT EDGES	TRANS.
S513	24	5-0			SLAB - TOP & BOTTOM - AT CORNERS	LONGIT.
S514	34	4-5	X		PARAPET	VERT.
S515	34	5-0	X		PARAPET	VERT.
S516	48	2-8	X		PARAPET	VERT.
S517	64	4-2	X		PARAPET	VERT.
S518	44	4-9	X		PARAPET	VERT.
S519	24	4-10	X		PARAPET	VERT.
S520	4	15-0	X		PARAPET	HORIZ.
S521	10	27-11			PARAPET	HORIZ.
S522	4	6-4	X		PARAPET	VERT.

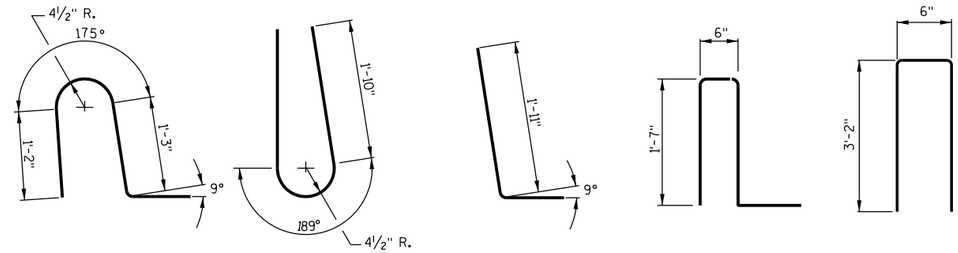
✳ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATION. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

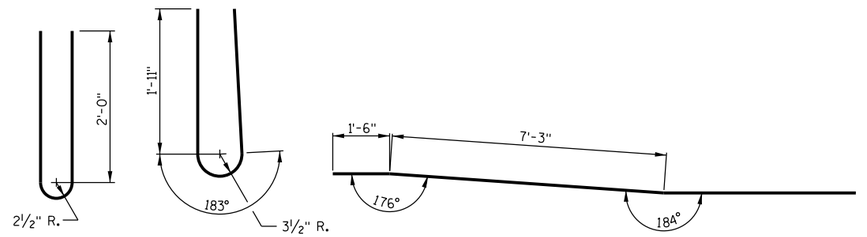
MARK	NO. REQ'D.	LENGTH
S508	2 SERIES OF 42	2'-2" TO 37'-8"
S511	2 SERIES OF 42	1'-9" TO 37'-3"



S502 S503 S506



S514 S515 S516 S517 S522



S518 S519 S520

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-17

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SUPERSTRUCTURE

SHEET 6 OF 7
107

STATE PROJECT NUMBER
1390-04-94

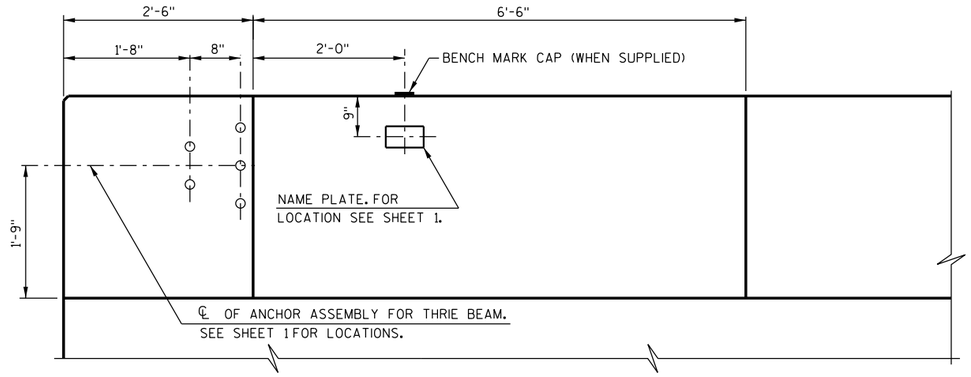
8

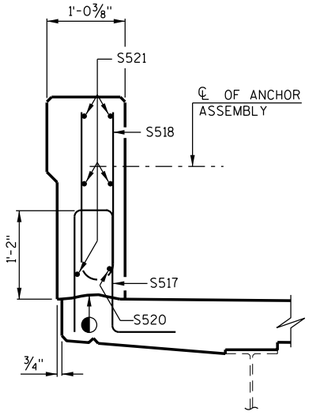
FILE NAME : P:\132 STH 26 Bridges\structures\B-53-17\06_super4_b-53-17.dgn
PLOT DATE : 1/12/2014

NOTE: QUANTITIES OF CONCRETE MASONRY AND BAR STEEL REINFORCEMENT ARE INCLUDED IN THE SUPERSTRUCTURE QUANTITIES ON SHEET 1.

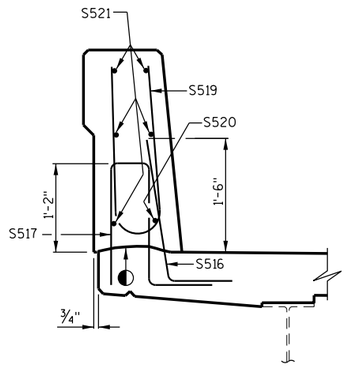
STATE PROJECT NUMBER

1390-04-94

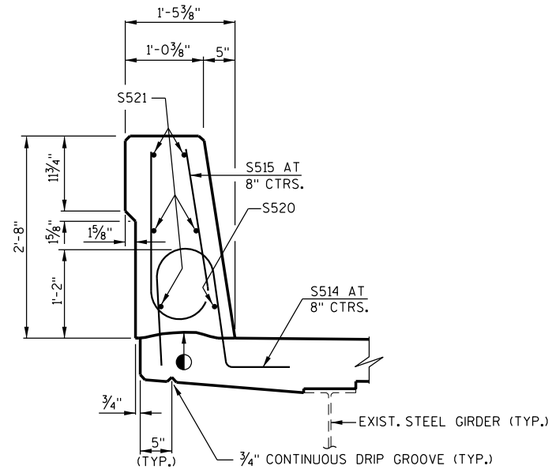




SECTION A-A



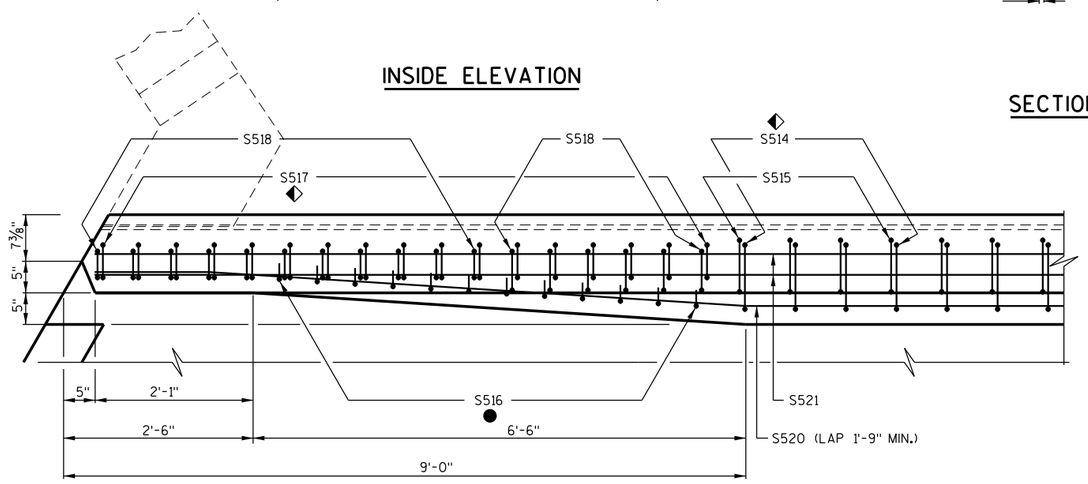
SECTION B-B



SECTION C-C & SECTION ON BRIDGE DECK

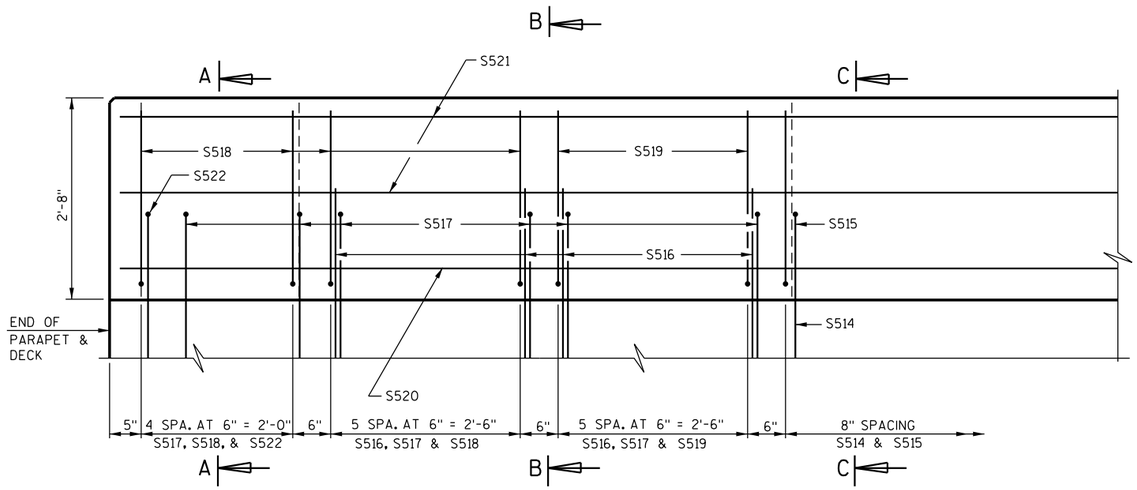
NOTE: SEE SHEET 6 FOR BAR STEEL REINFORCEMENT DETAILS AND BILL OF BARS FOR PARAPET ON BRIDGE.

INSIDE ELEVATION



PART PLAN

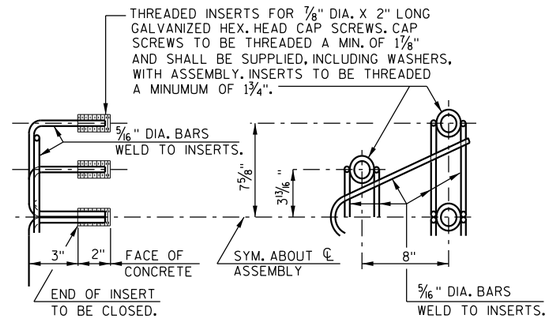
(PARAPET ON WEST SIDE OF BRIDGE SHOWN, EAST SIDE SIMILAR)



OUTSIDE ELEVATION

LEGEND

- ● S513 BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INTIAL SET HAS TAKEN PLACE. USE CARE TO PLACE S513 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ◆ S511 AND S514 BARS TO BE TIED TO DECK STEEL BEFORE DECK IS POURED.
- ◐ CONST. JT. - STRIKE OFF AS SHOWN.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-17

DRAWN BY TAW | PLANS CK'D. TR

SINGLE SLOPE PARAPET 32SS

SHEET 7 OF 7
108

8

8

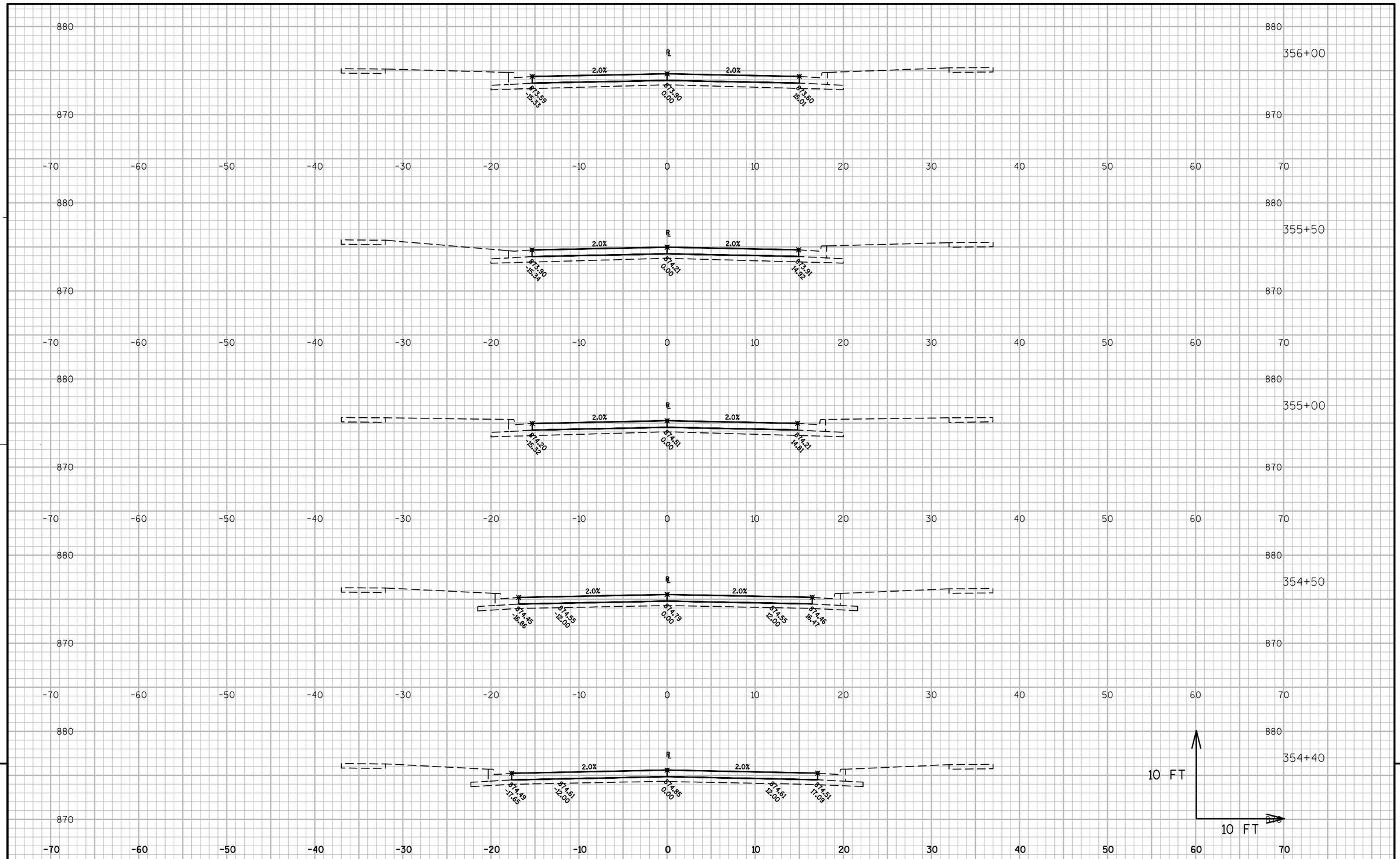
FILE NAME : P:\132 STH 26 Bridges\structures\B-53-17\07_parapet_32ss_b-53-17.dgn
PLOT DATE : 1/10/2014

STH 26 SOUTH

STATION	DISTANCE	AREA (SF) CUT	AREA (SF) UNUSABLE PAVEMENT MATERIAL	AREA (SF) FILL	INCREMENTAL VOL. (CY) CUT	INCREMENTAL VOL. (CY) UNUSABLE PAVEMENT MATERIAL	INCREMENTAL VOL. (CY) FILL	CUMULATIVE VOL. (CY) CUT	CUMULATIVE VOL. (CY) EXPANDED FILL 1.20	CUMULATIVE VOL. (CY) MASS ORDINATE
354+40	0	26	26	0	10	10	0	10	0	0
354+50	10	25	25	0	47	47	0	47	0	0
355+00	50	23	23	0	42	42	0	98	0	0
355+50	50	23	23	0	42	42	0	140	0	0
356+00	50	23	23	0	42	42	0	181	0	0
356+50	50	23	23	0	42	42	0	223	0	0
357+00	50	23	23	0	42	42	0	265	0	0
357+50	50	23	23	0	42	42	0	306	0	0
358+00	50	23	23	0	42	42	0	348	0	0
358+50	50	23	23	0	42	42	0	390	0	0
359+00	50	23	23	0	42	42	0	431	0	0
359+50	50	23	23	0	42	42	0	473	0	0
360+00	50	23	23	0	42	42	0	515	0	0
360+50	50	23	23	0	42	42	0	556	0	0
361+00	50	23	23	0	42	42	0	598	0	0
				TOTALS	598	598	0			

STH 26 NORTH

STATION	DISTANCE	AREA (SF) CUT	AREA (SF) UNUSABLE PAVEMENT MATERIAL	AREA (SF) FILL	INCREMENTAL VOL. (CY) CUT	INCREMENTAL VOL. (CY) UNUSABLE PAVEMENT MATERIAL	INCREMENTAL VOL. (CY) FILL	CUMULATIVE VOL. (CY) CUT	CUMULATIVE VOL. (CY) EXPANDED FILL 1.20	CUMULATIVE VOL. (CY) MASS ORDINATE	CUMULATIVE VOL. (CY) BORROW 1.20
532+80	20	23	23	0	17	17	0	17	0	0	0
533+00	50	23	23	0	42	42	0	58	0	0	0
535+50	50	23	23	5	42	42	9	100	11	-11	11
534+00	50	23	23	5	42	42	9	142	22	-22	22
534+50	50	23	23	8	42	42	14	183	39	-39	39
535+00	50	23	23	8	42	42	14	225	56	-56	56
535+50	50	23	23	8	42	42	14	267	72	-72	72
536+00	50	23	23	0	42	42	0	308	72	-72	72
536+50	50	23	23	0	42	42	0	350	75	-75	75
537+00	50	26	26	0	49	49	0	399	75	-75	75
537+50	50	26	26	0	49	49	0	447	75	-75	75
538+00	50	26	26	0	49	49	0	496	75	-75	75
538+50	50	26	26	0	49	49	0	544	75	-75	75
539+00	50	23	23	0	42	42	0	586	75	-75	75
539+50	50	23	23	0	42	42	0	628	75	-75	75
540+00	50	25	25	0	46	46	0	674	75	-75	75
540+50	50	23	23	0	42	42	0	716	75	-75	75
541+00	50	23	23	0	42	42	0	757	75	-75	75
541+50	50	23	23	8	42	42	14	799	89	-89	89
542+00	50	23	23	8	42	42	14	841	106	-106	106
542+50	50	23	23	8	42	42	14	882	122	-122	122
543+00	50	23	23	8	42	42	14	924	139	-139	139
543+50	50	23	23	8	42	42	14	966	156	-156	156
544+00	50	23	23	8	42	42	14	1007	172	-172	172
544+50	50	23	23	0	42	42	0	1049	172	-172	172
545+00	50	23	23	0	42	42	0	1091	179	-179	179
545+50	50	23	23	0	42	42	0	1132	179	-179	179
546+00	50	23	23	0	42	42	0	1174	179	-179	179
546+50	50	23	23	0	42	42	0	1216	179	-179	179
547+00	50	25	25	0	46	46	0	1262	179	-179	179
547+50	50	25	25	0	46	46	0	1308	179	-179	179
548+00	50	23	23	0	42	42	0	1350	179	-179	179
548+30	30	23	23	8	25	25	14	1375	189	-189	189
				TOTALS	1375	1375	157				



PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) SOUTH PORTION	SHEET 110 E

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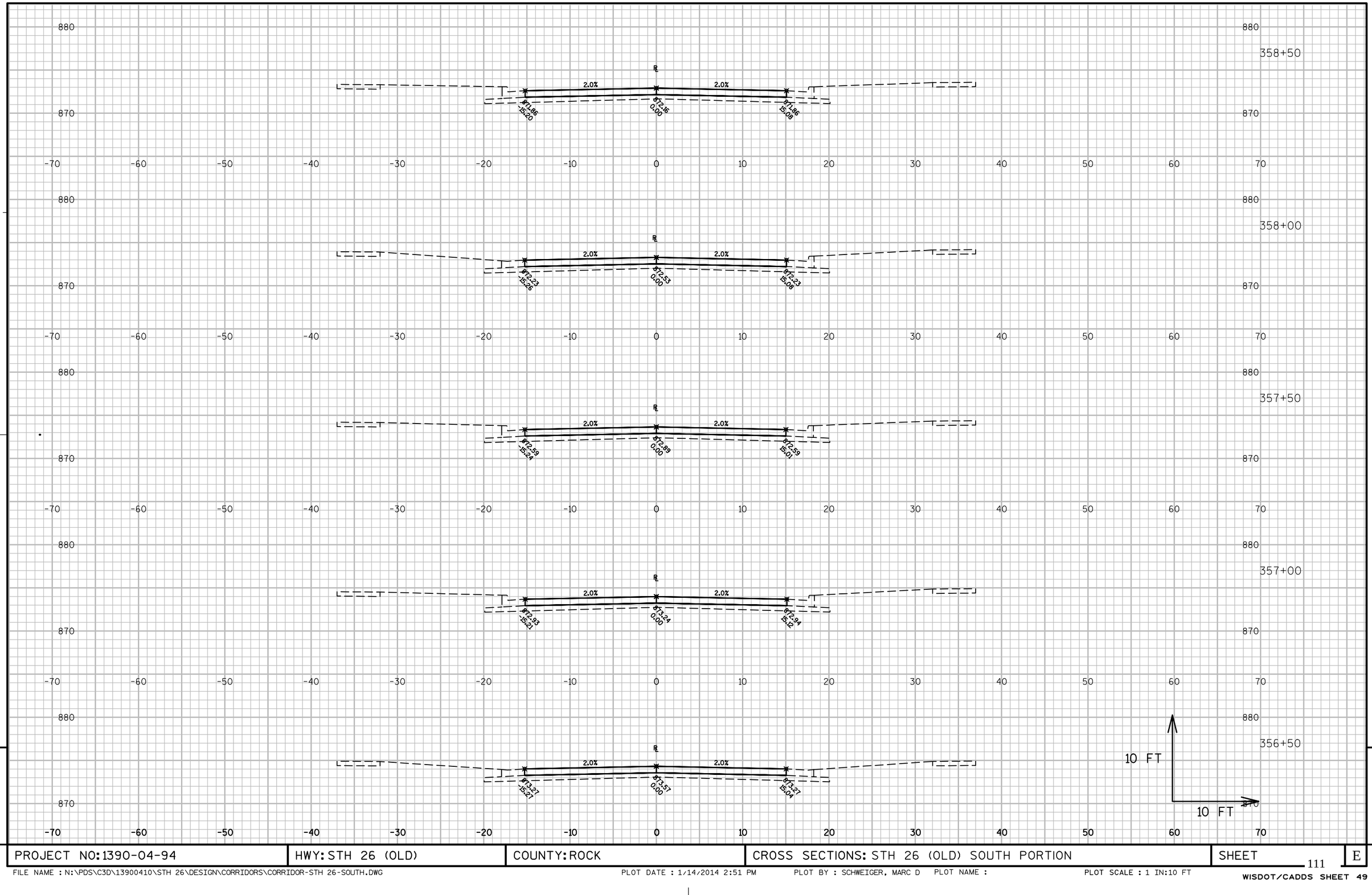

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PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) SOUTH PORTION	SHEET	E

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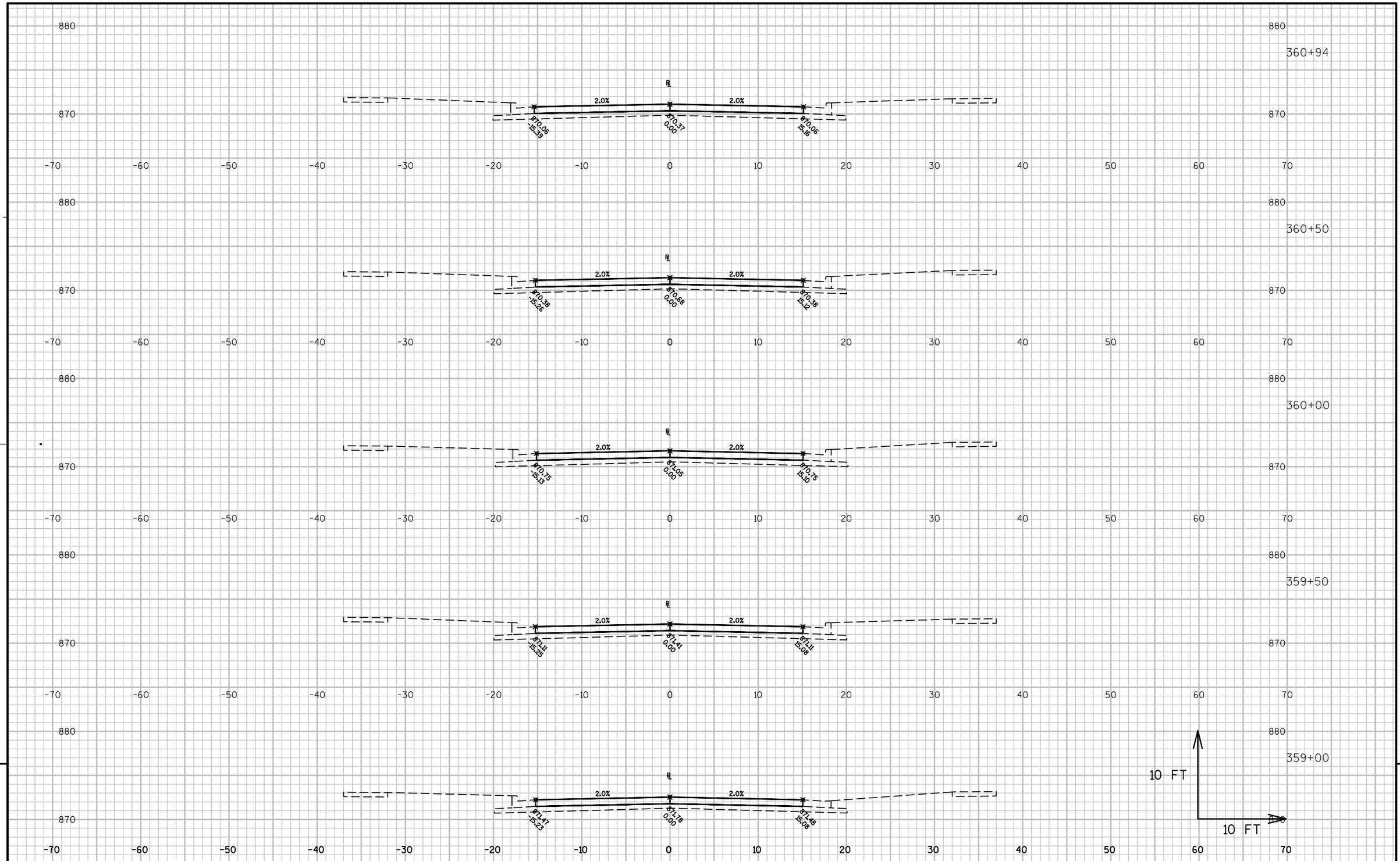
WISDOT/CADDS SHEET 49



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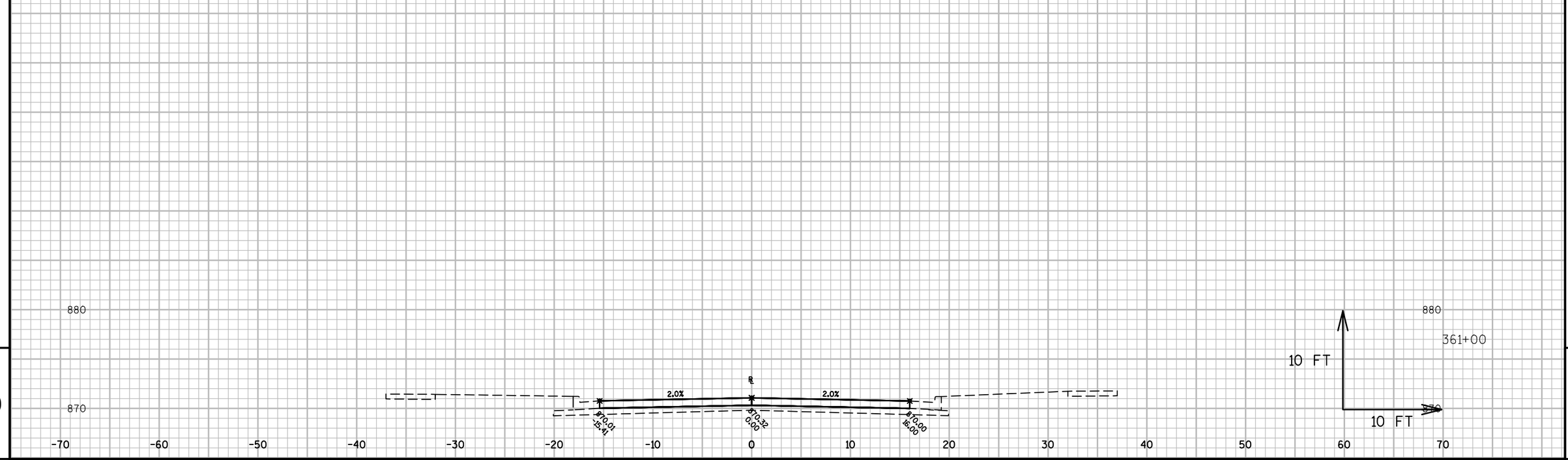
WISDOT/CADDS SHEET 49



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PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) SOUTH PORTION	SHEET	E

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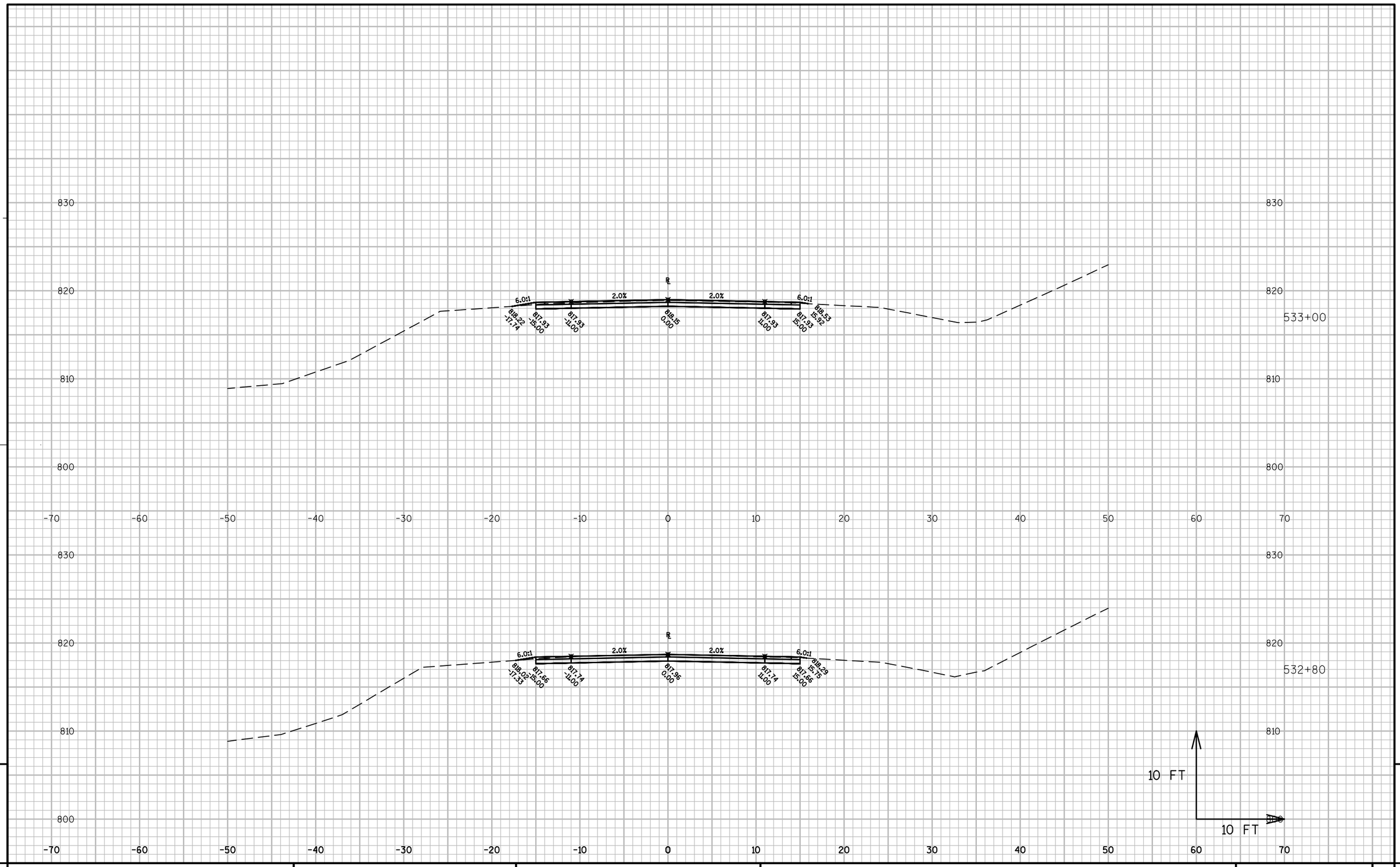
WISDOT/CADDS SHEET 49



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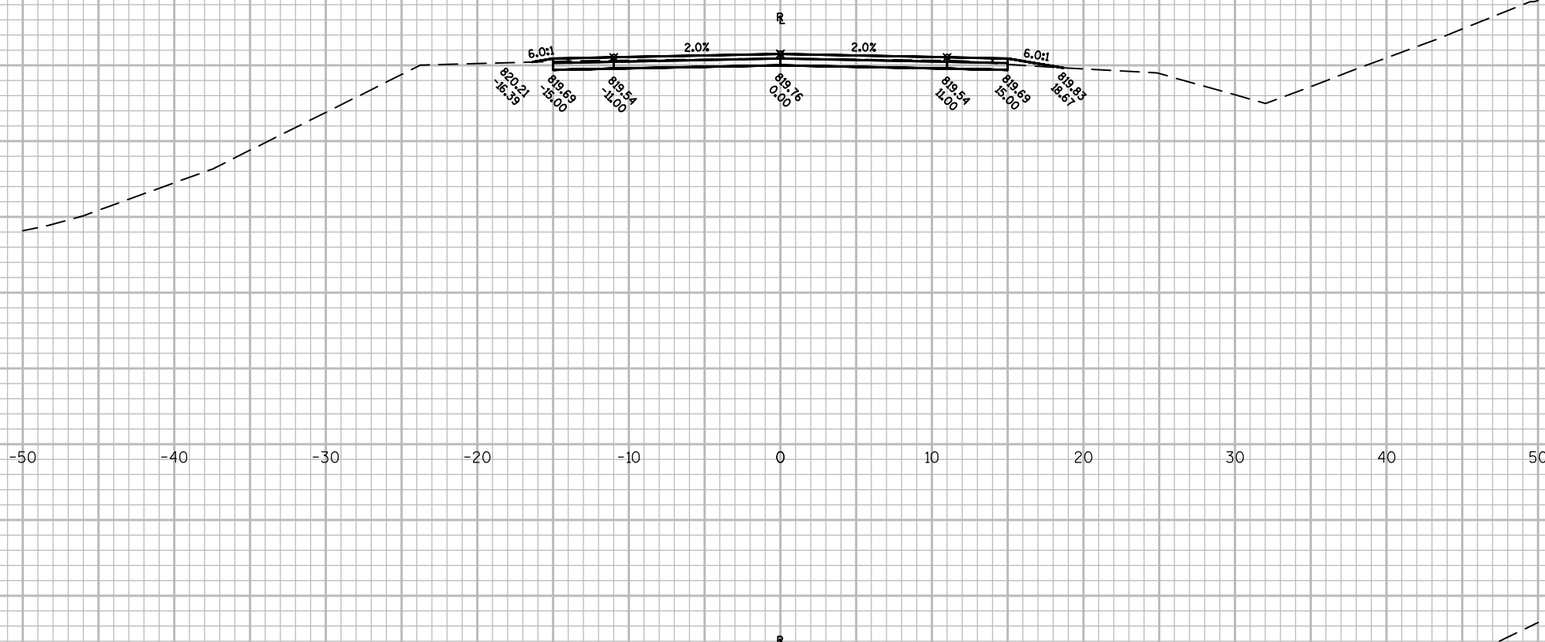

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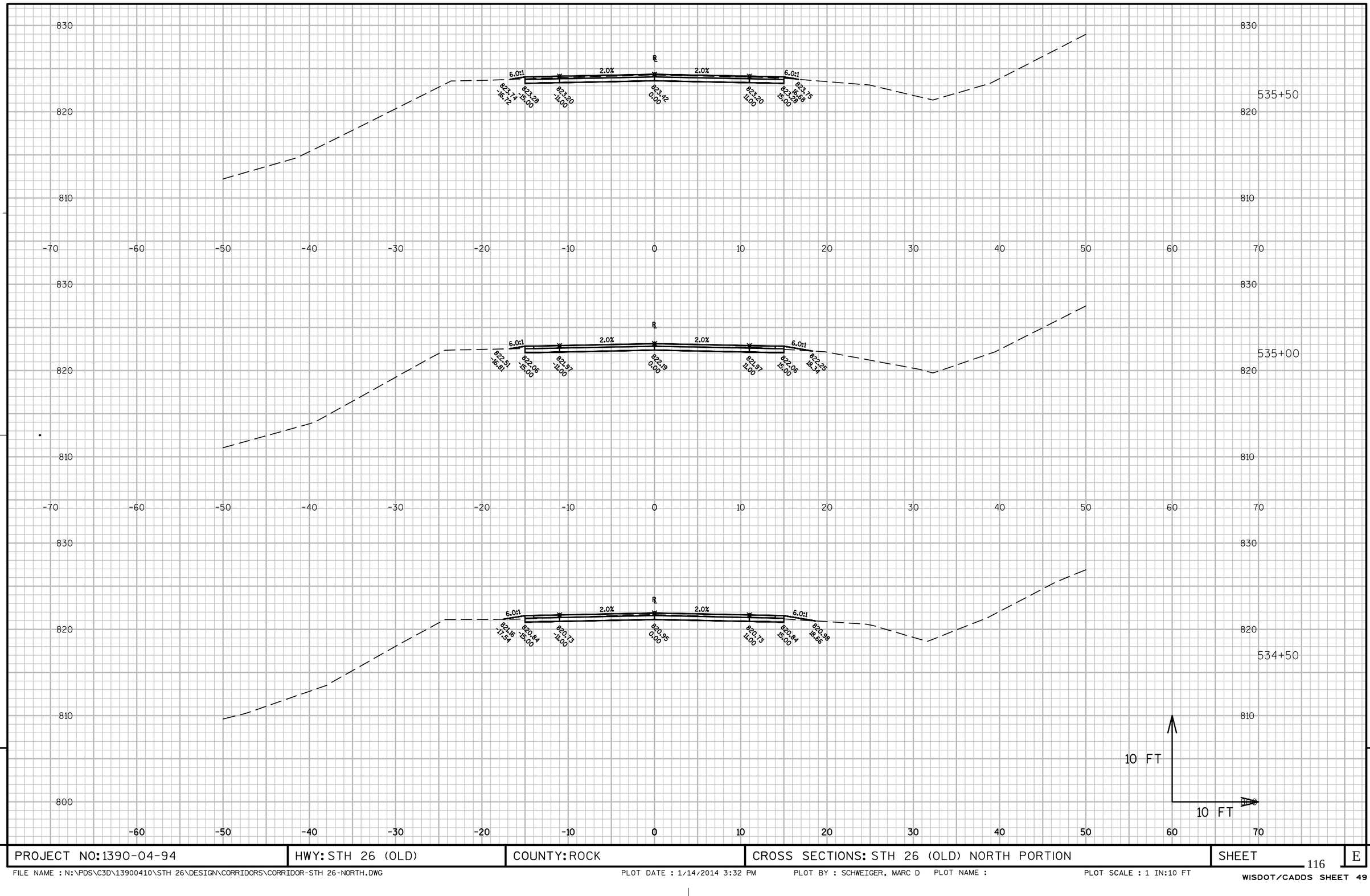
WISDOT/CADDS SHEET 49



