LAX

PROJECT ID: 5042-05-81

COUNTY: RICHLAND

DECEMBER 2017

ORDER OF SHEETS


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


TOTAL SHEETS = 312



N

DESIGN DESIGNATION

| | | |
|---|---|---|
| A.A.D.T. | 2018 | = 4300 |
| A.A.D.T. | 2038 | = 5100 |
| D.H.V. | | = 14.7 |
| D.D. | | = 59/41 |
| T. | | = 7.9% |
| DESIGN SPEED | | = 60 MPH (40 MPH) |
| ESALS | | = 1,600,000 |

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

# RICHLAND CENTER – HILLSBORO

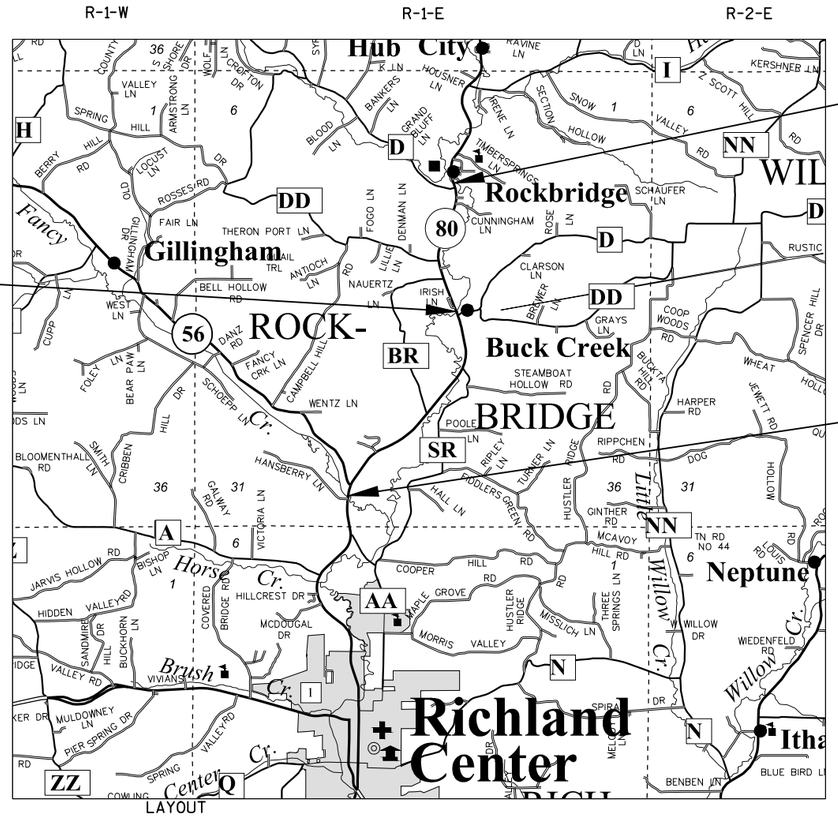
PINE RVR & FANCY CRK STRUCS

## STH 80

## RICHLAND COUNTY

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 5042-05-81 | WISC 2018004 | 1 |
| | | |
| | | |
| | | |

| STATE PROJECT NUMBER |
|---|
| 5042-05-81 |




LAYOUT

SCALE 0 2 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.832 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, RICHLAND COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | MSA |
| Designer | CAMERON SHIFFER |
| Project Manager | DAN KLEINERTZ |
| Regional Examiner | MIKE RUD |
| Regional Supervisor | JOE GREGAS |

APPROVED FOR THE DEPARTMENT

DATE: 7/27/2017 (Signature)

E

## GENERAL NOTES

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

-ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.

-CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER PIPE IN DRIVEWAY AREA IS INSTALLED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

-PRIOR TO THE PLACEMENT OF STEEL PLATE OR MGS GUARDRAIL, THE SHOULDERS SHALL BE IN PLACE, SHAPED, AND COMPACTED UNLESS SHOWN OTHERWISE.

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

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

-CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

-TOPSOIL SHALL BE PLACED 1 INCH BELOW THE TOP OF ADJACENT CONCRETE CURBS OR SIDEWALKS.

## ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL
PERMANENT SIGNING & PAVEMENT MARKING
TRAFFIC CONTROL PLAN
DETOUR PLANS
CONTROL DATA

## STANDARD ABBREVIATIONS

| | | | |
|---|---|---|---|
| AC. | ACRE | MAX. | MAXIMUM |
| AGG. | AGGREGATE | MGAL | 1000 GALLONS |
| AH | AHEAD | MIN. | MINIMUM |
| < | ANGLE | N.C. | NORMAL CROWN OR NO CHANGE |
| AE, AEW | APRON ENDWALL | N | NORTH |
| ASPH. | ASPHALTIC | NO. | NUMBER |
| A.D.T. | AVERAGE DAILY TRAFFIC | PAV'T | PAVEMENT |
| B.F. | BACK FACE | P.L.E. | PERMANENT LIMITED EASEMENT |
| BK. | BACK | P.C. | POINT OF CURVATURE |
| BEG. | BEGIN | P.I. | POINT OF INTERSECTION |
| B.M. | BENCH MARK | P.T. | POINT OF TANGENCY |
| C/L | CENTER LINE | V.P.C. | VERTICAL POINT OF CURVATURE |
| D | CENTRAL ANGLE OR DELTA | V.P.I. | VERTICAL POINT OF INTERSECTION |
| C.M.C.P. | CORRUGATED METAL CULVERT PIPE | V.P.T. | VERTICAL POINT OF TANGENCY |
| C.M.P. | CORRUGATED METAL PIPE | PCC | PORTLAND CEMENT CONCRETE |
| CO. | COUNTY | P.E. | PRIVATE ENTRANCE |
| CTH | COUNTY TRUNK HIGHWAY | P.L. | PROPERTY LINE |
| CR. | CREEK | R | RADIUS OR RANGE |
| C.A.B.C. | CRUSHED AGGREGATE BASE COURSE | R/L | REFERENCE LINE |
| C.Y. | CUBIC YARD | R.C.C.P. | REINFORCED CONCRETE CULVERT PIPE |
| C.P. | CULVERT PIPE | RT | RIGHT |
| C. & G. | CURB AND GUTTER | REQ'D | REQUIRED |
| D | DEGREE OF CURVE | R.H.F. | RIGHT HAND FORWARD |
| D.H.V. | DESIGN HOUR VOLUME | R/W | RIGHT OF WAY |
| DIA. | DIAMETER | R. | RIVER |
| DISCH. | DISCHARGE | RD. | ROAD |
| EA | EACH | SHLD. | SHOULDER(S) |
| E | EAST | SHR. | SHRINKAGE |
| ELEC. | ELECTRIC(AL), ELEC. CABLE | S | SOUTH |
| EL., ELEV. | ELEVATION | S.F. | SQUARE FOOT (FEET) |
| EXC. | EXCAVATION | SDD | STANDARD DETAIL DRAWING(S) |
| F.F. | FACE TO FACE | STH | STATE TRUNK HIGHWAY |
| FERT. | FERTILIZER | STA. | STATION |
| F.E. | FIELD ENTRANCE | S.E. | SUPERELEVATION |
| F/L, F.L. | FLOW LINE | S/L | SURVEY LINE |
| CWT. | HUNDRED WEIGHT | T | TANGENT |
| INL | INLET | TEL. | TELEPHONE |
| INTER. | INTERSECTION | TEMP. | TEMPORARY |
| JT. | JOINT | T.L.E. | TEMPORARY LIMITED EASEMENT |
| LT | LEFT | T.O.C. | TOP OF CURB |
| L.H.F. | LEFT HAND FORWARD | T. | (TRUCKS) PERCENT OF |
| L. | LENGTH OF CURVE | TYP. | TYPICAL |
| L.F. | LINEAR FOOT(FEET) | UNCL. | UNCLASSIFIED |
| LC. | LONG CHORD | U.G. | UNDERGROUND (CABLE) |
| LS | LUMP SUM | V.C. | VERTICAL CURVE |
| M.P. | MARKER POST | W | WEST |

## UTILITY CONTACTS

FRONTIER COMMUNICATIONS - COMMUNICATION LINE
RUSS RYAN
107 PLEASANTVIEW DR
PLYMOUTH, WI 53073
russell.w.ryan@ftr.com
(920) 893-7212

HUB-ROCK SANITARY DISTRICT #1
JOLENE COY
25475 SCHOONOVER ST
RICHLAND CENTER, WI 53581
goths112@gmail.com
(608) 647-4950

RICHLAND ELECTRIC COOPERATIVE - ELECTRICITY
LARRY HALLETT
1027 N JEFFERSON
PO BOX 439
RICHLAND CENTER, WI 53581
lhallett@rec.coop
(608) 647-317

## DESIGN CONTACTS

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PROJECT MANAGER
WISDOT SW REGION
PROJECT DEVELOPMENT
3550 MORMON COULEE RD
LA CROSSE, WI 54601
(608) 789-5709
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CAMERON SHIFFER
PROJECT DESIGNER
WISDOT SW REGION
PROJECT DEVELOPMENT
3550 MORMON COULEE RD
LA CROSSE, WI 54601
(608) 317-9130
Cameron.Shiffer@dot.wi.gov

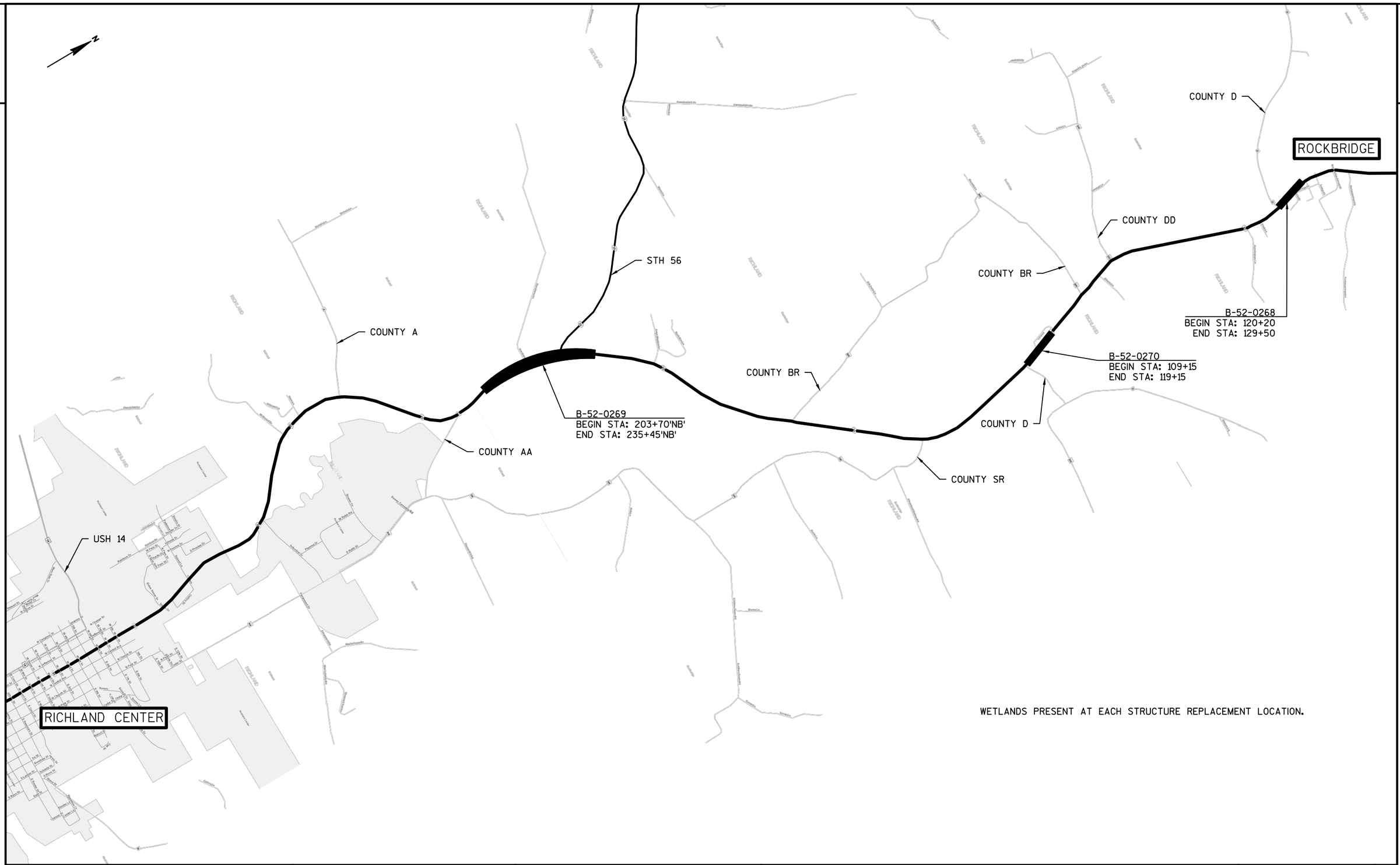
## DNR CONTACT

ANDY BARTA
ENVIRONMENTAL ANALYSIS AND SUSTAINABALITITY
DNR SOUTH CENTRAL REGION HQ
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
Andrew.Barta@wisconsin.gov

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

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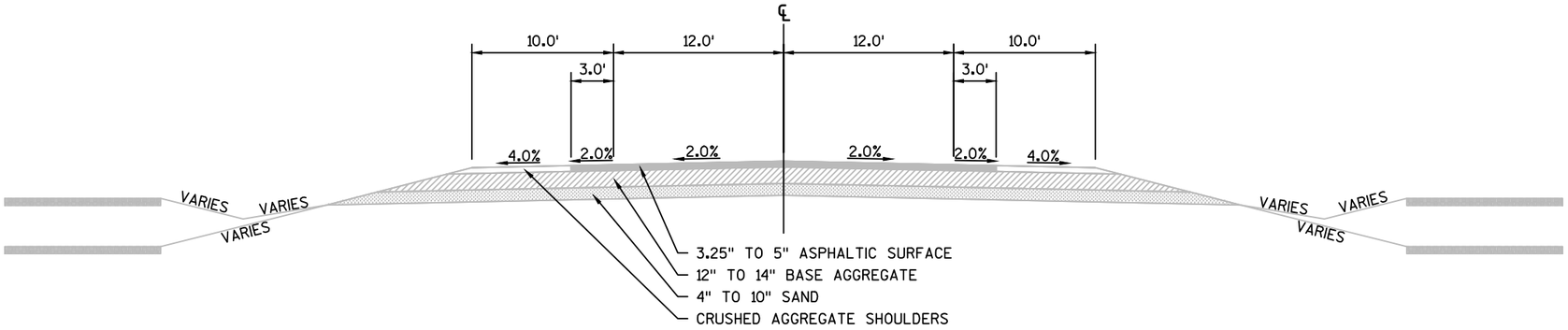
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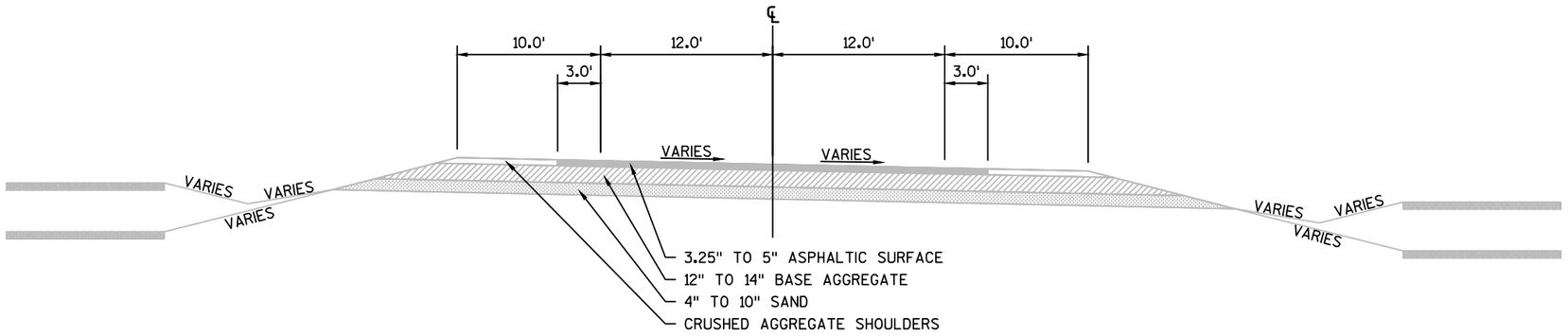

WETLANDS PRESENT AT EACH STRUCTURE REPLACEMENT LOCATION.

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PROJECT OVERVIEW | SHEET 3 | E |
|---|---|---|---|---|---|

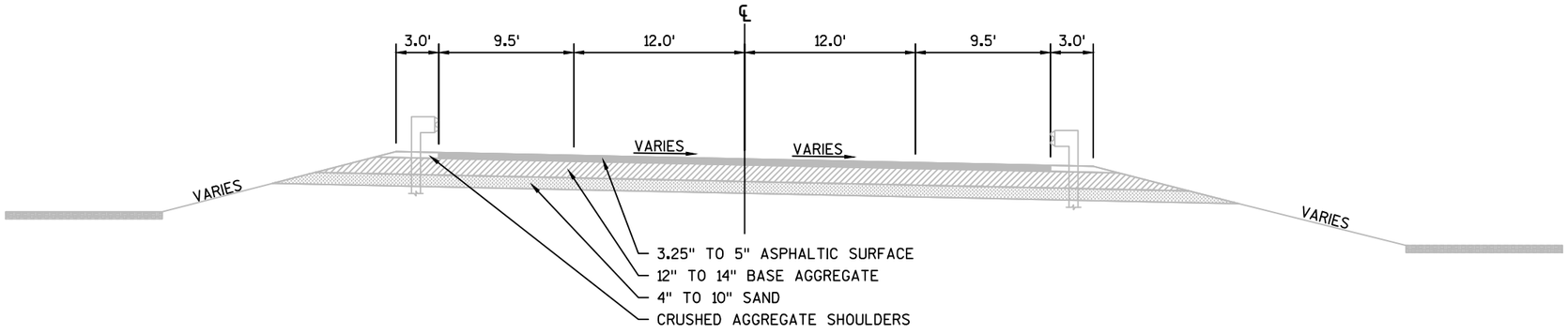
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EXISTING TYPICAL TANGENT SECTION
STH 80 - B-52-0269



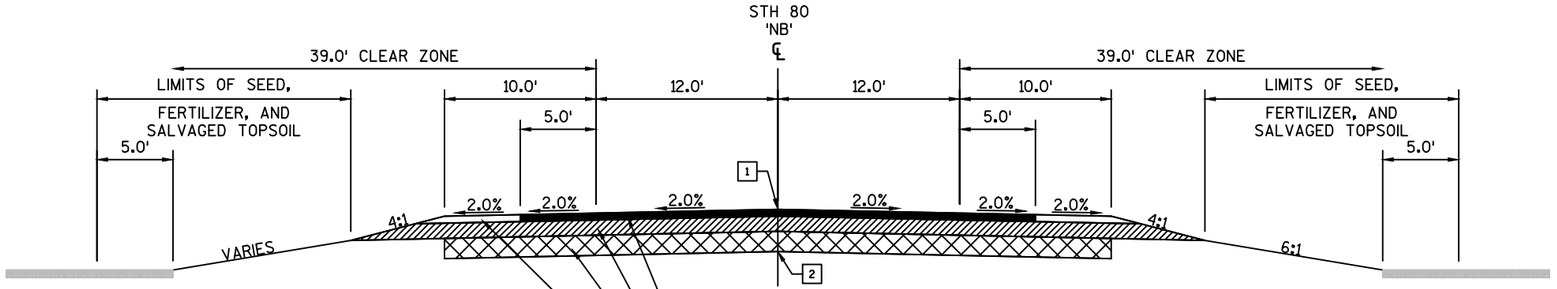

EXISTING TYPICAL SUPERELEVATED SECTION
STH 80 - B-52-0269




EXISTING TYPICAL SUPERELEVATED SECTION WITH BEAM GUARD
STH 80 - B-52-0269 AT BRIDGE

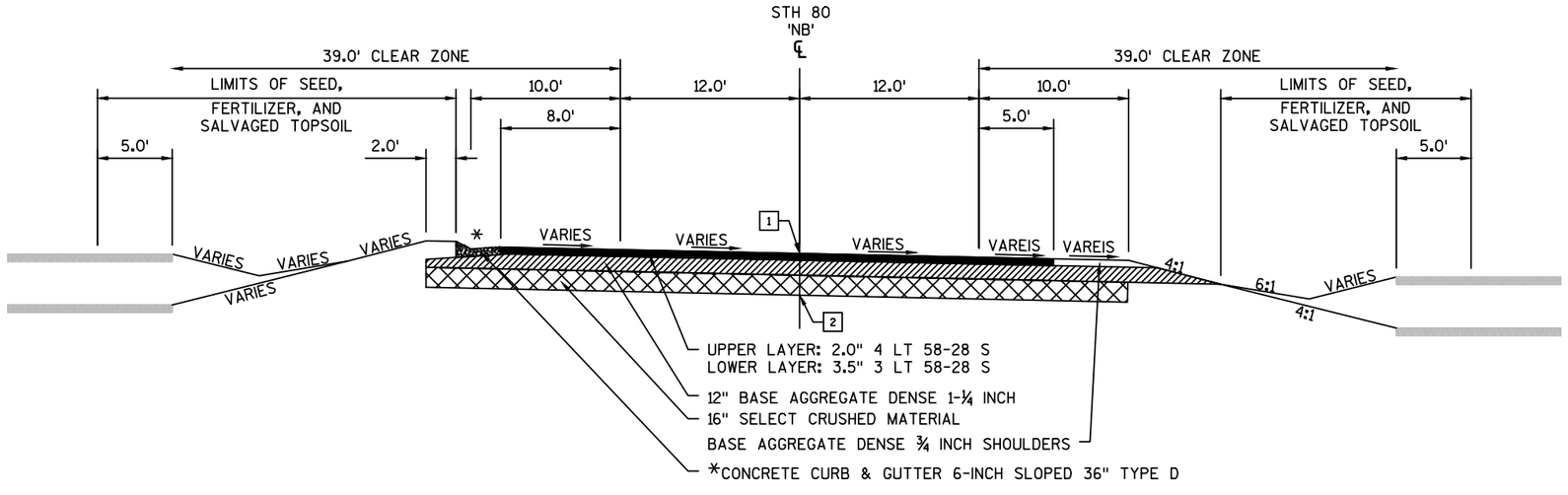
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TYPICAL SECTIONS: STH 80 (B-52-0269) | SHEET 4 | E |
|---|---|---|---|---|---|

| LEGEND | |
|---|---|
| 1 | POINT REFERRED TO ON PROFILE |
| 2 | POINT REFERRED TO ON CROSS SECTIONS |
| * | SEE PLAN FOR CURB HEAD VARIANCE |




PROPOSED TYPICAL TANGENT SECTION
STH 80 - B-52-0269

| LEFT STATIONING | RIGHT STATIONING |
|---|---|
| 203+70'NB' - 205+37'SB' | 203+70'NB' - 205+37'NB' |

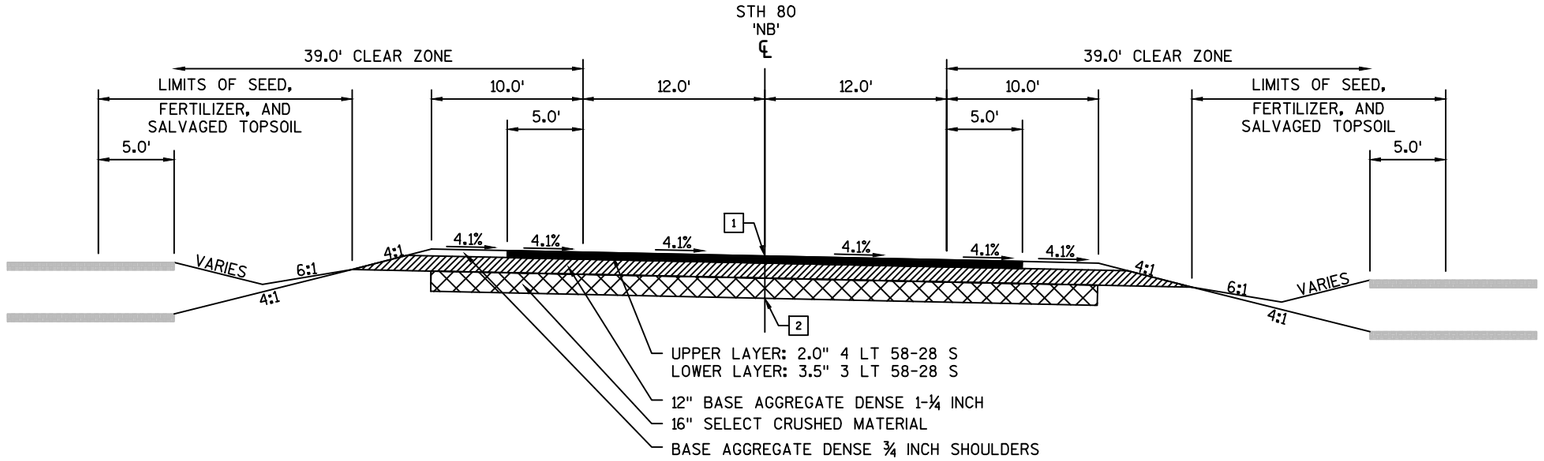



PROPOSED TYPICAL SUPERELEVATED SECTION WITH CURB & GUTTER
STH 80 - B-52-0269
SOUTH OF BRIDGE

| LEFT STATIONING | RIGHT STATIONING |
|---|---|
| 205+37'NB' - 208+37'NB' | 205+37'NB' - 208+37'NB' |

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TYPICAL SECTIONS: STH 80 (B-52-0269) | SHEET 5 | E |
|---|---|---|---|---|---|

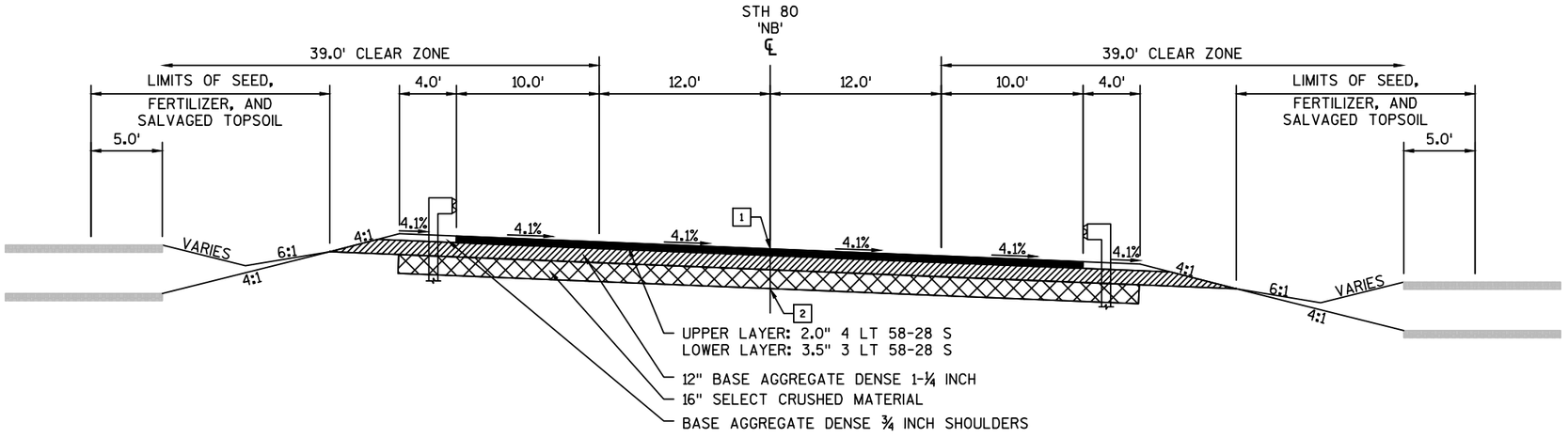
| LEGEND | |
|---|---|
| 1 | POINT REFERRED TO ON PROFILE |
| 2 | POINT REFERRED TO ON CROSS SECTIONS |
| * | SEE PLAN FOR CURB HEAD VARIANCE |




PROPOSED TYPICAL SUPERELEVATED SECTION
STH 80 - B-52-0269
SOUTH OF BRIDGE

LEFT STATIONING
208+37'NB' - 216+36'NB'

RIGHT STATIONING
208+37'NB' - 215+48'NB'

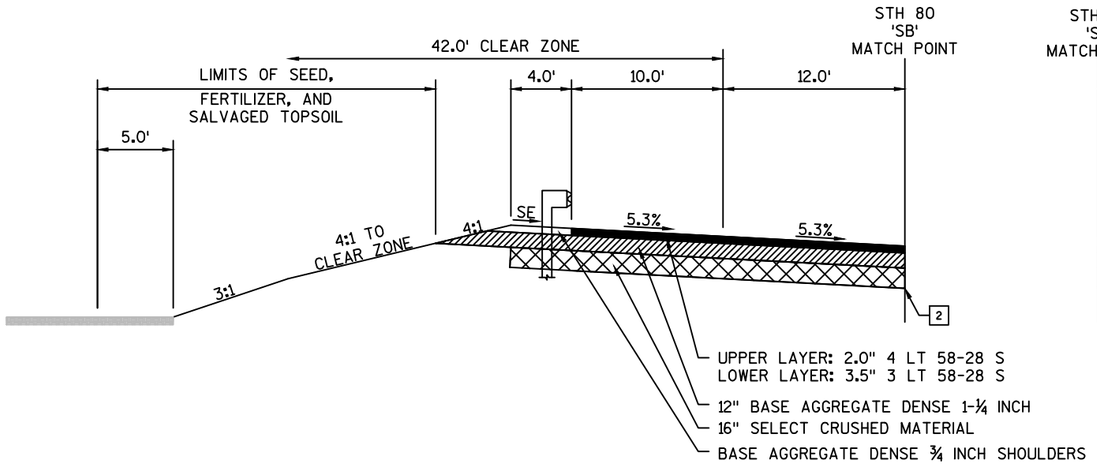



PROPOSED TYPICAL SUPERELEVATED SECTION WITH BEAM GUARD
STH 80 - B-52-0269
SOUTH OF BRIDGE

LEFT STATIONING
216+36'NB' - 219+34'NB'

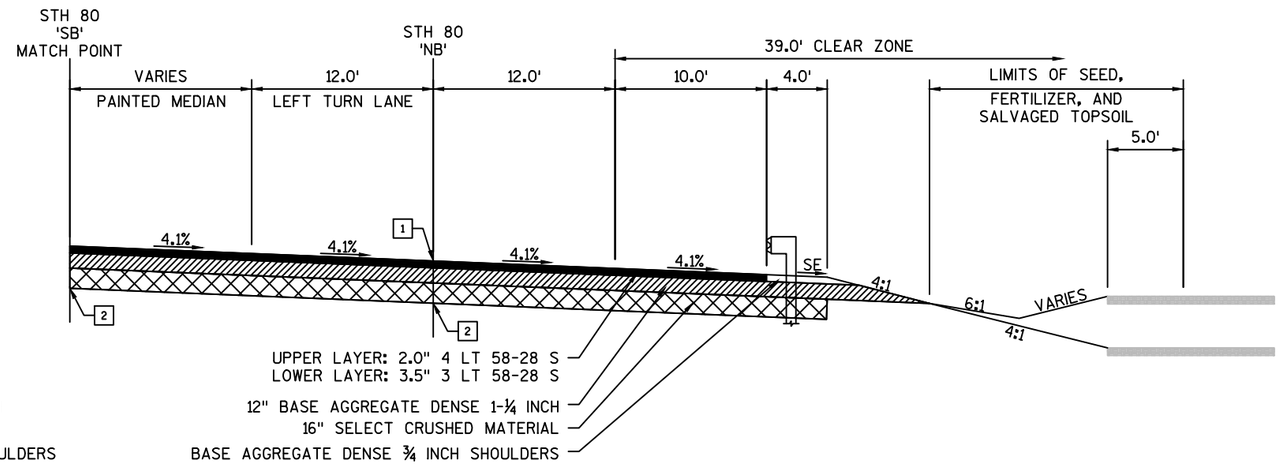
RIGHT STATIONING
215+48'NB' - 219+16'NB'

| LEGEND | |
|---|---|
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| 2 | POINT REFERRED TO ON CROSS SECTIONS |
| * | SEE PLAN FOR CURB HEAD VARIANCE |



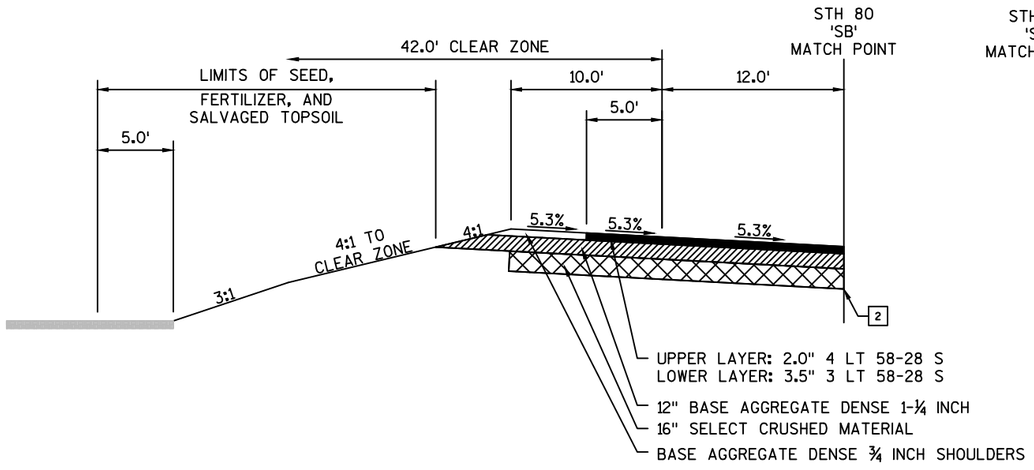

PROPOSED TYPICAL SUPERELEVATED HALF SECTION WITH BEAM GUARD
STH 80 - B-52-0269
NORTH OF BRIDGE

LEFT STATIONING
500+18'SB' - 501+96'SB'



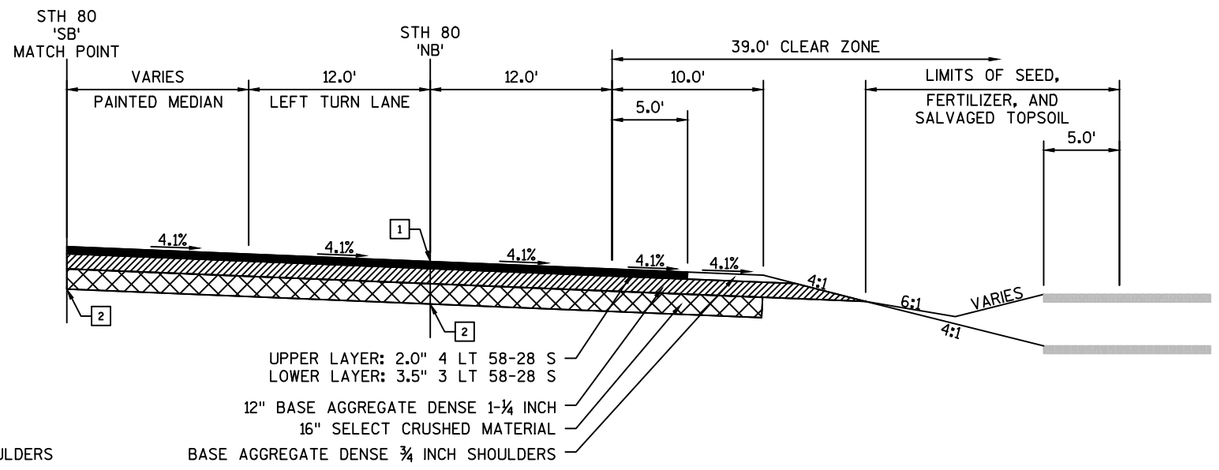

PROPOSED TYPICAL SUPERELEVATED HALF SECTION WITH BEAM GUARD
STH 80 - B-52-0269
NORTH OF BRIDGE

RIGHT STATIONING
220+84'NB' - 221+88'NB'




PROPOSED TYPICAL SUPERELEVATED HALF SECTION
STH 80 - B-52-0269
NORTH OF BRIDGE

LEFT STATIONING
501+96'SB' - 513+00'SB'

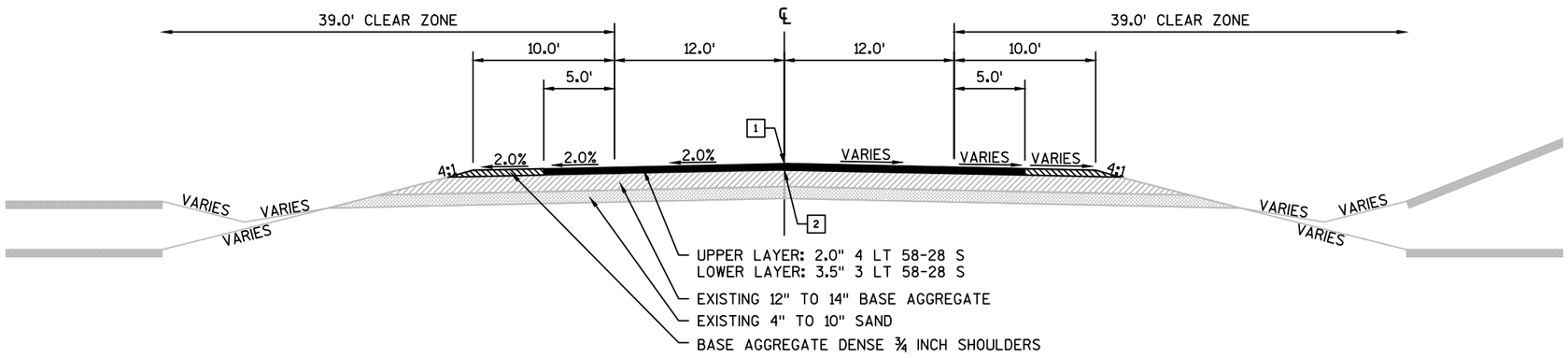



PROPOSED TYPICAL SUPERELEVATED HALF SECTION
STH 80 - B-52-0269
NORTH OF BRIDGE

RIGHT STATIONING
221+88'NB' - 233+75'NB'

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TYPICAL SECTIONS: STH 80 (B-52-0269) | SHEET 7 | E |
|---|---|---|---|---|---|

| LEGEND | |
|---|---|
| 1 | POINT REFERRED TO ON PROFILE |
| 2 | POINT REFERRED TO ON CROSS SECTIONS |
| * | SEE PLAN FOR CURB HEAD VARIANCE |



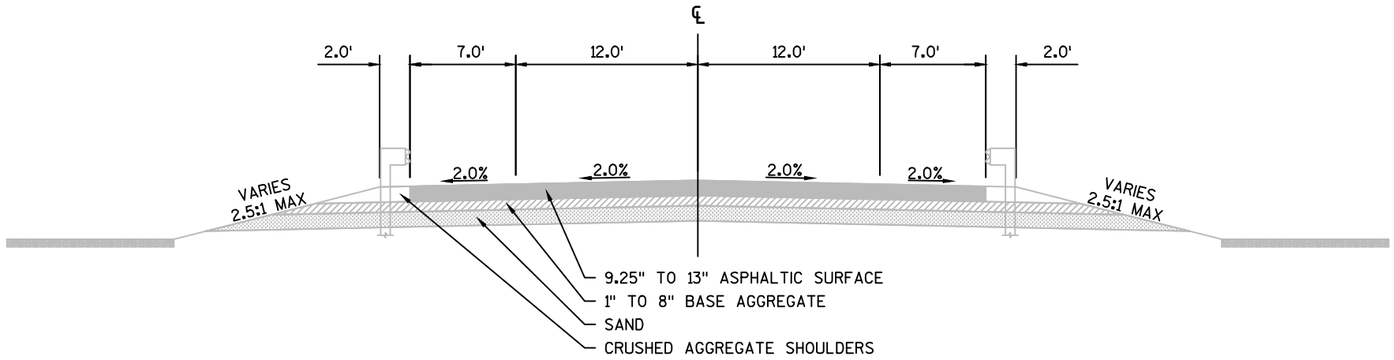

PROPOSED TYPICAL PAVEMENT REPLACEMENT SECTION
STH 80 - B-52-0269

| LEFT STATIONING | RIGHT STATIONING |
|---|---|
| 513+00'SB' - 514+70'SB' | 233+75'NB' - 235+45'NB' |

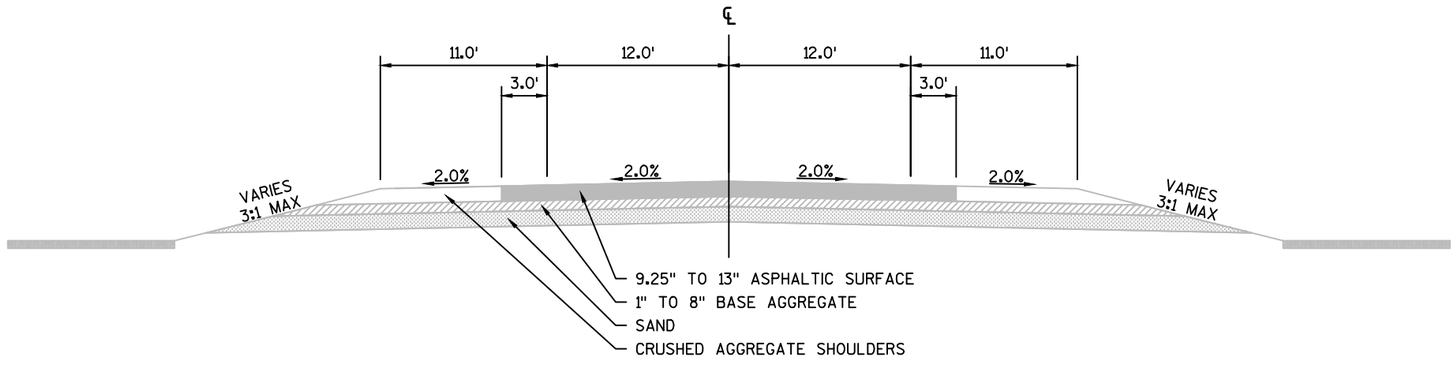
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|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020301_TS - 020301_TS_B5241-PROP
PLOT DATE : 9/18/2017 12:54 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



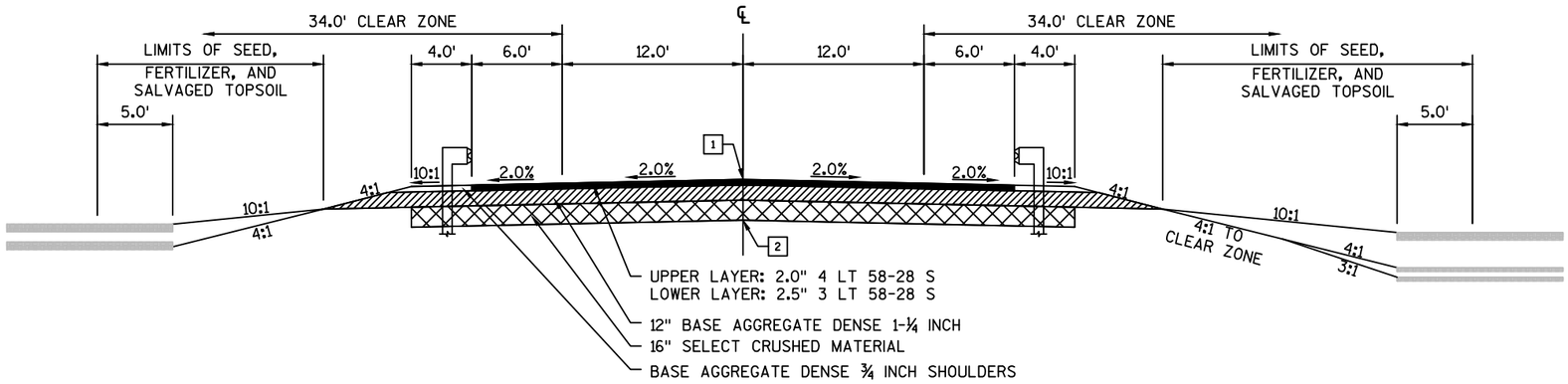

EXISTING TYPICAL TANGENT SECTION WITH BEAM GUARD
STH 80 - B-52-0270 AT BRIDGE




EXISTING TYPICAL TANGENT SECTION
STH 80 - B-52-0270

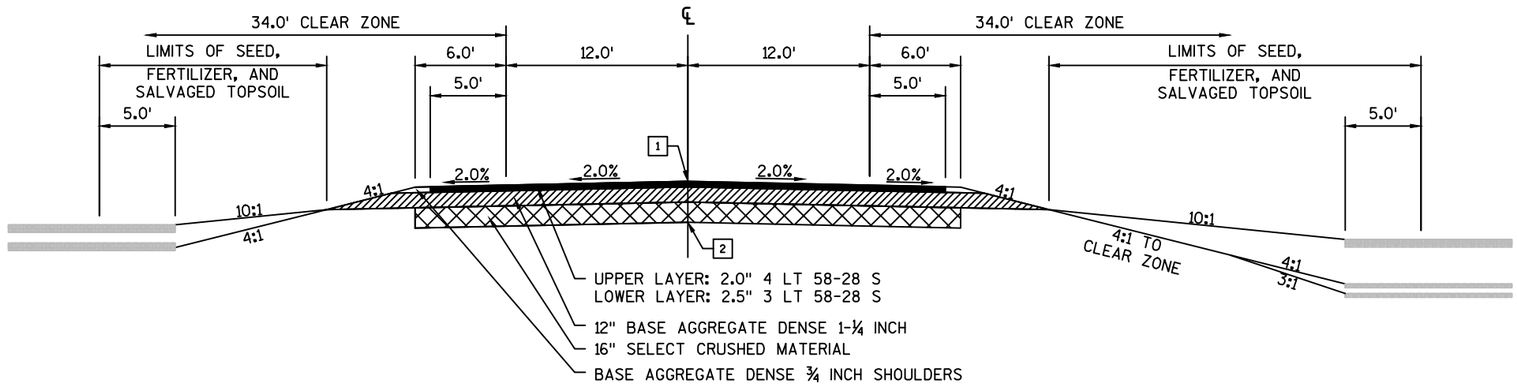
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TYPICAL SECTIONS: STH 80 (B-52-0270) | SHEET 9 | E |
|---|---|---|---|---|---|

| LEGEND | |
|---|---|
| 1 | POINT REFERRED TO ON PROFILE |
| 2 | POINT REFERRED TO ON CROSS SECTIONS |



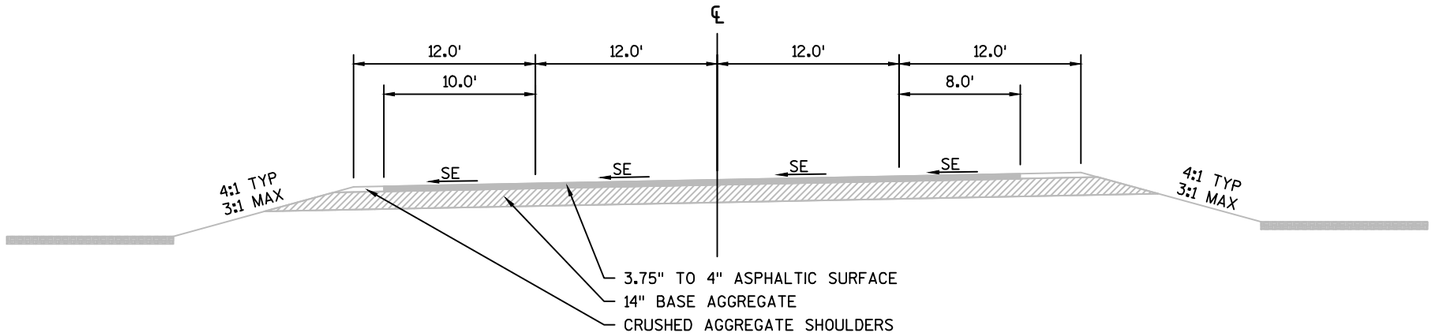

PROPOSED TYPICAL TANGENT SECTION WITH BEAM GUARD
STH 80 - B-52-0270

| LEFT STATIONING | RIGHT STATIONING |
|---|---|
| 109+42 - 110+58 | 109+36 - 110+76 |
| 113+57 - 114+62 | 113+75 - 114+91 |

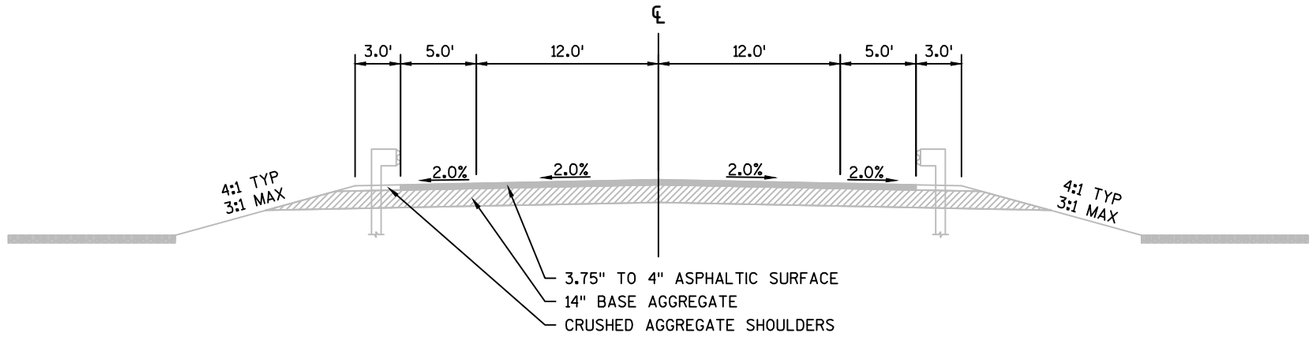



PROPOSED TYPICAL TANGENT SECTION
STH 80 - B-52-0270

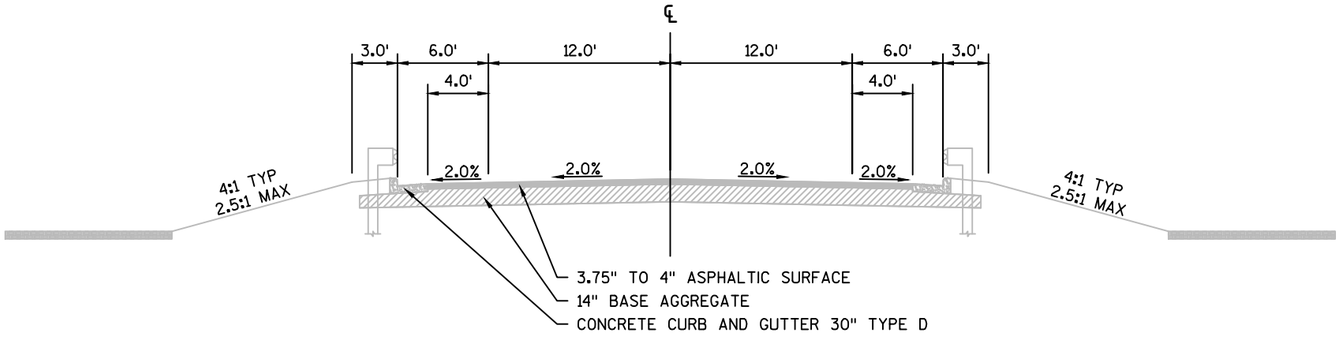
| LEFT STATIONING | RIGHT STATIONING |
|---|---|
| 114+62 - 119+15 | 114+91 - 119+15 |



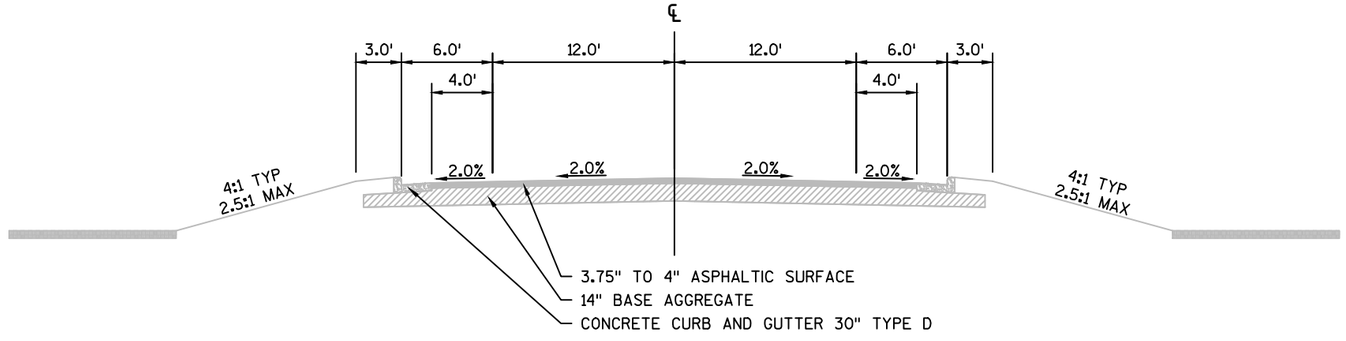

EXISTING TYPICAL SUPERELEVATED SECTION
STH 80 - B-52-0268
SOUTH OF BRIDGE




EXISTING TYPICAL TANGENT SECTION WITH BEAM GUARD
STH 80 - B-52-0268
SOUTH OF BRIDGE

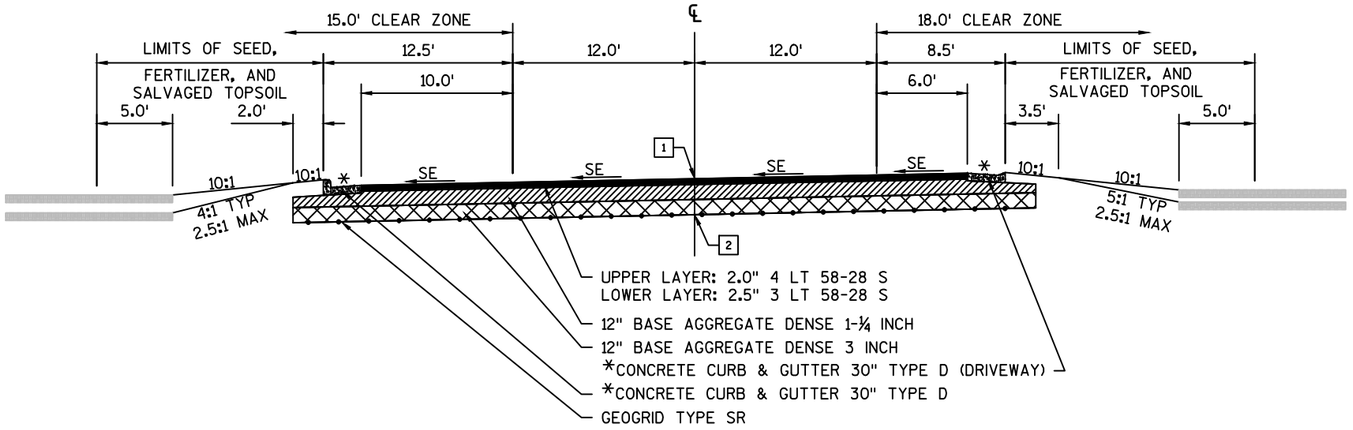



EXISTING TYPICAL TANGENT SECTION WITH BEAM GUARD
STH 80 - B-52-0268
NORTH OF BRIDGE



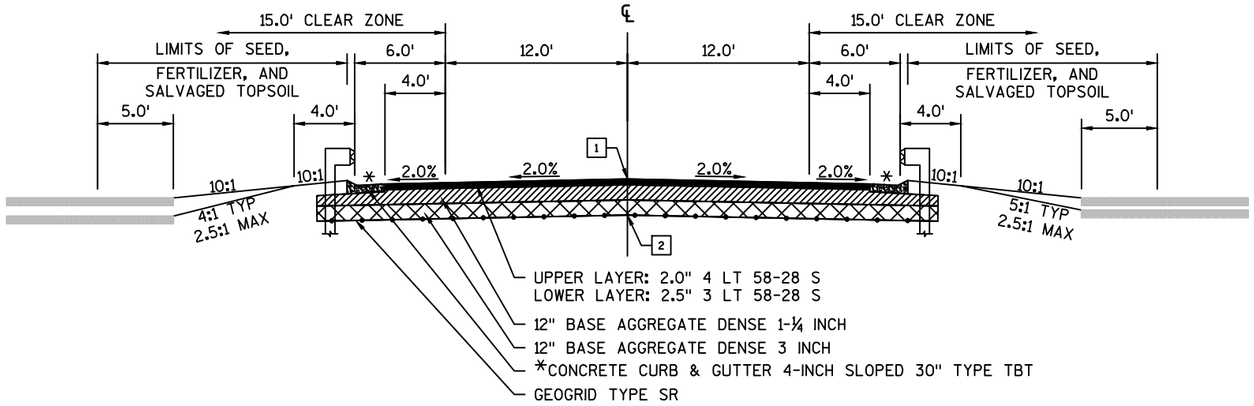

EXISTING TYPICAL TANGENT SECTION
STH 80 - B-52-0268
NORTH OF BRIDGE

| LEGEND | |
|---|---|
| 1 | POINT REFERRED TO ON PROFILE |
| 2 | POINT REFERRED TO ON CROSS SECTIONS |
| * | SEE PLAN FOR CURB HEAD VARIANCE |



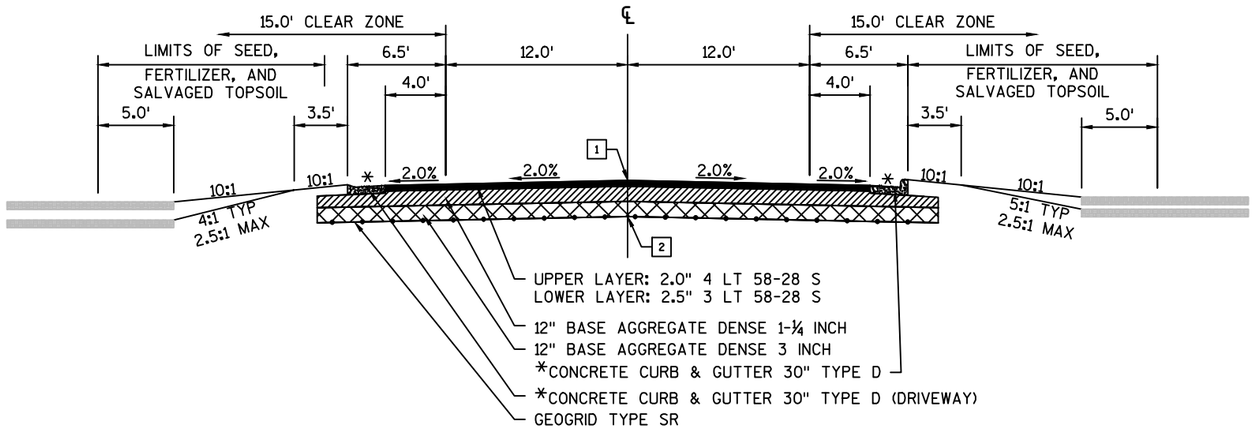

PROPOSED TYPICAL SUPERELEVATED SECTION
STH 80 - B-52-0268

| LEFT STATIONING | RIGHT STATIONING |
|---|---|
| 120+20 - 121+75 | 120+20 - 121+03 |




PROPOSED TYPICAL TANGENT SECTION WITH BEAM GUARD
STH 80 - B-52-0268

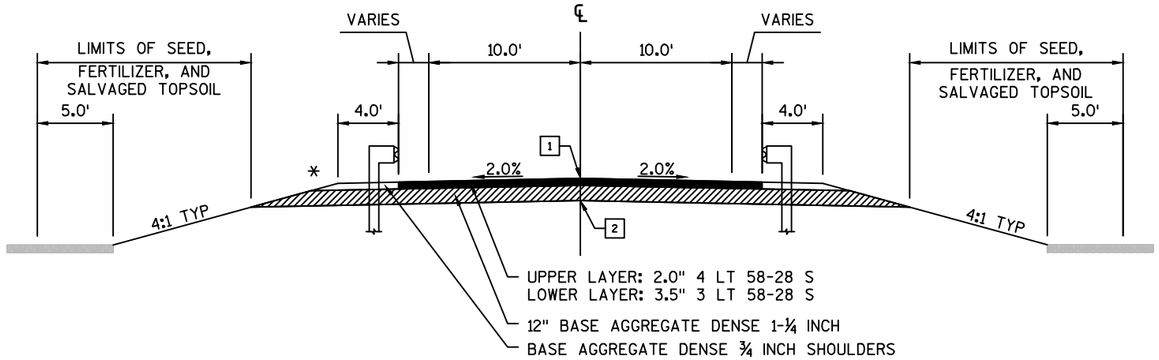
| LEFT STATIONING | RIGHT STATIONING |
|---|---|
| 121+75 - 122+39 | 121+03 - 122+18 |
| 125+70 - 126+85 | 125+49 - 126+12 |



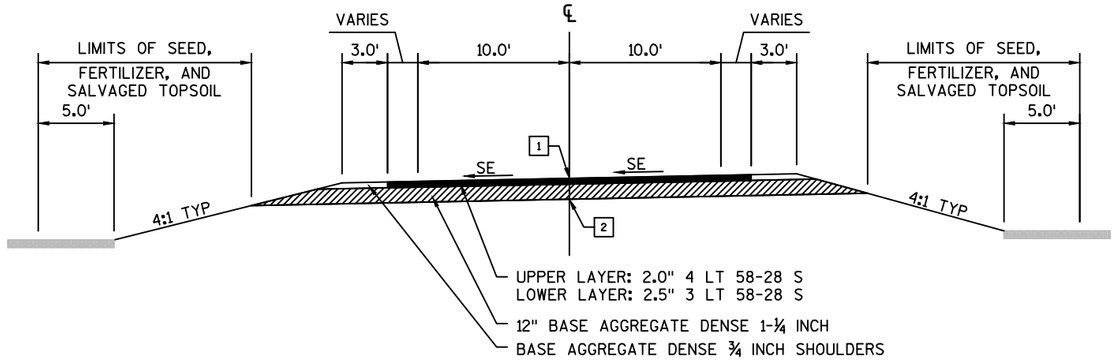

PROPOSED TYPICAL TANGENT SECTION
STH 80 - B-52-0268

| LEFT STATIONING | RIGHT STATIONING |
|---|---|
| 126+85 - 129+50 | 126+12 - 129+50 |

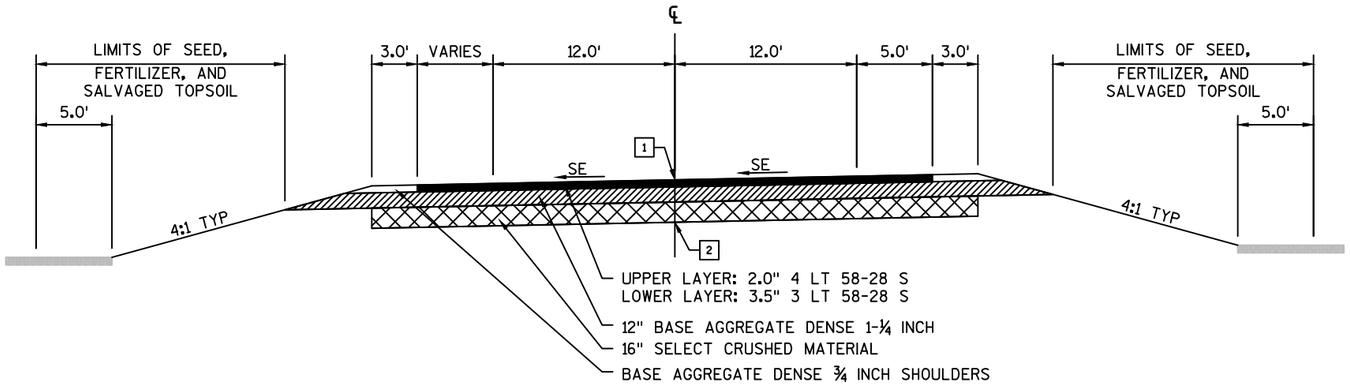
| PROJECT NO:5042-05-81 | HWY:STH 80 | COUNTY:RICHLAND | TYPICAL SECTIONS: STH 80 (B-52-0268) | SHEET 12 | E |
|---|---|---|---|---|---|




PROPOSED TYPICAL SECTION
HANSBERRY LANE - B-52-0269
STA 0+64'H' - 1+83'H'

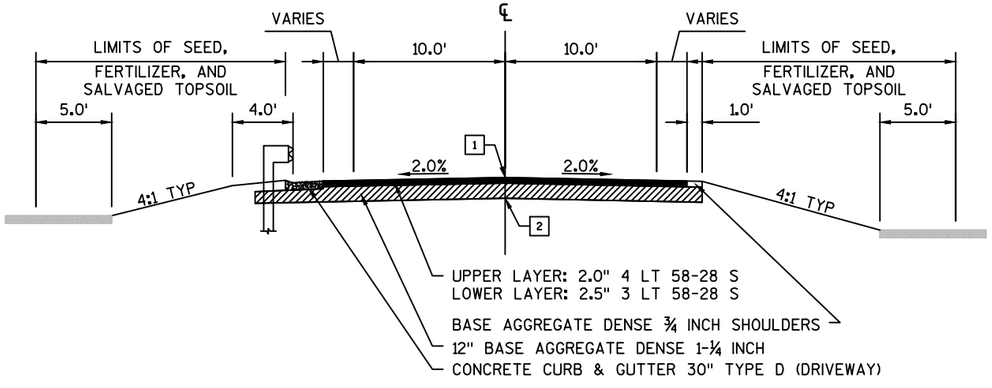



PROPOSED TYPICAL SECTION
IRISH DRIVE - B-52-0270
STA 0+75'ID' - 2+49'ID'

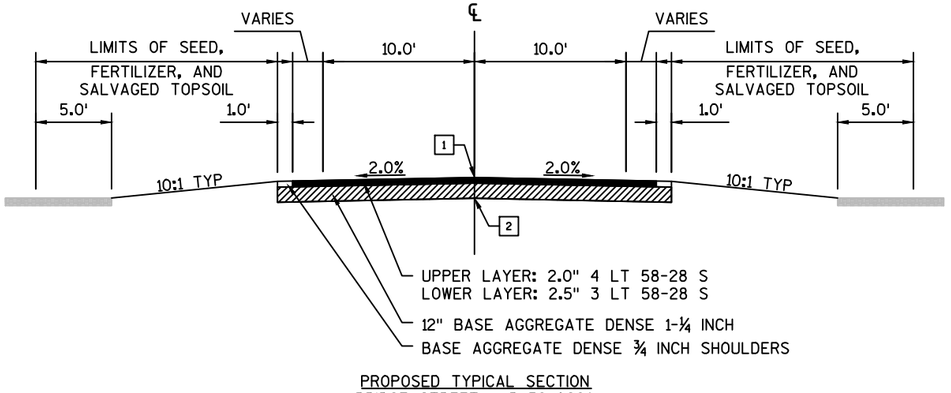



PROPOSED TYPICAL SECTION
STH 56 - B-52-0269
STA 606+20 - 607+21

| LEGEND | |
|---|---|
| 1 | POINT REFERRED TO ON PROFILE |
| 2 | POINT REFERRED TO ON CROSS SECTIONS |
| * | SEE PLAN FOR CURB HEAD VARIANCE |

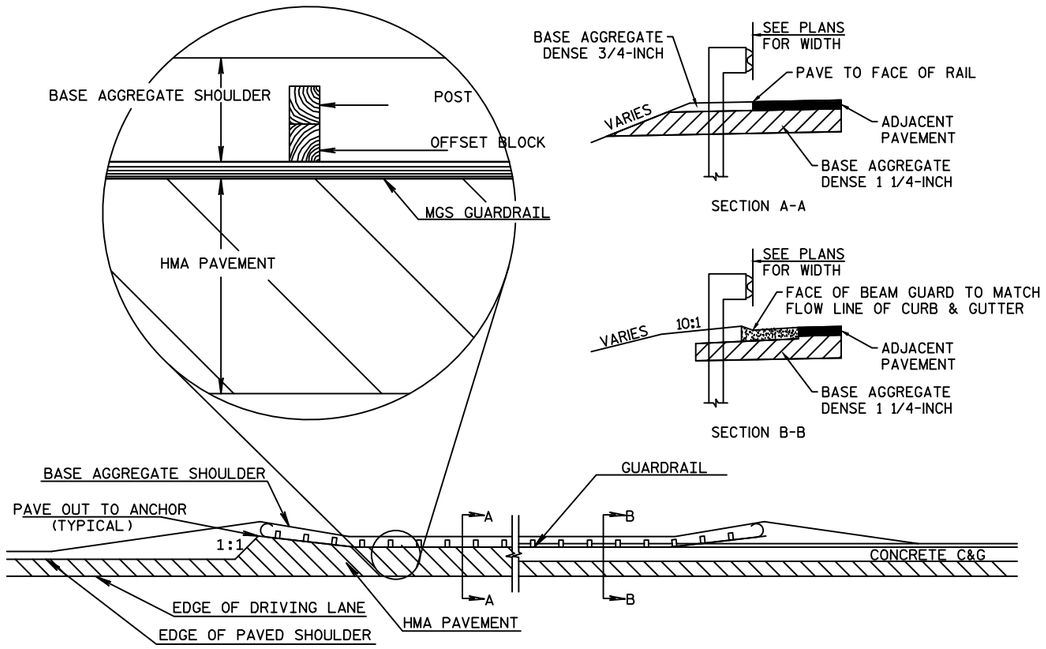



PROPOSED TYPICAL SECTION
PARK ENTRANCE - B-52-0268
STA 21+13'P' - 21+43'P'



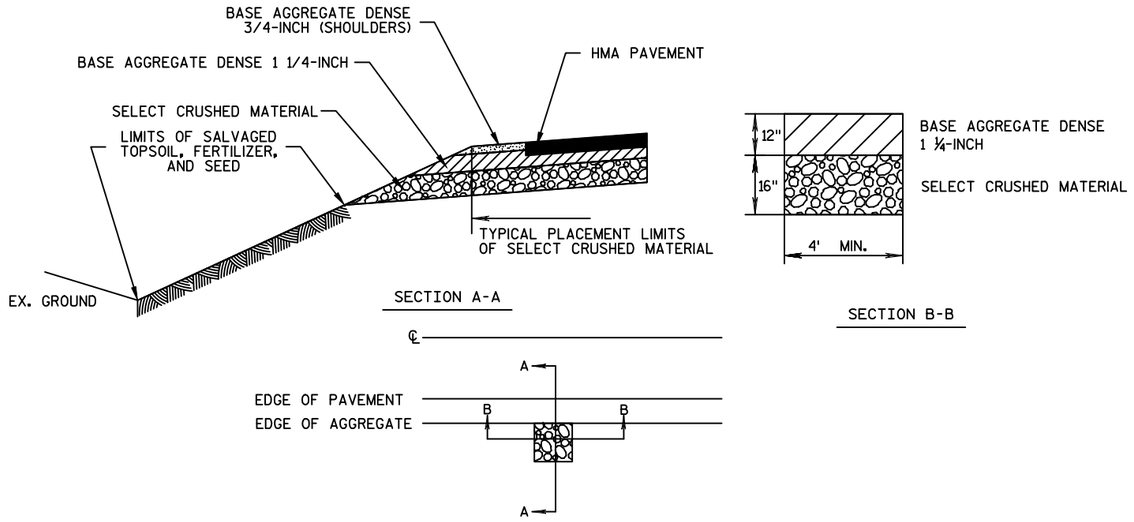

PROPOSED TYPICAL SECTION
BRIDGE STREET - B-52-0268
STA 10+79'B' - 11+00'B'

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TYPICAL SECTIONS: SIDEROADS | SHEET 13 | E |
|---|---|---|---|---|---|




ASPHALTIC PAVING ALONG BEAM GUARD

SEE PLAN SHEETS FOR ADDITIONAL DETAILS



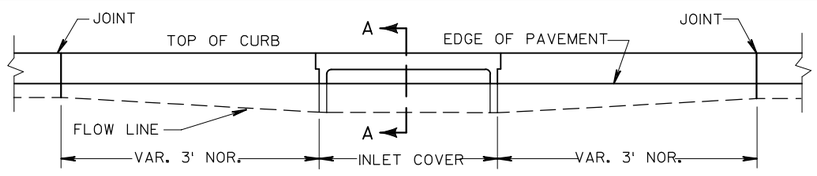

DETAIL FOR FRENCH DRAINS

DRAINS ARE TO BE CONSTRUCTED AT LEAST EVERY 250' AND AT EACH SAG VERTICAL CURVE IN THE PROFILE.

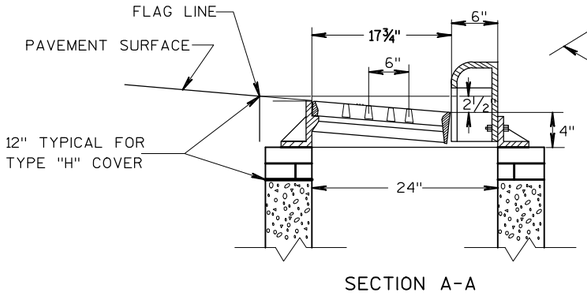
(LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER)

EXCAVATION REQUIRED TO CONSTRUCT FRENCH DRAINS SHALL BE CONSIDERED INCIDENTAL TO THE ITEM COMMON EXCAVATION

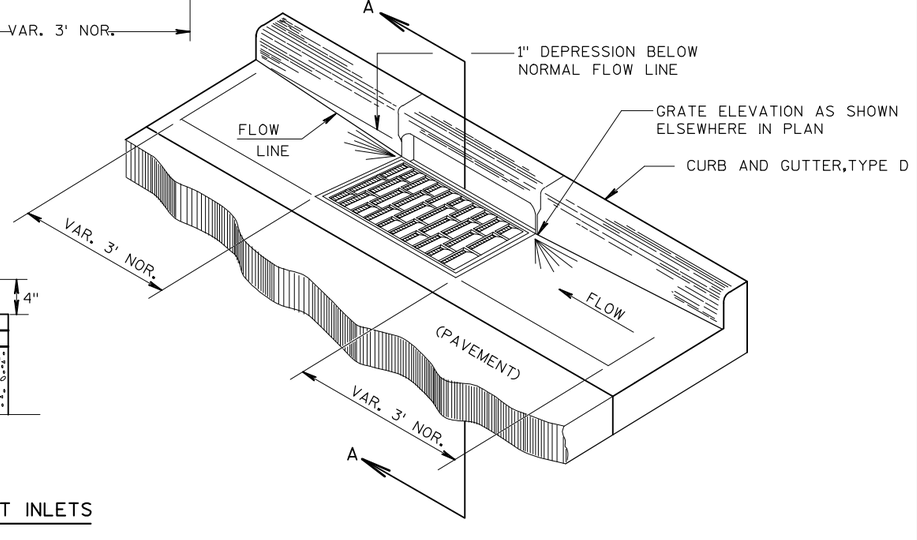
SELECT CRUSHED MATERIAL REQUIRED TO CONSTRUCT FRENCH DRAINS SHALL BE CONSIDERED INCIDENTAL TO THE ITEM SELECT CRUSHED MATERIAL.




ELEVATION

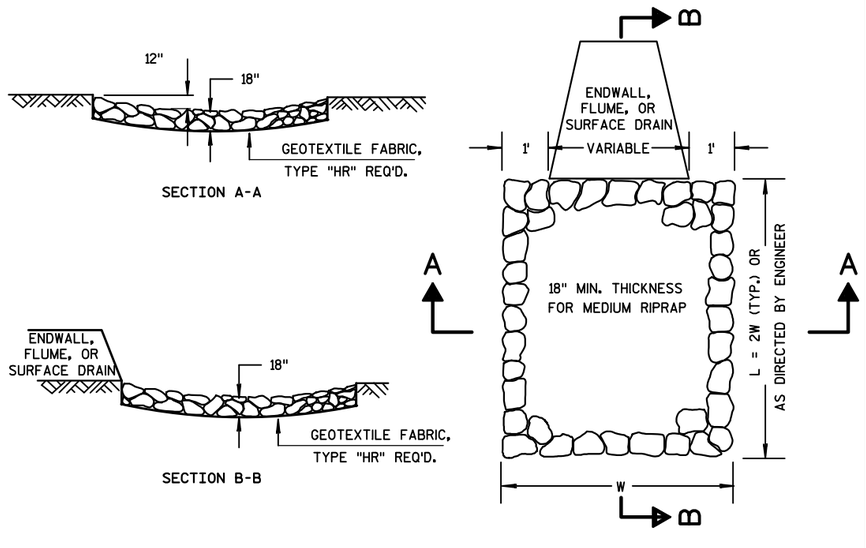



SECTION A-A



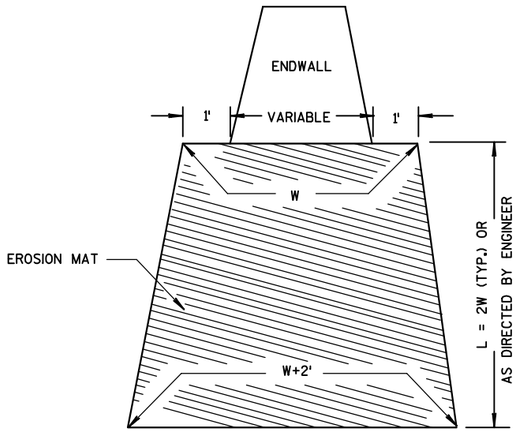

DETAIL OF CURB AND GUTTER AT INLETS

(INLETS 2X3-H SHOWN)

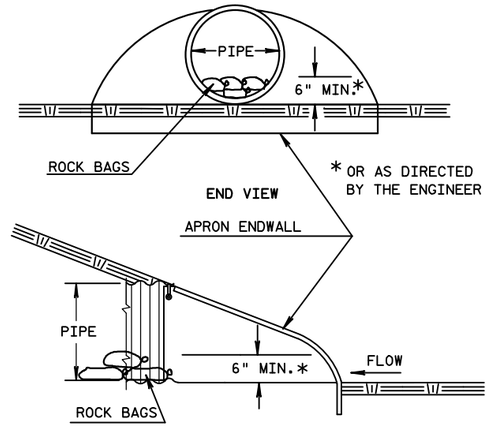



MEDIUM RIPRAP TREATMENT AT CULVERTS, ASPHALTIC FLUMES, & CONCRETE SURFACE DRAINS

| PROJECT NO:5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS | SHEET 14 | E |
|---|---|---|---|---|---|

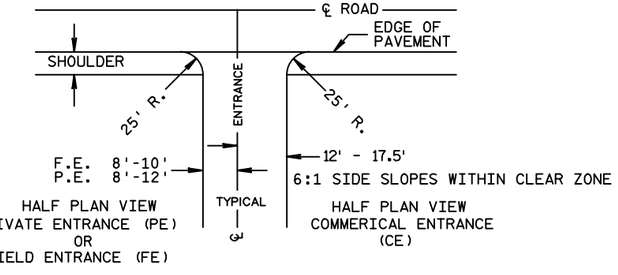



EROSION MAT TREATMENT AT CULVERTS



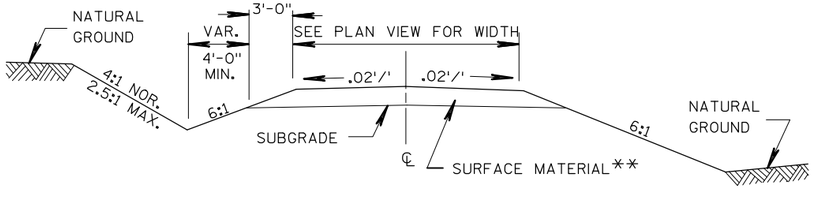

CULVERT PIPE CHECK

| ESTIMATED BAG SIZE - 18" X 12" X 6" | |
|---|---|
| PIPE SIZE | ESTIMATED NO. OF BAGS |
| 12" | 1 |
| 18" | 2 |
| 24" | 3 |
| 30" | 5 |
| 36" | 7 |




PLAN VIEW

GRADE SAG OR CREST IN DRIVEWAY PROFILE
TO PREVENT WATER FROM DRAINING ONTO ROADWAY

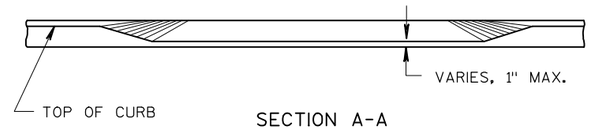



TYPICAL CROSS SECTION

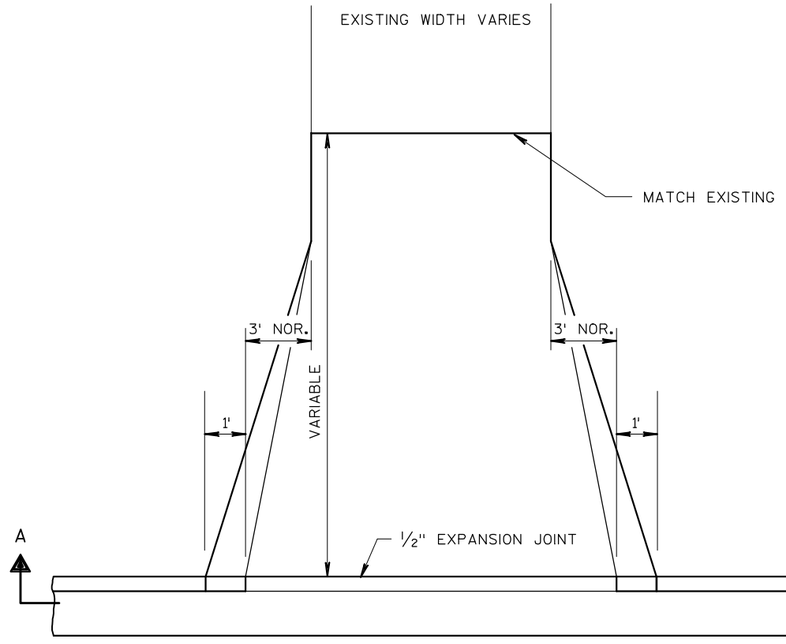
**6" BASE AGGREGATE DENSE 3/4" OR
6" BASE AGGREGATE DENSE 1 1/4" AND 2" ASPHALTIC SURFACE

RURAL DRIVEWAY DETAIL

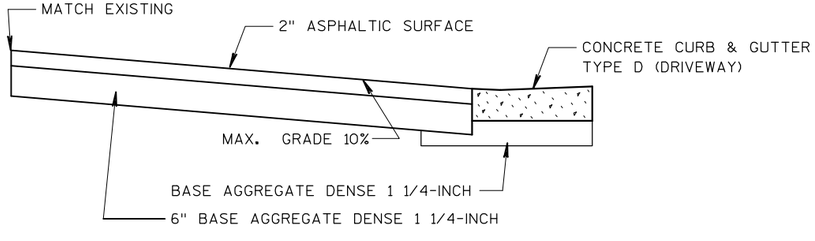
SEE PLAN SHEETS FOR FURTHER DETAILS




SECTION A-A




PLAN

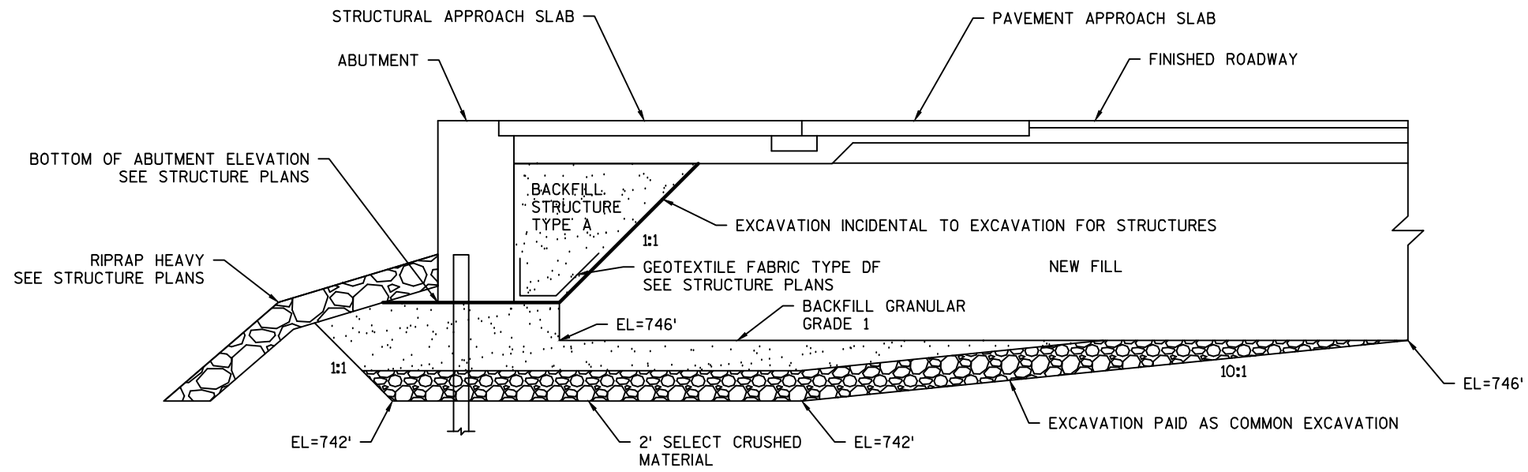


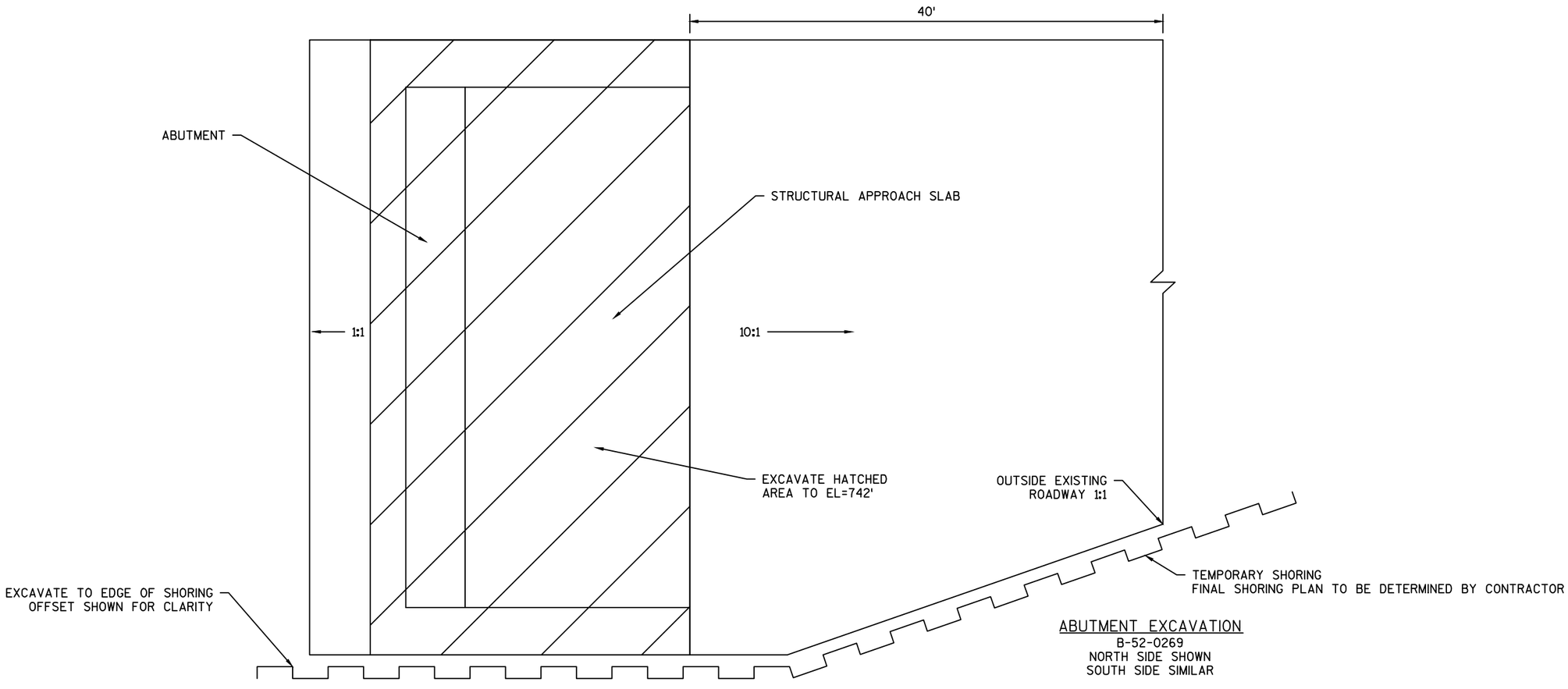

PROFILE

URBAN DRIVEWAY DETAIL

SEE PLAN SHEETS FOR FURTHER DETAILS

2




ABUTMENT EXCAVATION
B-52-0269
NORTH SIDE SHOWN
SOUTH SIDE SIMILAR

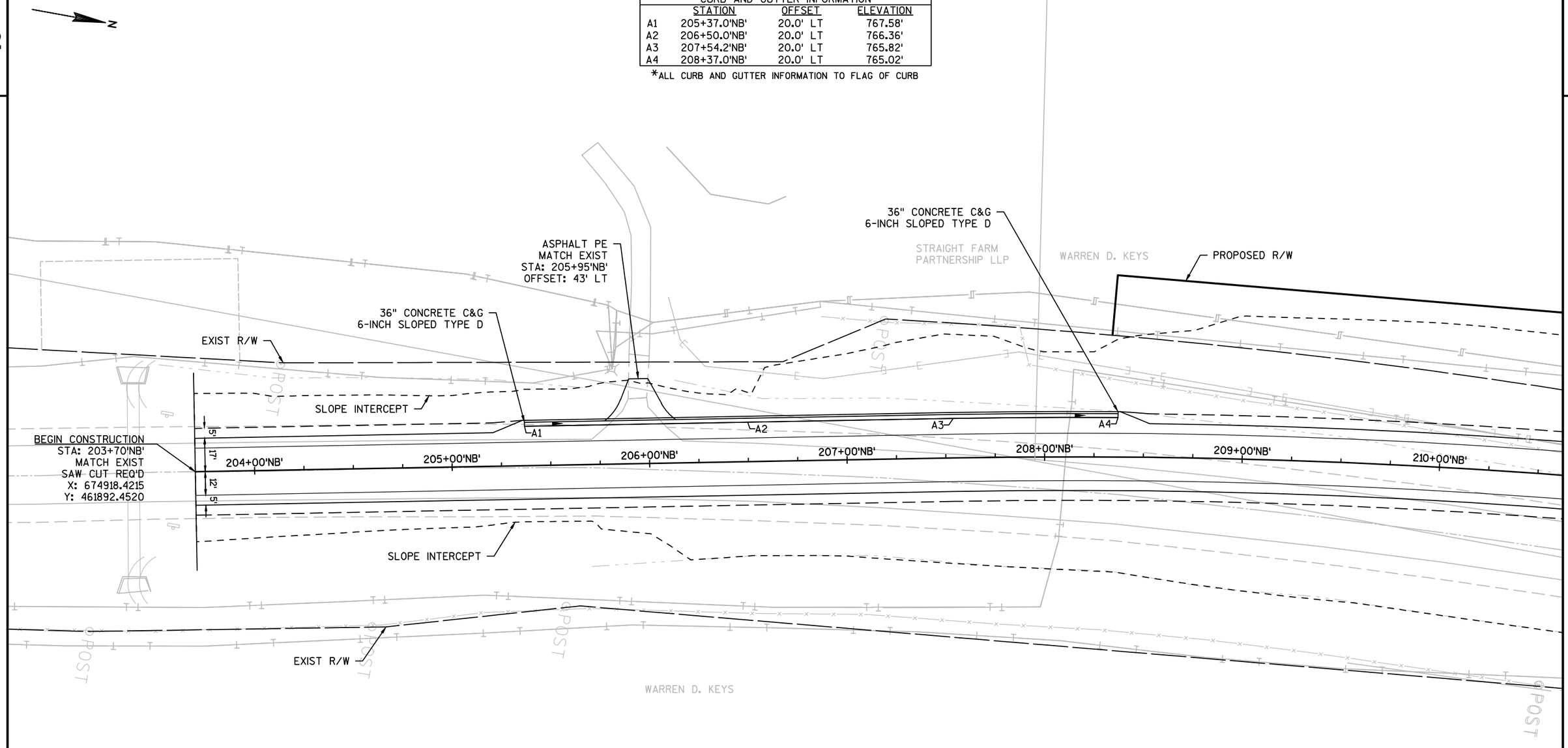
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS | SHEET 16 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\021000_CD_PROJECT.DWG
LAYOUT NAME - 021000_CD_PROJECT - 021000_CD_PROJECT (2)
PLOT DATE : 9/18/2017 1:14 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 42

2

| CURB AND GUTTER INFORMATION | | | |
|---|---|---|---|
| | STATION | OFFSET | ELEVATION |
| A1 | 205+37.0'NB' | 20.0' LT | 767.58' |
| A2 | 206+50.0'NB' | 20.0' LT | 766.36' |
| A3 | 207+54.2'NB' | 20.0' LT | 765.82' |
| A4 | 208+37.0'NB' | 20.0' LT | 765.02' |

*ALL CURB AND GUTTER INFORMATION TO FLAG OF CURB




| LEGEND |
|---|
| CONCRETE APPROACH SLAB |
| CONCRETE PAVEMENT 12-INCH |
| PAINTED MEDIAN |
| CURB & GUTTER FLOW DIRECTION |
| SURFACE FLOW DIRECTION |
| MEDIUM RIPRAP |

| PROJECT NO:5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS: STH 80 (B-52-0269) | SHEET 17 | E |
|---|---|---|---|---|---|

2

N

WARREN D. KEYS

16' GRAVEL FE
STA: 212+28'NB'
OFFSET: 58' LT

PROPOSED R/W

WARREN D. KEYS

STEEL PLATE BEAM GUARD
CLASS A
STA: 216+86'NB'
OFFSET: 22' LT

STEEL PLATE BEAM GUARD
TERMINAL EAT (POST 1)
STA: 216+36'NB'
OFFSET: 24' LT

SLOPE INTERCEPT

PROPOSED CULVERT-1

EXIST R/W

15:1

1:1

212+00'NB'

213+00'NB'

214+00'NB'

215+00'NB'

216+00'NB'

210+00'NB'

211+00'NB'

STH 80

STH 80

217+00'NB'

1:1

15:1

REMOVE SMALL PIPE
STA: 212+22'NB'

PROPOSED CULVERT-2

PROPOSED CULVERT-3

MGS GUARDRAIL
TERMINAL EAT (POST 1)
STA: 215+48'NB'
OFFSET: 24' RT

MGS GUARDRAIL 3
STA: 216+02'NB'
THRU 218+77'NB'
OFFSET: 22' RT

REMOVE SMALL PIPE
STA: 212+26'NB'

SLOPE INTERCEPT

EXIST R/W

GRAVEL PE
MATCH EXIST
STA: 212+27'NB'
OFFSET: 99' RT

REMOVE SMALL PIPE
STA: 214+31'NB'

GRAVEL PE
MATCH EXIST
STA: 214+36'NB'
OFFSET: 112' RT

EXIST R/W

POST

WARREN D. KEYS

WARREN D. KEYS

| LEGEND |
|---|
| CONCRETE APPROACH SLAB |
| CONCRETE PAVEMENT 12-INCH |
| PAINTED MEDIAN |
| CURB & GUTTER FLOW DIRECTION |
| SURFACE FLOW DIRECTION |
| MEDIUM RIPRAP |

CULVERT-1
24-INCH CPCS
STA: 212+08'NB'
OFFSET: 42.3' LT
INV IN: 757.52'
STA: 212+48'NB'
OFFSET: 42.3' LT
INV OUT: 757.33'
LENGTH: 40 LF
2-AEW CPCS 24-INCH

CULVERT-2
18-INCH CPCS
STA: 212+00'NB'
OFFSET: 47.0' RT
INV IN: 754.79'
STA: 212+56'NB'
OFFSET: 48.5' RT
INV OUT: 754.31'
LENGTH: 56 LF
2-AEW CPCS 18-INCH

CULVERT-3
24-INCH CPCS
STA: 214+13'NB'
OFFSET: 53.4' RT
INV IN: 752.80'
STA: 214+60'NB'
OFFSET: 56.0' RT
INV OUT: 752.34'
LENGTH: 48 LF
2-AEW CPCS 24-INCH

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS: STH 80 (B-52-0269) | SHEET 18 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\021001_CD_B520269.DWG
LAYOUT NAME - 021001_CD_B520269-(2)
PLOT DATE : 7/14/2017 5:59 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

N

WARREN D. KEYS

LOLA J & PAUL HIGGINS

END CONSTRUCTION
STA: 00+23'H'
MATCH EXIST
SAW CUT REQ'D

STEEL PLATE BEAM GUARD
TERMINAL EAT (POST 1)
STA: 00+64'H'
OFFSET: 12' LT

STEEL PLATE BEAM GUARD
TERMINAL EAT (POST 1)
STA: 00+77'H'
OFFSET: 17'

STEEL PLATE BEAM GUARD
CLASS A
STA: 1+27'H'
RADIUS: 40'
OFFSET: 15' RT

PROPOSED R/W

STEEL PLATE BEAM GUARD
CLASS A
STA: 1+26'H'
RADIUS: 60'
OFFSET: 17' LT

PROPOSED CULVERT-4

STEEL PLATE BEAM
GUARD CLASS A
STA: 217+85'NB'
RADIUS: 40'
OFFSET: 22.5' LT

STEEL PLATE BEAM GUARD
CLASS A
STA: 219+03'NB'
RADIUS: 60'
OFFSET: 22.5' LT

STEEL THRIE BEAM
STRUCTURE APPROACH REQ'D

APPROXIMATE ABUTMENT
EXCAVATION LIMITS
SEE CONSTRUCTION DETAIL

EXIST R/W

PROPOSED R/W

MGS GUARDRAIL
TERMINAL EAT (POST 1)
STA: 501+96'SB'
OFFSET: 24' LT
(222+76'NB' 30' LT)

SLOPE INTERCEPT

MGS THRIE BEAM
TRANSITION REQ'D

CONCRETE PAVEMENT
APPROACH SLAB
STA: 221+12.0'NB'

FULL 12' WIDTH
LT LANE
STA: 224+00'NB'

HANSBERRY LANE

4:1
1:1
15:1
1:1

1+00'H'

C1
C2
C3
C4
C5
C6

B
B1
B2
B3

C

D1

217+00'NB'
STH 80
218+00'NB'
219+00'NB'
220+00'NB'
221+00'NB'
222+00'NB'
223+00'NB'
224+00'NB'
STH 80

22'
22'

85°

PROPOSED STRUCTURE
B-52-0269
STA: 220+09'NB'
SEE STRUCTURE PLANS

MGS THRIE BEAM
TRANSITION REQ'D

CONCRETE C&G
4-INCH SLOPED
36-INCH TYPE TBTT

MGS GUARDRAIL
TERMINAL EAT (POST 1)
STA: 221+88'NB'
OFFSET: 24' RT

BEGIN LEFT TURN
LANE TAPER
STA: 222+50'NB'

REMOVE SMALL PIPE
STA: 218+39'NB'

CONCRETE PAVEMENT
APPROACH SLAB
STA: 219+05.0'NB'

*PROPOSED CATTLE PASS
MATCH INTO EXISTING

REMOVE OLD STRUCTURE
B-52-0041
STA: 219+95'NB'

**REMOVE OLD STRUCTURE (217+81'NB')
72" PCPCS X 78 LF CATTLE PASS

CONCRETE SURFACE DRAIN
TYPE A - TYPE TBTT CURB HEAD
STA: 218+99'NB'
1-AEW CPCS 12-INCH

REMOVE SMALL PIPE
STA: 223+24'NB'

PROPOSED CULVERT-6

SLOPE INTERCEPT

TLE

GRAVEL FE
MATCH EXIST
STA: 223+32'NB'
OFFSET: 100' RT

WARREN D. KEYS

EXIST R/W

WARREN D. KEYS

| CURB RETURN INFORMATION | | | |
|---|---|---|---|
| | STATION | OFFSET | RADIUS |
| B | 217+80.6'NB' | 62.0' LT | 40' |
| C | 219+08.3'NB' | 82.2' LT | 61' |
| | STATION | OFFSET | ELEVATION |
| B1 | 217+79.6'NB' | 22.0' LT | 759.56' |
| B2 | 218+09.1'NB' | 34.4' LT | 759.39' |
| B3 | 1+28.5'H' | 15.0' RT | 759.14' |
| C1 | 1+14.0'H' | 15.7' LT | 758.86' |
| C2 | 1+26.4'H' | 17.2' LT | 759.03' |
| C3 | 218+57.6'NB' | 51.9' LT | 759.28' |
| C4 | 218+69.2'NB' | 37.4' LT | 759.58' |
| C5 | 218+84.7'NB' | 27.1' LT | 759.84' |
| C6 | 219+02.6'NB' | 22.1' LT | 760.07' |
| D1 | 221+02.7'NB' | 19.6' RT | 759.40' |

*ALL CURB AND GUTTER INFORMATION TO FLAG OF CURB

| LEGEND |
|---|
| CONCRETE APPROACH SLAB |
| CONCRETE PAVEMENT 12-INCH |
| PAINTED MEDIAN |
| CURB & GUTTER FLOW DIRECTION |
| SURFACE FLOW DIRECTION |
| MEDIUM RIPRAP |

*PROPOSED CATTLE PASS
72-INCH PCPCS
STA: 217+76'NB'
OFFSET: 36.2' LT
INV IN: 751.63'
STA: 217+80'NB'
OFFSET: 39.6' RT
INV OUT: 748.54'
LENGTH: 76 LF

**EXISTING CATTLE PASS
72-INCH PCPCS
CONNECT PROPOSED INTO EXISTING
SAW CUT REQ'D
72-INCH CPCS COLLAR REQ'D
ITEMS ARE INCIDENTAL TO
REMOVING OLD STRUCTURE
(217+81'NB')
REMOVE DURING OLD ROADWAY
EXCAVATION

CULVERT-4
36-INCH CPCS
STA: 217+96'NB'
OFFSET: 63.2' LT
INV IN: 751.18'
STA: 218+91'NB'
OFFSET: 78.8' LT
INV OUT: 747.25'
LENGTH: 100 LF
2-AEW CPCS 36-INCH

CULVERT-6
30-INCH CPCS
STA: 223+59'NB'
OFFSET: 91.5' RT
INV IN: 746.79'
STA: 223+01'NB'
OFFSET: 98.6' RT
INV OUT: 746.58'
LENGTH: 58 LF
2-AEW CPCS 30-INCH

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS: STH 80 (B-52-0269) | SHEET 19 | E |
|---|---|---|---|---|---|

| CURB AND GUTTER INFORMATION | | | |
|---|---|---|---|
| | STATION | OFFSET | RADIUS |
| E | 227+61.5'NB' | 98.1' LT | 50' |
| F | 229+07.1'NB' | 95.6' LT | 50' |
| | STATION | OFFSET | ELEVATION |
| E1 | 227+61.3'NB' | 48.1' LT | 767.40' |
| E2 | 227+90.2'NB' | 57.6' LT | 767.71' |
| E3 | 608+19.5 | 18.0' RT | 768.03' |
| E4 | 607+69.5 | 18.0' RT | 768.55' |
| F1 | 607+20.9 | 24.0' LT | 766.94' |
| F2 | 607+70.9 | 24.0' LT | 767.72' |
| F3 | 607+95.2 | 29.1' LT | 768.12' |
| F4 | 228+66.3'NB' | 68.2' LT | 768.52' |
| F5 | 228+83.2'NB' | 52.0' LT | 769.39' |
| F6 | 229+05.6'NB' | 45.6' LT | 770.25' |

*ALL CURB AND GUTTER INFORMATION TO FLAG OF CURB

LOLA J & PAUL HIGGINS

EXIST R/W

SLOPE INTERCEPT

END TAPER
STA: 506+20'SB'
OFFSET: 17.0 LT
(226+98'NB' 41.0' LT)

ASPHALTIC FLUME

CONCRETE C&G
6-INCH SLOPED
36-INCH TYPE D

E1
E2
E3
E4

STH 56

103°

608+00

607+00

END CONSTRUCTION
STA: 606+20
MATCH EXIST
SAW CUT REQ'D

F1
F2
F3
F4
F5
F6

ASPHALTIC FLUME

CONCRETE C&G
6-INCH SLOPED
36-INCH TYPE D

JIMMEY R & LOLA B SCHWEITZER

EXIST R/W

SLOPE INTERCEPT

225+00'NB'
226+00'NB'
227+00'NB'
228+00'NB'
229+00'NB'
230+00'NB'
231+00'NB'

STH 80

REMOVE OLD STRUCTURE (225+52'NB')
72" PCPCS X 112 LF CATTLE PASS

EXIST R/W

SLOPE INTERCEPT

PROPOSED R/W

DAVID L & KAREN K FRY

WARREN D. KEYS

FRY

| LEGEND |
|---|
| CONCRETE APPROACH SLAB |
| CONCRETE PAVEMENT 12-INCH |
| PAINTED MEDIAN |
| CURB & GUTTER FLOW DIRECTION |
| SURFACE FLOW DIRECTION |
| MEDIUM RIPRAP |

| PROJECT NO:5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS: STH 80 (B-52-0269) | SHEET 20 | E |
|---|---|---|---|---|---|

2

N

JIMMEY R & LOLA
B SCHWEITZER

EXIST R/W

SLOPE INTERCEPT

RT LANE FULL WIDTH
STA: 511+88'SB'
OFFSET: 26' LT
(232+64'NB' 29' LT)

BEGIN RIGHT TURN
LANE TAPER
STA: 513+00'SB'
OFFSET: 17' LT
(233+75'NB' 17' LT)

232+00'NB'
233+00'NB'
234+00'NB'
235+00'NB'

STH 80

5'
17'
12'
5'

END CONSTRUCTION
STA: 235+45'NB'
MATCH EXIST
SAW CUT REQ'D
X: 675451.6471
Y: 464909.9816

REMOVE SMALL PIPE
STA: 232+35'NB'

SLOPE INTERCEPT

PROPOSED CULVERT-7

END FULL ROADWAY RECONSTRUCT
BEGIN PAVEMENT/SHOULDER REPLACEMENT
STA: 233+75'NB'
STA: 513+00'SB'

PROPOSED CULVERT-8

REMOVE SMALL PIPE
STA: 233+41'NB'

EXIST R/W

GRAVEL FE
MATCH EXIST
STA: 232+36'NB'
OFFSET: 65' RT

EXIST R/W

ASPHALT PE
MATCH EXIST
SAW CUT REQ'D
STA: 233+48'NB'
OFFSET: 68' RT

DAVID L & KAREN
K FRY

DAVID L & KAREN
K FRY

| LEGEND | |
|---|---|
| | CONCRETE APPROACH SLAB |
| | CONCRETE PAVEMENT 12-INCH |
| | PAINTED MEDIAN |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | MEDIUM RIPRAP |

**CULVERT-7**
24-INCH CPCS
STA: 232+56'NB'
OFFSET: 46.2' RT
INV IN: 770.32'
STA: 232+04'NB'
OFFSET: 48.0' RT
INV OUT: 767.93'
LENGTH: 52 LF
2-AEW CPCS 24-INCH

**CULVERT-8**
18-INCH CPCS
STA: 233+63'NB'
OFFSET: 38.0' RT
INV IN: 773.87'
STA: 233+15'NB'
OFFSET: 39.7' RT
INV OUT: 772.70'
LENGTH: 48 LF
2-AEW CPCS 18-INCH

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS: STH 80 (B-52-0269) | SHEET 21 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\021001_CD_B520269.DWG
LAYOUT NAME - 021001_CD_B520269-(5)
PLOT DATE : 7/14/2017 6:00 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

2

N

WARREN D. KEYS

LOLA J & PAUL
HIGGINS

END CONSTRUCTION
STA: 00+23'H'
MATCH EXIST
SAW CUT REQ'D

PROPOSED R/W

HANSBERRY LANE

1+00'H'

PROPOSED R/W

AREA OF STRIPPING
TOPSOIL SPECIAL
CONTINUE TO NORTH
AS NECESSARY

PROPOSED R/W

SLOPE INTERCEPT

215+00'NB'

216+00'NB'

217+00'NB'

218+00'NB'

219+00'NB'

220+00'NB'

221+00'NB'

222+00'NB'

STH 80

22'

22'

PROPOSED STRUCTURE
B-52-0269
STA: 220+09'NB'
SEE STRUCTURE PLANS

REMOVE OLD STRUCTURE
B-52-0041
STA: 219+95'NB'

SLOPE INTERCEPT

EXIST R/W

AREA OF FINAL TOPSOIL
SPECIAL PLACEMENT
AREA = 2400 SY
SEED WITH SEEDING MIXTURE NO. 60

WARREN D. KEYS

| LEGEND | |
|---|---|
| | CONCRETE APPROACH SLAB |
| | CONCRETE PAVEMENT 12-INCH |
| | PAINTED MEDIAN |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | MEDIUM RIPRAP |

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS: STH 80 (B-52-0269) | SHEET 22 | E |
|---|---|---|---|---|---|

2

N

CALVIN R & FRANCES J WILKINSON

CALVIN R & FRANCES J WILKINSON

DELBERT J & ARIEL L BANKER

PINE RIVER

IRISH DRIVE

STH 80

STH 80

COUNTY D

CALVIN R & FRANCES J WILKINSON

MGS GUARDRAIL
TERMINAL EAT (POST 1)
STA: 109+42
OFFSET: 19.5' LT

EXIST R/W

SLOPE INTERCEPT

CONCRETE SURFACE DRAIN
TYPE B - TYPE TBTT CURB HEAD
STA: 110+41

MGS THRIE BEAM
TRANSITION REQ'D

STEEL PLATE BEAM GUARD
TERMINAL EAT (POST 1)
STA: 114+62
OFFSET: 33' LT

STEEL PLATE BEAM GUARD
CLASS A
STA: 114+13
OFFSET: 22' LT

CONCRETE C&G
4-INCH SLOPED
36-INCH TYPE TBTT
STA: 113+57

STEEL PLATE BEAM GUARD
CLASS A
STA: 113+88
OFFSET: 18' LT

STEEL THRIE BEAM
STRUCTURE APPROACH REQ'D

PROPOSED STRUCTURE
B-52-0270
STA: 112+16.5
SEE STRUCTURE PLANS

6:1

1:1

5:1

B1

109+00

110+00

111+00

112+00

113+00

114+00

115+00

1+00 IRISH DRIVE

2+00 IRISH DRIVE

90°

6"

12"

12"

6"

BEGIN CONSTRUCTION
STA: 109+15
MATCH EXIST
SAW CUT REQ'D
X: 682455.2947
Y: 476204.9129

CONCRETE C&G
6-INCH SLOPED
36-INCH TYPE D (DRIVEWAY)
STA: 109+15
MATCH EXIST
SAW CUT REQ'D

A1

A2

10:1

A

MGS GUARDRAIL 3
STA: 110+26
OFFSET: 18' RT

CONCRETE PAVEMENT
APPROACH SLAB
STA: 110+57.7

MGS GUARDRAIL 3
STA: 109+89
OFFSET: 21.7' RT

MGS GUARDRAIL
TERMINAL EAT (POST 1)
STA: 109+36
OFFSET: 27' RT

MGS THRIE BEAM
TRANSITION REQ'D

CONCRETE SURFACE DRAIN
TYPE B - TYPE TBTT CURB HEAD
STA: 110+59

REMOVE OLD STRUCTURE
B-52-0044
STA: 112+02

CONCRETE PAVEMENT
APPROACH SLAB
STA: 113+75.3

MGS THRIE BEAM
TRANSITION REQ'D

CONCRETE C&G
4-INCH SLOPED
36-INCH TYPE TBT
STA: 113+75

C1

SLOPE INTERCEPT

MGS GUARDRAIL
TERMINAL EAT (POST 1)
STA: 114+91
OFFSET: 20' RT

EXIST R/W

| CURB AND GUTTER INFORMATION | | | |
|---|---|---|---|
| | STATION | OFFSET | RADIUS |
| A | 109+43.0 | 58.9' RT | 35' |
| | STATION | OFFSET | ELEVATION |
| A1 | 109+38.9 | 23.6' RT | 763.63' |
| A2 | 109+51.3 | 22.4' RT | 763.83' |
| B1 | 113+75.3 | 15.7' LT | 765.69' |
| C1 | 113+93.0 | 15.7' RT | 765.77' |

*ALL CURB AND GUTTER INFORMATION TO FLAG OF CURB

| LEGEND |
|---|
| CONCRETE APPROACH SLAB |
| CONCRETE PAVEMENT 12-INCH |
| CURB & GUTTER FLOW DIRECTION |
| SURFACE FLOW DIRECTION |
| MEDIUM RIPRAP |

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS: STH 80 (B-52-0270) | SHEET 23 | E |
|---|---|---|---|---|---|

2

CALVIN R &
FRANCES J
WILKINSON

EXIST R/W

END CONSTRUCTION
STA: 00+75'ID'
MATCH EXIST
SAW CUT REQ'D

12' GRAVEL PE
MATCH EXIST
STA: 00+79'ID'
OFFSET: 30.5 LT

1+00.0D

EXISTING
CULVERT
TO REMAIN

CHURCH

REMOVE SMALL PIPE
STA: 114+84

IRISH DRIVE

E1
E2
E3
E4
E5
E6
E7

D1
D2
D3
D4
D5

PROPOSED
CULVERT-9

E

2+00.0D

SLOPE INTERCEPT

5:1

EXIST R/W

1'
17'
12'
5'

114+00
115+00
116+00
117+00
118+00
119+00

STH 80
STH 80

90°

1:1
15:1

SLOPE INTERCEPT

END CONSTRUCTION
STA: 119+15
MATCH EXISTING
SAW CUT REQ'D
X: 682076.9723
Y: 477130.5866

EXIST R/W

CALVIN R &
FRANCES J
WILKINSON

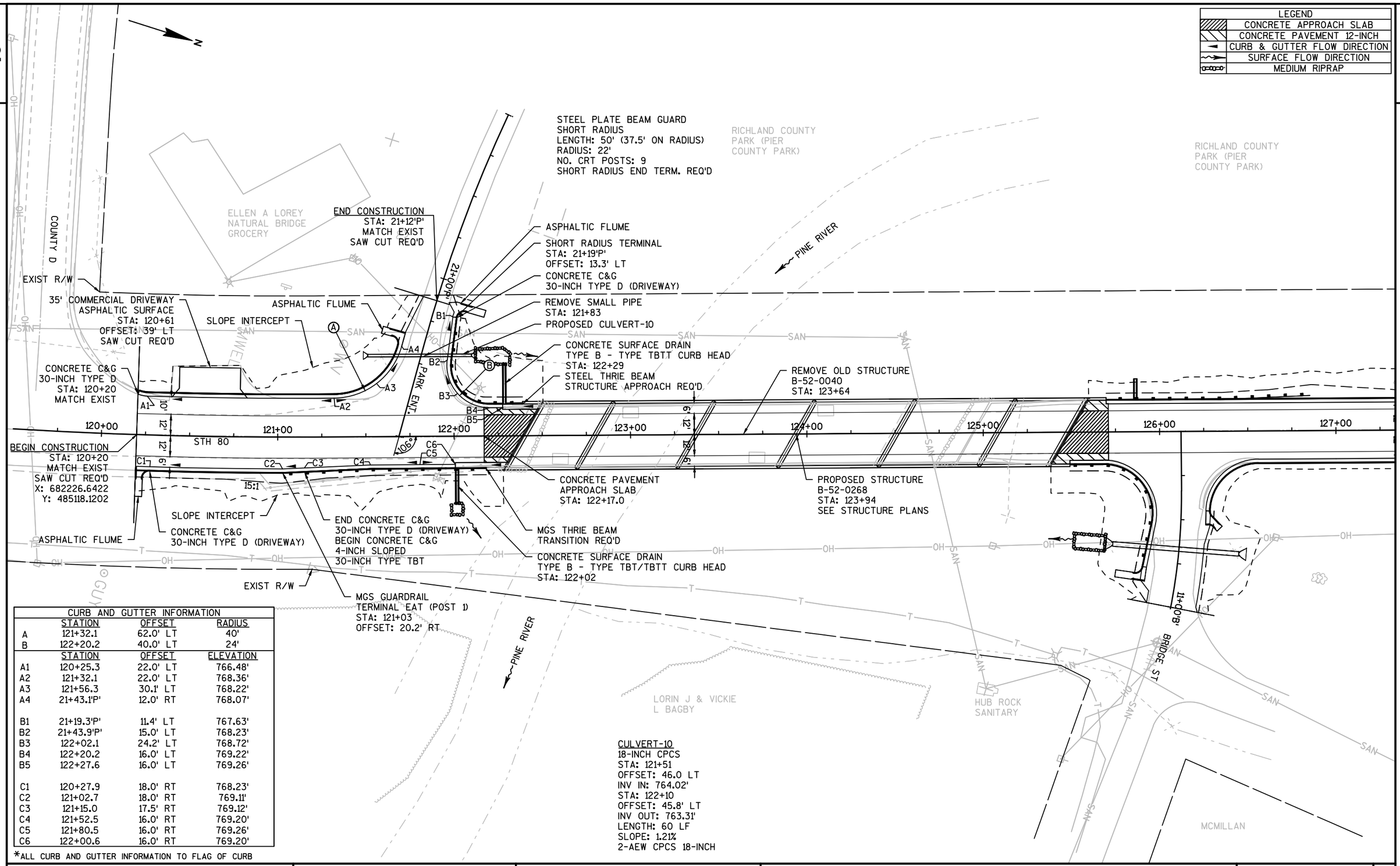
| CURB RETURN INFORMATION | | | |
|---|---|---|---|
| | STATION | OFFSET | RADIUS |
| E | 115+68.4 | 78.0' LT | 60' |
| | STATION | OFFSET | ELEVATION |
| D1 | 113+88.2 | 18.0' LT | 765.70' |
| D2 | 114+61.8 | 32.7' LT | 765.40' |
| D3 | 114+69.4 | 40.1' LT | 765.18' |
| D4 | 2+04.4'ID' | 15.0' RT | 764.74' |
| D5 | 1+74.4'ID' | 12.0' RT | 763.43' |
| E1 | 1+23.6'ID' | 12.0' LT | 760.23' |
| E2 | 1+53.6'ID' | 15.0' LT | 761.71' |
| E3 | 1+86.3'ID' | 18.75' LT | 763.26' |
| E4 | 115+18.7 | 44.4' LT | 764.80' |
| E5 | 115+40.3 | 25.0' LT | 765.48' |
| E6 | 115+68.4 | 18.0' LT | 766.07' |
| E7 | 115+83.4 | 17.0' LT | 766.10' |

*ALL CURB AND GUTTER INFORMATION TO FLAG OF CURB

CULVERT-9
30-INCH CPCS
STA: 115+34
OFFSET: 76.5' LT
INV IN: 754.88'
STA: 114+47
OFFSET: 80.5' LT
INV OUT: 754.26'
LENGTH: 88'
2-AEW CPCS 30-INCH

| LEGEND |
|---|
| CONCRETE APPROACH SLAB |
| CONCRETE PAVEMENT 12-INCH |
| CURB & GUTTER FLOW DIRECTION |
| SURFACE FLOW DIRECTION |
| MEDIUM RIPRAP |

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS: STH 80 (B-52-0270) | SHEET 24 | E |
|---|---|---|---|---|---|




| CURB AND GUTTER INFORMATION | | | |
|---|---|---|---|
| | STATION | OFFSET | RADIUS |
| A | 121+32.1 | 62.0' LT | 40' |
| B | 122+20.2 | 40.0' LT | 24' |
| | STATION | OFFSET | ELEVATION |
| A1 | 120+25.3 | 22.0' LT | 766.48' |
| A2 | 121+32.1 | 22.0' LT | 768.36' |
| A3 | 121+56.3 | 30.1' LT | 768.22' |
| A4 | 21+43.1'P' | 12.0' RT | 768.07' |
| B1 | 21+19.3'P' | 11.4' LT | 767.63' |
| B2 | 21+43.9'P' | 15.0' LT | 768.23' |
| B3 | 122+02.1 | 24.2' LT | 768.72' |
| B4 | 122+20.2 | 16.0' LT | 769.22' |
| B5 | 122+27.6 | 16.0' LT | 769.26' |
| C1 | 120+27.9 | 18.0' RT | 768.23' |
| C2 | 121+02.7 | 18.0' RT | 769.11' |
| C3 | 121+15.0 | 17.5' RT | 769.12' |
| C4 | 121+52.5 | 16.0' RT | 769.20' |
| C5 | 121+80.5 | 16.0' RT | 769.26' |
| C6 | 122+00.6 | 16.0' RT | 769.20' |

*ALL CURB AND GUTTER INFORMATION TO FLAG OF CURB

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS: STH 80 (B-52-0268) | SHEET 25 | E |
|---|---|---|---|---|---|

2

| CURB AND GUTTER INFORMATION | | | |
|---|---|---|---|
| | STATION | OFFSET | RADIUS |
| E | 125+68.0 | 46.0' RT | 30' |
| F | 126+56.1 | 46.0' RT | 30' |
| | STATION | OFFSET | ELEVATION |
| D1 | 125+69.8 | 16.0' LT | 770.97' |
| D2 | 125+86.4 | 16.0' LT | 771.04' |
| D3 | 126+56.7 | 16.0' LT | 771.18' (HP) |
| D4 | 126+73.1 | 16.0' LT | 771.17' |
| D5 | 127+74.0 | 16.0' LT | 770.88' (LP) |
| D6 | 128+00.0 | 16.0' LT | 770.99' |
| D7 | 128+84.2 | 16.0' LT | 771.56' |
| E1 | 125+49.1 | 16.0' RT | 770.87' |
| E2 | 125+68.0 | 16.0' RT | 770.96' (HP) |
| E3 | 125+91.4 | 27.2' RT | 770.03' |
| E4 | 10+53.3'B' | 14.4' RT | 769.10' |
| E5 | 10+79.2'B' | 17.3' RT | 768.24' |
| F1 | 10+44.6'B' | 14.0' LT | 769.96' |
| F2 | 126+35.2 | 24.5' RT | 770.57' |
| F3 | 126+56.1 | 16.0' RT | 771.18' (HP) |
| F4 | 128+00.0 | 16.0' RT | 770.79' |
| F5 | 128+84.2 | 16.0' RT | 770.48' |
| F6 | 129+13.7 | 16.0' RT | 770.32' |

*ALL CURB AND GUTTER INFORMATION TO FLAG OF CURB

RICHLAND COUNTY PARK (PIER COUNTY PARK)

RICHLAND COUNTY PARK (PIER COUNTY PARK)

PINE RIVER

CURB OPENING & ASPHALTIC FLUME

CONCRETE C&G 4-INCH SLOPED 30-INCH TYPE TBT

MGS GUARDRAIL TERMINAL EAT (POST 1) STA: 126+85 OFFSET: 20' LT

MGS THRIE BEAM TRANSITION REQ'D

CONCRETE PAVEMENT APPROACH SLAB STA: 125+71.0

BEGIN CONCRETE C&G 30-INCH TYPE D (DRIVEWAY)

INLET COVERS TYPE B

CURB OPENING & ASPHALTIC FLUME

END CONCRETE C&G 30-INCH TYPE D (DRIVEWAY) BEGIN CONCRETE C&G 30-INCH TYPE D

SLOPE INTERCEPT

ADJUST MANHOLE COVER

ADJUST INLET COVER

CONCRETE C&G 30-INCH TYPE D STA: 129+50 MATCH EXIST

END CONSTRUCTION STA: 129+50 MATCH EXIST SAW CUT REQ'D X: 681943.6992 Y: 486003.9576

REMOVE INLETS REMOVE STORM SEWER

REMOVE OLD STRUCTURE B-52-0040 STA: 123+64

PROPOSED STRUCTURE B-52-0268 STA: 123+94 SEE STRUCTURE PLANS

STEEL THRIE BEAM STRUCTURE APPROACH REQ'D

CONCRETE C&G 4-INCH SLOPED 30-INCH TYPE TBTT

BEGIN CONCRETE C&G 30-INCH TYPE D (DRIVEWAY)

SHORT RADIUS TERMINAL STA: 10+79'B' OFFSET: 19.5 RT

ASPHALTIC FLUME

END CONSTRUCTION STA: 11+00'B' MATCH EXISTING SAW CUT REQ'D

SLOPE INTERCEPT

ADJUST MANHOLE COVER

ADJUST INLET COVER

ASPHALTIC FLUME

PROPOSED CULVERT-11

REMOVE SMALL PIPE STA: 126+06

ADJUST INLET COVER

CONCRETE C&G 30-INCH TYPE D STA: 129+50 MATCH EXIST

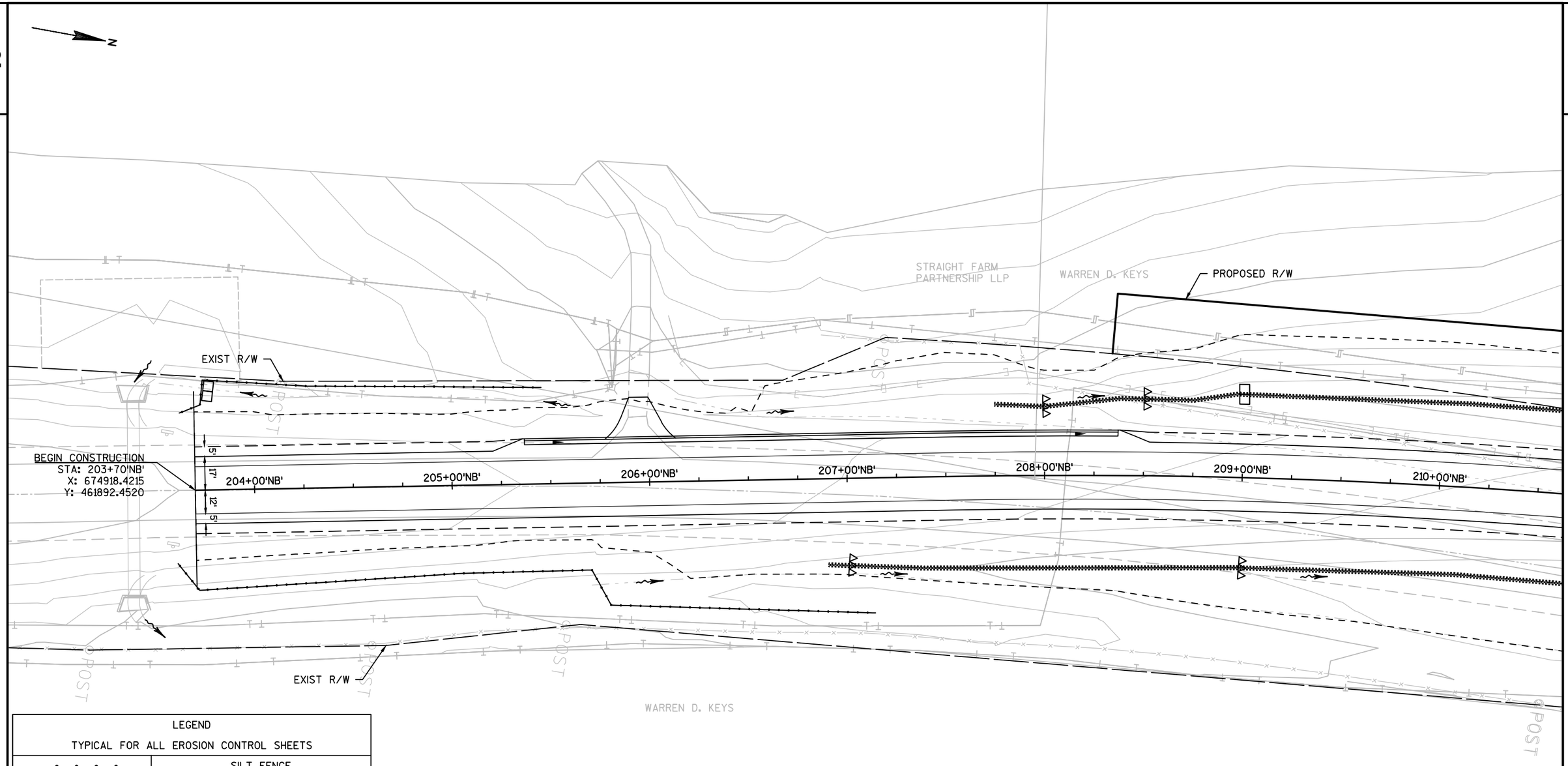
STEEL PLATE BEAM GUARD SHORT RADIUS LENGTH: 62.5' (50' ON RADIUS) RADIUS: 28' NO. CRT POSTS: 11 SHORT RADIUS END TERM. REQ'D

CULVERT-11
30-INCH CPCS
STA: 126+44
OFFSET: 69.6' RT
INV IN: 761.94'
STA: 125+73
OFFSET: 63.5' RT
INV OUT: 761.41'
LENGTH: 72 LF
SLOPE: 0.75%
2-AEW CPCS 30-INCH

| LEGEND |
|---|
| CONCRETE APPROACH SLAB |
| CONCRETE PAVEMENT 12-INCH |
| CURB & GUTTER FLOW DIRECTION |
| SURFACE FLOW DIRECTION |
| MEDIUM RIPRAP |

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONSTRUCTION DETAILS: STH 80 (B-52-0268) | SHEET 26 | E |
|---|---|---|---|---|---|

2




| LEGEND<br>TYPICAL FOR ALL EROSION CONTROL SHEETS | |
|---|---|
| | SILT FENCE |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | EROSION MAT-URBAN CLASS I-TYPE B |
| | EROSION MAT-CLASS II-TYPE C |
| | TEMPORARY DITCH CHECK |
| | MEDIUM RIPRAP |
| | EROSION BALE CHECK |

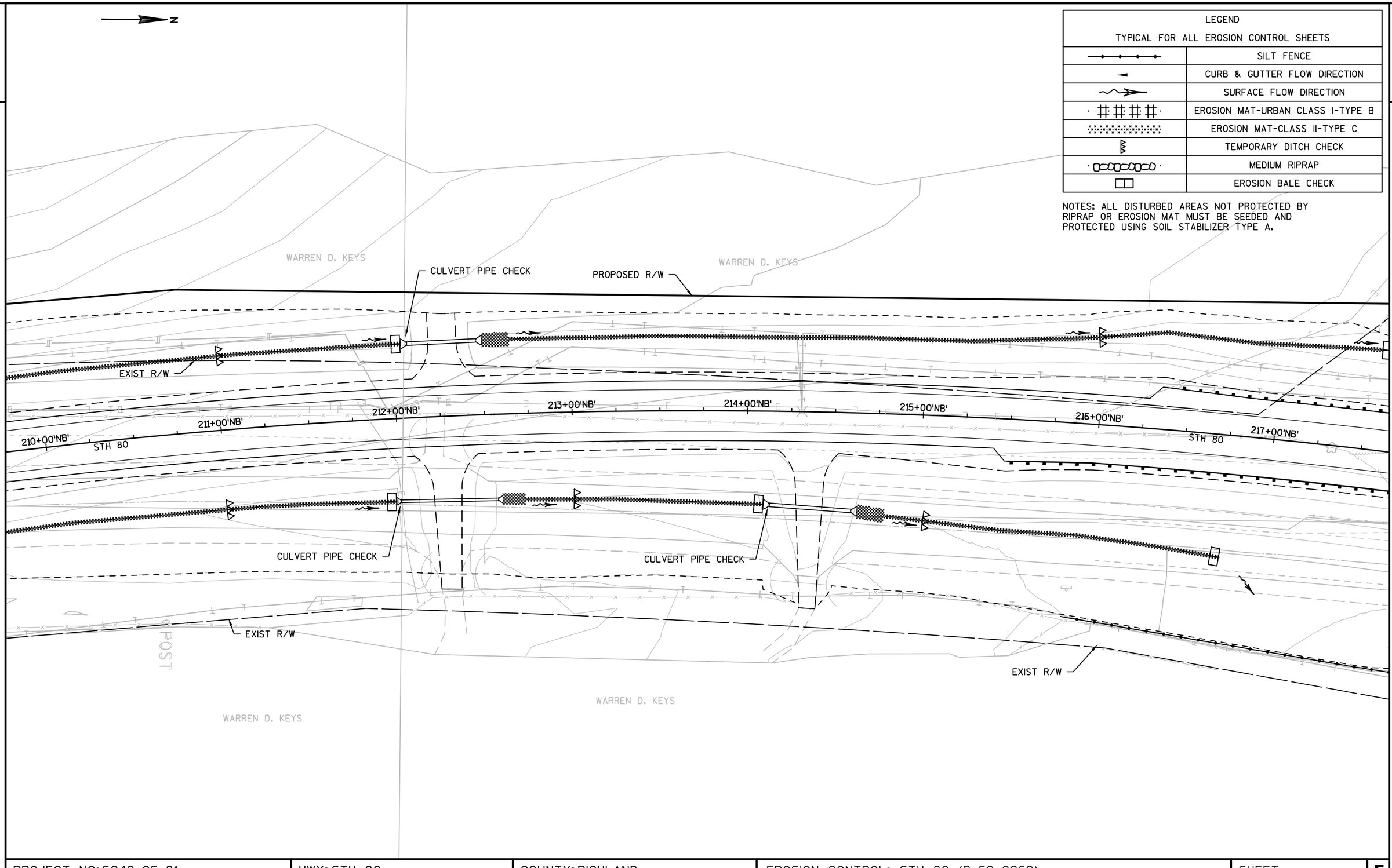
NOTES: ALL DISTURBED AREAS NOT PROTECTED BY RIPRAP OR EROSION MAT MUST BE SEEDED AND PROTECTED USING SOIL STABILIZER TYPE A.

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EROSION CONTROL: STH 80 (B-52-0269) | SHEET 27 | E |
|---|---|---|---|---|---|

2

| LEGEND<br>TYPICAL FOR ALL EROSION CONTROL SHEETS | |
|---|---|
| | SILT FENCE |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | EROSION MAT-URBAN CLASS I-TYPE B |
| | EROSION MAT-CLASS II-TYPE C |
| | TEMPORARY DITCH CHECK |
| | MEDIUM RIPRAP |
| | EROSION BALE CHECK |

NOTES: ALL DISTURBED AREAS NOT PROTECTED BY RIPRAP OR EROSION MAT MUST BE SEEDED AND PROTECTED USING SOIL STABILIZER TYPE A.




| PROJECT NO:5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EROSION CONTROL: STH 80 (B-52-0269) | SHEET 28 | E |
|---|---|---|---|---|---|

NOTES: ALL DISTURBED AREAS NOT PROTECTED BY RIPRAP OR EROSION MAT MUST BE SEEDED AND PROTECTED USING SOIL STABILIZER TYPE A.

| LEGEND<br>TYPICAL FOR ALL EROSION CONTROL SHEETS | |
|---|---|
| | SILT FENCE |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | EROSION MAT-URBAN CLASS I-TYPE B |
| | EROSION MAT-CLASS II-TYPE C |
| | TEMPORARY DITCH CHECK |
| | MEDIUM RIPRAP |
| | EROSION BALE CHECK |

N

WARREN D. KEYS

LOLA J & PAUL HIGGINS

END CONSTRUCTION
STA: 00+23'H'

CULVERT PIPE CHECK

HANSBERRY LANE

1+00'H'

FANCY CREEK

PROPOSED R/W

217+00'NB'

STH 80

218+00'NB'

219+00'NB'

220+00'NB'

221+00'NB'

222+00'NB'

223+00'NB'

224+00'NB'

22'

22'

PROPOSED STRUCTURE
B-52-0269
STA: 220+09'NB'
SEE STRUCTURE PLANS

TLE

CULVERT PIPE CHECK

EXIST R/W

WARREN D. KEYS

FANCY CREEK

WARREN D. KEYS

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EROSION CONTROL: STH 80 (B-52-0269) | SHEET 29 | E |
|---|---|---|---|---|---|

| LEGEND<br>TYPICAL FOR ALL EROSION CONTROL SHEETS | |
|---|---|
| | SILT FENCE |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | EROSION MAT-URBAN CLASS I-TYPE B |
| | EROSION MAT-CLASS II-TYPE C |
| | TEMPORARY DITCH CHECK |
| | MEDIUM RIPRAP |
| | EROSION BALE CHECK |

NOTES: ALL DISTURBED AREAS NOT PROTECTED BY RIPRAP OR EROSION MAT MUST BE SEEDED AND PROTECTED USING SOIL STABILIZER TYPE A.

N

606+00

END CONSTRUCTION
STA: 606+20

607+00

608+00

STH 56

EXIST R/W

JIMMEY R & LOLA
B SCHWEITZER

225+00'NB'

226+00'NB'

227+00'NB'

228+00'NB'

229+00'NB'

230+00'NB'

231+00'NB'

STH 80

EXIST R/W

PROPOSED R/W

DAVID L & KAREN
K FRY

WARREN D. KEYS

FRY

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EROSION CONTROL: STH 80 (B-52-0269) | SHEET 30 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\022001_EC_B520269-1.DWG
LAYOUT NAME - 021001_CD_B520269-(4)

PLOT DATE : 7/14/2017 6:21 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

| LEGEND<br>TYPICAL FOR ALL EROSION CONTROL SHEETS | |
|---|---|
| | SILT FENCE |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | EROSION MAT-URBAN CLASS I-TYPE B |
| | EROSION MAT-CLASS II-TYPE C |
| | TEMPORARY DITCH CHECK |
| | MEDIUM RIPRAP |
| | EROSION BALE CHECK |

NOTES: ALL DISTURBED AREAS NOT PROTECTED BY RIPRAP OR EROSION MAT MUST BE SEEDED AND PROTECTED USING SOIL STABILIZER TYPE A.

N

JIMMEY R & LOLA
B SCHWEITZER

EXIST R/W

232+00'NB'
233+00'NB'
234+00'NB'
235+00'NB'

STH 80

17'
12'
5'

END CONSTRUCTION
STA: 235+45'NB'
X: 675451.6471
Y: 464909.9816

CULVERT PIPE CHECK

EXIST R/W

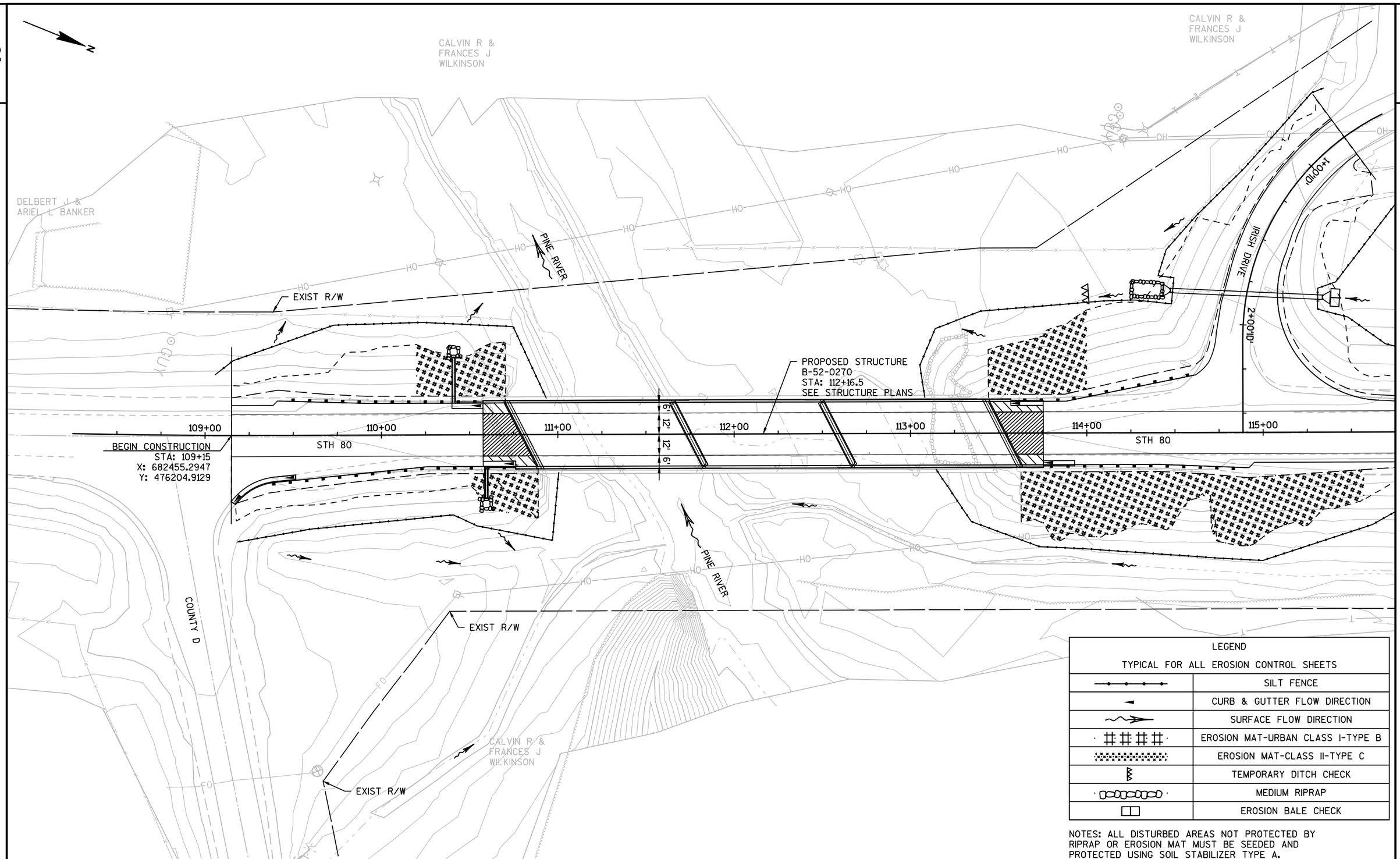
CULVERT PIPE CHECK

DAVID L & KAREN
K FRY

DAVID L & KAREN
K FRY

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EROSION CONTROL: STH 80 (B-52-0269) | SHEET 31 | E |
|---|---|---|---|---|---|

2



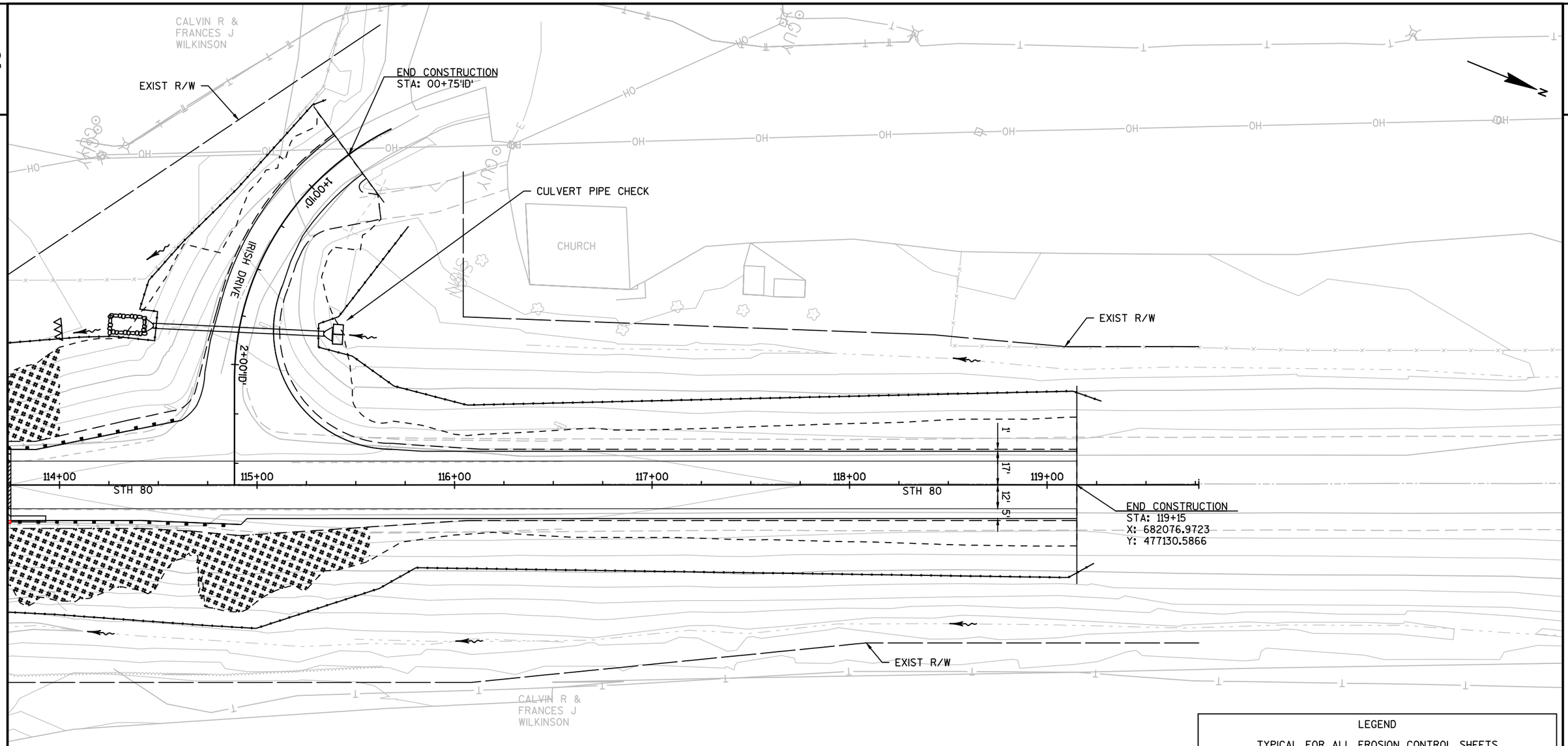

| LEGEND<br>TYPICAL FOR ALL EROSION CONTROL SHEETS | |
|---|---|
| | SILT FENCE |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | EROSION MAT-URBAN CLASS I-TYPE B |
| | EROSION MAT-CLASS II-TYPE C |
| | TEMPORARY DITCH CHECK |
| | MEDIUM RIPRAP |
| | EROSION BALE CHECK |

NOTES: ALL DISTURBED AREAS NOT PROTECTED BY RIPRAP OR EROSION MAT MUST BE SEEDED AND PROTECTED USING SOIL STABILIZER TYPE A.

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EROSION CONTROL: STH 80 (B-52-0270) | SHEET 32 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\022001_EC_B520270-1.DWG
LAYOUT NAME - 021001_CD_B520270
PLOT DATE : 3/21/2017 9:23 AM
PLOT BY : SHIFFER, CAMERON J PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

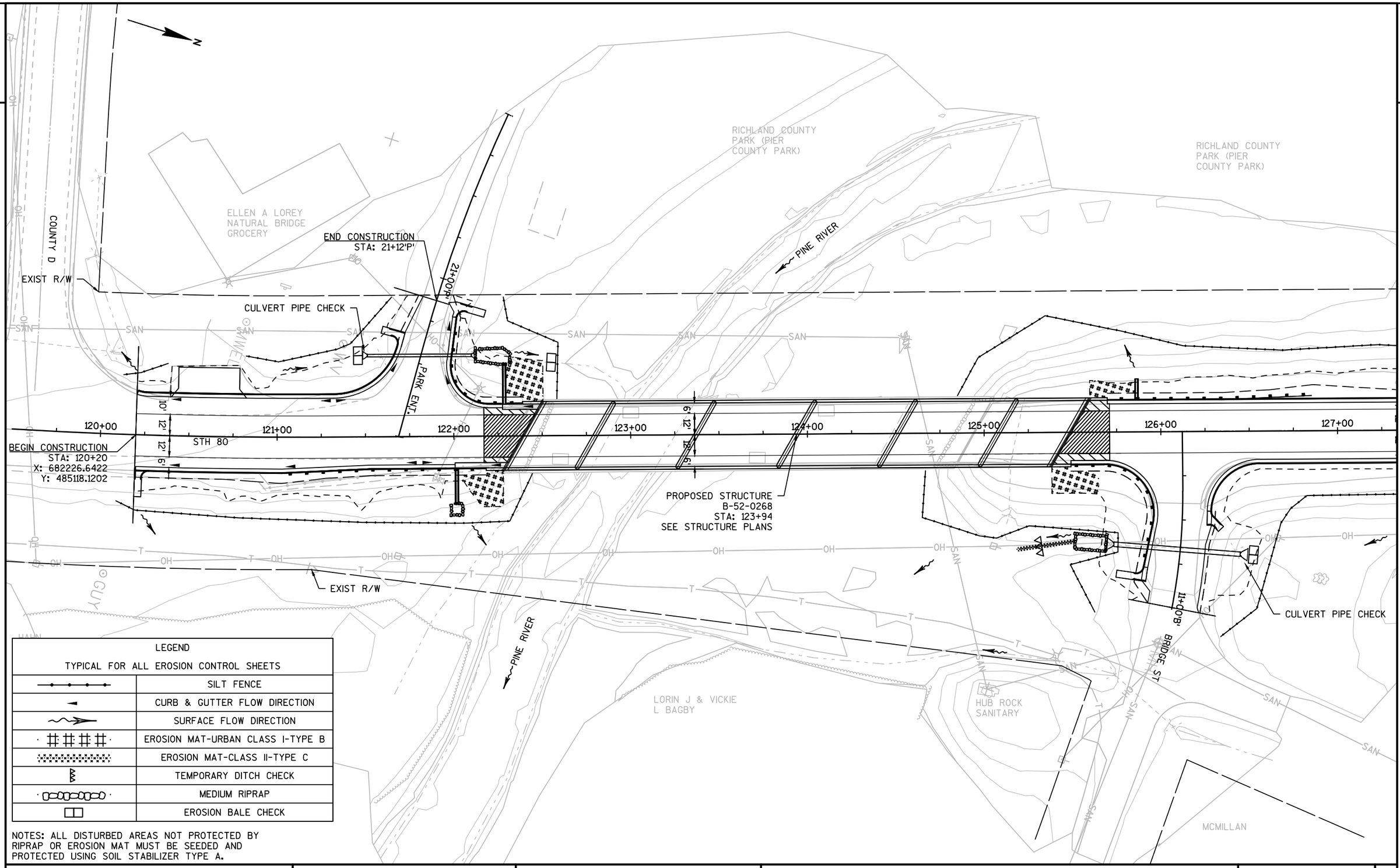



| LEGEND<br>TYPICAL FOR ALL EROSION CONTROL SHEETS | |
|---|---|
| | SILT FENCE |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | EROSION MAT-URBAN CLASS I-TYPE B |
| | EROSION MAT-CLASS II-TYPE C |
| | TEMPORARY DITCH CHECK |
| | MEDIUM RIPRAP |
| | EROSION BALE CHECK |

NOTES: ALL DISTURBED AREAS NOT PROTECTED BY RIPRAP OR EROSION MAT MUST BE SEEDED AND PROTECTED USING SOIL STABILIZER TYPE A.

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EROSION CONTROL: STH 80 (B-52-0270) | SHEET 33 | E |
|---|---|---|---|---|---|

2



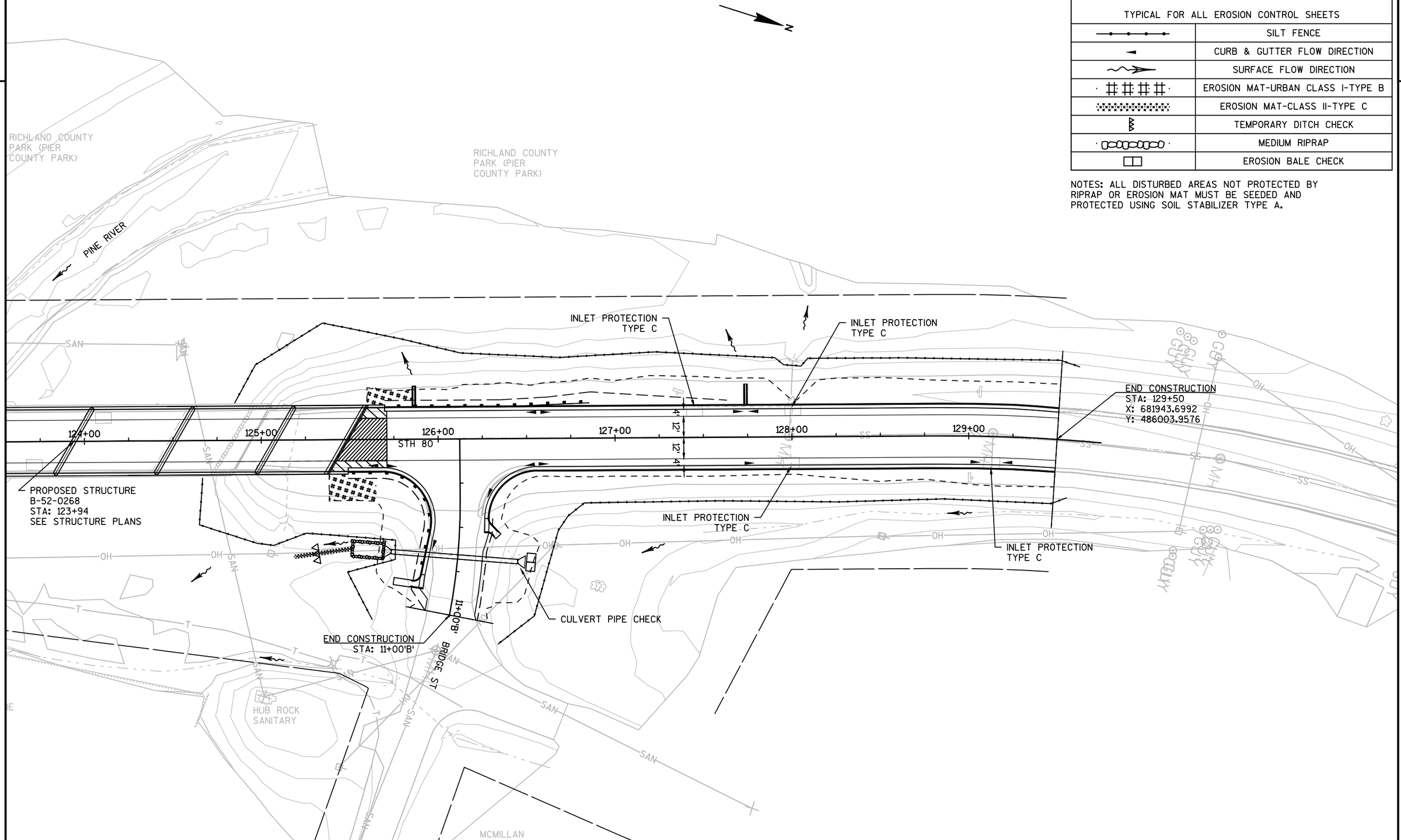

| LEGEND<br>TYPICAL FOR ALL EROSION CONTROL SHEETS | |
|---|---|
| | SILT FENCE |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | EROSION MAT-URBAN CLASS I-TYPE B |
| | EROSION MAT-CLASS II-TYPE C |
| | TEMPORARY DITCH CHECK |
| | MEDIUM RIPRAP |
| | EROSION BALE CHECK |

NOTES: ALL DISTURBED AREAS NOT PROTECTED BY RIPRAP OR EROSION MAT MUST BE SEEDED AND PROTECTED USING SOIL STABILIZER TYPE A.

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EROSION CONTROL: STH 80 (B-52-0268) | SHEET 34 | E |
|---|---|---|---|---|---|

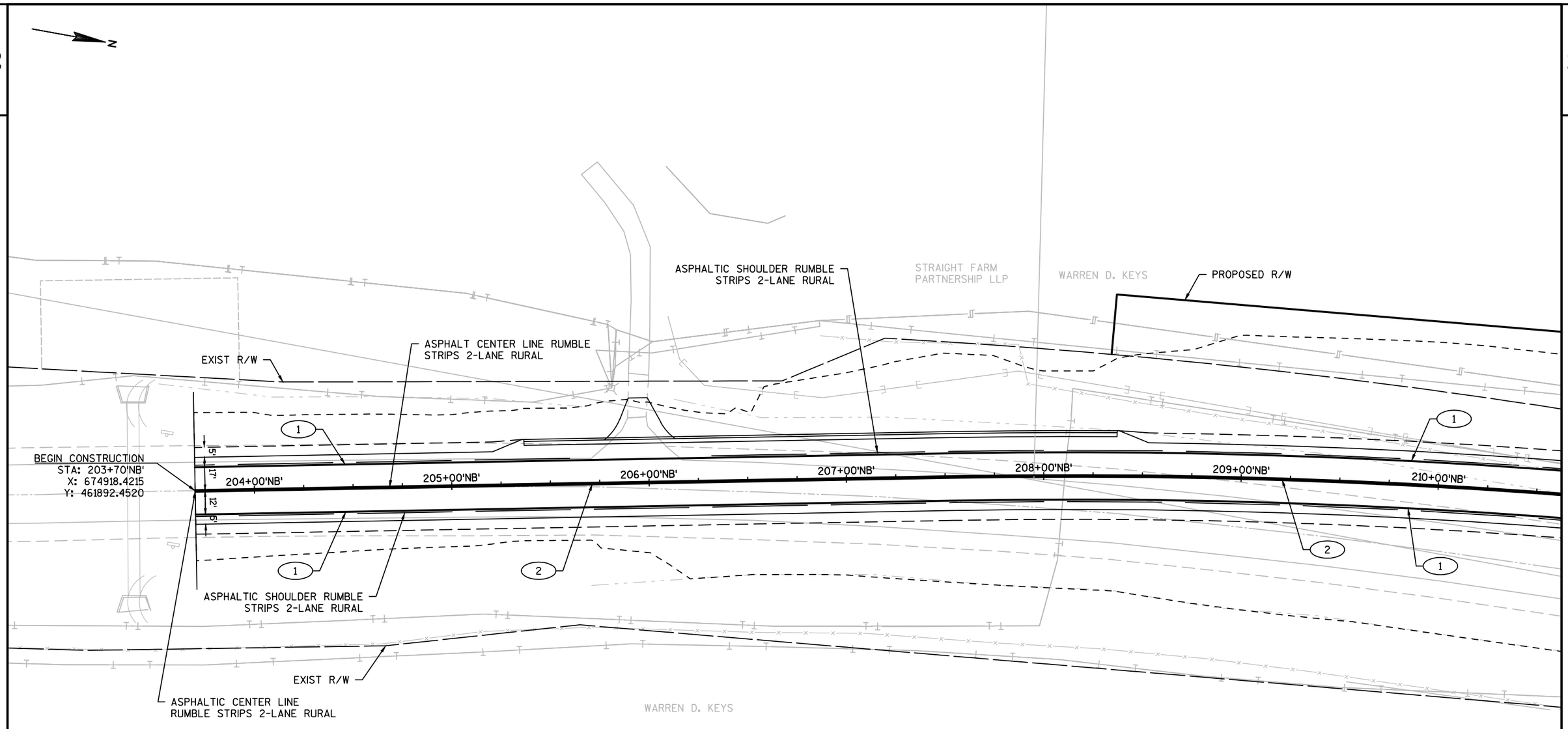
| LEGEND<br>TYPICAL FOR ALL EROSION CONTROL SHEETS | |
|---|---|
| | SILT FENCE |
| | CURB & GUTTER FLOW DIRECTION |
| | SURFACE FLOW DIRECTION |
| | EROSION MAT-URBAN CLASS I-TYPE B |
| | EROSION MAT-CLASS II-TYPE C |
| | TEMPORARY DITCH CHECK |
| | MEDIUM RIPRAP |
| | EROSION BALE CHECK |

NOTES: ALL DISTURBED AREAS NOT PROTECTED BY RIPRAP OR EROSION MAT MUST BE SEEDED AND PROTECTED USING SOIL STABILIZER TYPE A.




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EROSION CONTROL: STH 80 (B-52-0268) | SHEET 35 | E |
|---|---|---|---|---|---|

2

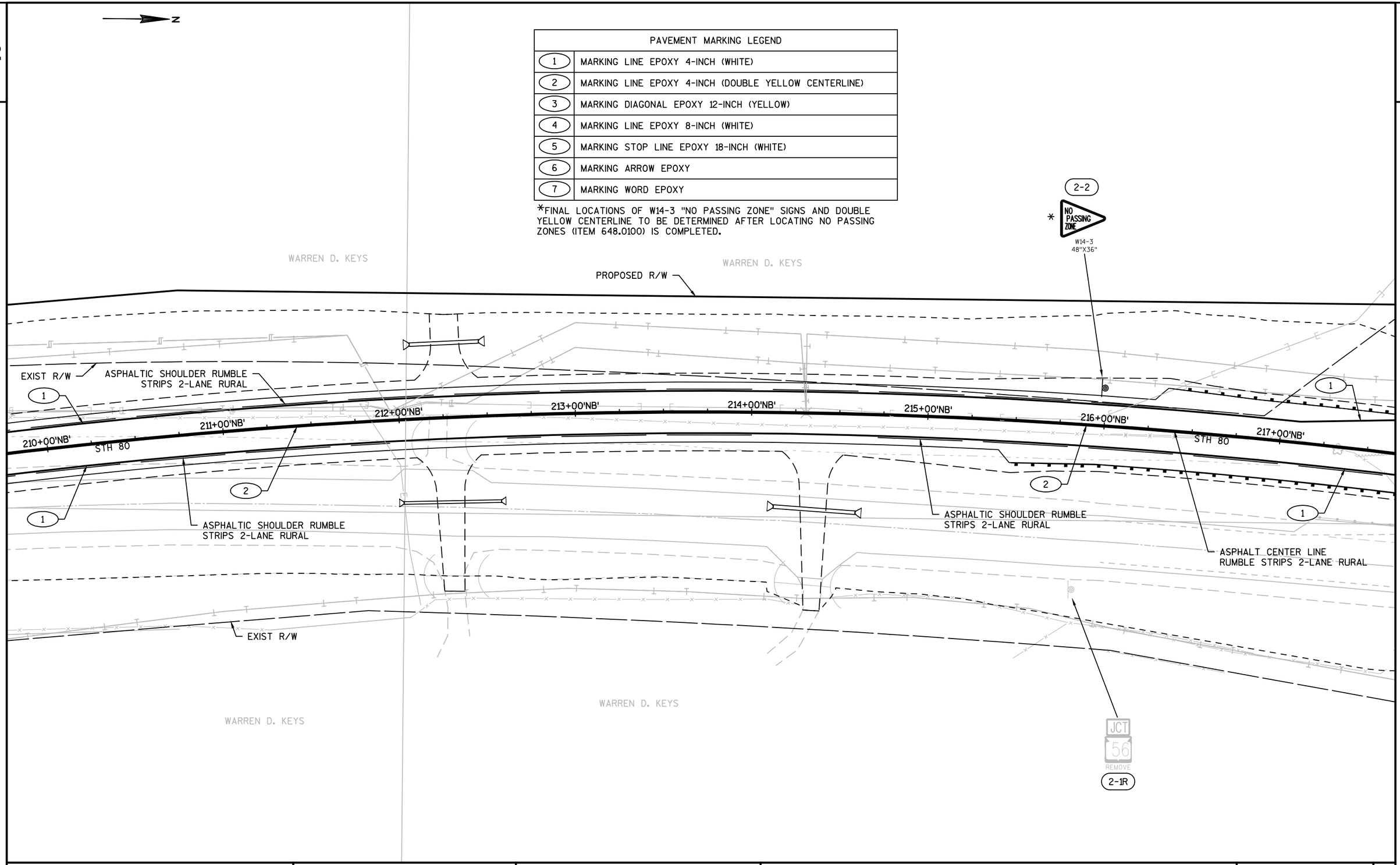



| PAVEMENT MARKING LEGEND | |
|---|---|
| 1 | MARKING LINE EPOXY 4-INCH (WHITE) |
| 2 | MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE) |
| 3 | MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| 4 | MARKING LINE EPOXY 8-INCH (WHITE) |
| 5 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |
| 6 | MARKING ARROW EPOXY |
| 7 | MARKING WORD EPOXY |

*FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS AND DOUBLE YELLOW CENTERLINE TO BE DETERMINED AFTER LOCATING NO PASSING ZONES (ITEM 648.0100) IS COMPLETED.

| PAVEMENT MARKING LEGEND | |
|---|---|
| 1 | MARKING LINE EPOXY 4-INCH (WHITE) |
| 2 | MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE) |
| 3 | MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| 4 | MARKING LINE EPOXY 8-INCH (WHITE) |
| 5 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |
| 6 | MARKING ARROW EPOXY |
| 7 | MARKING WORD EPOXY |

*FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS AND DOUBLE YELLOW CENTERLINE TO BE DETERMINED AFTER LOCATING NO PASSING ZONES (ITEM 648.0100) IS COMPLETED.




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PERMANENT SIGNING & PAVEMENT MARKING: STH 80 (B-52-0269) | SHEET 37 | E |
|---|---|---|---|---|---|

| PAVEMENT MARKING LEGEND | |
|---|---|
| 1 | MARKING LINE EPOXY 4-INCH (WHITE) |
| 2 | MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE) |
| 3 | MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| 4 | MARKING LINE EPOXY 8-INCH (WHITE) |
| 5 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |
| 6 | MARKING ARROW EPOXY |
| 7 | MARKING WORD EPOXY |

*FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS AND DOUBLE YELLOW CENTERLINE TO BE DETERMINED AFTER LOCATING NO PASSING ZONES (ITEM 648.0100) IS COMPLETED.

N

END CONSTRUCTION
STA: 00+23'H'

PROPOSED R/W

WARREN D. KEYS

LOLA J & PAUL HIGGINS

3-2
STOP
R1-1
30"X30"

HANSBERRY LANE

1+00'H'

MARKING LINE EPOXY 4-INCH WHITE EDGE LINE 3' SKIPS, 9' GAPS

FANCY CREEK

EXIST R/W

PROPOSED R/W

3-9
Richland Center 4
D2-1
108"X15"

217+00'NB'
STH 80
218+00'NB'
219+00'NB'
220+00'NB'
221+00'NB'
222+00'NB'
223+00'NB'
224+00'NB'

22'
22'
20'

PROPOSED STRUCTURE
B-52-0269
STA: 220+09'NB'
SEE STRUCTURE PLANS

ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

EXIST R/W

TLE

WARREN D. KEYS

JCT
56
J1-1
24"X39"
3-1

STOP
REMOVE
3-3R

WEST NORTH
56 80
J2-2
48"X57"
3-4

NO PASSING ZONE
REMOVE
3-5R

FANCY CREEK

WEST NORTH
56 80
REMOVE
3-6R

Hillsboro
Viola
D1-2
66"X30"
3-7

Hillsboro
Viola
REMOVE
3-8R

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PERMANENT SIGNING & PAVEMENT MARKING: STH 80 (B-52-0269) | SHEET 38 | E |
|---|---|---|---|---|---|

| PAVEMENT MARKING LEGEND | |
|---|---|
| 1 | MARKING LINE EPOXY 4-INCH (WHITE) |
| 2 | MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE) |
| 3 | MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| 4 | MARKING LINE EPOXY 8-INCH (WHITE) |
| 5 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |
| 6 | MARKING ARROW EPOXY |
| 7 | MARKING WORD EPOXY |

*FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS AND DOUBLE YELLOW CENTERLINE TO BE DETERMINED AFTER LOCATING NO PASSING ZONES (ITEM 648.0100) IS COMPLETED.

LOLA J & PAUL HIGGINS

4-12 NO PASSING ZONE W14-3 48"X36"

4-13R NO PASSING ZONE REMOVE

END CONSTRUCTION STA: 606+20

606+00

607+00

608+00

4-8 NORTH SOUTH 80 80 J3-2 48"X57"

4-10 STOP R1-1 36"X36"

4-6R NORTH SOUTH 80 80 REMOVE

4-9R STOP REMOVE

4-16R WEST 56 REMOVE

EXIST R/W

JIMMEY R & LOLA B SCHWEITZER

4-14 WEST 56 J4-1 24"X36"

4-15R WEST 56 REMOVE

4-17 WEST 56 J3-1 24"X57"

4-1 SPEED LIMIT 55 R2-1 24"X30"

4-2 SOUTH 80 J4-1 24"X36"

4-3R SOUTH 80 REMOVE

ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

STH 56

225+00'NB'

226+00'NB'

227+00'NB'

228+00'NB'

229+00'NB'

230+00'NB'

231+00'NB'

75'

60'

60'

60'

STH 80

ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

EXIST R/W

PROPOSED R/W

DAVID L & KAREN K FRY

WARREN D. KEYS

FRY

4-4 WEST 56 J3-1 24"X57"

4-5R WEST 56 REMOVE

4-7R REMOVE

4-11 W1-7 48"X24"

4-18 NORTH 80 J4-1 24"X36"

4-19R NORTH 80 REMOVE

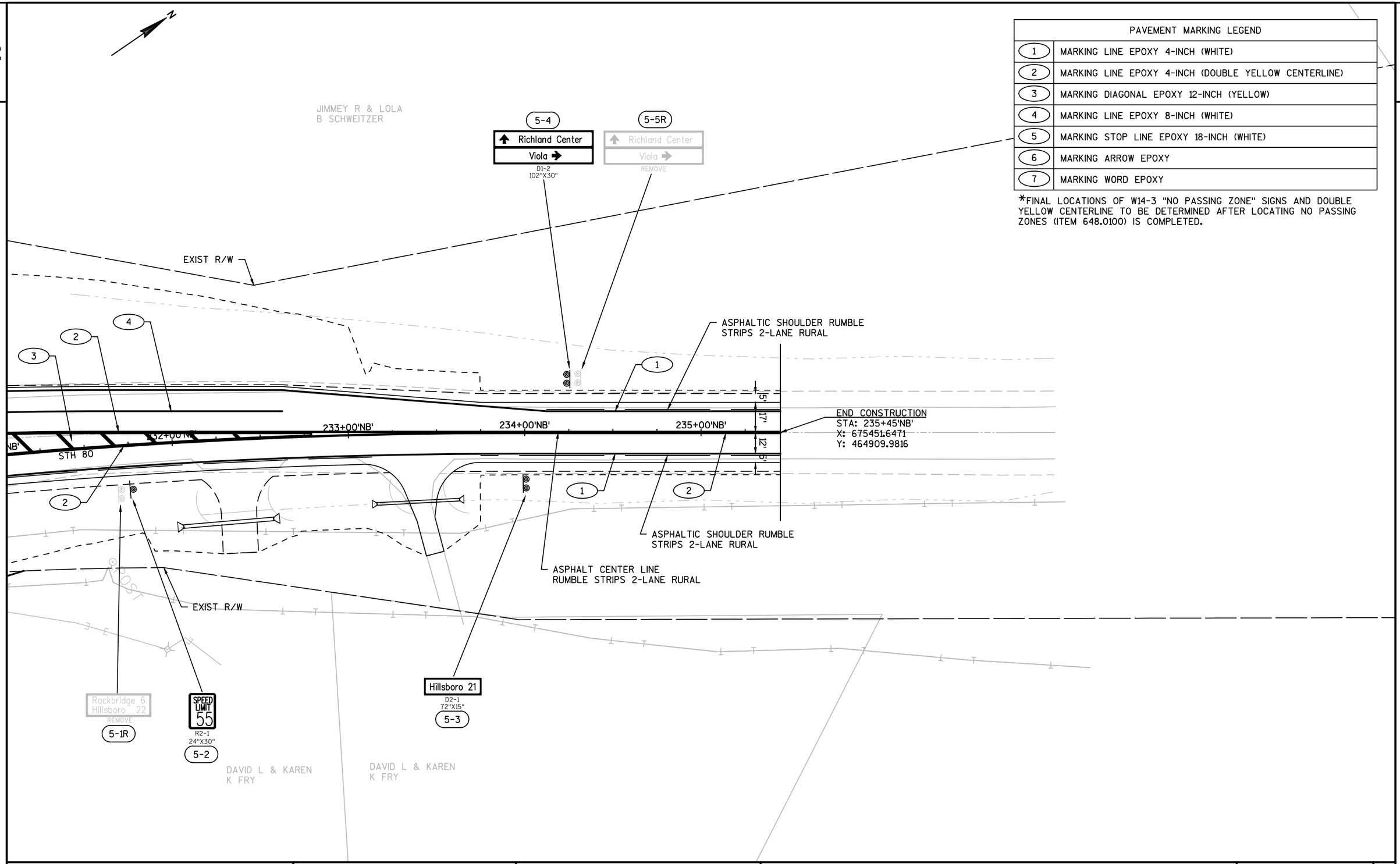
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PERMANENT SIGNING & PAVEMENT MARKING: STH 80 (B-52-0269) | SHEET 39 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\023201_PS_B520269.DWG
LAYOUT NAME - 021001_CD_B520269-(4)

PLOT DATE : 9/18/2017 7:13 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT

| PAVEMENT MARKING LEGEND | |
|---|---|
| 1 | MARKING LINE EPOXY 4-INCH (WHITE) |
| 2 | MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE) |
| 3 | MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| 4 | MARKING LINE EPOXY 8-INCH (WHITE) |
| 5 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |
| 6 | MARKING ARROW EPOXY |
| 7 | MARKING WORD EPOXY |

*FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS AND DOUBLE YELLOW CENTERLINE TO BE DETERMINED AFTER LOCATING NO PASSING ZONES (ITEM 648.0100) IS COMPLETED.




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PERMANENT SIGNING & PAVEMENT MARKING: STH 80 (B-52-0269) | SHEET 40 | E |
|---|---|---|---|---|---|

2

CALVIN R &
FRANCES J
WILKINSON

CALVIN R &
FRANCES J
WILKINSON

DELBERT J &
ARIEL L BANKER

PINE RIVER

EXIST R/W

MARKING LINE EPOXY
4-INCH (YELLOW)
12.5' SKIPS, 37.5' GAPS

PROPOSED STRUCTURE
B-52-0270
STA: 112+16.5
SEE STRUCTURE PLANS

6'
12'
12'
6'

109+00
110+00
111+00
112+00
113+00
114+00
115+00

STH 80

BEGIN CONSTRUCTION
STA: 109+15
X: 682455.2947
Y: 476204.9129

1+00 IRISH DRIVE

2+00 IRISH DRIVE

6-7R
STOP
REMOVE

6-8
STOP
R1-1
30"X30"

1

COUNTY D

STOP
R1-1
30"X30"
6-1

STOP
REMOVE
6-2R

80
J13-1
24"X45"
6-3

80
REMOVE
6-4R

NORTH
80
REMOVE
6-5R

NORTH
80
COUNTY
D
J4-2
48"X36"
6-6

MARKING LINE EPOXY
4-INCH (YELLOW)
12.5' SKIPS, 37.5' GAPS

EXIST R/W

CALVIN R &
FRANCES J
WILKINSON

| PAVEMENT MARKING LEGEND | |
|---|---|
| 1 | MARKING LINE EPOXY 4-INCH (WHITE) |
| 2 | MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE) |
| 3 | MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| 4 | MARKING LINE EPOXY 8-INCH (WHITE) |
| 5 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |
| 6 | MARKING ARROW EPOXY |
| 7 | MARKING WORD EPOXY |

*FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS AND DOUBLE YELLOW CENTERLINE TO BE DETERMINED AFTER LOCATING NO PASSING ZONES (ITEM 648.0100) IS COMPLETED.

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PERMANENT SIGNING & PAVEMENT MARKING: STH 80 (B-52-0270) | SHEET 41 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\023201_PS_B520270.DWG
LAYOUT NAME - 021001_CD_B520270

PLOT DATE : 9/18/2017 7:14 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

CALVIN R &
FRANCES J
WILKINSON

EXIST R/W

END CONSTRUCTION
STA: 00+75'ID'

1+00'ID'

IRISH DRIVE

2+00'ID'

CHURCH

7-1R
COUNTY D
REMOVE

7-2
COUNTY D
J12-1
24"X45"

EXIST R/W

1

114+00
STH 80
115+00
116+00
117+00
118+00
STH 80
119+00

1'
17'
12.5'

END CONSTRUCTION
STA: 119+15
X: 682076.9723
Y: 477130.5866

1

MARKING LINE
EPOXY 4-INCH
WHITE EDGE LINE
3' SKIPS, 9' GAPS

MARKING LINE EPOXY
4-INCH (YELLOW)
12.5' SKIPS, 37.5' GAPS

EXIST R/W

CALVIN R &
FRANCES J
WILKINSON

| PAVEMENT MARKING LEGEND | |
|---|---|
| 1 | MARKING LINE EPOXY 4-INCH (WHITE) |
| 2 | MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE) |
| 3 | MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| 4 | MARKING LINE EPOXY 8-INCH (WHITE) |
| 5 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |
| 6 | MARKING ARROW EPOXY |
| 7 | MARKING WORD EPOXY |

*FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS AND DOUBLE YELLOW CENTERLINE TO BE DETERMINED AFTER LOCATING NO PASSING ZONES (ITEM 648.0100) IS COMPLETED.

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PERMANENT SIGNING & PAVEMENT MARKING: STH 80 (B-52-0270) | SHEET 42 | E |
|---|---|---|---|---|---|

| PAVEMENT MARKING LEGEND | |
|---|---|
| 1 | MARKING LINE EPOXY 4-INCH (WHITE) |
| 2 | MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE) |
| 3 | MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| 4 | MARKING LINE EPOXY 8-INCH (WHITE) |
| 5 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |
| 6 | MARKING ARROW EPOXY |
| 7 | MARKING WORD EPOXY |

*FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS AND DOUBLE YELLOW CENTERLINE TO BE DETERMINED AFTER LOCATING NO PASSING ZONES (ITEM 648.0100) IS COMPLETED.

COUNTY D

ELLEN A LOREY NATURAL BRIDGE GROCERY

RICHLAND COUNTY PARK (PIER COUNTY PARK)

PINE RIVER

END CONSTRUCTION
STA: 21+12'P'

21+00'P

8-1 J13-2 48"X45"

8-2R REMOVE

8-6 STOP R1-1 30"X30"

8-7R STOP REMOVE

8-12R Pier County Park REMOVE

8-13 Pier County Park D7-68-R 60"X36"

8-14R REMOVE

PARK ENT.

BEGIN CONSTRUCTION
STA: 120+20
X: 682226.6422
Y: 485118.1202

STH 80

120+00 121+00 122+00 123+00 124+00 125+00 126+00 127+00

10' 12' 12' 6' 6' 12' 12' 6'

PROPOSED STRUCTURE
B-52-0268
STA: 123+94
SEE STRUCTURE PLANS

8-11R REMOVE

11+00'B

BRIDGE ST

HAHN

8-3 J4-2 48"X36" NORTH 80 COUNTY I

8-4R REMOVE NORTH 80

8-5 D7-68-L 60"X36" Pier County Park

8-8R REMOVE Pier County Park

8-9R REMOVE Pine River

8-10 I3-1 36"x24" Pine River

LORIN J & VICKIE L BAGBY

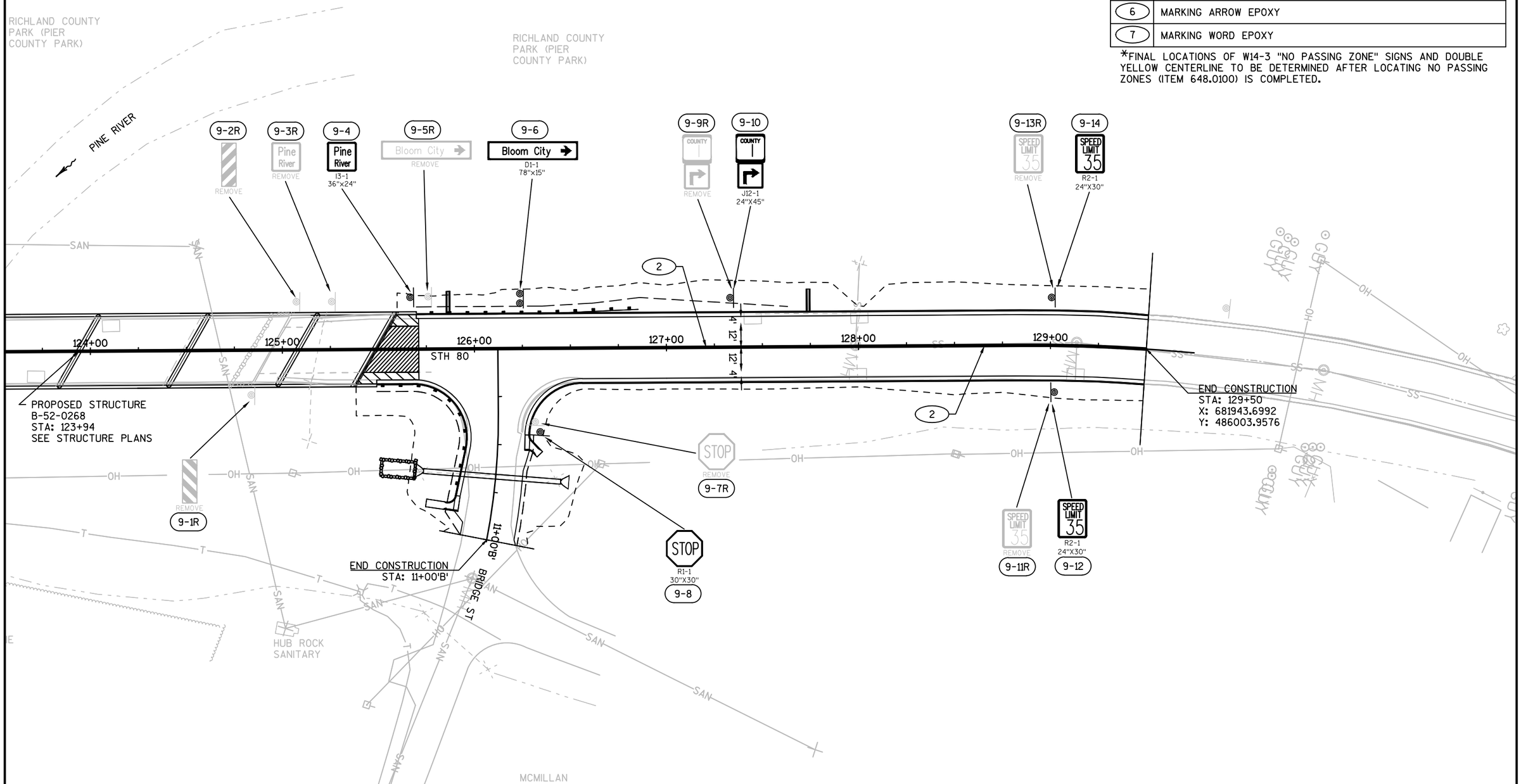
HUB ROCK SANITARY

MCMILLAN

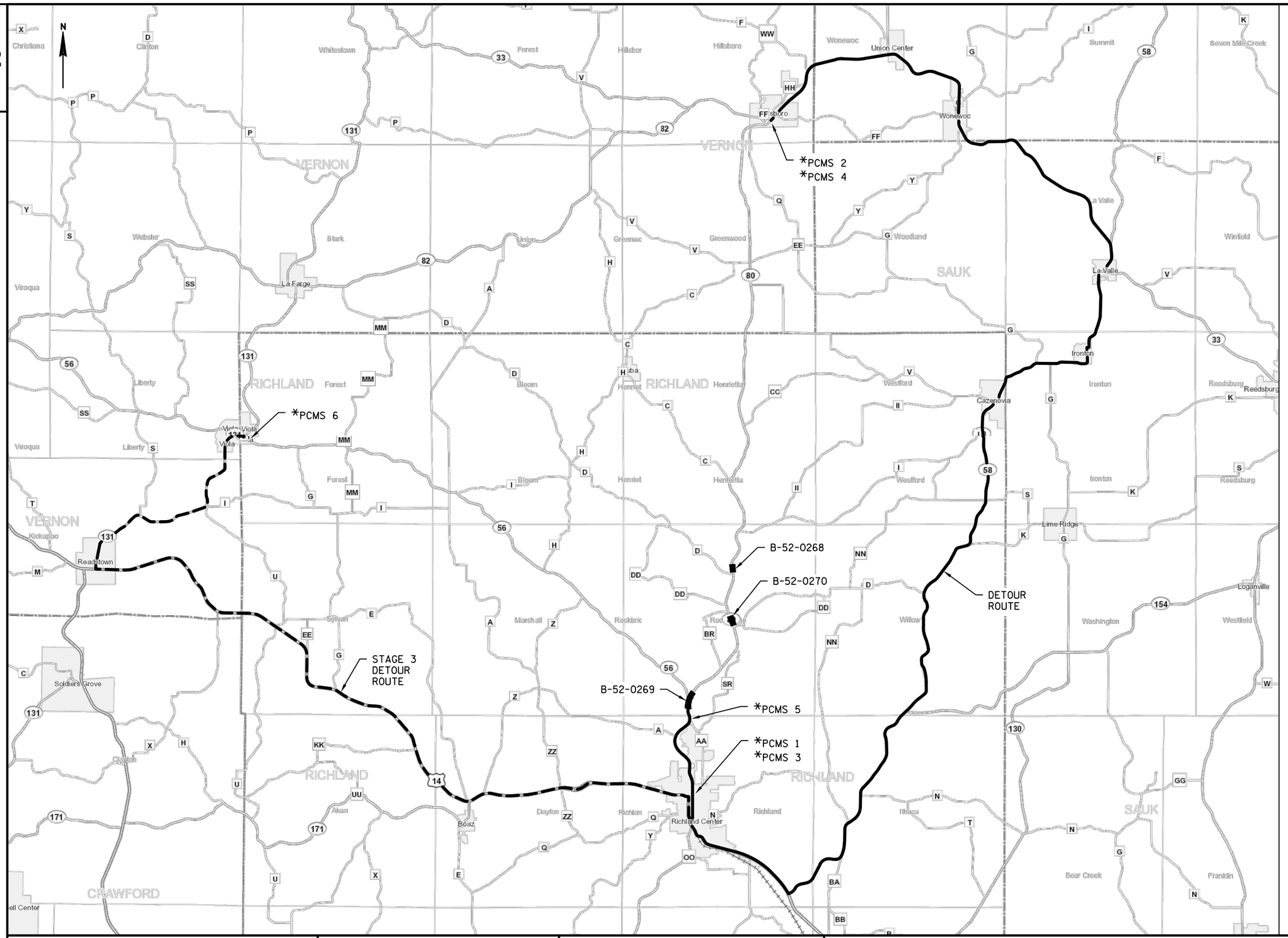
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PERMANENT SIGNING & PAVEMENT MARKING: STH 80 (B-52-0268) | SHEET 43 | E |
|---|---|---|---|---|---|

| PAVEMENT MARKING LEGEND | |
|---|---|
| 1 | MARKING LINE EPOXY 4-INCH (WHITE) |
| 2 | MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE) |
| 3 | MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| 4 | MARKING LINE EPOXY 8-INCH (WHITE) |
| 5 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |
| 6 | MARKING ARROW EPOXY |
| 7 | MARKING WORD EPOXY |

*FINAL LOCATIONS OF W14-3 "NO PASSING ZONE" SIGNS AND DOUBLE YELLOW CENTERLINE TO BE DETERMINED AFTER LOCATING NO PASSING ZONES (ITEM 648.0100) IS COMPLETED.




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PERMANENT SIGNING & PAVEMENT MARKING: STH 80 (B-52-0268) | SHEET 44 | E |
|---|---|---|---|---|---|




| LEGEND | |
|---|---|
| ——— | DETOUR ROUTE |
| — — — | STAGE 3 DETOUR ROUTE |

PCMS 1 & PCMS 2 MESSAGES USED FOR 7 DAY ADVANCED WARNING OF CONSTRUCTION BEGINNING.

| PORTABLE CHANGEABLE MESSAGE SIGN 1 (PCMS 1) |
|---|
| HWY 80 ROADWORK |
| STARTING X/XX/XX |

| PORTABLE CHANGEABLE MESSAGE SIGN 2 (PCMS 2) |
|---|
| HWY 80 ROADWORK |
| STARTING X/XX/XX |

PCMS 3 & PCMS 4 MESSAGES USED FOR 7 DAY ADVANCED WARNING OF STH 80 DETOUR BEGINNING.

| PORTABLE CHANGEABLE MESSAGE SIGN 3 (PCMS 3) |
|---|
| HWY 80 CLOSED X/XX/XX |
| USE DETOUR ROUTE |

| PORTABLE CHANGEABLE MESSAGE SIGN 4 (PCMS 4) |
|---|
| HWY 80 CLOSED X/XX/XX |
| USED DETOUR ROUTE |

PCMS 5 & PCMS 6 MESSAGES USED FOR 7 DAY ADVANCED WARNING OF STAGE 3 DETOUR BEGINNING.

| PORTABLE CHANGEABLE MESSAGE SIGN 5 (PCMS 5) |
|---|
| HWY 56 CLOSED X/XX/XX |
| USE DETOUR ROUTE |

| PORTABLE CHANGEABLE MESSAGE SIGN 6 (PCMS 6) |
|---|
| HWY 56 CLOSED X/XX/XX |
| USE DETOUR ROUTE |

*FINAL LOCATION OF ALL PCMS SIGNS TO BE DETERMINED BY THE ENGINEER.

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TRAFFIC CONTROL PLAN: OVERVIEW | SHEET 45 | E |
|---|---|---|---|---|---|

2

TYPICAL FOR ALL TRAFFIC CONTROL PLAN SHEETS

-FOLLOW TRAFFIC CONTROL PLAN AS SHOWN OR AS DIRECTED BY THE ENGINEER

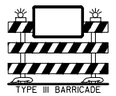
-SEE "DETOUR PLAN" AND "STAGE 3 DETOUR PLAN" FOR DETOUR SIGNING INFORMATION

-SEE "STAGE "#" CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269)" FOR ADDITIONAL INFORMATION

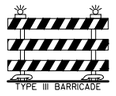
-UTILIZE SDD 15C2 DETAILS A, C, D, AND E FOR MORE INFORMATION

-UTILIZE SDD 15C3 DETAIL 3 FOR MORE INFORMATION

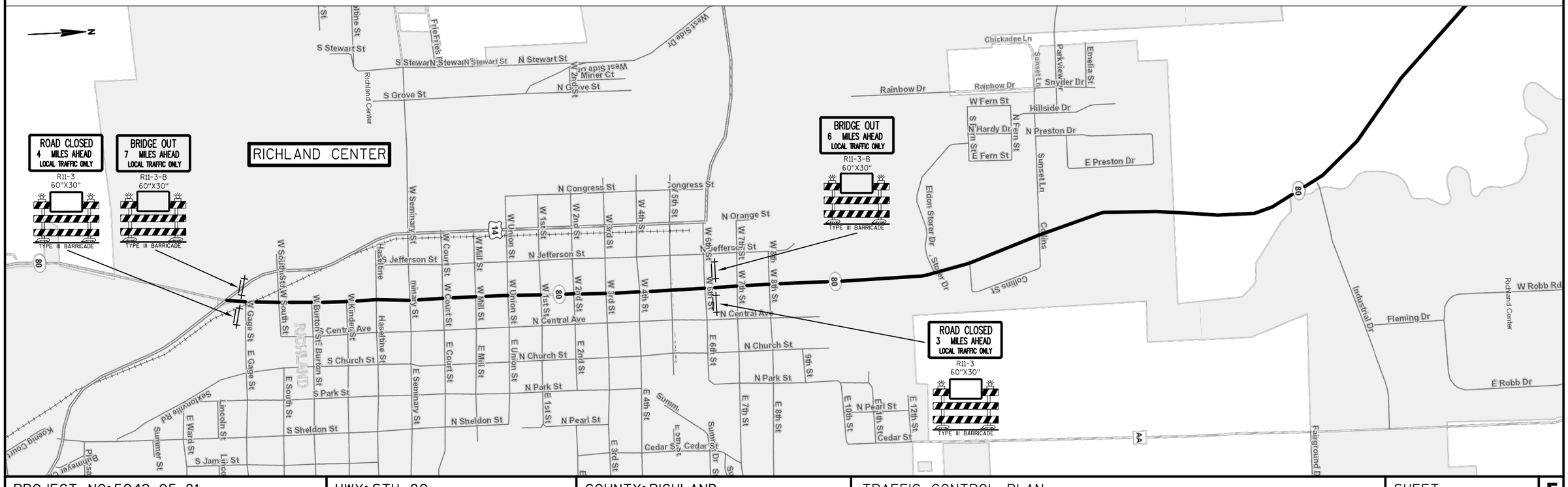
| LEGEND | |
|---|---|
| +—+ | TYPE III BARRICADE |
| +—+ | TYPE III BARRICADE WITH ATTACHED SIGN |
| ◎ | SIGN ON PERMANENT SUPPORT |
| ▨ | WORK AREA |




TYPE III BARRICADE WITH
SIGN AND TYPE A LIGHTS




TYPE III BARRICADE WITH
TYPE A LIGHTS




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TRAFFIC CONTROL PLAN | SHEET 46 | E |
|---|---|---|---|---|---|

2

2

ROAD WORK AHEAD W20-1-A

BRIDGE OUT 4 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30" TYPE III BARRICADE

COUNTY A

Hillcrest Ln

Noon Ln

McDougal Dr

80

ROAD CLOSED 1 MILES AHEAD LOCAL TRAFFIC ONLY R11-3 60"X30" TYPE III BARRICADE

ROAD WORK AHEAD W20-1-A

RICHLAND

RICHLAND CENTER

Bowen Cir

Bowen Ct

COUNTY AA

ROAD WORK 1000 FT W20-1-C

G20-2A "END ROAD WORK" SIGN TO BE INSTALLED AFTER COMPLETION OF PROJECT 5042-05-61

END ROAD WORK G20-2A 48"X24"

BRIDGE OUT 4 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30" TYPE III BARRICADE

ROAD CLOSED 0.5 MILES AHEAD LOCAL TRAFFIC ONLY R11-3 60"X30" TYPE III BARRICADE

ROAD WORK AHEAD W20-1-A

Hansberry Ln

56

ROAD WORK 500 FT W20-1-D

ROAD WORK 1000 FT W20-1-C

ROAD WORK AHEAD W20-1-A

Fawn Meadow Ln

Buck Run Ln

B-52-0269 WORK AREA

ROAD WORK 500 FT W20-1-D

ROAD CLOSED AHEAD W20-3-A

ROAD CLOSED 1000 FT W20-3-C

ROAD CLOSED 500 FT W20-3-D

RICHLAND

Rockridge

ROAD WORK AHEAD W20-1-A

COUNTY BR

BRIDGE OUT 2 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30" TYPE III BARRICADE

BRIDGE OUT 1 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30" TYPE III BARRICADE

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30" TYPE III BARRICADE

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30" TYPE III BARRICADE

R11-2 48"X30" ROAD CLOSED TYPE III BARRICADE TYPE III BARRICADE

SEE SDD 15C2 DETAIL D

R11-2B 48"X30" BRIDGE OUT TYPE III BARRICADE

IRISH DRIVE

80

SR

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30" TYPE III BARRICADE

ROAD WORK AHEAD W20-1-A

COUNTY SR

ROAD WORK 1000 FT W20-1-C

ROAD WORK 500 FT W20-1-D

B-52-0270 WORK AREA

ROAD WORK 500 FT W20-1-D

R11-2B 48"X30" BRIDGE OUT TYPE III BARRICADE

COUNTY D

ROAD WORK 1000 FT W20-1-C

COUNTY DD

Rockbridge

BRIDGE OUT 0.5 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30" TYPE III BARRICADE

BRIDGE OUT 1 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30" TYPE III BARRICADE

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30" TYPE III BARRICADE

ROAD WORK AHEAD W20-1-A

ROAD WORK 1000 FT W20-1-C

Albertis Ln

Cunningham Ln

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TRAFFIC CONTROL PLAN | SHEET 47 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\025001_TC_OVERVIEW.DWG
LAYOUT NAME - 025001_TC_OVERVIEW - TCP_OVERVIEW1

PLOT DATE : 7/14/2017 10:52 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME :

PLOT SCALE : 1 IN:1000 FT

ROAD WORK AHEAD W20-1-A

ROAD WORK 500 FT W20-1-D

G20-2A "END ROAD WORK" SIGN TO BE INSTALLED AFTER COMPLETION OF PROJECT 5042-05-61

END ROAD WORK G20-2A 48"X24"

ROAD WORK 1000 FT W20-1-C

ROAD WORK AHEAD W20-1-A

B-52-0268 WORK AREA

DETAIL 1

COUNTY D

Bridge St

Circle Dr

Lodge St

Rockbridge School St

Thunderbrook Ln

Clark Ln

ROAD WORK 500 FT W20-1-D

*MAINTAIN ACCESS TO PIER COUNTY PARK

**CLOSE ENTRANCE TO GROCERY STORE ON STH 80 USING BARRICADES

Gardenview Ln

80

BRIDGE OUT 1 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30" TYPE III BARRICADE

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30" TYPE III BARRICADE

ROAD WORK AHEAD W20-1-A

D.S.M.L.R.

SHELLINGTON DR

DETAIL 1

PIER COUNTY PARK

D

Bridge St

Circle Dr

Lodge St

1 ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30" TYPE III BARRICADE

2 R11-2B 48"X30" BRIDGE OUT TYPE III BARRICADE

4 BRIDGE OUT 2 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30" TYPE III BARRICADE

R11-2 48"X30" ROAD CLOSED TYPE III BARRICADE TYPE III BARRICADE TYPE III BARRICADE

3 SEE SDD 15C2 DETAIL D

COUNTY I

Howser Ln

ROAD WORK AHEAD W20-1-A

Mick Park Ln

Syverson St

Mandt St

Johnson St

Sauk Creek Dr

Tamarack Rd

ROAD WORK AHEAD W20-1-A

N

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30" TYPE III BARRICADE

COUNTY C

ROAD WORK AHEAD W20-1-A

BRIDGE OUT 3 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30" TYPE III BARRICADE

BORNTREGER LN

80

RICHLAND

ELK LN

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30" TYPE III BARRICADE

BRIDGE OUT 5 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30" TYPE III BARRICADE

ROAD WORK AHEAD W20-1-A

COUNTY CC

CC

BH LN

Piner Ln

Squash Ln

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TRAFFIC CONTROL PLAN | SHEET 48 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\025001_TC_OVERVIEW.DWG
LAYOUT NAME - 025001_TC_OVERVIEW - TCP_OVERVIEW2

PLOT DATE : 7/14/2017 10:52 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:1000 FT

2

CENTURY FARM RD

Lebansky Dr

ROAD WORK AHEAD W20-1-A

80

Shields Ln

Hawk Ln

RICHLAND

GRINSELL LN

VERNON

Crossroad

N

BEAVER CREEK DR

Western Rd

V

ROAD WORK AHEAD W20-1-A

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30"

TYPE III BARRICADE

COUNTY V

STH 80

EE

FF

COUNTY EE

BRIDGE OUT 9 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30"

BRIDGE OUT 10 MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30"

STALEY SCHOOL RD

VERNON

2

| PROJECT NO:5042-05-81 | HWY: STH 80 | COUNTY:RICHLAND | TRAFFIC CONTROL PLAN | SHEET 49 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\025001_TC_OVERVIEW.DWG
LAYOUT NAME - 025001_TC_OVERVIEW - TCP_OVERVIEW3

PLOT DATE : 7/14/2017 10:52 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME :

PLOT SCALE : 1 IN:1000 FT

2

2

ROAD WORK AHEAD W20-1-A

ROAD WORK AHEAD W20-1-A

ROAD WORK AHEAD W20-1-A

ROAD WORK AHEAD W20-1-A

BEAVER CREEK DR

Kosha Valley Rd

RIVER RD

GARNER HILL RD

VERNON

PINE HILL RD

Heights Rd

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"
TYPE III BARRICADE

BRIDGE OUT
15 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3-B
60"X30"
TYPE III BARRICADE

ROAD OPEN TO
ROCKBRIDGE
R10-61
60"X30"
TYPE III BARRICADE

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"
TYPE III BARRICADE

STH 33

HILLSBORO

Elm Ave
Hill Ave
Hillsborough Ave
Klondike Ave
Vernon Ave
Harrison Ave
Shear Ave
Pine Ave
Field Ave
High Ave
Prairie Ave
Spring St
Lake St
Mechanic St
Carden St
Crest Ave
Mill St

STH 33,80,82

**FOR USE WITH STAGE 3A/3B CLOSURE**

-ADD TRAFFIC CONTROL AS SHOWN OR AS DIRECTED BY THE ENGINEER
-COVER, SHIFT, OR REMOVE ALL CONFLICTING SIGNS FROM PREVIOUS TRAFFIC CONTROL PLANS
-SEE STAGE 3A/3B CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) PLAN FOR ADDITIONAL GUIDANCE

ROAD CLOSED 1 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"
TYPE III BARRICADE

BRIDGE OUT
4 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3-B
60"X30"
TYPE III BARRICADE

ROAD CLOSED AHEAD W20-3-A

ROAD CLOSED 1000 FT W20-3-C

ROAD CLOSED 500 FT W20-3-D

SEE STAGE 3A/3B CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269)
TYPE III BARRICADE

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"
TYPE III BARRICADE

ROAD CLOSED AHEAD W20-3-A

ROAD CLOSED 1000 FT W20-3-C

ROAD CLOSED 500 FT W20-3-D

HANSBERRY LANE

B-52-0269 WORK AREA

STH 80

COUNTY A

COUNTY AA

McDougal Dr
Hillcrest Ln
Neon Ln
Richland Center
RICHLAND
Bowen Cir
W Robb Rd
Fleming Dr
Industrial Dr
Fawn Meadow

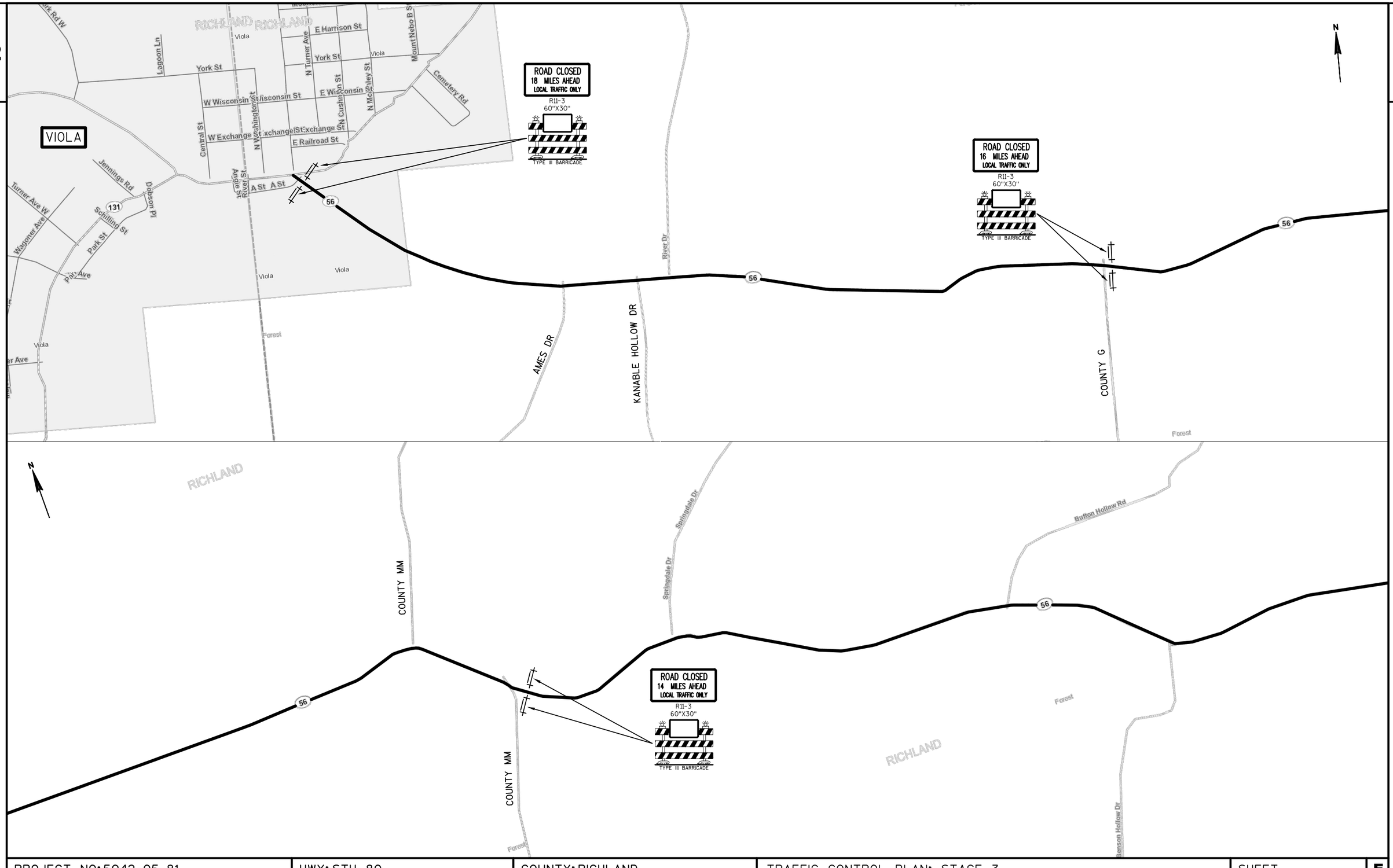
RICHLAND CENTER

| PROJECT NO:5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TRAFFIC CONTROL PLAN | SHEET 50 E |
|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\025001_TC_OVERVIEW.DWG
LAYOUT NAME - 025001_TC_OVERVIEW - TCP_OVERVIEW4

PLOT DATE : 7/14/2017 10:52 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 44




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | TRAFFIC CONTROL PLAN: STAGE 3 | SHEET 51 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\025001_TC_OVERVIEW.DWG
LAYOUT NAME - 025001_TC_OVERVIEW - TCP_OVERVIEW1

PLOT DATE : 7/14/2017 10:52 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:1000 FT

2

2

N

COUNTY A

COUNTY A

RICHLAND

RICHLAND

RICHLAND

Forest

Bloom

Bloom

Bloom

Jaudyn Ln

Allbaugh Ln

Ash River Dr

Sleepy Valley Rd

Hickory Hill Rd

Sleepy Hill Dr

Merry Hill Rd

Marshall

Berry Hill Rd

56

I

H

ROAD CLOSED
10 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"
TYPE III BARRICADE

ROAD CLOSED
6 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"
TYPE III BARRICADE

| PROJECT NO:5042-05-81 | HWY:STH 80 | COUNTY:RICHLAND | TRAFFIC CONTROL PLAN: STAGE 3 | SHEET 52 | E |
|---|---|---|---|---|---|

2

2

ROAD CLOSED
5 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"
TYPE III BARRICADE

ROAD CLOSED
2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60"X30"
TYPE III BARRICADE

SEE STAGE 3A/3B CONSTRUCTION
AND TRAFFIC CONTROL (B-52-0269)

B-52-0269 WORK AREA

RICHLAND

Marshall

COUNTY Z

Berry Hill Rd

Rockbridge

Bell Hollow Ln

Gillingham Dr

Jones Ln

Rooster Ln

Campbell Hill Dr

Janney Rd

Wientz Ln

Fancy Creek Ln

Rockbridge Rd

Schoepp Ln

Hansberry Ln

56

| PROJECT NO:5042-05-81 | HWY:STH 80 | COUNTY:RICHLAND | TRAFFIC CONTROL PLAN: STAGE 3 | SHEET 53 | E |
|---|---|---|---|---|---|

2

| LEGEND | |
|---|---|
| +—+ | TYPE III BARRICADE |
| +—+ | TYPE III BARRICADE WITH ATTACHED SIGN |
| ● | TRAFFIC CONTROL DRUM |
| ● | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| ◎ | SIGN ON PERMANENT SUPPORT |
| ⊥⊥ | SIGN ON TEMPORARY SUPPORT |
| ➡ | DIRECTION OF TRAFFIC |
| ▨ | WORK AREA |

N

STAGE 1 CONSTRUCTION AREA

STRAIGHT FARM PARTNERSHIP LLP

WARREN D. KEYS

MAINTAIN ACCESS THROUGHOUT CONSTRUCTION

204+00'NB'

205+00'NB'

206+00'NB'

207+00'NB'

208+00'NB'

209+00'NB'

210+00'NB'

STH 80

STAGE 1 TRAFFIC

TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW CL)

WARREN D. KEYS

| PROJECT NO:5042-05-81 | HWY:STH 80 | COUNTY:RICHLAND | STAGE 1 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 54 | E |
|---|---|---|---|---|---|

2

N

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

STAGE 1 CONSTRUCTION AREA

WARREN D. KEYS

WARREN D. KEYS

210+00'NB'

211+00'NB'

212+00'NB'

213+00'NB'

214+00'NB'

215+00'NB'

216+00'NB'

217+00'NB'

STH 80

TEMPORARY MARKING LINE PAINT
4-INCH (DOUBLE YELLOW CL)

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

STAGE 1 TRAFFIC

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

TEMPORARY MARKING LINE PAINT
4-INCH (DOUBLE YELLOW CL)

POST

WARREN D. KEYS

WARREN D. KEYS

2

| PROJECT NO:5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 1 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 55 | E |
|---|---|---|---|---|---|

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

N

WARREN D. KEYS

HANSBERRY LN

LOLA J & PAUL HIGGINS

FANCY CREEK

CONSTRUCT INTERSECTION HALF AT A TIME OR MAINTAIN SUITABLE ACCESS

STAGE 1 CONSTRUCTION AREA

STOP
R1-1
30"X30"

H-00'H'

217+00'NB'

218+00'NB'

219+00'NB'

220+00'NB'

221+00'NB'

501+00'SB'

222+00'NB'

502+00'SB'

223+00'NB'

503+00'SB'

224+00'NB'

504

STH 80

SAW CUT REQ'D

TEMPORARY MARKING LINE PAINT
4-INCH (DOUBLE YELLOW CL)

STAGE 1 TRAFFIC

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

MARKING REMOVAL LINE 4-INCH

TEMPORARY MARKING LINE PAINT
4-INCH (DOUBLE YELLOW CL)

WARREN D. KEYS

WARREN D. KEYS

FANCY CREEK

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 1 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 56 | E |
|---|---|---|---|---|---|

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

STAGE 1 CONSTRUCTION AREA

STOP
R1-1
30"X30"

606+00
607+00
608+00
STH 56

TYPE III BARRICADE

JIMMEY R & LOLA
B SCHWEITZER

504+00'SB'
505+00'SB'
506+00'SB'
507+00'SB'
508+00'SB'
509+00'SB'
510+00'SB'
511+00'SB'
225+00'NB'
226+00'NB'
227+00'NB'
228+00'NB'
229+00'NB'
230+00'NB'
231+00'NB'
STH 80

MARKING REMOVAL LINE 4-INCH
SKIPS

TEMPORARY MARKING LINE PAINT
4-INCH (DOUBLE YELLOW CL)

MARKING REMOVAL LINE 4-INCH

STAGE 1 TRAFFIC

MARKING REMOVAL LINE 4-INCH

TEMPORARY MARKING LINE PAINT
4-INCH (DOUBLE YELLOW CL)

BRIDGE OUT
3 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3-B
TYPE III BARRICADE

ROAD CLOSED
TO
THRU TRAFFIC
R11-4
TYPE III BARRICADE

WARREN D. KEYS

FRY

ROSS

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 1 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 57 | E |
|---|---|---|---|---|---|

2

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

JIMMEY R & LOLA
B SCHWEITZER

MARKING REMOVAL LINE 4-INCH

511+00'SB'
232+00'NB'
512+00'SB'
233+00'NB'
513+00'SB'
234+00'NB'
235+00'NB'
STH 80

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

MARKING REMOVAL LINE 4-INCH

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

TEMPORARY MARKING LINE PAINT
4-INCH (DOUBLE YELLOW CL)

TEMPORARY MARKING LINE PAINT
4-INCH (DOUBLE YELLOW CL)

DAVID L & KAREN
K FRY

DAVID L & KAREN
K FRY

| PROJECT NO:5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 1 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 58 | E |
|---|---|---|---|---|---|

2

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

N

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

STRAIGHT FARM
PARTNERSHIP LLP

WARREN D. KEYS

STH 80

204+00'NB'

205+00'NB'

206+00'NB'

207+00'NB'

208+00'NB'

209+00'NB'

210+00'NB'

STAGE 2 TRAFFIC

WARREN D. KEYS

| PROJECT NO:5042-05-81 | HWY:STH 80 | COUNTY:RICHLAND | STAGE 2 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 59 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\026001_S2_B520269.DWG
LAYOUT NAME - 021001_CD_B520269-(1)

PLOT DATE : 4/5/2017 11:38 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

WARREN D. KEYS

WARREN D. KEYS

210+00'NB'

211+00'NB'

212+00'NB'

213+00'NB'

214+00'NB'

215+00'NB'

216+00'NB'

217+00'NB'

STH 80

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

STAGE 2 TRAFFIC

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

POST

WARREN D. KEYS

WARREN D. KEYS

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 2 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 60 | E |
|---|---|---|---|---|---|

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

N

WARREN D. KEYS

HANSBERRY LN

1+00'HL'

LOLA J & PAUL HIGGINS

FANCY CREEK

217+00'NB'

218+00'NB'

219+00'NB'

220+00'NB'

221+00'NB'

501+00'SB'

222+00'NB'

502+00'SB'

223+00'NB'

503+00'SB'

224+00'NB'

504

STH 80

STOP

R1-1
30"X30"

STAGE 2 TRAFFIC

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

WARREN D. KEYS

FANCY CREEK

WARREN D. KEYS

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 2 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 61 | E |
|---|---|---|---|---|---|

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

STOP
R1-1
30"X30"

606+00
607+00
608+00
STH 56

TYPE III BARRICADE

JIMMEY R & LOLA
B SCHWEITZER

504+00'SB'
505+00'SB'
506+00'SB'
507+00'SB'
508+00'SB'
509+00'SB'
510+00'SB'
511+00'SB'
225+00'NB'
226+00'NB'
227+00'NB'
228+00'NB'
229+00'NB'
230+00'NB'
231+00'NB'
STH 80

SAW CUT REQ'D

BRIDGE OUT
3 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3-B

ROAD CLOSED
TO
THRU TRAFFIC
R11-4

TYPE III BARRICADE
TYPE III BARRICADE

DAVID L & KAREN
K FRY

WARREN D. KEYS
FRY

STAGE 2 CONSTRUCTION
UTILIZE SDD 15C12: TRAFFIC CONTROL FOR
LANE CLOSURE WITH FLAGGING OPERATION

STAGE 2 TRAFFIC

2

| PROJECT NO:5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 2 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 62 | E |
|---|---|---|---|---|---|

2

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

JIMMEY R & LOLA
B SCHWEITZER

STAGE 2 CONSTRUCTION
UTILIZE SDD 15C12: TRAFFIC CONTROL FOR
LANE CLOSURE WITH FLAGGING OPERATION

511+00'SB'
232+00'NB'
512+00'SB'
233+00'NB'
513+00'SB'
234+00'NB'
235+00'NB'

STH 80

STAGE 2 TRAFFIC

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

DAVID L & KAREN
K FRY

DAVID L & KAREN
K FRY

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 2 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 63 | E |
|---|---|---|---|---|---|

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

N

TYPE III BARRICADE

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

STRAIGHT FARM
PARTNERSHIP LLP

WARREN D. KEYS

204+00'NB'

205+00'NB'

206+00'NB'

207+00'NB'

208+00'NB'

209+00'NB'

210+00'NB'

STH 80

STAGE 3 TRAFFIC

SAW CUT REQ'D

ROAD CLOSED
TO
THRU TRAFFIC
R11-4
60"X30"

TYPE III BARRICADE

STAGE 3B CONSTRUCTION
UTILIZE SDD 15C12: TRAFFIC CONTROL FOR
LANE CLOSURE WITH FLAGGING OPERATION

WARREN D. KEYS

| PROJECT NO:5042-05-81 | HWY:STH 80 | COUNTY:RICHLAND | STAGE 3A/3B CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 64 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\026001_S3AB_B520269.DWG
LAYOUT NAME - 021001_CD_B520269-(1)

PLOT DATE : 4/5/2017 11:35 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

N

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

WARREN D. KEYS

WARREN D. KEYS

210+00'NB'

211+00'NB'

212+00'NB'

213+00'NB'

214+00'NB'

215+00'NB'

216+00'NB'

217+00'NB'

STH 80

SAW CUT REQ'D

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

STAGE 3 TRAFFIC

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

POST

WARREN D. KEYS

WARREN D. KEYS

STAGE 3B CONSTRUCTION
UTILIZE SDD 15C12: TRAFFIC CONTROL FOR
LANE CLOSURE WITH FLAGGING OPERATION

2

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 3A/3B CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 65 | E |
|---|---|---|---|---|---|

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

N

WARREN D. KEYS

HANSBERRY LN

LOLA J & PAUL HIGGINS

FANCY CREEK

STOP
R1-1
30"X30"

1+00'HL

217+00'NB'

218+00'NB'

219+00'NB'

220+00'NB'

221+00'NB'

501+00'SB'

222+00'NB'

502+00'SB'

223+00'NB'

503+00'SB'

224+00'NB'

504

STH 80

STAGE 3 TRAFFIC

MAINTAIN ACCESS THROUGHOUT CONSTRUCTION

STAGE 3A CONSTRUCTION
UTILIZE SDD 15C12: TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

WARREN D. KEYS

WARREN D. KEYS

FANCY CREEK

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 3A/3B CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 66 | E |
|---|---|---|---|---|---|

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

CONSTRUCT INTERSECTION HALF AT A TIME OR MAINTAIN SUITABLE ACCESS

STOP
R1-1
30"X30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"
TYPE III BARRICADE

BRIDGE OUT
3 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3-B
TYPE III BARRICADE

STH 56

STH 80

504+00'SB' 505+00'SB' 506+00'SB' 507+00'SB' 508+00'SB' 509+00'SB' 510+00'SB' 511+00'SB'

225+00'NB' 226+00'NB' 227+00'NB' 228+00'NB' 229+00'NB' 230+00'NB' 231+00'NB'

606+00 607+00 608+00 609+00

JIMMEY R & LOLA B SCHWEITZER

DAVID L & KAREN K FRY

WARREN D. KEYS

FRY

STAGE 3A CONSTRUCTION
UTILIZE SDD 15C12: TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STAGE 3 TRAFFIC

ROAD CLOSED TO THRU TRAFFIC
R11-4
TYPE III BARRICADE

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 3A/3B CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 67 | E |
|---|---|---|---|---|---|

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

JIMMEY R & LOLA
B SCHWEITZER

511+00'SB'
232+00'NB'
512+00'SB'
233+00'NB'
513+00'SB'
234+00'NB'
235+00'NB'

STH 80

STAGE 3 TRAFFIC

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

DAVID L & KAREN
K FRY

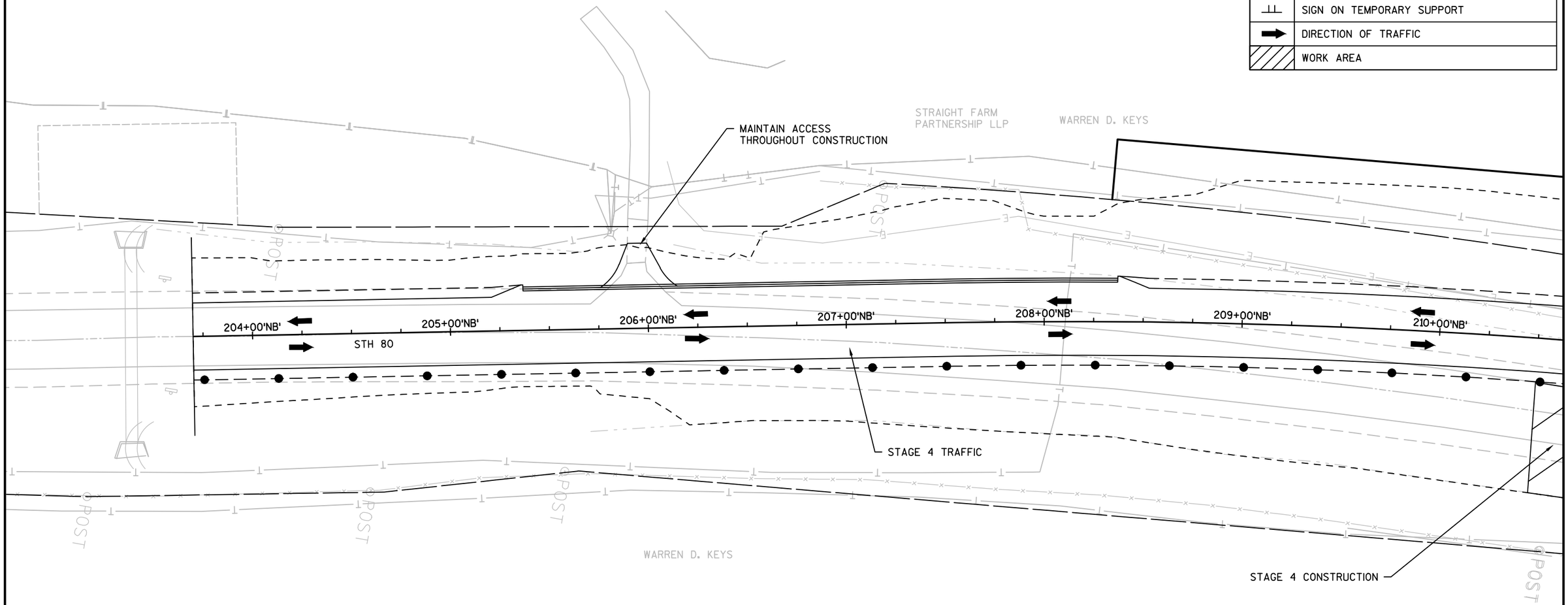
DAVID L & KAREN
K FRY

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 3A/3B CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 68 | E |
|---|---|---|---|---|---|

2

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |




| PROJECT NO:5042-05-81 | HWY: STH 80 | COUNTY:RICHLAND | STAGE 4 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 69 | E |
|---|---|---|---|---|---|

2

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

N

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

STAGE 4 TRAFFIC

WARREN D. KEYS

WARREN D. KEYS

210+00'NB'

211+00'NB'

212+00'NB'

213+00'NB'

214+00'NB'

215+00'NB'

216+00'NB'

217+00'NB'

STH 80

9 POST

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

STAGE 4 CONSTRUCTION

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

WARREN D. KEYS

WARREN D. KEYS

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 4 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 70 | E |
|---|---|---|---|---|---|

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

N

WARREN D. KEYS

HANSBERRY LN

LOLA J & PAUL HIGGINS

FANCY CREEK

STOP
R1-1
30"X30"

1+00'NB'

217+00'NB'

218+00'NB'

219+00'NB'

220+00'NB'

221+00'NB'

501+00'SB'

222+00'NB'

502+00'SB'

223+00'NB'

503+00'SB'

224+00'NB'

504

STH 80

STAGE 4 TRAFFIC

STAGE 4 CONSTRUCTION

MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

WARREN D. KEYS

WARREN D. KEYS

FANCY CREEK

| PROJECT NO:5042-05-81 | HWY:STH 80 | COUNTY:RICHLAND | STAGE 4 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 71 | E |
|---|---|---|---|---|---|

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

2

STOP
R1-1
30"X30"

606+00
607+00
608+00
STH 56

BRIDGE OUT
3 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3-B
TYPE III BARRICADE

STAGE 4 TRAFFIC

JIMMEY R & LOLA
B SCHWEITZER

504+00'SB'
505+00'SB'
506+00'SB'
507+00'SB'
508+00'SB'
509+00'SB'
510+00'SB'
511+00'SB'
225+00'NB'
226+00'NB'
227+00'NB'
228+00'NB'
229+00'NB'
230+00'NB'
231+00'NB'
STH 80

DAVID L & KAREN
K FRY

ROAD CLOSED
TO
THRU TRAFFIC
R11-4
TYPE III BARRICADE

TYPE III BARRICADE

WARREN D. KEYS

FRY

STAGE 4 CONSTRUCTION

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 4 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 72 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\026001_S4_B520269.DWG
LAYOUT NAME - 021001_CD_B520269-(4)
PLOT DATE : 4/5/2017 11:37 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

| LEGEND | |
|---|---|
| | TYPE III BARRICADE |
| | TYPE III BARRICADE WITH ATTACHED SIGN |
| | TRAFFIC CONTROL DRUM |
| | TRAFFIC CONTROL DRUM WITH TYPE C LIGHT |
| | SIGN ON PERMANENT SUPPORT |
| | SIGN ON TEMPORARY SUPPORT |
| | DIRECTION OF TRAFFIC |
| | WORK AREA |

JIMMEY R & LOLA
B SCHWEITZER

511+00'SB'
232+00'NB'
512+00'SB'
233+00'NB'
513+00'SB'
234+00'NB'
235+00'NB'

STH 80

STAGE 4 TRAFFIC

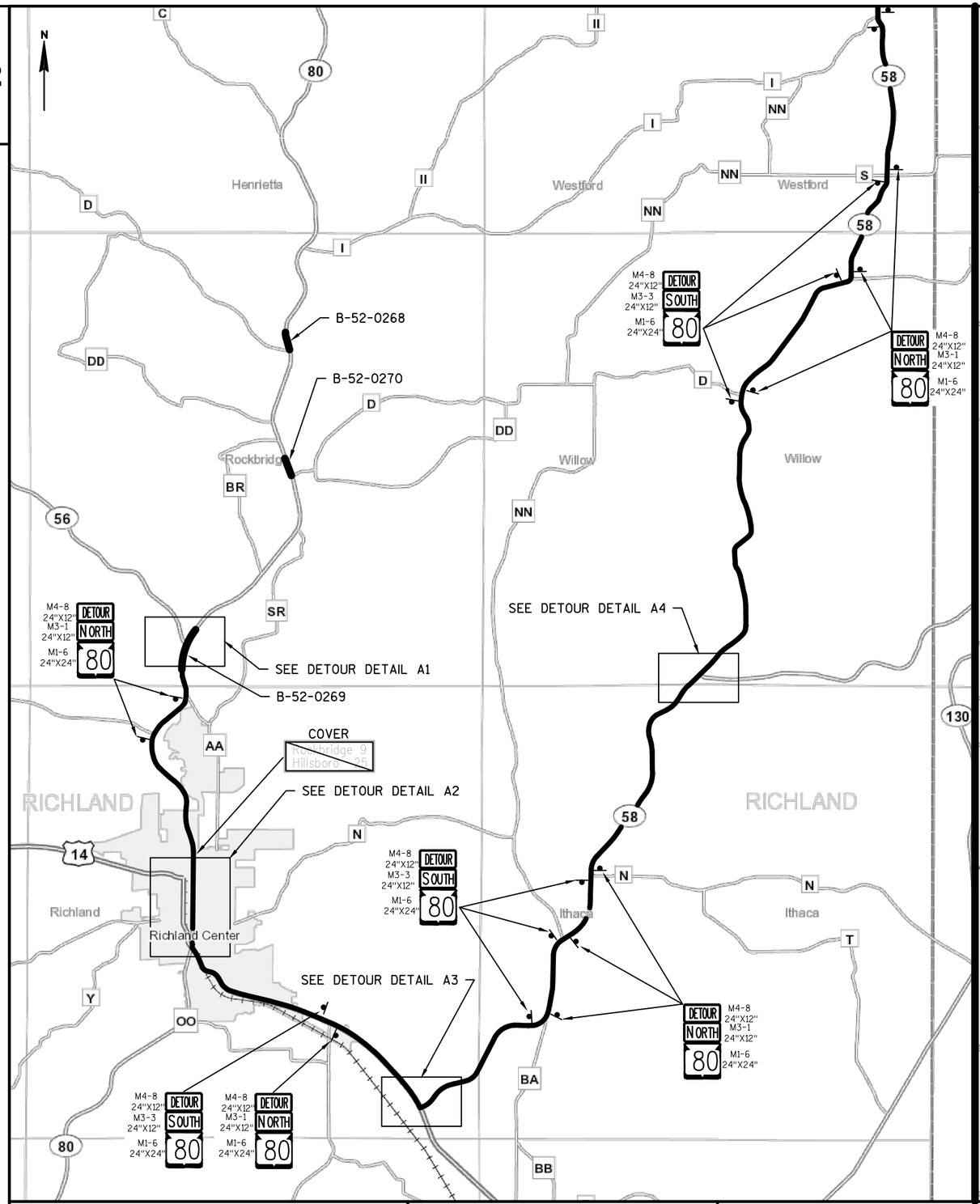
MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

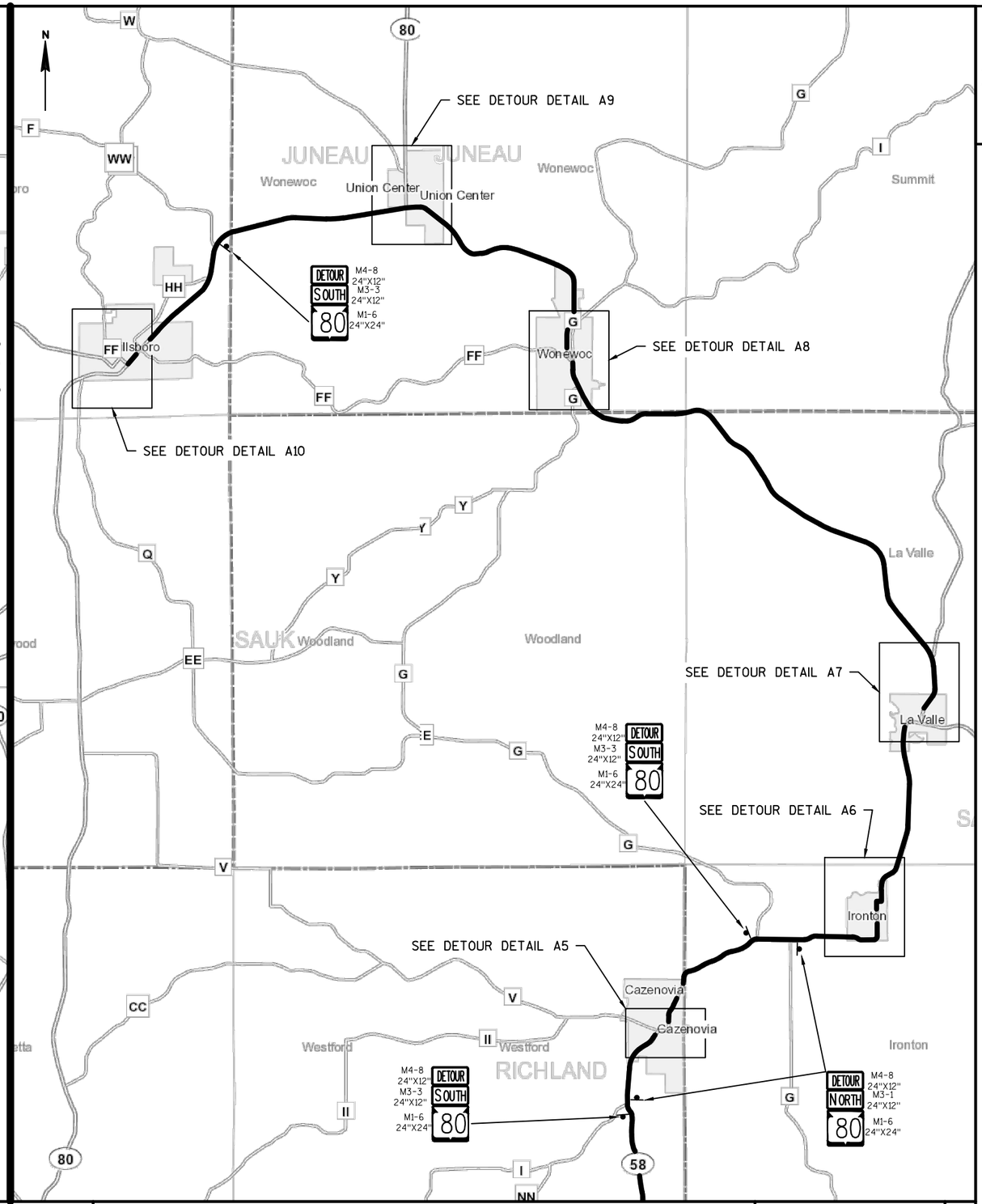
MAINTAIN ACCESS
THROUGHOUT CONSTRUCTION

DAVID L & KAREN
K FRY

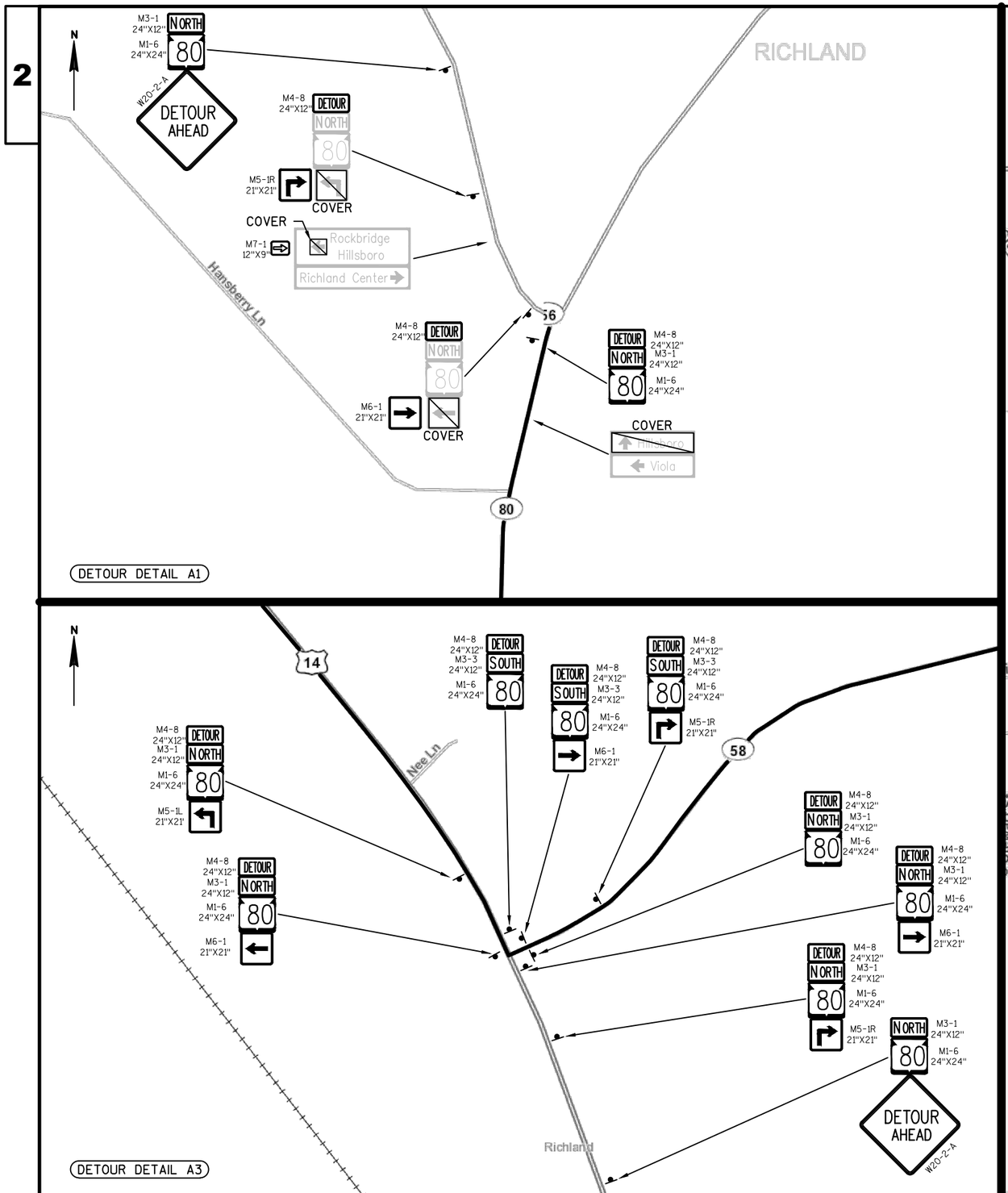
DAVID L & KAREN
K FRY

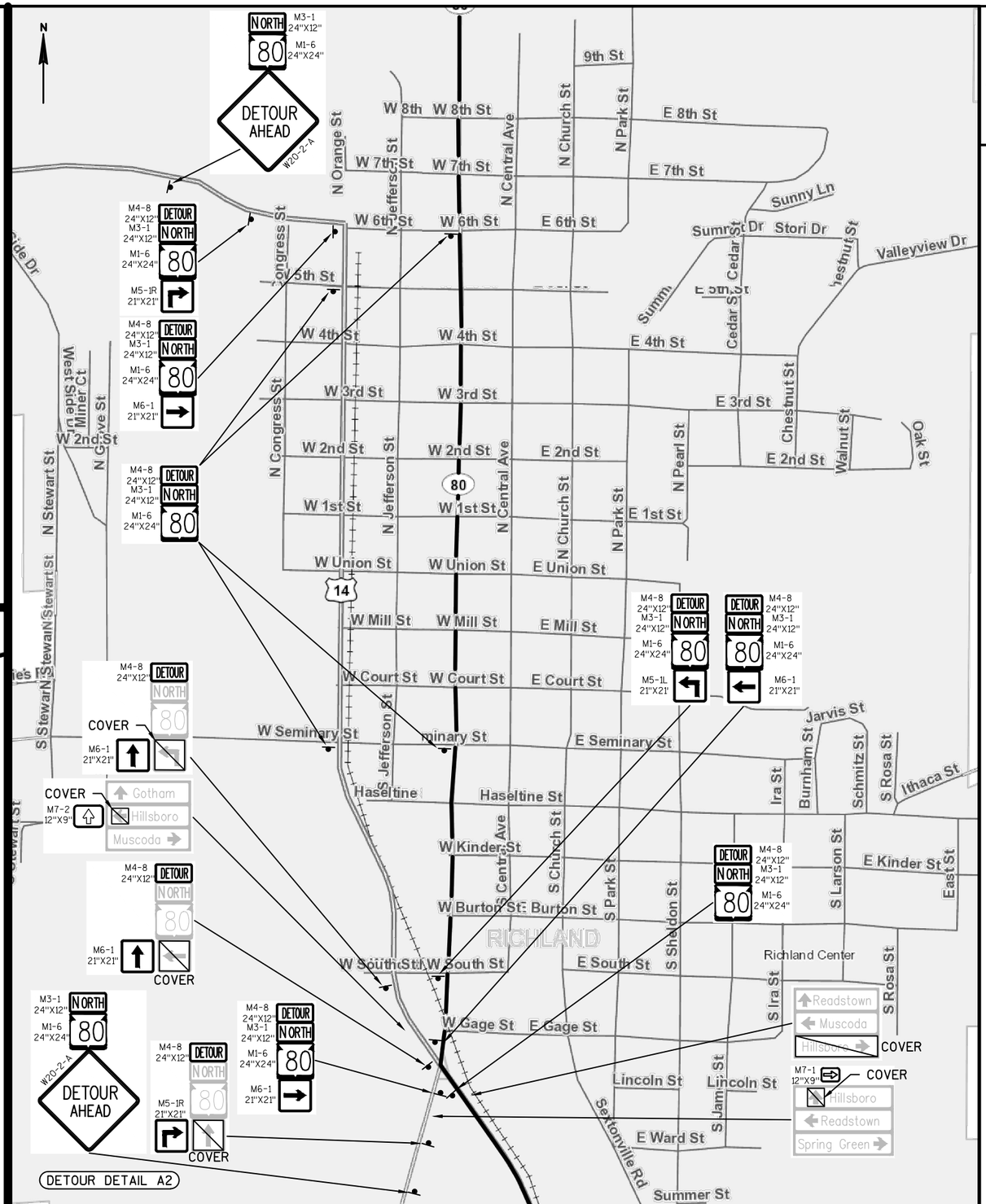
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 4 CONSTRUCTION AND TRAFFIC CONTROL (B-52-0269) | SHEET 73 | E |
|---|---|---|---|---|---|



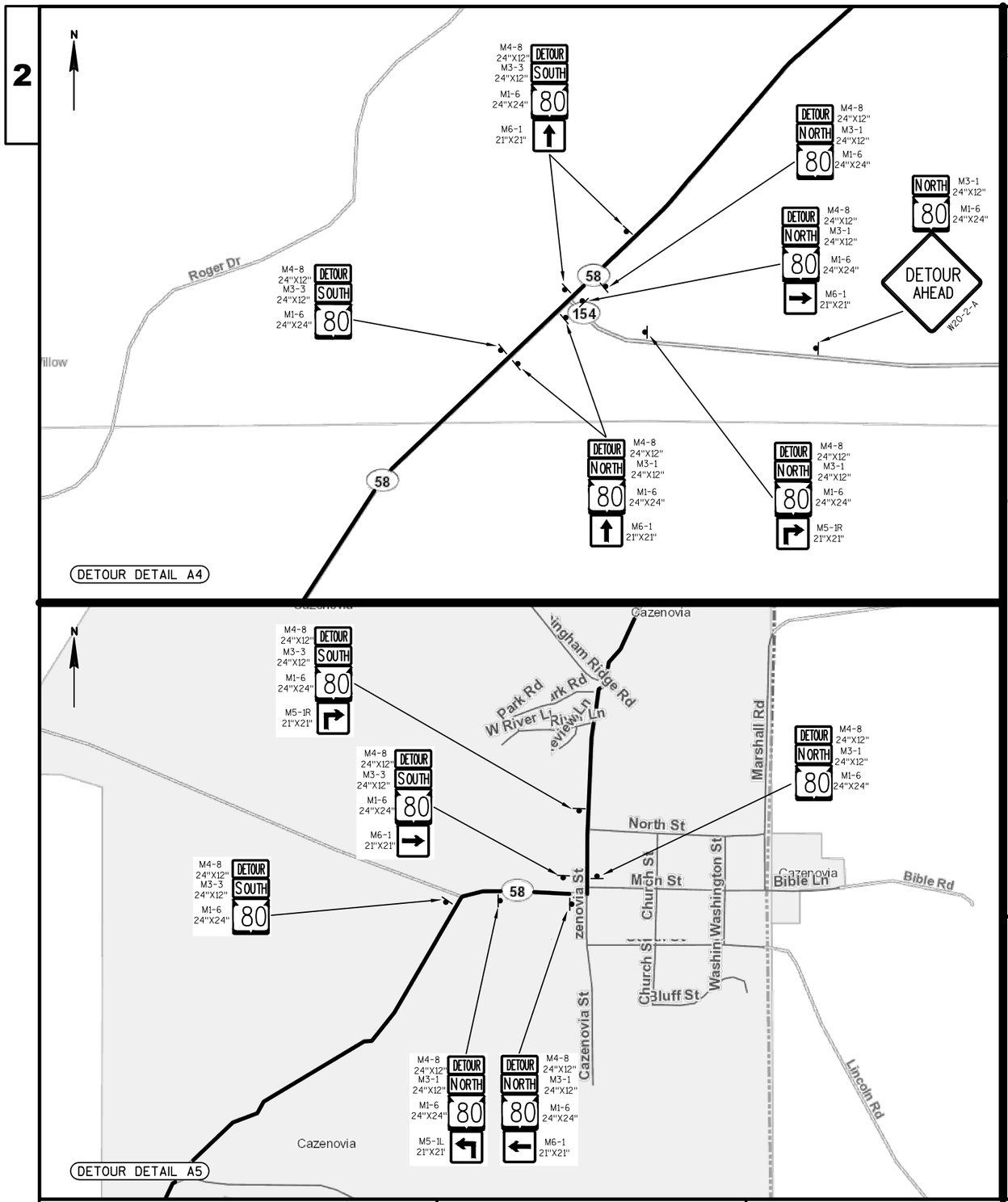

| PROJECT NO: 5042-05-01 | HWY: STH 80 | COUNTY: RICHLAND | DETOUR PLAN | SHEET 74 E |
|---|---|---|---|---|

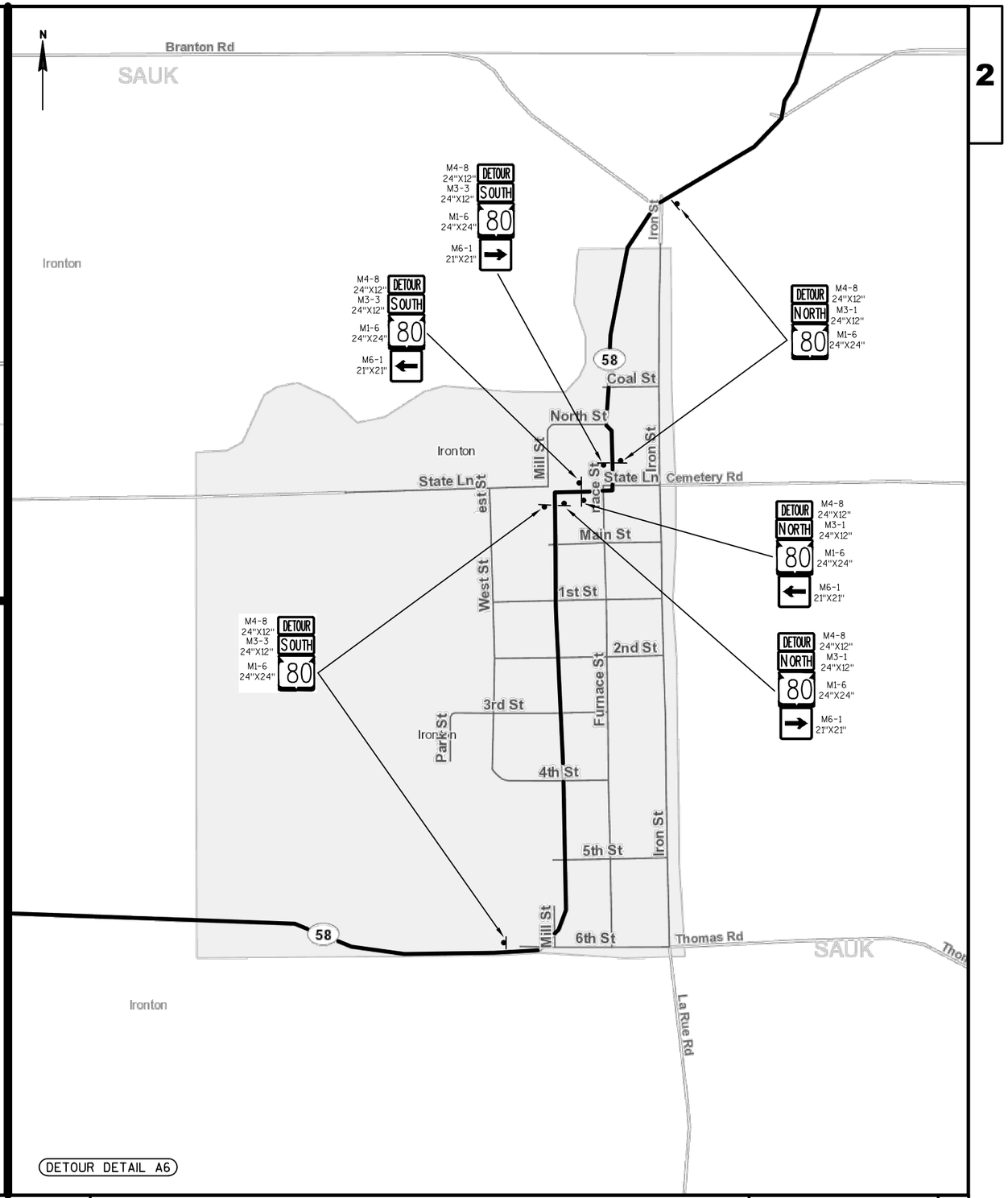


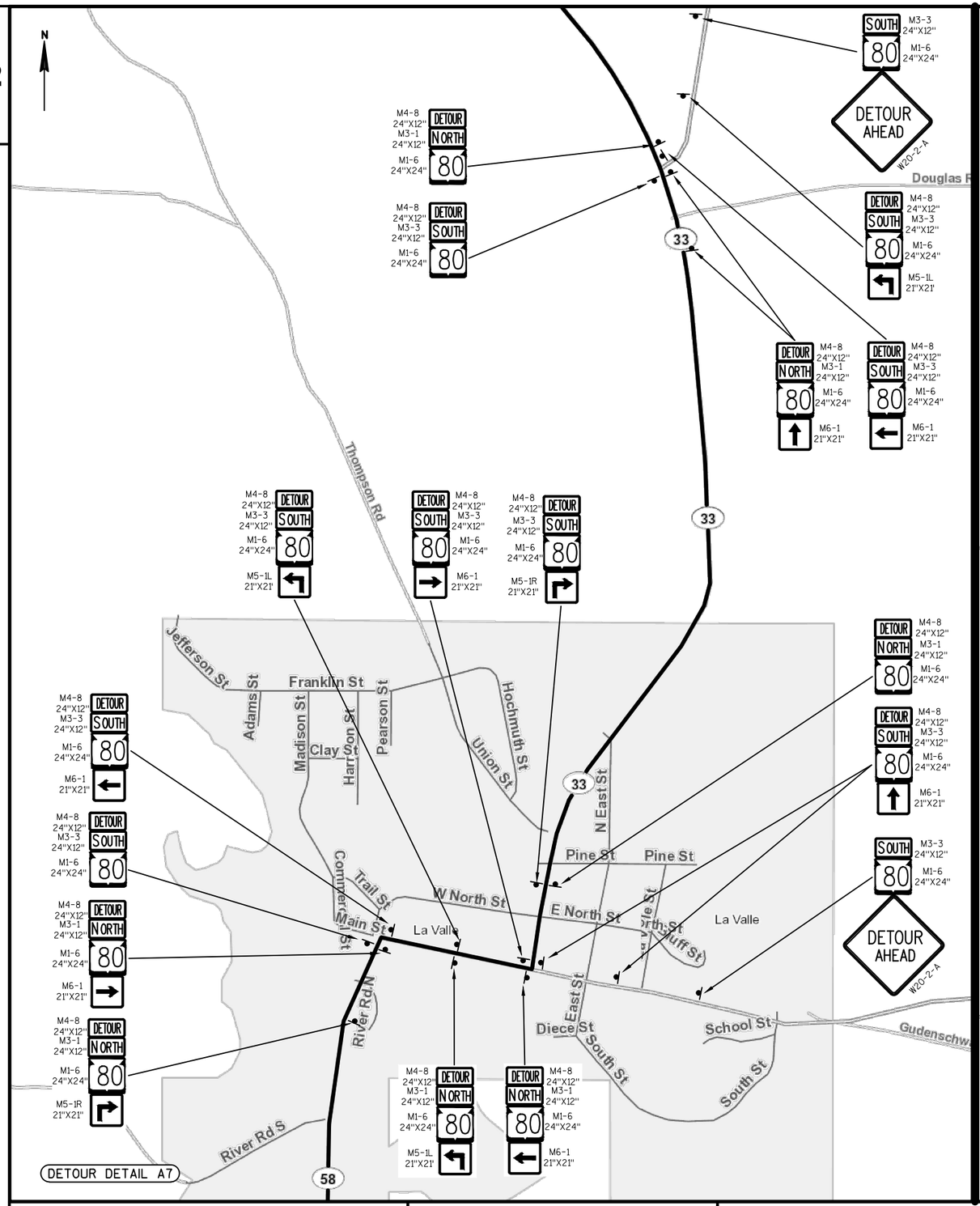

| PROJECT NO: 5042-05-01 | HWY: STH 80 | COUNTY: RICHLAND | DETOUR PLAN | SHEET 75 | E |
|---|---|---|---|---|---|

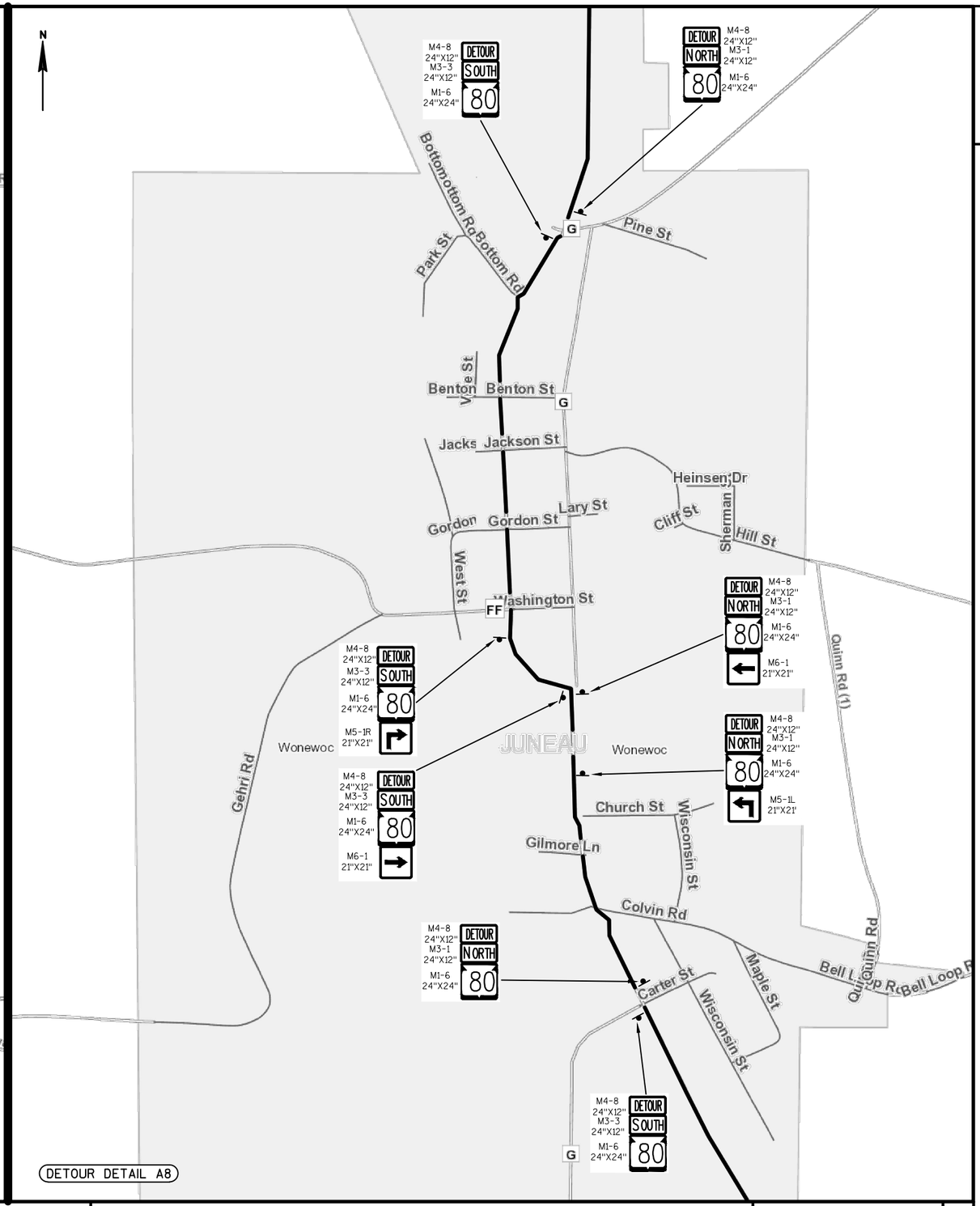
FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - ****
PLOT DATE : 7/14/2017 10:33 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME :
PLOT SCALE : ******
WISDOT/CADDS SHEET 44



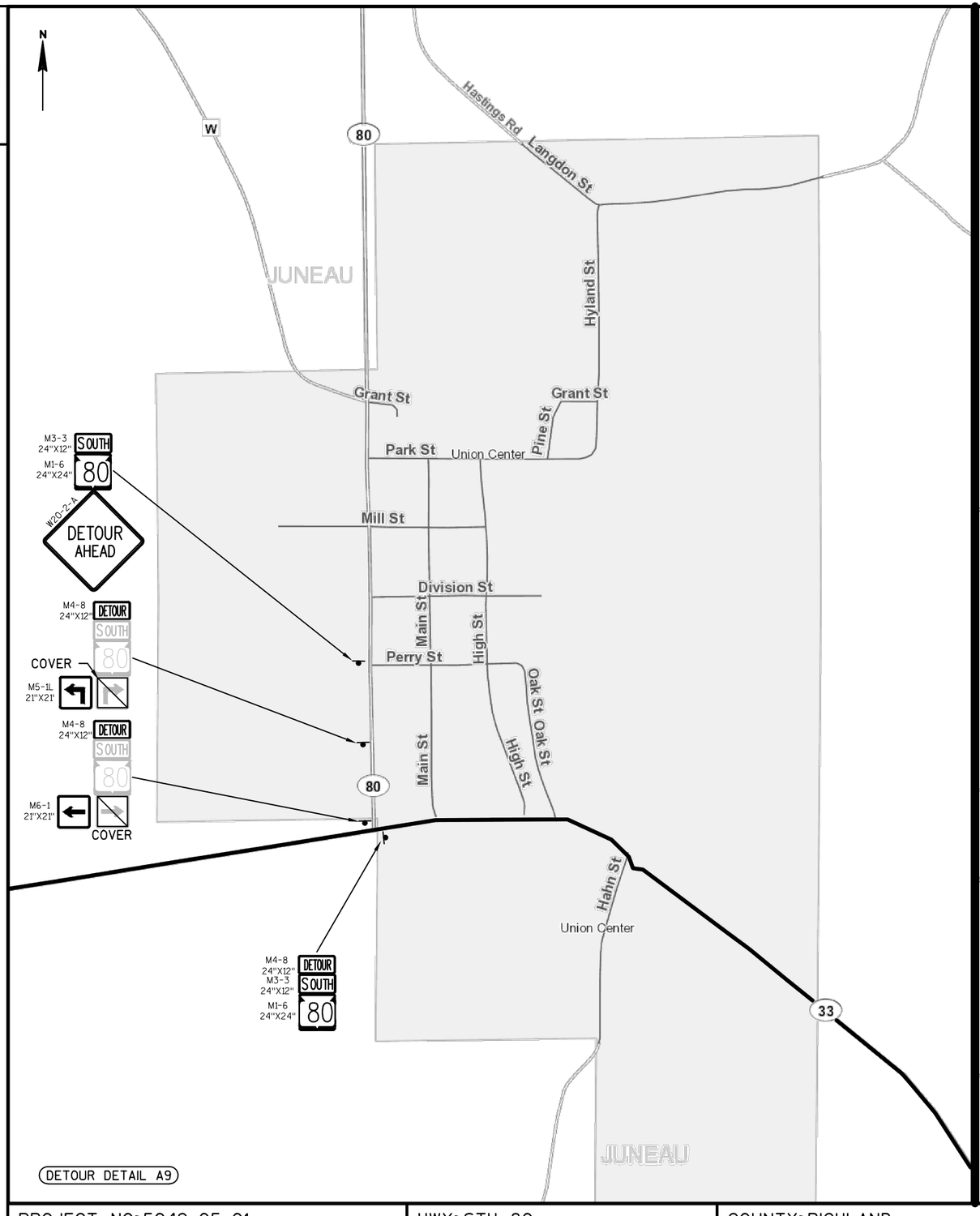



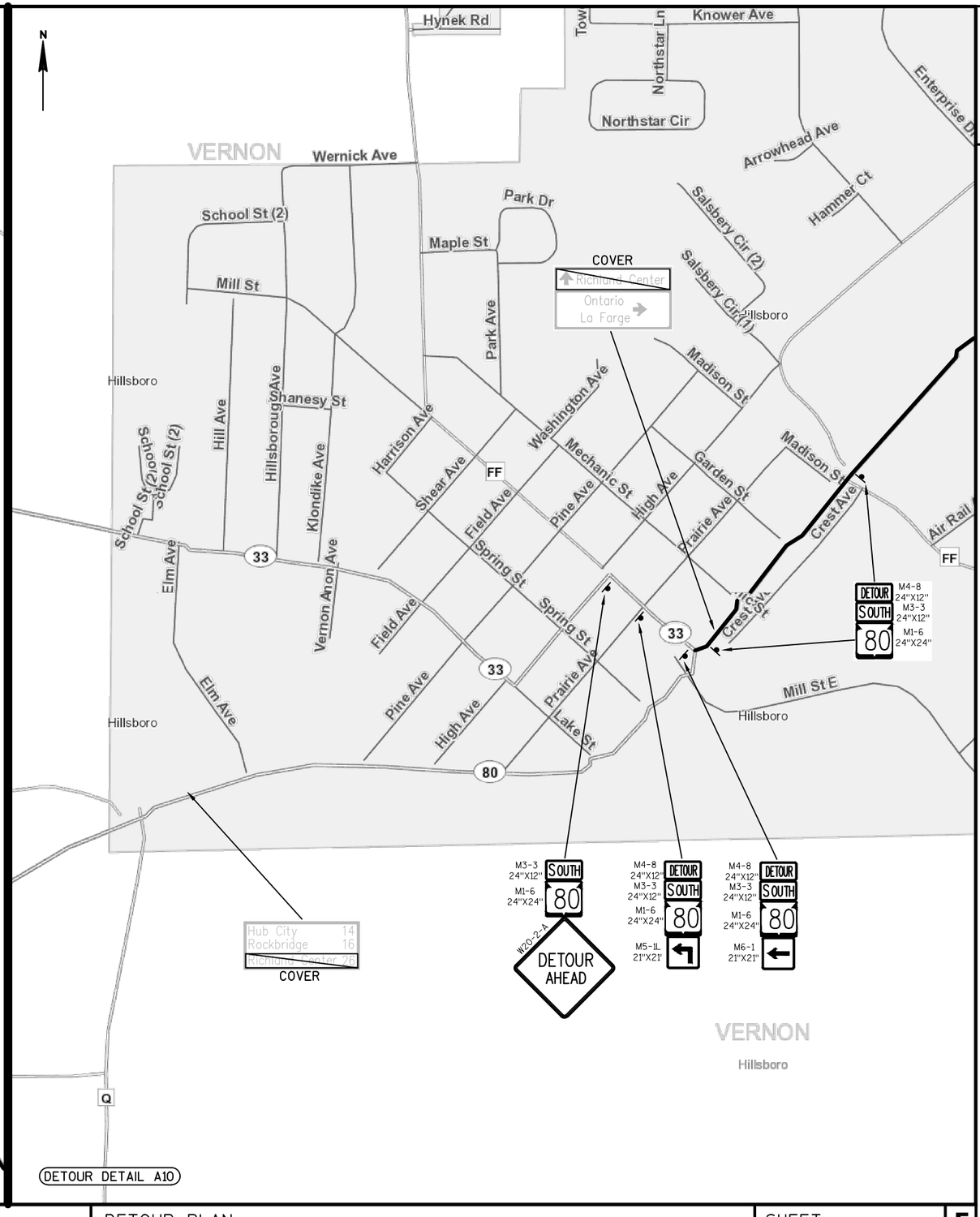

| PROJECT NO: 5042-05-01 | HWY: STH 80 | COUNTY: RICHLAND | DETOUR PLAN | SHEET 76 E |
|---|---|---|---|---|




| PROJECT NO: 5042-05-01 | HWY: STH 80 | COUNTY: RICHLAND | DETOUR PLAN | SHEET 77 | E |
|---|---|---|---|---|---|




| PROJECT NO: 5042-05-01 | HWY: STH 80 | COUNTY: RICHLAND | DETOUR PLAN | SHEET 78 | E |
|---|---|---|---|---|---|

2

2

SEE DETOUR DETAIL B3

SEE DETOUR DETAIL B2

SEE DETOUR DETAIL B1

M4-8 24"X12"
M3-2 24"X12"
M1-6 24"X24"
DETOUR EAST 56

M4-8 24"X12"
M3-4 24"X12"
M1-6 24"X24"
DETOUR WEST 56

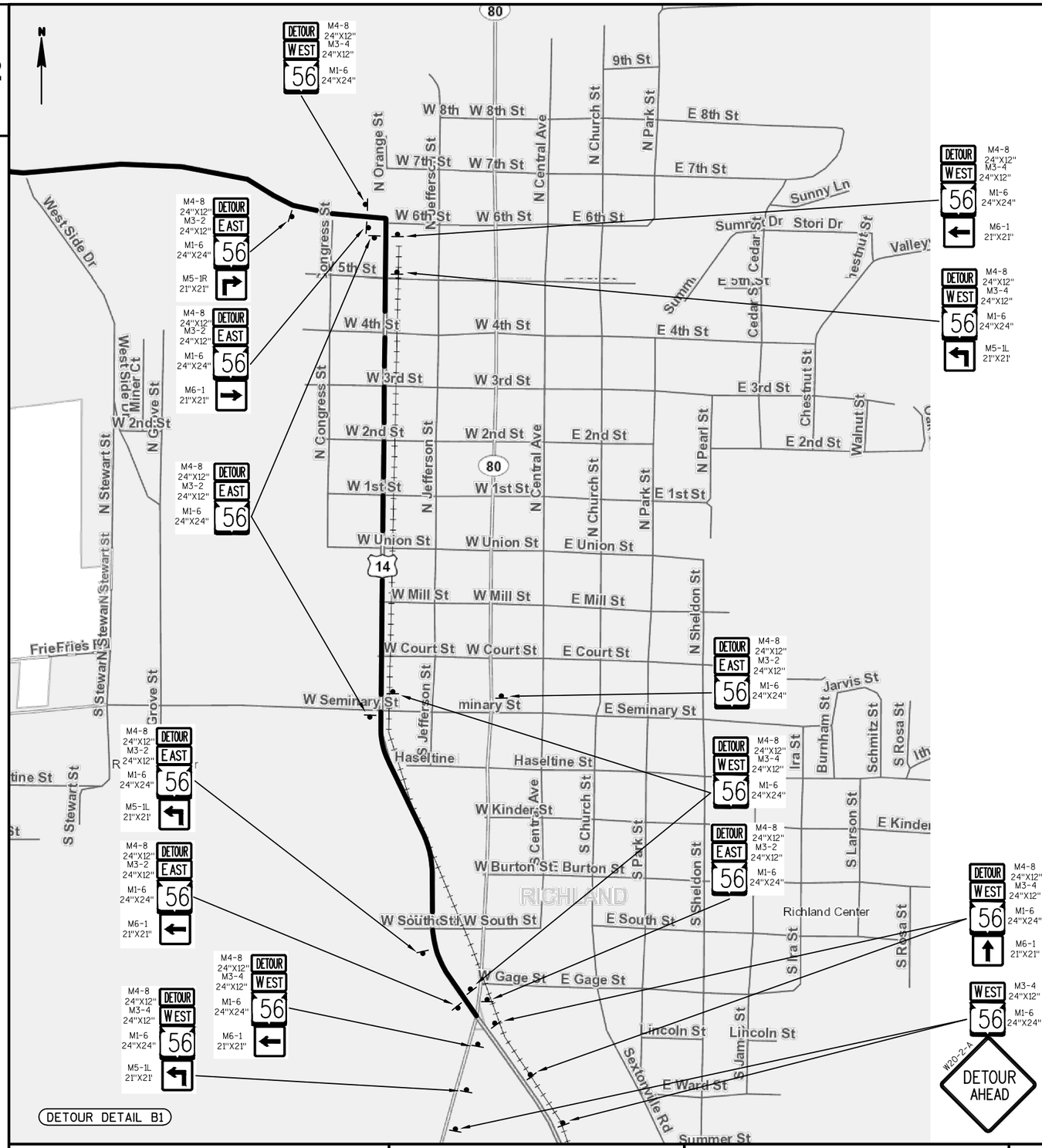
B-52-0268

B-52-0270

B-52-0269

Liberty
Viola
Forest
Bloom
Huba
Henrietta
RICHLAND
Kickapoo
Readstown
Sylvan
Marshall
Rockbridge
GRAMEFORD
Soldiers Grove
Clayton
Akan
Dayton
Boaz
Richland
Richland Center
Gays Mills

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 3 DETOUR PLAN | SHEET 79 | E |
|---|---|---|---|---|---|




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 3 DETOUR PLAN | SHEET 80 | E |
|---|---|---|---|---|---|

2

N

VERNON

Readstown

Prairie St

Main St E

Wisconsin Ave

Fayette St

Glass Ln

Saint Elmo St

Smith Ln

Charles St

Winter St

Cemetery Ave

Center St

Water St

Bluff St

Railroad St

Maiben St

3rd St

6th St

Drake Ln

J St

Mill St

South St

Day Creek Rd

131

14

61

M4-8 24"X12" DETOUR M3-2 24"X12" EAST M1-6 24"X24" 56 M5-1L 21"X21"

M4-8 24"X12" DETOUR M3-2 24"X12" EAST M1-6 24"X24" 56 M6-1 21"X21"

M4-8 24"X12" DETOUR WEST M3-4 24"X12" 56 M1-6 24"X24"

M4-8 24"X12" DETOUR WEST M3-4 24"X12" 56 M1-6 24"X24" M6-1 21"X21"

M4-8 24"X12" DETOUR WEST M3-4 24"X12" 56 M1-6 24"X24" M5-1R 21"X21"

M3-2 24"X12" EAST M1-6 24"X24" 56 W20-2-A DETOUR AHEAD

M4-8 24"X12" DETOUR M3-2 24"X12" EAST M1-6 24"X24" 56 M6-1 21"X21"

M4-8 24"X12" DETOUR M3-2 24"X12" EAST M1-6 24"X24" 56

DETOUR DETAIL B2

N

VERNON

RICHLAND

EAST M3-2 24"X12" M1-6 24"X24" 56 DETOUR AHEAD W20-2-A

M4-8 24"X12" DETOUR M3-2 24"X12" EAST M1-6 24"X24" 56 M6-1 21"X21"

M4-8 24"X12" DETOUR M3-2 24"X12" EAST M1-6 24"X24" 56 M5-1L 21"X21"

M4-8 24"X12" DETOUR M3-2 24"X12" EAST M1-6 24"X24" 56 M5-1R 21"X21"

M4-8 24"X12" DETOUR M3-2 24"X12" EAST M1-6 24"X24" 56 M6-1 21"X21"

M4-8 24"X12" DETOUR EAST 56 COVER M6-1 21"X21"

M4-8 24"X12" DETOUR EAST 56 M6-1 21"X21" COVER

La Farge Richland Center COVER

Viroqua Richland Center La Farge COVER

Viroqua Readstown Richland Center M7-2 12"X9" COVER

N York Rd W

Viola

Summit Ave

Mount Nebo A St

Mount Nebo B St

E Harrison St

N Turner Ave

N Cushman St

York St

Central St

W Wisconsin St

E Wisconsin St

N Washington St

N Mckinley St

E Railroad St

N Main St

Angle St

A St

Jennings Rd

Dobson Pl

Turner Ave W

Schilling St

Park St

Drake Ave

South St

Wagon Ct Ave

Majestic Ct

56

13

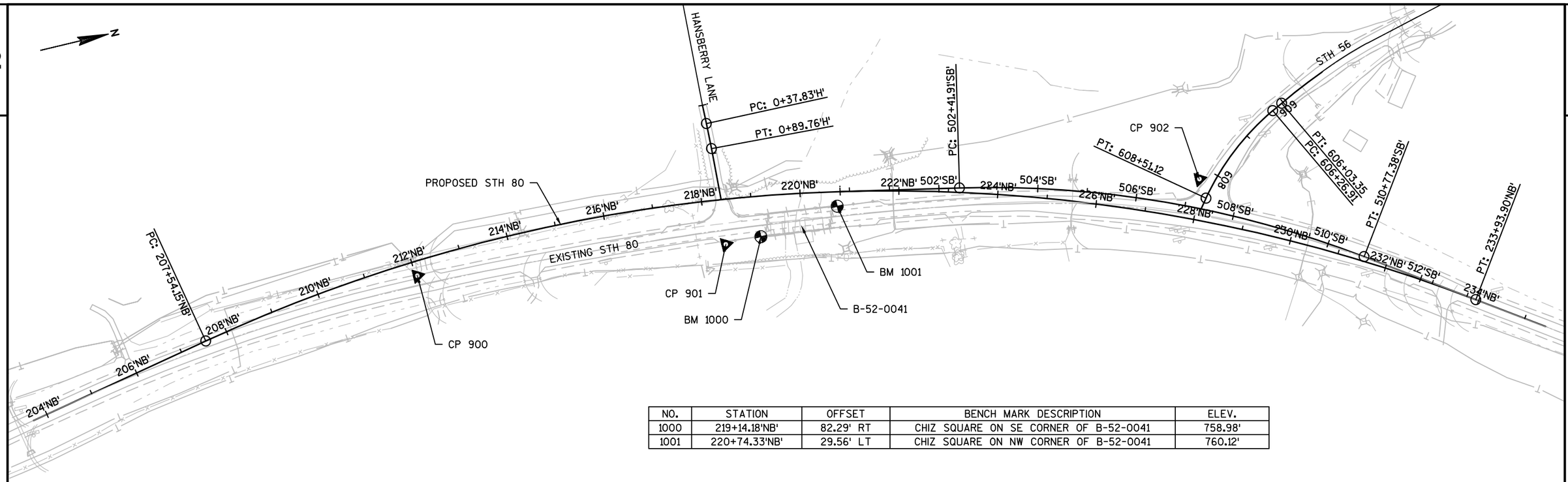
131

Forest

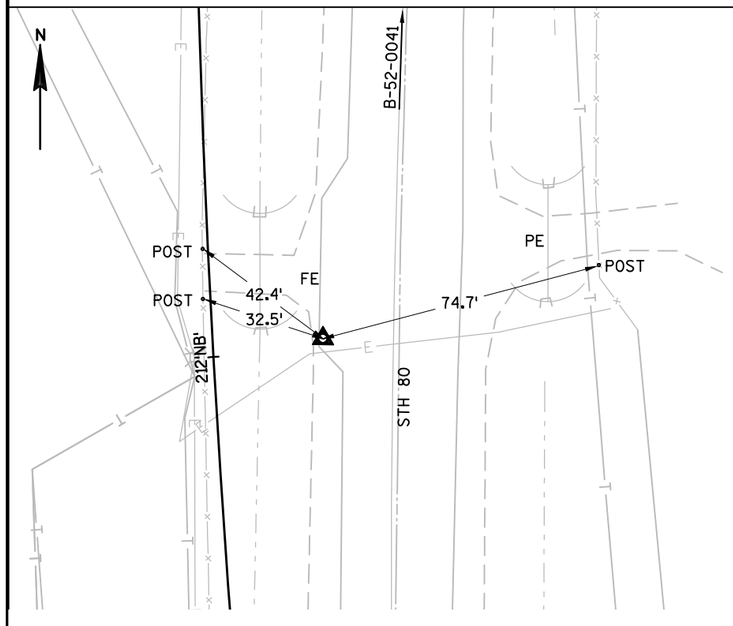
Liberty

DETOUR DETAIL B3

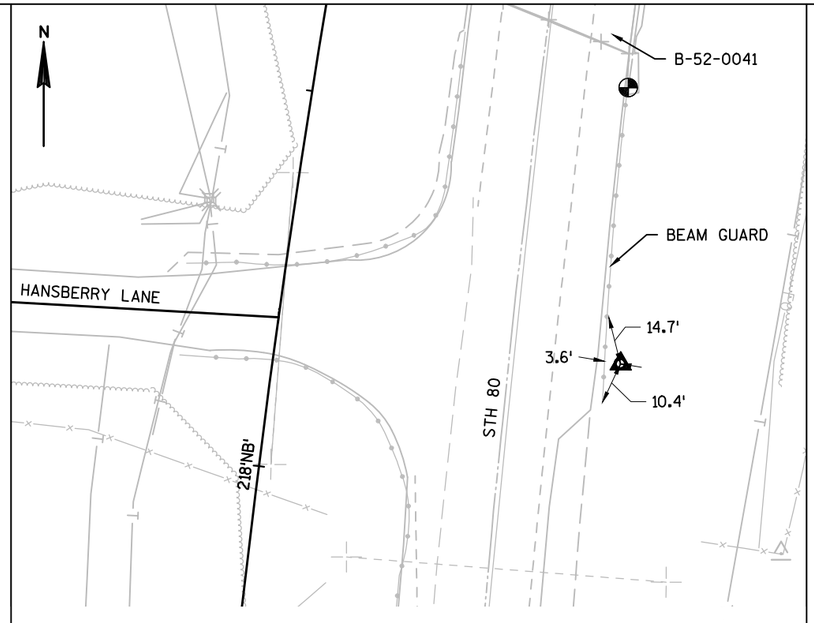
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | STAGE 3 DETOUR PLAN | SHEET 81 | E |
|---|---|---|---|---|---|



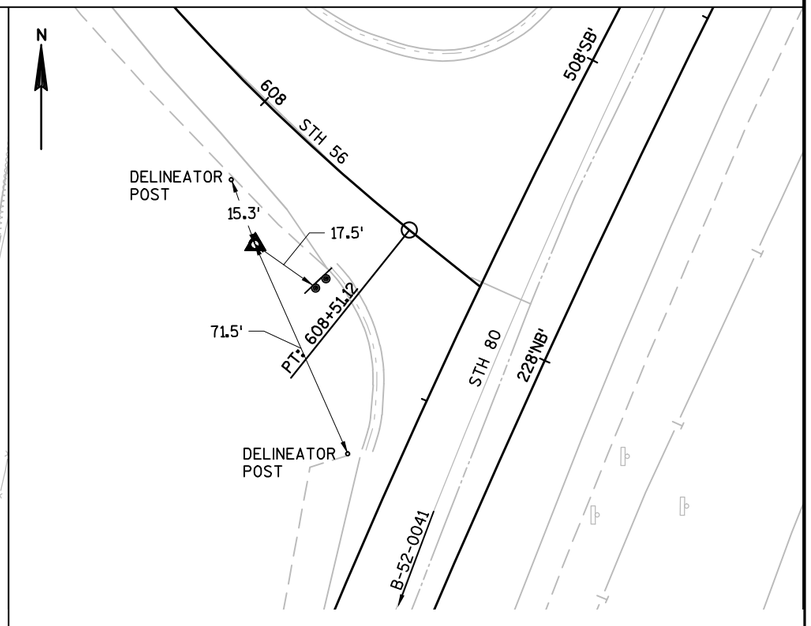

| NO. | STATION | OFFSET | BENCH MARK DESCRIPTION | ELEV. |
|---|---|---|---|---|
| 1000 | 219+14.18'NB' | 82.29' RT | CHIZ SQUARE ON SE CORNER OF B-52-0041 | 758.98' |
| 1001 | 220+74.33'NB' | 29.56' LT | CHIZ SQUARE ON NW CORNER OF B-52-0041 | 760.12' |




CONTROL POINT 900
X: 674815.9140', Y: 462716.1660', Z: 760.593'
MAG NAIL IN BITUMINOUS FE
+/- 1600' SOUTH OF STH 80 AND STH 56 INTERSECTION



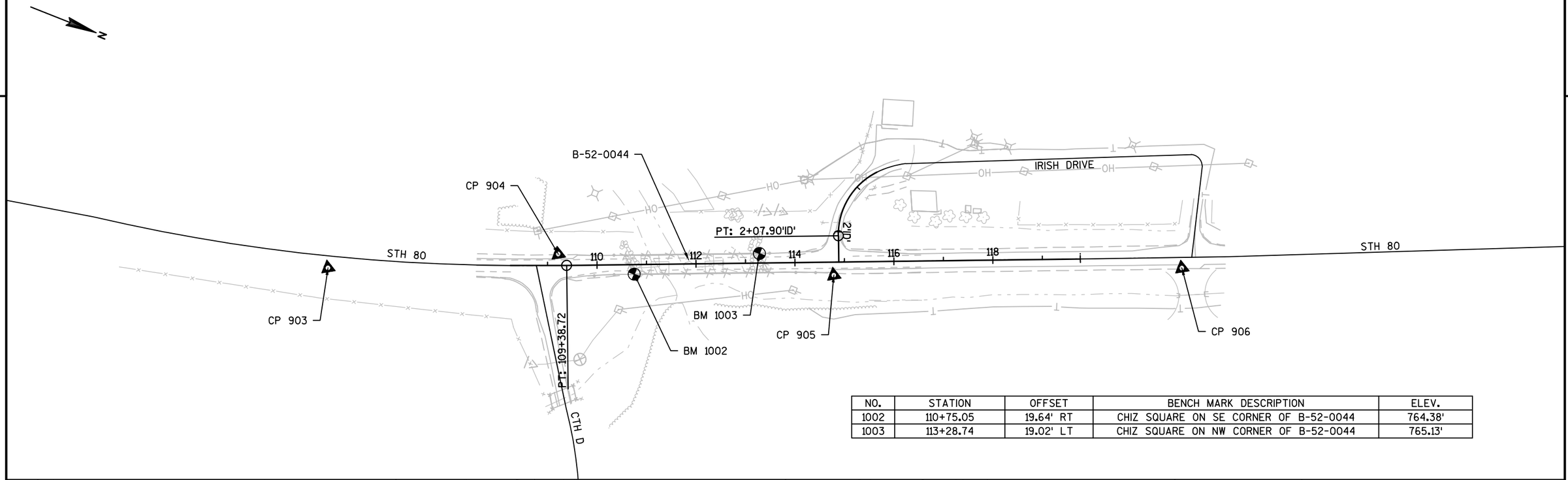

CONTROL POINT 901
X: 674900.6590', Y: 463337.4880', Z: 757.474'
REBAR
+/- 1000' SOUTH OF STH 80 AND STH 56 INTERSECTION



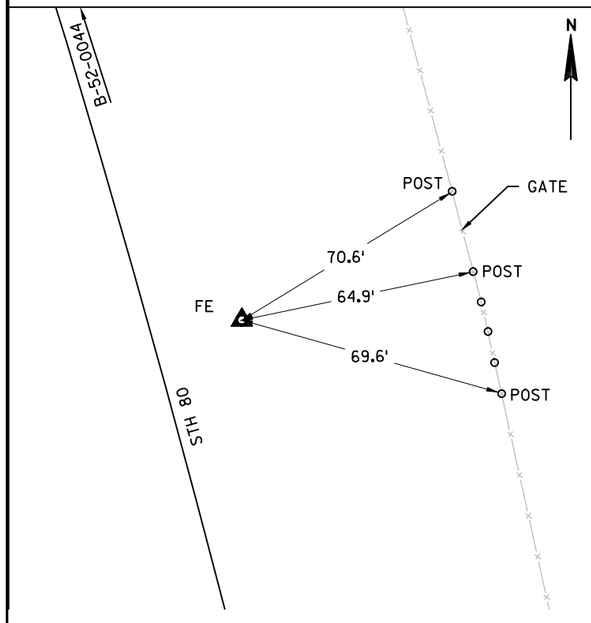

CONTROL POINT 902
X: 674997.3650', Y: 464299.6440', Z: 767.383'
REBAR
ON SW QUADRANT OF STH 80 AND STH 56 INTERSECTION

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONTROL POINT DATA: B-52-0041 (B-52-00269) | SHEET 82 E |
|---|---|---|---|---|

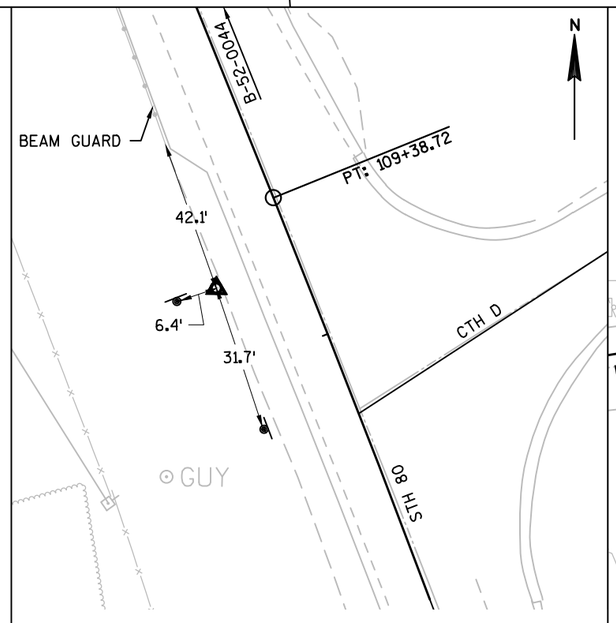
2



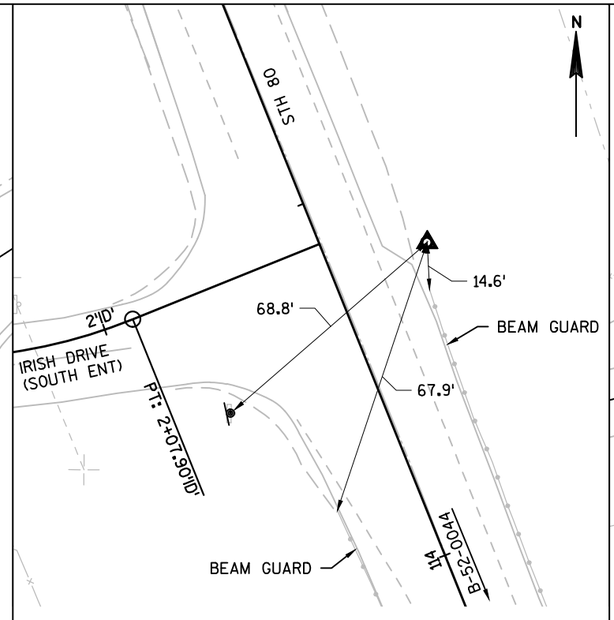

| NO. | STATION | OFFSET | BENCH MARK DESCRIPTION | ELEV. |
|---|---|---|---|---|
| 1002 | 110+75.05 | 19.64' RT | CHIZ SQUARE ON SE CORNER OF B-52-0044 | 764.38' |
| 1003 | 113+28.74 | 19.02' LT | CHIZ SQUARE ON NW CORNER OF B-52-0044 | 765.13' |



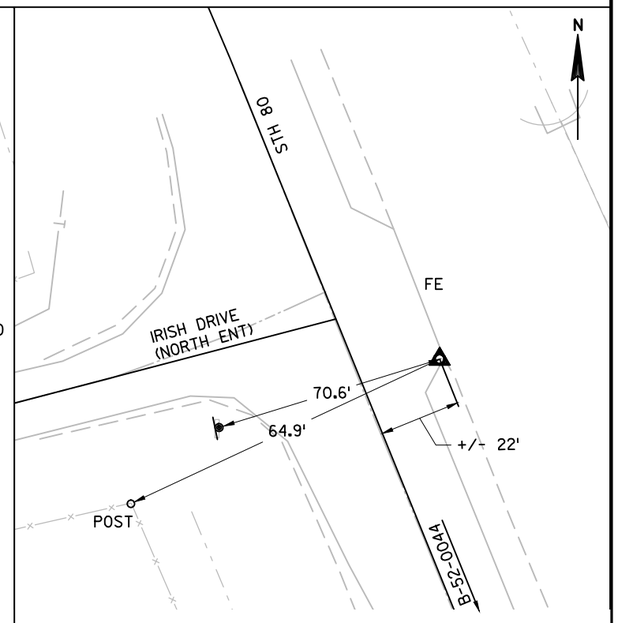

CONTROL POINT 903
X: 682627.9420', Y: 475780.0410', Z: 763.623'
MAG NAIL IN BITUMINOUS FE
+/- 400' SOUTH OF INTERSECTION OF STH 80 AND CTH D




CONTROL POINT 904
X: 682431.4450', Y: 476202.9250', Z: 763.025'
REBAR
ON NW QUADRANT OF STH 80 AND CTH D INTERSECTION



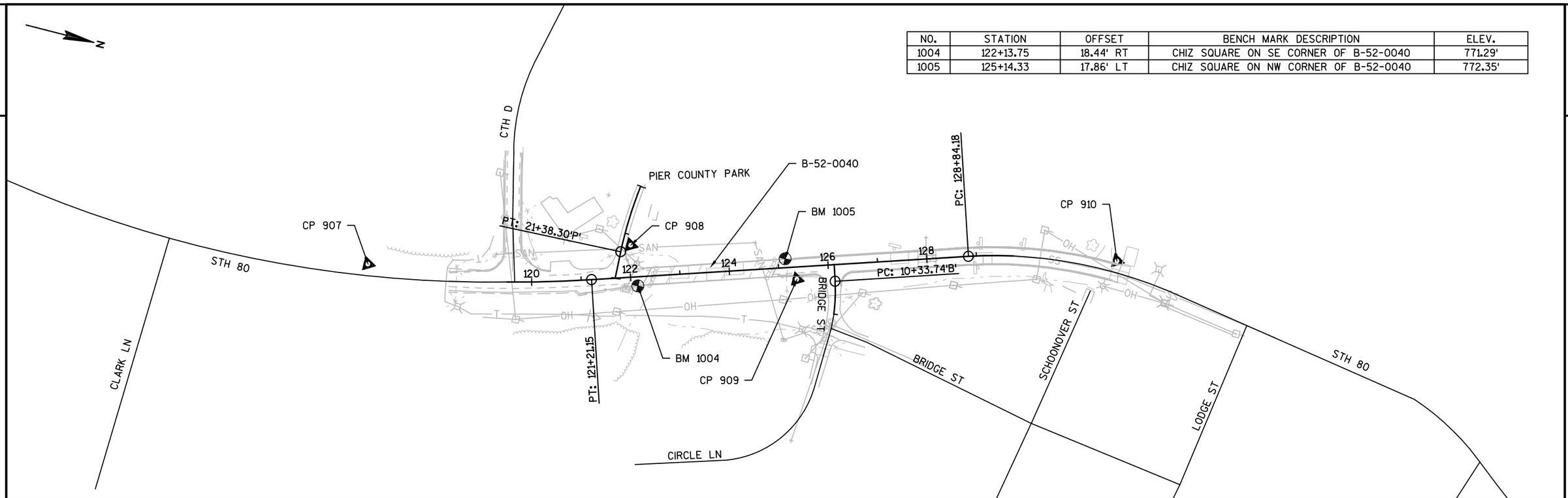

CONTROL POINT 905
X: 682266.7620', Y: 476736.4250', Z: 764.649'
REBAR
+/- 600' NORTH OF STH 80 AND CTH D INTERSECTION

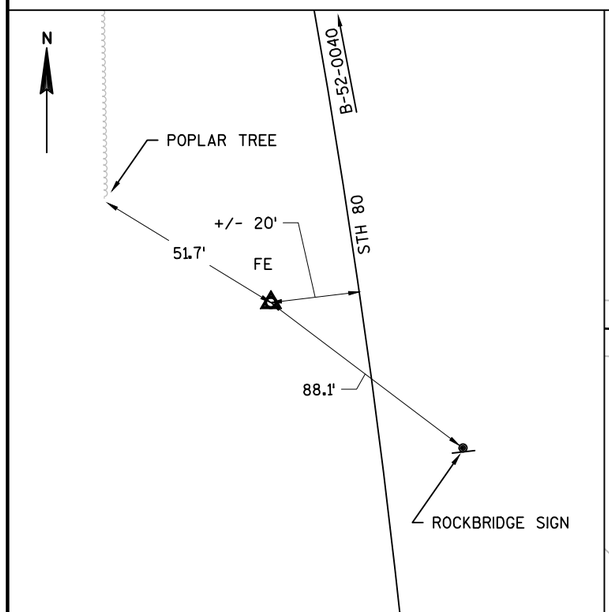



CONTROL POINT 906
X: 681995.3200', Y: 477385.5330', Z: 765.227'
MAG NAIL IN BITUMINOUS FE
+/- 1300' NORTH OF STH 80 AND CTH D INTERSECTION

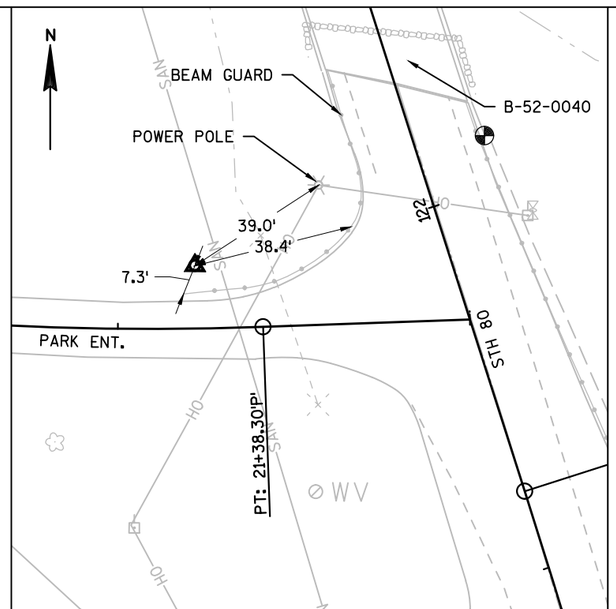
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONTROL POINT DATA: B-52-0044 (B-52-00270) | SHEET 83 | E |
|---|---|---|---|---|---|

| NO. | STATION | OFFSET | BENCH MARK DESCRIPTION | ELEV. |
|---|---|---|---|---|
| 1004 | 122+13.75 | 18.44' RT | CHIZ SQUARE ON SE CORNER OF B-52-0040 | 771.29' |
| 1005 | 125+14.33 | 17.86' LT | CHIZ SQUARE ON NW CORNER OF B-52-0040 | 772.35' |

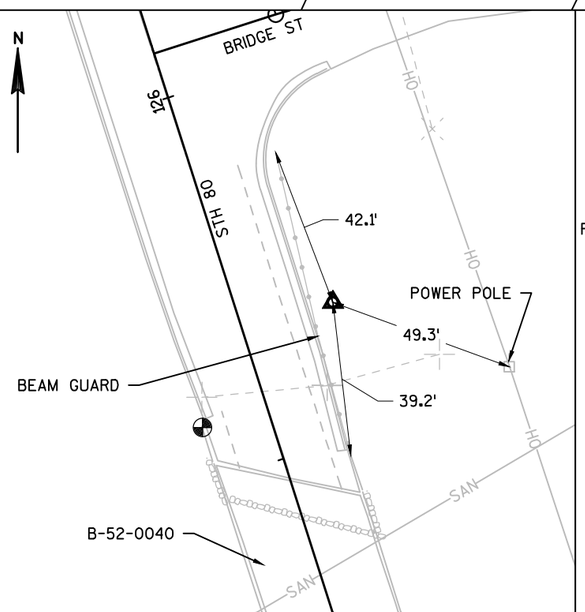


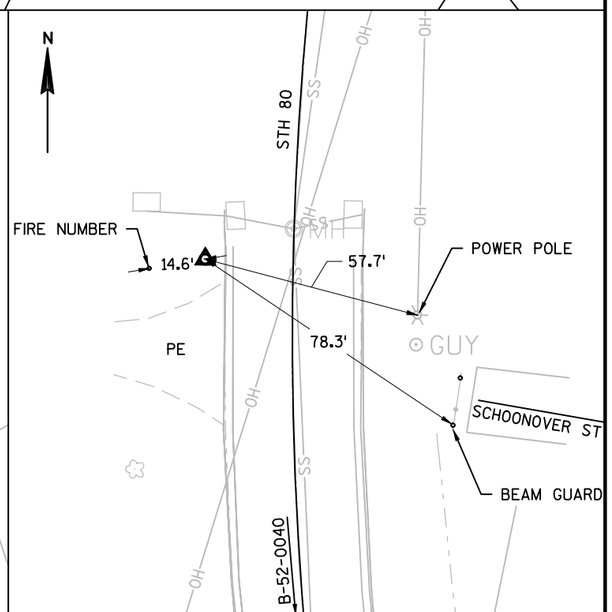

CONTROL POINT 907
X: 682279.5970', Y: 484769.4390', Z: 764.334'
MAG NAIL IN BITUMINOUS PE
+/- 300' SOUTH OF STH 80 AND CTH D INTERSECTION




CONTROL POINT 908
X: 682110.0280', Y: 485274.0850', Z: 767.203'
REBAR
+/- 250' NORTH OF STH 80 AND CTH D INTERSECTION




CONTROL POINT 909
X: 682093.2260', Y: 485616.6030', Z: 771.336'
REBAR
+/- 600' NORTH OF STH 80 AND CTH D INTERSECTION




CONTROL POINT 910
X: 681895.8350', Y: 486233.6090', Z: 773.797'
REBAR
+/- 1200' NORTH OF STH 80 AND CTH D INTERSECTION

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CONTROL POINT DATA: B-52-0040 (B-52-00268) | SHEET 84 | E |
|---|---|---|---|---|---|

5042-05-81

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0002 | 201.0105 | Clearing | STA | 6.000 | 6.000 |
| 0004 | 201.0205 | Grubbing | STA | 6.000 | 6.000 |
| 0006 | 203.0100 | Removing Small Pipe Culverts | EACH | 10.000 | 10.000 |
| 0008 | 203.0200 | Removing Old Structure (station) 01. 217+81'NB' | LS | 1.000 | 1.000 |
| 0010 | 203.0200 | Removing Old Structure (station) 01. 225+52'NB' | LS | 1.000 | 1.000 |
| 0012 | 203.0210.S | Abatement of Asbestos Containing Material (structure) 01. B-52-0041 | LS | 1.000 | 1.000 |
| 0014 | 203.0210.S | Abatement of Asbestos Containing Material (structure) 02. B-52-0044 | LS | 1.000 | 1.000 |
| 0016 | 203.0600.S | Removing Old Structure Over Waterway With Minimal Debris (station) 01. 123+60 | LS | 1.000 | 1.000 |
| 0018 | 203.0600.S | Removing Old Structure Over Waterway With Minimal Debris (station) 02. 220+00'NB' | LS | 1.000 | 1.000 |
| 0020 | 203.0600.S | Removing Old Structure Over Waterway With Minimal Debris (station) 03. 112+00 | LS | 1.000 | 1.000 |
| 0022 | 204.0150 | Removing Curb & Gutter | LF | 1,086.000 | 1,086.000 |
| 0024 | 204.0165 | Removing Guardrail | LF | 1,323.000 | 1,323.000 |
| 0026 | 204.0180 | Removing Delineators and Markers | EACH | 27.000 | 27.000 |
| 0028 | 204.0220 | Removing Inlets | EACH | 2.000 | 2.000 |
| 0030 | 204.0245 | Removing Storm Sewer (size) 24-Inch | LF | 64.000 | 64.000 |
| 0032 | 205.0100 | Excavation Common | CY | 36,938.000 | 36,938.000 |
| 0034 | 206.1000 | Excavation for Structures Bridges (structure) 01. B-52-0268 | LS | 1.000 | 1.000 |
| 0036 | 206.1000 | Excavation for Structures Bridges (structure) 02.B-52-0269 | LS | 1.000 | 1.000 |
| 0038 | 206.1000 | Excavation for Structures Bridges (structure) 03. B-52-0270 | LS | 1.000 | 1.000 |
| 0040 | 206.5000 | Cofferdams (structure) 01. B-52-0268 | LS | 1.000 | 1.000 |
| 0042 | 206.5000 | Cofferdams (structure) 03. B-52-0270 | LS | 1.000 | 1.000 |
| 0044 | 208.0100 | Borrow | CY | 27,692.000 | 27,692.000 |
| 0046 | 209.1500 | Backfill Granular Grade 1 | TON | 1,110.000 | 1,110.000 |
| 0048 | 210.1500 | Backfill Structure Type A | TON | 1,246.000 | 1,246.000 |
| 0050 | 213.0100 | Finishing Roadway (project) 01. 5042-05-81 | EACH | 1.000 | 1.000 |
| 0052 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 1,990.000 | 1,990.000 |
| 0054 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 21,155.000 | 21,155.000 |
| 0056 | 305.0130 | Base Aggregate Dense 3-Inch | TON | 2,070.000 | 2,070.000 |
| 0058 | 312.0110 | Select Crushed Material | TON | 17,695.000 | 17,695.000 |
| 0060 | 415.0120 | Concrete Pavement 12-Inch | SY | 168.000 | 168.000 |
| 0062 | 415.0410 | Concrete Pavement Approach Slab | SY | 341.000 | 341.000 |
| 0064 | 416.1010 | Concrete Surface Drains | CY | 15.000 | 15.000 |
| 0066 | 440.4410 | Incentive IRI Ride | DOL | 2,408.000 | 2,408.000 |

5042-05-81

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0068 | 450.4000 | HMA Cold Weather Paving | TON | 1,625.000 | 1,625.000 |
| 0070 | 455.0605 | Tack Coat | GAL | 1,106.000 | 1,106.000 |
| 0072 | 460.2000 | Incentive Density HMA Pavement | DOL | 4,140.000 | 4,140.000 |
| 0074 | 460.5223 | HMA Pavement 3 LT 58-28 S | TON | 4,001.000 | 4,001.000 |
| 0076 | 460.5224 | HMA Pavement 4 LT 58-28 S | TON | 2,483.000 | 2,483.000 |
| 0078 | 465.0120 | Asphaltic Surface Driveways and Field Entrances | TON | 17.000 | 17.000 |
| 0080 | 465.0315 | Asphaltic Flumes | SY | 102.000 | 102.000 |
| 0082 | 465.0425 | Asphaltic Shoulder Rumble Strips 2-Lane Rural | LF | 4,582.000 | 4,582.000 |
| 0084 | 465.0475 | Asphalt Center Line Rumble Strips 2-Lane Rural | LF | 1,396.000 | 1,396.000 |
| 0086 | 502.0100 | Concrete Masonry Bridges | CY | 2,451.000 | 2,451.000 |
| 0088 | 502.3200 | Protective Surface Treatment | SY | 3,194.000 | 3,194.000 |
| 0090 | 502.3210 | Pigmented Surface Sealer | SY | 663.000 | 663.000 |
| 0092 | 503.0137 | Prestressed Girder Type I 36W-Inch | LF | 1,629.000 | 1,629.000 |
| 0094 | 503.0155 | Prestressed Girder Type I 54W-Inch | LF | 1,008.000 | 1,008.000 |
| 0096 | 505.0400 | Bar Steel Reinforcement HS Structures | LB | 38,300.000 | 38,300.000 |
| 0098 | 505.0600 | Bar Steel Reinforcement HS Coated Structures | LB | 362,890.000 | 362,890.000 |
| 0100 | 505.0800.S | Bar Steel Reinforcement HS Stainless Structures | LB | 1,600.000 | 1,600.000 |
| 0102 | 506.2605 | Bearing Pads Elastomeric Non-Laminated | EACH | 52.000 | 52.000 |
| 0104 | 506.4000 | Steel Diaphragms (structure) 01. B-52-0269 | EACH | 14.000 | 14.000 |
| 0106 | 506.4000 | Steel Diaphragms (structure) 03. B-52-0270 | EACH | 30.000 | 30.000 |
| 0108 | 511.1200 | Temporary Shoring (structure) 01. B-52-0269 | SF | 1,950.000 | 1,950.000 |
| 0110 | 516.0500 | Rubberized Membrane Waterproofing | SY | 79.000 | 79.000 |
| 0112 | 521.1012 | Apron Endwalls for Culvert Pipe Steel 12-Inch | EACH | 1.000 | 1.000 |
| 0114 | 521.1018 | Apron Endwalls for Culvert Pipe Steel 18-Inch | EACH | 6.000 | 6.000 |
| 0116 | 521.1024 | Apron Endwalls for Culvert Pipe Steel 24-Inch | EACH | 6.000 | 6.000 |
| 0118 | 521.1030 | Apron Endwalls for Culvert Pipe Steel 30-Inch | EACH | 6.000 | 6.000 |
| 0120 | 521.1036 | Apron Endwalls for Culvert Pipe Steel 36-Inch | EACH | 2.000 | 2.000 |
| 0122 | 521.1900 | Pipe Cattle Pass Corrugated Steel | LF | 76.000 | 76.000 |
| 0124 | 521.3118 | Culvert Pipe Corrugated Steel 18-Inch | LF | 164.000 | 164.000 |
| 0126 | 521.3124 | Culvert Pipe Corrugated Steel 24-Inch | LF | 140.000 | 140.000 |
| 0128 | 521.3130 | Culvert Pipe Corrugated Steel 30-Inch | LF | 218.000 | 218.000 |
| 0130 | 521.3136 | Culvert Pipe Corrugated Steel 36-Inch | LF | 100.000 | 100.000 |
| 0132 | 550.0500 | Pile Points | EACH | 40.000 | 40.000 |
| 0134 | 550.1100 | Piling Steel HP 10-Inch X 42 Lb | LF | 3,950.000 | 3,950.000 |
| 0136 | 550.1120 | Piling Steel HP 12-Inch X 53 Lb | LF | 4,330.000 | 4,330.000 |
| 0138 | 601.0409 | Concrete Curb & Gutter 30-Inch Type A | LF | 11.000 | 11.000 |
| 0140 | 601.0411 | Concrete Curb & Gutter 30-Inch Type D | LF | 1,049.000 | 1,049.000 |
| 0142 | 601.0557 | Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D | LF | 557.000 | 557.000 |
| 0144 | 601.0584 | Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type TBT | LF | 189.000 | 189.000 |

5042-05-81

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0146 | 601.0586 | Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type TBTT | LF | 19.000 | 19.000 |
| 0148 | 601.0588 | Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT | LF | 18.000 | 18.000 |
| 0150 | 601.0590 | Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT | LF | 36.000 | 36.000 |
| 0152 | 606.0200 | Riprap Medium | CY | 50.000 | 50.000 |
| 0154 | 606.0300 | Riprap Heavy | CY | 1,221.000 | 1,221.000 |
| 0156 | 611.0606 | Inlet Covers Type B | EACH | 1.000 | 1.000 |
| 0158 | 611.8110 | Adjusting Manhole Covers | EACH | 2.000 | 2.000 |
| 0160 | 611.8115 | Adjusting Inlet Covers | EACH | 3.000 | 3.000 |
| 0162 | 612.0212 | Pipe Underdrain Unperforated 12-Inch | LF | 52.000 | 52.000 |
| 0164 | 612.0406 | Pipe Underdrain Wrapped 6-Inch | LF | 530.000 | 530.000 |
| 0166 | 614.0150 | Anchor Assemblies for Steel Plate Beam Guard | EACH | 12.000 | 12.000 |
| 0168 | 614.0200 | Steel Thrie Beam Structure Approach | LF | 84.000 | 84.000 |
| 0170 | 614.0305 | Steel Plate Beam Guard Class A | LF | 300.000 | 300.000 |
| 0172 | 614.0345 | Steel Plate Beam Guard Short Radius | LF | 112.500 | 112.500 |
| 0174 | 614.0370 | Steel Plate Beam Guard Energy Absorbing Terminal | EACH | 4.000 | 4.000 |
| 0176 | 614.0390 | Steel Plate Beam Guard Short Radius Terminal | EACH | 2.000 | 2.000 |
| 0178 | 614.2300 | MGS Guardrail 3 | LF | 525.000 | 525.000 |
| 0180 | 614.2500 | MGS Thrie Beam Transition | LF | 320.000 | 320.000 |
| 0182 | 614.2610 | MGS Guardrail Terminal EAT | EACH | 8.000 | 8.000 |
| 0184 | 618.0100 | Maintenance And Repair of Haul Roads (project) 01. 5042-05-81 | EACH | 1.000 | 1.000 |
| 0186 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0188 | 624.0100 | Water | MGAL | 420.000 | 420.000 |
| 0190 | 625.0100 | Topsoil | SY | 4,070.000 | 4,070.000 |
| 0192 | 625.0500 | Salvaged Topsoil | SY | 50,885.000 | 50,885.000 |
| 0194 | 628.1104 | Erosion Bales | EACH | 68.000 | 68.000 |
| 0196 | 628.1504 | Silt Fence | LF | 9,370.000 | 9,370.000 |
| 0198 | 628.1520 | Silt Fence Maintenance | LF | 9,370.000 | 9,370.000 |
| 0200 | 628.1905 | Mobilizations Erosion Control | EACH | 8.000 | 8.000 |
| 0202 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 4.000 | 4.000 |
| 0204 | 628.2008 | Erosion Mat Urban Class I Type B | SY | 9,010.000 | 9,010.000 |
| 0206 | 628.2027 | Erosion Mat Class II Type C | SY | 2,355.000 | 2,355.000 |
| 0208 | 628.6505 | Soil Stabilizer Type A | ACRE | 8.000 | 8.000 |
| 0210 | 628.7015 | Inlet Protection Type C | EACH | 4.000 | 4.000 |
| 0212 | 628.7504 | Temporary Ditch Checks | LF | 170.000 | 170.000 |
| 0214 | 628.7555 | Culvert Pipe Checks | EACH | 37.000 | 37.000 |
| 0216 | 628.7560 | Tracking Pads | EACH | 3.000 | 3.000 |
| 0218 | 629.0210 | Fertilizer Type B | CWT | 33.000 | 33.000 |

5042-05-81

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0220 | 630.0110 | Seeding Mixture No. 10 | LB | 607.000 | 607.000 |
| 0222 | 630.0140 | Seeding Mixture No. 40 | LB | 57.000 | 57.000 |
| 0224 | 630.0160 | Seeding Mixture No. 60 | LB | 38.000 | 38.000 |
| 0226 | 630.0200 | Seeding Temporary | LB | 140.000 | 140.000 |
| 0228 | 633.5200 | Markers Culvert End | EACH | 23.000 | 23.000 |
| 0230 | 634.0614 | Posts Wood 4x6-Inch X 14-FT | EACH | 19.000 | 19.000 |
| 0232 | 634.0616 | Posts Wood 4x6-Inch X 16-FT | EACH | 21.000 | 21.000 |
| 0234 | 634.0618 | Posts Wood 4x6-Inch X 18-FT | EACH | 3.000 | 3.000 |
| 0236 | 637.2210 | Signs Type II Reflective H | SF | 307.240 | 307.240 |
| 0238 | 637.2230 | Signs Type II Reflective F | SF | 20.000 | 20.000 |
| 0240 | 638.2602 | Removing Signs Type II | EACH | 37.000 | 37.000 |
| 0242 | 638.3000 | Removing Small Sign Supports | EACH | 37.000 | 37.000 |
| 0244 | 642.5201 | Field Office Type C | EACH | 1.000 | 1.000 |
| 0246 | 643.0300 | Traffic Control Drums | DAY | 14,904.000 | 14,904.000 |
| 0248 | 643.0420 | Traffic Control Barricades Type III | DAY | 7,784.000 | 7,784.000 |
| 0250 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 15,568.000 | 15,568.000 |
| 0252 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 1,491.000 | 1,491.000 |
| 0254 | 643.0900 | Traffic Control Signs | DAY | 53,675.000 | 53,675.000 |
| 0256 | 643.0920 | Traffic Control Covering Signs Type II | EACH | 20.000 | 20.000 |
| 0258 | 643.1050 | Traffic Control Signs PCMS | DAY | 42.000 | 42.000 |
| 0260 | 643.5000 | Traffic Control | EACH | 1.000 | 1.000 |
| 0262 | 645.0111 | Geotextile Type DF Schedule A | SY | 320.000 | 320.000 |
| 0264 | 645.0120 | Geotextile Type HR | SY | 2,183.000 | 2,183.000 |
| 0266 | 645.0220 | Geogrid Type SR | SY | 2,960.000 | 2,960.000 |
| 0268 | 646.1020 | Marking Line Epoxy 4-Inch | LF | 18,982.000 | 18,982.000 |
| 0270 | 646.3020 | Marking Line Epoxy 8-Inch | LF | 712.000 | 712.000 |
| 0272 | 646.5020 | Marking Arrow Epoxy | EACH | 3.000 | 3.000 |
| 0274 | 646.5120 | Marking Word Epoxy | EACH | 2.000 | 2.000 |
| 0276 | 646.6120 | Marking Stop Line Epoxy 18-Inch | LF | 30.000 | 30.000 |
| 0278 | 646.7120 | Marking Diagonal Epoxy 12-Inch | LF | 467.000 | 467.000 |
| 0280 | 646.9000 | Marking Removal Line 4-Inch | LF | 1,369.000 | 1,369.000 |
| 0282 | 648.0100 | Locating No-Passing Zones | MI | 1.000 | 1.000 |
| 0284 | 649.0105 | Temporary Marking Line Paint 4-Inch | LF | 6,310.000 | 6,310.000 |
| 0286 | 650.4500 | Construction Staking Subgrade | LF | 4,868.000 | 4,868.000 |
| 0288 | 650.5000 | Construction Staking Base | LF | 5,038.000 | 5,038.000 |
| 0290 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 1,879.000 | 1,879.000 |
| 0292 | 650.6000 | Construction Staking Pipe Culverts | EACH | 12.000 | 12.000 |
| 0294 | 650.6500 | Construction Staking Structure Layout (structure) 01. B-52-0268 | LS | 1.000 | 1.000 |
| 0296 | 650.6500 | Construction Staking Structure Layout (structure) 02. B- | LS | 1.000 | 1.000 |

5042-05-81

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| | | 52-0269 | | | |
| 0298 | 650.6500 | Construction Staking Structure Layout (structure) 03. B-52-0270 | LS | 1.000 | 1.000 |
| 0300 | 650.9910 | Construction Staking Supplemental Control (project) 01. 5042-05-81 | LS | 1.000 | 1.000 |
| 0302 | 650.9920 | Construction Staking Slope Stakes | LF | 5,038.000 | 5,038.000 |
| 0304 | 690.0150 | Sawing Asphalt | LF | 534.000 | 534.000 |
| 0306 | 690.0250 | Sawing Concrete | LF | 10.500 | 10.500 |
| 0308 | 715.0415 | Incentive Strength Concrete Pavement | DOL | 500.000 | 500.000 |
| 0310 | 715.0502 | Incentive Strength Concrete Structures | DOL | 14,706.000 | 14,706.000 |
| 0312 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 2,400.000 | 2,400.000 |
| 0314 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 3,200.000 | 3,200.000 |
| 0316 | SPV.0180 | Special 01. Topsoil Special | SY | 2,400.000 | 2,400.000 |

## CLEARING & GRUBBING

| CATEGORY | STATION TO STATION | LOCATION | CLEARING 201.0105 STA | GRUBBING 201.0205 STA | REMARKS |
|---|---|---|---|---|---|
| 0010 | 207+00'NB' - 209+00'NB' | LT | 2 | 2 | B-52-0269 |
| 0010 | 217+00'NB' - 221+00'NB' | LT | 4 | 4 | B-52-0269 |
| | | TOTAL 0010 | 6 | 6 | |

## REMOVING SMALL PIPE CULVERTS

| CATEGORY | STATION | LOCATION | 203.0100 EACH | SIZE | REMARKS |
|---|---|---|---|---|---|
| 0010 | 121+83 | LT | 1 | 18-IN CPCS | B-52-0268 |
| 0010 | 126+06 | RT | 1 | 30-IN CPCS | B-52-0268 |
| 0010 | 212+22'NB' | RT | 1 | 18-IN CPCS | B-52-0269 |
| 0010 | 212+26'NB' | RT | 1 | 18-IN CPCS | B-52-0269 |
| 0010 | 214+31'NB' | RT | 1 | 18-IN CPCS | B-52-0269 |
| 0010 | 218+39'NB' | RT | 1 | 24-IN CPCS | B-52-0269 |
| 0010 | 223+24'NB' | RT | 1 | 24-IN CPCS | B-52-0269 |
| 0010 | 232+35'NB' | RT | 1 | 24-IN CPCS | B-52-0269 |
| 0010 | 233+41'NB' | RT | 1 | 18-IN CPCS | B-52-0269 |
| 0010 | 114+84 | LT | 1 | 30-IN CPCS | B-52-0270 |
| | | TOTAL 0010 | 10 | | |

## REMOVING OLD STRUCTURE (217+81'NB')

| CATEGORY | STATION | LOCATION | 203.0200.01 LS | REMARKS |
|---|---|---|---|---|
| 0010 | 217+81'NB' | ML | 1 | B-52-0269 |
| | | TOTAL 0010 | 1 | |

## REMOVING OLD STRUCTURE (225+52'NB')

| CATEGORY | STATION | LOCATION | 203.0200.02 LS | REMARKS |
|---|---|---|---|---|
| 0010 | 225+52'NB' | ML | 1 | B-52-0269 |
| | | TOTAL 0010 | 1 | |

## REMOVING CURB & GUTTER

| CATEGORY | STATION TO STATION | LOCATION | 204.0150 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 120+20 - 120+38 | LT | 18 | B-52-0268 |
| 0010 | 124+98 - 125+96 | RT | 114 | B-52-0268 |
| 0010 | 125+16 - 129+50 | LT | 435 | B-52-0268 |
| 0010 | 126+22 - 129+50 | RT | 343 | B-52-0268 |
| 0010 | 227+60'NB' - 228+00'NB' | LT | 53 | B-52-0269 |
| 0010 | 228+58'NB' - 229+00'NB' | LT | 93 | B-52-0269 |
| 0010 | 109+15 - 109+40 | RT | 30 | B-52-0270 |
| | | TOTAL 0010 | 1086 | |

## REMOVING GUARDRAIL

| CATEGORY | STATION TO STATION | LOCATION | 204.0165 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 120+92 - 122+24 | RT | 133 | B-52-0268 |
| 0010 | 121+98 - 122+43 | LT | 92 | B-52-0268 |
| 0010 | 124+97 - 125+82 | RT | 85 | B-52-0268 |
| 0010 | 125+16 - 126+50 | LT | 133 | B-52-0268 |
| 0010 | 217+24'NB' - 218+26'NB' | LT (EXIST) | 151 | B-52-0269 |
| 0010 | 218+29'NB' - 219+12'NB' | RT (EXIST) | 82 | B-52-0269 |
| 0010 | 218+50'NB' - 219+22'NB' | LT (EXIST) | 118 | B-52-0269 |
| 0010 | 220+68'NB' - 221+52'NB' | RT (EXIST) | 82 | B-52-0269 |
| 0010 | 220+76'NB' - 221+58'NB' | LT (EXIST) | 82 | B-52-0269 |
| 0010 | 109+62 - 110+47 | LT | 85 | B-52-0270 |
| 0010 | 109+82 - 110+67 | RT | 85 | B-52-0270 |
| 0010 | 113+37 - 114+22 | LT | 85 | B-52-0270 |
| 0010 | 113+57 - 114+67 | RT | 110 | B-52-0270 |
| | | TOTAL 0010 | 1323 | |

## REMOVING DELINEATORS AND MARKERS

| CATEGORY | STATION TO STATION | LOCATION | 204.0180 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 221+75'NB' - 235+00'NB' | STH 80-LT | 21 | B-52-0269 |
| 0010 | 606+20 - 608+30 | STH 56-RT | 6 | B-52-0269 |
| | | TOTAL 0010 | 27 | |

## REMOVING INLETS

| CATEGORY | STATION | LOCATION | 204.0220 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 125+15 | RT | 1 | B-52-0268 |
| 0010 | 125+22 | LT | 1 | B-52-0268 |
| | | TOTAL 0010 | 2 | |

## REMOVING STORM SEWER (SIZE) 24-INCH

| CATEGORY | STATION TO STATION | LOCATION | 204.0245 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 125+15 - 125+22 | ML | 33 | B-52-0268 |
| 0010 | 125+15 - 125+15 | RT | 31 | B-52-0268 |
| | | TOTAL 0010 | 64 | |

| Division | From/To Station | Location | 205.0100 Common Excavation (1) | | Available Material (5) | Unexpanded Fill | Expanded Fill (13) | Mass Ordinate +/- (14) | Waste | 208.0100 Borrow | Comment: |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cut (2) | EBS Excavation (3) | | | Factor | | | | |
| Division 1 | | | | | | | 1.25 | | | | |
| B-52-0268 - Park Entrance | 21+07'P'/21+80'P' | Sideroad | 113 | 0 | 113 | 28 | 35 | 78 | 78 | 0 | |
| B-52-0268 - Bridge Street | 10+15'B'/11+00'B' | Sideroad | 169 | 0 | 169 | 37 | 46 | 123 | 123 | 0 | |
| B-52-0268 - STH 80 | 120+20/129+50 | Mainline | 2,243 | 0 | 2,243 | 88 | 110 | 2,134 | 2,134 | 0 | |
| Division 1 Subtotal | | | 2,526 | 0 | 2,526 | 152 | 191 | 2,335 | 2,335 | 0 | |
| Division 2 | | | | | | | | | | | |
| B-52-0269 - Hansberry Lane | 00+45'H'/01+80'H' | Sideroad | 97 | 0 | 0 | 548 | 685 | * | 97 | 685 | ** |
| B-52-0269 - STH 56 | 606+20/608+60 | Sideroad | 1,151 | 0 | 0 | 404 | 504 | * | 1,151 | 504 | ** |
| B-52-0269 - STH 80 | 203+70'NB'/235+45'NB' | Mainline | 28,914 | 0 | 0 | 21,201 | 26,502 | * | 28,914 | 26,502 | ** |
| B-52-0269 - STH 80 | 218+85'NB'/219+57'NB' | S. Abutment Exc. | 0 | 724 | 0 | 0 | 0 | * | 724 | 0 | ** |
| B-52-0269 - STH 80 | 220+61'NB'/221+33'NB' | N. Abutment Exc. | 0 | 853 | 0 | 0 | 0 | * | 853 | 0 | ** |
| Division 2 Subtotal | | | 30,162 | 1,577 | 0 | 22,153 | 27,692 | * | 31,739 | 27,692 | ** |
| Division 3 | | | | | | | | | | | |
| B-52-0270 - Irish Drive | 00+75'ID'/02+45'ID' | Sideroad | 105 | 0 | 105 | 431 | 538 | -433 | -433 | 0 | |
| B-52-0270 - STH 80 | 109+15/119+15 | Mainline | 2,568 | 0 | 2,568 | 430 | 537 | 2,031 | 2,031 | 0 | |
| Division 3 Subtotal | | | 2,673 | 0 | 2,673 | 861 | 1,075 | 1,598 | 1,598 | 0 | |
| Grand Total | | | 35,361 | 1,577 | 5,199 | 23,166 | 28,957 | 3,933 | 35,672 | 27,692 | |
| Total Common Exc | | | 36,938 | | | | | | | | |

Notes:

*No Mass Ordinate for Division 2 because of staging

(1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100

(2) Salvaged/Unsuable Pavement Material is included in Cut.

(3) EBS Excavation to be backfilled with Select Crushed Material and Backfill Granular Grade 1. See miscellaneous quantities sheets.