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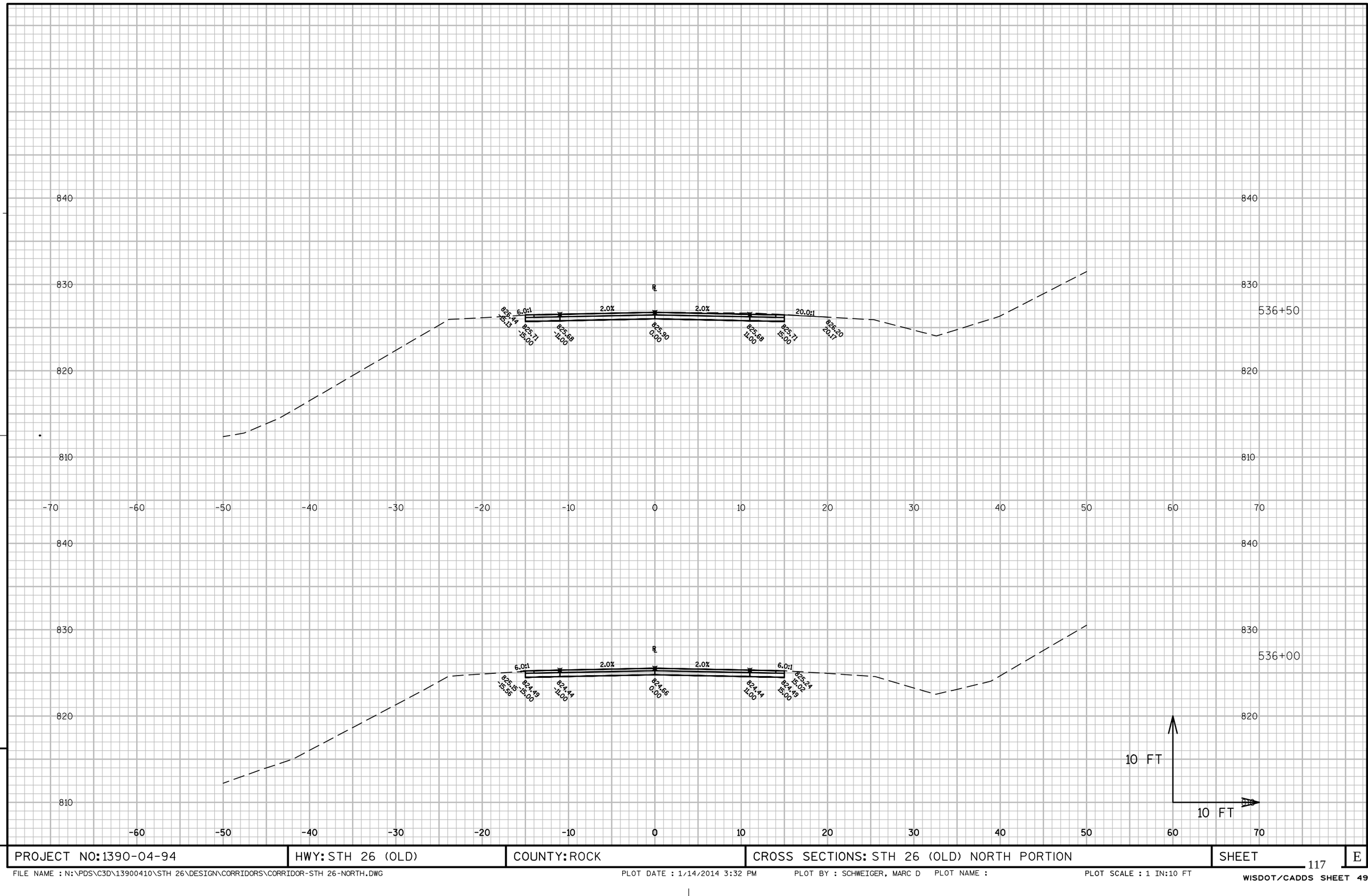

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PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) NORTH PORTION	SHEET	E

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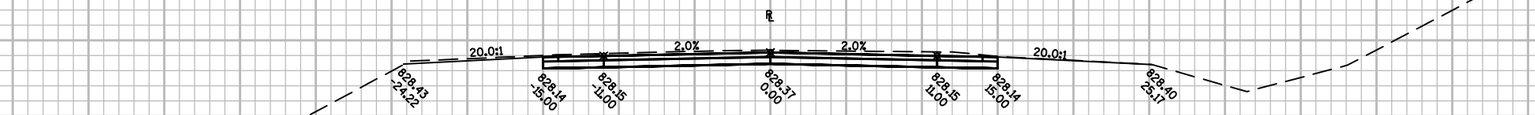
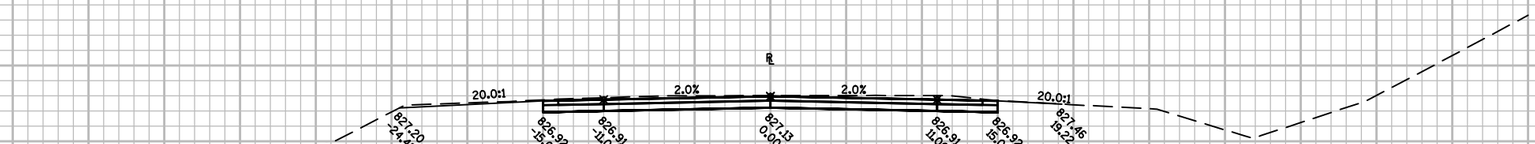


537+50



537+00

10 FT

10 FT

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) NORTH PORTION	SHEET	E

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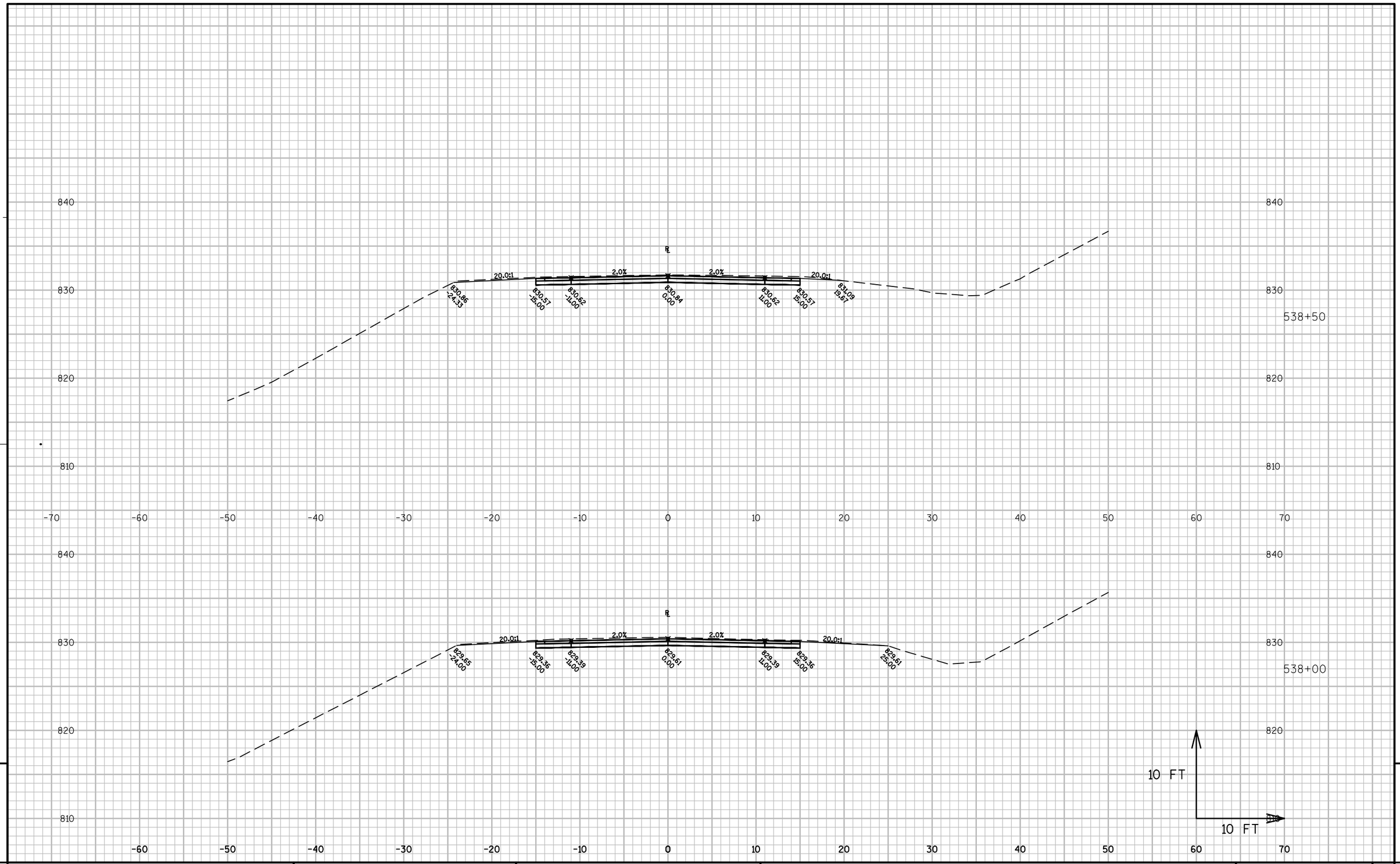
WISDOT/CADDS SHEET 49



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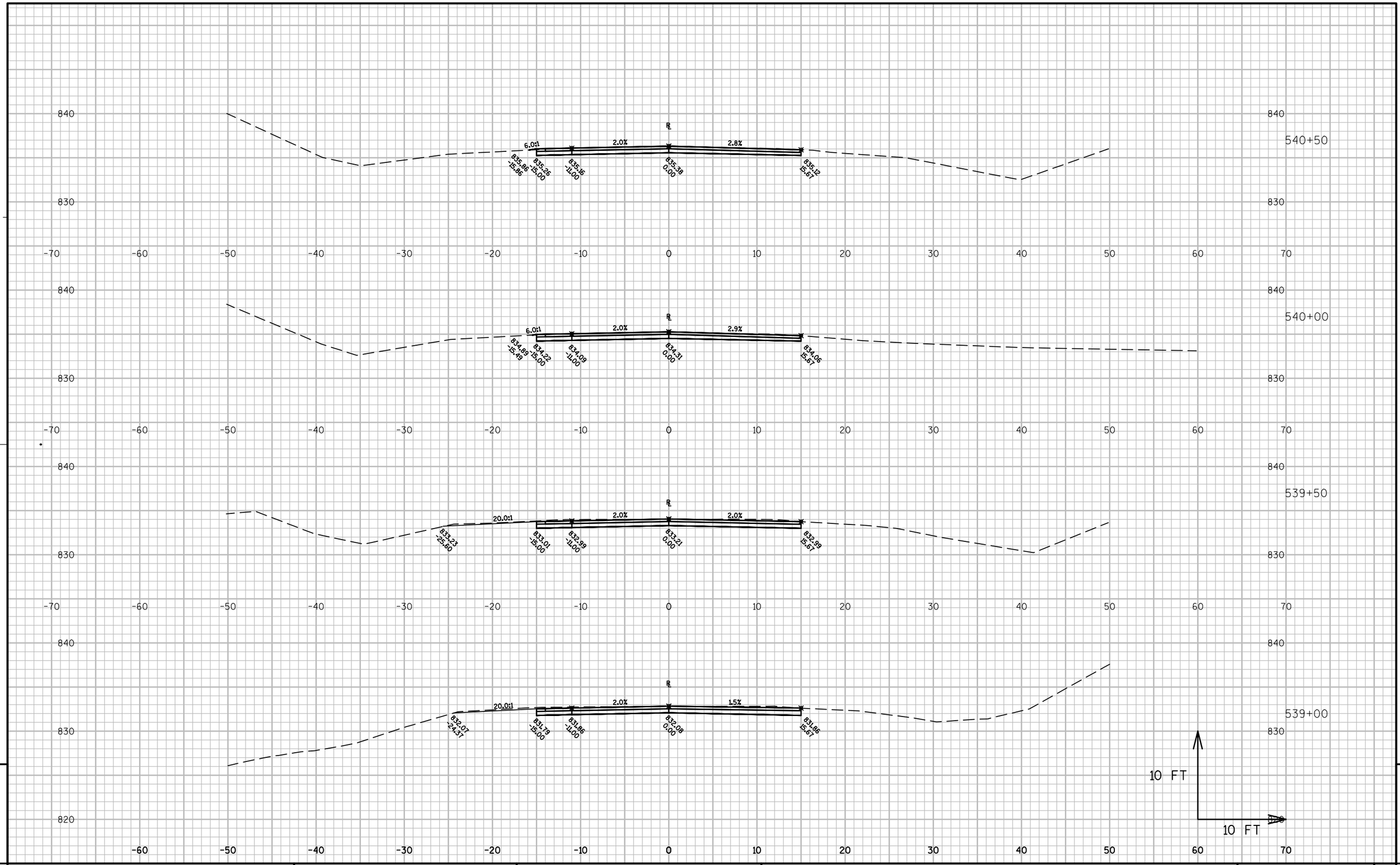
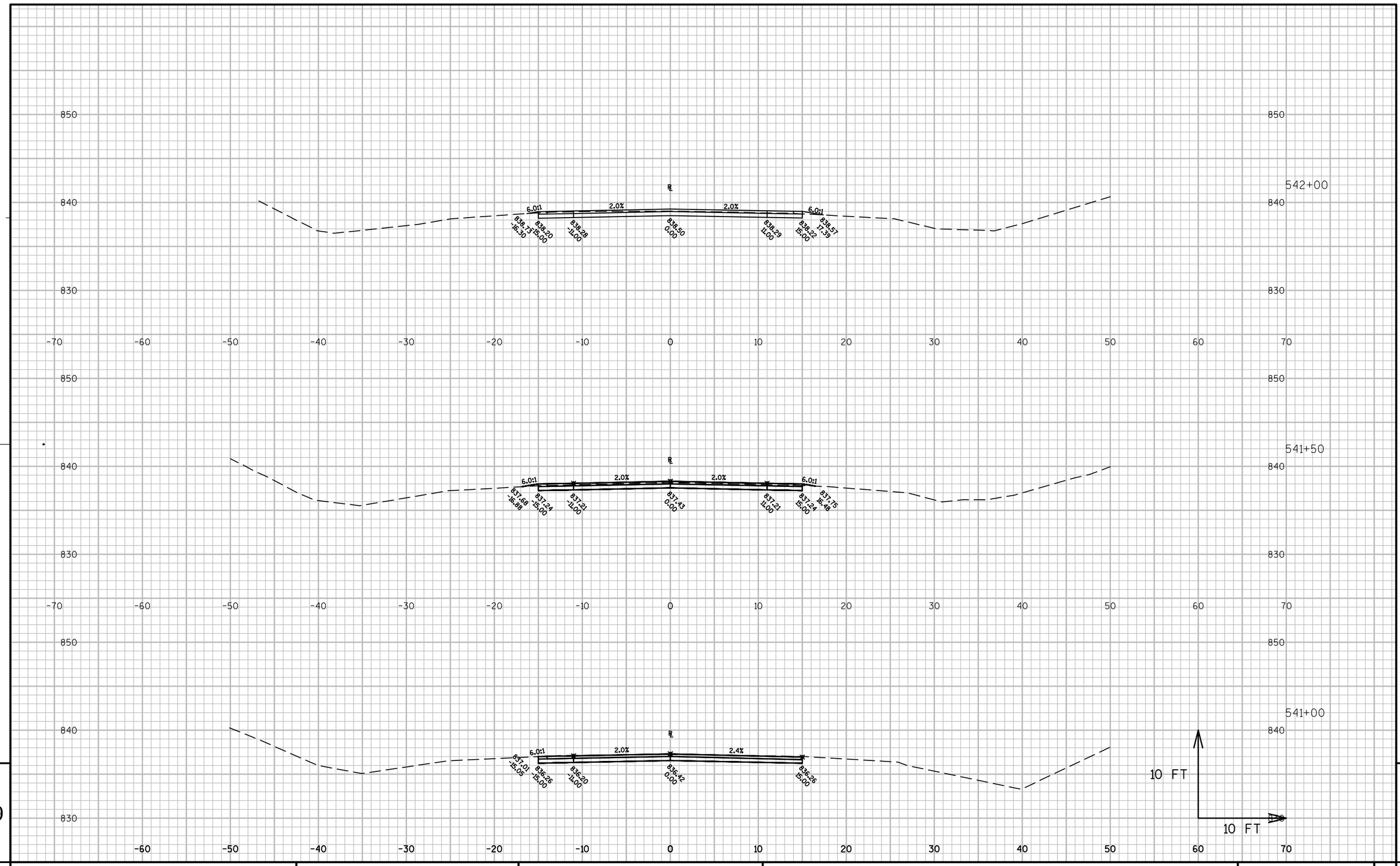
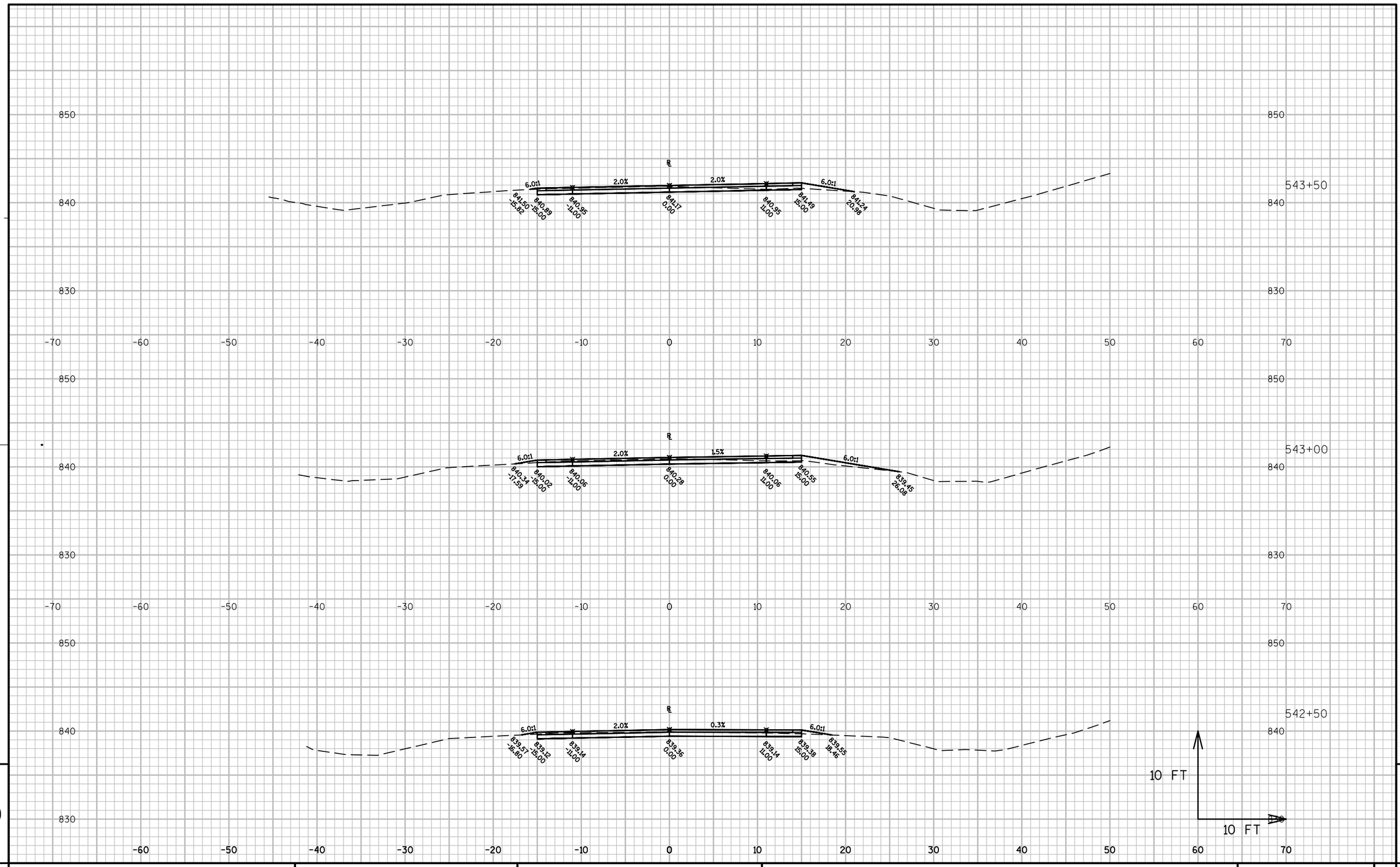


PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) NORTH PORTION	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\CORRIDORS\CORRIDOR-STH 26-NORTH.DWG PLOT DATE : 1/14/2014 3:32 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT

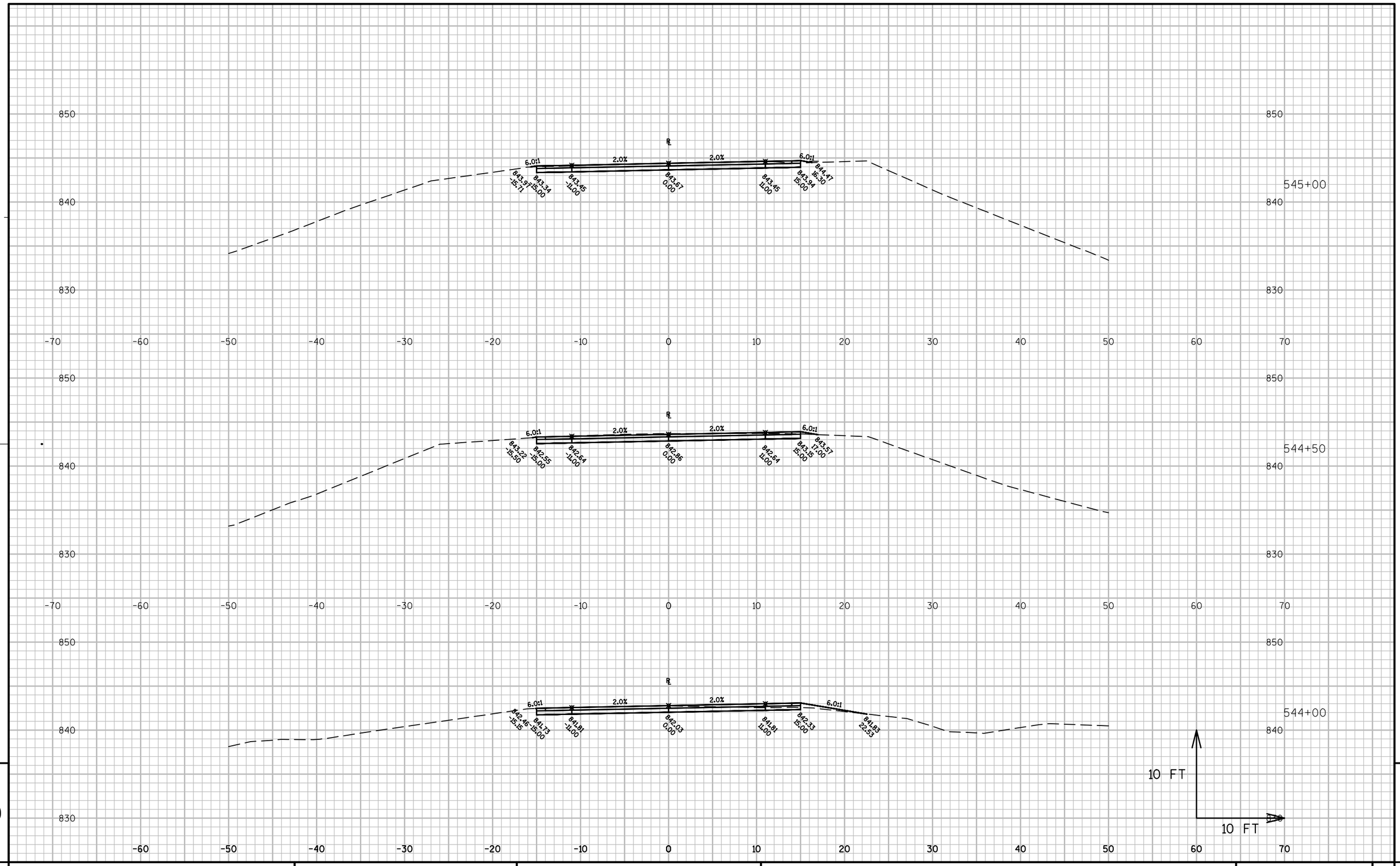


PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) NORTH PORTION	SHEET	E



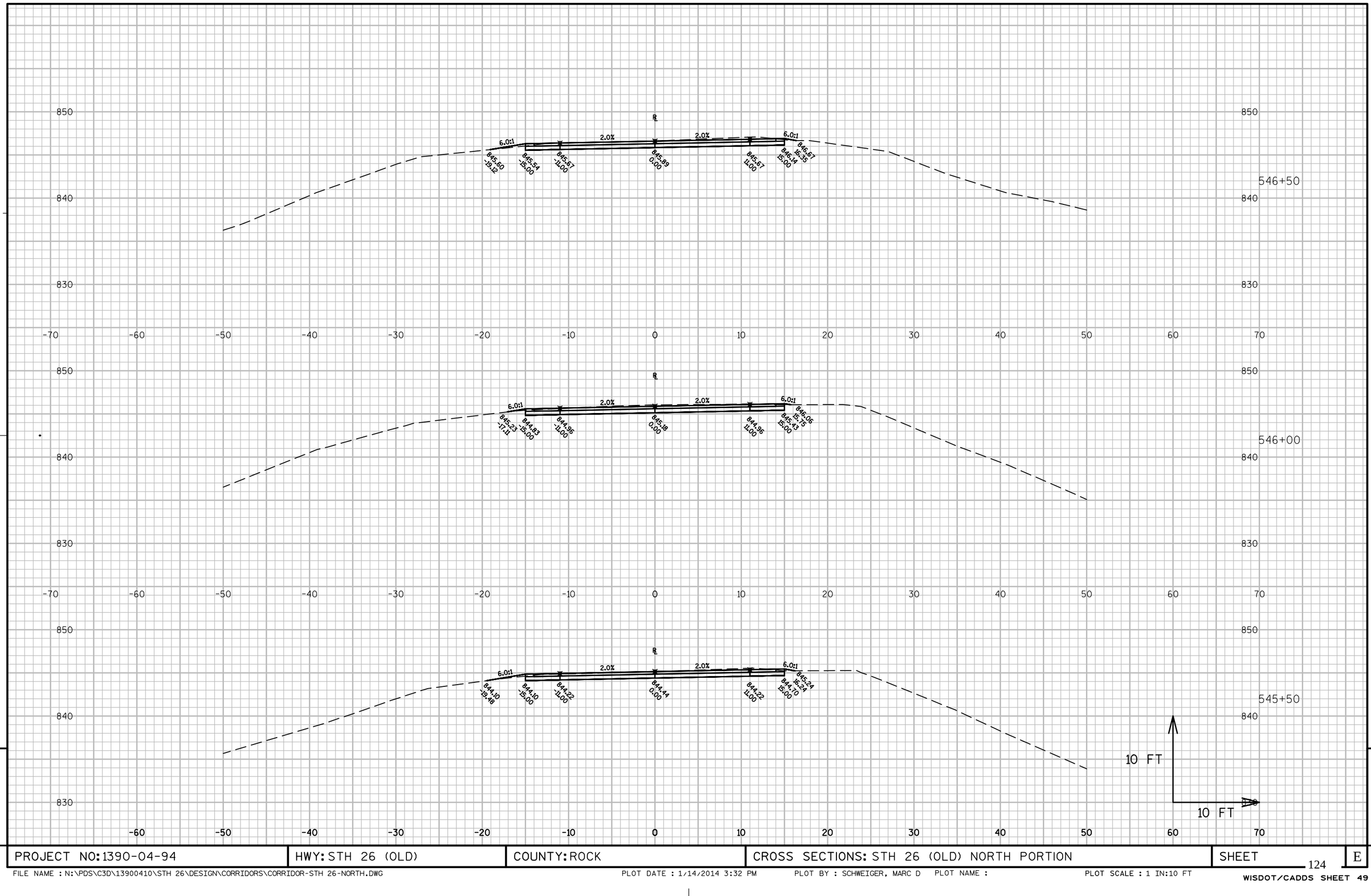
PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) NORTH PORTION	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\CORRIDORS\CORRIDOR-STH 26-NORTH.DWG PLOT DATE : 1/14/2014 3:32 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



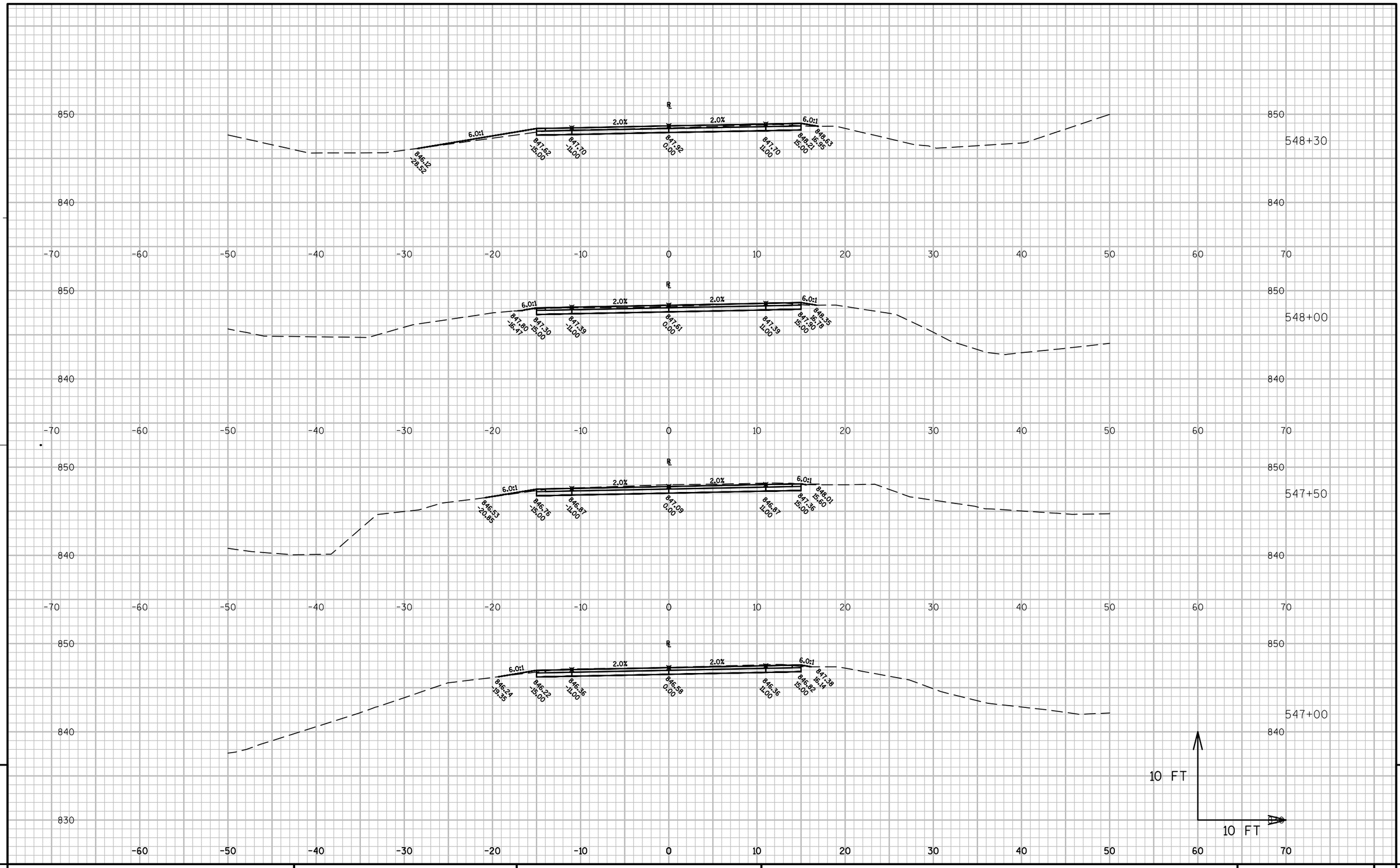
PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) NORTH PORTION	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\CORRIDORS\CORRIDOR-STH 26-NORTH.DWG PLOT DATE : 1/14/2014 3:32 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) NORTH PORTION	SHEET 124	E

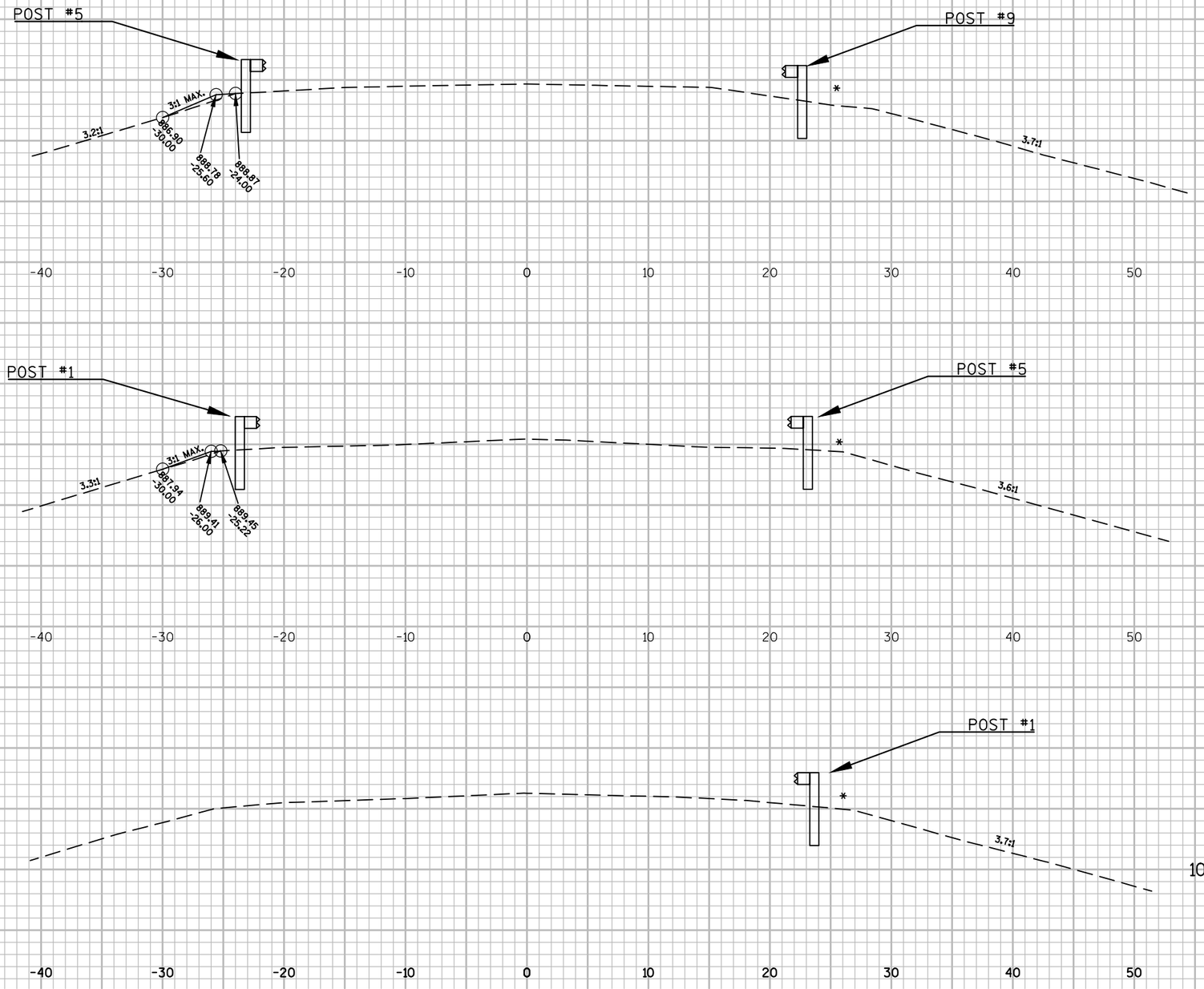
FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\CORRIDORS\CORRIDOR-STH 26-NORTH.DWG PLOT DATE : 1/14/2014 3:32 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: STH 26 (OLD) NORTH PORTION	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\CORRIDORS\CORRIDOR-STH 26-NORTH.DWG PLOT DATE : 1/14/2014 3:32 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT

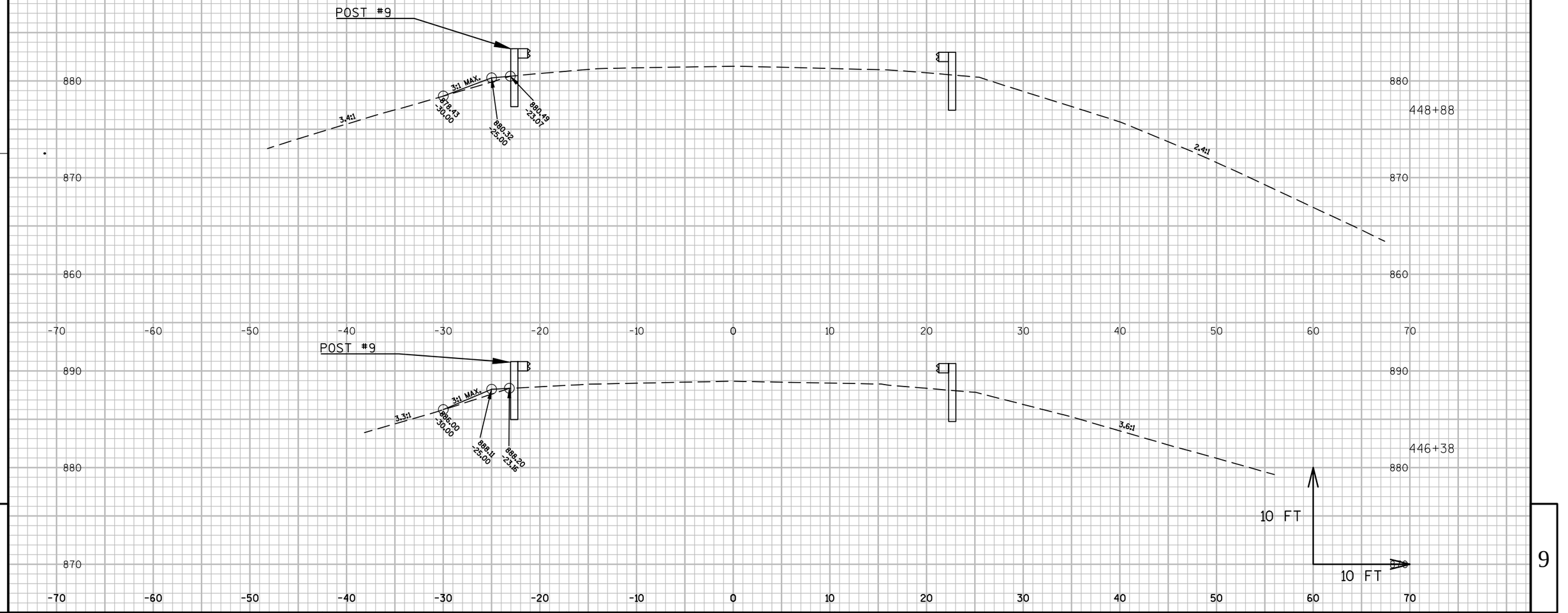
*NO GRADING ANTICIPATED IN THIS LOCATION.
USE EXISTING BASE AGGREGATE SHOULDER.



PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: BEAM GUARD	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\CONSTRUCTION DETAILS- BEAM GUARD.DWG PLOT DATE : 1/29/2014 12:46 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT

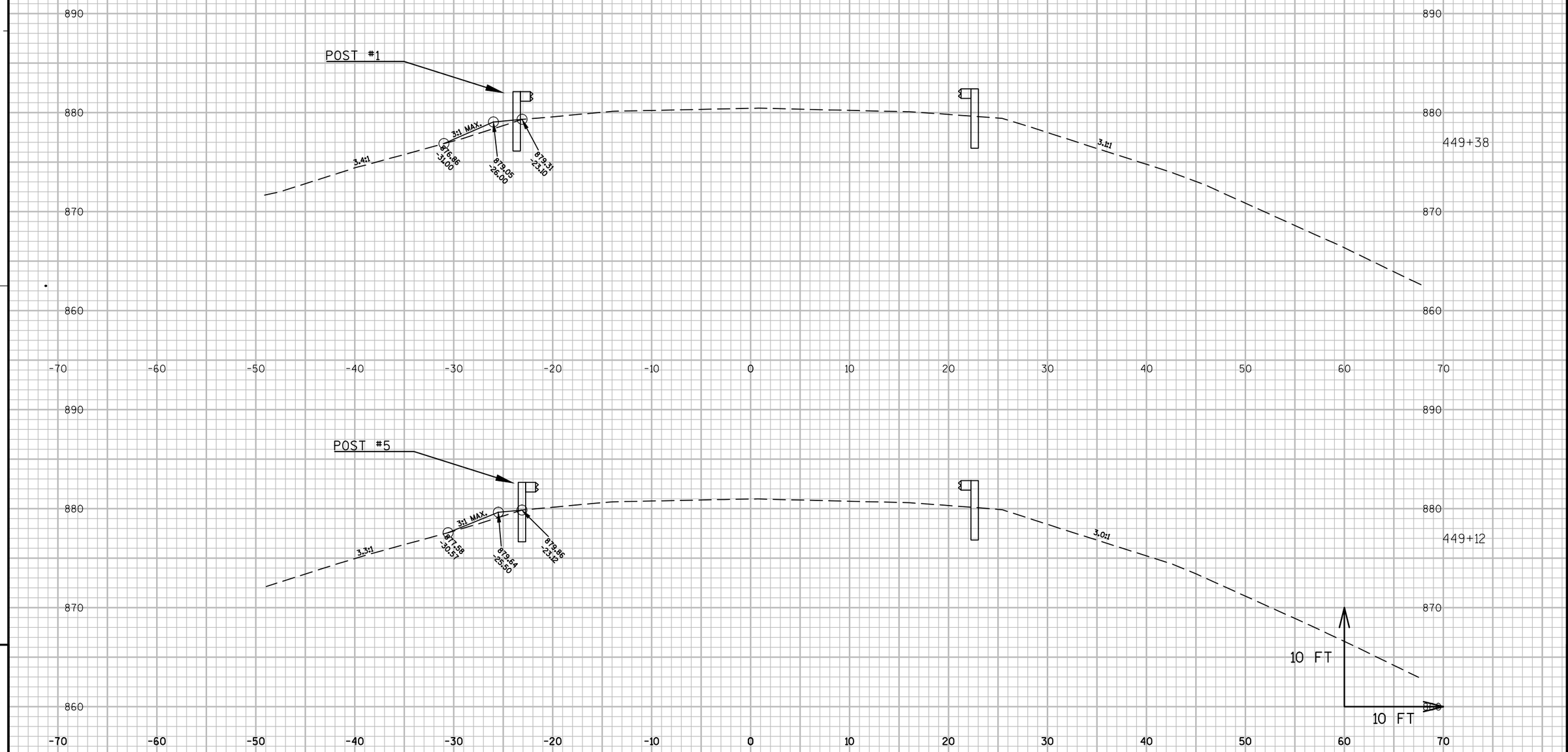
*NO GRADING ANTICIPATED IN THIS LOCATION.
USE EXISTING BASE AGGREGATE SHOULDER.



PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: BEAM GUARD	SHEET 127	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\CONSTRUCTION DETAILS- BEAM GUARD.DWG PLOT DATE : 1/29/2014 12:46 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT

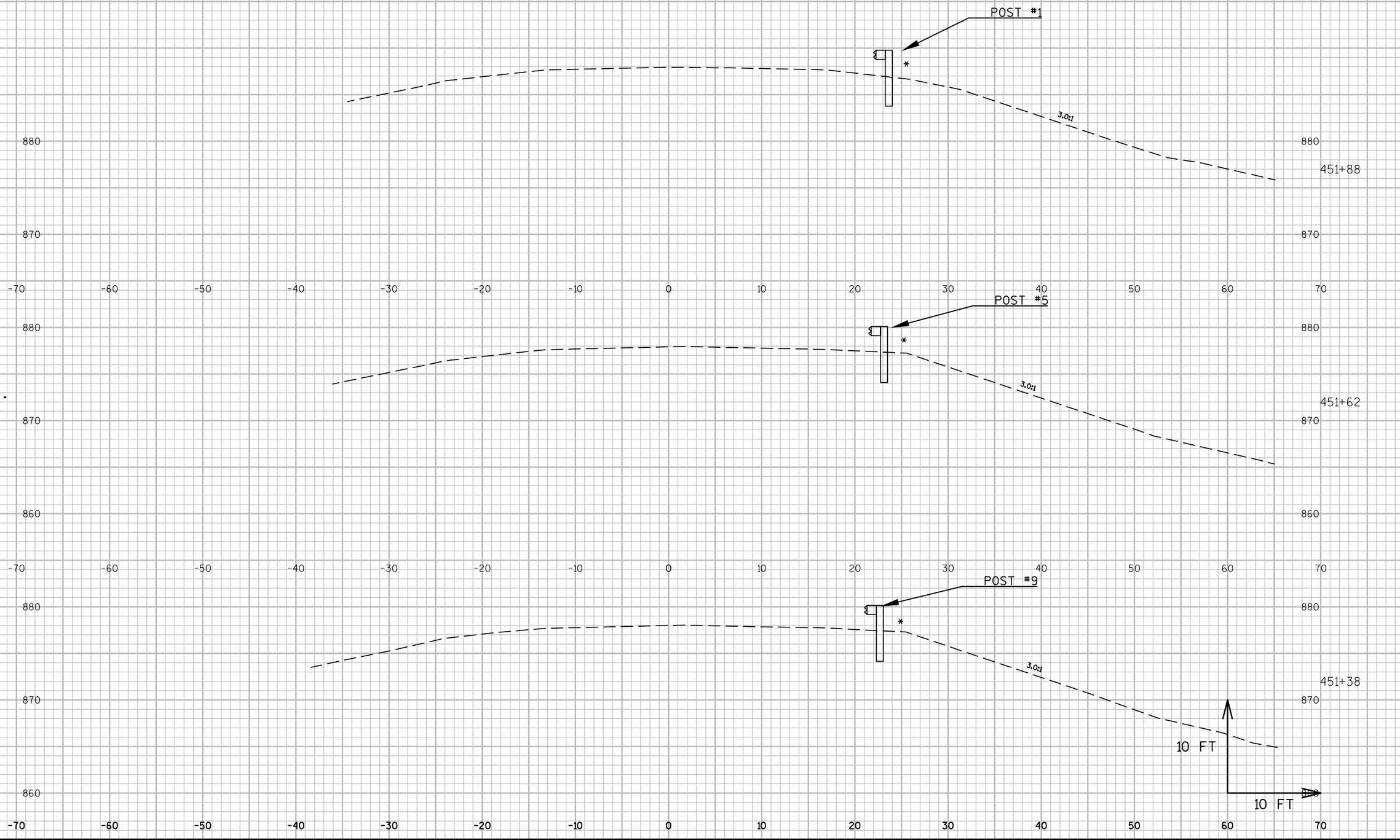
*NO GRADING ANTICIPATED IN THIS LOCATION.
USE EXISTING BASE AGGREGATE SHOULDER.



PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: BEAM GUARD	SHEET 128	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\CONSTRUCTION DETAILS- BEAM GUARD.DWG PLOT DATE : 1/29/2014 12:46 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT

*NO GRADING ANTICIPATED IN THIS LOCATION.
USE EXISTING BASE AGGREGATE SHOULDER.



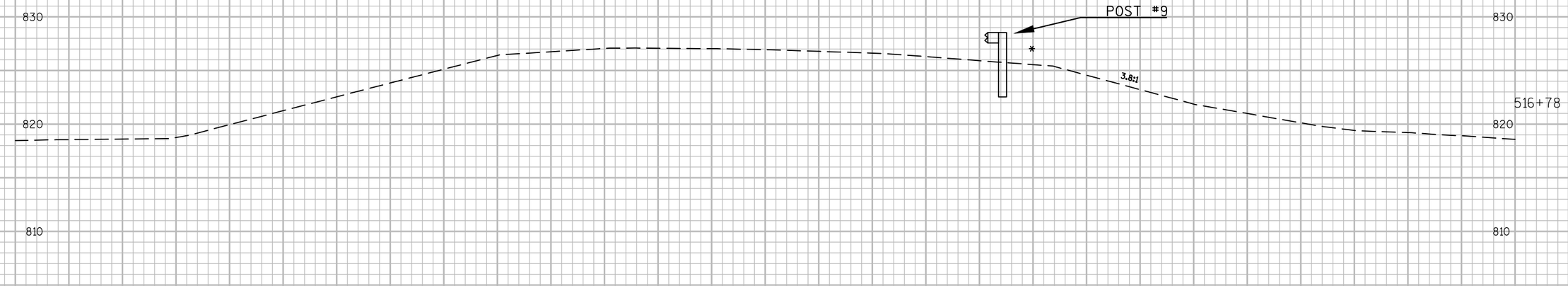
9

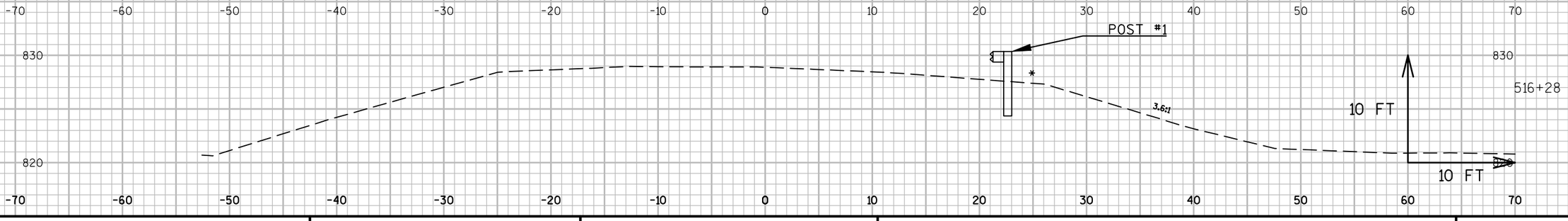
PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: BEAM GUARD	SHEET 129	E

9

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\CONSTRUCTION DETAILS- BEAM GUARD.DWG PLOT DATE : 1/29/2014 12:46 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT

*NO GRADING ANTICIPATED IN THIS LOCATION.
USE EXISTING BASE AGGREGATE SHOULDER.

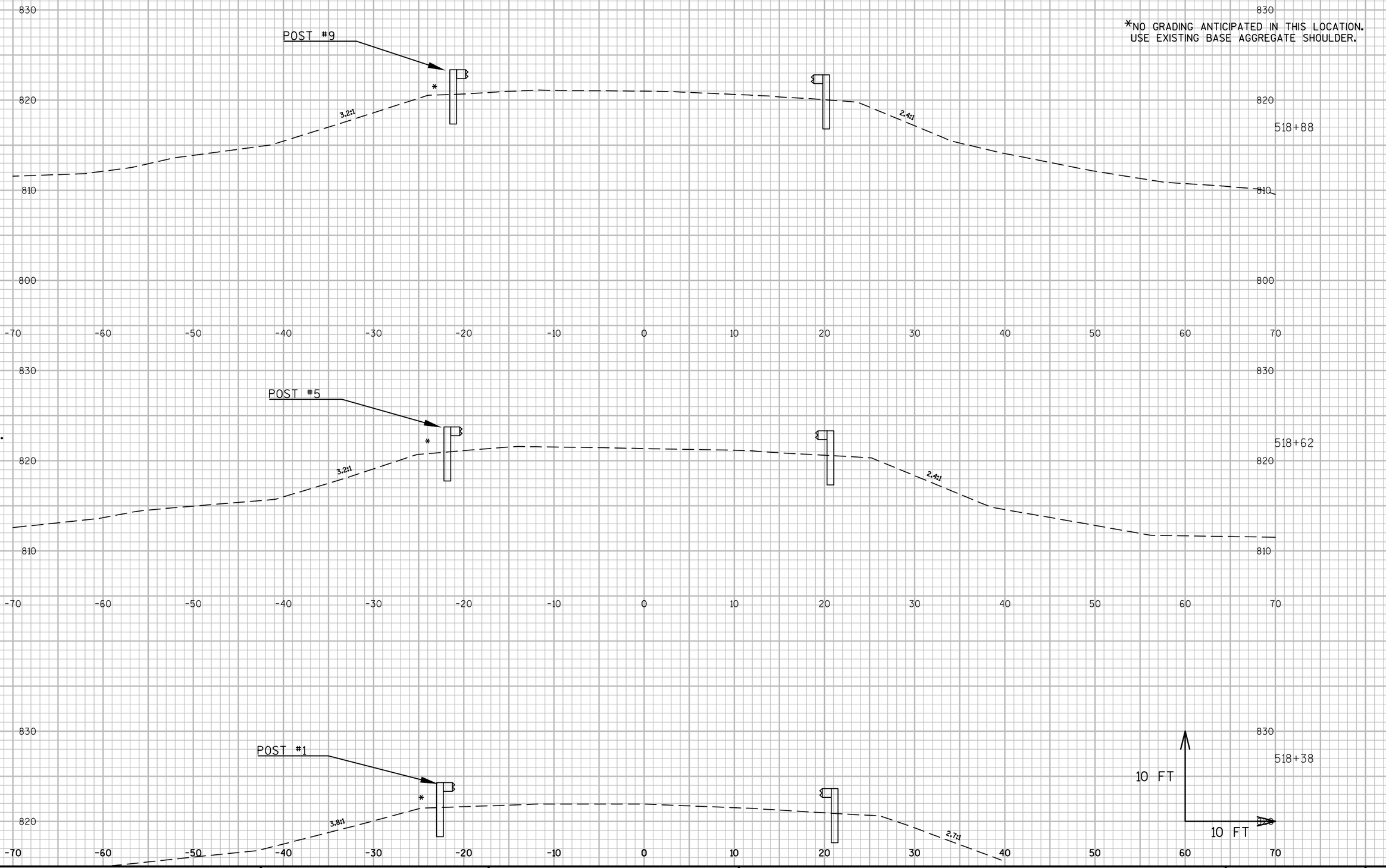




9 9

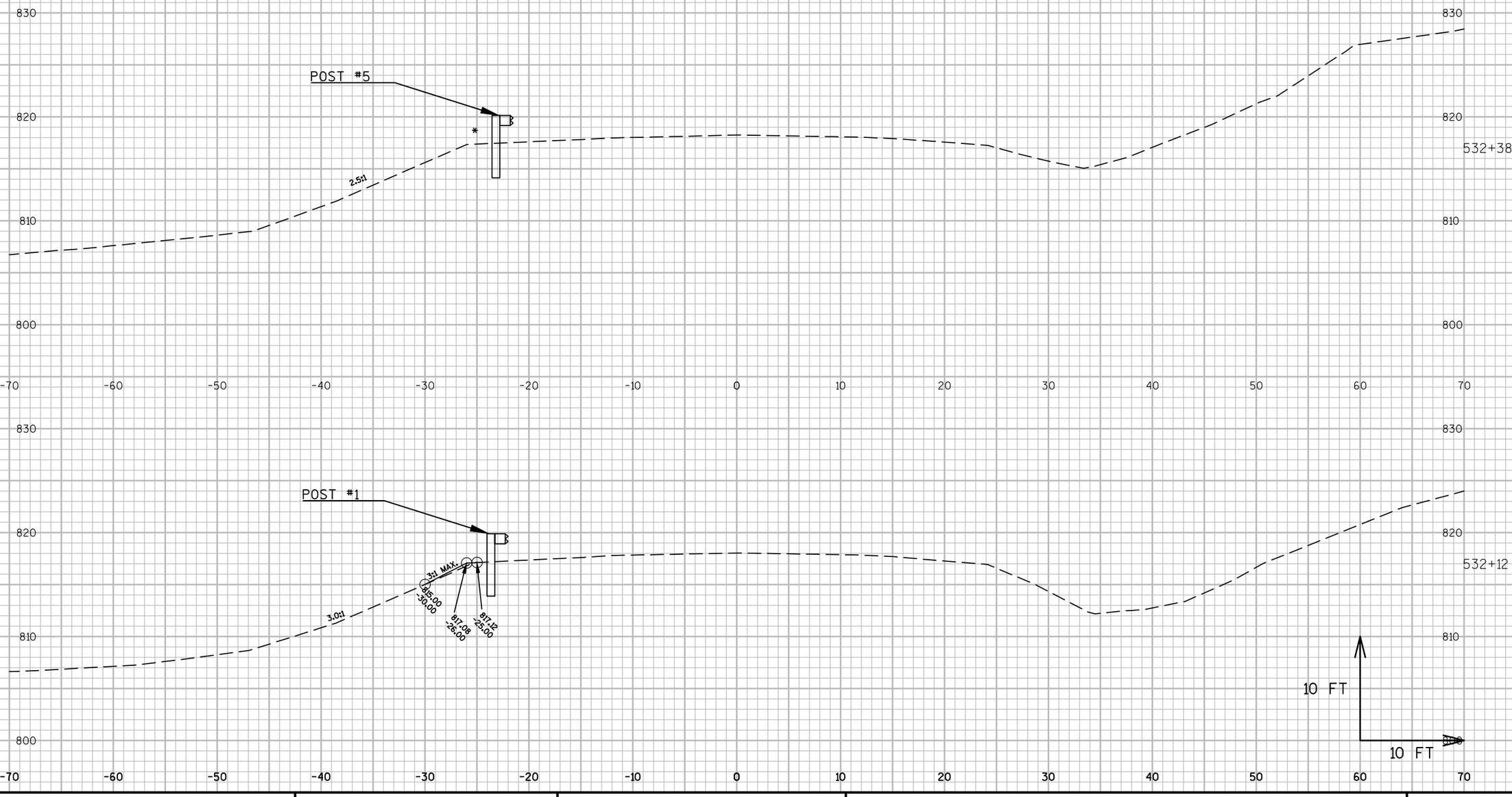
PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: BEAM GUARD	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\CONSTRUCTION DETAILS- BEAM GUARD.DWG PLOT DATE : 1/29/2014 12:46 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: BEAM GUARD	SHEET	E

*NO GRADING ANTICIPATED IN THIS LOCATION.
USE EXISTING BASE AGGREGATE SHOULDER.

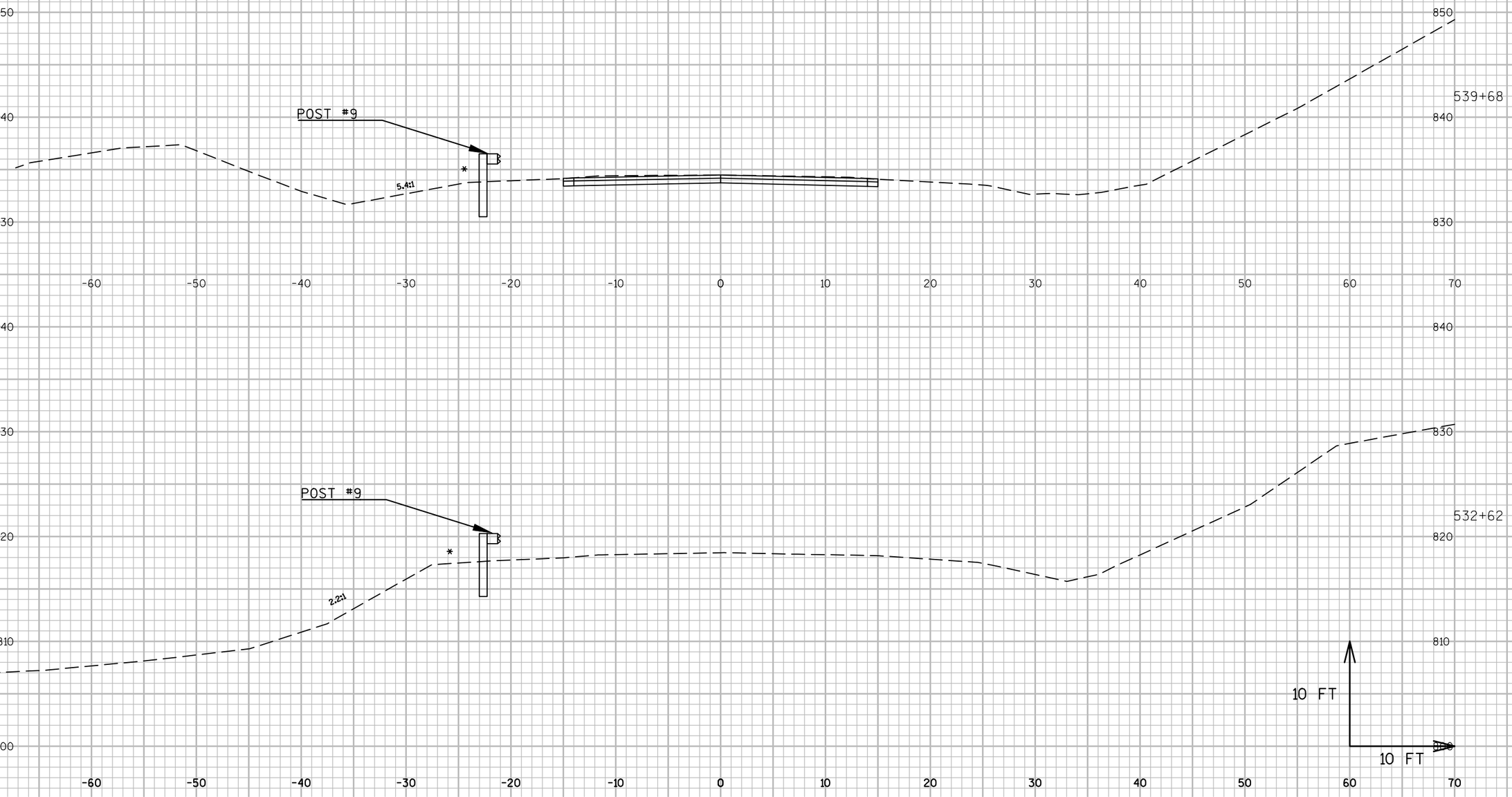


9 9

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: BEAM GUARD	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\CONSTRUCTION DETAILS- BEAM GUARD.DWG PLOT DATE : 1/29/2014 12:46 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT

*NO GRADING ANTICIPATED IN THIS LOCATION.
USE EXISTING BASE AGGREGATE SHOULDER.



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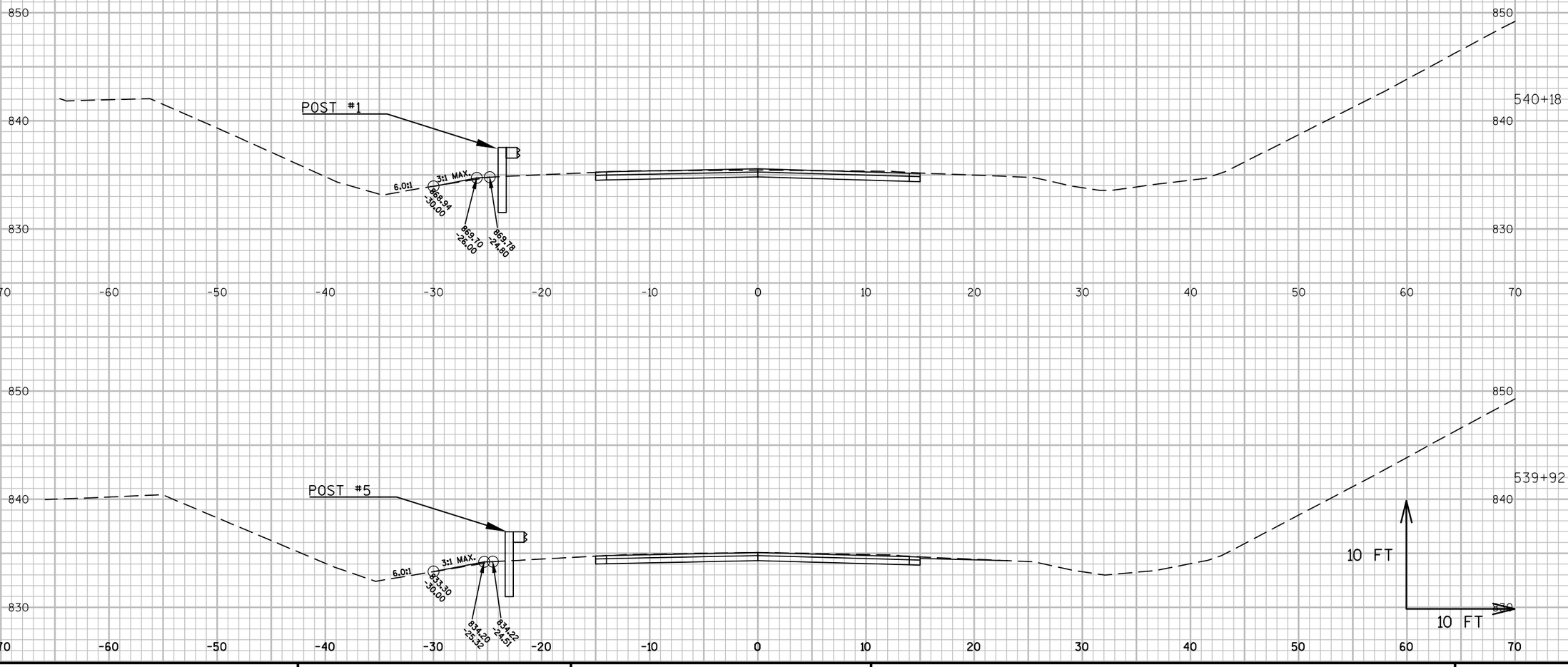
9

PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: BEAM GUARD	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\CONSTRUCTION DETAILS- BEAM GUARD.DWG PLOT DATE : 1/29/2014 12:46 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT

*NO GRADING ANTICIPATED IN THIS LOCATION.
USE EXISTING BASE AGGREGATE SHOULDER.



PROJECT NO: 1390-04-94	HWY: STH 26 (OLD)	COUNTY: ROCK	CROSS SECTIONS: BEAM GUARD	SHEET	E

FILE NAME : N:\PDS\C3D\13900410\STH 26\DESIGN\ALIPROFS\CONSTRUCTION DETAILS- BEAM GUARD.DWG PLOT DATE : 1/29/2014 12:46 PM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1 IN:10 FT

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

MAD JULY 2014

PROJECT ID: 1390-04-95

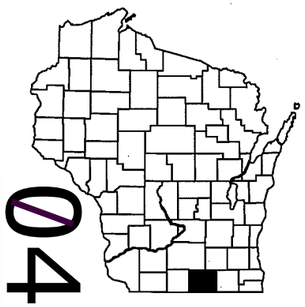
WITH: 1390-04-94

COUNTY: ROCK

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 = 56



04

N

DESIGN DESIGNATION

A.A.D.T.	(2014)	= 1175
A.A.D.T.	(2034)	= 1500
D.H.V.		= 2.8%
D.D.		= 59/41
T.		= 3.3%
DESIGN SPEED		= 50 MPH
ESALS		= 146,000

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

JANESVILLE - FORT ATKINSON

S. JANESVILLE STREET TO STH 59

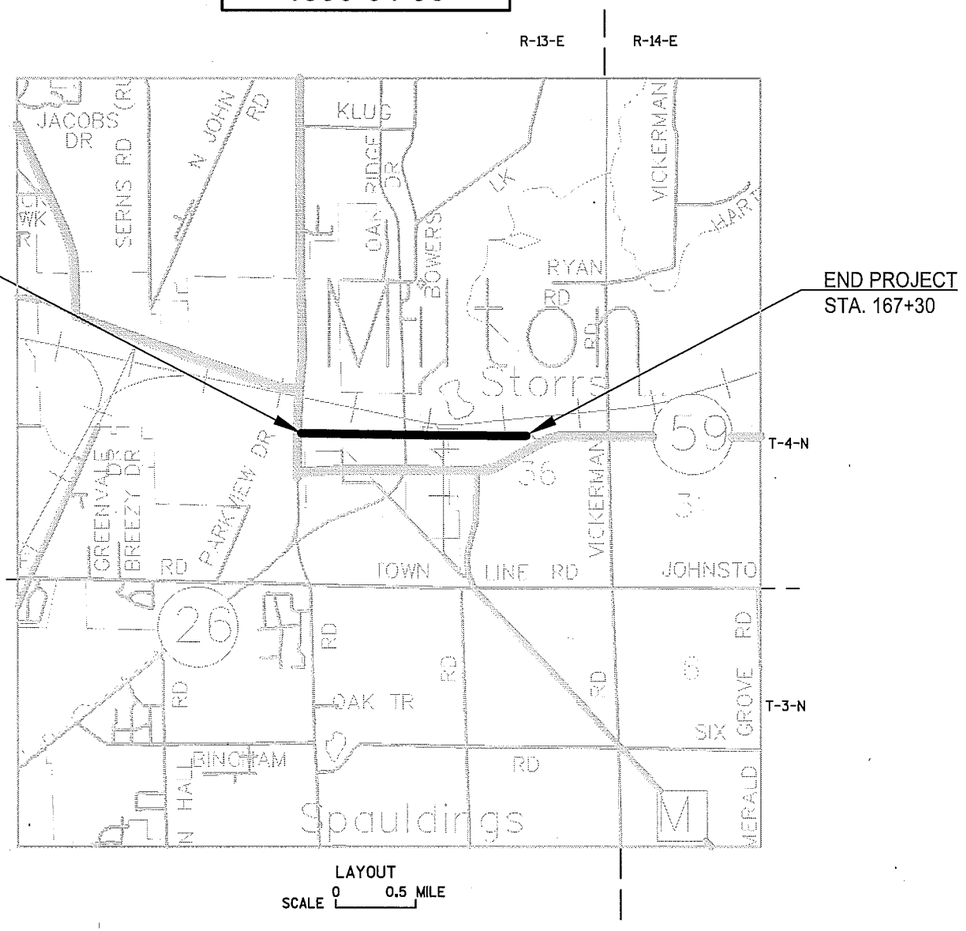
STH 59 (OLD)
ROCK COUNTY

STATE PROJECT NUMBER
1390-04-95

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1390-04-95	———	—

BEGIN PROJECT
STA. 87+55
Y=301,905.25
X=516,339.60

END PROJECT
STA. 167+30



LAYOUT
SCALE 0 0.5 MILE

TOTAL NET LENGTH OF CENTERLINE = 1.510 MILES

ORIGINAL PLANS PREPARED BY

PEOPLE WHO CARE,
CREATING QUALITY TRANSPORTATION
TODAY AND TOMORROW

WISDOT SOUTHWEST REGION – MADISON OFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	-
Designer	MARC SCHWEIGER
Project Manager	JEREMY HALL
Regional Examiner	-
Regional Supervisor	TERI SCHOPP

APPROVED FOR THE DEPARTMENT
DATE: 1/31/14 Teri Schopp
(Signature)

E

FILE NAME : N:\PDS\C3D\13900410\STH 59\DESIGN\TITLE PAGE, OVERVIEW, GEN NOTES, TRAFFIC CON\13900495-010101_TI.DWG PLOT DATE : 1/29/2014 8:24 AM PLOT BY : SCHWEIGER, MARC D PLOT NAME :

WISDOT/CADDS SHEET 10

GENERAL NOTES

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

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

APPLY TACK COAT TO MILLED SURFACES. THE RATE OF APPLICATION IS 0.025 GALLONS PER SQUARE YARD OR AS DIRECTED BY THE ENGINEER.

THE LOCATION OF STOP LINES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, ALL SIGNS RELATING TO THIS OPERATION SHALL BE COVERED OR REMOVED AND FACILITY RESTORED TO NORMAL OPERATIONS.

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

PAVING LIMITS AT INTERSECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER AND SHALL HAVE BUTT JOINTS.

EXISTING SHOULDER AGGREGATE SHALL BE INCORPORATED INTO THE NEW SHOULDERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD.

EROSION CONTROL ITEMS IN THE MISC. QUAN. ARE SUGGESTED. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. MAINTAIN EROSION CONTROL ITEMS UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. PROTECT WETLANDS AND OTHER WATERWAYS THAT ARE PRESENT WITHIN THE PROJECT LIMITS.

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO "DIGGERS HOTLINE" AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

IF UTILITY CONFLICTS OCCUR DURING CONSTRUCTION, ADJUSTMENTS WILL BE COORDINATED BY CONTRACTOR. IF THERE ARE CONFLICTS WITH SIGNS OR OTHER WORK UNDER PROJECT, THE CONTRACTOR WILL WORK AROUND THE UTILITY FACILITIES.

CONTRACTOR WILL NOT PLACE BORROW/WASTE MATERIAL OR ANY PERSONNEL, EQUIPMENT, AND/OR SUPPLIES IN THE ENVIRONMENTALLY SENSITIVE AREAS SHOWN ON THE PLANS.

REMOVE AND REPLACE ALL SIGNS AND POSTS WITH NEW SIGNS AND POSTS IN THE SAME GENERAL LOCATION UNLESS OTHERWISE NOTED ON THE PLANS.

HMA PAVEMENT SHALL BE PLACED IN ONE LAYER FOR A TOTAL DEPTH OF 2".

DNR/RAILROAD CONTACT

Eric Heggelund
3911 Fish Hatchery Road
Fitchburg, WI 53711
(608)-275-3301
Eric.Heggelund@wisconsin.gov

Wisconsin and Southern Railroad
Ben Meighan
1890 East Johnson Street
Madison, WI 53704
608-243-9192 EXT 201
FAX 608-243-9225
bmeighan@wsorrailroad.com

UTILITY/MUNICIPALITY

Alliant Energy - Electric/Gas/Petroleum
Jason Hogan
Suite 1000
4902 N. Biltmore Lane
Madison, WI 53718
(608) 458-4871
jasonhogan@alliantenergy.com

Century Link - Communication Line
Dennis Haag
144 N. Pearl St.
P.O. Box 70
Berlin, WI 54923
(920) 361-0040
dennis.haag@centurytel.com

Charter Communications - Communications Line
Brandon Storm
2701 Daniels St.
Madison, WI 53718
(608) 274-3822
brandon.storm@chartercom.com

City of Milton - Water/Sewer
David Sauer
430 E. High St., Ste 3
Milton, WI 53563
(608) 868-6900
cityofmilton@charter.net

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

ROCK COUNTY | JEFFERSON COUNTY

N

BEGIN PROJECT (1390-04-95)
STA 87+55

TIED WITH PROJECT
1390-04-94
STH 26 (OLD)

END PROJECT (1390-04-95)
STA 167+30

NEW STH 26 BYPASS
BUILT IN 2012-2013
(1390-04-78/79)

Milton

Lake Koshkonong

Clear Creek

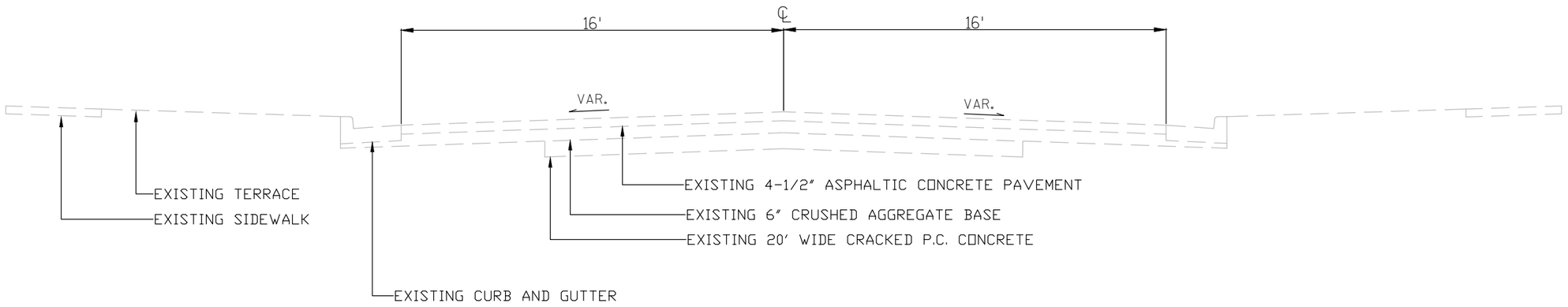
Grass L.