(5) Available Material = Cut - Salvaged/Unusuable Pavement Material **No available material assumed due to staging plan**

(13) Expanded Fill Factor = 1.25

Depending on selections: **Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor**

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

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

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

(14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

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## BACKFILL GRANULAR GRADE 1

| CATEGORY | STATION TO STATION | LOCATION | 209.1500 TON | REMARKS |
|---|---|---|---|---|
| 0010 | 218+85'NB' - 219+57'NB' | S. ABUT. | 536 | B-52-0269 |
| 0010 | 220+61'NB' - 221+33'NB' | N. ABUT. | 574 | B-52-0269 |
| | | TOTAL 0010 | 1110 | |

## AGGREGATE ITEMS

| CATEGORY | STATION TO STATION | LOCATION | BASE AGGREGATE DENSE 3/4-INCH 305.0110 TON | BASE AGGREGATE DENSE 1 1/4-INCH 305.0120 TON | BASE AGGREGATE DENSE 3-INCH 305.0130 TON | SELECT CRUSHED MATERIAL 312.0110 TON | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 120+20 - 122+48 | STH 80 - ML | - | 760 | 790 | - | B-52-0268 - SOUTH |
| 0010 | 120+61 | CE LT | - | 20 | - | - | B-52-0268 |
| 0010 | 21+12'P' - 21+69'P' | PARK ENT | 2 | 170 | - | - | B-52-0268 |
| 0010 | 125+38 - 129+50 | STH 80 - ML | - | 1225 | 1280 | - | B-52-0268 - NORTH |
| 0010 | 10+21'B' - 11+00'B' | BRIDGE ST | 6 | 245 | - | - | B-52-0268 |
| 0010 | 203+70'NB' - 219+35'NB' | STH 80 - ML | 450 | 6490 | - | 6315 | B-52-0269 - SOUTH |
| 0010 | 205+95'NB' | PE LT | - | 17 | - | - | B-52-0269 |
| 0010 | 212+27'NB' | FE LT | 27 | - | - | - | B-52-0269 |
| 0010 | 212+28'NB' | PE RT | 48 | - | - | - | B-52-0269 |
| 0010 | 214+36'NB' | PE RT | 50 | - | - | - | B-52-0269 |
| 0010 | 0+23'H' - 1+69'H' | HANSBERRY LN | 130 | 580 | - | - | B-52-0269 |
| 0010 | 218+85'NB' - 219+57'NB' | S. ABUT. | - | - | - | 500 | B-52-0269 |
| 0010 | 220+61'NB' - 221+33'NB' | N. ABUT. | - | - | - | 470 | B-52-0269 |
| 0010 | 220+75'NB' - 235+45'NB' | STH 80 - ML | 965 | 6715 | - | 6635 | B-52-0269 - NORTH |
| 0010 | 223+32'NB' | FE RT | 44 | - | - | - | B-52-0269 |
| 0010 | 606+20 - 608+63 | STH 56 | 110 | 1250 | - | 1190 | B-52-0269 |
| 0010 | 232+36'NB' | FE RT | 38 | - | - | - | B-52-0269 |
| 0010 | 233+48'NB' | PE RT | - | 38 | - | - | B-52-0269 |
| 0010 | 109+15 - 110+90 | STH 80 - ML | 15 | 675 | - | 680 | B-52-0270 - SOUTH |
| 0010 | 113+45 - 119+15 | STH 80 - ML | 40 | 1985 | - | 1905 | B-52-0270 - NORTH |
| 0010 | 0+75'ID' - 2+40'ID' | IRISH DRIVE | 50 | 660 | - | - | B-52-0270 |
| 0010 | 1+01'ID' | PE LT | 15 | - | - | - | B-52-0270 |
| | | TOTAL 0010 | 1990 | 20830 | 2070 | 17695 | |

## CONCRETE APPROACH SLAB

| CATEGORY | STATION TO STATION | LOCATION | CONCRETE PAVEMENT 12-INCH 415.0120 SY | CONCRETE PAVEMENT APPROACH SLAB 415.0410 SY | REMARKS |
|---|---|---|---|---|---|
| 0010 | 122+17 - 122+46 | ML | - | 60 | B-52-0268 - SOUTH |
| 0010 | 122+17 - 122+32 | RT | 5 | - | B-52-0268 - SOUTH |
| 0010 | 122+17 - 122+48 | LT | 11 | - | B-52-0268 - SOUTH |
| 0010 | 125+42 - 125+71 | ML | - | 60 | B-52-0268 - NORTH |
| 0010 | 125+38 - 125+71 | RT | 16 | - | B-52-0268 - NORTH |
| 0010 | 125+56 - 125+71 | LT | 9 | - | B-52-0268 - NORTH |
| 0010 | 219+05'NB' - 219+29'NB' | ML | - | 52 | B-52-0269 - SOUTH |
| 0010 | 219+05'NB' - 219+20'NB' | RT | 10 | - | B-52-0269 - SOUTH |
| 0010 | 219+05'NB' - 219+33'NB' | LT | 29 | - | B-52-0269 - SOUTH |
| 0010 | 220+88'NB' - 221+12'NB' | ML | - | 53 | B-52-0269 - NORTH |
| 0010 | 220+86'NB' - 221+12'NB' | RT | 24 | - | B-52-0269 - NORTH |
| 0010 | 220+96'NB' - 221+12'NB' | LT | 15 | - | B-52-0269 - NORTH |
| 0010 | 110+58 - 110+86 | ML | - | 58 | B-52-0270 - SOUTH |
| 0010 | 110+58 - 110+89 | RT | 14 | - | B-52-0270 - SOUTH |
| 0010 | 110+58 - 110+73 | LT | 10 | - | B-52-0270 - SOUTH |
| 0010 | 113+47 - 113+75 | ML | - | 58 | B-52-0270 - NORTH |
| 0010 | 113+60 - 113+75 | RT | 15 | - | B-52-0270 - NORTH |
| 0010 | 113+44 - 113+75 | LT | 10 | - | B-52-0270 - NORTH |
| | | TOTAL 0010 | 168 | 341 | |

## CONCRETE SURFACE DRAINS

| CATEGORY | STATION | LOCATION | 416.1010 CY | REMARKS |
|---|---|---|---|---|
| 0010 | 122+02 | RT | 4 | B-52-0268 - SE QUAD |
| 0010 | 122+29 | LT | 3 | B-52-0268 - SW QUAD |
| 0010 | 218+99'NB' | RT | 2 | B-52-0269 - SE QUAD |
| 0010 | 110+41 | LT | 3 | B-52-0270 - SW QUAD |
| 0010 | 110+59 | RT | 3 | B-52-0270 - SE QUAD |
| | | TOTAL 0010 | 15 | |

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## ASPHALTIC ITEMS

| CATEGORY | STATION TO STATION | LOCATION | HMA COLD WEATHER PAVING 450.4000 TON | TACK COAT 455.0605 GAL | 3 LT 58-28 S 460.5223 TON | 4 LT 58-28 S 460.5224 TON | ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES 465.0120 TON | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0010 | 120+20 - 122+17 | STH 80 - ML | - | 43 | 121 | 97 | - | B-52-0268 - SOUTH |
| 0010 | 21+12'P' - 21+69'P' | PARK ENT | - | 9 | 26 | 21 | - | B-52-0268 |
| 0010 | 125+71 - 129+50 | STH 80 - ML | - | 69 | 192 | 154 | - | B-52-0268 - NORTH |
| 0010 | 10+21'B' - 11+00'B' | BRIDGE ST | - | 14 | 40 | 32 | - | B-52-0268 |
| 0010 | 203+70'NB' - 219+20'NB | STH 80 - ML | - | 314 | 1232 | 704 | - | B-52-0269 - SOUTH |
| 0010 | 205+96'NB' | PE LT | - | - | - | - | 5 | B-52-0269 |
| 0010 | 0+23 - 1+69 | HANSBERRY LN | - | 26 | 101 | 58 | - | B-52-0269 |
| 0010 | 220+93'NB' - 235+45'NB' | STH 80 - ML | - | 393 | 1541 | 880 | - | B-52-0269 - NORTH |
| 0010 | 606+20 - 608+52 | STH 56 | - | 69 | 271 | 155 | - | B-52-0269 |
| 0010 | 233+41'NB' | PE RT | - | - | - | - | 12 | B-52-0269 |
| 0010 | 109+15 - 110+58 | STH 80 - ML | - | 31 | 88 | 70 | - | B-52-0270 - SOUTH |
| 0010 | 113+75 - 119+15 | STH 80 - ML | - | 106 | 298 | 239 | - | B-52-0270 - NORTH |
| 0010 | 0+75'ID' - 2+40'ID' | IRISH DR | - | 32 | 91 | 73 | - | B-52-0270 |
| 0010 | | UNDISTRIBUTED | 1625 | - | - | - | - | |
| | | TOTAL 0010 | 1625 | 1106 | 4001 | 2483 | 17 | |

## ASPHALTIC FLUMES

| CATEGORY | STATION | LOCATION | 465.0315 SY | REMARKS |
|---|---|---|---|---|
| 0010 | 120+22 | RT | 9 | B-52-0268 |
| 0010 | 121+60 | LT | 8 | B-52-0268 |
| 0010 | 122+18 | LT | 11 | B-52-0268 |
| 0010 | 125+74 | RT | 9 | B-52-0268 |
| 0010 | 125+86 | LT | 3 | B-52-0268 |
| 0010 | 126+34 | RT | 6 | B-52-0268 |
| 0010 | 127+74 | LT | 3 | B-52-0268 |
| 0010 | 227+57'NB' | LT | 27 | B-52-0269 |
| 0010 | 607+13 | LT | 26 | B-52-0269 |
| | | TOTAL 0010 | 102 | |

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## ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

| CATEGORY | STATION TO STATION | LOCATION | 465.0425 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 203+70'NB' - 211+94'NB' | RT | 822 | B-52-0269 |
| 0010 | 203+70'NB' - 205+65'NB' | LT | 195 | B-52-0269 |
| 0010 | 206+25'NB' - 216+61'NB' | LT | 1039 | B-52-0269 |
| 0010 | 212+61'NB' - 214+03'NB' | RT | 141 | B-52-0269 |
| 0010 | 214+69'NB' - 218+80'NB' | RT | 409 | B-52-0269 |
| 0010 | 221+37'NB' - 233+13'NB' | RT | 1171 | B-52-0269 |
| 0010 | 221+37'NB' - 226+35'NB' | LT | 502 | B-52-0269 |
| 0010 | 233+75'NB' - 235+45'NB' | RT | 170 | B-52-0269 |
| 0010 | 234+12'NB' - 235+45'NB' | LT | 133 | B-52-0269 |
| | | TOTAL 0010 | 4582 | |

## ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL

| CATEGORY | STATION TO STATION | LOCATION | 465.0475 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 203+70'NB' - 216+40'NB' | ML | 1270 | B-52-0269 |
| 0010 | 234+19'NB' - 235+45'NB' | ML | 126 | B-52-0269 |
| | | TOTAL 0010 | 1396 | |

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## CULVERT PIPE SUMMARY

| CATEGORY | STATION | LOCATION | APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH 521.1012 EACH | APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH 521.1018 EACH | APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH 521.1024 EACH | APRON ENDWALLS FOR CULVERT PIPE STEEL 30-INCH 521.1030 EACH | APRON ENDWALLS FOR CULVERT PIPE STEEL 36-INCH 521.1036 EACH | CULVERT PIPE CORRUGATED STEEL 18-INCH 521.3118 LF | CULVERT PIPE CORRUGATED STEEL 24-INCH 521.3124 LF | CULVERT PIPE CORRUGATED STEEL 30-INCH 521.3130 LF | CULVERT PIPE CORRUGATED STEEL 36-INCH 521.3136 LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 121+83 | LT - PARK ENT | - | 2 | - | - | - | 60 | - | - | - | B-52-0268 |
| 0010 | 126+06 | RT - BRIDGE ST | - | - | - | 2 | - | - | - | 72 | - | B-52-0268 |
| 0010 | 212+27'NB' | LT - FE | - | - | 2 | - | - | - | 40 | - | - | B-52-0269 |
| 0010 | 212+28'NB' | RT - PE | - | 2 | - | - | - | 56 | - | - | - | B-52-0269 |
| 0010 | 214+37'NB' | RT - PE | - | - | 2 | - | - | - | 48 | - | - | B-52-0269 |
| 0010 | 218+44'NB' | LT - HANSBERRY LN | - | - | - | - | 2 | - | - | - | 100 | B-52-0269 |
| 0010 | 219+14'NB' | RT - SURFACE DRAIN | 1 | - | - | - | - | - | - | - | - | B-52-0269 |
| 0010 | 223+30'NB' | RT - FE | - | - | - | 2 | - | - | - | 58 | - | B-52-0269 |
| 0010 | 232+30'NB' | RT - FE | - | - | 2 | - | - | - | 52 | - | - | B-52-0269 |
| 0010 | 233+39'NB' | RT - PE | - | 2 | - | - | - | 48 | - | - | - | B-52-0269 |
| 0010 | 114+91 | LT - IRISH DR | - | - | - | 2 | - | - | - | 88 | - | B-52-0270 |
| | | TOTAL 0010 | 1 | 6 | 6 | 6 | 2 | 164 | 140 | 218 | 100 | |

## PIPE CATTLE PASS CORRUGATED STEEL

| CATEGORY | STATION | LOCATION | 521.1900 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 217+78'NB' | ML | 76 | B-52-0269 - 72-INCH |
| | | TOTAL 0010 | 76 | |

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## CURB & GUTTER

| CATEGORY | STATION TO STATION | LOCATION | CONCRETE CURB & GUTTER 30-INCH TYPE A 601.0409 LF | CONCRETE CURB & GUTTER 30-INCH TYPE D 601.0411 LF | CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D 601.0557 LF | CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT 601.0584 LF | CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBTT 601.0586 LF | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT 601.0588 LF | CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT 601.0590 LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 120+28 - 121+25 | RT - SE QUAD | - | 88 | - | - | - | - | - | B-52-0268 - DRIVEWAY |
| 0010 | 121+25 - 122+10 | RT - SE QUAD | - | - | - | 86 | - | - | - | B-52-0268 |
| 0010 | 120+20 - 120+40 | LT | - | 19 | - | - | - | - | - | B-52-0268 |
| 0010 | 120+40 - 120+83 | LT | - | 43 | - | - | - | - | - | B-52-0268 - DRIVEWAY |
| 0010 | 120+83 - 121+71 | LT | - | 101 | - | - | - | - | - | B-52-0268 |
| 0010 | 122+00 - 122+17 | LT - SW QUAD | - | 62 | - | - | - | - | - | B-52-0268 - DRIVEWAY |
| 0010 | 122+17 - 122+28 | LT - SW QUAD | 11 | - | - | - | - | - | - | B-52-0268 - DRIVEWAY |
| 0010 | 125+49 - 125+68 | RT - NE QUAD | - | - | - | - | 19 | - | - | B-52-0268 |
| 0010 | 125+68 - 125+92 | RT - NE QUAD | - | 78 | - | - | - | - | - | B-52-0268 - DRIVEWAY |
| 0010 | 126+26 - 129+50 | RT | - | 339 | - | - | - | - | - | B-52-0268 |
| 0010 | 125+70 - 126+73 | LT - NW QUAD | - | - | - | 103 | - | - | - | B-52-0268 |
| 0010 | 126+73 - 127+75 | LT - NW QUAD | - | 102 | - | - | - | - | - | B-52-0268 - DRIVEWAY |
| 0010 | 127+75 - 129+50 | LT - NW QUAD | - | 176 | - | - | - | - | - | B-52-0268 |
| 0010 | 205+37'NB' - 205+76'NB' | LT | - | - | 39 | - | - | - | - | B-52-0269 |
| 0010 | 205+76'NB' - 206+15'NB' | LT | - | - | 39 | - | - | - | - | B-52-0269 - DRIVEWAY |
| 0010 | 206+15'NB' - 208+37'NB' | LT | - | - | 222 | - | - | - | - | B-52-0269 |
| 0010 | 220+85'NB' - 221+03'NB' | RT - NE QUAD | - | - | - | - | - | - | 18 | B-52-0269 |
| 0010 | 607+21 - 608+28 | LT - STH 56 | - | - | 143 | - | - | - | - | B-52-0269 |
| 0010 | 607+69 - 608+64 | RT - STH 56 | - | - | 114 | - | - | - | - | B-52-0269 |
| 0010 | 109+15 - 109+51 | RT | - | 41 | - | - | - | - | - | B-52-0270 - DRIVEWAY |
| 0010 | 113+57 - 113+75 | LT - NW QUAD | - | - | - | - | - | - | 18 | B-52-0270 |
| 0010 | 113+75 - 113+93 | RT - NE QUAD | - | - | - | - | - | 18 | - | B-52-0270 |
| | | TOTAL 0010 | 11 | 1049 | 557 | 189 | 19 | 18 | 36 | |

## RIPRAP ITEMS

| CATEGORY | STATION | LOCATION | RIPRAP MEDIUM 606.0200 CY | GEOTEXTILE FABRIC TYPE HR 645.0120 SY | REMARKS |
|---|---|---|---|---|---|
| 0010 | 122+02 | RT | 2 | 4 | B-52-0268 |
| 0010 | 122+24 | LT | 8 | 16 | B-52-0268 |
| 0010 | 125+60 | RT | 9 | 18 | B-52-0268 |
| 0010 | 218+99'NB' | RT | 2 | 4 | B-52-0269 |
| 0010 | 219+07'NB' | LT | 12 | 24 | B-52-0269 |
| 0010 | 227+43'NB' | LT | 2 | 4 | B-52-0269 |
| 0010 | 607+02 | LT | 2 | 4 | B-52-0269 |
| 0010 | 110+41 | LT | 2 | 4 | B-52-0270 |
| 0010 | 110+59 | RT | 2 | 4 | B-52-0270 |
| 0010 | 114+34 | LT | 9 | 18 | B-52-0270 |
| | TOTAL 0010 | | 50 | 100 | |

## INLET COVERS TYPE B

| CATEGORY | STATION | LOCATION | 611.0606 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 127+45 | LT | 1 | B-52-0268 |
| | TOTAL 0010 | | 1 | |

## ADJUSTING MANHOLE COVERS

| CATEGORY | STATION | LOCATION | 611.8110 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 127+99 | ML | 1 | B-52-0268 |
| 0010 | 129+14 | ML | 1 | B-52-0268 |
| | TOTAL 0010 | | 2 | |

## ADJUSTING INLET COVERS

| CATEGORY | STATION | LOCATION | 611.8115 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 128+00 | LT | 1 | B-52-0268 |
| 0010 | 128+00 | RT | 1 | B-52-0268 |
| 0010 | 129+13 | RT | 1 | B-52-0268 |
| | TOTAL 0010 | | 3 | |

## PIPE UNDERDRAIN UNPERFORATED 12-INCH

| CATEGORY | STATION | LOCATION | 612.0212 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 218+99'NB' | RT | 52 | B-52-0269 |
| | TOTAL 0010 | | 52 | |

## BEAM GUARD ITEMS

| CATEGORY | STATION TO STATION | LOCATION | STEEL THRIE BEAM STRUCTURE APPROACH 614.0200 LF | STEEL PLATE BEAM GUARD CLASS A 614.0305 LF | STEEL PLATE BEAM GUARD SHORT RADIUS 614.0345 LF | STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL 614.0370 EACH | STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL 614.0390 EACH | MGS GUARDRAIL 3 614.2300 LF | MGS THRIE BEAM TRANSITION 614.2500 LF | MGS GUARDRAIL TERMINAL EAT 614.2610 EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 121+03 - 121+56 | RT - SE QUAD | - | - | - | - | - | - | - | 1 | B-52-0268 |
| 0010 | 121+56 - 121+81 | RT - SE QUAD | - | - | - | - | - | 25.0 | - | - | B-52-0268 |
| 0010 | 121+81 - 122+21 | RT - SE QUAD | - | - | - | - | - | - | 40 | - | B-52-0268 |
| 0010 | 21+19'P' - 21+31'P' | LT - SW QUAD | - | - | - | - | 1 | - | - | - | B-52-0268 |
| 0010 | 122+00 - 122+20 | LT - SW QUAD | - | - | 50.0 | - | - | - | - | - | B-52-0268 |
| 0010 | 122+20 - 122+41 | LT - SW QUAD | 21 | - | - | - | - | - | - | - | B-52-0268 |
| 0010 | 125+47 - 125+68 | RT - NE QUAD | 21 | - | - | - | - | - | - | - | B-52-0268 |
| 0010 | 125+68 - 125+93 | RT - NE QUAD | - | - | 62.5 | - | - | - | - | - | B-52-0268 |
| 0010 | 10+66'B' - 10+79'B' | RT - NE QUAD | - | - | - | - | 1 | - | - | - | B-52-0268 |
| 0010 | 125+67 - 126+07 | LT - NW QUAD | - | - | - | - | - | - | 40 | - | B-52-0268 |
| 0010 | 126+07 - 126+32 | LT - NW QUAD | - | - | - | - | - | 25.0 | - | - | B-52-0268 |
| 0010 | 126+32 - 126+85 | LT - NW QUAD | - | - | - | - | - | - | - | 1 | B-52-0268 |
| 0010 | 215+48'NB' - 216+02'NB' | RT - SE QUAD | - | - | - | - | - | - | - | 1 | B-52-0269 |
| 0010 | 216+02'NB' - 218+77'NB' | RT - SE QUAD | - | - | - | - | - | 275.0 | - | - | B-52-0269 |
| 0010 | 218+77'NB' - 219+17'NB' | RT - SE QUAD | - | - | - | - | - | - | 40 | - | B-52-0269 |
| 0010 | 216+36'NB' - 216+86'NB' | LT | - | - | - | 1 | - | - | - | - | B-52-0269 |
| 0010 | 216+86'NB' - 218+20'NB' | LT | - | 162.5 | - | - | - | - | - | - | B-52-0269 |
| 0010 | 0+77 - 1+27 | RT | - | - | - | 1 | - | - | - | - | B-52-0269 |
| 0010 | 0+64 - 1+14 | LT - SW QUAD | - | - | - | 1 | - | - | - | - | B-52-0269 |
| 0010 | 218+49'NB' - 219+34'NB' | LT - SW QUAD | - | 100.0 | - | - | - | - | - | - | B-52-0269 |
| 0010 | 219+28'NB' - 219+49'NB' | LT - SW QUAD | 21 | - | - | - | - | - | - | - | B-52-0269 |
| 0010 | 220+83'NB' - 221+23'NB' | RT - NE QUAD | - | - | - | - | - | - | 40 | - | B-52-0269 |
| 0010 | 221+23'NB' - 221+35'NB' | RT - NE QUAD | - | - | - | - | - | 12.5 | - | - | B-52-0269 |
| 0010 | 221+35'NB' - 221+88'NB' | RT - NE QUAD | - | - | - | - | - | - | - | 1 | B-52-0269 |
| 0010 | 220+96'NB' - 221+36'NB' | LT - NW QUAD | - | - | - | - | - | - | 40 | - | B-52-0269 |
| 0010 | 221+36'NB' - 222+23'NB' | LT - NW QUAD | - | - | - | - | - | 87.5 | - | - | B-52-0269 |
| 0010 | 222+23'NB' - 222+76'NB' | LT - NW QUAD | - | - | - | - | - | - | - | 1 | B-52-0269 |
| 0010 | 109+36 - 109+89 | RT - SE QUAD | - | - | - | - | - | - | - | 1 | B-52-0270 |
| 0010 | 109+89 - 110+39 | RT - SE QUAD | - | - | - | - | - | 50.0 | - | - | B-52-0270 |
| 0010 | 110+39 - 110+79 | RT - SE QUAD | - | - | - | - | - | - | 40 | - | B-52-0270 |
| 0010 | 109+42 - 109+95 | LT - SW QUAD | - | - | - | - | - | - | - | 1 | B-52-0270 |
| 0010 | 109+95 - 110+20 | LT - SW QUAD | - | - | - | - | - | 25.0 | - | - | B-52-0270 |
| 0010 | 110+20 - 110+60 | LT - SW QUAD | - | - | - | - | - | - | 40 | - | B-52-0270 |
| 0010 | 113+55 - 113+76 | LT - NW QUAD | 21 | - | - | - | - | - | - | - | B-52-0270 |
| 0010 | 113+76 - 114+13 | LT - NW QUAD | - | 37.5 | - | - | - | - | - | - | B-52-0270 |
| 0010 | 114+13 - 114+62 | LT - NW QUAD | - | - | - | 1 | - | - | - | - | B-52-0270 |
| 0010 | 113+73 - 114+13 | RT - NE QUAD | - | - | - | - | - | - | 40 | - | B-52-0270 |
| 0010 | 114+13 - 114+38 | RT - NE QUAD | - | - | - | - | - | 25.0 | - | - | B-52-0270 |
| 0010 | 114+38 - 114+91 | RT - NE QUAD | - | - | - | - | - | - | - | 1 | B-52-0270 |
| | | TOTAL 0010 | 84 | 300.0 | 112.5 | 4 | 2 | 525.0 | 320 | 8 | |

## WATER

| CATEGORY | LOCATION | 624.0100 MGAL | REMARKS |
|---|---|---|---|
| 0010 | PROJECT | 420 | |
| | TOTAL 0010 | 420 | |

## MOBILIZATION EROSION CONTROL

| CATEGORY | LOCATION | MOBILIZATIONS EROSION CONTROL 628.1905 EACH | MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH |
|---|---|---|---|
| 0010 | PROJECT | 8 | 4 |
| | TOTAL 0010 | 8 | 4 |

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## FINISHING ITEMS

| CATEGORY | STATION TO STATION | LOCATION | TOPSOIL 625.0100 SY | SALVAGED TOPSOIL 625.0500 SY | SOIL STABILIZER TYPE A 628.6505 ACRE | FERTILIZER TYPE B 629.0210 CWT | SEEDING MIXTURE NO. 10 630.0110 LB | SEEDING MIXTURE NO. 40 630.0140 LB | SEEDING MIXTURE NO. 60 630.0160 LB | SEEDING TEMPORARY 630.0200 LB | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 120+20 - 122+35 | RT | - | 465 | 0.09 | 0.3 | - | 8.4 | - | - | B-52-0268 |
| 0010 | 120+20 - 121+90 | LT | - | 265 | 0.05 | 0.2 | - | 4.8 | - | - | B-52-0268 |
| 0010 | 121+90 - 122+55 | LT | - | 270 | 0.04 | 0.2 | - | 4.9 | - | - | B-52-0268 |
| 0010 | 125+30 - 126+15 | RT | - | 285 | 0.04 | 0.2 | - | 5.1 | - | - | B-52-0268 |
| 0010 | 125+55 - 129+50 | LT | - | 805 | 0.16 | 0.5 | - | 14.5 | - | - | B-52-0268 |
| 0010 | 126+15 - 129+50 | RT | - | 550 | 0.11 | 0.3 | - | 9.9 | - | - | B-52-0268 |
| 0010 | 203+70'NB' - 219+30'NB' | RT | - | 7790 | 1.43 | 4.9 | 72.8 | - | 32.4 | - | B-52-0269 |
| 0010 | 203+70'NB' - 218+30'NB' | LT | - | 6675 | 1.20 | 4.2 | 90.1 | - | - | - | B-52-0269 |
| 0010 | 218+30'NB' - 219+50'NB' | LT | - | 935 | 0.15 | 0.6 | 12.6 | - | - | - | B-52-0269 |
| 0010 | 220+80'NB' - 235+45'NB' | RT | - | 8620 | 1.68 | 5.4 | 116.4 | - | - | - | B-52-0269 |
| 0010 | 220+80'NB' - 228+30'NB' | LT | - | 5445 | - | 3.4 | 73.5 | - | - | - | B-52-0269 |
| 0010 | 228+30'NB' - 235+45'NB' | LT | - | 4395 | 0.91 | 2.8 | 59.3 | - | - | - | B-52-0269 |
| 0010 | 109+15 - 110+90 | RT | - | 325 | 0.05 | 0.2 | 4.4 | - | - | - | B-52-0270 |
| 0010 | 109+15 - 110+70 | LT | - | 445 | 0.06 | 0.3 | 6.0 | - | - | - | B-52-0270 |
| 0010 | 113+45 - 114+90 | LT | - | 960 | 0.15 | 0.6 | 13.0 | - | - | - | B-52-0270 |
| 0010 | 113+60 - 119+15 | RT | - | 1425 | 0.16 | 0.9 | 19.2 | - | - | - | B-52-0270 |
| 0010 | 114+90 - 119+15 | LT | - | 1055 | 0.22 | 0.7 | 14.2 | - | - | - | B-52-0270 |
| 0010 | UNDISTRIBUTED | | 4070 | 8140 | 1.25 | 5.5 | 96.0 | 9.4 | 5.6 | 140.0 | 10% Topsoil, 20% Else |
| 0010 | BORROW SITE | | - | 2035 | 0.25 | 1.4 | 29.0 | - | - | - | 5% Estimated |
| | | TOTAL 0010 | 4070 | 50885 | 8.00 | 33.0 | 607.0 | 57.0 | 38.0 | 140.0 | |

## SILT FENCE

| CATEGORY | STATION TO STATION | LOCATION | SILT FENCE 628.1504 LF | SILT FENCE MAINTENANCE 628.1520 LF | REMARKS |
|---|---|---|---|---|---|
| 0010 | 120+20 - 122+60 | RT | 255 | 255 | B-52-0268 |
| 0010 | 120+20 - 120+40 | LT | 25 | 25 | B-52-0268 |
| 0010 | 120+80 - 121+65 | LT | 100 | 100 | B-52-0268 |
| 0010 | 122+25 122+60 | LT | 75 | 75 | B-52-0268 |
| 0010 | 124+65 - 125+80 | RT | 210 | 210 | B-52-0268 |
| 0010 | 124+80 - 129+50 | LT | 505 | 505 | B-52-0268 |
| 0010 | 126+25 - 129+50 | RT | 375 | 375 | B-52-0268 |
| 0010 | 203+70'NB' - 207+13'NB' | RT | 370 | 370 | B-52-0269 |
| 0010 | 203+70'NB' - 205+45'NB' | LT | 195 | 195 | B-52-0269 |
| 0010 | 215+85'NB' - 219+65'NB' | RT | 455 | 455 | B-52-0269 |
| 0010 | 217+85'NB' - 218+15'NB' | LT | 100 | 100 | B-52-0269 |
| 0010 | 218+40'NB' - 219+75'NB' | LT | 235 | 235 | B-52-0269 |
| 0010 | 220+45'NB' - 223+00'NB' | RT | 345 | 345 | B-52-0269 |
| 0010 | 220+50'NB' - 228+95'NB' | LT | 1000 | 1000 | B-52-0269 |
| 0010 | 223+65'NB' - 231+95'NB' | RT | 815 | 815 | B-52-0269 |
| 0010 | 229+90'NB' - 233+85'NB' | LT | 530 | 530 | B-52-0269 |
| 0010 | 109+15 - 111+00 | RT | 220 | 220 | B-52-0270 |
| 0010 | 109+15 - 111+00 | LT | 220 | 220 | B-52-0270 |
| 0010 | 113+10 - 114+90 | LT | 345 | 345 | B-52-0270 |
| 0010 | 113+10 - 119+15 | RT | 635 | 635 | B-52-0270 |
| 0010 | 114+90 - 119+15 | LT | 485 | 485 | B-52-0270 |
| | UNDISTRIBUTED | | 1875 | 1875 | 25% Estimated |
| | TOTAL 0010 | | 9370 | 9370 | |

## EROSION BALES

| CATEGORY | STATION | LOCATION | 628.1104 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 121+45 | LT | 2 | B-52-0268 |
| 0010 | 122+55 | LT | 2 | B-52-0268 |
| 0010 | 126+50 | RT | 2 | B-52-0268 |
| 0010 | 203+75'NB' | LT | 2 | B-52-0269 |
| 0010 | 209+00'NB' | LT | 7 | B-52-0269 |
| 0010 | 211+95'NB' | RT | 2 | B-52-0269 |
| 0010 | 212+00'NB' | LT | 2 | B-52-0269 |
| 0010 | 214+05'NB' | RT | 2 | B-52-0269 |
| 0010 | 216+75'NB' | RT | 5 | B-52-0269 |
| 0010 | 217+60'NB' | LT | 7 | B-52-0269 |
| 0010 | 217+90'NB' | LT | 2 | B-52-0269 |
| 0010 | 219+25'NB' | LT | 5 | B-52-0269 |
| 0010 | 219+45'NB' | RT | 2 | B-52-0269 |
| 0010 | 222+75'NB' | RT | 2 | B-52-0269 |
| 0010 | 223+65'NB' | RT | 2 | B-52-0269 |
| 0010 | 231+65'NB' | RT | 2 | B-52-0269 |
| 0010 | 232+65'NB' | RT | 2 | B-52-0269 |
| 0010 | 233+70'NB' | RT | 2 | B-52-0269 |
| 0010 | 115+40 | LT | 2 | B-52-0270 |
| | UNDISTRIBUTED | | 14 | 25% Estimated |
| | TOTAL 0010 | | 68 | |

## EROSION MAT URBAN CLASS I TYPE B

| CATEGORY | STATION TO STATION | LOCATION | 628.2008 SY | REMARKS |
|---|---|---|---|---|
| 0010 | 122+00 - 122+30 | RT | 40 | B-52-0268 |
| 0010 | 122+30 - 122+50 | LT | 55 | B-52-0268 |
| 0010 | 125+35 - 125+65 | RT | 40 | B-52-0268 |
| 0010 | 125+60 - 125+85 | LT | 20 | B-52-0268 |
| 0010 | 219+00'NB' - 219+15'NB' | RT | 105 | B-52-0269 |
| 0010 | 219+05'NB' - 219+35'NB' | LT | 185 | B-52-0269 |
| 0010 | 220+85'NB' - 221+10'NB' | RT | 250 | B-52-0269 |
| 0010 | 220+81'NB' - 227+97'NB' | LT | 5445 | B-52-0269 |
| 0010 | 110+20 - 110+70 | LT | 140 | B-52-0270 |
| 0010 | 110+50 - 110+90 | RT | 80 | B-52-0270 |
| 0010 | 113+45 - 114+00 | LT | 210 | B-52-0270 |
| 0010 | 113+60 - 115+55 | RT | 640 | B-52-0270 |
| | UNDISTRIBUTED | | 1800 | 25% Estimated |
| | TOTAL 0010 | | 9010 | |

## EROSION MAT CLASS II TYPE C

| CATEGORY | STATION TO STATION | LOCATION | 628.2027 SY | REMARKS |
|---|---|---|---|---|
| 0010 | 125+15 - 125+50 | RT | 30 | B-52-0268 |
| 0010 | 206+90'NB' - 211+98'NB' | RT | 445 | B-52-0269 |
| 0010 | 207+75'NB' - 212+04'NB' | LT | 390 | B-52-0269 |
| 0010 | 212+50'NB' - 217+55'NB' | LT | 455 | B-52-0269 |
| 0010 | 212+60'NB' - 214+09'NB' | RT | 135 | B-52-0269 |
| 0010 | 214+64'NB' - 216+75'NB' | RT | 180 | B-52-0269 |
| 0010 | 219+02'NB' - 219+47'NB' | RT | 40 | B-52-0269 |
| 0010 | 222+77'NB' - 222+95'NB' | RT | 15 | B-52-0269 |
| 0010 | 223+64'NB' - 223+84'NB' | RT | 20 | B-52-0269 |
| 0010 | 230+61'NB' - 232+00'NB' | RT | 120 | B-52-0269 |
| 0010 | 232+59'NB' - 233+13'NB' | RT | 45 | B-52-0269 |
| 0010 | 233+65'NB' - 233+77'NB' | RT | 10 | B-52-0269 |
| | UNDISTRIBUTED | | 470 | 25% Estimated |
| | TOTAL 0010 | | 2355 | |

## INLET PROTECTION TYPE C

| CATEGORY | STATION | LOCATION | 628.7015 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 127+45 | LT | 1 | B-52-0268 |
| 0010 | 128+00 | RT | 1 | B-52-0268 |
| 0010 | 128+00 | LT | 1 | B-52-0268 |
| 0010 | 129+13 | RT | 1 | B-52-0268 |
| | | TOTAL 0010 | 4 | |

## TEMPORARY DITCH CHECKS

| CATEGORY | STATION TO STATION | LOCATION | 628.7504 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 125+30 | RT | 10 | B-52-0268 |
| 0010 | 206+90'NB' - 216+75'NB' | RT | 50 | B-52-0269 |
| 0010 | 207+75'NB' - 217+55'NB' | LT | 40 | B-52-0269 |
| 0010 | 230+60'NB' - 233+75'NB' | RT | 20 | B-52-0269 |
| 0010 | 114+00 | | 10 | B-52-0270 |
| 0010 | UNDISTRIBUTED | | 40 | 30% Estimated |
| | | TOTAL 0010 | 170 | |

## CULVERT PIPE CHECKS

| CATEGORY | STATION | LOCATION | 628.7555 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 121+50 | LT | 2 | B-52-0268 |
| 0010 | 126+45 | RT | 5 | B-52-0268 |
| 0010 | 212+00'NB' | RT | 3 | B-52-0269 |
| 0010 | 212+05'NB' | LT | 2 | B-52-0269 |
| 0010 | 214+10'NB' | RT | 3 | B-52-0269 |
| 0010 | 217+90'NB' | LT | 7 | B-52-0269 |
| 0010 | 223+60'NB' | RT | 5 | B-52-0269 |
| 0010 | 232+55'NB' | RT | 3 | B-52-0269 |
| 0010 | 233+65'NB' | RT | 2 | B-52-0269 |
| 0010 | 115+35 | LT | 5 | B-52-0270 |
| | | TOTAL 0010 | 37 | |

## TRACKING PADS

| CATEGORY | LOCATION | 628.7560 EACH | REMARKS |
|---|---|---|---|
| 0010 | UNDISTRIBUTED | 3 | PROJECT |
| | TOTAL 0010 | 3 | |

## MARKERS CULVERT END

| CATEGORY | STATION | LOCATION | 633.5200 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 121+51 | LT | 1 | B-52-0268 |
| 0010 | 122+10 | LT | 1 | B-52-0268 |
| 0010 | 125+73 | RT | 1 | B-52-0268 |
| 0010 | 126+44 | RT | 1 | B-52-0268 |
| 0010 | 212+00'NB' | RT | 1 | B-52-0269 |
| 0010 | 212+08'NB' | LT | 1 | B-52-0269 |
| 0010 | 212+48'NB' | LT | 1 | B-52-0269 |
| 0010 | 212+56'NB' | RT | 1 | B-52-0269 |
| 0010 | 214+13'NB' | RT | 1 | B-52-0269 |
| 0010 | 214+60'NB' | RT | 1 | B-52-0269 |
| 0010 | 217+77'NB' | LT | 1 | B-52-0269 |
| 0010 | 217+80'NB' | RT | 1 | B-52-0269 |
| 0010 | 217+96'NB' | LT | 1 | B-52-0269 |
| 0010 | 218+91'NB' | LT | 1 | B-52-0269 |
| 0010 | 218+99'NB' | RT | 1 | B-52-0269 |
| 0010 | 223+01'NB' | RT | 1 | B-52-0269 |
| 0010 | 223+59'NB' | RT | 1 | B-52-0269 |
| 0010 | 232+04'NB' | RT | 1 | B-52-0269 |
| 0010 | 232+56'NB' | RT | 1 | B-52-0269 |
| 0010 | 233+15'NB' | RT | 1 | B-52-0269 |
| 0010 | 233+63'NB' | RT | 1 | B-52-0269 |
| 0010 | 114+47 | LT | 1 | B-52-0270 |
| 0010 | 115+34 | LT | 1 | B-52-0270 |
| | | TOTAL 0010 | 23 | |

## GEOGRID TYPE SR

| CATEGORY | STATION TO STATION | LOCATION | 645.0220 SY | REMARKS |
|---|---|---|---|---|
| 0010 | 120+20 - 122+50 | ML | 1130 | B-52-0268 - SOUTH |
| 0010 | 125+38 - 129+50 | ML | 1830 | B-52-0268 - NORTH |
| | | TOTAL 0010 | 2960 | |

## PERMANENT SIGNING SUMMARY

| SIGN NUMBER | STATION | LOCATION | SIGN CODE | SIZE | DESCRIPTION | ORDER LINES | POSTS WOOD 4X6-INCH X 14-FT 634.0614 EACH | POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH | POSTS WOOD 4X6-INCH X 18-FT 634.0618 EACH | SIGNS TYPE II REFLECTIVE H 637.2210 SF | REMOVING SIGNS TYPE II 638.2602 EACH | REMOVING SMALL SIGN SUPPORTS 638.3000 EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-1R | 215+85'NB' | STH 80 RT | J1-1 | 24"x39" | Junction Assembly | JCT | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | 56 | - | - | - | - | - | - | |
| 2-2 | 216+00'NB' | STH 80 LT | W14-3 | 48"x36" | No Passing Zone | - | 1.00 | - | - | 6.00 | - | - | |
| 3-1 | 217+00'NB' | STH 80 RT | J1-1 | 24"x39" | Junction Assembly | JCT | - | 1.00 | - | 6.50 | - | - | |
| - | - | - | - | - | - | 56 | - | - | - | - | - | - | |
| 3-2 | 218+10'NB' | Hansberry RT | R1-1 | 30"x30" | Stop | - | 1.00 | - | - | 5.18 | - | - | |
| 3-3R | 218+20'NB' | Hansberry RT | R1-1 | 30"x30" | Stop | - | - | - | - | - | 1.00 | 1.00 | |
| 3-4 | 218+90'NB' | STH 80 RT | J2-2 | 48"x57" | Route Turn Assembly | WEST-NORTH | - | - | 1.00 | 19.00 | - | - | |
| - | - | - | - | - | - | 56-80 | - | - | - | - | - | - | |
| - | - | - | - | - | - | [LT]-[UA] | - | - | - | - | - | - | |
| 3-5R | 219+10'NB' | STH 80 LT | W14-3 | 48"x36" | No Passing Zone | - | - | - | - | - | 1.00 | 1.00 | |
| 3-6R | 220+60'NB' | STH 80 RT | J2-2 | 48"x57" | Route Turn Assembly | WEST-NORTH | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | 56-80 | - | - | - | - | - | - | |
| - | - | - | - | - | - | [LT]-[UA] | - | - | - | - | - | - | |
| 3-7 | 221+25'NB' | STH 80 RT | D1-2 | 66"x30" | Two Destinations (Arrows) | [UA] Hillsboro | 1.00 | 1.00 | - | 13.75 | - | - | |
| - | - | - | - | - | - | [LA] Viola | - | - | - | - | - | - | |
| 3-8R | 223+00'NB' | STH 80 RT | D1-2 | 66"x30" | Two Destinations (Arrows) | [UA] Hillsboro | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | [LA] Viola | - | - | - | - | - | - | |
| 3-9 | 223+50'NB' | STH 80 LT | D2-1 | 108"x15" | Destination/Distance (One) | Richland Center 4 | 2.00 | - | - | 11.25 | - | - | |
| 4-1 | 224+50'NB' | STH 80 LT | R2-1 | 24"x30" | Speed Limit __ MPH | 55 | 1.00 | - | - | 5.00 | - | - | |
| 4-2 | 226+50'NB' | STH 80 LT | J4-1 | 24"x36" | Reassurance Assembly | SOUTH | - | 1.00 | - | 6.00 | - | - | |
| - | - | - | - | - | - | 80 | - | - | - | - | - | - | |
| 4-3R | 226+80'NB' | STH 80 LT | J4-1 | 24"x36" | Reassurance Assembly | SOUTH | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | 80 | - | - | - | - | - | - | |
| 4-4 | 227+50'NB' | STH 80 RT | J3-1 | 24"x57" | Directional Assembly | WEST | - | - | 1.00 | 9.50 | - | - | |
| - | - | - | - | - | - | 56 | - | - | - | - | - | - | |
| - | - | - | - | - | - | [LA] | - | - | - | - | - | - | |
| 4-5R | 227+65'NB' | STH 80 RT | J3-1 | 24"x57" | Directional Assembly | WEST | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | 56 | - | - | - | - | - | - | |
| - | - | - | - | - | - | [LA] | - | - | - | - | - | - | |
| 4-6R | 227+80'NB' | STH 56 RT | J3-2 | 48"x57" | Directional Assembly | NORTH-SOUTH | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | 80-80 | - | - | - | - | - | - | |
| - | - | - | - | - | - | [LA]-[RA] | - | - | - | - | - | - | |
| 4-7R | 227+85'NB' | STH 80 RT | W1-7 | 48"x24" | Night Arrow (Double) | - | - | - | - | - | 1.00 | 1.00 | |
| 4-8 | 227+90'NB' | STH 56 RT | J3-2 | 48"x57" | Directional Assembly | NORTH-SOUTH | - | 1.00 | - | 19.00 | - | - | |
| - | - | - | - | - | - | 80-80 | - | - | - | - | - | - | |
| - | - | - | - | - | - | [LA]-[RA] | - | - | - | - | - | - | |
| 4-9R | 227+90'NB' | STH 56 RT | R1-1 | 36"x36" | STOP | - | - | - | - | - | 1.00 | 1.00 | |
| 4-10 | 227+95'NB' | STH 56 RT | R1-1 | 36"x36" | STOP | - | 1.00 | - | - | 7.46 | - | - | |
| 4-11 | 228+00'NB' | STH 80 RT | W1-7 | 48"x24" | Night Arrow (Double) | - | 1.00 | - | - | 8.00 | - | - | |
| 4-12 | 607+00 | STH 56 RT | W14-3 | 48"x36" | No Passing Zone | - | 1.00 | - | - | 6.00 | - | - | |
| 4-13R | 606+75 | STH 56 RT | W14-3 | 48"x36" | No Passing Zone | - | - | - | - | - | 1.00 | 1.00 | |
| | | | | | | Page 1 Subtotal | 9.00 | 4.00 | 2.00 | 122.64 | 11.00 | 11.00 | |

PERMANENT SIGNING SUMMARY CONTINUED

| SIGN NUMBER | STATION | LOCATION | SIGN CODE | SIZE | DESCRIPTION | ORDER LINES | POSTS WOOD 4X6-INCH X 14-FT 634.0614 EACH | POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH | POSTS WOOD 4X6-INCH X 18-FT 634.0618 EACH | SIGNS TYPE II REFLECTIVE H 637.2210 SF | REMOVING SIGNS TYPE II 638.2602 EACH | REMOVING SMALL SIGN SUPPORTS 638.3000 EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4-14 | 607+25 | STH 56 LT | J4-1 | 24"x36" | Reassurance Assembly | WEST | 1.00 | - | - | 9.50 | - | - | |
| - | - | - | - | - | - | 56 | - | - | - | - | - | - | |
| 4-15R | 229+00'NB' | STH 80 LT | J3-1 | 24"x57" | Directional Assembly | WEST | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | 56 | - | - | - | - | - | - | |
| - | - | - | - | - | - | [RA] | - | - | - | - | - | - | |
| 4-16R | 606+75 | STH 56 LT | J4-1 | 24"x36" | Reassurance Assembly | WEST | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | 56 | - | - | - | - | - | - | |
| 4-17 | 229+25'NB' | STH 80 LT | J3-1 | 24"x57" | Directional Assembly | WEST | - | - | 1.00 | 9.50 | - | - | |
| - | - | - | - | - | - | 56 | - | - | - | - | - | - | |
| - | - | - | - | - | - | [RA] | - | - | - | - | - | - | |
| 4-18 | 229+50'NB' | STH 80 RT | J4-1 | 24"x36" | Reassurance Assembly | NORTH | - | 1.00 | - | 9.50 | - | - | |
| - | | - | - | - | - | 80 | - | - | - | - | - | - | |
| 4-19R | 229+65'NB' | STH 80 RT | J4-1 | 24"x36" | Reassurance Assembly | NORTH | - | - | - | - | 1.00 | 1.00 | |
| - | | - | - | - | - | 80 | - | - | - | - | - | - | |
| 5-1R | 231+70'NB' | STH 80 RT | D2-2 | 72"x30" | Destination/Distance (Two) | Rockbridge 6 | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | Hillsboro 22 | - | - | - | - | - | - | |
| 5-2 | 231+75'NB' | STH 80 RT | R2-1 | 24"x30" | Speed Limit __ MPH | 55 | - | 1.00 | - | 5.00 | - | - | |
| 5-3 | 234+00'NB' | STH 80 RT | D2-1 | 72"x15" | Destination/Distance (One) | Hillsboro 21 | 2.00 | - | - | 7.50 | - | - | |
| 5-4 | 234+25'NB' | STH 80 LT | D1-2 | 102"x30" | Two Destinations (Arrows) | [UA] Richland Center | 1.00 | 1.00 | - | 21.25 | - | - | |
| - | - | - | - | - | - | Viola [LA] | - | - | - | - | - | - | |
| 5-5R | 234+30'NB' | STH 80 LT | D1-2 | 102"x30" | Two Destinations (Arrows) | [UA] Richland Center | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | Viola [LA] | - | - | - | - | - | - | |
| 6-1 | 109+15 | CTH D LT | R1-1 | 30"x30" | Stop | - | 1.00 | - | - | 5.18 | - | - | |
| 6-2R | 109+15 | CTH D LT | R1-1 | 30"x30" | Stop | - | - | - | - | - | 1.00 | 1.00 | |
| 6-3 | 109+20 | CTH D LT | J13-1 | 24"x45" | Directional without Cardinal | 80 | - | 1.00 | - | 7.50 | - | - | |
| - | - | - | - | - | - | [DBA] | - | - | - | - | - | - | |
| 6-4R | 109+20 | CTH D LT | J13-1 | 24"x45" | Directional without Cardinal | 80 | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | [DBA] | - | - | - | - | - | - | |
| 6-5R | 110+05 | STH 80 RT | J4-1 | 24"x36" | Reassurance Assembly | NORTH | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | 80 | - | - | - | - | - | - | |
| 6-6 | 110+25 | STH 80 RT | J4-2 | 48"x36" | Reassurance Assembly | NORTH-[BLANK] | - | 1.00 | - | 12.00 | - | - | |
| - | - | - | - | - | - | 80-D | - | - | - | - | - | - | |
| 6-7R | 114+55 | IRISH DR RT | R1-1 | 30"x30" | Stop | - | - | - | - | - | 1.00 | 1.00 | |
| 6-8 | 114+60 | IRISH DR RT | R1-1 | 30"x30" | Stop | - | 1.00 | - | - | 5.18 | - | - | |
| 7-1R | 116+55 | STH 80 LT | J12-1 | 24"x45" | Route Turn without Cardinal | D | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | [LT] | - | - | - | - | - | - | |
| 7-2 | 118+00 | STH 80 LT | J12-1 | 24"x45" | Route Turn without Cardinal | D | - | 1.00 | - | 7.50 | - | - | |
| - | - | - | - | - | - | [LT] | - | - | - | - | - | - | |
| | | | | | | Page 2 Subtotal | 6.00 | 6.00 | 1.00 | 99.61 | 10.00 | 10.00 | |

PERMANENT SIGNING SUMMARY CONTINUED

| SIGN NUMBER | STATION | LOCATION | SIGN CODE | SIZE | DESCRIPTION | ORDER LINES | POSTS WOOD 4X6-INCH X 14-FT 634.0614 EACH | POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH | POSTS WOOD 4X6-INCH X 18-FT 634.0618 EACH | SIGNS TYPE II REFLECTIVE H 637.2210 SF | REMOVING SIGNS TYPE II 638.2602 EACH | REMOVING SMALL SIGN SUPPORTS 638.3000 EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8-1 | 120+25 | STH 80 LT | J13-2 | 48"x45" | Directional without Cardinal | D-I | - | 1.00 | - | 15.00 | - | - | |
| - | - | - | - | - | - | [U/RA]-[RA] | - | - | - | - | - | - | |
| 8-2R | 120+25 | STH 80 LT | J13-2 | 48"x45" | Directional without Cardinal | D-I | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | [U/RA]-[RA] | - | - | - | - | - | - | |
| 8-3 | 120+50 | STH 80 RT | J4-2 | 48"x36" | Reassurance Assembly | North-[BLANK] | - | 1.00 | - | 12.00 | - | - | |
| - | - | - | - | - | - | 80-I | - | - | - | - | - | - | |
| 8-4R | 121+20 | STH 80 RT | J4-1 | 24"x36" | Reassurance Assembly | NORTH | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | 80 | - | - | - | - | - | - | |
| 8-5 | 121+50 | STH 80 RT | D7-68-L | 60"x36" | [Name County Park]/Arrow Left | Pier | - | 2.00 | - | 15.00 | - | - | |
| 8-6 | 121+60 | STH 80 LT | R1-1 | 30"x30" | Stop | - | - | 1.00 | - | 5.18 | - | - | |
| 8-7R | 121+65 | STH 80 LT | R1-1 | 30"x30" | Stop | - | - | - | - | - | 1.00 | 1.00 | |
| 8-8R | 121+75 | STH 80 RT | D7-68-L | 60"x36" | [Name County Park]/Arrow Left | Pier | - | - | - | - | 1.00 | 1.00 | |
| 8-9R | 122+15 | STH 80 RT | | | Lake or River Name | Pine River | - | - | - | - | 1.00 | 1.00 | |
| 8-10 | 122+15 | STH 80 RT | I3-1 | 36"x24" | Lake or River Name | Pine River | 1.00 | - | - | 6.00 | - | - | |
| 8-11R | 122+25 | STH 80 RT | W5-52-R | 12"x36" | Clearance Striper Down Left | - | - | - | - | - | 1.00 | 1.00 | |
| 8-12R | 122+25 | STH 80 LT | D7-68-R | 60"x36" | [Name County Park]/Arrow Right | Pier | - | - | - | - | 1.00 | 1.00 | |
| 8-13 | 122+35 | STH 80 LT | D7-68-R | 60"x36" | [Name County Park]/Arrow Right | Pier | - | 2.00 | - | 15.00 | - | - | |
| 8-14R | 122+40 | STH 80 LT | W5-52-L | 12"x36" | Clearance Striper Down Right | - | - | - | - | - | 1.00 | 1.00 | |
| 9-1R | 124+85 | STH 80 RT | W5-52-L | 12"x36" | Clearance Striper Down Right | - | - | - | - | - | 1.00 | 1.00 | |
| 9-2R | 125+10 | STH 80 LT | W5-52-R | 12"x36" | Clearance Striper Down Left | - | - | - | - | - | 1.00 | 1.00 | |
| 9-3R | 125+25 | STH 80 LT | | | Lake or River Name | Pine River | - | - | - | - | 1.00 | 1.00 | |
| 9-4 | 125+65 | STH 80 RT | I3-1 | 36"x24" | Lake or River Name | Pine River | 1.00 | - | - | 6.00 | - | - | |
| 9-5R | 125+75 | STH 80 LT | D1-1 | 78"x15" | One Destination (Arrow) | Bloom City [RA] | - | - | - | - | 1.00 | 1.00 | |
| 9-6 | 126+25 | STH 80 LT | D1-1 | 78"x15" | One Destination (Arrow) | Bloom City [RA] | 2.00 | - | - | 8.13 | - | - | |
| 9-7R | 126+30 | BRIDGE ST LT | R1-1 | 30"x30" | Stop | - | - | - | - | - | 1.00 | 1.00 | |
| 9-8 | 126+35 | BRIDGE ST LT | R1-1 | 30"x30" | Stop | - | - | - | 1.00 | - | 5.18 | - | - |
| 9-9R | 127+35 | STH 80 LT | J12-1 | 24"x45" | Route Turn without Cardinal | I | - | - | - | - | 1.00 | 1.00 | |
| - | - | - | - | - | - | [RT] | - | - | - | - | - | - | |
| 9-10 | 127+35 | STH 80 LT | J12-1 | 24"x45" | Route Turn without Cardinal | I | - | 1.00 | - | 7.50 | - | - | |
| - | - | - | - | - | - | [RT] | - | - | - | - | - | - | |
| 9-11R | 129+00 | STH 80 RT | R2-1 | 24"x30" | Speed Limit __ MPH | 35 | - | - | - | - | 1.00 | 1.00 | |
| 9-12 | 129+00 | STH 80 RT | R2-1 | 24"x30" | Speed Limit __ MPH | 35 | - | 1.00 | - | 5.00 | - | - | |
| 9-13R | 129+00 | STH 80 RT | R2-1 | 24"x30" | Speed Limit __ MPH | 35 | - | - | - | - | 1.00 | 1.00 | |
| 9-14 | 129+00 | STH 80 RT | R2-1 | 24"x30" | Speed Limit __ MPH | 35 | - | 1.00 | - | 5.00 | - | - | |
| | | | | | | Page 3 Subtotal | 4.00 | 11.00 | 0.00 | 104.99 | 16.00 | 16.00 | |
| | | | | | | Page 1 Subtotal | 9.00 | 4.00 | 2.00 | 122.64 | 11.00 | 11.00 | |
| | | | | | | Page 2 Subtotal | 6.00 | 6.00 | 1.00 | 99.61 | 10.00 | 10.00 | |
| | | | | | | Page 3 Subtotal | 4.00 | 11.00 | 0.00 | 104.99 | 16.00 | 16.00 | |
| | | | | | | TOTAL 0010 | 19 | 21 | 3 | 327.24 | 37 | 37 | |

## TRAFFIC CONTROL

| CATEGORY | LOCATION | TRAFFIC CONTROL DRUMS 643.0300 DAY | TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY | TRAFFIC CONTROL WARNING LIGHTS TYPE A 643.0705 DAY | TRAFFIC CONTROL WARNING LIGHTS TYPE C 643.0715 DAY | TRAFFIC CONTROL SIGNS 643.0900 DAY | TRAFFIC CONTROL COVERING SIGNS TYPE II *One Cycle 643.0920 EACH | TRAFFIC CONTROL SIGNS PCMS 643.1050 DAY | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | PROJECT | - | - | - | - | 6810 | - | 14 | PROJECT |
| 0010 | B-52-0268 | - | 1672 | 3344 | - | 988 | - | - | - |
| 0010 | B-52-0269 | 10300 | - | - | 1030 | 800 | - | - | STAGE 1 |
| 0010 | B-52-0269 | 1755 | - | - | 176 | 120 | - | - | STAGE 2 |
| 0010 | B-52-0269 | 2072 | - | - | 207 | 112 | - | - | STAGE 3 |
| 0010 | B-52-0269 | 777 | - | - | 78 | 168 | - | - | STAGE 4 |
| 0010 | B-52-0270 | - | 1860 | 3720 | - | 1209 | - | - | - |
| 0010 | PROJECT | - | 4000 | 8000 | - | 40500 | 15 | 14 | PROJECT DETOUR |
| 0010 | PROJECT | - | 252 | 504 | - | 2968 | 5 | 14 | STAGE 3 DETOUR |
| | TOTAL 0010 | 14904 | 7784 | 15568 | 1491 | 53675 | 20 | 42 | |

## MARKING SUMMARY

| CATEGORY | STATION | TO | STATION | LOCATION | MARKING LINE EPOXY 4-INCH 646.1020 WHITE LF | MARKING LINE EPOXY 4-INCH 646.1020 YELLOW LF | MARKING LINE EPOXY 8-INCH 646.3020 LF | MARKING ARROW EPOXY 646.5020 EACH | MARKING WORD EPOXY 646.5120 EACH | MARKING STOP LINE EPOXY 18-INCH 646.6120 LF | MARKING DIAGONAL EPOXY 12-INCH 646.7120 LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 203+70'NB' | - | 235+45'NB' | RT | 3165 | - | - | - | - | - | - | STH 80 RT EDGELINE |
| 0010 | 203+70'NB' | - | 227+86'NB' | CL | - | 6021 | - | - | - | - | - | STH 80 CL YELLOW |
| 0010 | 228+50'NB' | - | 234+45'NB' | CL | - | 2266 | - | - | - | - | - | STH 80 CL YELLOW |
| 0010 | 203+70'NB' | - | 217+80'NB' | LT | 1414 | - | - | - | - | - | - | STH 80 LT EDGELINE |
| 0010 | 219+02'NB' | - | 227+61'NB' | LT | 750 | - | - | - | - | - | - | STH 80 LT EDGELINE |
| 0010 | 229+06'NB' | - | 235+45'NB' | LT | 645 | - | - | - | - | - | - | STH 80 LT EDGELINE |
| 0010 | 224+00'NB' | - | 227+51'NB' | | - | - | 351 | - | - | - | - | CHANNELIZING LT LANE |
| 0010 | 229+05'NB' | - | 232+63'NB' | | - | - | 361 | - | - | - | - | CHANNELIZING RT LANE |
| 0010 | 224+30'NB' | - | 227+85'NB' | ML | - | - | - | - | - | - | 175 | MEDIAN DIAGONALS |
| 0010 | 228+50'NB' | - | 232+40'NB' | ML | - | - | - | - | - | - | 292 | MEDIAN DIAGONALS |
| 0010 | 224+24'NB' | | | | - | - | - | 1 | - | - | - | LT LANE |
| 0010 | 225+07'NB' | | | | - | - | - | - | 1 | - | - | LT LANE 'ONLY' |
| 0010 | 225+25'NB' | | | | - | - | - | 1 | - | - | - | LT LANE |
| 0010 | 226+58'NB' | | | | - | - | - | - | 1 | - | - | LT LANE 'ONLY' |
| 0010 | 227+27'NB' | | | | - | - | - | 1 | - | - | - | LT LANE |
| 0010 | 606+20 | - | 608+19 | RT | 205 | - | - | - | - | - | - | STH 56 RT EDGELINE |
| 0010 | 606+20 | - | 608+46 | CL | - | 453 | - | - | - | - | - | STH 56 CL YELLOW |
| 0010 | 606+20 | - | 607+71 | LT | 146 | - | - | - | - | - | - | STH 56 LT EDGELINE |
| 0010 | 608+46 | | | | - | - | - | - | - | 30 | - | STH 56 STOP LINE |
| 0010 | 109+15 | - | 119+15 | CL | - | 250 | - | - | - | - | - | STH 80 CL YELLOW (SKIPS) |
| 0010 | 109+15 | - | 114+62 | LT | 550 | - | - | - | - | - | - | STH 80 LT EDGELINE |
| 0010 | 109+51 | - | 119+15 | RT | 964 | - | - | - | - | - | - | STH 80 RT EDGELINE |
| 0010 | 115+68 | - | 119+15 | LT | 293 | - | - | - | - | - | - | STH 80 LT EDGELINE |
| 0010 | 120+20 | - | 129+50 | CL | - | 1860 | - | - | - | - | - | STH 80 CL YELLOW |
| 0010 | | | | | | | | | | | | |
| 0010 | | | | SUBTOTAL | 8132 | 10850 | | | | | | |
| | | | | TOTAL 0010 | 18982 | | 712 | 3 | 2 | 30 | 467 | |

## MARKING REMOVAL LINE 4-INCH

| CATEGORY | STATION TO STATION | LOCATION | 646.9000 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 223+02'NB' - 224+85'NB' | RT (EXIST) | 182 | B-52-0269 |
| 0010 | 223+12'NB' - 233+50'NB' | CL (EXIST) | 1041 | B-52-0269 |
| 0010 | 232+04'NB' - 233+50'NB' | RT (EXIST) | 146 | B-52-0269 |
| | | TOTAL 0010 | 1369 | |

## LOCATING NO-PASSING ZONES

| CATEGORY | LOCATION | 648.0100 MI | REMARKS |
|---|---|---|---|
| 0010 | STH 80 | 1.00 | 5042-05-81; B-52-0269 |
| | TOTAL 0010 | 1.00 | |

## TEMPORARY MARKING LINE PAINT 4-INCH

| CATEGORY | STATION TO STATION | LOCATION | 649.0105 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 203+70'NB' - 235+45'NB' | CL | 6310 | B-52-0269 - DOUBLE YELLOW |
| | | TOTAL 0010 | 6310 | |

## CONSTRUCTION STAKING SUMMARY

| CATEGORY | STATION TO STATION | LOCATION | CONSTRUCTION STAKING SUBGRADE 650.4500 LF | CONSTRUCTION STAKING BASE 650.5000 LF | CONSTRUCTION STAKING SLOPE STAKES 650.9920 LF | REMARKS |
|---|---|---|---|---|---|---|
| 0010 | 203+70'NB' - 219+25'NB' | ML | 1555 | 1555 | 1555 | |
| 0010 | 220+92'NB' - 235+45'NB' | ML | 1283 | 1453 | 1453 | |
| 0010 | 0+23'H' - 1+73'H' | HANSBERRY LN | 150 | 150 | 150 | |
| 0010 | 606+20 - 608+52 | STH 56 | 232 | 232 | 232 | |
| 0010 | 109+15 - 110+80 | ML | 165 | 165 | 165 | |
| 0010 | 113+53 - 119+15 | ML | 562 | 562 | 562 | |
| 0010 | 0+75'ID' - 2+32'ID' | IRISH DR | 157 | 157 | 157 | |
| 0010 | 120+20 - 122+39 | ML | 219 | 219 | 219 | |
| 0010 | 125+49 - 129+50 | ML | 401 | 401 | 401 | |
| 0010 | 21+13'P' - 21+73'P' | PARK ENT. | 60 | 60 | 60 | |
| 0010 | 10+16'B' - 11+00'B' | BRIDGE ST | 84 | 84 | 84 | |
| | | TOTAL 0010 | 4868 | 5038 | 5038 | |

## CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

| CATEGORY | STATION TO STATION | LOCATION | 650.5500 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 120+28 - 121+25 | RT - SE QUAD | 88 | |
| 0010 | 121+25 - 122+10 | RT - SE QUAD | 86 | |
| 0010 | 120+20 - 120+40 | LT | 19 | |
| 0010 | 120+40 - 120+83 | LT | 43 | |
| 0010 | 120+83 - 121+71 | LT | 101 | |
| 0010 | 122+00 - 122+17 | LT - SW QUAD | 62 | |
| 0010 | 122+17 - 122+28 | LT - SW QUAD | 11 | |
| 0010 | 125+49 - 125+68 | RT - NE QUAD | 19 | |
| 0010 | 125+68 - 125+92 | RT - NE QUAD | 78 | |
| 0010 | 126+26 - 129+50 | RT | 339 | |
| 0010 | 125+70 - 126+73 | LT - NW QUAD | 103 | |
| 0010 | 126+73 - 127+75 | LT - NW QUAD | 102 | |
| 0010 | 127+75 - 129+50 | LT - NW QUAD | 176 | |
| 0010 | 205+37'NB' - 205+76'NB' | LT | 39 | |
| 0010 | 205+76'NB' - 206+15'NB' | LT | 39 | |
| 0010 | 206+15'NB' - 208+37'NB' | LT | 222 | |
| 0010 | 220+85'NB' - 221+03'NB' | RT - NE QUAD | 18 | |
| 0010 | 607+21 - 608+28 | LT - STH 56 | 143 | |
| 0010 | 607+69 - 608+64 | RT - STH 56 | 114 | |
| 0010 | 109+15 - 109+51 | RT | 41 | |
| 0010 | 113+57 - 113+75 | LT - NW QUAD | 18 | |
| 0010 | 113+75 - 113+93 | RT - NE QUAD | 18 | |
| | | TOTAL 0010 | 1879 | |

## CONSTRUCTION STAKING PIPE CULVERTS

| CATEGORY | STATION | LOCATION | 650.6000 EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 121+83 | LT - PARK ENT | 1 | |
| 0010 | 126+06 | RT - BRIDGE ST | 1 | |
| 0010 | 212+27'NB' | LT - FE | 1 | |
| 0010 | 212+28'NB' | RT - PE | 1 | |
| 0010 | 214+37'NB' | RT - PE | 1 | |
| 0010 | 217+78'NB' | ML | 1 | CATTLE PASS |
| 0010 | 218+44'NB' | LT - HANSBERRY LN | 1 | |
| 0010 | 219+14'NB' | RT - SURFACE DRAIN | 1 | |
| 0010 | 223+30'NB' | RT - FE | 1 | |
| 0010 | 232+30'NB' | RT - FE | 1 | |
| 0010 | 233+39'NB' | RT - PE | 1 | |
| 0010 | 114+91 | LT - IRISH DR | 1 | |
| | | TOTAL 0010 | 12 | |

CONSTRUCTION STAKING STRUCTURE LAYOUT (01. B-52-0268)

| CATEGORY | STATION | 650.6500.01 LS | REMARKS |
|---|---|---|---|
| 0010 | | 1 | |
| | TOTAL 0010 | 1 | |

CONSTRUCTION STAKING STRUCTURE LAYOUT (02. B-52-0269)

| CATEGORY | STATION | 650.6500.02 LS | REMARKS |
|---|---|---|---|
| 0010 | | 1 | |
| | TOTAL 0010 | 1 | |

CONSTRUCTION STAKING STRUCTURE LAYOUT (03. B-52-0270)

| CATEGORY | STATION | 650.6500.03 LS | REMARKS |
|---|---|---|---|
| 0010 | | 1 | |
| | TOTAL 0010 | 1 | |

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT 5042-05-81)

| CATEGORY | LOCATION | 650.9910 LS | REMARKS |
|---|---|---|---|
| 0010 | PROJECT | 1 | |
| | TOTAL 0010 | 1 | |

SAWING ASPHALT

| CATEGORY | STATION | LOCATION | 690.0150 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 120+20 | ML | 43 | B-52-0268 |
| 0010 | 120+61 | LT | 38 | B-52-0268 |
| 0010 | 21+13'P' | PARK ENT. | 15 | B-52-0268 |
| 0010 | 11+00'B' | BRIDGE ST | 28 | B-52-0268 |
| 0010 | 129+50 | ML | 32 | B-52-0268 |
| 0010 | 203+70'NB' | ML | 30 | B-52-0269 |
| 0010 | 00+23'H' | HANSBERRY LN | 16 | B-52-0269 |
| 0010 | 606+20 | STH 56 | 25 | B-52-0269 |
| 0010 | 233+48'NB' | RT | 10 | B-52-0269 |
| 0010 | 235+45'NB' | ML | 29 | B-52-0269 |
| 0010 | 218+32'NB' | HANSBERRY LN | 86 | B-52-0269 STAGE 1 |
| 0010 | 229+00'NB' | ML | 52 | B-52-0269 STAGE 2 |
| 0010 | 210+50'NB' | ML | 30 | B-52-0269 STAGE 3 |
| 0010 | 109+15 | ML | 51 | B-52-0270 |
| 0010 | 0+75'ID' | IRISH DR | 20 | B-52-0270 |
| 0010 | 119+15 | ML | 29 | B-52-0270 |
| | | TOTAL 0010 | 534 | |

SAWING CONCRETE

| CATEGORY | STATION | LOCATION | 690.0250 LF | REMARKS |
|---|---|---|---|---|
| 0010 | 120+20 | LT | 2.5 | B-52-0268 |
| 0010 | 129+50 | RT | 2.5 | B-52-0268 |
| 0010 | 129+50 | LT | 2.5 | B-52-0268 |
| 0010 | 109+15 | RT | 3.0 | B-52-0270 |
| | | TOTAL 0010 | 10.5 | |

TOPSOIL SPECIAL

| CATEGORY | STATION TO STATION | LOCATION | SPV.0180.01 SY | REMARKS |
|---|---|---|---|---|
| 0010 | 214+70'NB' - 219+30'NB' | RT | 2400 | B-52-0269 |
| | | TOTAL 0010 | 2400 | |

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

### TRANSPORTATION PROJECT PLAT TITLE SHEET

# PROJECT NO. 5042-05-21

## RICHLAND CENTER - HILLSBORO

### FANCY CREEK STRUCTURE

## STH 80
## RICHLAND COUNTY



NOTES:

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

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾"X24" IRON REBAR), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

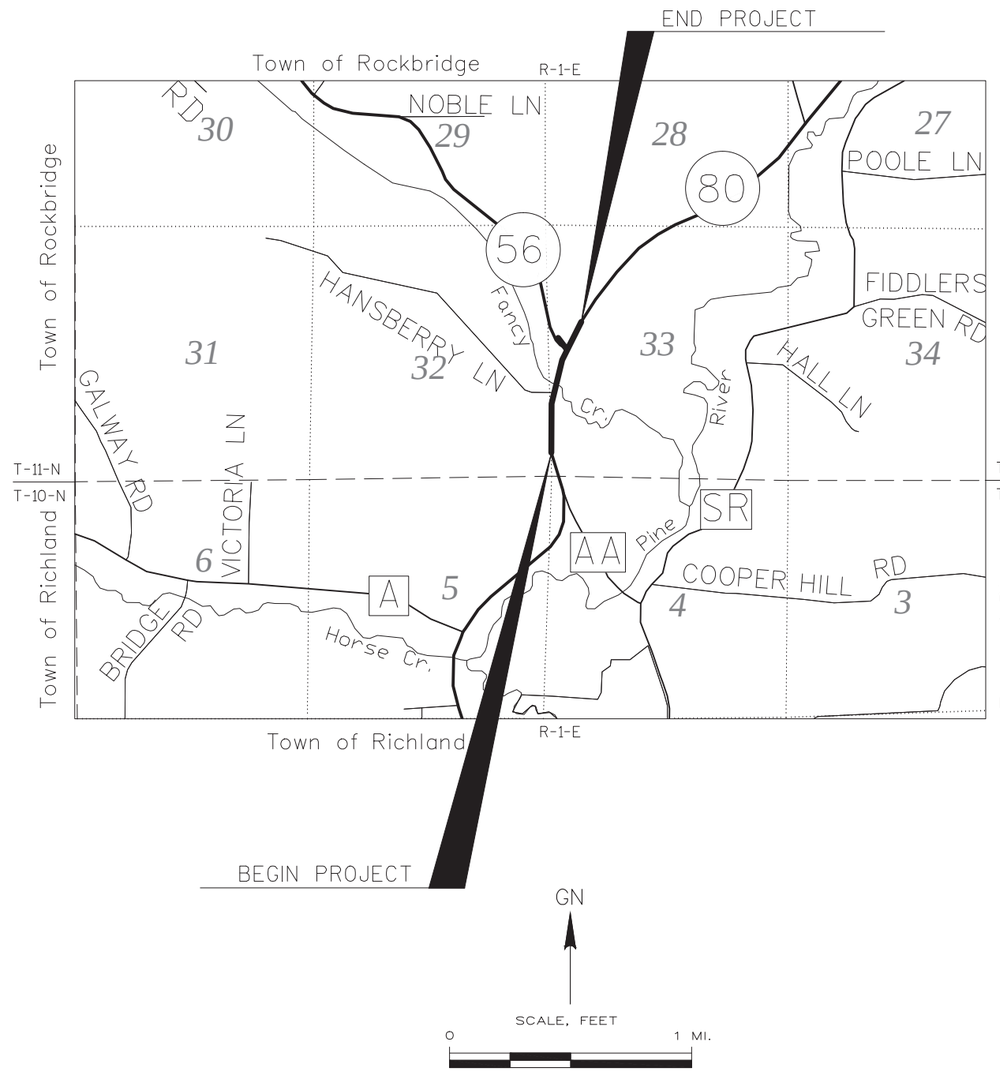
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 80, STH 56, AND HANSBERRY LANE ESTABLISHED FROM PREVIOUS PROJECTS; PLAT OF RIGHT OF WAY-PROJECT N.R.S 559A, PLAT OF RIGHT OF WAY-PROJECT T0110(7), PLAT OF RIGHT OF WAY-PROJECT T0110(14)

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

A **PERMANENT LIMITED EASEMENT** (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIREABLE.

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




## CONVENTIONAL SYMBOLS

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

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

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

## CONVENTIONAL ABBREVIATIONS

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

## CURVE DATA

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

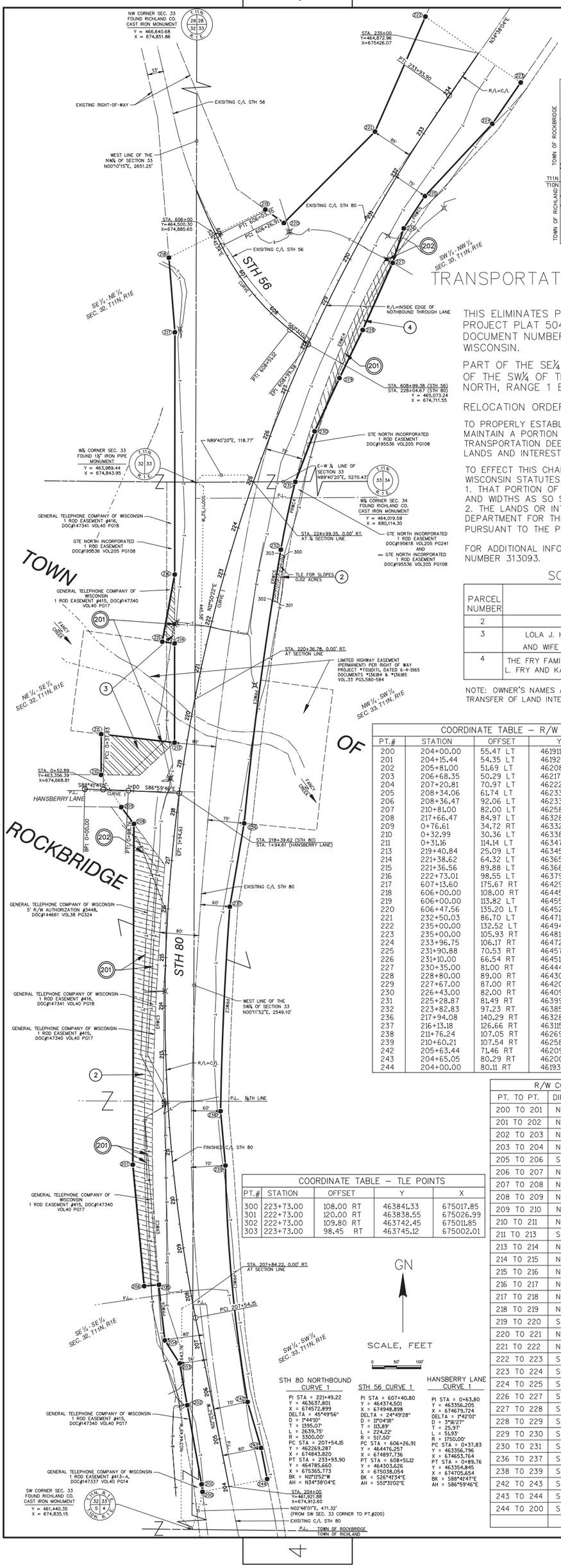
## CONVENTIONAL UTILITY SYMBOLS

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

PROJECT NUMBER: 5042-05-21
SHEET 2 OF 2

APPRAISAL PLAT DATE:

TITLE




DOCUMENT #314000

FILED IN PLAT CABINET 1
ENV. 181A2

IN THE OFFICE OF REGISTER
OF DEEDS IN
RICHLAND , COUNTY,
ON 11/03/2016.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5042-05-21-4.01

AMENDMENT NO. 1

4.01 AMEND. NO. 1

# TRANSPORTATION PROJECT PLAT NO: 5042-05-21-4.01 AMENDMENT 1

THIS ELIMINATES PARCEL NUMBER 1 AND AMENDS PARCEL NUMBER 2 OF TRANSPORTATION PROJECT PLAT 5042-05-21-4.01 FILED IN PLAT CABINET 1 ON PAGE 181A, RECORDED AS DOCUMENT NUMBER 313093 IN THE OFFICE OF REGISTER OF DEEDS IN RICHLAND COUNTY, WISCONSIN.

PART OF THE SE¼ OF THE SE¼, AND PART OF THE NE¼ OF THE SE¼, SECTION 32, PART OF THE SW¼ OF THE NW¼, AND PART OF THE NW¼ OF THE SW¼, SECTION 33, TOWN 11 NORTH, RANGE 1 EAST, TOWN OF ROCKBRIDGE, RICHLAND COUNTY, WISCONSIN.

RELOCATION ORDER STH 80, RICHLAND CENTER – HILLSBORO, RICHLAND COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.30, AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 AS DOCUMENT NUMBER 313093.

## SCHEDULE OF LANDS & INTERESTS REQUIRED

| PARCEL NUMBER | OWNER (S) | INTEREST REQUIRED | R/W ACRES REQUIRED | | | T.L.E. ACRES |
|---|---|---|---|---|---|---|
| | | | NEW | EXISTING | TOTAL | |
| 2 | WARREN D. KEYS | FEE, TLE | 0.93 | -- | 0.93 | 0.02 |
| 3 | LOLA J. HIGGINS AND PAUL HIGGINS, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY | FEE | 0.25 | -- | 0.25 | -- |
| 4 | THE FRY FAMILY TRUST, DATED AUGUST 16, 2004, DAVID L. FRY AND KAREN K. FRY, TRUSTORS AND/OR TRUSTEES | FEE | 0.21 | -- | 0.21 | -- |

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

## COORDINATE TABLE – R/W POINTS

| PT.# | STATION | OFFSET | Y | X |
|---|---|---|---|---|
| 200 | 204+00.00 | 55.47 LT | 461911.11 | 674858.18 |
| 201 | 204+15.44 | 54.35 LT | 461926.47 | 674856.28 |
| 202 | 205+81.00 | 51.69 LT | 462089.40 | 674826.74 |
| 203 | 206+68.35 | 50.29 LT | 462175.35 | 674811.15 |
| 204 | 207+20.81 | 70.97 LT | 462222.80 | 674780.68 |
| 205 | 208+34.06 | 61.74 LT | 462337.34 | 674768.41 |
| 206 | 208+36.47 | 92.06 LT | 462334.61 | 674738.11 |
| 207 | 210+81.00 | 82.00 LT | 462584.64 | 674714.70 |
| 208 | 217+66.47 | 84.97 LT | 463286.20 | 674716.98 |
| 209 | 0+76.61 | 34.72 RT | 463320.80 | 674690.95 |
| 210 | 0+32.99 | 30.36 LT | 463387.26 | 674649.61 |
| 211 | 0+31.16 | 114.14 LT | 463471.05 | 674649.68 |
| 213 | 219+40.84 | 25.09 LT | 463453.55 | 674800.61 |
| 214 | 221+38.62 | 64.32 LT | 463657.78 | 674800.79 |
| 215 | 221+36.56 | 89.88 LT | 463661.40 | 674775.41 |
| 216 | 222+73.01 | 98.55 LT | 463799.66 | 674800.92 |
| 217 | 607+13.60 | 175.67 RT | 464298.44 | 674801.38 |
| 218 | 606+00.00 | 108.00 RT | 464452.07 | 674789.02 |
| 219 | 606+00.00 | 113.82 LT | 464551.12 | 674987.50 |
| 220 | 606+47.56 | 135.20 LT | 464523.50 | 675025.65 |
| 221 | 232+50.03 | 86.70 LT | 464711.66 | 675213.20 |
| 222 | 235+00.00 | 132.52 LT | 464948.27 | 675317.04 |
| 223 | 235+00.00 | 105.93 RT | 464812.75 | 675513.23 |
| 224 | 233+96.75 | 106.17 RT | 464727.66 | 675454.74 |
| 225 | 231+90.88 | 70.53 RT | 464578.73 | 675315.99 |
| 226 | 231+10.00 | 66.54 RT | 464512.44 | 675272.46 |
| 227 | 230+35.00 | 81.00 RT | 464441.33 | 675249.49 |
| 228 | 228+80.00 | 89.00 RT | 464303.22 | 675187.93 |
| 229 | 227+67.00 | 87.00 RT | 464204.16 | 675140.10 |
| 230 | 226+43.00 | 82.00 RT | 464094.61 | 675088.91 |
| 231 | 225+28.87 | 81.49 RT | 463990.61 | 675049.27 |
| 232 | 223+82.83 | 97.23 RT | 463850.87 | 675019.49 |
| 236 | 217+94.08 | 140.29 RT | 463287.43 | 674943.89 |
| 237 | 216+13.18 | 126.66 RT | 463115.86 | 674914.33 |
| 238 | 211+76.24 | 107.05 RT | 462694.68 | 674895.33 |
| 239 | 210+60.21 | 107.54 RT | 462582.87 | 674905.36 |
| 242 | 205+63.44 | 71.46 RT | 462096.08 | 674950.95 |
| 243 | 204+65.05 | 80.29 RT | 462001.29 | 674978.73 |
| 244 | 204+00.00 | 80.11 RT | 461937.44 | 674991.18 |

## R/W CURVE TABLE

| CURVE # | DELTA ANGLE | TANGENT | RADIUS | ARC LENGTH | CHORD LENGTH | CHORD BEARING |
|---|---|---|---|---|---|---|
| PRWC1 | 08°41'13" | 245.16' | 3227.78' | 489.39' | 488.92' | S05°21'05"E |
| PRWC2 | 03°11'15" | 210.88' | 7579.44' | 421.65' | 421.59' | S02°35'00"W |
| PRWC3 | 04°18'25" | 284.45' | 7564.44' | 568.62' | 568.49' | S07°38'34"W |
| PRWC4 | 04°27'46" | 71.50' | 1834.86' | 142.92' | 142.89' | S12°01'40"W |
| PRWC5 | 02°28'35" | 39.66' | 1834.86' | 79.31' | 79.30' | S33°17'30"W |
| PRWC6 | 01°57'14" | 57.60' | 3377.78' | 115.19' | 115.19' | N06°06'42"W |
| ERWC2 | 06°06'32" | 180.24' | 3377.78' | 360.15' | 359.98' | S02°04'49"E |
| ERWC3 | 03°45'01" | 252.72' | 7719.44' | 505.26' | 505.17' | S02°51'52"W |
| ERWC4 | 17°47'39" | 287.24' | 1834.86' | 569.85' | 567.56' | N23°09'23"E |
| ERWC5 | 00°44'19" | 48.75' | 7564.44' | 97.51' | 97.50' | N09°21'14"E |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | OWNER (S) | INTEREST REQUIRED |
|---|---|---|
| 201 | FRONTIER COMMUNICATIONS (GENERAL TELEPHONE COMPANY) (GTE NORTH INCORPORATED) | RELEASE OF RIGHTS |
| 202 | RICHLAND ELECTRIC COOPERATIVE | RELEASE OF RIGHTS |

## COORDINATE TABLE – TLE POINTS

| PT.# | STATION | OFFSET | Y | X |
|---|---|---|---|---|
| 300 | 223+73.00 | 108.00 RT | 463841.33 | 675017.85 |
| 301 | 222+73.00 | 120.00 RT | 463839.55 | 675026.99 |
| 302 | 222+73.00 | 109.80 RT | 463742.45 | 675011.85 |
| 303 | 223+73.00 | 98.45 RT | 463745.12 | 675002.01 |

## R/W COURSE TABLE

| PT. TO PT. | DIRECTION | DISTANCE |
|---|---|---|
| 200 TO 201 | N07°01'45"W | 15.48' |
| 201 TO 202 | N10°16'43"W | 165.58' |
| 202 TO 203 | N10°16'43"W | 87.36' |
| 203 TO 204 | N32°42'37"W | 56.39' |
| 205 TO 206 | S84°51'55"W | 30.42' |
| 206 TO 207 | N05°21'03"W | 251.12' |
| 207 TO 208 | N00°11'11"E | 701.56' |
| 208 TO 209 | N36°56'35"W | 43.30' |
| 209 TO 210 | N31°53'21"W | 78.27' |
| 210 TO 211 | N00°03'07"E | 83.80' |
| 211 TO 213 | S83°23'08"E | 151.94' |
| 213 TO 214 | N00°03'07"E | 204.23' |
| 214 TO 215 | N81°53'08"W | 25.64' |
| 215 TO 216 | N10°27'20"E | 140.60' |
| 216 TO 217 | N00°03'07"E | 498.78' |
| 217 TO 218 | N04°35'59"W | 154.13' |
| 218 TO 219 | N63°28'45"E | 221.82' |
| 219 TO 220 | S54°05'36"E | 47.10' |
| 220 TO 221 | N44°54'24"E | 265.67' |
| 221 TO 222 | N23°41'38"E | 258.40' |
| 222 TO 223 | S55°21'56"E | 238.45' |
| 223 TO 224 | S34°30'00"W | 103.25' |
| 224 TO 225 | S42°58'31"W | 203.55' |
| 226 TO 227 | S17°53'55"W | 74.73' |
| 227 TO 228 | S24°01'32"W | 151.21' |
| 228 TO 229 | S25°46'21"W | 110.00' |
| 229 TO 230 | S25°02'34"W | 120.92' |
| 230 TO 231 | S20°51'59"W | 111.30' |
| 236 TO 237 | S09°46'32"W | 174.10' |
| 238 TO 239 | S05°07'34"E | 112.27' |
| 242 TO 243 | S16°19'49"E | 98.78' |
| 243 TO 244 | S11°02'00"E | 65.05' |
| 244 TO 200 | S78°48'08"W | 135.58' |

## EASEMENT TABLE

| OWNER | RECORDING INFORMATION | LOCATED IN R/W PARCEL # |
|---|---|---|
| GENERAL TELEPHONE COMPANY OF WISCONSIN | 1 ROD EASEMENT #416, DOC#147341 VOL40 PG18 | 2 and 3 |
| GENERAL TELEPHONE COMPANY OF WISCONSIN | 1 ROD EASEMENT #415, DOC#147340 VOL40 PG17 | 2 and 3 |
| GENERAL TELEPHONE COMPANY OF WISCONSIN | 5' R/W AUTHORIZATION #3448, DOC#144661 VOL38 PG324 | 3 |
| GTE NORTH INCORPORATED | 1 ROD EASEMENT DOC#195618 VOL205 PG241 | 4 |
| GTE NORTH INCORPORATED | 1 ROD EASEMENT DOC#195536 VOL205 PG108 | 3 and 4 |
| RICHLAND ELECTRIC COOPERATIVE | NO RECORD FOUND | 4 |

## STH 80 NORTHBOUND CURVE 1

PI STA = 221+49.22
Y = 463637.801
X = 674572.899
DELTA = 45°49'56"
D = 1°44'0"
T = 1395.07'
L = 2639.75'
R = 3300.00'
PC STA = 207+54.15
Y = 462269.287
X = 674843.820
PT STA = 233+93.90
Y = 464785.660
X = 675365.773
BK = NUT1°52"W
AH = N34°38'04"E

## STH 56 CURVE 1

PI STA = 607+40.80
Y = 464374.501
X = 674948.898
DELTA = 24°49'28"
D = 11°04'18"
T = 115.89'
L = 224.22'
R = 517.50'
PC STA = 606+26.91
Y = 464476.257
X = 674897.736
PT STA = 608+51.12
Y = 464303.626
X = 675038.054
BK = S26°43'4"E
AH = S51°31'02"E

## HANSBERRY LANE CURVE 1

PI STA = 0+63.80
Y = 463356.205
X = 674679.724
DELTA = 1°42'01"
D = 3°16'27"
T = 26.97'
L = 51.93'
R = 1750.00'
PC STA = 0+37.83
Y = 463356.796
X = 674653.764
PT STA = 0+89.76
Y = 463354.845
X = 674705.654
BK = S88°47'47"E
AH = S86°59'46"E

JEWELL associates engineers, inc.
Engineers - Architects - Surveyors

I, SCOTT D. WARNER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5042-05-01-4.01 AMENDMENT NO. 1, AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

(SIGNATURE) _____ DATE 10/13/16
(PRINTED NAME) SCOTT D. WARNER
(REGISTRATION NUMBER) S2524

WISCONSIN SCOTT D. WARNER S-2524 RICHLAND CENTER WI LAND SURVEYOR

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

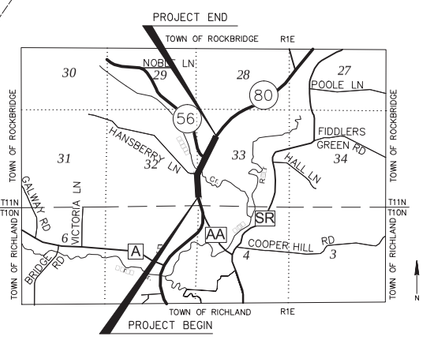
(SIGNATURE) Cory Schlagel DATE 10/17/16
(PRINTED NAME) CORY SCHLAGEL

APPRAISAL PLAT DATE:

DOCUMENT #313093

FILED IN PLAT CABINET 1,
ON PAGE 181A
ON AUGUST 18, 2016

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5042-05-21-4.01
SHEET 1 OF 2




# TRANSPORTATION PROJECT PLAT NO: 5042-05-21-4.01

PART OF THE SE¼ OF THE SE¼, AND PART OF THE NE¼ OF THE SE¼, SECTION 32, PART OF THE SW¼ OF THE NW¼, AND PART OF THE NW¼ OF THE SW¼, SECTION 33, TOWN 11 NORTH, RANGE 1 EAST, TOWN OF ROCKBRIDGE, RICHLAND COUNTY, WISCONSIN.

RELOCATION ORDER STH 80, RICHLAND CENTER – HILLSBORO, RICHLAND COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.30, AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2.

## SCHEDULE OF LANDS & INTERESTS REQUIRED

| PARCEL NUMBER | OWNER (S) | INTEREST REQUIRED | R/W ACRES REQUIRED | | | T.L.E. ACRES |
|---|---|---|---|---|---|---|
| | | | NEW | EXISTING | TOTAL | |
| 1 | STRAIGHT FARM PARTNERSHIP LLP | FEE | 0.17 | -- | 0.17 | -- |
| 2 | WARREN D. KEYS | FEE, TLE | 0.95 | -- | 0.95 | 0.02 |
| 3 | LOLA J. HIGGINS AND PAUL HIGGINS, HUSBAND AND WIFE AS SURVIVORSHIP MARITAL PROPERTY | FEE | 0.25 | -- | 0.25 | -- |
| 4 | THE FRY FAMILY TRUST, DATED AUGUST 16, 2004, DAVID L. FRY AND KAREN K. FRY, TRUSTORS AND/OR TRUSTEES | FEE | 0.21 | -- | 0.21 | -- |

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

## COORDINATE TABLE – R/W POINTS

| PT.# | STATION | OFFSET | Y | X |
|---|---|---|---|---|
| 200 | 204+00.00 | 55.47 LT | 461911.11 | 674858.18 |
| 201 | 204+15.44 | 54.35 LT | 461926.47 | 674856.28 |
| 202 | 205+81.00 | 51.69 LT | 462089.40 | 674826.74 |
| 203 | 205+81.00 | 86.00 LT | 462082.73 | 674793.08 |
| 204 | 206+21.00 | 85.00 LT | 462122.17 | 674786.30 |
| 205 | 207+14.00 | 97.00 LT | 462211.07 | 674756.46 |
| 206 | 207+91.00 | 96.00 LT | 462287.89 | 674742.49 |
| 207 | 210+81.00 | 82.00 LT | 462584.64 | 674714.70 |
| 208 | 217+66.47 | 84.97 LT | 463286.20 | 674716.98 |
| 209 | 0+76.61 | 34.72 RT | 463320.80 | 674690.95 |
| 210 | 0+32.99 | 30.36 LT | 463387.26 | 674649.61 |
| 211 | 0+31.16 | 114.14 LT | 463471.05 | 674649.68 |
| 213 | 219+40.84 | 25.09 LT | 463453.55 | 674800.61 |
| 214 | 221+38.62 | 64.32 LT | 463657.78 | 674800.79 |
| 215 | 221+36.56 | 89.88 LT | 463661.40 | 674775.41 |
| 216 | 222+73.01 | 98.55 LT | 463799.66 | 674800.92 |
| 217 | 607+13.60 | 175.67 RT | 464298.44 | 674801.38 |
| 218 | 606+00.00 | 108.00 RT | 464452.07 | 674789.02 |
| 219 | 606+00.00 | 113.82 LT | 464551.12 | 674987.50 |
| 220 | 606+47.56 | 135.20 LT | 464523.50 | 675025.65 |
| 221 | 232+50.03 | 86.70 LT | 464711.66 | 675213.20 |
| 222 | 235+00.00 | 132.52 LT | 464948.27 | 675317.04 |
| 223 | 235+00.00 | 105.93 RT | 464812.75 | 675513.23 |
| 224 | 233+96.75 | 106.17 RT | 464727.66 | 675454.74 |
| 225 | 231+90.88 | 70.53 RT | 464578.73 | 675315.99 |
| 226 | 231+10.00 | 66.54 RT | 464512.44 | 675272.46 |
| 227 | 230+35.00 | 81.00 RT | 464441.33 | 675249.49 |
| 228 | 228+80.00 | 89.00 RT | 464303.22 | 675187.93 |
| 229 | 227+67.00 | 87.00 RT | 464204.16 | 675140.10 |
| 230 | 226+43.00 | 82.00 RT | 464094.61 | 675088.91 |
| 231 | 225+28.87 | 81.49 RT | 463990.61 | 675049.27 |
| 232 | 223+82.83 | 97.23 RT | 463850.87 | 675019.49 |
| 236 | 217+94.08 | 140.29 RT | 463287.43 | 674943.89 |
| 237 | 216+13.18 | 126.66 RT | 463115.86 | 674914.33 |
| 238 | 211+76.24 | 107.05 RT | 462694.68 | 674895.33 |
| 239 | 210+60.21 | 107.54 RT | 462582.87 | 674905.36 |
| 242 | 205+63.44 | 71.46 RT | 462096.08 | 674950.95 |
| 243 | 204+65.05 | 80.29 RT | 462001.29 | 674978.73 |
| 244 | 204+00.00 | 80.11 RT | 461937.44 | 674991.18 |

## R/W CURVE TABLE

| CURVE # | DELTA ANGLE | TANGENT | RADIUS | ARC LENGTH | CHORD LENGTH | CHORD BEARING |
|---|---|---|---|---|---|---|
| PRWC1 | 08°41'13" | 245.16' | 3227.78' | 489.39' | 488.92' | S05°21'05"E |
| PRWC2 | 03°11'15" | 210.88' | 7579.44' | 421.65' | 421.59' | S02°35'00"W |
| PRWC3 | 04°18'25" | 284.45' | 7564.44' | 568.62' | 568.49' | S07°38'34"W |
| PRWC4 | 04°27'46" | 71.50' | 1834.86' | 142.92' | 142.89' | S12°01'40"W |
| PRWC5 | 02°28'35" | 39.66' | 1834.86' | 79.31' | 79.30' | S33°17'30"W |
| ERWC1 | 01°35'14" | 46.79' | 3377.78' | 93.57' | 93.57' | S06°17'42"E |
| ERWC2 | 06°28'33" | 191.09' | 3377.78' | 381.77' | 381.57' | S02°15'49"E |
| ERWC3 | 03°45'01" | 252.72' | 7719.44' | 505.26' | 505.17' | S02°51'52"W |
| ERWC4 | 17°47'39" | 287.24' | 1834.86' | 569.85' | 567.56' | N23°09'23"E |
| ERWC5 | 00°44'19" | 48.75' | 7564.44' | 97.51' | 97.50' | N09°21'14"E |

## UTILITY INTERESTS REQUIRED

| UTILITY NUMBER | OWNER (S) | INTEREST REQUIRED |
|---|---|---|
| 201 | FRONTIER COMMUNICATIONS (GENERAL TELEPHONE COMPANY) (GTE NORTH INCORPORATED) | RELEASE OF RIGHTS |
| 202 | RICHLAND ELECTRIC COOPERATIVE | RELEASE OF RIGHTS |

## R/W COURSE TABLE

| PT. TO PT. | DIRECTION | DISTANCE |
|---|---|---|
| 200 TO 201 | N07°01'45"W | 15.48' |
| 201 TO 202 | N10°16'43"W | 165.58' |
| 202 TO 203 | S78°48'08"W | 34.31' |
| 203 TO 204 | N09°45'57"W | 40.01' |
| 204 TO 205 | N18°33'01"W | 93.77' |
| 205 TO 206 | N10°18'31"W | 78.08' |
| 206 TO 207 | N05°21'03"W | 298.05' |
| 207 TO 208 | N00°11'11"E | 701.56' |
| 208 TO 209 | N36°56'35"W | 43.30' |
| 209 TO 210 | N31°53'21"W | 78.27' |
| 210 TO 211 | N00°03'07"E | 83.80' |
| 211 TO 213 | S83°23'08"E | 151.94' |
| 213 TO 214 | N00°03'07"E | 204.23' |
| 214 TO 215 | N81°53'08"W | 25.64' |
| 215 TO 216 | N10°27'20"E | 140.60' |
| 216 TO 217 | N00°03'07"E | 498.78' |
| 217 TO 218 | N04°35'59"W | 154.13' |
| 218 TO 219 | N63°28'45"E | 221.82' |
| 219 TO 220 | S54°05'36"E | 47.10' |
| 220 TO 221 | N44°54'24"E | 265.67' |
| 221 TO 222 | N23°41'38"E | 258.40' |
| 222 TO 223 | S55°21'56"E | 238.45' |
| 223 TO 224 | S34°30'00"W | 103.25' |
| 224 TO 225 | S42°58'31"W | 203.55' |
| 226 TO 227 | S17°53'55"W | 74.73' |
| 227 TO 228 | S24°01'32"W | 151.21' |
| 228 TO 229 | S25°46'21"W | 110.00' |
| 229 TO 230 | S25°02'34"W | 120.92' |
| 230 TO 231 | S20°51'59"W | 111.30' |
| 236 TO 237 | S09°46'32"W | 174.10' |
| 238 TO 239 | S05°07'34"E | 112.27' |
| 242 TO 243 | S16°19'49"E | 98.78' |
| 243 TO 244 | S11°02'00"E | 65.05' |
| 244 TO 200 | S78°48'08"W | 135.58' |

## EASEMENT TABLE

| OWNER | RECORDING INFORMATION | LOCATED IN R/W PARCEL # |
|---|---|---|
| GENERAL TELEPHONE COMPANY OF WISCONSIN | 1 ROD EASEMENT #413-A, DOC#147337 VOL40 PG14 | 1 |
| GENERAL TELEPHONE COMPANY OF WISCONSIN | 1 ROD EASEMENT #416, DOC#147341 VOL40 PG18 | 2 and 3 |
| GENERAL TELEPHONE COMPANY OF WISCONSIN | 1 ROD EASEMENT #415, DOC#147340 VOL40 PG17 | 1, 2 and 3 |
| GENERAL TELEPHONE COMPANY OF WISCONSIN | 5' R/W AUTHORIZATION #3448, DOC#144661 VOL38 PG324 | 3 |
| GTE NORTH INCORPORATED | 1 ROD EASEMENT DOC#195618 VOL205 PG241 | 4 |
| GTE NORTH INCORPORATED | 1 ROD EASEMENT DOC#195536 VOL205 PG108 | 3 and 4 |
| RICHLAND ELECTRIC COOPERATIVE | NO RECORD FOUND | 4 |

## COORDINATE TABLE – TLE POINTS

| PT.# | STATION | OFFSET | Y | X |
|---|---|---|---|---|
| 300 | 223+73.00 | 108.00 RT | 463841.33 | 675017.85 |
| 301 | 222+73.00 | 120.00 RT | 463839.55 | 675026.99 |
| 302 | 222+73.00 | 109.80 RT | 463742.45 | 675011.85 |
| 303 | 223+73.00 | 98.45 RT | 463745.12 | 675002.01 |

GN

SCALE, FEET
0 50' 100'

STH 80 NORTHBOUND CURVE 1
PI STA = 221+49.22
Y = 463637.801
X = 674572.899
DELTA = 45°49'56"
D = 1°44'00"
T = 1395.07'
L = 2639.75'
R = 3300.00'
PC STA = 207+54.15
Y = 462269.287
X = 674843.820
PT STA = 233+93.90
Y = 464785.660
X = 675365.773
BK = N11°52'0"E
AH = N34°38'04"E

STH 56 CURVE 1
PI STA = 607+40.80
Y = 464374.501
X = 674948.898
DELTA = 24°49'28"
D = 11°04'18"
T = 115.89'
L = 224.22'
R = 517.50'
PC STA = 606+26.91
Y = 464476.257
X = 674897.736
PT STA = 608+51.12
Y = 464303.626
X = 675038.054
BK = S26°43'4"E
AH = S51°31'02"E

HANSBERRY LANE CURVE 1
PI STA = 0+63.80
Y = 463356.205
X = 674679.724
DELTA = 1°42'01"
D = 3°16'27"
T = 25.97'
L = 51.93'
R = 1750.00'
PC STA = 0+37.83
Y = 463356.796
X = 674653.764
PT STA = 0+89.76
Y = 463354.845
X = 674705.654
BK = S88°47'4"E
AH = S86°59'46"E

STA. 204+00
Y=461,921.88
X=674,912.60
N02°48'01"E, 471.32'
(FROM SW SEC. 33 CORNER TO PT.#200)

EXISTING C/L STH 80

P.L. TOWN OF ROCKBRIDGE
TOWN OF RICHLAND

SW CORNER SEC. 33
FOUND RICHLAND CO.
CAST IRON MONUMENT
Y = 461,440.35
X = 674,835.15

JEWELL
associates engineers, Inc.
Engineers - Architects - Surveyors

I, SCOTT D. WARNER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 5042-05-01-4.01, AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

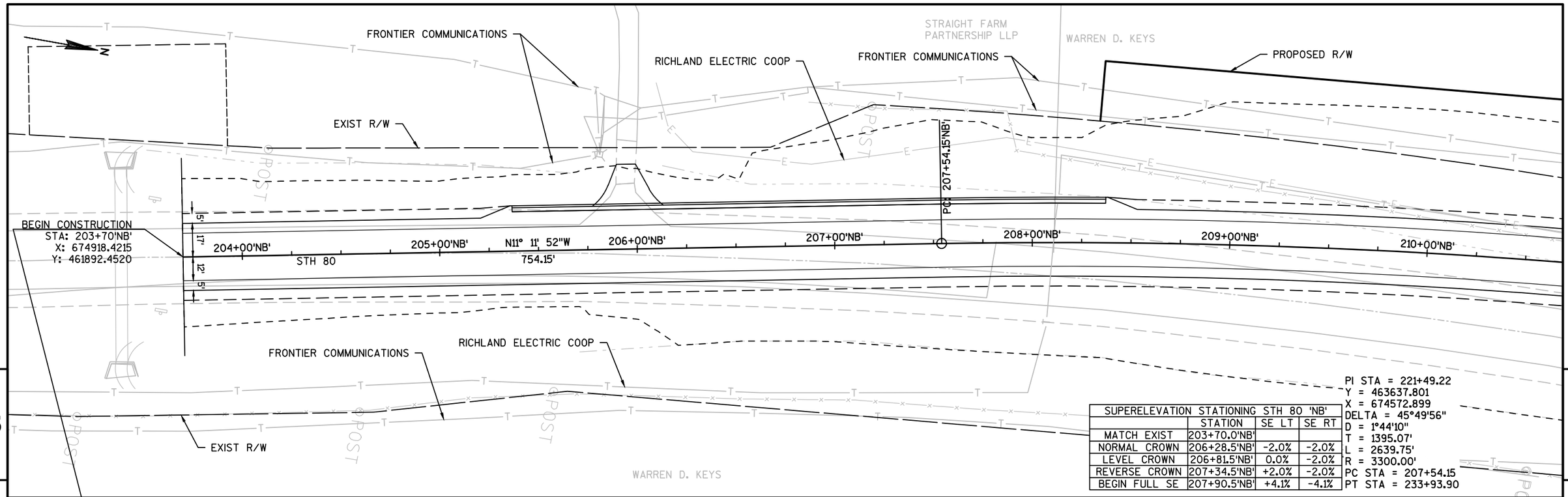
WISCONSIN SCOTT D. WARNER S-2524 RICHLAND CENTER, WI LAND SURVEYOR

(SIGNATURE) DATE 08/11/16
(PRINTED NAME) SCOTT D. WARNER
(REGISTRATION NUMBER) S2524

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

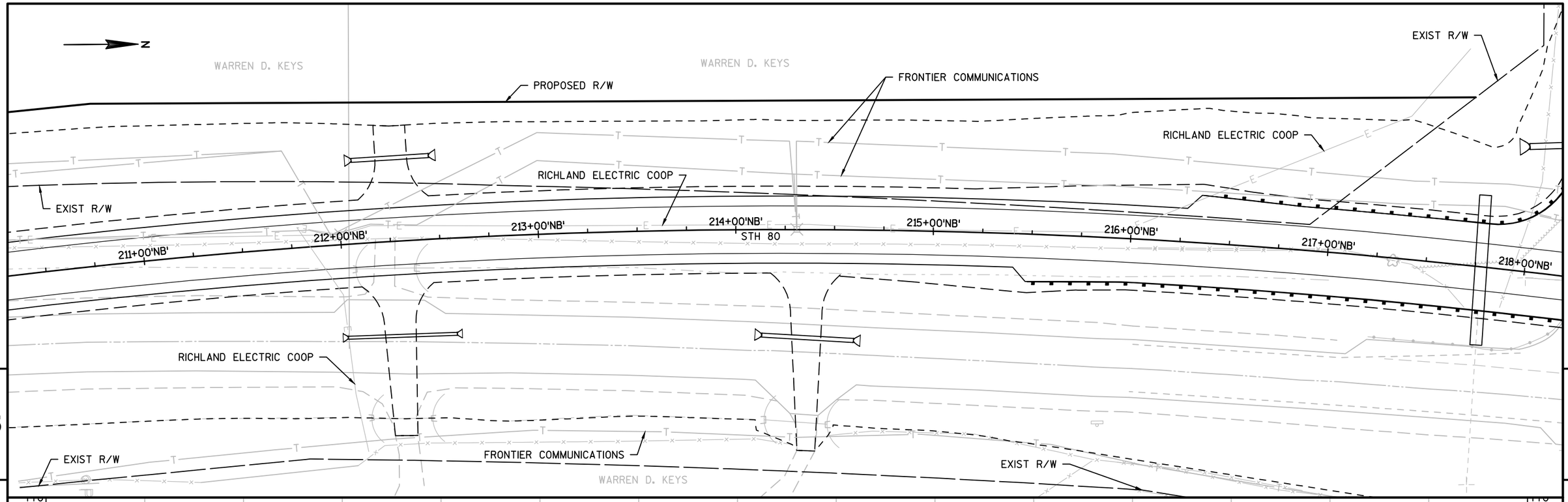
(SIGNATURE) DATE 8/12/16
(PRINTED NAME) CORY SCHLAGEL

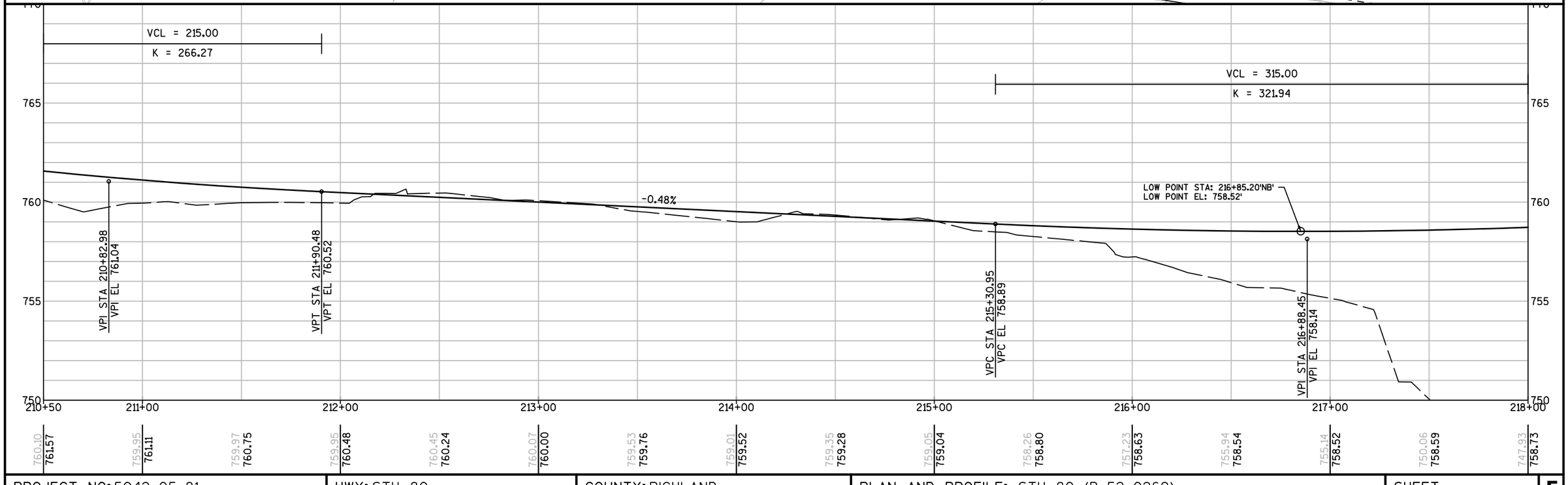
APPRAISAL PLAT DATE:



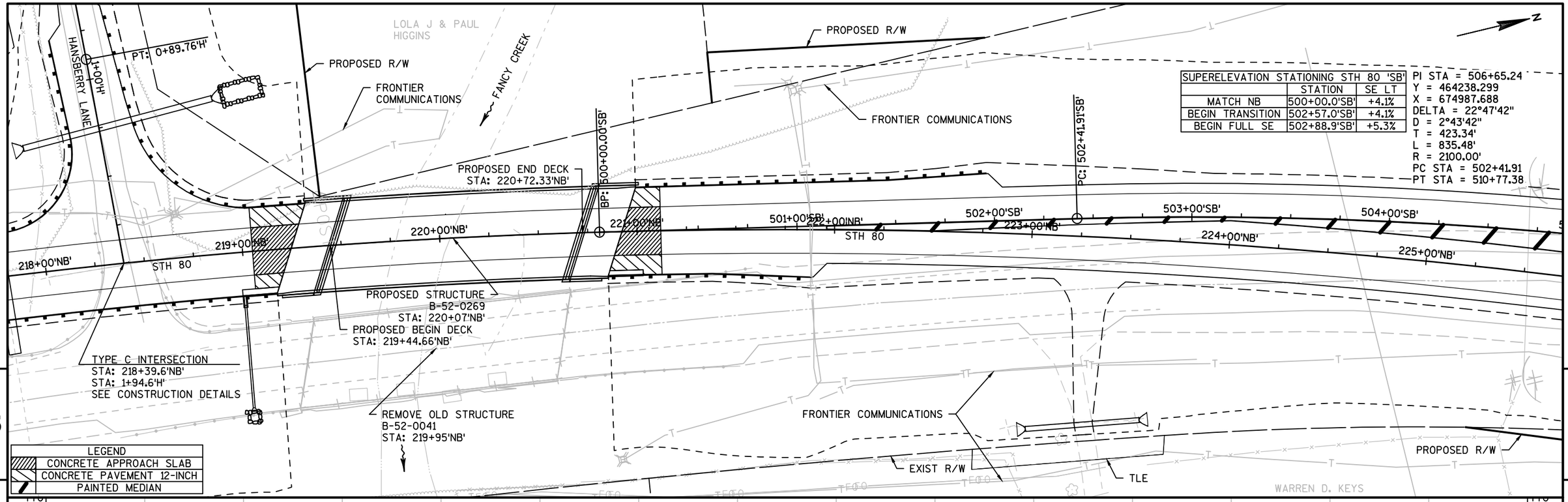

| SUPERELEVATION STATIONING STH 80 'NB' | | | |
|---|---|---|---|
| | STATION | SE LT | SE RT |
| MATCH EXIST | 203+70.0'NB' | | |
| NORMAL CROWN | 206+28.5'NB' | -2.0% | -2.0% |
| LEVEL CROWN | 206+81.5'NB' | 0.0% | -2.0% |
| REVERSE CROWN | 207+34.5'NB' | +2.0% | -2.0% |
| BEGIN FULL SE | 207+90.5'NB' | +4.1% | -4.1% |

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: STH 80 (B-52-0269) | SHEET 109 E |



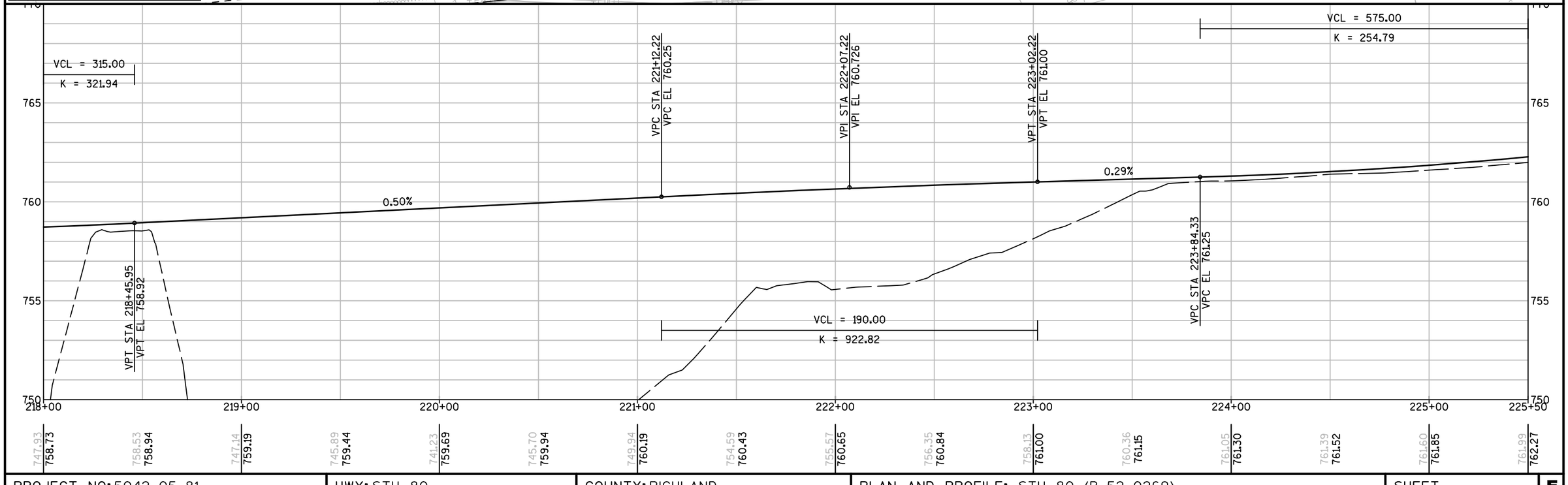




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: STH 80 (B-52-0269) | SHEET 110 | E |
|---|---|---|---|---|---|

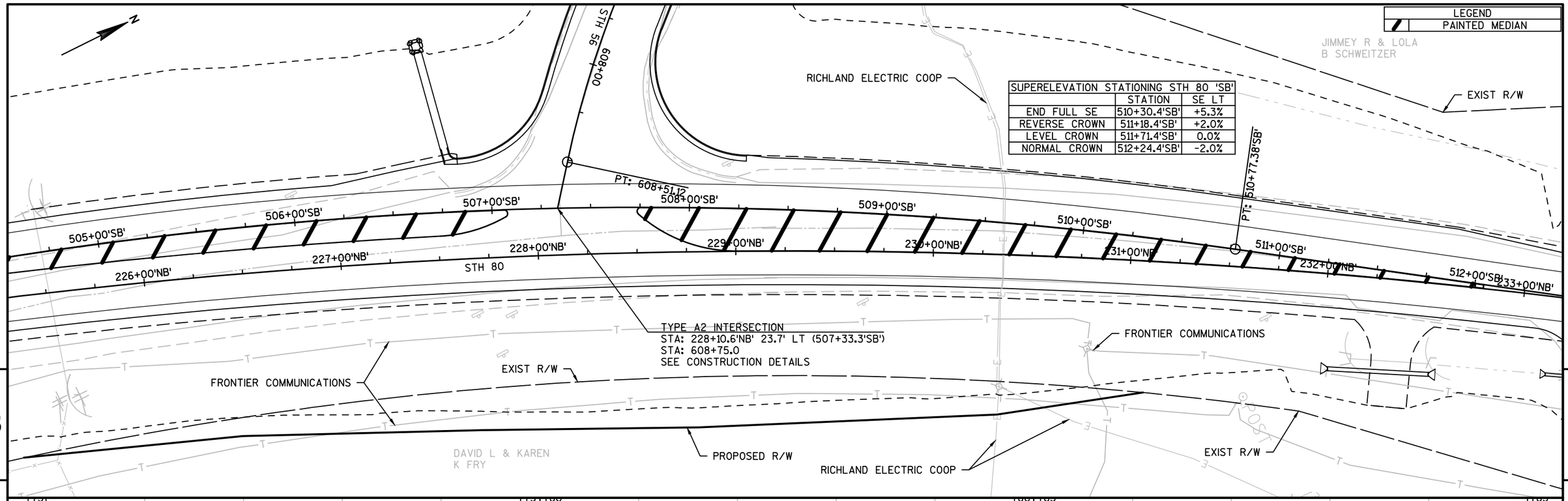



| SUPERELEVATION STATIONING STH 80 'SB' | | |
|---|---|---|
| | STATION | SE LT |
| MATCH NB | 500+00.0'SB' | +4.1% |
| BEGIN TRANSITION | 502+57.0'SB' | +4.1% |
| BEGIN FULL SE | 502+88.9'SB' | +5.3% |

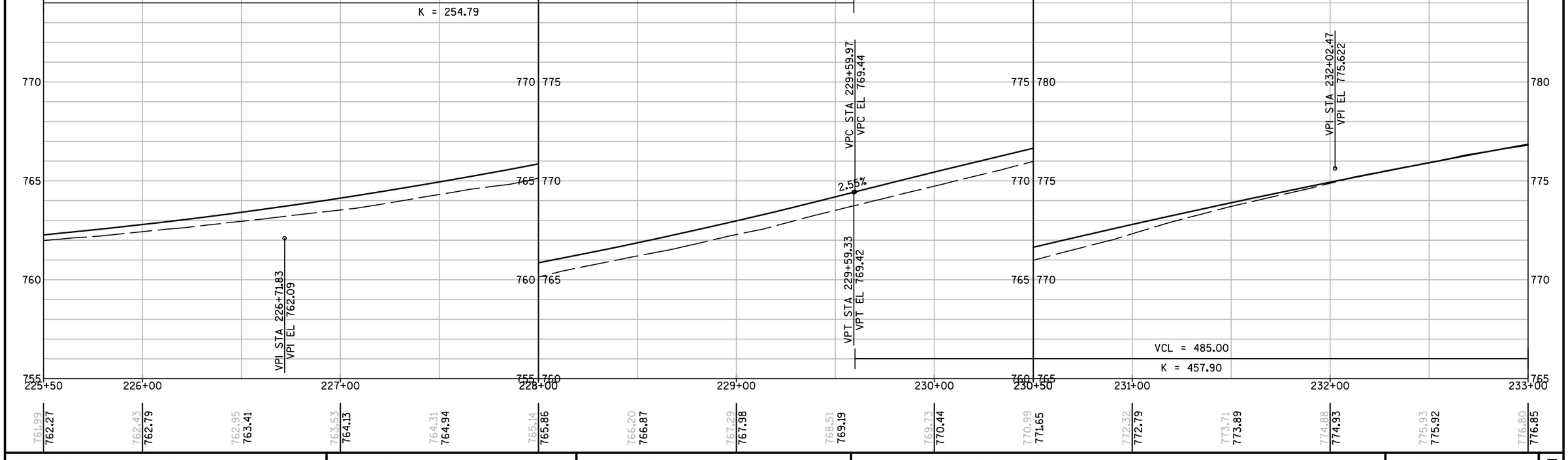
PI STA = 506+65.24
Y = 464238.299
X = 674987.688
DELTA = 22°47'42"
D = 2°43'42"
T = 423.34'
L = 835.48'
R = 2100.00'
PC STA = 502+41.91
PT STA = 510+77.38



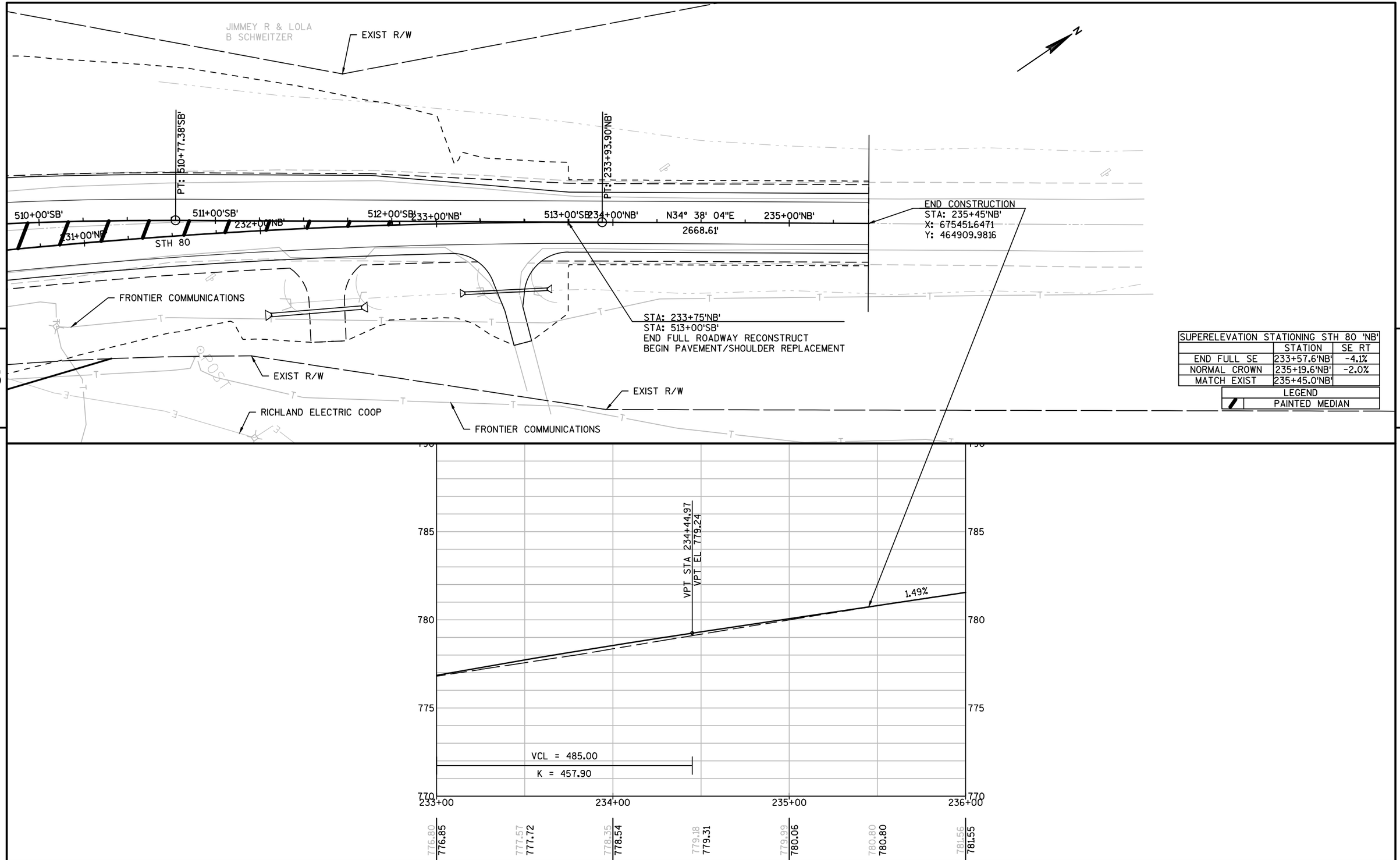

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: STH 80 (B-52-0269) | SHEET 111 | E |
|---|---|---|---|---|---|




| SUPERELEVATION STATIONING STH 80 'SB' | | |
|---|---|---|
| | STATION | SE LT |
| END FULL SE | 510+30.4'SB' | +5.3% |
| REVERSE CROWN | 511+18.4'SB' | +2.0% |
| LEVEL CROWN | 511+71.4'SB' | 0.0% |
| NORMAL CROWN | 512+24.4'SB' | -2.0% |




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: STH 80 (B-52-0269) | SHEET 112 E |
|---|---|---|---|---|




| SUPERELEVATION STATIONING STH 80 'NB' | | |
|---|---|---|
| | STATION | SE RT |
| END FULL SE | 233+57.6'NB' | -4.1% |
| NORMAL CROWN | 235+19.6'NB' | -2.0% |
| MATCH EXIST | 235+45.0'NB' | |

| LEGEND |
|---|
| PAINTED MEDIAN |

5

5

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: STH 80 (B-52-0269) | SHEET 113 | E |
|---|---|---|---|---|---|

PROPOSED R/W

EXIST R/W

PC: 0+37.83'H'

PT: 0+89.76'H'

219+00'NB'

FRONTIER COMMUNICATIONS

TYPE C INTERSECTION
STA: 218+39.6'NB'
STA: 1+94.6'H'
SEE CONSTRUCTION DETAILS

1+00'H'

HANSBERRY LANE

END CONSTRUCTION
STA: 00+23'H'

WARREN D. KEYS

FRONTIER COMMUNICATIONS

218+00'NB'

EXIST R/W

WARREN D. KEYS

RICHLAND ELECTRIC COOP

PROPOSED R/W

EXIST R/W

N

PI STA = 0+63.80
Y = 463356.205
X = 674679.724
DELTA = 1°42'01"
D = 3°16'27"
T = 25.97'
L = 51.93'
R = 1750.00'
PC STA = 0+37.83
PT STA = 0+89.76

| LEGEND |
|---|
| CONCRETE APPROACH SLAB |
| CONCRETE PAVEMENT 12-INCH |

5

5

VCL = 65.00
K = 29.05

VCL = 35.00
K = 5.96

STA 0+00.01
EL 758.86

VPC STA 1+47.22
VPC EL 759.78

VPI STA 1+64.72
VPI EL 760.101

STA 1+82.57
EL 759.38

VPT STA 1+82.2
VPT EL 759.39

STA 1+94.61
EL 758.89

LOW POINT STA: 0+58.37
LOW POINT EL: 758.65'

-0.42%

1.82%

-4.05%

HIGH POINT STA: 1+58.09
HIGH POINT EL: 759.88'

VPC STA 0+46.30
VPC EL 758.67

VPI STA 0+78.80
VPI EL 758.54

VPT STA 1+11.30
VPT EL 759.13

760
755
750

0+00
1+00
1+95

758.86
758.65
758.66
758.56
758.94
758.51
759.83
758.51
758.89

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: HANSBERRY LANE (B-52-0269) | SHEET 114 | E |
|---|---|---|---|---|---|

EXIST R/W

RICHLAND ELECTRIC COOP

PT: 606+03.35

PC: 606+26.91

606+00

607+00

608+00

STH 56

END CONSTRUCTION
STA: 606+20

EXIST R/W

PI STA = 607+40.80
Y = 464374.501
X = 674948.898
DELTA = 24°49'28"
D = 11°04'18"
T = 113.89'
L = 224.22'
R = 517.50'
PC STA = 606+26.91
PT STA = 608+51.12

LEGEND
PAINTED MEDIAN

LOLA J & PAUL
HIGGINS

FRONTIER COMMUNICATIONS

TYPE A2 INTERSECTION
STA: 228+10.6'NB' 23.7' LT (507+33.3'SB')
STA: 608+75.0
SEE CONSTRUCTION DETAILS

228+00NB'

PT: 608+51.12
507+00SB'

PROPOSED R/W

EXIST R/W

DAVID L & KAREN
K FRY

228+00NB'

507+00SB'

227+00NB'

506+00SB'

FRONTIER
COMMUNICATIONS

5

5

VPI STA 606+02.39
VPI EL 766.140

VPT STA 607+22.39
VPT EL 767.68

VPC STA 607+96.34
VPC EL 768.62

VPI STA 608+28.84
VPI EL 769.037

VPT STA 608+61.34
VPT EL 767.77

STA 608+62.67
EL 767.72

STA 608+74.99
EL 767.03

1.28%

-3.99%

HIGH POINT STA: 608+12.42
HIGH POINT EL: 768.72'

VCL = 240.00
K = 100.00

VCL = 65.00
K = 12.57

775
770
765
760

606+00
607+00
608+00
608+75

765.34 765.36
766.44 766.49
767.32 767.36
768.07 768.03
768.41 768.66
767.61 768.16
766.60 767.03

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: STH 56 (B-52-0269) | SHEET 115 | E |
|---|---|---|---|---|---|

DELBERT J &
ARIEL L BANKER

CALVIN R &
FRANCES J
WILKINSON

FRONTIER COMMUNICATIONS

EXIST R/W

PINE RIVER

IRISH DRIVE

PI STA = 105+20.56
Y = 475837.649
X = 682605.488
DELTA = 10°29'00"
D = 1°15'00"
T = 420.51'
L = 838.67'
R = 4583.66'
PC STA = 101+00.05
PT STA = 109+38.72

PT: 109+38.72

PROPOSED BEGIN DECK
STA: 110+79.60

PROPOSED STRUCTURE
B-52-0270
STA: 112+16.5

6'
12'
12'
6'

REMOVE OLD STRUCTURE
B-52-0044
STA: 112+02

PROPOSED END DECK
STA: 113+53.40

2+00'LT

PT: 2+07.90'LT'

EXIST R/W

109+00 110+00 111+00 112+00 113+00 114+00 115+00 116+00

STH 80 STH 80

BEGIN CONSTRUCTION
STA: 109+15
X: 682455.2947
Y: 476204.9129

TYPE C INTERSECTION
STA: 114+89
STA: 2+61'ID'
SEE CONSTRUCTION DETAILS

| SUPERELEVATION STATIONING | | | |
|---|---|---|---|
| | STATION | SE LT | SE RT |
| MATCH EXIST | 109+15.0 | -1.0% | 1.0% |
| LEVEL CROWN | 109+40.5 | -2.0% | 0.0% |
| NORMAL CROWN | 109+91.5 | -2.0% | -2.0% |

*SUPERELEVATION STATIONING ADJUSTED TO MATCH EXIST

PINE RIVER

FRONTIER COMMUNICATIONS

COUNTY D

EXIST R/W

CALVIN R &
FRANCES J
WILKINSON

| LEGEND |
|---|
| CONCRETE APPROACH SLAB |
| CONCRETE PAVEMENT 12-INCH |

VCL = 200.00
K = 1391.22

VPC STA 113+51.12
VPC EL 765.89

VPI STA 115+38.62
VPI EL 766.828

0.50%

HIGH POINT STA: 115+71.50
HIGH POINT EL: 766.44'

VPI STA 109+45.54
VPI EL 763.86

VPT STA 110+45.54
VPT EL 764.36

VCL = 375.00
K = 440.17

770 765 760 755

108+60 109+00 110+00 111+00 112+00 113+00 114+00 115+00 116+00

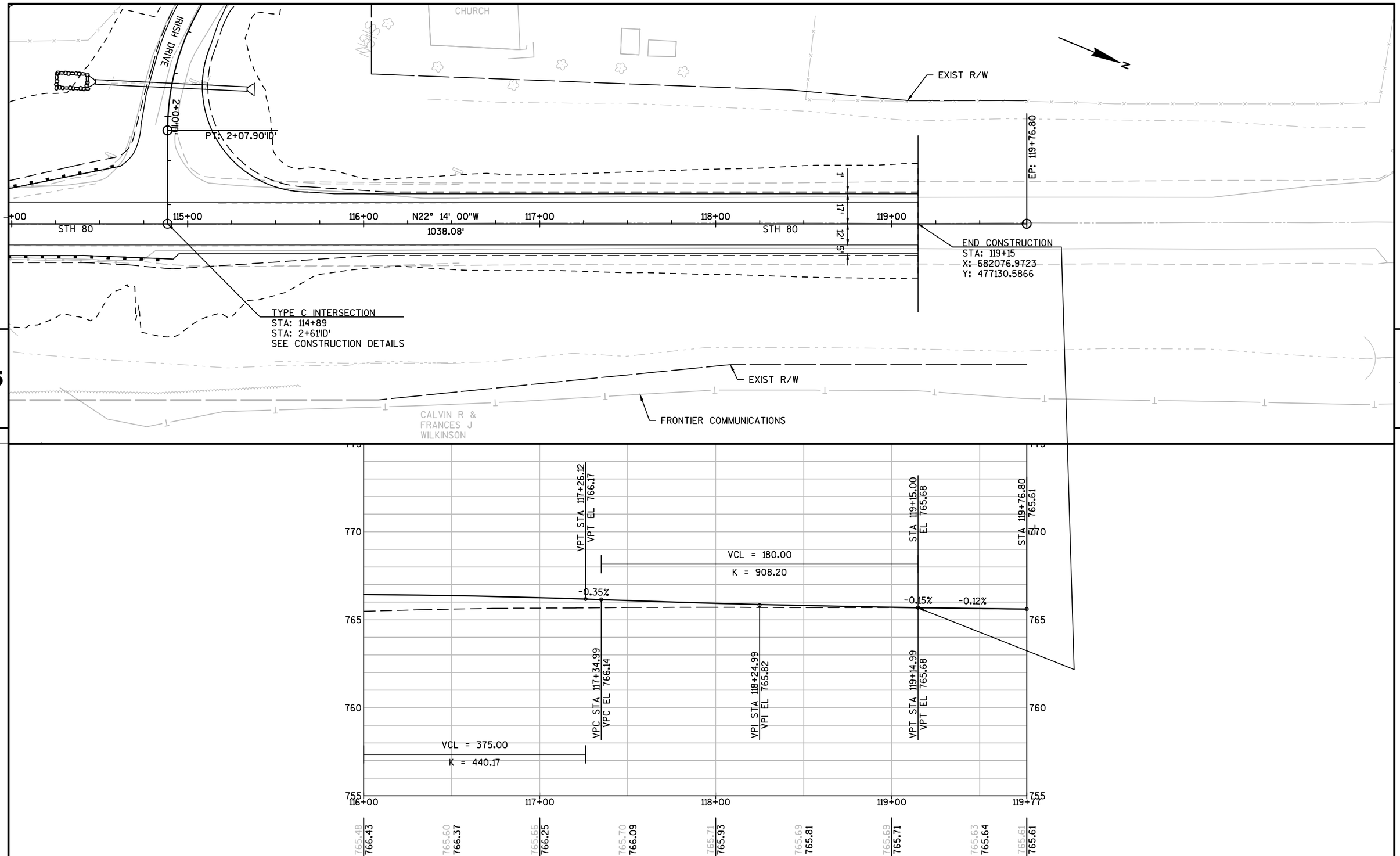
763.57 763.55 | 763.74 763.71 | 763.90 763.91 | 764.04 764.14 | 764.10 764.38 | 753.81 764.63 | 746.60 764.88 | 750.65 765.13 | 751.26 765.38 | 749.32 765.63 | 764.95 765.88 | 765.00 766.11 | 765.21 766.27 | 765.23 766.38 | 765.35 766.44 | 765.48 766.43

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: STH 80 (B-52-0270) | SHEET 116 | E |
|---|---|---|---|---|---|

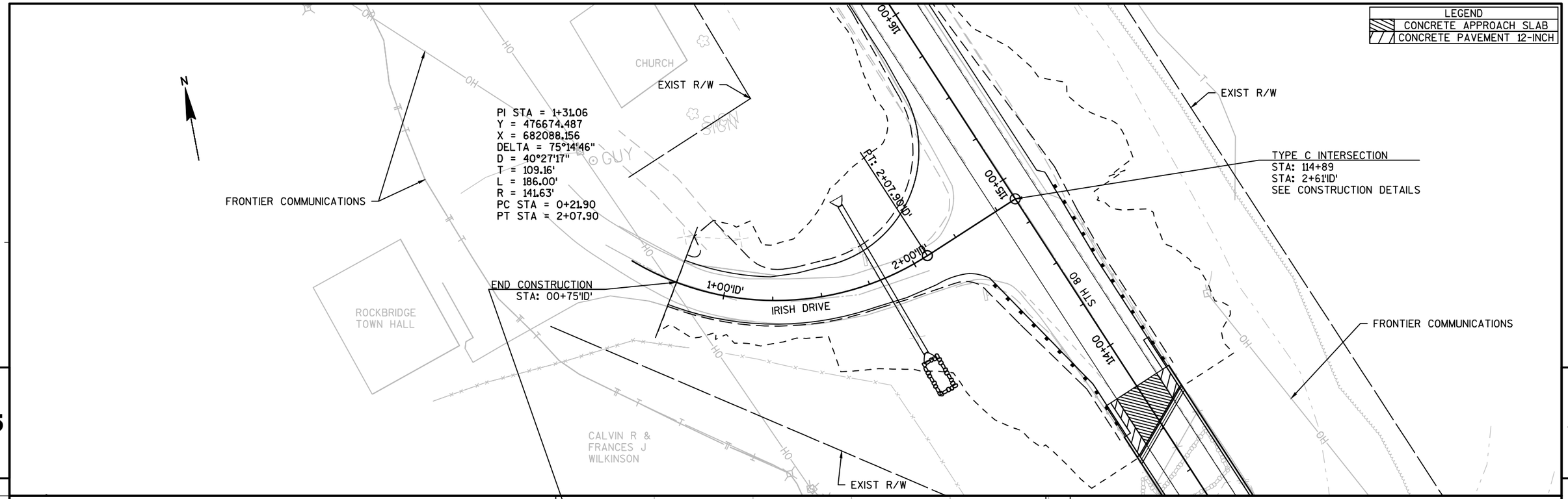
FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\050101_PP_B5244-1.DWG
LAYOUT NAME - 050101_PP_B520270-(1)

PLOT DATE : 7/14/2017 7:53 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT

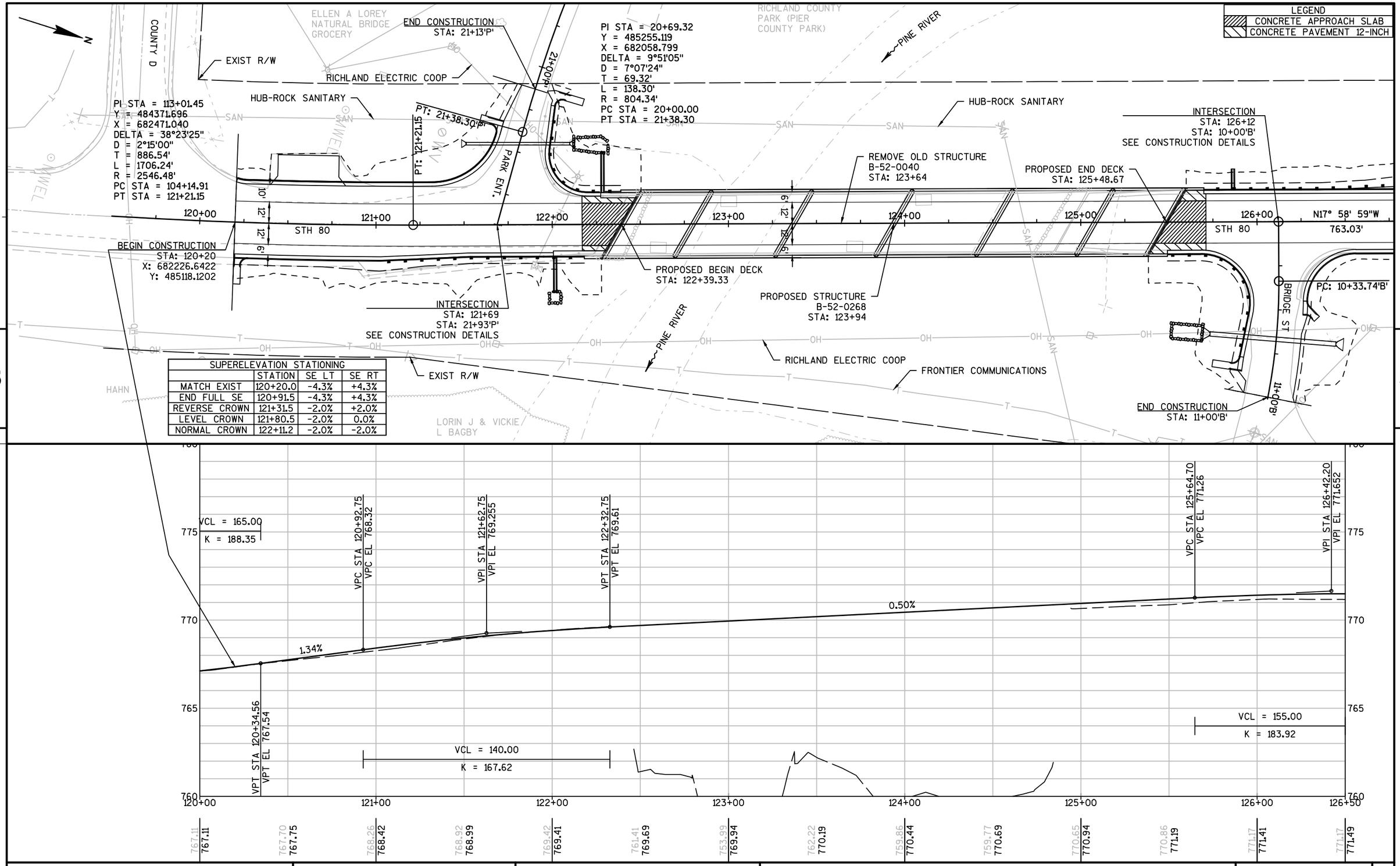
WISDOT/CADDS SHEET 44




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: STH 80 (B-52-0270) | SHEET 117 | E |
|---|---|---|---|---|---|




| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: IRISH DRIVE (B-52-0270) | SHEET 118 E |
|---|---|---|---|---|




5

5

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: STH 80 (B-52-0268) | SHEET 119 E |
|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\050101_PP_B5240.DWG
LAYOUT NAME - 050101_B520268-(1)

PLOT DATE : 7/14/2017 8:11 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT

| LEGEND |
|---|
| CONCRETE APPROACH SLAB |
| CONCRETE PAVEMENT 12-INCH |

EXIST R/W

HUB-ROCK SANITARY

INTERSECTION
STA: 126+12
STA: 10+00'B'
SEE CONSTRUCTION DETAILS

PI STA = 131+00.34
Y = 486146.278
X = 681895.020
DELTA = 26°32'08"
D = 6°15'00"
T = 216.16'
L = 424.57'
R = 916.73'
PC STA = 128+84.18
PT STA = 133+08.75

PC: 128+84.18

124+00 | 125+00 | 126+00 | 127+00 | 128+00 | 129+00

N17° 58' 59"W
763.03'

STH 80

4' 12' 12' 4'

PROPOSED END DECK
STA: 125+48.67

PROPOSED STRUCTURE
B-52-0268
STA: 123+94

PC: 10+33.74'B'

BRIDGE ST

RICHLAND ELECTRIC COOP

FRONTIER COMMUNICATIONS

END CONSTRUCTION
STA: 11+00'B'

PI STA = 10+92.01
Y = 485710.524
X = 682133.196
DELTA = 19°53'50"
D = 17°14'55"
T = 58.27'
L = 115.36'
R = 332.18'
PC STA = 10+33.74
PT STA = 11+49.10

RICHLAND ELECTRIC COOP

EXIST R/W

END CONSTRUCTION
STA: 129+50
X: 681943.6992
Y: 486003.9576

| SUPERELEVATION STATIONING | | | |
|---|---|---|---|
| | STATION | SE LT | SE RT |
| NORMAL CROWN | 127+74.0 | -2.0% | -2.0% |
| LEVEL CROWN | 128+15.0 | 0.0% | -2.0% |
| REVERSE CROWN | 128+56.0 | 2.0% | -2.0% |
| FULL SUPER | 129+18.0 | 5.0% | -5.0% |
| MATCH POINT | 129+50.0 | 5.0% | -5.0% |

VPC STA 125+64.70
VPC EL 771.26

VPI STA 126+42.20
VPI EL 771.652

VPT STA 127+19.70
VPT EL 771.39

VCL = 145.00
K = 169.56

LOW POINT STA: 128+61.12
LOW POINT EL: 771.00'

-0.34%

0.51%

HIGH POINT STA: 126+56.66
HIGH POINT EL: 771.49'

VCL = 155.00
K = 183.92

VPC STA 128+03.00
VPC EL 771.10

VPI STA 128+75.50
VPI EL 770.85

VPT STA 129+48.00
VPT EL 771.22

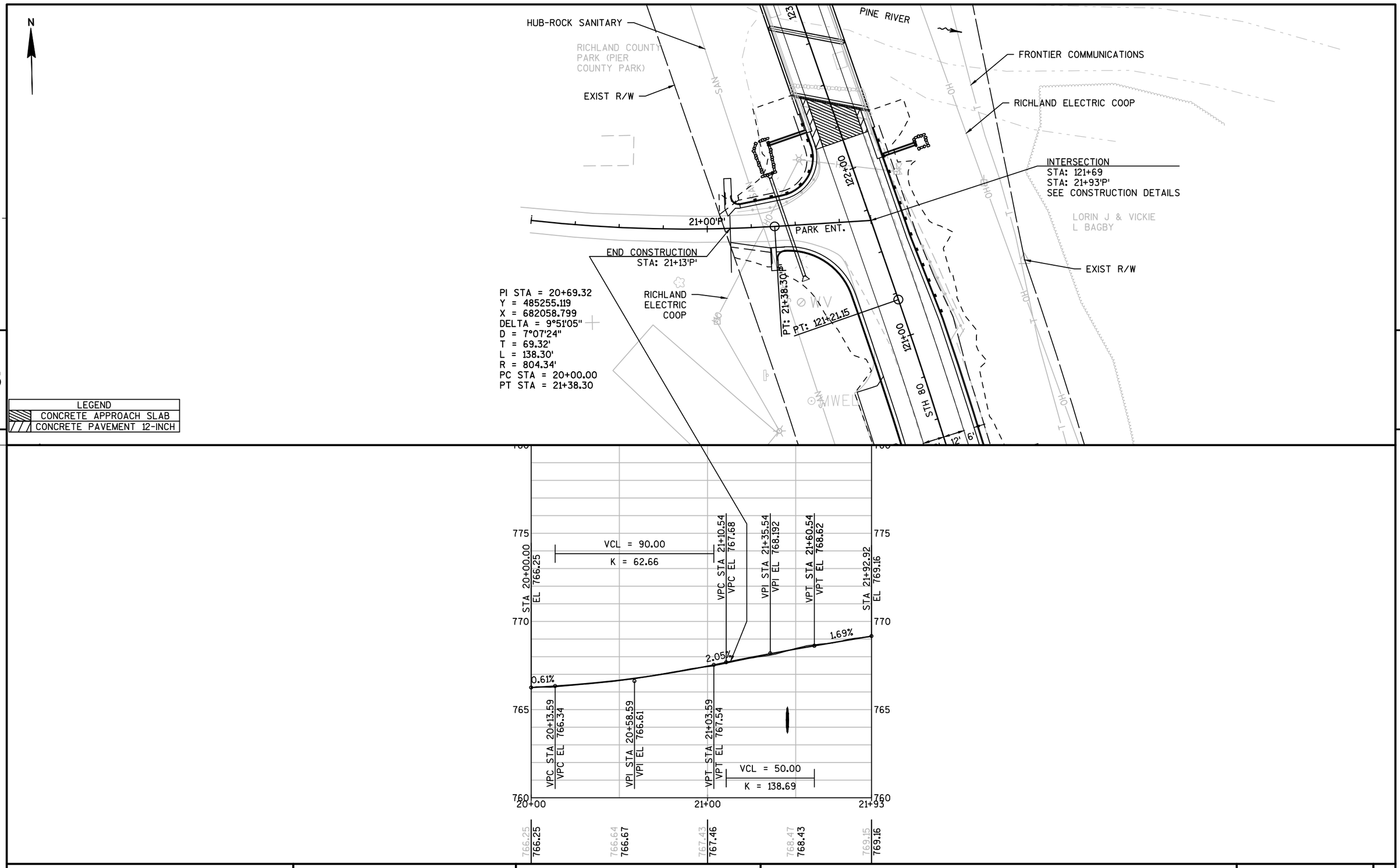
775 | 770 | 765 | 760

124+00 | 125+00 | 126+00 | 127+00 | 128+00 | 129+00 | 130+00

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 759.86 | 759.77 | 770.65 | 770.86 | 771.17 | 771.17 | 770.88 | 770.69 | 770.56 | 770.68 | 770.94 | 771.24 | 771.48 |
| 770.44 | 770.69 | 770.94 | 771.19 | 771.41 | 771.49 | 771.44 | 771.28 | 771.11 | 771.01 | 771.05 | 771.23 | 771.49 |

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: STH 80 (B-52-0268) | SHEET 120 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\050101_PP_B5240.DWG
LAYOUT NAME - 050101_B520268-(2)
PLOT DATE : 7/14/2017 8:11 PM
PLOT BY : SHIFFER, CAMERON J PLOT NAME :
PLOT SCALE : 1 IN:50 FT



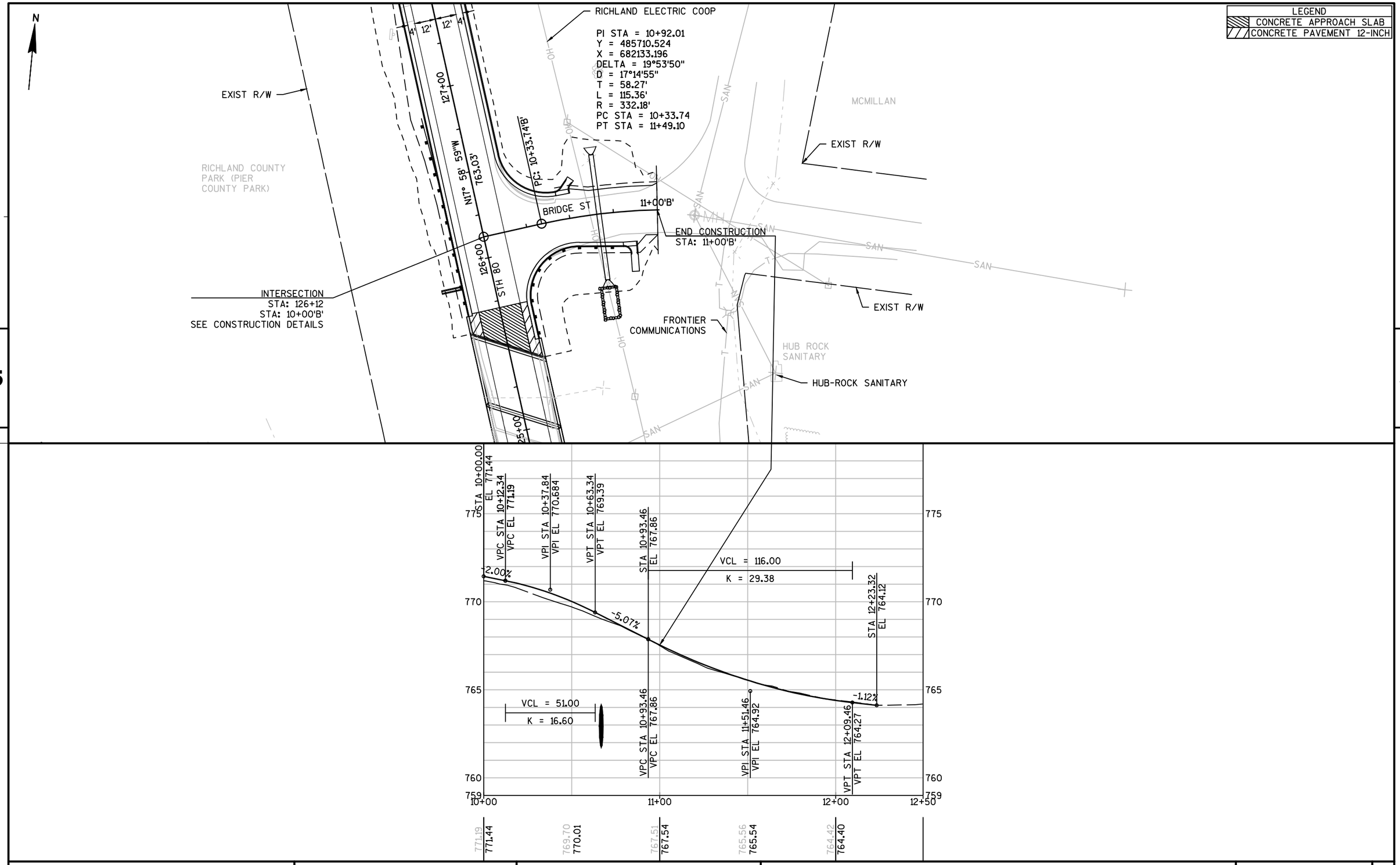

5

5

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: PARK ENTRANCE (B-52-0268) | SHEET 121 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\050101_PP_B5240.DWG
LAYOUT NAME - 050101_B520268-(2)

PLOT DATE : 7/14/2017 8:11 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT



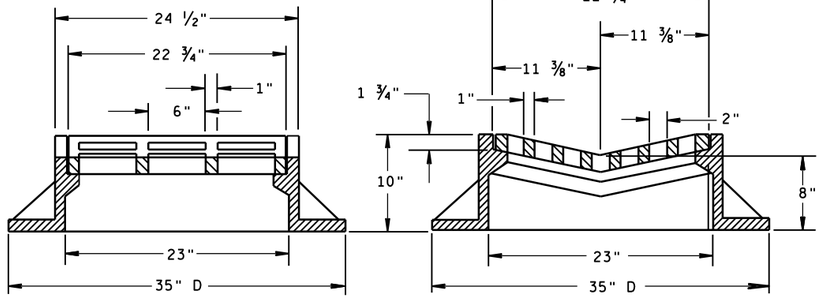

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | PLAN AND PROFILE: BRIDGE ST (B-52-0268) | SHEET 122 | E |
|---|---|---|---|---|---|

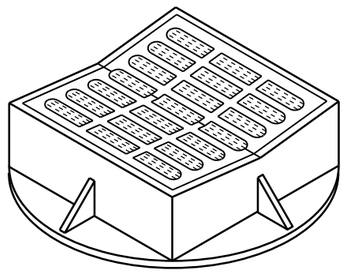
FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\050101_PP_B5240.DWG
LAYOUT NAME - 050101_B520268-(3)
PLOT DATE : 7/14/2017 8:11 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

# Standard Detail Drawing List

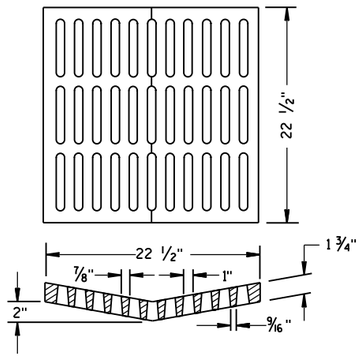
| | |
|---|---|
| 08A05-19B | INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM |
| 08D01-19 | CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES |
| 08D02-06 | CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES |
| 08D04-05 | CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES |
| 08E08-03 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E09-06 | SILT FENCE |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 08E14-01 | TRACKING PAD |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F03-03 | DETAILS FOR PIPE CATTLE PASS, CONCRETE ENDWALLS AND STEPS |
| 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) |
| 13A03-06 | CONCRETE PAVEMENT SHOULDERS |
| 13A10-01A | 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING |
| 13A10-01C | 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING |
| 13A10-01D | 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING |
| 13A11-02A | 2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING |
| 13A11-02B | 2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING |
| 13B02-08A | CONCRETE PAVEMENT APPROACH SLAB |
| 13B02-08B | STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB |
| 13C01-18 | CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES |
| 14B15-09A | STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS |
| 14B15-09B | STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS |
| 14B15-09C | STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS |
| 14B20-11A | STEEL THRIE BEAM STRUCTURE APPROACH |
| 14B20-11B | STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO  SQUARE END PARAPETS |
| 14B24-08A | STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL |
| 14B24-08B | STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL |
| 14B24-08C | STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL |
| 14B25-01 | STEEL PLATE BEAM GUARD, CLASS "A", OVER LOW FILL CULVERTS |
| 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 |
| 14B42-04A | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-04B | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-04C | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B44-02A | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B44-02B | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B44-02C | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B45-04A | MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS) |
| 14B45-04B | MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS) |
| 14B45-04C | MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS) |
| 14B45-04D | MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS) |
| 15A02-09 | DELINEATOR POST, DELINEATOR REFLECTOR  AND DELINEATOR  BRACKET WITH REFLECTIVE SHEETING |
| 15A03-02A | FLEXIBLE MARKER POST FOR CULVERT END |
| 15A03-02B | FLEXIBLE MARKER POST FOR CULVERT END |
| 15C02-06A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-06B | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-06C | DETOUR SIGNING FOR MAINLINE CLOSURES |
| 15C03-03 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C04-03 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC |
| 15C07-13B | PAVEMENT MARKING WORDS |
| 15C07-13C | PAVEMENT MARKING ARROWS |
| 15C08-17A | LONGITUDINAL MARKING (MAINLINE) |
| 15C12-05 | TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION |
| 15C18-03 | MEDIAN ISLAND MARKING |
| 15C33-02 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15D38-01A | TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS |
| 15D38-01B | ATTACHMENT OF SIGNS TO POSTS |

6



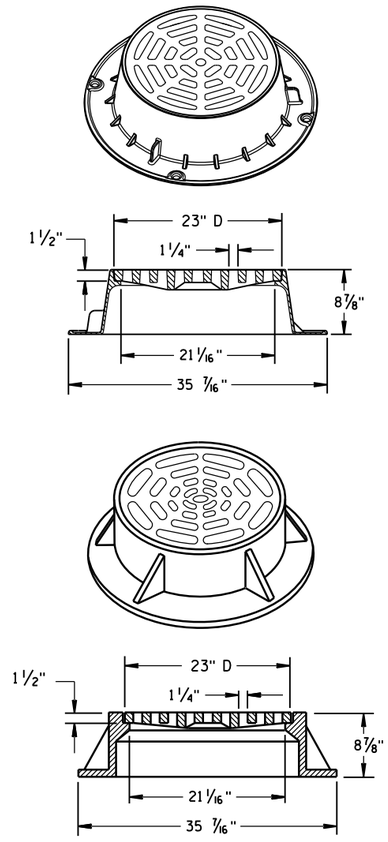



TYPE "B"




ALTERNATIVE GRATE FOR TYPE "B" COVER

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




TYPE "C"

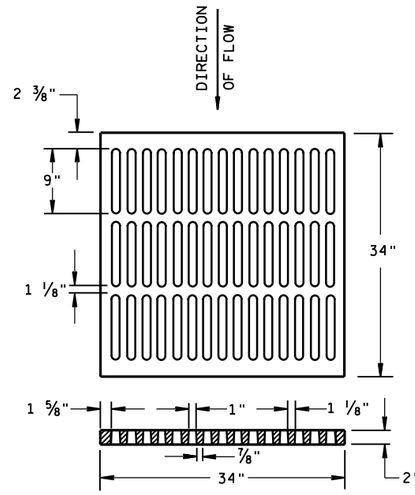
NOTE: EITHER CASTING IS ACCEPTABLE

## GENERAL NOTES

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

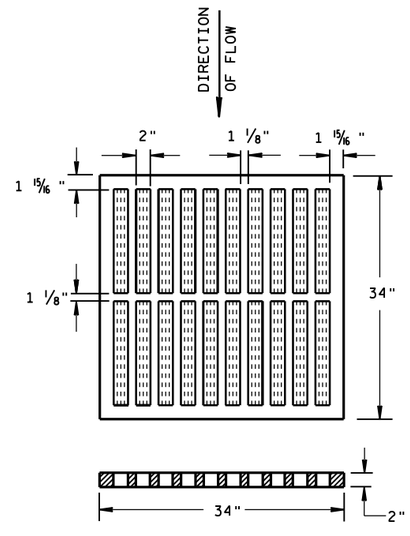
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



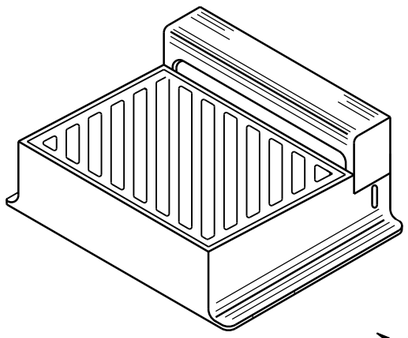

ALTERNATIVE TYPE "MS"

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



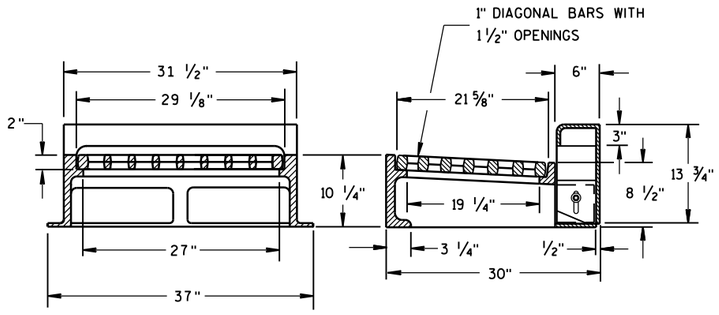

TYPE "MS"

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






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




NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

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

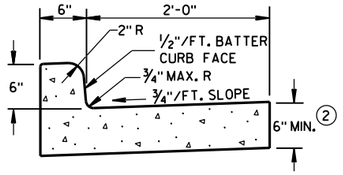
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

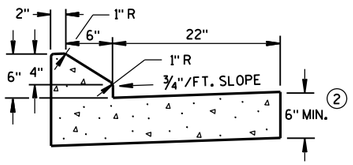


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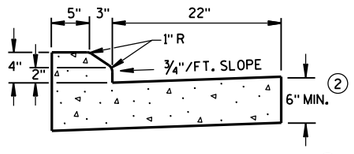
S.D.D. 8 A 5-19b




TYPES A & D ①

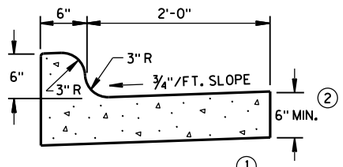



6" SLOPED CURB TYPES G & J ①

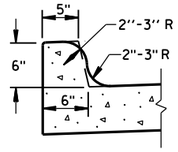



4" SLOPED CURB TYPES G & J ①

## CONCRETE CURB & GUTTER 30"

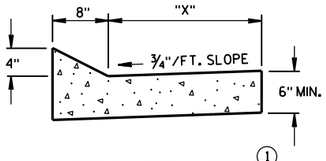



TYPES K & L ①




OPTIONAL CURB SHAPE FOR TYPES K & L ①

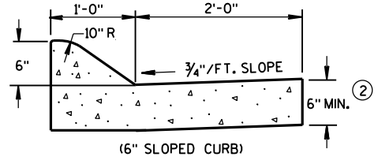
## CONCRETE CURB & GUTTER 30"



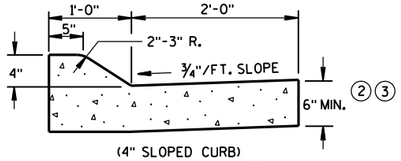

TYPES TBT & TBTT ①

## CONCRETE CURB & GUTTER

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

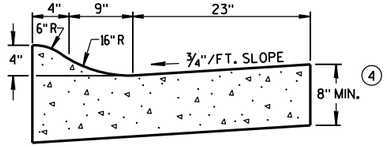



(6" SLOPED CURB)




(4" SLOPED CURB)

TYPES A & D ①




4" SLOPED CURB TYPES R & T ①⑤

## CONCRETE CURB & GUTTER 36"

## GENERAL NOTES

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

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

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

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

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

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

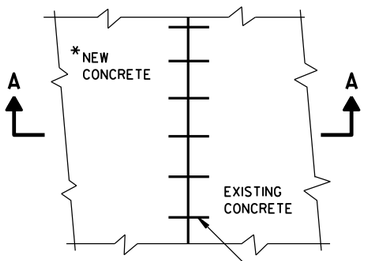
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

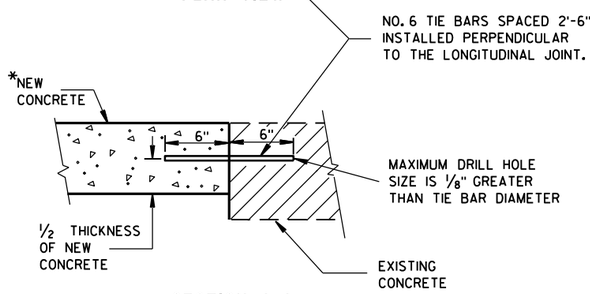
⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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



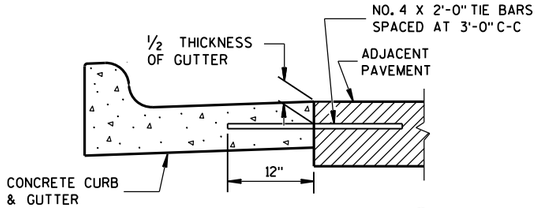

PLAN VIEW

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

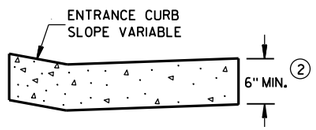



SECTION A-A

## TIE BARS DRILLED INTO EXISTING PAVEMENT

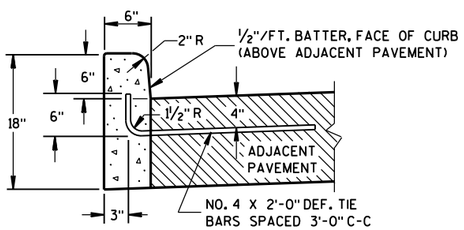



TYPICAL TIE BAR LOCATION ①

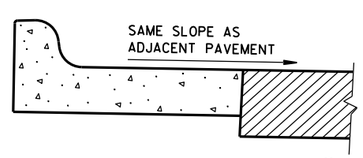



## DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)

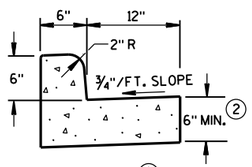



① TYPES A & D



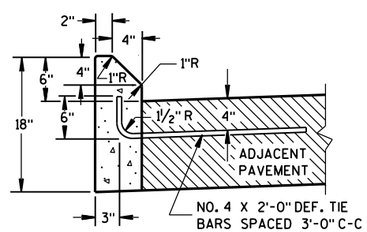

⑥ REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)



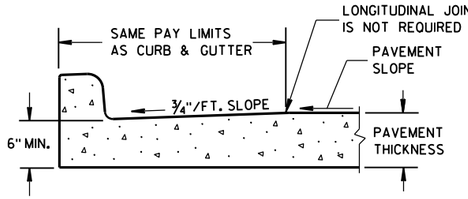

① TYPES A & D

## CONCRETE CURB & GUTTER 18"

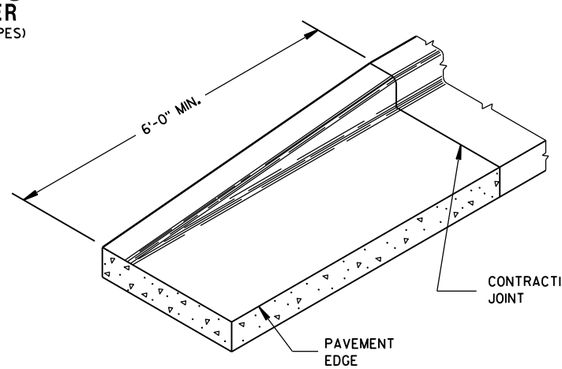



① TYPES G & J

## CONCRETE CURB




## PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER




## END SECTION CURB & GUTTER

# CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

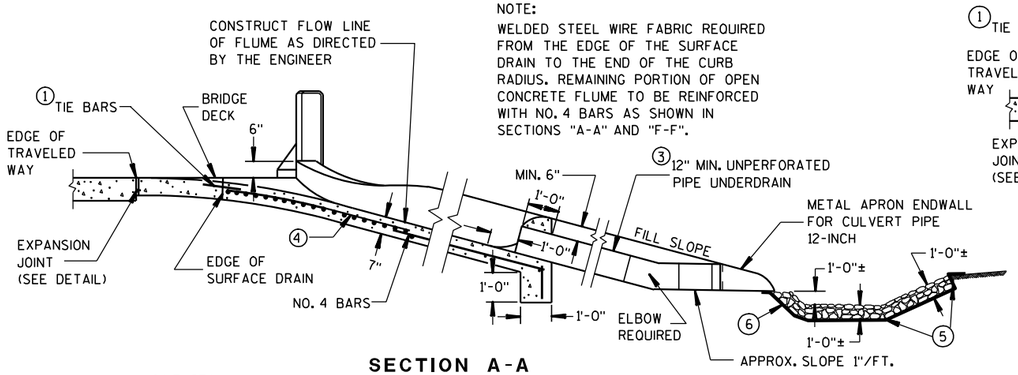
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

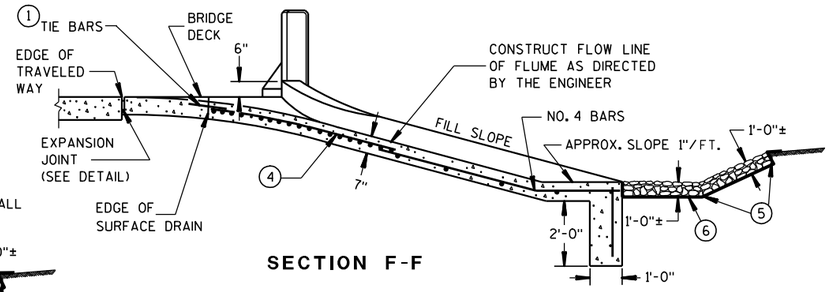


6

S.D.D. 8 D 1-19




SECTION A-A




SECTION F-F

## GENERAL NOTES

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

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

(1) NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.

(2) NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PIPE UNDERDRAIN MAY BE ANY OF THE MATERIALS LISTED IN SECTION 612.2 OF THE STANDARD SPECIFICATIONS EXCEPT DRAIN TILE.

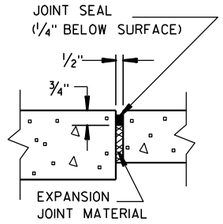
(4) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

(5) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

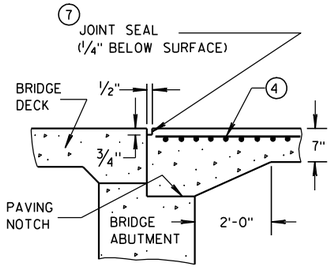
(6) GEOTEXTILE FABRIC, TYPE 'R"

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

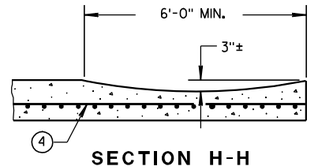
(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½".



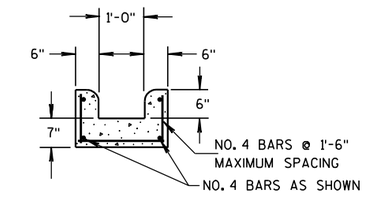

EXPANSION JOINT DETAIL



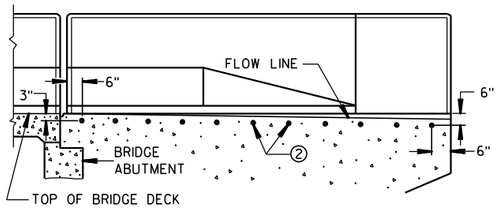

SECTION D-D



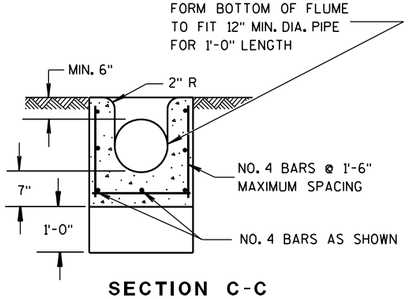

SECTION H-H



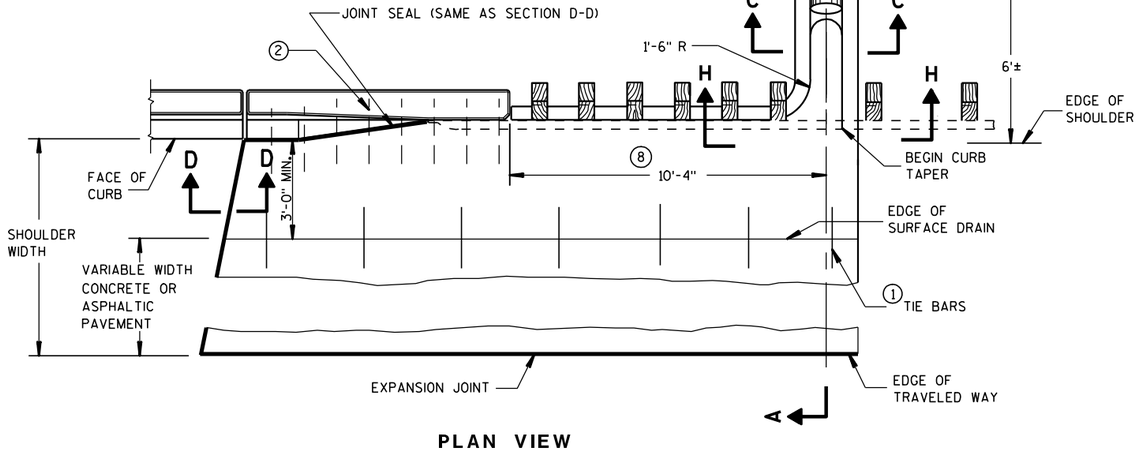

SECTION E-E



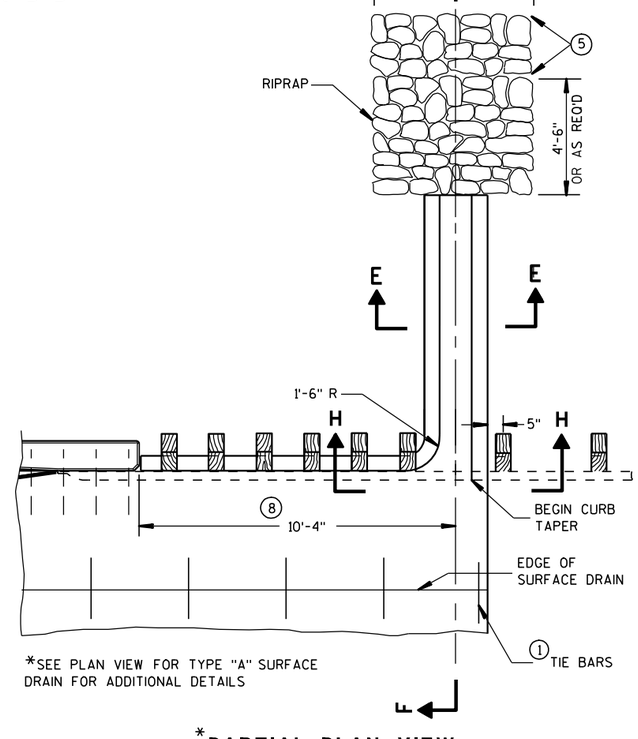

LOCATION OF TIE BARS IN WINGWALL




SECTION C-C




PLAN VIEW
SURFACE DRAIN WITH PIPE
TYPE "A"




*SEE PLAN VIEW FOR TYPE "A" SURFACE DRAIN FOR ADDITIONAL DETAILS

*PARTIAL PLAN VIEW
SURFACE DRAIN WITHOUT PIPE
TYPE "B"

CONCRETE SURFACE DRAINS
FLUME TYPE
AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

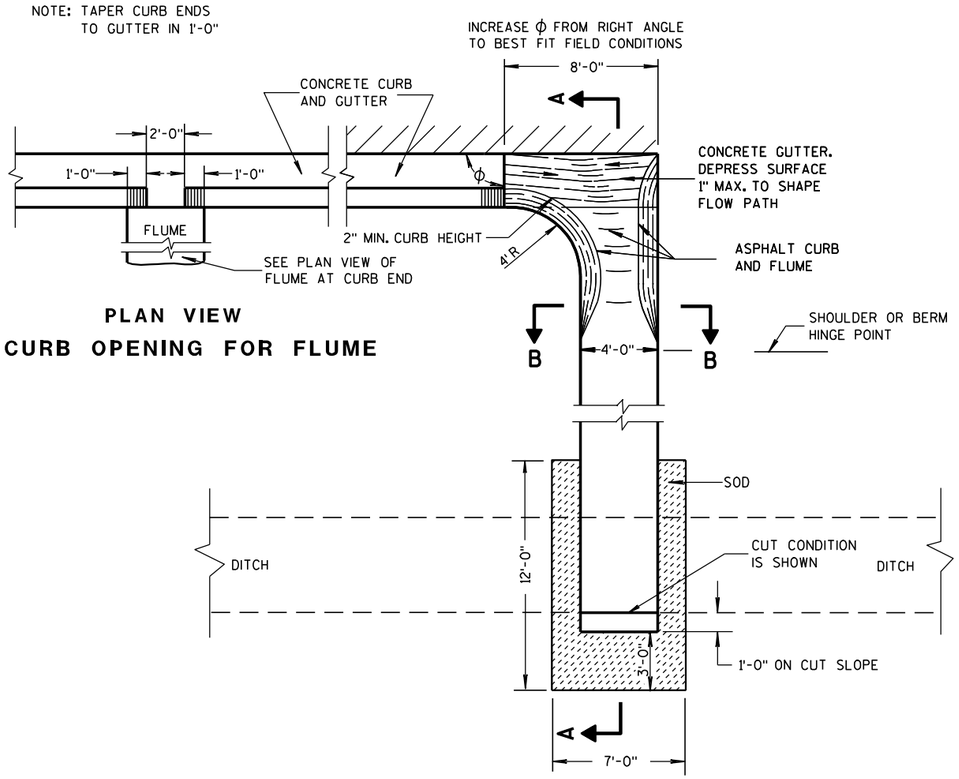
APPROVED
9/4/08 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA



S.D.D. 8 D 2-6

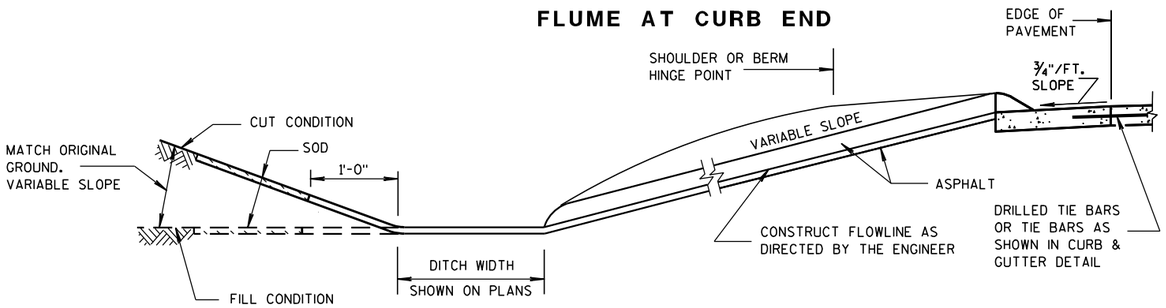
S.D.D. 8 D 2-6

## ASPHALTIC FLUME

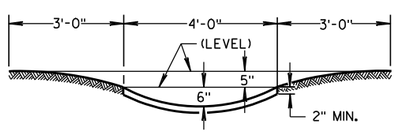



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END




SECTION A-A




SECTION B-B

## GENERAL NOTES

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

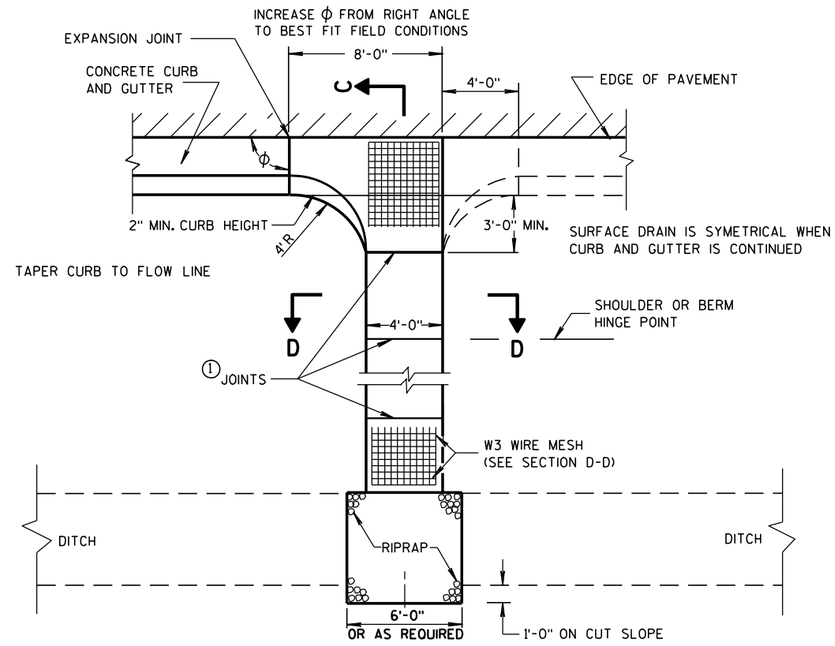
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

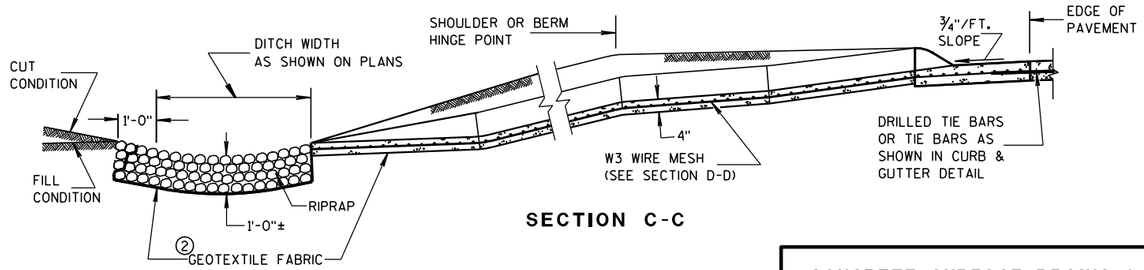
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

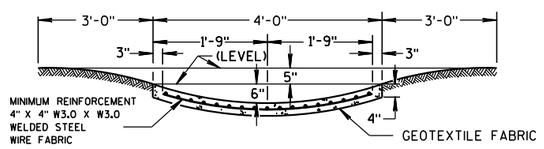
## ③ CONCRETE SURFACE DRAIN




PLAN VIEW




SECTION C-C




SECTION D-D

## CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

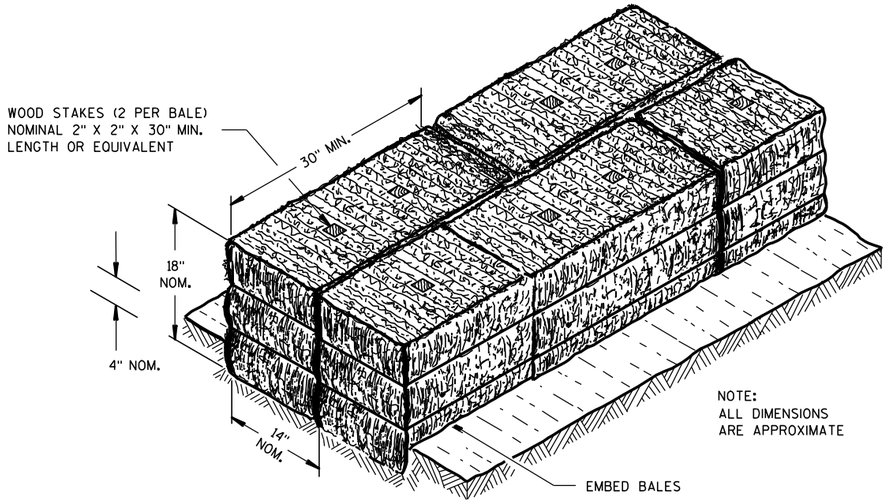
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
127
MENT
FHWA

6

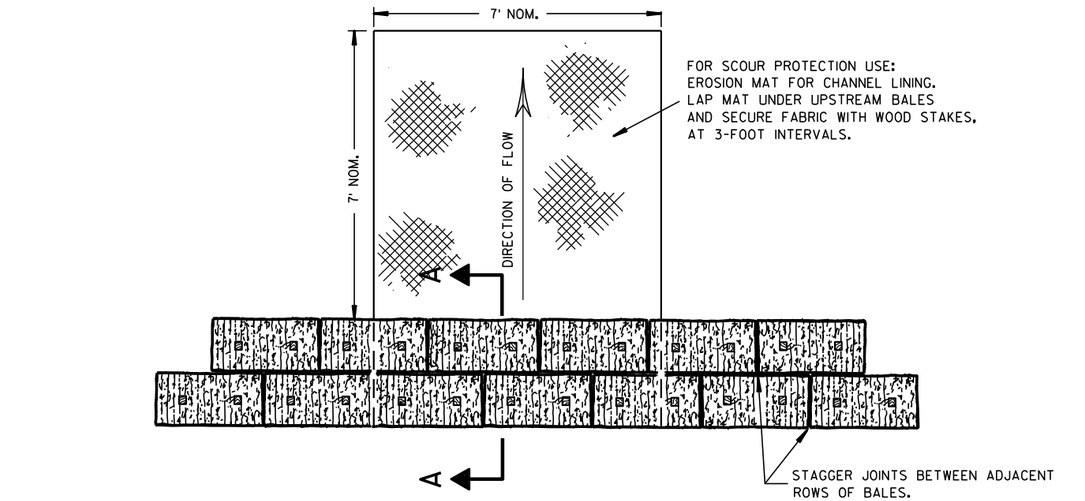
S.D.D. 8 D 4-5

6

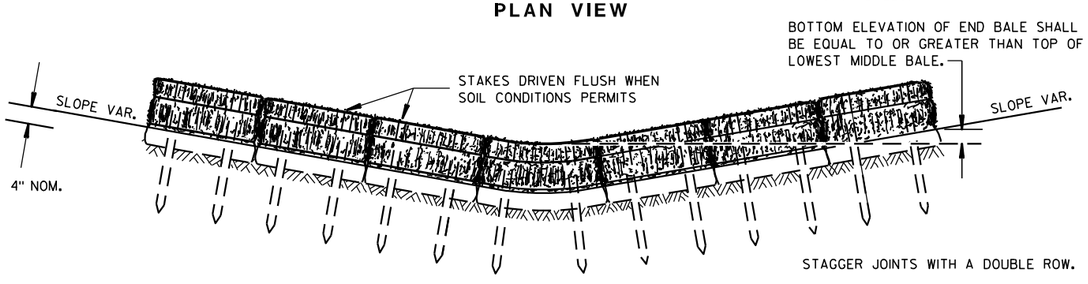
S.D.D. 8 D 4-5




**SECTION A-A**




**PLAN VIEW**



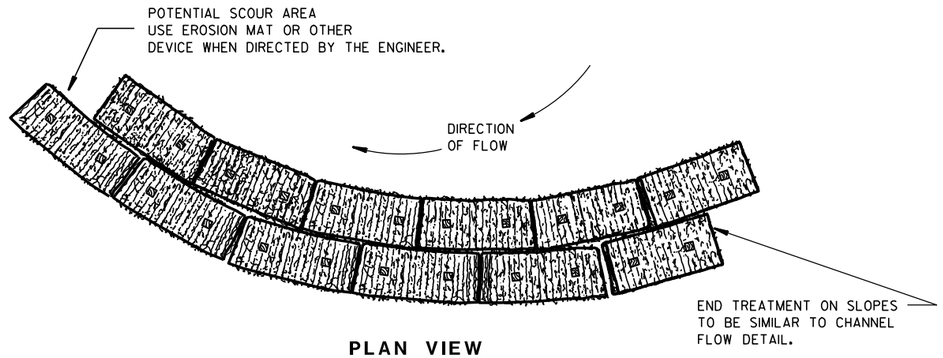

**FRONT ELEVATION**

## TEMPORARY DITCH CHECK USING EROSION BALES (1)

## GENERAL NOTES

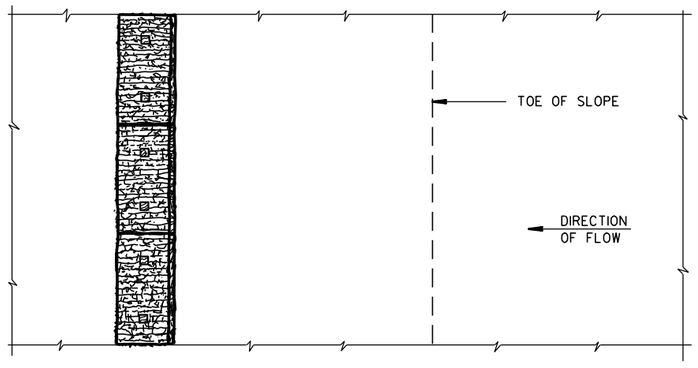
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

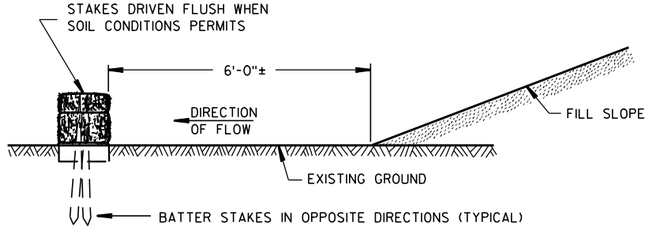



**PLAN VIEW**

WHEN ALTERING THE DIRECTION OF FLOW




**PLAN VIEW**




**FRONT ELEVATION**

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

## EROSION BALES FOR SHEET FLOW

**TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

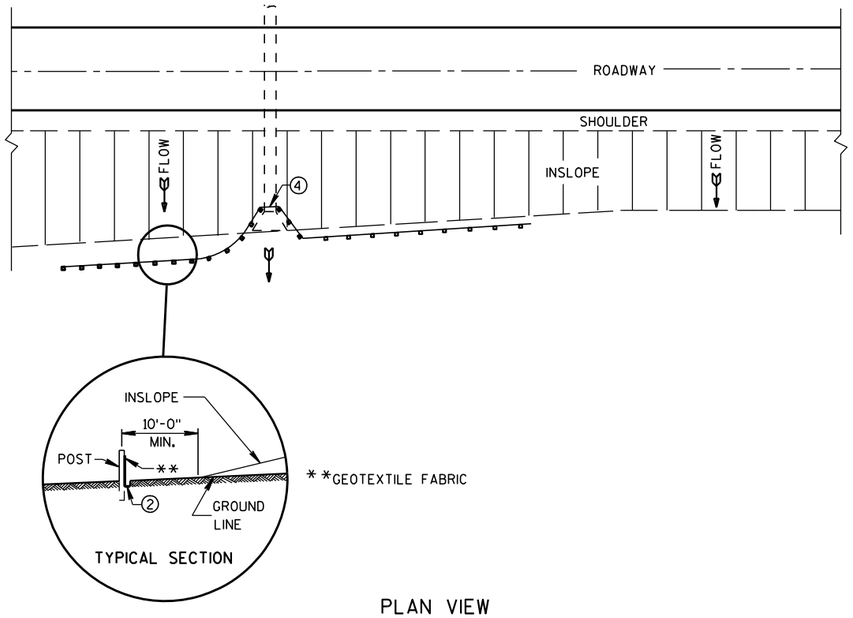


6

S.D.D. 8 E 8-3

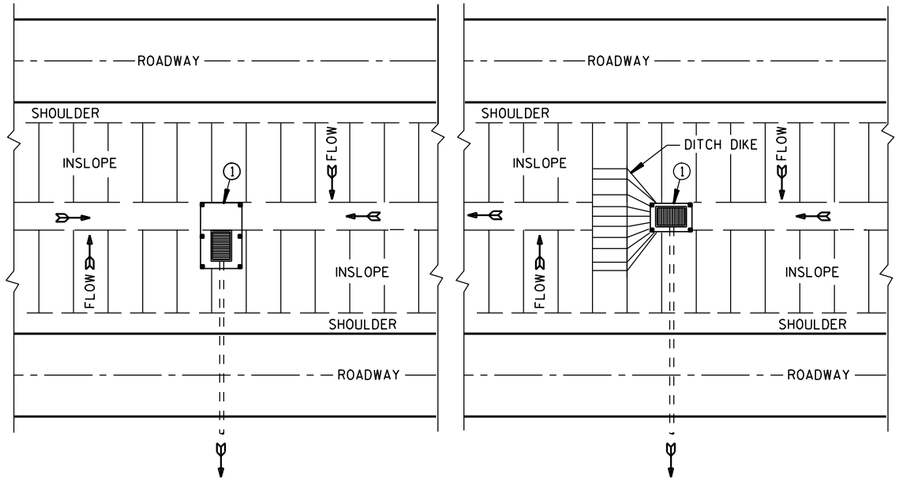
6

S.D.D. 8 E 8-3




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE




PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

## GENERAL NOTES

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

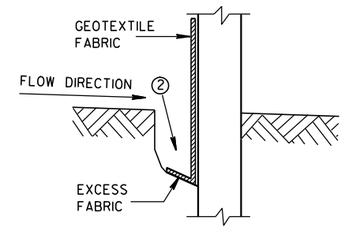
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

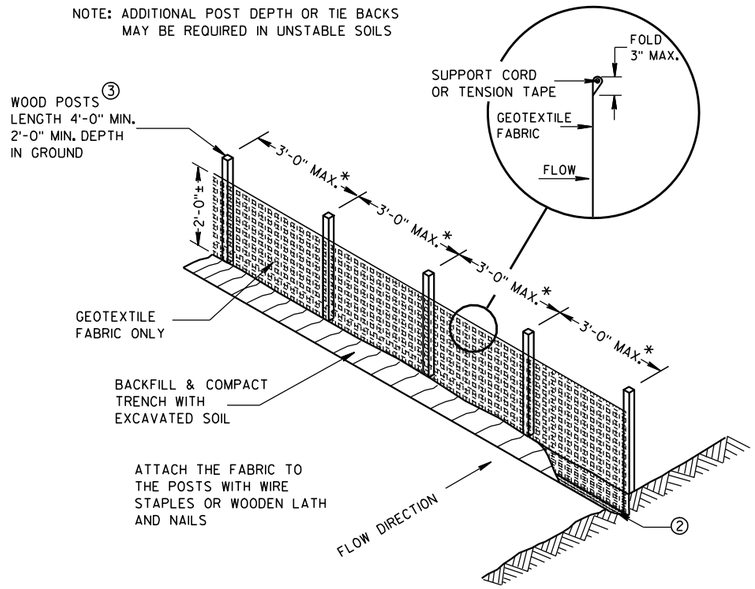
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

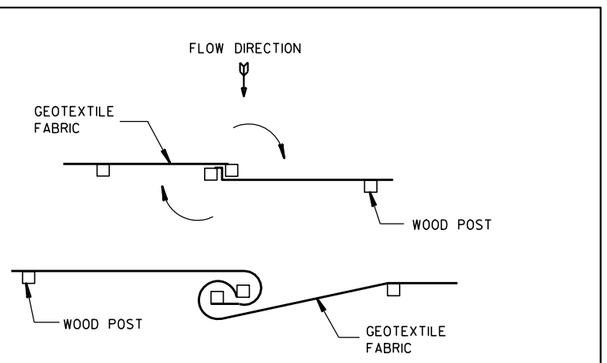
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



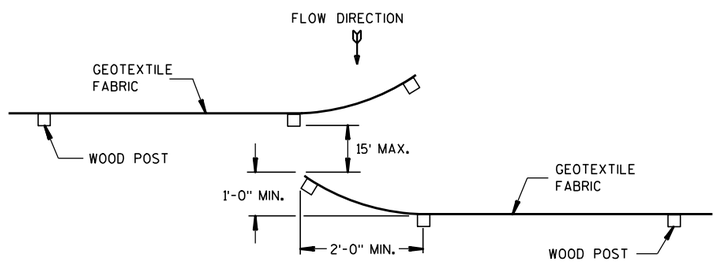

## TRENCH DETAIL




## SILT FENCE

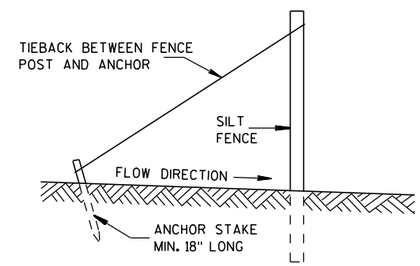



TWIST METHOD




HOOK METHOD

## JOINING TWO LENGTHS OF SILT FENCE ⑤




## SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

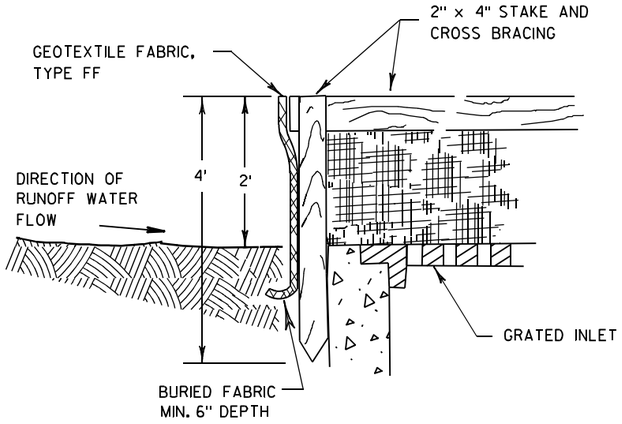


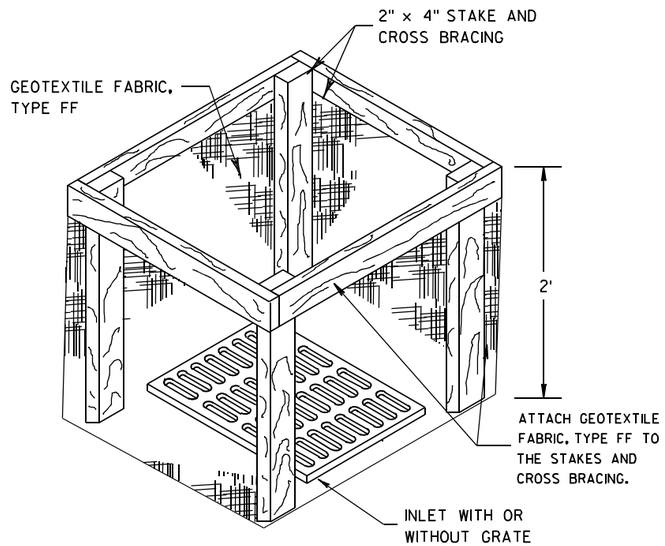
6

S.D.D. 8 E 9-6

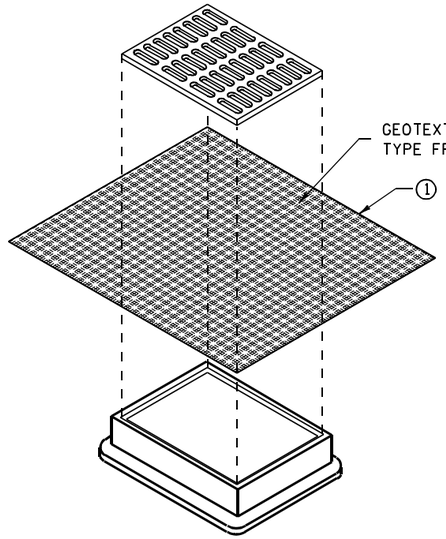
6

S.D.D. 8 E 9-6



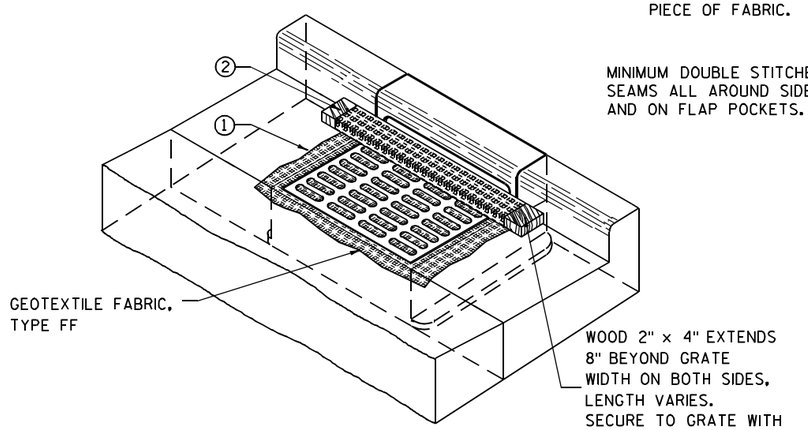




## INLET PROTECTION, TYPE A

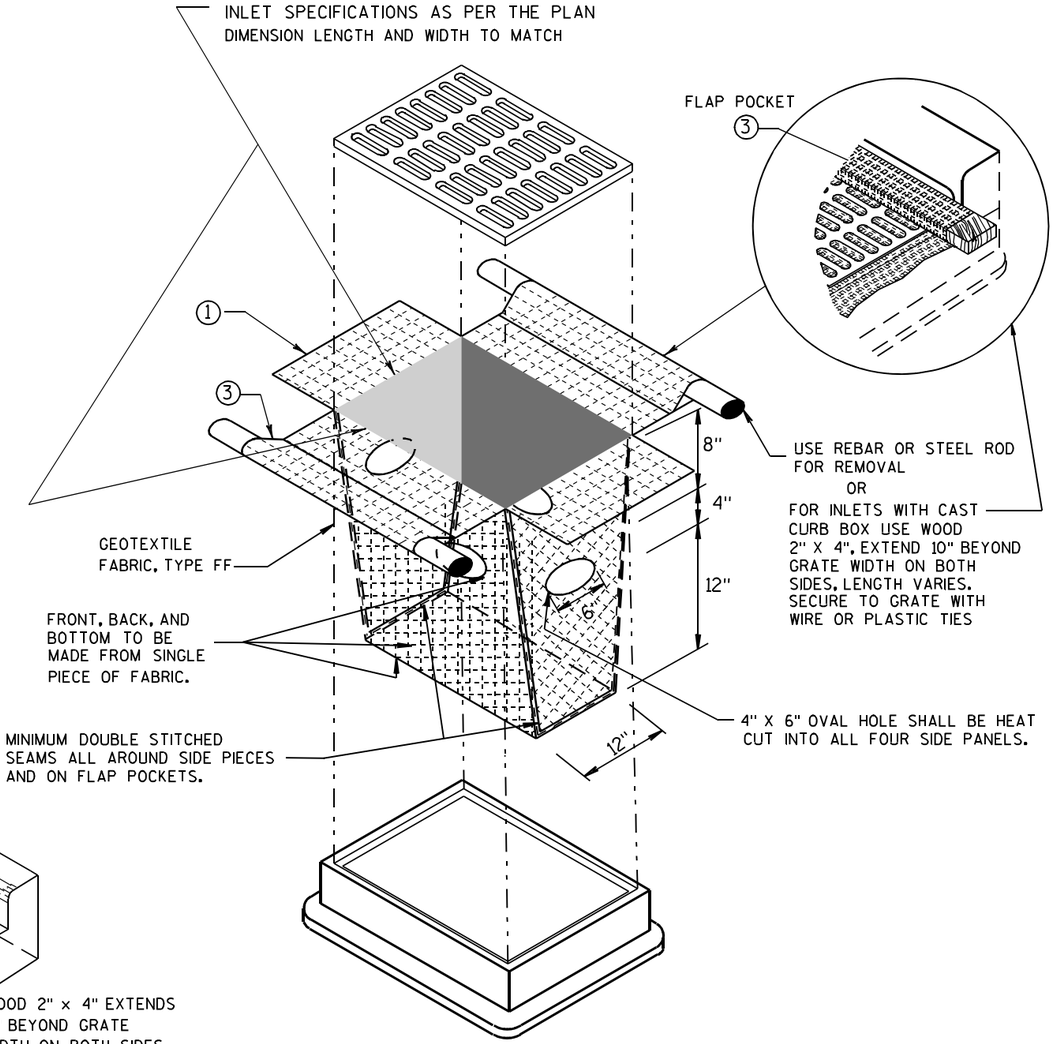



## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

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




## INLET PROTECTION, TYPE C (WITH CURB BOX)




## INLET PROTECTION, TYPE D

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

## GENERAL NOTES

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

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

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

## INSTALLATION NOTES

### TYPE B & C

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

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

### TYPE D

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

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

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

**INLET PROTECTION**
**TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

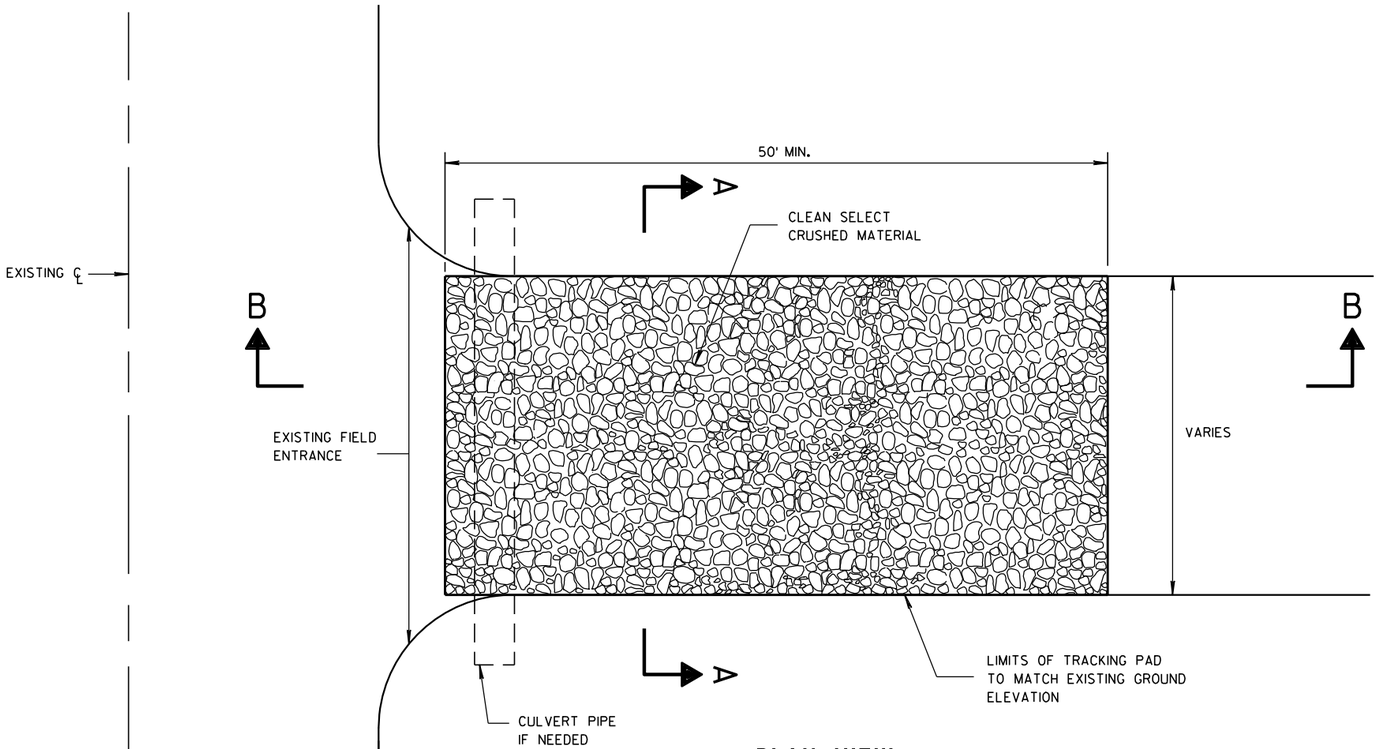
10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

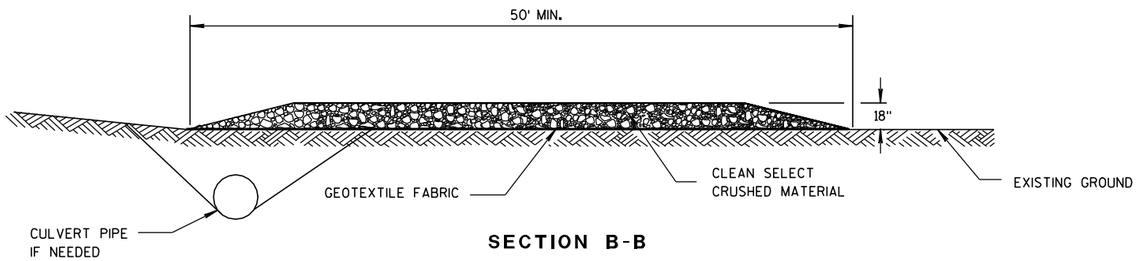
FHWA




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




PLAN VIEW




SECTION B-B

## GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

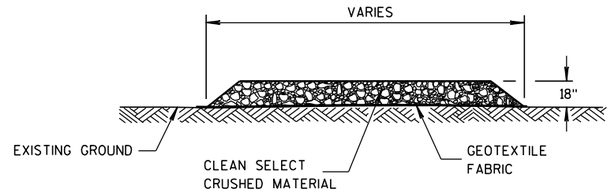
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.




SECTION A-A

# TRACKING PAD

| TRACKING PAD | |
|---|---|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>3/24/2011<br>DATE<br>FHWA | /S/ Jerry H. Zoda<br>ROADWAY STANDARDS ENGINEER |



6



S.D.D. 8 E 14-1

## METAL APRON ENDWALLS

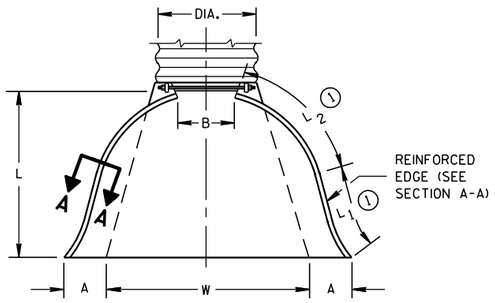
| PIPE DIA. (IN.) | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | .064 | .060 | 6 | 6 | 6 | 21 | 12 | 17 1/2 | 24 | 2 1/2 to 1 | 1 Pc. |
| 15 | .064 | .060 | 7 | 8 | 6 | 26 | 14 | 21 3/4 | 30 | 2 1/2 to 1 | 1 Pc. |
| 18 | .064 | .060 | 8 | 10 | 6 | 31 | 15 | 28 1/4 | 36 | 2 1/2 to 1 | 1 Pc. |
| 21 | .064 | .060 | 9 | 12 | 6 | 36 | 18 | 29 5/8 | 42 | 2 1/2 to 1 | 1 Pc. |
| 24 | .064 | .075 | 10 | 13 | 6 | 41 | 18 | 37 1/4 | 48 | 2 1/2 to 1 | 1 Pc. |
| 30 | .079 | .075 | 12 | 16 | 8 | 51 | 18 | 52 1/4 | 60 | 2 1/2 to 1 | 1 Pc. |
| 36 | .079 | .105 | 14 | 19 | 9 | 60 | 24 | 59 3/4 | 72 | 2 1/2 to 1 | 2 Pc. |
| 42 | .109 | .105 | 16 | 22 | 11 | 69 | 24 | 75 5/8 | 84 | 2 1/2 to 1 | 2 Pc. |
| 48 | .109 | .105 | 18 | 27 | 12 | 78 | 24 | 81 | 90 | 2 1/4 to 1 | 3 Pc. |
| 54 | .109 | .105 | 18 | 30 | 12 | 84 | 30 | 85 1/2 | 102 | 2 1/4 to 1 | 3 Pc. |
| 60 | .109× | .105× | 18 | 33 | 12 | 87 | — | — | 114 | 2 to 1 | 3 Pc. |
| 66 | .109× | .105× | 18 | 36 | 12 | 87 | — | — | 120 | 2 to 1 | 3 Pc. |
| 72 | .109× | .105× | 18 | 39 | 12 | 87 | — | — | 126 | 2 to 1 | 3 Pc. |
| 78 | .109× | .105× | 18 | 42 | 12 | 87 | — | — | 132 | 1 1/2 to 1 | 3 Pc. |
| 84 | .109× | .105× | 18 | 45 | 12 | 87 | — | — | 138 | 1 1/2 to 1 | 3 Pc. |
| 90 | .109× | .105× | 18 | 37 | 12 | 87 | — | — | 144 | 1 1/2 to 1 | 3 Pc. |
| 96 | .109× | .105× | 18 | 35 | 12 | 87 | — | — | 150 | 1 1/2 to 1 | 3 Pc. |

× EXCEPT CENTER PANEL SEE GENERAL NOTES

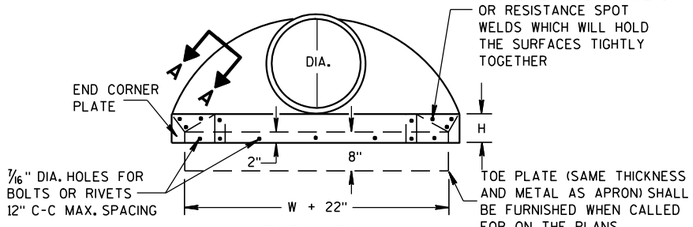
## REINFORCED CONCRETE APRON ENDWALLS

| PIPE DIA. (IN.) | DIMENSIONS (Inches) T | A | B | C | D | E | G | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|
| 12 | 2 | 4 | 24 | 48 7/8 | 72 1/8 | 24 | 2 | 3 to 1 |
| 15 | 2 1/4 | 6 | 27 | 46 | 73 | 30 | 2 1/4 | 3 to 1 |
| 18 | 2 1/2 | 9 | 27 | 46 | 73 | 36 | 2 1/2 | 3 to 1 |
| 21 | 2 3/4 | 9 | 36 | 37 1/2 | 73 1/2 | 42 | 2 3/4 | 3 to 1 |
| 24 | 3 | 9 1/2 | 43 1/2 | 30 | 73 1/2 | 48 | 3 | 3 to 1 |
| 27 | 3 1/4 | 10 1/2 | 49 1/2 | 24 | 73 1/2 | 54 | 3 1/4 | 3 to 1 |
| 30 | 3 1/2 | 12 | 54 | 19 3/4 | 73 1/2 | 60 | 3 1/2 | 3 to 1 |
| 36 | 4 | 15 | 63 | 34 3/4 | 97 3/4 | 72 | 4 | 3 to 1 |
| 42 | 4 1/2 | 21 | 63 | 35 | 98 | 78 | 4 1/2 | 3 to 1 |
| 48 | 5 | 24 | 72 | 26 | 98 | 84 | 5 | 3 to 1 |
| 54 | 5 1/2 | 27 | 65 | * 33 1/4 - ** 35 | * 98 1/4 - ** 100 | 90 | 5 1/2 | 2 2/5 to 1 |
| 60 | 6 | * 30 - ** 35 | 60 | 39 | 99 | 96 | 5 | 2 to 1 |
| 66 | 6 1/2 | * 24 - ** 30 | * 72 - ** 78 | * 21 - ** 27 | 99 | 102 | 5 1/2 | 2 to 1 |
| 72 | 7 | * 24 - ** 36 | 78 | 21 | 99 | 108 | 6 | 2 to 1 |
| 78 | 7 1/2 | * 24 - ** 36 | 78 | 21 | 99 | 114 | 6 1/2 | 2 to 1 |
| 84 | 8 | 36 | 90 1/2 | 21 | 111 1/2 | 120 | 6 1/2 | 1 1/2 to 1 |
| 90 | 8 1/2 | 41 | 87 1/2 | 24 | 111 1/2 | 132 | 6 1/2 | 1 1/2 to 1 |

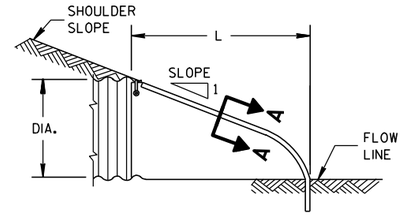
*MINIMUM
**MAXIMUM




PLAN VIEW

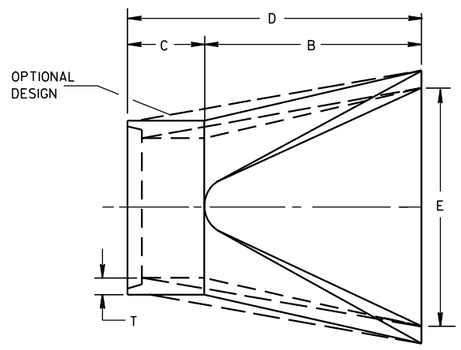



END VIEW

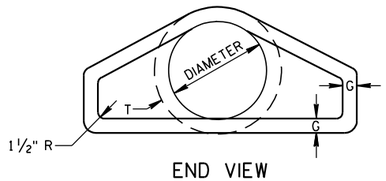



SIDE ELEVATION

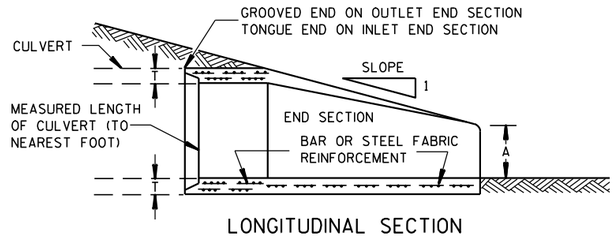
## METAL ENDWALLS




PLAN

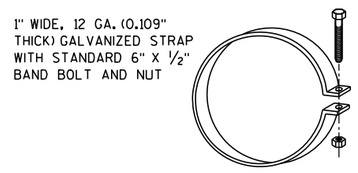



END VIEW



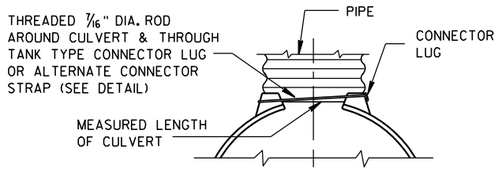

LONGITUDINAL SECTION

## CONCRETE ENDWALLS

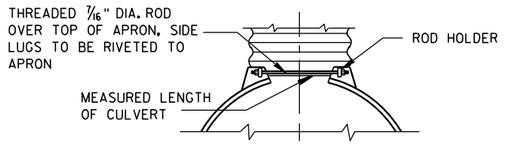



ALTERNATE FOR TYPE 1 CONNECTION

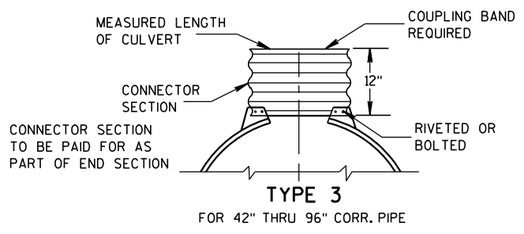
## END SECTION CONNECTOR STRAP



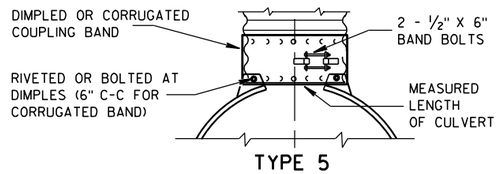

TYPE 1
FOR 12" THRU 24" CORR. PIPE




TYPE 2
FOR 30" THRU 96" CORR. PIPE




TYPE 3
FOR 42" THRU 96" CORR. PIPE




TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

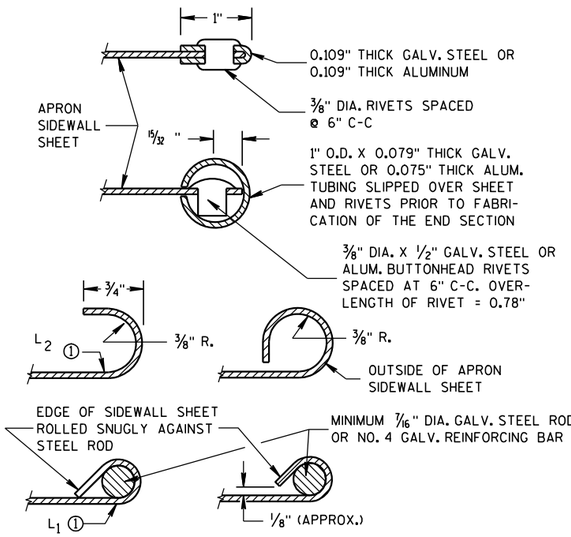
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

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

## CONNECTION DETAILS




## SECTION A-A

## GENERAL NOTES

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

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

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

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

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

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

# APRON ENDWALLS FOR CULVERT PIPE

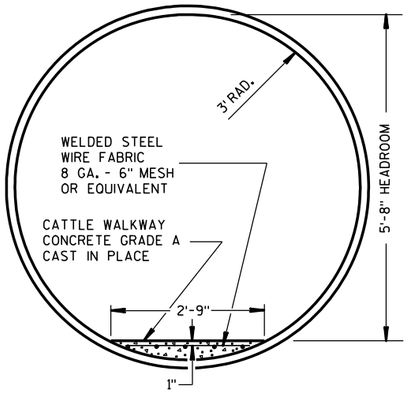
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



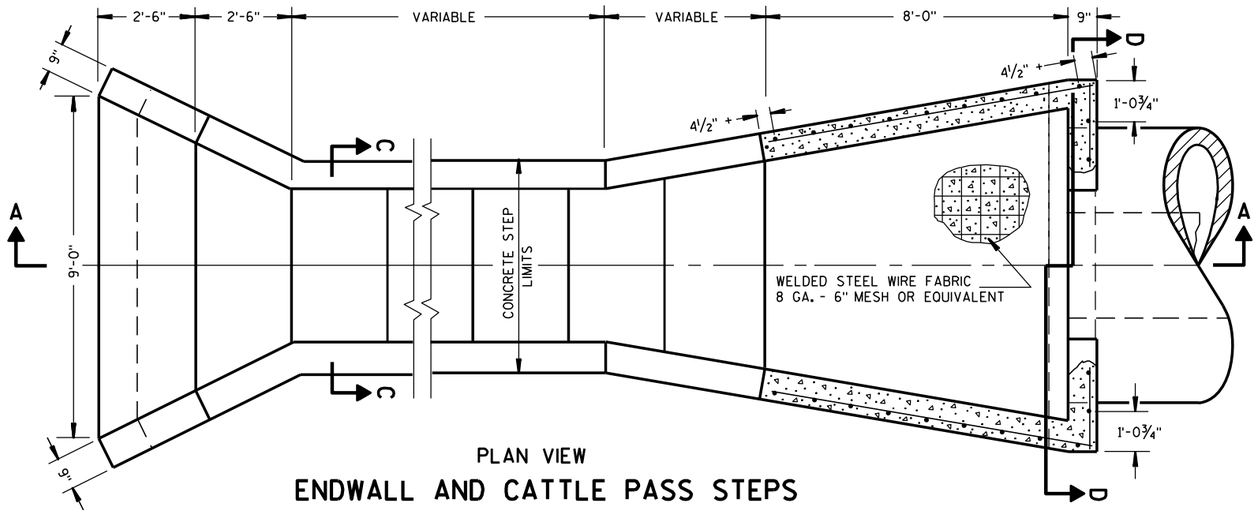
6

S.D.D. 8 F 1-11



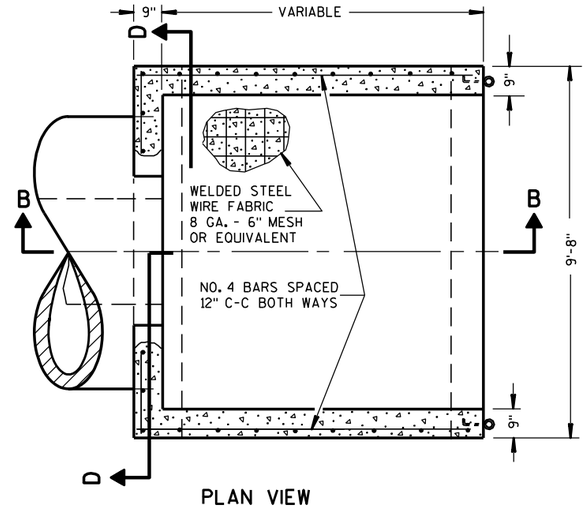

CROSS SECTION

## CORRUGATED METAL PIPE CATTLE PASS



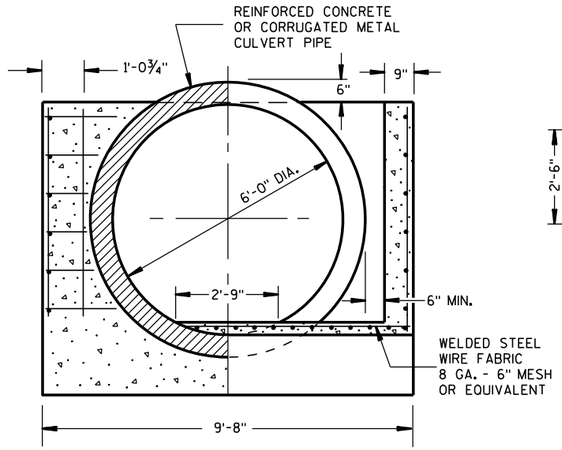

PLAN VIEW

## ENDWALL AND CATTLE PASS STEPS

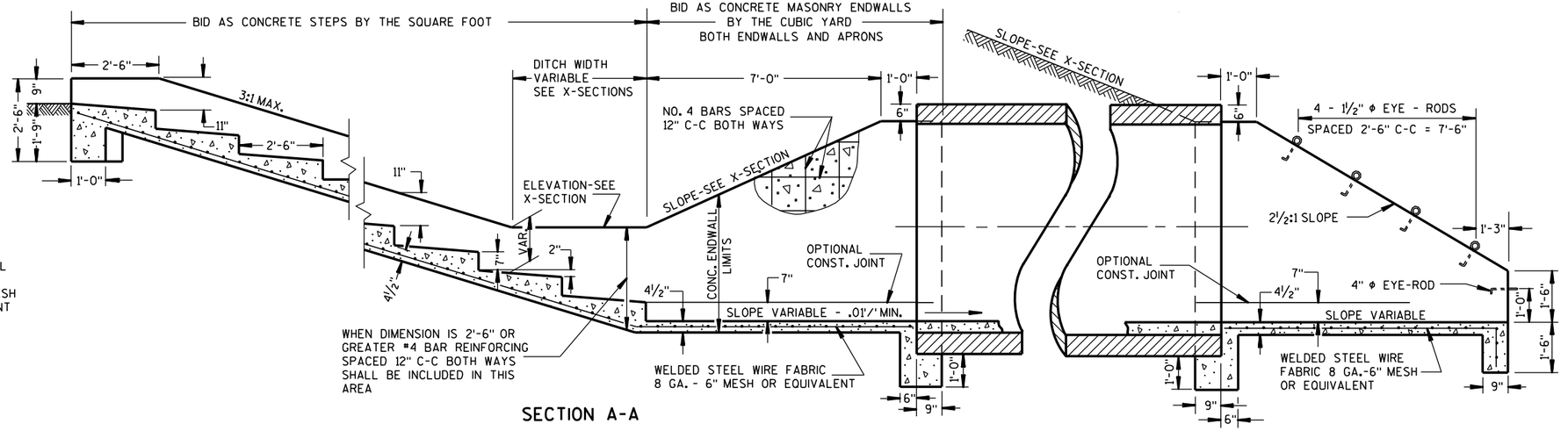



PLAN VIEW

## ENDWALL FOR CATTLE PASS

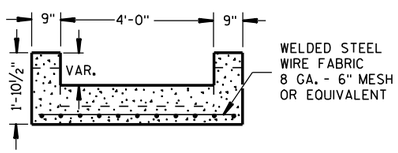



SECTION D-D

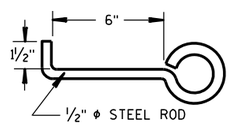



SECTION A-A

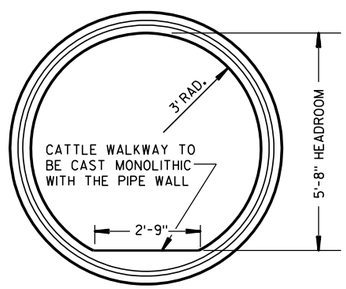
SECTION B-B




SECTION C-C




## EYE-ROD ANCHOR




END VIEW

## REINFORCED CONCRETE PIPE CATTLE PASS

## GENERAL NOTES

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

ALL STEEL REINFORCEMENT IN ENDWALLS AND CATTLE PASS STEPS SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

ALL STEEL REINFORCEMENT OR FABRIC USED AS SHOWN ABOVE SHALL BE INCIDENTAL TO THE BID ITEM OF WHICH IT IS AN INTEGRAL PART.

EYE-RODS FOR FENCE CONNECTIONS SHALL BE PROVIDED BY THE CONTRACTOR AS AN INCIDENTAL TO THE BID ITEM OF CONCRETE MASONRY, ENDWALLS AND SHALL BE GALVANIZED.

CONCRETE USED FOR THE CATTLE WALKWAY WITHIN THE PIPE SHALL BE INCIDENTAL TO THE BID ITEM OF PIPE CATTLE PASS.

**DETAILS FOR PIPE CATTLE PASS, CONCRETE ENDWALL AND STEPS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/6/75 — DATE

/S/ Harold Fiedler — STATE DESIGN ENGINE

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HWYS

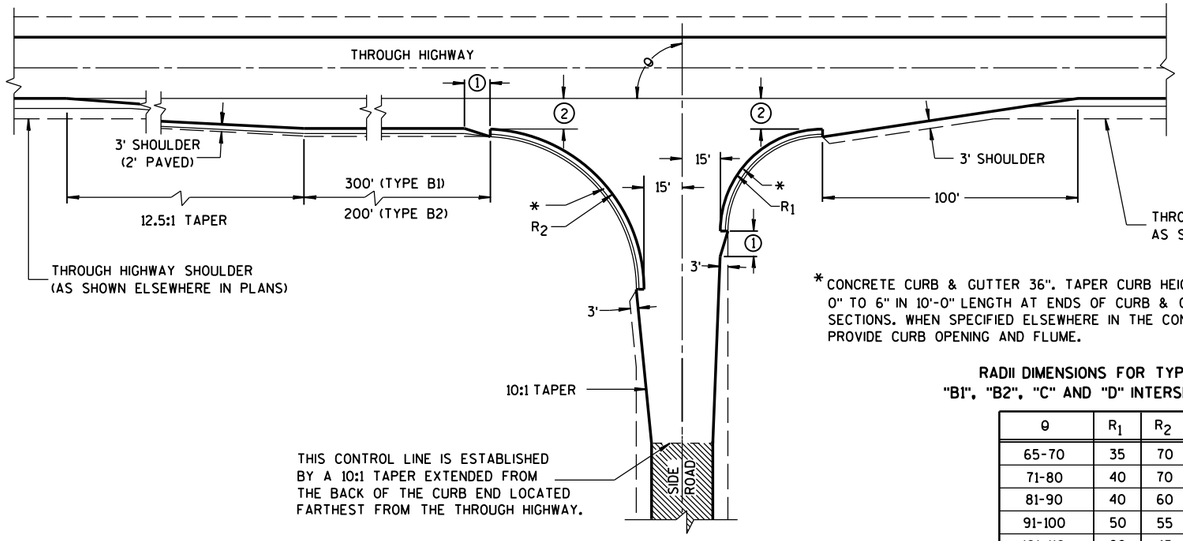
FHWA

6

S.D.D. 8 F 3-3

6

S.D.D. 8 F 3-3

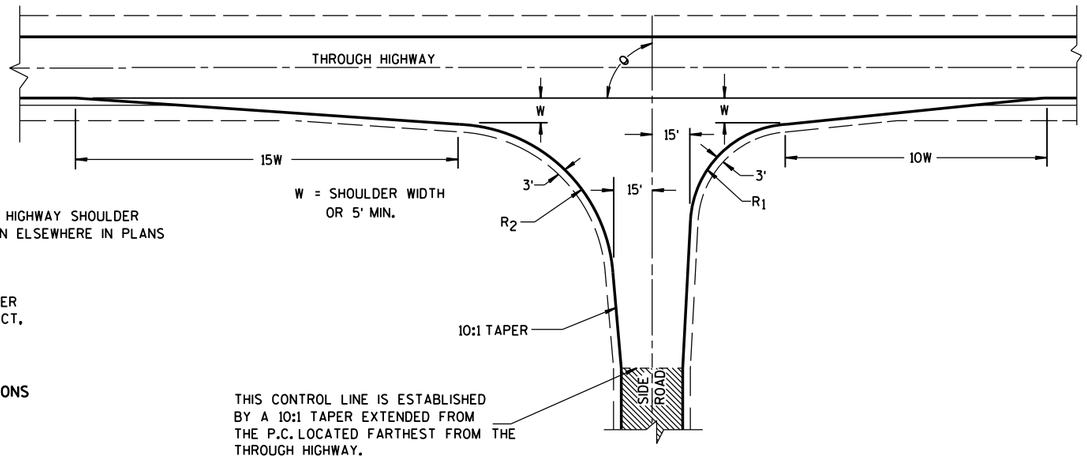



TYPE "B1" AND "B2"

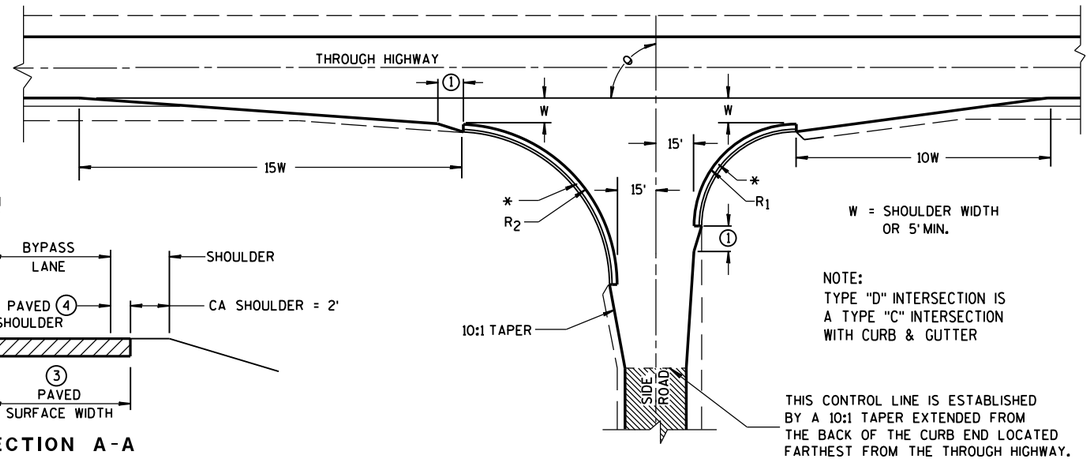
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

**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

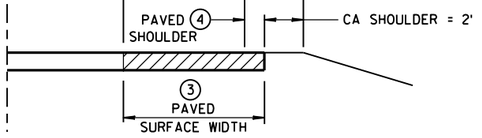
(1) 10-FT TYPICAL.

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

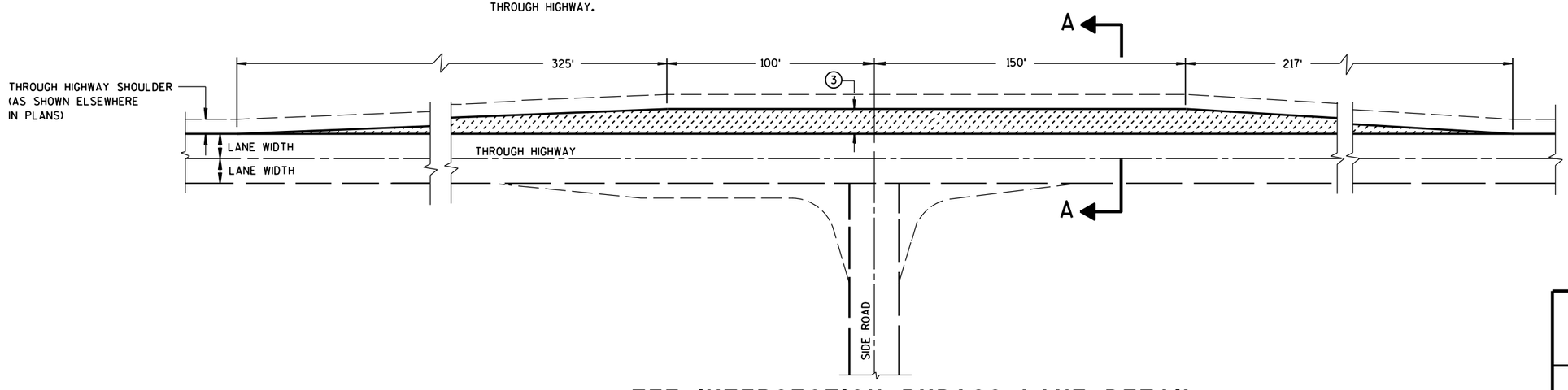
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(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

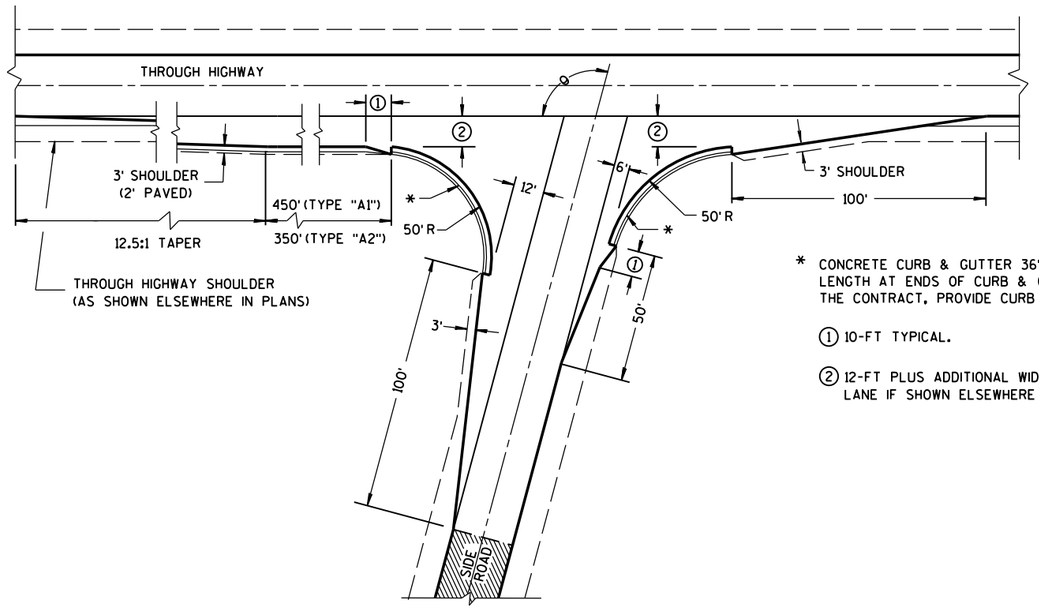
AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR




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



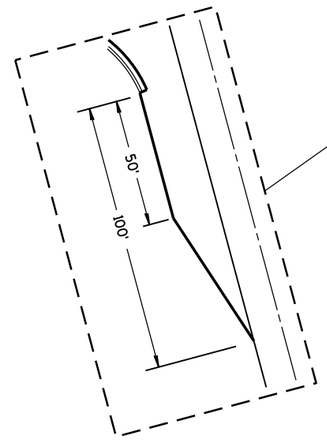

θ = MORE THAN 80°

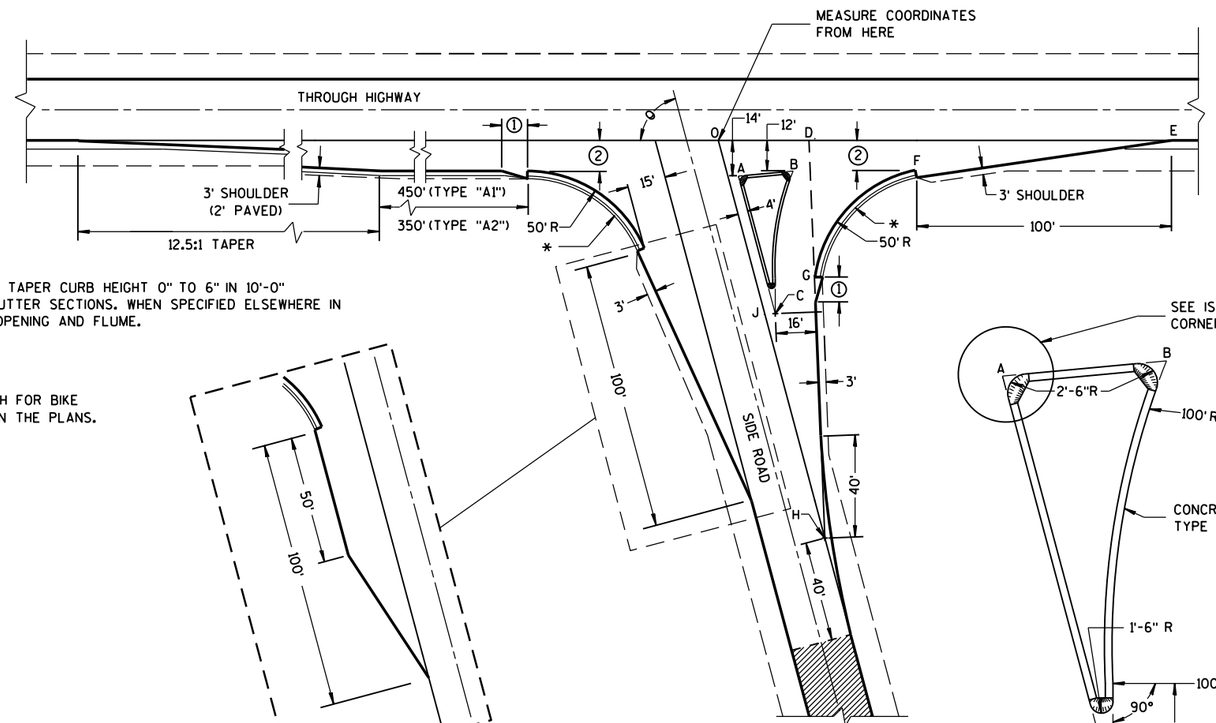
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

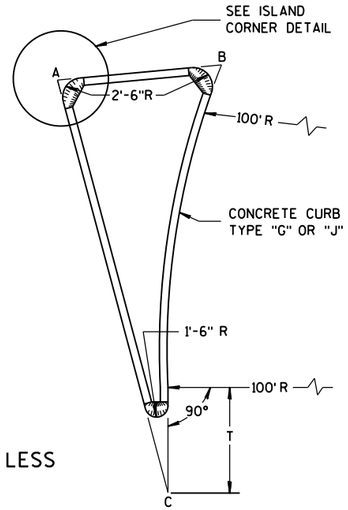
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

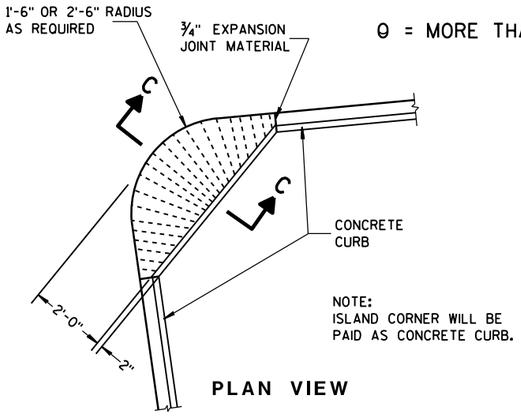



θ = ACUTE ANGLES 80° OR LESS

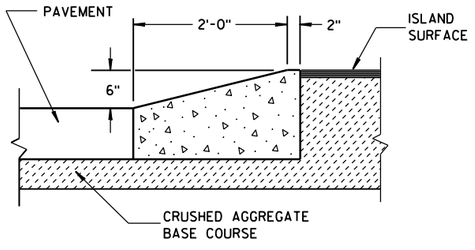



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS




NOTE:
ISLAND CORNER WILL BE
PAID AS CONCRETE CURB.

PLAN VIEW




SECTION C-C

## ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

| ANGLE θ DEGREES | COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y | | | | | | | | LENGTH IN FEET | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | AB | AC | T | OJ | OH |
| 60 | 12.7 / -14.0 | 44.9 / -12.0 | 46.4 / -72.4 | 41.9 / 0.0 | 205.0 / 0.0 | 104.6 / -12.0 | 64.0 / -75.5 | 85.0 / -147.1 | 32.3 | 67.4 | 4.9 | 85.9 | 169.9 |
| 65 | 10.9 / -14.0 | 39.0 / -12.0 | 37.8 / -71.6 | 39.4 / 0.0 | 196.1 / 0.0 | 95.7 / -12.0 | 54.1 / -71.5 | 70.5 / -151.3 | 28.2 | 63.6 | 8.5 | 80.9 | 166.9 |
| 70 | 9.4 / -14.0 | 33.9 / -12.0 | 29.8 / -70.1 | 37.4 / 0.0 | 188.3 / 0.0 | 87.8 / -12.0 | 45.6 / -67.5 | 56.1 / -154.2 | 24.6 | 59.7 | 11.5 | 76.1 | 164.1 |
| 75 | 7.9 / -14.0 | 29.3 / -12.0 | 22.3 / -67.9 | 35.7 / 0.0 | 181.2 / 0.0 | 80.7 / -12.0 | 38.2 / -63.4 | 41.8 / -155.9 | 21.5 | 55.8 | 13.8 | 71.4 | 161.4 |
| 80 | 6.5 / -14.0 | 25.4 / -12.0 | 15.6 / -65.2 | 34.4 / 0.0 | 174.8 / 0.0 | 74.4 / -12.0 | 31.8 / -59.3 | 27.6 / -156.5 | 18.9 | 52.0 | 15.6 | 66.9 | 158.9 |

## TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

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

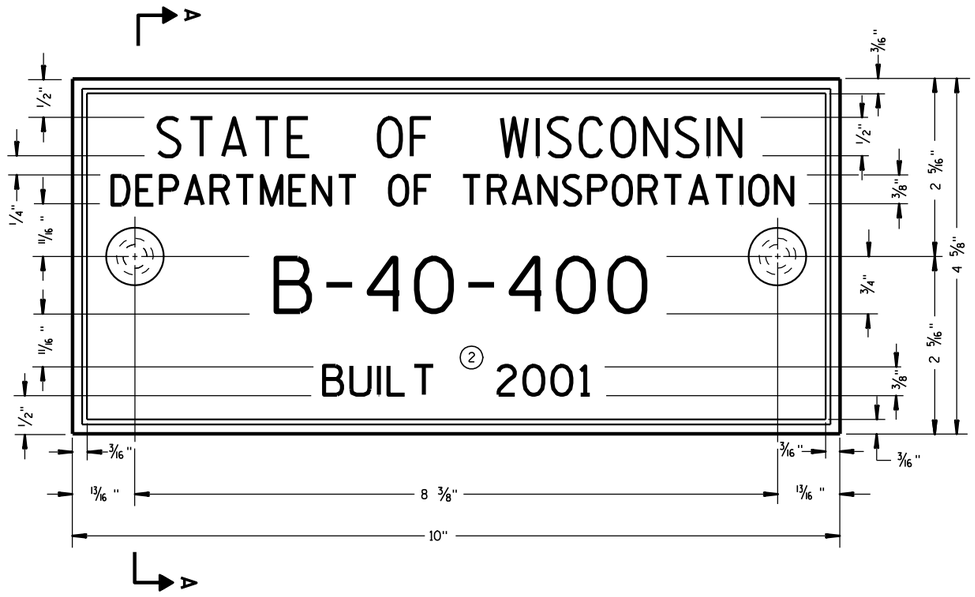
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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

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**TYPICAL NAME PLATE**
(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

**NUMBERING DESIGNATION**
**MULTI-UNIT STRUCTURES**

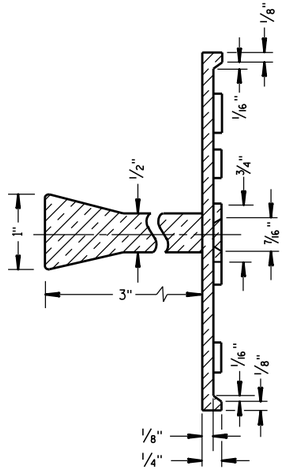
## GENERAL NOTES

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

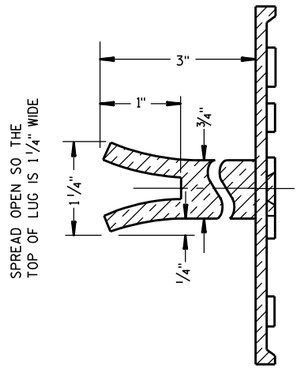
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

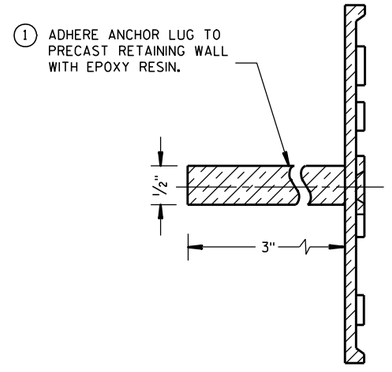
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.




**SECTION A-A**




**ALTERNATE LUG**




**ALTERNATE LUG**
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE (STRUCTURES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

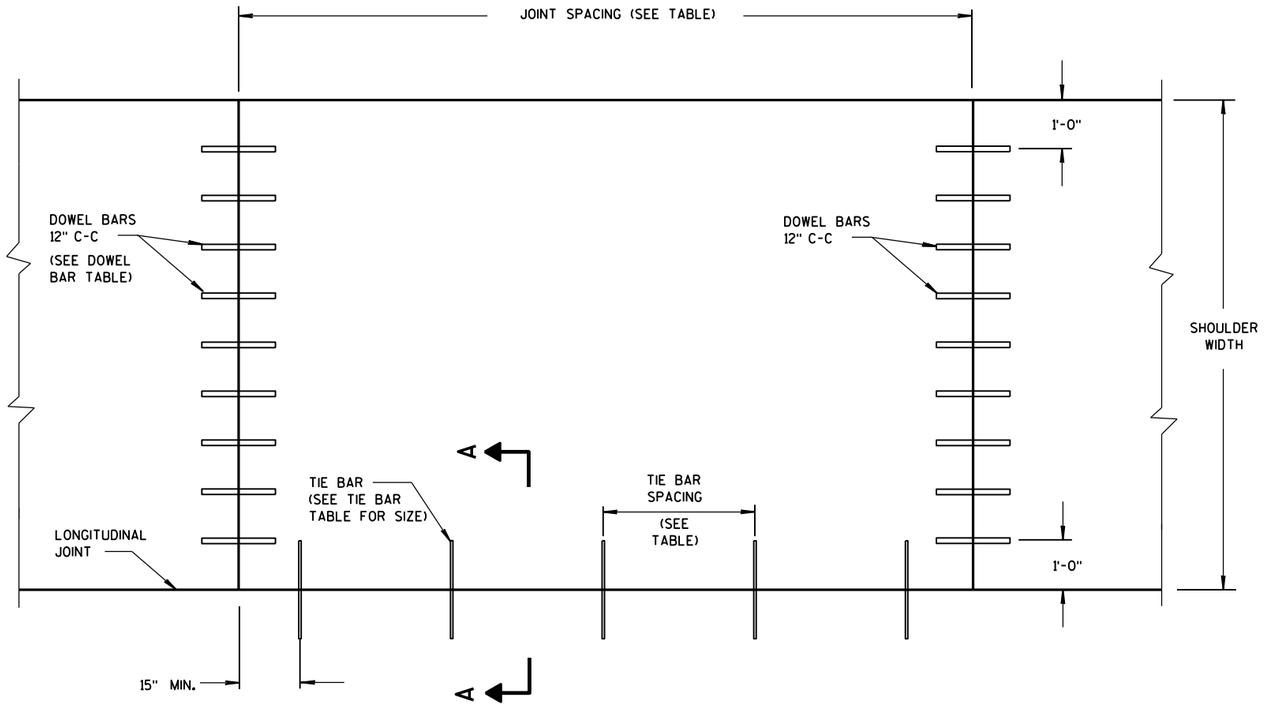
/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA



6

S.D.D. 12 A 3-10




PLAN VIEW

## CONCRETE PAVEMENT SHOULDER

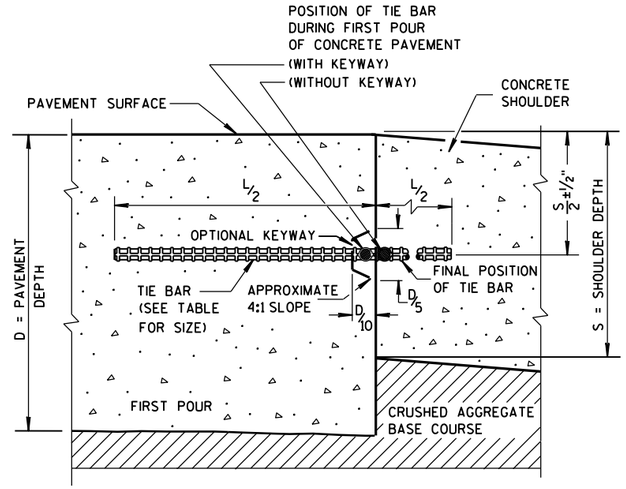
## GENERAL NOTES

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.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.




SECTION A-A

## LONGITUDINAL CONSTRUCTION JOINT

### TIE BAR TABLE

| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 ½" | NO. 4 | 30" | 36" |
| ≥ 10 ½" | NO. 5 | 36" | 36" |
| | NO. 4* | 30" | 24"** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

### 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' |

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEF
FHWA

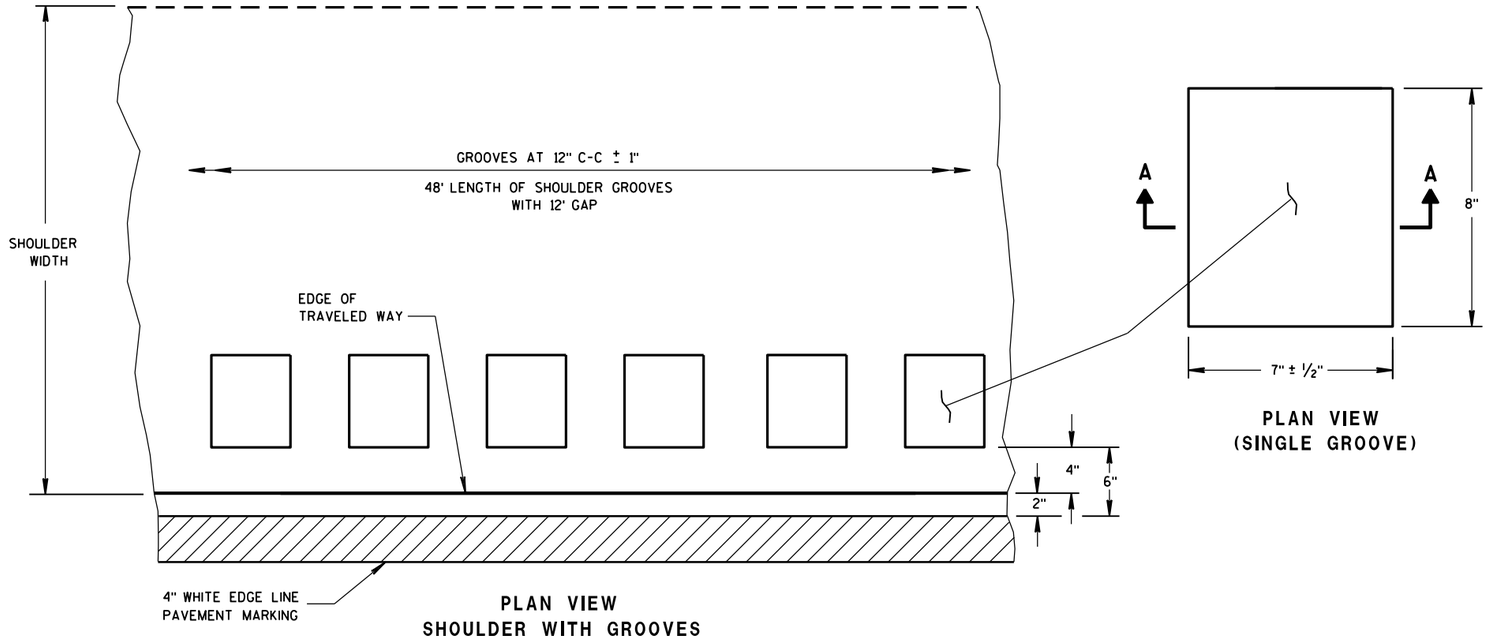


6

S.D.D. 13 A 3-6

6

S.D.D. 13 A 3-6




PLAN VIEW
SHOULDER WITH GROOVES




PLAN VIEW
(SINGLE GROOVE)

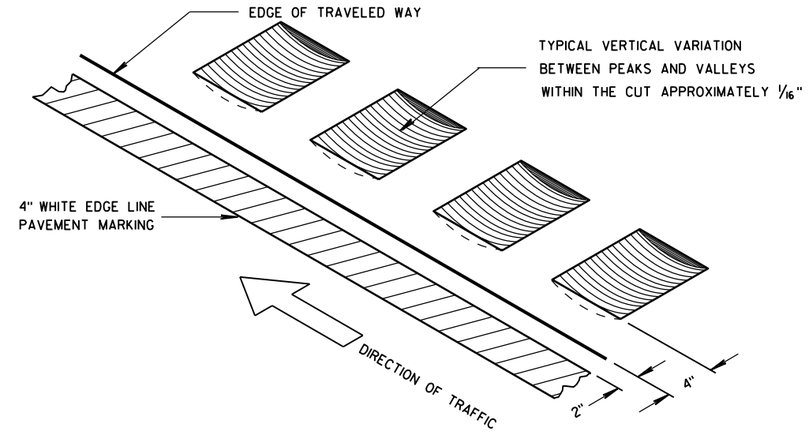
## PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

## GENERAL NOTES

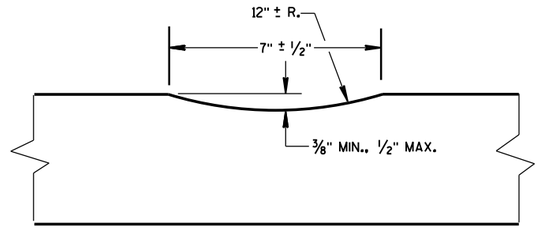
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

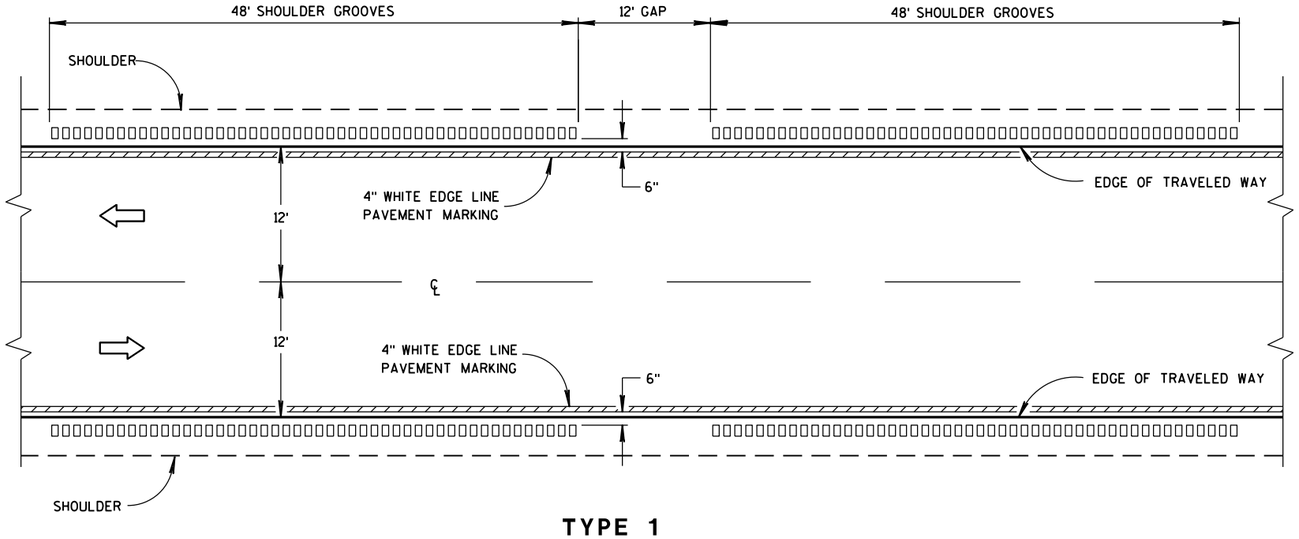
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.




ISOMETRIC




SECTION A-A




TYPE 1
2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

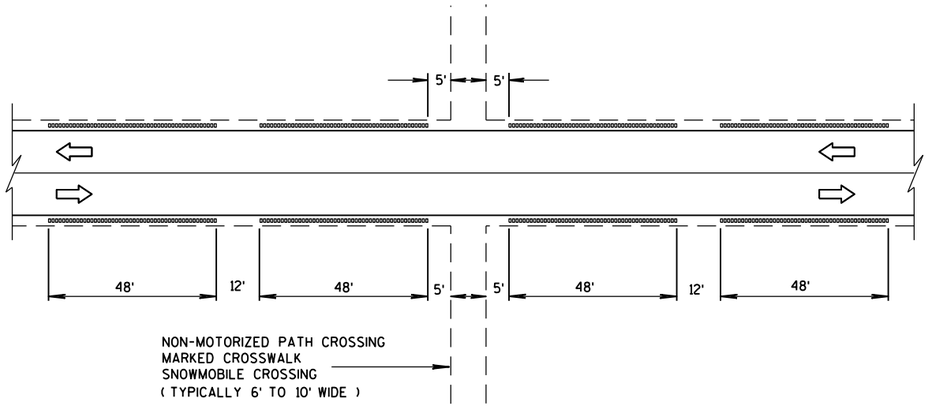


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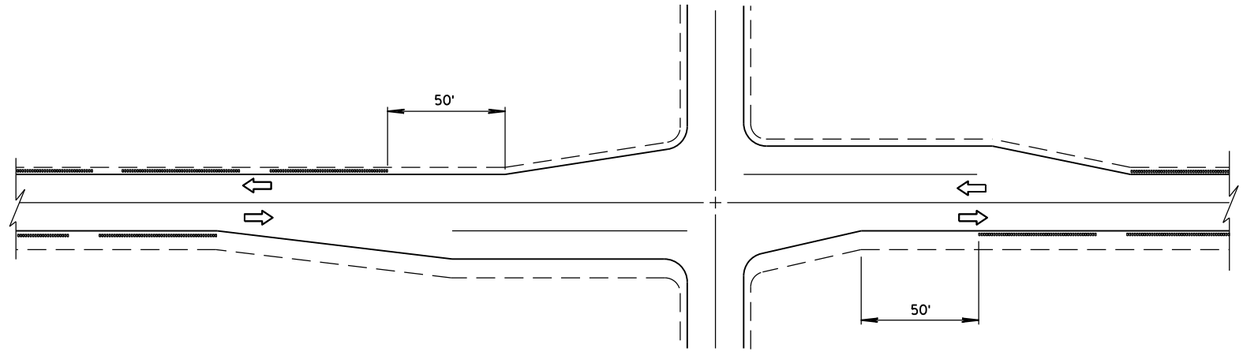
S.D.D. 13 A 10-1a

6

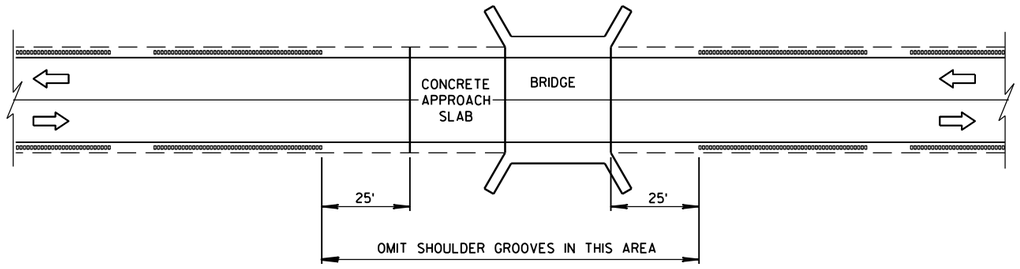
S.D.D. 13 A 10-1a



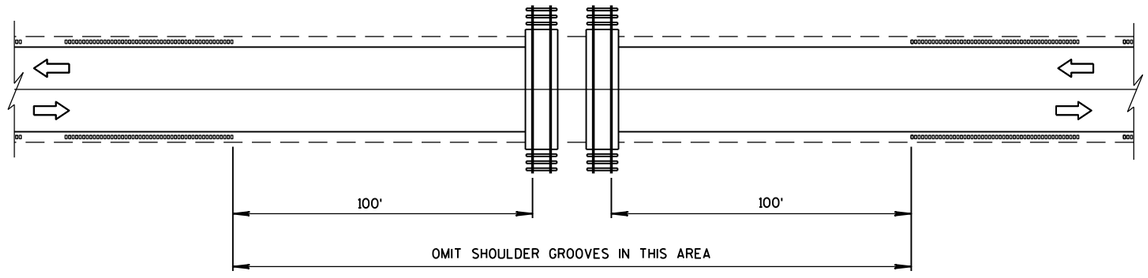

SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



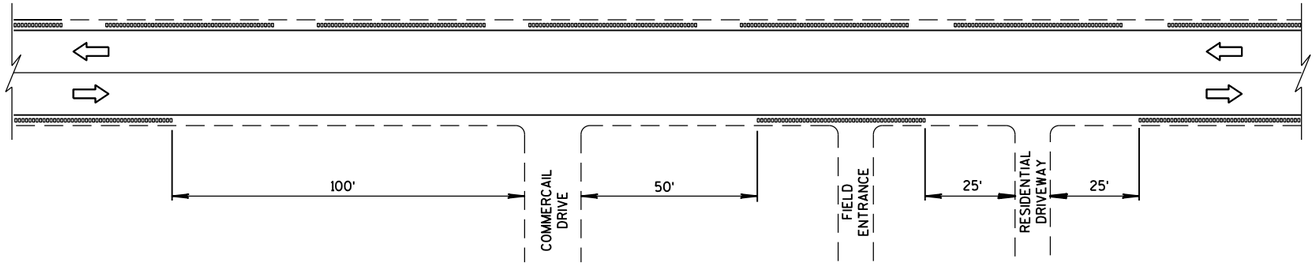

SHOULDER GROOVES AT INTERSECTIONS




SHOULDER GROOVES AT BRIDGES




SHOULDER GROOVES AT RAILROADS




SHOULDER GROOVES AT DRIVEWAYS (1)

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

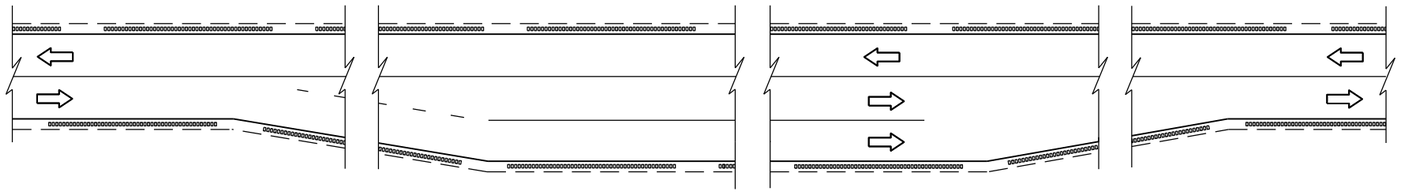


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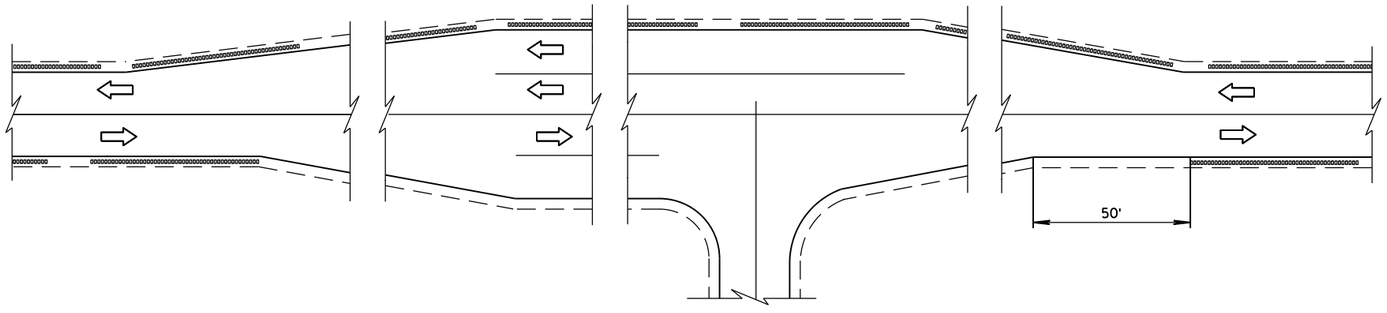
S.D.D. 13 A 10-1c

6

S.D.D. 13 A 10-1c



SHOULDER GROOVES AT PASSING AND CLIMBING LANES




SHOULDER GROOVES AT BYPASS LANES

6

6

S.D.D. 13 A 10-1d

S.D.D. 13 A 10-1d

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

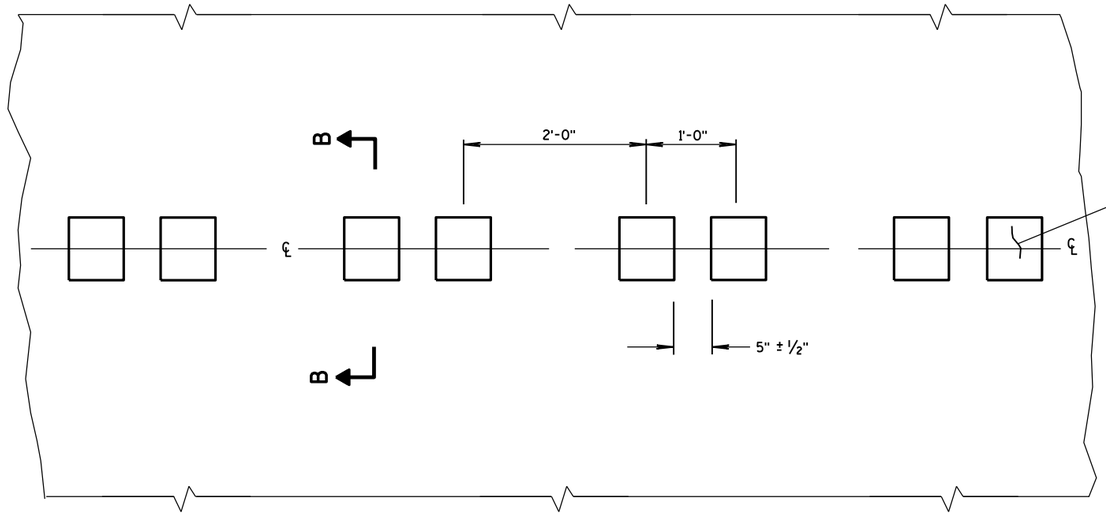
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

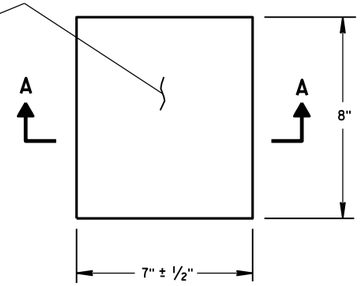
12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA




PLAN VIEW
CENTER LINE WITH GROOVES




PLAN VIEW
(SINGLE GROOVE)

## PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

## GENERAL NOTES

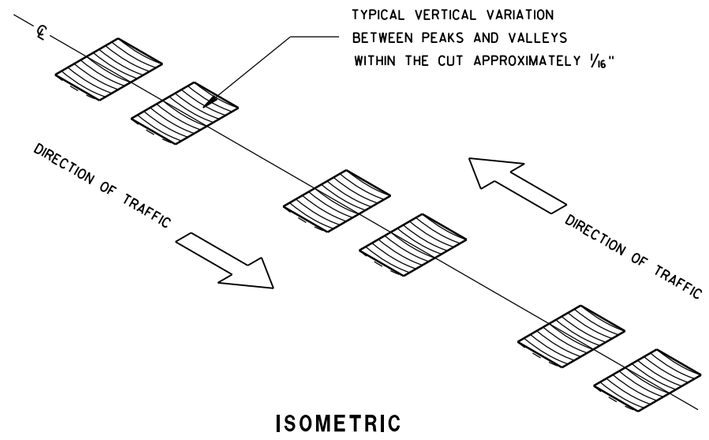
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

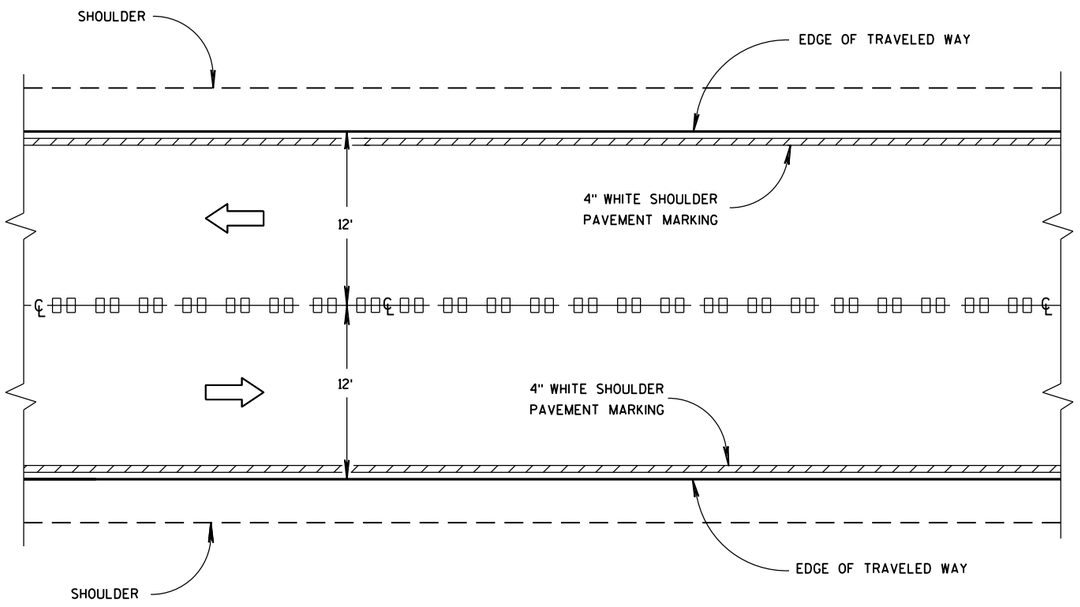
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

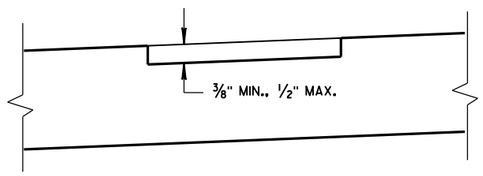
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



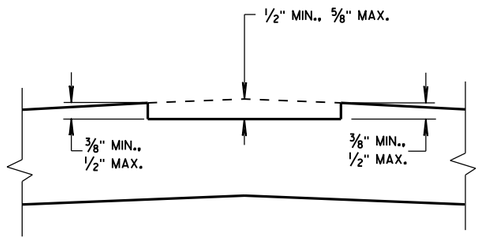

ISOMETRIC



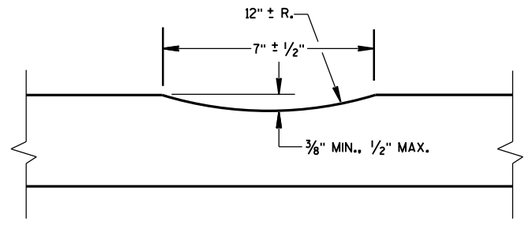

CENTER LINE GROOVES ON TWO-WAY ROADWAYS




SECTION B-B
SUPERELEVATED ROADWAY




SECTION B-B
CROWNED ROADWAY




SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

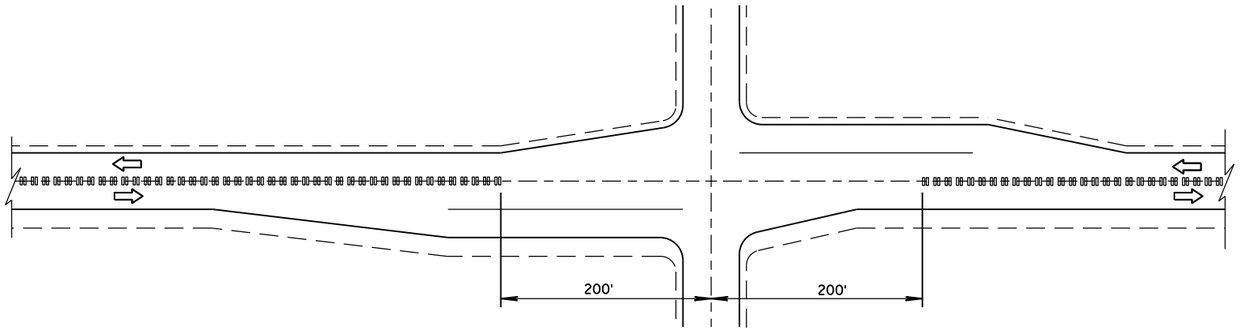


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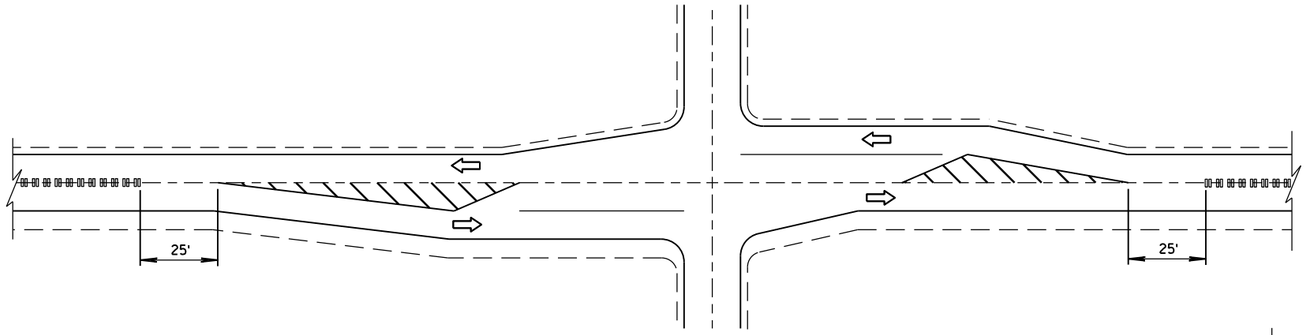
S.D.D. 13 A 11-2a

6

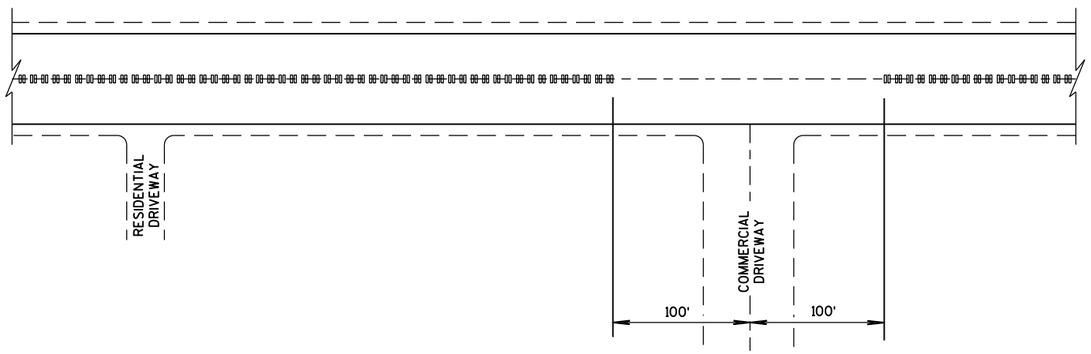
S.D.D. 13 A 11-2a




## CENTER LINE GROOVES AT INTERSECTIONS

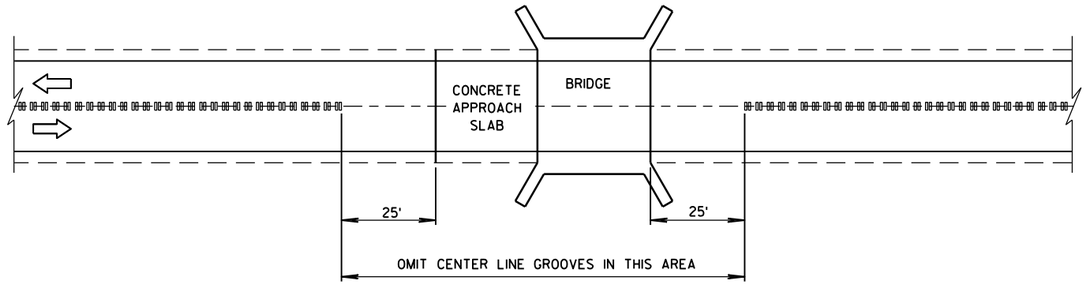



## CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

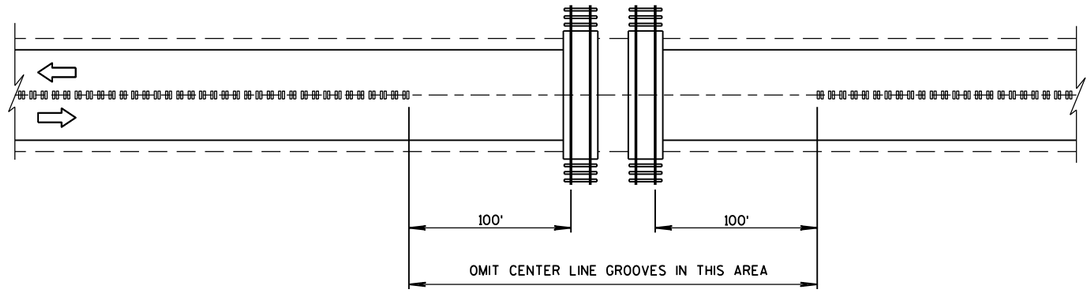



## CENTER LINE GROOVES AT DRIVEWAYS (1)

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.




## CENTER LINE GROOVES AT BRIDGES




## CENTER LINE GROOVES AT RAILROADS

6

S.D.D. 13 A 11-2b

# 2-LANE RURAL
# CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/15/2013
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

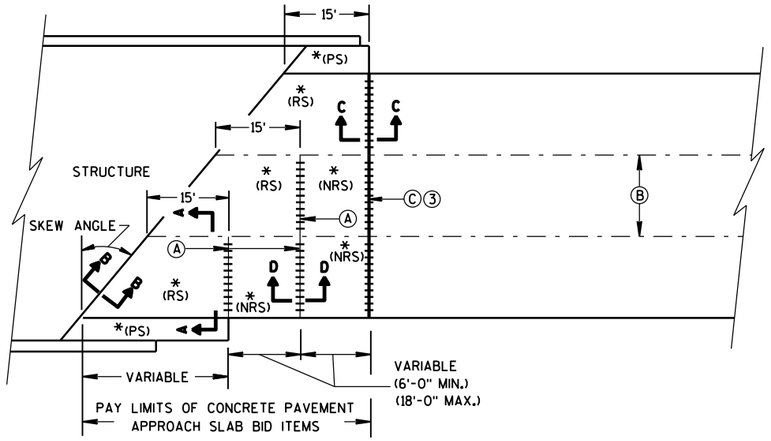
NT

FHWA

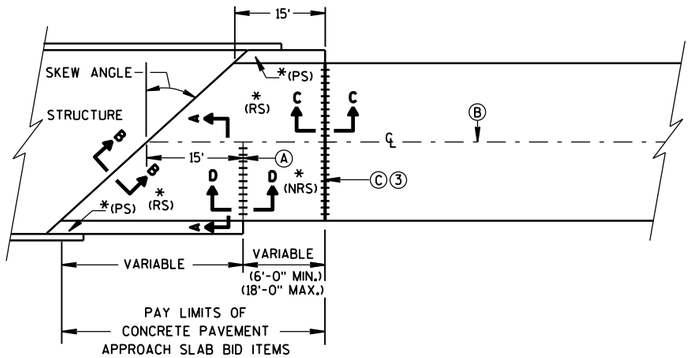


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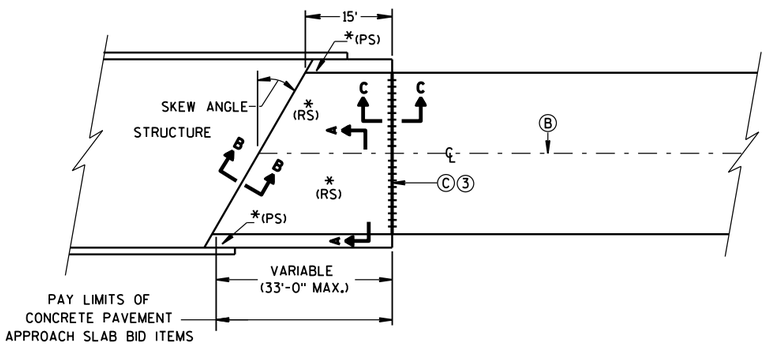
S.D.D. 13 A 11-2b




**SKEWED APPROACH**
**(PAVEMENT MORE THAN 2 LANES)**




**SKEWS >20°**
**(PAVEMENT WIDTH ≤30')**




**SKEWS ≤20°**
**(PAVEMENT WIDTH ≤30')**

**APPROACH SLAB AND ADJACENT PAVEMENT**

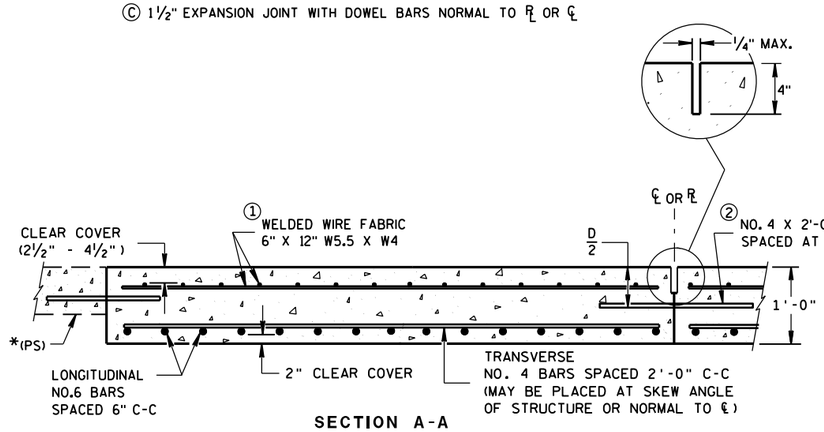
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

***STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

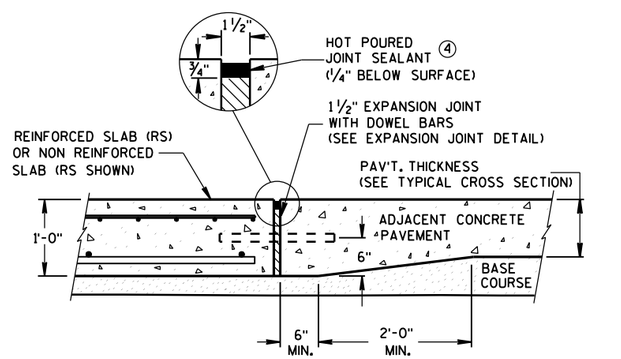
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.

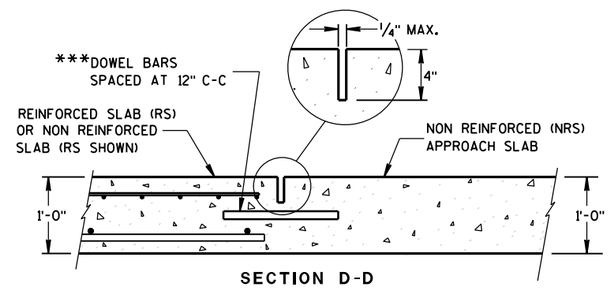
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄




**SECTION A-A**
**REINFORCEMENT POSITIONING DETAIL**




**SECTION C-C**
**TRANSITION DETAIL**
**APPROACH SLAB TO ADJACENT PAVEMENT**




**SECTION D-D**
**CONTRACTION JOINT**

## GENERAL NOTES

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

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

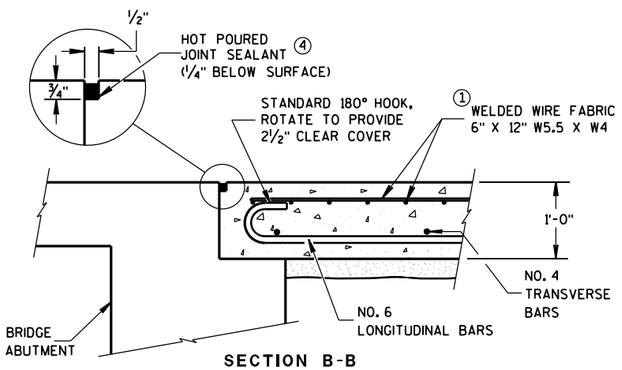
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

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

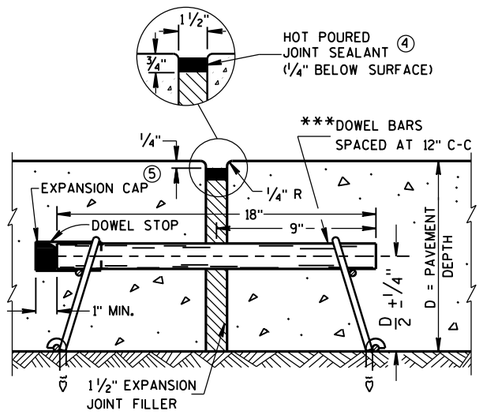
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

④ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.

⑤ PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.




**SECTION B-B**
**BEND DETAIL**
**BOTTOM REINFORCEMENT**




**EXPANSION JOINT DETAIL**

**CONCRETE PAVEMENT APPROACH SLAB**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA



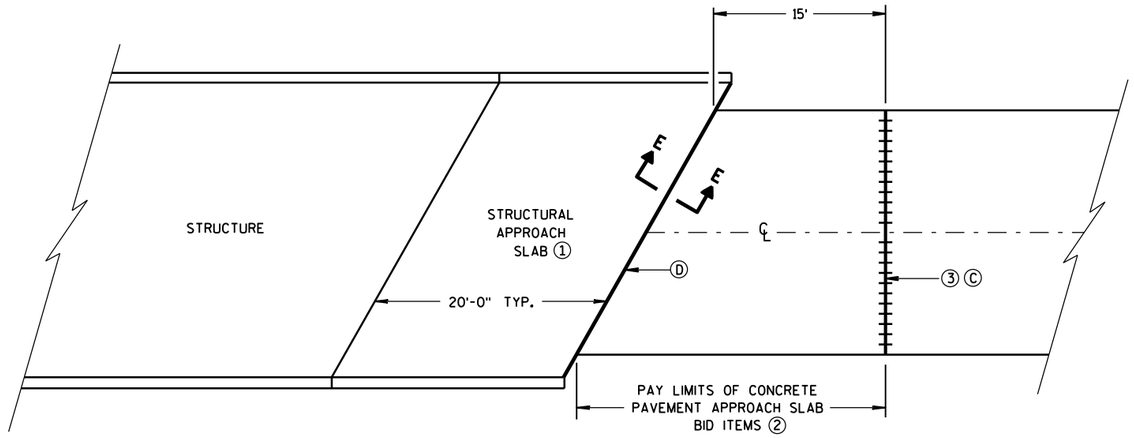
6

S.D.D. 13 B 2-8a

6

S.D.D. 13 B 2-8a

## BRIDGE APPROACHES




## GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

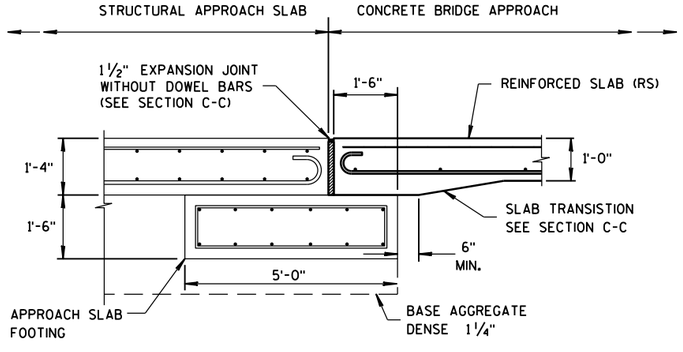
① SEE BRIDGE PLAN.

② CONFORM TO SHEET 13 B 2(A) FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS.

③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)




SECTION E-E

## FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

**STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

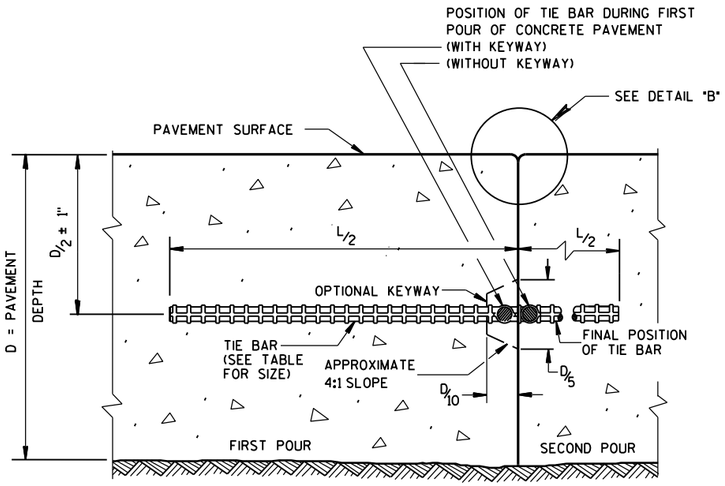
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEF
FHWA



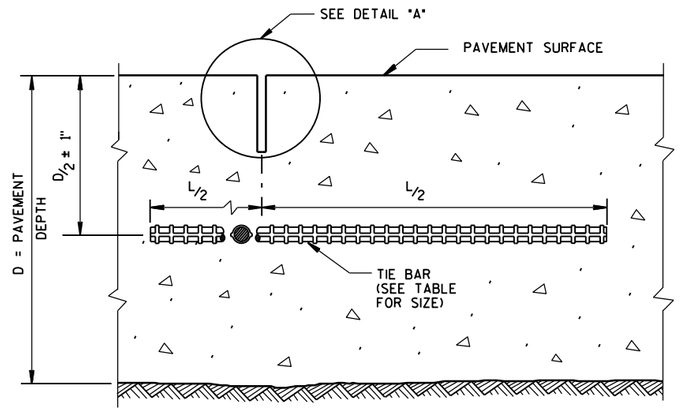
6

S.D.D. 13 B 2-8b

S.D.D. 13 B 2-8b




## CONSTRUCTION JOINT




## SAWED JOINT

## GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.




PLAN VIEW




SECTION A-A

## LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT




DETAIL "A"




DETAIL "B"



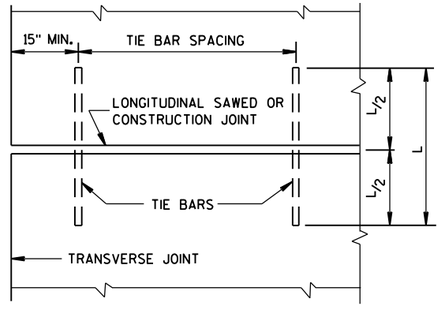

DETAIL "C"

### TIE BAR TABLE

| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 1/2" | NO. 4 | 30" | 36" |
| ≥ 10 1/2" | NO. 5 | 36" | 36" |
| | NO. 4 * | 30" | 24"** |

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.




PLAN VIEW
SHOWING LOCATION OF TIE BARS

## CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

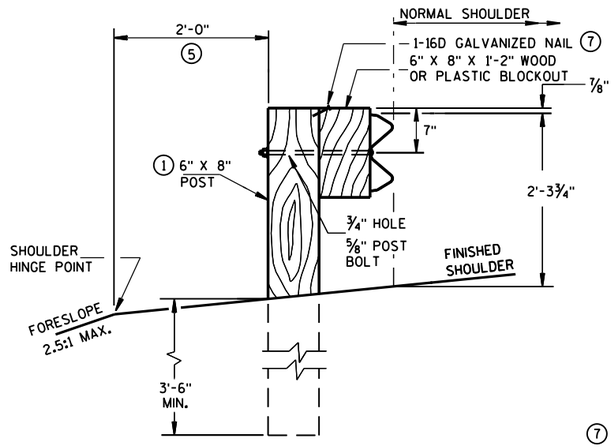



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S.D.D. 13 C 1-18

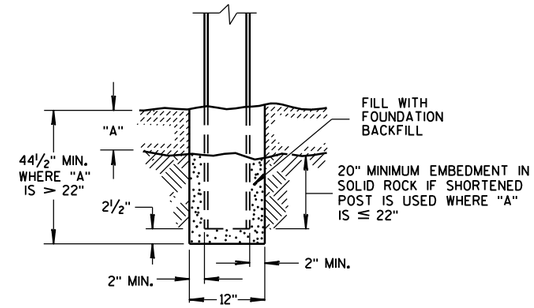
## GENERAL NOTES

1. W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.
   DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
2. USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.
3. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
4. USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
5. IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).
6. IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.
7. WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

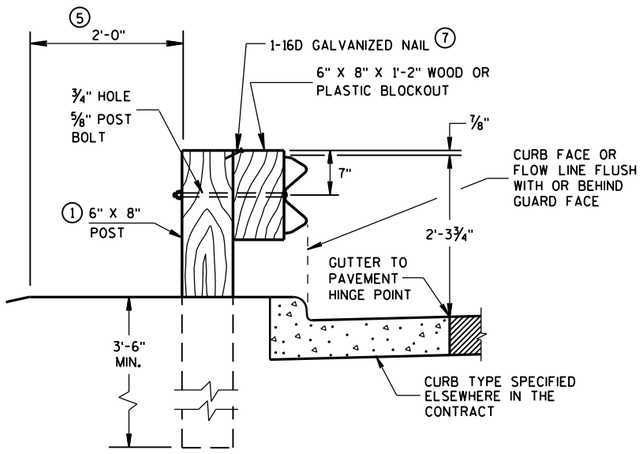
INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



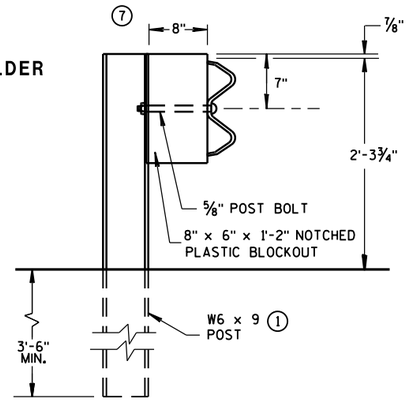

END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



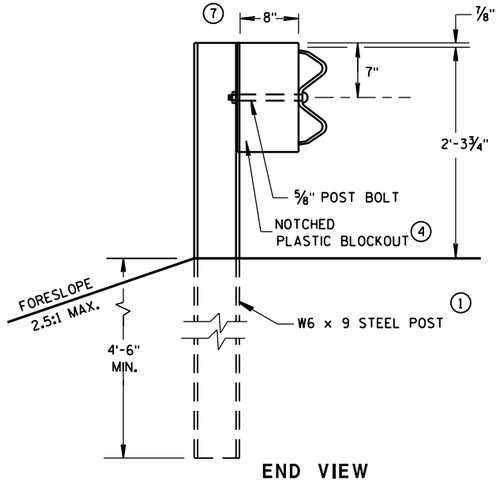

END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥



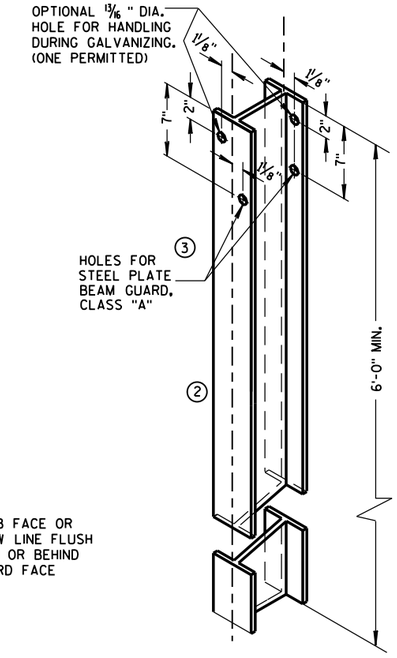

END VIEW
LOCATED ALONG A CURBED ROADWAY




END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION

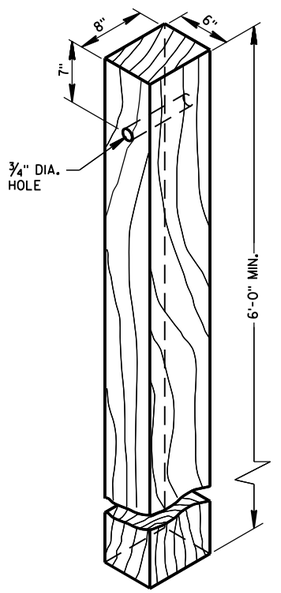



END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)

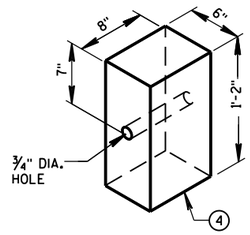



STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①

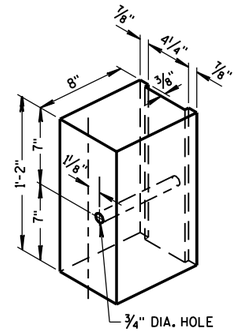
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



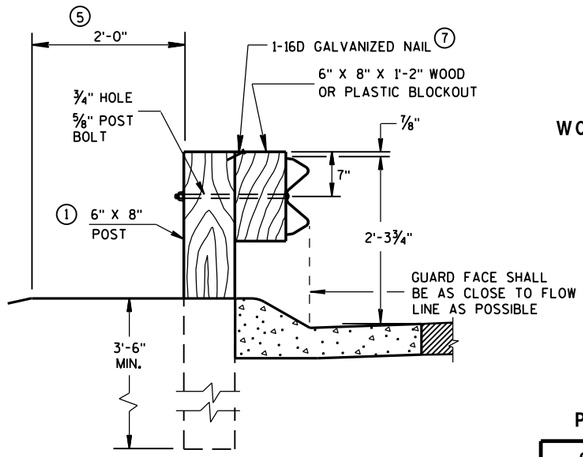

WOOD POST
(6"X8") NOMINAL



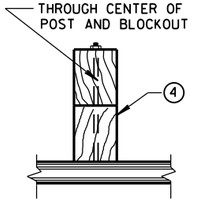

WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



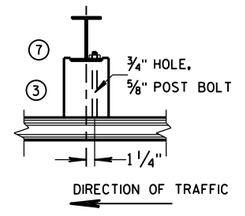

TYPICAL NOTCHED ①
PLASTIC BLOCKOUT
FOR STEEL POSTS




END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY




PLAN VIEW
WOOD POST, BLOCKOUT & BEAM




PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM

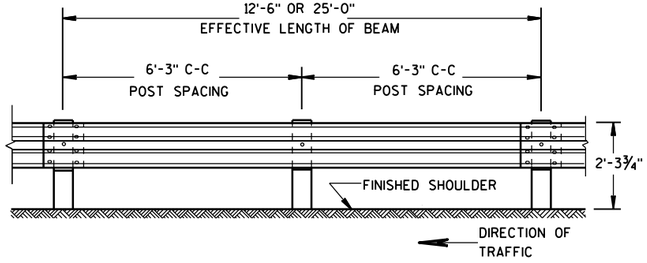
STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

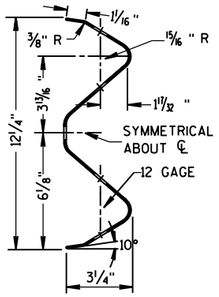



6
S.D.D. 14 B 15-9a

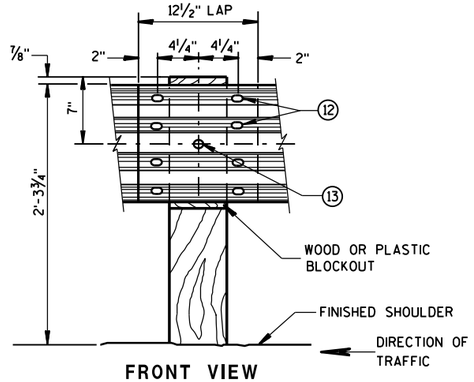



FRONT VIEW

## POST SPACING STANDARD INSTALLATION




## SECTION THRU W BEAM




FRONT VIEW

## BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

## GENERAL NOTES

(8) PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

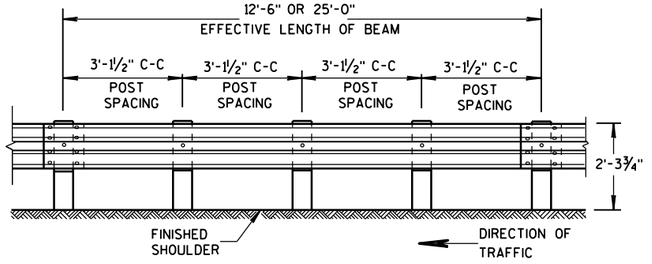
(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

(10) REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

(11) PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

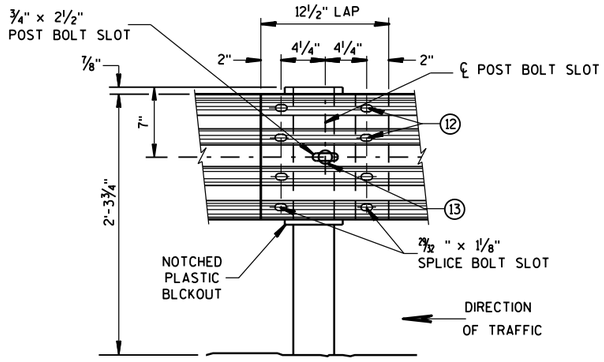
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) ⅝" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH ⅝" DIA. F844 FLAT WASHER UNDER NUT.




FRONT VIEW

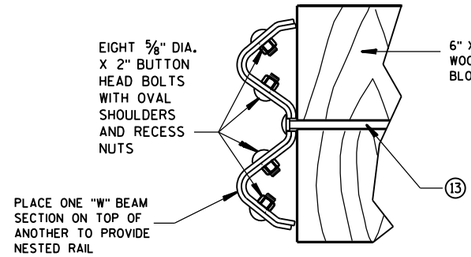
## POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)




FRONT VIEW

## BEAM SPLICE AT STEEL POST

## TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

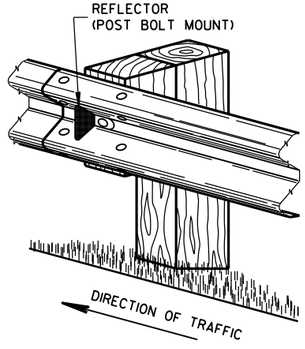


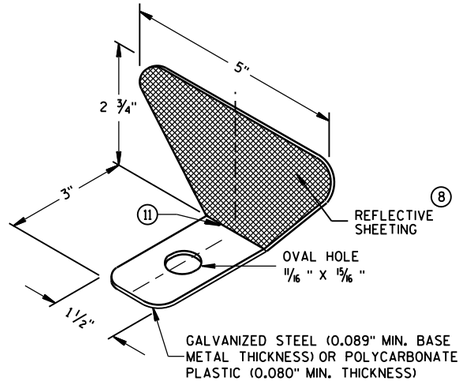

## NESTED W BEAM (NW)

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

REFLECTOR SPACING (9)

| | BEAM GUARD LENGTH | REFLECTOR SPACING | NO. SURFACES REFLECTORIZED | MIN. NO. REFLECTORS |
|---|---|---|---|---|
| ONE WAY TRAFFIC | < 200' | 50' C-C | 1 | 3 |
| | > 200' | 100' C-C | 1 | |
| TWO WAY TRAFFIC | < 200' | 25' C-C | 1 (10) | 6 |
| | > 200' | 50' C-C | 1 | |
| TWO WAY TRAFFIC | < 200' | 50' C-C | 2 (11) | 3 |
| | > 200' | 100' C-C | 2 | |




## ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (8)

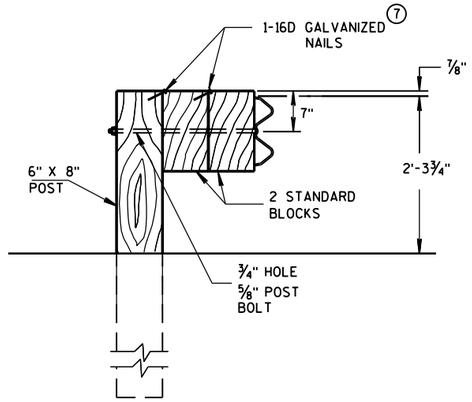
STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



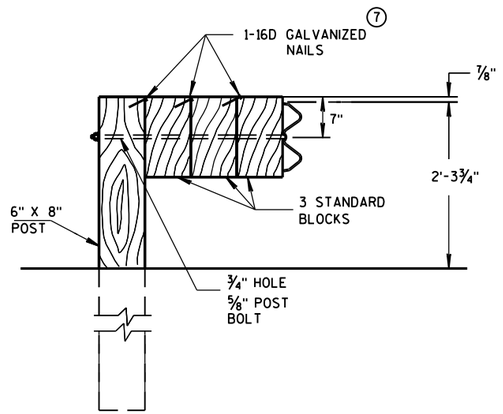


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S.D.D. 14 B 15-9b




**DETAIL FOR DOUBLE BLOCKS**

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

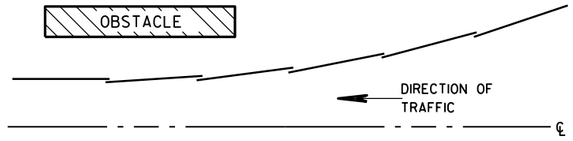



**DETAIL FOR TRIPLE BLOCKS**

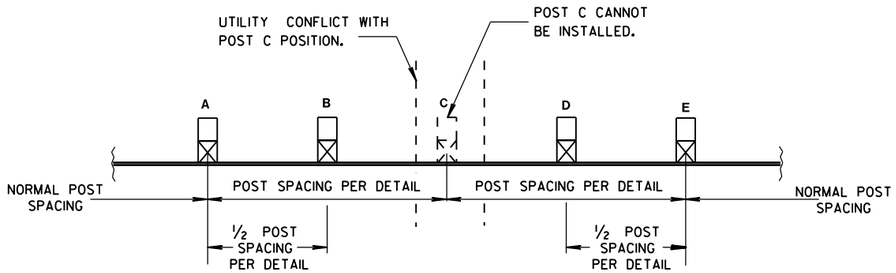
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

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




**PLAN VIEW**
**BEAM LAPPING DETAIL**




**POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION**

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

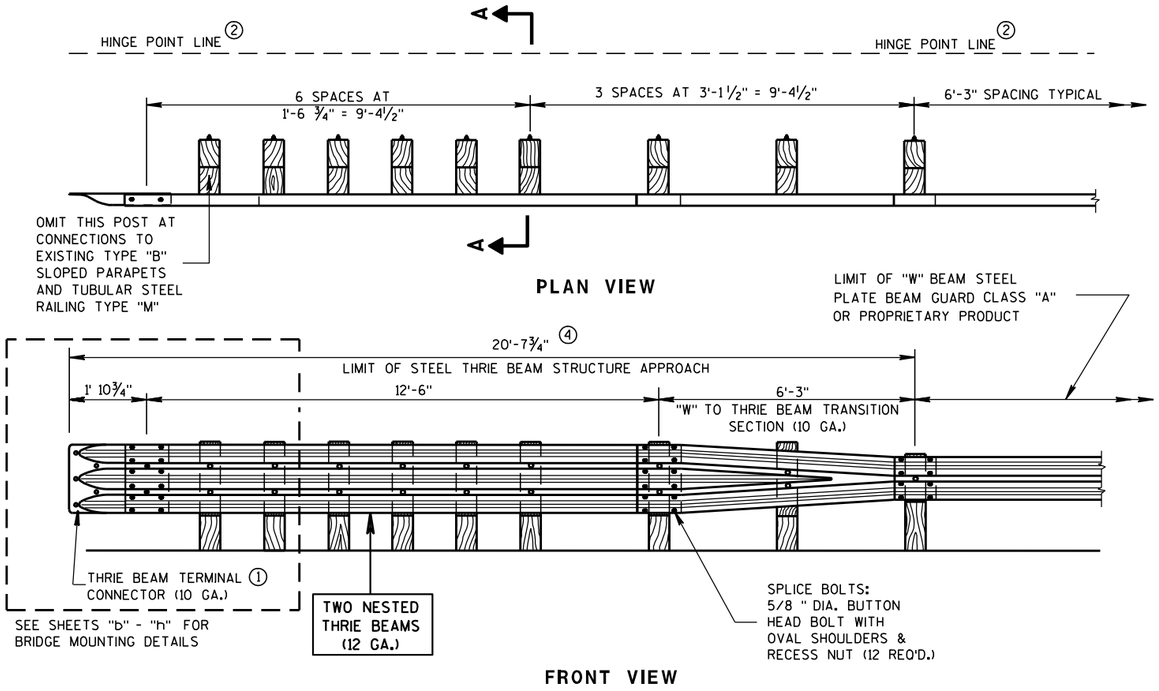
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA




6


S.D.D. 14 B 15-9c



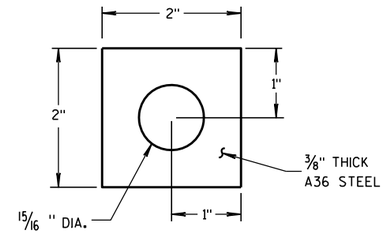




PLATE WASHER DETAIL

## 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.

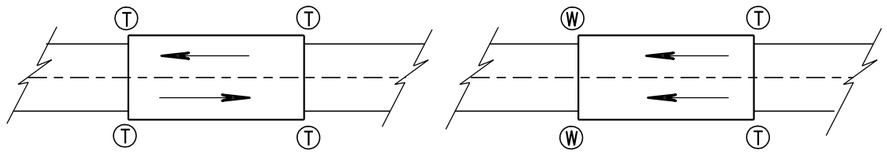
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

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.



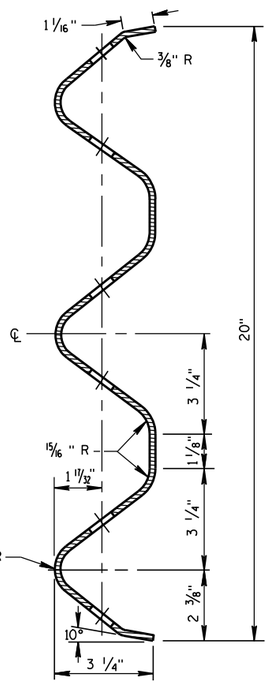

TWO WAY TRAFFIC

ONE WAY TRAFFIC

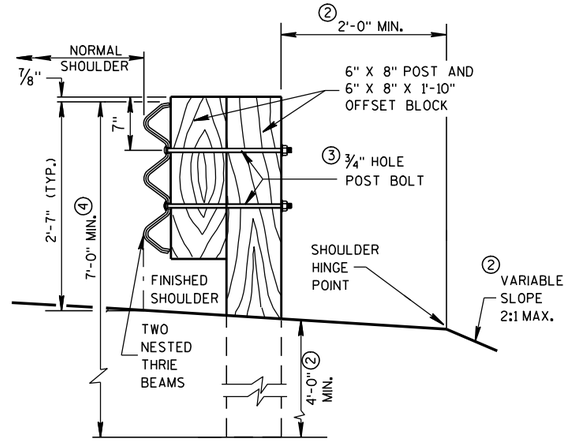
T THRIE BEAM CONNECTION

W W-BEAM CONNECTION WHEN REQUIRED

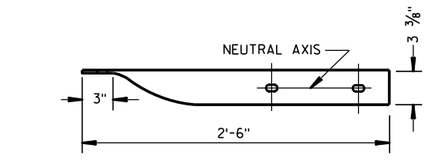
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

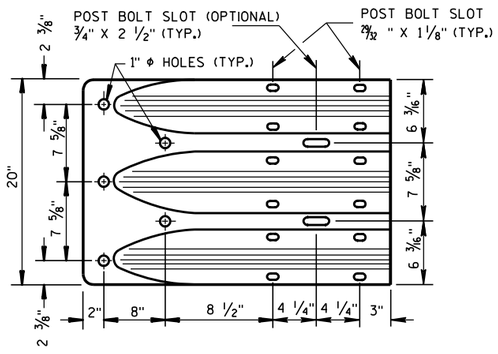



SECTION THRU THRIE BEAM RAIL ELEMENT

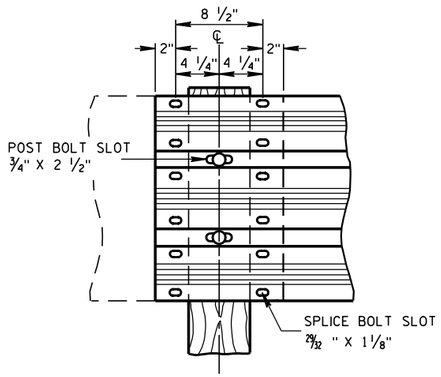



SECTION A-A




THRIE BEAM TERMINAL CONNECTOR




THRIE BEAM SPLICE

STEEL THRIE BEAM STRUCTURE APPROACH

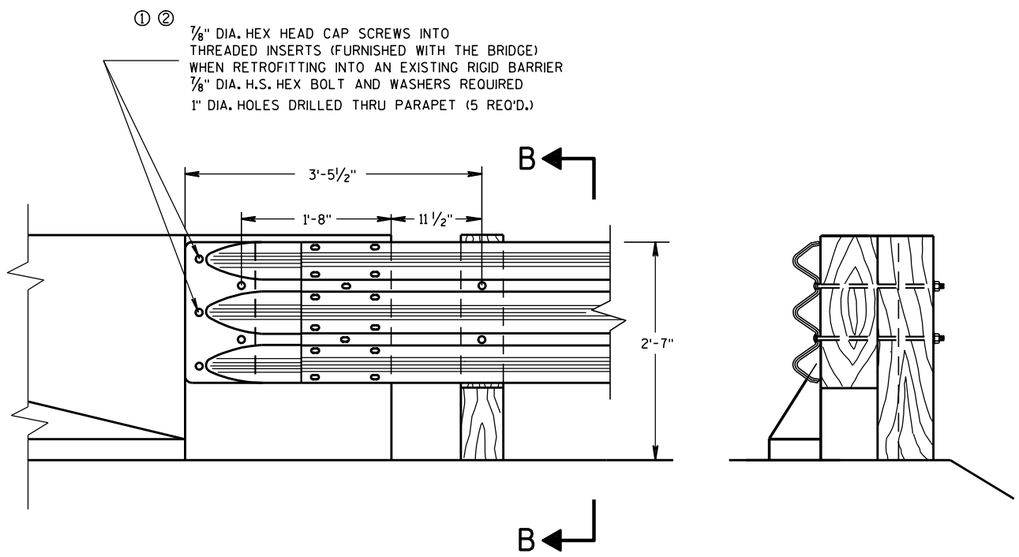
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

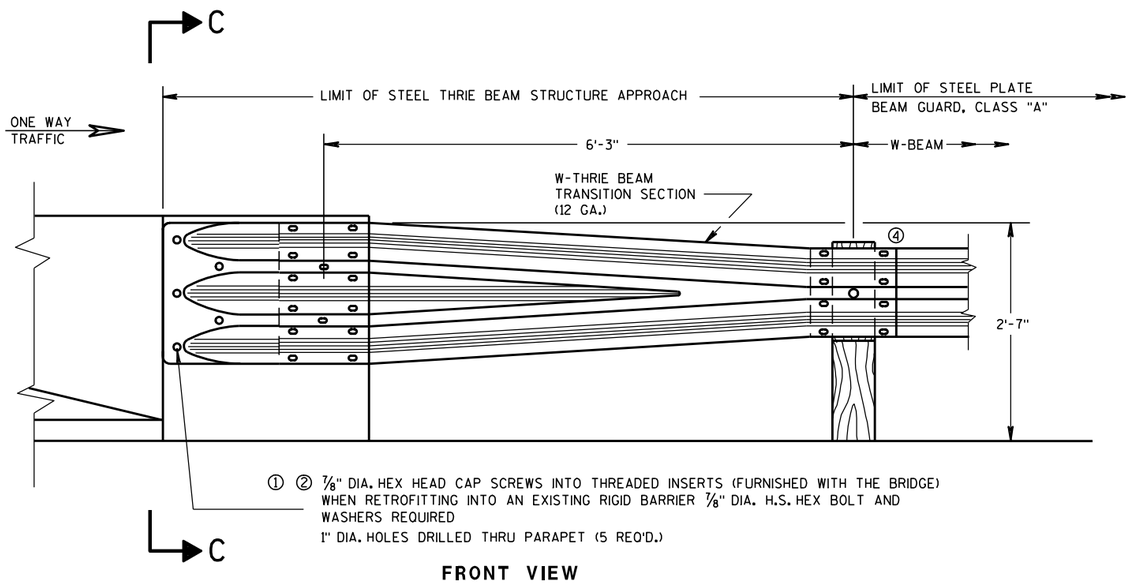
FHWA




FRONT VIEW

SECTION B-B

## THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS




① ② ⅞" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER ⅞" DIA. H.S. HEX BOLT AND WASHERS REQUIRED
1" DIA. HOLES DRILLED THRU PARAPET (5 REQ'D.)

FRONT VIEW

## W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

## GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

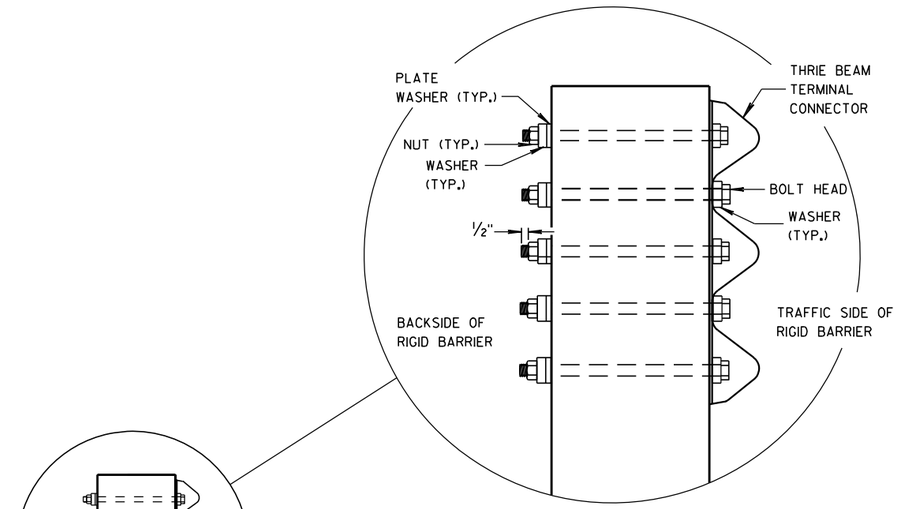
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

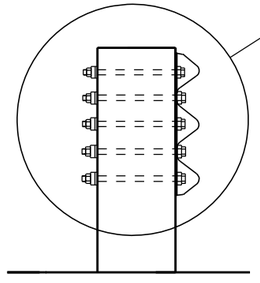
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.



SECTION C-C

## STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

## 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 | 0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS |
| ⑮ | 1 | E.A.T. MARKER POST |

## GENERAL NOTES

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

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

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

(C) 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.

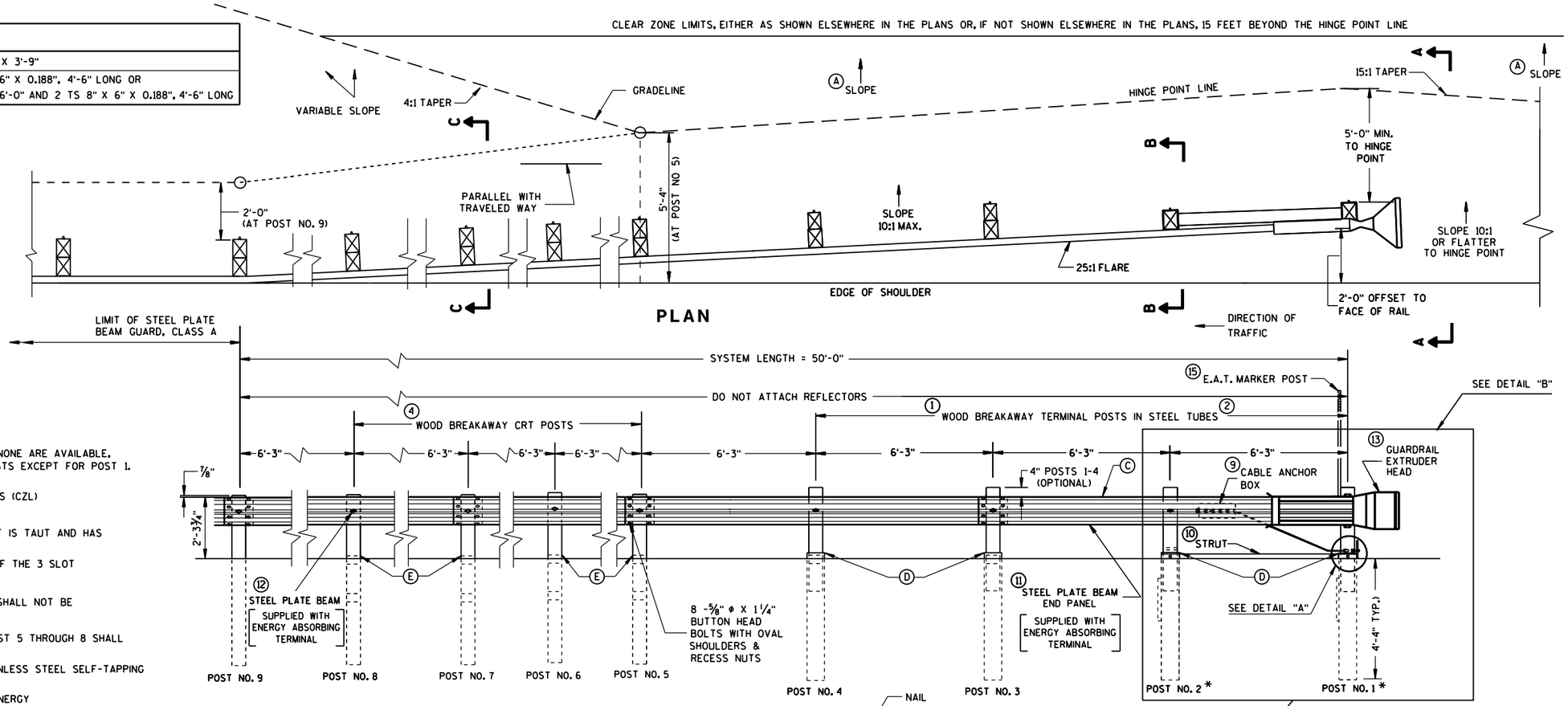
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

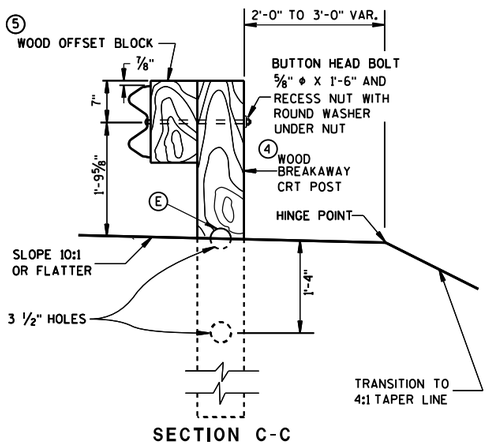
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

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

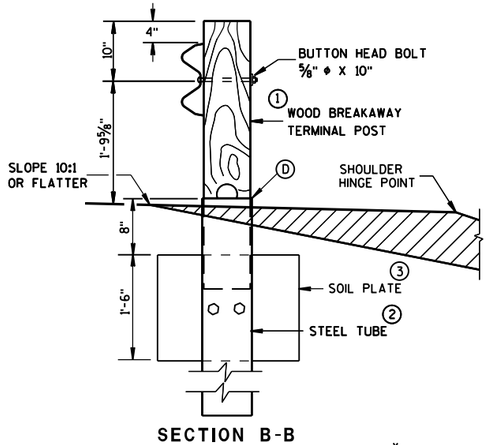
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

** 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.

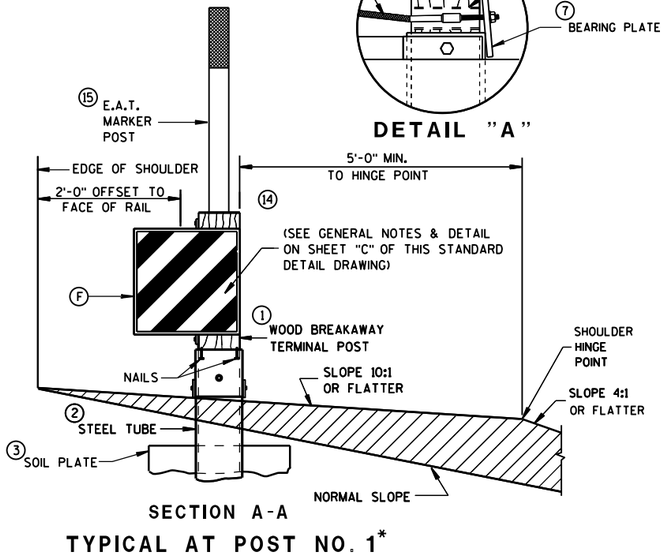


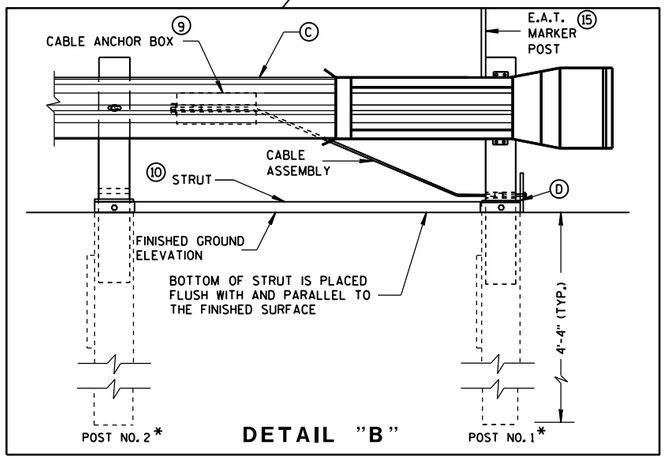

SECTION C-C
TYPICAL AT POST NOS. 6, 8




SECTION B-B
TYPICAL AT POST NO. 2*




SECTION A-A
TYPICAL AT POST NO. 1*




DETAIL "B"

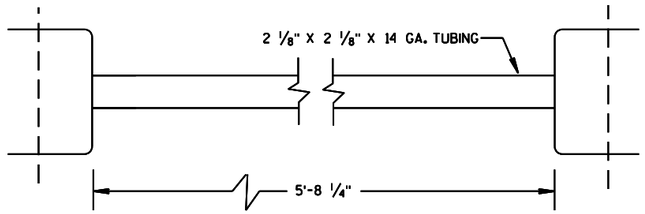
**STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

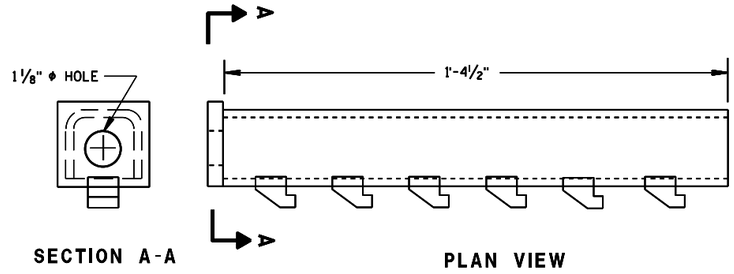



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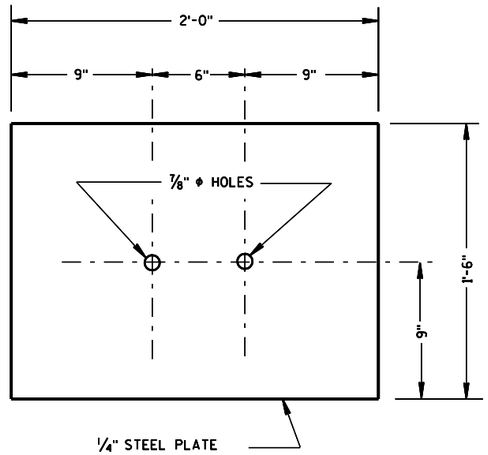

S.D.D. 14 B 24-8a




⑩ STRUT DETAIL (SKT-350)

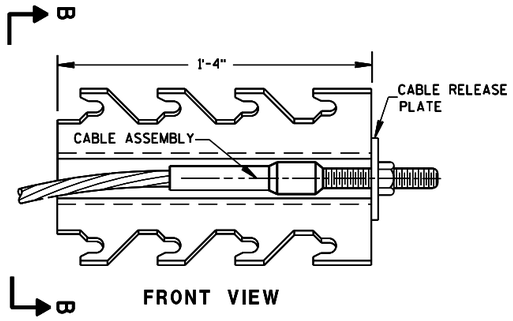


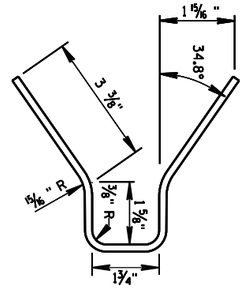

⑨ CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)




③ SOIL PLATE

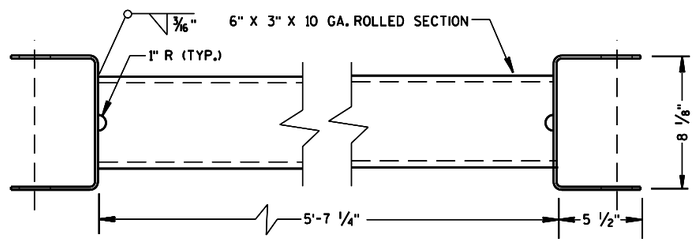
(SKT-350, ET-2000/ET-2000 PLUS)



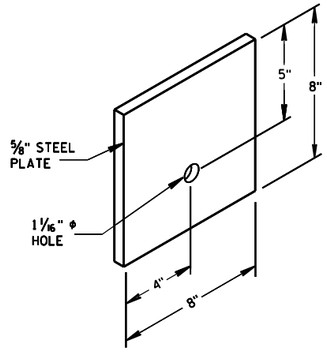

⑨ CABLE ANCHOR BOX (SKT-350)

(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)

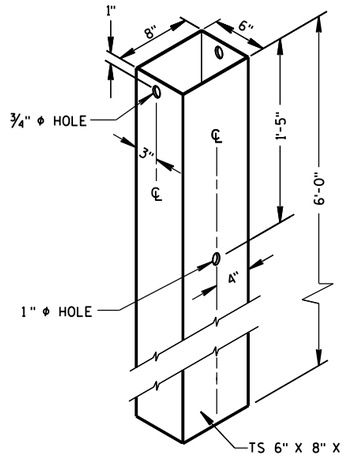
STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

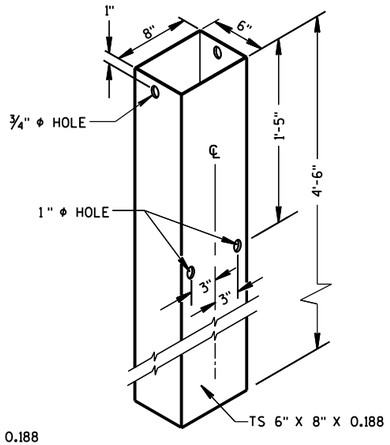



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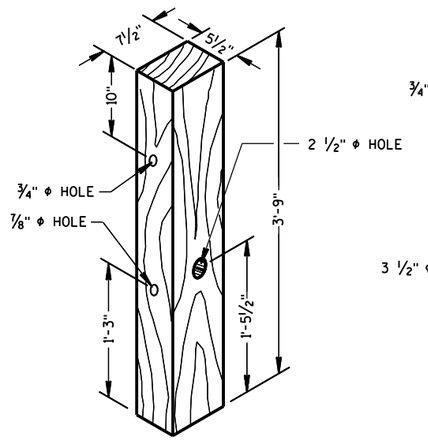
S.D.D. 14 B 24-8b



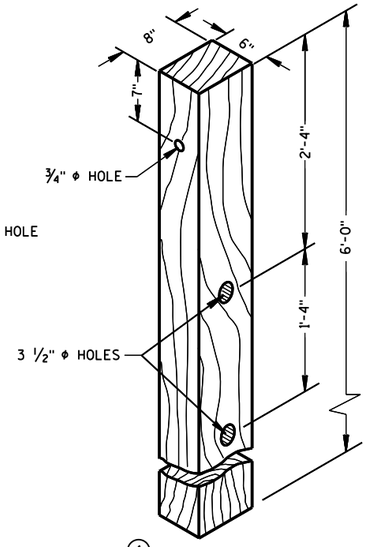

② 72" STEEL TUBE
(POSTS NO. 1-4




② 54" STEEL TUBE
(POSTS NO. 1-4




① TERMINAL POST
(POSTS NO. 1-4




④ CRT POST
(POSTS NO'S 5-8

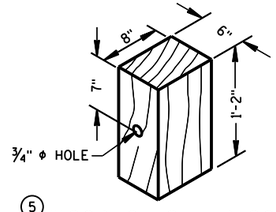
## WOOD BREAKAWAY POSTS

## GENERAL NOTES

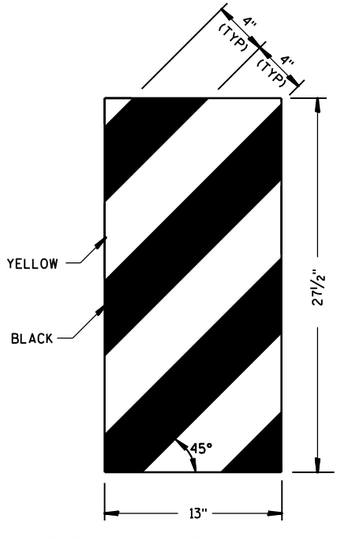
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH,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

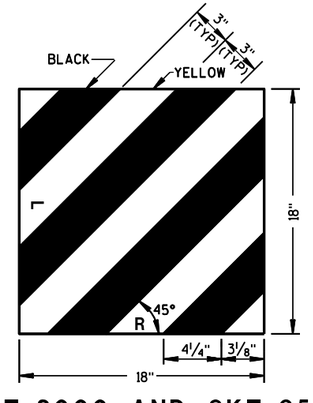
(G) ½" DIA. X 3" LAG BOLT WITH WASHER.




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

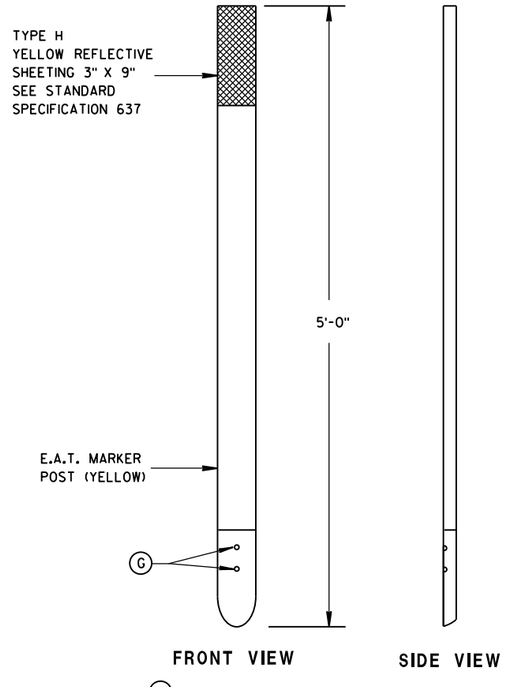



ET-2000 PLUS ONLY



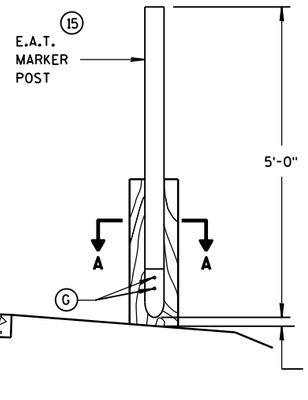

ET-2000 AND SKT-350

⑭ REFLECTIVE SHEETING DETAILS

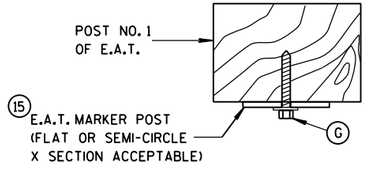



FRONT VIEW SIDE VIEW

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
June 2014 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS ENGINEER
FHWA

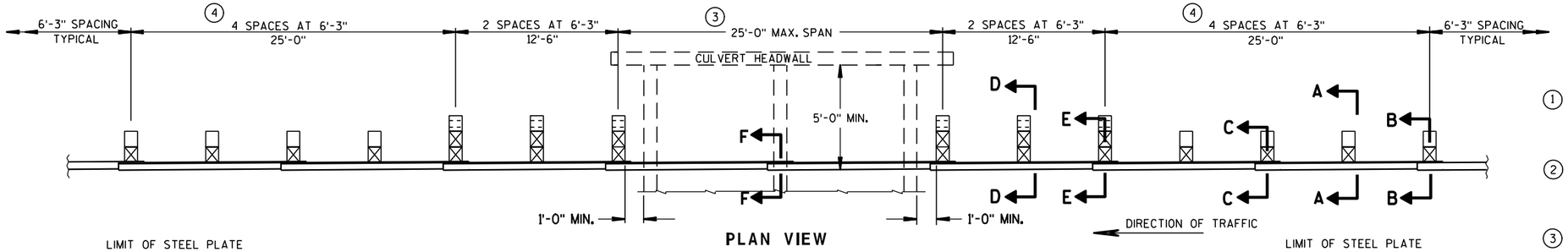


6

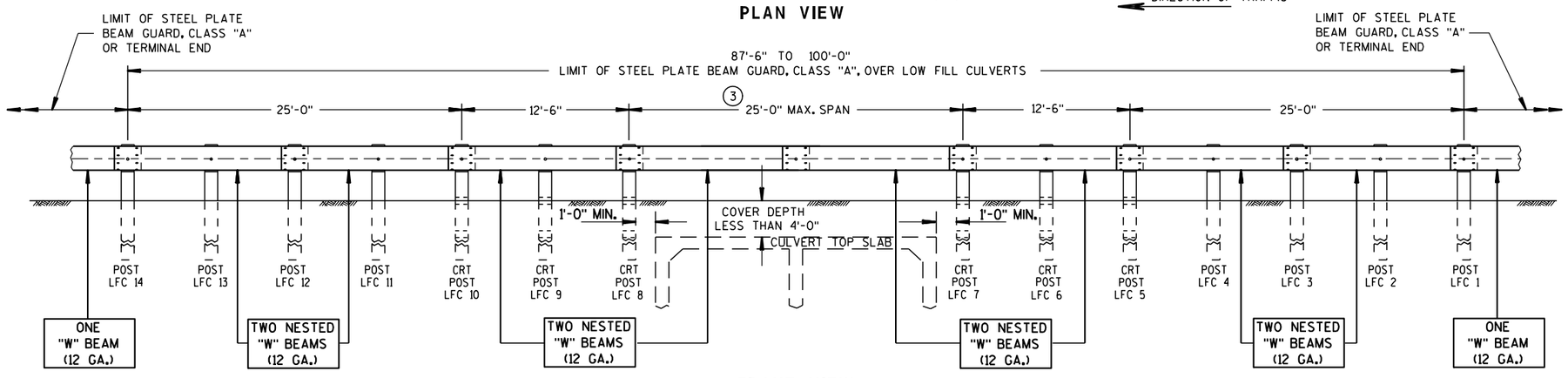
S.D.D. 14 B 24-8c

6

S.D.D. 14 B 24-8c




PLAN VIEW




FRONT VIEW

# TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD OVER LOW FILL CULVERTS

## 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.

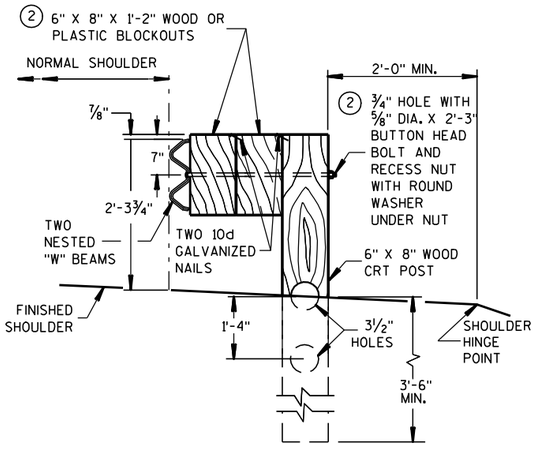
(1) MAINTAIN THE NESTING OF EACH NESTED PAIR OF "W" BEAM SECTIONS THROUGH SPLICES. ORIENTATE NESTED "W" BEAM SPLICES IN THE DIRECTION OF TRAFFIC AS THE PLAN VIEW SHOWS. SEE S.D.D. 14 B 15 FOR SPLICE INSTALLATION.

(2) THE CONTRACTOR MAY USE APPROVED PLASTIC BLOCKOUTS IN LIEU OF WOOD BLOCKOUTS. SEE S.D.D. 14 B 15 FOR TYPICAL BLOCKOUT, SPLICE AND REFLECTOR INSTALLATIONS. USE BOLT SIZES AND LENGTHS AS SHOWN ON THIS DETAIL.

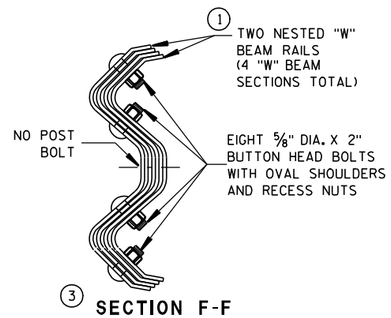
(3) PROVIDE 12'-6", 18'-9" AND 25'-0" SPANS ONLY. USE A MAXIMUM OF ONE SPLICE LOCATED ANYWHERE WITHIN THE SPAN SECTION. LOCATE ALL OTHER SPLICES AT BEAM GUARD POSTS.

(4) IN THE FIRST AND LAST 25 FOOT SECTIONS (POSTS LFC 1-4 & LFC 11-14), THE CONTRACTOR MAY USE W6 X 9 OR W6 X 8.5 STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS OR 6" X 8" WOOD POSTS WITH EITHER WOOD OR PLASTIC BLOCKOUTS. DO NOT MIX STEEL POSTS WITH NOTCHED PLASTIC BLOCKOUTS AND WOOD POSTS WITH EITHER WOOD OR PLASTIC BLOCKOUTS IN THE SAME INSTALLATION.

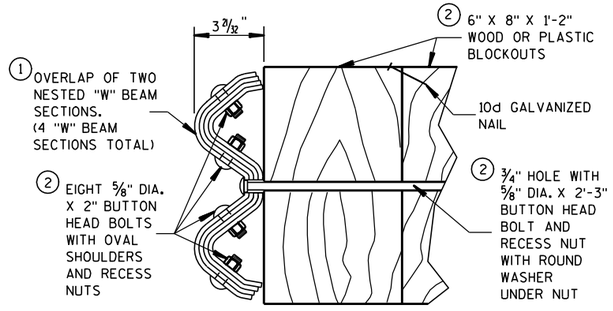
(5) WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK, THE PLAN TYPICAL SECTIONS OR DETAILS MAY SHOW, OR THE ENGINEER MAY ALLOW, THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. BUILD AS THE PLAN SHOWS OR ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST SOIL DEPTH TO 4'-6" OR MORE.