SCALE, FEET 0 2000 4000

ROCK COUNTY | JEFFERSON COUNTY

PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	PROJECT OVERVIEW	SHEET 3	E

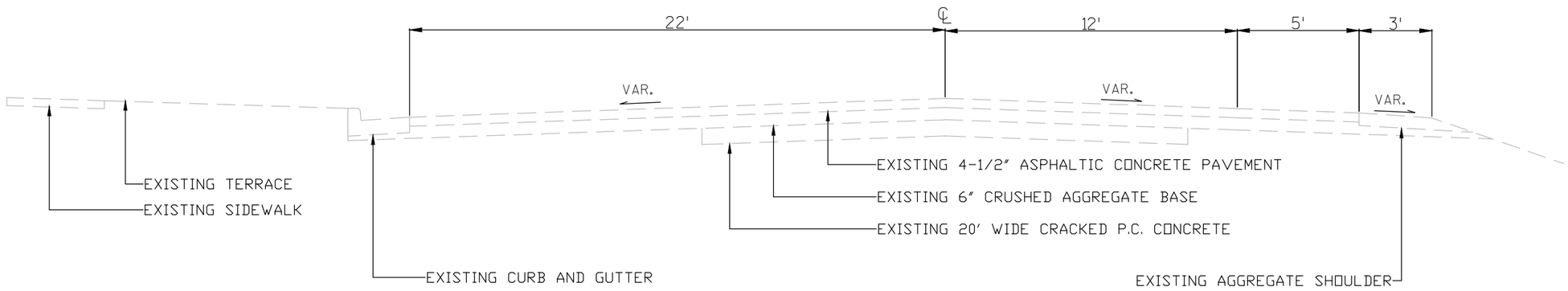
FILE NAME : N\PDS\C3D\13900410\STH 59\DESIGN\TITLE PAGE, OVERVIEW, GEN NOTES, TRAFFIC CON\GENERAL NOTES STH 59.DWG PLOT DATE : 12/17/2013 9:59 AM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE :



TYPICAL EXISTING SECTION

STH 59 (OLD)

STA. 87+55 - STA. 99+10

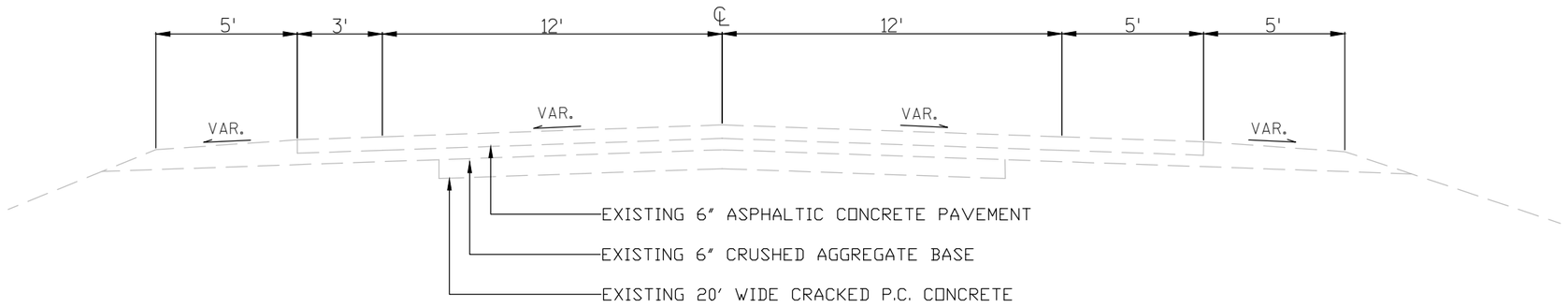


TYPICAL EXISTING SECTION

STH 59 (OLD)

STA. 99+10 - STA. 104+00

PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 4	E



TYPICAL EXISTING SECTION

STH 59 (OLD)

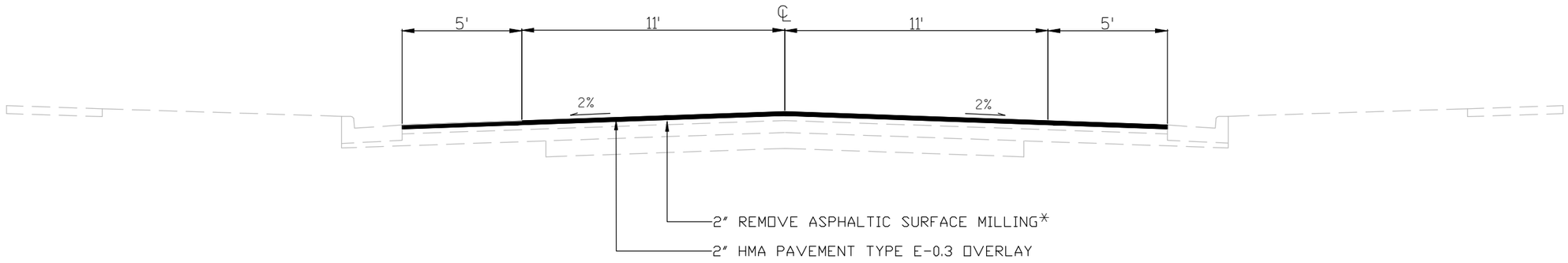
STA. 104+00 - STA. 167+30

PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : N:\PDS\C3D\13900410\STH 59\DESIGN\ALIPROFS\STH 59 13900410 020301_TS.DWG PLOT DATE : 1/28/2014 8:54 AM PLOT BY : SCHWEIGER, MARC D PLOT NAME : _____ PLOT SCALE : 1 INCH = 5 FEET

WISDOT/CADDS SHEET 5

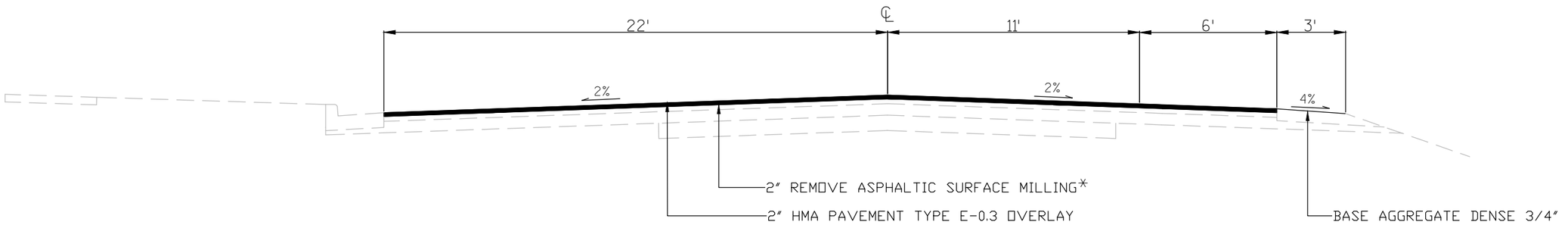
2



TYPICAL FINISHED SECTION

STH 59 (OLD)

STA. 87+55 - STA. 99+10



TYPICAL FINISHED SECTION

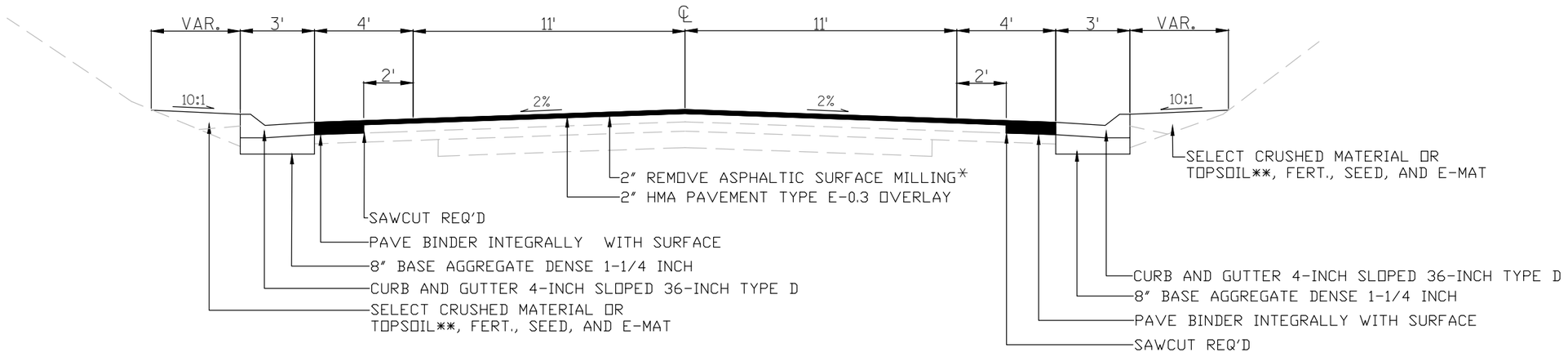
STH 59 (OLD)

STA. 99+10 - STA. 104+00

*2" MILL DEPTH AT CURB AND GUTTER/SHOULDER AND A 2% CROWNED CROSS SLOPE TO CENTERLINE WHERE SLOPE CORRECTION IS NEEDED.

PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 6	E

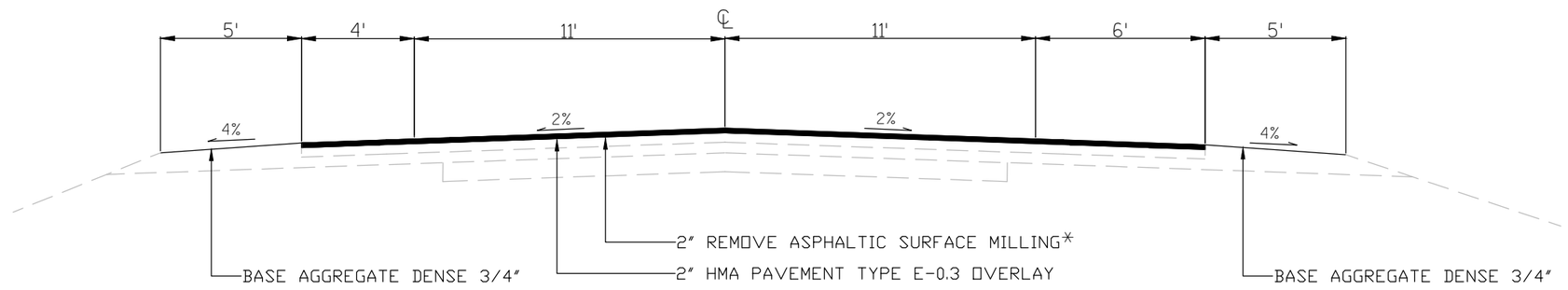
FILE NAME : N:\PDS\C3D\13900410\STH 59\DESIGN\ALIPROFS\STH 59 13900410 020301_TS.DWG PLOT DATE : 1/28/2014 8:54 AM PLOT BY : SCHWEIGER, MARC D PLOT NAME : ---------- PLOT SCALE : 1 INCH = 5 FEET
WISDOT/CADDS SHEET 5



TYPICAL FINISHED SECTION

STH 59 (OLD)

STA. 120+87 - STA. 123+12



TYPICAL FINISHED SECTION

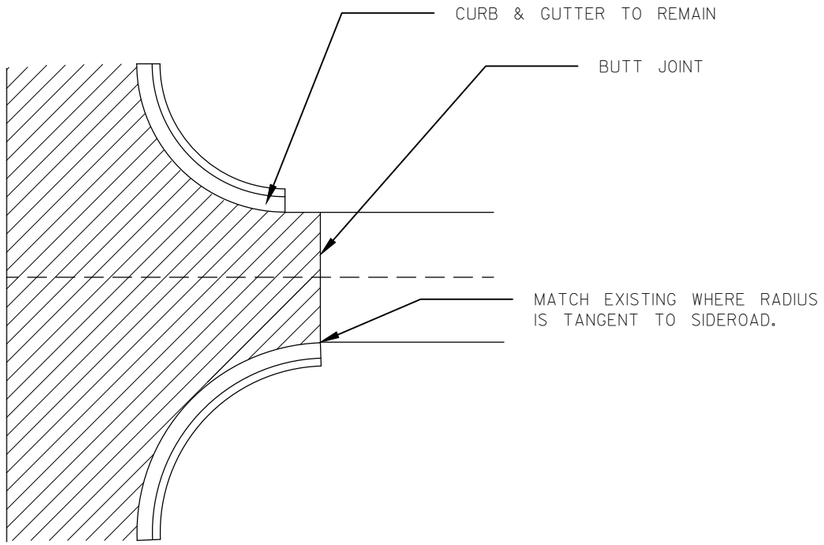
STH 59 (OLD)

STA. 104+00 - STA. 120+87
STA. 123+12 - STA. 167+30

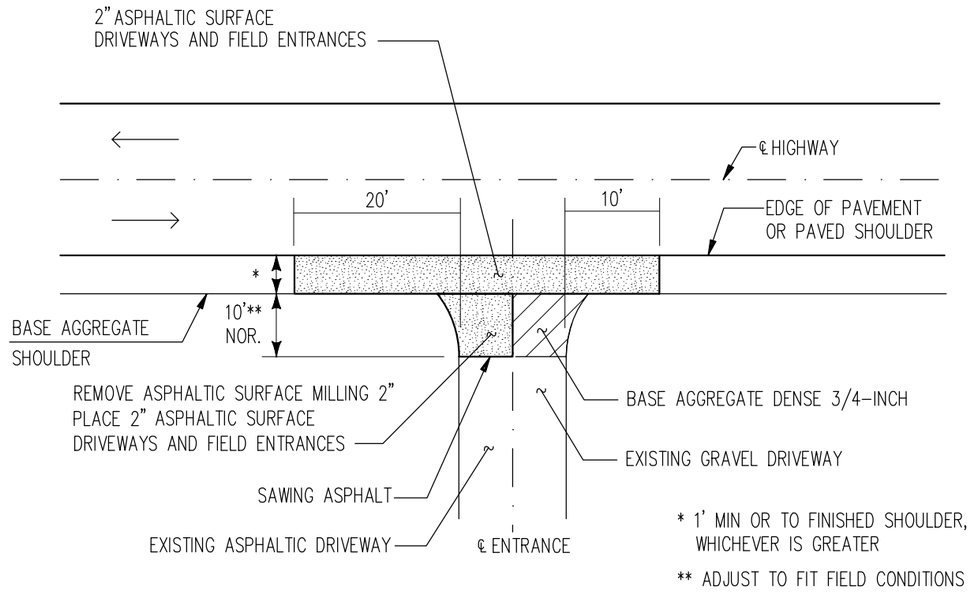
*2" MILL DEPTH AT CURB AND GUTTER/SHOULDER AND A 2% CROWNED CROSS SLOPE TO CENTERLINE WHERE SLOPE CORRECTION IS NEEDED.

**TOPSOIL WILL BE USED FOR THE ENTIRE DEPTH OF FILL BEHIND THE CURB. DEPTHS GREATER THAN 4" ARE INCIDENTAL TO THE ITEM.

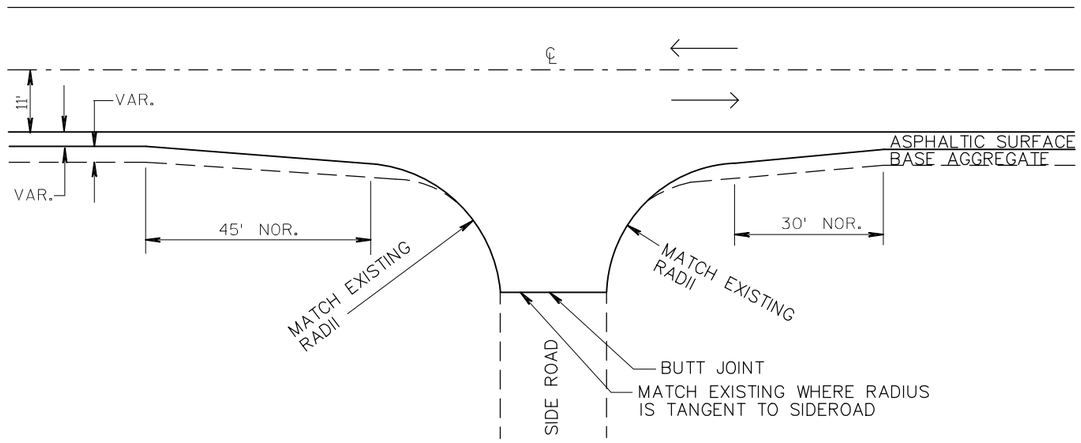
PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 7	E



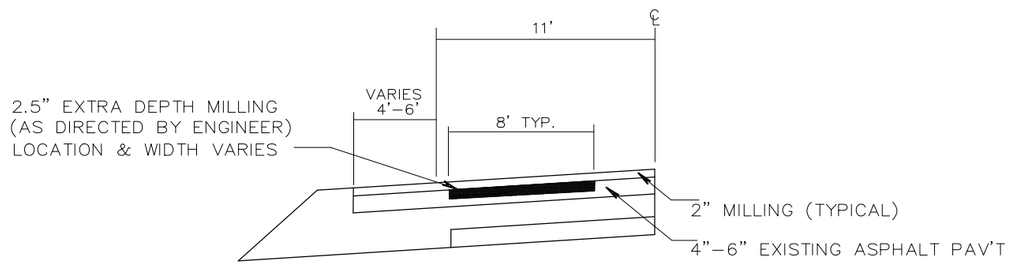
SIDE ROAD DETAIL



RURAL DRIVEWAY DETAIL



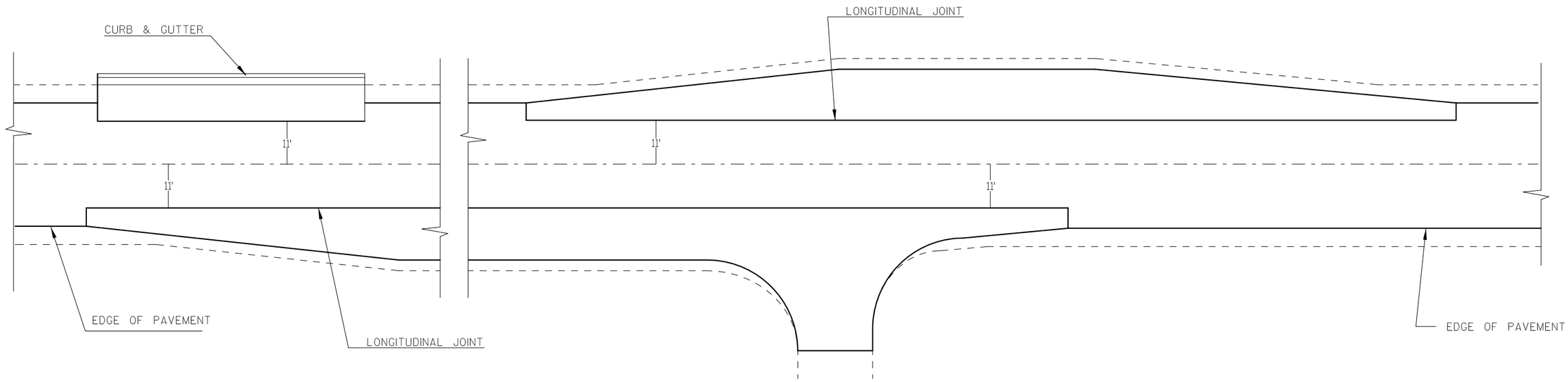
SIDE ROAD DETAIL, SPECIAL
(ASPHALTIC SHOULDERS)



EXTRA DEPTH MILL AND FILL IN SPOT LOCATIONS

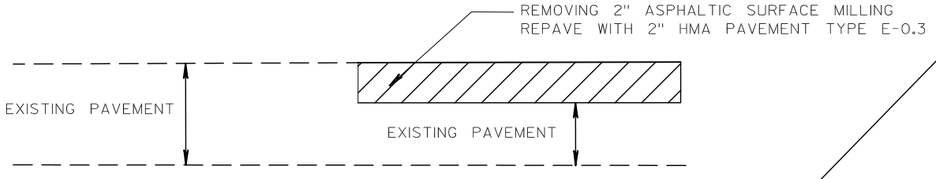
PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	CONSTRUCTION DETAILS	SHEET 8	E

2

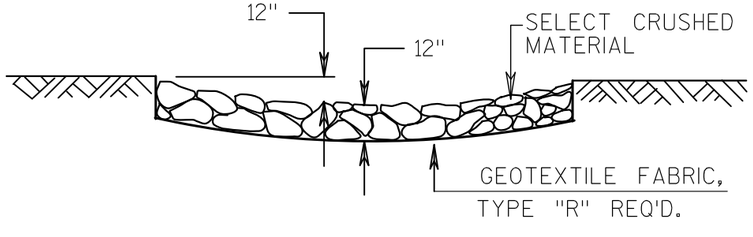


HMA LONGITUDINAL JOINT DETAIL *

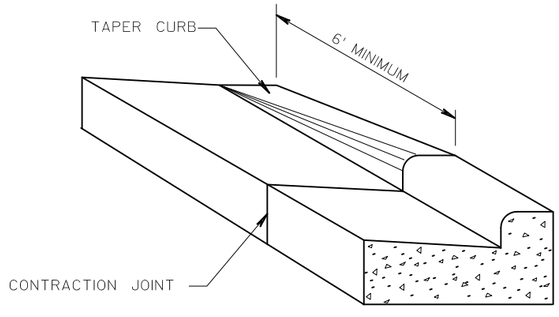
* TO BE USED AT ALL INTERSECTIONS, BYPASS, PASSING LANE AND RURAL CURB SECTIONS



BUTT JOINT DETAIL



CURB & GUTTER OUTFLOW AREA



DETAIL OF CURB & GUTTER TERMINI

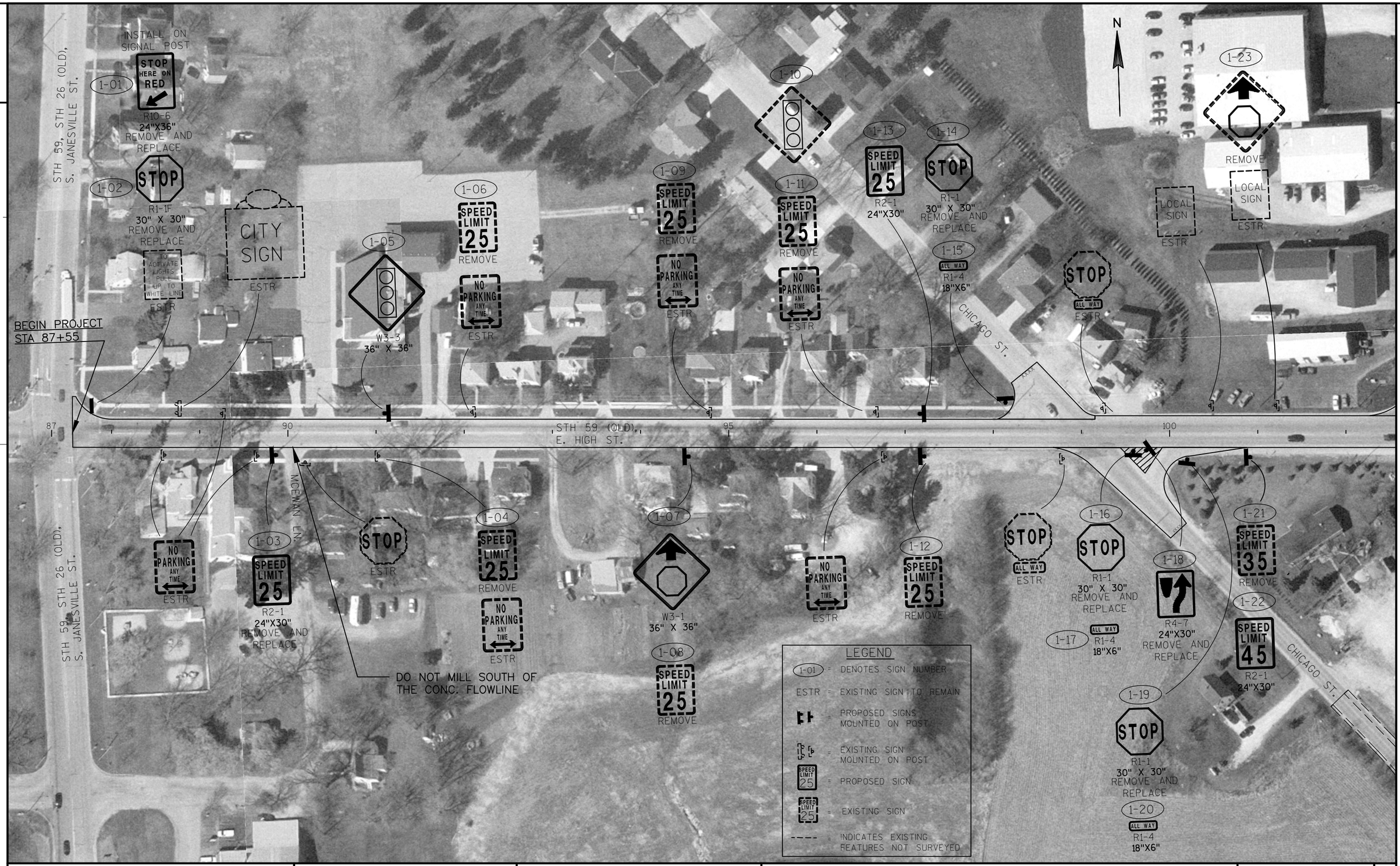
PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	CONSTRUCTION DETAILS	SHEET -----	E

NOTE: MATCH FINISHED OVERLAY PAVEMENT GRADE AND BACKFILL TO TIE INTO EXISTING SLOPES AND GRADES.

NOTE: DRIVEWAY AT STA 123+25 LT NO LONGER EXISTS. REMOVED WITH PREVIOUS STH 26 PROJECT.

----- = INDICATES EXISTING FEATURES NOT SURVEYED

PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	PLAN DETAILS - CURB & GUTTER	SHEET	E



PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET 11	E

2

PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET 12	E

2

2

ENVIRONMENTALLY SENSITIVE AREA

LOCAL SIGN

LOCAL SIGN

LOCAL SIGN

ESTR

ESTR

STH 26 SOUTH BYPASS

STH 26 NORTH BYPASS

MULTI-USE PATH

3-03

SPEED LIMIT 45

REMOVE

C.E. ASPHALT

STH 59 (OLD), E. HIGH ST.

120

125

130

B-53-0255

B-53-0254

3-07

W11-15
30" X 30"

3-08

W16-7L
24"X12"

ENVIRONMENTALLY SENSITIVE AREA

3-10

SPEED LIMIT 45

R2-1
24"X30"
REMOVE AND REPLACE

3-11

3-12

W11-15
30" X 30"

AHEAD
W16-9P
24" X 8"

P.E. ASPHALT

N

3-01

W11-15
30" X 30"

AHEAD
3-02
W16-9P
24" X 8"

3-04

NO PASSING ZONE

W14-3
48" X 36"

3-05

W11-15
30" X 30"

W16-7L
24"X12"

3-06

MULTI-USE PATH

SEE PLAN DETAILS
CURB & GUTTER
FOR MORE INFORMATION

C.E. ASPHALT

3-09

R R

W10-1
36" X 36"
REMOVE AND REPLACE

EXISTING MULTI-USE PATH

EXISTING WARNING FIELD

10'

30'

AGG. SHOULDER

32'

42'

STH 59 (OLD)

CREATE ASPHALT RAMP TO MEET MULTI-USE PATH OPENING.

AGG. SHOULDER

EXISTING MULTI-USE PATH

EXISTING WARNING FIELD

LEGEND

1-01 = DENOTES SIGN NUMBER

ESTR = EXISTING SIGN TO REMAIN

= PROPOSED SIGNS MOUNTED ON POST

= EXISTING SIGN MOUNTED ON POST

SPEED LIMIT 25 = PROPOSED SIGN

SPEED LIMIT 25 = EXISTING SIGN

= INDICATES EXISTING FEATURES NOT SURVEYED

= ENVIRONMENTALLY SENSITIVE AREA

PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET 13	E

FILE NAME : N:\PDS\C3D\13900410\STH 59\DESIGN\ALIPROFS\ALIPROFS-STH59.DWG PLOT DATE : 1/29/2014 9:10 AM PLOT BY : SCHWEIGER, MARC D PLOT NAME : PLOT SCALE : 1:100_XREF

2

PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET 14	E

2

2

N

5-02

SPEED LIMIT 45

R2-1

24"X30"

C.E. ASPHALT

150

STH 59 (OLD), E. HIGH ST.

155

160

P.E. ASPHALT

5-01

SPEED LIMIT 45

R2-1

24"X30"

30 M.P.H.

ESTR

LEGEND

1-01 = DENOTES SIGN NUMBER

ESTR = EXISTING SIGN TO REMAIN

= PROPOSED SIGNS MOUNTED ON POST

= EXISTING SIGN MOUNTED ON POST

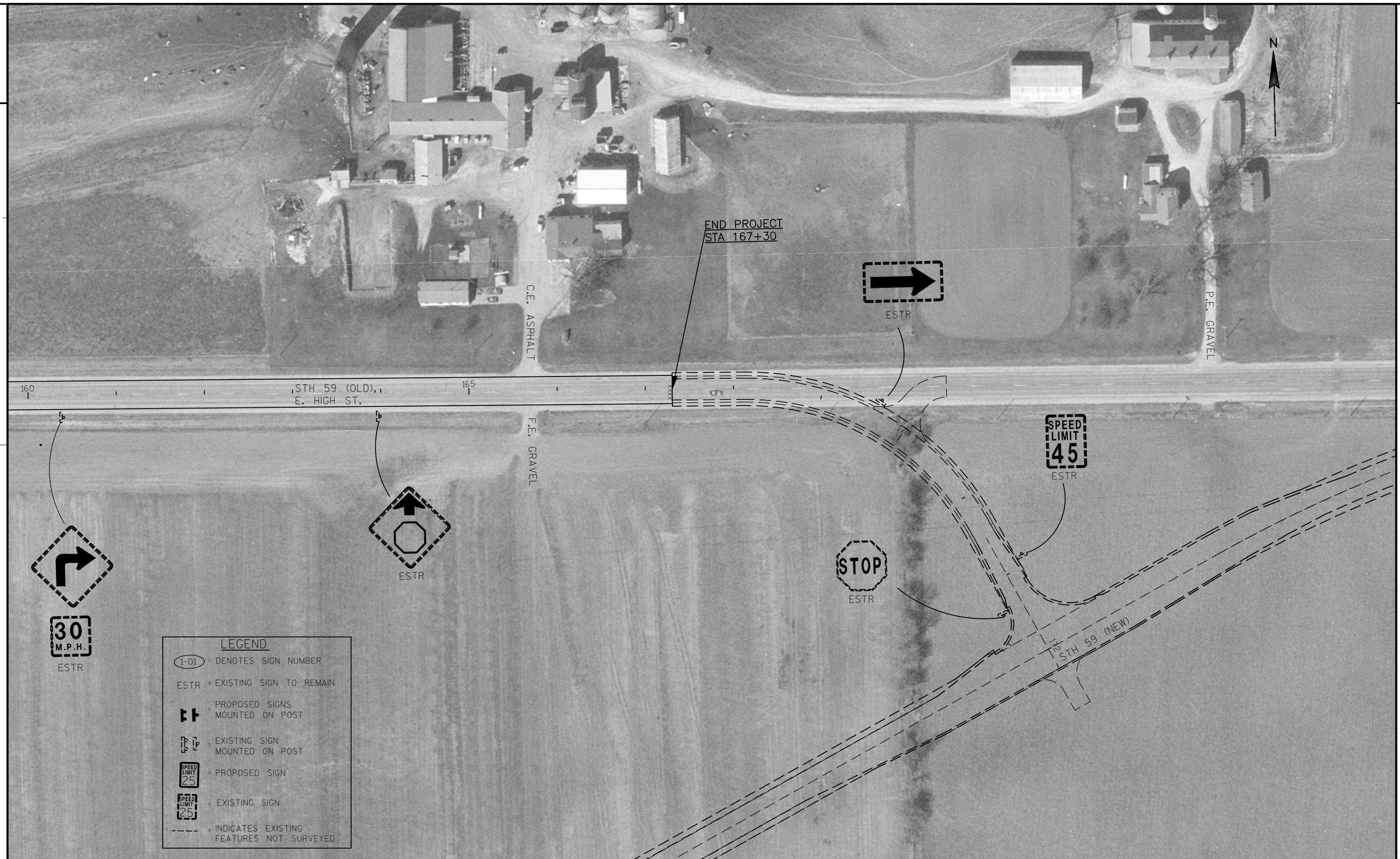
SPEED LIMIT 25 = PROPOSED SIGN

SPEED LIMIT 25 = EXISTING SIGN

= INDICATES EXISTING FEATURES NOT SURVEYED

PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET 15	E

2

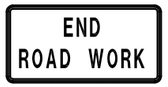


PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	PLAN DETAILS	SHEET 16	E

A

W20-1
48" X 48"

B



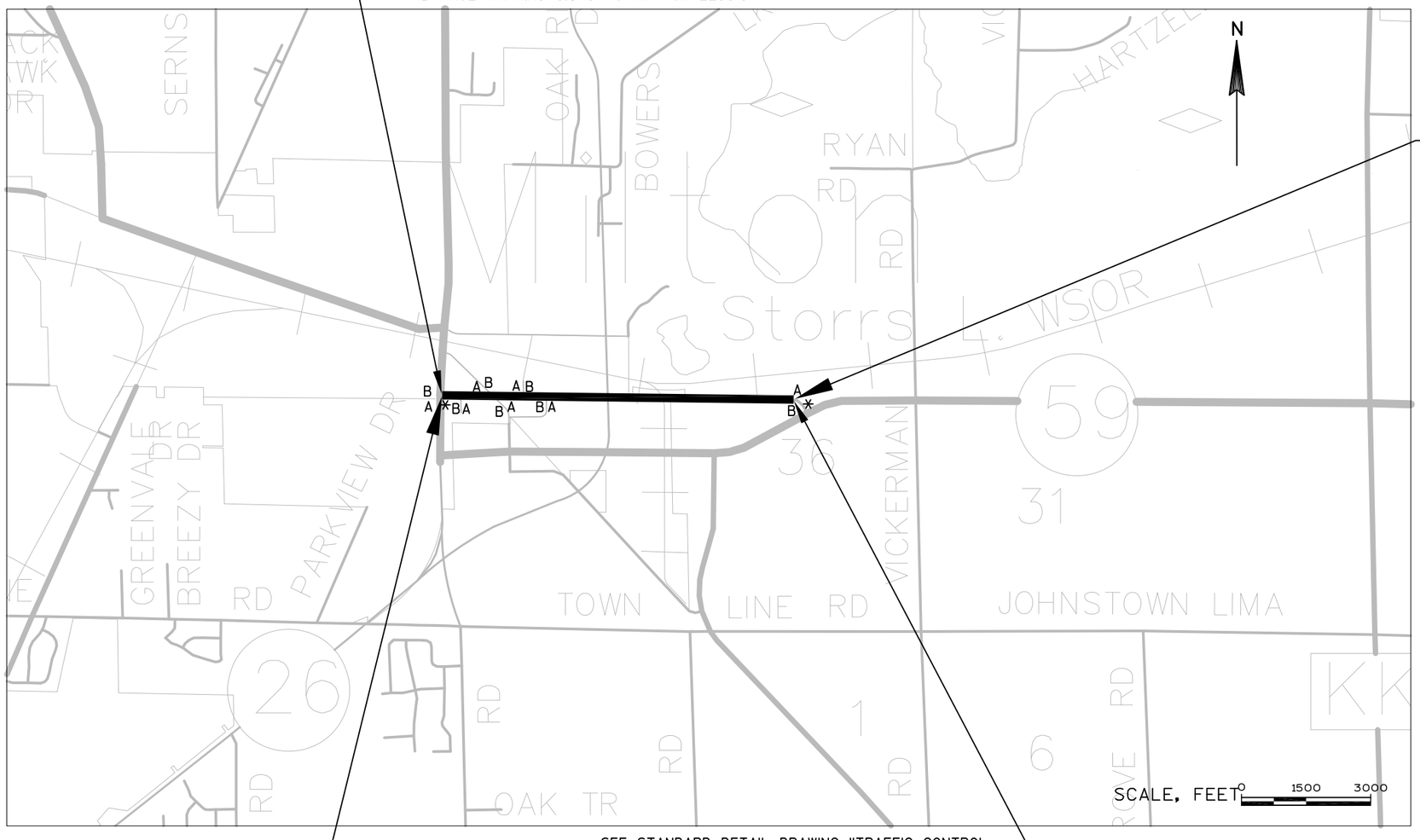
G20-2A
48" X 24"

TRAFFIC CONTROL

FOR MOVING OPERATION STA 87+55 TO STA 167+30
SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".

* PLACE PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) AT THE LIMITS OF THE PROJECT FOR 10 WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION AND FOR THE DURATION OF THE STH 59 (OLD) PROJECT.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL ADVANCE WARNING SIGNS 40 MPH OR LESS".



END PROJECT
STA. 167+30

BEGIN PROJECT
STA. 87+55

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC".