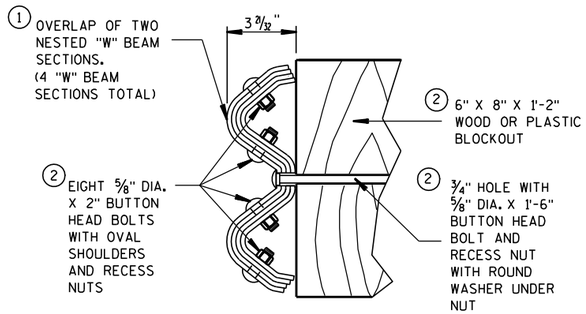

SECTION D-D
TYPICAL CRT POST LFC 6 AND 9



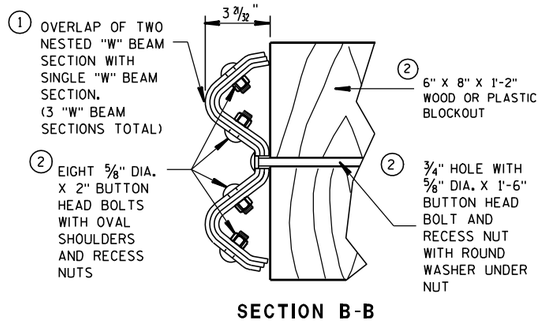

(3) SECTION F-F
BEAM SPLICE IN SPAN OVER CULVERT



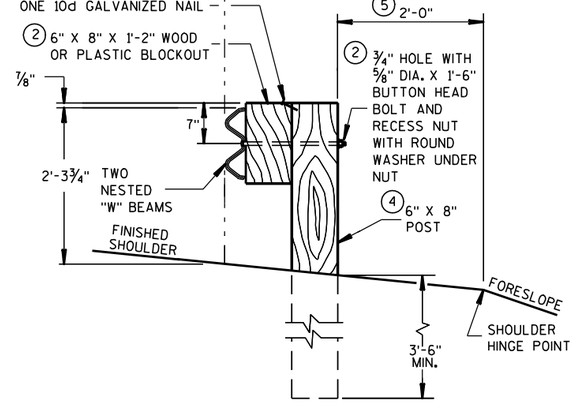

SECTION E-E
TYPICAL CRT POST LFC 5, 7, 8 AND 10




SECTION C-C
TYPICAL AT POSTS LFC 3 AND 12




SECTION B-B
TYPICAL AT POSTS LFC 1 AND 14




SECTION A-A
TYPICAL AT POST LFC 2,4,11,13

**STEEL PLATE BEAM GUARD, CLASS "A", OVER LOW FILL CULVERTS**

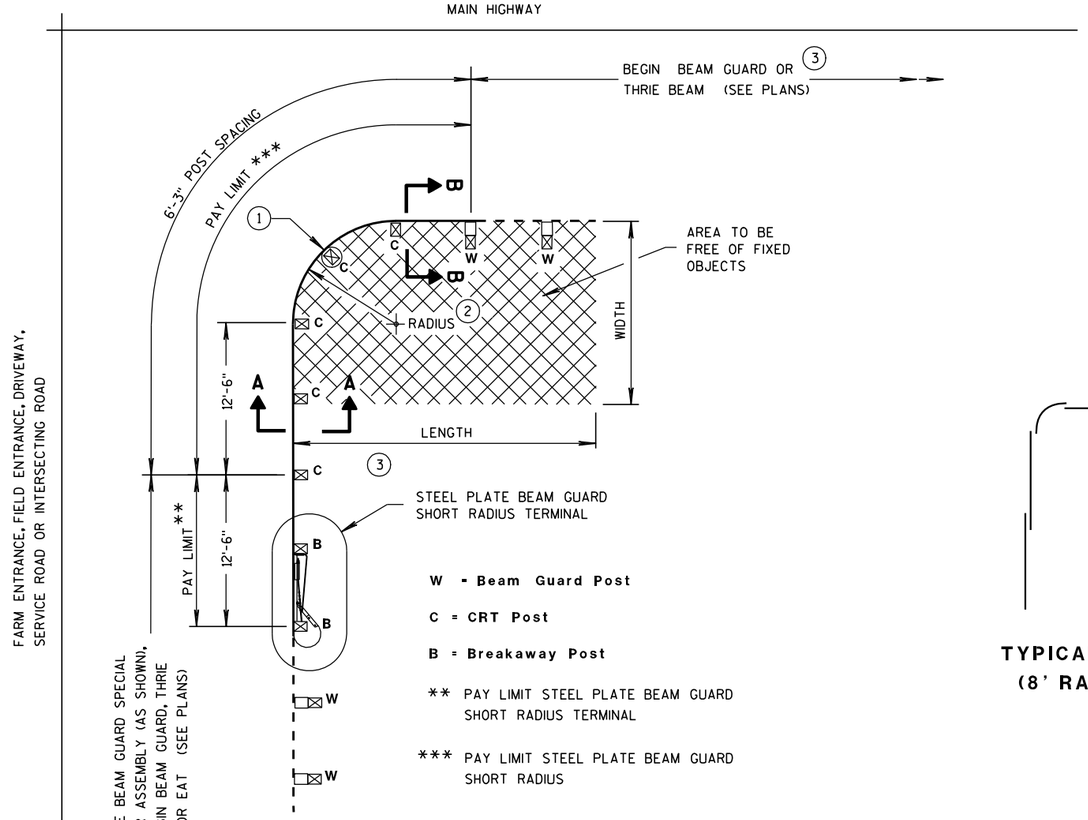
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/8/00 DATE
/S/ John Have... CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

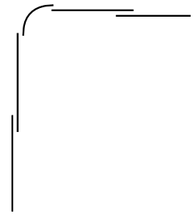



6

S.D.D. 14 B 25-1




**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.

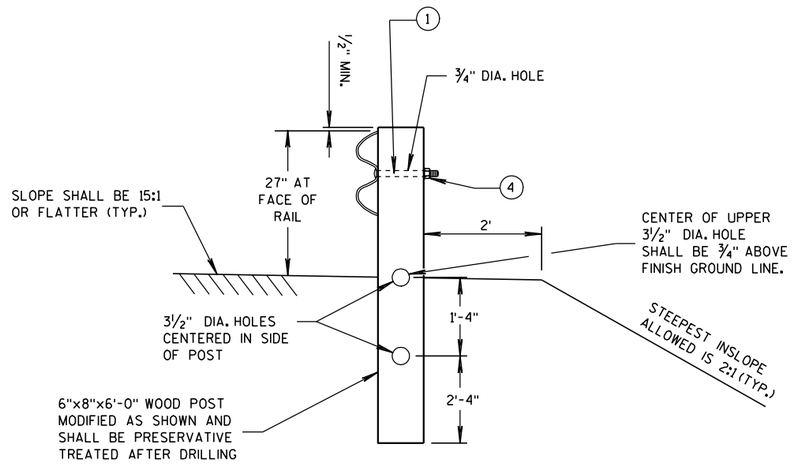
(2) RADIUS FROM 8' - 36'. SEE PLAN.

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

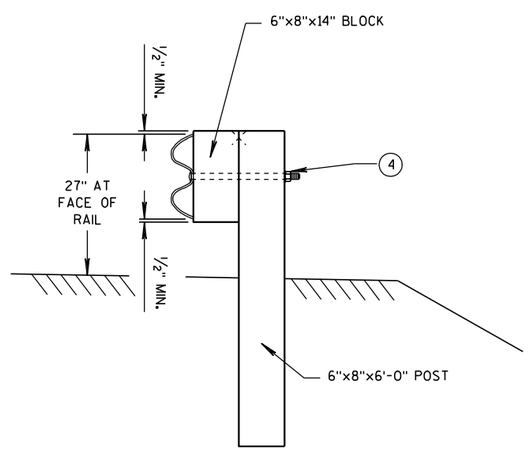
(4) 5/8" ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

| 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

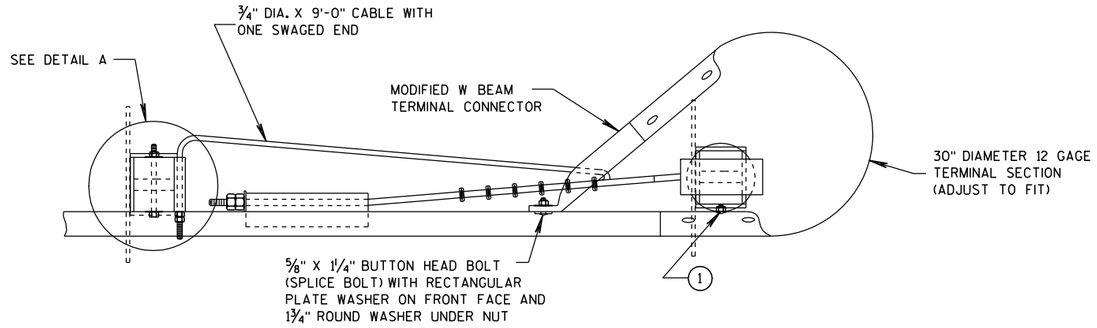


6

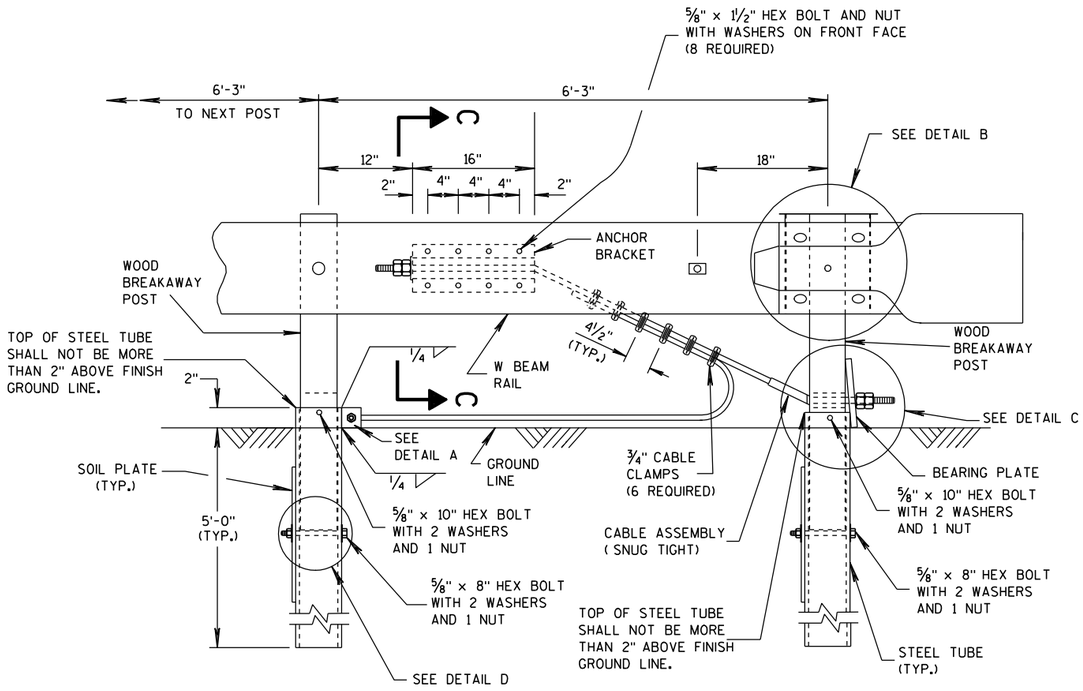
S.D.D. 14 B 27-1a

6

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




**PLAN VIEW**



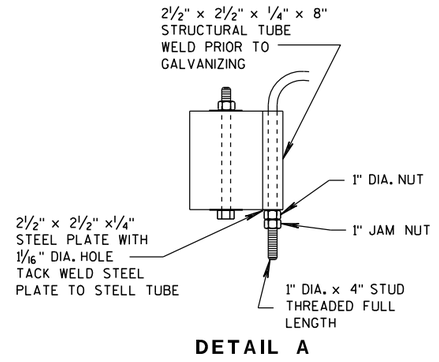

**ELEVATION VIEW**

# STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

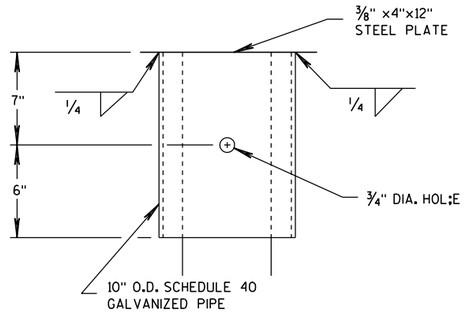
## GENERAL NOTES

(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)

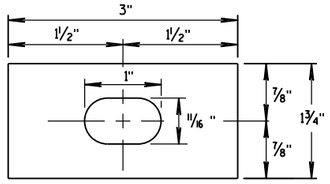
**STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

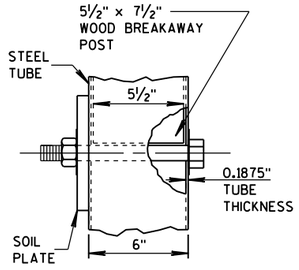




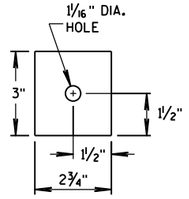
6
S.D.D. 14 B 27-1b



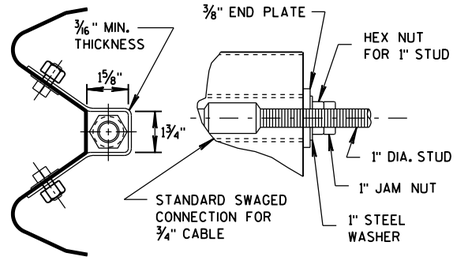

**RECTANGULAR PLATE WASHER**



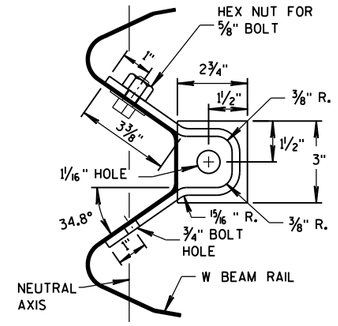

**DETAIL D**



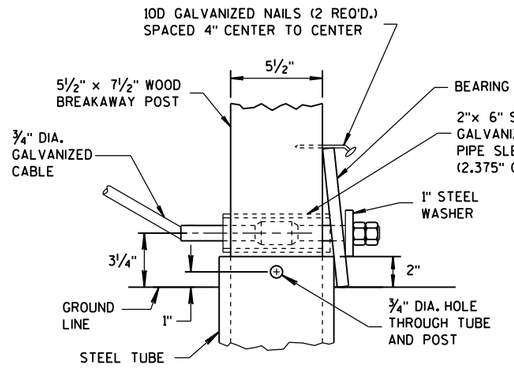

**END PLATE**



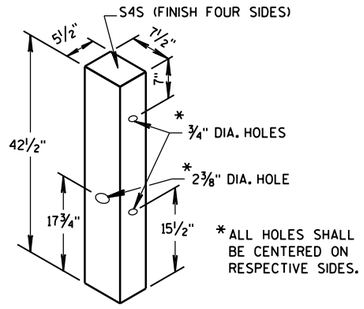

**SECTION C-C**
**(END PLATE REMOVED)**



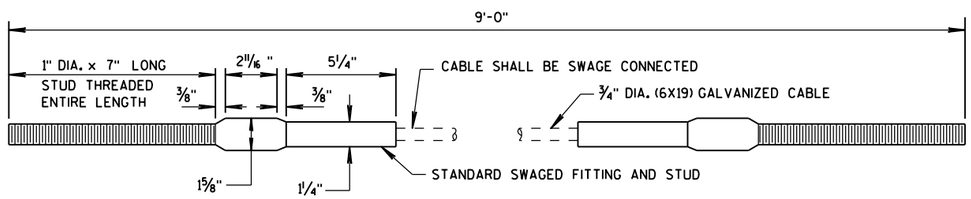

**ANCHOR BRACKET**



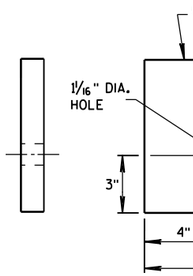

**DETAIL C**



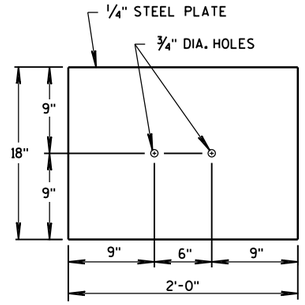

**WOOD BREAKAWAY POST**



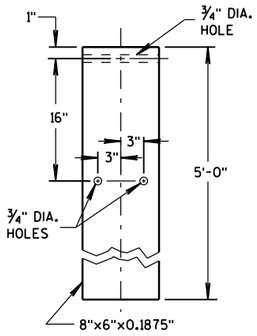

**CABLE ASSEMBLY**




**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

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

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

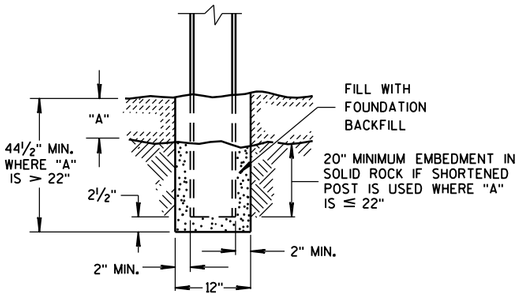
② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

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

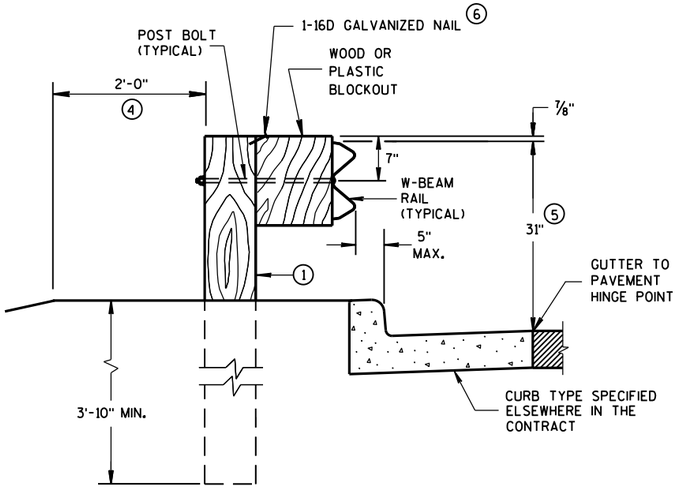
④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

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

⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.




END VIEW
SETTING STEEL OR WOOD POST IN ROCK ③



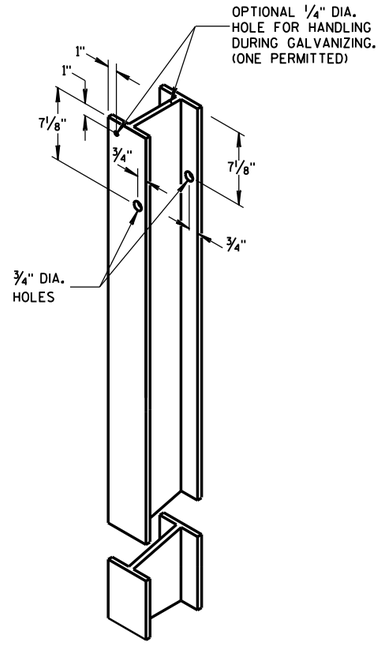

END VIEW
LOCATED ALONG A CURBED ROADWAY



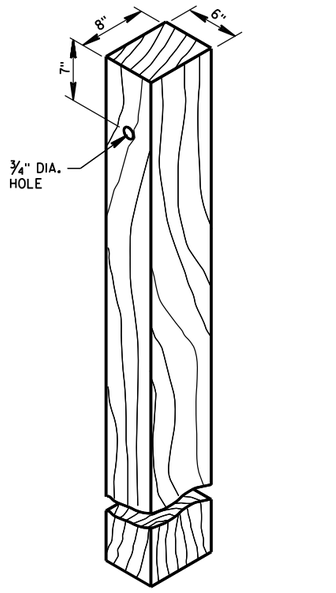

END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



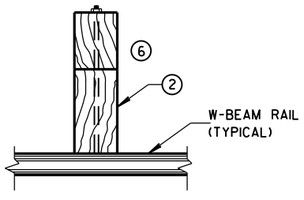

END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



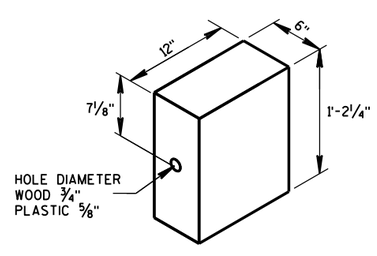

STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



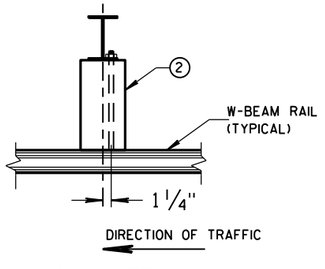

WOOD POST
(6" X 8") NOMINAL ①




PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM




WOOD OR
PLASTIC BLOCKOUT ②



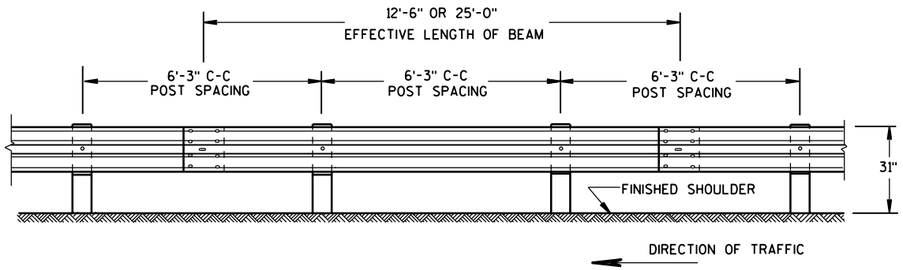

PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

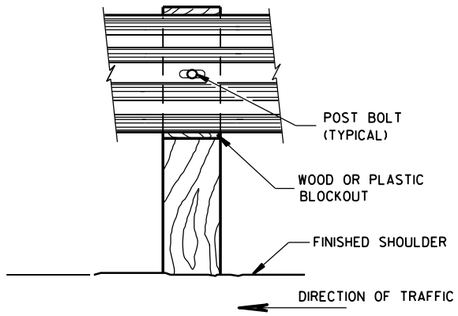



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S.D.D. 14 B 42-4a




FRONT VIEW

## POST SPACING STANDARD INSTALLATION




FRONT VIEW AT WOOD POST

7. PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

8. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

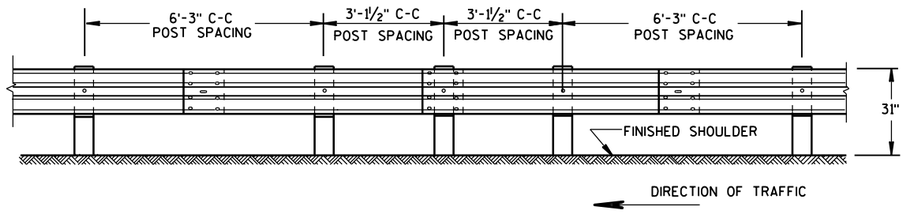
9. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

10. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

11. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

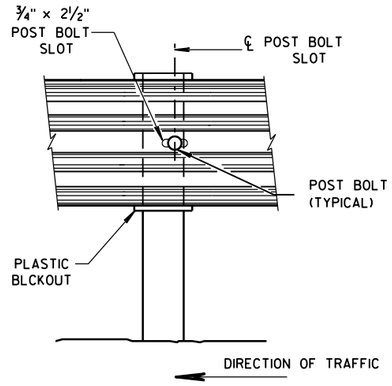
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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

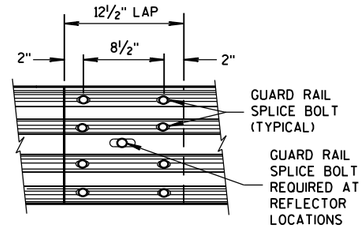



FRONT VIEW

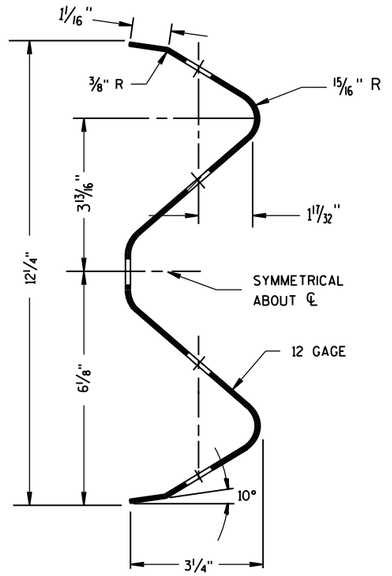
## HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



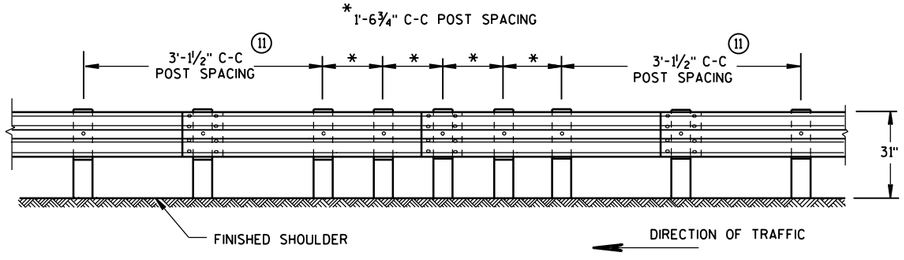

FRONT VIEW AT STEEL POST




FRONT VIEW
MID-SPAN BEAM SPLICE

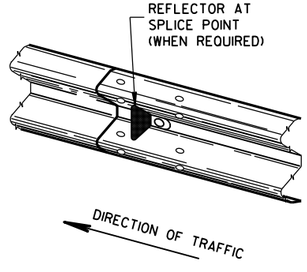


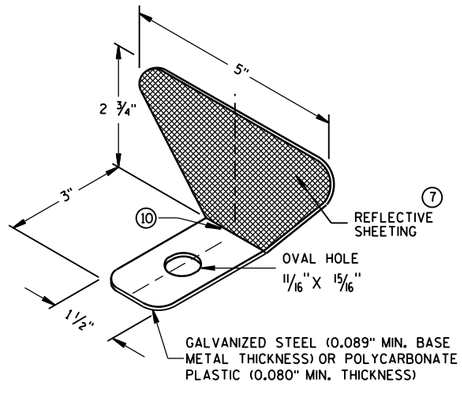

SECTION THRU W-BEAM RAIL




FRONT VIEW

## QUARTER POST SPACING (QS)




## ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (7)

### REFLECTOR SPACING (8)

| | BEAM GUARD LENGTH | REFLECTOR SPACING | NO. SURFACES REFLECTORIZED | MIN. NO. REFLECTORS |
|---|---|---|---|---|
| ONE WAY TRAFFIC | < 200' | 50' C-C | 1 | 3 |
| | > 200' | 100' C-C | 1 | |
| TWO WAY TRAFFIC | < 200' | 25' C-C | 1 (9) | 6 |
| | > 200' | 50' C-C | 1 | |
| TWO WAY TRAFFIC | < 200' | 50' C-C | 2 | 3 |
| | > 200' | 100' C-C | 2 (10) | |

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

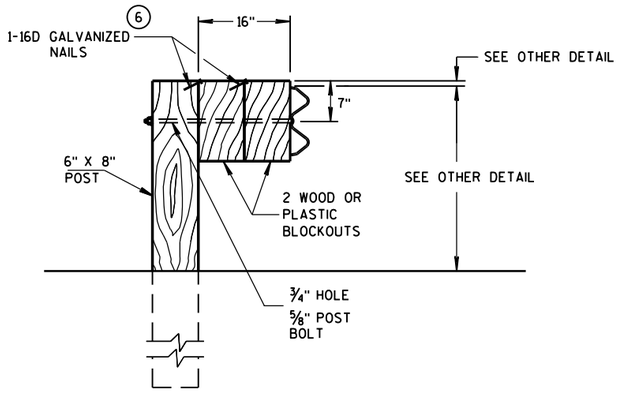


6

S.D.D. 14 B 42-4b

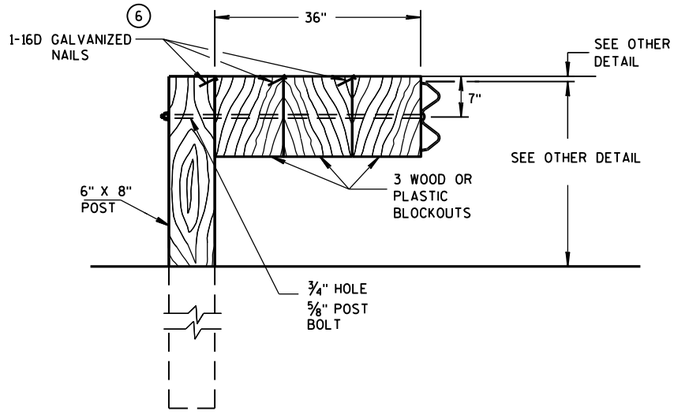
6

S.D.D. 14 B 42-4b




## DETAIL FOR 16" BLOCKOUT DEPTH

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

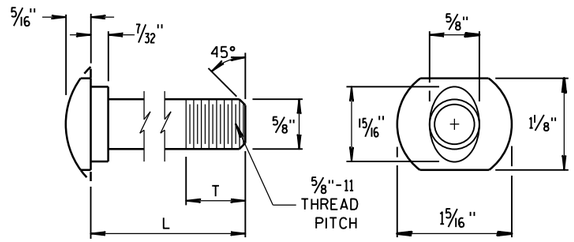



## DETAIL FOR 36" BLOCKOUT DEPTH

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

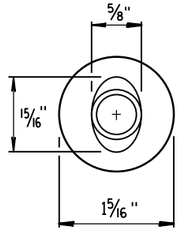
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

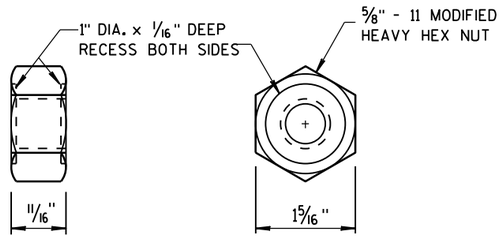



### POST BOLT TABLE

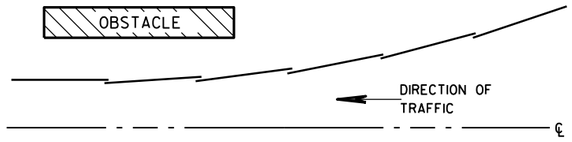
| L | T (MIN.) |
|---|---|
| 1¼" | 1⅛" |
| 2" | 1¾" |
| 10" | 4" |
| 14" | 4 1/16" |
| 18" | 4" |
| 21" | 4 1/16" |
| 25" | 4" |




ALTERNATE BOLT HEAD

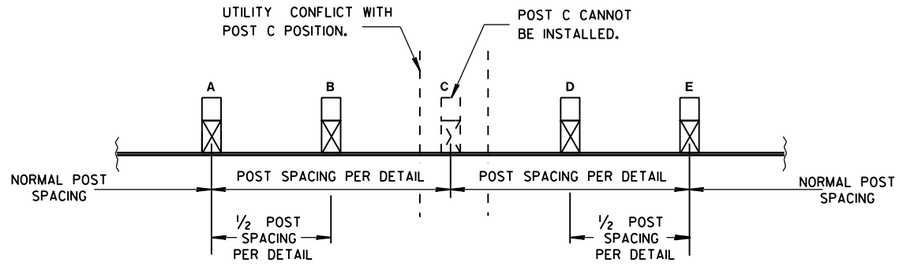



## POST BOLT, SPLICE BOLT AND RECESS NUT

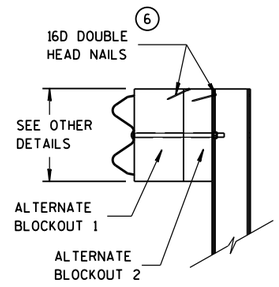



PLAN VIEW

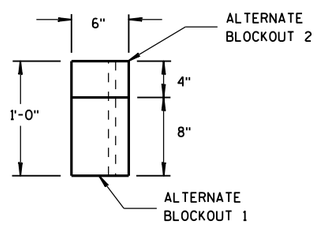
## BEAM LAPPING DETAIL




## POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION




SIDE VIEW




TOP VIEW

## ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA




6
S.D.D. 14 B 42-4c

## GENERAL NOTES

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

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

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

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

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

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

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

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

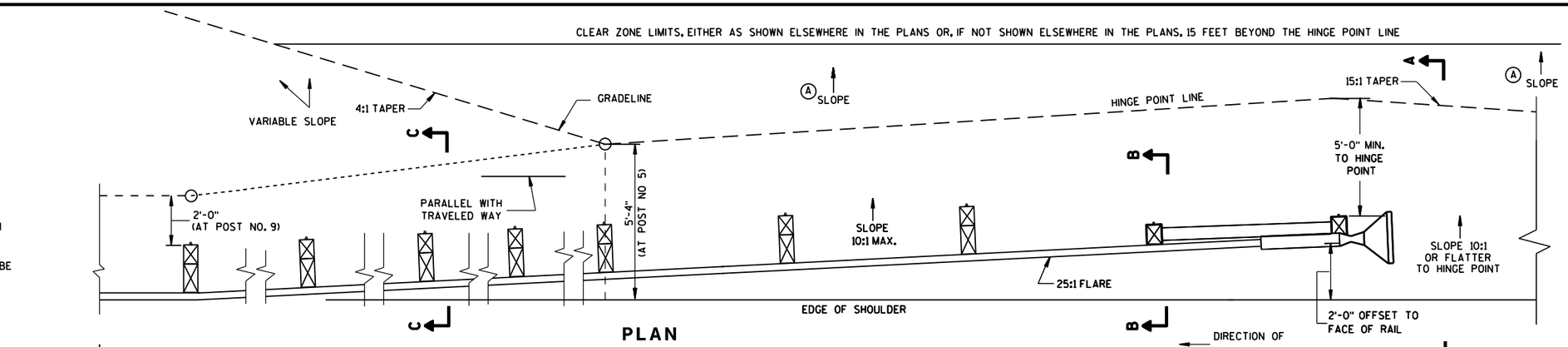
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

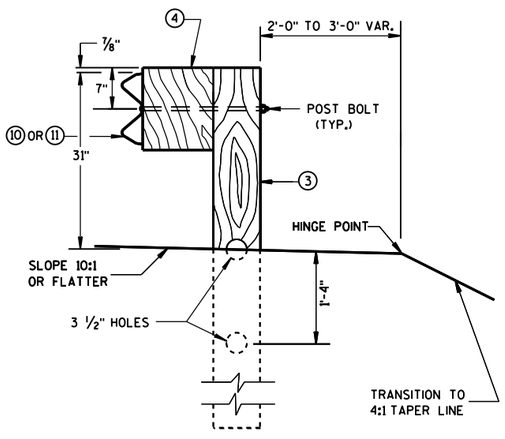
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

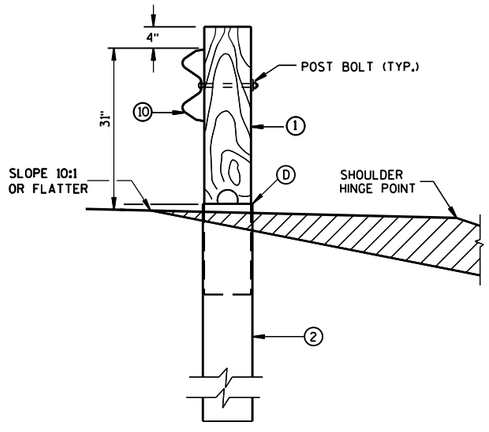
THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.



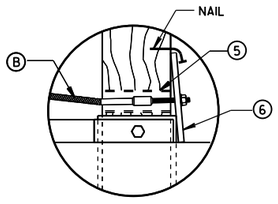

ELEVATION



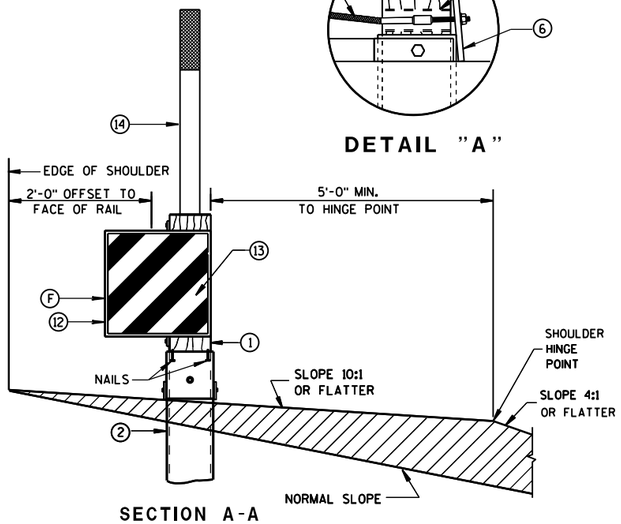

SECTION C-C
TYPICAL AT POST NOS. 3-9



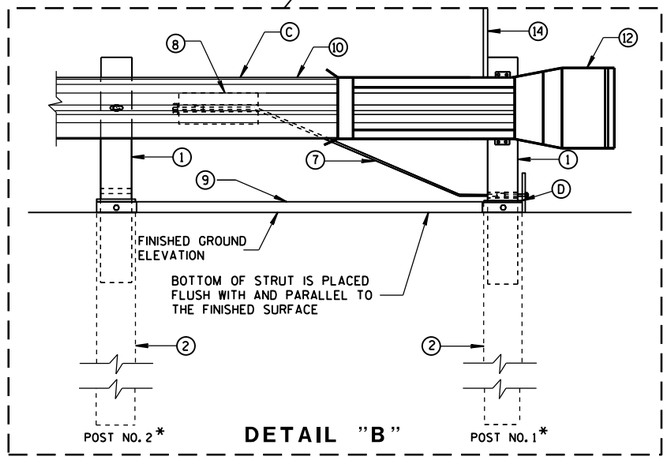

SECTION B-B
TYPICAL AT POST NO. 2*




DETAIL "A"




SECTION A-A
TYPICAL AT POST NO. 1*




DETAIL "B"

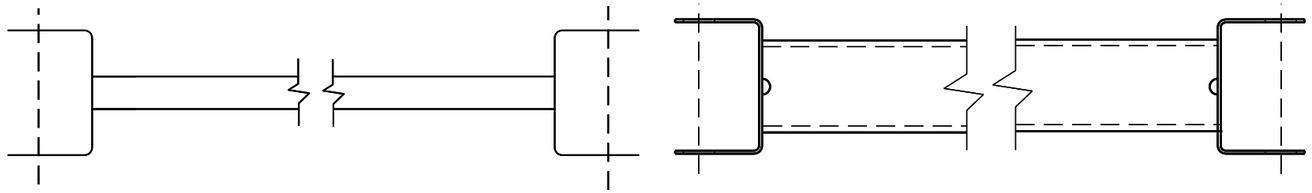
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



S.D.D. 14 B 44-2a

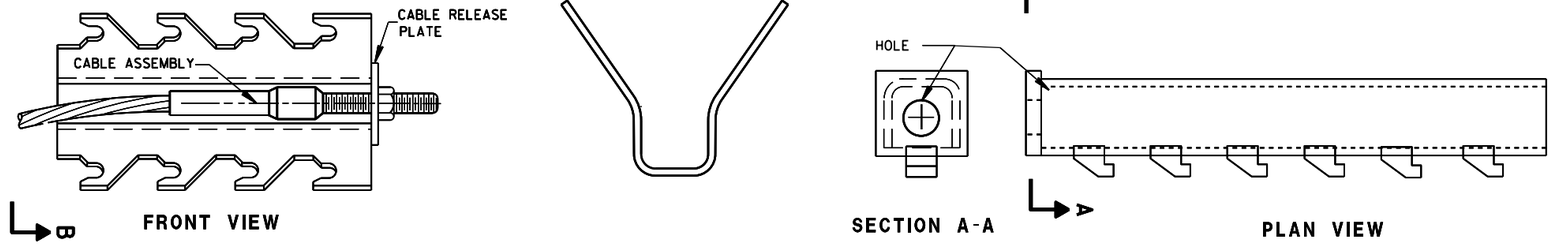
S.D.D. 14 B 44-2a



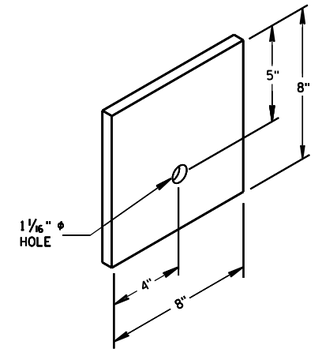
GENERIC GROUND STRUT (9) (H)

## BILL OF MATERIALS

| PART NO. | DESCRIPTION<br>MATERIALS PROVIDED BY MGS EAT MANUFACTURER.<br>SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION. |
|---|---|
| (1) | WOOD BREAKAWAY POST |
| (2) | 6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE<br>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.<br>SECTIONS VARY IN LENGTH. |
| (12) | END SECTION EAT |
| (13) | 0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING<br>TYPE F PER SECTION 637 OF THE STANDARD<br>SPECIFICATIONS |
| (14) | EAT MARKER POST - YELLOW<br>(SEE APPROVED PRODUCTS LIST) |




GENERIC ANCHOR CABLE BOX (8) (H)




BEARING PLATE (6)

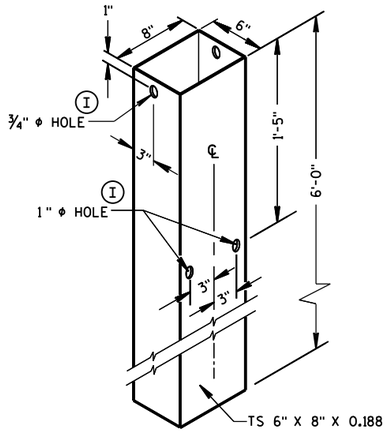
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

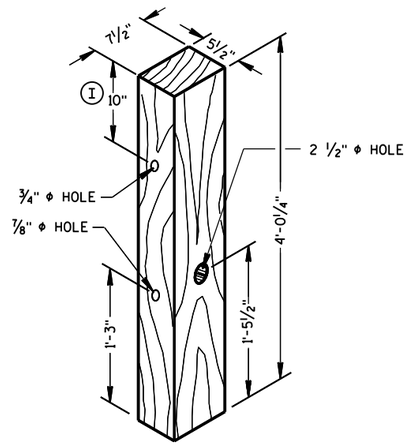




6
S.D.D. 14 B 44-2b

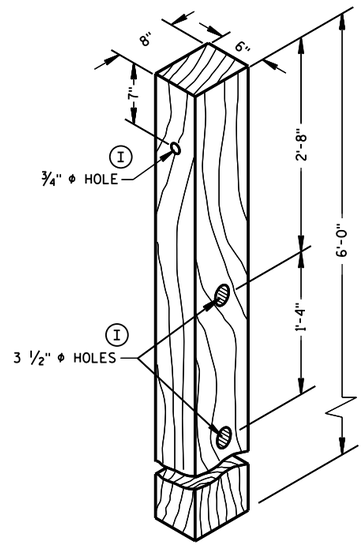



## FOUNDATION TUBE (2)



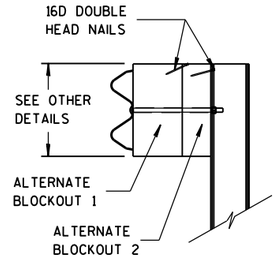

POSTS NUMBER 1 AND 2

## WOOD BREAKAWAY POST (1)

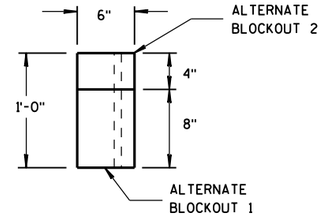



POSTS NUMBER 3-9

## WOOD CRT POST (3)

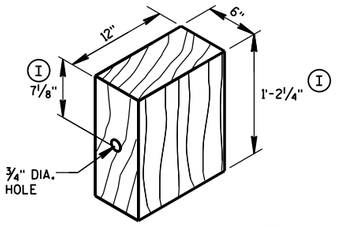



SIDE VIEW



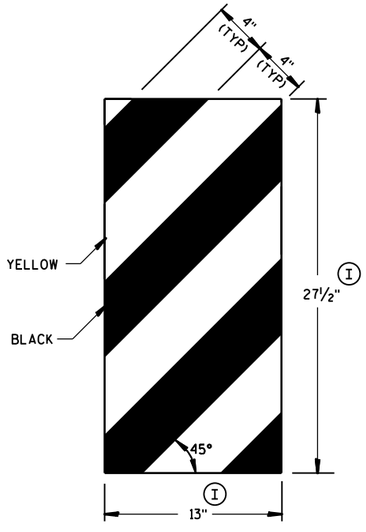

TOP VIEW

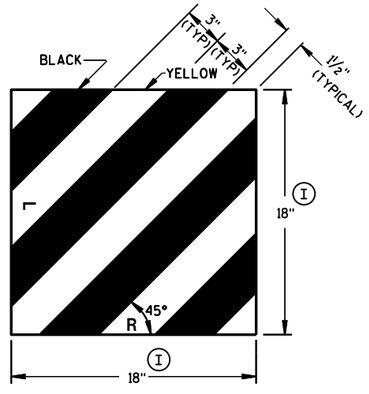
## ALTERNATE WOOD BLOCKOUT DETAIL



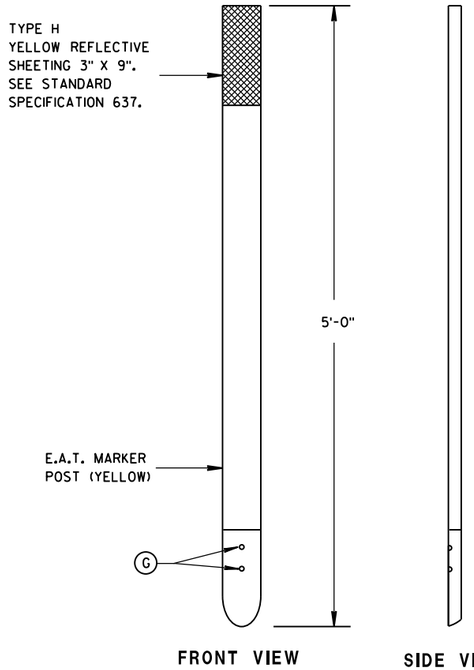

## WOOD BLOCKOUT (4)

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



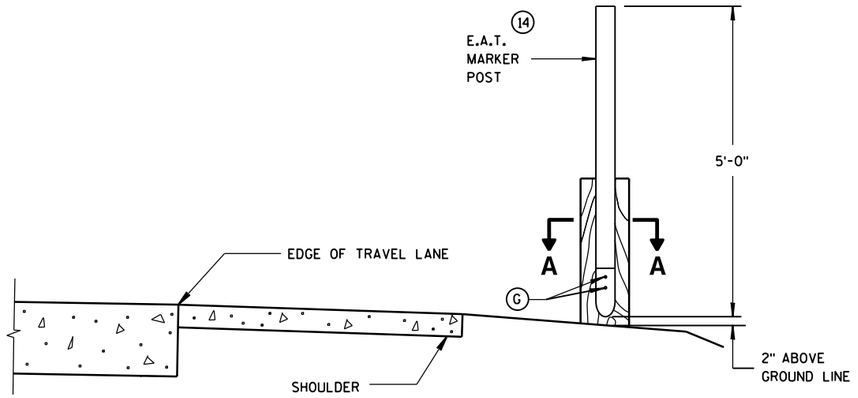

## GENERIC REFLECTIVE SHEETING (13) (H)




FRONT VIEW

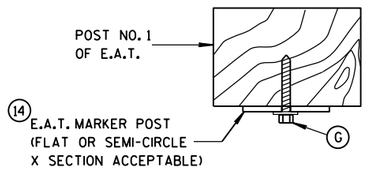
SIDE VIEW

## E.A.T. MARKER POST (14)




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

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




SECTION A-A

**MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)**

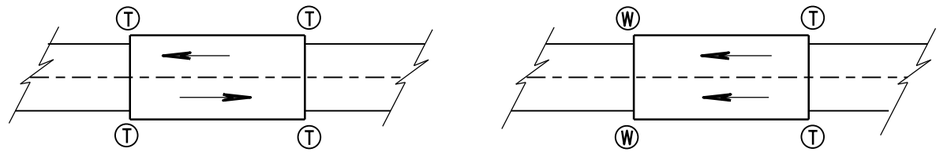
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA




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S.D.D. 14 B 44-2c




TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

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

## GENERAL NOTES

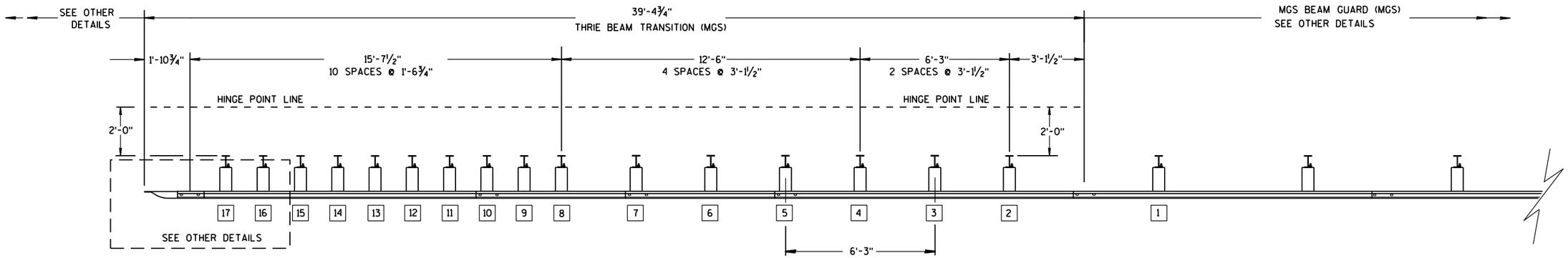
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

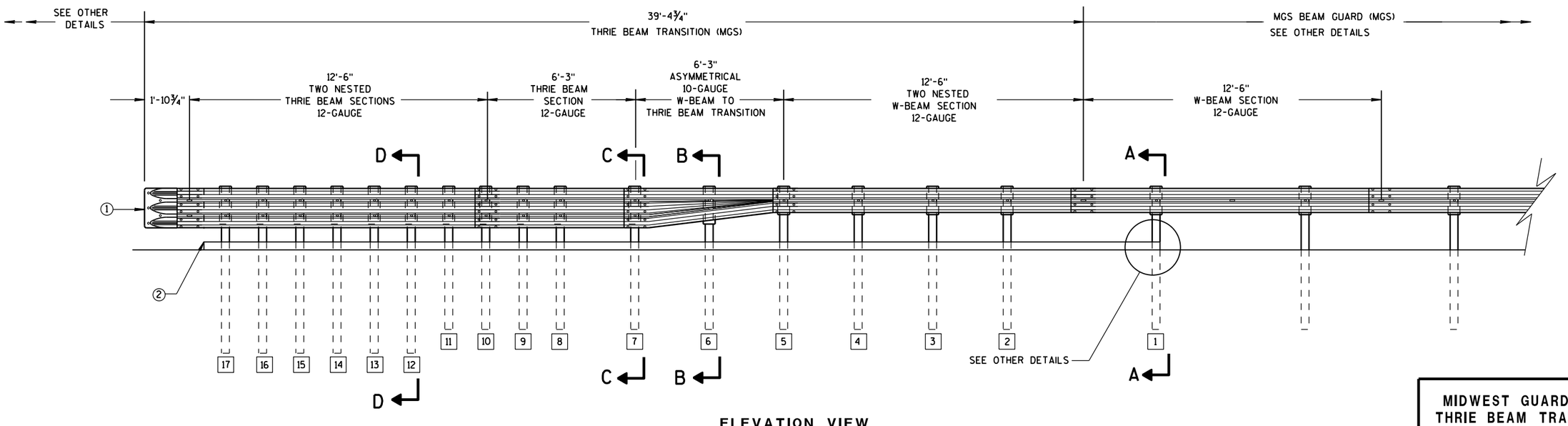
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.




PLAN VIEW




ELEVATION VIEW

## MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

**MIDWEST GUARDRAIL SYSTEM**
**THRIE BEAM TRANSITION (MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



6

S.D.D. 14 B 45-4a

6

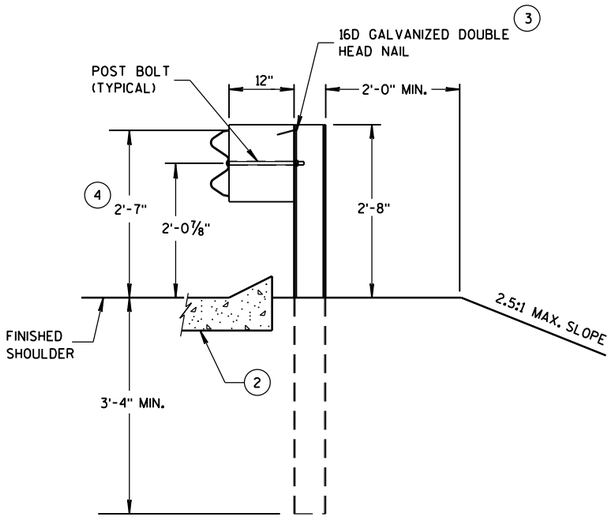
S.D.D. 14 B 45-4a

## GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE_FEATURE SEE PLAN FOR INFORMATION.

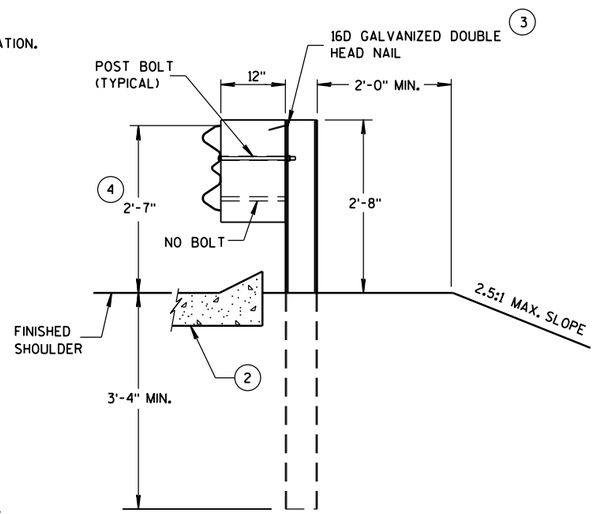
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



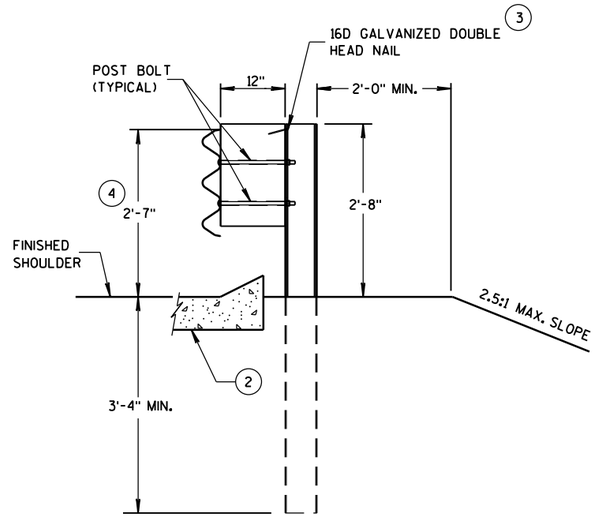

SECTION A-A

**POSTS 1-5**



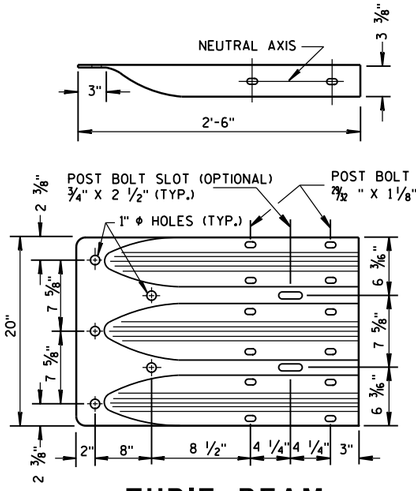

SECTION B-B

**POST 6**




SECTION C-C

**POSTS 7-11**




**THRIE BEAM TERMINAL CONNECTOR**

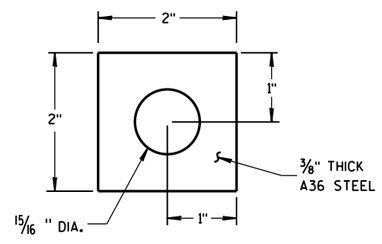
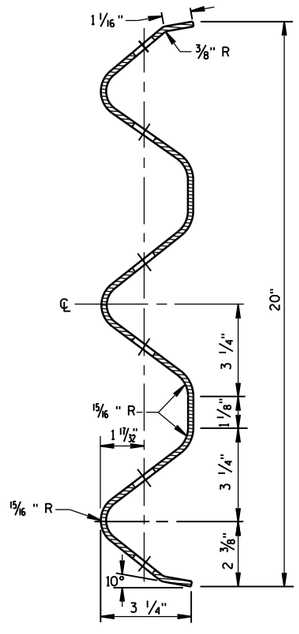
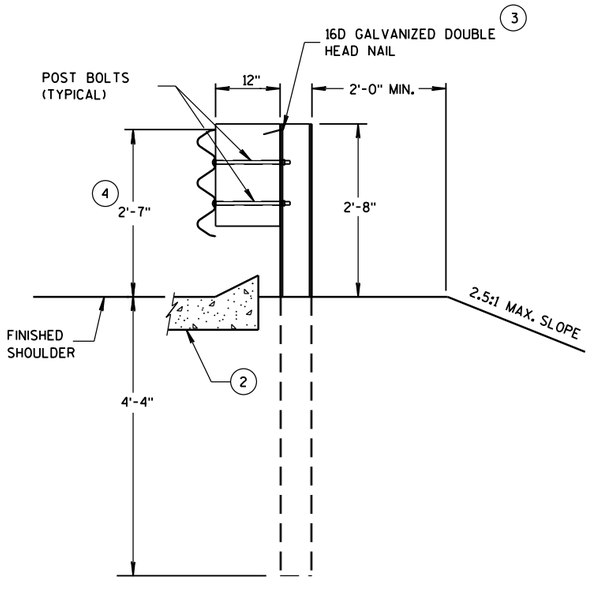



PLATE WASHER DETAIL

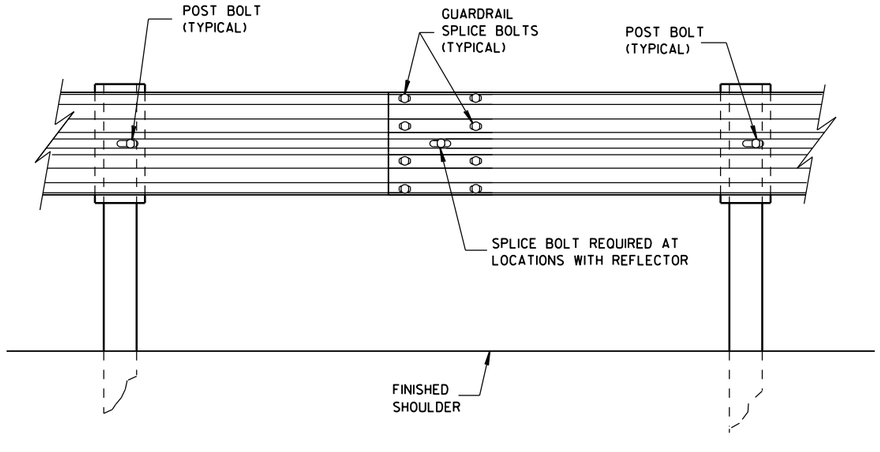



**SECTION THRU THRIE BEAM RAIL ELEMENT**




SECTION D-D

**POSTS 12-17**




**SPLICE DETAIL**

**MIDWEST GUARDRAIL SYSTEM**
**THRIE BEAM TRANSITION (MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

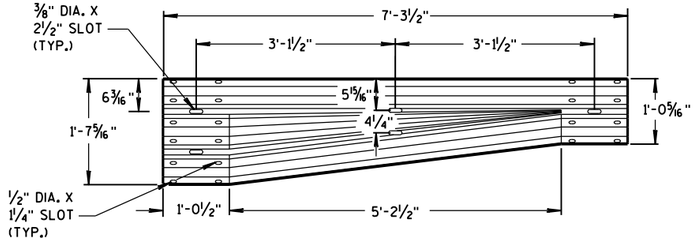




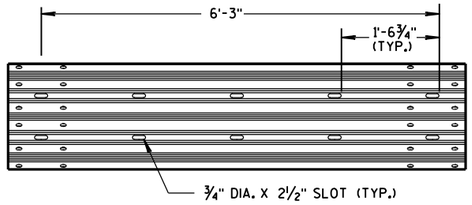
6



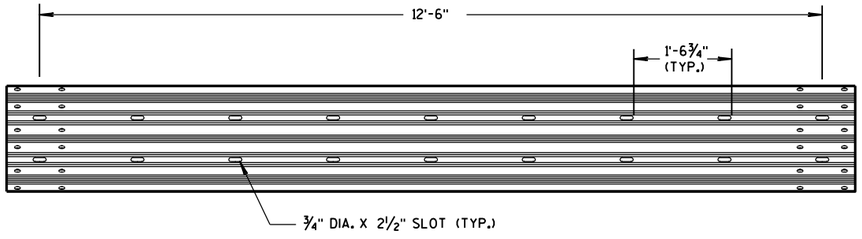
S.D.D. 14 B 45-4b



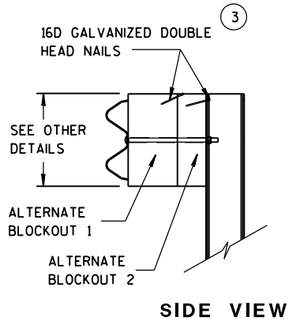

## W-BEAM TO THRIE BEAM TRANSITION SECTION



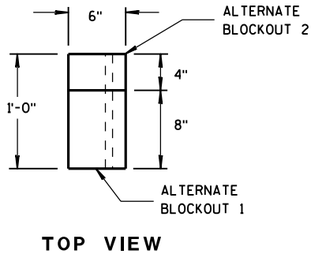

## 6'-3" THRIE BEAM SECTION




## 12'-6" THRIE BEAM SECTION

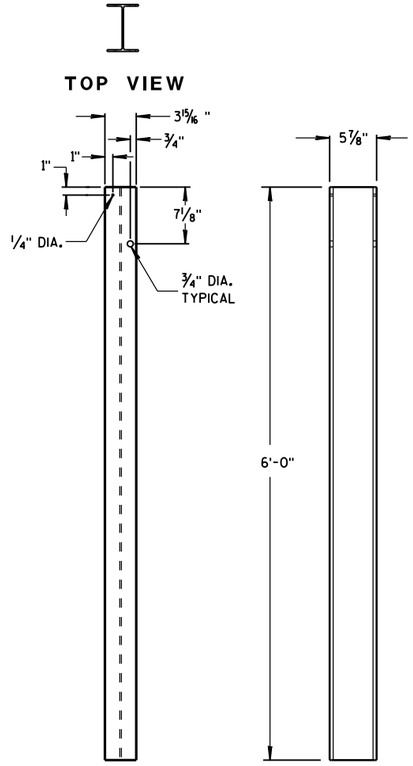



SIDE VIEW

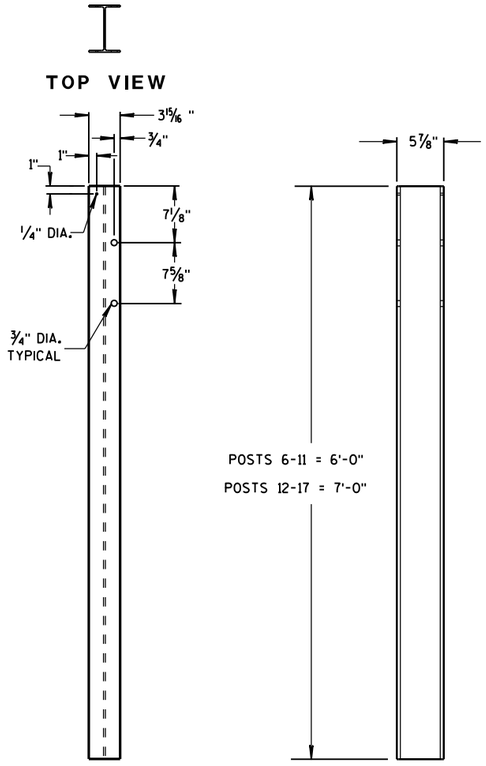



TOP VIEW

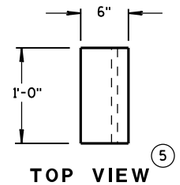
## ALTERNATE WOOD BLOCKOUT DETAIL



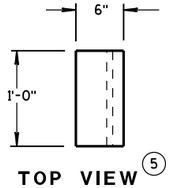

## STEEL POSTS 1-5



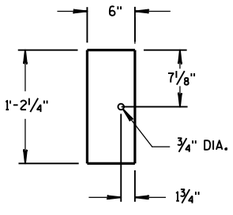

## STEEL POSTS 6-17




TOP VIEW (5)

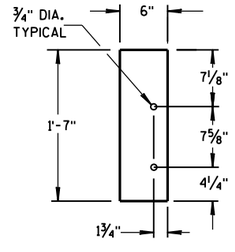



TOP VIEW (5)




FRONT VIEW

## BLOCKOUT POSTS 1-5




FRONT VIEW

## BLOCKOUT POSTS 6-17

## GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

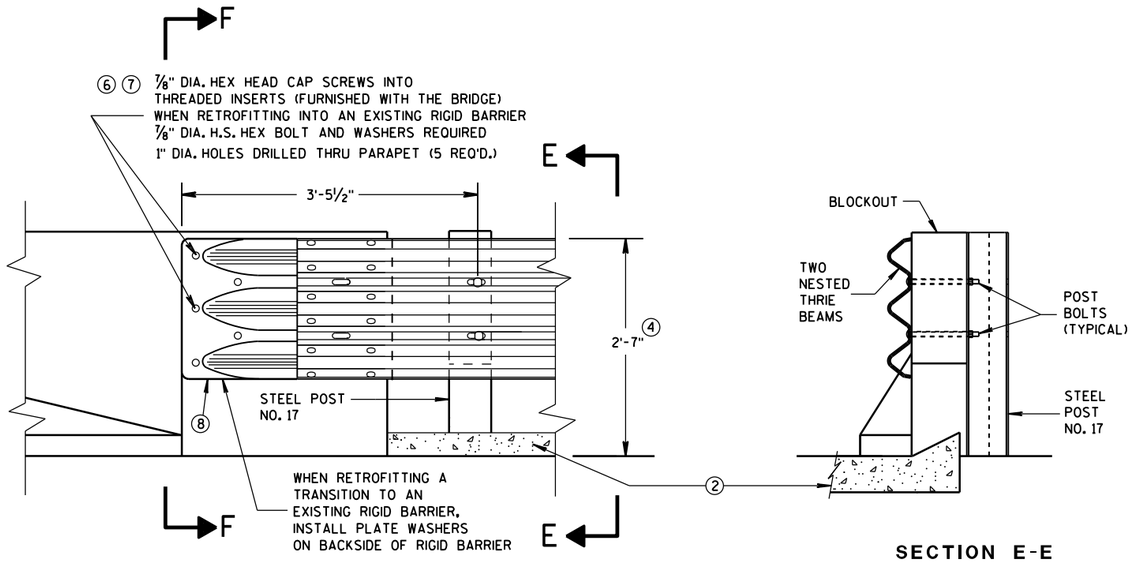
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI




6

S.D.D. 14 B 45-4c
S.D.D. 14 B 45-4c




FRONT VIEW

SECTION E-E

# THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

## GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

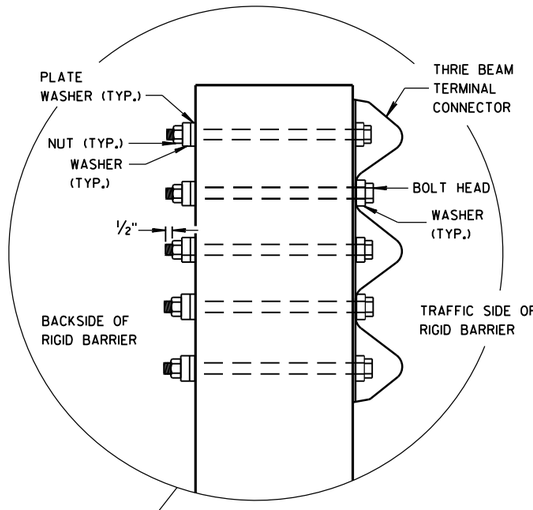
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

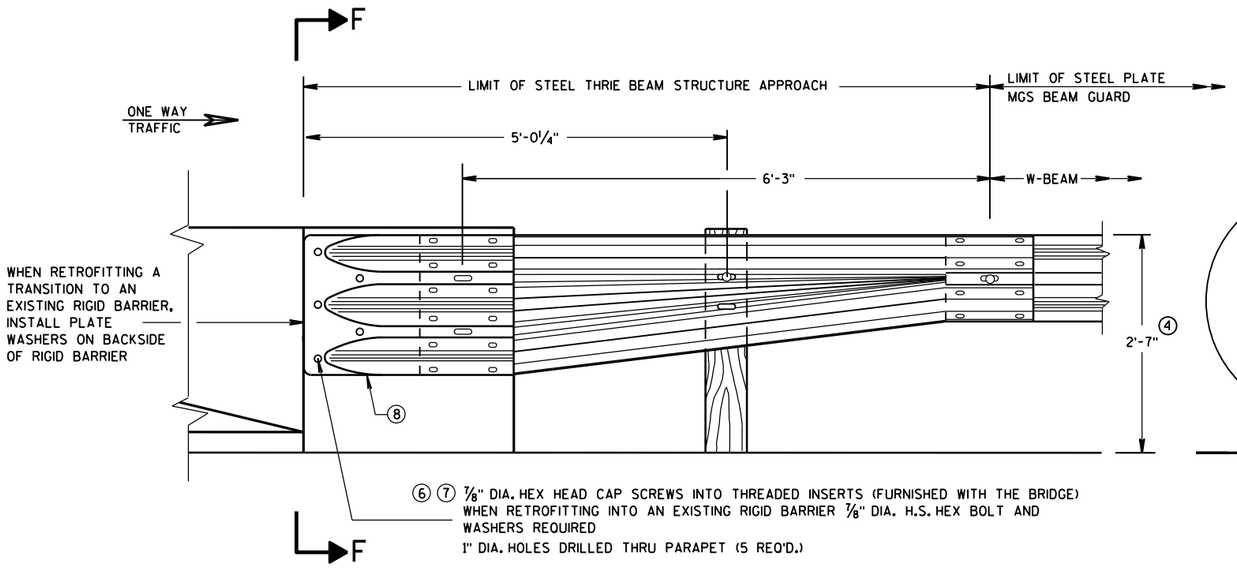
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

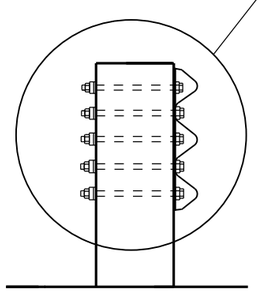
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

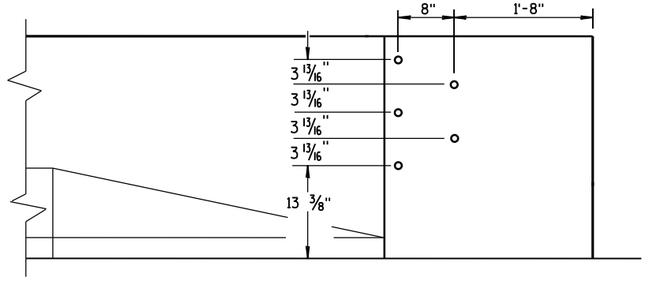



FRONT VIEW



SECTION F-F




DRILL HOLE LOCATION

# W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

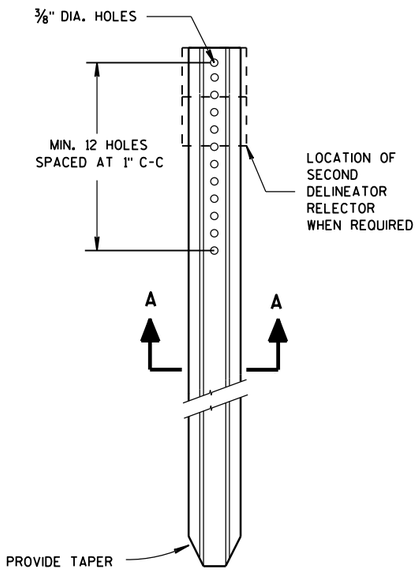


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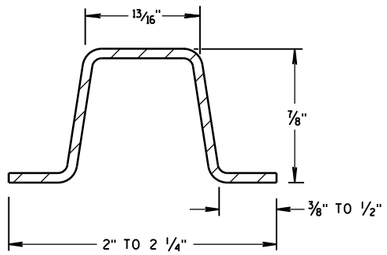
S.D.D. 14 B 45-4d

6

S.D.D. 14 B 45-4d

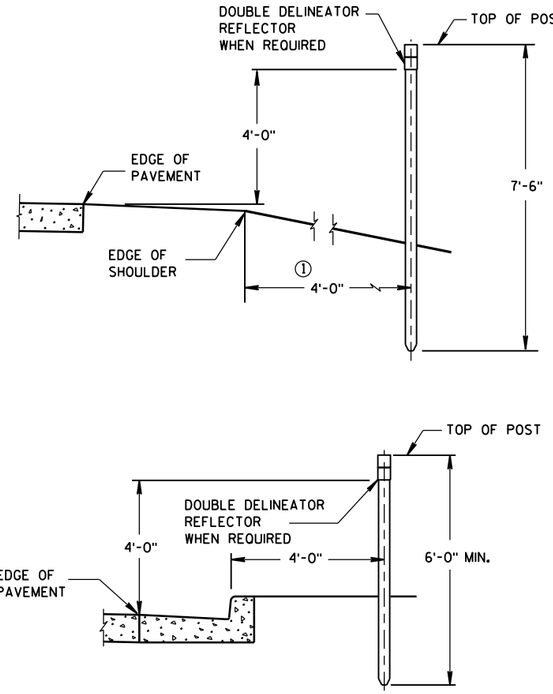



**DELINEATOR POST**




**SECTION A-A**

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.

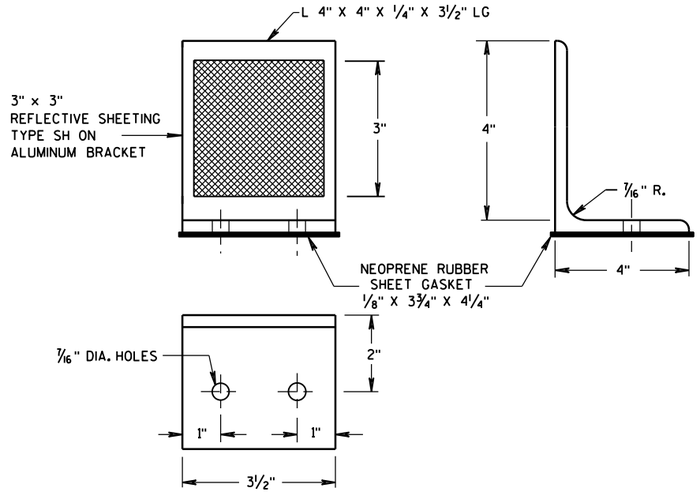



**TYPICAL INSTALLATIONS OF DELINEATOR POSTS**

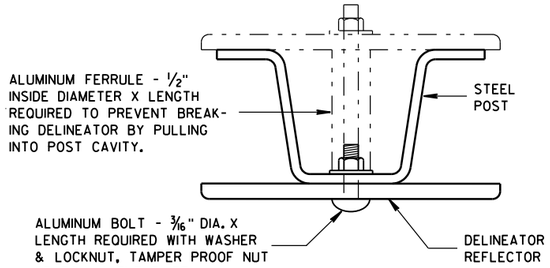
## GENERAL NOTES

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

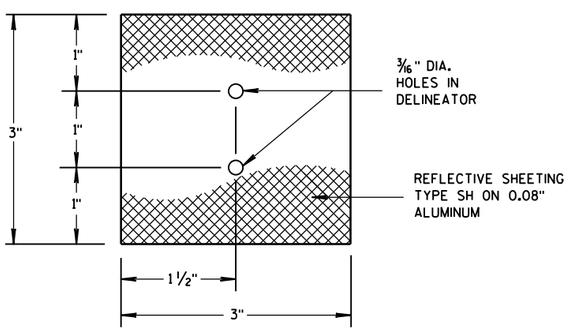
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



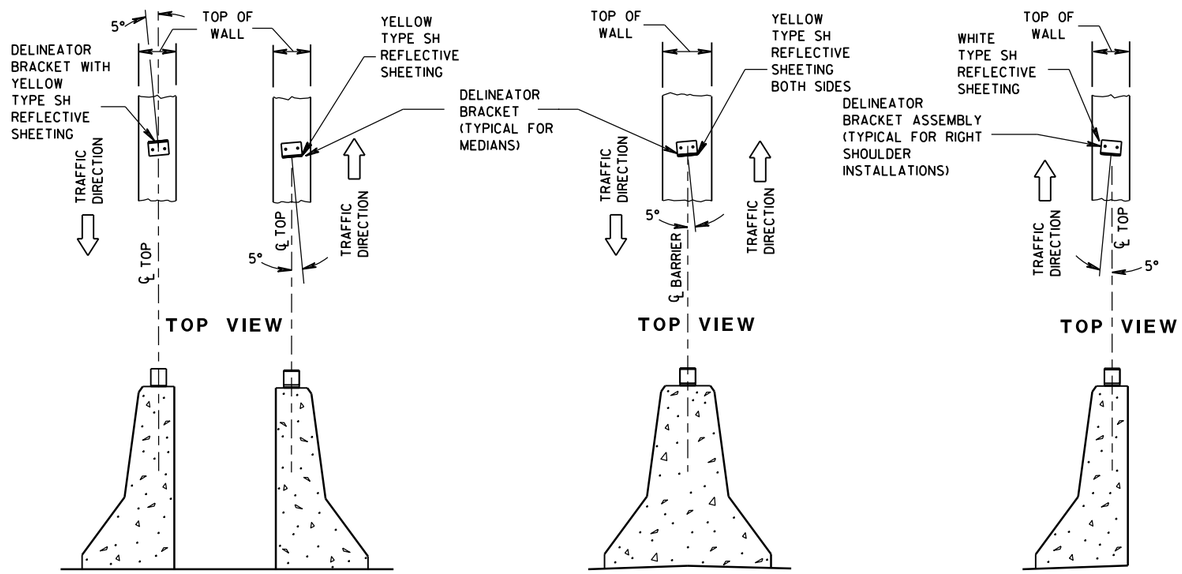

**DELINEATOR BRACKET**




**MOUNTING DETAIL FOR DELINEATOR REFLECTOR**

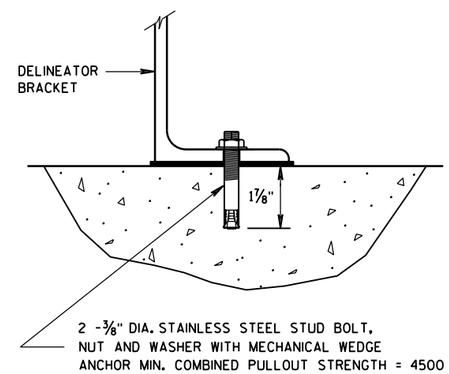



**3"x 3" DELINEATOR REFLECTOR**




**DOUBLE BARRIERS IN MEDIAN** | **MEDIAN BARRIER** | **BARRIER LOCATED TO RT. OF TRAFFIC FLOW**

**LOCATION AND AIMING DETAILS FOR DELINEATOR BRACKETS MOUNTED ON CONCRETE BARRIERS**




**DELINEATOR BRACKET MOUNTING DETAIL**

**DELINEATOR POST, DELINEATOR REFLECTOR AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR[illegible] ENGINEER
FHWA

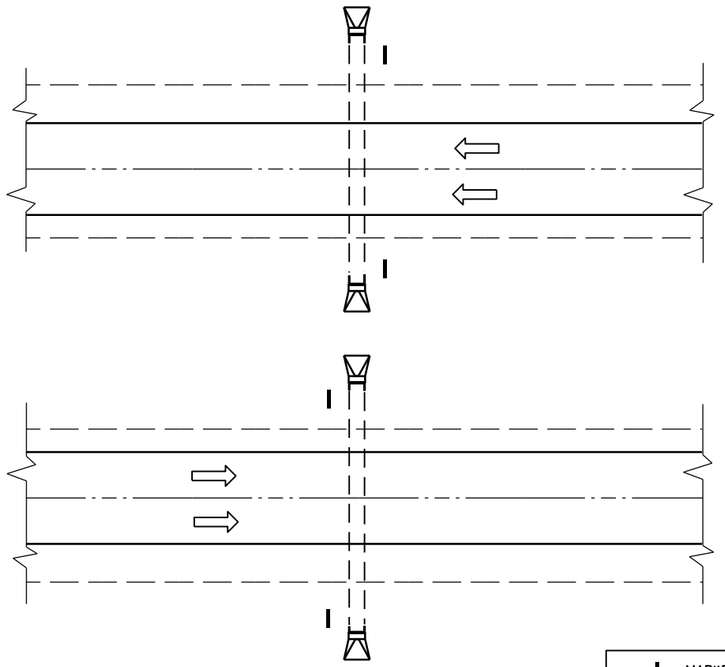


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S.D.D. 15 A 2-9

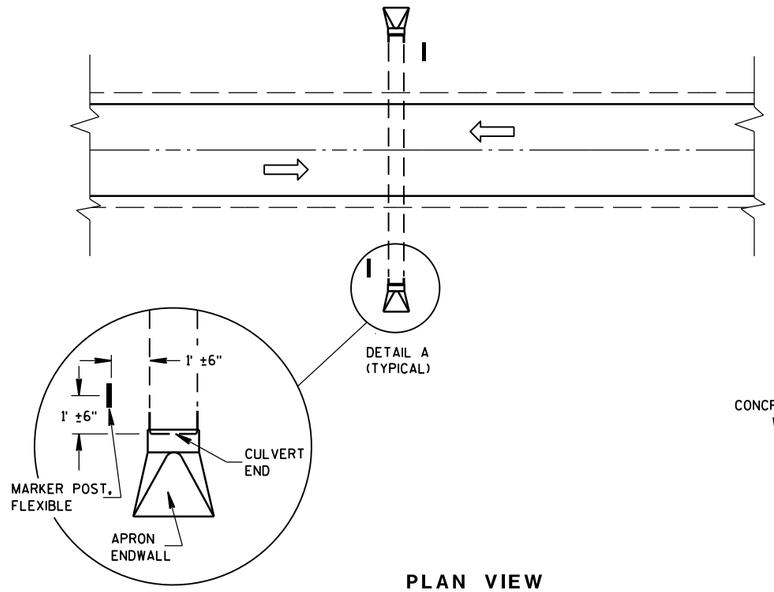
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S.D.D. 15 A 2-9



PLAN VIEW

**DIVIDED HIGHWAY**




**DETAIL A**
(TYPICAL)

PLAN VIEW

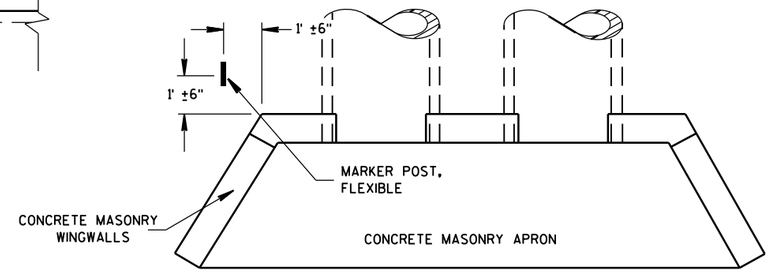
**UNDIVIDED HIGHWAY**

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

## GENERAL NOTES

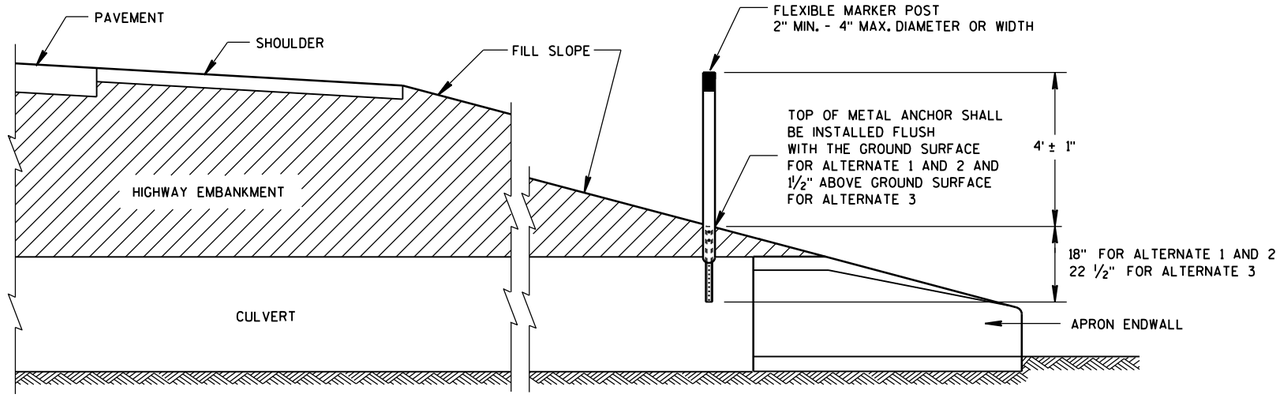
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.




PLAN VIEW

**CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH**

## FLEXIBLE MARKER POST LOCATION




CROSS SECTION

**FLEXIBLE MARKER POST**

**FLEXIBLE MARKER POST FOR CULVERT END**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

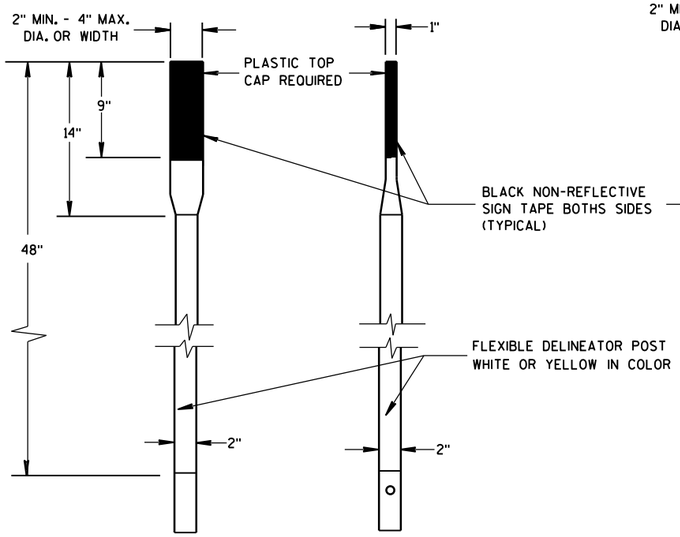


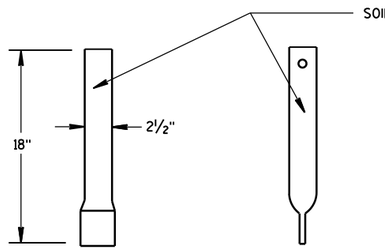
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S.D.D. 15 A 3-2a

6

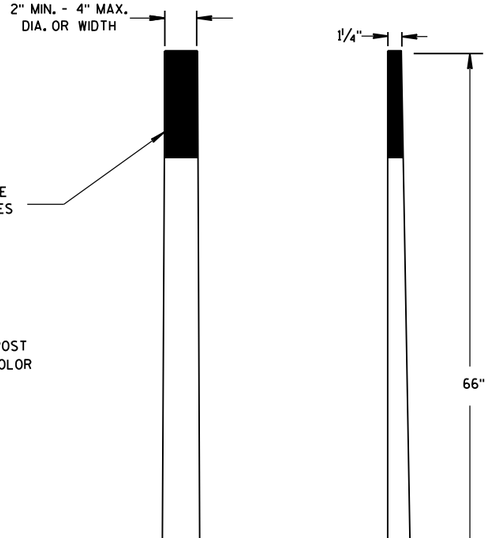
S.D.D. 15 A 3-2a



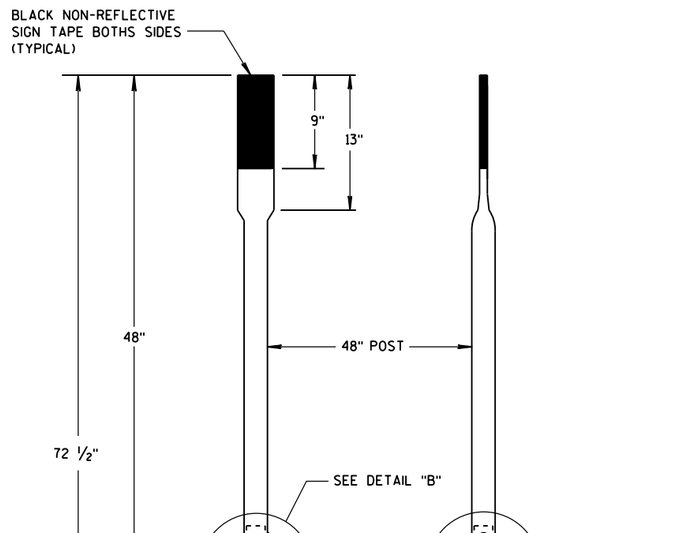

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

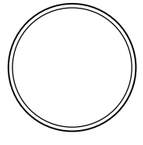
ALTERNATE 2



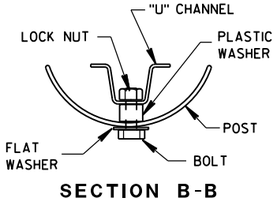

FRONT VIEW SIDE VIEW

ALTERNATE 3

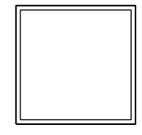
## FLEXIBLE MARKER POSTS



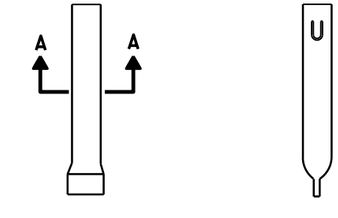
SECTION A-A




SECTION B-B

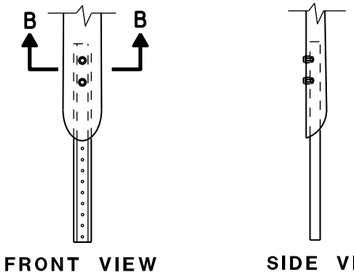


SECTION C-C



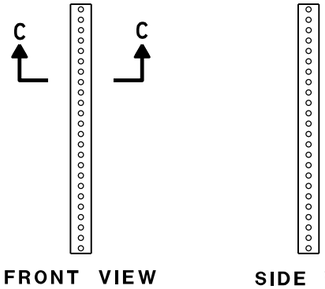

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

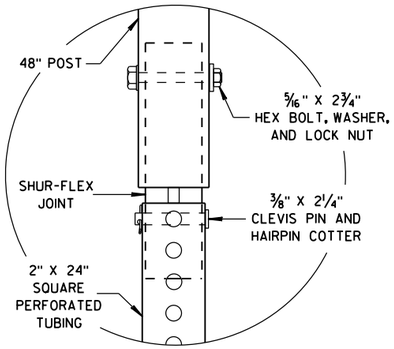
ALTERNATE 2



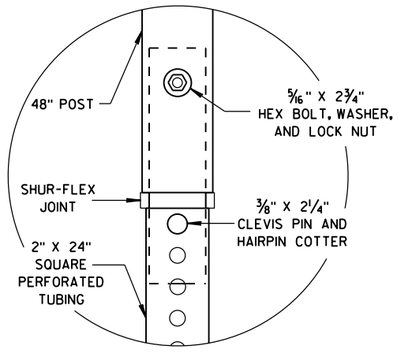

FRONT VIEW SIDE VIEW

ALTERNATE 3

## FLEXIBLE MARKER POST ANCHORS




DETAIL B




DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

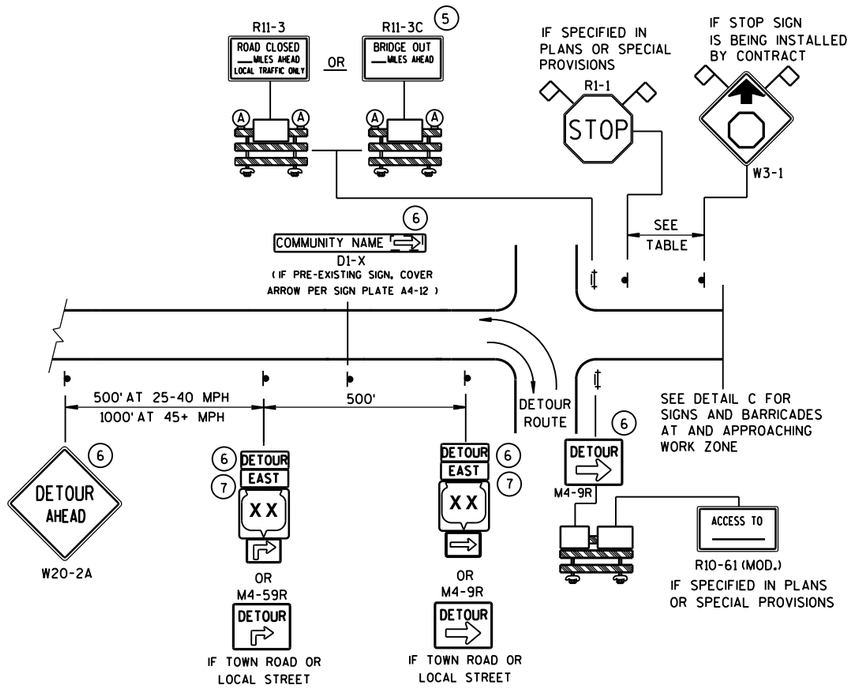


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S.D.D. 15 A 3-2b

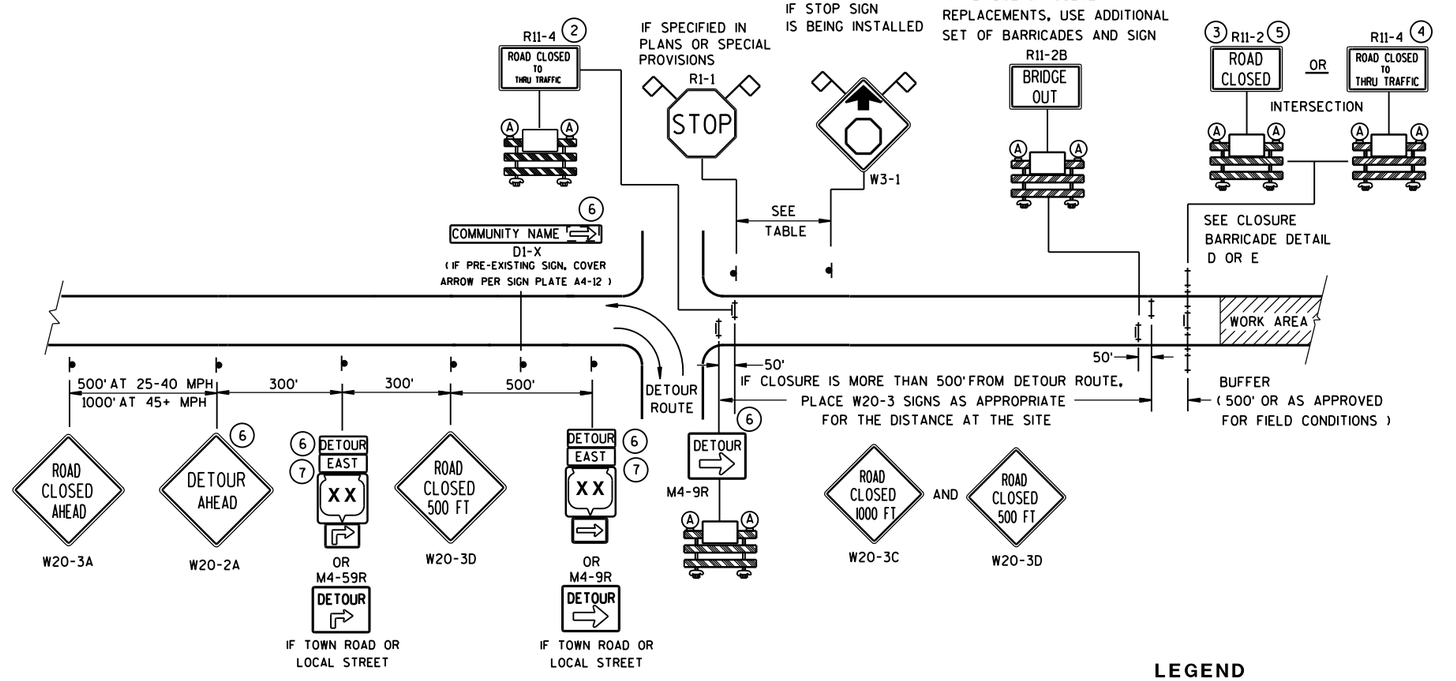
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S.D.D. 15 A 3-2b



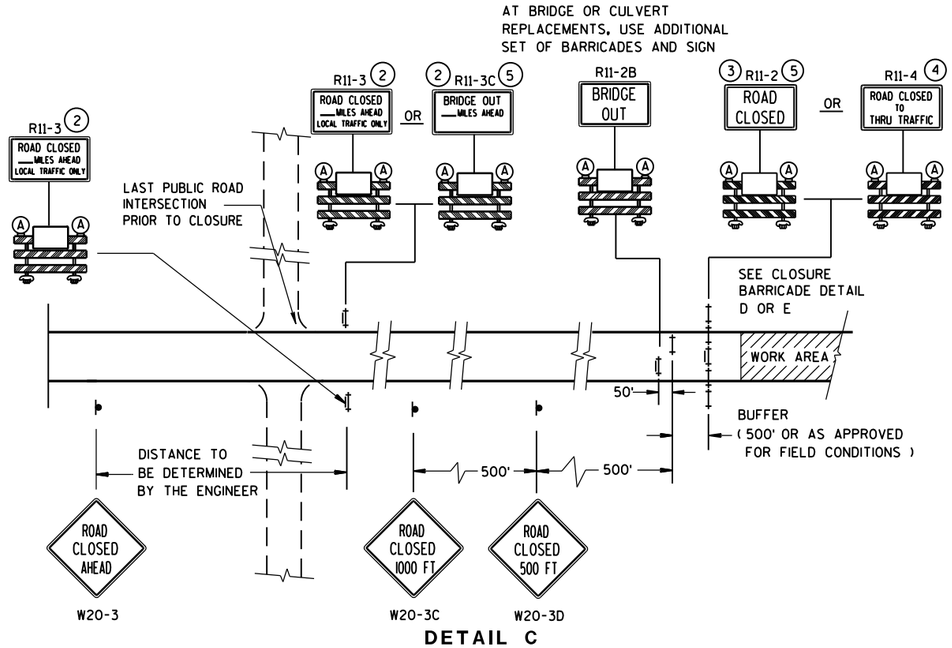

## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR

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




## DETAIL B
## MAINLINE CLOSURE WITH POSTED DETOUR

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




## DETAIL C
## MAINLINE CLOSURE, NO POSTED DETOUR

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

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

### LEGEND

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

**BARRICADES AND SIGNS FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

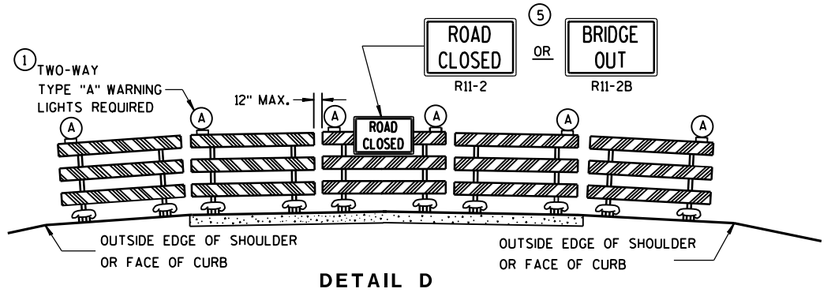


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S.D.D. 15 C 2-6a

6

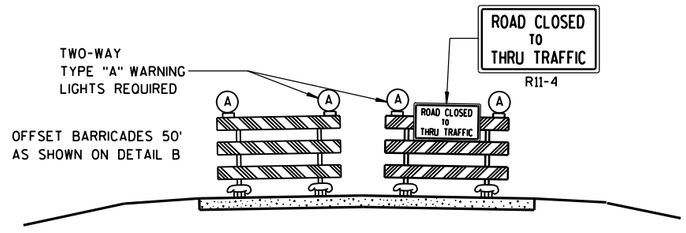
S.D.D. 15 C 2-6a




**DETAIL D**

## ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW




**DETAIL E**

## LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

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

## GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**BARRICADES AND SIGNS FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI... — FHWA




6


S.D.D. 15 C 2-6b

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

## GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

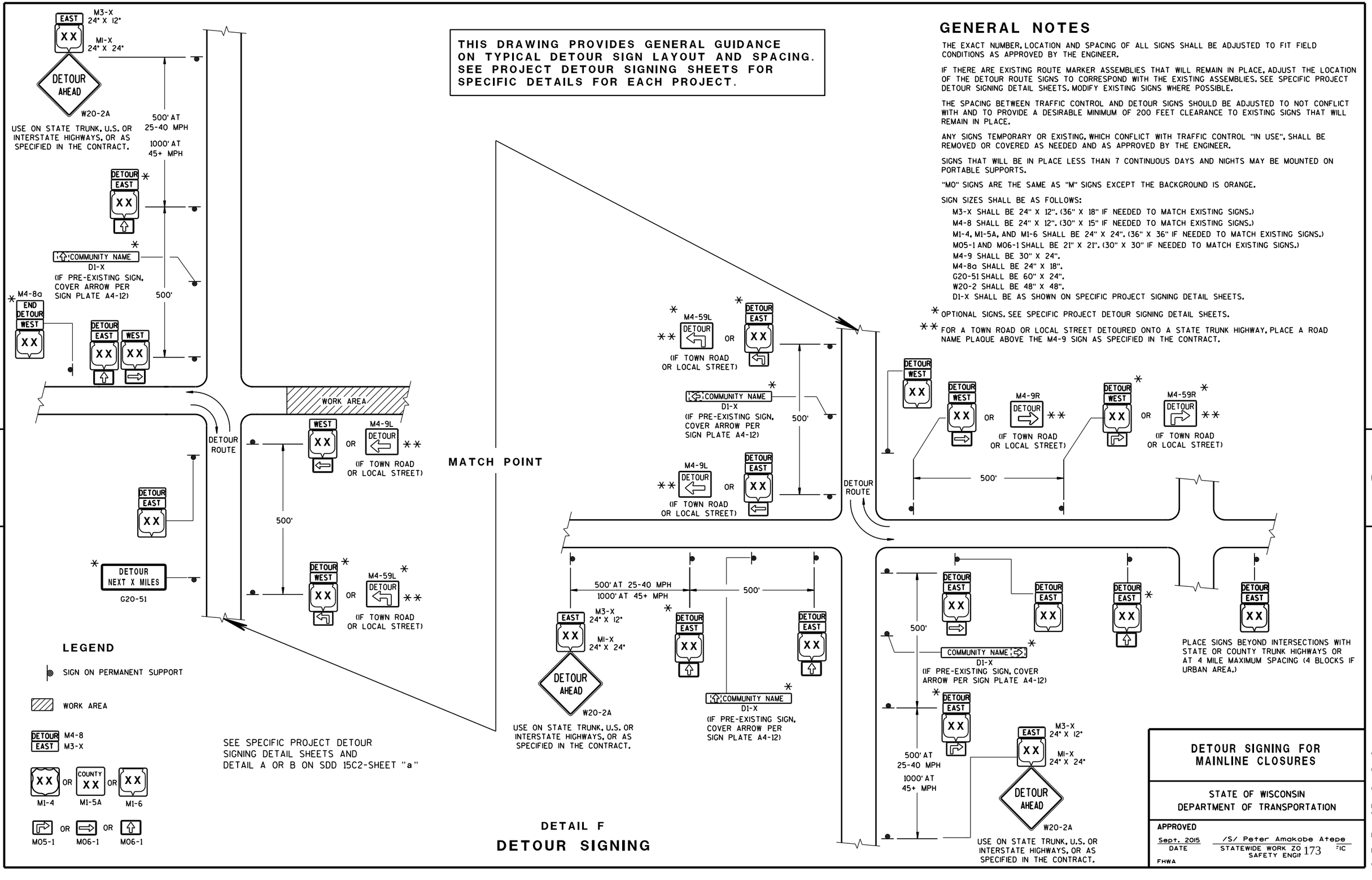
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

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

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




### LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- MO5-1 OR MO6-1 OR MO6-1

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

**DETAIL F**

**DETOUR SIGNING**

**DETOUR SIGNING FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

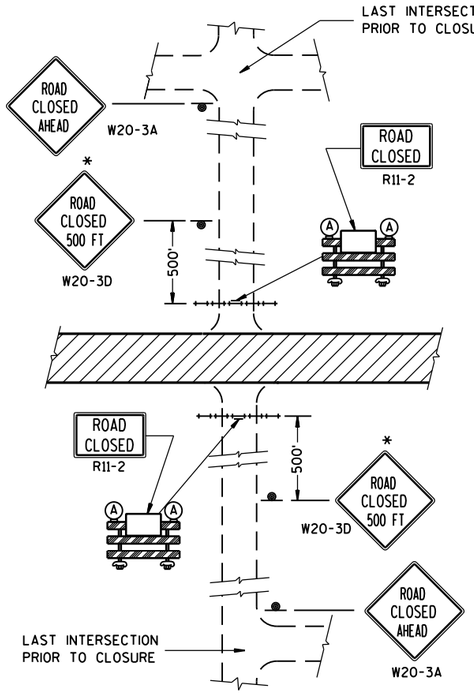
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] FIC
SAFETY ENGI[illegible]

FHWA



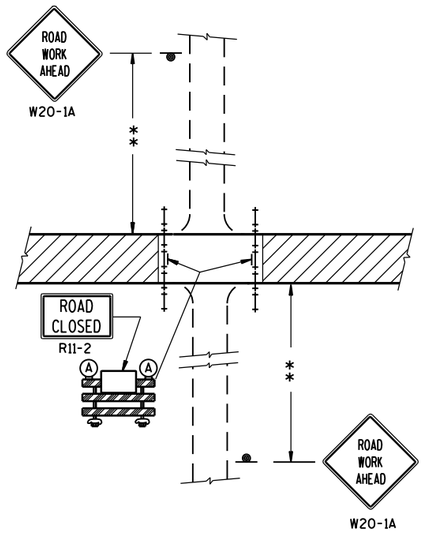
S.D.D. 15 C 2-6c

S.D.D. 15 C 2-6c



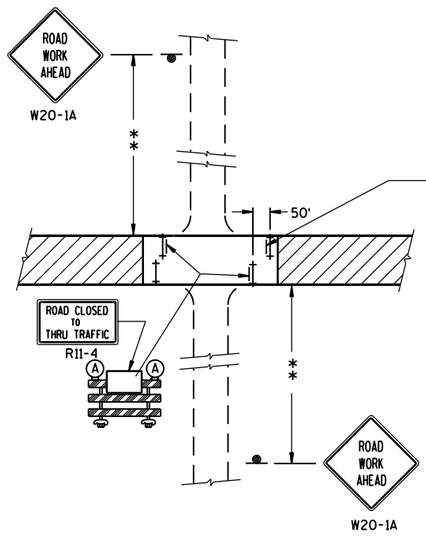

**DETAIL 1**

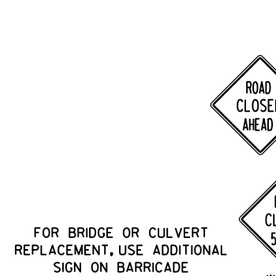
(NO ACCESS TO PROJECT)




**DETAIL 2**

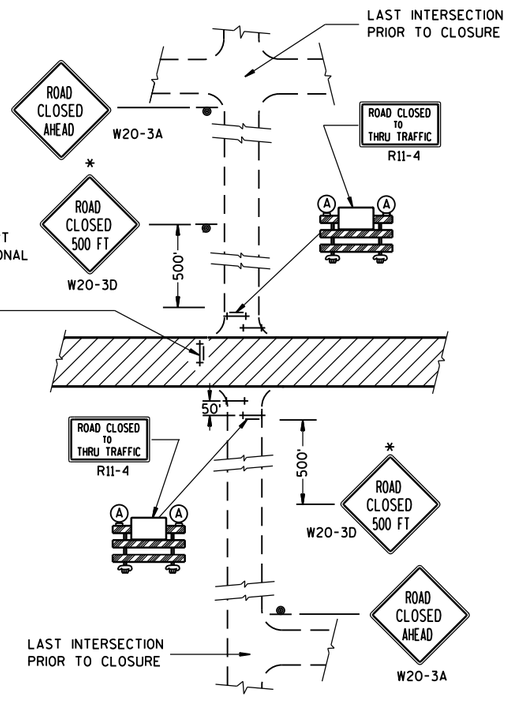
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).




**DETAIL 3**

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




**DETAIL 4**

(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

## GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

## LEGEND

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

**BARRICADES AND SIGNS FOR SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible]FIC SAFETY ENGI[illegible]
FHWA

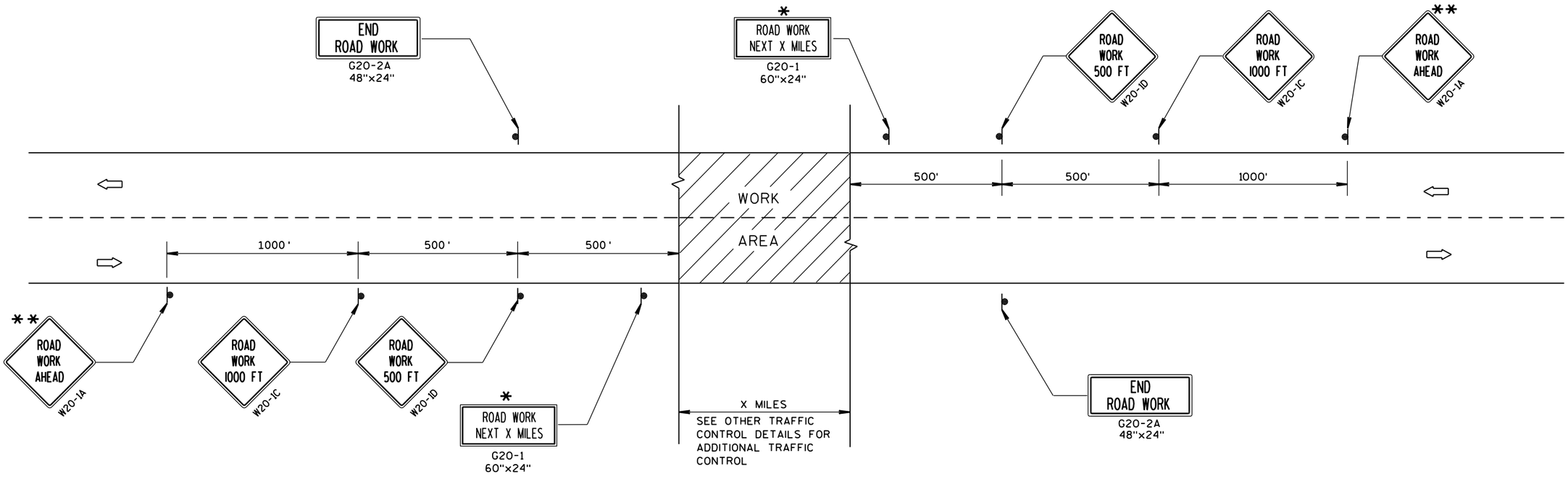


6

S.D.D. 15 C 3-3

6

S.D.D. 15 C 3-3




# TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

## GENERAL NOTES

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

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

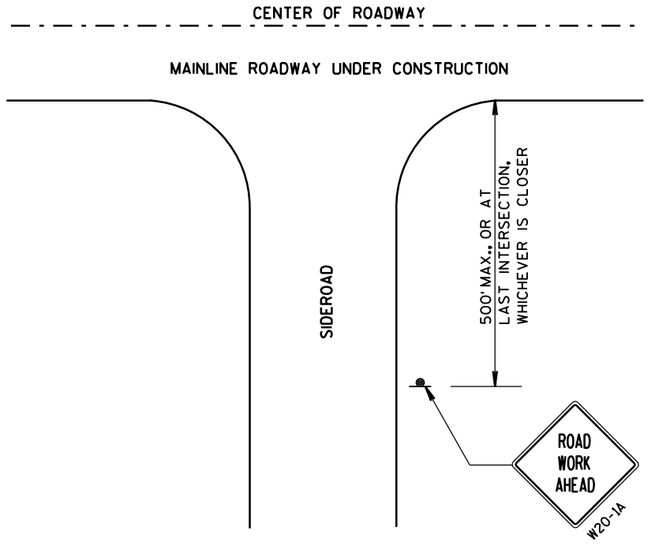
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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




## LEGEND

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

**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZOI SAFETY ENGIN IC

FHWA



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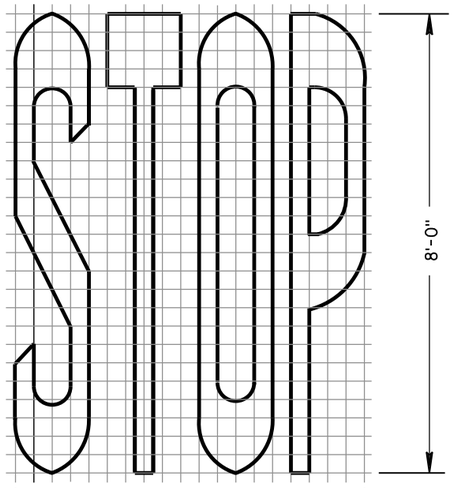
S.D.D. 15 C 4-3

6

S.D.D. 15 C 4-3

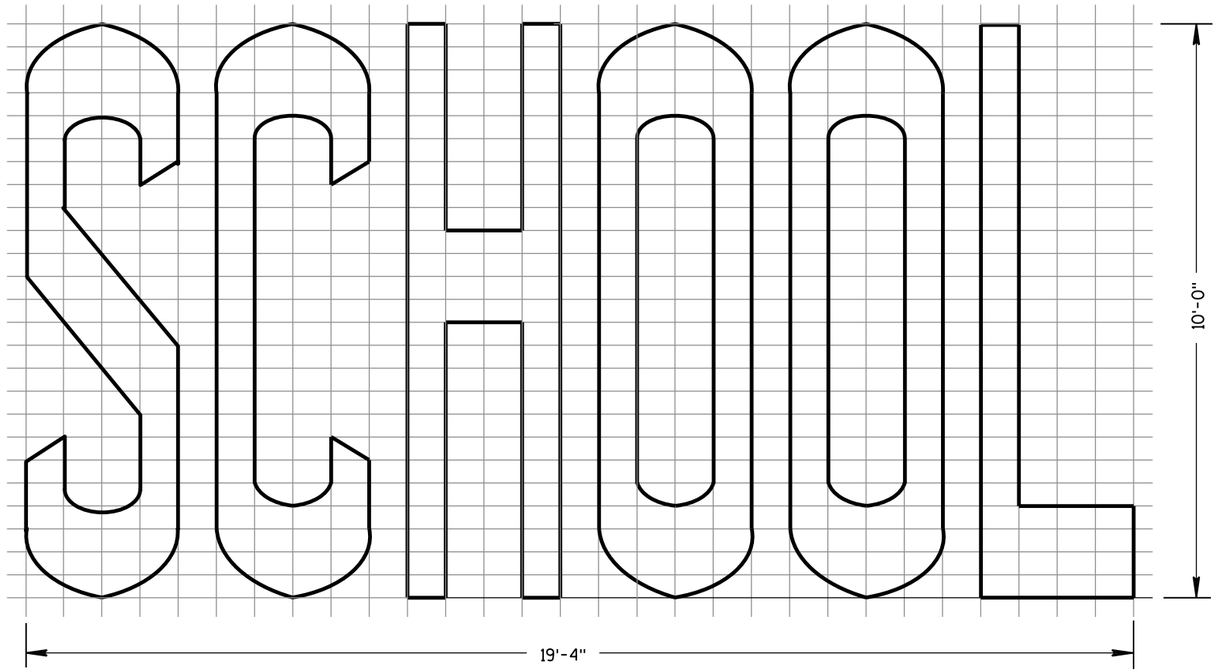
## GENERAL NOTES

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

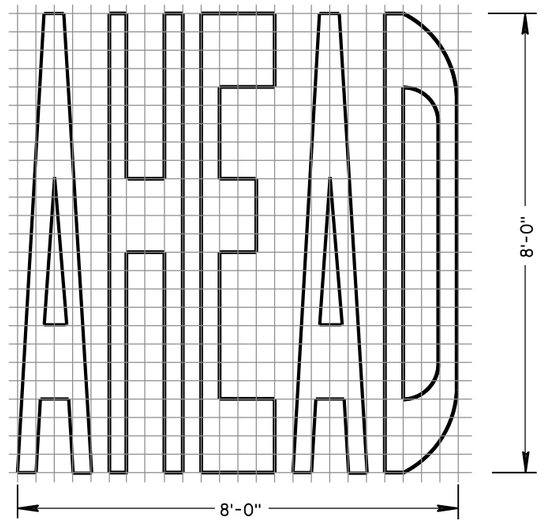


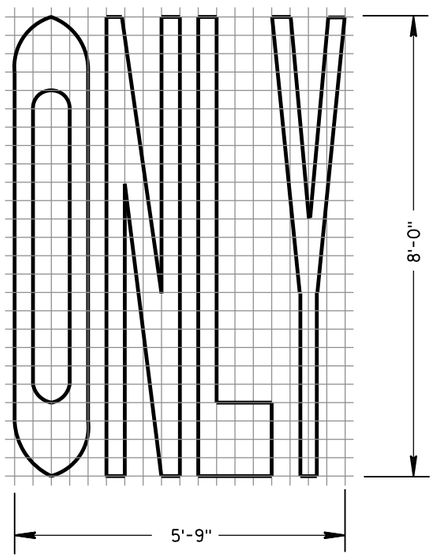


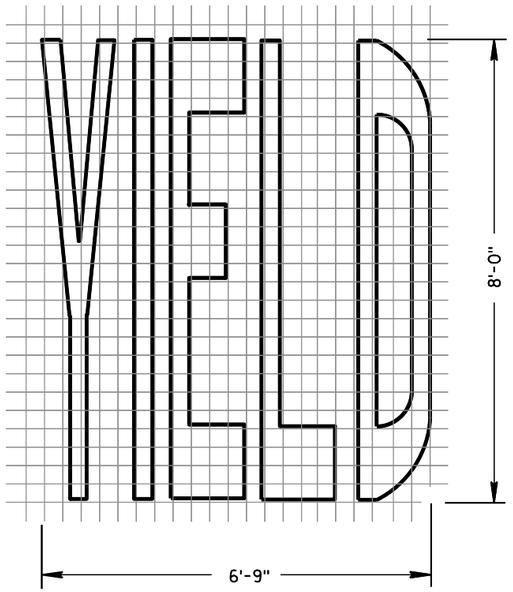


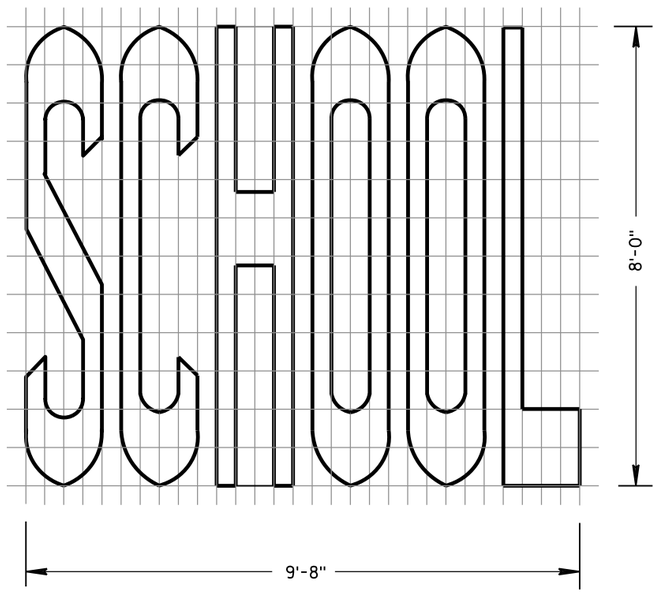



**TWO-LANE**




**SINGLE-LANE**

# PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

| 4-18-16 | /S/ Matthew R. Rauch | |
|---|---|---|
| DATE | STATE SIGNING AND MARK | EER |

FHWA



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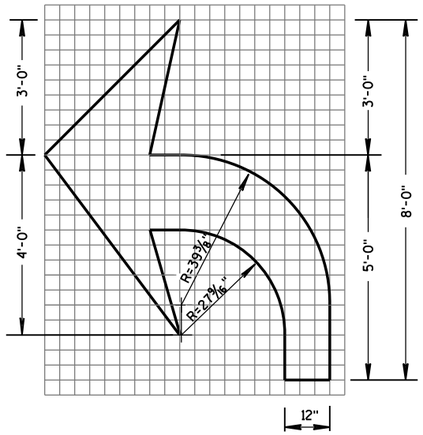
S.D.D. 15 C 7-13b

6

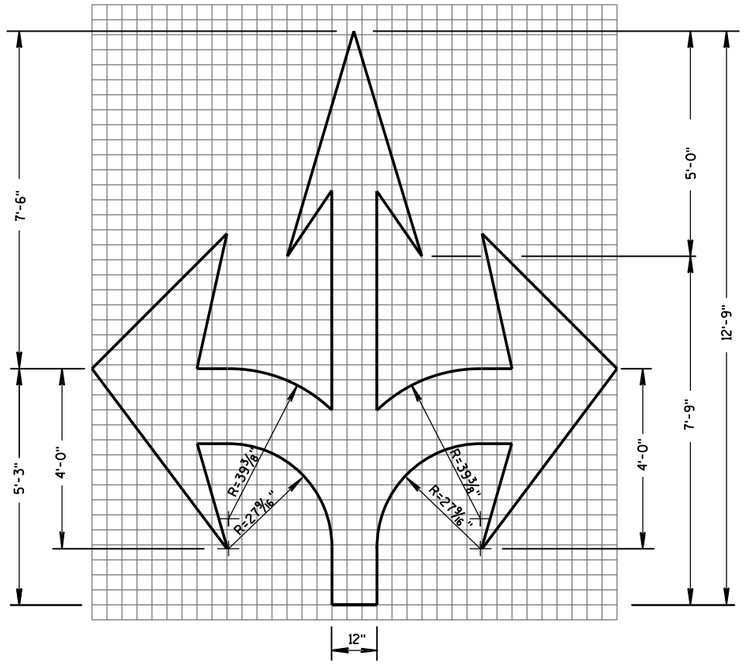
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## GENERAL NOTES

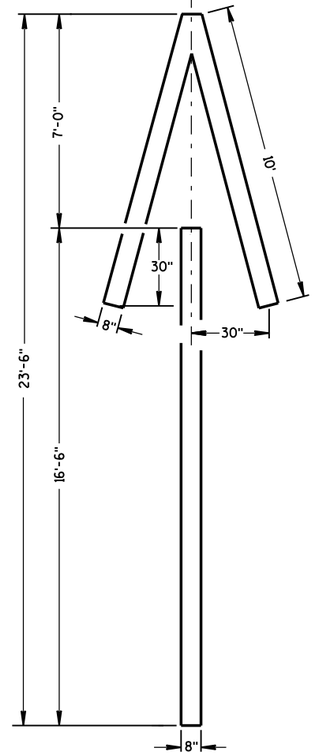
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



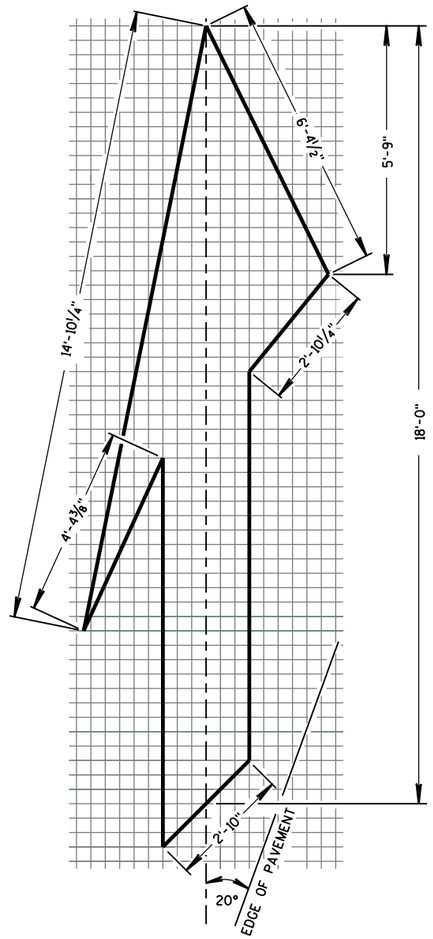

TYPE 2



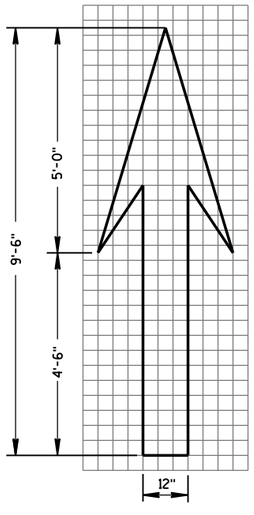

TYPE 6



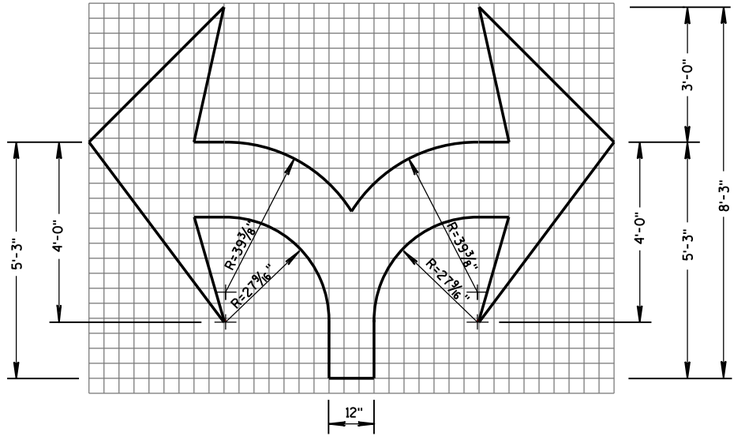

TYPE 4



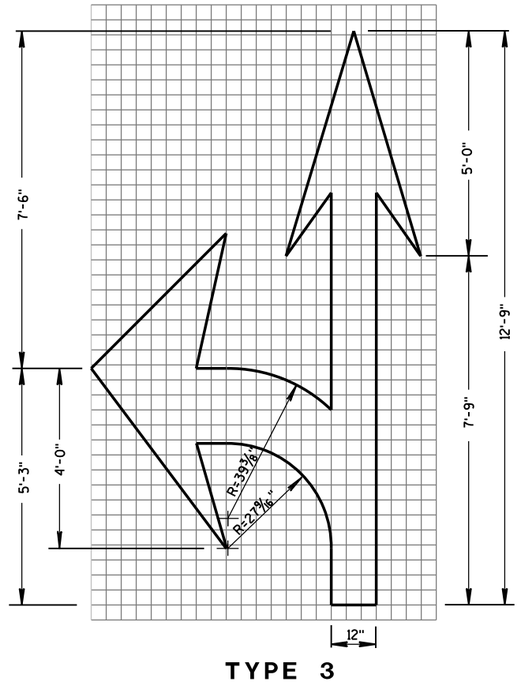

TYPE 5 LANE DROP ARROW




TYPE 1




TYPE 7




TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR ENGINEER
FHWA

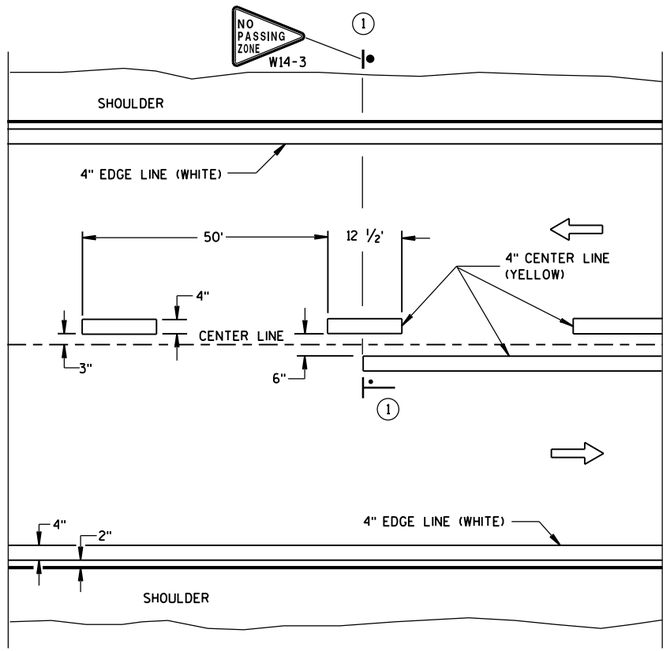


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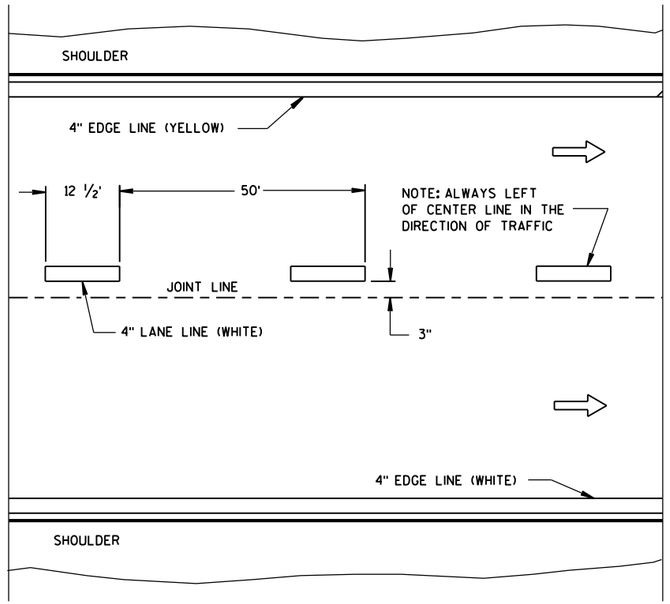
S.D.D. 15 C 7-13c

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S.D.D. 15 C 7-13c




TWO WAY TRAFFIC




ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING

## GENERAL NOTES

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

(1) NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

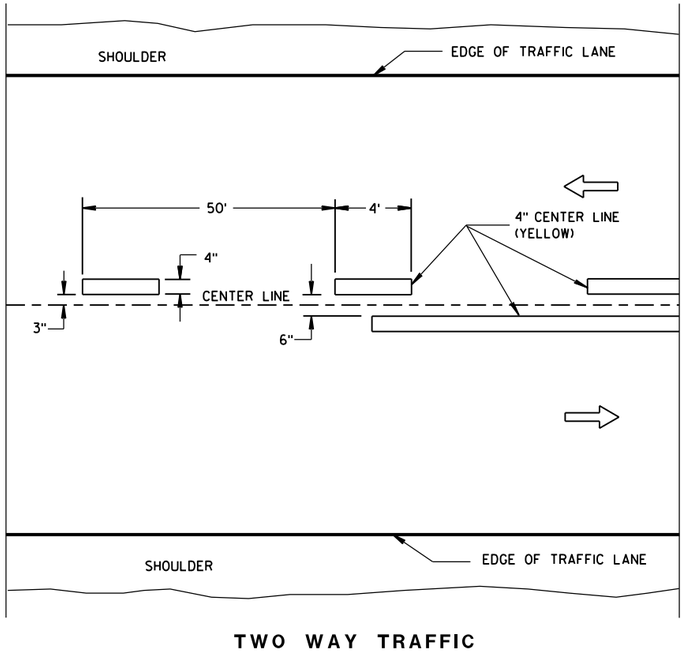
## NOTE

ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL

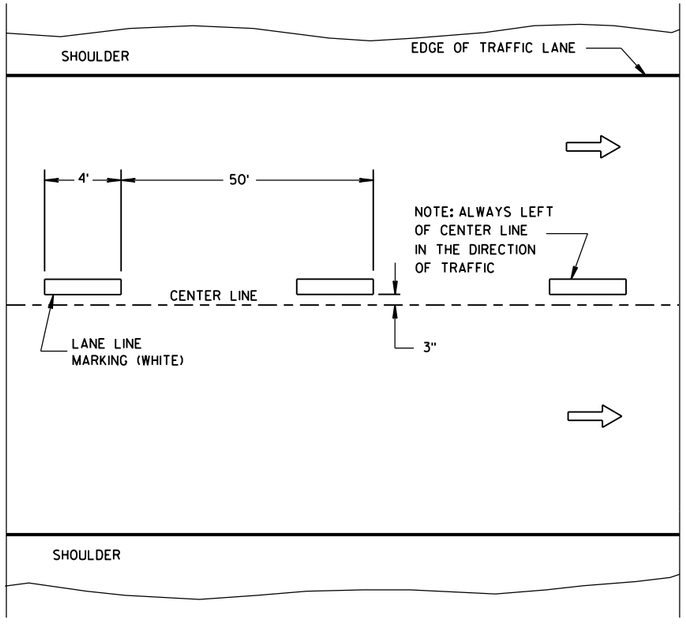
## LEGEND

"T" MARKING

POST MOUNTED SIGN




TWO WAY TRAFFIC




ONE WAY TRAFFIC

## TEMPORARY PAVEMENT MARKING

| LONGITUDINAL MARKING (MAINLINE) | |
|---|---|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED | |
| Sept., 2016 | /S/ Matthew R. Rauch |
| DATE | STATE SIGNING AND MAR[illegible] ENGINEER |
| FHWA | |



6

S.D.D. 15 C 8-17a

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S.D.D. 15 C 8-17a

## LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

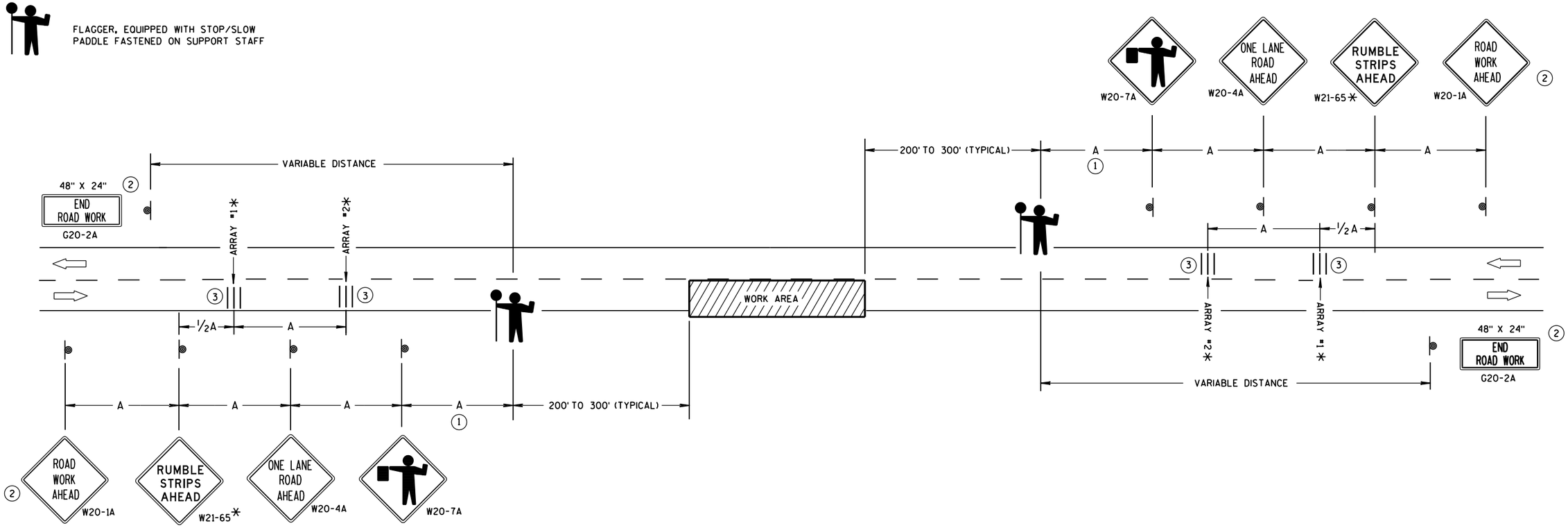
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

## SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

| SPEED LIMIT | SPACING A |
|---|---|
| 25-35 MPH | 200' |
| 35-40 MPH | 350' |
| 45-55 MPH | 500' |




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




# TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

## GENERAL NOTES

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

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

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

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

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

(1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

(3) EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

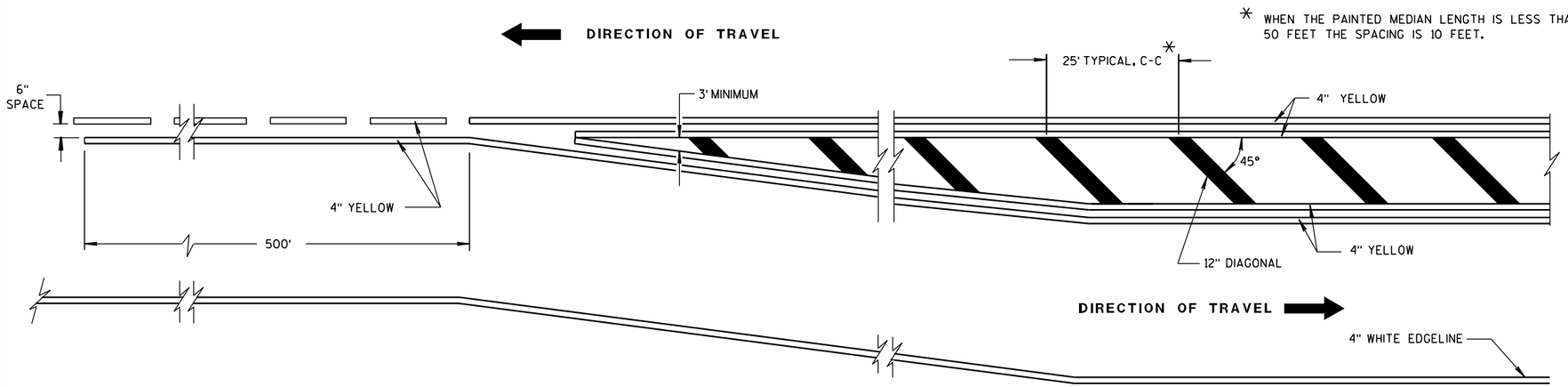
**TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — /S/ Andrew Heldtke
DATE — WORK ZONE ENG
FHWA



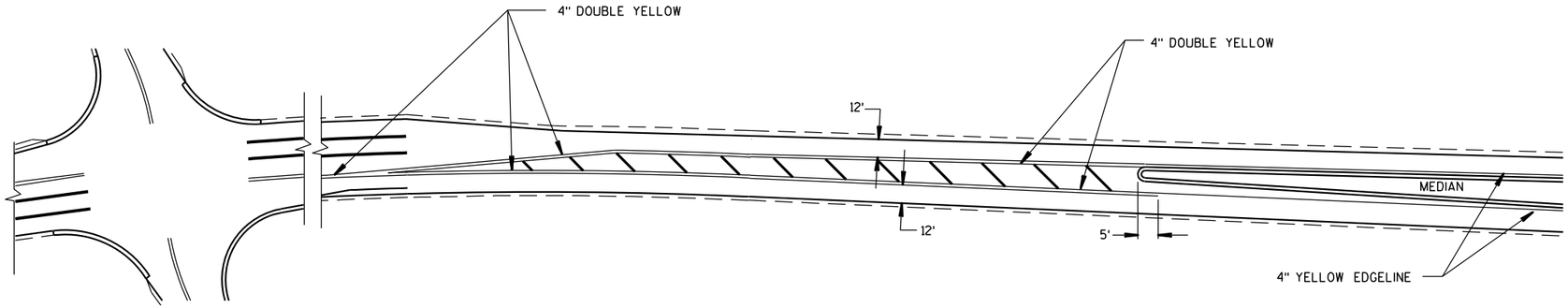

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S.D.D. 15 C 12-5



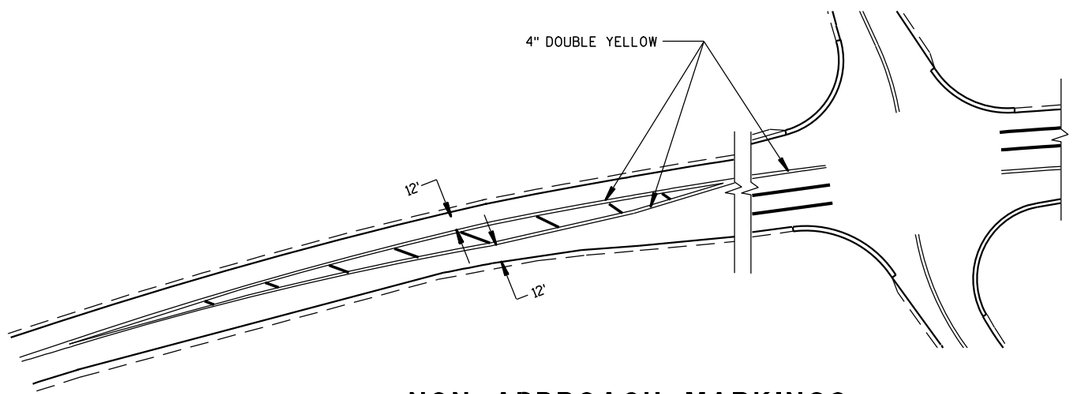

## MEDIAN ISLAND DETAIL

## GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.




## APPROACH MARKINGS FOR OTHER MEDIAN TYPES




## NON APPROACH MARKINGS

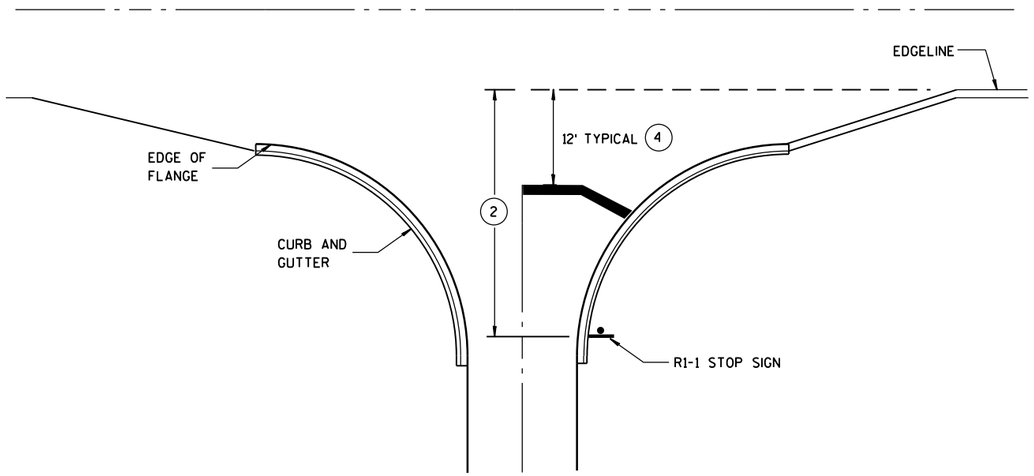
| MEDIAN ISLAND MARKING | |
|---|---|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>2-5-09<br>DATE | /S/ Thomas N. Nothohm<br>STATE TRAFFIC ENGINEER |
| FHWA | 180 IGN |

6

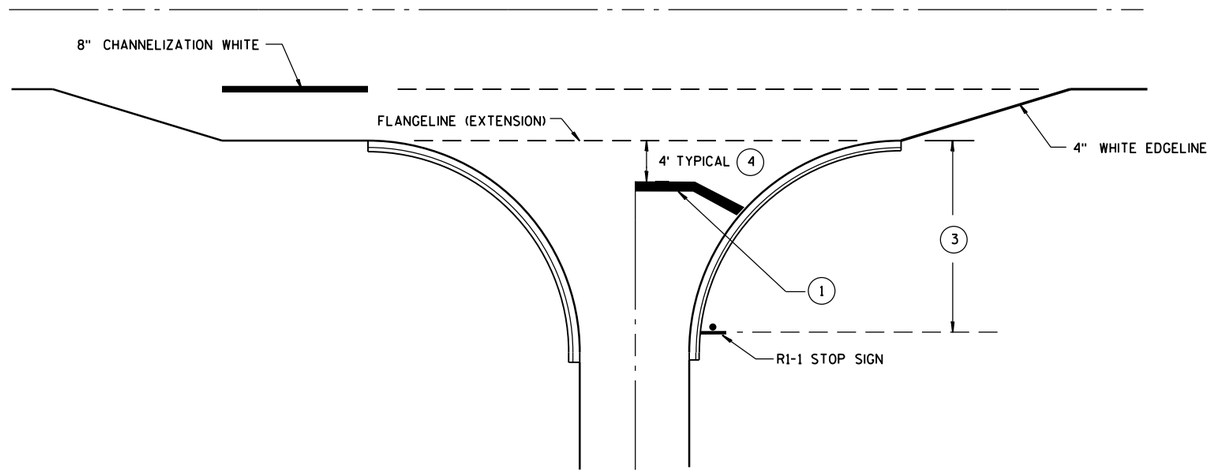
S.D.D. 15 C 18-3

6

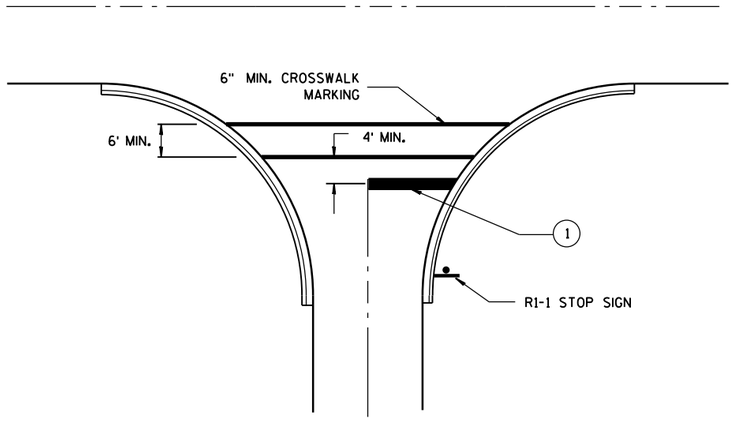
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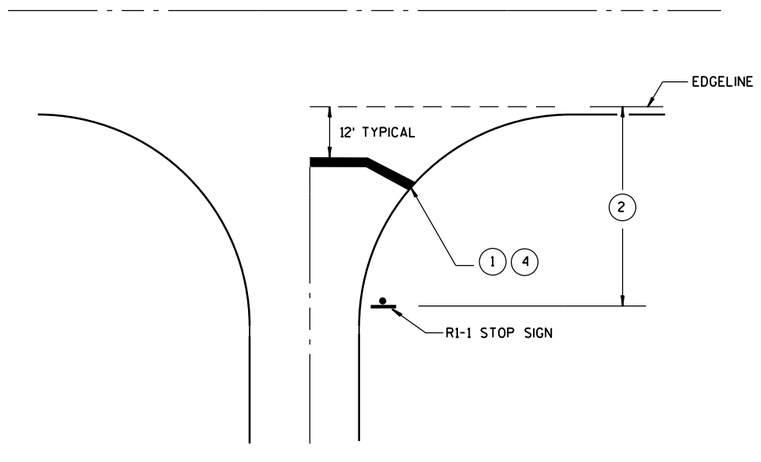

**TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER**




**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE**




**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING**




**TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER**

## GENERAL NOTES

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

**STOP LINE AND CROSSWALK PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR[illegible]NEER

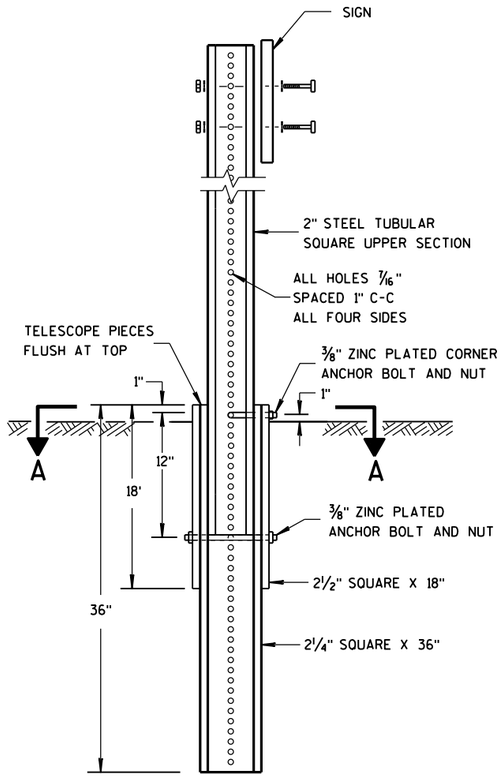
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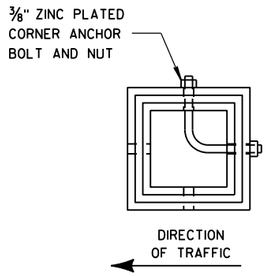
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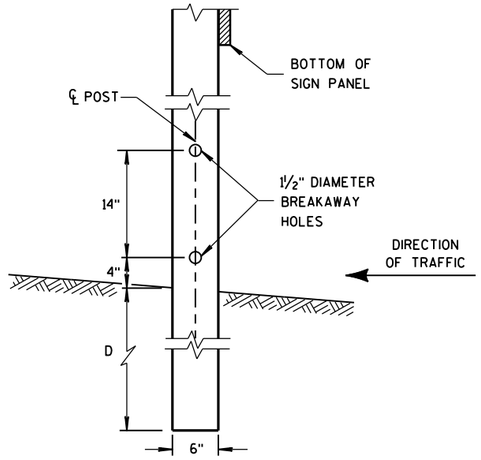
S.D.D. 15 C 33-2




## DETAIL OF TUBULAR STEEL SIGN POST




## SECTION A-A



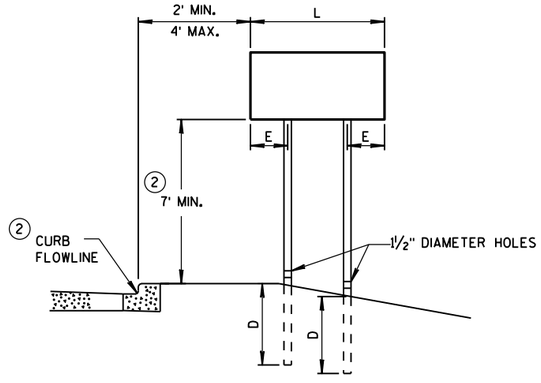

## 4"x6" WOOD POST MODIFICATION

## GENERAL NOTES

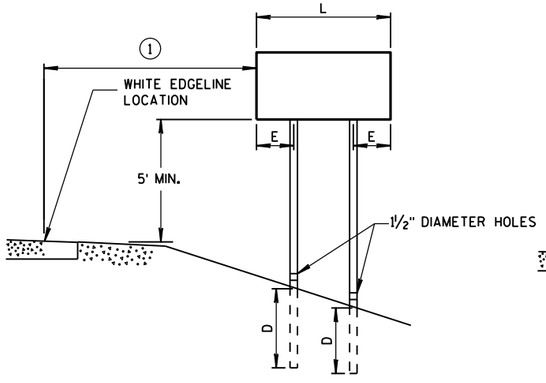
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

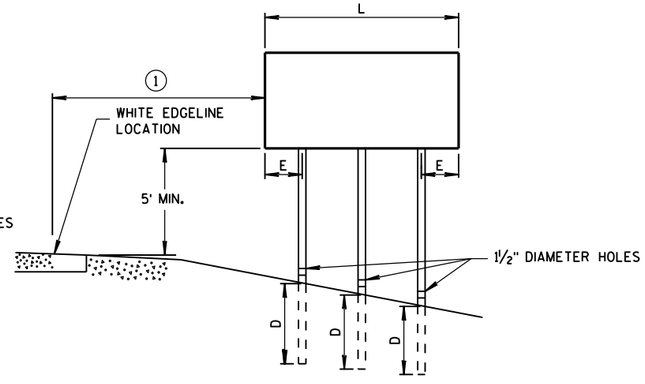
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.




## URBAN AREA




## RURAL AREA

## POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

### TUBULAR STEEL POSTS

| AREA OF SIGN INSTALLATION (SQ. FT.) | NUMBER OF REQUIRED TUBULAR STEEL POSTS |
|---|---|
| 9 OR LESS | 1 |
| GREATER THAN 9 LESS THAN OR EQUAL TO 18 | 2 |
| GREATER THAN 18 LESS THAN OR EQUAL TO 27 | 3 |

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

### WOOD POST EMBEDMENT DEPTH

| AREA OF SIGN INSTALLATION (SQ. FT.) | D (MIN) |
|---|---|
| 20 OR LESS | 4' |
| GREATER THAN 20 | 5' |

### 4" X 6" WOOD POST

| POST SPACING REQUIREMENTS | | NUMBER OF WOOD POSTS REQUIRED |
|---|---|---|
| L | E | |
| 48" OR LESS AND LESS THAN 20 SQ. FT. | - | 1 |
| LESS THAN 60" | 12" | 2 |
| 60" TO 120" | L/5 | 2 |
| GREATER THAN 120" LESS THAN 168" | 12" | 3 |
| 168" AND GREATER | 12" | 4 |

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

STATE OF WISCONSIN DEPARTMENT OF TRANSPOR

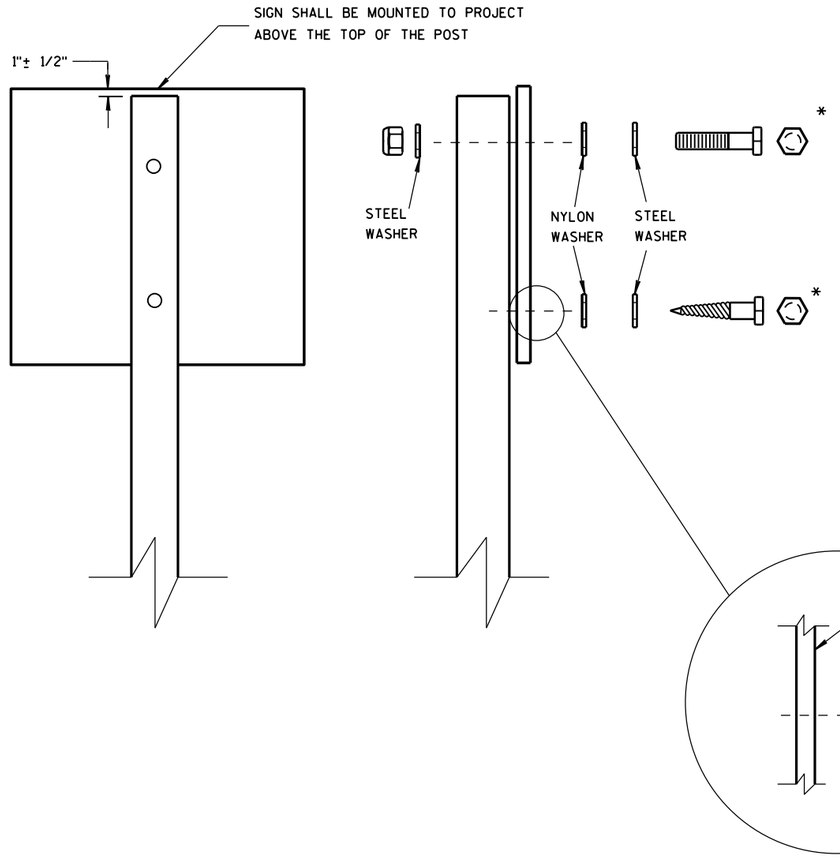


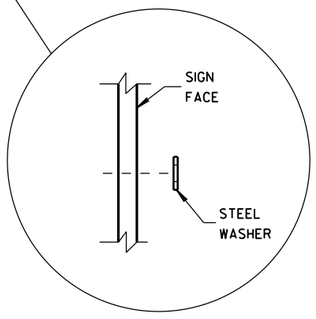


6



S.D.D. 15 D 38-1a




WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-1b

S.D.D. 15 D 38-1b

# ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

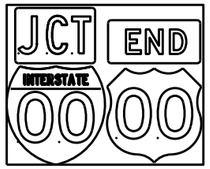


SIGN

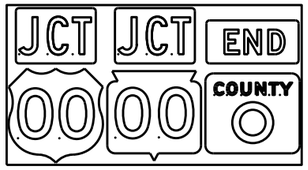
## TYPICAL ASSEMBLIES



J1-1



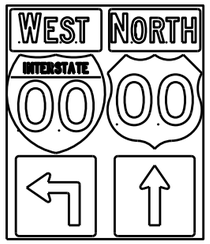
J1-2



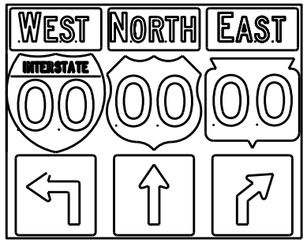
J1-3



J2-1



J2-2

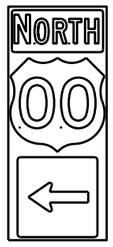


J2-3

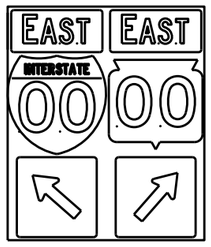


JV

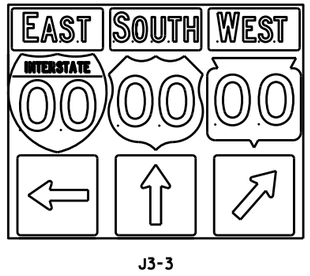
( Typical Vertical J-Assembly
See Note 10 and 11 )



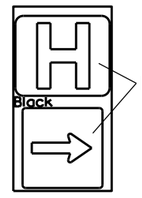
J3-1



J3-2



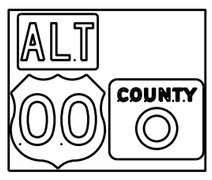
J3-3



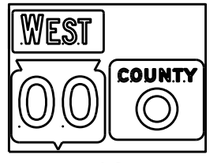
JH-1



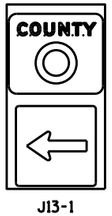
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

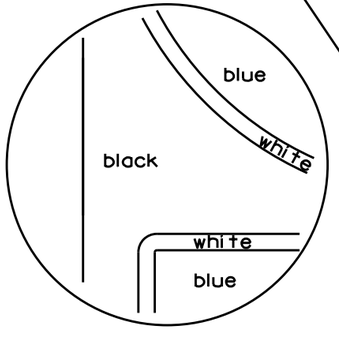


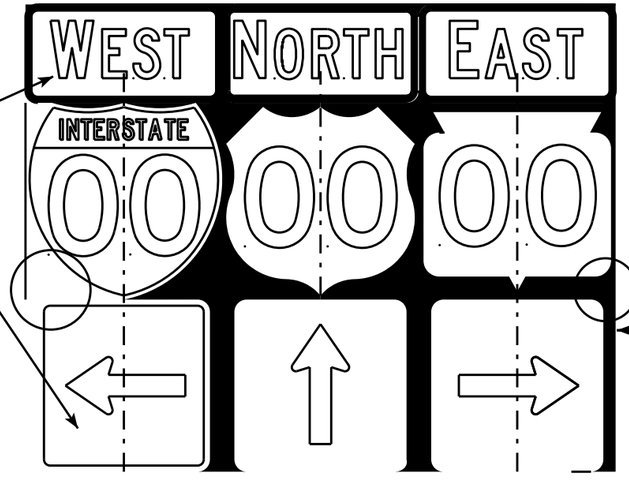
J23-1

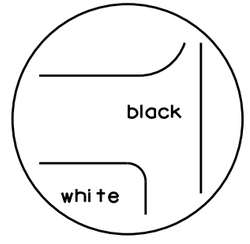


J22-1

[blue background with interstate]




[black background]

### NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

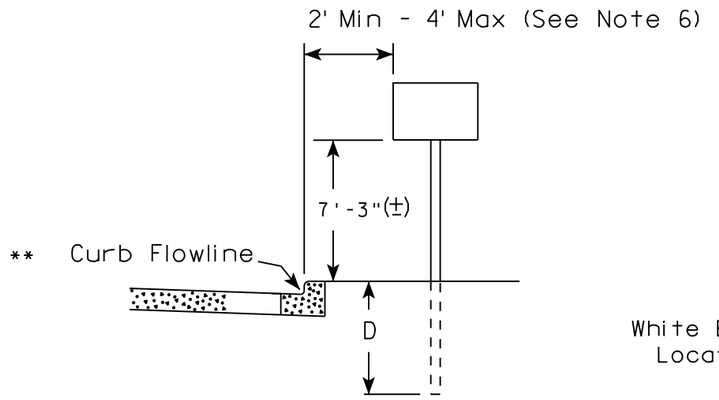
PROJECT NO: | SHEET NO: E



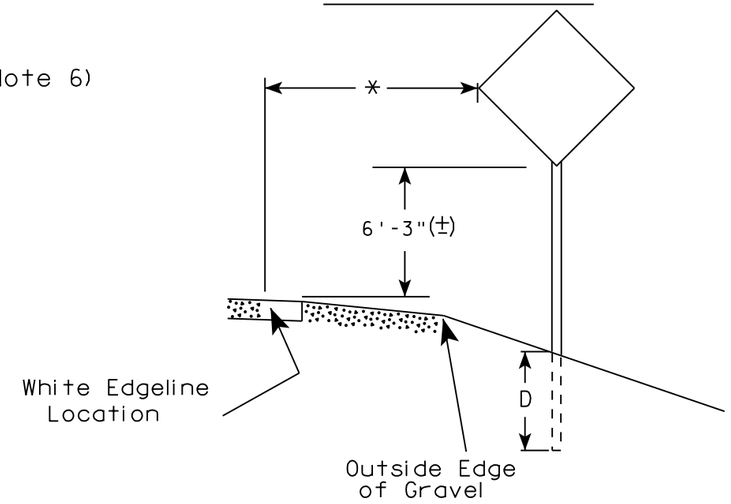
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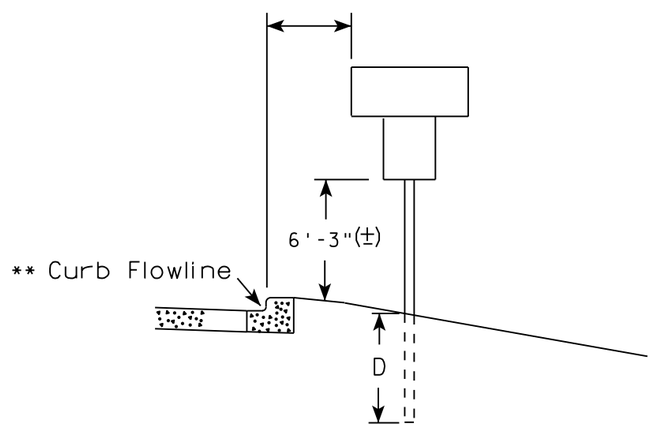
WISDOT/CADDS SHEET 42

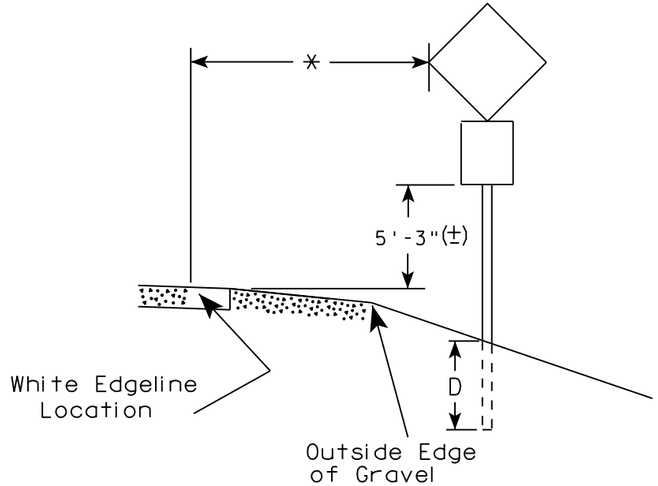
## URBAN AREA




## 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.

### POST EMBEDMENT DEPTH

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

### GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

**TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS**

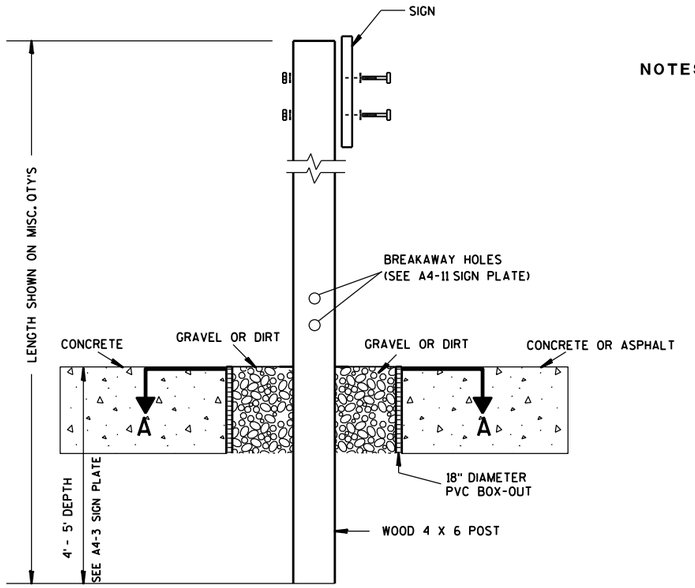
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

7 7

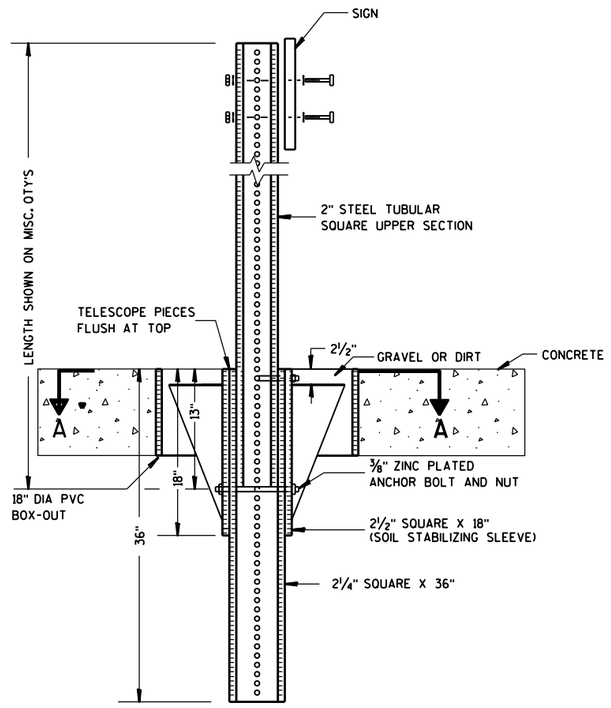
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|---|---|---|---|---|---|




**ELEVATION VIEW**

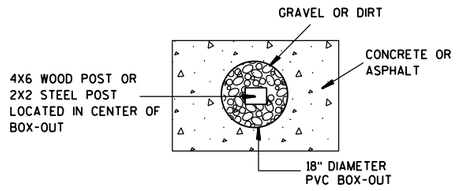
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

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

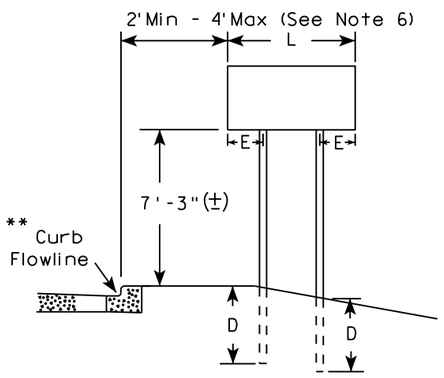
DATE 1/27/14 PLATE NO. A4-3B.1



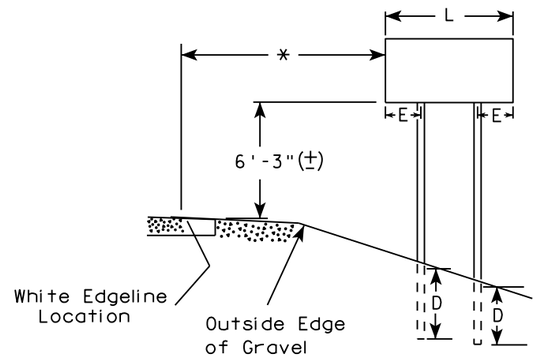
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|---|---|---|---|---|---|

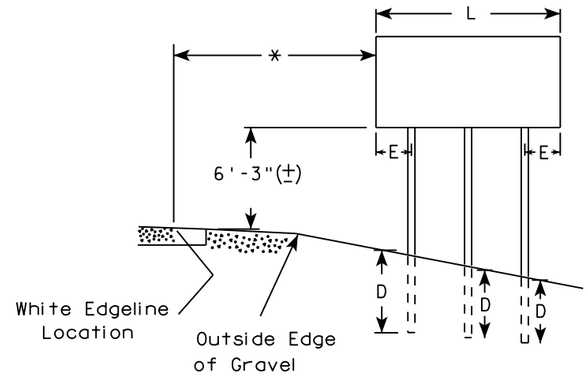
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

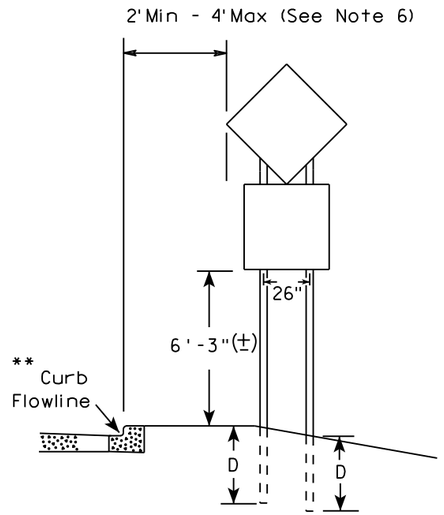
## URBAN AREA



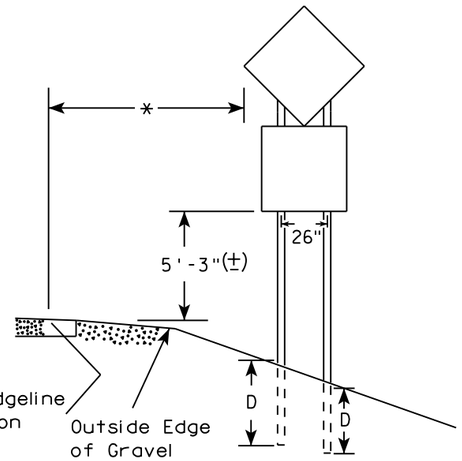

## RURAL AREA (See Note 3)




48" DIAMOND WARNING SIGN




48" DIAMOND WARNING SIGN

| SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED) | | |
|---|---|---|
| | L | E |
| *** | Greater than 48" Less than 60" | 12" |
| | 60" to 108" | L/5 |

| SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED) | |
|---|---|
| L | E |
| Greater than 108" to 144" | 12" |

### 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. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

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

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

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

### POST EMBEDMENT DEPTH

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

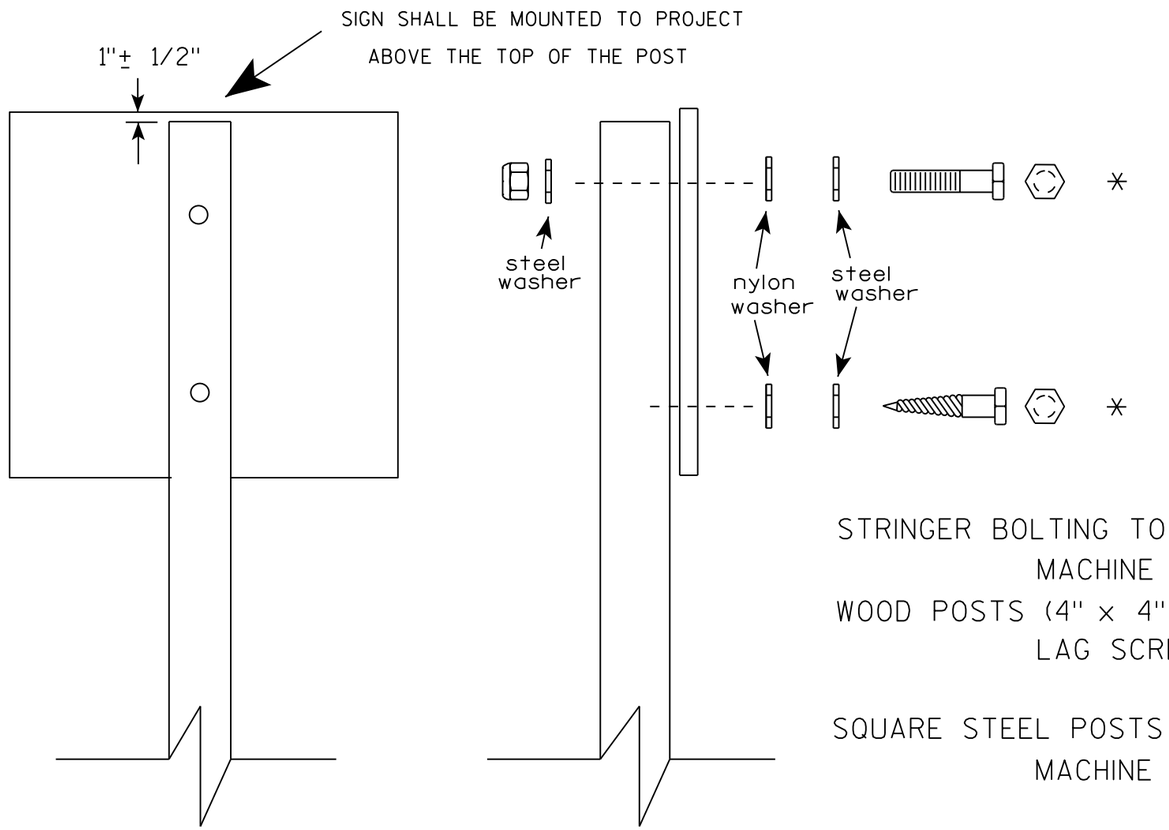
**TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS**

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 187 | E |
|---|---|---|---|---|---|




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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

# ATTACHMENT OF SIGNS TO POSTS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8



7

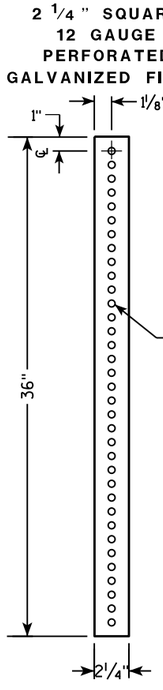
PROJECT NO:

SHEET NO: E

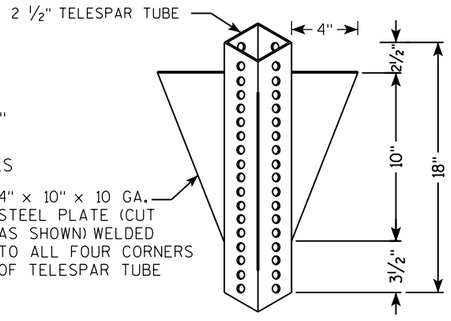
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

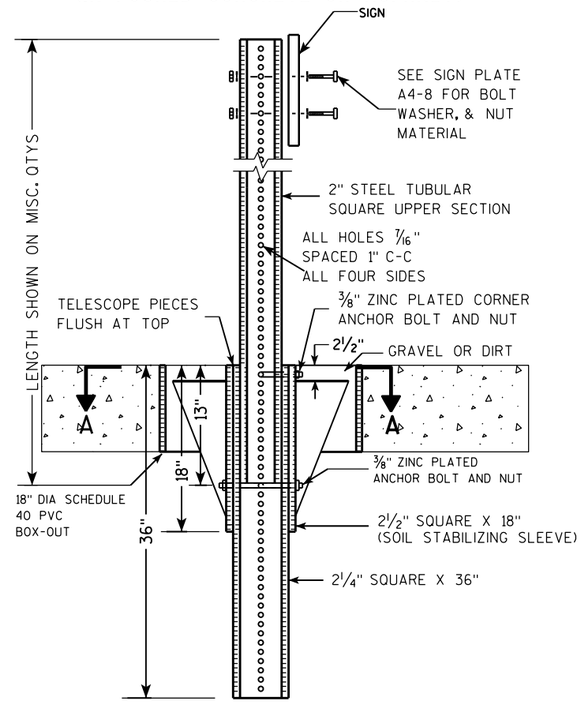
**2 1/4 " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



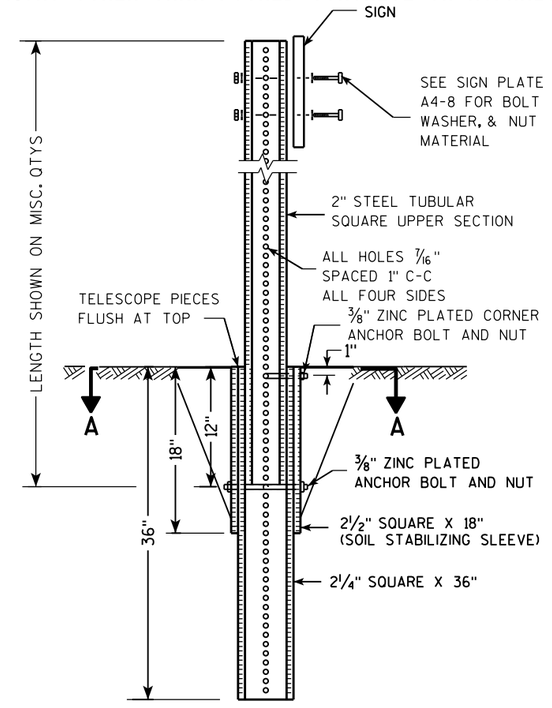

**2 1/2 " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

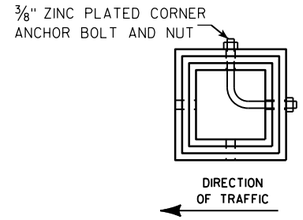



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




## DETAIL OF TUBULAR STEEL SIGN POST
**(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)**




**SECTION A-A**

| Area of Sign Installation (Sq. Ft.) | Number of Required Posts |
|---|---|
| 9 or less | 1 |
| Greater than 9 less than or equal to 18 | 2 |
| Greater than 18 less than or equal to 27 | 3 |

**Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).**

TUBULAR STEEL
SIGN POST
A4-9

*WISCONSIN DEPT OF TRANSPORTATION*

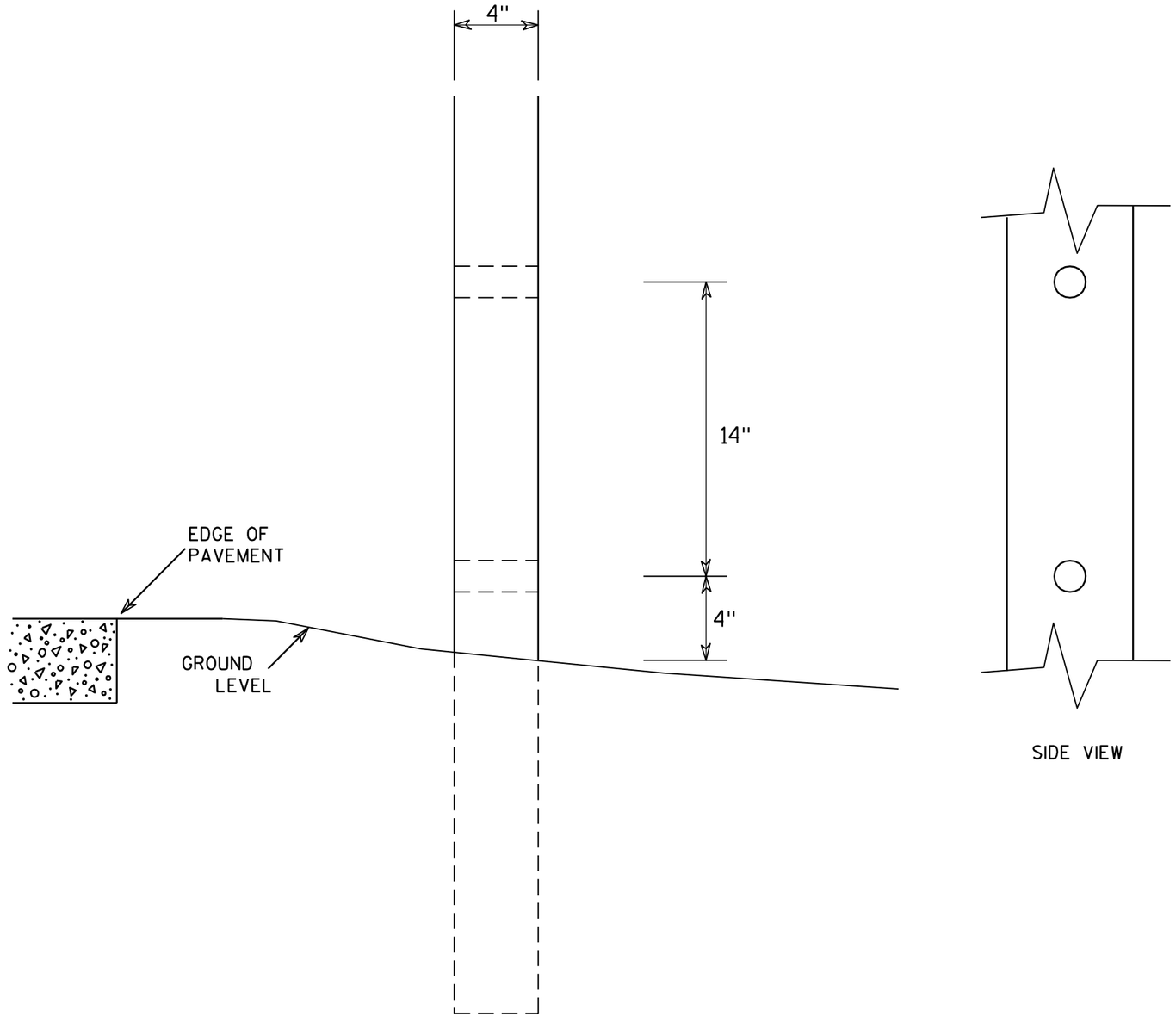
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

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



FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42






SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

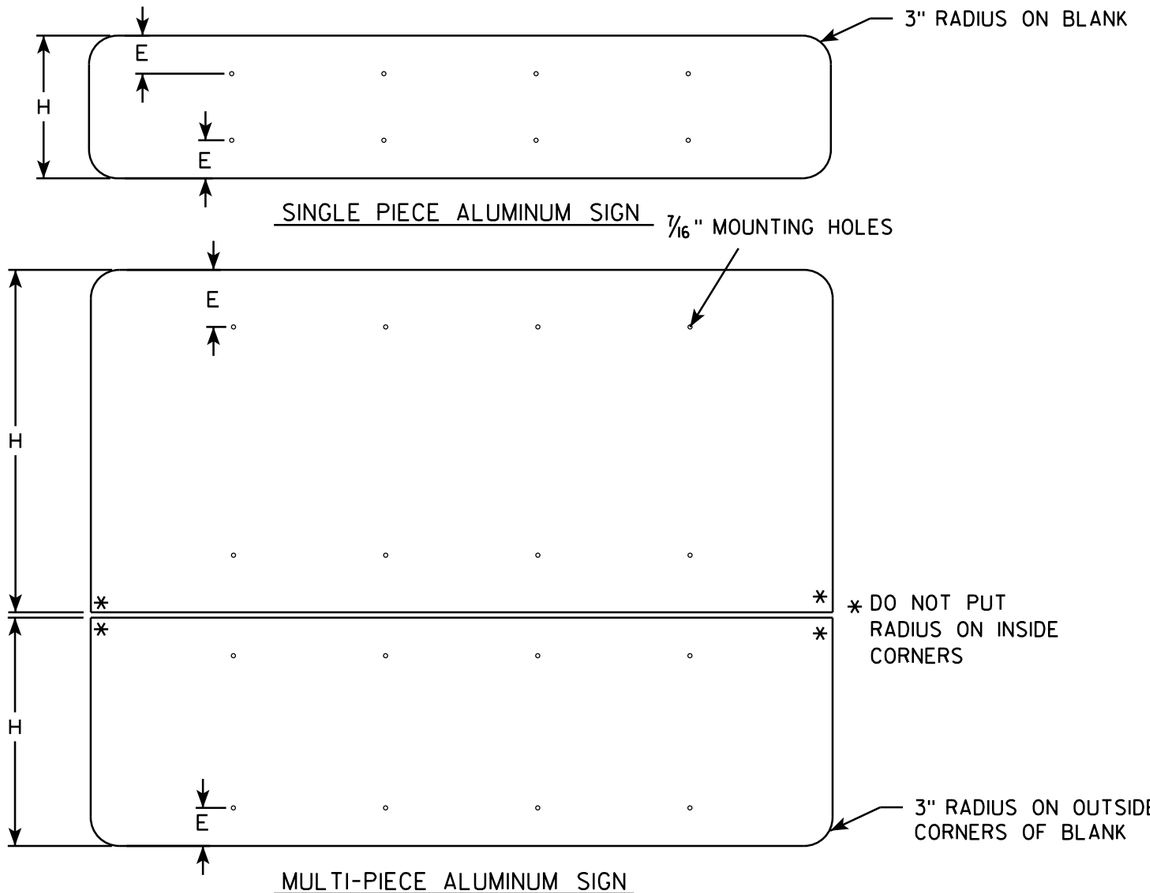
# 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

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

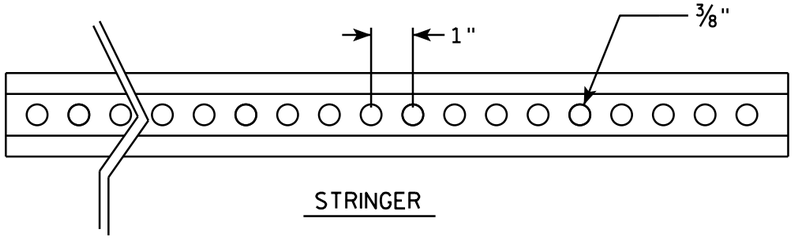
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 190 | E |
|---|---|---|---|---|---|




# GENERAL NOTES

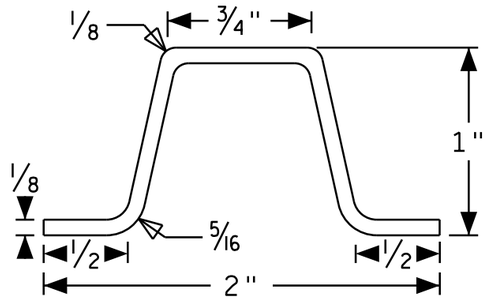
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

| SIGN WIDTH | STRINGER WIDTH | POSTS | HOLE SPACING | MOUNTING HOLES |
|---|---|---|---|---|
| 78" | 72" | 2 | 16" | 15" 31" 47" 63" |
| 84" | 72" | 2 | 17" | 16½" 33½" 50½" 67½" |
| 90" | 72" | 2 | 18" | 18" 36" 54" 72" |
| 96" | 90" | 2 | 19" | 19½" 38½" 57½" 76½" |
| 102" | 90" | 2 | 20" | 21" 41" 61" 81" |
| 108" | 90" | 2 | 21" | 22½" 43½" 64½" 85½" |
| 114" | 108" | 3 | 15" | 12" 27" 42" 57" 72" 87" 102" |
| 120" | 108" | 3 | 16" | 12" 28" 44" 60" 76" 92" 108" |
| 126" | 108" | 3 | 17" | 12" 29" 46" 63" 80" 97" 114" |
| 132" | 126" | 3 | 18" | 12" 30" 48" 66" 84" 102" 120" |
| 138" | 126" | 3 | 19" | 12" 31" 50" 69" 88" 107" 126" |
| 144" | 126" | 3 | 20" | 12" 32" 52" 72" 92" 112" 132" |

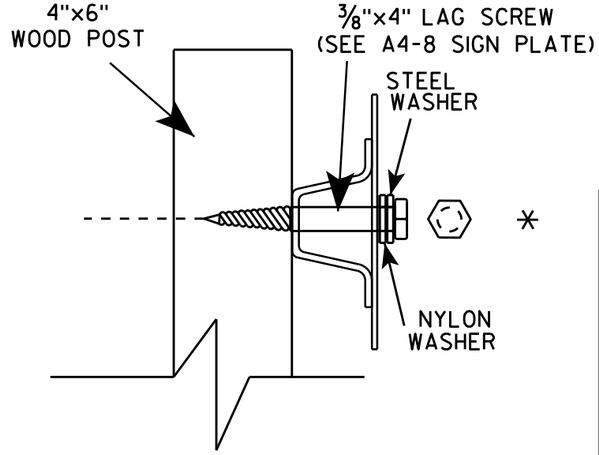



STRINGER

CROSS SECTION VIEW OF CHANNEL




POST MOUNTING




## SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

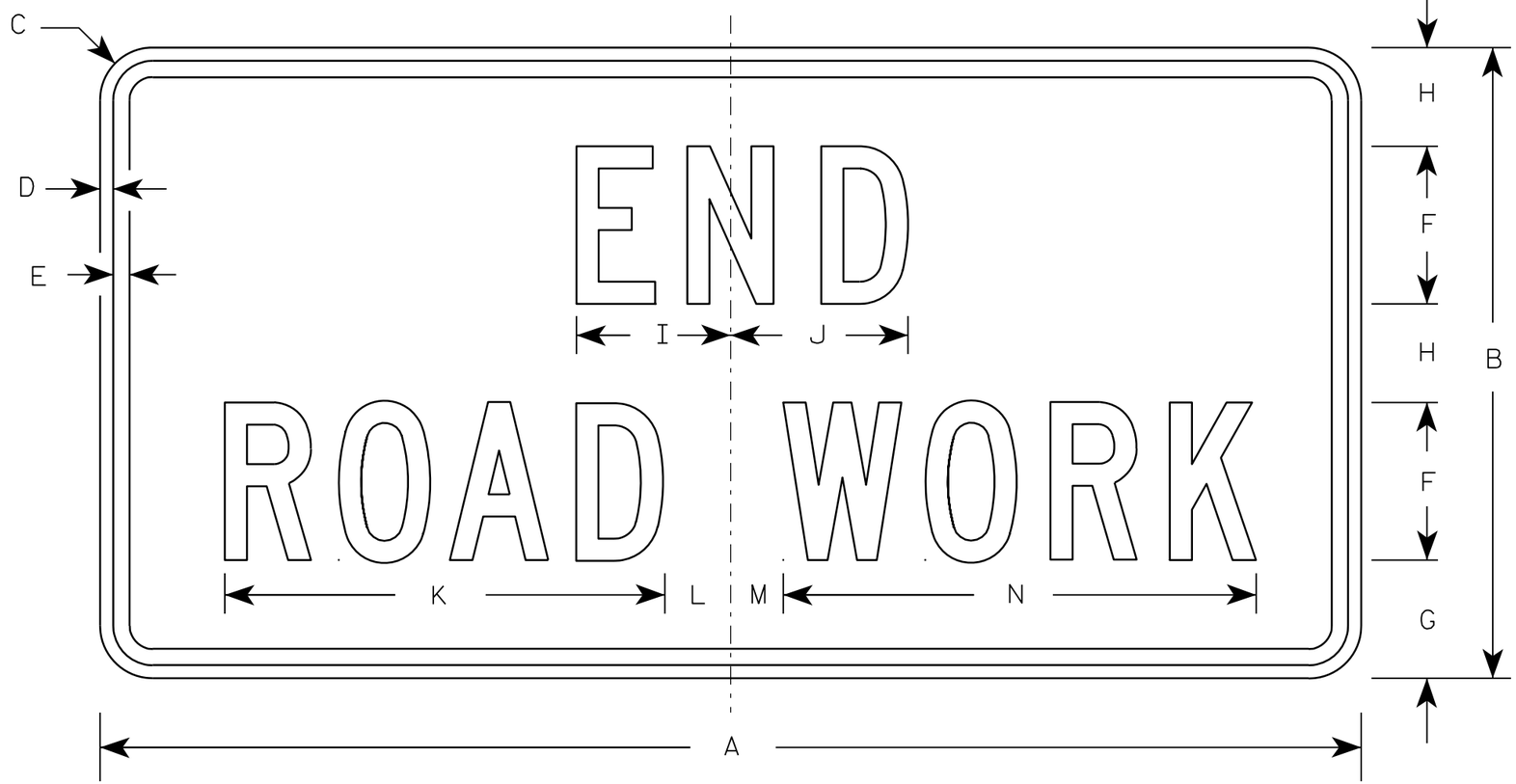
for State Traffic Engineer

DATE 4/26/16 PLATE NO A4-18.1

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



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42




G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | 900 mm X 450 mm |
| 2 | 1200 mm X 600 mm |
| 3 | 1200 mm X 600 mm |
| 4 | 1200 mm X 600 mm |
| 5 | 1200 mm X 600 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 4 | 3 3/4 | 2 1/2 | 4 1/8 | 4 1/8 | 11 1/8 | 2 | 1 | 12 1/8 | | | | | | | | | | | | | 4.5 | 0.41 |
| 2 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 3 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 4 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 5 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |

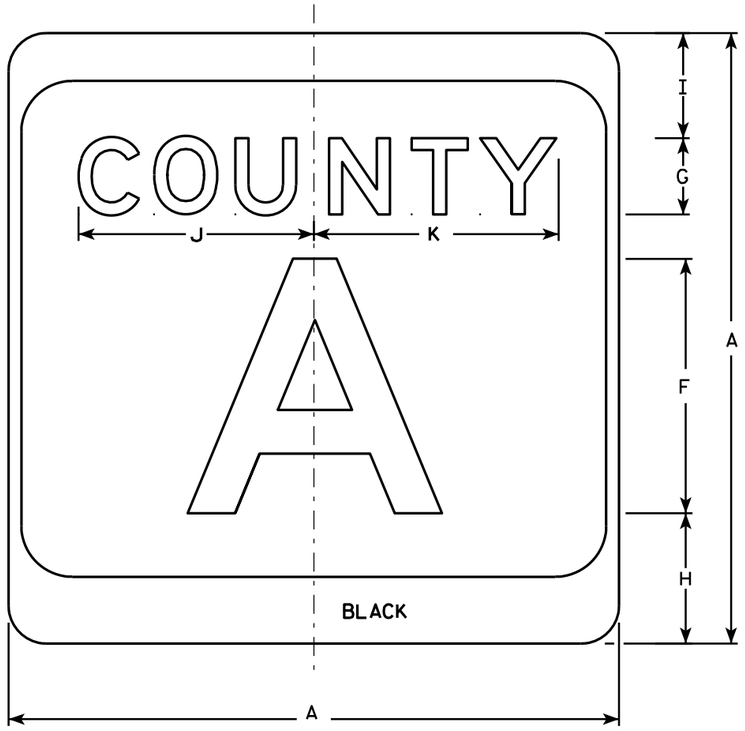
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

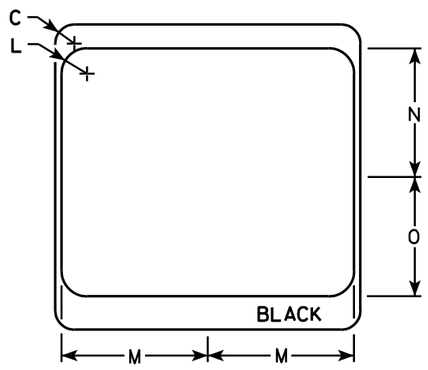
APPROVED Matthew R Rauch
for State Traffic Engineer

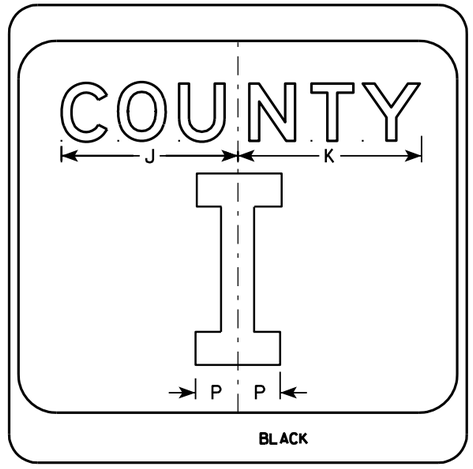
DATE 9/30/09 PLATE NO. G20-2A.8

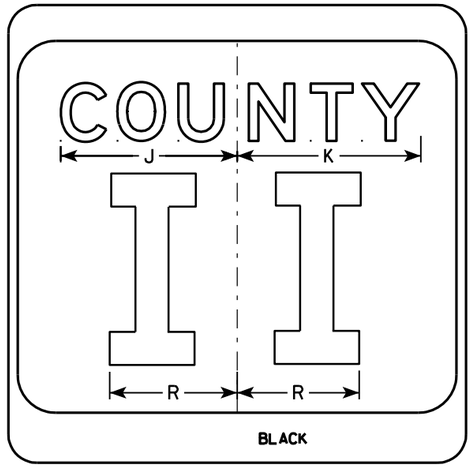
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 192 | E |
|---|---|---|---|---|---|




M1-5A




NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | 1 1/2 | | | 10 | 3 | 5 1/8 | 4 1/8 | 9 1/4 | 9 5/8 | 2 | 11 1/2 | 10 1/8 | 9 3/8 | 2 1/4 | | 6 5/8 | | | | | | | | | 4.0 |
| 3 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |
| 5 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |

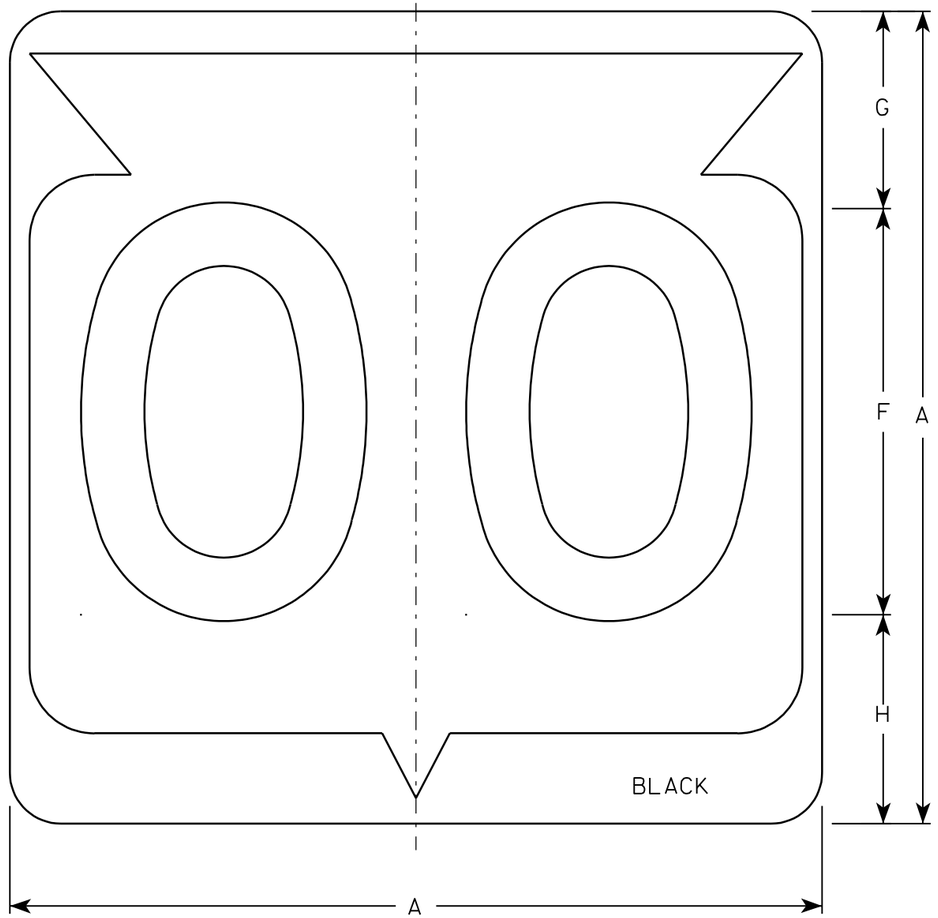
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

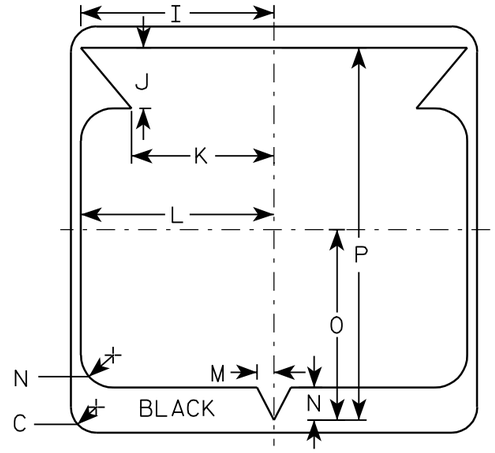
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 193 | E




M1-6

## NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective




Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | |
| 2 | 600 mm X 600 mm |
| 3 | 900 mm X 900 mm |
| 4 | 900 mm X 900 mm |
| 5 | 900 mm X 900 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | 1 1/2 | | | 12 | 5 1/2 | 6 1/2 | 10 1/4 | 2 1/2 | 8 7/8 | 11 1/2 | 1 | 1 7/8 | 11 1/4 | 21 7/8 | | | | | | | | | | | 4.0 | .36 |
| 3 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 | .81 |
| 4 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 | .81 |
| 5 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 | .81 |

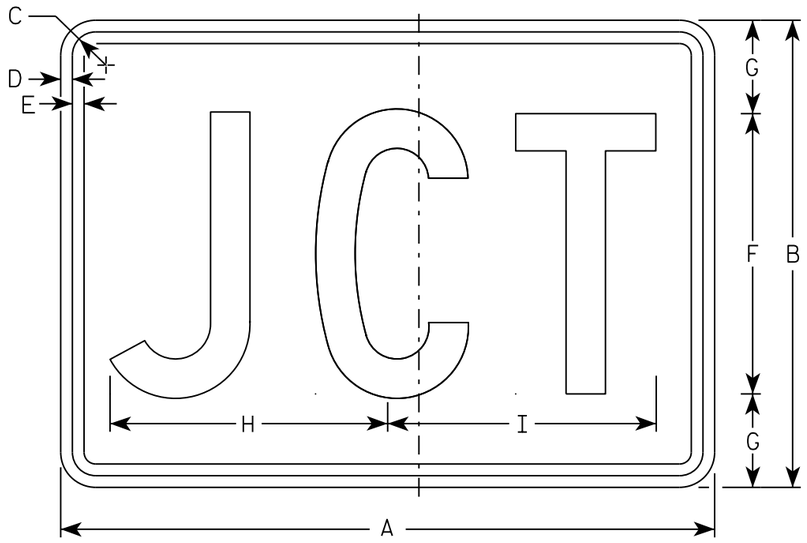
# STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

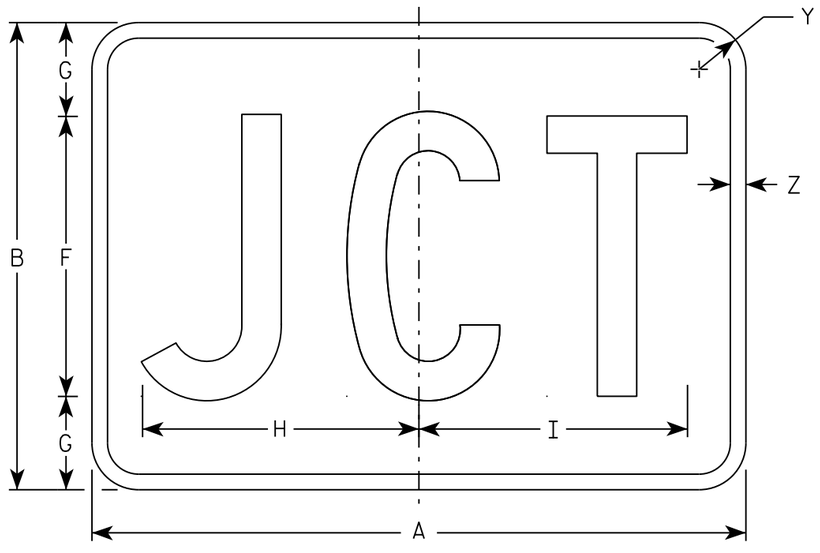
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 194 | E |
|---|---|---|---|---|---|




M2-1
MM2-1
MP2-1




MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | 15 | 1 1/8 | 3/8 | 3/8 | 9 | 3 | 8 7/8 | 8 5/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 2.20 |
| 3 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |
| 4 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |
| 5 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |

STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

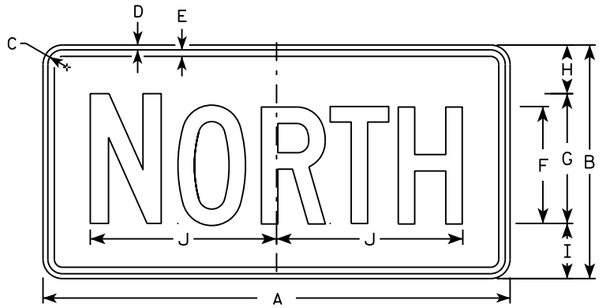
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 195 12-1.12

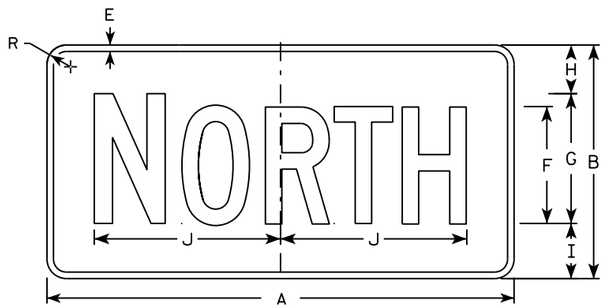
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000




M3-1
MM3-1
MP3-1



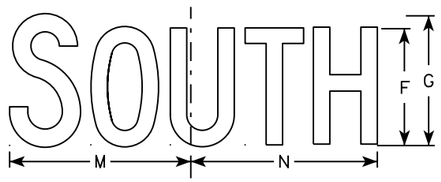

MB3-1
MK3-1
MN3-1



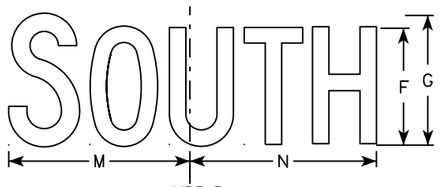

M3-2
MM3-2
MP3-2



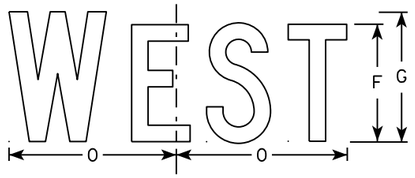

MB3-2
MK3-2
MN3-2



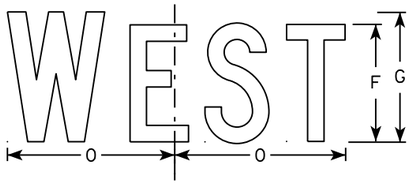

M3-3
MM3-3
MP3-3




MB3-3
MK3-3
MN3-3




M3-4
MM3-4
MP3-4




MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 7 | 2 1/4 | 2 3/4 | 10 1/4 | 7 7/8 | 8 3/8 | 10 1/4 | 9 3/4 | 8 3/4 | | | 1 1/2 | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |

STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

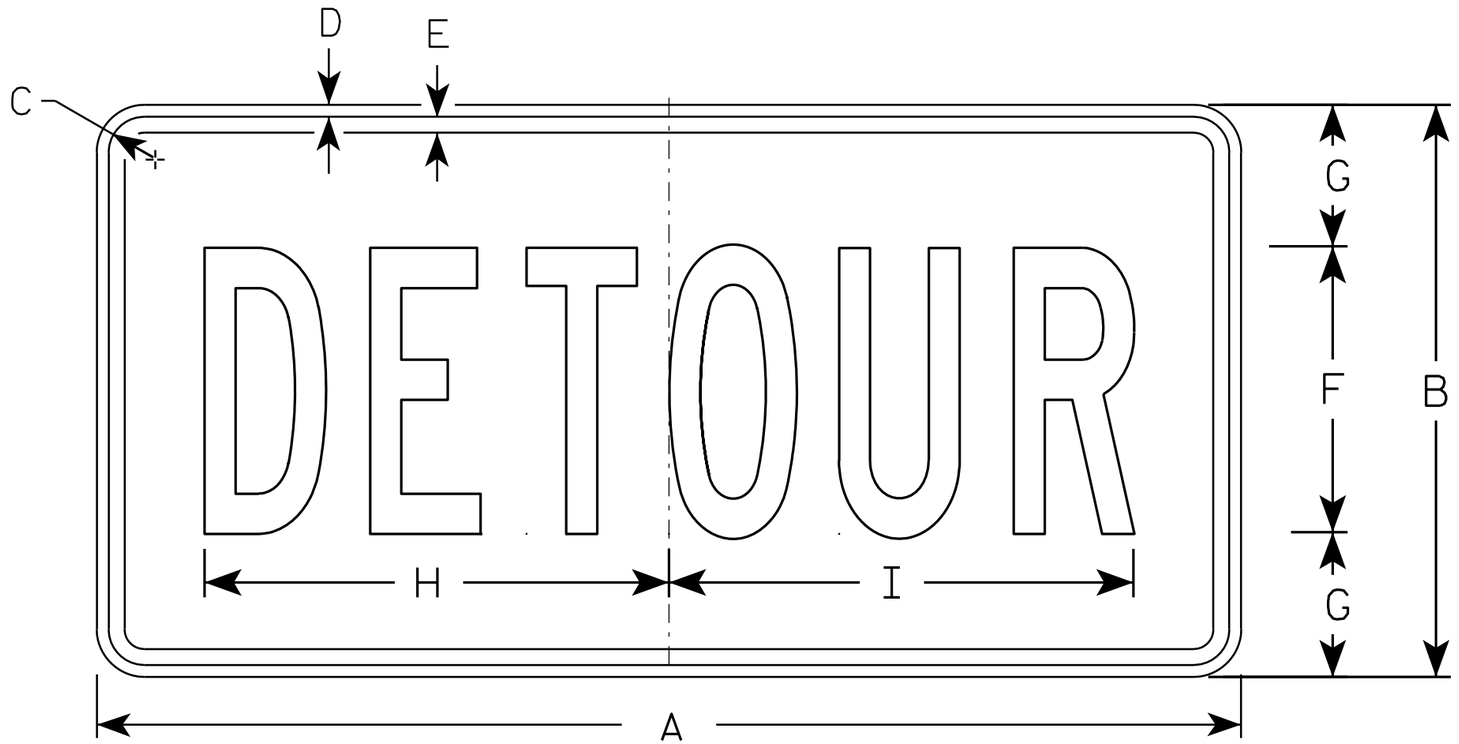
DATE 10/15/15 PLATE NO M3-1.14



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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000

7




M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 3 | 10 | 10 1/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

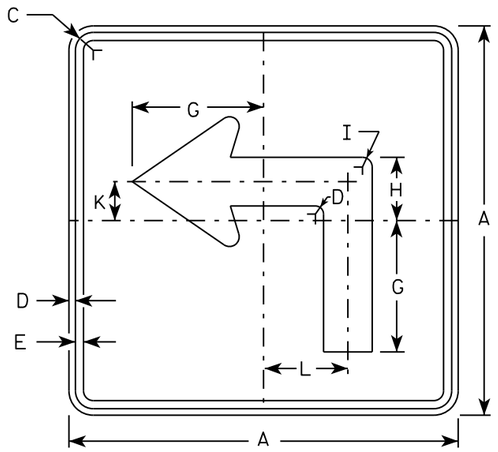
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

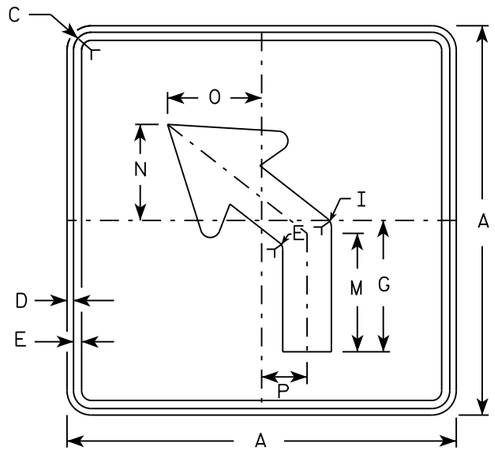
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

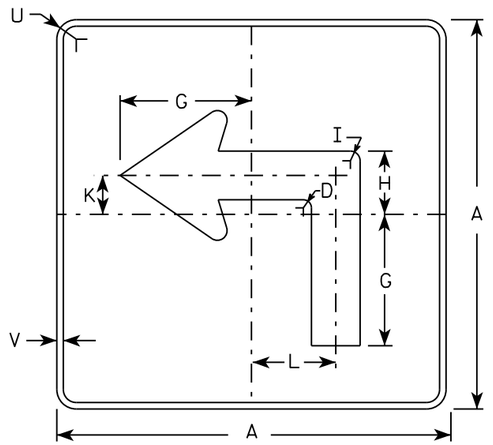
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 197 | E |
|---|---|---|---|---|---|



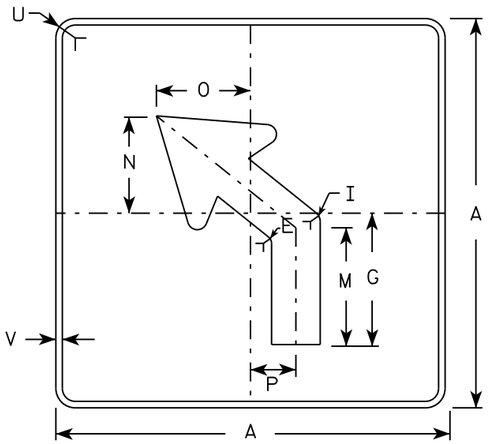

M5-1L
MM5-1L
MO5-1L
MP5-1L



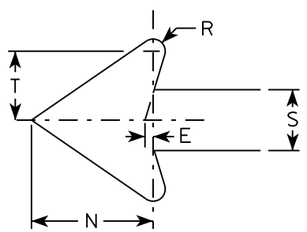

M5-2L
MM5-2L
MO5-2L
MP5-2L




MB5-1L
MK5-1L
MN5-1L
MR5-1L




MB5-2L
MK5-2L
MN5-2L
MR5-2L




NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 | 3 3/8 | 5/8 | | 2 1/8 | 4 1/2 | 6 3/8 | 5 1/4 | 5 | 2 1/2 | | 1/2 | 2 5/8 | 3 | 1 1/2 | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |

STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

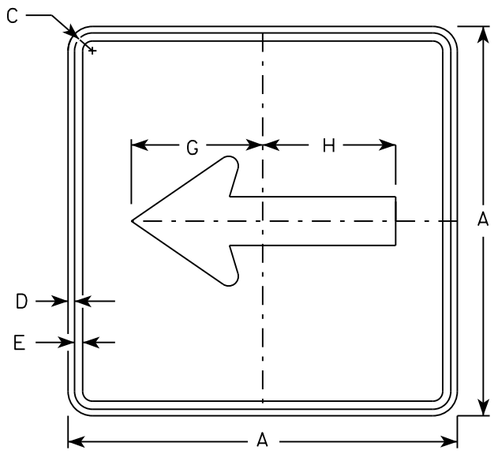
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M5-1.13

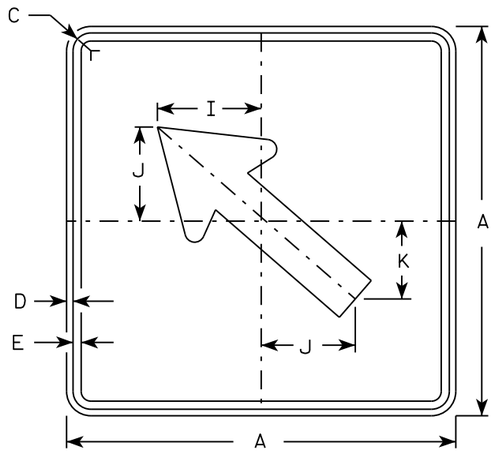


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



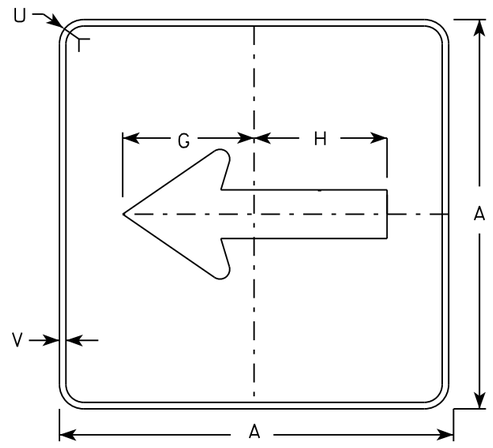

M6-1
MM6-1
MO6-1
MP6-1




M6-2
MM6-2
MO6-2
MP6-2

NOTES

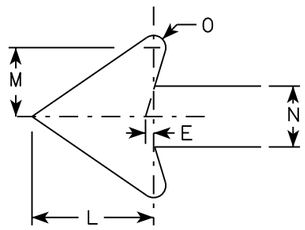
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow




MB6-1
MK6-1
MN6-1
MR6-1




MB6-2
MK6-2
MN6-2
MR6-2




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 1/2 | 7 1/8 | 5 5/8 | 5 | 4 1/4 | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | 1 1/2 | 1/2 | | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | | 6.25 |

# STANDARD SIGN M6-1 & M6-2 SERIES

*WISCONSIN DEPT OF TRANSPORTATION*

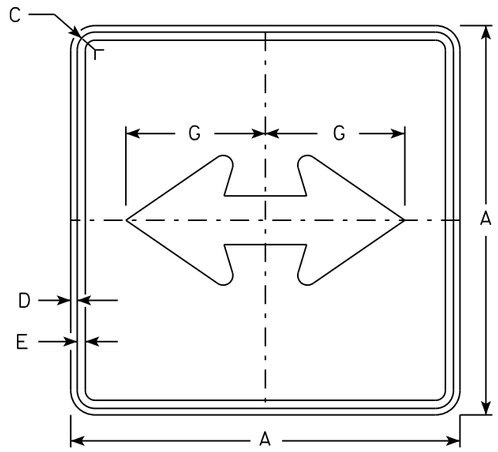
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 10/15/15 PLATE 199 M6-1.15

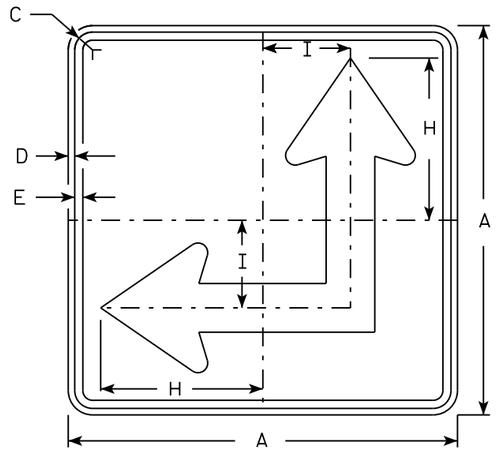
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



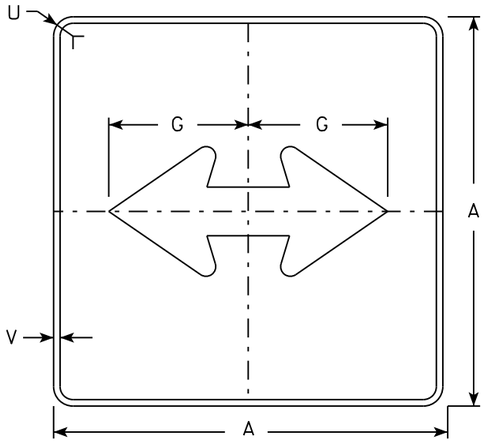

M6-4
MM6-4
MO6-4
MP6-4



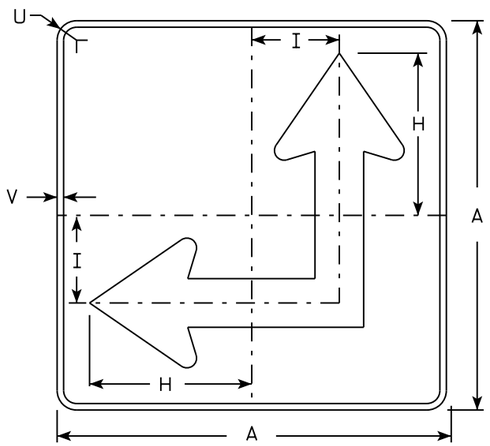

M6-6
MM6-6
MO6-6
MP6-6

NOTES

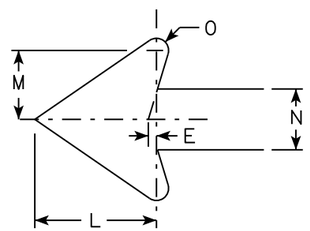
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.




MB6-4
MK6-4
MN6-4
MR6-4




MB6-6
MK6-6
MN6-6
MR6-6




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 1/2 | 8 3/4 | 4 1/4 | | | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | 1 1/2 | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 |

STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

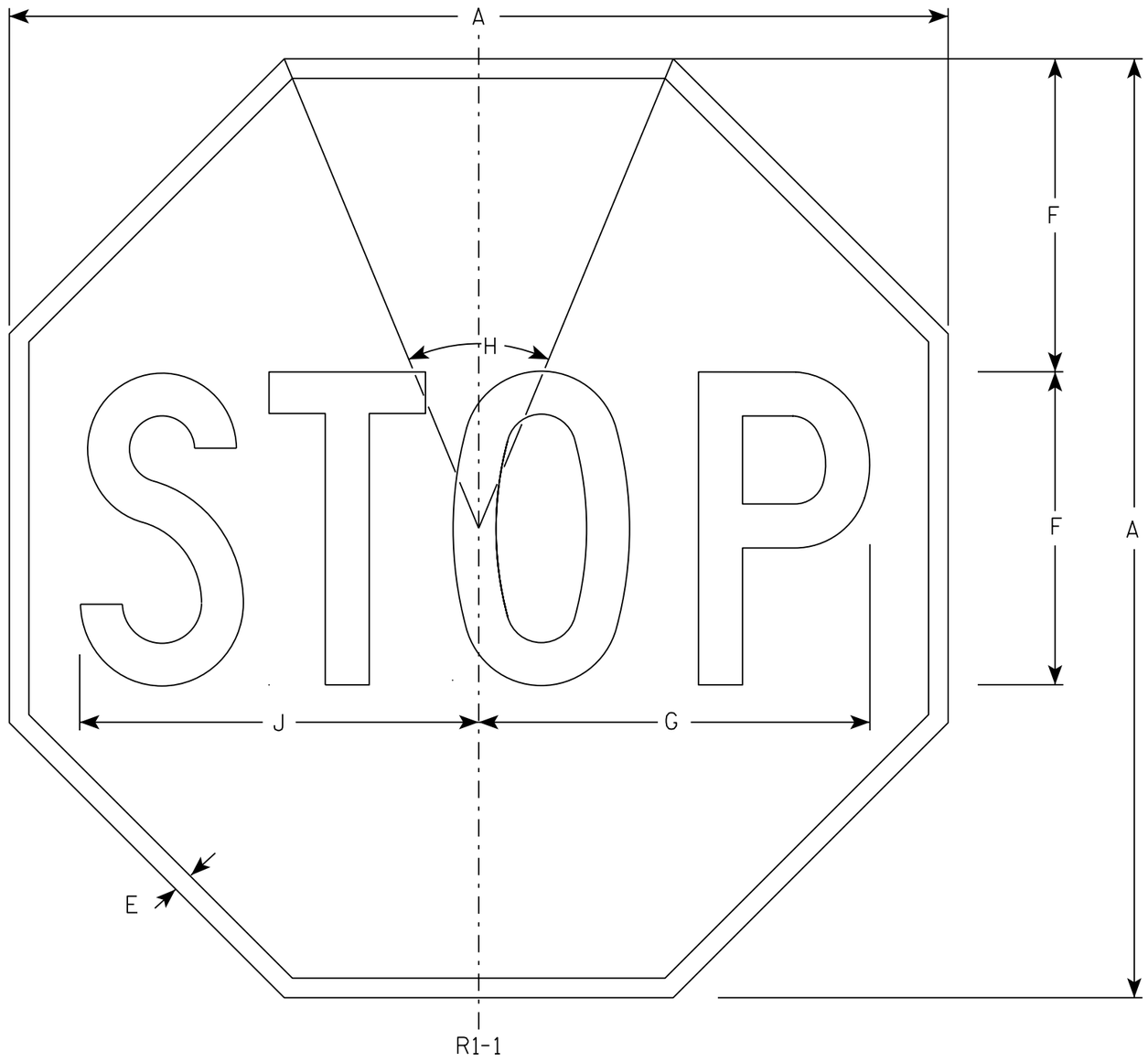
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 200 M6-4.10

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



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000




NOTES

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

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

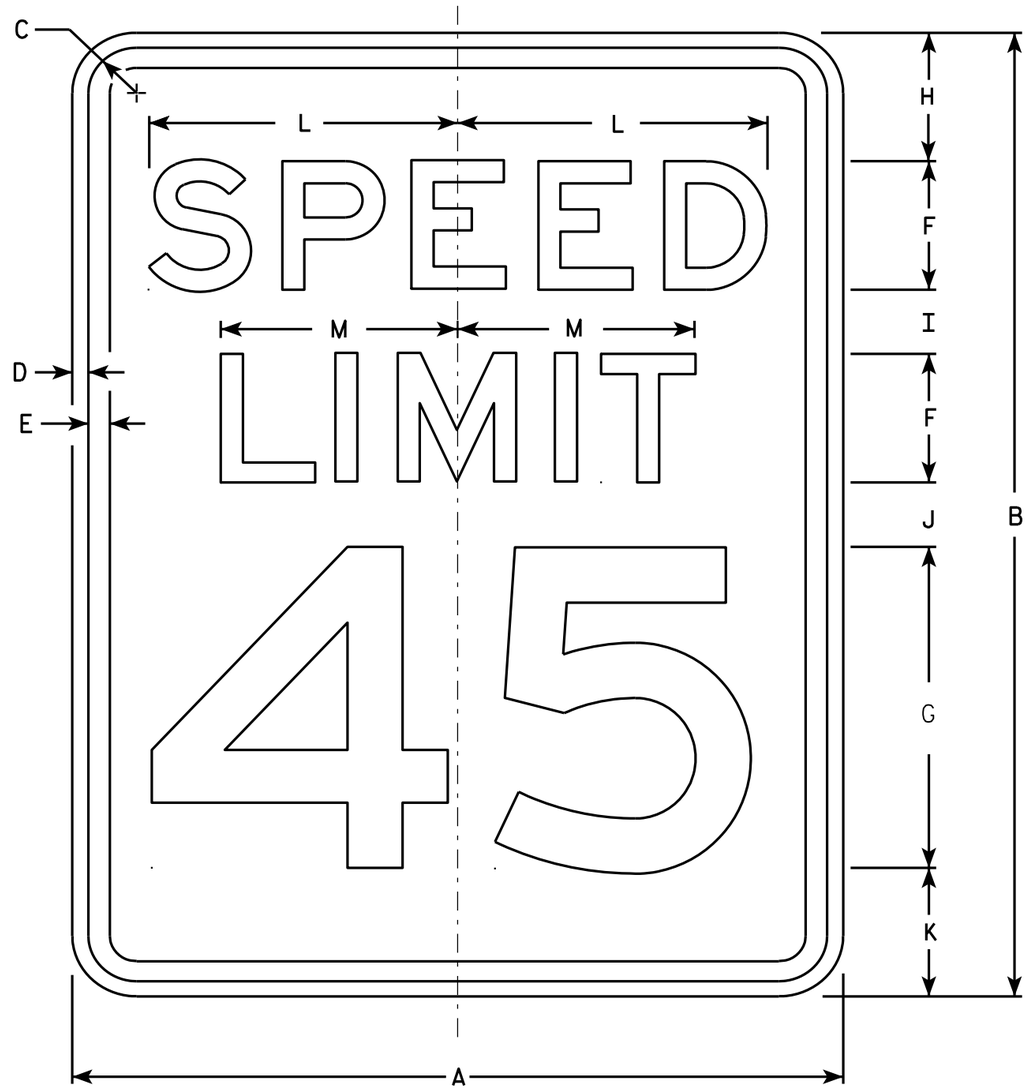
# STANDARD SIGN
# R1-1

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 201 | 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 |

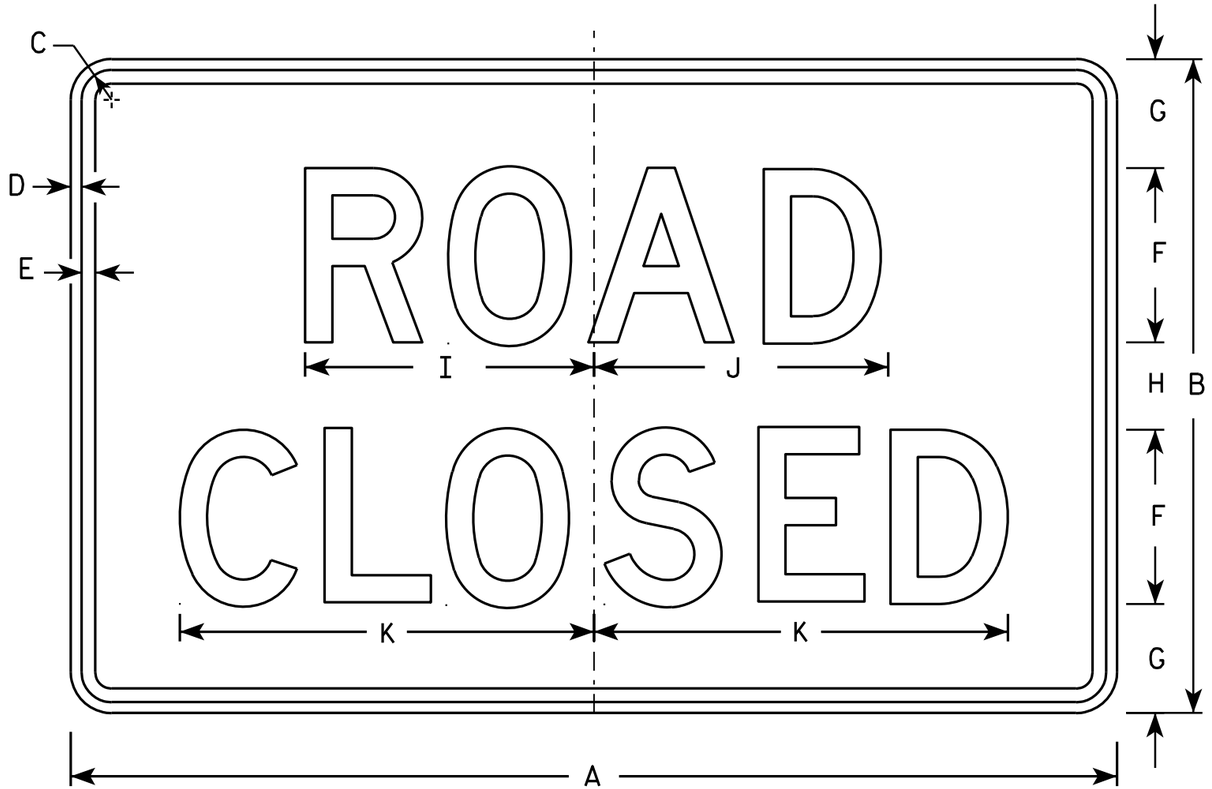
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

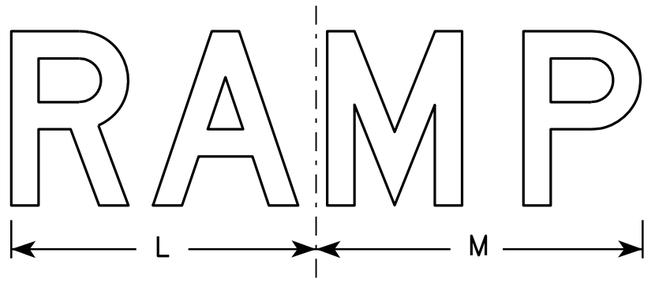
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 202 | E |
|---|---|---|---|---|---|



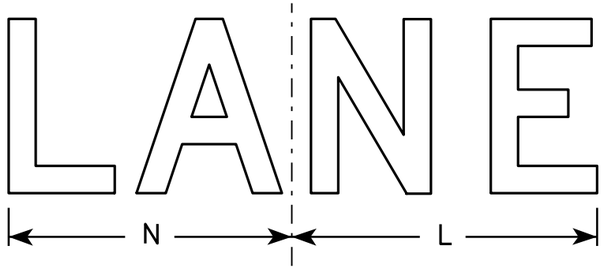

R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.




R11-2R




R11-2L

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 2M | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 3 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 4 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |
| 5 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 13 1/4 | 13 1/2 | 19 | 14 | 15 | 13 | | | | | | | | | | | | | 10.0 |

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 203 | E |
|---|---|---|---|---|---|

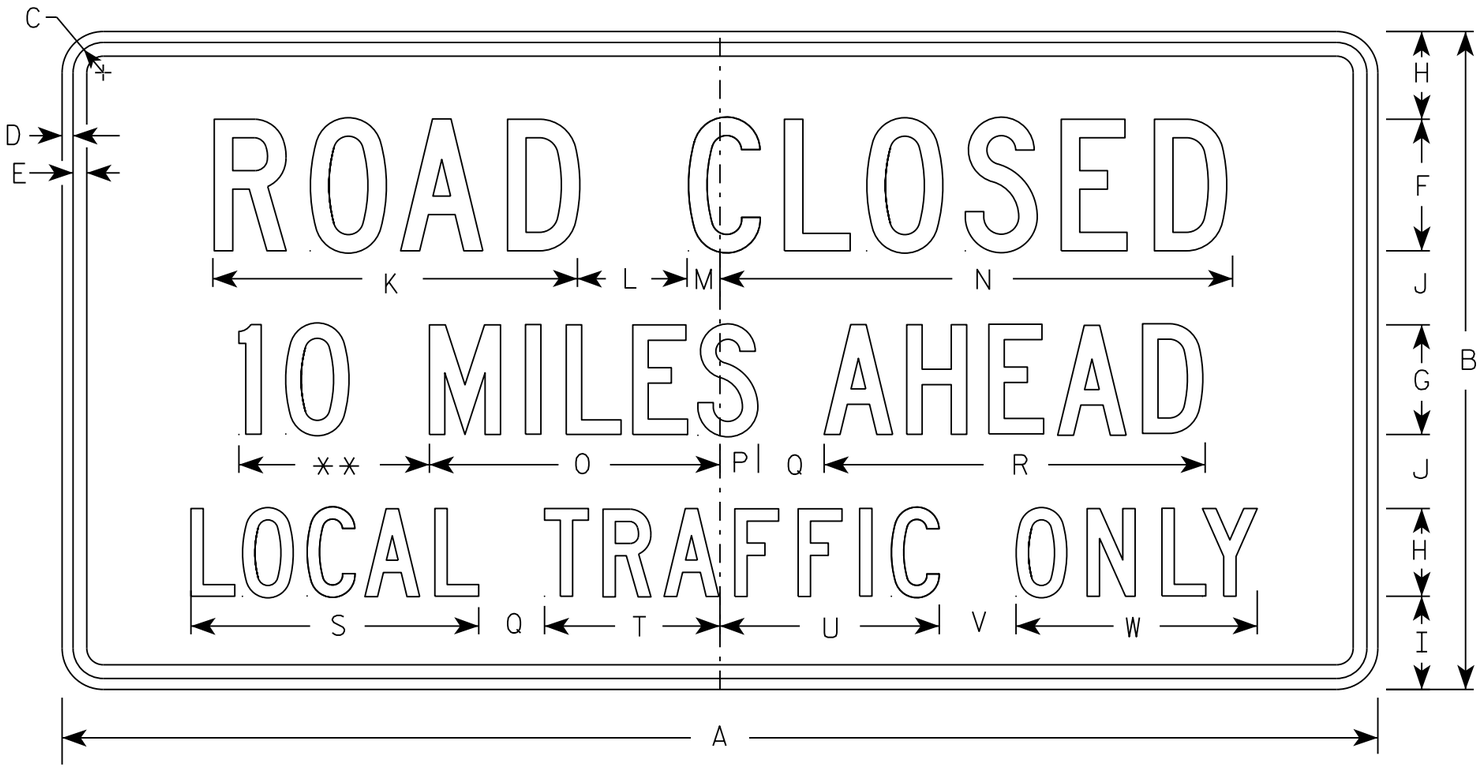



FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.DGN PLOT DATE : 01-APR-2011 14:25 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.952219:1.000000

WISDOT/CADDS SHEET 42

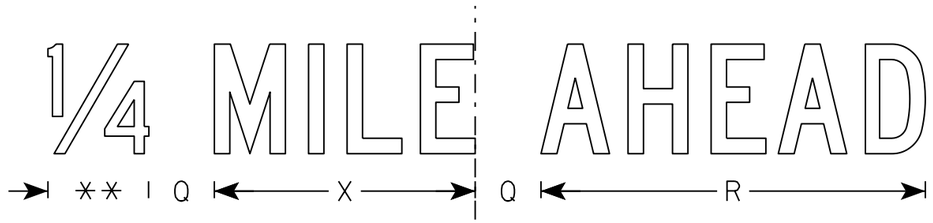
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.




R11-3

** See Note 5




| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 3 | 2 1/2 | 2 | 2 | 11 1/8 | 3 | 1 1/8 | 15 1/4 | 8 | 1 1/2 | 2 | 10 3/4 | 8 3/8 | 4 3/4 | 6 1/2 | 2 | 6 3/4 | 7 1/8 | | | 4.5 |
| 2S | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 4 1/4 | 3 3/8 | 16 5/8 | 5 | 1 1/2 | 23 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | 13 1/8 | 8 | 10 | 3 1/2 | 11 | 11 7/8 | | | 12.5 |
| 2M | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 4 1/4 | 3 3/8 | 16 5/8 | 5 | 1 1/2 | 23 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | 13 1/8 | 8 | 10 | 3 1/2 | 11 | 11 7/8 | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

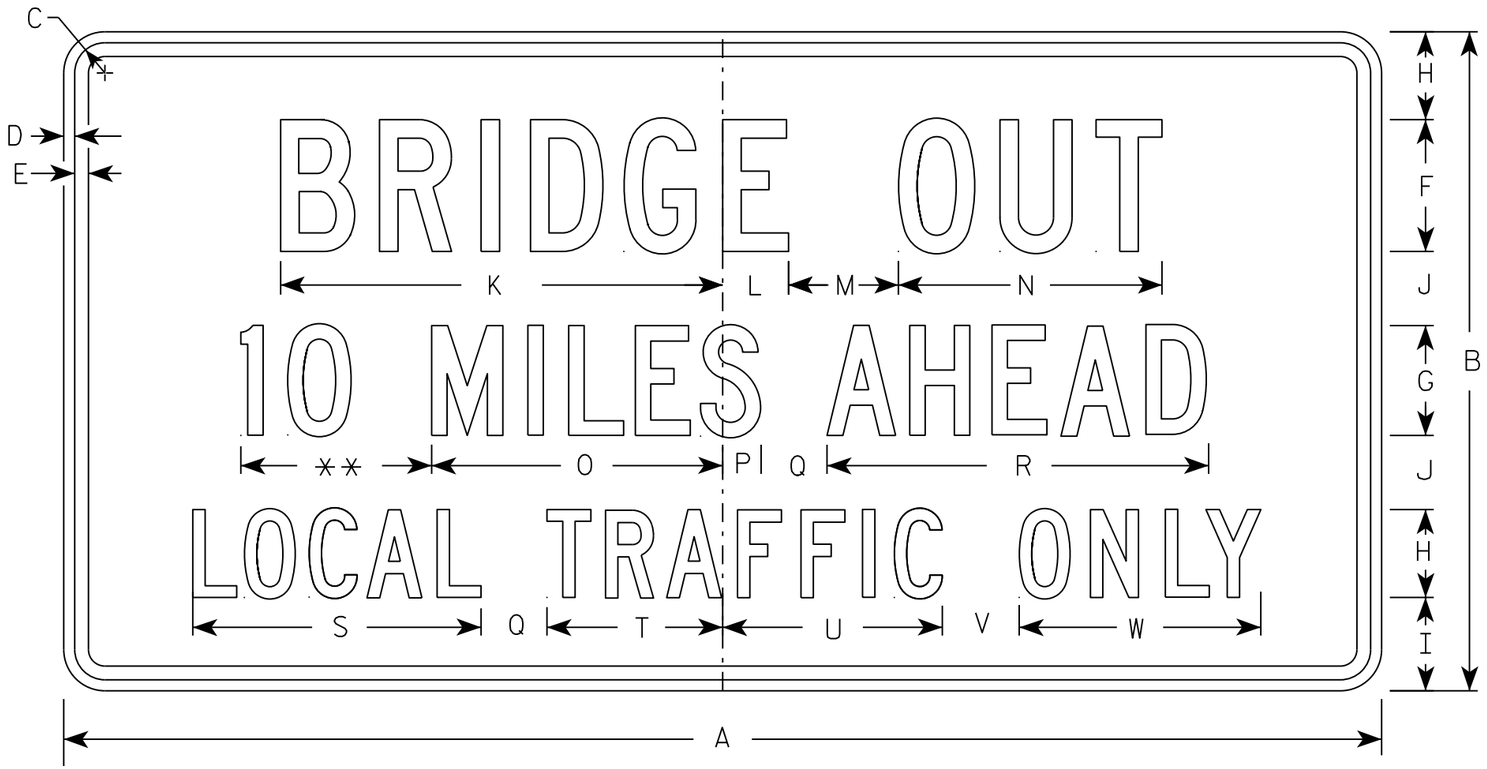
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

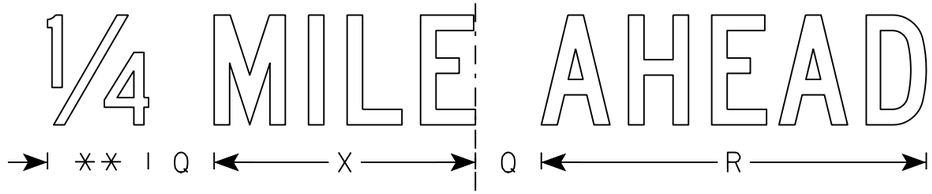
DATE 3/15/17 PLATE NO. R11-3.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 204 | E |
|---|---|---|---|---|---|




R11-3B

** See Note 5




NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 3/8 | 1/2 | 5/8 | 4 | 3 | 2 1/2 | 2 | 2 | 13 1/4 | 2 1/4 | 3 | 8 | 8 | 1 1/2 | 2 | 10 3/4 | 8 3/8 | 4 3/4 | 6 1/2 | 2 | 6 3/4 | 7 1/8 | | | 4.5 |
| 2S | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 4 1/4 | 3 3/8 | 20 1/8 | 3 | 5 | 12 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | 13 1/8 | 8 | 10 | 3 1/2 | 11 | 11 7/8 | | | 12.5 |
| 2M | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 4 1/4 | 3 3/8 | 20 1/8 | 3 | 5 | 12 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | 13 1/8 | 8 | 10 | 3 1/2 | 11 | 11 7/8 | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

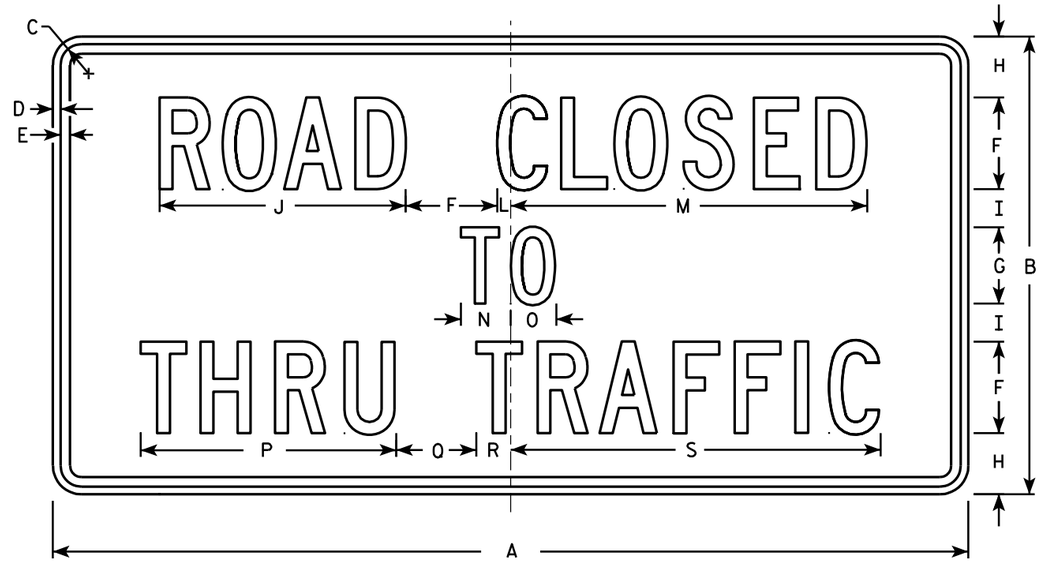
STANDARD SIGN
R11-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. R11-3B.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 205 | E




R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - 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 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 2 1/2 | 16 1/8 | | 7/8 | 23 3/8 | 3 1/4 | 3 | 16 3/4 | 5 1/4 | 2 1/4 | 24 1/4 | | | | | | | | 12.5 |
| 2M | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 2 1/2 | 16 1/8 | | 7/8 | 23 3/8 | 3 1/4 | 3 | 16 3/4 | 5 1/4 | 2 1/4 | 24 1/4 | | | | | | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

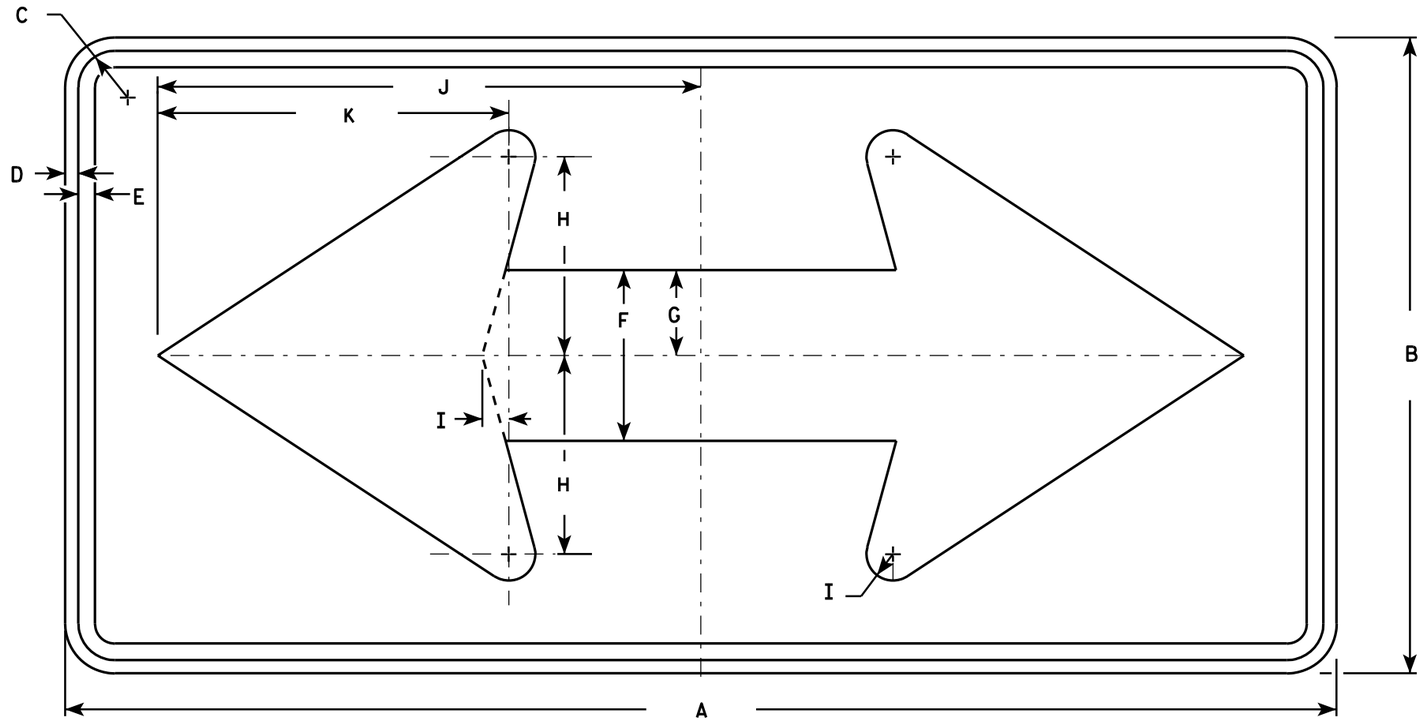
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 206 | E




W1-7

NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 5 | 2 1/2 | 5 3/4 | 3/4 | 15 5/8 | 10 1/8 | | | | | | | | | | | | | | | | 4.5 |
| 2S | 48 | 24 | 1 3/8 | 1/2 | 5/8 | 6 1/2 | 3 1/4 | 7 1/2 | 1 | 20 1/2 | 13 1/4 | | | | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | 6 1/2 | 3 1/4 | 7 1/2 | 1 | 20 1/2 | 13 1/4 | | | | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 4 | 9 1/4 | 1 1/4 | 25 3/8 | 16 1/4 | | | | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 4 | 9 1/4 | 1 1/4 | 25 3/8 | 16 1/4 | | | | | | | | | | | | | | | | 12.5 |
| 5 | 96 | 48 | 2 1/4 | 3/4 | 1 | 13 | 6 1/2 | 15 | 2 | 41 | 26 1/2 | | | | | | | | | | | | | | | | 32.0 |

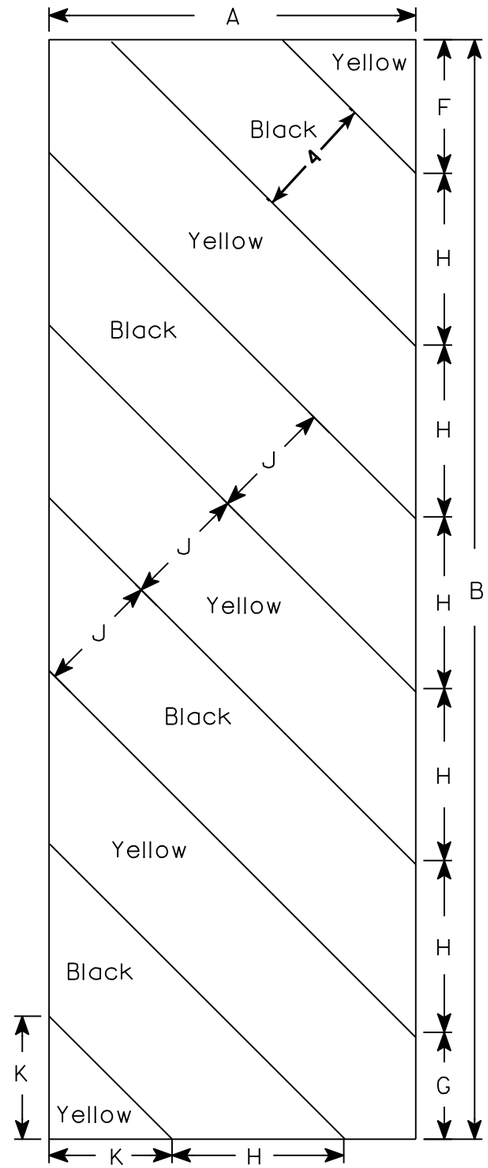
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

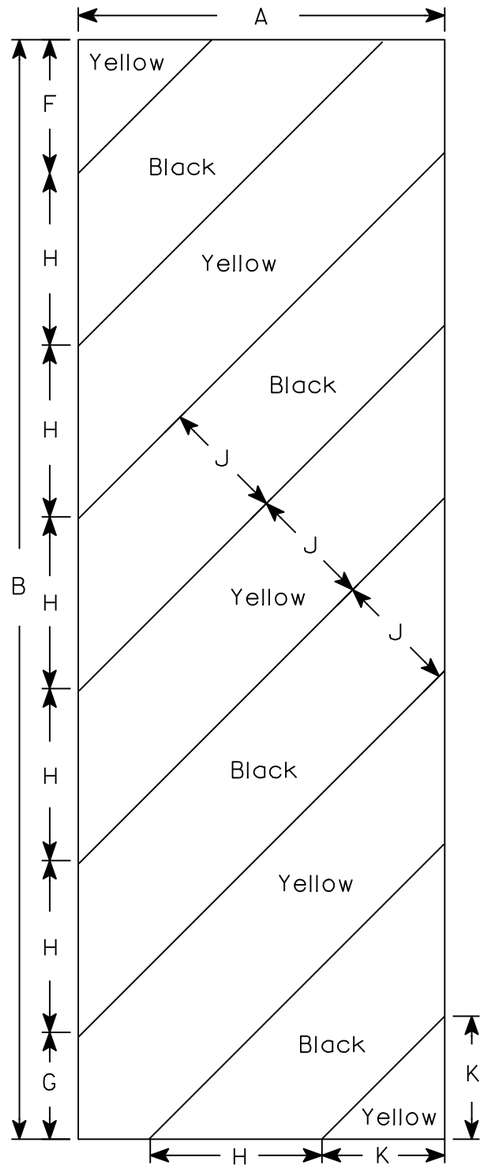
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 207 | 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*

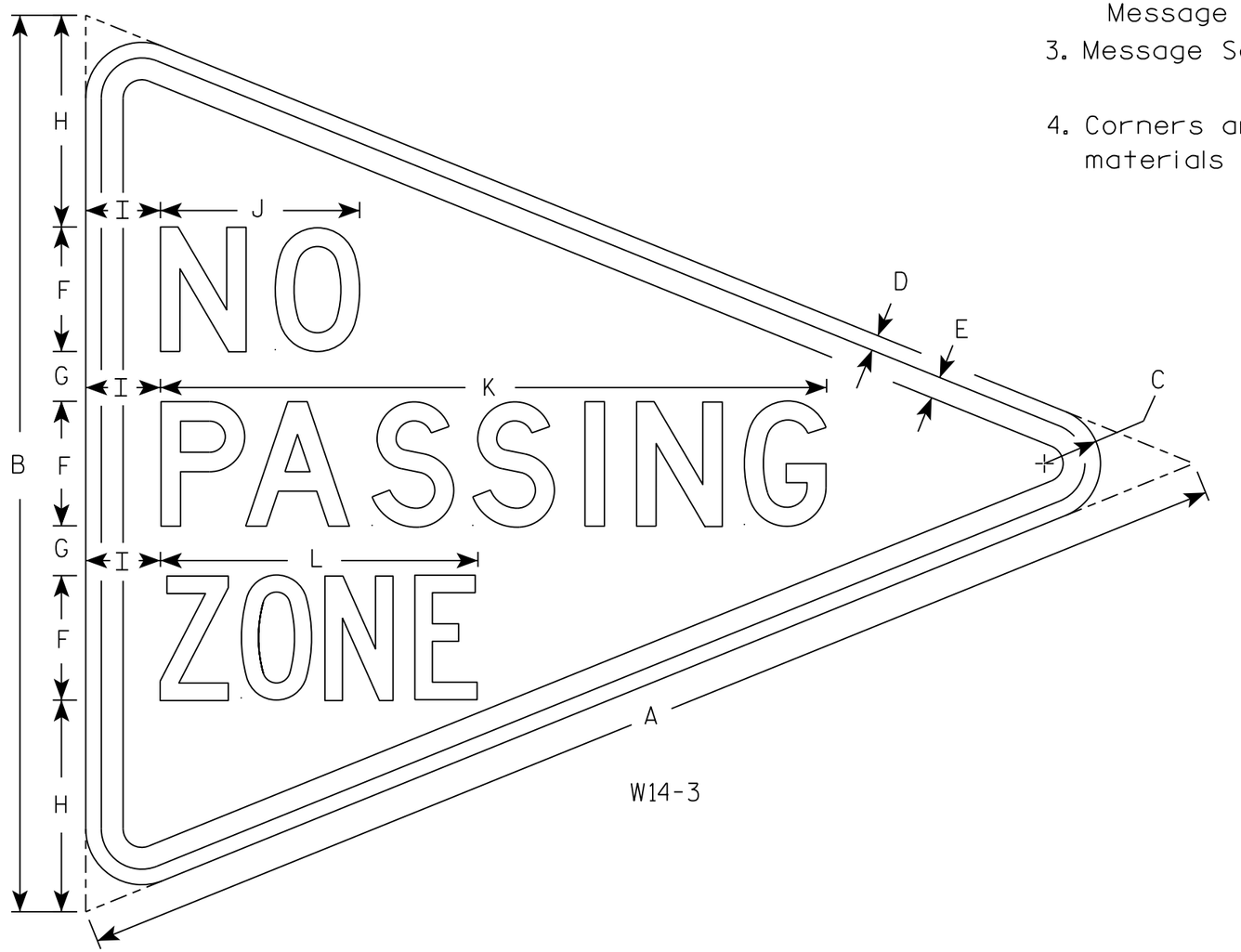
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 208 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.




W14-3

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 36 | 2 1/4 | 5/8 | 7/8 | 5 | 2 | 8 1/2 | 3 | 8 | 26 3/4 | 12 3/4 | | | | | | | | | | | | | | | 5.56 |
| 2M | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

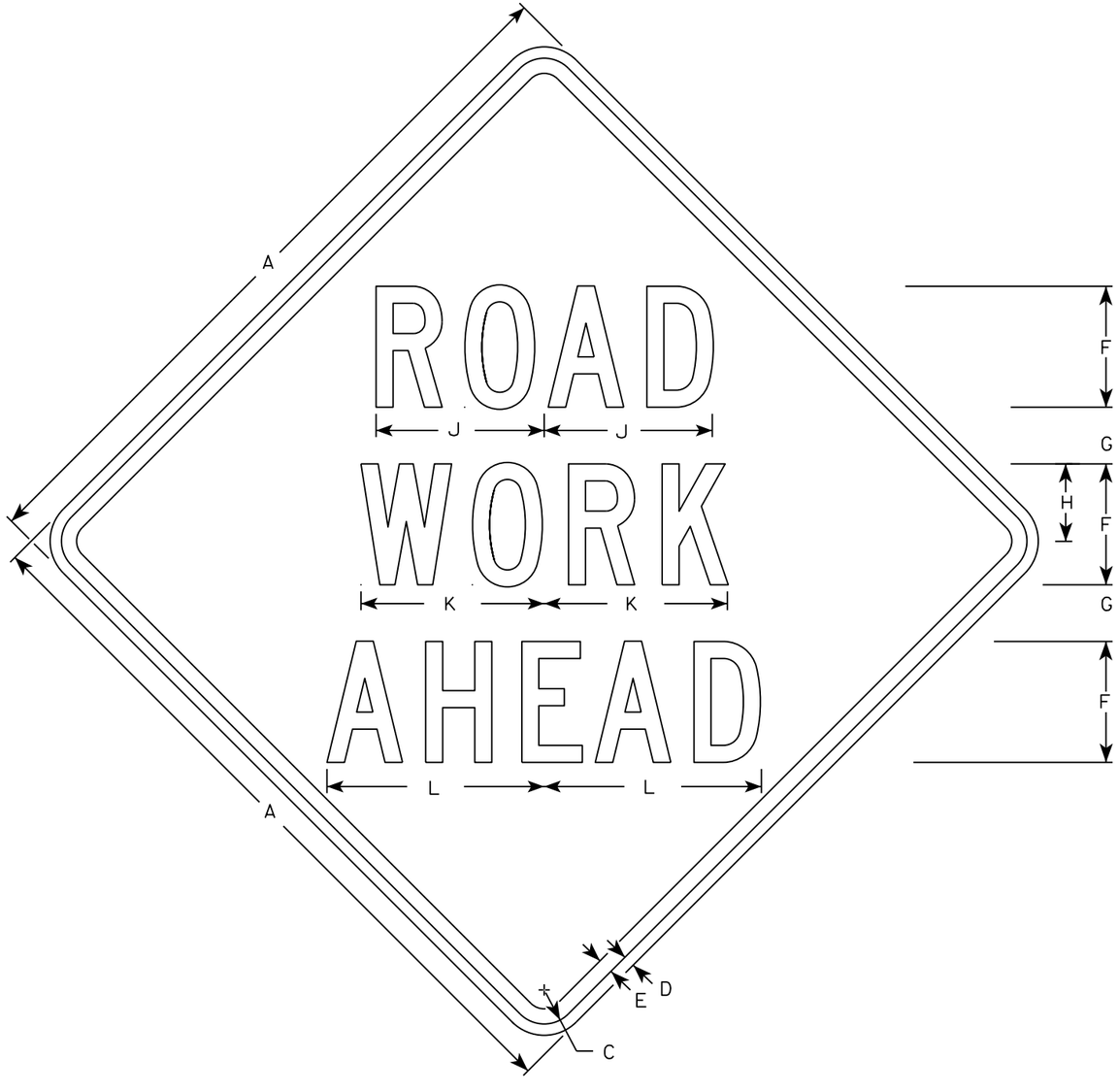
DATE 3/21/17 PLATE NO. W14-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 209 | E

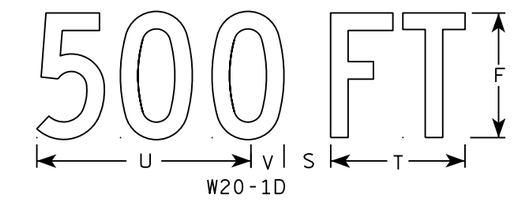




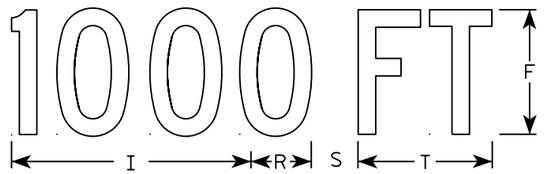
7



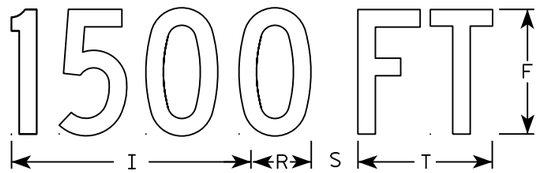

W20-1A




W20-1D



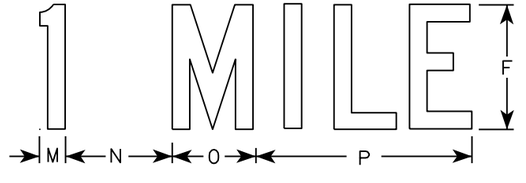

W20-1C



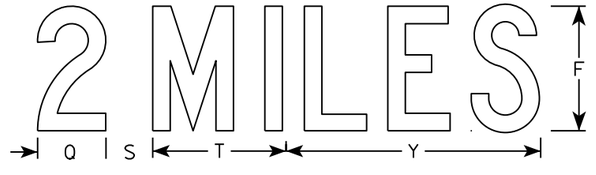

W20-1B




W20-1G




W20-1F




W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 5/8 | 3 1/4 | 10 1/8 | 7 | 7 5/8 | 8 7/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | | 2 1/2 | 2 1/4 | 5 5/8 | 9 | 1 3/8 | 8 | 1 3/4 | 10 3/4 | 6 | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

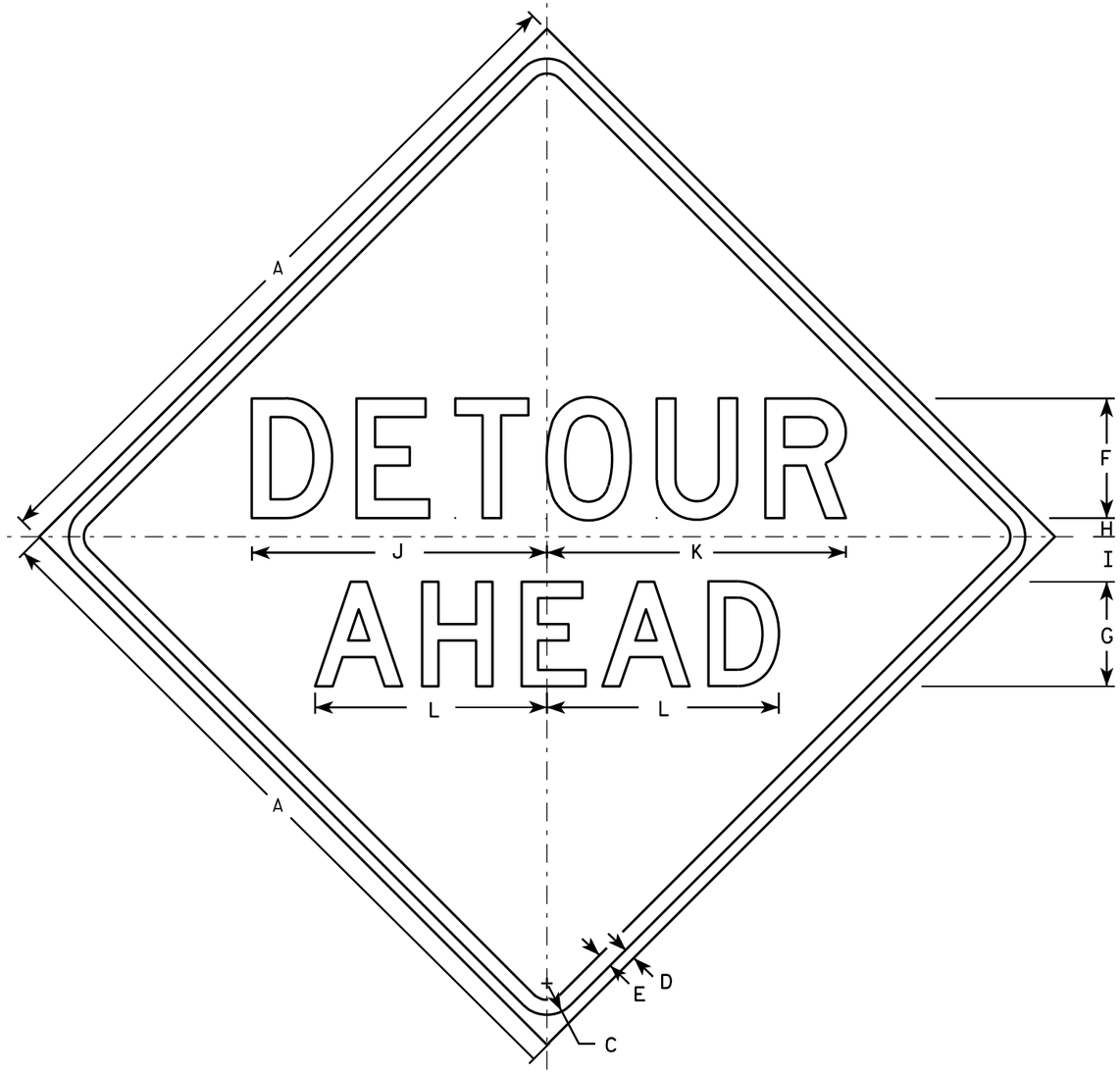


PROJECT NO:

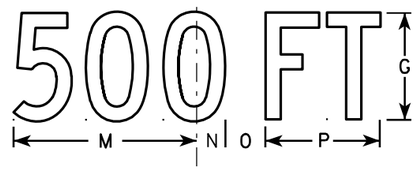
SHEET NO: E



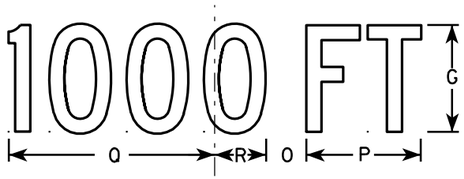
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



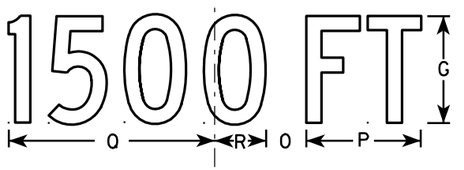

W20-2A



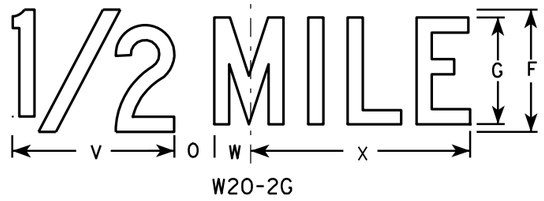

W20-2D




W20-2C




W20-2B




W20-2G




W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 5 | 1 | 2 1/4 | 14 3/4 | 15 | 11 5/8 | 9 | 1 3/8 | 1 7/8 | 5 5/8 | 10 1/8 | 2 1/2 | 1 1/8 | 4 1/2 | 3 1/2 | 8 | 1 3/4 | 10 3/4 | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

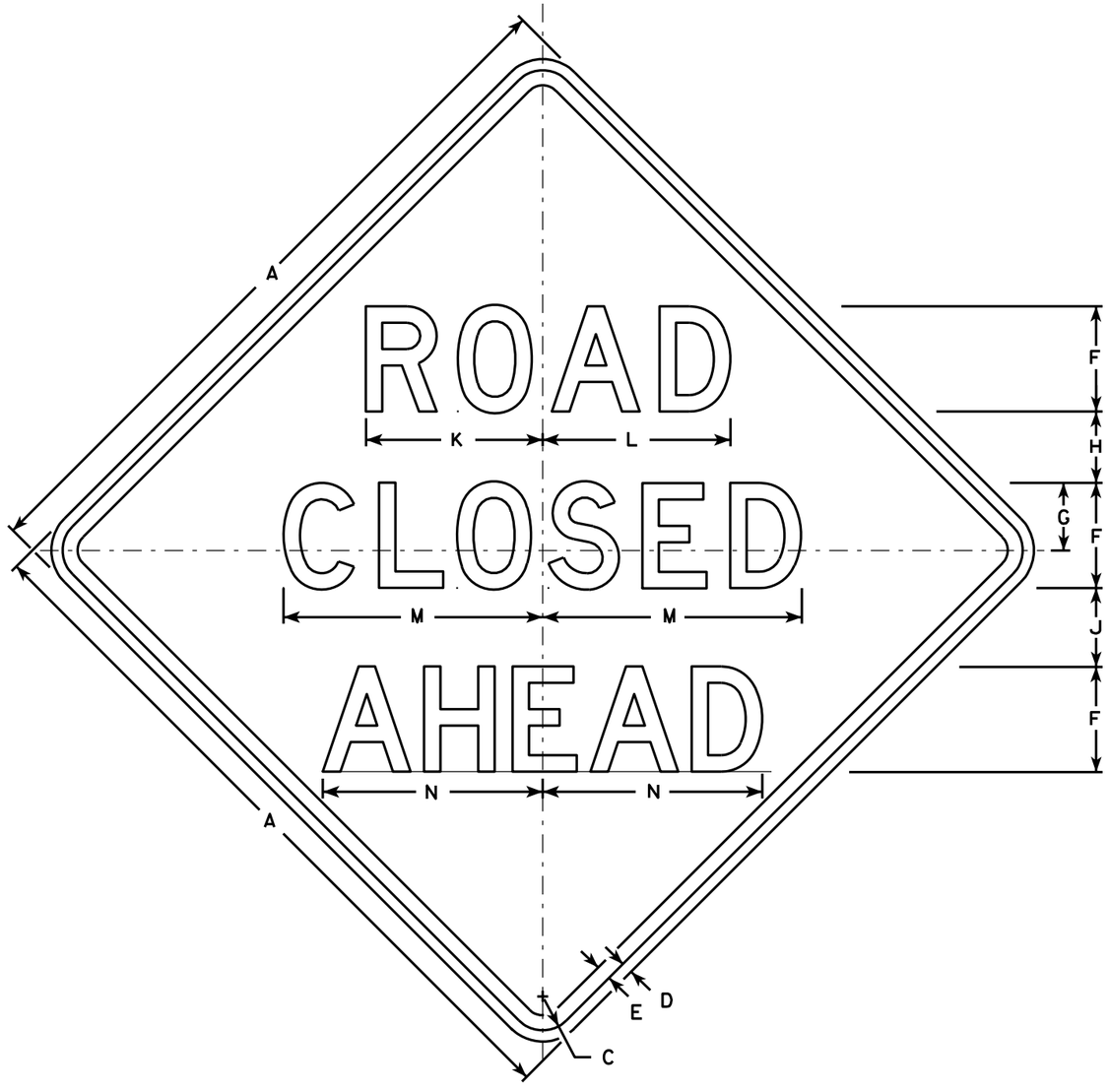
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

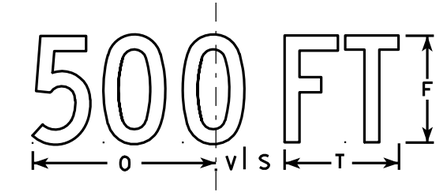
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 211 | E



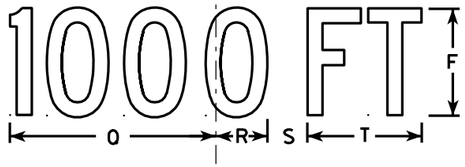
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



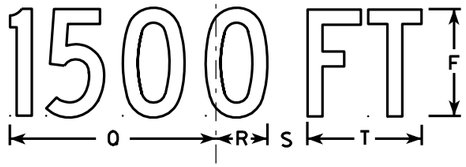

W20-3A



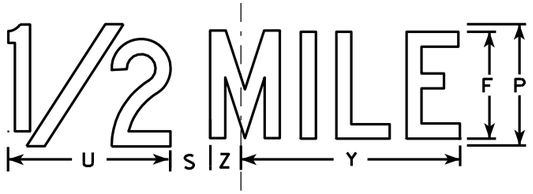

W20-3D



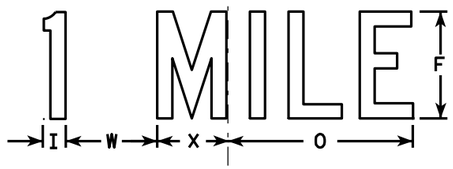

W20-3C




W20-3B




W20-3G




W20-3F

**NOTES**

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

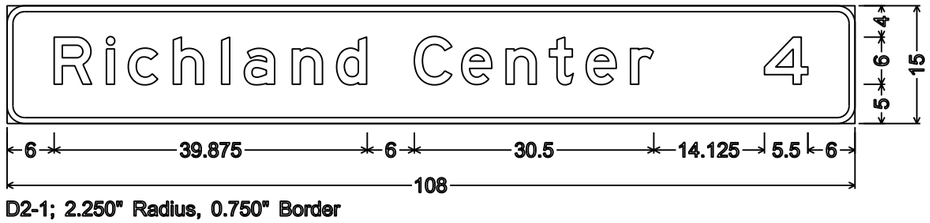
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 | 3 3/8 | 3 1/2 | 1 1/8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

STANDARD SIGN
W20-3A, B, C, D, F & G

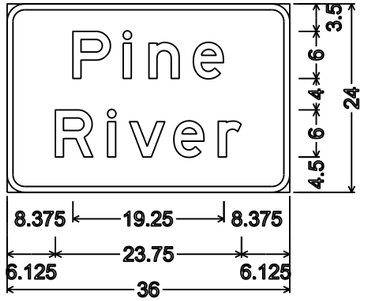
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

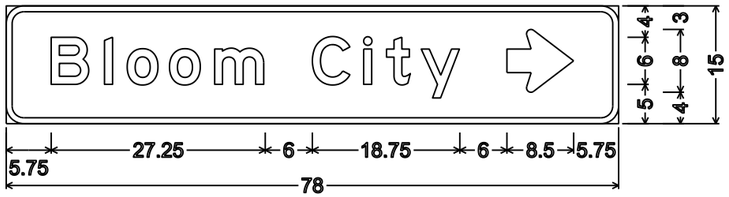
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 212 | E



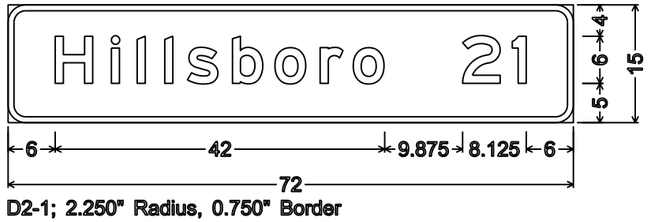

D2-1; 2.250" Radius, 0.750" Border



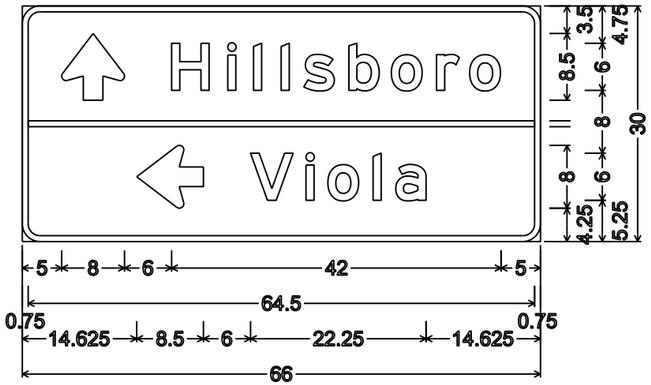

I3-1;
2.250" Radius, 0.750" Border



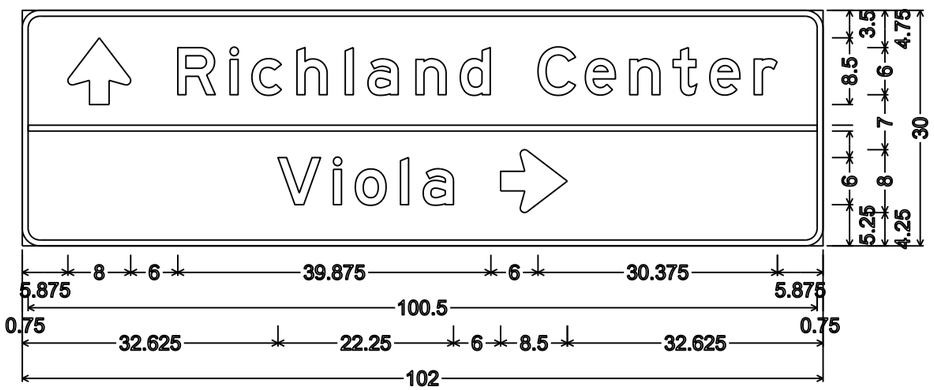

D1-1; 2.250" Radius, 0.750" Border



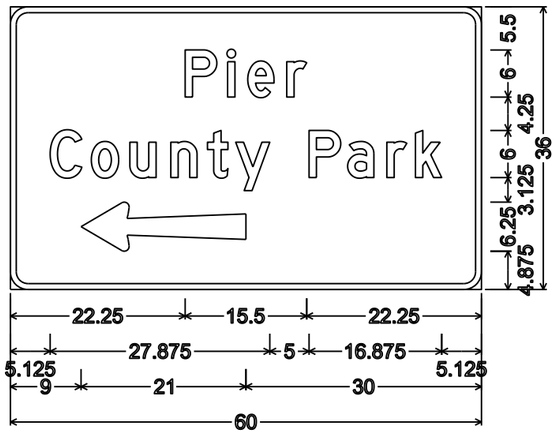

D2-1; 2.250" Radius, 0.750" Border



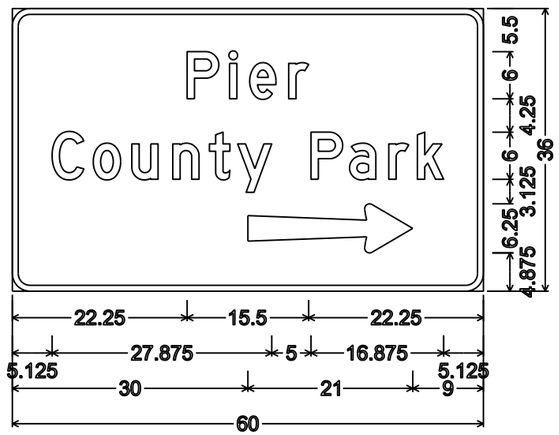

D1-2; 2.250" Radius, 0.750" Border




D1-2; 2.250" Radius, 0.750" Border




D7-68L;
2.250" Radius, 0.750" Border, White on Brown;
"Pier" D; "County" D; "Park" D




D7-68R;
2.250" Radius, 0.750" Border, White on Brown;
"Pier" D; "County" D; "Park" D

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - E except as noted

7

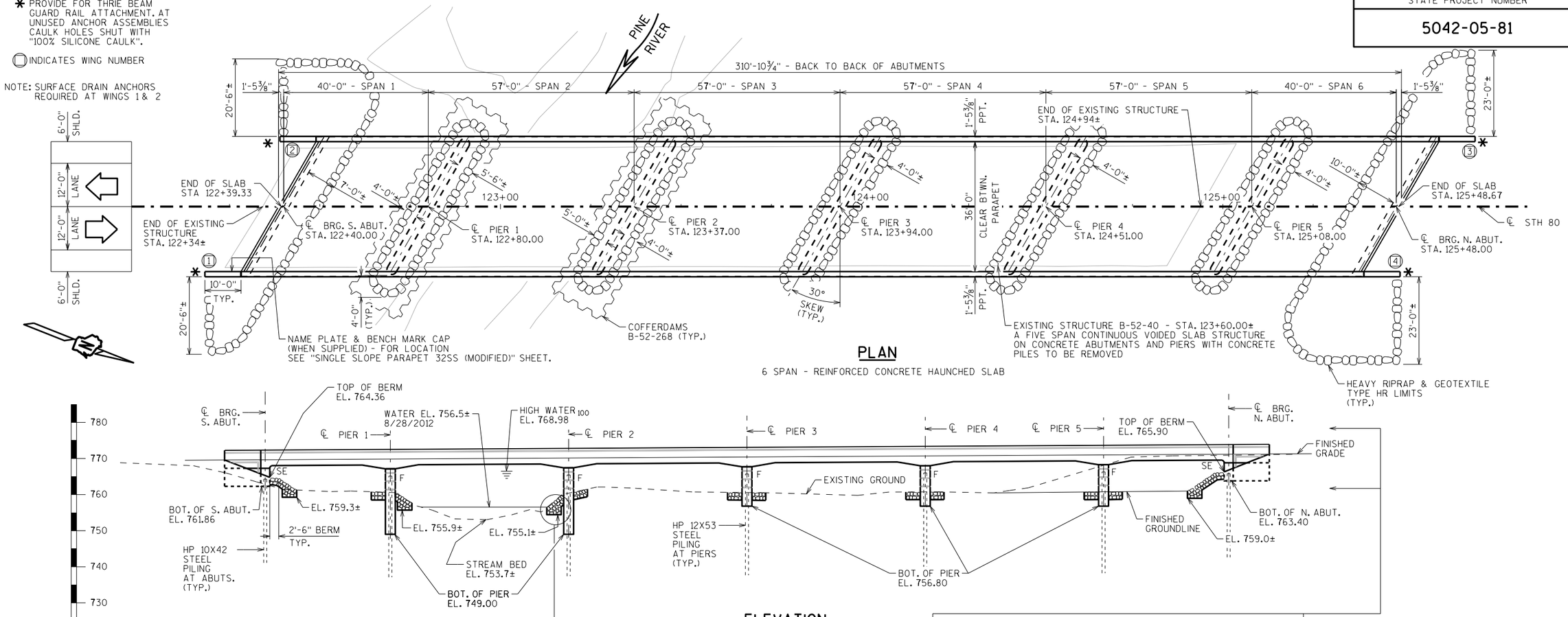
7

| STATE PROJECT NUMBER |
|---|
| 5042-05-81 |

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

(1) INDICATES WING NUMBER

NOTE: SURFACE DRAIN ANCHORS REQUIRED AT WINGS 1 & 2



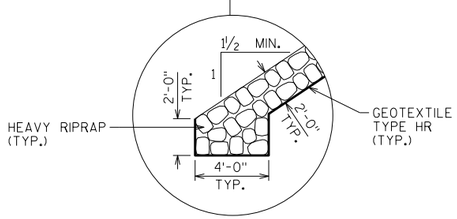

## PLAN

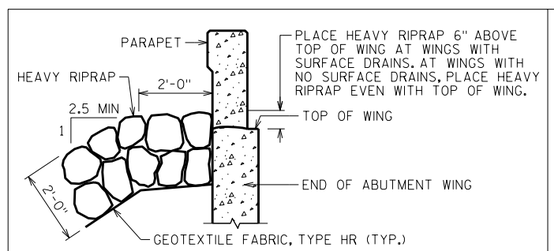
6 SPAN - REINFORCED CONCRETE HAUNCHED SLAB




## ELEVATION

NORMAL TO PINE RIVER




## TYPICAL FILL SECTION AT WING TIPS

## DESIGN DATA

**LIVE LOAD:**

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.09
OPERATING RATING FACTOR: RF = 1.41
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

**MATERIAL PROPERTIES:**

CONCRETE MASONRY:
SUPERSTRUCTURE ——— f'c = 4,000 P.S.I.
ALL OTHER ——— f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:
GRADE 60 ——— fy = 60,000 P.S.I.

## FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 50' LONG. PILE POINTS REQ'D AT NORTH ABUTMENT.

PIERS TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 55' LONG. PILE POINTS REQ'D AT PIERS 4 & 5.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

## TRAFFIC VOLUME

**STH 80**
ADT = 2,700 (2038)
R.D.S. = 40 M.P.H.

## HYDRAULIC DATA

**100 YEAR FREQUENCY**
$Q_{100}$ = 9,580 C.F.S.
VEL. = 5.3 F.P.S.
$HW_{100}$ = EL. 768.98
WATERWAY AREA = 1,820 SQ. FT.
DRAINAGE AREA = 116.8 SQ. MI.
SCOUR CRITICAL CODE = 5

**2 YEAR FREQUENCY**
$Q_2$ = 1,680 C.F.S.
$HW._2$ = EL. 763.09

## LIST OF DRAWINGS


1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. PIER 1
9. PIER 2
10. PIER 3
11. PIER 4
12. PIER 5
13. SUPERSTRUCTURE PLAN
14. SUPERSTRUCTURE SECTION
15. SUPERSTRUCTURE DETAILS 1
16. SUPERSTRUCTURE DETAILS 2
17. SINGLE SLOPE PARAPET 32SS (MODIFIED)



**STRUCTURE DESIGN CONTACTS:**
MICHAEL LARSON (608) 267-4539
LAURA SHADEWALD (608) 267-9592


| NO. | DATE | REVISION | BY |
|---|---|---|---|

WISCONSIN DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher, LRS 8/4/17
CHIEF STRUCTURES DESIGN ENGINEER — DATE

# STRUCTURE B-52-268

STH 80 OVER PINE RIVER

| COUNTY | TOWN/~~CITY/VILLAGE~~ |
|---|---|
| RICHLAND | ROCKBRIDGE |

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

| DESIGNED BY | DESIGNED CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| MJL | JLR | MJL | JLR |

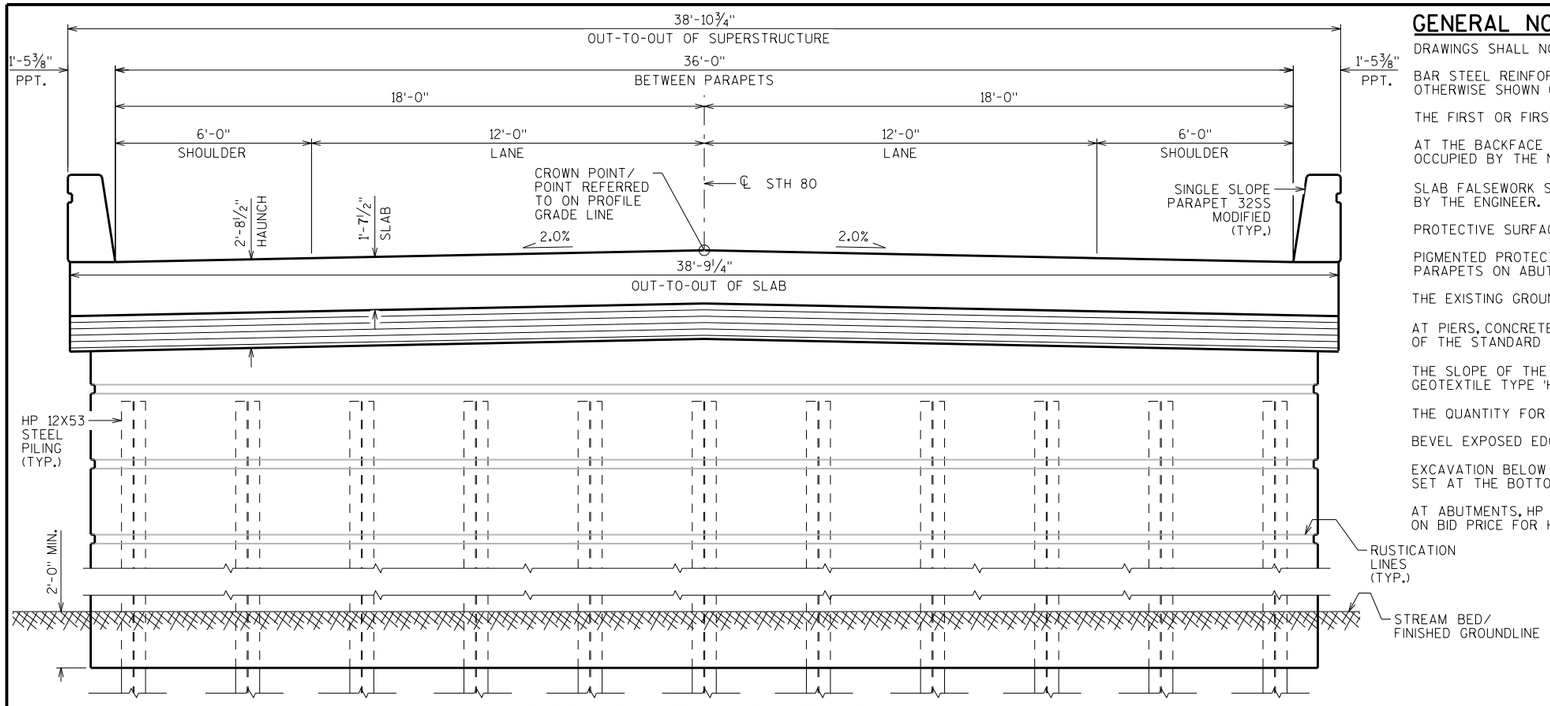
GENERAL PLAN

SHEET 1 OF 17

214

I.D. 5042-05-01A DATE: JULY 2017

SCALE = 14.00




## CROSS SECTION THRU ROADWAY

LOOKING UPSTATION

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

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

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

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF SLAB.

PIGMENTED PROTECTIVE SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON ABUTMENT WINGS.

THE EXISTING GROUND LINE AND EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

AT PIERS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

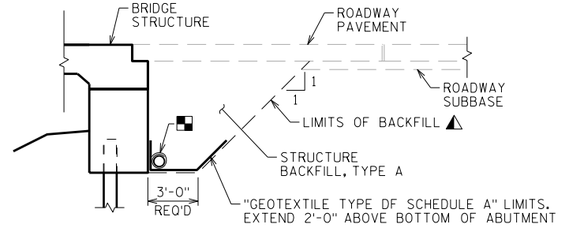
THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS AND PIERS 1 AND 2 SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE 'HR' TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT AND PIER DETAILS.

THE QUANTITY FOR BACKFILL STRUCTURE TYPE A IS CALCULATED BASED ON THE TYPICAL SECTION SHOWN ON THIS SHEET.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE SHOWN OR NOTED.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

AT ABUTMENTS, HP 12X53 STEEL PILING MAY BE USED IN LIEU OF HP 10X42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10X42 STEEL PILING.



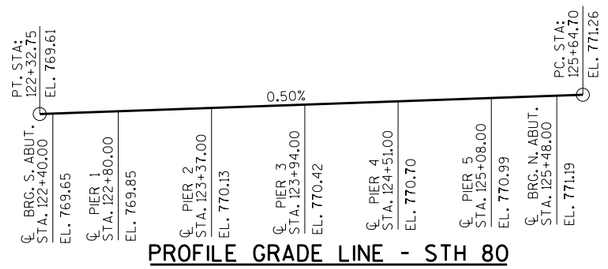

## TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

■ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

## TOTAL ESTIMATED QUANTITIES

| BID ITEM NUMBER | BID ITEMS | UNIT | SUPER. | SOUTH ABUT. | PIER 1 | PIER 2 | PIER 3 | PIER 4 | PIER 5 | NORTH ABUT. | TOTALS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 203.0600.S | REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 123+60 | LS | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | 1 |
| 206.1000 | EXCAVATION FOR STRUCTURES BRIDGES B-52-268 | LS | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | 1 |
| 206.5000 | COFFERDAMS B-52-268 | LS | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | 1 |
| 210.1500 | BACKFILL STRUCTURE TYPE A | TON | ——— | 145 | ——— | ——— | ——— | ——— | ——— | 145 | 290 |
| 502.0100 | CONCRETE MASONRY BRIDGES | CY | 899 | 40 | 78 | 79 | 47 | 48 | 49 | 40 | 1,280 |
| 502.3200 | PROTECTIVE SURFACE TREATMENT | SY | 1,252 | ——— | ——— | ——— | ——— | ——— | ——— | ——— | 1,252 |
| 502.3210 | PIGMENTED SURFACE SEALER | SY | 258 | 9 | ——— | ——— | ——— | ——— | ——— | 9 | 276 |
| 505.0400 | BAR STEEL REINFORCEMENT HS STRUCTURES | LB | ——— | 2,530 | 3,160 | 3,180 | 1,900 | 1,940 | 1,950 | 2,530 | 17,190 |
| 505.0600 | BAR STEEL REINFORCEMENT HS COATED STRUCTURES | LB | 191,780 | 1,830 | 90 | 90 | 90 | 90 | 90 | 1,800 | 195,770 |
| 516.0500 | RUBBERIZED MEMBRANE WATERPROOFING | SY | ——— | 12 | ——— | ——— | ——— | ——— | ——— | 12 | 24 |
| 550.0500 | PILE POINTS | EACH | ——— | ——— | ——— | ——— | ——— | 10 | 9 | 6 | 25 |
| 550.1100 | PILING STEEL HP 10-INCH X 42 LB | LF | ——— | 300 | ——— | ——— | ——— | ——— | ——— | 300 | 600 |
| 550.1120 | PILING STEEL HP 12-INCH X 53 LB | LF | ——— | ——— | 550 | 550 | 495 | 550 | 495 | ——— | 2,640 |
| 606.0300 | RIPRAP HEAVY | CY | ——— | 112 | 52 | 50 | 32 | 32 | 32 | 148 | 458 |
| 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | ——— | 80 | ——— | ——— | ——— | ——— | ——— | 80 | 160 |
| 614.0150 | ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD | EACH | ——— | 2 | ——— | ——— | ——— | ——— | ——— | 2 | 4 |
| 645.0111 | GEOTEXTILE TYPE DF SCHEDULE A | SY | ——— | 50 | ——— | ——— | ——— | ——— | ——— | 50 | 100 |
| 645.0120 | GEOTEXTILE TYPE HR | SY | ——— | 182 | 93 | 90 | 73 | 73 | 73 | 239 | 823 |
| | NON-BID ITEMS | | | | | | | | | | |
| | FILLER | SIZE | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ——— | ½", ¾" |




## PROFILE GRADE LINE - STH 80

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

CROSS SECTION & QUANTITIES

SHEET 2

215

STATE PROJECT NUMBER

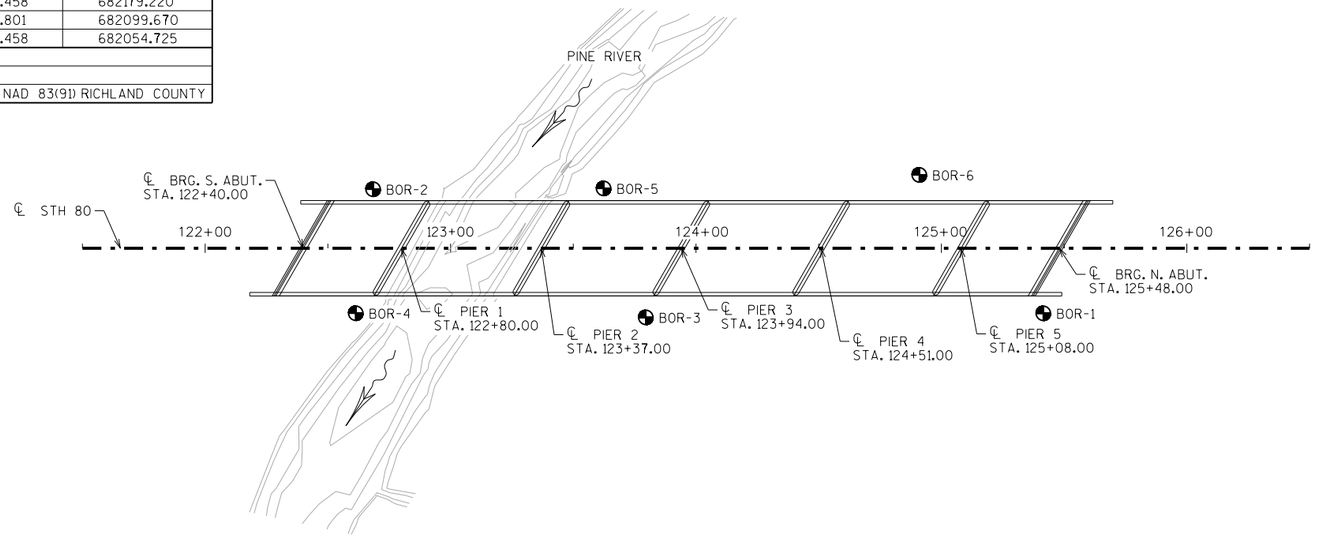
5042-05-81

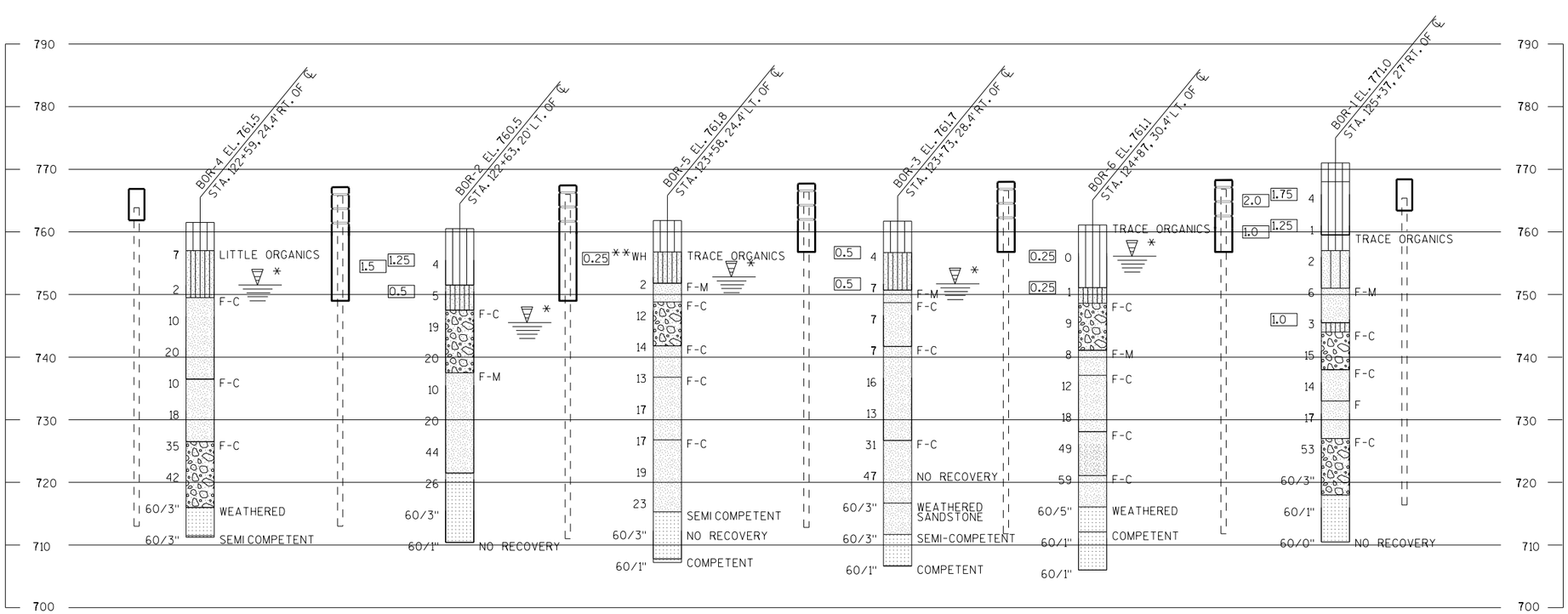
8

8

SCALE = 2.25

| BORING # | DATE COMPLETED | NORTHING (Y) | EASTING (X) |
|---|---|---|---|
| 1 | 9/20/2016 | 485622.930 | 682092.758 |
| 2 | 9/21/2016 | 485347.574 | 682128.993 |
| 3 | 10/06/2016 | 485469.392 | 682144.340 |
| 4 | 10/10/2016 | 485356.458 | 682179.220 |
| 5 | 10/11/2016 | 485436.801 | 682099.670 |
| 6 | 10/11/2016 | 485557.458 | 682054.725 |
| BORINGS COMPLETED BY: WISDOT | | | |
| REPORT COMPLETED BY: WISDOT | | | |
| ALL COORDINATES REFERENCED TO WCCS NAD 83(91) RICHLAND COUNTY | | | |




**WEIGHT OF HAMMER

* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

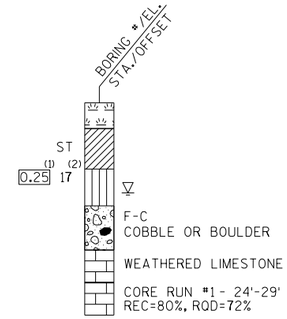
STATE PROJECT NUMBER

5042-05-81

MATERIAL SYMBOLS

| | | |
|---|---|---|
| ASPHALT | TOPSOIL | PEAT |
| CONCRETE | FILL | GRAVEL |
| SAND | CLAY | SILT |
| BOULDERS OR COBBLES | LIMESTONE | BEDROCK (UNKNOWN) |
| SHALE | SANDSTONE | IGNEOUS/ META |

LEGEND OF BORING




(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY TLP/MJL | PLANS CK'D. JLR

SUBSURFACE EXPLORATION

SHEET 3

216

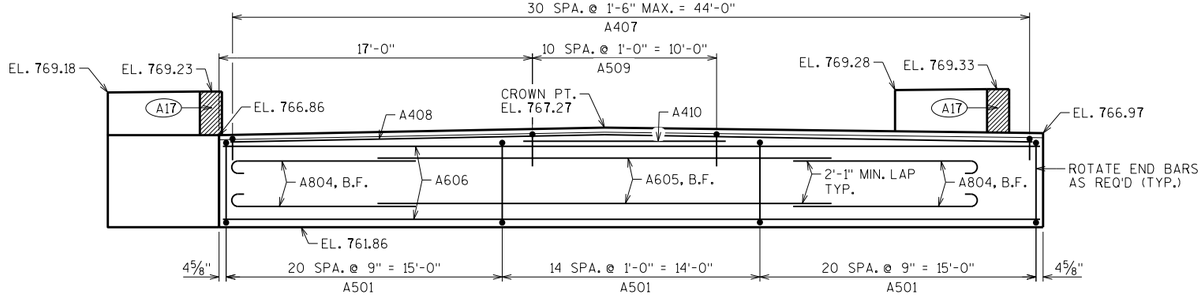
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8

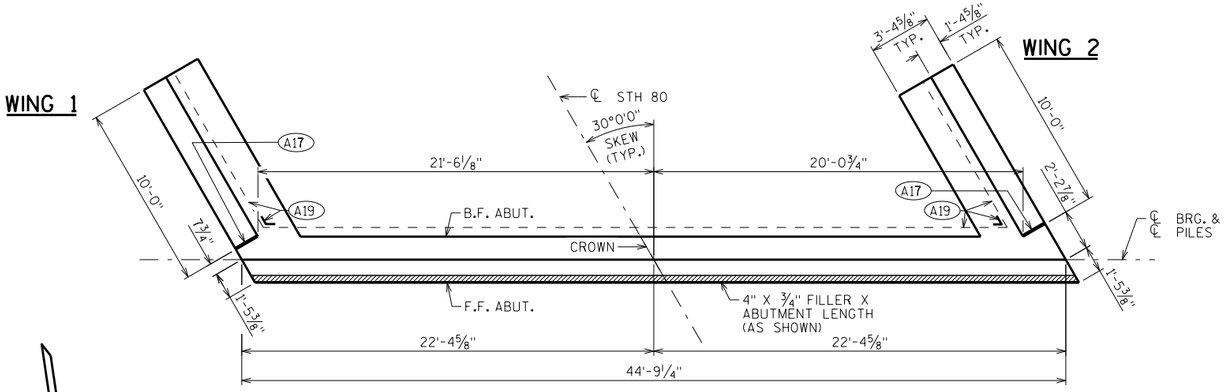
STATE PROJECT NUMBER

5042-05-81

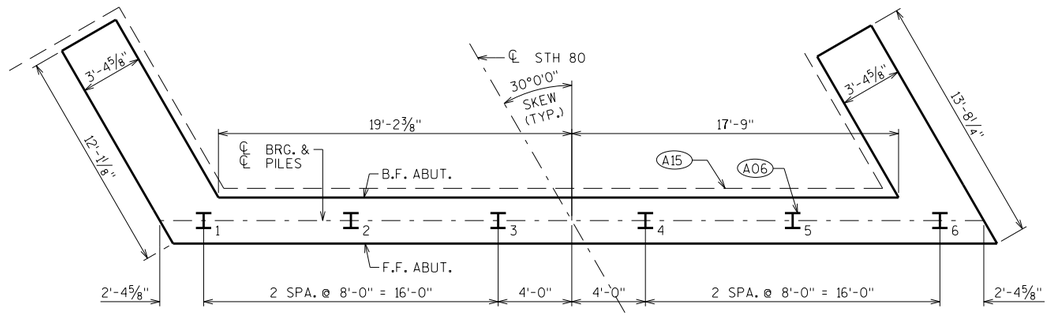



ELEVATION

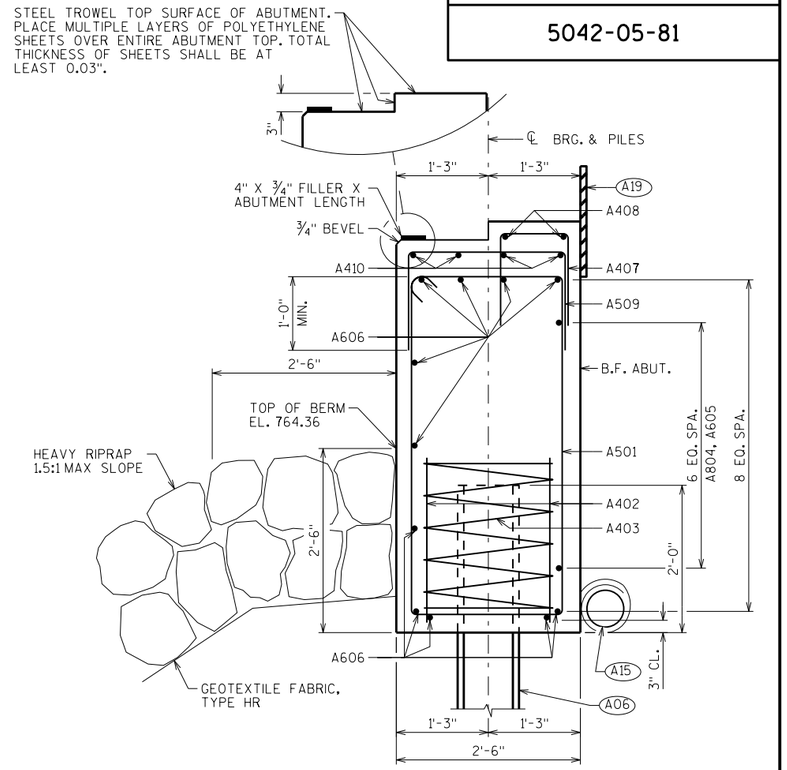
(LOOKING SOUTH)




PLAN




PILE PLAN



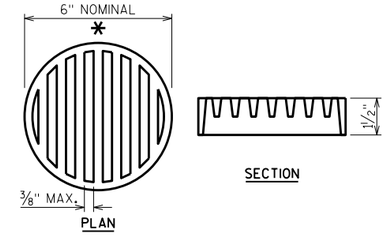

SECTION THRU BODY

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 50'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.




RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHEMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

SOUTH ABUTMENT

SHEET 4

217

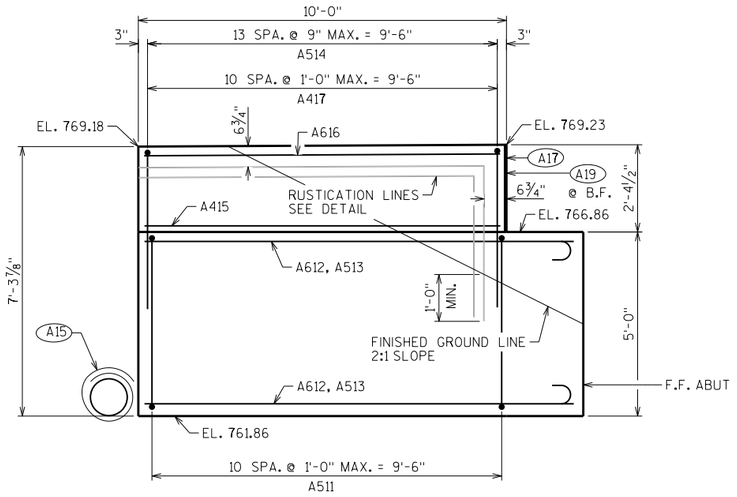
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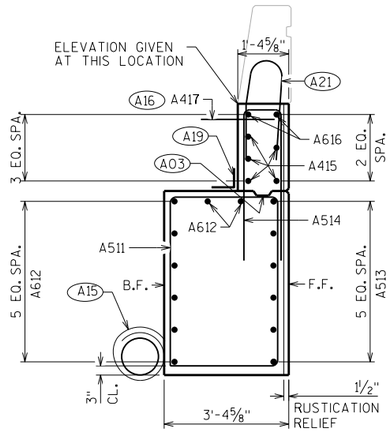
8

STATE PROJECT NUMBER

5042-05-81




WING 1 ELEVATION LOOKING AT F.F. OF WING

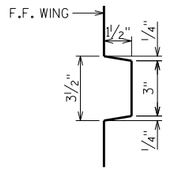



SECTION THRU WING 1

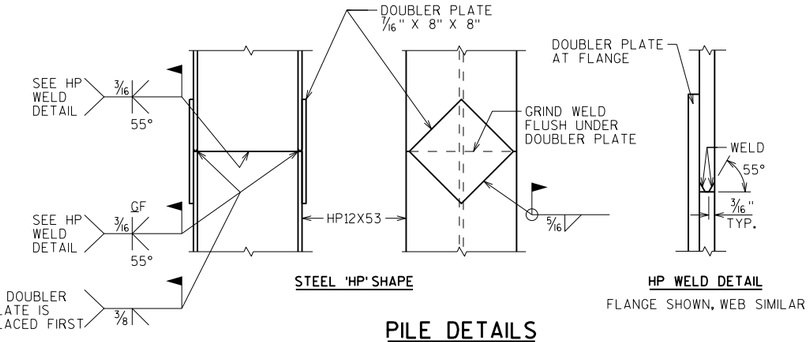
## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A501 | | 55 | 13'-8" | X | | ABUTMENT BODY - STIRRUPS |
| A402 | | 12 | 2'-3" | | | PILES - 2 PER PILE |
| A403 | | 6 | 28'-0" | X | | PILES - 1 PER PILE |
| A804 | | 14 | 10'-11" | X | | ABUTMENT BODY - HORIZ. - B.F. |
| A605 | | 7 | 24'-8" | | | ABUTMENT BODY - HORIZ. - B.F. |
| A606 | | 11 | 44'-5" | | | ABUTMENT BODY - HORIZ. - F.F. & TOP |
| A407 | | 31 | 3'-3" | X | | ABUTMENT BODY - VERT. |
| A408 | | 2 | 44'-5" | | | ABUTMENT BODY - HORIZ. |
| A509 | | 11 | 4'-11" | X | | ABUTMENT BODY - VERT. |
| A410 | | 4 | 10'-2" | | | ABUTMENT BODY - HORIZ. |
| A511 | X | 22 | 15'-8" | X | | WINGS 1 & 2 - STIRRUPS |
| A612 | X | 8 | 13'-1" | X | | WING 1 - B.F. |
| A513 | X | 6 | 11'-10 | | | WING 1 - F.F. |
| A514 | X | 28 | 9'-2" | X | | WINGS 1 & 2 - VERT. |
| A415 | X | 10 | 9'-7" | | | WINGS 1 & 2 - HORIZ. TOP |
| A616 | X | 4 | 9'-7" | | | WINGS 1 & 2 - HORIZ. TOP |
| A417 | X | 22 | 2'-0" | | | WINGS 1 & 2 - SURFACE DRAIN DOWEL |
| A618 | X | 8 | 10'-11" | | | WING 2 - B.F. |
| A519 | X | 6 | 13'-1" | | | WING 2 - F.F. |




RUSTICATION DETAIL

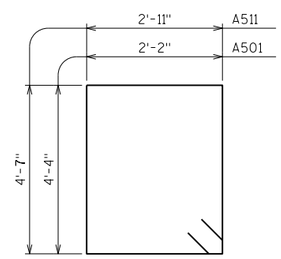



STEEL 'HP' SHAPE

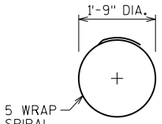
HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

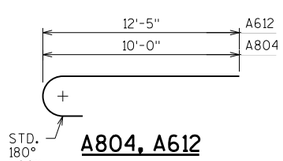
PILE DETAILS



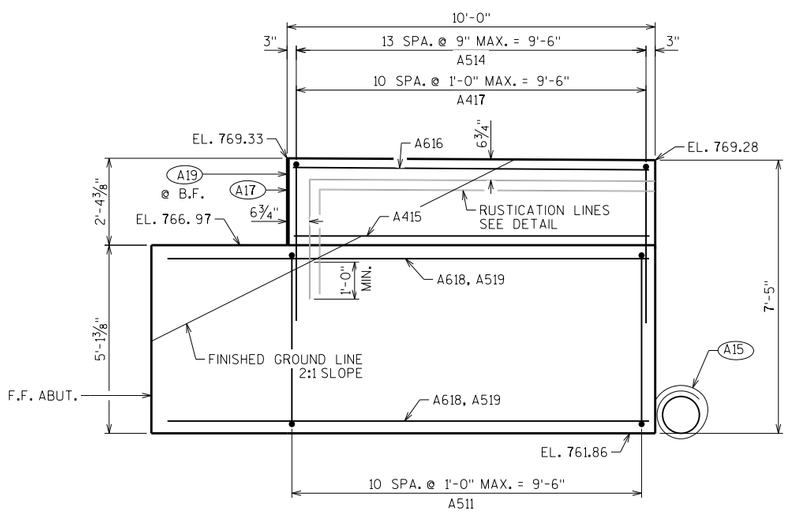

A501, A511



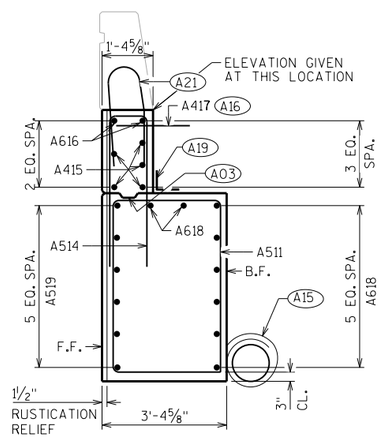

A403



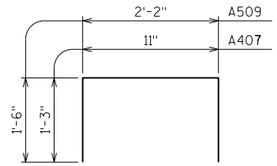

A804, A612



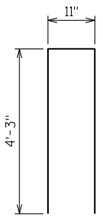

WING 2 ELEVATION LOOKING AT F.F. OF WING




SECTION THRU WING 2




A407, A509




A514

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A16) A417 BARS SPACED @ 1'-0" CTRS. EMBED 1'-0" INTO WING CONC. LOCATE 3" DOWN FROM TOP OF WING @ BACKFACE TO 6" DOWN @ WING TIP.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSION SEE PARAPET SHT.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

SOUTH ABUTMENT DETAILS

SHEET 5

218

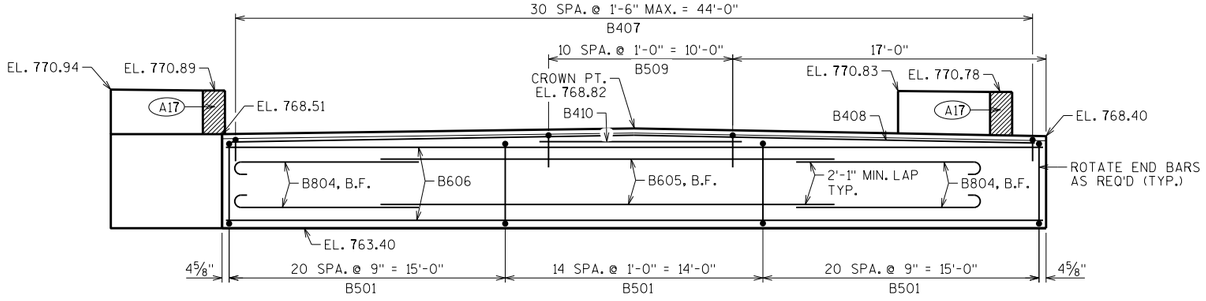
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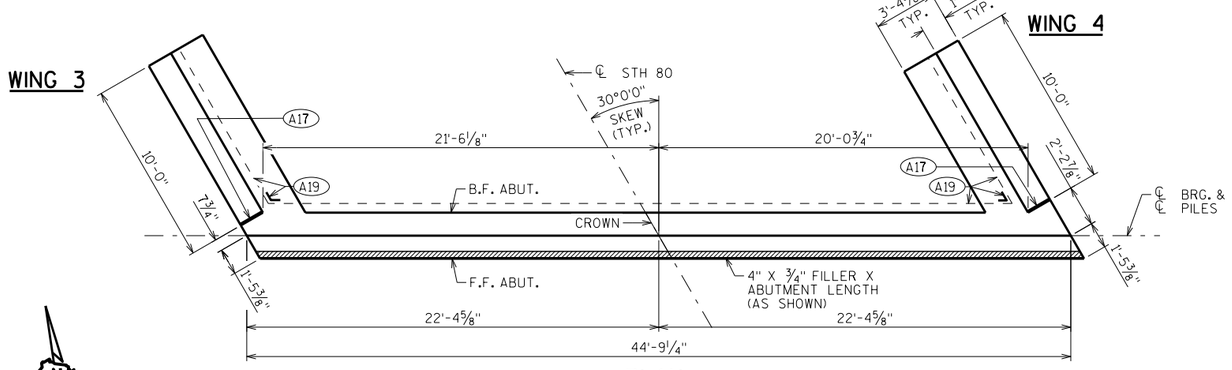
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STATE PROJECT NUMBER

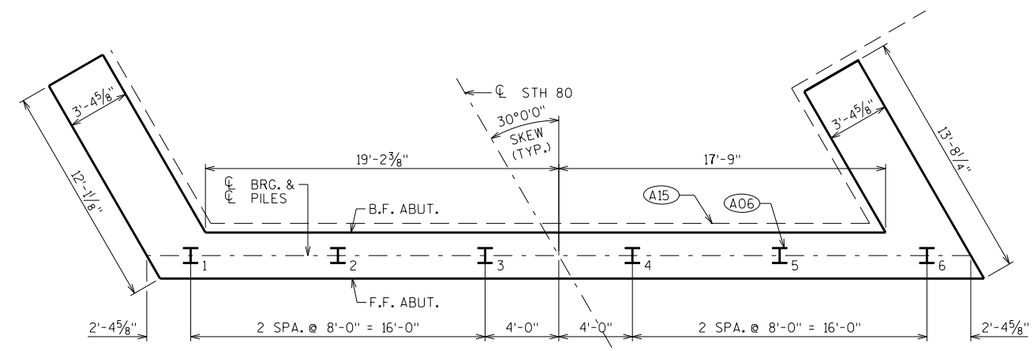
5042-05-81



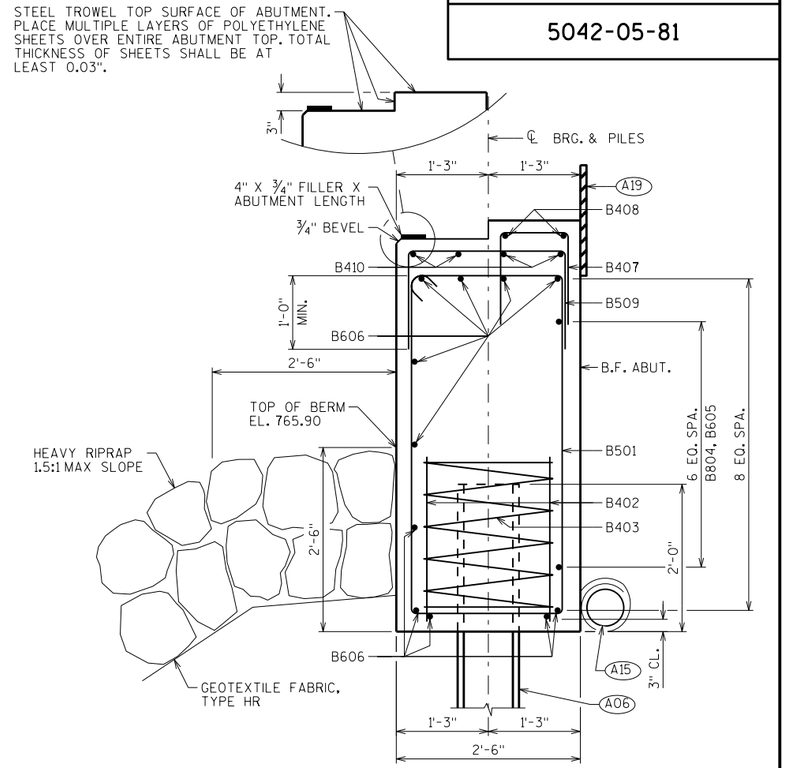

## ELEVATION
(LOOKING NORTH)




## PLAN




## PILE PLAN



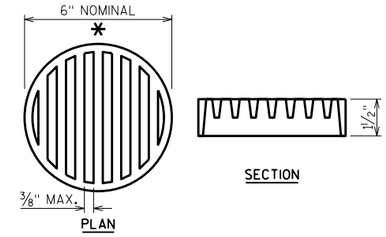

## SECTION THRU BODY

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 50'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE. PILE POINTS REQ'D.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.




PLAN

SECTION

## RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHEMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

NORTH ABUTMENT

SHEET 6

219

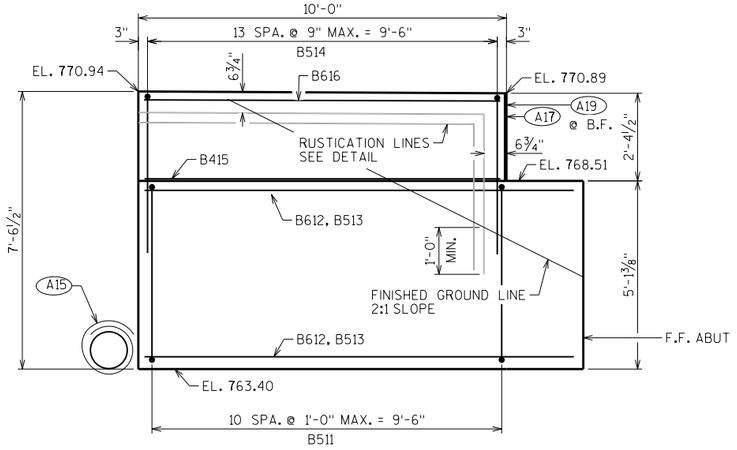
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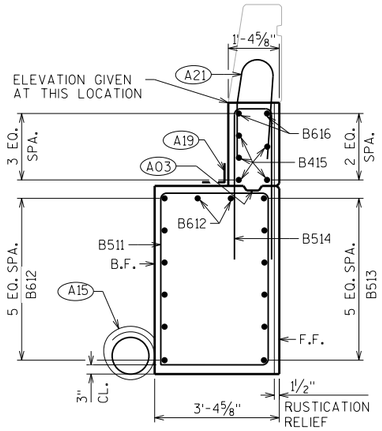
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STATE PROJECT NUMBER

5042-05-81




WING 3 ELEVATION LOOKING AT F.F. OF WING

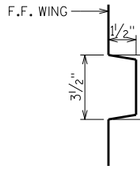



SECTION THRU WING 3

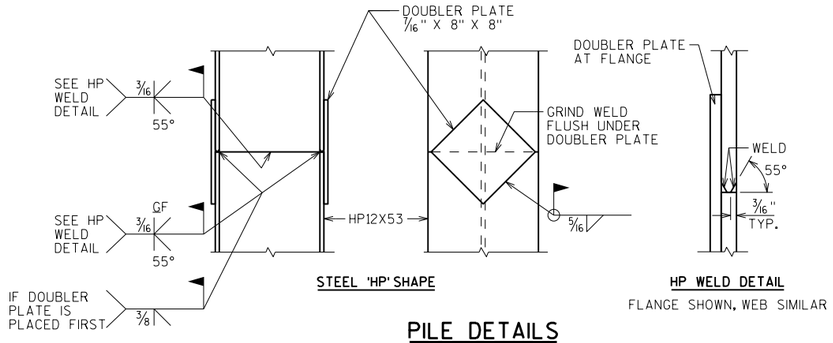
## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| B501 | | 55 | 13'-8" | X | | ABUTMENT BODY - STIRRUPS |
| B402 | | 12 | 2'-3" | | | PILES - 2 PER PILE |
| B403 | | 6 | 28'-0" | X | | PILES - 1 PER PILE |
| B804 | | 14 | 10'-11" | X | | ABUTMENT BODY - HORIZ. - B.F. |
| B605 | | 7 | 24'-8" | | | ABUTMENT BODY - HORIZ. - B.F. |
| B606 | | 11 | 44'-5" | | | ABUTMENT BODY - HORIZ. - F.F. & TOP |
| B407 | | 31 | 3'-3" | X | | ABUTMENT BODY - VERT. |
| B408 | | 2 | 44'-5" | | | ABUTMENT BODY - HORIZ. |
| B509 | | 11 | 4'-11" | X | | ABUTMENT BODY - VERT. |
| B410 | | 4 | 10'-2" | | | ABUTMENT BODY - HORIZ. |
| B511 | X | 22 | 15'-8" | X | | WINGS 3&4 - STIRRUPS |
| B612 | X | 8 | 13'-1" | X | | WING 3 - B.F. |
| B513 | X | 6 | 11'-10 | | | WING 3 - F.F. |
| B514 | X | 28 | 9'-2" | X | | WINGS 3&4 - VERT. |
| B415 | X | 10 | 9'-7" | | | WINGS 3&4 - HORIZ. TOP |
| B616 | X | 4 | 9'-7" | | | WINGS 3&4 - HORIZ. TOP |
| B617 | X | 8 | 10'-11" | | | WING 4 - B.F. |
| B518 | X | 6 | 13'-1" | | | WING 4 - F.F. |



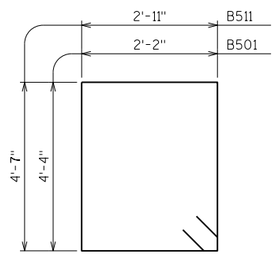

RUSTICATION DETAIL



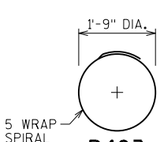

STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

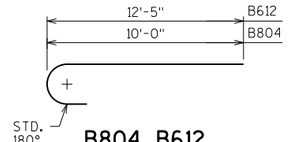
PILE DETAILS



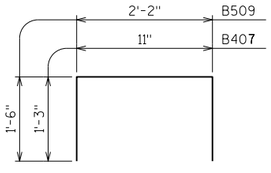

B501, B511



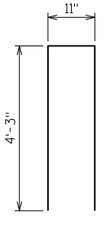

B403



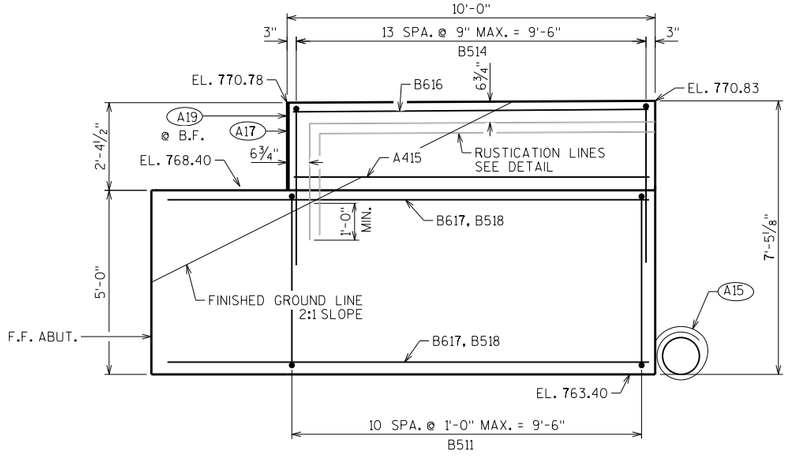

B804, B612



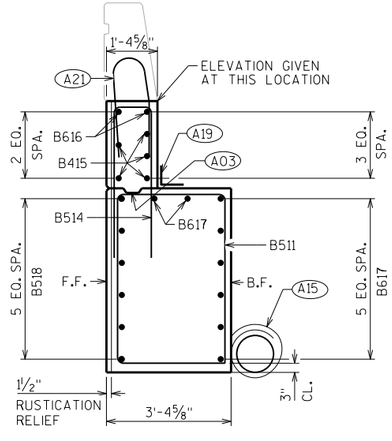

B407, B509




B514




WING 4 ELEVATION LOOKING AT F.F. OF WING




SECTION THRU WING 4

A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

A21 FOR PPT. BARS & DIMENSION SEE PARAPET SHT.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

NORTH ABUTMENT DETAILS

SHEET 7

220

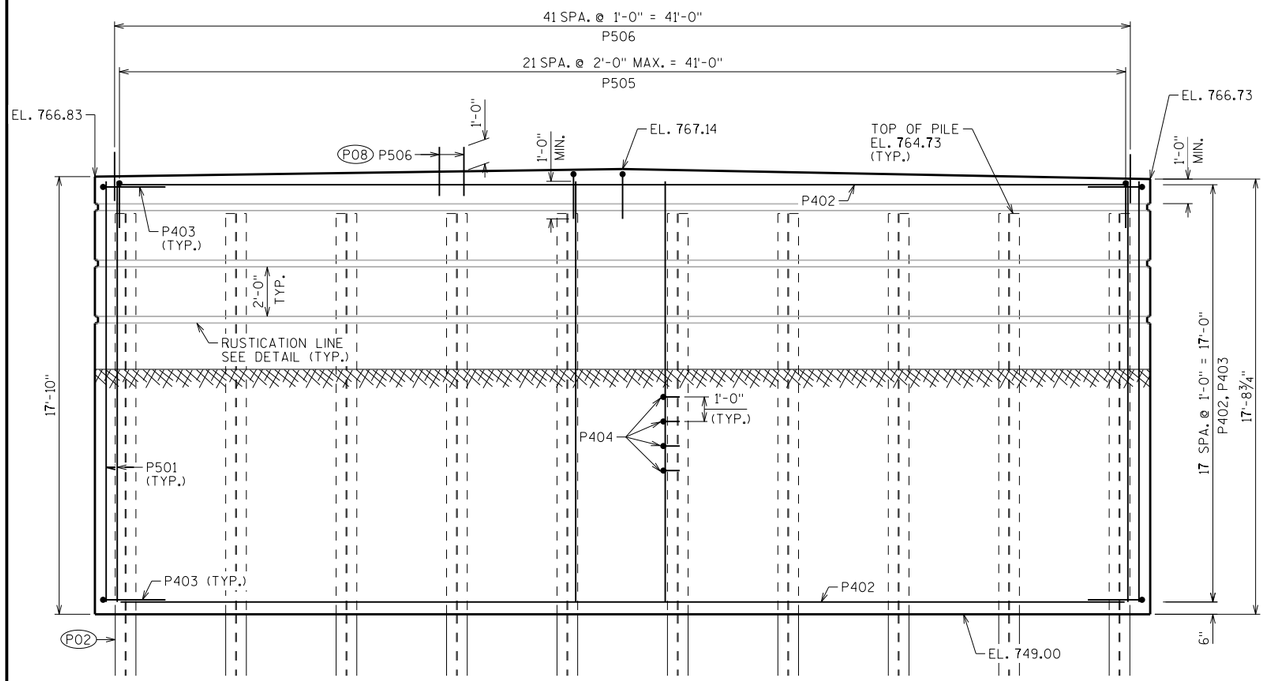
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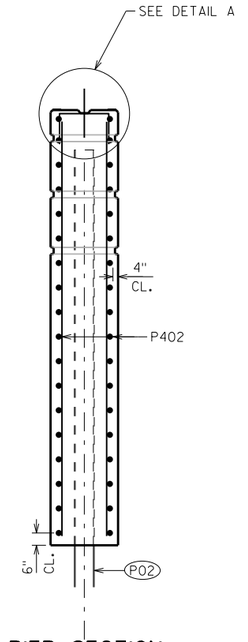
STATE PROJECT NUMBER

5042-05-81




ELEVATION

(LOOKING NORTH)

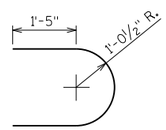



PIER SECTION

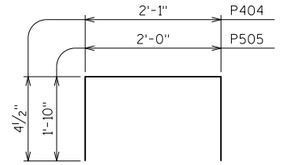
## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

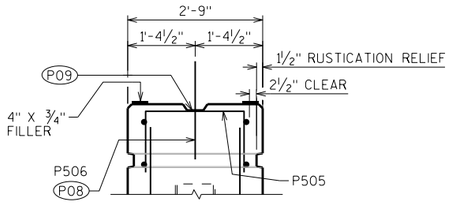
| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| P501 | | 90 | 17'-0" | | | PIER - VERTICAL |
| P402 | | 36 | 40'-3" | | | PIER - HORIZONTAL |
| P403 | | 36 | 6'-2" | X | | PIER - HORIZONTAL - ENDS |
| P404 | | 180 | 2'-8" | X | | PIER - HORIZONTAL |
| P505 | | 22 | 5'-5" | X | | PIER - VERTICAL |
| (P08) P506 | X | 42 | 2'-0" | | | PIER - VERTICAL - DOWEL BARS |



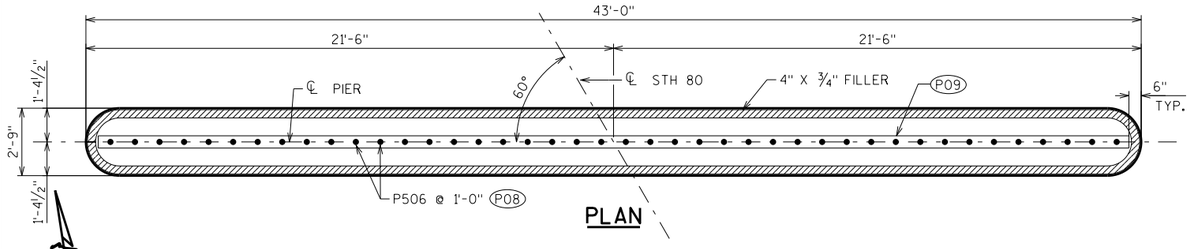

P403



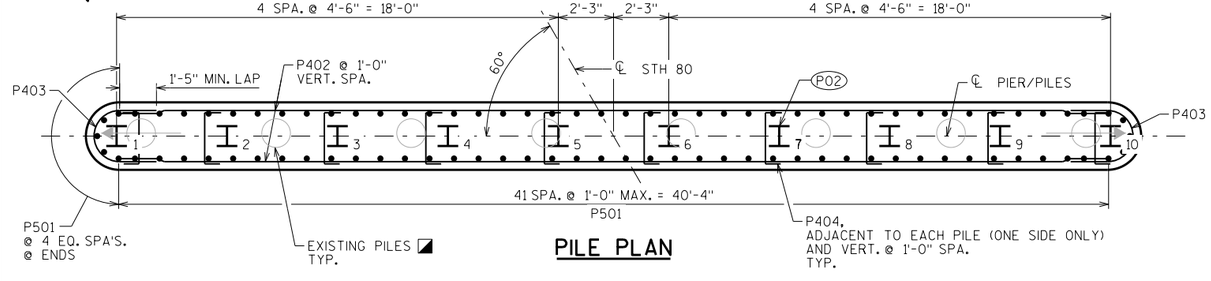

P404, P505



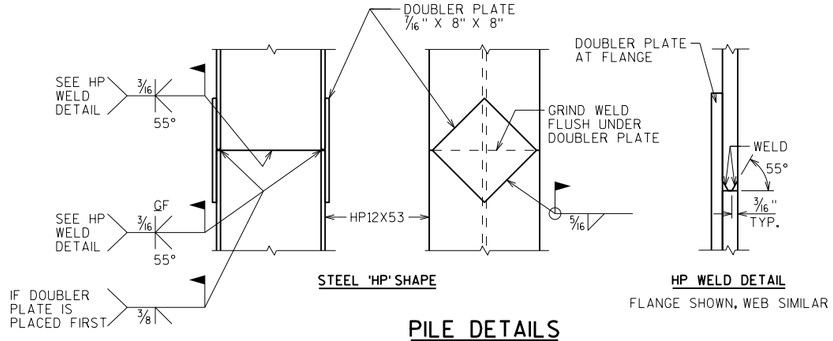

DETAIL A




PLAN




PILE PLAN

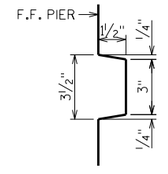



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS




RUSTICATION DETAIL

(P02) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 55'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P08) BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONST. JOINT-FORMED BY BEVELED 2 x 6.