PROJECT NO: 1390-04-95	HWY: STH 59 (OLD)	COUNTY: ROCK	TRAFFIC CONTROL - STH 59 (OLD) OPEN TO TRAFFIC	SHEET 17 E

DATE 30APR14 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1390-04-95 QUANTITY
0030	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	35,210.000	35,210.000
0040	204.0150	REMOVING CURB & GUTTER	LF	30.000	30.000
0110	213.0100	FINISHING ROADWAY (PROJECT) 02. 1390-04-95	EACH	1.000	1.000
0120	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	2,200.000	2,200.000
0130	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	100.000	100.000
0140	312.0110	SELECT CRUSHED MATERIAL	TON	105.000	105.000
0210	440.4410.S	INCENTIVE IRI RIDE	DOL	6,050.000	6,050.000
0220	455.0105	ASPHALTIC MATERIAL PG58-28	TON	231.000	231.000
0230	455.0605	TACK COAT	GAL	818.000	818.000
0240	460.1100	HMA PAVEMENT TYPE E-0.3	TON	4,157.000	4,157.000
0250	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	2,660.000	2,660.000
0270	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	76.000	76.000
0390	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	30.000	30.000
0400	601.0553	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D	LF	450.000	450.000
0410	611.8110	ADJUSTING MANHOLE COVERS	EACH	17.000	17.000
0520	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 02. 1390-04-95	EACH	1.000	1.000
0530	619.1000	MOBILIZATION	EACH	0.300	0.300
0540	625.0100	TOPSOIL	SY	90.000	90.000
0550	628.1504	SILT FENCE	LF	600.000	600.000
0560	628.1520	SILT FENCE MAINTENANCE	LF	600.000	600.000
0570	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	2.000	2.000
0580	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0590	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	90.000	90.000
0610	629.0210	FERTILIZER TYPE B	CWT	0.028	0.028
0620	630.0120	SEEDING MIXTURE NO. 20	LB	2.400	2.400
0640	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	24.000	24.000
0650	637.2210	SIGNS TYPE II REFLECTIVE H	SF	78.970	78.970
0660	637.2230	SIGNS TYPE II REFLECTIVE F	SF	84.810	84.810
0670	638.2602	REMOVING SIGNS TYPE II	EACH	26.000	26.000
0680	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	16.000	16.000
0700	643.0100	TRAFFIC CONTROL (PROJECT) 02. 1390-04-95	EACH	1.000	1.000
0710	643.0300	TRAFFIC CONTROL DRUMS	DAY	630.000	630.000
0740	643.0900	TRAFFIC CONTROL SIGNS	DAY	295.000	295.000
0750	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	62.000	62.000
0760	645.0130	GEOTEXTILE FABRIC TYPE R	SY	100.000	100.000
0770	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	13,650.000	13,650.000
0780	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	240.000	240.000
0790	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	4,200.000	4,200.000
0800	647.0110	PAVEMENT MARKING RAILROAD CROSSINGS EPOXY	EACH	2.000	2.000
0810	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	80.000	80.000
0820	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	80.000	80.000
0830	648.0100	LOCATING NO-PASSING ZONES	MI	1.510	1.510
0860	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	450.000	450.000
0890	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	7,975.000	7,975.000
0910	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 02. 1390-04-95	LS	1.000	1.000
0920	690.0150	SAWING ASPHALT	LF	1,015.000	1,015.000
0930	690.0250	SAWING CONCRETE	LF	30.000	30.000

3

3

BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON
0010	99+10	-	104+00	RT SHOULDER	50	-	-
0010	104+00	-	120+87	RT/LT SHOULDERS	595	-	-
0010	120+87	-	123+12	RT/LT CURB & GUTTER	-	100	-
0010	120+87	-	123+12	BEHIND C&G AND OUTFLOW AREAS	-	-	105
0010	123+12	-	167+30	RT/LT SHOULDERS	1555	-	-
				TOTAL	**2200**	**100**	**105**

ADJUSTING MANHOLE COVERS

CATEGORY	STATION	TO	STATION	LOCATION	611.8110 ADJUSTING MANHOLE COVERS EACH
0010	87+55	-	167+30	MAINLINE	17

3

HMA ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SUFACE MILLING SY	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0605 TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	690.0150 SAWING ASPHALT LF
0010	87+55	-	167+30	MAINLINE	29200	190	730	3430	-	35
0010	87+55	-	167+30	SIDEROADS	2290	20	73	360	-	140
0010	87+55	-	167+30	DRIVEWAYS	1220	-	15	-	76	370
0010	120+87	-	123+12	C&G	-	1	-	17	-	470
0010	UNDISTRIBUTED EXTRA MILL & FILL SPOT LOCATIONS				2500	20	-	350	-	-
				TOTAL	**35210**	**231**	**818**	**4157**	**76**	**1015**

EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	87+55	-	167+30	UNDISTRIBUTED	600	600	2	2

CONCRETE CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	204.0150 REMOVING CURB & GUTTER LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	690.0250 SAWING CONCRETE LF	REMARKS
0010	120+87	-	123+12	RT	-	-	225	-	-
0010	120+87	-	123+12	LT	-	-	225	-	-
0010	87+55	-	104+00	UNDISTRIBUTED	30	30	-	30	CURB & GUTTER REPLACEMENT
				TOTAL	**30**	**30**	**450**	**30**	

3

RESTORATION ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO.20 LB
0010	120+87	-	123+12	RT/LT BEHIND C&G	90	90	0.028	2.4

GEOTEXTILE FABRIC TYPE R

CATEGORY	STATION	TO	STATION	LOCATION	645.0130 GEOTEXTILE FABRIC TYPE R SY
0010	120+82	-	120+87	RT	50
0010	120+82	-	120+87	LT	50
				TOTAL	**100**

3

TRAFFIC CONTROL

CATEGORY	LOCATION	* DAYS	643.0100 TRAFFIC CONTROL 1390-04-95 EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS NO.	DAY
0010	MAINLINE	21.00	1	-	295	2	62
0010	UNDISTRIBUTED	-	-	630	-		-
	TOTAL		**1**	**630**	**295**		**62**

CONSTRUCTION STAKING

CATEGORY	LOCATION	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (1390-04-95) LS
0010	PROJECT	450	7975	1

PAVEMENT MARKING

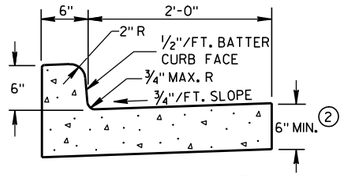
CATEGORY	STATION	TO	STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH LF	646.0126 PAVEMENT MARKING EPOXY 8-INCH LF	646.0406 PAVEMENT MARKING SAME DAY EPOXY 4-INCH LF	647.0110 PAVEMENT MARKING RAILROAD CROSSINGS EPOXY EACH	647.0566 PAVEMENT MARKING STOP LINE EPOXY 18-INCH LF	647.0766 PAVEMENT MARKING CROSSWALK EPOXY 6-INCH LF	648.0100 LOCATING NO-PASSING ZONES MI	REMARKS
0010	99+10	-	167+30	MAINLINE	13650	-	-	-	-	-	-	WHITE EDGELINES
0010	87+55	-	167+30	MAINLINE	-	240	-	-	-	-	-	TURN LANES
0010	87+55	-	167+30	MAINLINE	-	-	4200	-	-	-	-	YELLOW CENTERLINE
0010	87+55	-	167+30	MAINLINE	-	-	-	2	-	-	-	1 EB, 1 WB
0010	87+55	-	167+30	PROJECT	-	-	-	-	80	80	1.51	-
				TOTAL	**13650**	**240**	**4200**	**2**	**80**	**80**	**1.51**	

PERMANENT SIGNING

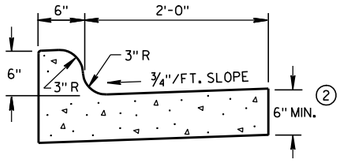
CATEGORY	SIGN NUMBER	LOCATION	SIGN CODE	SIGN W	SIGN X	SIGN H	MESSAGE	634.0616 POSTS WOOD 4 X 6 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	1-01	87+65 LT	R10-6	24	X	36	STOP HERE ON RED	-	6.0	-	1	-	ON SIGNAL POST
0010	1-02	87+65 LT	R1-1F	30	X	30	STOP (FOLDING SIGN)	-	5.18	-	1	-	ON SIGNAL POST
0010	1-03	89+75 RT	R2-1	24	X	30	SPEED LIMIT 25	1	5.0	-	1	1	-
0010	1-04	91+00 RT	-	-		-	SPEED LIMIT 25	-	-	-	1	-	-
0010	1-05	91+15 LT	W3-3	36	X	36	SIGNAL AHEAD SYMBOL	1	-	9.0	-	-	-
0010	1-06	92+10 LT	-	-	X	-	SPEED LIMIT 25	-	-	-	1	-	-
0010	1-07	94+55 RT	W3-1	36	X	36	STOP AHEAD SYMBOL	1	-	9.0	-	-	-
0010	1-08	94+55 RT	-	-	X	-	SPEED LIMIT 25	-	-	-	1	1	-
0010	1-09	94+80 LT	-	-	X	-	SPEED LIMIT 25	-	-	-	1	-	-
0010	1-10	96+70 LT	-	-	X	-	SIGNAL AHEAD SYMBOL	-	-	-	1	-	-
0010	1-11	96+70 LT	-	-	X	-	SPEED LIMIT 25	-	-	-	1	-	-
0010	1-12	97+20 RT	R2-1	24	X	30	SPEED LIMIT 25	-	-	-	1	1	-
0010	1-13	97+20 LT	R2-1	24	X	30	SPEED LIMIT 25	1	5.0	-	-	-	-
0010	1-14	98+10 LT	R1-1	30	X	30	STOP	1	5.18	-	1	1	-
0010	1-15	98+10 LT	R1-3P	18	X	6	ALL WAY	-	0.8	-	-	-	ON SAME POST AS ABOVE
0010	1-16	99+60 RT	R1-1	30	X	30	STOP	1	5.18	-	1	1	-
0010	1-17	99+60 RT	R1-3P	18	X	6	ALL WAY	-	0.8	-	-	-	ON SAME POST AS ABOVE
0010	1-18	99+80 RT	R4-7	24	X	30	STAY RIGHT SYMBOL	1	5.0	-	-	-	-
0010	1-19	100+15 RT	R1-1	30	X	30	STOP	1	5.18	-	-	-	-
0010	1-20	100+15 RT	R1-3P	18	X	6	ALL WAY	-	0.8	-	-	-	ON SAME POST AS ABOVE
0010	1-21	100+85 RT	-	-	X	-	SPEED LIMIT 35	-	-	-	1	1	-
0010	1-22	100+85 RT	R2-1	24	X	30	SPEED LIMIT 45	1	5.0	-	-	-	-
0010	1-23	101+20 LT	-	-	X	-	STOP AHEAD SYMBOL	-	-	-	1	-	-
0010	2-01	104+50 LT	W3-1	36	X	36	STOP AHEAD SYMBOL	1	-	9.0	-	-	-
0010	2-02	106+50 RT	R2-1	24	X	30	SPEED LIMIT 45	1	5.0	-	1	1	-
0010	2-03	106+65 LT	-	-	X	-	REDUCED SPEED AHEAD	-	-	-	1	-	-
0010	2-04	106+65 LT	-	-	X	-	25 M.P.H.	-	-	-	1	-	-
0010	2-05	112+10 LT	R2-1	24	X	30	SPEED LIMIT 45	1	5.0	-	-	-	-
0010	2-06	115+05 RT	-	-	X	-	SPEED LIMIT 45	-	-	-	1	1	-
0010	3-01	117+40 RT	W11-15	30	X	30	BIKE/PED SYMBOL	1	-	6.3	-	-	-
0010	3-02	117+40 RT	W16-9P	24	X	8	AHEAD	-	-	1.3	-	-	ON SAME POST AS ABOVE
0010	3-03	117+95 LT	-	-	X	-	SPEED LIMIT 45	-	-	-	1	1	-
0010	3-04	120+50 LT	W14-3	48	X	36	NO PASSING ZONE	1	-	6.0	-	-	-
0010	3-05	123+70 RT	W11-15	30	X	30	BIKE/PED SYMBOL	1	-	6.3	-	-	-
0010	3-06	123+70 RT	W16-7L	24	X	12	ARROW	-	-	2.0	-	-	ON SAME POST AS ABOVE
0010	3-07	123+95 LT	W11-15	30	X	30	BIKE/PED SYMBOL	1	-	6.3	-	-	-
0010	3-08	123+95 LT	W16-7L	24	X	12	ARROW	-	-	2.0	-	-	ON SAME POST AS ABOVE
0010	3-09	126+50 RT	W10-1	36	X	36	R/R CROSSING	1	-	7.07	1	1	-
0010	3-10	127+85 LT	R2-1	24	X	30	SPEED LIMIT 45	1	5.0	-	1	1	-
0010	3-11	130+55 LT	W11-15	30	X	30	BIKE/PED SYMBOL	1	-	6.3	-	-	-
0010	3-12	130+55 LT	W16-9P	24	X	8	AHEAD	-	-	1.3	-	-	ON SAME POST AS ABOVE
0010	4-01	132+20 RT	R2-1	24	X	30	SPEED LIMIT 45	1	5.0	-	1	1	-
0010	4-02	138+20 RT	W14-3	48	X	36	NO PASSING ZONE	1	-	6.0	1	1	-
0010	4-03	140+00 LT	W10-1	36	X	36	R/R CROSSING	1	-	7.07	1	1	-
0010	4-04	143+50 RT	-	-	X	-	SPEED LIMTT 45	-	-	-	1	1	-
0010	4-05	143+50 LT	-	-	X	-	SPEED LIMIT 45	-	-	-	1	1	-
0010	5-01	149+00 RT	R2-1	24	X	30	SPEED LIMIT 45	1	5.0	-	-	-	-
0010	5-02	149+15 LT	R2-1	24	X	30	SPEED LIMIT 45	1	5.0	-	-	-	-
							TOTAL	**24**	**78.97**	**84.81**	**26**	**16**	

Standard Detail Drawing List

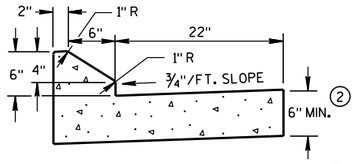
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E09-06	SILT FENCE
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C09-09A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING



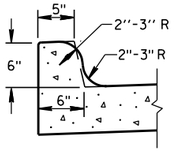
TYPES A & D (1)



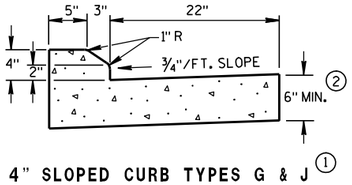
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

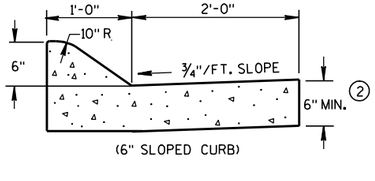


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

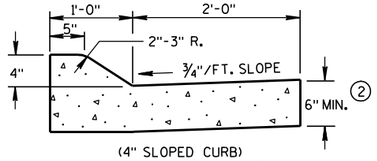


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

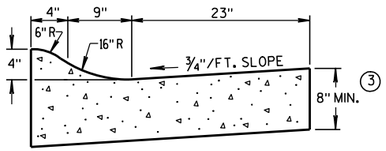


(6" SLOPED CURB)



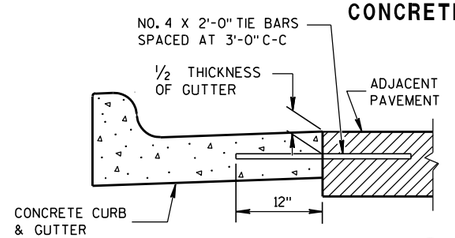
(4" SLOPED CURB)

TYPES A & D (1)

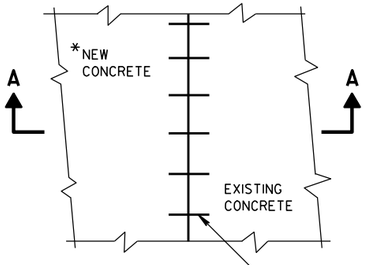


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

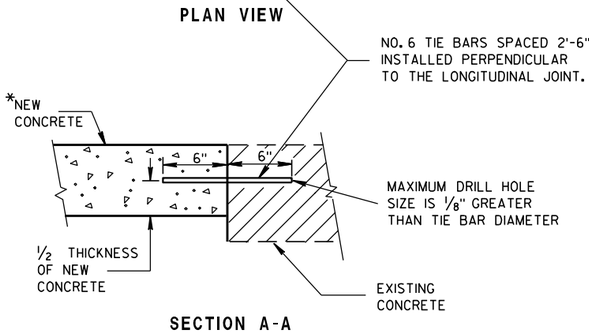


TYPICAL TIE BAR LOCATION (1)



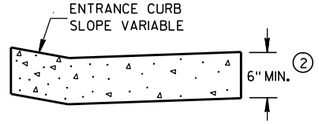
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

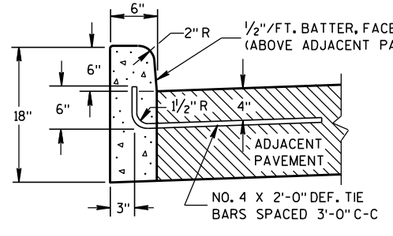


SECTION A-A

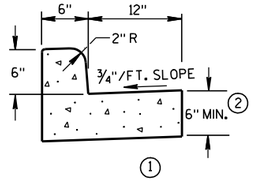
TIE BARS DRILLED INTO EXISTING PAVEMENT



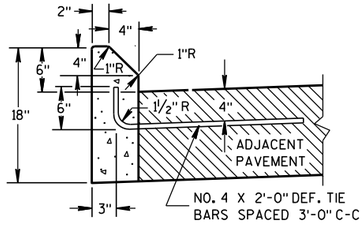
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



(1)
TYPES A & D

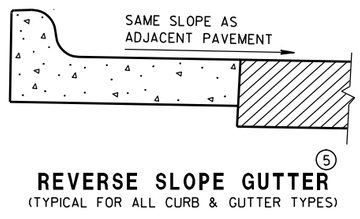


(1)
TYPES A & D
CONCRETE CURB & GUTTER 18"



(1)
TYPES G & J

CONCRETE CURB



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

GENERAL NOTES

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

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

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

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

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

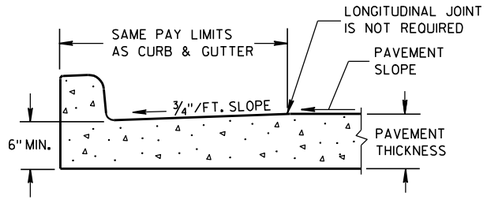
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

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

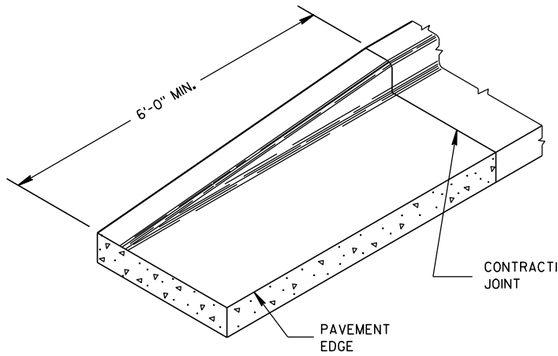
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

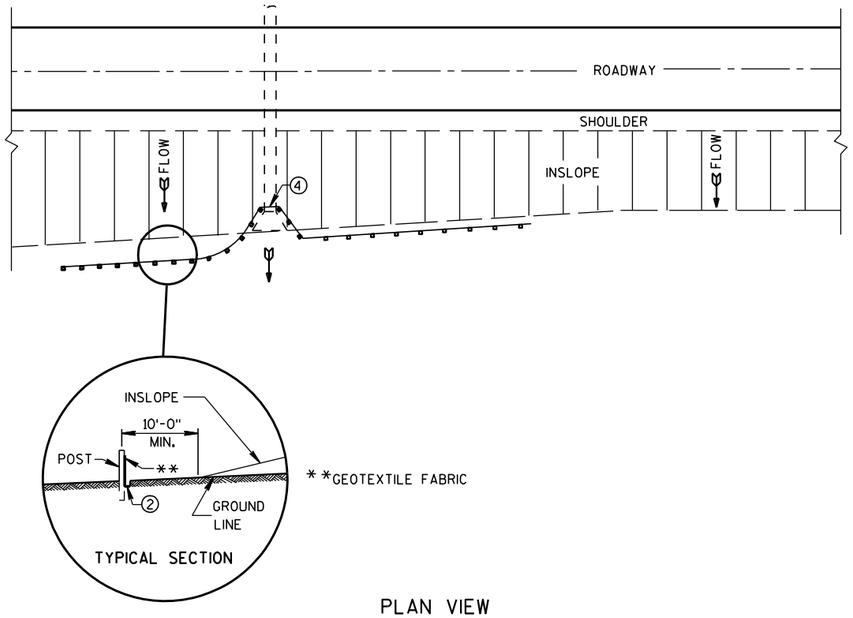
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

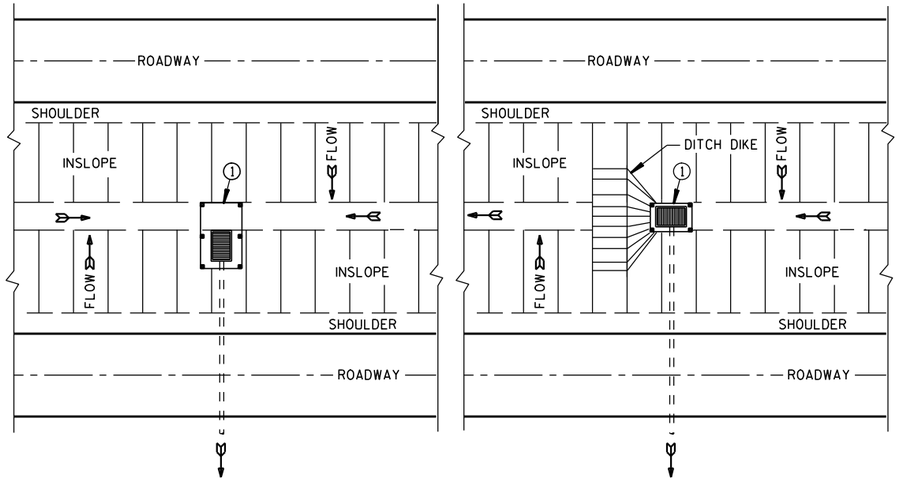
6

S.D.D. 8 D 1-17



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



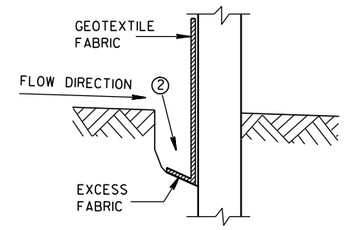
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

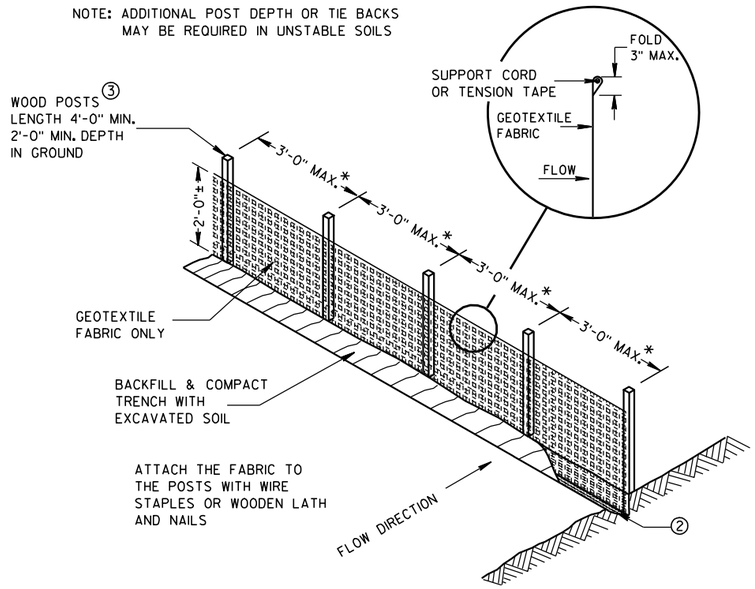
GENERAL NOTES

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

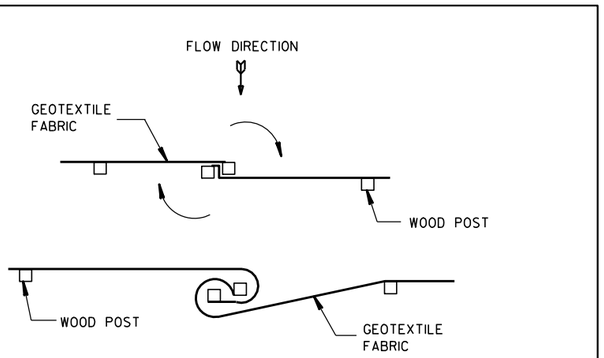
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



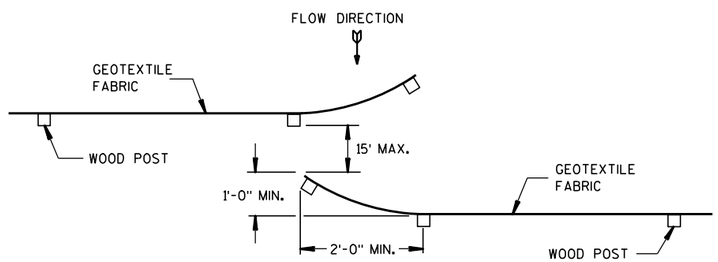
TRENCH DETAIL



SILT FENCE

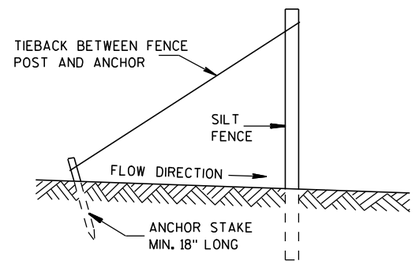


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

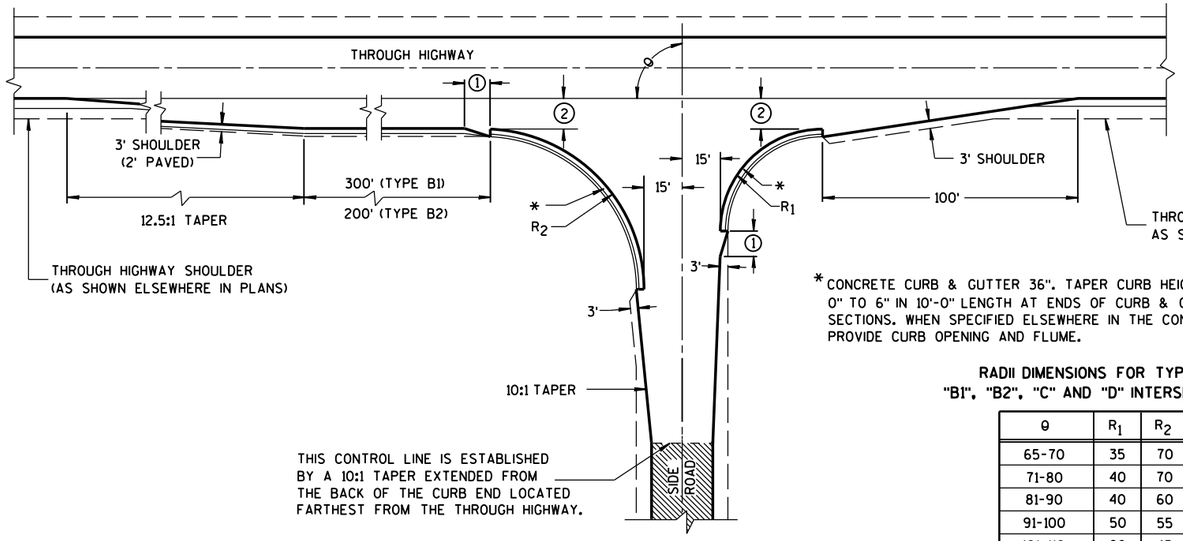
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

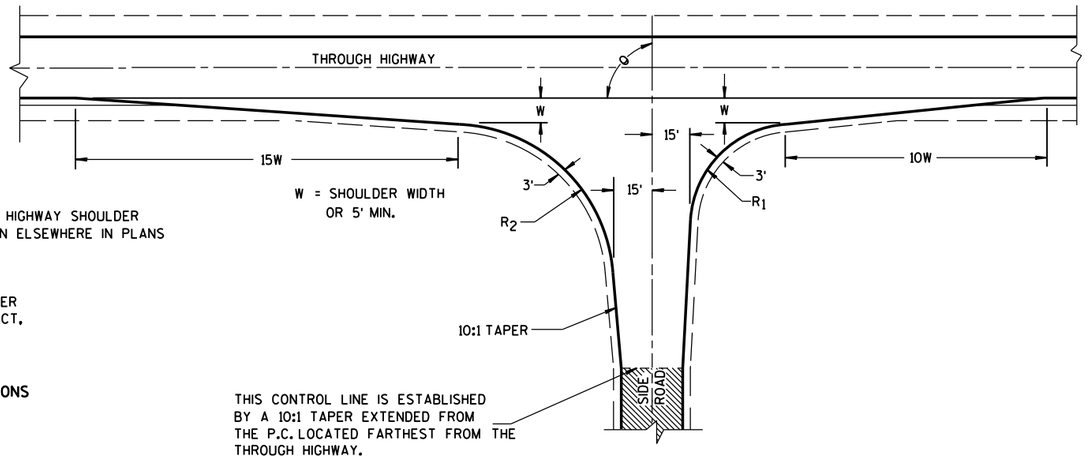


TYPE "B1" AND "B2"

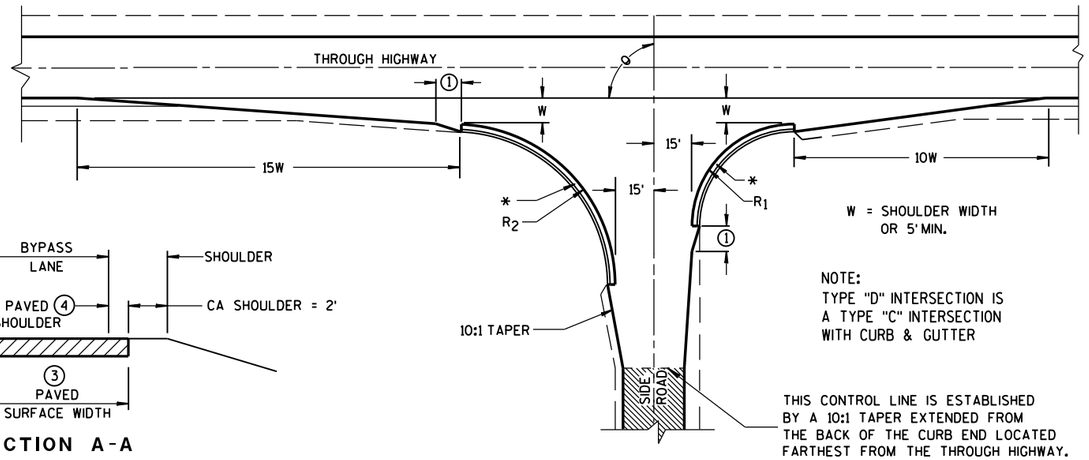
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

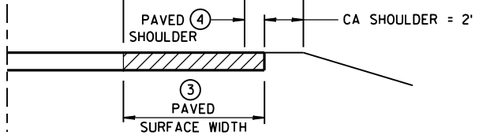
(1) 10-FT TYPICAL.

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

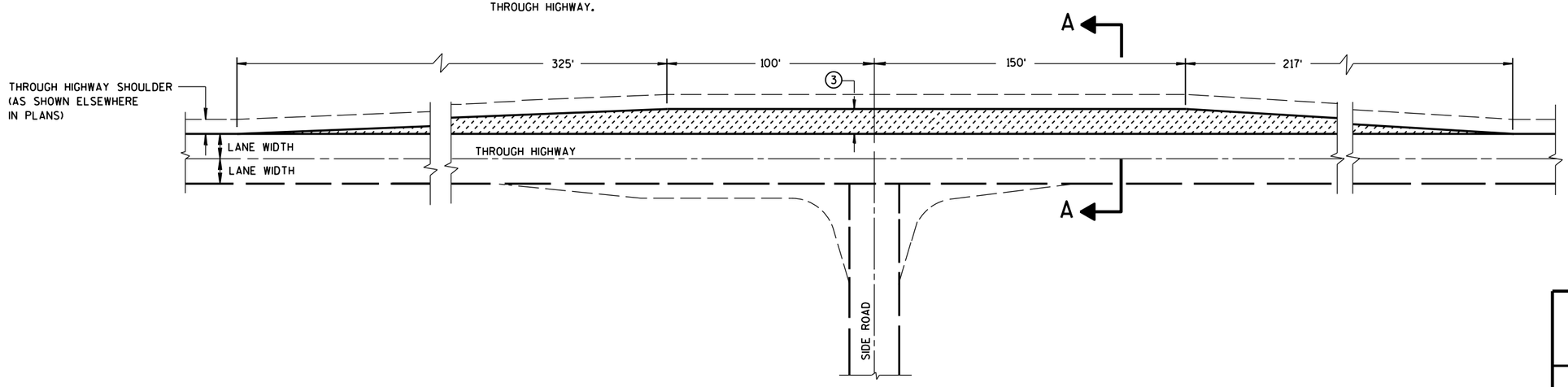
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(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
DEPARTMENT OF TRANSPO

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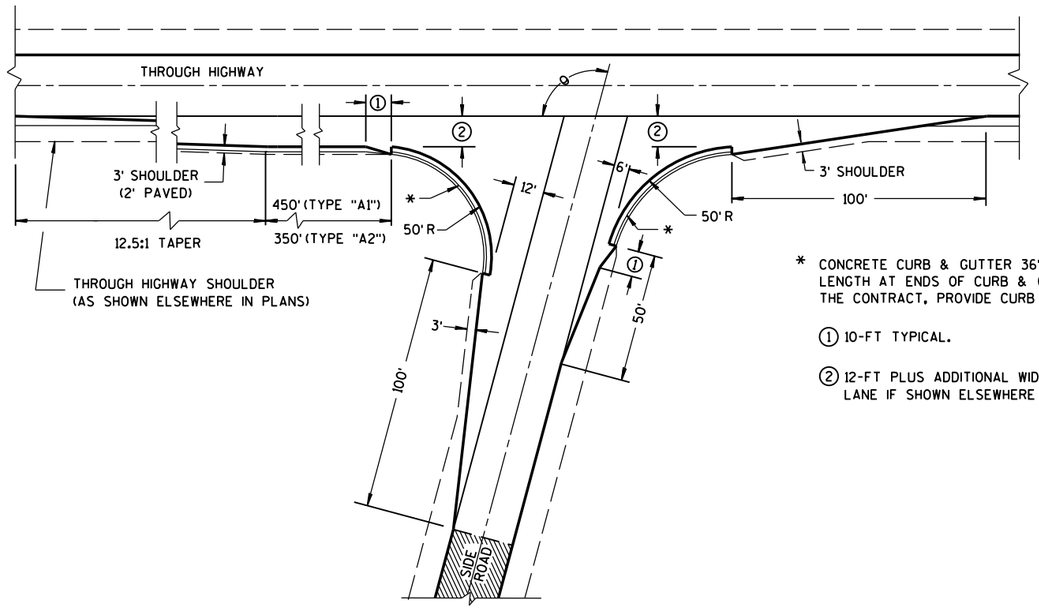
S.D.D. 9 A 1-13a



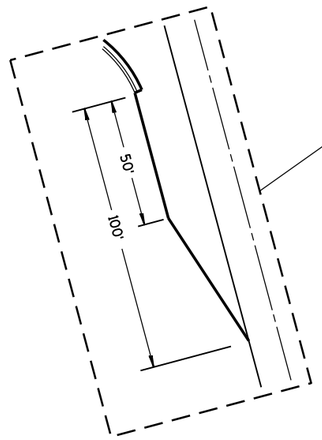
θ = MORE THAN 80°

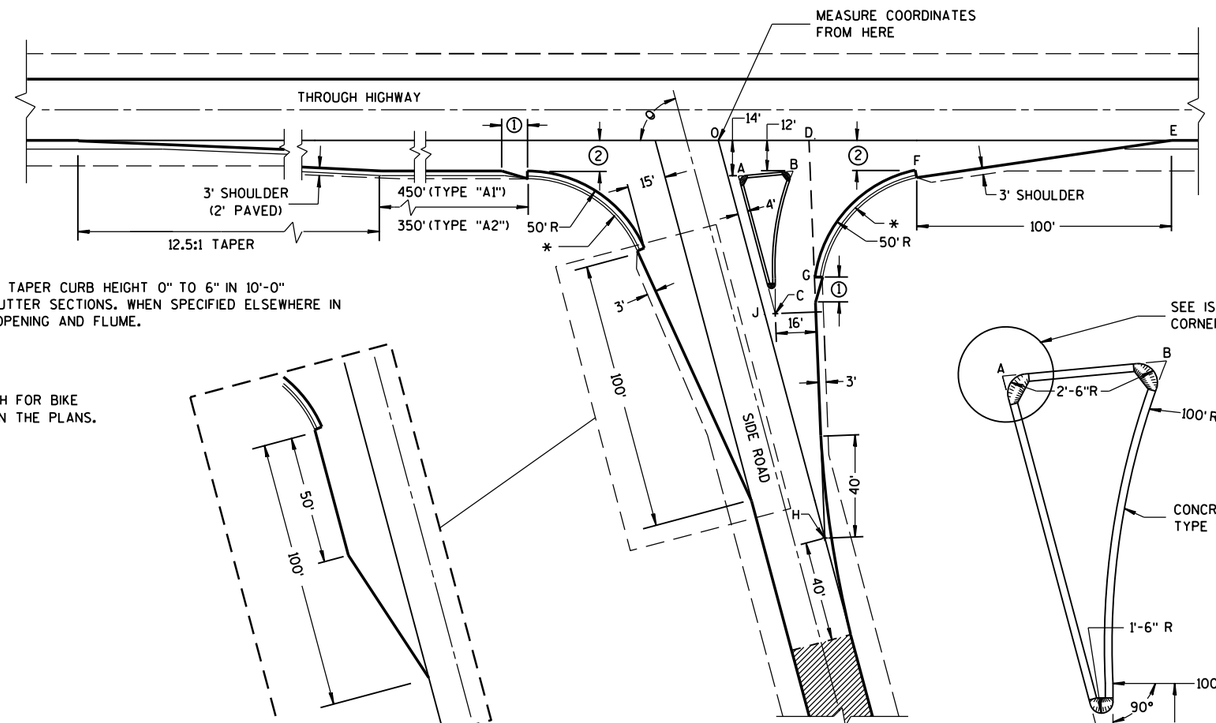
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

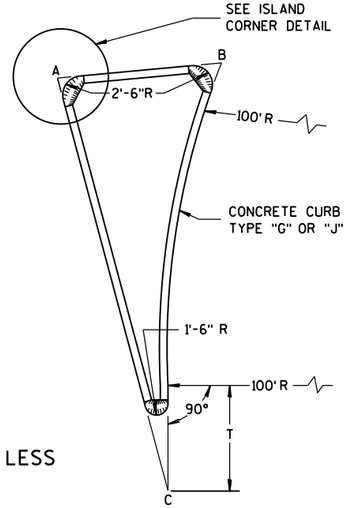
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

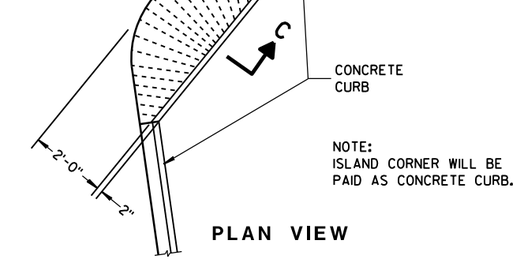




θ = ACUTE ANGLES 80° OR LESS

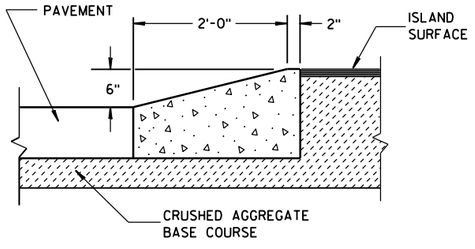


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



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

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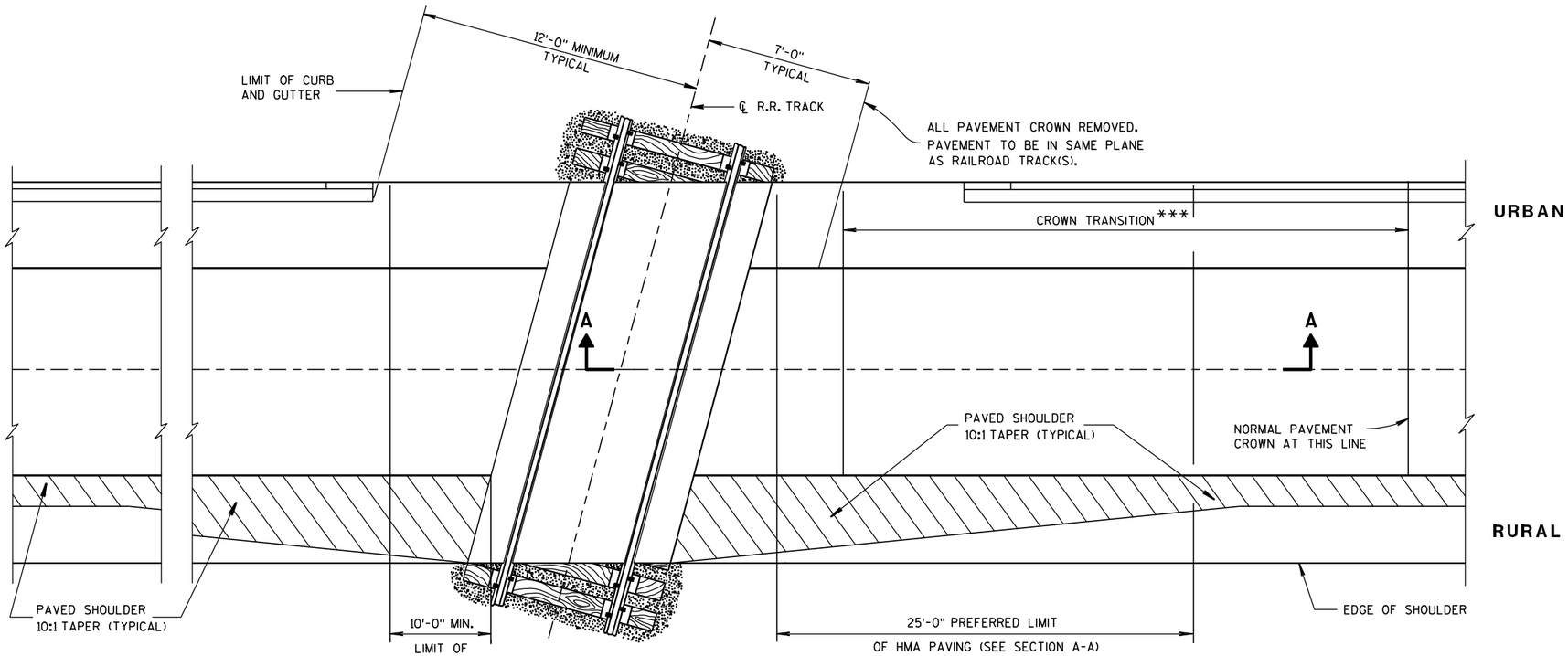
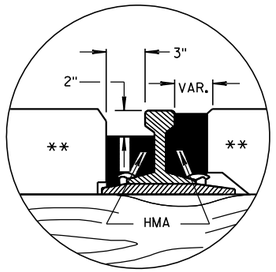
S.D.D. 9 A 1-13b





DETAIL B

HMA FLANGEWAY AND FIELD FILLERS

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.