◪ NOTE: PROPOSED PILES MAY BE MOVED UP TO 1'-0" ALONG THE ℄ PIER TO AVOID CONFLICTS WITH EXISTING PILES. IF GREATER ADJUSTMENT IS NECESSARY, CONTACT THE ENGINEER FOR ADDITIONAL INSTRUCTIONS BEFORE PROCEEDING.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY | MJL | PLANS CK'D. JLR

PIER 1

SHEET 8

221

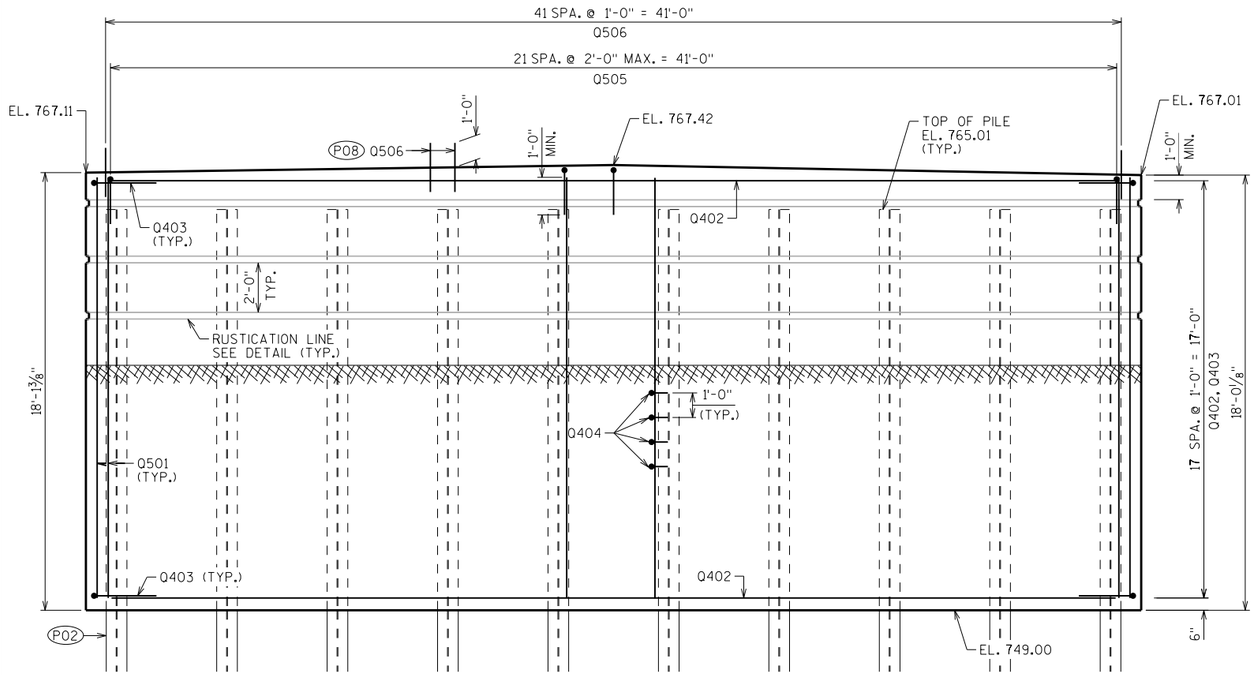
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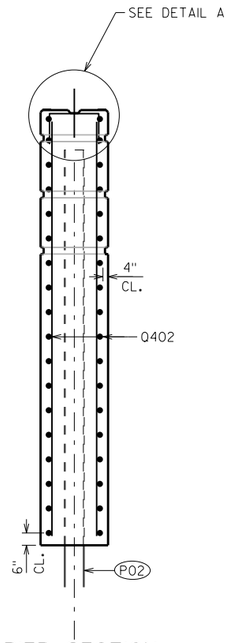
STATE PROJECT NUMBER

5042-05-81




ELEVATION

LOOKING NORTH

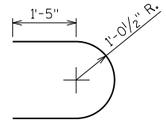



PIER SECTION

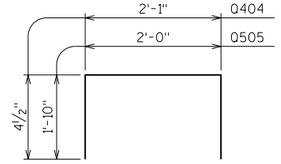
## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

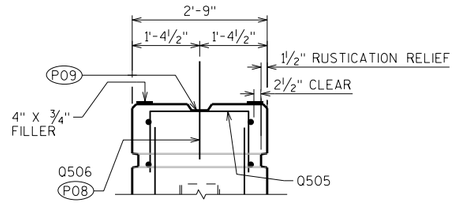
| | BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|---|
| | Q501 | | 90 | 17'-3" | | | PIER - VERTICAL |
| | Q402 | | 36 | 40'-3" | | | PIER - HORIZONTAL |
| | Q403 | | 36 | 6'-2" | X | | PIER - HORIZONTAL - ENDS |
| | Q404 | | 180 | 2'-8" | X | | PIER - HORIZONTAL |
| | Q505 | | 22 | 5'-5" | X | | PIER - VERTICAL |
| P08 | Q506 | X | 42 | 2'-0" | | | PIER - VERTICAL - DOWEL BARS |



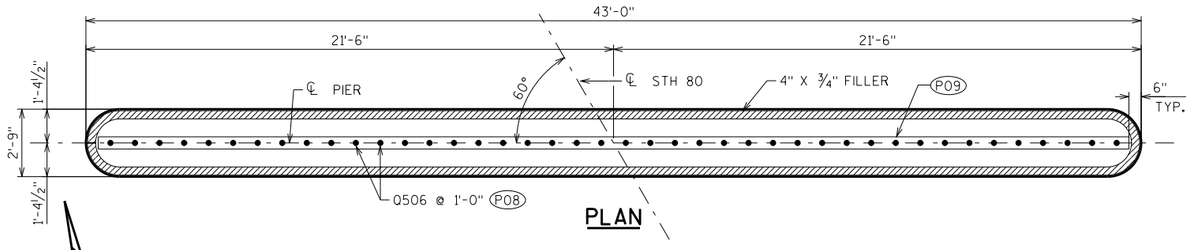

Q403



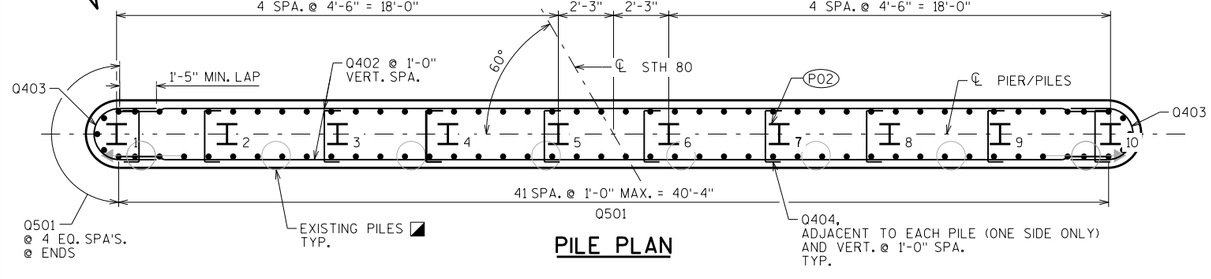

Q404, Q505



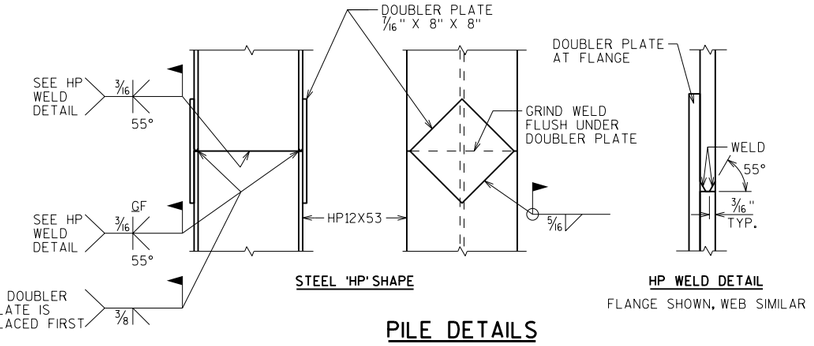

DETAIL A




PLAN




PILE PLAN

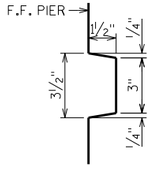



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS




RUSTICATION DETAIL

P02 SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 55'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

P08 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

P09 KEYED CONST. JOINT-FORMED BY BEVELED 2 x 6.

◪ NOTE: PROPOSED PILES MAY BE MOVED UP TO 1'-0" ALONG THE ℄ PIER TO AVOID CONFLICTS WITH EXISTING PILES. IF GREATER ADJUSTMENT IS NECESSARY, CONTACT THE ENGINEER FOR ADDITIONAL INSTRUCTIONS BEFORE PROCEEDING.

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

PIER 2

SHEET 9

222

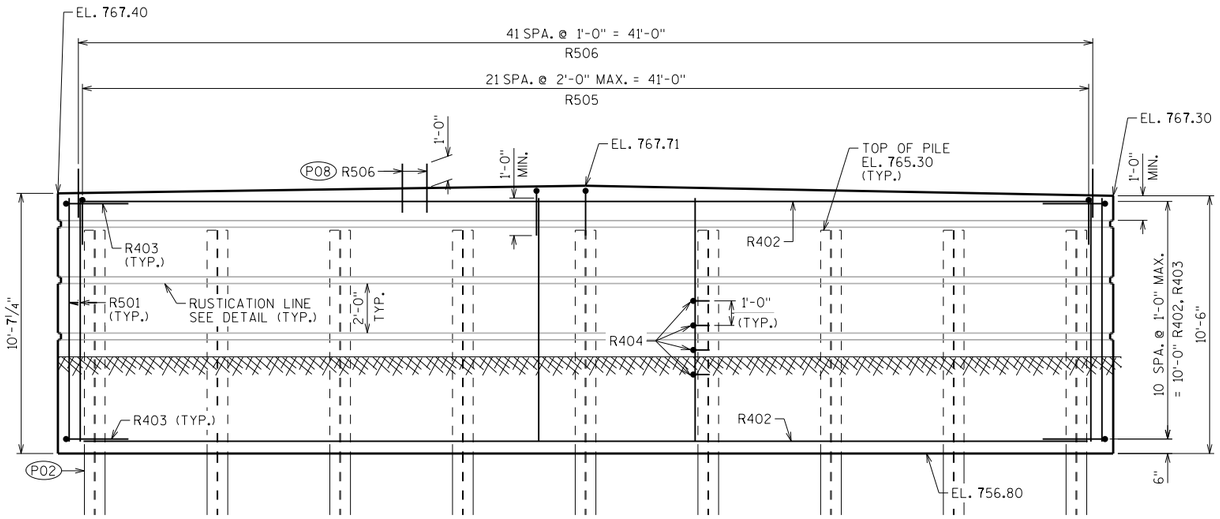
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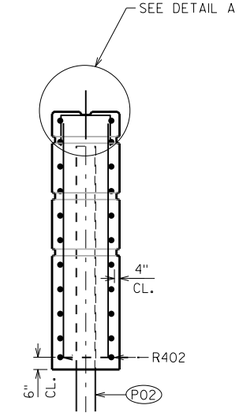
STATE PROJECT NUMBER

5042-05-81




ELEVATION

LOOKING NORTH

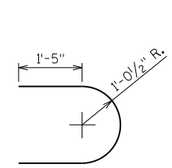



PIER SECTION

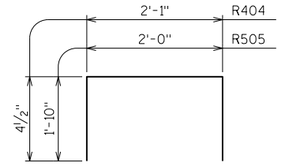
## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

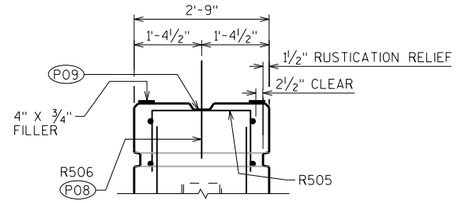
| | BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|---|
| | R501 | | 90 | 9'-9" | | | PIER - VERTICAL |
| | R402 | | 22 | 40'-3" | | | PIER - HORIZONTAL |
| | R403 | | 22 | 6'-2" | X | | PIER - HORIZONTAL - ENDS |
| | R404 | | 99 | 2'-8" | X | | PIER - HORIZONTAL |
| | R505 | | 22 | 5'-5" | X | | PIER - VERTICAL |
| P08 | R506 | X | 42 | 2'-0" | | | PIER - VERTICAL - DOWEL BARS |



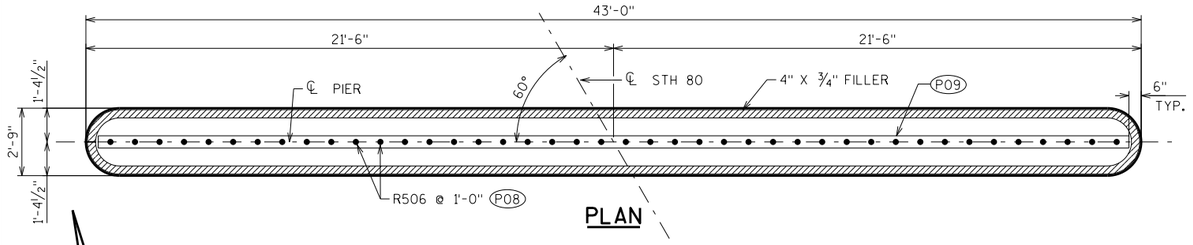

R403



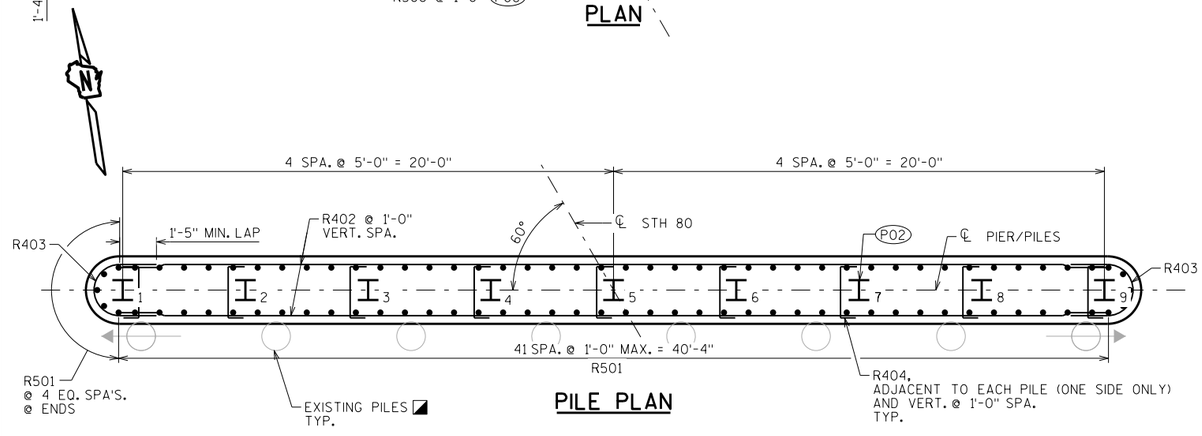

R404, R505



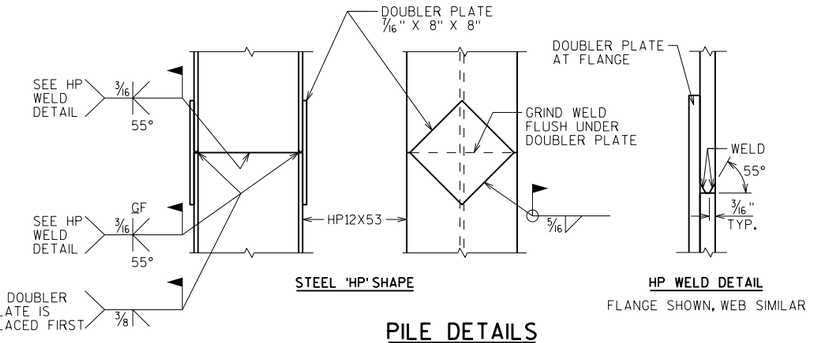

DETAIL A




PLAN




PILE PLAN

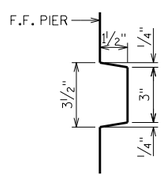



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS




RUSTICATION DETAIL

(P02) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 55'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P08) BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONST. JOINT-FORMED BY BEVELED 2 x 6.

◪ NOTE: PROPOSED PILES MAY BE MOVED UP TO 1'-0" ALONG THE ℄ PIER TO AVOID CONFLICTS WITH EXISTING PILES. IF GREATER ADJUSTMENT IS NECESSARY, CONTACT THE ENGINEER FOR ADDITIONAL INSTRUCTIONS BEFORE PROCEEDING.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

PIER 3

SHEET 10

223

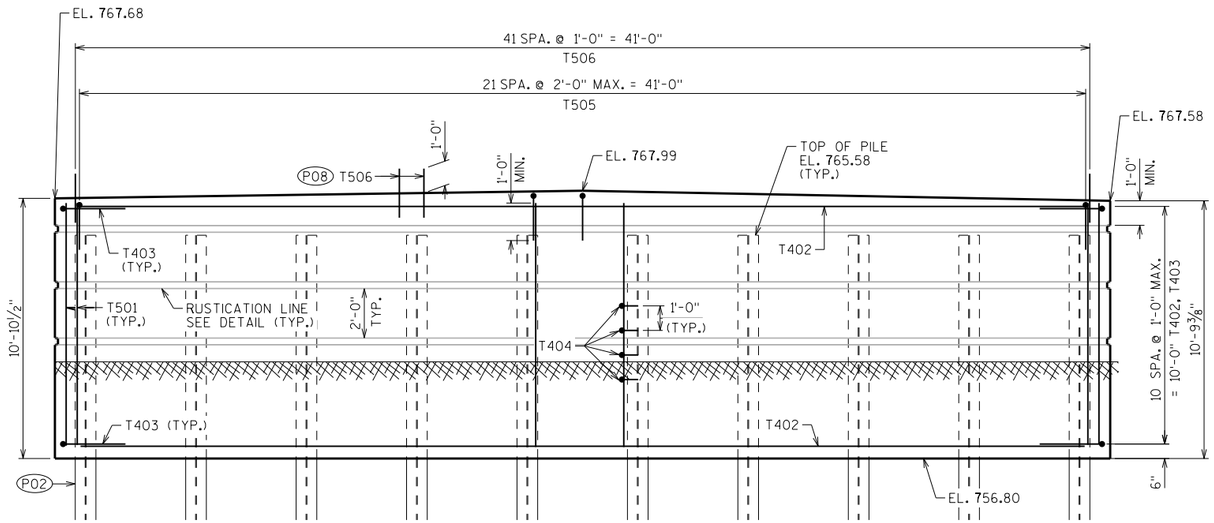
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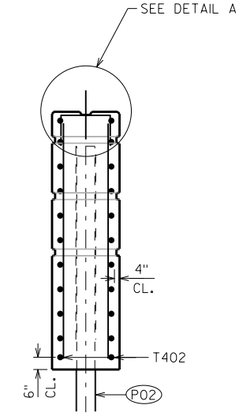
STATE PROJECT NUMBER

5042-05-81




ELEVATION

LOOKING NORTH

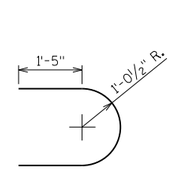



PIER SECTION

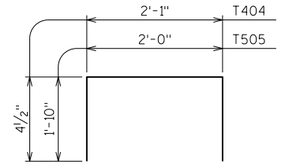
## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

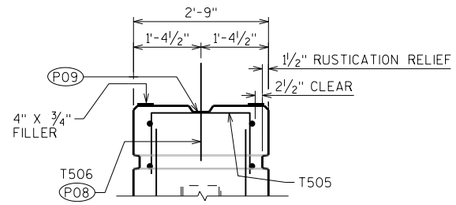
| | BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|---|
| | T501 | | 90 | 10'-0" | | | PIER - VERTICAL |
| | T402 | | 22 | 40'-3" | | | PIER - HORIZONTAL |
| | T403 | | 22 | 6'-2" | X | | PIER - HORIZONTAL - ENDS |
| | T404 | | 110 | 2'-8" | X | | PIER - HORIZONTAL |
| | T505 | | 22 | 5'-5" | X | | PIER - VERTICAL |
| P08 | T506 | X | 42 | 2'-0" | | | PIER - VERTICAL - DOWEL BARS |



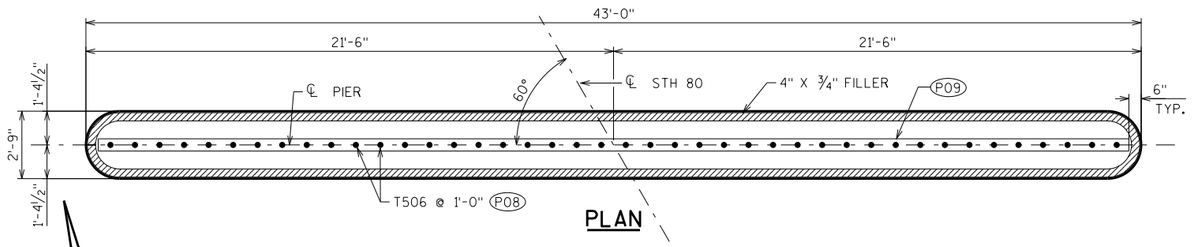

T403



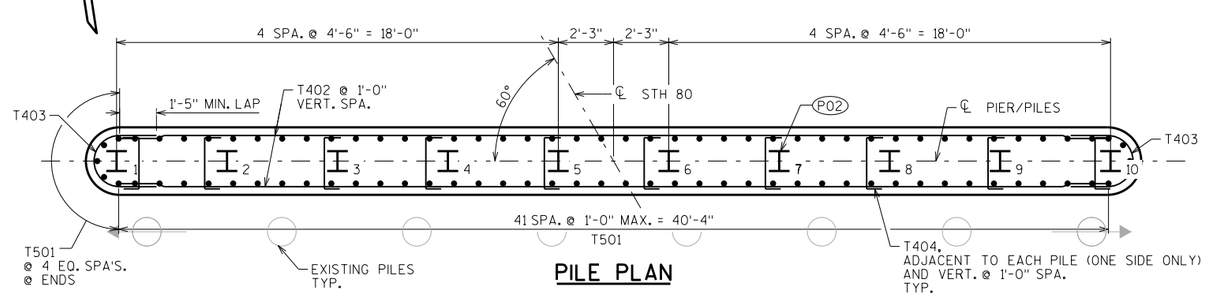

T404, T505



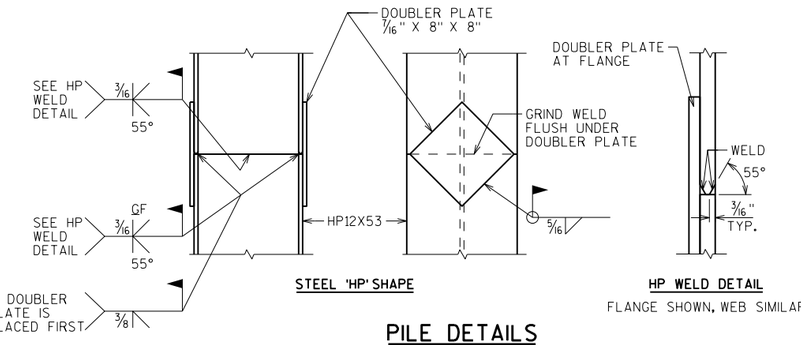

DETAIL A




PLAN




PILE PLAN

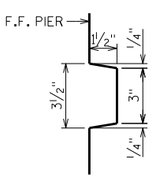



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS




RUSTICATION DETAIL

P02 SUPPORT PIER ON HP 12 x 53 STEEL PILING. ESTIMATED 55'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. PILE POINTS REQ'D.

P08 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

P09 KEYED CONST. JOINT-FORMED BY BEVELED 2 x 6.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

PIER 4

SHEET 11

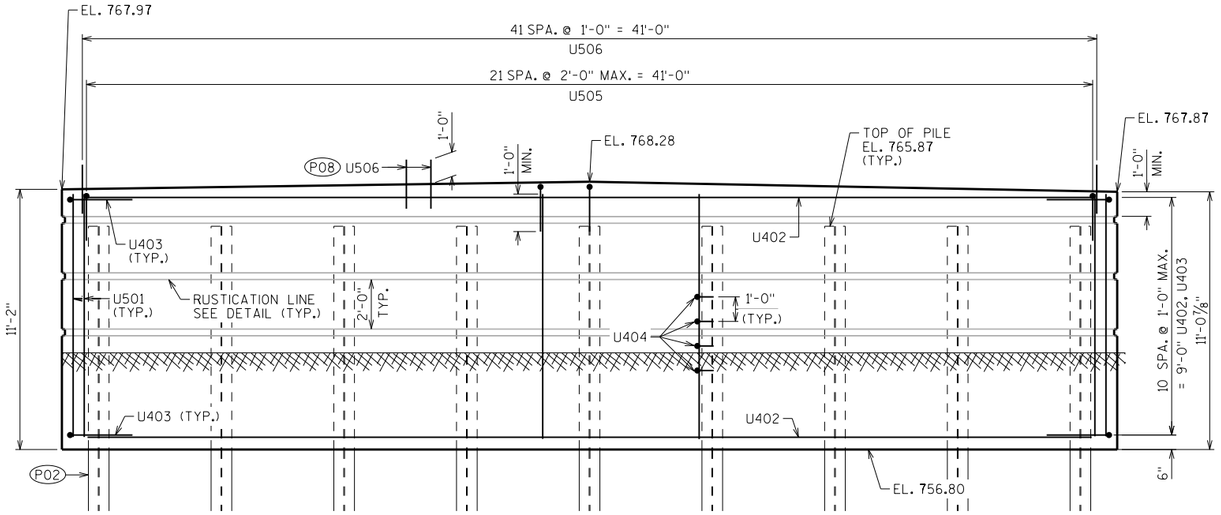
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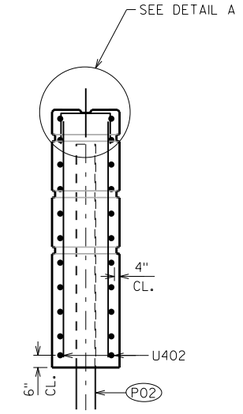
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| STATE PROJECT NUMBER |
|---|
| 5042-05-81 |




ELEVATION
LOOKING NORTH

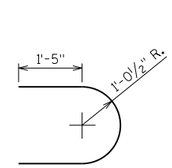



PIER SECTION

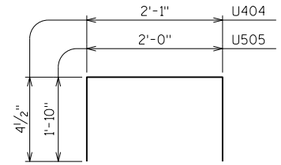
## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

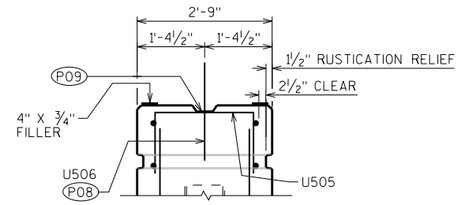
| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| U501 | | 90 | 10'-4" | | | PIER - VERTICAL |
| U402 | | 22 | 40'-3" | | | PIER - HORIZONTAL |
| U403 | | 22 | 6'-2" | X | | PIER - HORIZONTAL - ENDS |
| U404 | | 99 | 2'-8" | X | | PIER - HORIZONTAL |
| U505 | | 22 | 5'-5" | X | | PIER - VERTICAL |
| P08 U506 | X | 42 | 2'-0" | | | PIER - VERTICAL - DOWEL BARS |



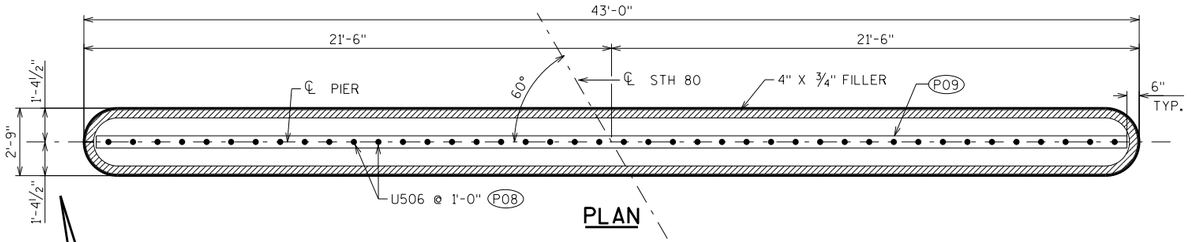

U403



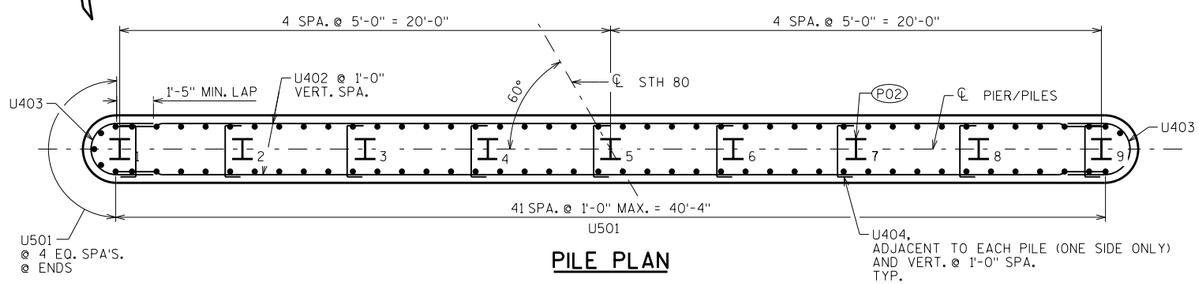

U404, U505



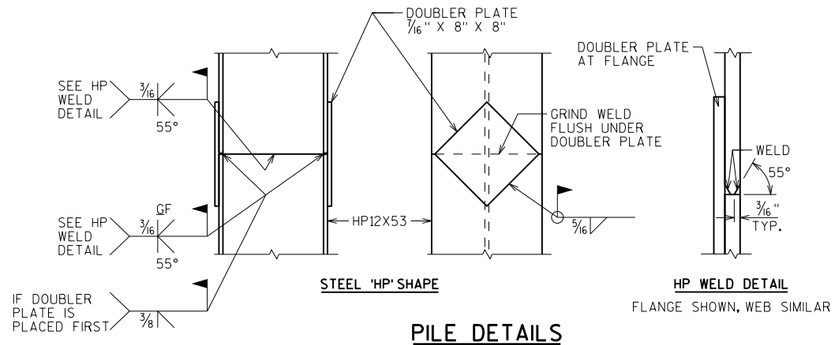

DETAIL A




PLAN



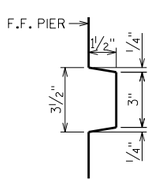

PILE PLAN




STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS




RUSTICATION DETAIL

(P02) SUPPORT PIER ON HP 12 x 53 STEEL PILING. ESTIMATED 55'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE. PILE POINTS REQ'D.

(P08) BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONST. JOINT-FORMED BY BEVELED 2 x 6.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

PIER 5

SHEET 12

225

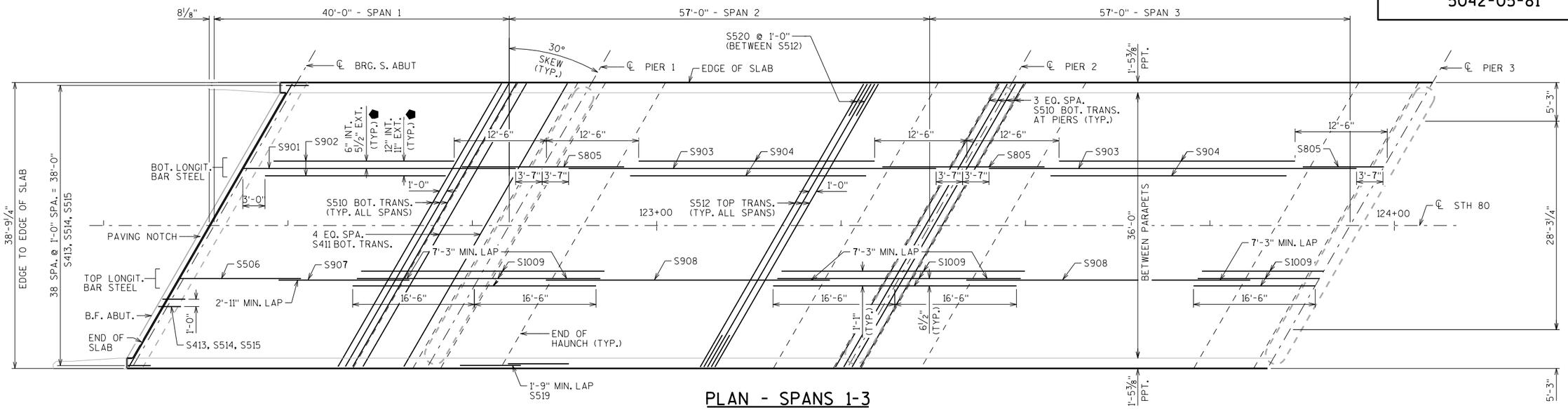
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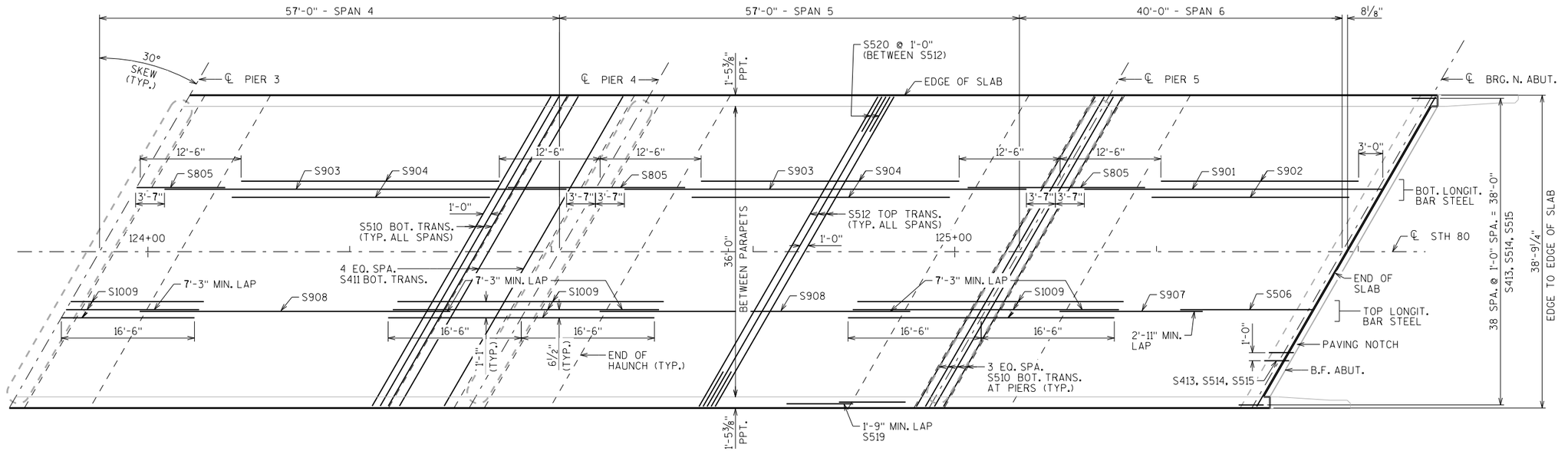
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STATE PROJECT NUMBER

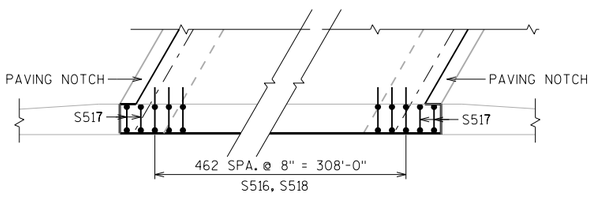
5042-05-81




PLAN - SPANS 1-3




PLAN - SPANS 4-6




PARTIAL PLAN DETAIL OF PARAPET REINF.

⬟ SEE "SUPERSTRUCTURE SECTION" SHEET FOR MORE DETAILED SPACING

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

SUPERSTRUCTURE PLAN

SHEET 13

226

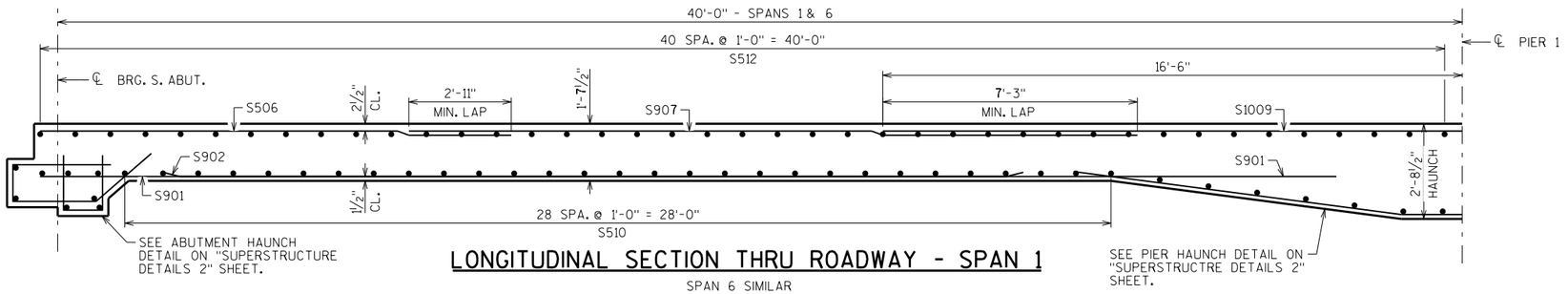
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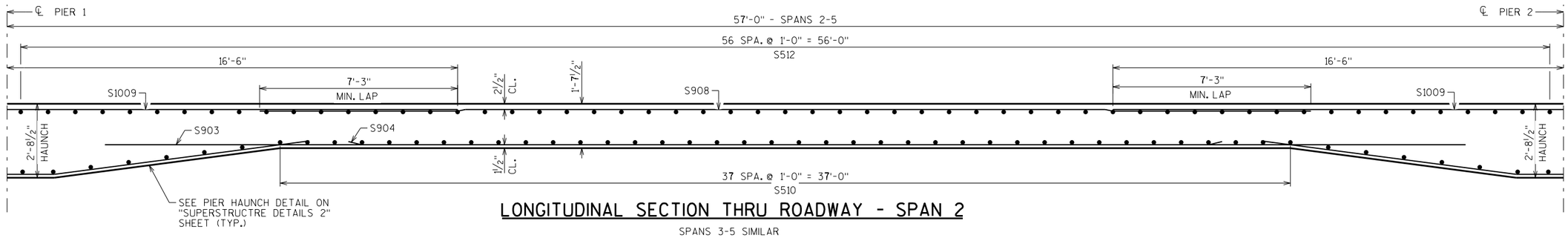
STATE PROJECT NUMBER

5042-05-81



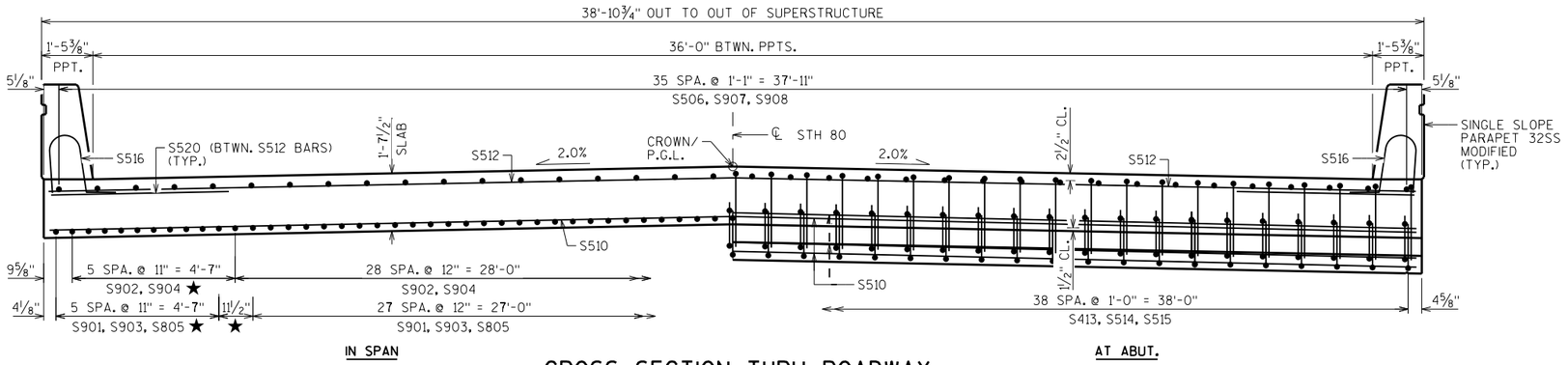

## LONGITUDINAL SECTION THRU ROADWAY - SPAN 1

SPAN 6 SIMILAR



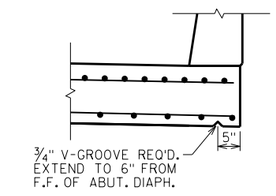

## LONGITUDINAL SECTION THRU ROADWAY - SPAN 2

SPANS 3-5 SIMILAR

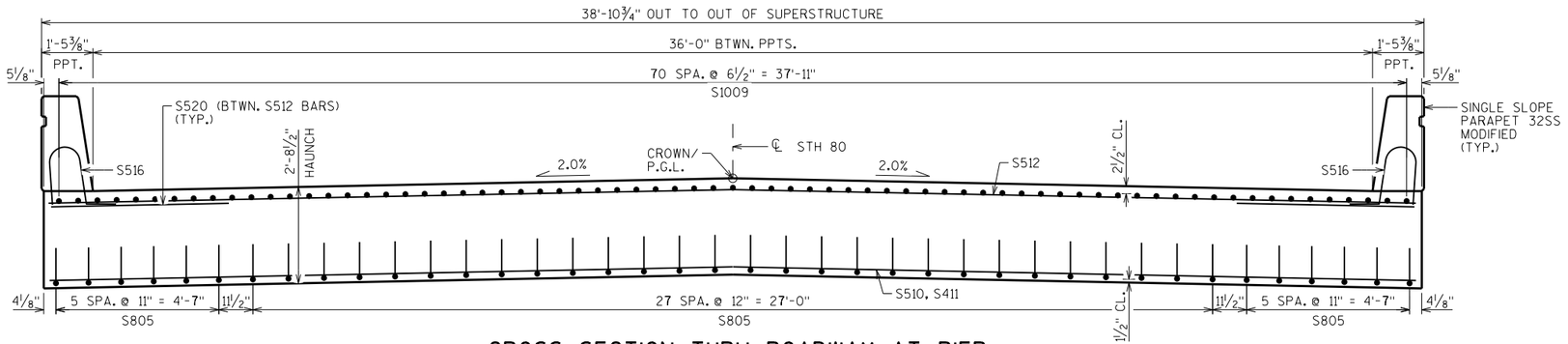



## CROSS SECTION THRU ROADWAY

★ SYMMETRICAL ABOUT ℄ STH 80




## CROSS SECTION THRU EDGE OF SLAB




## CROSS SECTION THRU ROADWAY AT PIER

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

SUPERSTRUCTURE SECTION

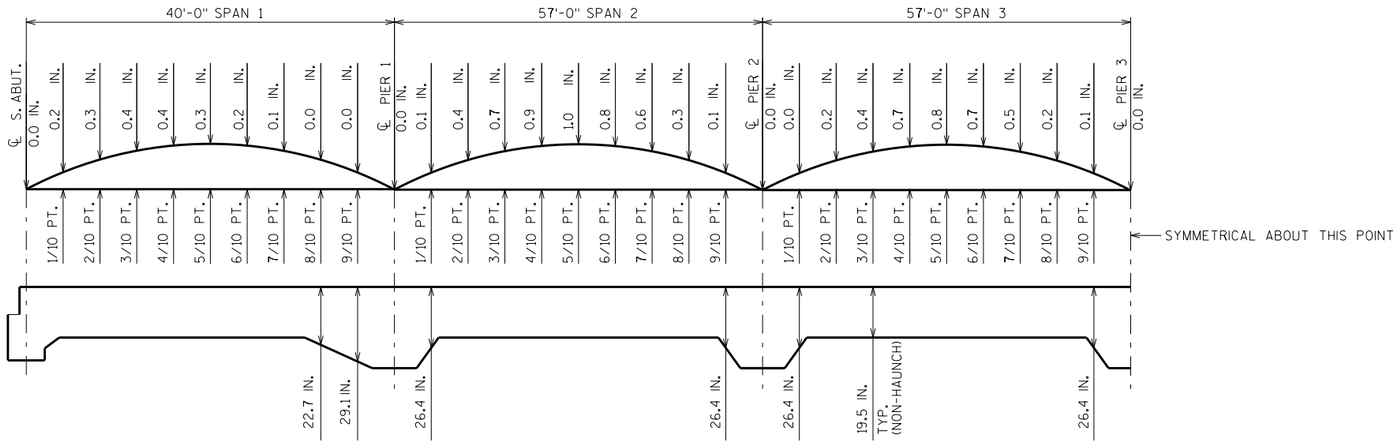
SHEET 14

227

SCALE = 2.00

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## CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS.
CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.
PARAPETS SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

| | |
|---|---|
| | TOP OF SLAB ELEVATION AT FINAL GRADE |
| LESS | SLAB THICKNESS |
| PLUS | CAMBER |
| PLUS | FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR) |
| EQUALS | TOP OF SLAB FALSEWORK ELEVATION. |

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ℓ OF ABUTMENTS, THE ℓ OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN/ℓ.

## TOP OF DECK ELEVATIONS

| | ℓ BRG. S. ABUT. | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | ℓ PIER 1 | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | ℓ PIER 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W. EDGE OF DECK | 769.34 | 769.36 | 769.38 | 769.40 | 769.42 | 769.44 | 769.46 | 769.48 | 769.50 | 769.52 | 769.54 | 769.57 | 769.60 | 769.62 | 769.65 | 769.68 | 769.71 | 769.74 | 769.77 | 769.79 | 769.82 |
| CROWN/ℓ | 769.65 | 769.67 | 769.69 | 769.71 | 769.73 | 769.75 | 769.77 | 769.79 | 769.81 | 769.83 | 769.85 | 769.87 | 769.90 | 769.93 | 769.96 | 769.99 | 770.02 | 770.05 | 770.07 | 770.10 | 770.13 |
| E. EDGE OF DECK | 769.23 | 769.25 | 769.27 | 769.29 | 769.31 | 769.33 | 769.35 | 769.37 | 769.39 | 769.41 | 769.43 | 769.46 | 769.49 | 769.52 | 769.55 | 769.58 | 769.61 | 769.63 | 769.66 | 769.69 | 769.72 |

| ℓ PIER 2 | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | ℓ PIER 3 | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | ℓ PIER 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 769.82 | 769.85 | 769.88 | 769.91 | 769.94 | 769.97 | 769.99 | 770.02 | 770.05 | 770.08 | 770.11 | 770.14 | 770.17 | 770.19 | 770.22 | 770.25 | 770.28 | 770.31 | 770.34 | 770.36 | 770.39 |
| 770.13 | 770.16 | 770.19 | 770.22 | 770.25 | 770.27 | 770.30 | 770.33 | 770.36 | 770.39 | 770.42 | 770.44 | 770.47 | 770.50 | 770.53 | 770.56 | 770.59 | 770.62 | 770.64 | 770.67 | 770.70 |
| 769.72 | 769.75 | 769.78 | 769.80 | 769.83 | 769.86 | 769.89 | 769.92 | 769.95 | 769.98 | 770.00 | 770.03 | 770.06 | 770.09 | 770.12 | 770.15 | 770.18 | 770.20 | 770.23 | 770.26 | 770.29 |

| ℓ PIER 4 | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | ℓ PIER 5 | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | ℓ BRG. N. ABUT. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 770.39 | 770.42 | 770.45 | 770.48 | 770.51 | 770.54 | 770.56 | 770.59 | 770.62 | 770.65 | 770.68 | 770.70 | 770.72 | 770.74 | 770.76 | 770.78 | 770.80 | 770.82 | 770.84 | 770.86 | 770.88 |
| 770.70 | 770.73 | 770.76 | 770.79 | 770.82 | 770.84 | 770.87 | 770.90 | 770.93 | 770.96 | 770.99 | 771.01 | 771.03 | 771.05 | 771.07 | 771.09 | 771.11 | 771.13 | 771.15 | 771.17 | 771.19 |
| 770.29 | 770.32 | 770.35 | 770.37 | 770.40 | 770.43 | 770.46 | 770.49 | 770.52 | 770.55 | 770.57 | 770.59 | 770.61 | 770.63 | 770.65 | 770.67 | 770.69 | 770.71 | 770.73 | 770.75 | 770.77 |

STATE PROJECT NUMBER

5042-05-81

## NOTES

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIAMTELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

SUPERSTRUCTURE DETAILS 1

SHEET 15

228

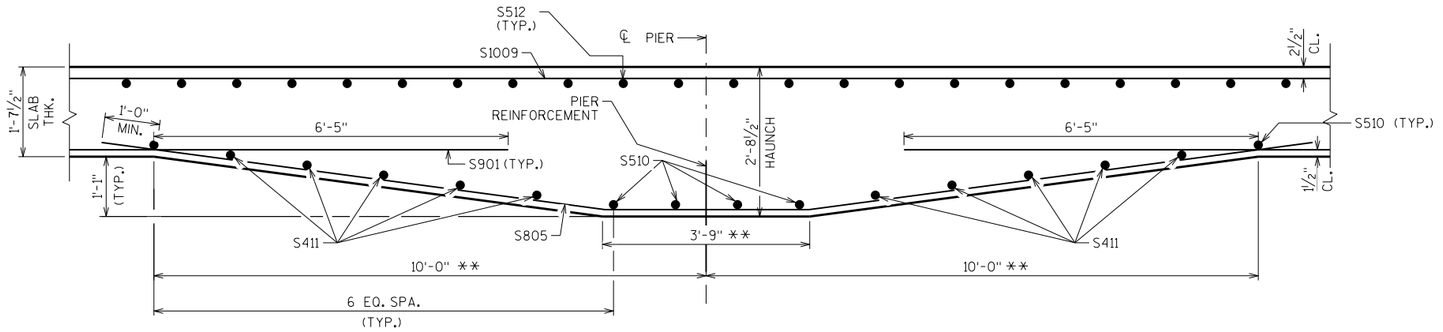
8

8

SCALE = 1.00

STATE PROJECT NUMBER

5042-05-81



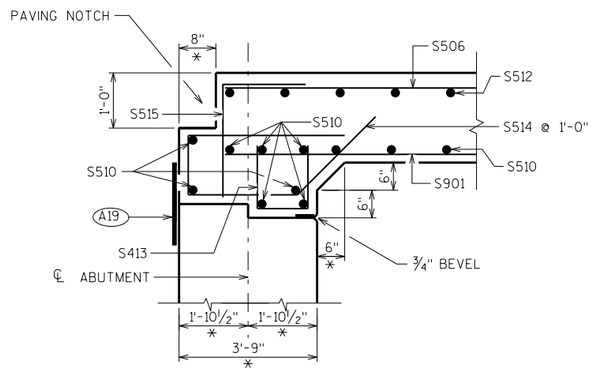

## PIER HAUNCH DETAIL

** DIMENSION IS TAKEN ALONG ℄ OF SUPERSTRUCTURE

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| S901 | X | 80 | 36'-11" | | | SLAB - LONGIT. - BOT. SPAN 1,6 |
| S902 | X | 78 | 24'-6" | | | SLAB - LONGIT. - BOT. SPAN 1,6 |
| S903 | X | 160 | 49'-10" | | | SLAB - LONGIT. - BOT. SPAN 2-5 |
| S904 | X | 156 | 32'-0" | | | SLAB - LONGIT. - BOT. SPAN 2-5 |
| S805 | X | 200 | 22'-2" | X | | SLAB - LONGIT. - BOT. OVER PIERS |
| S506 | X | 72 | 16'-5" | | | SLAB - LONGIT. - TOP SPAN 1,6 |
| S907 | X | 72 | 17'-9" | | | SLAB - LONGIT. - TOP SPAN 1,6 |
| S908 | X | 144 | 38'-6" | | | SLAB - LONGIT. - TOP SPAN 2-5 |
| S1009 | X | 355 | 33'-0" | | | SLAB - LONGIT. - TOP OVER PIERS |
| S510 | X | 242 | 44'-4" | | | SLAB - TRANS. - BOT. |
| S411 | X | 50 | 44'-4" | | | SLAB - TRANS. - BOT HAUNCH |
| S512 | X | 310 | 44'-4" | | | SLAB - TRANS. - TOP |
| S413 | X | 78 | 3'-5" | X | | SLAB - VERT. - ABUT. HAUNCH |
| S514 | X | 78 | 7'-11" | X | | SLAB - VERT. - ABUT. HAUNCH |
| S515 | X | 78 | 3'-5" | X | | SLAB - VERT. - ABUT. HAUNCH |
| S516 | X | 926 | 4'-5" | X | | SLAB/PPT. - VERT. |
| S517 | X | 8 | 5'-10" | X | | SLAB/PPT. - VERT. |
| S518 | X | 926 | 5'-0" | X | | PPT. - VERT. |
| S519 | X | 72 | 53'-6" | | | PPT. - HORIZ. |
| S520 | X | 618 | 5'-0" | | | SLAB - TRANS. - TOP SLAB EDGE |

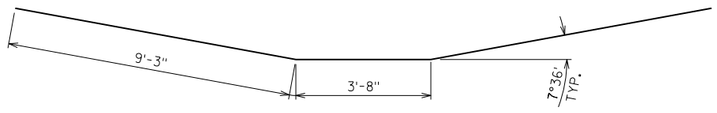



## ABUTMENT HAUNCH DETAIL

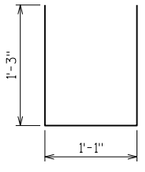
* DIMENSION IS TAKEN NORMAL TO ℄ OF SUBSTRUCTURE UNITS.



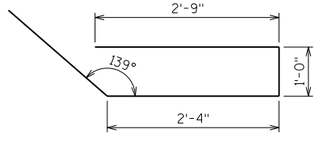

## SECTION THRU PARAPET ON BRIDGE



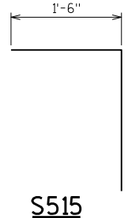

S805



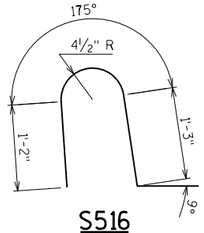

S413



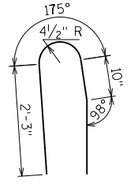

S514



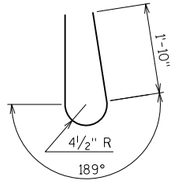

S515




S516




S517




S518

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

SUPERSTRUCTURE DETAILS 2

SHEET 16

229

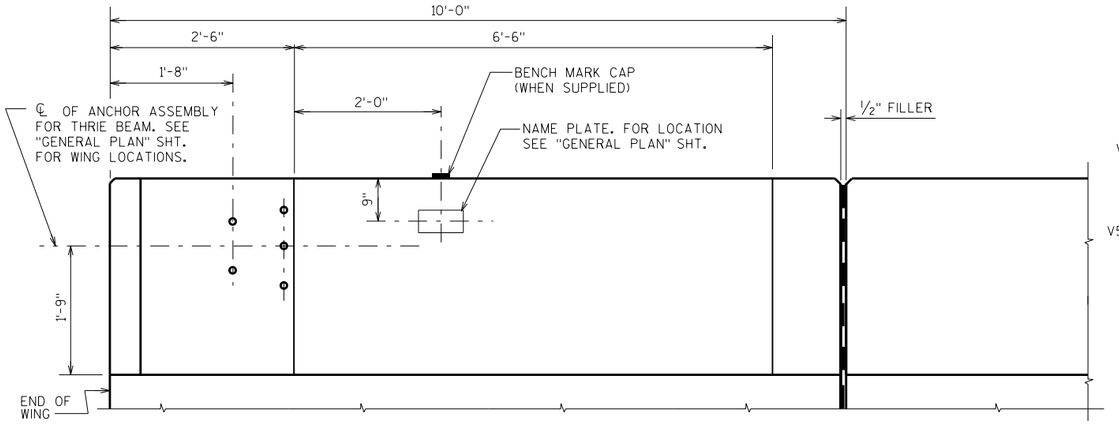
SCALE = 2.00

8

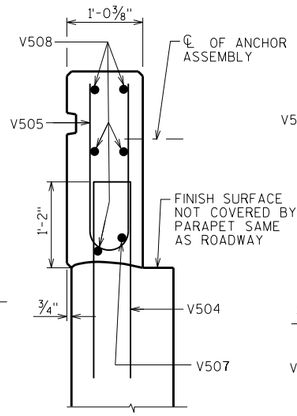
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STATE PROJECT NUMBER

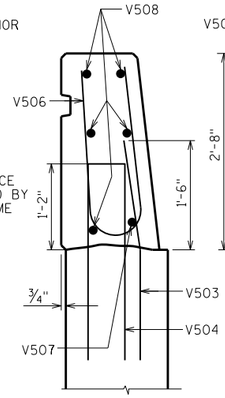
5042-05-81



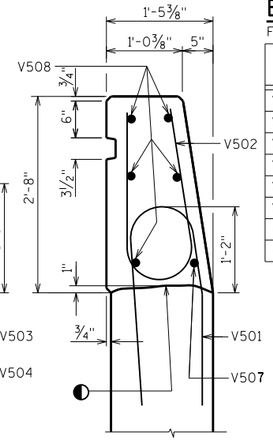

INSIDE ELEVATION




SECTION A




SECTION B

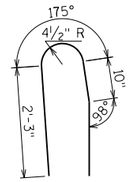



SECTION C

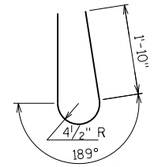
## BILL OF BARS

FOR ABUTMENT PARAPETS

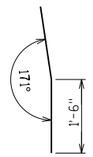
| BAR MARK | COAT | SOUTH ABUT. | NORTH ABUT. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|---|
| V501 | X | 4 | 4 | 5'-10" | X | | PARAPET VERT. |
| V502 | X | 4 | 4 | 5'-0" | X | | PARAPET VERT. |
| V503 | X | 24 | 24 | 3'-0" | X | | PARAPET VERT. |
| V504 | X | 34 | 34 | 5'-7" | X | | PARAPET VERT. |
| V505 | X | 22 | 22 | 4'-9" | X | | PARAPET VERT. |
| V506 | X | 12 | 12 | 4'-10" | X | | PARAPET VERT. |
| V507 | X | 2 | 2 | 9'-6" | X | | PARAPET HORIZ. |
| V508 | X | 10 | 10 | 9'-6" | | | PARAPET HORIZ. |



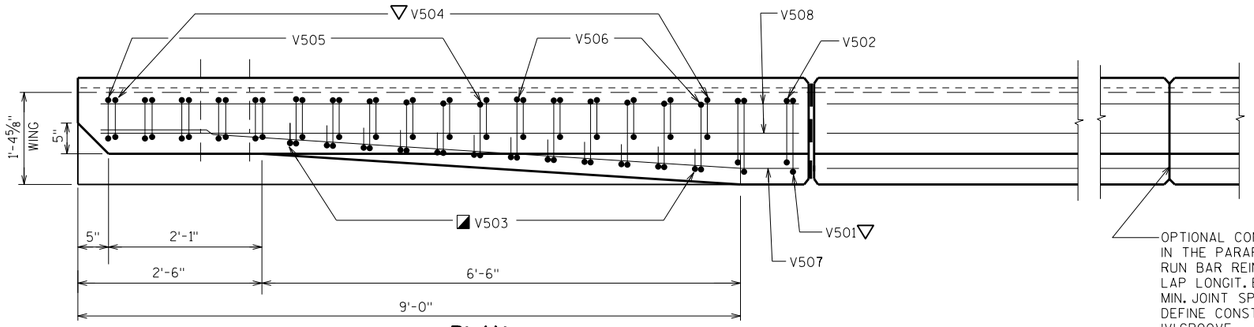

V501




V502

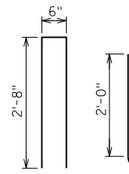



V503

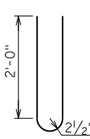



PLAN

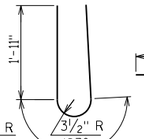
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A ¾" - 'V' GROOVE.



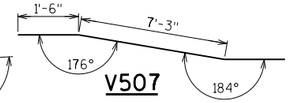

V504



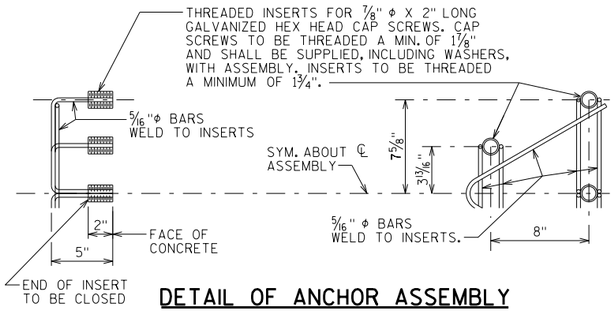

V505




V506



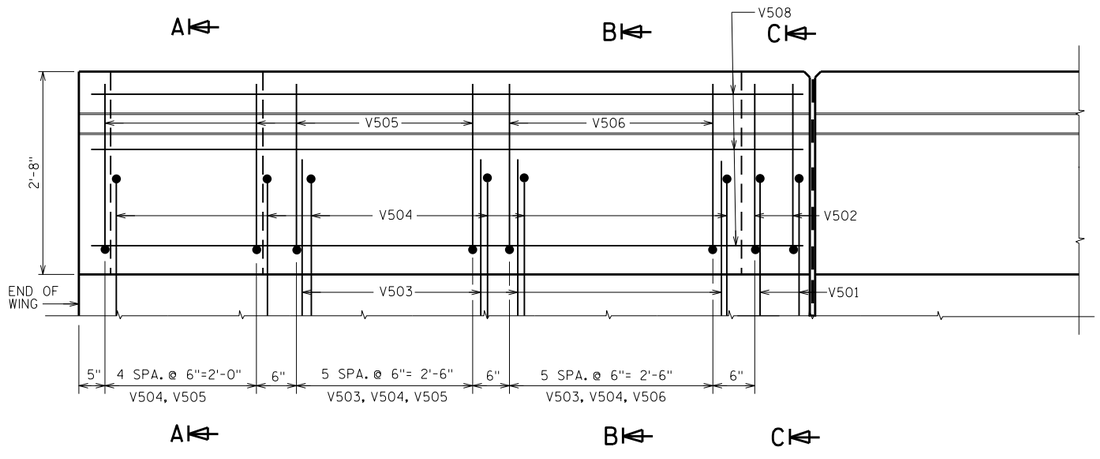

V507




## DETAIL OF ANCHOR ASSEMBLY

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

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.




OUTSIDE ELEVATION

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◪ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 OR S503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-268

DRAWN BY MJL | PLANS CK'D. JLR

PARAPET 32SS SINGLE SLOPE (MODIFIED)

SHEET 17

230

SCALE = 1.00

32SSWIN
1-14

8

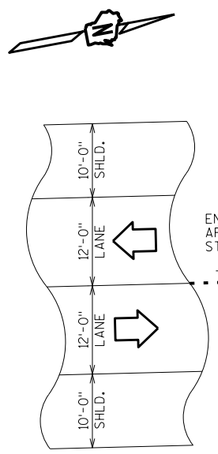
12
7
1 2 3 4

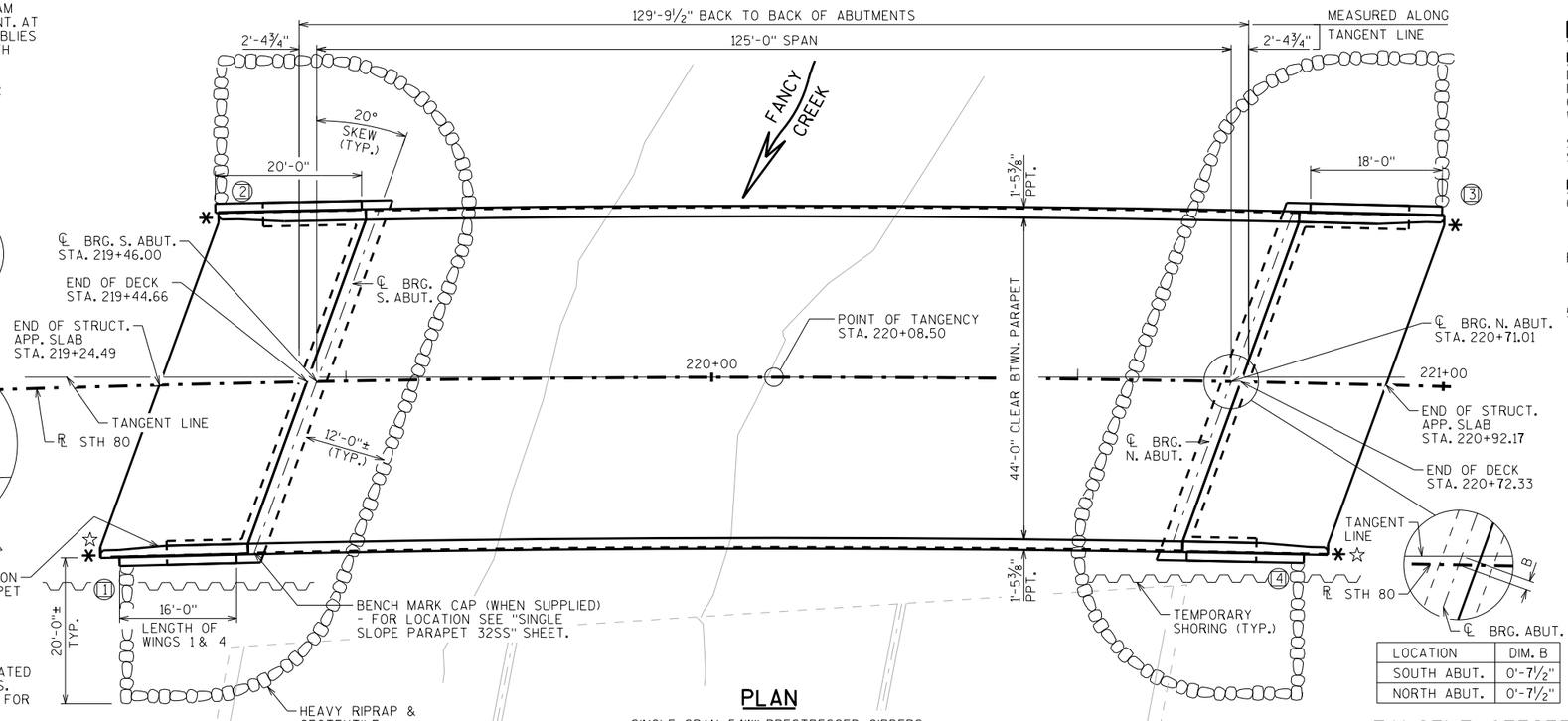
STATE PROJECT NUMBER

5042-05-81

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

(1) INDICATES WING NUMBER




☆ SURFACE DRAINS LOCATED AT NE & SE CORNERS. SEE ROADWAY PLANS FOR DETAILS.

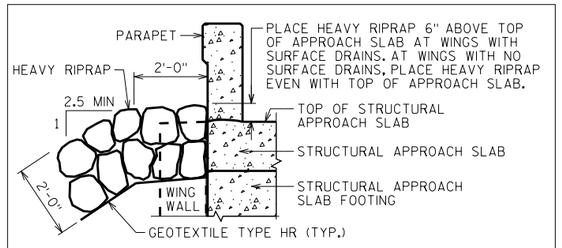
| LOCATION | DIM. B |
|---|---|
| SOUTH ABUT. | 0'-7½" |
| NORTH ABUT. | 0'-7½" |

## PLAN

SINGLE SPAN 54W" PRESTRESSED GIRDERS

EXISTING STRUCTURE B-52-41
A THREE SPAN CONTINUOUS HAUNCHED SLAB STRUCTURE APPROX. 132 FEET LONG ON CONCRETE ABUTMENTS AND PIERS WITH CONCRETE PILES TO BE REMOVED.

## TANGENT OFFSET DETAIL & TABLE




## TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS

## DESIGN DATA

**LIVE LOAD:**

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.13
OPERATING RATING FACTOR: RF = 1.93
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

**MATERIAL PROPERTIES:**

CONCRETE MASONRY:
SUPERSTRUCTURE & STRUCTURAL APPROACH SLAB — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:
GRADE 60 — fy = 60,000 P.S.I.
STAINLESS, GRADE 60 — fy = 60,000 P.S.I.

54W" PRESTRESSED GIRDERS:
CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

## FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 75 LONG. PILE POINTS REQUIRED AT N. ABUTMENT.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

## HYDRAULIC DATA

**100 YEAR FREQUENCY**

$Q_{100}$ = 4,810 C.F.S.
VEL. = 7.0 F.P.S.
$HW._{100}$ = EL. 753.6
WATERWAY AREA = 688 SQ. FT.
DRAINAGE AREA = 28.5 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

**2 YEAR FREQUENCY**

$Q_2$ = 815 C.F.S.
$HW._2$ = EL. 748.32

## TRAFFIC VOLUME

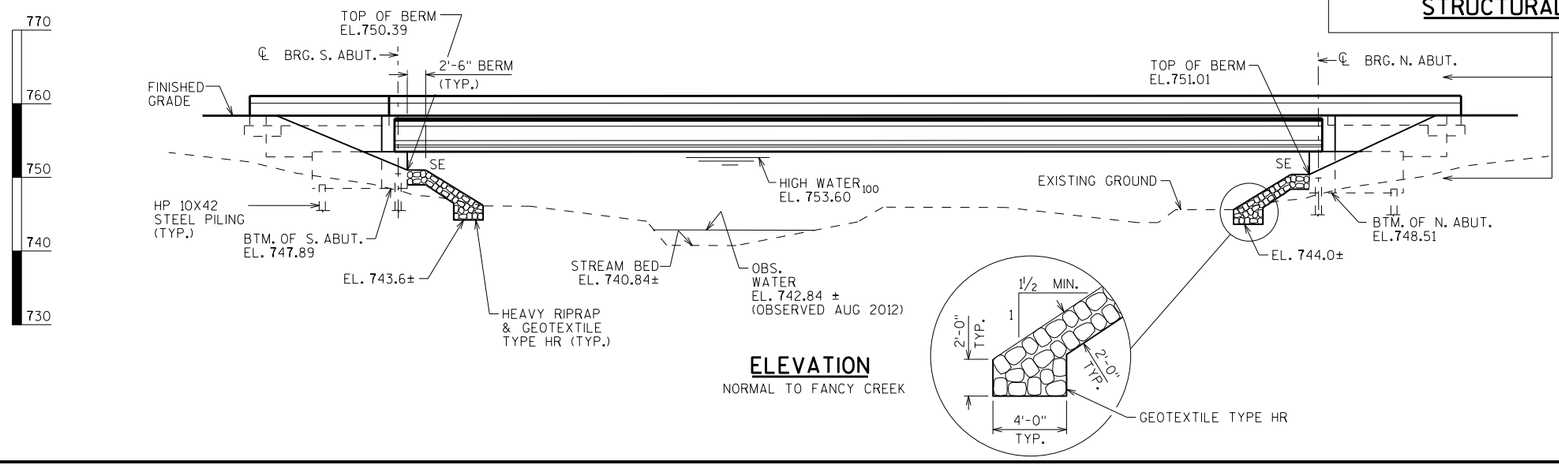
**STH 80**

ADT = 5,100 (2038)
R.D.S. = 60 M.P.H.

## CURVE DATA

STH 80

P.I. = 221+49.22
△ = 45°49'56"
D = 1°44'10"
T = 1395.07'
L = 2639.75'
R = 3300.00'
S.E. = 4.1 %
P.C. = 207+54.15
P.T. = 233+93.90




## ELEVATION

NORMAL TO FANCY CREEK

## LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. 54W" PRESTRESSED GIRDER DETAILS 1
9. 54W" PRESTRESSED GIRDER DETAILS 2
10. STEEL DIAPHRAGM
11. SUPERSTRUCTURE
12. SUPERSTRUCTURE DETAILS 1
13. SUPERSTRUCTURE DETAILS 2
14. SINGLE SLOPE PARAPET 32SS
15. SOUTH STRUCTURAL APPROACH SLAB
16. NORTH STRUCTURAL APPROACH SLAB
17. ALTERNATE CONSTRUCTION JOINT


STRUCTURE DESIGN CONTACTS:
MICHAEL LARSON (608) 267-4539
LAURA SHADEWALD (608) 267-9592


| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

WISCONSIN DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 8/4/17
CHIEF STRUCTURES DESIGN ENGINEER — DATE

# STRUCTURE B-52-269

STH 80 OVER FANCY CREEK

COUNTY: RICHLAND
TOWN ~~CITY/VILLAGE~~: ROCKBRIDGE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

| DESIGNED BY | DESIGNED CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| MJL | JLR | DLM | MJL |

GENERAL PLAN

SHEET 1 OF 17

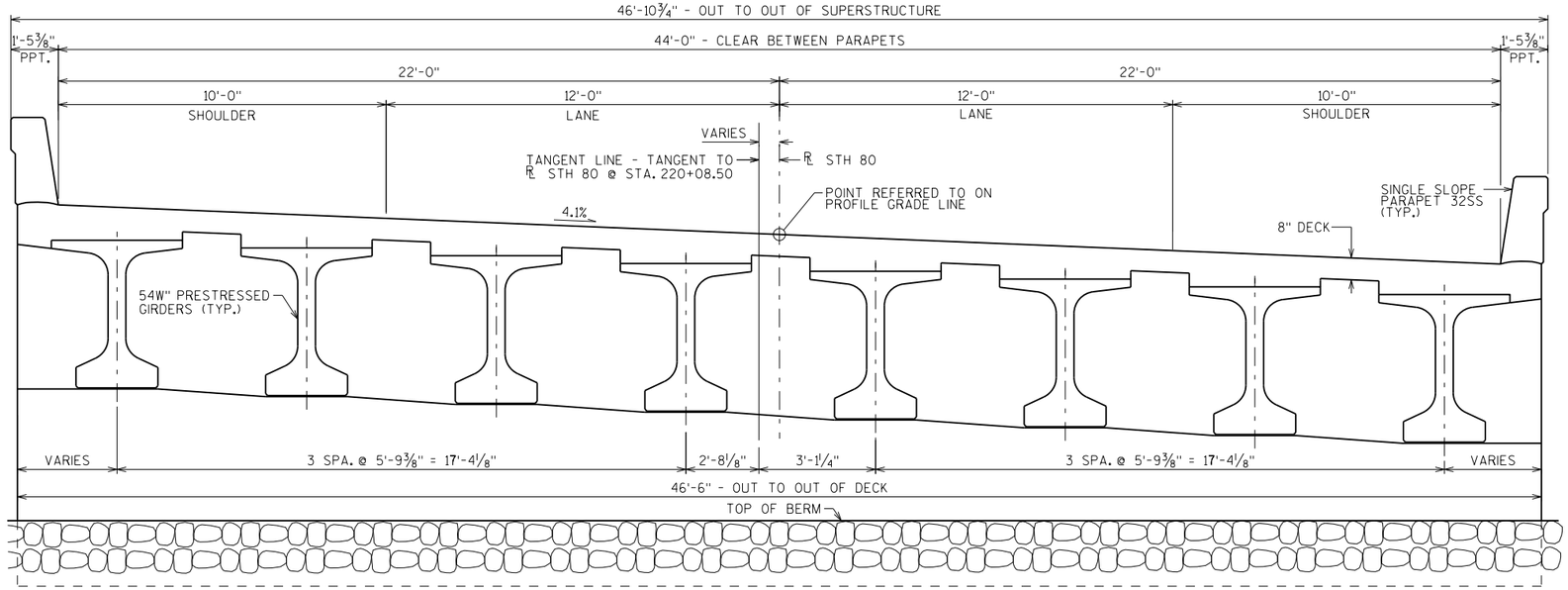
231

I.D. 5042-05-01B DATE: FEB. 2017

SCALE = 10.00

STATE PROJECT NUMBER

5042-05-81




## CROSS SECTION THRU ROADWAY

(LOOKING UPSTATION)

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL. ALSO EXCLUDED IS THE "BASE AGGREGATE DENSE 1¼-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

NON-LAMINATED ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK AND APPROACH SLAB SURFACES.

PIGMENTED PROTECTIVE SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

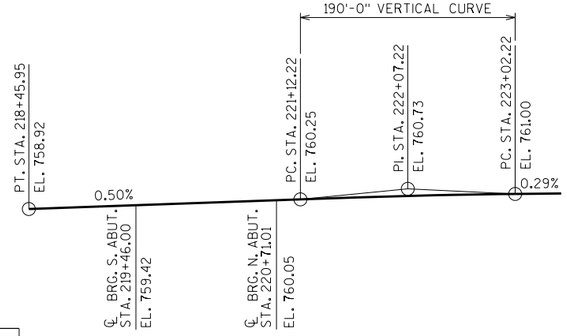
THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE 'HR' TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS IS REQUIRED. SEE ROADWAY PLANS FOR EXCAVATION LIMITS.

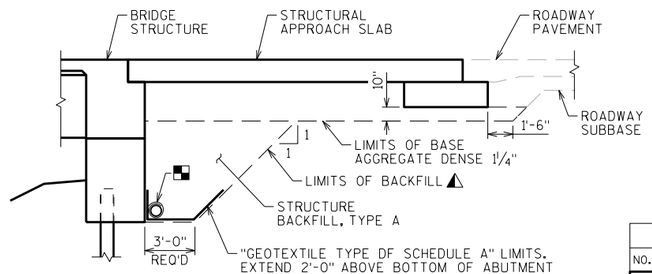
THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN ON THIS SHEET.

## TOTAL ESTIMATED QUANTITIES

| BID ITEM NUMBER | BID ITEMS | UNIT | SUPER | SOUTH APPROACH | SOUTH ABUT. | NORTH ABUT. | NORTH APPROACH | TOTALS |
|---|---|---|---|---|---|---|---|---|
| 203.0600.S | REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 220+00 | LS | ——— | ——— | ——— | ——— | ——— | 1 |
| 206.1000 | EXCAVATION FOR STRUCTURES BRIDGES B-52-269 | LS | ——— | ——— | ——— | ——— | ——— | 1 |
| 210.1500 | BACKFILL STRUCTURE TYPE A | TON | ——— | ——— | 209 | 207 | ——— | 416 |
| 305.0120 | BASE AGGREGATE DENSE 1 1/4-INCH | TON | ——— | ——— | 164 | 161 | ——— | 325 |
| 502.0100 | CONCRETE MASONRY BRIDGES | CY | 258 | 65 | 67 | 64 | 64 | 518 |
| 502.3200 | PROTECTIVE SURFACE TREATMENT | SY | 650 | 99 | ——— | ——— | 98 | 847 |
| 502.3210 | PIGMENTED SURFACE SEALER | SY | 105 | 17 | ——— | ——— | 17 | 139 |
| 503.0155 | PRESTRESSED GIRDER TYPE 154W-INCH | LF | 1,008 | ——— | ——— | ——— | ——— | 1,008 |
| 505.0400 | BAR STEEL REINFORCEMENT HS STRUCTURES | LB | ——— | ——— | 4,530 | 4,460 | ——— | 8,990 |
| 505.0600 | BAR STEEL REINFORCEMENT HS COATED STRUCTURES | LB | 40,410 | 10,950 | 2,460 | 2,490 | 10,810 | 67,120 |
| 505.0800.S | BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES | LB | 1,600 | ——— | ——— | ——— | ——— | 1,600 |
| 506.2605 | BEARING PADS ELASTOMERIC NON-LAMINATED | EACH | ——— | ——— | 8 | 8 | ——— | 16 |
| 506.4000 | STEEL DIAPHRAGMS B-52-269 | EACH | 14 | ——— | ——— | ——— | ——— | 14 |
| 511.1200 | TEMPORARY SHORING B-52-269 | SF | ——— | ——— | 940 | 1,010 | ——— | 1,950 |
| 516.0500 | RUBBERIZED MEMBRANE WATERPROOFING | SY | ——— | ——— | 16 | 15 | ——— | 31 |
| 550.0500 | PILE POINTS | EACH | ——— | ——— | ——— | 15 | ——— | 15 |
| 550.1100 | PILING STEEL HP 10-INCH X 42 LB | LF | ——— | ——— | 1,125 | 1,125 | ——— | 2,250 |
| 606.0300 | RIPRAP HEAVY | CY | ——— | ——— | 190 | 190 | ——— | 380 |
| 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | ——— | ——— | 95 | 95 | ——— | 190 |
| 614.0150 | ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD | EACH | ——— | 2 | ——— | ——— | 2 | 4 |
| 645.0111 | GEOTEXTILE TYPE DF SCHEDULE A | SY | ——— | ——— | 60 | 60 | ——— | 120 |
| 645.0120 | GEOTEXTILE TYPE HR | SY | ——— | ——— | 295 | 295 | ——— | 590 |
| | NON-BID ITEMS | | | | | | | |
| | FILLER | SIZE | ——— | ——— | | ——— | ——— | ½", ¾", 1½" |




## PROFILE GRADE LINE - STH 80




## TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. SEE ROADWAY PLANS FOR ADDITIONAL EXCAVATION LIMITS.

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

CROSS SECTION & QUANTITIES

SHEET 2

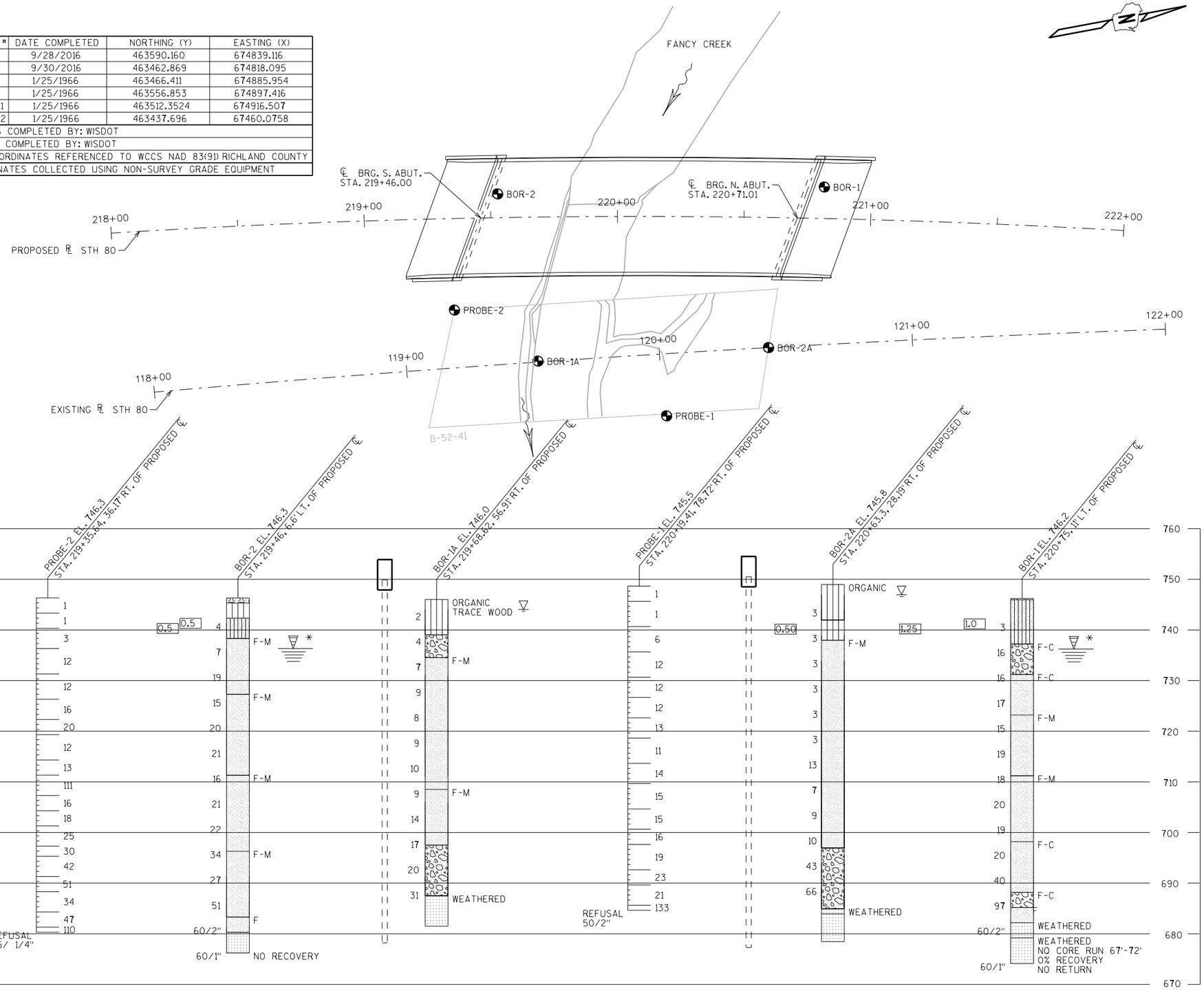
232

SCALE = 2.00

8

8

| BORING # | DATE COMPLETED | NORTHING (Y) | EASTING (X) |
|---|---|---|---|
| 1 | 9/28/2016 | 463590.160 | 674839.116 |
| 2 | 9/30/2016 | 463462.869 | 674818.095 |
| 1A | 1/25/1966 | 463466.411 | 674885.954 |
| 2A | 1/25/1966 | 463556.853 | 674897.416 |
| PROBE 1 | 1/25/1966 | 463512.3524 | 674916.507 |
| PROBE 2 | 1/25/1966 | 463437.696 | 674960.0758 |
| BORINGS COMPLETED BY: WISDOT | | | |
| REPORT COMPLETED BY: WISDOT | | | |
| ALL COORDINATES REFERENCED TO WCCS NAD 83(91) RICHLAND COUNTY | | | |
| COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT | | | |




* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

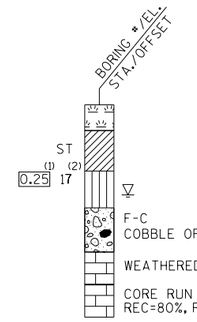
STATE PROJECT NUMBER

5042-05-81

MATERIAL SYMBOLS

| | | |
|---|---|---|
| ASPHALT | TOPSOIL | PEAT |
| CONCRETE | FILL | GRAVEL |
| SAND | CLAY | SILT |
| BOULDERS OR COBBLES | LIMESTONE | BEDROCK (UNKNOWN) |
| SHALE | SANDSTONE | IGNEOUS/ META |

LEGEND OF BORING




(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY TLP/DLM | PLANS CK'D. MJL

SUBSURFACE EXPLORATION

SHEET 3

233

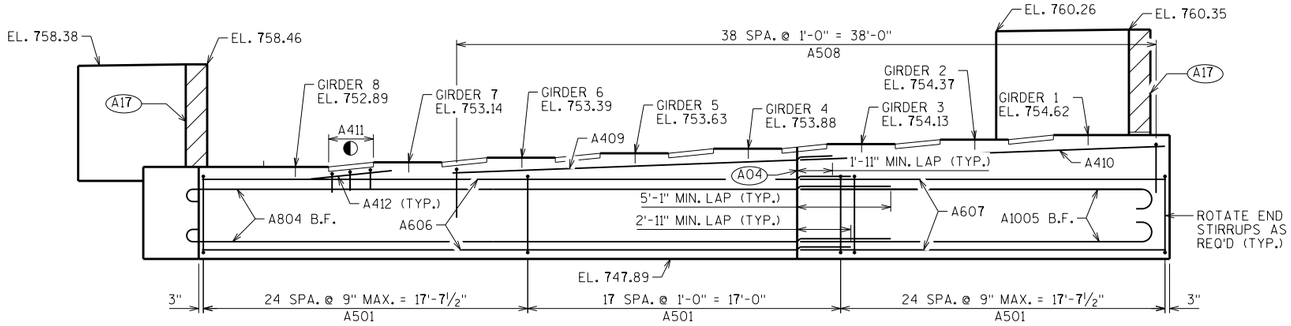
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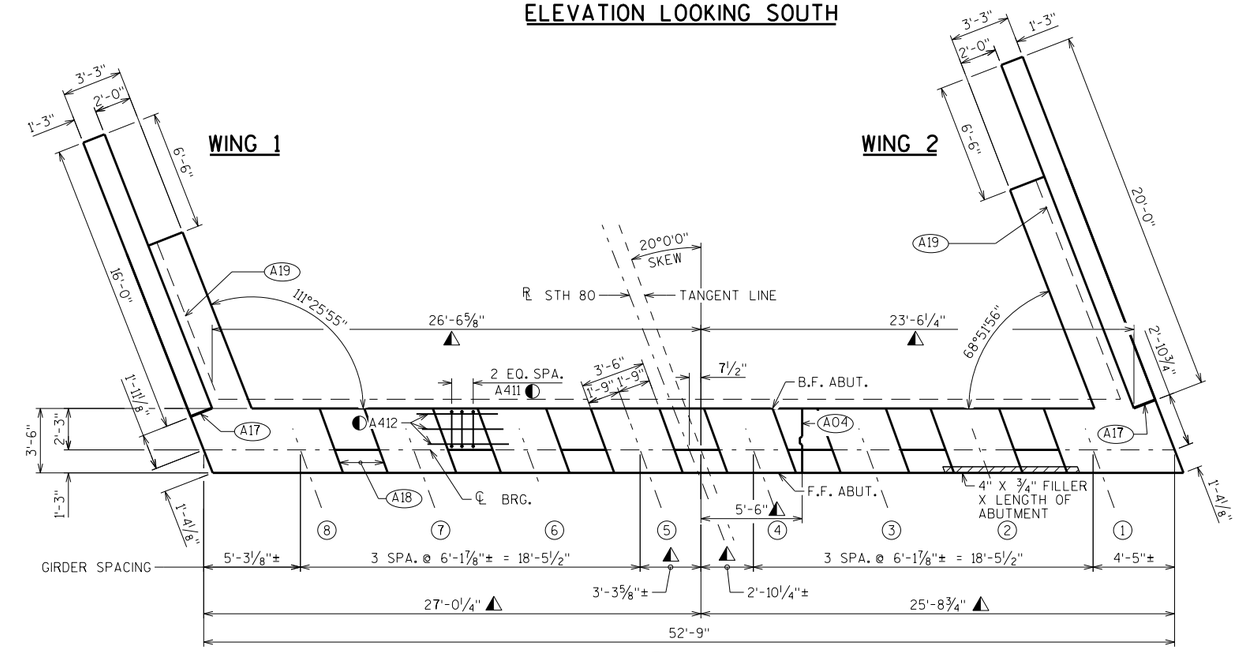
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STATE PROJECT NUMBER

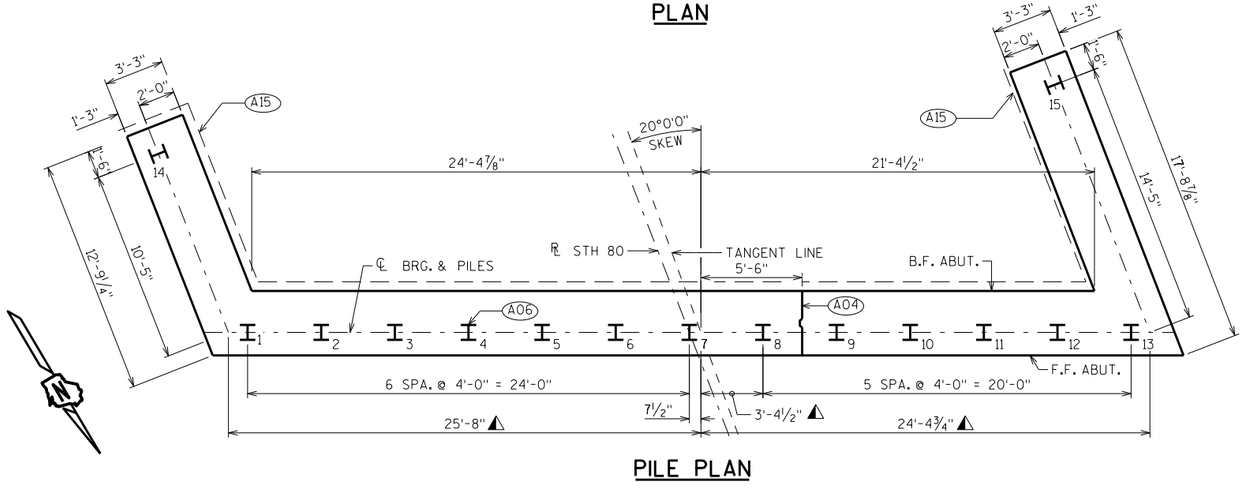
5042-05-81



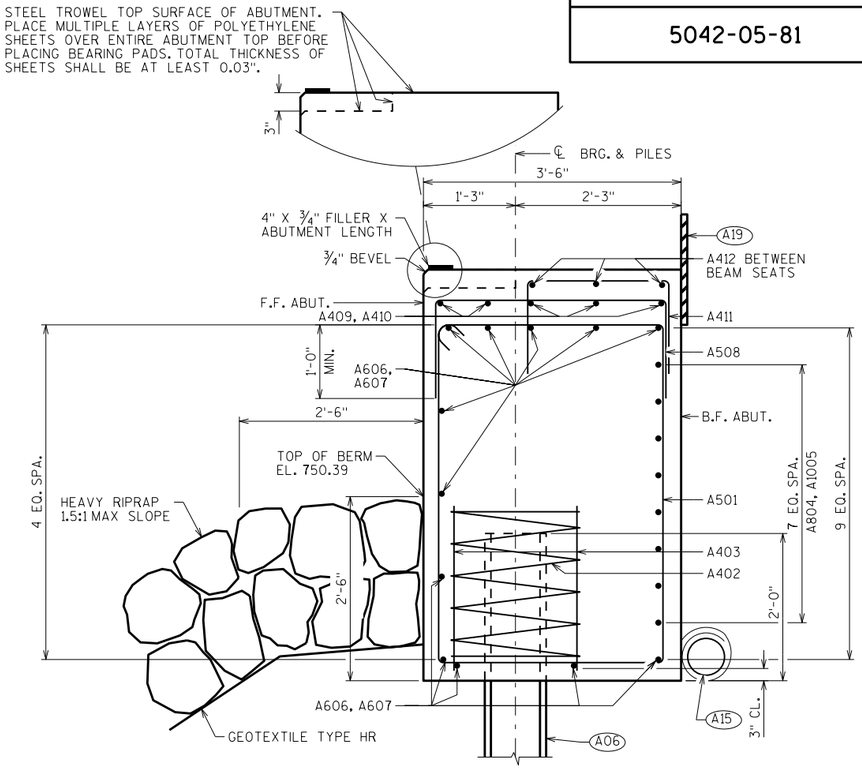

## ELEVATION LOOKING SOUTH




## PLAN



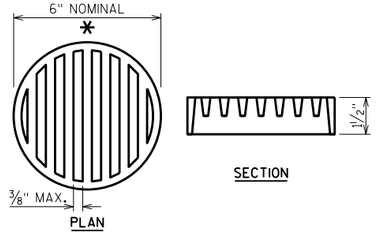

## PILE PLAN




## SECTION THRU BODY

▲ MEASURED TO TANGENT LINE

◐ BETWEEN BEAM SEATS (TYP.)




## RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHEMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

A04 VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

A06 SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A18 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

SOUTH ABUTMENT

SHEET 4

234

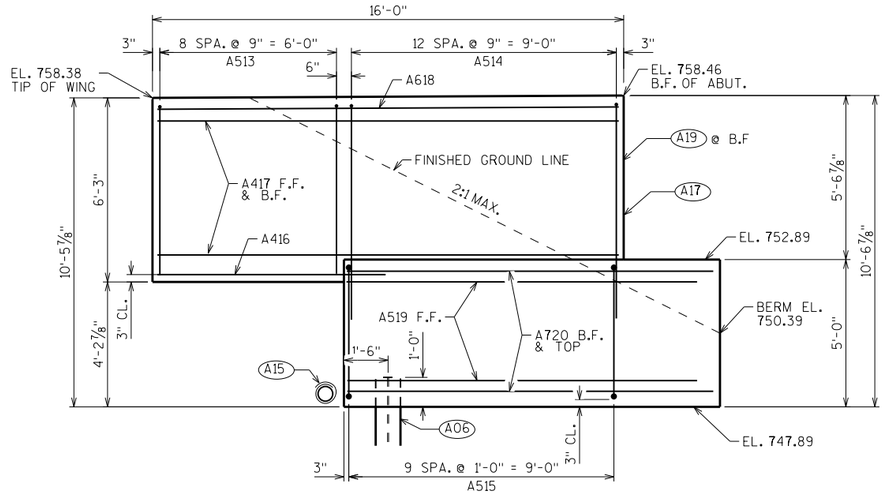
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8

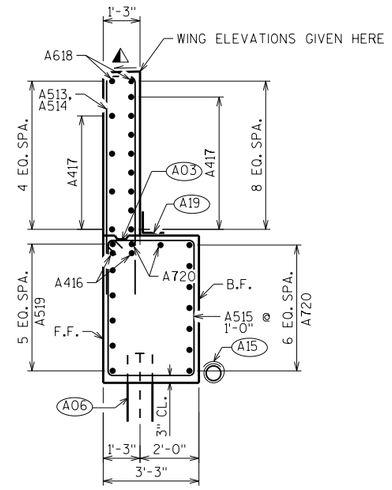
STATE PROJECT NUMBER

5042-05-81

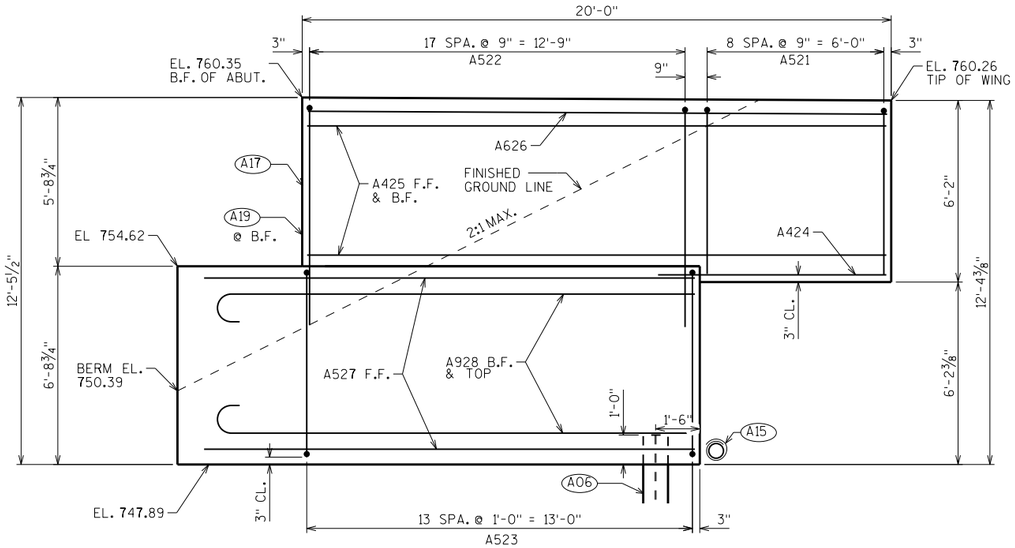



## WING 1 ELEVATION

(FRONT FACE SHOWN)

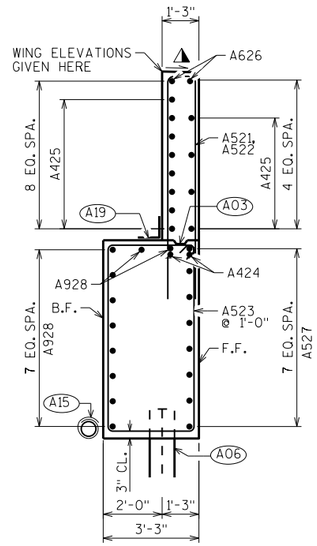



## WING 1 SECTION

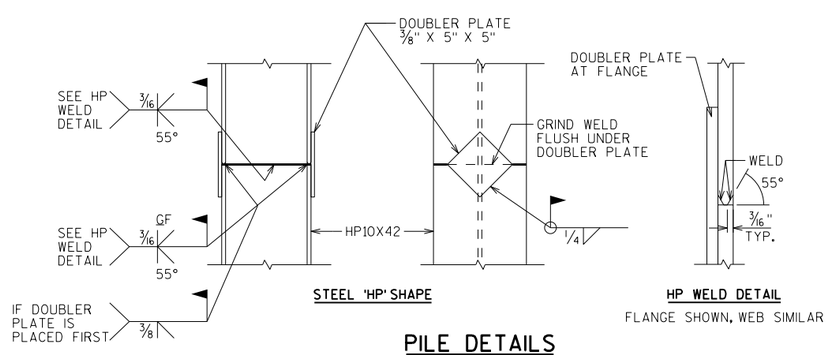



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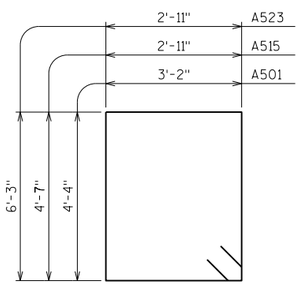
(FRONT FACE SHOWN)



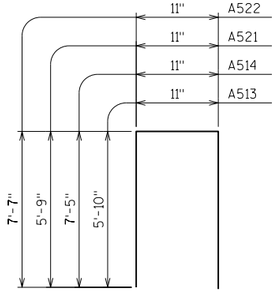

## WING 2 SECTION



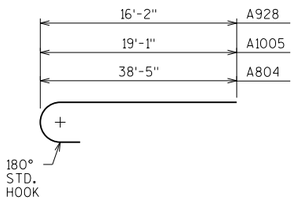

## PILE DETAILS



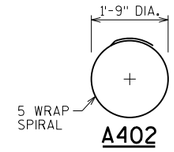

## A501, A515, A523



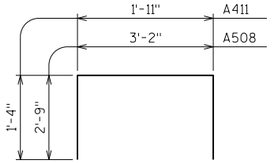

## A513, A514, A521, A522




## A804, A1005, A928




## A402




## A508, A411

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A501 | | 66 | 15'-8" | X | | BODY-STIRRUP |
| A402 | | 13 | 28'-0" | X | | BODY-1 PER BODY PILE-VERT. |
| A403 | | 26 | 2'-3" | | | BODY-2 PER BODY PILE-VERT. |
| A804 | | 8 | 39'-4" | X | | BODY-HORIZ.-B.F. AT ENDS |
| A1005 | | 8 | 20'-6" | X | | BODY-HORIZ.-B.F. AT ENDS |
| A606 | | 12 | 37'-7" | | | BODY-HORIZ. |
| A607 | | 12 | 19'-0" | | | BODY-HORIZ. |
| A508 | | 39 | 8'-5" | X | | BODY-VERT.-TOP-UNDER G1-G6 |
| A409 | | 5 | 20'-8" | | | BODY-HORIZ.-TOP-UNDER G4-G6 |
| A410 | | 5 | 19'-0" | | | BODY-HORIZ.-TOP-UNDER G1-G3 |
| A411 | | 21 | 4'-5" | X | | BODY-VERT.-TOP-BTWN. BEAM SEATS |
| A412 | | 21 | 4'-6" | | | BODY-HORIZ.-TOP-BTWN. BEAM SEATS |
| A513 | X | 9 | 12'-4" | X | | WING 1-VERT. |
| A514 | X | 13 | 15'-6" | X | | WING 1-VERT. |
| A515 | X | 10 | 15'-8" | X | | WING 1-STIRRUP |
| A416 | X | 2 | 7'-11" | | | WING 1-HORIZ.-F.F. & B.F. |
| A417 | X | 12 | 15'-8" | | | WING 1-HORIZ.-F.F. & B.F. |
| A618 | X | 2 | 15'-8" | | | WING 1-HORIZ.-TOP-F.F. & B.F. |
| A519 | X | 6 | 12'-6" | | | WING 1-HORIZ.-F.F. |
| A720 | X | 9 | 13'-0" | | | WING 1-HORIZ.-B.F. & TOP |
| A521 | X | 9 | 12'-2" | X | | WING 2-VERT. |
| A522 | X | 18 | 15'-10" | X | | WING 2-VERT. |
| A523 | X | 14 | 19'-0" | X | | WING 2-STIRRUP |
| A424 | X | 2 | 7'-11" | | | WING 2-HORIZ.-F.F. & B.F. |
| A425 | X | 12 | 19'-8" | | | WING 2-HORIZ.-F.F. & B.F. |
| A626 | X | 2 | 19'-8" | | | WING 2-HORIZ. TOP-F.F. & B.F. |
| A527 | X | 8 | 17'-3" | | | WING 2-HORIZ.-F.F. |
| A928 | X | 10 | 17'-5" | X | | WING 2-HORIZ.-B.F. & TOP |

▲ SLOPE TO DRAIN

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

SOUTH ABUTMENT DETAILS

SHEET 5

235

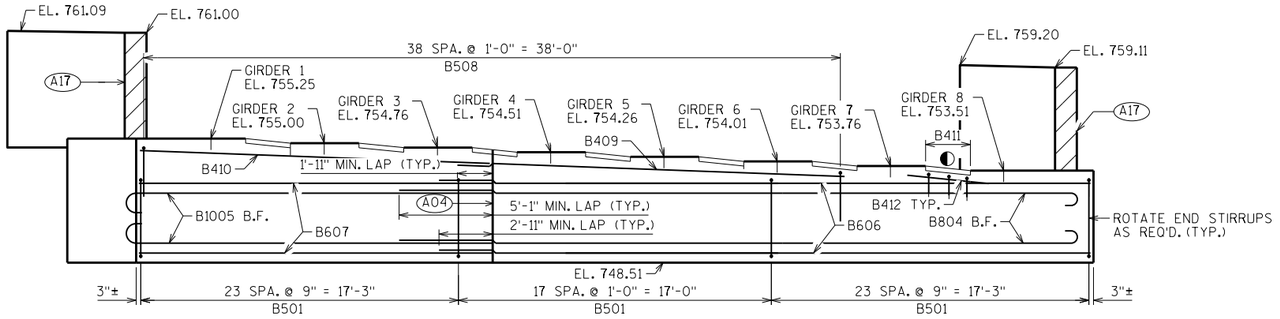
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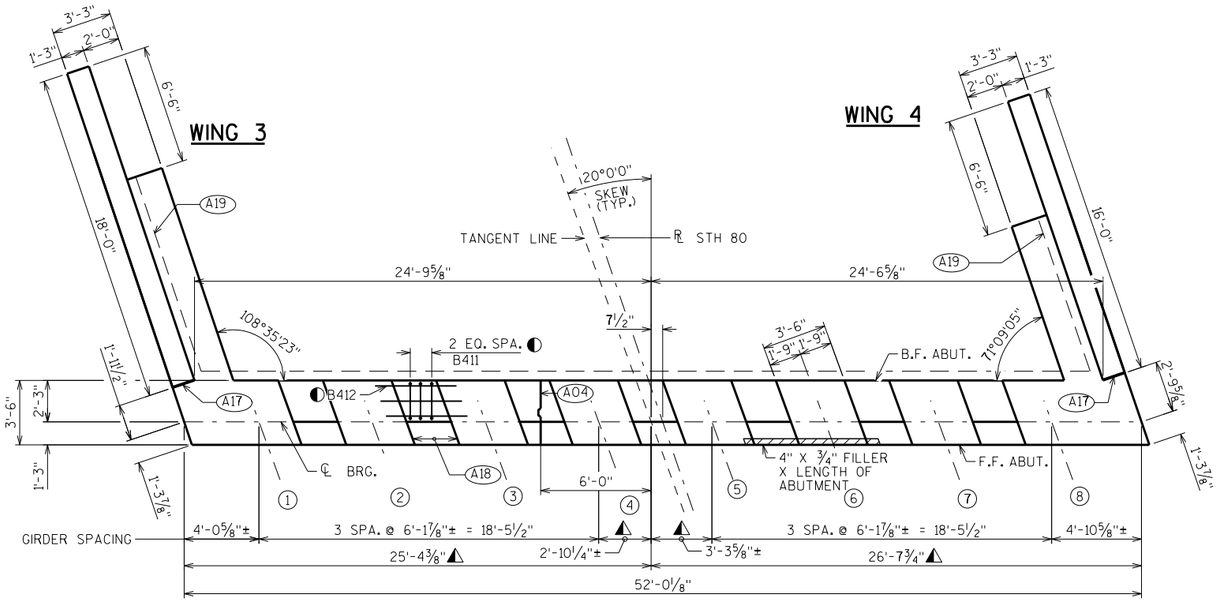
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STATE PROJECT NUMBER

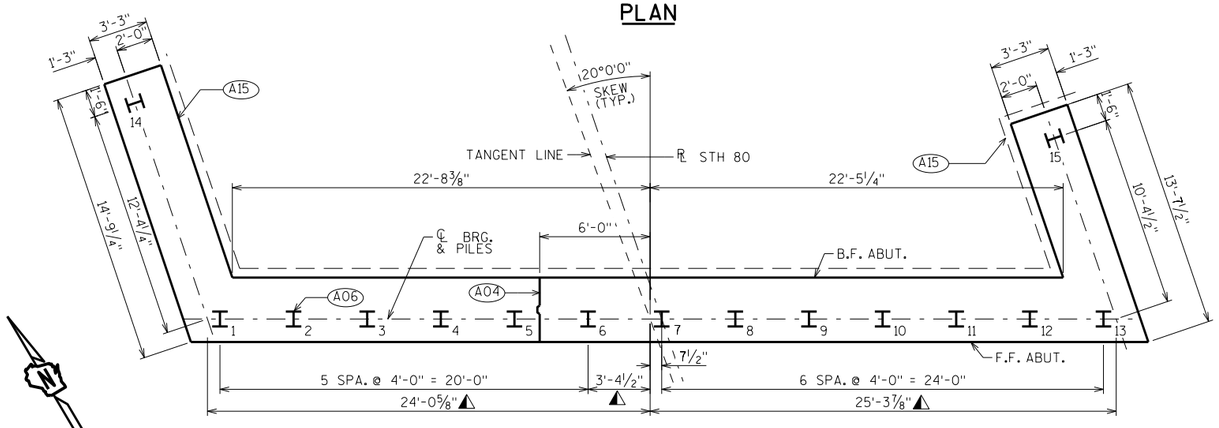
5042-05-81




## ELEVATION LOOKING NORTH



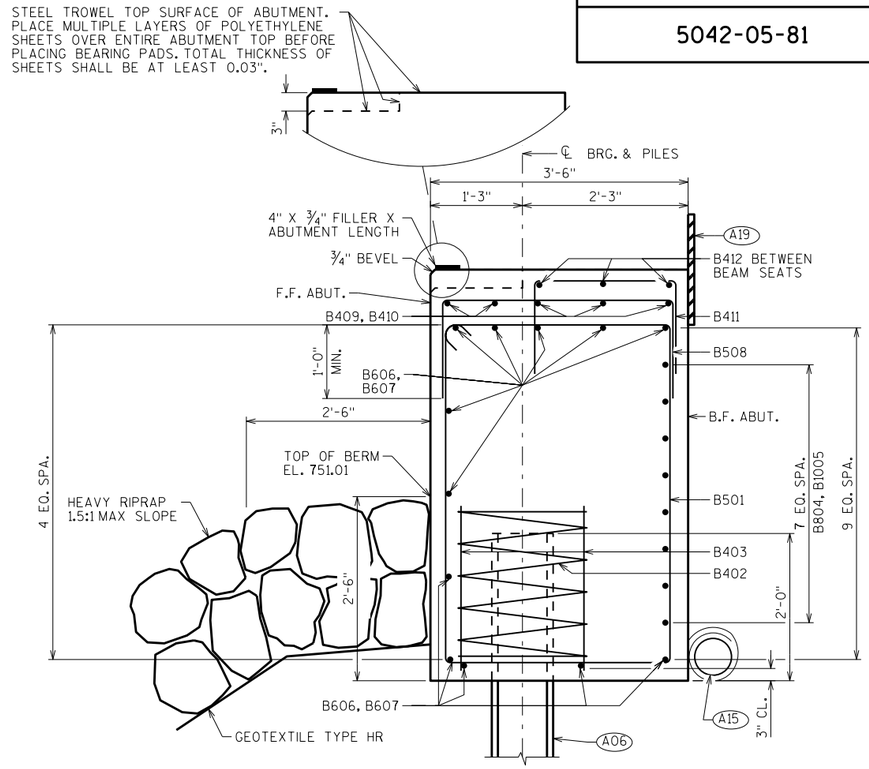

## PLAN



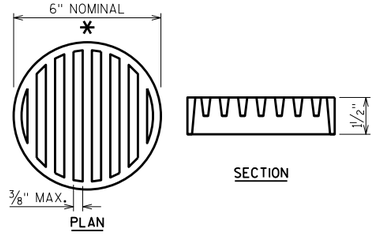

## PILE PLAN

▲ MEASURED TO TANGENT LINE

◐ BETWEEN BEAM SEATS (TYP.)




## SECTION THRU BODY




## RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHEMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

(A04) VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

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NORTH ABUTMENT

SHEET 6

236

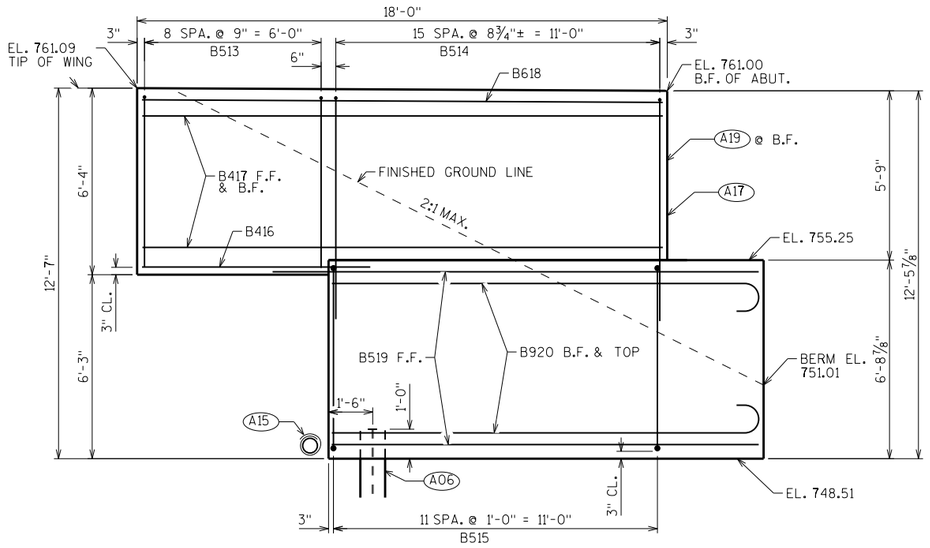
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8

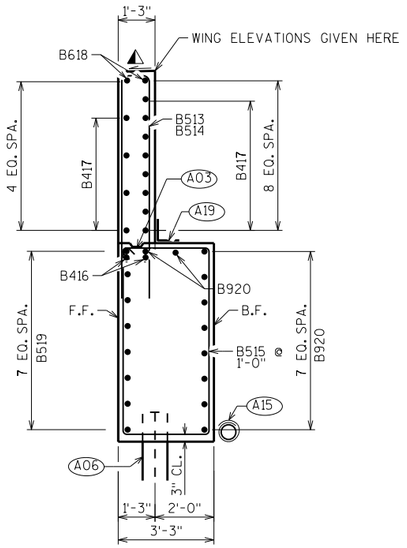
STATE PROJECT NUMBER

5042-05-81

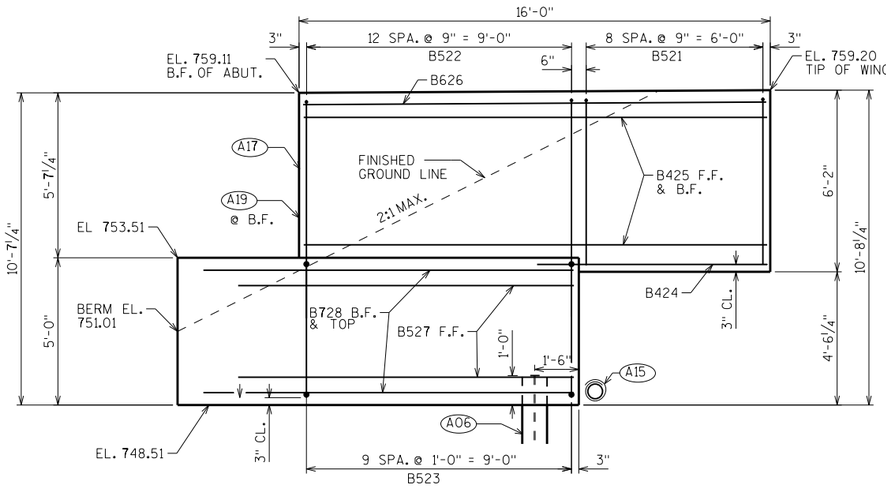



## WING 3 ELEVATION

(FRONT FACE SHOWN)

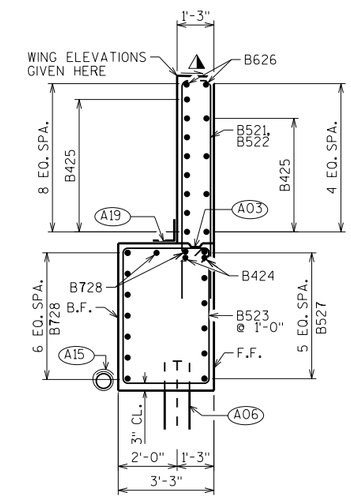



## WING 3 SECTION

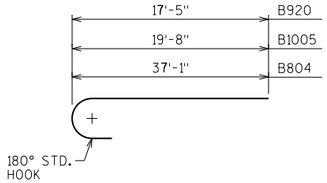



## WING 4 ELEVATION

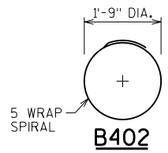
(FRONT FACE SHOWN)



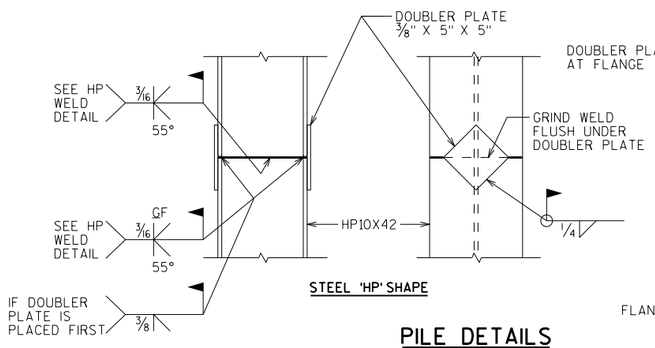

## WING 4 SECTION



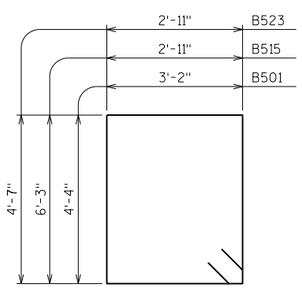

## B804, B1005, B920



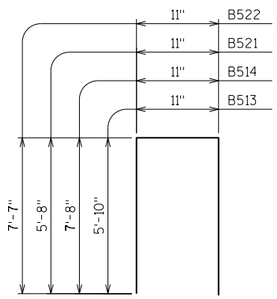

## B402



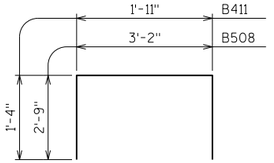

## PILE DETAILS




## B501, B515, B523




## B513, B514, B521, B522




## B508, B411

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| B501 | | 64 | 15'-8" | X | | BODY-STIRRUP |
| B402 | | 13 | 28'-0" | X | | BODY-1 PER BODY PILE-VERT. |
| B403 | | 26 | 2'-3" | | | BODY-2 PER BODY PILE-VERT. |
| B804 | | 8 | 38'-0" | X | | BODY-HORIZ.-B.F. AT ENDS |
| B1005 | | 8 | 21'-1" | X | | BODY-HORIZ.-B.F. AT ENDS |
| B606 | | 12 | 35'-11" | | | BODY-HORIZ. |
| B607 | | 12 | 18'-8" | | | BODY-HORIZ. |
| B508 | | 39 | 8'-5" | X | | BODY-VERT.-TOP-UNDER G1-G6 |
| B409 | | 5 | 21'-6" | | | BODY-HORIZ.-TOP-UNDER G4-G6 |
| B410 | | 5 | 18'-8" | | | BODY-HORIZ.-TOP-UNDER G1-G3 |
| B411 | | 21 | 4'-5" | X | | BODY-VERT.-TOP-BTWN. BEAM SEATS |
| B412 | | 21 | 4'-6" | | | BODY-HORIZ.-TOP-BTWN. BEAM SEATS |
| B513 | X | 9 | 12'-4" | X | | WING 3-VERT. |
| B514 | X | 16 | 16'-0" | X | | WING 3-VERT. |
| B515 | X | 12 | 19'-0" | X | | WING 3-STIRRUP |
| B416 | X | 2 | 7'-11" | | | WING 3-HORIZ.-F.F. & B.F. |
| B417 | X | 12 | 17'-8" | | | WING 3-HORIZ.-F.F. & B.F. |
| B618 | X | 2 | 17'-8" | | | WING 3-HORIZ.-TOP-F.F. & B.F. |
| B519 | X | 8 | 14'-5" | | | WING 3-HORIZ.-F.F. |
| B920 | X | 10 | 16'-8" | X | | WING 3-HORIZ.-B.F. & TOP |
| B521 | X | 9 | 12'-0" | X | | WING 4-VERT. |
| B522 | X | 13 | 15'-10" | X | | WING 4-VERT. |
| B523 | X | 10 | 15'-8" | X | | WING 4-STIRRUP |
| B424 | X | 2 | 7'-11" | | | WING 4-HORIZ.-F.F. & B.F. |
| B425 | X | 12 | 15'-8" | | | WING 4-HORIZ.-F.F. & B.F. |
| B626 | X | 2 | 15'-8" | | | WING 4-HORIZ.-F.F. & B.F. |
| B527 | X | 6 | 13'-2" | | | WING 4-HORIZ.-F.F. |
| B728 | X | 9 | 11'-6" | | | WING 4-HORIZ.-B.F. & TOP |

▲ SLOPE TO DRAIN

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

NORTH ABUTMENT DETAILS

SHEET 7

237

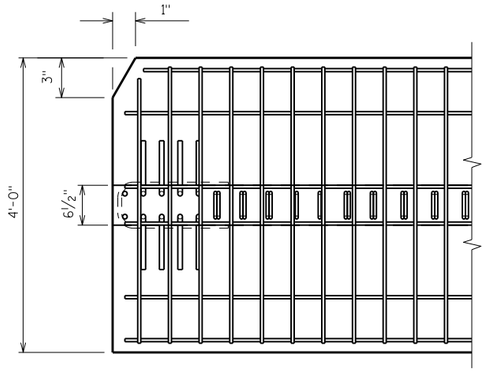
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STATE PROJECT NUMBER

5042-05-81




TOP FLANGE

## DIAPHRAGM HOLE LOCATIONS

| GIRDER | "D" | "E" | "F" | "G" | "H" |
|---|---|---|---|---|---|
| 1 | 40'-11⅜" | —— | 42'-0" | —— | 43'-0⅝" |
| 2-7 | 40'-11⅜" | 2'-1¼" | 39'-10¾" | 2'-1¼" | 40'-11⅜" |
| 8 | 43'-0⅝" | —— | 42'-0" | —— | 40'-11⅜" |

## NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 15" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

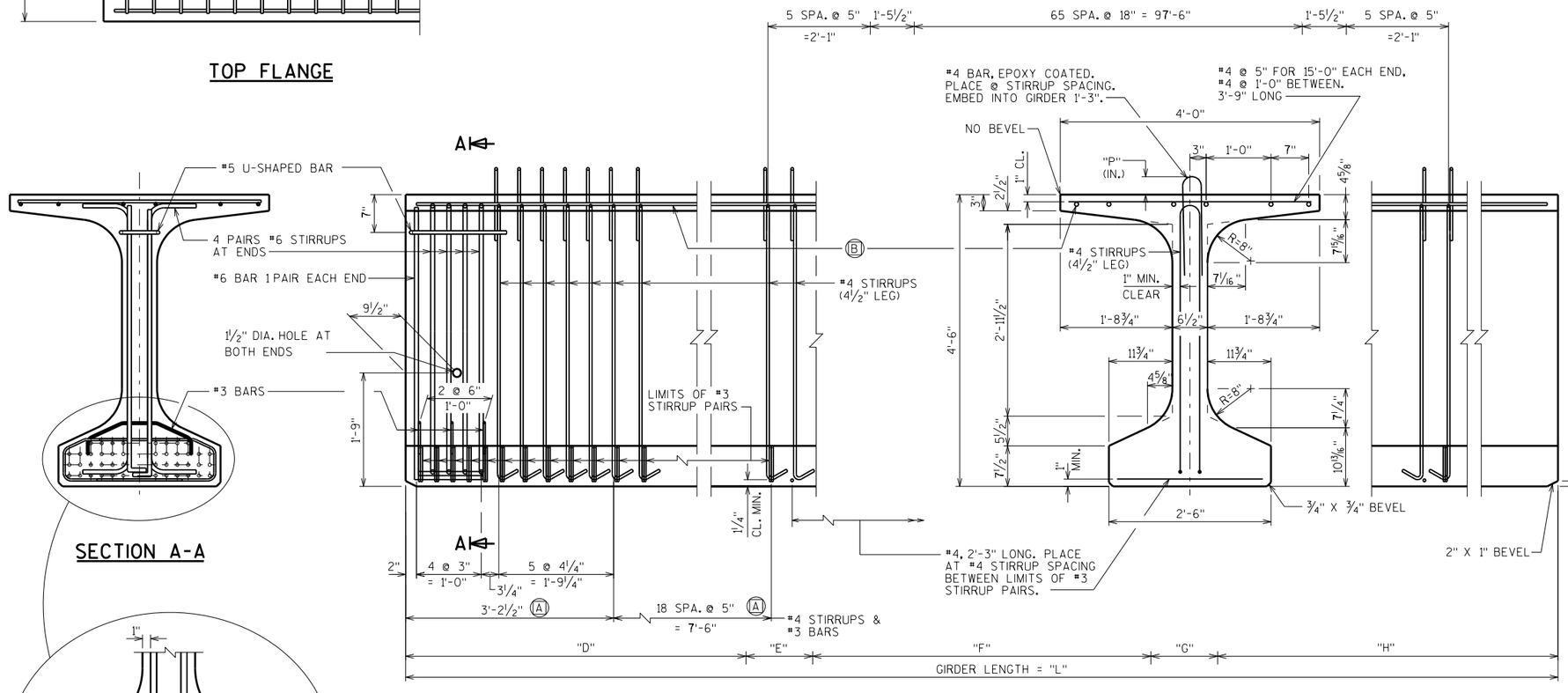
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

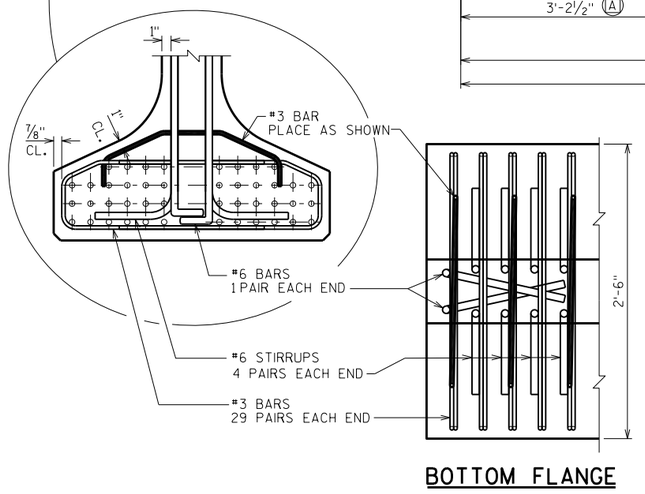



SECTION A-A

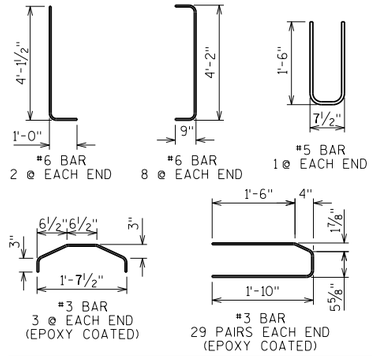
SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 # 4 BARS, FULL LENGTH, MIN. LAP = 1'-11"




BOTTOM FLANGE




✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

## GIRDER DATA

| SPAN | GIRDER | GIRDER LENGTH "L" | DEAD LOAD DEFL. (IN.) 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | CONC. STRGTH. f'c (p.s.i.) | "P" IST 1/3 OF GIRDER | "P" MID 1/3 OF GIRDER | "P" END 1/3 OF GIRDER | DIA. OF STRAND (IN.) | DRAPED PATTERN TOTAL NO. OF STRANDS | f'ci (P.S.I.) ✳ | ( IN.) "A" | "B" MIN. | "B" MAX. | "C" | UNDRAPED PATTERN TOTAL NO. OF STRANDS | f'ci (P.S.I.) ✳ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 126 | 0.8 | 1.5 | 2.1 | 2.5 | 2.6 | 2.5 | 2.1 | 1.5 | 0.8 | 8,000 | 9" | 7.5" | 9" | 0.6 | 42 | 6,800 | 49 | 16 | 19 | 5 | | |
| 1 | 2-7 | 126 | 0.7 | 1.3 | 1.8 | 2.2 | 2.3 | 2.2 | 1.8 | 1.3 | 0.7 | 8,000 | 9" | 7.5" | 9" | 0.6 | 42 | 6,800 | 49 | 16 | 19 | 5 | | |
| 1 | 8 | 126 | 0.8 | 1.5 | 2.0 | 2.4 | 2.5 | 2.4 | 2.0 | 1.5 | 0.8 | 8,000 | 9" | 7.5" | 9" | 0.6 | 42 | 6,800 | 49 | 16 | 19 | 5 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

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54W" PRESTRESSED GIRDER DETAILS 1

SHEET 8

238

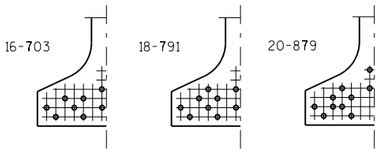
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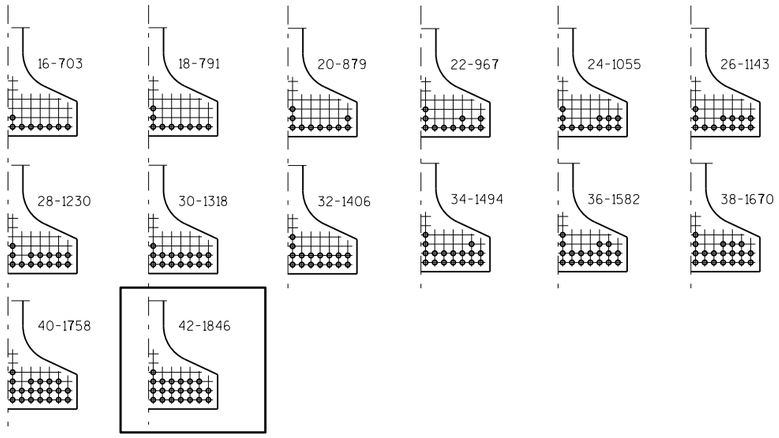
STATE PROJECT NUMBER

5042-05-81



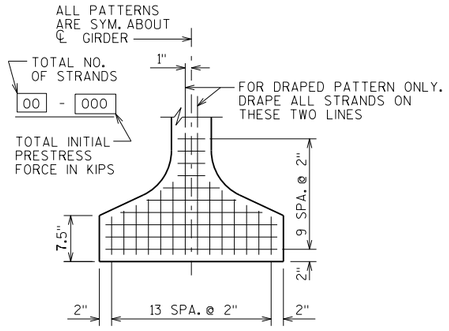

## STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS

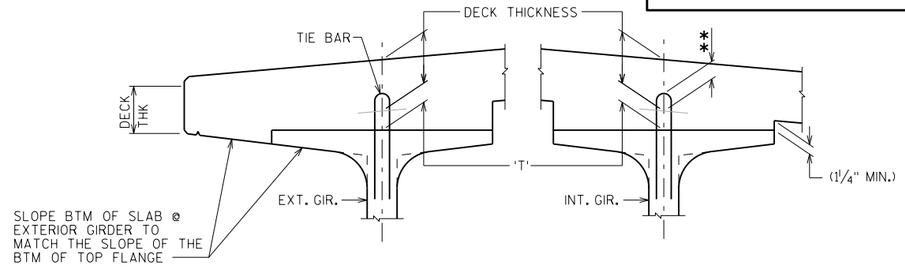



## ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS




## TYP. STRAND PATTERN




## DECK HAUNCH DETAIL

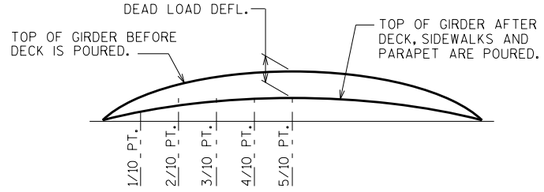
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

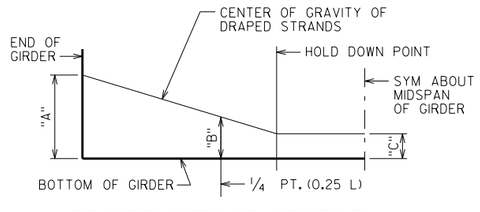
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3⅞" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".




## DEAD LOAD DEFLECTION DIAGRAM




## DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

| SPAN | CAMBER (IN.) * |
|---|---|
| 1 | 4.7 |
| | |
| | |
| | |
| | |

**THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.**

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

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54W" PRESTRESSED GIRDER DETAILS 2

SHEET 9

239

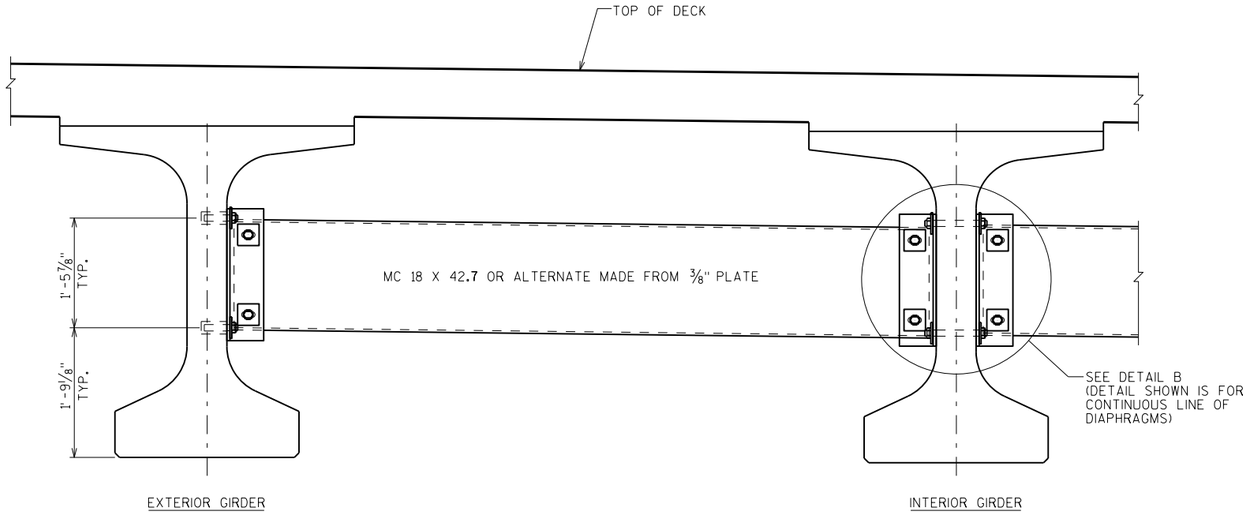
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STATE PROJECT NUMBER

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## PART TRANSVERSE SECTION AT DIAPHRAGM

## NOTES

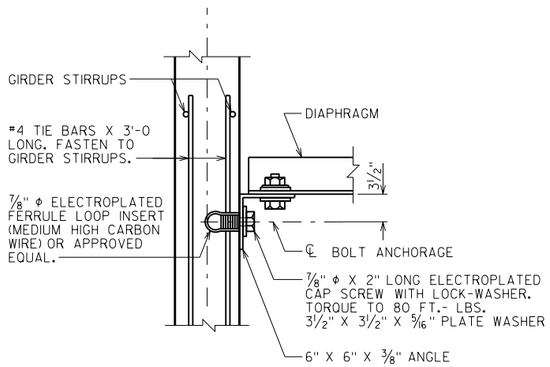
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-52-269", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

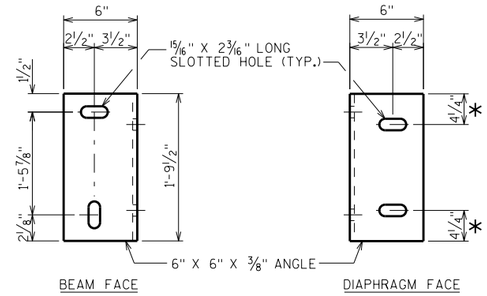
ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.



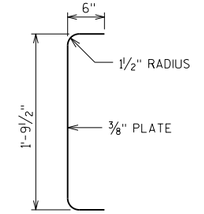

## SECTION A-A

(FOR EXTERIOR ATTACHMENT)

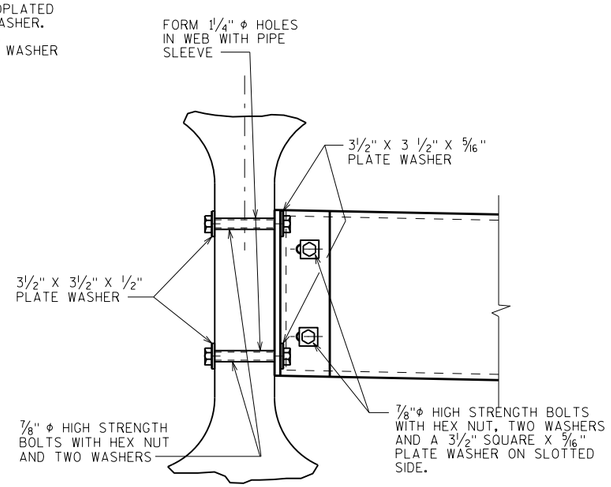



## DIAPHRAGM SUPPORT

* 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM




## SECTION THRU ALTERNATE DIAPHRAGM




(FOR STAGGERED DIAPHRAGM)

## DETAIL B

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

STEEL DIAPHRAGM

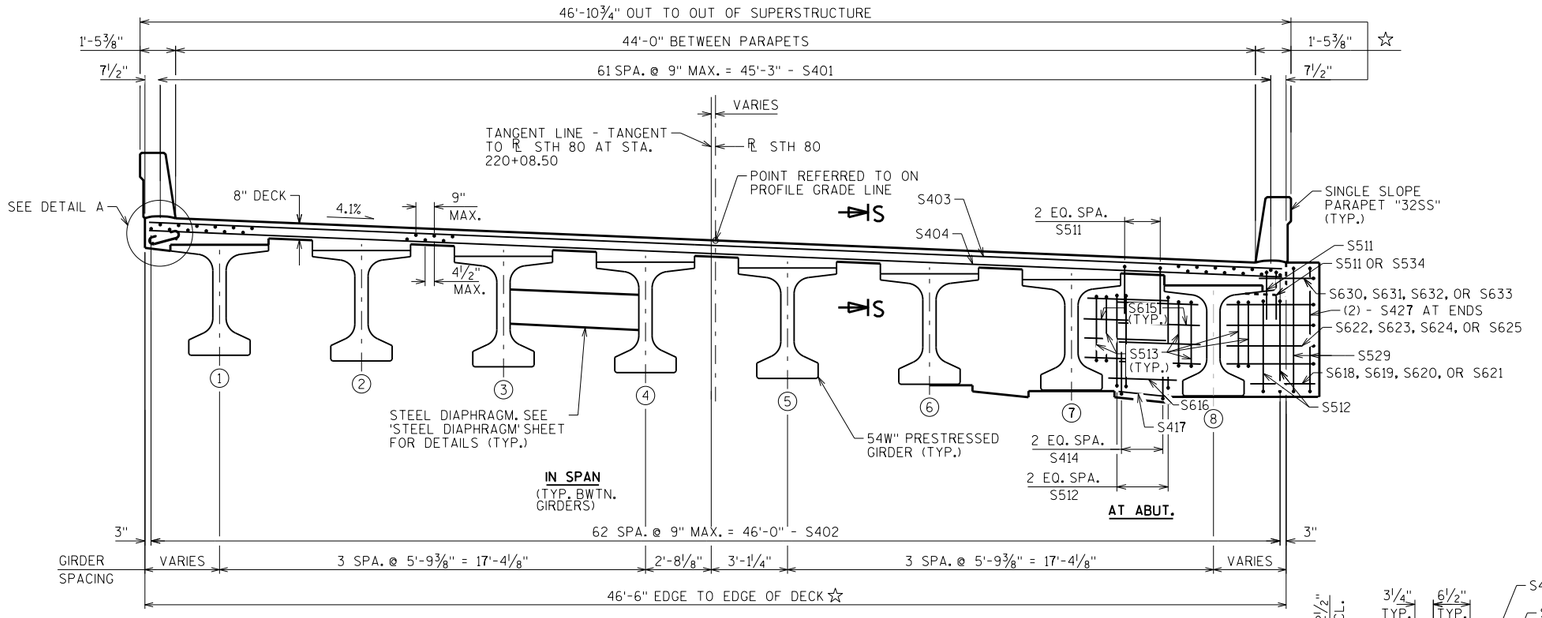
SHEET 10

240

SCALE = 1.00

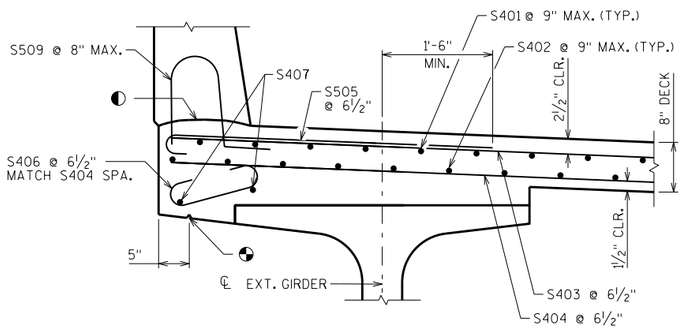
STATE PROJECT NUMBER

5042-05-81




## SECTION THRU BRIDGE

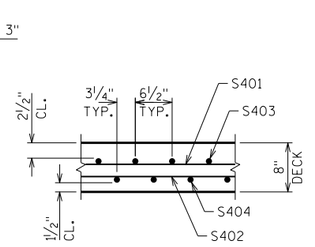
(LOOKING UPSTATION)



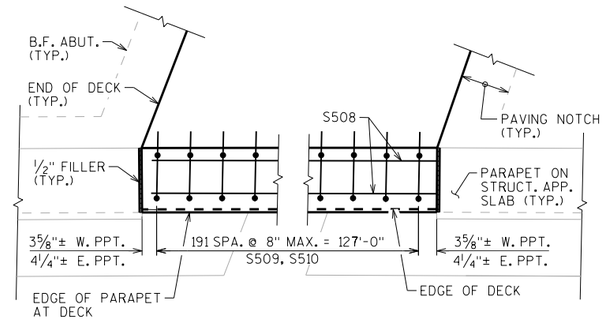

## DETAIL A

(TYP. BOTH SIDES)

NOTE: S406 & S407 BARS LOCATED ON WEST SIDE OF STRUCTURE ONLY.



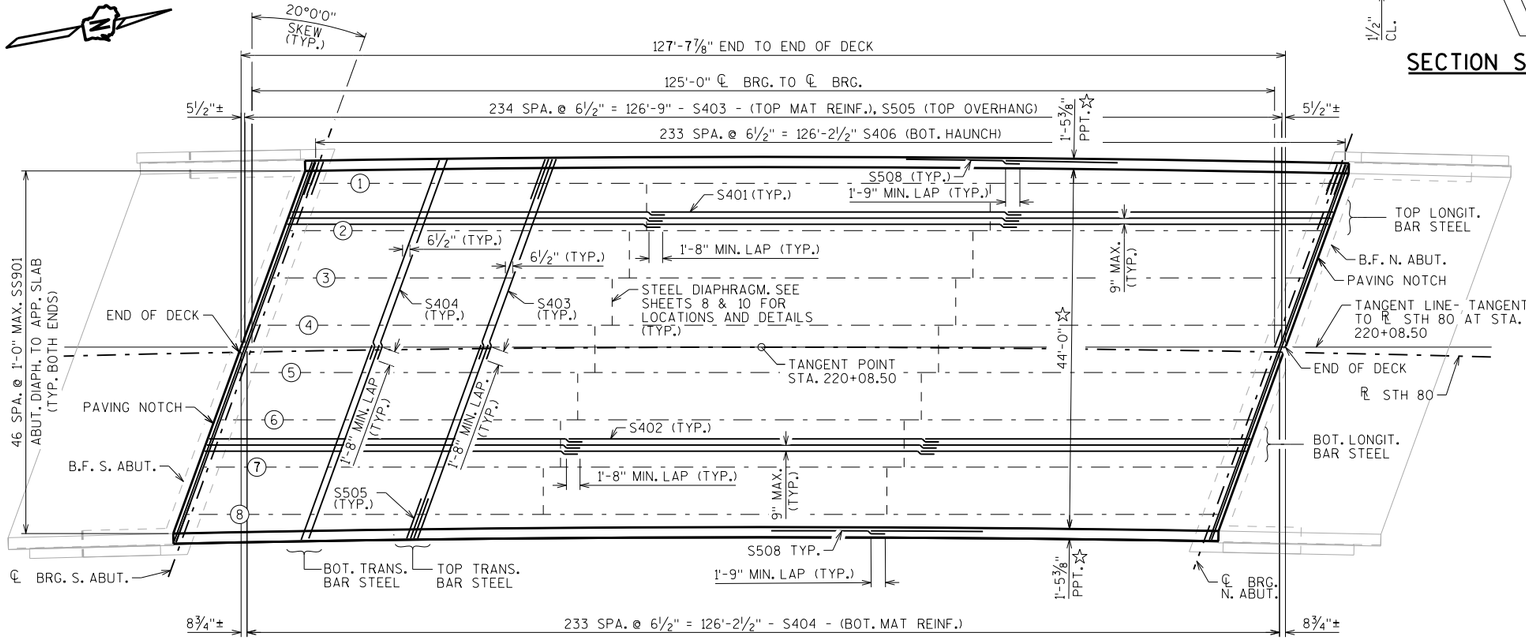

## SECTION S-S



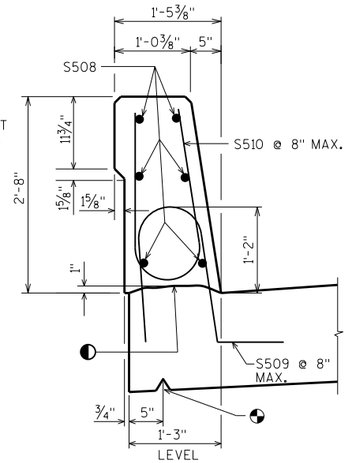

## PLAN DETAIL OF PARAPET REINFORCEMENT

SHOWING EAST PARAPET

(TYP. BOTH SIDES)




## PLAN




## SECTION THRU PARAPET ON BRIDGE

☆ MEASURED RADIALLY

◔ ¾" V-GROOVE REQUIRED. EXTEND V-GROOVE TO 6" FROM F.F. OF ABUT. DIAPHRAGM.

◐ HORIZ. CONST. JOINT.- STRIKE OFF AND LEAVE ROUGH AS SHOWN.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

SUPERSTRUCTURE

SHEET 11

241

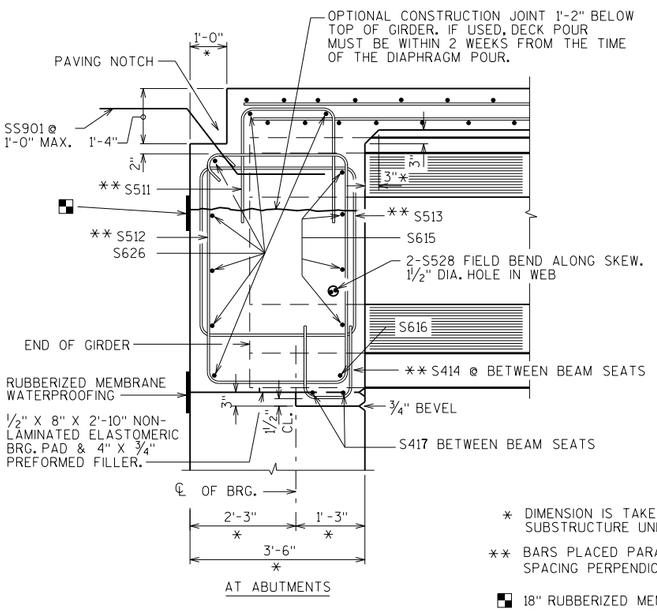
SCALE = 9.00

8

8

STATE PROJECT NUMBER

5042-05-81

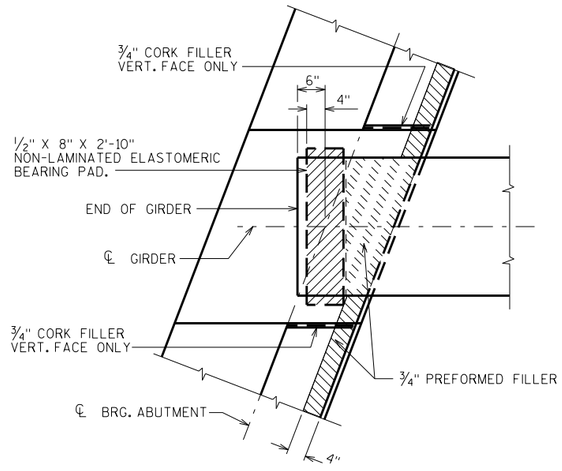



## PART LONGIT. SECTION

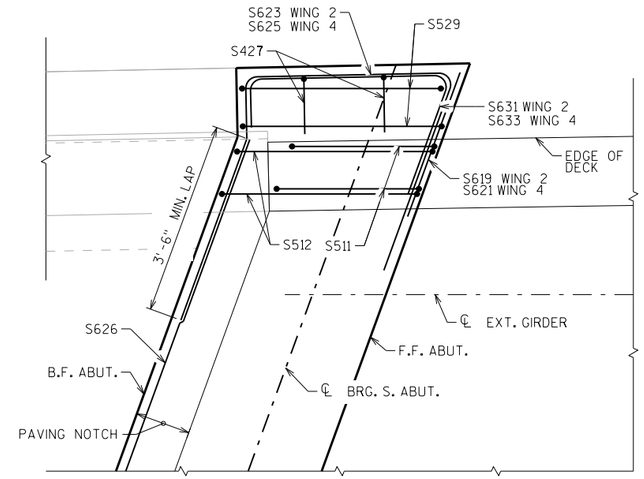
* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

▪ 18" RUBBERIZED MEMBRANE WATERPROOFING: SEAL ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED (COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES")

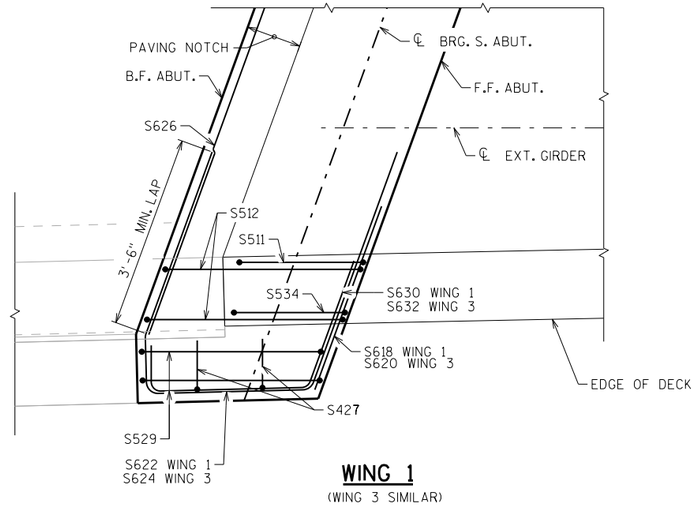



## BEARING PAD DETAIL




## WING 2

(WING 4 SIMILAR)




## WING 1

(WING 3 SIMILAR)

## ABUTMENT DIAPHRAGM ENDS

## TOP OF DECK ELEVATIONS

| | ℄ BRG. S. ABUT. | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | ℄ BRG. N. ABUT. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| LT. EOD | 760.37 | 760.43 | 760.49 | 760.55 | 760.62 | 760.68 | 760.74 | 760.80 | 760.86 | 760.93 | 760.99 |
| G1 | 760.30 | 760.35 | 760.41 | 760.47 | 760.53 | 760.59 | 760.65 | 760.72 | 760.79 | 760.86 | 760.93 |
| G2 | 760.05 | 760.11 | 760.16 | 760.22 | 760.28 | 760.34 | 760.41 | 760.47 | 760.54 | 760.61 | 760.68 |
| G3 | 759.80 | 759.86 | 759.91 | 759.97 | 760.03 | 760.09 | 760.16 | 760.22 | 760.29 | 760.36 | 760.43 |
| G4 | 759.56 | 759.61 | 759.67 | 759.73 | 759.79 | 759.85 | 759.91 | 759.98 | 760.04 | 760.11 | 760.18 |
| G5 | 759.31 | 759.37 | 759.42 | 759.48 | 759.54 | 759.60 | 759.66 | 759.73 | 759.80 | 759.86 | 759.94 |
| G6 | 759.06 | 759.12 | 759.17 | 759.23 | 759.29 | 759.35 | 759.41 | 759.48 | 759.55 | 759.62 | 759.69 |
| G7 | 758.82 | 758.87 | 758.93 | 758.98 | 759.04 | 759.10 | 759.17 | 759.23 | 759.30 | 759.37 | 759.44 |
| G8 | 758.57 | 758.62 | 758.68 | 758.74 | 758.80 | 758.86 | 758.92 | 758.98 | 759.05 | 759.12 | 759.19 |
| RT. EOD | 758.47 | 758.54 | 758.60 | 758.66 | 758.73 | 758.79 | 758.85 | 758.92 | 758.98 | 759.04 | 759.10 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

SUPERSTRUCTURE DETAILS 1

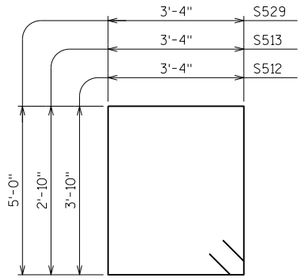
SHEET 12

242

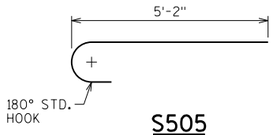
SCALE = 1.33

STATE PROJECT NUMBER

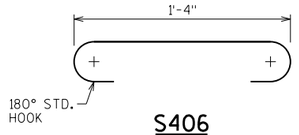
5042-05-81



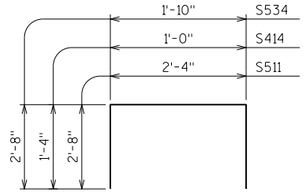

S512, S513, S529



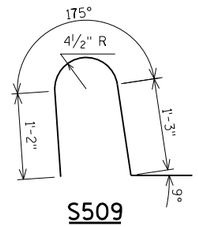

S505



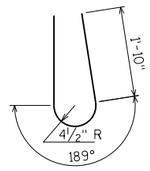

S406



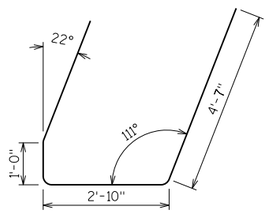

S511, S414, S534



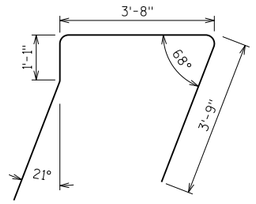

S509



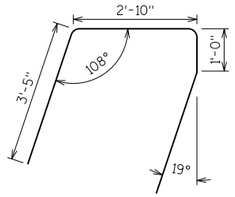

S510



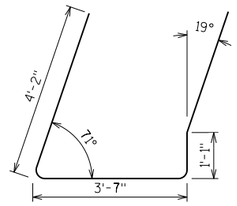

S622



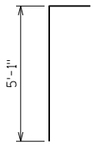

S623



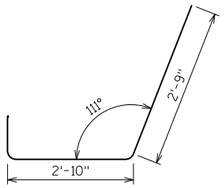

S624



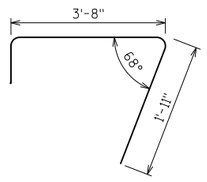

S625



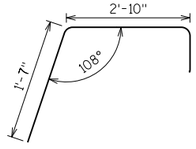

S427



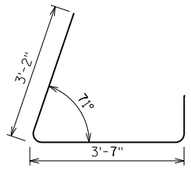

S630



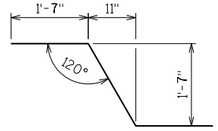

S631




S632




S633




SS901

## TABLE OF TAN. OFFSETS

(OFFSETS ARE NORMAL TO TAN. LINE).

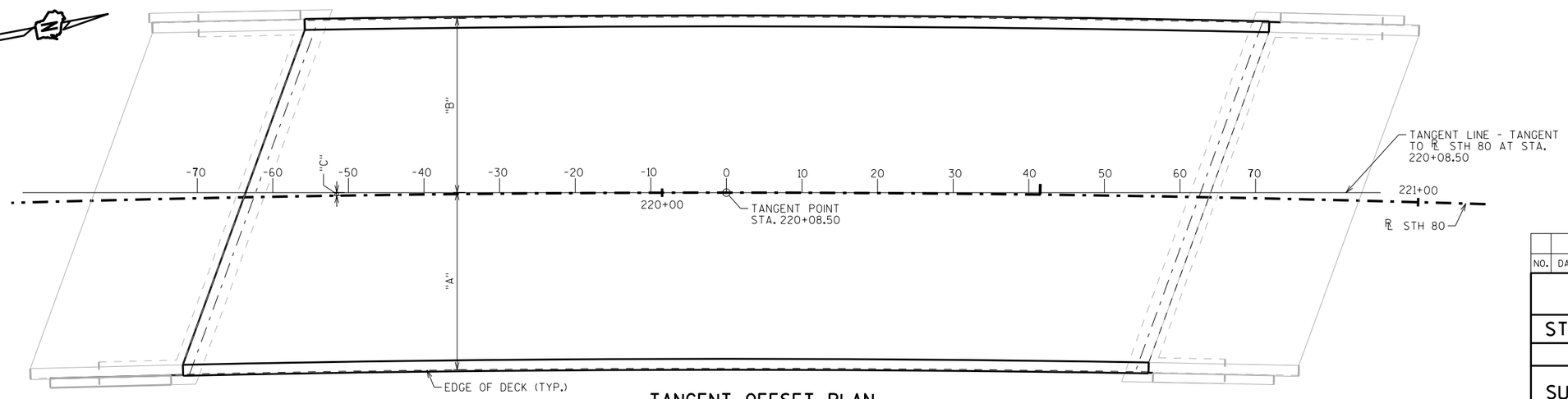
| LOCATION | "A" | "B" | "C" |
|---|---|---|---|
| -70 | 24'-0" | --- | 8 7/8" |
| ℄ S. ABUT. | 23'-10 1/8" | --- | 7" |
| -60 | 23'-9 5/8" | --- | 6 1/2" |
| -50 | 23'-7 5/8" | 22'-10 1/2" | 4 1/2" |
| -40 | 23'-5 7/8" | 23'-0 1/8" | 2 7/8" |
| -30 | 23'-4 5/8" | 23'-1 3/8" | 1 5/8" |
| -20 | 23'-3 3/4" | 23'-2 1/4" | 0 3/4" |
| -10 | 23'-3 1/8" | 23'-2 7/8" | 0 1/8" |
| 0 | 23'-3" | 23'-3" | 0" |
| 10 | 23'-3 1/8" | 23'-2 7/8" | 0 1/8" |
| 20 | 23'-3 3/4" | 23'-2 1/4" | 0 3/4" |
| 30 | 23'-4 5/8" | 23'-1 3/8" | 1 5/8" |
| 40 | 23'-5 7/8" | 23'-0 1/8" | 2 7/8" |
| 50 | 23'-7 5/8" | 22'-10 1/2" | 4 1/2" |
| 60 | --- | 22'-8 1/2" | 6 1/2" |
| ℄ N. ABUT. | --- | 22'-7 1/8" | 7" |
| 70 | --- | 22'-6 1/8" | 8 7/8" |

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| S401 | X | 186 | 43'-7" | | | LONGIT.-TOP |
| S402 | X | 189 | 43'-7" | | | LONGIT.-BOT. |
| S403 | X | 470 | 25'-7" | | | TRANSVERSE-TOP |
| S404 | X | 468 | 25'-7" | | | TRANSVERSE-BOT. |
| S505 | X | 470 | 5'-9" | X | | TRANSVERSE-OVERHANG |
| S406 | X | 234 | 2'-4" | X | | HAUNCH OVERHANG |
| S407 | X | 6 | 43'-7" | | | HAUNCH OVERHANG-LONGIT.-BOT. |
| S508 | X | 36 | 43'-8" | | | PARAPET-HORIZ. |
| S509 | X | 384 | 4'-5" | X | | DECK/32SS PARAPET - VERT. |
| S510 | X | 384 | 5'-0" | X | | 32SS PARAPET - VERT. |
| S511 | X | 48 | 7'-5" | X | | ABUT. DIAPHRAGM-VERT. |
| S512 | X | 50 | 15'-0" | X | | ABUT. DIAPHRAGM-VERT.-STIRRUP |
| S513 | X | 64 | 13'-0" | X | | ABUT. DIAPHRAGM-VERT.-STIRRUP |
| S414 | X | 42 | 3'-6" | X | | ABUT. DIAPHRAGM-VERT. |
| S615 | X | 112 | 3'-8" | | | ABUT. DIAPHRAGM-HORIZ. |
| S616 | X | 14 | 3'-1" | | | ABUT. DIAPHRAGM-HORIZ. |
| S417 | X | 28 | 1'-11" | | | ABUT. DIAPHRAGM-HORIZ. |
| S618 | X | 1 | 3'-6" | | | ABUT. DIAPHRAGM-HORIZ.-END-WING 1 |
| S619 | X | 1 | 2'-9" | | | ABUT. DIAPHRAGM-HORIZ.-END-WING 2 |
| S620 | X | 1 | 2'-4" | | | ABUT. DIAPHRAGM-HORIZ.-END-WING 3 |
| S621 | X | 1 | 3'-2" | | | ABUT. DIAPHRAGM-HORIZ.-END-WING 4 |
| S622 | X | 4 | 11'-11" | X | | ABUT. DIAPHRAGM-HORIZ.-END-WING 1 |
| S623 | X | 4 | 11'-10" | X | | ABUT. DIAPHRAGM-HORIZ.-END-WING 2 |
| S624 | X | 4 | 10'-9" | X | | ABUT. DIAPHRAGM-HORIZ.-END-WING 3 |
| S625 | X | 4 | 12'-2" | X | | ABUT. DIAPHRAGM-HORIZ.-END-WING 4 |
| S626 | X | 28 | 26'-10" | | | ABUT. DIAPHRAGM-HORIZ.-B.F. |
| S427 | X | 8 | 6'-0" | X | | ABUT. DIAPHRAGM-VERT.-EXT. |
| S528 | X | 32 | 6'-0" | | | ABUT. DIAPHRAGM-HORIZ.-THRU GIRDER |
| S529 | X | 8 | 17'-4" | X | | ABUT. DIAPHRAGM-VERT.-STIRRUP-EXT. |
| S630 | X | 1 | 6'-2" | X | | ABUT. DIAPHRAGM-HORIZ.-END-WING 1 |
| S631 | X | 1 | 6'-2" | X | | ABUT. DIAPHRAGM-HORIZ.-END-WING 2 |
| S632 | X | 1 | 5'-0" | X | | ABUT. DIAPHRAGM-HORIZ.-END-WING 3 |
| S633 | X | 1 | 7'-4" | X | | ABUT. DIAPHRAGM-HORIZ.-END-WING 4 |
| S534 | X | 2 | 6'-11" | X | | ABUT. DIAPHRAGM-VERT.-END-WING 1 & 3 |
| | | | | | | |
| SS901 | S | 94 | 5'-0" | X | | CONC. ABUT. DIAPH. TO APPROACH SLAB |

STAINLESS STEEL




TANGENT OFFSET PLAN

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

SUPERSTRUCTURE DETAILS 2

SHEET 13

243

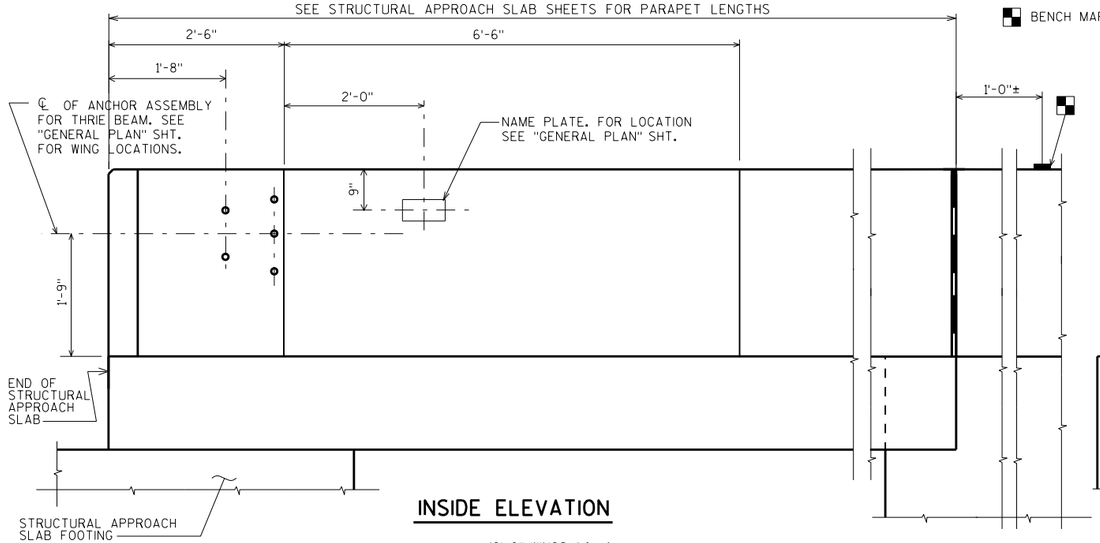
SCALE = 8.00

8

8

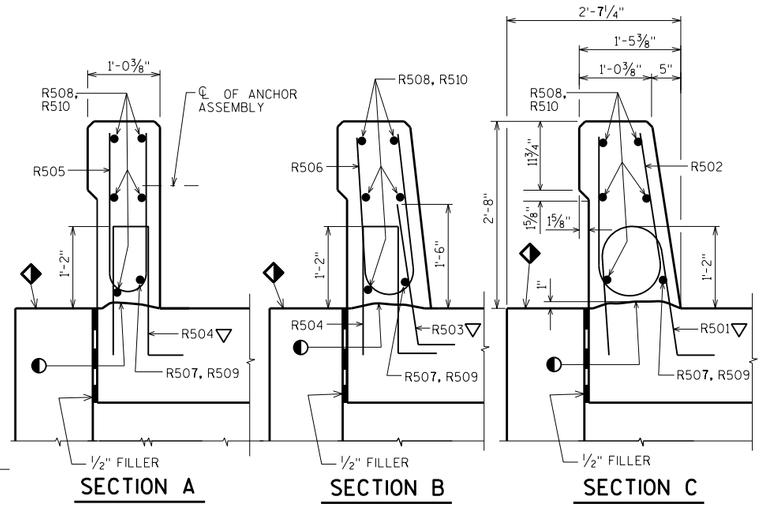
STATE PROJECT NUMBER

5042-05-81




INSIDE ELEVATION

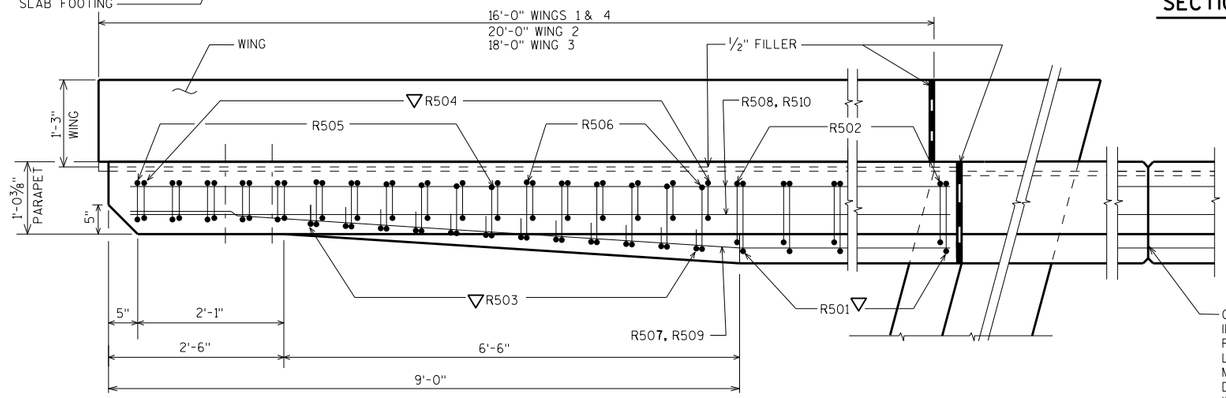
BENCH MARK CAP (WHEN SUPPLIED).