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

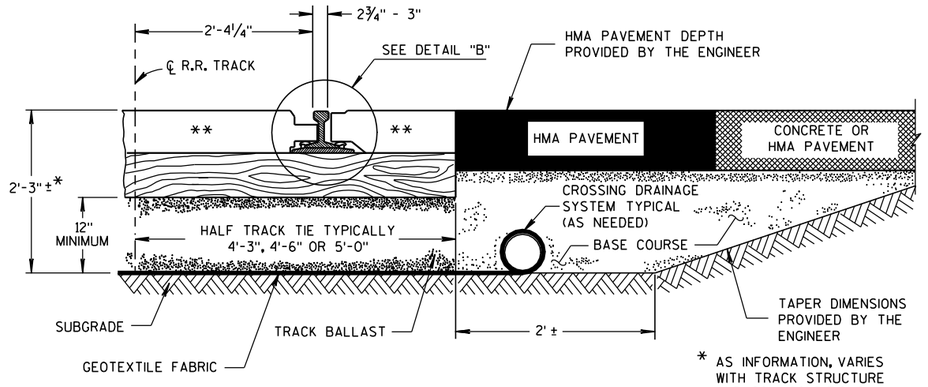
HMA PAVEMENT APPROACHES AND HMA PAVEMET CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGEWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

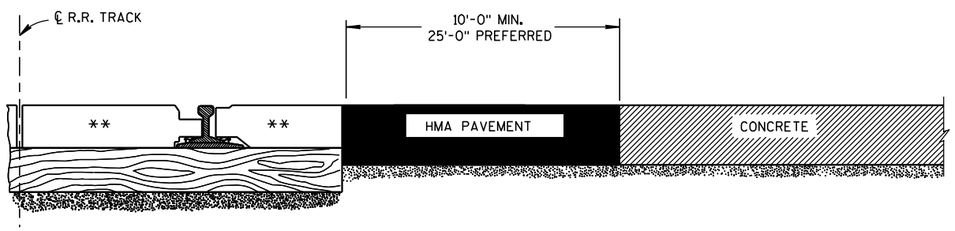
HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

** CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

*** CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.

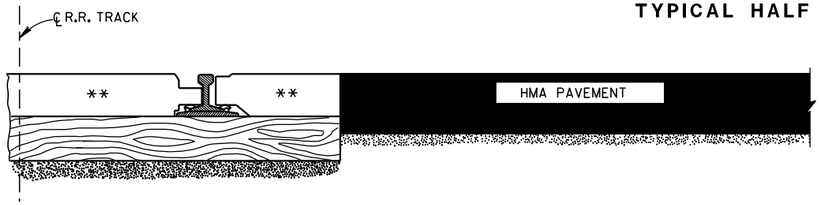


TYPICAL HALF SECTION



SECTION A-A

CONCRETE PAVEMENT APPROACH



SECTION A-A

HMA PAVEMENT APPROACH

EXAMPLES OF PAVEMENT APPROACHES

PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-28-09 DATE
/S/ Ronald E. Adams
CHIEF, RAILROADS & HAI CTION
FHWA

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S.D.D. 13 B 1-10

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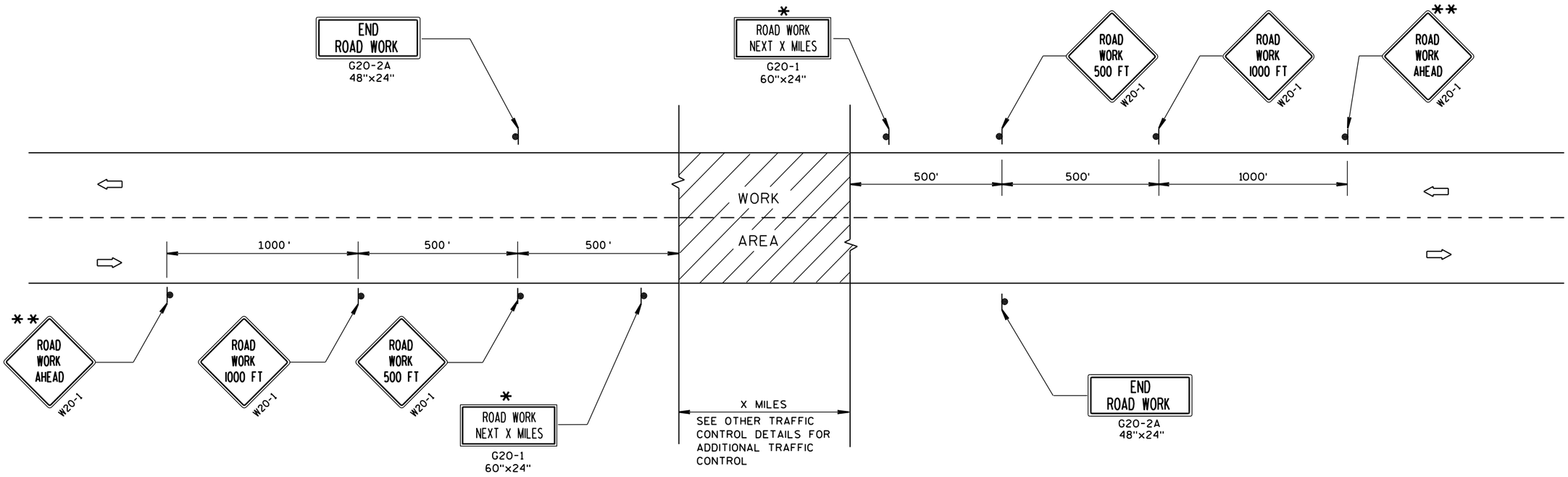
S.D.D. 13 B 1-10



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

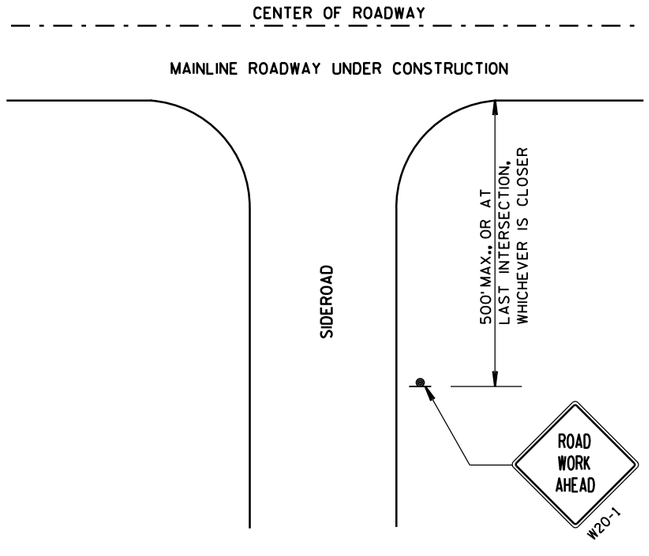
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



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

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

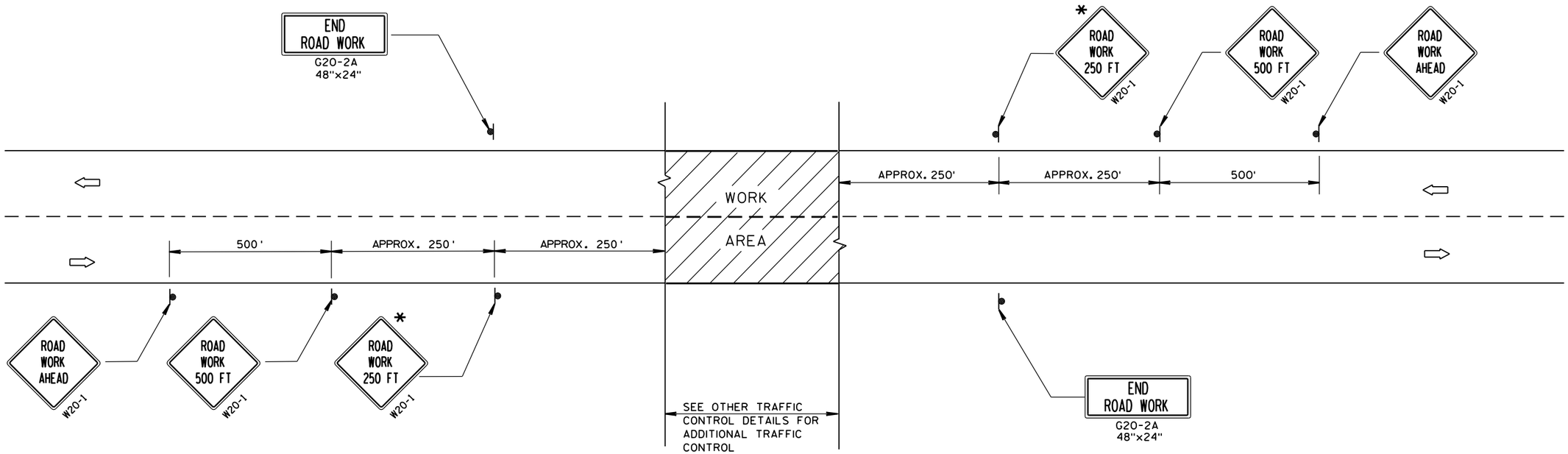
FHWA

6

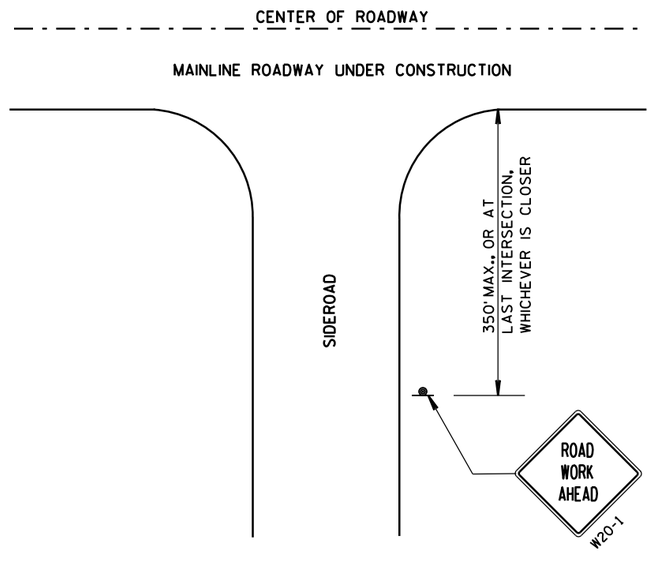
S.D.D. 15 C 4-2

6

S.D.D. 15 C 4-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

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

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

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 (DATE) — /S/ Travis Feltes (STATE TRAFFIC ENGINEER) — (SIGN)

FHWA

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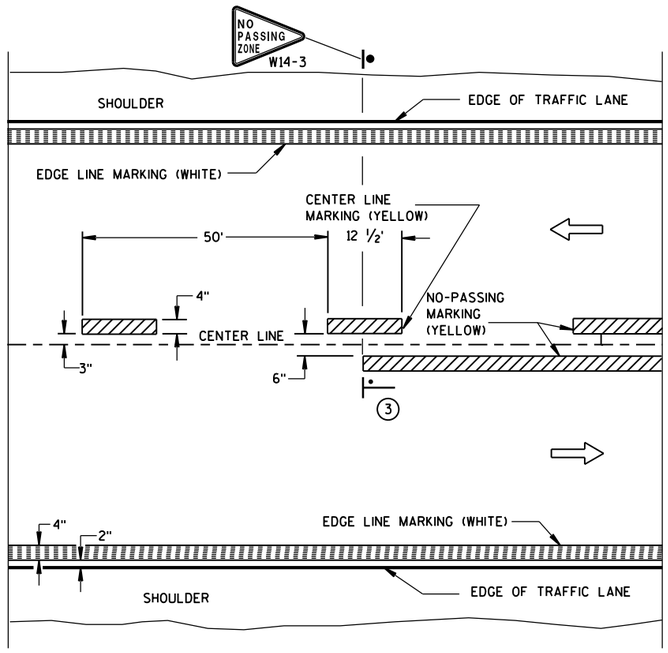
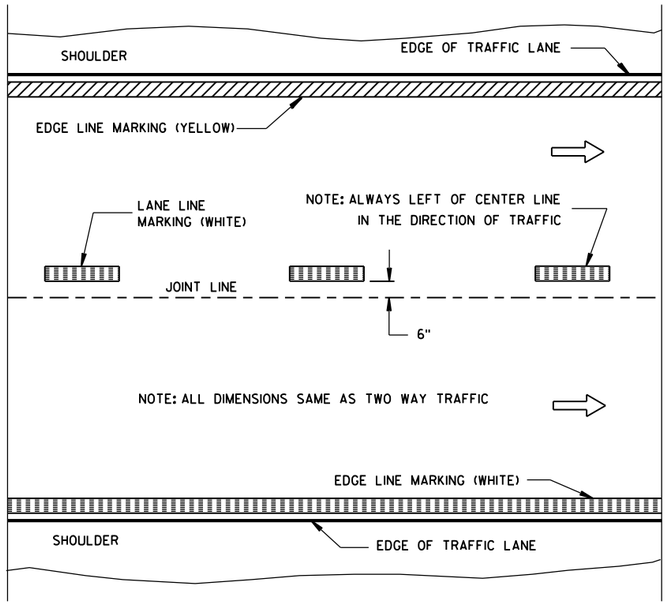
S.D.D. 15 C 5-2

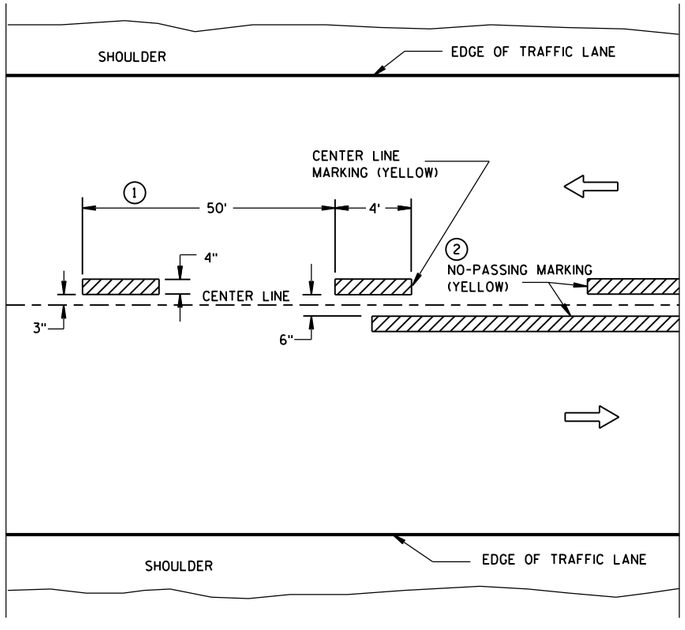


TWO WAY TRAFFIC

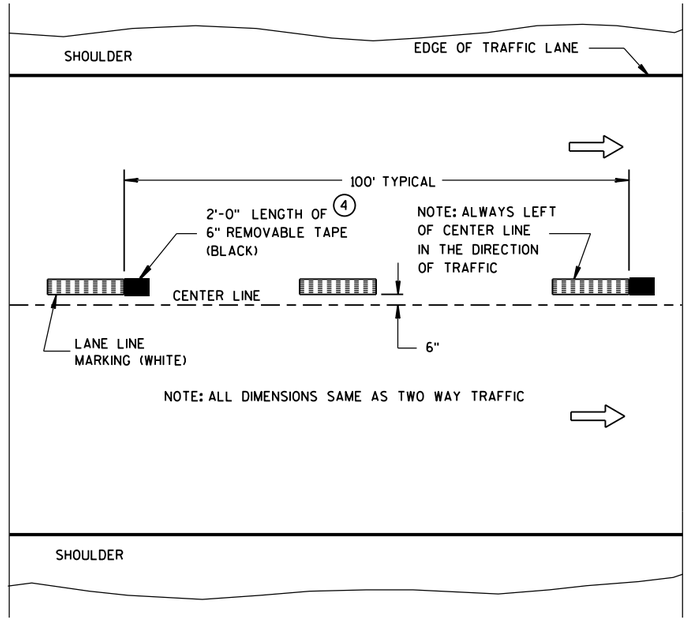


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

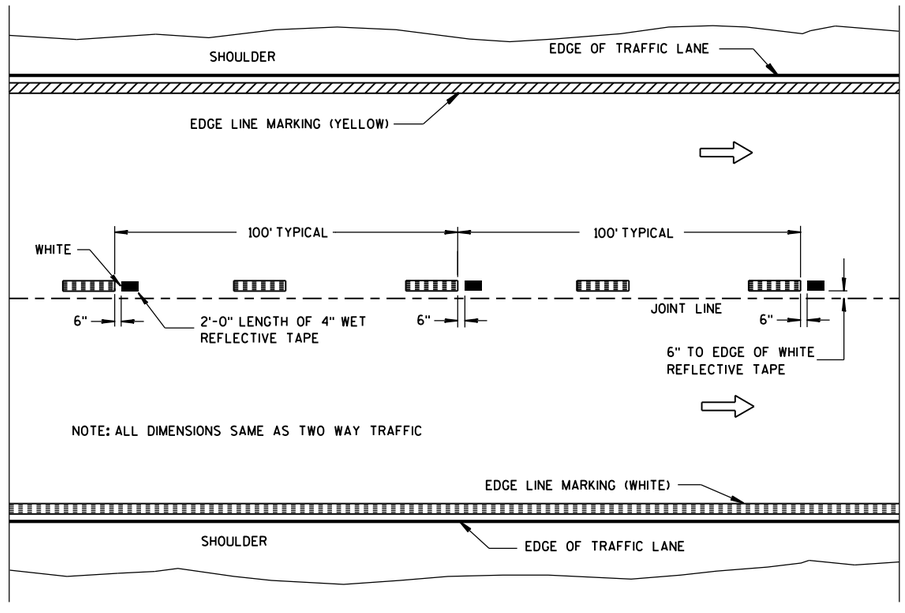
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC E

FHWA

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

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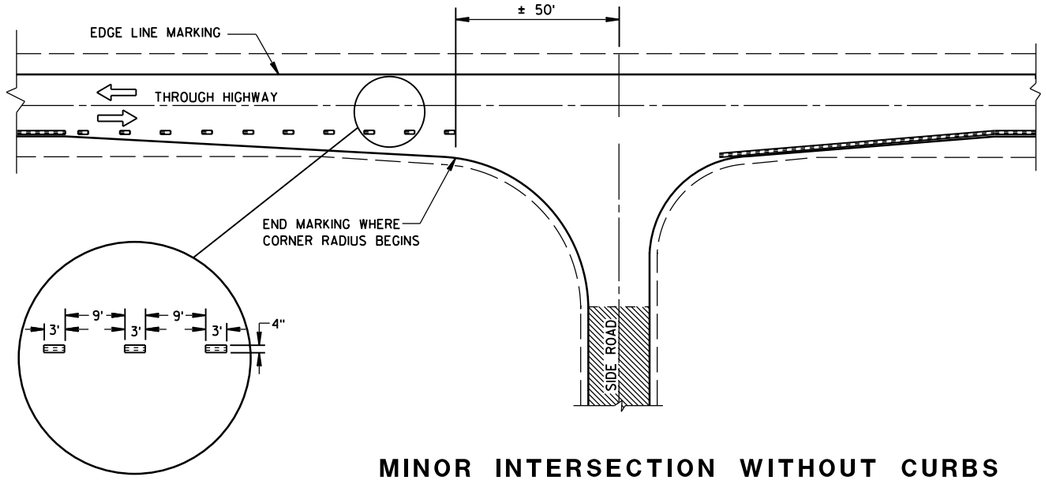
S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

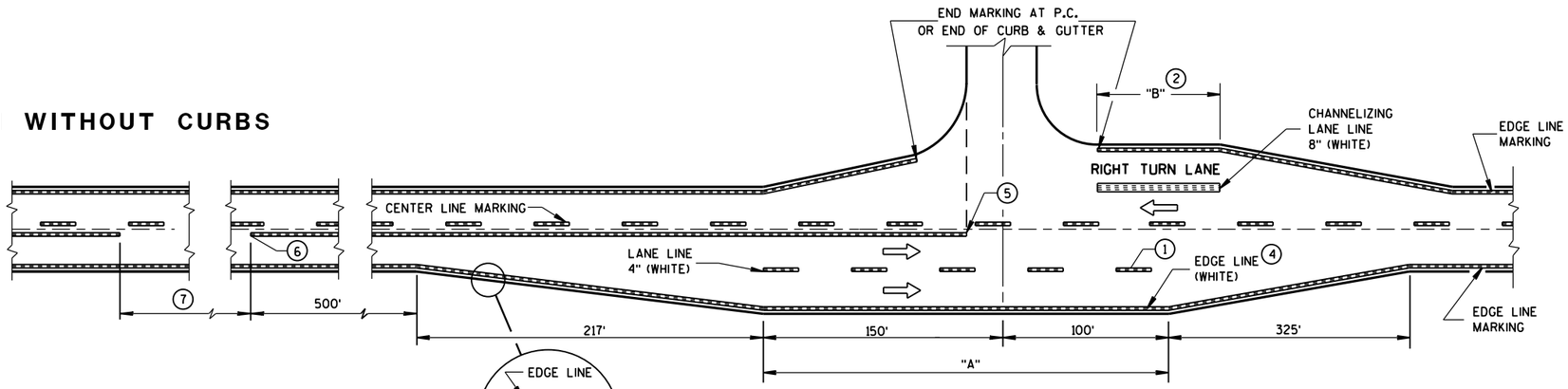
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

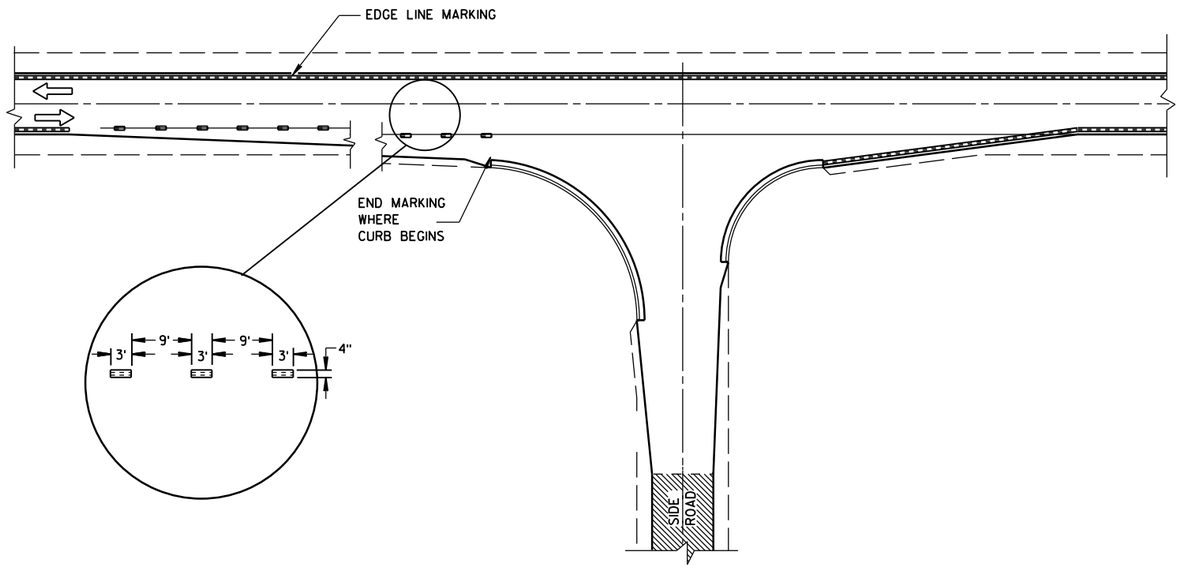
(7)

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



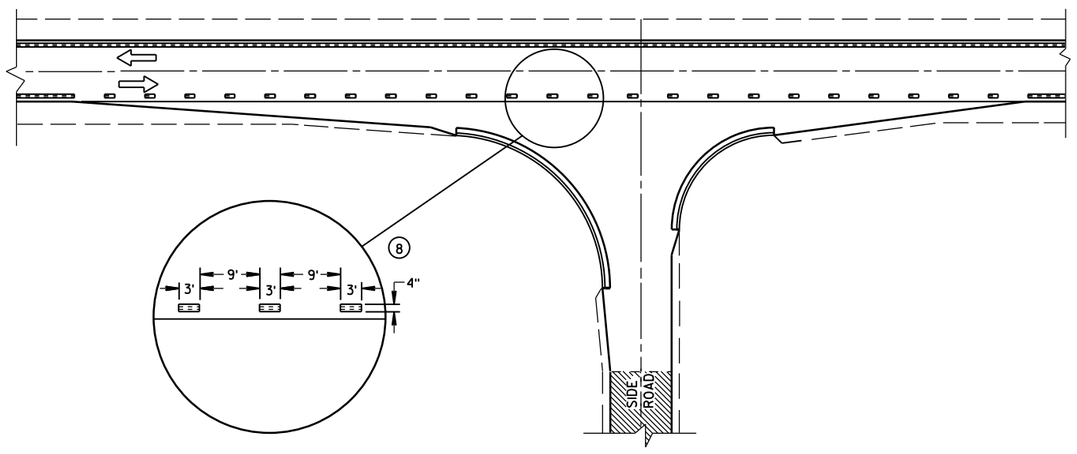
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

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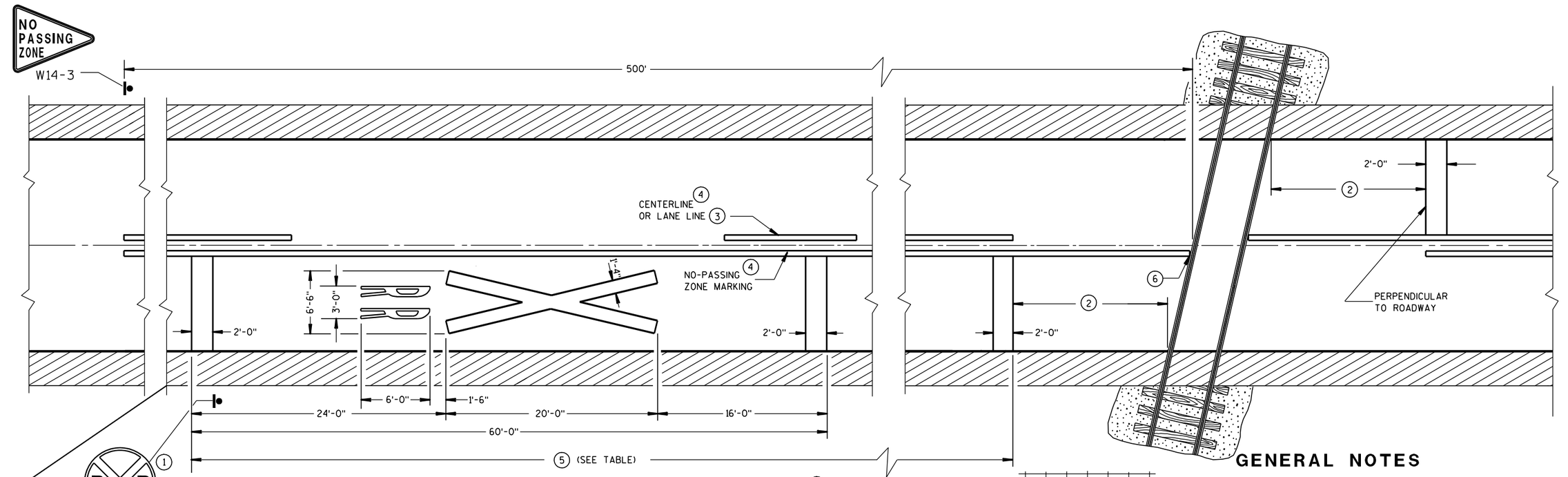
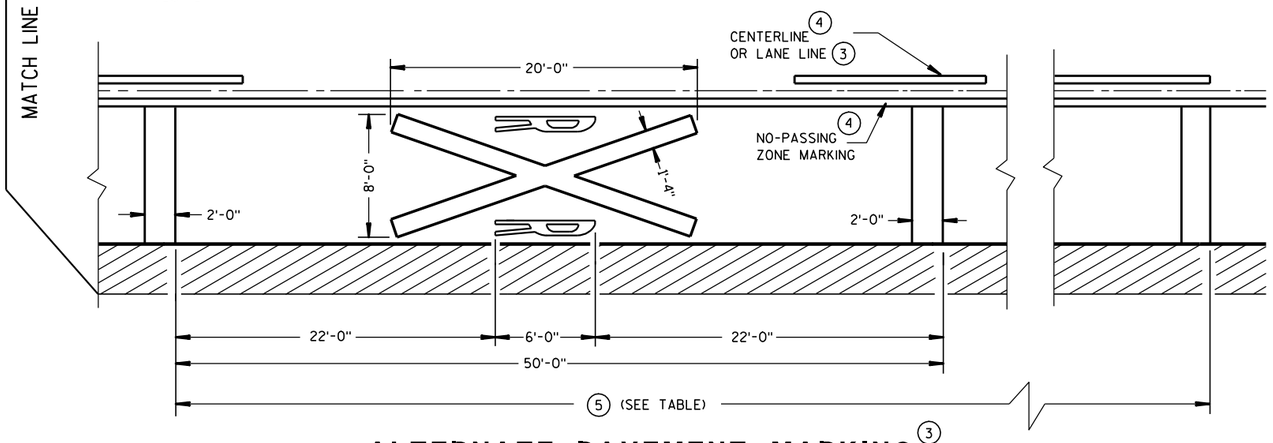
S.D.D. 15 C 8-16b



PREFERRED PAVEMENT MARKING (3)

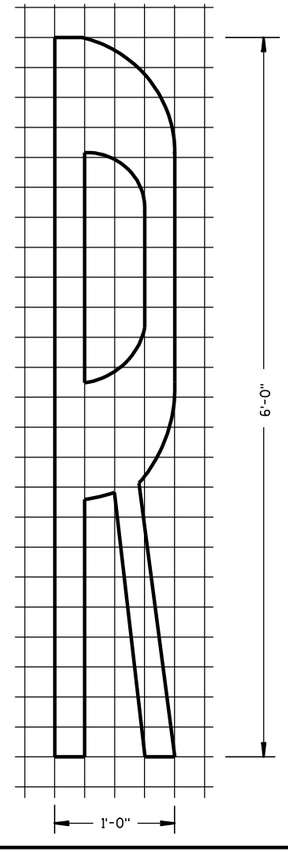


ALTERNATE PAVEMENT MARKING (3)

(5)

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.



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.

A THREE-LANE ROADWAY SHOULD BE MARKED WITH A CENTERLINE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE. ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION).

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

(1) A PORTION OF THE PAVEMENT MARKING SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN (W10-1).

(2) MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.

(3) REFLECTIVE WHITE.

(4) REFLECTIVE YELLOW 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.

(5) TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

(6) FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

1-9-2012
DATE

/S/ Thomas N. [illegible]
STATE TRAFFIC ENGINEER

FHWA

S.D.D. 15 C 9-9a

S.D.D. 15 C 9-9a

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

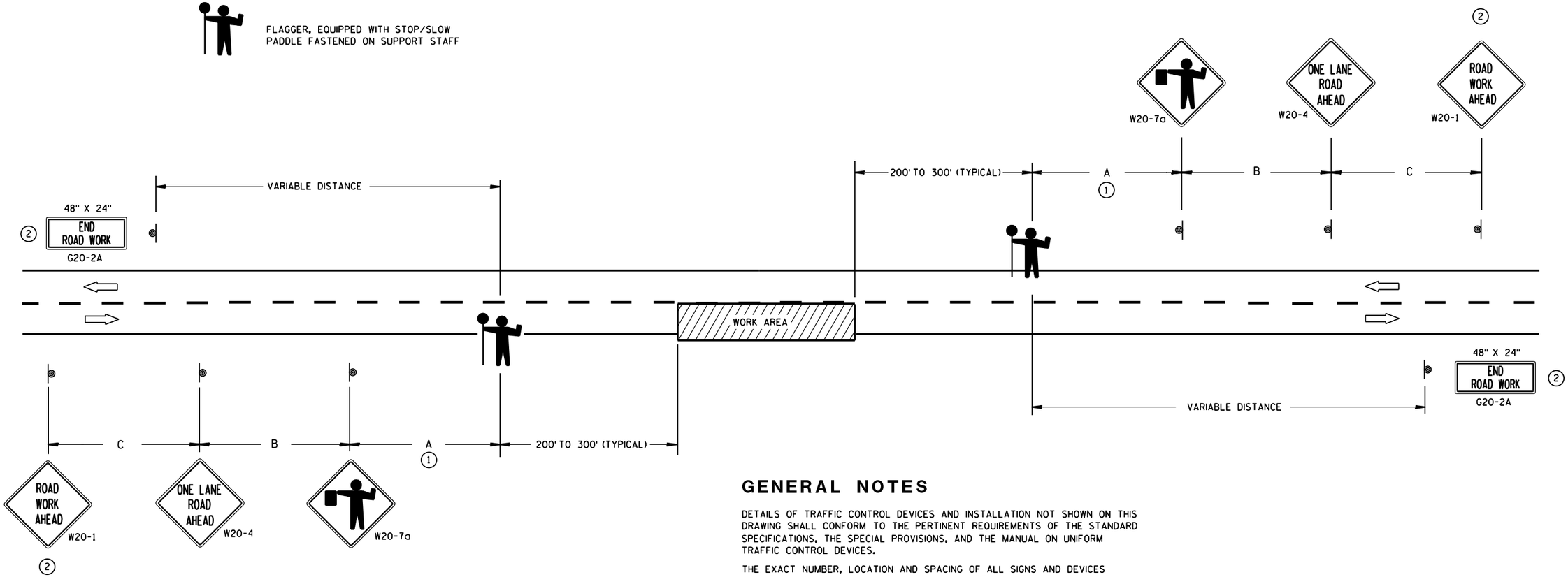
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

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

BE PREPARED TO STOP
W3-4

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



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

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

GENERAL NOTES

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

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

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

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

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

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

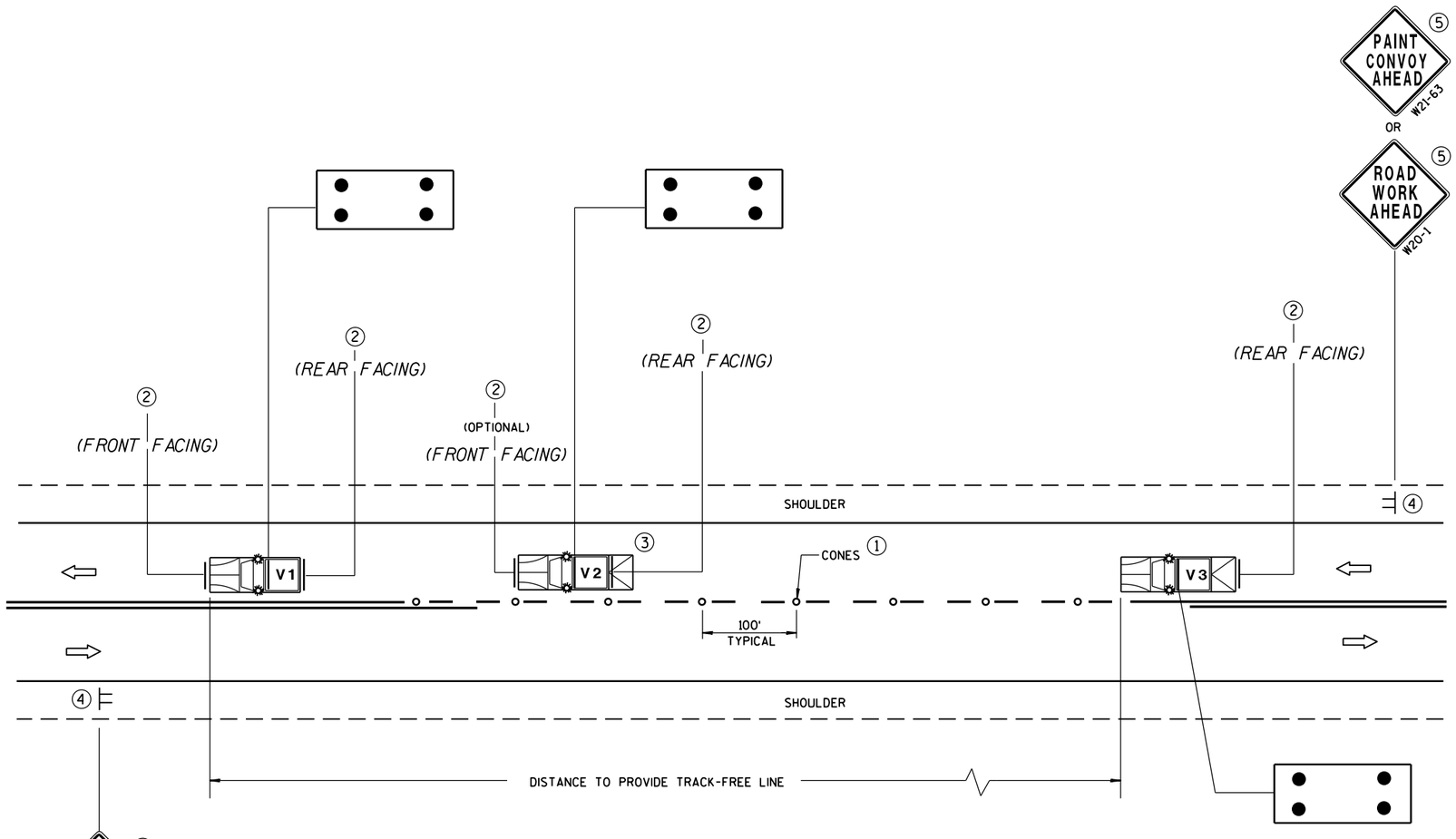
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 15 C 12-4



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

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

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

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

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

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

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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

LEGEND

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

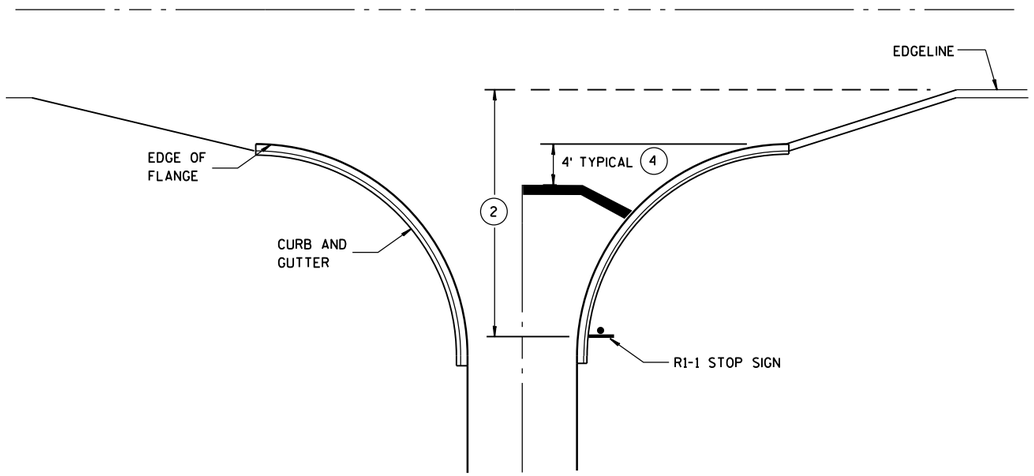
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC E
FHWA	

6

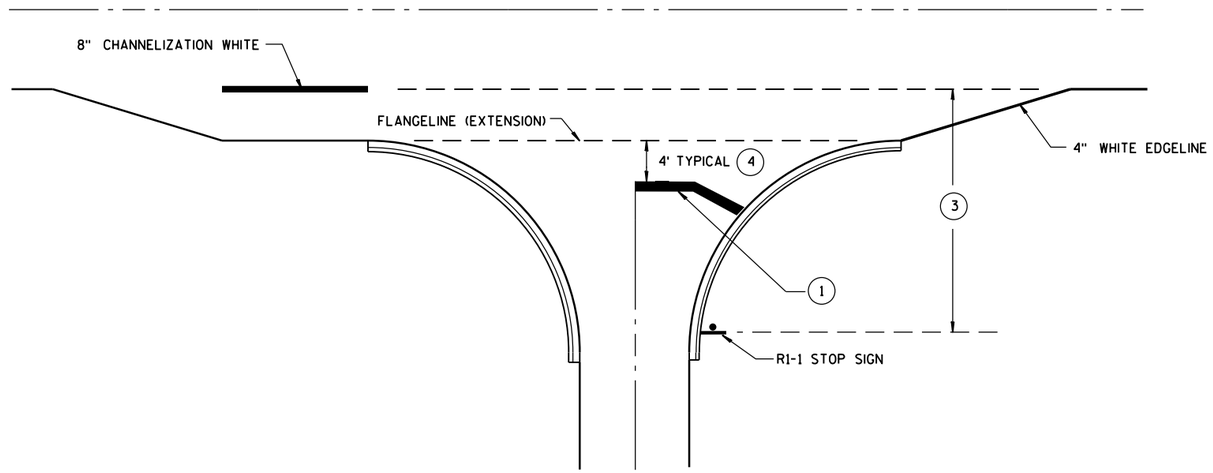
S.D.D. 15 C 19-2a

6

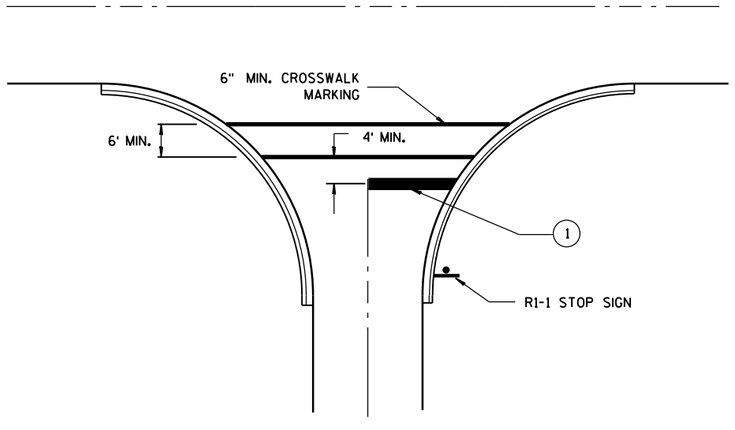
S.D.D. 15 C 19-2a



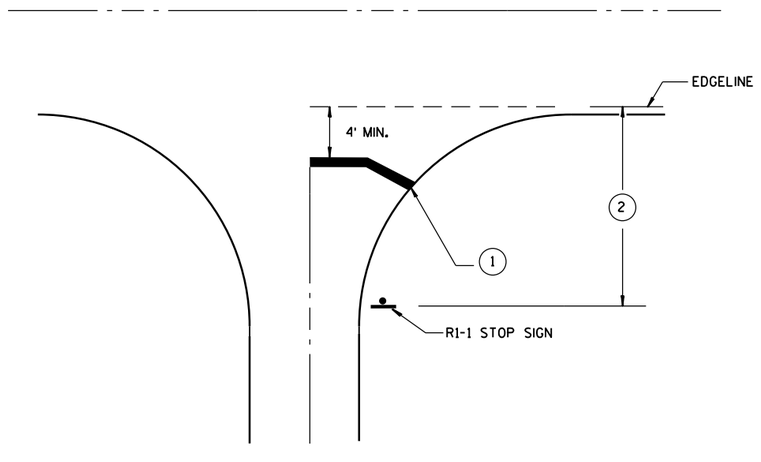
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

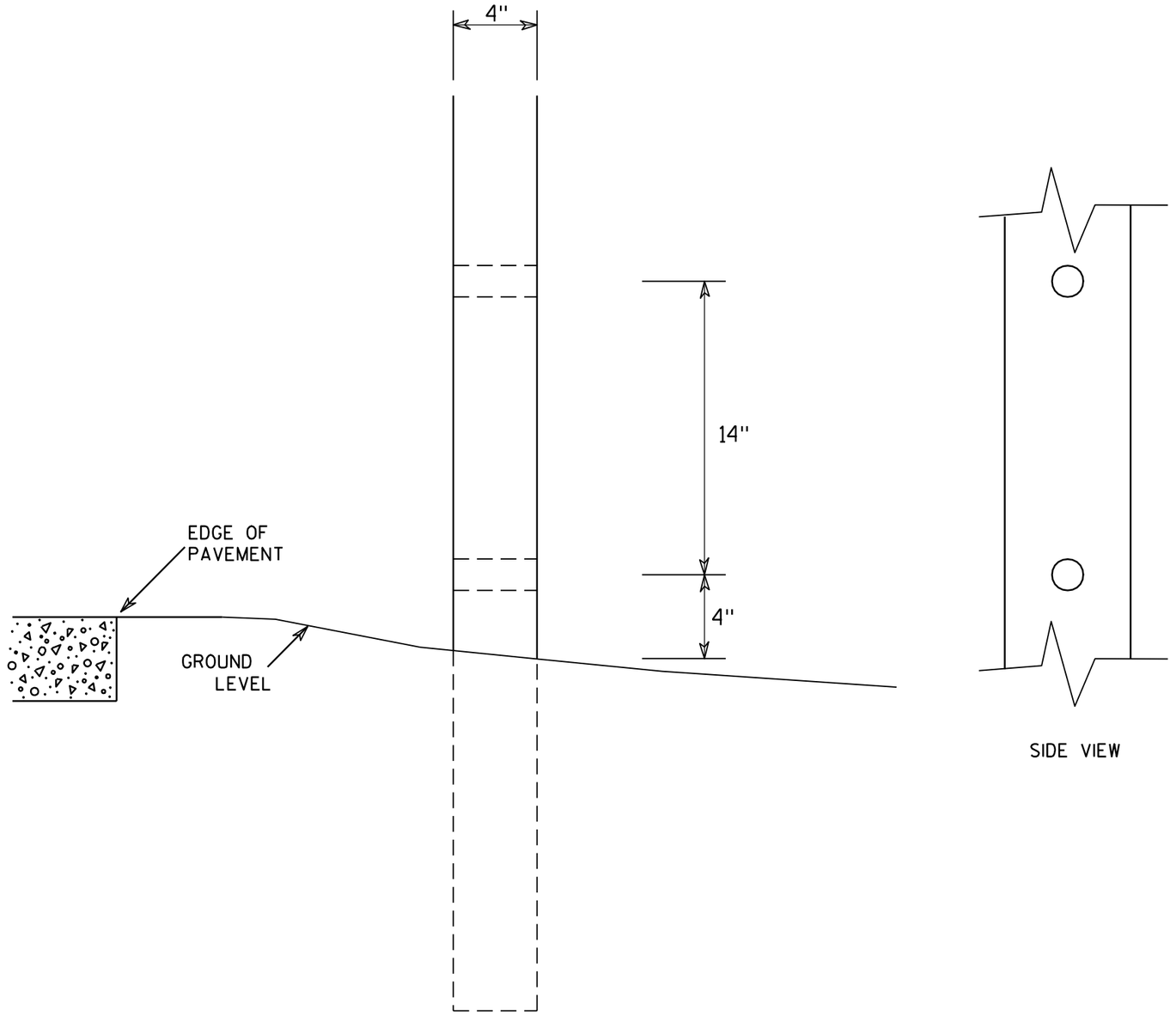
4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1



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.

7

7

4 X 6 WOOD POST MODIFICATIONS

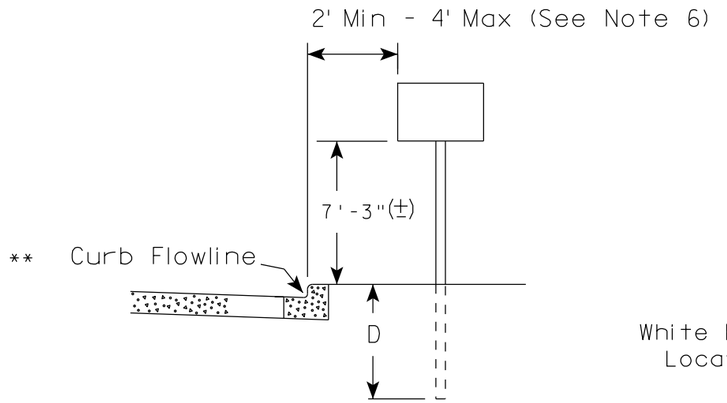
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

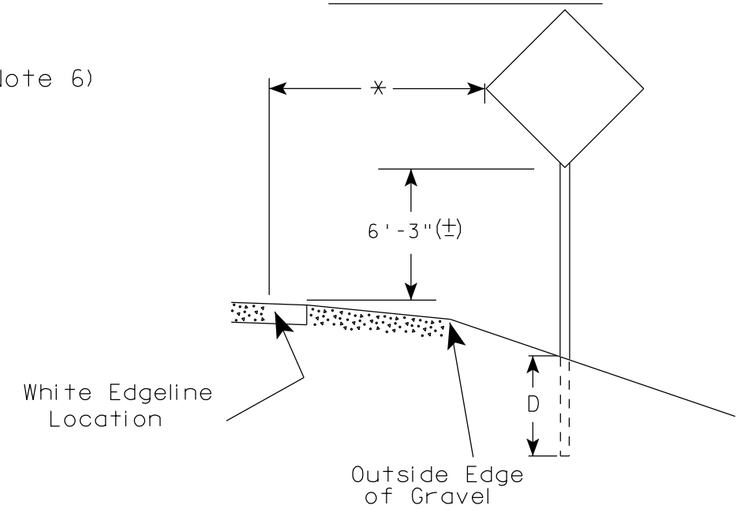
DATE 3/27/97 PLATE NO. A4-11.2

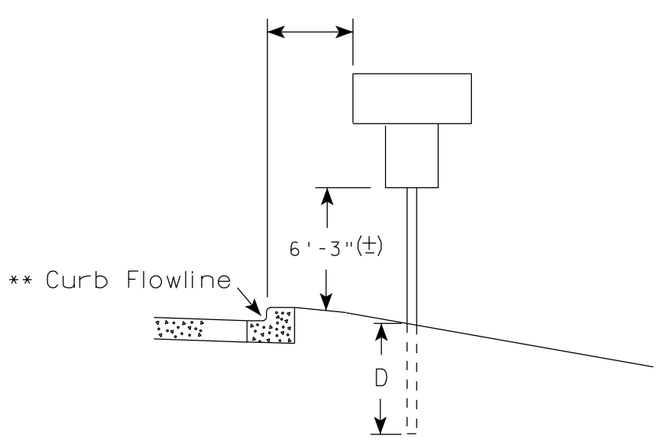
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 36	E

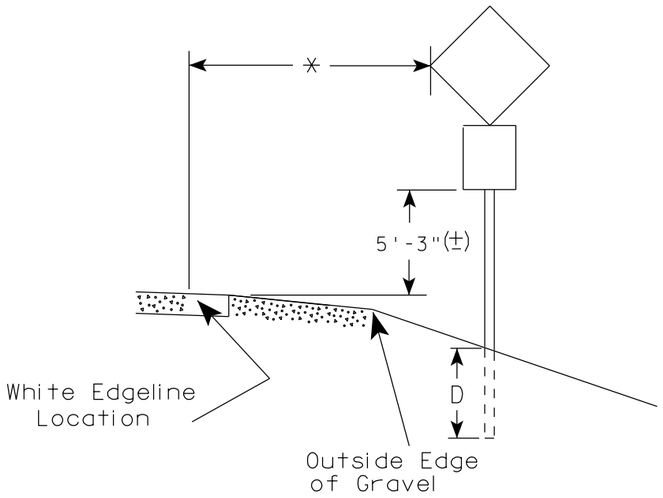
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

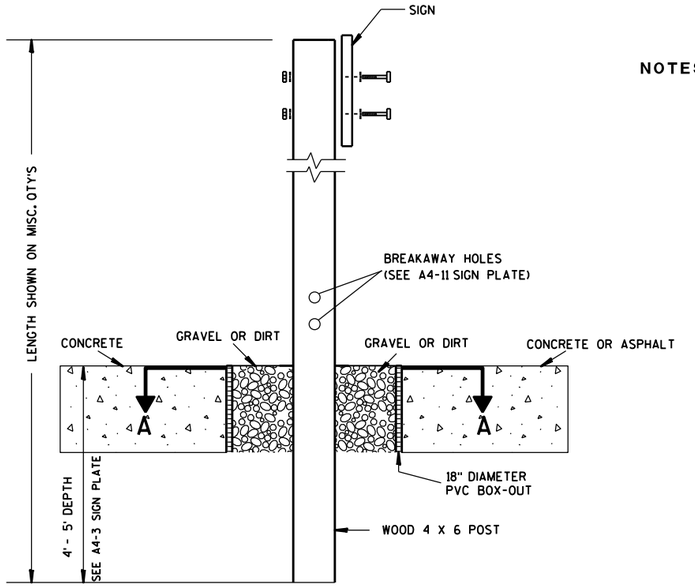
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-3.18

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

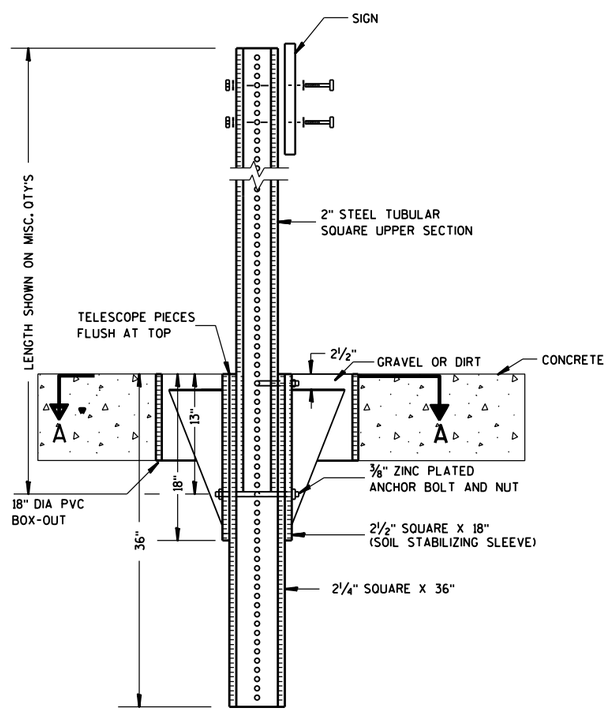
7



ELEVATION VIEW

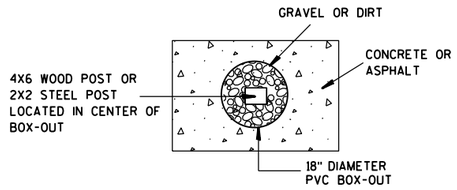
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

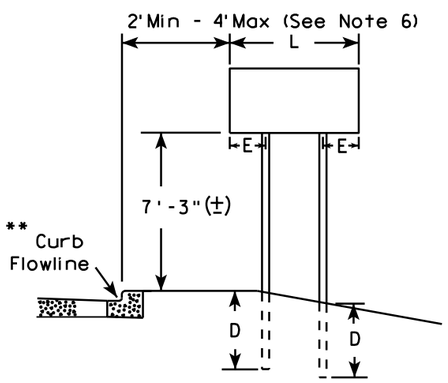
APPROVED Matthew R Rauch
for State Traffic Engineer

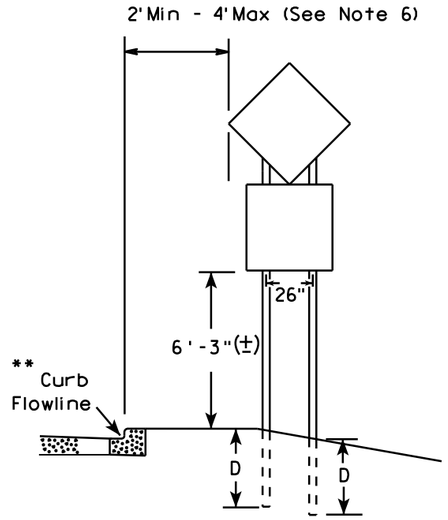
DATE 1/27/14 PLATE NO. A4-3B.1

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

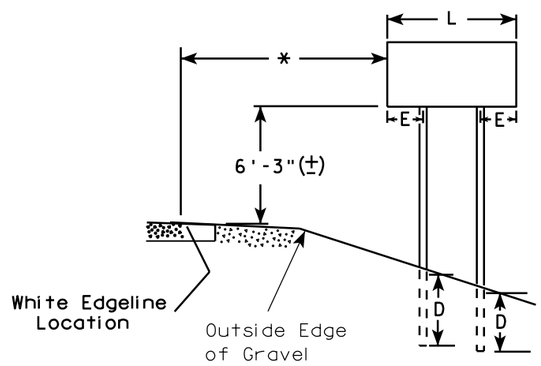
URBAN AREA

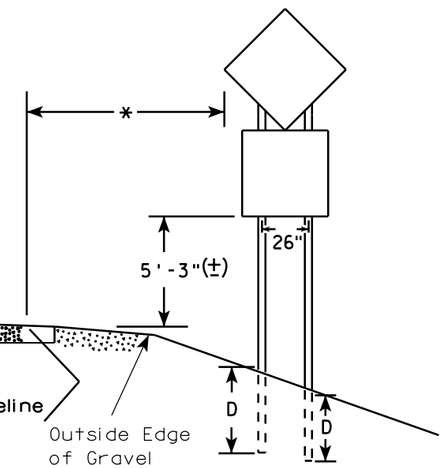




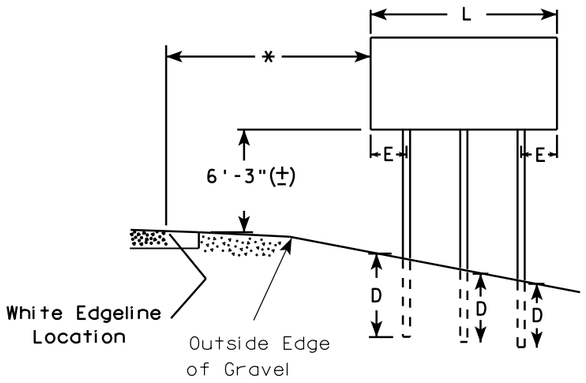
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

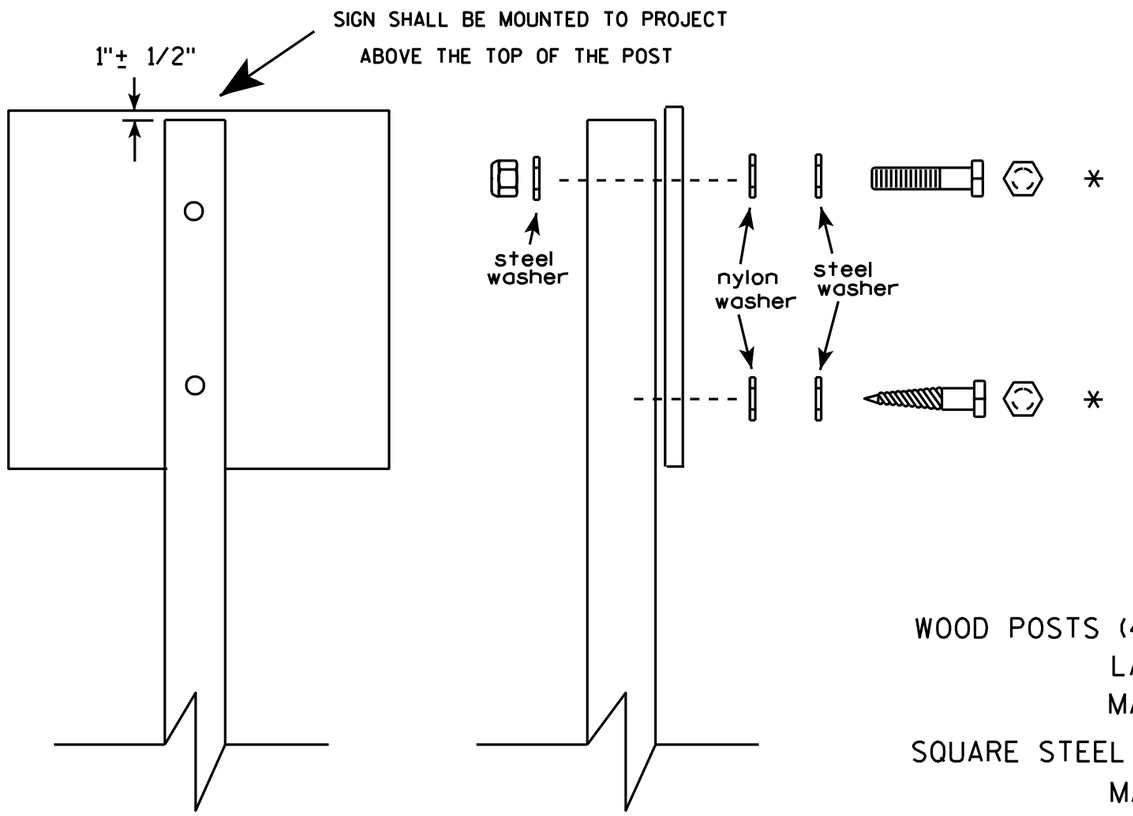
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-4 12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

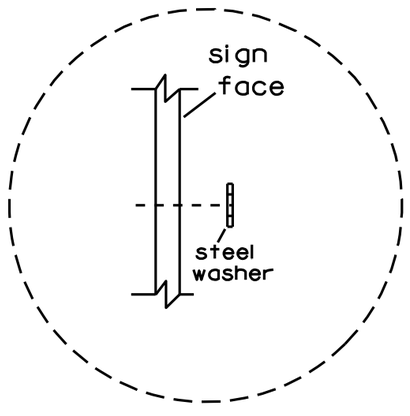
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

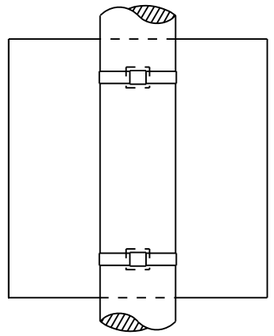
7

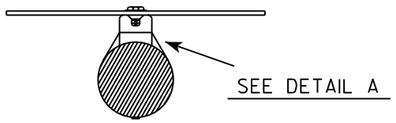
PROJECT NO:

SHEET NO: 40 E

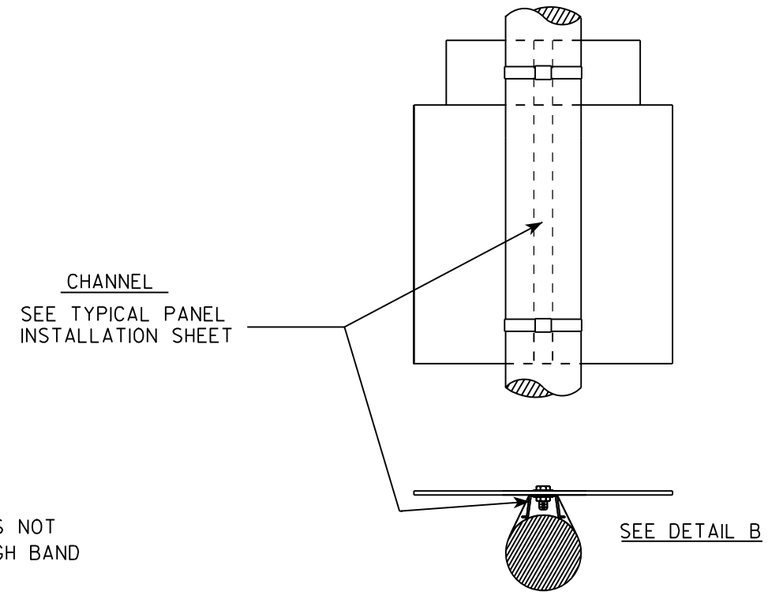
BANDING

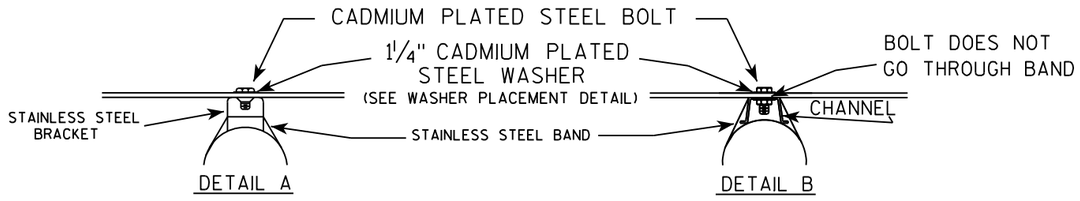
SINGLE SIGN



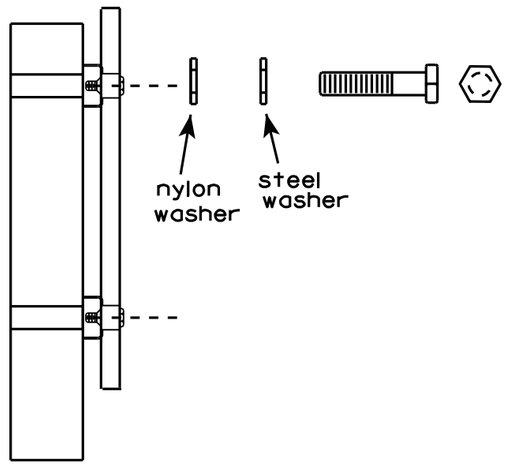


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

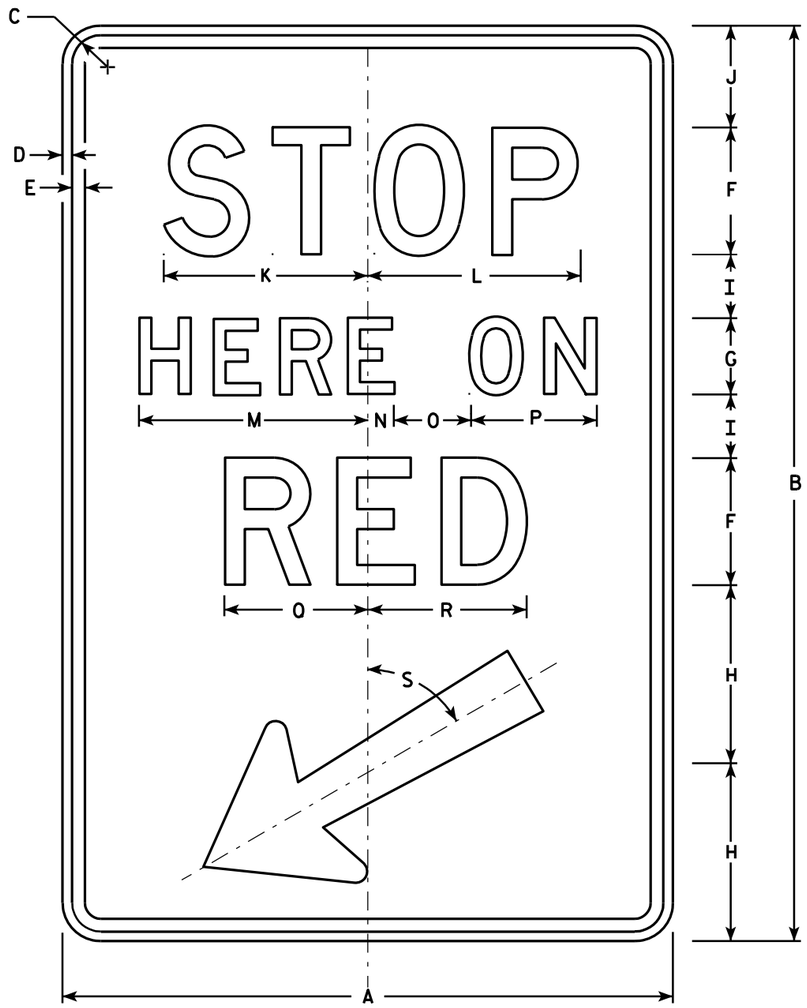
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

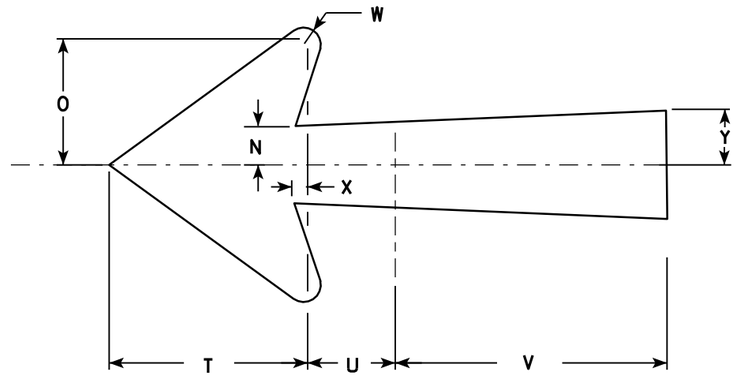
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 41	E



R10-6

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
2M	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
3																											
4																											
5																											

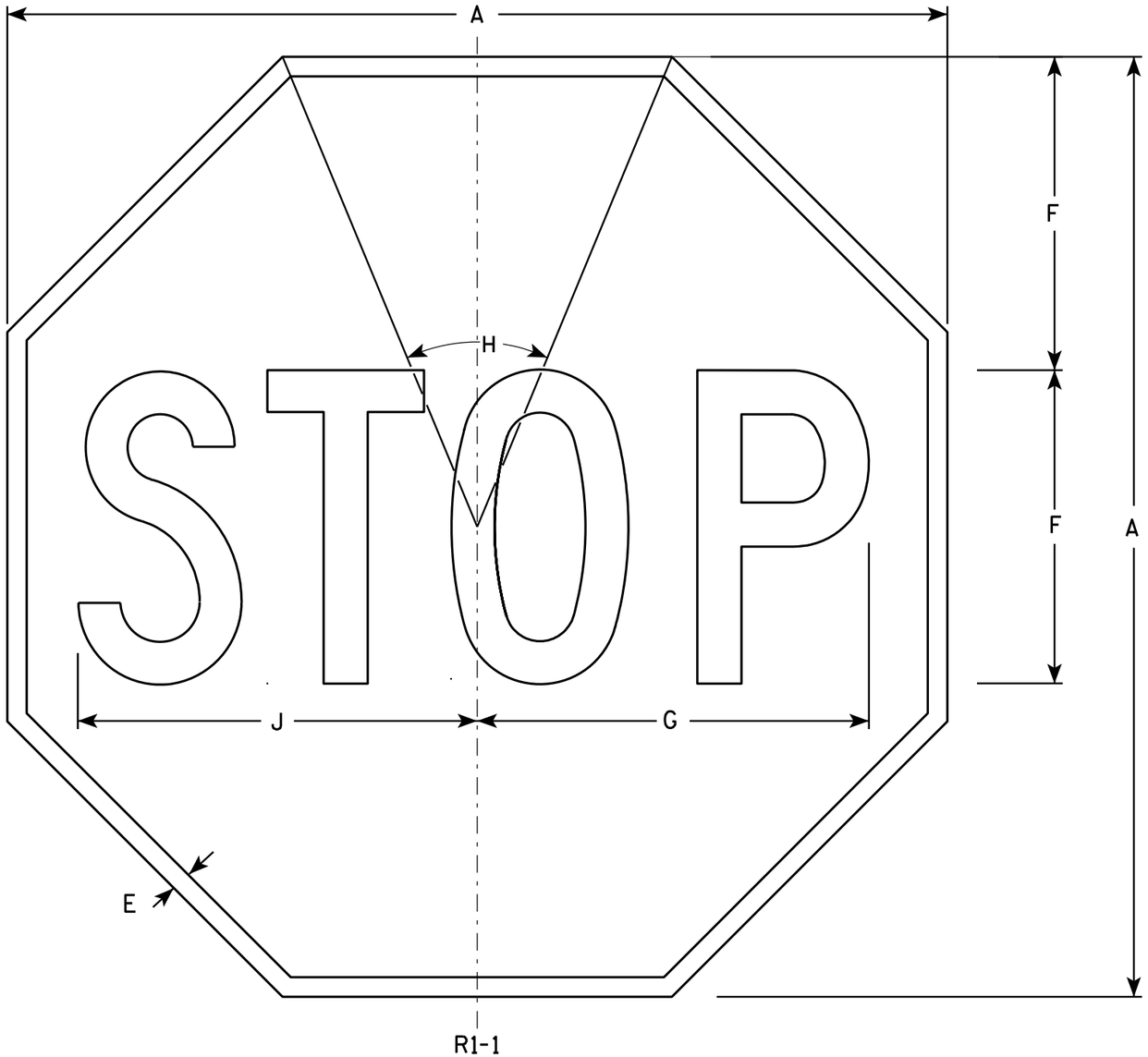
STANDARD SIGN
R10-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-6.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 42	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

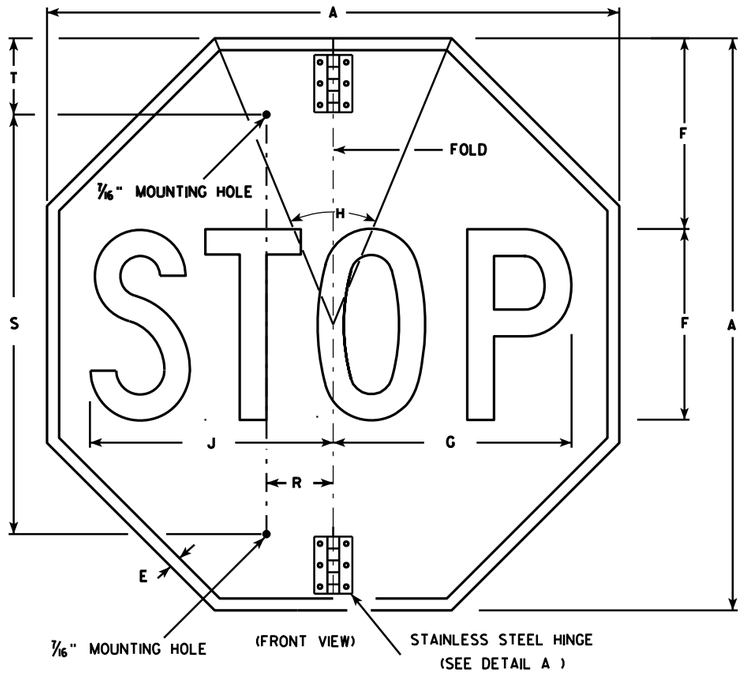
STANDARD SIGN
R1-1

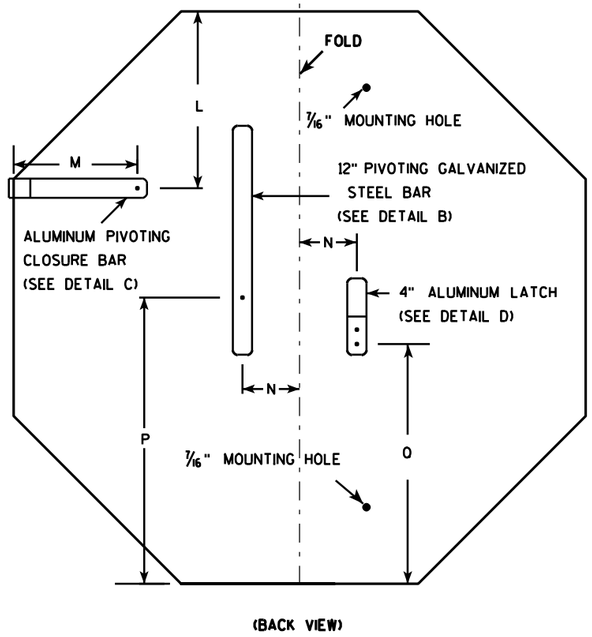
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

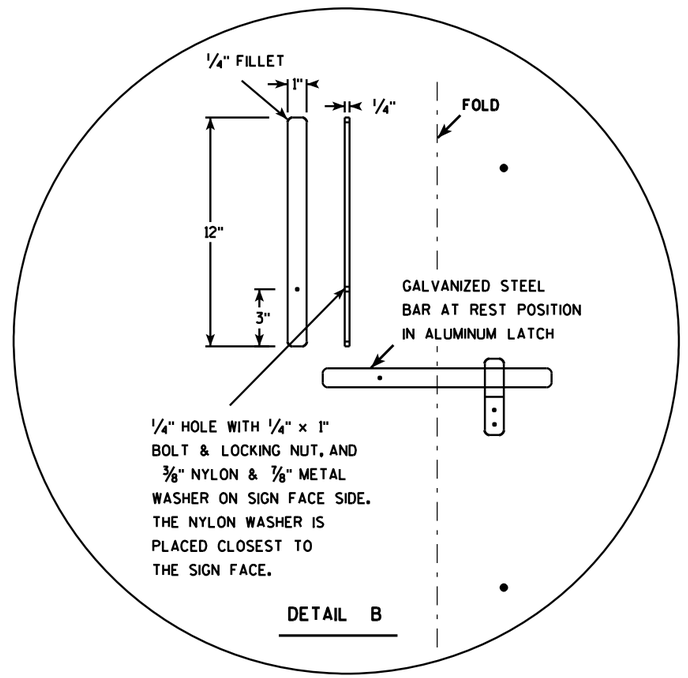
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 43	E

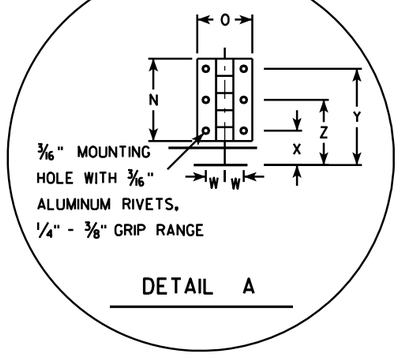


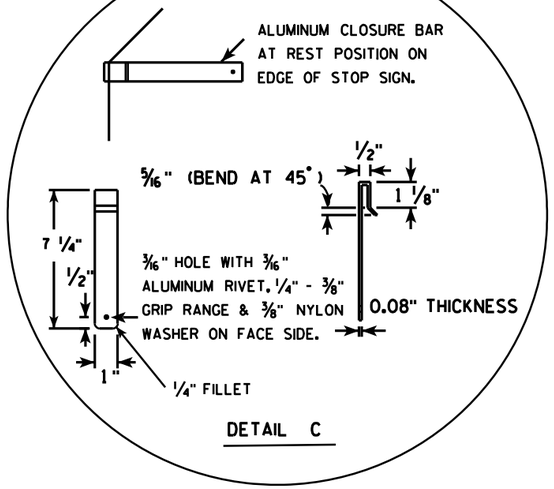


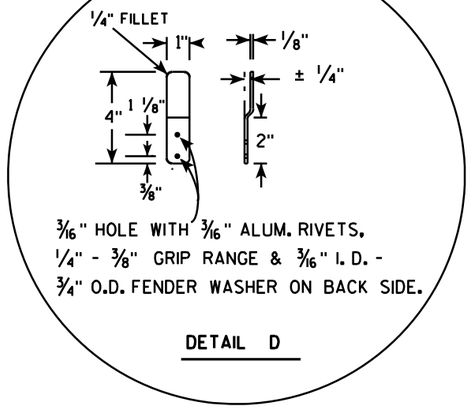
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

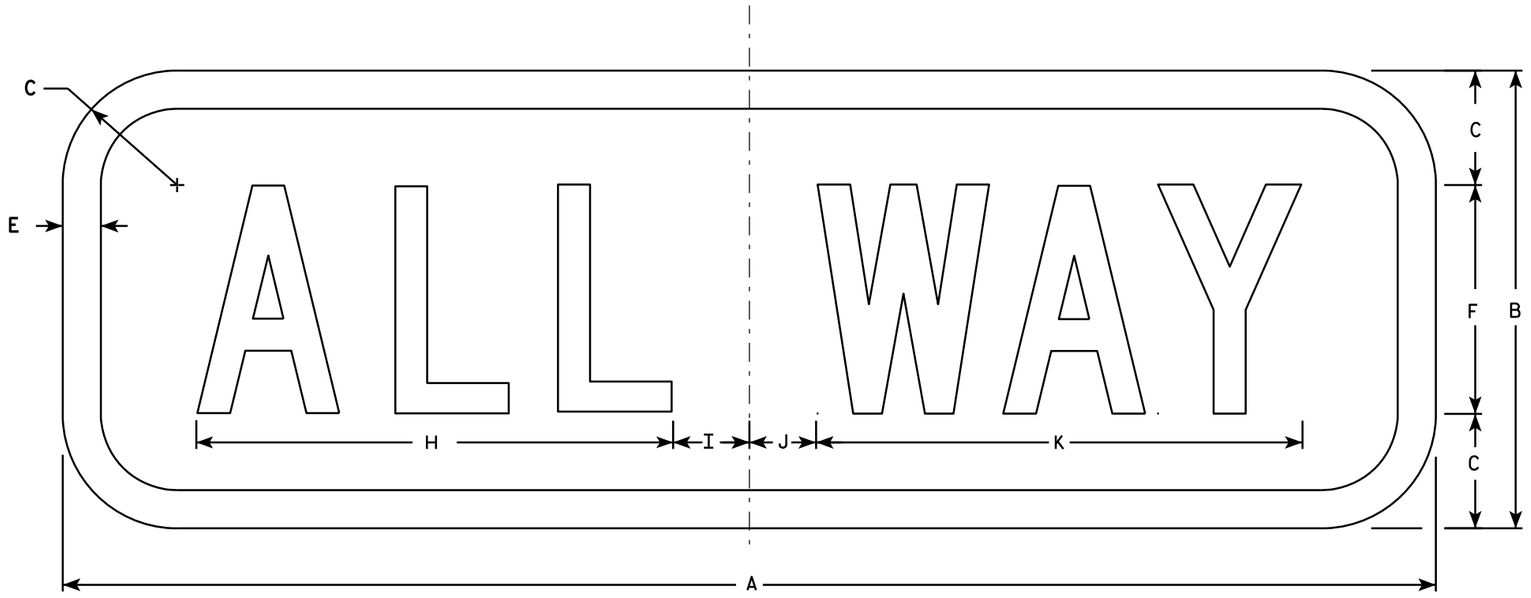
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 44	E



R1-3P

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. 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	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																1.5
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
4																											
5																											

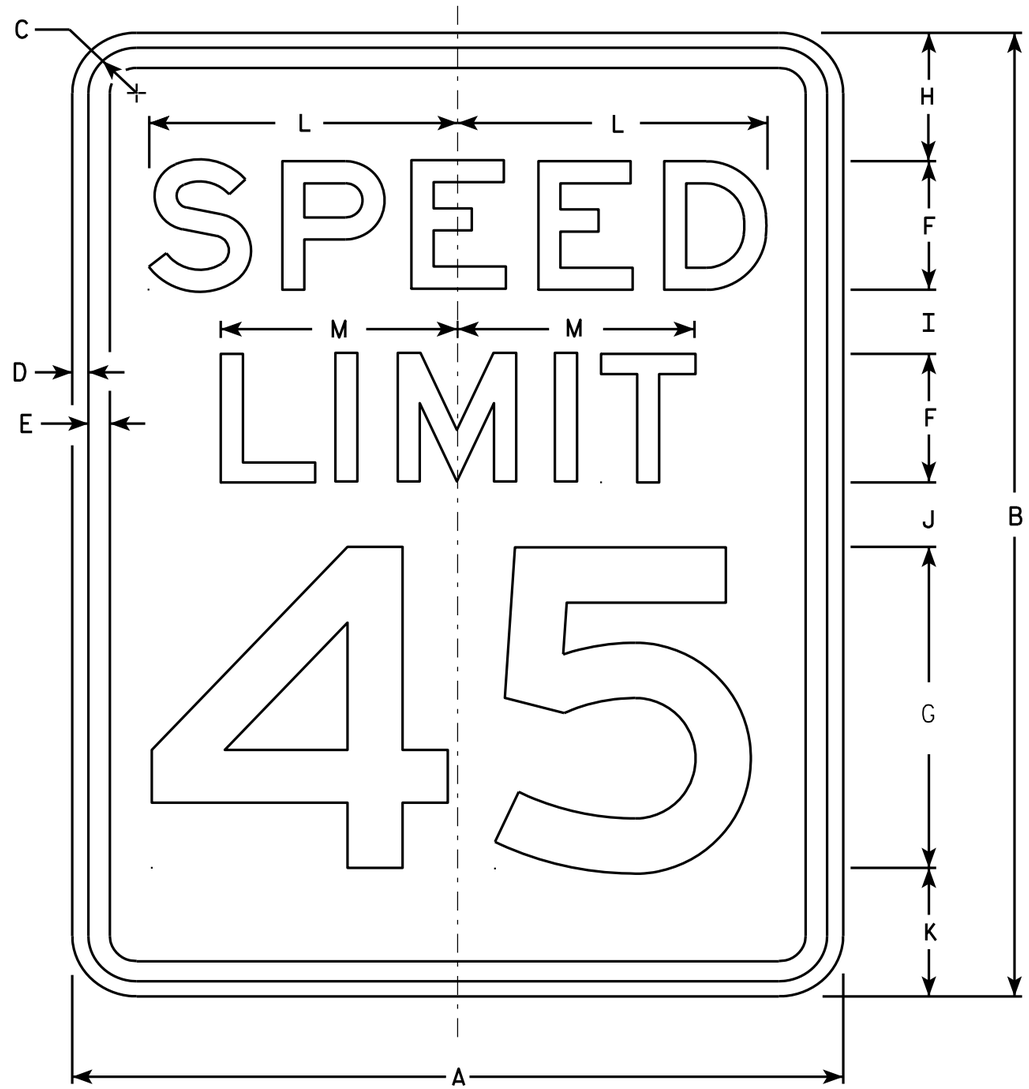
STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. R1-3P.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 45	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

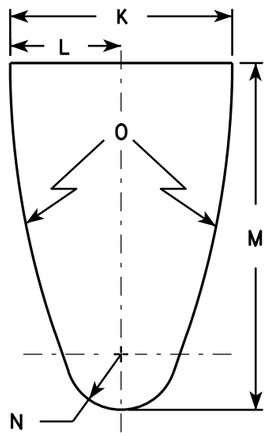
APPROVED Matthew R Rauch
for State Traffic Engineer

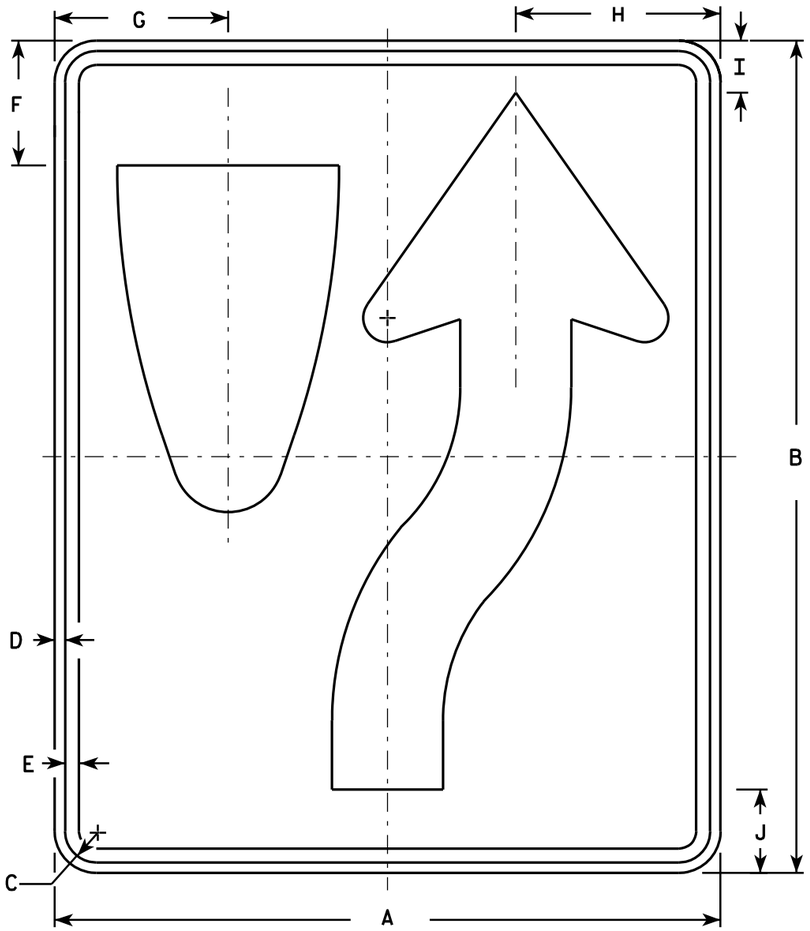
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 46 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

WISDOT/CADDS SHEET 42

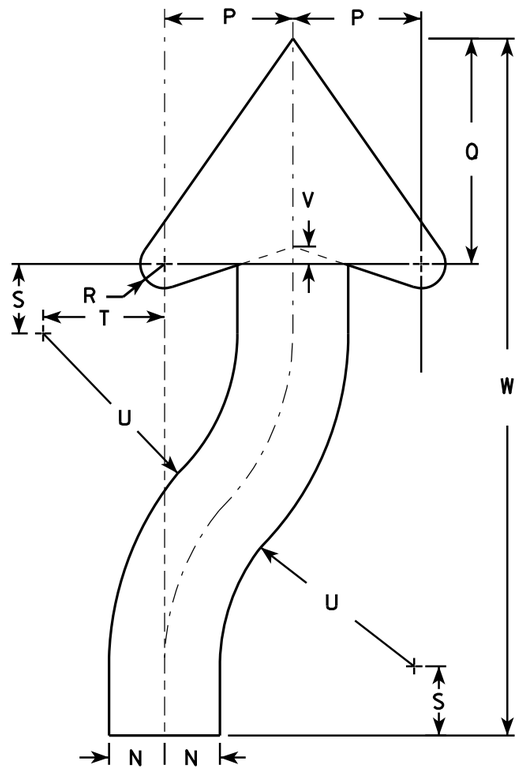




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

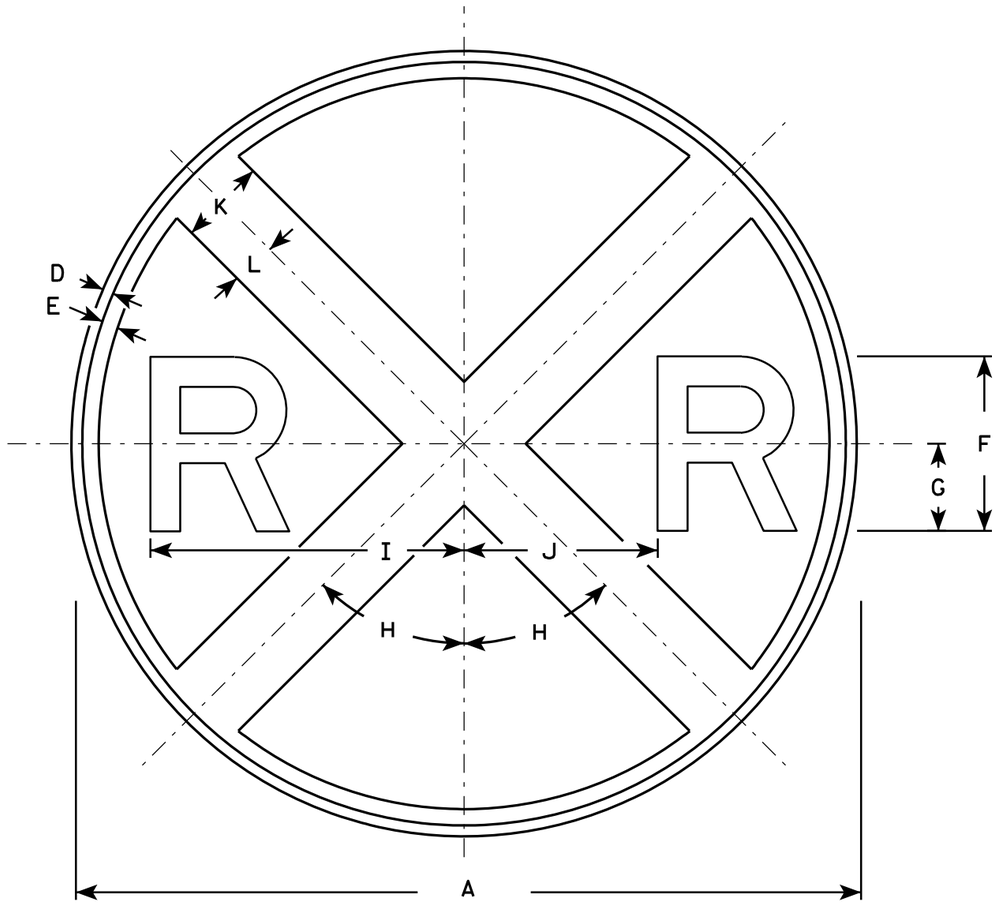
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 47	E



W10-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E

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			3/8	5/8	7	3 1/2	45°	12 3/8	7 1/8	3	1 1/2															4.91
2S	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
2M	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
3																											
4	48			3/4	1 1/4	10	5	45°	18 3/8	11 5/8	5	2 1/2															12.57
5																											

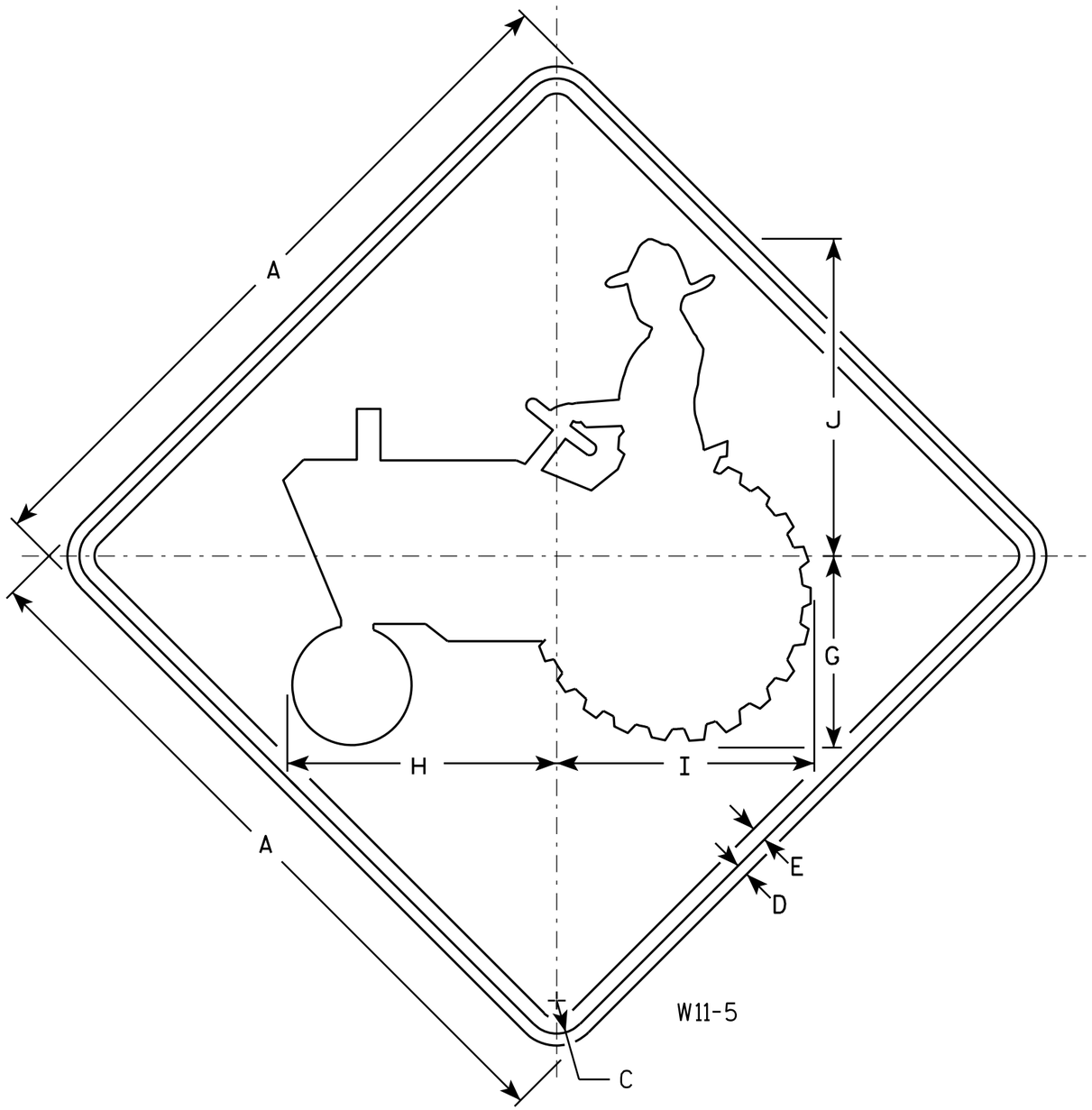
STANDARD SIGN
W10-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 48	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		6 3/8	9	8 5/8	10 5/8																	4.0
2S	30		1 3/8	1/2	5/8		8	11 1/4	10 3/4	13 1/4																	6.25
2M	30		1 3/8	1/2	5/8		8	11 1/4	10 3/4	13 1/4																	6.25
3																											
4	36		1 5/8	5/8	3/4		9 5/8	13 1/2	12 7/8	16																	9.0
5	48		2 1/4	3/4	1		12 3/4	18	17 1/4	21 1/8																	16.0

STANDARD SIGN
W11-5

WISCONSIN DEPT OF TRANSPORTATION

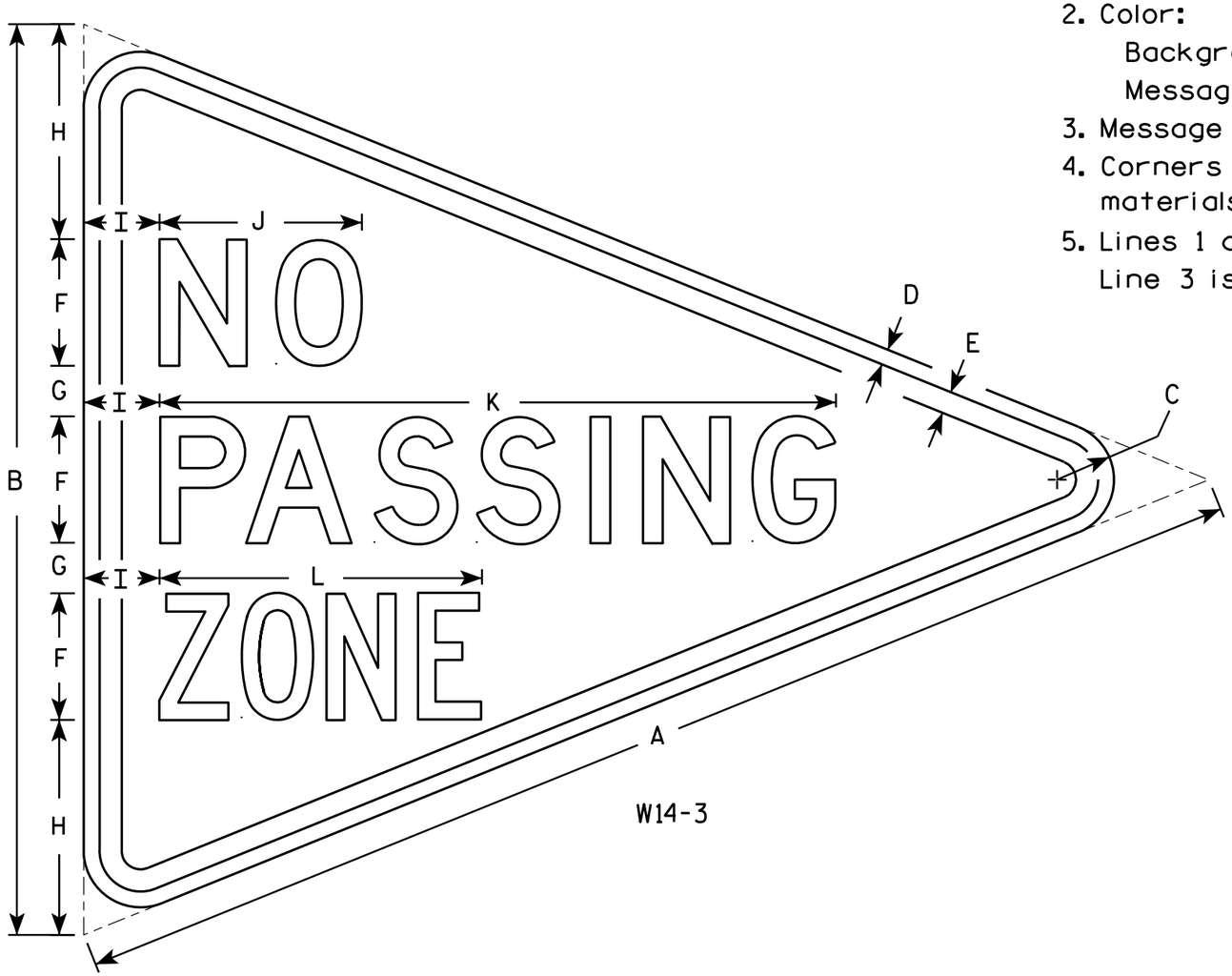
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/13/15 PLATE NO. W11-5.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 49 | E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

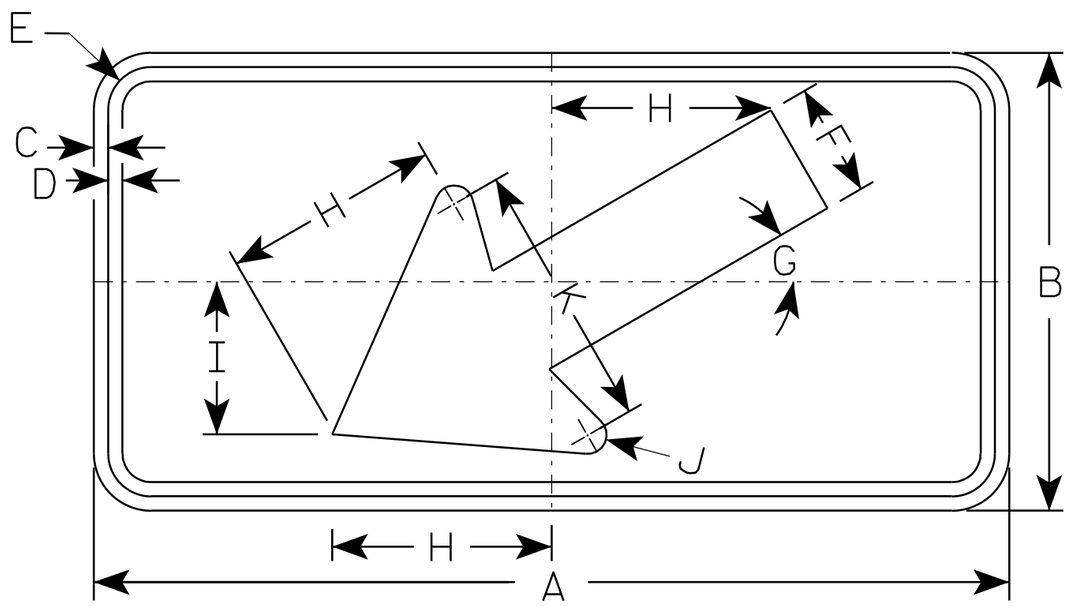
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 50	E



W16-7L

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. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

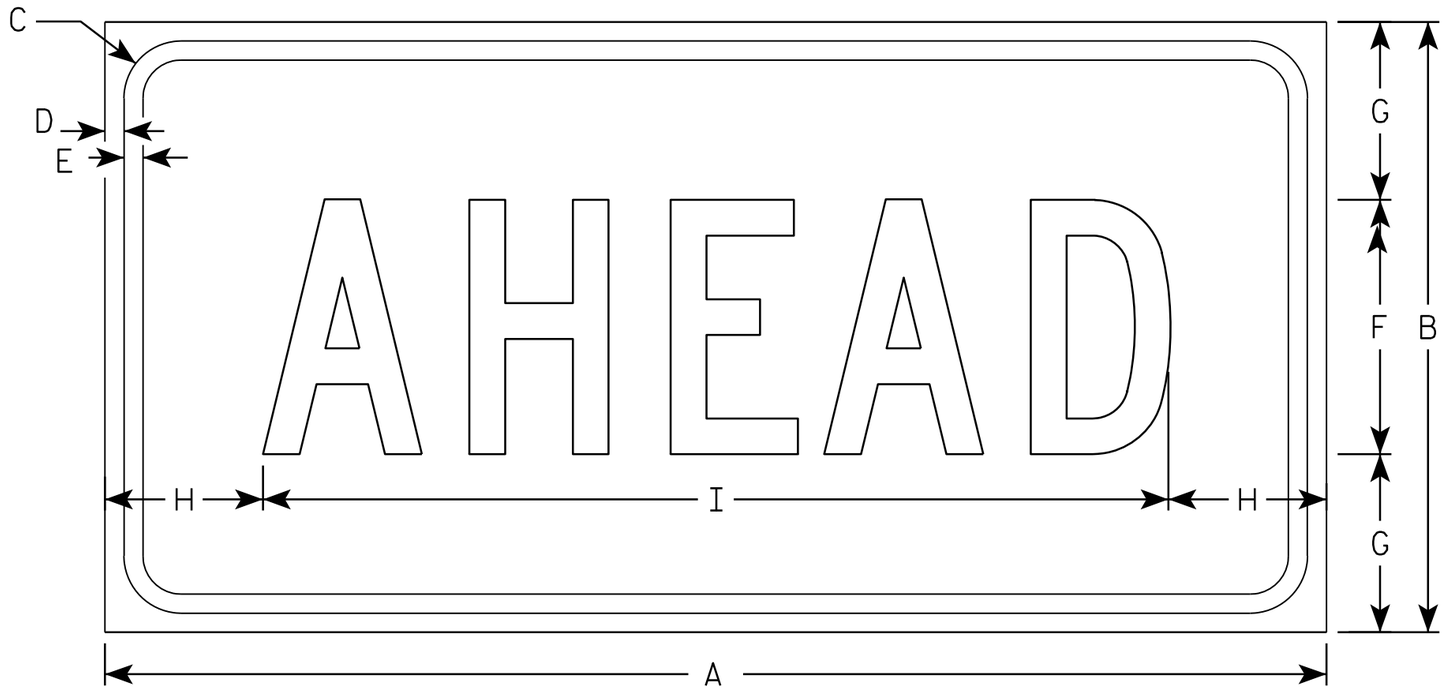
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 51	E



W16-9P

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	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
W16-9P

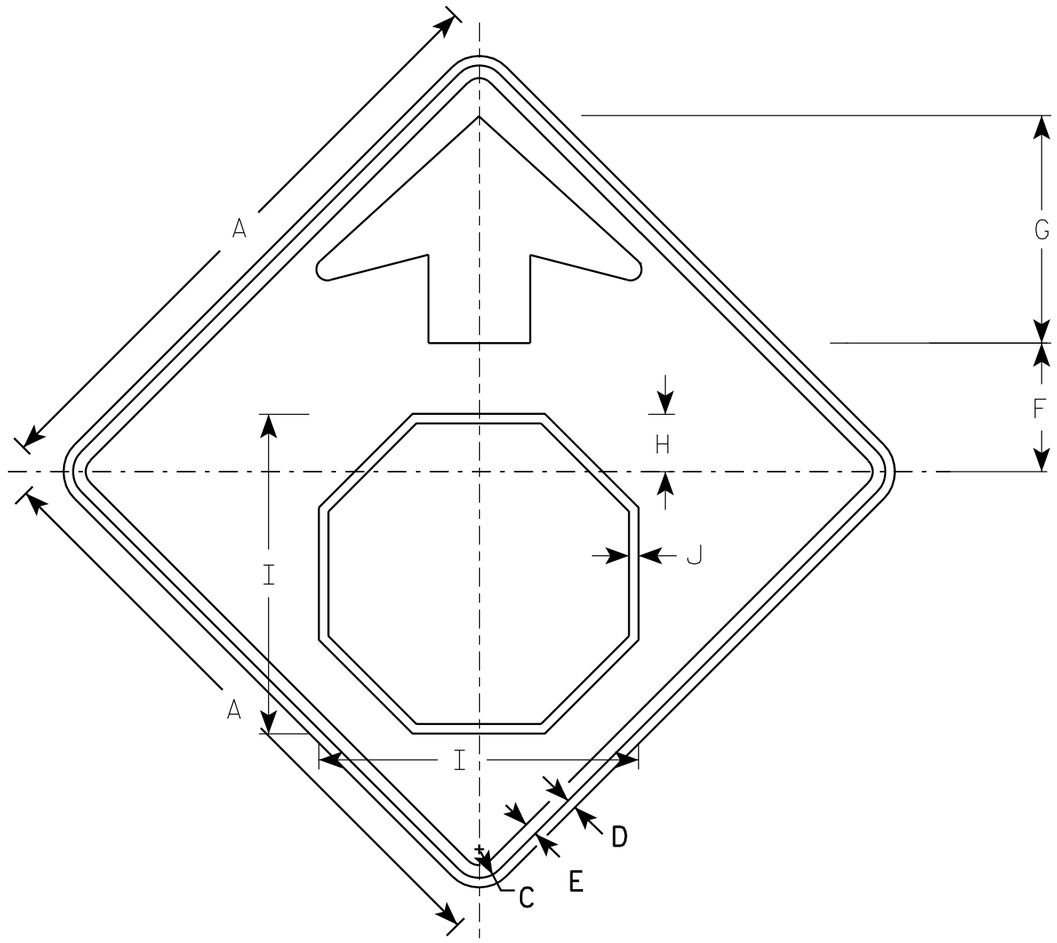
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/28/10 PLATE NO. W16-9P.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 52 | E

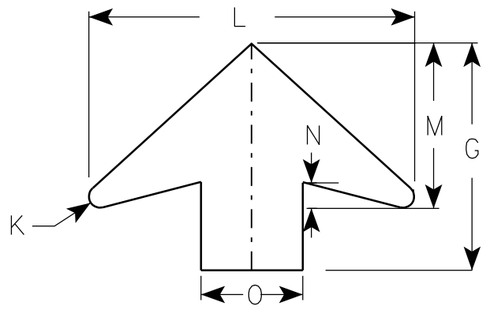
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W169P.DGN PLOT DATE : 28-DEC-2010 13:39 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 2.979524:1.000000
WISDOT/CADDS SHEET 42



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:

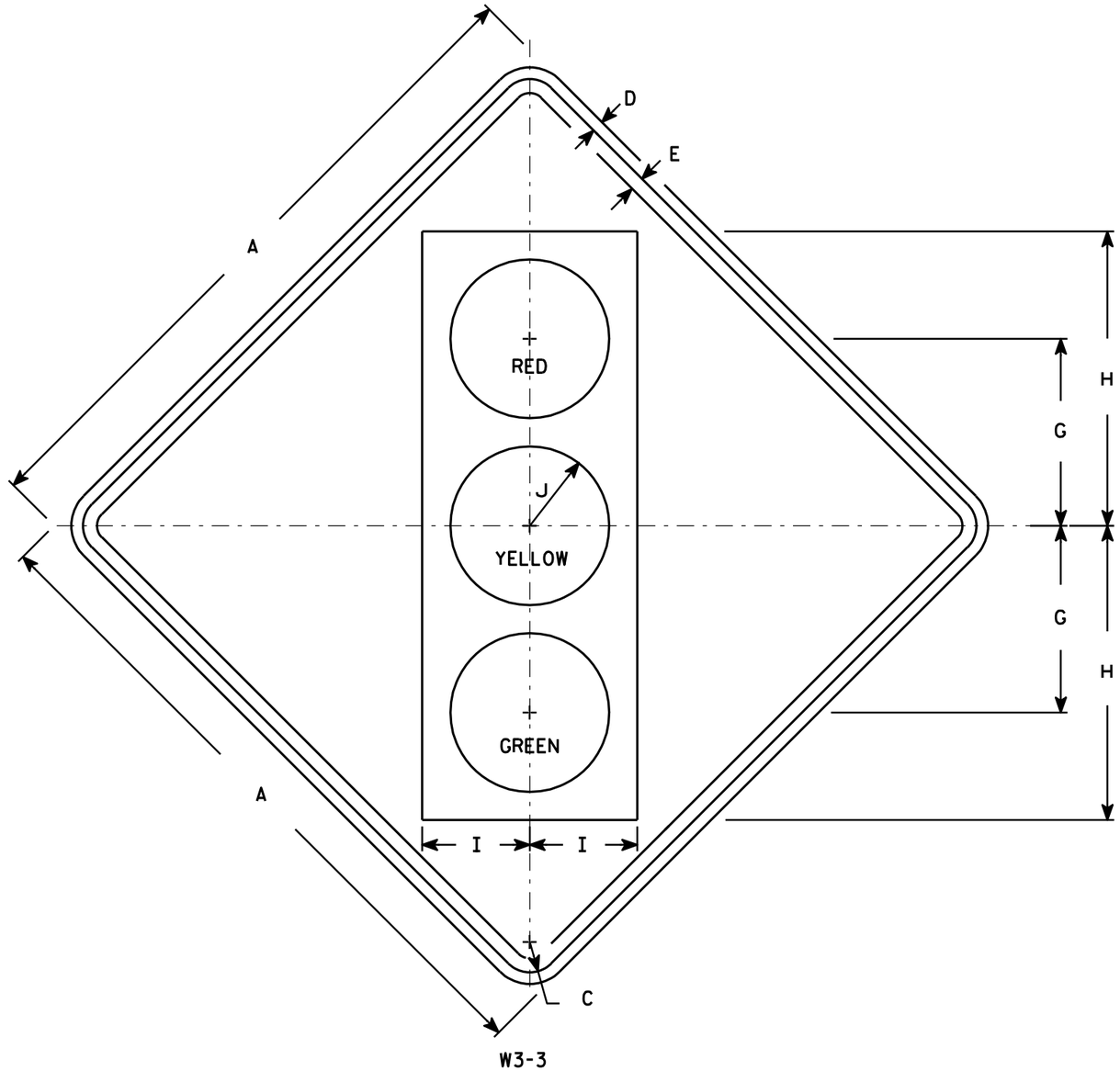
SHEET NO: 53 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W31.DGN PLOT DATE : 07-JUN-2010 12:59 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

7

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 54 | E

Notes

Wisconsin Department of Transportation

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