SECTION A

SECTION B

SECTION C




PLAN

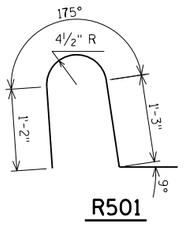
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A 3/4" - 'V' GROOVE.

## BILL OF BARS

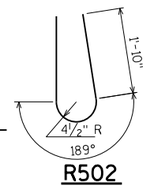
FOR STRUCTURAL APPROACH SLAB PARAPETS

| BAR MARK | COAT | S. ABUT. | N. ABUT. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|---|
| R501 | X | 34 | 34 | 4'-5" | X | | PARAPET VERT. |
| R502 | X | 34 | 34 | 5'-0" | X | | PARAPET VERT. |
| R503 | X | 24 | 24 | 2'-9" | X | | PARAPET VERT. |
| R504 | X | 34 | 34 | 4'-4" | X | | PARAPET VERT. |
| R505 | X | 22 | 22 | 4'-9" | X | | PARAPET VERT. |
| R506 | X | 12 | 12 | 4'-10" | X | | PARAPET VERT. |
| R507 | X | 2 | -- | 19'-8" | X | | PARAPET HORIZ. S. ABUT. |
| R508 | X | 10 | -- | 19'-9" | | | PARAPET HORIZ. S. ABUT. |
| R509 | X | -- | 2 | 19'-5" | X | | PARAPET HORIZ. N. ABUT. |
| R510 | X | -- | 10 | 19'-6" | | | PARAPET HORIZ. N. ABUT. |

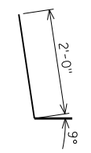
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE



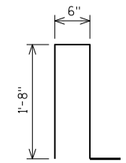

R501



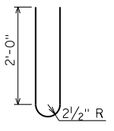

R502



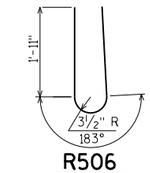

R503



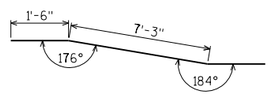

R504



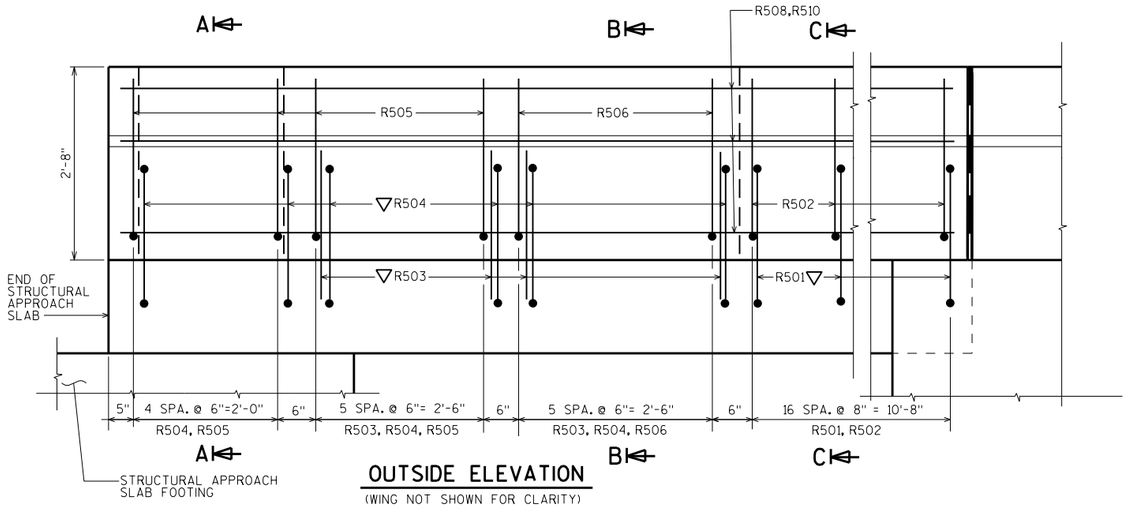

R505




R506

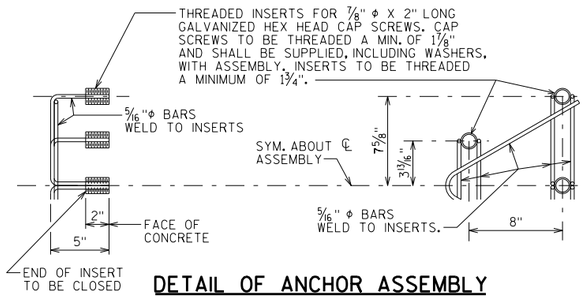



R507, R509




OUTSIDE ELEVATION

(WING NOT SHOWN FOR CLARITY)




DETAIL OF ANCHOR ASSEMBLY

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

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

◆ SLOPE FOR DRAINAGE

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

▽ R501, R503 AND R504 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

SINGLE SLOPE PARAPET 32SS

SHEET 14

244

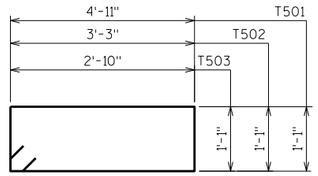
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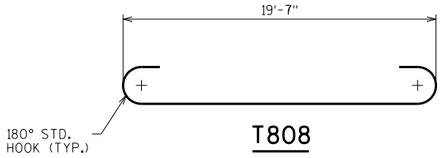
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STATE PROJECT NUMBER

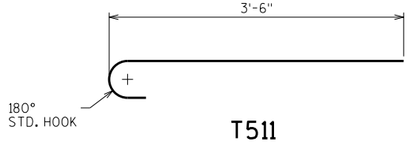
5042-05-81



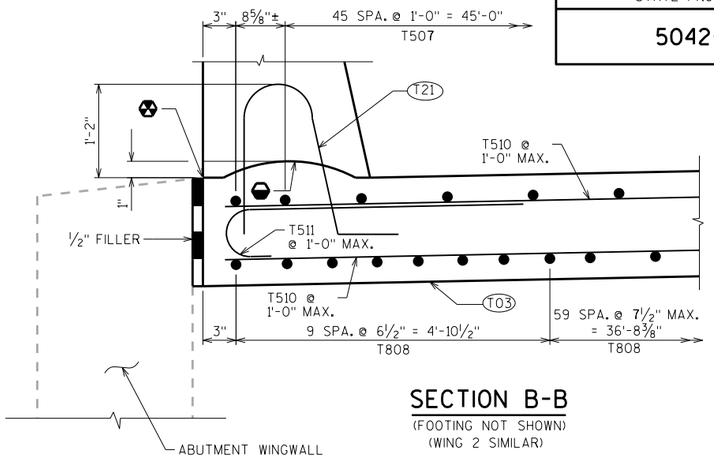

T501, T502, T503




T808



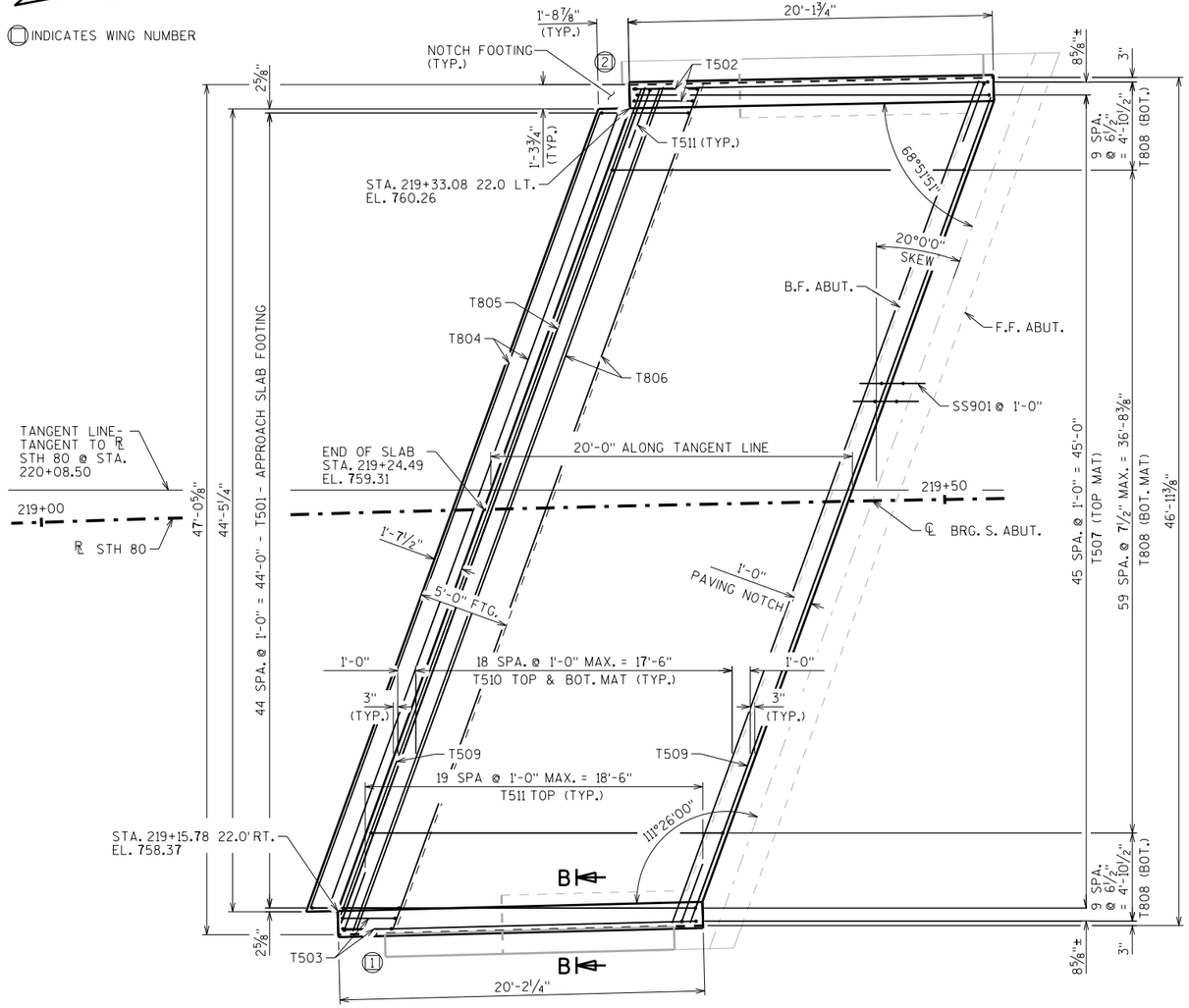

T511



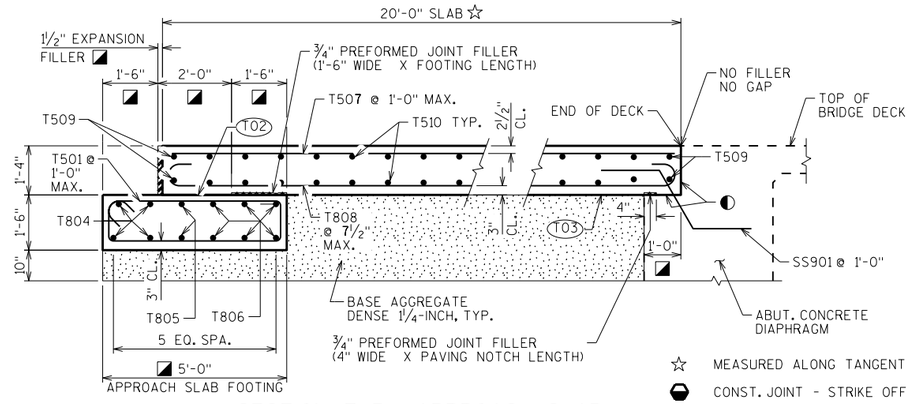

SECTION B-B

(FOOTING NOT SHOWN)
(WING 2 SIMILAR)

INDICATES WING NUMBER




PLAN




SECTION THRU APPROACH SLAB

☆ MEASURED ALONG TANGENT LINE

CONST. JOINT - STRIKE OFF AS SHOWN

APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCUTRAL APPROACH SLAB.

MEASURED NORMAL TO ABUTMENT

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF THE FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF THE SUBGRADE.

(T21) FOR PPT. BARS & DIMENSIONS SEE "SINGLE SLOPE PARAPET 32SS" SHEET.

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

## NOTES:

ALLOWABLE SOIL PRESSURE: _____ 2,000 P.S.F.

THE EXISTING SOIL MAY REMAIN IN PLACE IF THE REGION SOILS ENGINEER DETERMINES THAT THE EXISTING SOIL BEARING PRESSURE MEETS THE REQUIREMENTS ABOVE.

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| T501 | X | 45 | 12'-8" | X | | FOOTING-STIRRUP |
| T502 | X | 2 | 9'-4" | X | | FOOTING-STIRRUP |
| T503 | X | 2 | 8'-6" | X | | FOOTING-STIRRUP |
| T804 | X | 4 | 46'-11" | | | FOOTING-TRANS. |
| T805 | X | 2 | 49'-2" | | | FOOTING-TRANS. |
| T806 | X | 6 | 49'-8" | | | FOOTING-TRANS. |
| T507 | X | 48 | 19'-7" | | | SLAB-LONGIT.-TOP |
| T808 | X | 78 | 21'-5" | X | | SLAB-LONGIT.-BOT. |
| T509 | X | 4 | 48'-7" | | | SLAB-TRANS.-TOP & BOT. |
| T510 | X | 38 | 49'-7" | | | SLAB-TRANS.-TOP & BOT. |
| T511 | X | 40 | 4'-1" | X | | SLAB-TRANS.-TOP. -ENDS |

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

SOUTH STRUCTURAL APPROACH SLAB

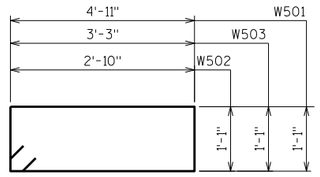
SHEET 15

245

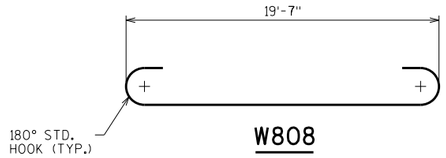
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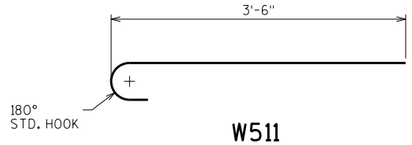
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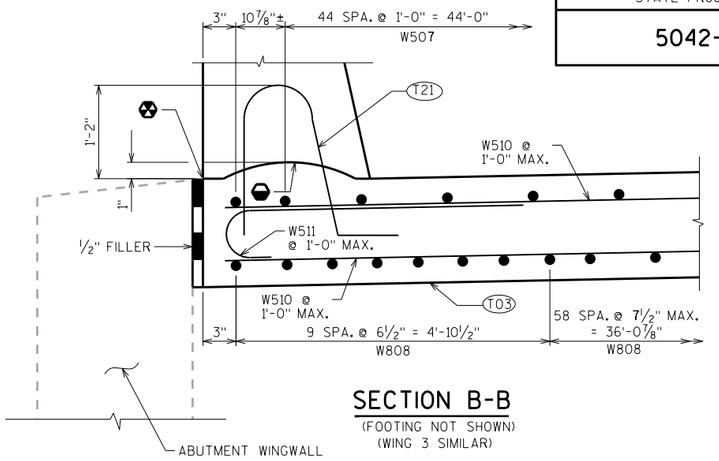

W501, W502, W503




W808

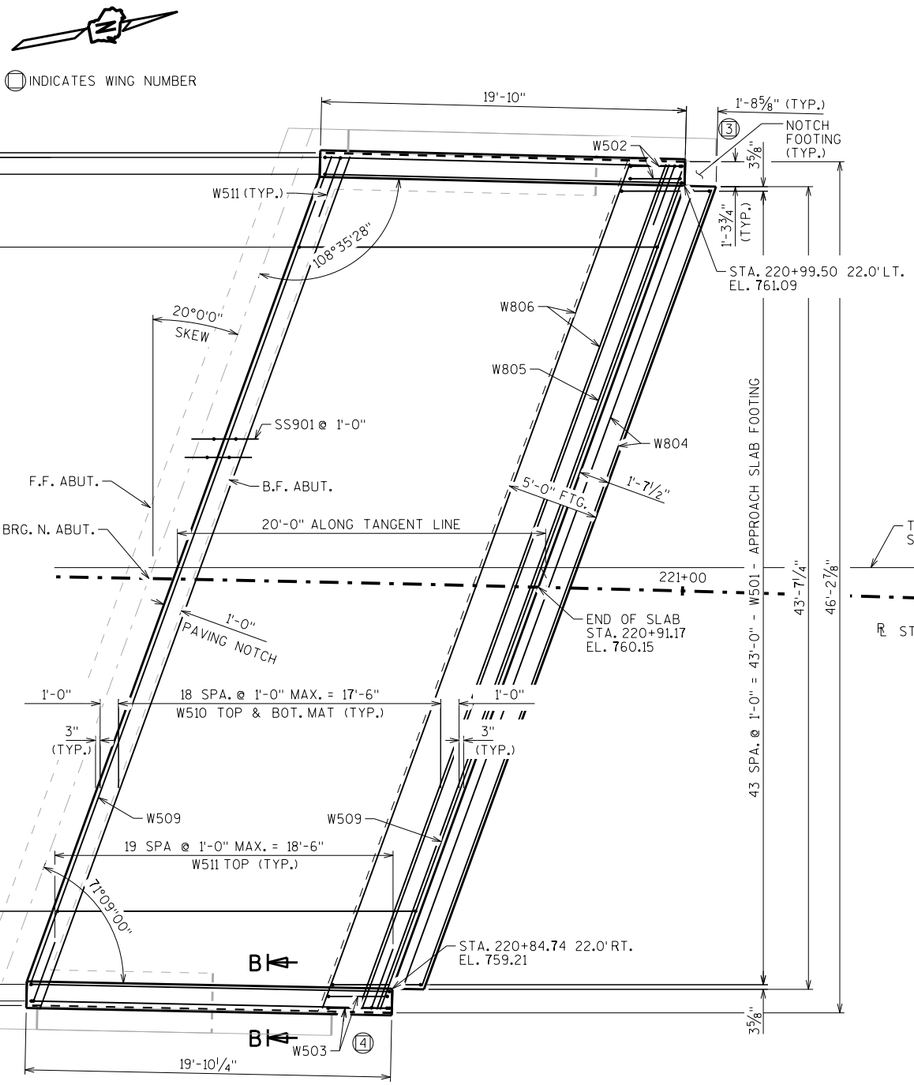



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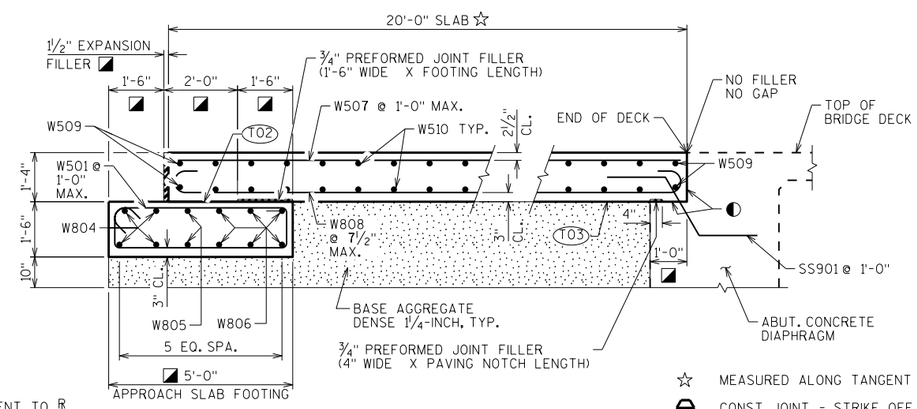



SECTION B-B

(FOOTING NOT SHOWN)
(WING 3 SIMILAR)




PLAN




SECTION THRU APPROACH SLAB

☆ MEASURED ALONG TANGENT LINE

CONST. JOINT - STRIKE OFF AS SHOWN

APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCUTRAL APPROACH SLAB.

MEASURED NORMAL TO ABUTMENT

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF THE FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF THE SUBGRADE.

(T21) FOR PPT. BARS & DIMENSIONS SEE "SINGLE SLOPE PARAPET 32SS" SHEET.

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

## NOTES:

ALLOWABLE SOIL PRESSURE: _____ 2,000 P.S.F.

THE EXISTING SOIL MAY REMAIN IN PLACE IF THE REGION SOILS ENGINEER DETERMINES THAT THE EXISTING SOIL BEARING PRESSURE MEETS THE REQUIREMENTS ABOVE.

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| W501 | X | 44 | 12'-8" | X | | FOOTING-STIRRUP |
| W502 | X | 2 | 8'-6" | X | | FOOTING-STIRRUP |
| W503 | X | 2 | 9'-4" | X | | FOOTING-STIRRUP |
| W804 | X | 4 | 46'-0" | | | FOOTING-TRANS. |
| W805 | X | 2 | 48'-5" | | | FOOTING-TRANS. |
| W806 | X | 6 | 48'-10" | | | FOOTING-TRANS. |
| W507 | X | 47 | 19'-7" | | | SLAB-LONGIT.-TOP |
| W808 | X | 77 | 21'-5" | X | | SLAB-LONGIT.-BOT. |
| W509 | X | 4 | 47'-11" | | | SLAB-TRANS.-TOP & BOT. |
| W510 | X | 38 | 48'-11" | | | SLAB-TRANS.-TOP & BOT. |
| W511 | X | 40 | 4'-1" | X | | SLAB-TRANS.-TOP. -ENDS |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

DRAWN BY DLM | PLANS CK'D. MJL

NORTH STRUCTURAL APPROACH SLAB

SHEET 16

246

STATE PROJECT NUMBER

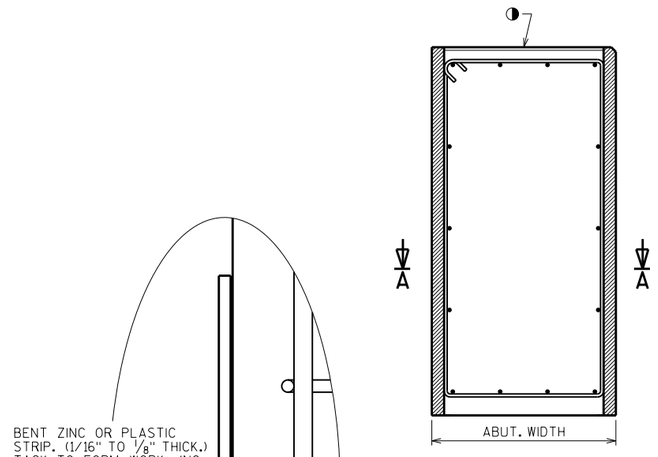
5042-05-81

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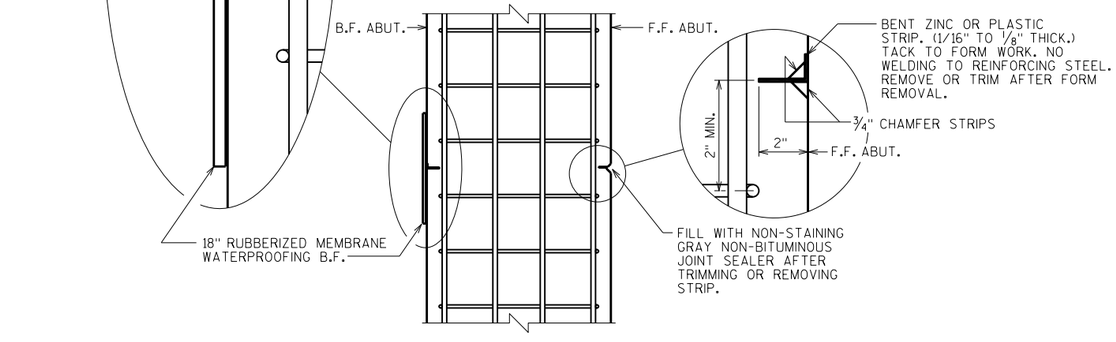
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SCALE = 4.00

| STATE PROJECT NUMBER |
| --- |
| 5042-05-81 |




SECTION THRU ABUTMENT BODY




SECTION A-A

# ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

## NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SAW CUTTING JOINT IS NOT ALLOWED.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

| NO. | DATE | REVISION | BY |
| --- | --- | --- | --- |
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-269

| DRAWN BY | DLM | PLANS CK'D. | MJL |
| --- | --- | --- | --- |

ALTERNATE CONSTRUCTION JOINT

SHEET 17

247

SCALE = 1.00

8

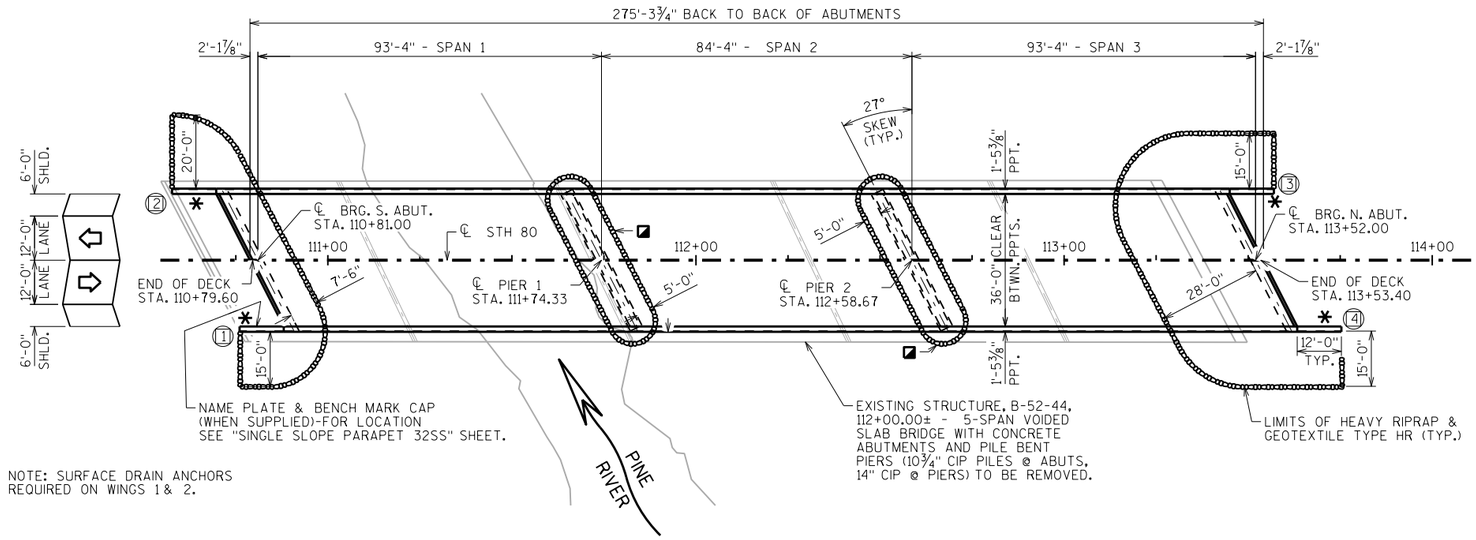
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STATE PROJECT NUMBER

5042-05-81

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

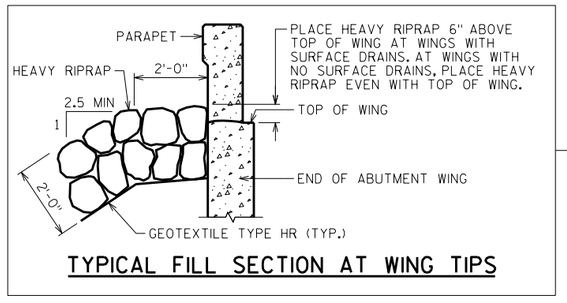
(n) INDICATES WING NUMBER



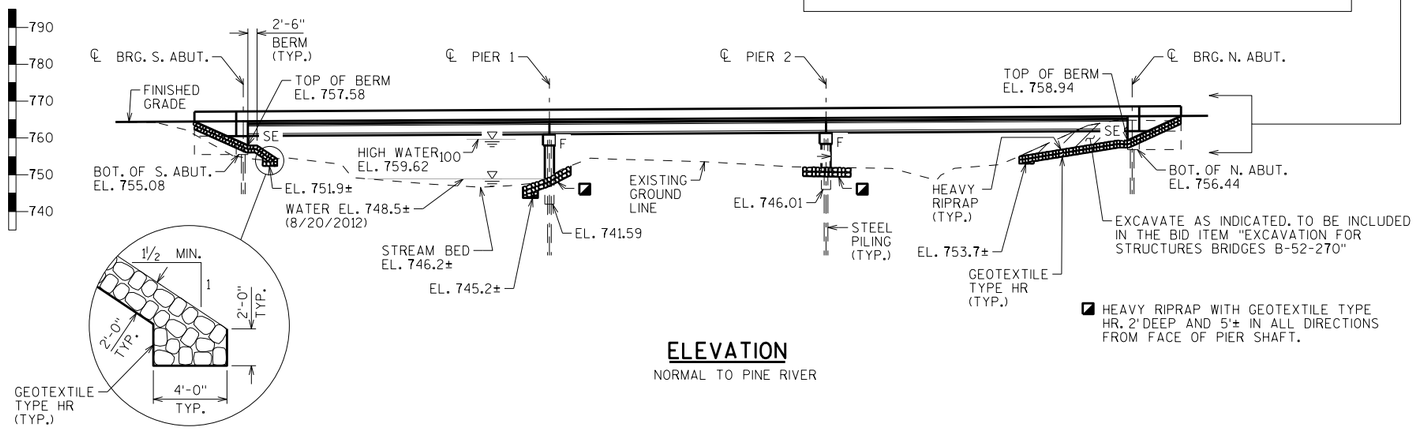

NOTE: SURFACE DRAIN ANCHORS REQUIRED ON WINGS 1 & 2.

## PLAN

THREE SPAN - 36W" PRESTRESSED GIRDER




## TYPICAL FILL SECTION AT WING TIPS




## ELEVATION

NORMAL TO PINE RIVER

## DESIGN DATA

**LIVE LOAD:**

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.09
OPERATING RATING FACTOR: RF = 1.41
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

**MATERIAL PROPERTIES:**

CONCRETE MASONRY:
SUPERSTRUCTURE — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:
GRADE 60 — fy = 60,000 P.S.I.

36W" PRESTRESSED GIRDERS:
CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

## FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ✱✱ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 45'LONG AT SOUTH ABUTMENT.
ESTIMATED 65'LONG AT NORTH ABUTMENT.

PIERS TO BE SUPPORTED ON HP 12 X 53 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS ✱✱ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 65'LONG.

✱✱ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

## HYDRAULIC DATA

**100 YEAR FREQUENCY**

$Q_{100}$ = 9,940 C.F.S.
VEL. = 6.8 F.P.S.
$HW._{100}$ = EL. 759.62
WATERWAY AREA = 1,455 SQ. FT.
DRAINAGE AREA = 126.8 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

**2 YEAR FREQUENCY**

$Q_2$ = 2,280 C.F.S.
$HW._2$ = EL. 756.21

## TRAFFIC VOLUME

**STH 80**

ADT = 2,500 (2038)
R.D.S. = 60 M.P.H.

**STRUCTURE DESIGN CONTACTS:**

TIM BOROWSKI (608) 266-4547
LAURA SHADEWALD (608) 267-9592

## LIST OF DRAWINGS


1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. PIER 1
9. PIER 2
10. 36W" PRESTRESSED GIRDER
11. 36W" PRESTRESSED GIRDER DETAILS
12. STEEL DIAPHRAGM
13. SUPERSTRUCTURE
14. SUPERSTRUCTURE DETAILS 1
15. SUPERSTRUCTURE DETAILS 2
16. SINGLE SLOPE PARAPET 32SS


| NO. | DATE | REVISION | BY |
|---|---|---|---|

BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LES 8/4/17
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-52-270

STH 80 OVER PINE RIVER

COUNTY: RICHLAND | TOWN/~~CITY/VILLAGE~~: ROCKBRIDGE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

| DESIGNED BY | DESIGNED CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| TAB | MJL | DLM | MJL |

GENERAL PLAN

SHEET 1 OF 16

248

I.D. 5042-05-01C

DATE: MAY 2017

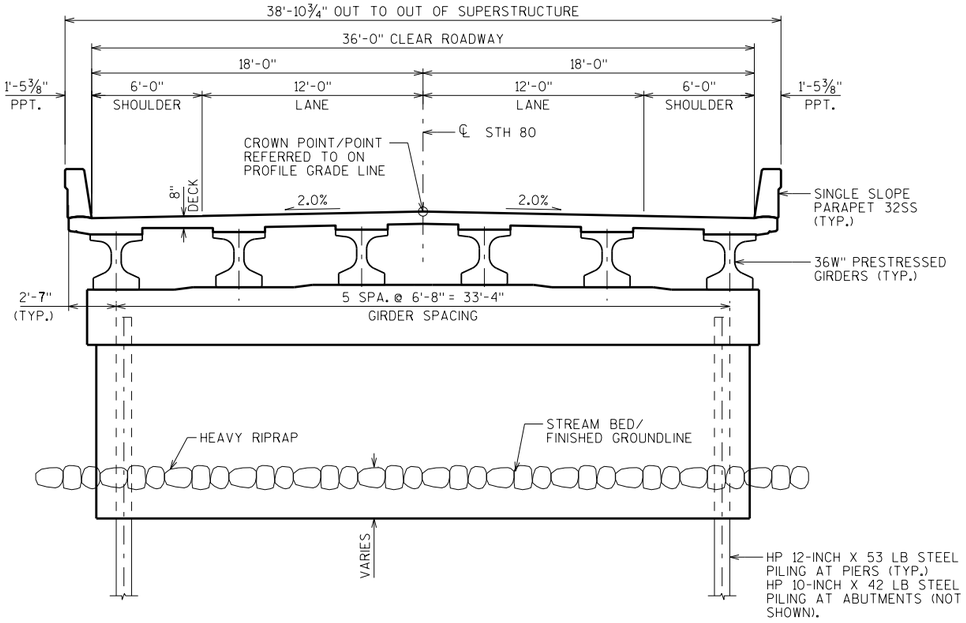
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8

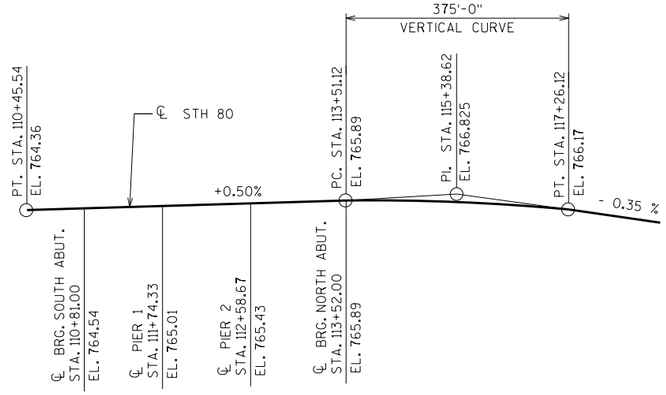
STATE PROJECT NUMBER

5042-05-81




## CROSS SECTION THRU ROADWAY

LOOKING UPSTATION




## PROFILE GRADE LINE STH 80

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

NON-LAMINATED ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN ON THIS SHEET.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACES.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON ABUTMENT WINGS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS AND PIERS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE 'HR' TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

AT PIERS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

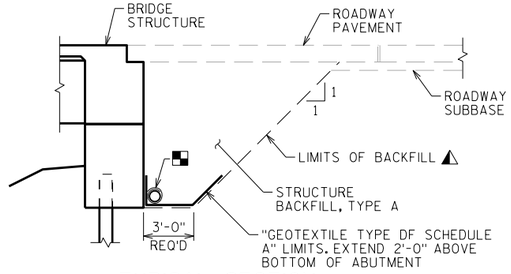
EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE EXISTING STREAM BED AND EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

AT ABUTMENTS, HP 12 X 53 STEEL PILING MAY BE USED IN LIEU OF HP 10 X 42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10 X 42 STEEL PILING.

## TOTAL ESTIMATED QUANTITIES

| BID ITEM NUMBER | BID ITEMS | UNIT | SUPER. | SOUTH ABUT. | PIER 1 | PIER 2 | NORTH ABUT. | TOTALS |
|---|---|---|---|---|---|---|---|---|
| 203.0600.S | REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 112+00.00 | LS | —— | —— | —— | —— | —— | 1 |
| 206.1000 | EXCAVATION FOR STRUCTURES BRIDGES B-52-270 | LS | —— | —— | —— | —— | —— | 1 |
| 206.5000 | COFFERDAMS B-52-270 | LS | —— | —— | —— | —— | —— | 1 |
| 210.1500 | BACKFILL STRUCTURE TYPE A | TON | —— | 270 | —— | —— | 270 | 540 |
| 502.0100 | CONCRETE MASONRY BRIDGES | CY | 416 | 49 | 77 | 62 | 49 | 653 |
| 502.3200 | PROTECTIVE SURFACE TREATMENT | SY | 1,095 | —— | —— | —— | —— | 1,095 |
| 502.3210 | PIGMENTED SURFACE SEALER | SY | 228 | 10 | —— | —— | 10 | 248 |
| 503.0137 | PRESTRESSED GIRDER TYPE I 36W-INCH | LF | 1,629 | —— | —— | —— | —— | 1,629 |
| 505.0400 | BAR STEEL REINFORCEMENT HS STRUCTURES | LB | —— | 2,410 | 4,000 | 3,300 | 2,410 | 12,120 |
| 505.0600 | BAR STEEL REINFORCEMENT HS COATED STRUCTURES | LB | 95,350 | 2,260 | 30 | 30 | 2,230 | 100,000 |
| 506.2605 | BEARING PADS ELASTOMERIC NON-LAMINATED | EACH | —— | 6 | 12 | 12 | 6 | 36 |
| 506.4000 | STEEL DIAPHRAGMS B-52-270 | EACH | 30 | —— | —— | —— | | 30 |
| 516.0500 | RUBBERIZED MEMBRANE WATERPROOFING | SY | —— | 12 | —— | —— | 12 | 24 |
| 550.1100 | PILING STEEL HP 10-INCH X 42 LB | LF | —— | 450 | —— | —— | 650 | 1,100 |
| 550.1120 | PILING STEEL HP 12-INCH X 53 LB | LF | —— | | 845 | 845 | | 1,690 |
| 606.0300 | RIPRAP HEAVY | CY | —— | 92 | 52 | 39 | 200 | 383 |
| 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | —— | 90 | —— | —— | 90 | 180 |
| 614.0150 | ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD | EACH | —— | 2 | —— | —— | 2 | 4 |
| 645.0111 | GEOTEXTILE TYPE DF SCHEDULE A | SY | —— | 50 | —— | —— | 50 | 100 |
| 645.0120 | GEOTEXTILE TYPE HR | SY | —— | 155 | 95 | 80 | 340 | 670 |
| | NON-BID ITEMS | | | | | | | |
| | FILLER | SIZE | —— | —— | —— | —— | —— | ½", ¾" |




## TYPICAL SECTION THRU ABUTMENT

◭ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

◪ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

CROSS SECTION & QUANTITIES

SHEET 2

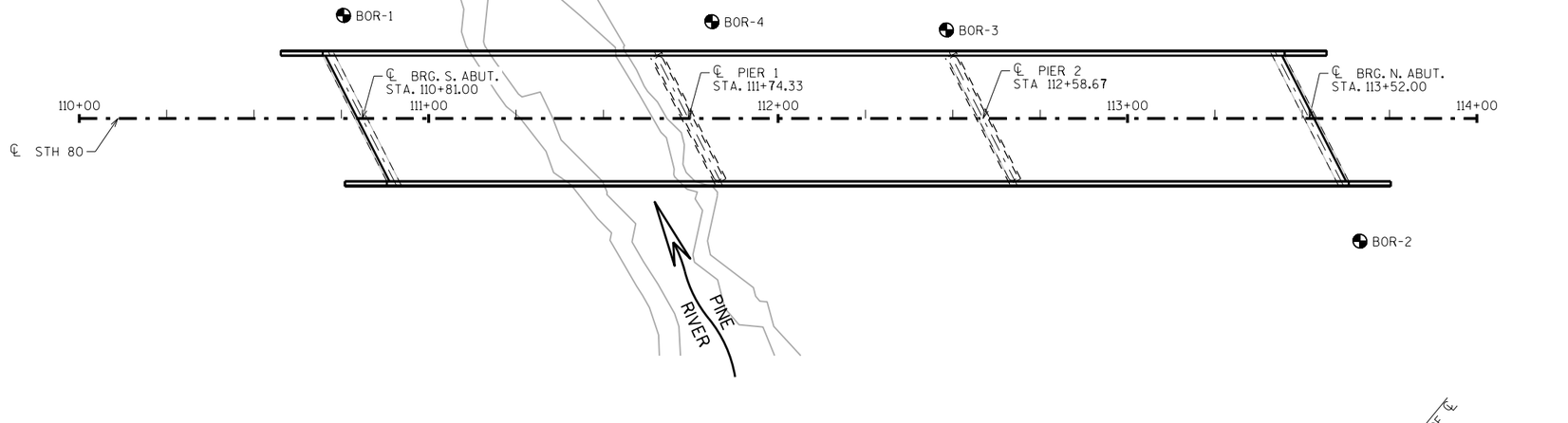
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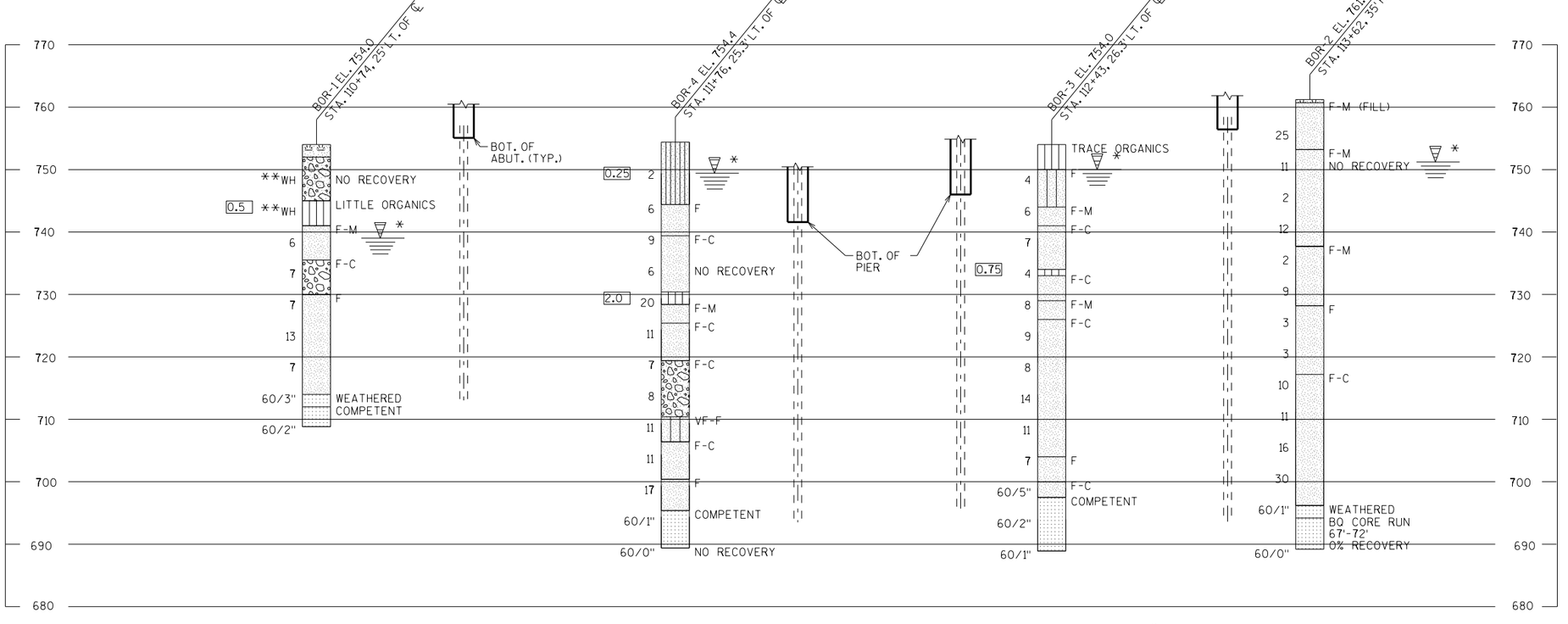
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8

8

| BORING # | DATE COMPLETED | NORTHING (Y) | EASTING (X) |
|---|---|---|---|
| 1 | 9/14/2016 | 476342.457 | 682367.237 |
| 2 | 9/15/2016 | 476636.170 | 682317.024 |
| 3 | 10/13/2016 | 476503.750 | 682305.799 |
| 4 | 10/17/2016 | 476440.705 | 682329.011 |
| | | | |
| BORINGS COMPLETED BY: WISDOT | | | |
| REPORT COMPLETED BY: WISDOT | | | |
| ALL COORDINATES REFERENCED TO WCCS NAD 83(91) RICHLAND COUNTY | | | |
| COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT | | | |




** WH = WEIGHT OF HAMMER

* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

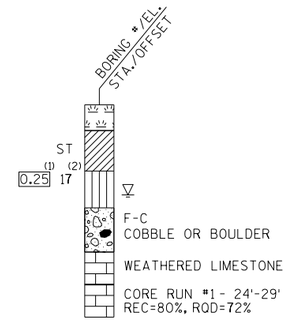
STATE PROJECT NUMBER

5042-05-81

MATERIAL SYMBOLS

| | | |
|---|---|---|
| ASPHALT | TOPSOIL | PEAT |
| CONCRETE | FILL | GRAVEL |
| SAND | CLAY | SILT |
| BOULDERS OR COBBLES | LIMESTONE | BEDROCK (UNKNOWN) |
| SHALE | SANDSTONE | IGNEOUS/ META |

LEGEND OF BORING




(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY TLP/DLM | PLANS CK'D. MJL

SUBSURFACE EXPLORATION

SHEET 3

250

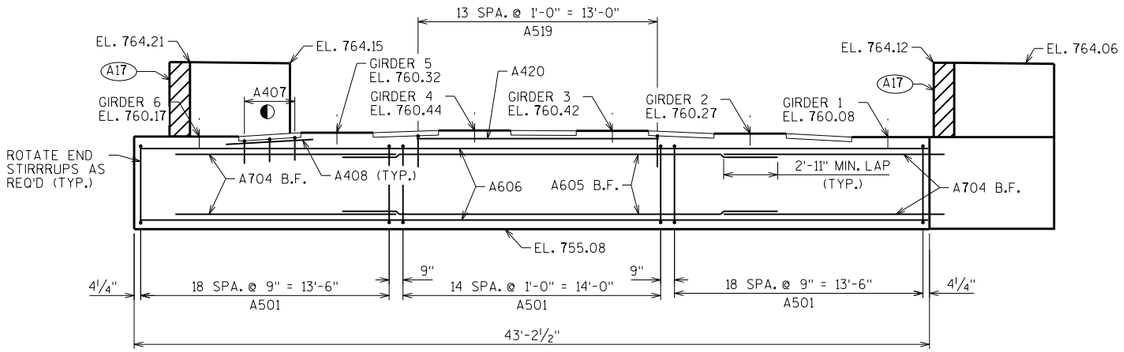
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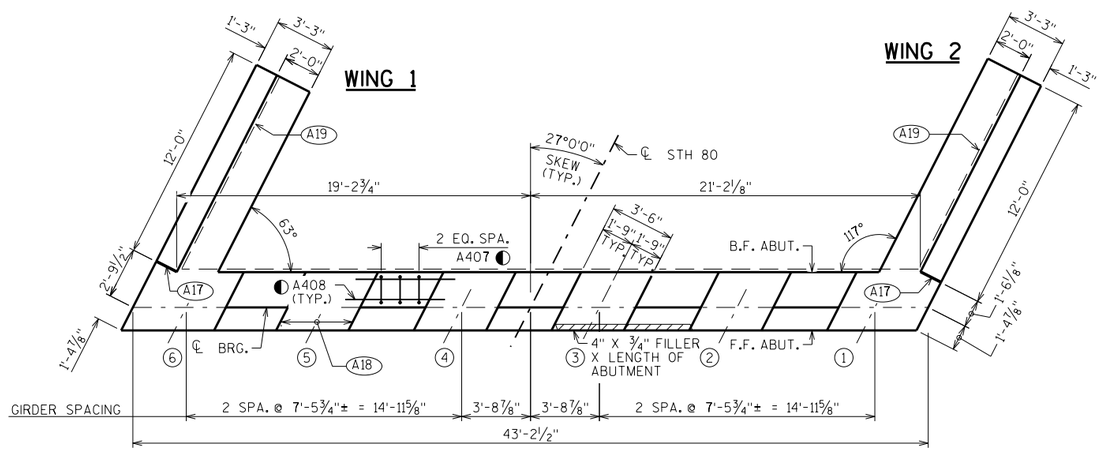
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STATE PROJECT NUMBER

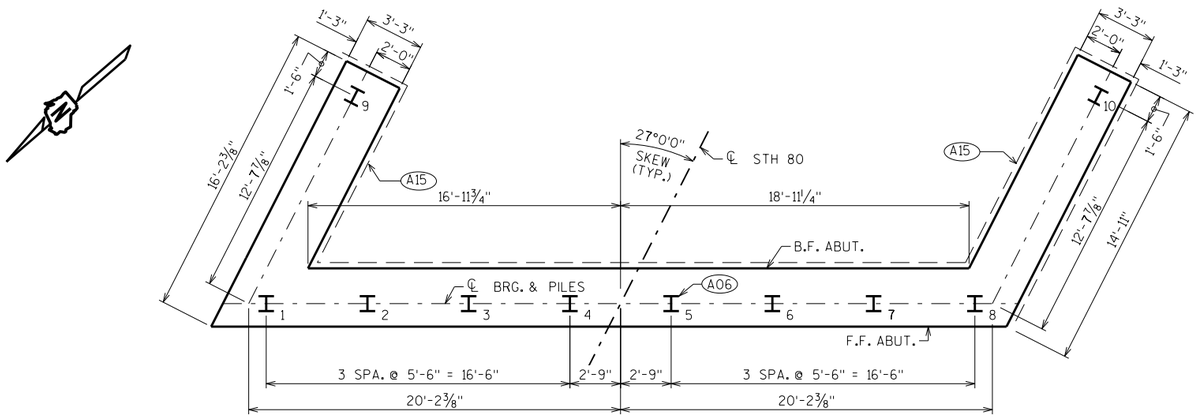
5042-05-81



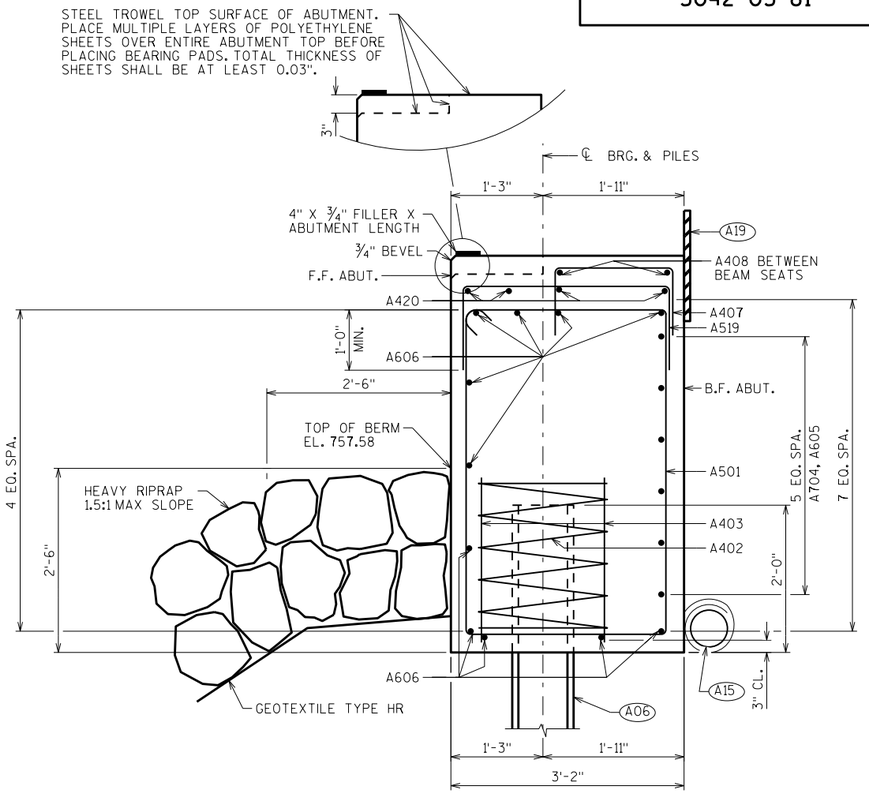

ELEVATION LOOKING SOUTH




PLAN

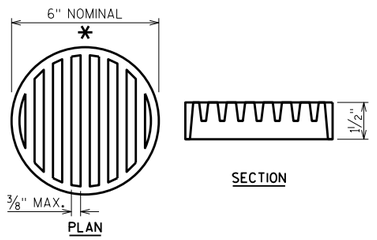



PILE PLAN




SECTION THRU BODY

◐ BETWEEN BEAM SEATS (TYP.)




RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

SOUTH ABUTMENT

SHEET 4

251

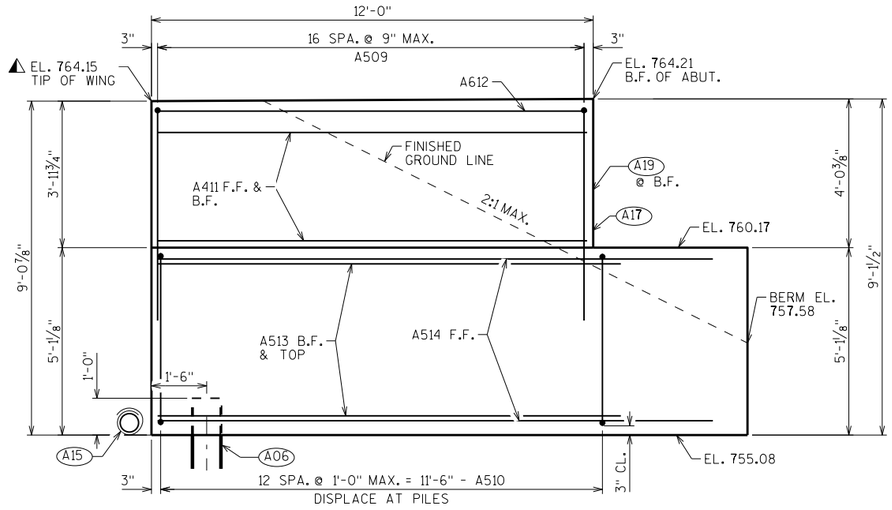
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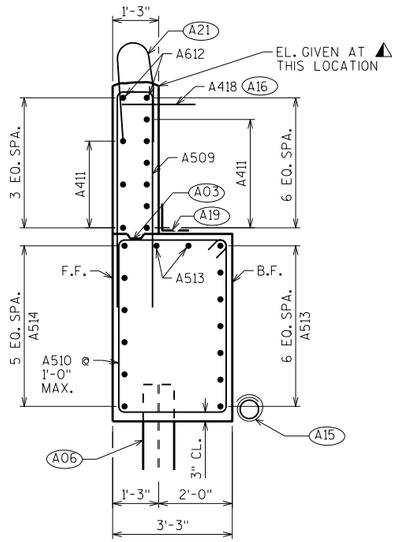
STATE PROJECT NUMBER

5042-05-81

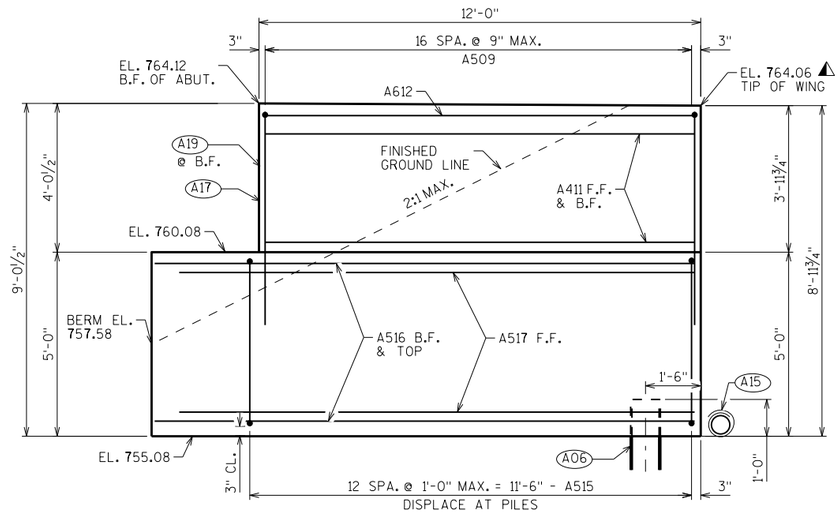



## WING 1 ELEVATION

(FRONT FACE SHOWN)

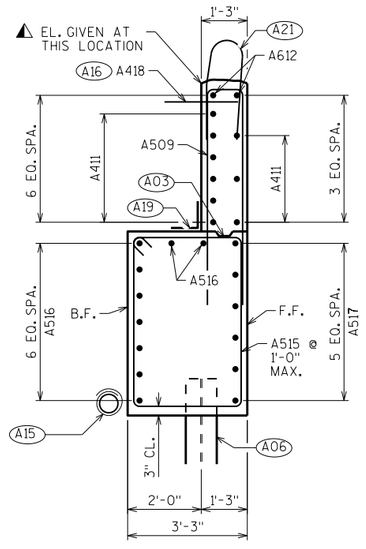



## WING 1 SECTION




## WING 2 ELEVATION

(FRONT FACE SHOWN)

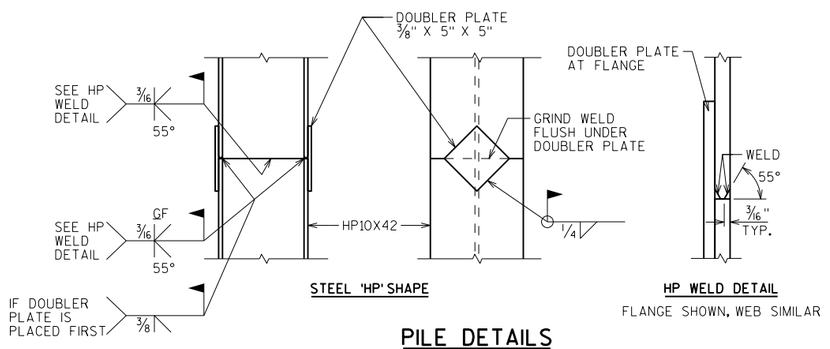



## WING 2 SECTION

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A501 | | 53 | 15'-0" | X | | BODY-STIRRUP |
| A402 | | 8 | 28'-0" | X | | BODY- 1 PER BODY PILE-VERT. |
| A403 | | 16 | 2'-3" | | | BODY- 2 PER BODY PILE-VERT. |
| A704 | | 12 | 12'-0" | | | BODY-HORIZ.-B.F. AT ENDS |
| A605 | | 6 | 23'-8" | | | BODY-HORIZ.-B.F. AT CENTER |
| A606 | | 11 | 42'-10" | | | BODY-HORIZ. |
| A407 | | 15 | 4'-1" | X | | BODY-VERT.-TOP-BTWN. BEAM SEATS |
| A408 | | 10 | 5'-7" | | | BODY-HORIZ.-TOP-BTWN. BEAM SEATS |
| A509 | X | 34 | 12'-6" | X | | WING 1 & 2 - VERT. |
| A510 | X | 13 | 15'-10" | X | | WING 1- STIRRUP |
| A411 | X | 18 | 11'-8" | | | WING 1 & 2- HORIZ.-TOP |
| A612 | X | 4 | 11'-8" | | | WING 1 & 2- HORIZ.-TOP |
| A513 | X | 9 | 12'-7" | | | WING 1- HORIZ.-BOT.-B.F. & TOP |
| A514 | X | 6 | 15'-6" | | | WING 1- HORIZ.-BOT.-F.F. |
| A515 | X | 13 | 15'-8" | X | | WING 2- STIRRUP |
| A516 | X | 9 | 14'-8" | | | WING 2- HORIZ.-BOT.-B.F. & TOP |
| A517 | X | 6 | 14'-7" | | | WING 2- HORIZ.-BOT.-F.F. |
| A418 | X | 24 | 2'-0" | | | WING 1 & 2-HORIZ.-SURFACE DRAIN DOWEL |
| A519 | | 14 | 5'-5" | X | | BODY-VERT.-TOP-UNDER G3 & G4 |
| A420 | | 4 | 13'-2" | | | BODY-HORIZ.-TOP-UNDER G3 & G4 |

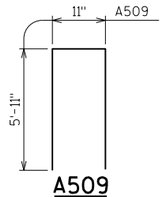



STEEL 'HP' SHAPE

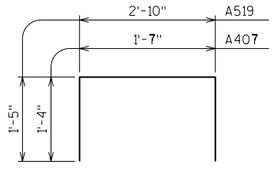
HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

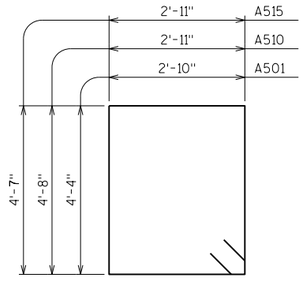
## PILE DETAILS



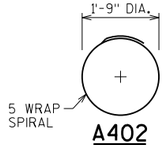

A509




A407, A519




A501, A510, A515




A402

A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

A06 SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A16 A418 BARS SPACED @ 1'-0" CTRS. EMBED 1'-0" INTO WING CONC. LOCATE 3" DOWN FROM TOP OF WING @ BACKFACE TO 6" DOWN @ WING TIP.

A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

A21 FOR PPT. BARS & DIMENSIONS SEE PARAPET SHEET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

SOUTH ABUTMENT DETAILS

SHEET 5

252

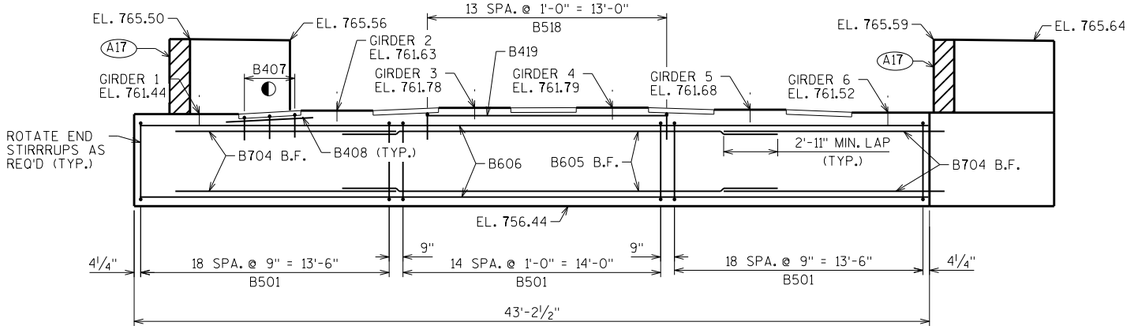
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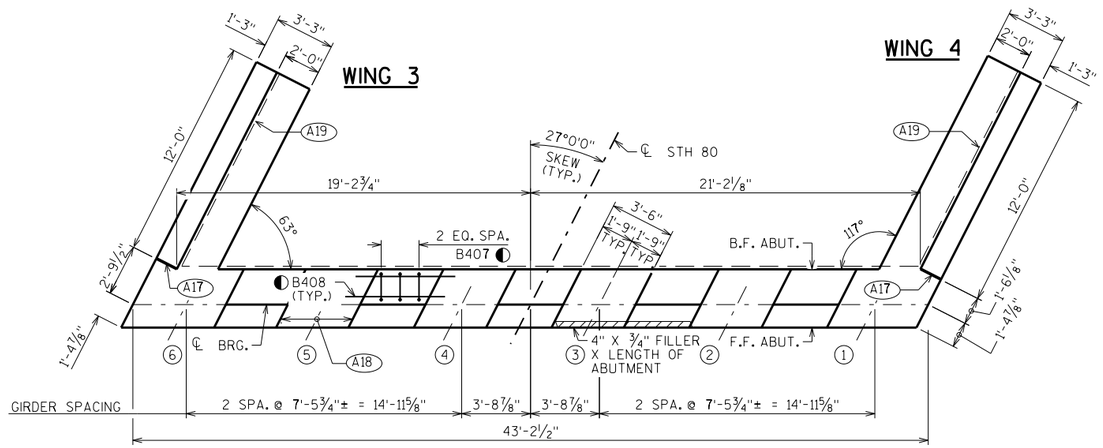
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STATE PROJECT NUMBER

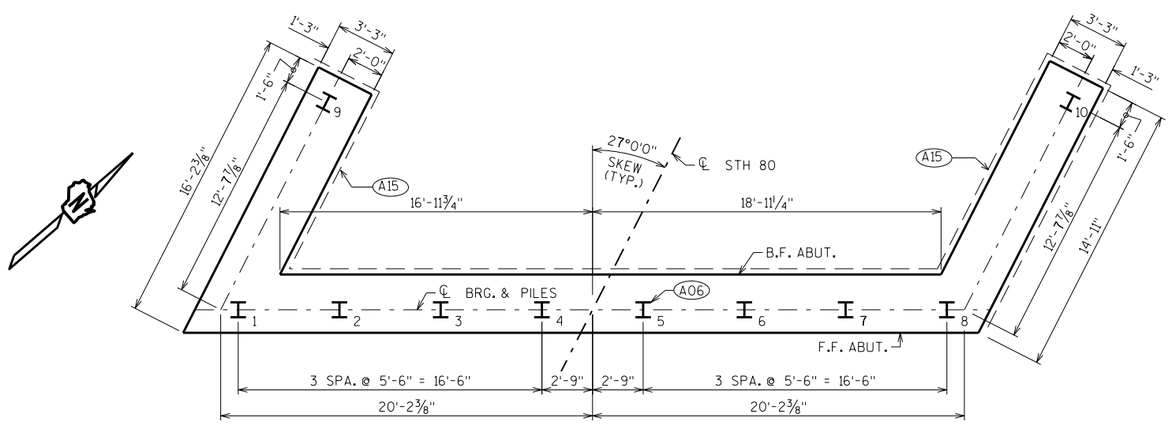
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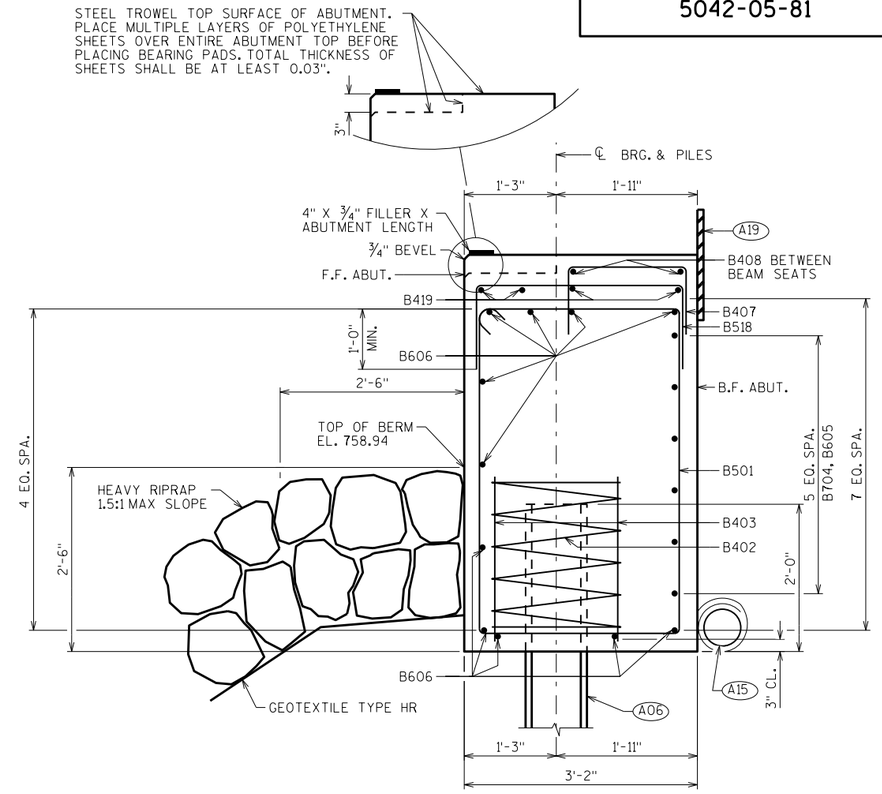

ELEVATION LOOKING NORTH




PLAN

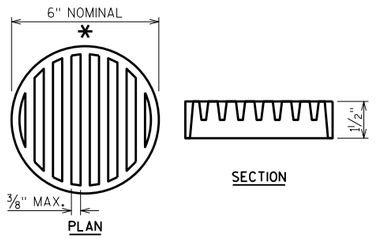



PILE PLAN




SECTION THRU BODY

◐ BETWEEN BEAM SEATS (TYP.)




RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

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(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

NORTH ABUTMENT

SHEET 6

253

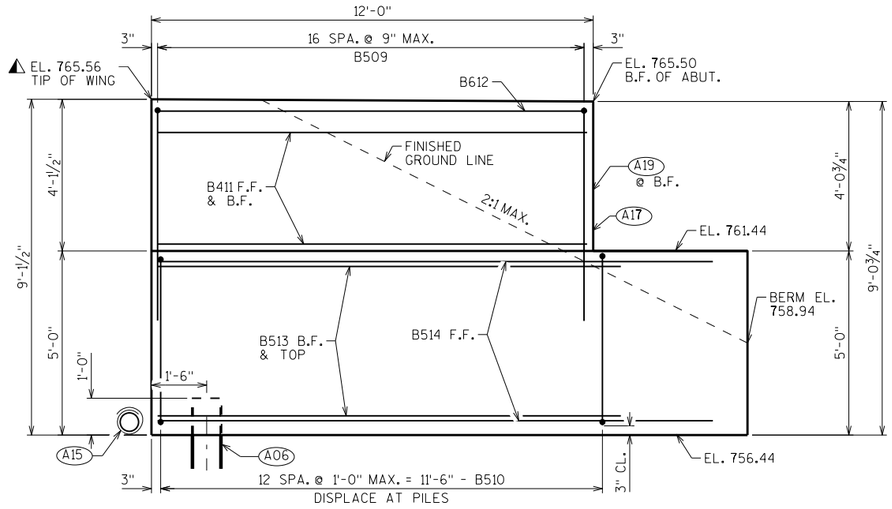
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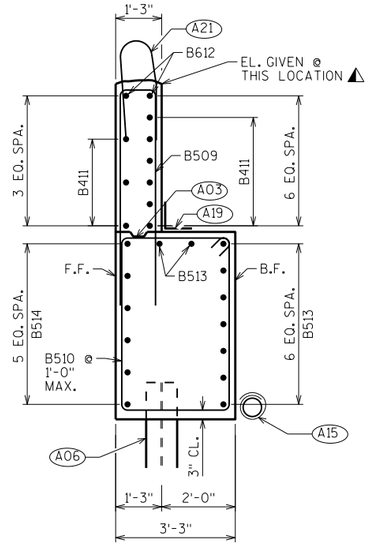
STATE PROJECT NUMBER

5042-05-81

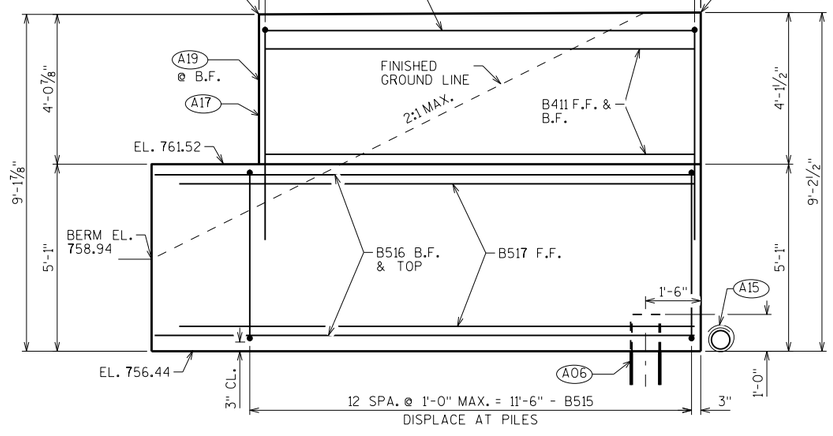



## WING 3 ELEVATION

(FRONT FACE SHOWN)

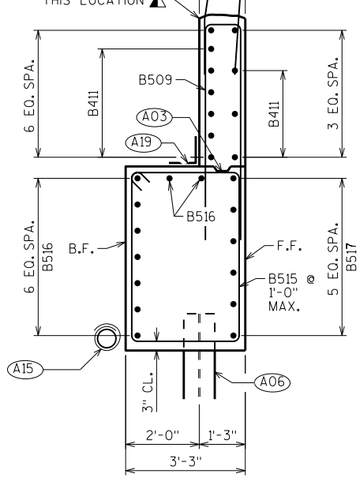



## WING 3 SECTION




## WING 4 ELEVATION

(FRONT FACE SHOWN)

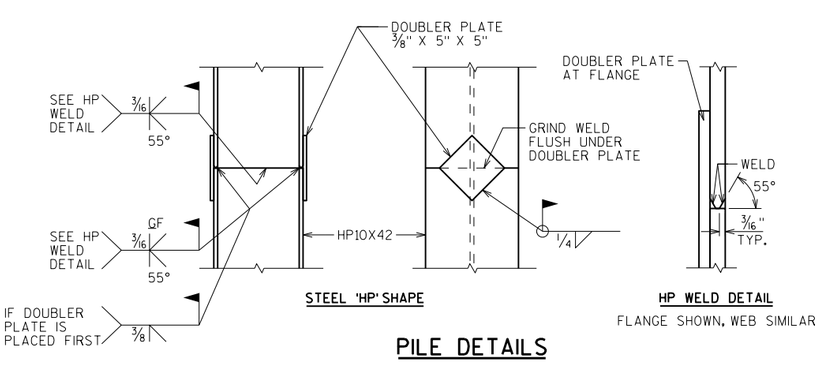



## WING 4 SECTION

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| B501 | | 53 | 15'-0" | X | | BODY-STIRRUP |
| B402 | | 8 | 28'-0" | X | | BODY- 1 PER BODY PILE-VERT. |
| B403 | | 16 | 2'-3" | | | BODY- 2 PER BODY PILE-VERT. |
| B704 | | 12 | 12'-0" | | | BODY-HORIZ.-B.F. AT ENDS |
| B605 | | 6 | 23'-8" | | | BODY-HORIZ.-B.F. AT CENTER |
| B606 | | 11 | 42'-10" | | | BODY-HORIZ. |
| B407 | | 15 | 4'-1" | X | | BODY-VERT.-TOP-BTWN. BEAM SEATS |
| B408 | | 10 | 5'-7" | | | BODY-HORIZ.-TOP-BTWN. BEAM SEATS |
| B509 | X | 34 | 12'-6" | X | | WING 3 & 4 - VERT. |
| B510 | X | 13 | 15'-10" | X | | WING 3- STIRRUP |
| B411 | X | 18 | 11'-8" | | | WING 3 & 4- HORIZ.-TOP |
| B612 | X | 4 | 11'-8" | | | WING 3 & 4- HORIZ.-TOP |
| B513 | X | 9 | 12'-7" | | | WING 3- HORIZ.-BOT.-B.F. & TOP |
| B514 | X | 6 | 15'-6" | | | WING 3- HORIZ.-BOT.-F.F. |
| B515 | X | 13 | 15'-8" | X | | WING 4- STIRRUP |
| B516 | X | 9 | 14'-8" | | | WING 4- HORIZ.-BOT.-B.F. & TOP |
| B517 | X | 6 | 14'-7" | | | WING 4- HORIZ.-BOT.-F.F. |
| B518 | | 14 | 5'-5" | X | | BODY-VERT.-TOP-UNDER G3 & G4 |
| B419 | | 4 | 13'-2" | | | BODY-HORIZ.-TOP-UNDER G3 & G4 |

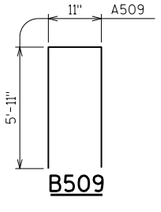



STEEL 'HP' SHAPE

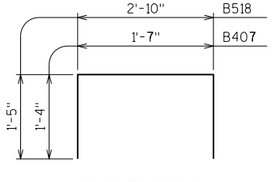
HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

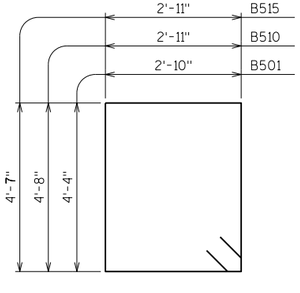
## PILE DETAILS



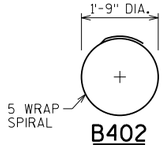

B509




B407, B518




B501, B510, B515




B402

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 65'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSIONS SEE PARAPET SHEET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

NORTH ABUTMENT DETAILS

SHEET 7

254

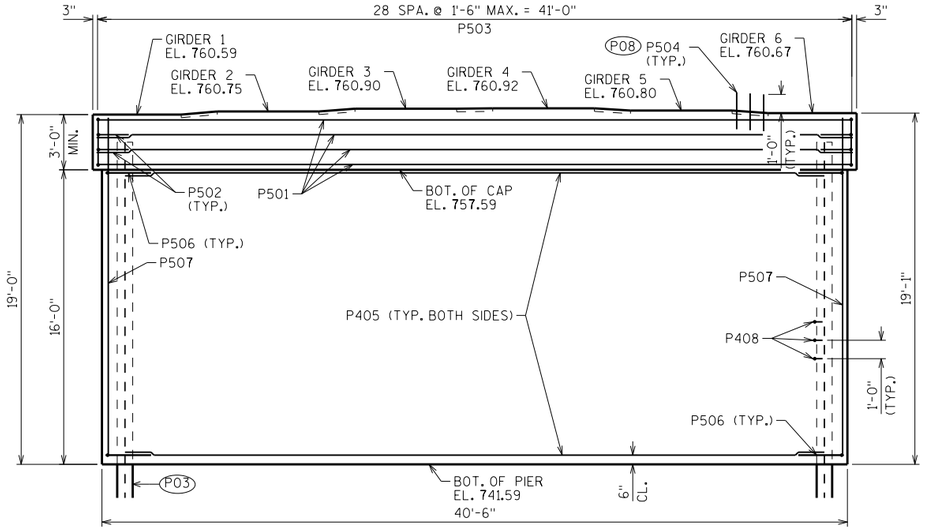
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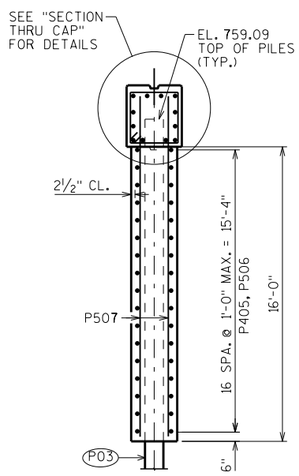
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STATE PROJECT NUMBER

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ELEVATION - LOOKING NORTH

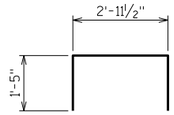



PIER SECTION

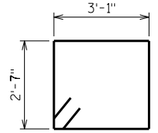
## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

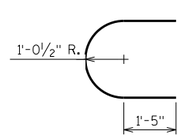
| BAR MARK | COAT | NO. REQ'D | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| P501 | | 12 | 41'-1" | | | CAP-HORIZ. |
| P502 | | 4 | 5'-7" | X | | CAP-HORIZ.-ENDS |
| P503 | | 29 | 12'-0" | X | | CAP-VERT.-STIRRUP |
| P08 P504 | X | 15 | 2'-0" | | | CAP-VERT. DOWELS-BTWN. BEAM SEATS |
| P405 | | 34 | 38'-0" | | | PIER-HORIZ. |
| P506 | | 34 | 6'-2" | X | | PIER-HORIZ.-ENDS |
| P507 | | 84 | 18'-3" | | | PIER-VERT. |
| P408 | | 234 | 2'-8" | X | | PIER-TIE BARS |



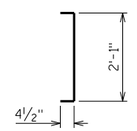

P502



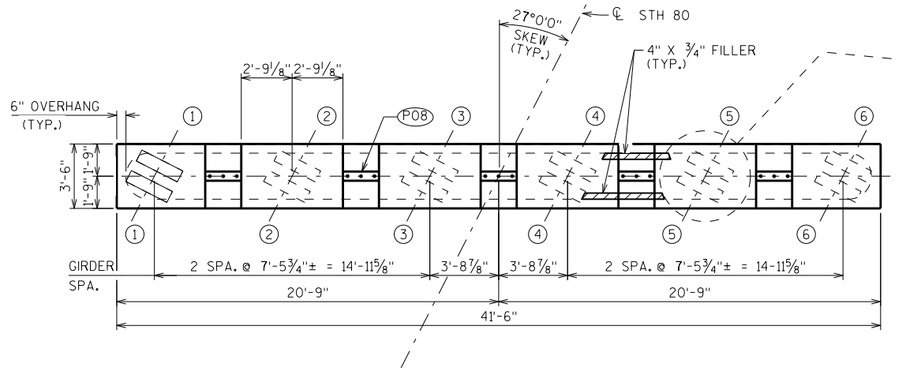

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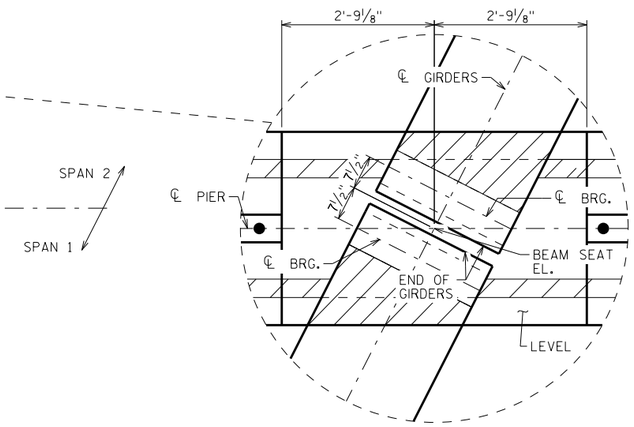

P506



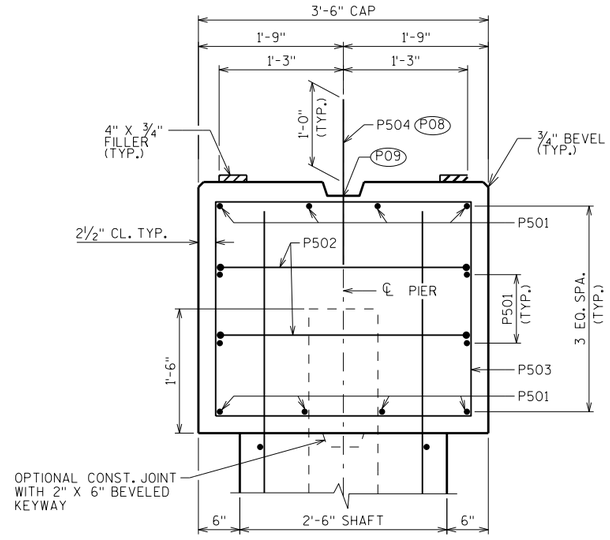

P408



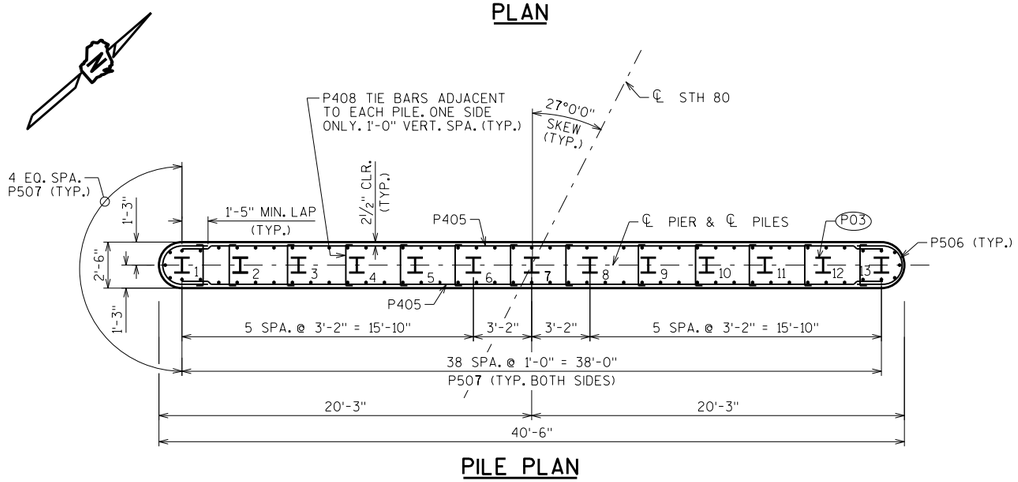

PLAN



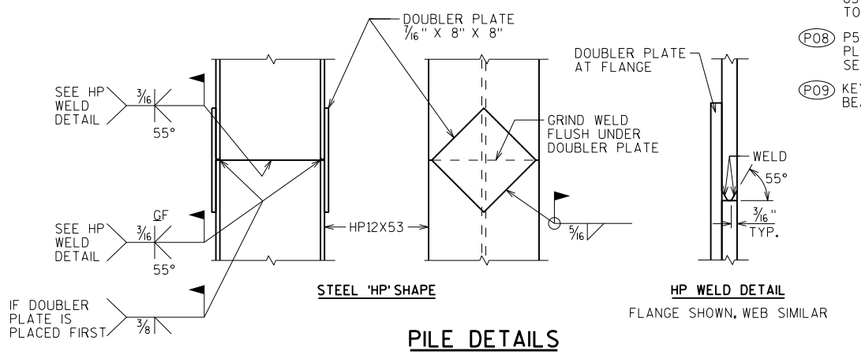

TYPICAL BEAM SEAT DETAIL




SECTION THRU CAP




PILE PLAN




STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

(P03) SUPPORT PIER ON HP 12 X 53 STEEL PILING, ESTIMATED 65'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P08) P504 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONST. JOINT-FORMED BY BEVELED 2 X 6 BETWEEN BEAM SEATS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

PIER 1

SHEET 8

255

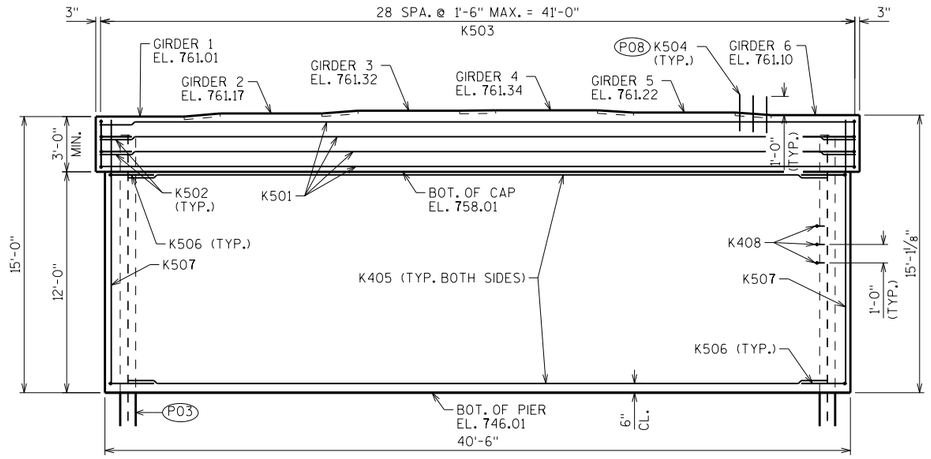
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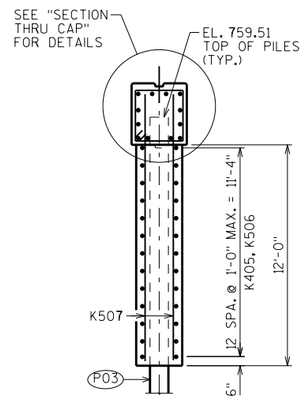
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STATE PROJECT NUMBER

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ELEVATION - LOOKING NORTH

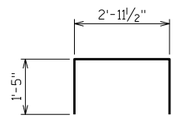



PIER SECTION

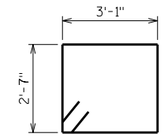
## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

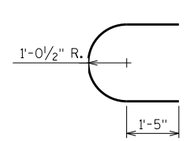
| BAR MARK | COAT | NO. REQ'D | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| K501 | | 12 | 41'-1" | | | CAP-HORIZ. |
| K502 | | 4 | 5'-7" | X | | CAP-HORIZ.-ENDS |
| K503 | | 29 | 12'-0" | X | | CAP-VERT.-STIRRUP |
| P08 K504 | X | 15 | 2'-0" | | | CAP-VERT. DOWELS-BTWN. BEAM SEATS |
| K405 | | 26 | 38'-0" | | | PIER-HORIZ. |
| K506 | | 26 | 6'-2" | X | | PIER-HORIZ.-ENDS |
| K507 | | 84 | 14'-3" | | | PIER-VERT. |
| K408 | | 182 | 2'-8" | X | | PIER-TIE BARS |



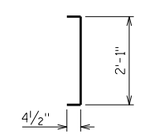

K502



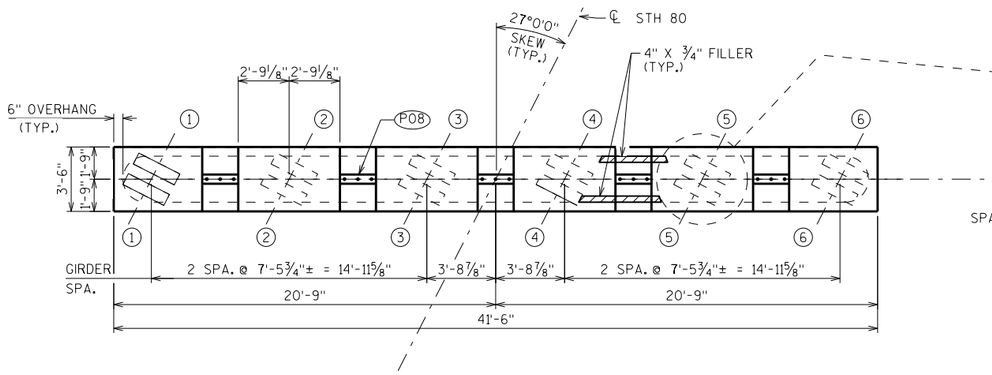

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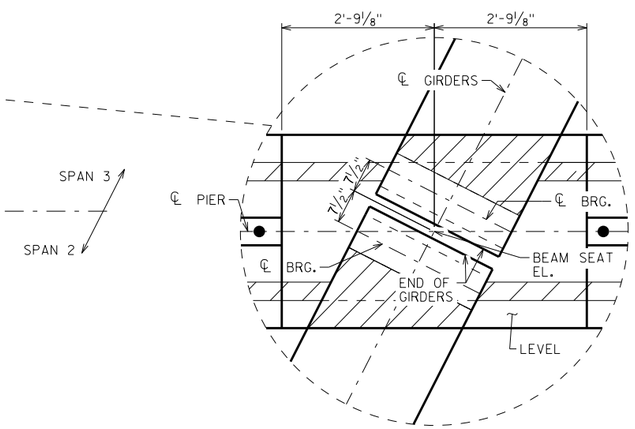

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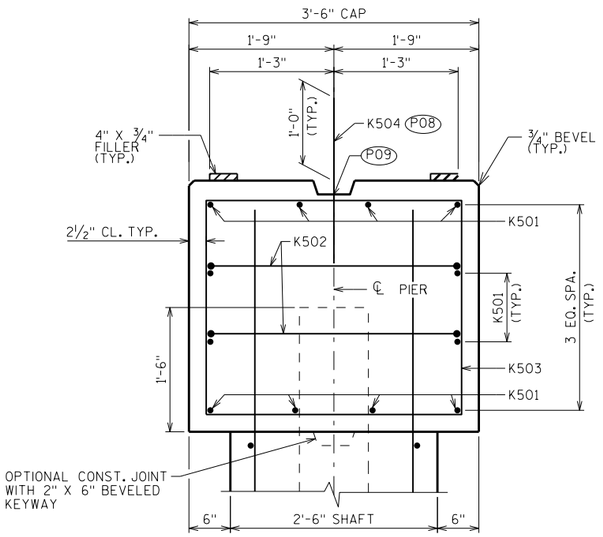

K408



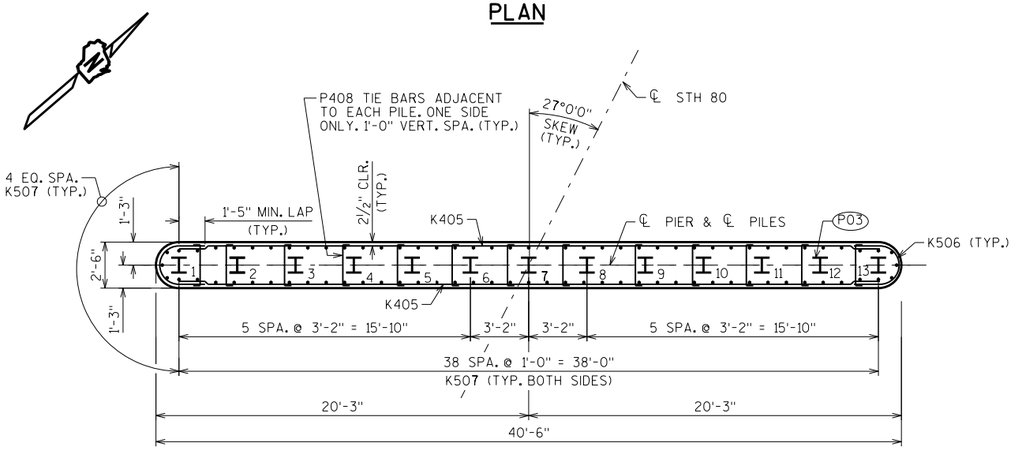

PLAN



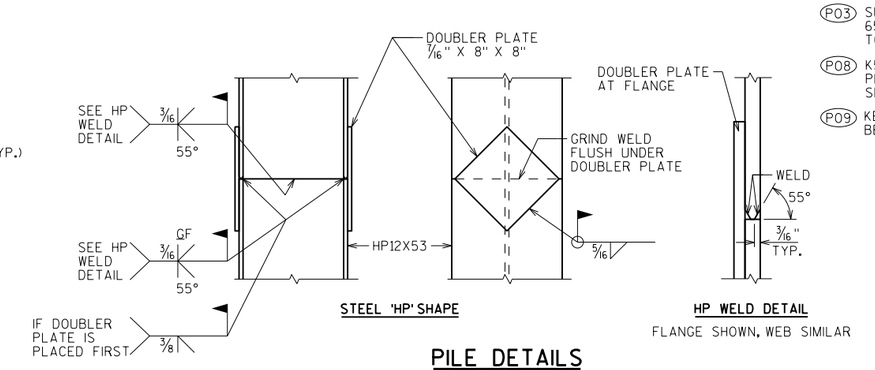

TYPICAL BEAM SEAT DETAIL




SECTION THRU CAP




PILE PLAN




STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

(P03) SUPPORT PIER ON HP 12 X 53 STEEL PILING, ESTIMATED 65'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P08) K504 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONST. JOINT-FORMED BY BEVELED 2 X 6 BETWEEN BEAM SEATS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

PIER 2

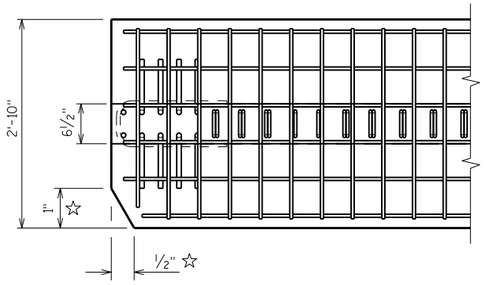
SHEET 9

256

SCALE = 4.00

STATE PROJECT NUMBER

5042-05-81




☆ CLIP ONLY ABUTMENT ENDS OF SPAN 1 & 3 GIRDERS

## SPANS 1 & 3 DIAPHRAGM HOLE LOCATIONS

| GIRDER | "D" | "E" | "F" | "G" | "H" |
|---|---|---|---|---|---|
| 1 | 32'-11¼" | ——— | 31'-2¾" | ——— | 29'-6½" |
| 2 | 29'-6½" | 3'-4¾" | 27'-10" | 3'-4¾" | 29'-6½" |
| 3 | 29'-6½" | 3'-4¾" | 27'-10" | 3'-4¾" | 29'-6½" |
| 4 | 29'-6½" | 3'-4¾" | 27'-10" | 3'-4¾" | 29'-6½" |
| 5 | 29'-6½" | 3'-4¾" | 27'-10" | 3'-4¾" | 29'-6½" |
| 6 | 29'-6½" | ——— | 31'-2¾" | ——— | 32'-11¼" |

## SPAN 2 DIAPHRAGM HOLE LOCATIONS

| GIRDER | "D" | "E" | "F" | "G" | "H" |
|---|---|---|---|---|---|
| 1 | 29'-8¾" | ——— | 28'-0¼" | ——— | 26'-4" |
| 2 | 26'-4" | 3'-4¾" | 24'-7½" | 3'-4¾" | 26'-4" |
| 3 | 26'-4" | 3'-4¾" | 24'-7½" | 3'-4¾" | 26'-4" |
| 4 | 26'-4" | 3'-4¾" | 24'-7½" | 3'-4¾" | 26'-4" |
| 5 | 26'-4" | 3'-4¾" | 24'-7½" | 3'-4¾" | 26'-4" |
| 6 | 26'-4" | ——— | 28'-0¼" | ——— | 29'-8¾" |

## NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

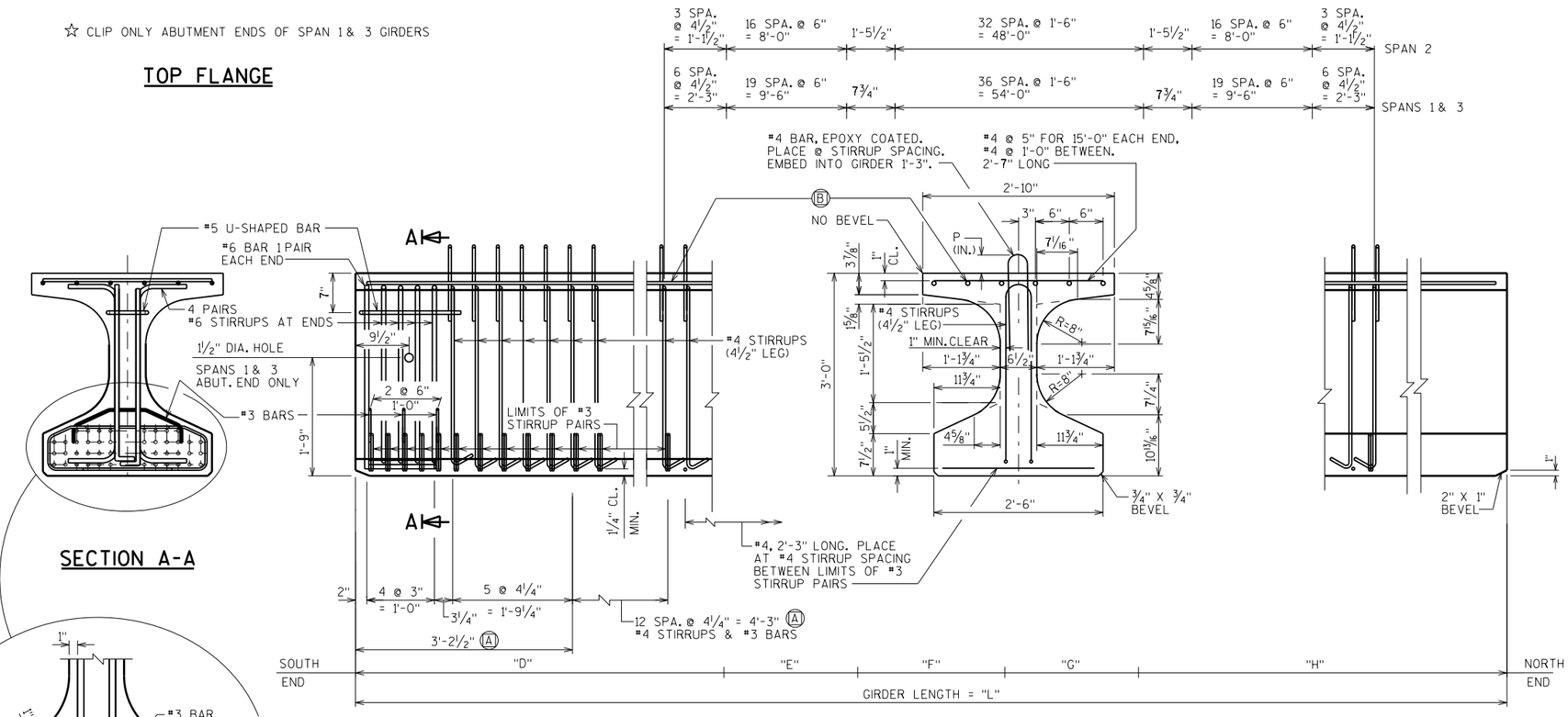
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

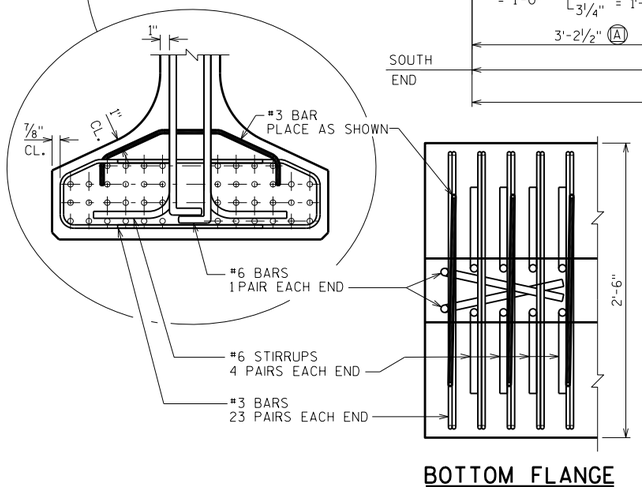
PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

## TOP FLANGE




## SECTION A-A

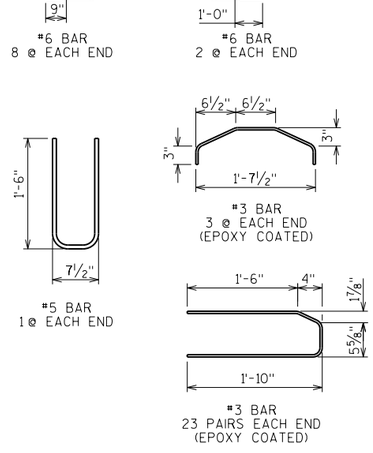



## BOTTOM FLANGE

## SIDE VIEW & TYPICAL SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11




☆ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

## GIRDER DATA

| SPAN | GIRDER | GIRDER LENGTH "L" | DEAD LOAD DEFL. (IN.) 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | CONC. STRGTH. f'c (P.S.I.) | "P" IST 1/3 OF GIRDER | "P" MID 1/3 OF GIRDER | "P" END 1/3 OF GIRDER | DIA. OF STRAND (IN.) | DRAPED PATTERN TOTAL NO. OF STRANDS | f'ci (P.S.I.) ☆ | ( IN.) "A" | "B" MIN. | "B" MAX. | "C" | UNDRAPED PATTERN TOTAL NO. OF STRANDS | f'ci (P.S.I.) ☆ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ALL | 93.71 | 0.7 | 1.3 | 1.8 | 2.1 | 2.2 | 2.1 | 1.8 | 1.3 | 0.7 | 8,000 | 7.5 | 7 | 7.5 | 0.6 | 32 | 6,400 | 31.0 | 11.5 | 14.5 | 5.0 | | |
| 2 | ALL | 84.08 | 0.4 | 0.8 | 1.1 | 1.3 | 1.4 | 1.3 | 1.1 | 0.8 | 0.4 | 8,000 | 7.25 | 7.25 | 7.25 | 0.6 | 22 | 6,400 | 32.0 | 11.0 | 14.0 | 4.0 | | |
| 3 | ALL | 93.71 | 0.7 | 1.3 | 1.8 | 2.1 | 2.2 | 2.1 | 1.8 | 1.3 | 0.7 | 8,000 | 7.5 | 7 | 7.5 | 0.6 | 32 | 6,400 | 31.0 | 11.5 | 14.5 | 5.0 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

36W" PRESTRESSED GIRDER

SHEET 10

257

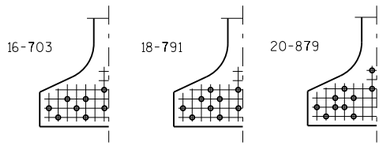
SCALE = 1.00

8

8

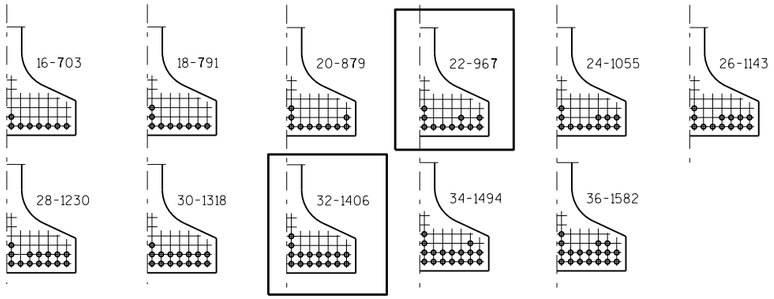
STATE PROJECT NUMBER

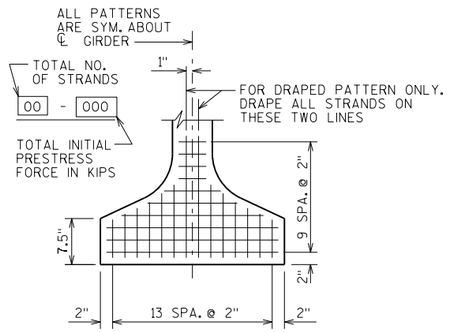
5042-05-81



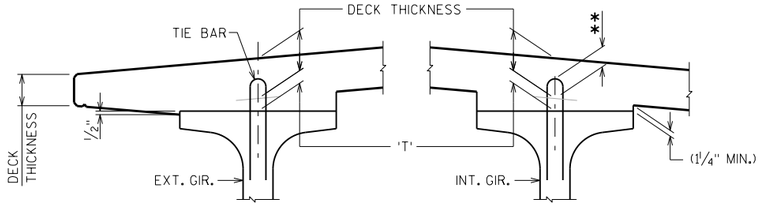

## STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS




## TYP. STRAND PATTERN




## DECK HAUNCH DETAIL

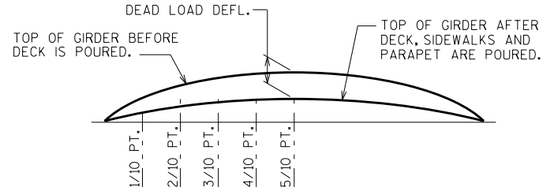
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

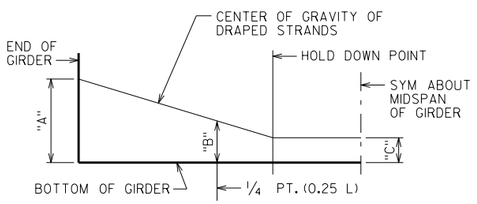
NOTE: AN AVERAGE HAUNCH ('T') OF:
3" - SPANS 1 & 3
3.5" - SPAN 2
WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".




## DEAD LOAD DEFLECTION DIAGRAM

## ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS




## DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

| SPAN | CAMBER (IN.) * |
|---|---|
| 1 | 3.77 |
| 2 | 2.03 |
| 3 | 3.77 |
| | |
| | |

**THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.**

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

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|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

36W" PRESTRESSED GIRDER DETAILS

SHEET 11

258

G36W
7-16

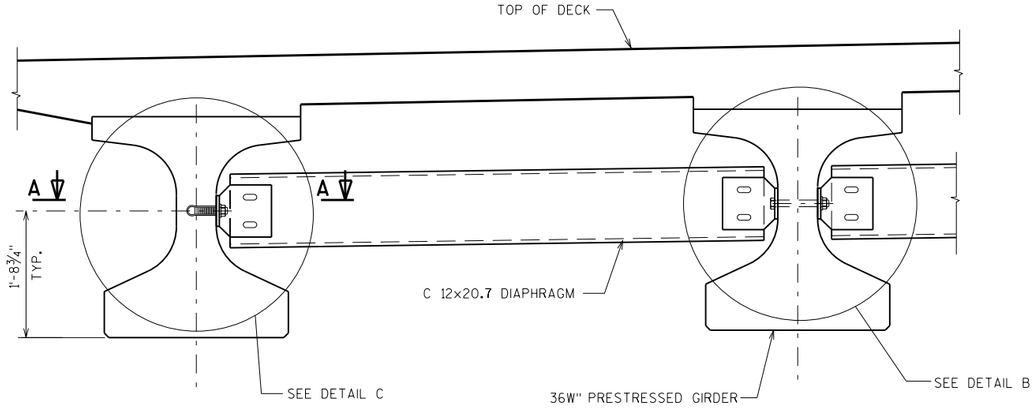
SCALE = 1.00

8 19 9 5 12

8

STATE PROJECT NUMBER

5042-05-81




EXTERIOR GIRDER

INTERIOR GIRDER

## PART TRANSVERSE SECTION AT DIAPHRAGM

## NOTES

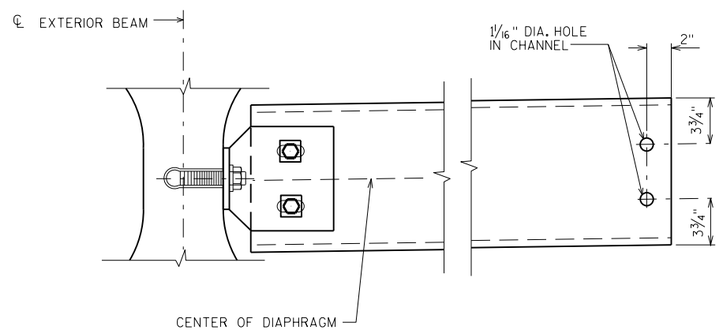
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-52-270", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

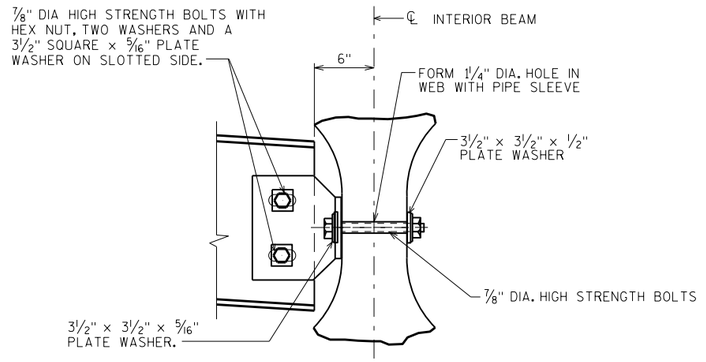
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

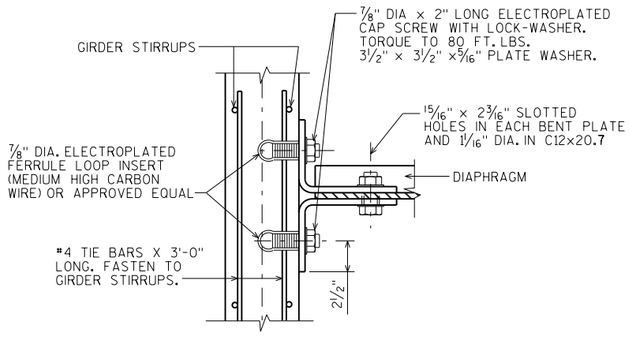



DETAIL C



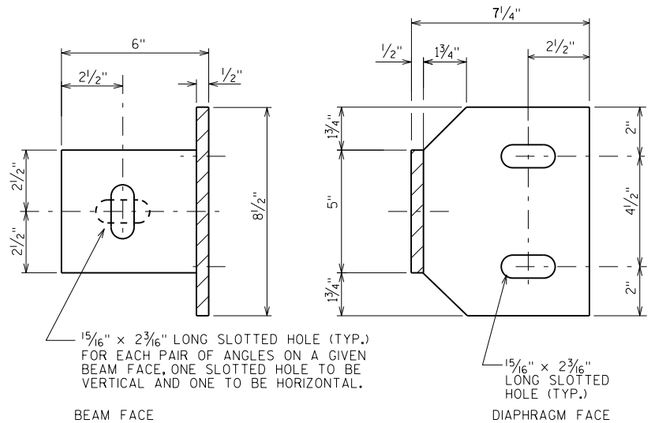

DETAIL B

SECTION AT INTERIOR GIRDERS THRU DIAPHRAGM FOR SKEW ANGLES > 10°




SECTION A-A

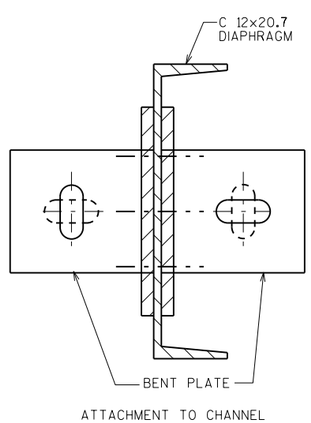
(FOR EXTERIOR ATTACHMENT)




BEAM FACE




DIAPHRAGM FACE




ATTACHMENT TO CHANNEL

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

STEEL DIAPHRAGM

SHEET 12

259

SCALE = 1.00

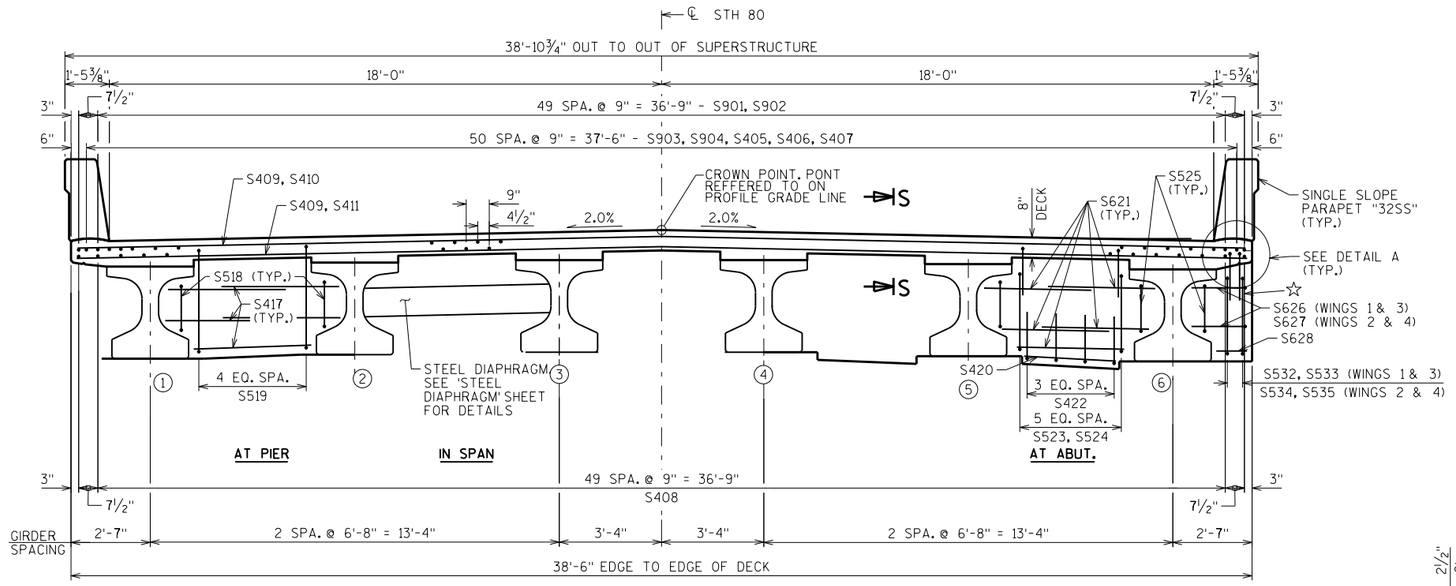
GSTDIA36W
1-13

8

8

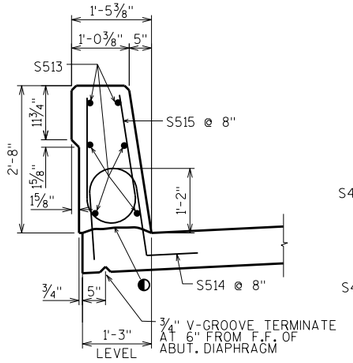
STATE PROJECT NUMBER

5042-05-81

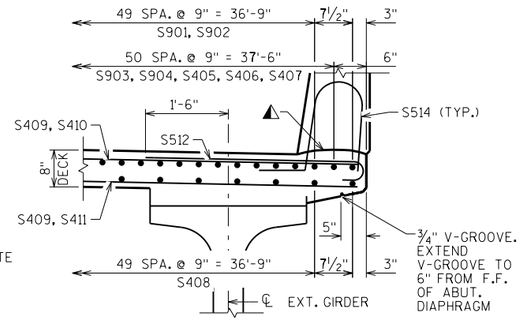



## SECTION THRU BRIDGE

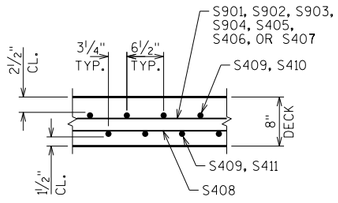
(LOOKING UPSTATION)



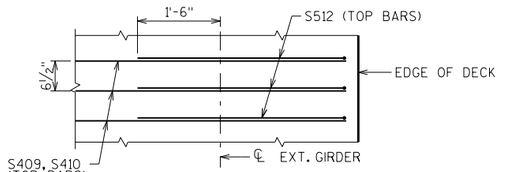

## SECTION THRU PARAPET




## DETAIL A



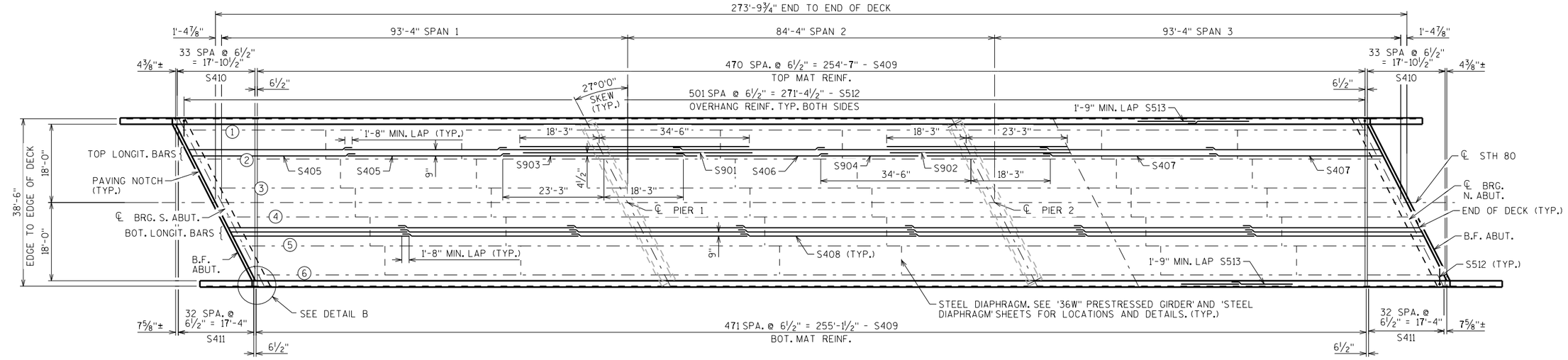

## SECTION S-S



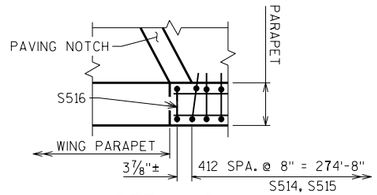

PLAN

## OVERHANG REINF. DETAIL

(TYP. AT BOTH SIDES OF DECK)




## PLAN




## DETAIL B

SOUTHEAST CORNER SHOWN. OTHERS SIMILAR

△ HORIZONTAL CONSTRUCTION JOINT-STRIKE OFF AND LEAVE ROUGH AS SHOWN.

☆ 2 - S429 BARS. PLACE AT ENDS INSIDE OF U-BARS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

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SUPERSTRUCTURE

SHEET 13

260

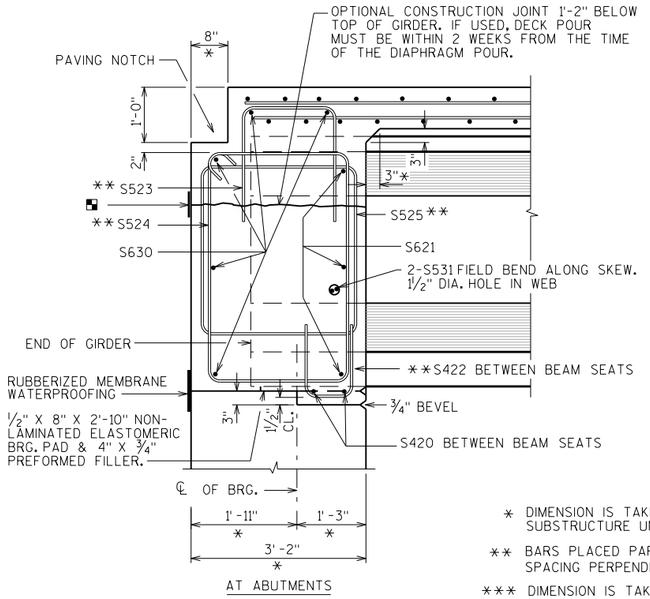
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8

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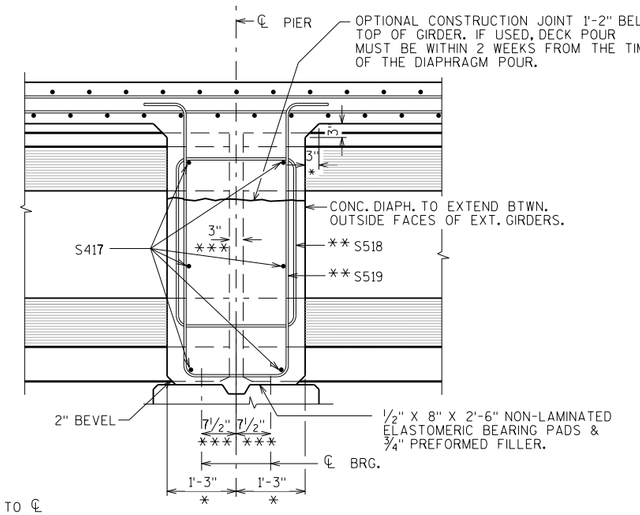
STATE PROJECT NUMBER

5042-05-81




AT ABUTMENTS

## PART LONGIT. SECTION



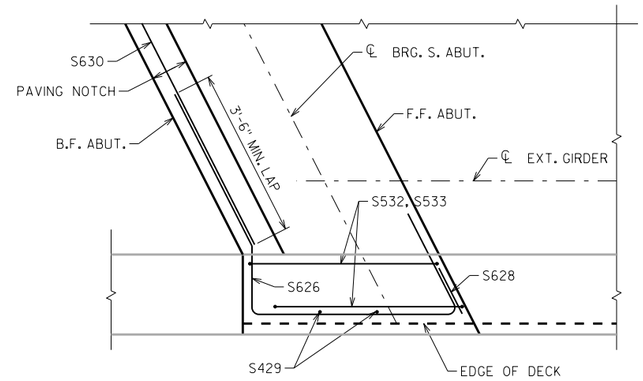

## AT PIER DIAPHRAGMS

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

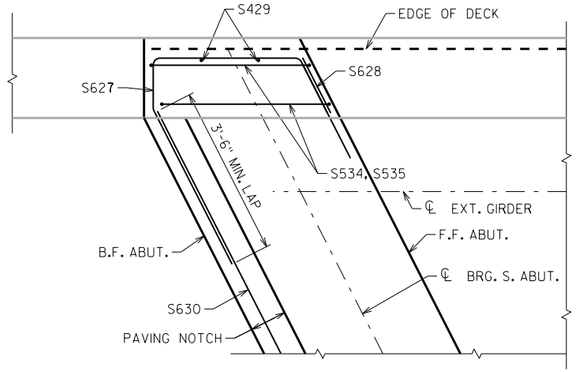
*** DIMENSION IS TAKEN PARALLEL TO ℄ GIRDER

▪ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ONLY IF OPTIONAL CONSTRUCTION JOINT IS USED (COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES").




## WING 1

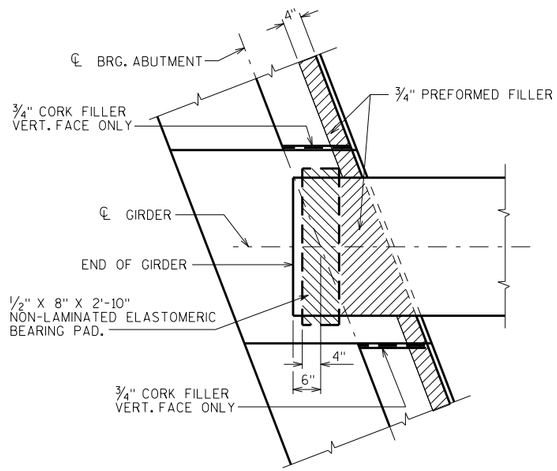
(WING 3 SIMILAR)



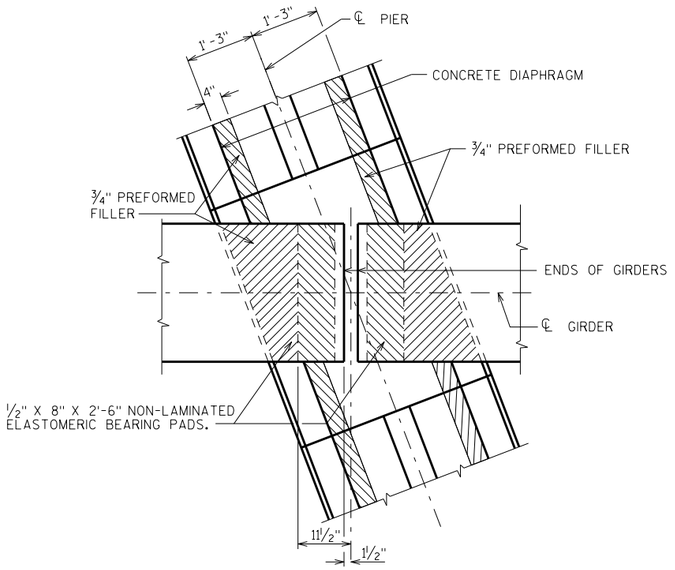

## WING 2

(WING 4 SIMILAR)

## ABUTMENT DIAPHRAGM ENDS




ABUTMENT




PIER

## BEARING PAD DETAIL

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

SUPERSTRUCTURE DETAILS 1

SHEET 14

261

SCALE = 1.33

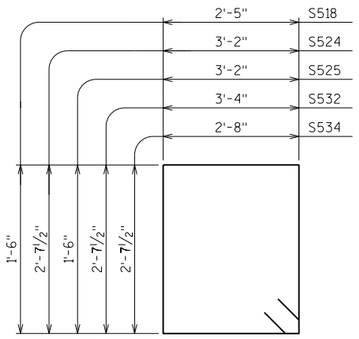
G36WDET
7-14

8

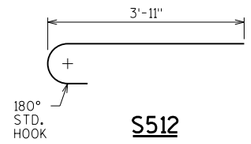
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STATE PROJECT NUMBER

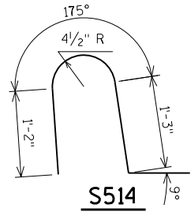
5042-05-81



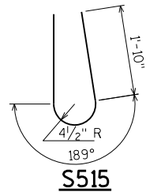

S518, S524, S525, S532, S534



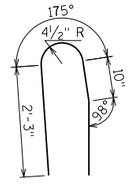

S512



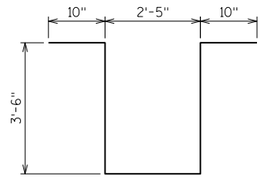

S514



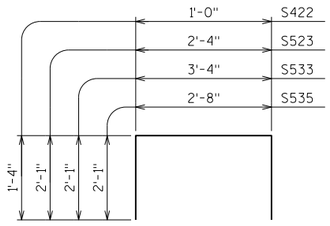

S515



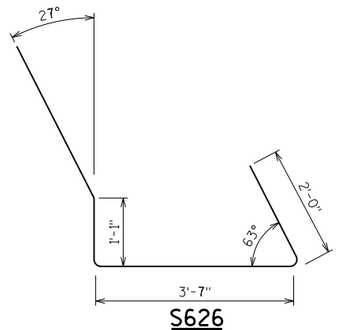

S516



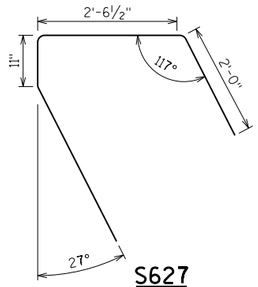

S519




S422, S523, S533, S535




S626




S627

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| S901 | X | 52 | 52'-9" | | | LONGIT. - CONTINUITY - PIER 1 |
| S902 | X | 52 | 41'-6" | | | LONGIT. - CONTINUITY - PIER 2 |
| S903 | X | 51 | 41'-6" | | | LONGIT. - CONTINUITY - PIER 1 |
| S904 | X | 51 | 52'-9" | | | LONGIT. - CONTINUITY - PIER 2 |
| S405 | X | 102 | 37'-5" | | | LONGIT. - TOP- SPAN 1 |
| S406 | X | 51 | 34'-11" | | | LONGIT. - TOP- SPAN 2 |
| S407 | X | 102 | 39'-10" | | | LONGIT. - TOP- SPAN 3 |
| S408 | X | 364 | 40'-6" | | | LONGIT. - BOT. |
| S409 | X | 943 | 38'-2" | | | TRANSVERSE - TOP & BOT. |
| S410 | X | 68 | 19'-0" | | ⚠ | TRANSVERSE - TOP |
| S411 | X | 66 | 18'-11" | | ⚠ | TRANSVERSE - BOT. |
| S512 | X | 1004 | 4'-6" | X | | TRANSVERSE - OVERHANG |
| S513 | X | 60 | 56'-5" | | | PARAPET - HORIZ. |
| S514 | X | 826 | 4'-5" | X | | DECK/32SS PARAPET - VERT. |
| S515 | X | 826 | 5'-0" | X | | 32SS PARAPET - VERT. |
| S516 | X | 4 | 5'-10" | X | | ABUT. DIAPH./32SS PARAPET - VERT. |
| S417 | X | 100 | 4'-3" | | | PIER DIAPHRAGM - HORIZ. |
| S518 | X | 20 | 8'-6" | X | | PIER DIAPHRAGM - VERT. |
| S519 | X | 50 | 10'-7" | X | | PIER DIAPHRAGM - VERT. |
| S420 | X | 20 | 3'-2" | | | ABUT. DIAPHRAGM - HORIZ. - BTWN. BEAM SEATS |
| S621 | X | 50 | 4'-3" | | | ABUT. DIAPHRAGM - HORIZ. |
| S422 | X | 40 | 3'-6" | X | | ABUT. DIAPHRAGM - VERT.-BTWN. BEAM SEATS |
| S523 | X | 60 | 6'-3" | X | | ABUT. DIAPHRAGM - VERT. |
| S524 | X | 60 | 12'-3" | X | | ABUT. DIAPHRAGM - VERT.-STIRRUP |
| S525 | X | 24 | 10'-0" | X | | ABUT. DIAPHRAGM - VERT.-STIRRUP |
| S626 | X | 4 | 9'-10" | X | | ABUT. DIAPH.- HORIZ. - ENDS - WINGS 1 AND 3 |
| S627 | X | 4 | 8'-8" | X | | ABUT. DIAPH.- HORIZ. - ENDS - WINGS 2 AND 4 |
| S628 | X | 4 | 1'-0" | | | ABUT. DIAPH.- HORIZ.- ENDS |
| S429 | X | 8 | 3'-8" | | | ABUT. DIAPH. -VERT. ENDS |
| S630 | X | 10 | 40'-5" | | | ABUT. DIAPHRAGM - HORIZ. |
| S531 | X | 24 | 6'-0" | | | ABUT. DIAPH. -HORIZ.-THRU GIRDER |
| S532 | X | 4 | 12'-7" | X | | ABUT. DIAPH.-VERT.-ENDS- WINGS 1 & 3 |
| S533 | X | 4 | 7'-3" | X | | ABUT. DIAPH.-VERT.-ENDS- WINGS 1 & 3 |
| S534 | X | 4 | 11'-3" | X | | ABUT. DIAPH.-VERT.-ENDS- WINGS 2 & 4 |
| S535 | X | 4 | 6'-7" | X | | ABUT. DIAPH.-VERT.-ENDS- WINGS 2 & 4 |

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

## BAR SERIES TABLE

| BAR MARK | NO. REQ'D. | LENGTH |
|---|---|---|
| S410 | 2 SERIES OF 34 | 1'-5" TO 36'-6" |
| S411 | 2 SERIES OF 33 | 1'-11" TO 35'-11" |

BUNDLE AND TAG EACH SERIES SEPARATELY.

## TOP OF DECK ELEVATIONS

| | SPAN 1 | | | | | | | | | | | SPAN 2 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ℄ BRG. S. ABUT. | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | PIER 1 | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | PIER 2 |
| LT EOD | 764.13 | 764.18 | 764.23 | 764.27 | 764.32 | 764.37 | 764.41 | 764.46 | 764.51 | 764.55 | 764.60 | 764.64 | 764.68 | 764.73 | 764.77 | 764.81 | 764.85 | 764.90 | 764.94 | 764.98 | 765.02 |
| G1 | 764.16 | 764.21 | 764.26 | 764.30 | 764.35 | 764.40 | 764.44 | 764.49 | 764.54 | 764.58 | 764.63 | 764.67 | 764.71 | 764.76 | 764.80 | 764.84 | 764.88 | 764.93 | 764.97 | 765.01 | 765.05 |
| G2 | 764.31 | 764.36 | 764.41 | 764.45 | 764.50 | 764.55 | 764.59 | 764.64 | 764.69 | 764.73 | 764.78 | 764.82 | 764.87 | 764.91 | 764.95 | 764.99 | 765.03 | 765.08 | 765.12 | 765.16 | 765.20 |
| G3 | 764.46 | 764.51 | 764.56 | 764.60 | 764.65 | 764.70 | 764.74 | 764.79 | 764.84 | 764.88 | 764.93 | 764.97 | 765.02 | 765.06 | 765.10 | 765.14 | 765.18 | 765.23 | 765.27 | 765.31 | 765.35 |
| CROWN | 764.54 | 764.59 | 764.63 | 764.68 | 764.73 | 764.77 | 764.82 | 764.87 | 764.91 | 764.96 | 765.01 | 765.05 | 765.09 | 765.13 | 765.17 | 765.22 | 765.26 | 765.30 | 765.34 | 765.39 | 765.43 |
| G4 | 764.48 | 764.53 | 764.57 | 764.62 | 764.67 | 764.71 | 764.76 | 764.81 | 764.85 | 764.90 | 764.95 | 764.99 | 765.03 | 765.07 | 765.12 | 765.16 | 765.20 | 765.24 | 765.29 | 765.33 | 765.37 |
| G5 | 764.37 | 764.41 | 764.46 | 764.51 | 764.55 | 764.60 | 764.65 | 764.69 | 764.74 | 764.79 | 764.83 | 764.87 | 764.92 | 764.96 | 765.00 | 765.04 | 765.08 | 765.13 | 765.17 | 765.21 | 765.25 |
| G6 | 764.25 | 764.30 | 764.34 | 764.39 | 764.44 | 764.48 | 764.53 | 764.58 | 764.62 | 764.67 | 764.72 | 764.76 | 764.80 | 764.84 | 764.88 | 764.93 | 764.97 | 765.01 | 765.05 | 765.09 | 765.14 |
| RT. EOD | 764.23 | 764.27 | 764.32 | 764.37 | 764.41 | 764.46 | 764.51 | 764.55 | 764.60 | 764.65 | 764.69 | 764.73 | 764.78 | 764.82 | 764.86 | 764.90 | 764.95 | 764.99 | 765.03 | 765.07 | 765.11 |

| | | SPAN 3 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | PIER 2 | 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | 6/10 | 7/10 | 8/10 | 9/10 | ℄ BRG. N. ABUT. |
| LT EOD | 765.02 | 765.07 | 765.12 | 765.16 | 765.21 | 765.26 | 765.30 | 765.35 | 765.40 | 765.44 | 765.49 |
| G1 | 765.05 | 765.10 | 765.15 | 765.19 | 765.24 | 765.29 | 765.33 | 765.38 | 765.43 | 765.47 | 765.52 |
| G2 | 765.20 | 765.25 | 765.30 | 765.34 | 765.39 | 765.44 | 765.48 | 765.53 | 765.58 | 765.62 | 765.67 |
| G3 | 765.35 | 765.40 | 765.45 | 765.49 | 765.54 | 765.59 | 765.63 | 765.68 | 765.73 | 765.77 | 765.82 |
| CROWN | 765.43 | 765.47 | 765.52 | 765.57 | 765.61 | 765.66 | 765.71 | 765.75 | 765.80 | 765.85 | 765.89 |
| G4 | 765.37 | 765.42 | 765.46 | 765.51 | 765.56 | 765.60 | 765.65 | 765.70 | 765.74 | 765.79 | 765.84 |
| G5 | 765.25 | 765.30 | 765.35 | 765.39 | 765.44 | 765.49 | 765.53 | 765.58 | 765.63 | 765.67 | 765.72 |
| G6 | 765.14 | 765.18 | 765.23 | 765.28 | 765.32 | 765.37 | 765.42 | 765.46 | 765.51 | 765.56 | 765.60 |
| RT. EOD | 765.11 | 765.16 | 765.21 | 765.25 | 765.30 | 765.35 | 765.39 | 765.44 | 765.49 | 765.53 | 765.58 |

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

SUPERSTRUCTURE DETAILS 2

SHEET 15

262

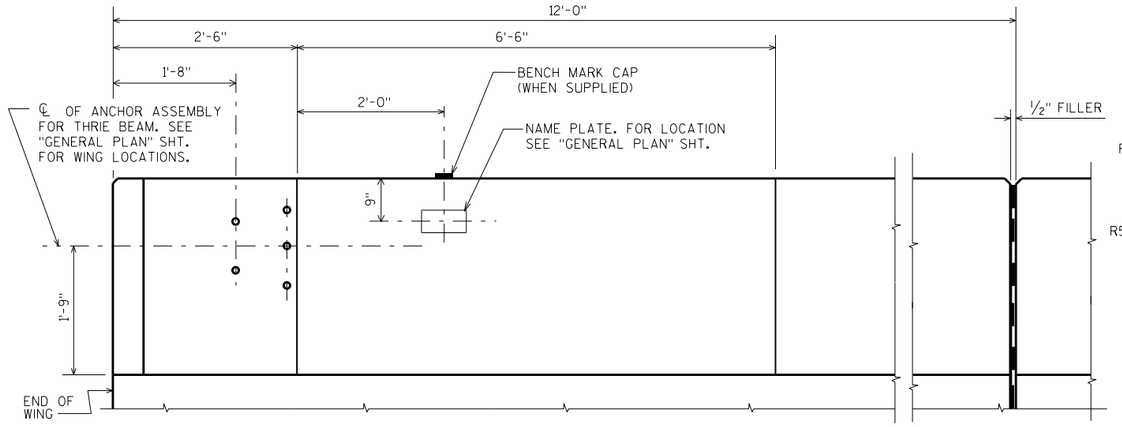
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8

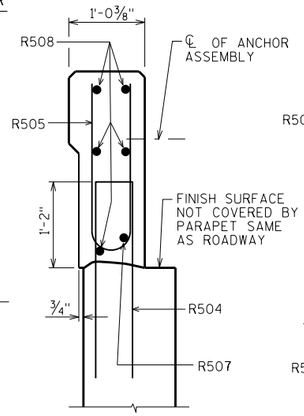
8

STATE PROJECT NUMBER

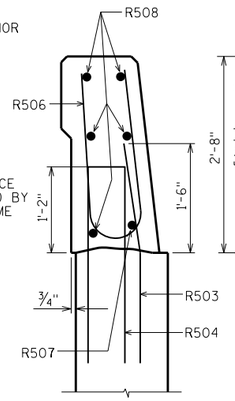
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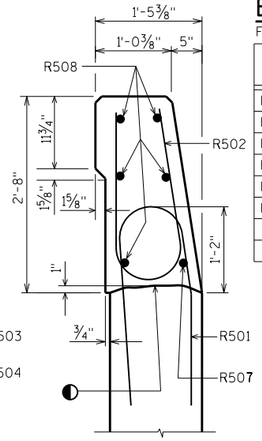

INSIDE ELEVATION




SECTION A




SECTION B

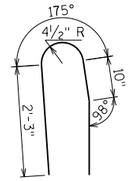



SECTION C

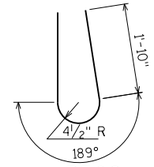
## BILL OF BARS

FOR ABUTMENT PARAPETS

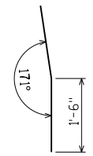
| BAR MARK | COAT | S. ABUT. | N. ABUT. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|---|
| R501 | X | 10 | 10 | 5'-10" | X | | PARAPET-VERT. |
| R502 | X | 10 | 10 | 5'-0" | X | | PARAPET-VERT. |
| R503 | X | 24 | 24 | 3'-0" | X | | PARAPET-VERT. |
| R504 | X | 34 | 34 | 5'-7" | X | | PARAPET-VERT. |
| R505 | X | 22 | 22 | 4'-9" | X | | PARAPET-VERT. |
| R506 | X | 12 | 12 | 4'-10" | X | | PARAPET-VERT. |
| R507 | X | 2 | 2 | 11'-6" | X | | PARAPET-HORIZ. |
| R508 | X | 10 | 10 | 11'-6" | | | PARAPET-HORIZ. |



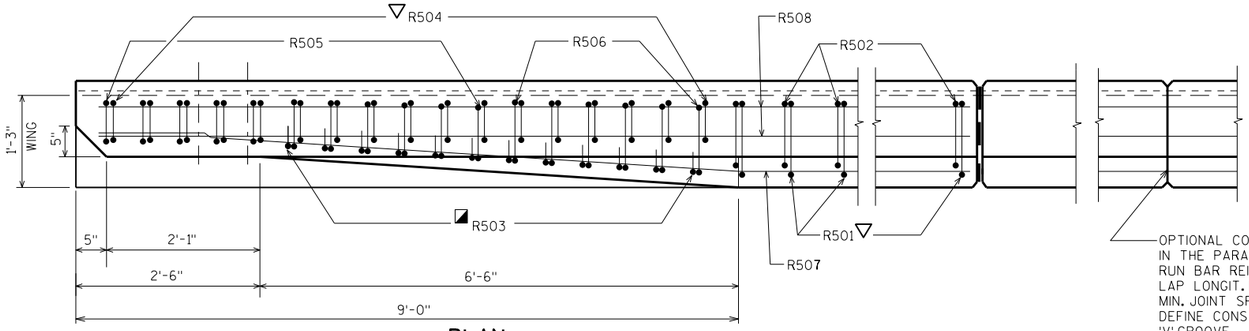

R501




R502

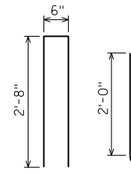



R503

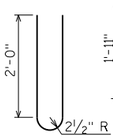



PLAN

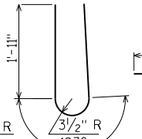
OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A ¾" - 'V' GROOVE.



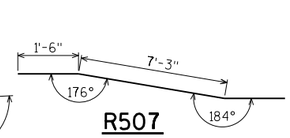

R504



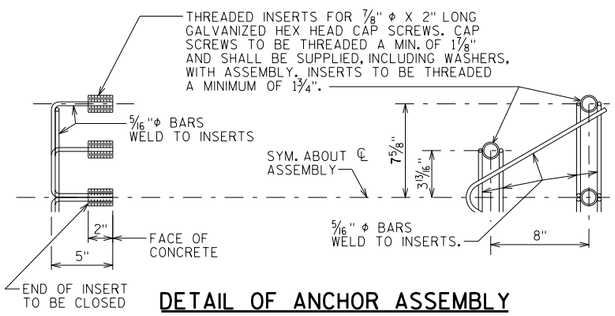

R505




R506



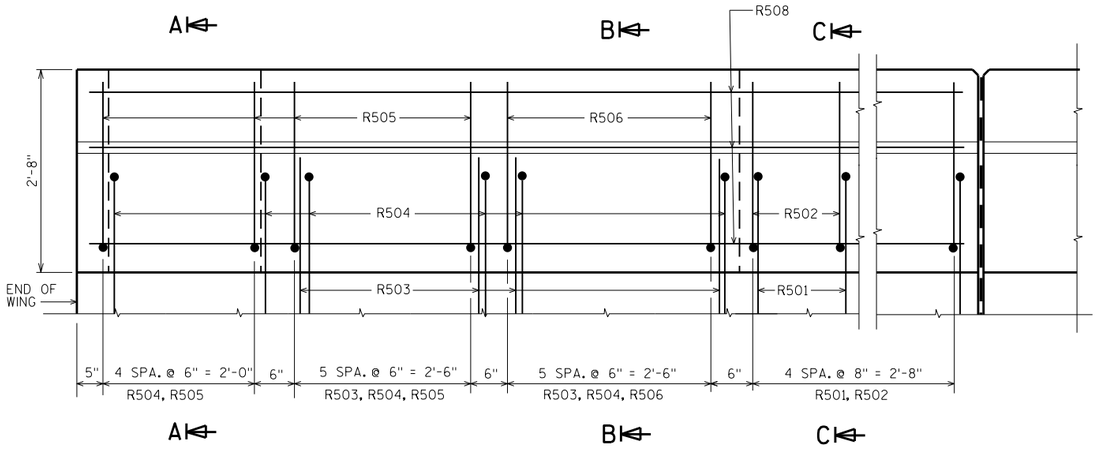

R507




## DETAIL OF ANCHOR ASSEMBLY

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

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.




OUTSIDE ELEVATION

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◪ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 OR S503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-52-270

DRAWN BY DLM | PLANS CK'D. MJL

SINGLE SLOPE PARAPET 32SS

SHEET 16

263

32SSWIN
1-14

SCALE = 1.00

8

12
7
1 2 3 4

**B-52-0268 PROJECT LOCATION**

**PARK ENTRANCE**

| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
|---|---|---|---|---|---|---|---|
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 21+07.12 | 27 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21+10 | 30 | 0 | 3 | 0 | 3 | 0 | 3 |
| 21+15 | 34 | 1 | 6 | 0 | 9 | 0 | 9 |
| 21+20 | 38 | 2 | 7 | 0 | 16 | 0 | 15 |
| 21+25 | 40 | 4 | 7 | 1 | 23 | 1 | 22 |
| 21+30 | 40 | 7 | 7 | 1 | 30 | 2 | 28 |
| 21+35 | 41 | 15 | 8 | 2 | 38 | 5 | 33 |
| 21+38.3 | 41 | 22 | 5 | 2 | 43 | 8 | 35 |
| 21+40 | 42 | 23 | 3 | 1 | 45 | 9 | 36 |
| 21+45 | 45 | 28 | 8 | 5 | 53 | 15 | 38 |
| 21+50 | 50 | 30 | 9 | 5 | 62 | 22 | 40 |
| 21+55 | 60 | 29 | 10 | 5 | 72 | 29 | 43 |
| 21+60 | 55 | 13 | 11 | 4 | 83 | 34 | 49 |
| 21+65 | 51 | 0 | 10 | 1 | 93 | 35 | 58 |
| 21+70 | 53 | 0 | 10 | 0 | 102 | 35 | 67 |
| 21+75 | 31 | 0 | 8 | 0 | 110 | 35 | 75 |
| 21+80 | 3 | 0 | 3 | 0 | 113 | 35 | 78 |

**B-52-0268 PROJECT LOCATION**

**BRIDGE STREET**

| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
|---|---|---|---|---|---|---|---|
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 10+15 | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10+20 | 47 | 0 | 6 | 0 | 6 | 0 | 6 |
| 10+25 | 43 | 0 | 8 | 0 | 14 | 0 | 14 |
| 10+30 | 65 | 0 | 10 | 0 | 24 | 0 | 24 |
| 10+33.74 | 68 | 0 | 9 | 0 | 34 | 0 | 34 |
| 10+35 | 69 | 0 | 3 | 0 | 37 | 0 | 37 |
| 10+40 | 67 | 1 | 13 | 0 | 49 | 0 | 49 |
| 10+45 | 59 | 2 | 12 | 0 | 61 | 0 | 61 |
| 10+50 | 53 | 7 | 10 | 1 | 71 | 1 | 70 |
| 10+55 | 51 | 24 | 10 | 3 | 81 | 5 | 76 |
| 10+60 | 51 | 27 | 9 | 5 | 90 | 11 | 80 |
| 10+65 | 52 | 25 | 9 | 5 | 100 | 17 | 83 |
| 10+70 | 52 | 27 | 10 | 5 | 109 | 23 | 87 |
| 10+75 | 52 | 26 | 10 | 5 | 119 | 29 | 90 |
| 10+80 | 53 | 29 | 10 | 5 | 129 | 35 | 94 |
| 10+85 | 54 | 21 | 10 | 5 | 139 | 41 | 98 |
| 10+90 | 55 | 8 | 10 | 3 | 149 | 45 | 104 |
| 10+91.42 | 55 | 5 | 3 | 0 | 152 | 45 | 107 |
| 10+95 | 54 | 1 | 7 | 0 | 159 | 46 | 114 |
| 11+00 | 50 | 0 | 10 | 0 | 169 | 46 | 123 |

| B-52-0268 PROJECT LOCATION | | | | | | | |
|---|---|---|---|---|---|---|---|
| STH 80 | | | | | | | |
| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 120+20 | 118 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120+25 | 115 | 1 | 22 | 0 | 22 | 0 | 22 |
| 120+38.94 | 112 | 1 | 59 | 0 | 80 | 1 | 80 |
| 120+39.58 | 112 | 3 | 3 | 0 | 83 | 1 | 82 |
| 120+43.51 | 111 | 3 | 16 | 0 | 99 | 1 | 98 |
| 120+50 | 112 | 0 | 27 | 0 | 126 | 2 | 124 |
| 120+75 | 114 | 0 | 105 | 0 | 231 | 2 | 228 |
| 120+78.61 | 112 | 2 | 15 | 0 | 246 | 2 | 243 |
| 120+87.75 | 113 | 1 | 38 | 0 | 284 | 3 | 281 |
| 120+91.5 | 114 | 0 | 16 | 0 | 299 | 3 | 296 |
| 121+00 | 113 | 2 | 36 | 0 | 335 | 4 | 332 |
| 121+11.34 | 110 | 6 | 47 | 2 | 382 | 6 | 376 |
| 121+21.15 | 109 | 8 | 40 | 3 | 422 | 9 | 413 |
| 121+25 | 109 | 8 | 16 | 1 | 437 | 11 | 427 |
| 121+31.5 | 108 | 10 | 26 | 2 | 463 | 13 | 450 |
| 121+32.09 | 108 | 10 | 2 | 0 | 466 | 13 | 452 |
| 121+35 | 109 | 10 | 12 | 1 | 477 | 15 | 463 |
| 121+40 | 110 | 12 | 20 | 2 | 498 | 17 | 480 |
| 121+45 | 114 | 17 | 21 | 3 | 518 | 21 | 498 |
| 121+50 | 115 | 12 | 21 | 3 | 540 | 24 | 516 |
| 121+55 | 116 | 0 | 21 | 1 | 561 | 25 | 536 |
| 121+60 | 110 | 0 | 21 | 0 | 582 | 25 | 557 |
| 121+65 | 98 | 0 | 19 | 0 | 601 | 25 | 576 |
| 121+70 | 83 | 0 | 17 | 0 | 618 | 26 | 592 |
| 121+75 | 81 | 0 | 15 | 0 | 633 | 26 | 608 |
| 121+80 | 88 | 0 | 16 | 0 | 649 | 26 | 623 |
| 121+80.5 | 89 | 0 | 2 | 0 | 650 | 26 | 625 |
| 121+85 | 96 | 0 | 15 | 0 | 666 | 26 | 640 |
| 121+90 | 104 | 1 | 18 | 0 | 684 | 26 | 658 |
| 121+95 | 109 | 1 | 20 | 0 | 704 | 26 | 678 |
| 122+00 | 114 | 1 | 21 | 0 | 725 | 26 | 698 |
| 122+05 | 111 | 4 | 21 | 0 | 745 | 27 | 718 |
| 122+10 | 106 | 11 | 20 | 1 | 765 | 29 | 737 |
| 122+11.15 | 105 | 12 | 5 | 0 | 770 | 29 | 741 |
| 122+15 | 102 | 19 | 15 | 2 | 785 | 32 | 753 |
| 122+20 | 95 | 39 | 18 | 5 | 803 | 39 | 764 |
| 122+21.5 | 94 | 49 | 5 | 2 | 808 | 42 | 766 |
| 122+25 | 85 | 57 | 12 | 7 | 820 | 50 | 770 |
| 122+30 | 62 | 22 | 14 | 7 | 833 | 59 | 774 |
| 122+35 | 34 | 35 | 9 | 5 | 842 | 66 | 776 |
| 122+40 | 14 | 51 | 4 | 8 | 847 | 76 | 771 |
| 122+45 | 0 | 64 | 1 | 11 | 848 | 89 | 759 |
| 122+50 | 0 | 82 | 0 | 14 | 848 | 106 | 742 |
| 122+50.52 | 0 | 82 | 0 | 2 | 848 | 108 | 740 |

| B-52-0268 PROJECT LOCATION | | | | | | | |
|---|---|---|---|---|---|---|---|
| STH 80 - CONTINUED | | | | | | | |
| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 125+38.25 | 0 | 0 | 0 | 0 | 848 | 108 | 740 |
| 125+40 | 20 | 0 | 1 | 0 | 849 | 108 | 740 |
| 125+45 | 40 | 0 | 6 | 0 | 854 | 108 | 746 |
| 125+50 | 58 | 0 | 9 | 0 | 863 | 108 | 755 |
| 125+55 | 76 | 0 | 12 | 0 | 876 | 108 | 768 |
| 125+60 | 101 | 0 | 16 | 0 | 892 | 108 | 784 |
| 125+65 | 101 | 0 | 19 | 0 | 911 | 108 | 803 |
| 125+70 | 107 | 0 | 19 | 0 | 930 | 108 | 822 |
| 125+75 | 112 | 0 | 20 | 0 | 950 | 108 | 842 |
| 125+80 | 113 | 0 | 21 | 0 | 971 | 108 | 863 |
| 125+85 | 112 | 0 | 21 | 0 | 992 | 108 | 884 |
| 125+90 | 108 | 0 | 20 | 0 | 1012 | 108 | 904 |
| 125+95 | 101 | 0 | 19 | 0 | 1031 | 108 | 923 |
| 126+00 | 95 | 0 | 18 | 0 | 1050 | 108 | 941 |
| 126+05 | 87 | 0 | 17 | 0 | 1066 | 108 | 958 |
| 126+10 | 78 | 0 | 15 | 0 | 1082 | 108 | 973 |
| 126+15 | 81 | 0 | 15 | 0 | 1096 | 108 | 988 |
| 126+20 | 89 | 0 | 16 | 0 | 1112 | 108 | 1004 |
| 126+25 | 97 | 0 | 17 | 0 | 1129 | 108 | 1021 |
| 126+30 | 102 | 0 | 18 | 0 | 1148 | 108 | 1039 |
| 126+35 | 110 | 0 | 20 | 0 | 1167 | 108 | 1059 |
| 126+40 | 105 | 0 | 20 | 0 | 1187 | 108 | 1079 |
| 126+45 | 98 | 0 | 19 | 0 | 1206 | 108 | 1098 |
| 126+50 | 94 | 0 | 18 | 0 | 1224 | 108 | 1116 |
| 126+55 | 92 | 0 | 17 | 0 | 1241 | 108 | 1133 |
| 126+56.3 | 91 | 0 | 4 | 0 | 1245 | 108 | 1137 |
| 126+75 | 88 | 0 | 62 | 0 | 1308 | 108 | 1199 |
| 127+00 | 86 | 0 | 80 | 0 | 1388 | 109 | 1279 |
| 127+25 | 87 | 0 | 80 | 0 | 1468 | 109 | 1359 |
| 127+50 | 83 | 0 | 79 | 0 | 1546 | 109 | 1437 |
| 127+74 | 87 | 0 | 76 | 0 | 1622 | 109 | 1513 |
| 127+75 | 87 | 0 | 3 | 0 | 1625 | 109 | 1516 |
| 127+86 | 87 | 0 | 35 | 0 | 1661 | 109 | 1551 |
| 128+00 | 79 | 0 | 43 | 0 | 1704 | 109 | 1594 |
| 128+03 | 79 | 0 | 9 | 0 | 1712 | 109 | 1603 |
| 128+15 | 86 | 0 | 37 | 0 | 1749 | 109 | 1640 |
| 128+25 | 88 | 0 | 32 | 0 | 1781 | 110 | 1672 |
| 128+50 | 95 | 0 | 85 | 0 | 1866 | 110 | 1756 |
| 128+56 | 96 | 0 | 21 | 0 | 1887 | 110 | 1777 |
| 128+75 | 100 | 0 | 69 | 0 | 1956 | 110 | 1846 |
| 128+84.18 | 101 | 0 | 34 | 0 | 1990 | 110 | 1881 |
| 129+00 | 103 | 0 | 60 | 0 | 2050 | 110 | 1941 |
| 129+18 | 104 | 0 | 69 | 0 | 2119 | 110 | 2010 |
| 129+25 | 104 | 0 | 27 | 0 | 2146 | 110 | 2037 |
| 129+50 | 106 | 0 | 97 | 0 | 2243 | 110 | 2134 |

| B-52-0269 PROJECT LOCATION | | | | | | | |
|---|---|---|---|---|---|---|---|
| HANSBERRY LANE | | | | | | | |
| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 00+45 | 33 | 11 | 0 | 0 | 0 | 0 | * |
| 00+50 | 33 | 24 | 6 | 3 | 6 | 4 | * |
| 00+55 | 32 | 40 | 6 | 6 | 12 | 12 | * |
| 00+60 | 32 | 63 | 6 | 10 | 18 | 24 | * |
| 00+65 | 32 | 80 | 6 | 13 | 24 | 40 | * |
| 00+70 | 31 | 82 | 6 | 15 | 30 | 59 | * |
| 00+75 | 30 | 79 | 6 | 15 | 36 | 78 | * |
| 00+80 | 29 | 80 | 5 | 15 | 41 | 96 | * |
| 00+85 | 28 | 82 | 5 | 15 | 46 | 115 | * |
| 00+90 | 26 | 89 | 5 | 16 | 51 | 135 | * |
| 00+95 | 25 | 100 | 5 | 18 | 56 | 156 | * |
| 01+00 | 25 | 114 | 5 | 20 | 61 | 181 | * |
| 01+05 | 23 | 131 | 4 | 23 | 65 | 209 | * |
| 01+10 | 20 | 152 | 4 | 26 | 69 | 242 | * |
| 01+15 | 17 | 179 | 3 | 31 | 72 | 281 | * |
| 01+20 | 14 | 204 | 3 | 36 | 75 | 325 | * |
| 01+25 | 12 | 220 | 2 | 39 | 78 | 374 | * |
| 01+30 | 9 | 238 | 2 | 42 | 80 | 427 | * |
| 01+35 | 7 | 247 | 2 | 45 | 81 | 483 | * |
| 01+40 | 5 | 235 | 1 | 45 | 82 | 539 | * |
| 01+45 | 3 | 205 | 1 | 41 | 83 | 590 | * |
| 01+50 | 1 | 154 | 0 | 33 | 83 | 631 | * |
| 01+55 | 1 | 96 | 0 | 23 | 84 | 660 | * |
| 01+60 | 1 | 47 | 0 | 13 | 84 | 677 | * |
| 01+65 | 2 | 14 | 0 | 6 | 84 | 684 | * |
| 01+70 | 37 | 0 | 4 | 1 | 88 | 685 | * |
| 01+75 | 28 | 0 | 6 | 0 | 94 | 685 | * |
| 01+80 | 11 | 0 | 4 | 0 | 97 | 685 | * |

| B-52-0269 PROJECT LOCATION | | | | | | | |
|---|---|---|---|---|---|---|---|
| STH 56 | | | | | | | |
| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 606+20 | 113 | 42 | 0 | 0 | 0 | 0 | * |
| 606+25 | 114 | 41 | 21 | 8 | 21 | 10 | * |
| 606+30 | 114 | 45 | 21 | 8 | 42 | 19 | * |
| 606+35 | 114 | 49 | 21 | 9 | 63 | 30 | * |
| 606+40 | 114 | 55 | 21 | 10 | 85 | 42 | * |
| 606+45 | 114 | 60 | 21 | 11 | 106 | 56 | * |
| 606+50 | 114 | 67 | 21 | 12 | 127 | 70 | * |
| 606+55 | 115 | 73 | 21 | 13 | 148 | 87 | * |
| 606+60 | 115 | 79 | 21 | 14 | 169 | 104 | * |

| B-52-0269 PROJECT LOCATION | | | | | | | |
|---|---|---|---|---|---|---|---|
| STH 56 - CONTINUED | | | | | | | |
| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 606+65 | 115 | 85 | 21 | 15 | 191 | 123 | * |
| 606+70 | 115 | 90 | 21 | 16 | 212 | 143 | * |
| 606+75 | 116 | 89 | 21 | 17 | 233 | 164 | * |
| 606+80 | 121 | 88 | 22 | 16 | 255 | 185 | * |
| 606+85 | 120 | 86 | 22 | 16 | 278 | 205 | * |
| 606+90 | 118 | 84 | 22 | 16 | 300 | 224 | * |
| 606+95 | 119 | 82 | 22 | 15 | 322 | 244 | * |
| 607+00 | 121 | 79 | 22 | 15 | 344 | 262 | * |
| 607+05 | 122 | 75 | 22 | 14 | 366 | 280 | * |
| 607+10 | 123 | 72 | 23 | 14 | 389 | 297 | * |
| 607+15 | 124 | 68 | 23 | 13 | 412 | 313 | * |
| 607+20 | 124 | 63 | 23 | 12 | 435 | 328 | * |
| 607+25 | 126 | 73 | 23 | 13 | 458 | 344 | * |
| 607+30 | 128 | 73 | 24 | 14 | 481 | 361 | * |
| 607+35 | 131 | 81 | 24 | 14 | 505 | 379 | * |
| 607+40 | 132 | 87 | 24 | 16 | 530 | 398 | * |
| 607+45 | 134 | 88 | 25 | 16 | 554 | 418 | * |
| 607+50 | 134 | 82 | 25 | 16 | 579 | 438 | * |
| 607+55 | 134 | 62 | 25 | 13 | 604 | 455 | * |
| 607+60 | 134 | 42 | 25 | 10 | 629 | 467 | * |
| 607+65 | 135 | 29 | 25 | 7 | 654 | 475 | * |
| 607+70 | 139 | 26 | 25 | 5 | 679 | 481 | * |
| 607+75 | 140 | 18 | 26 | 4 | 705 | 486 | * |
| 607+80 | 140 | 12 | 26 | 3 | 731 | 490 | * |
| 607+85 | 140 | 8 | 26 | 2 | 757 | 492 | * |
| 607+90 | 145 | 8 | 26 | 1 | 783 | 494 | * |
| 607+95 | 154 | 10 | 28 | 2 | 811 | 496 | * |
| 608+00 | 165 | 11 | 30 | 2 | 841 | 498 | * |
| 608+05 | 181 | 8 | 32 | 2 | 873 | 500 | * |
| 608+10 | 199 | 2 | 35 | 1 | 908 | 502 | * |
| 608+15 | 196 | 2 | 37 | 0 | 944 | 502 | * |
| 608+20 | 185 | 2 | 35 | 0 | 980 | 503 | * |
| 608+25 | 176 | 1 | 33 | 0 | 1013 | 503 | * |
| 608+30 | 162 | 1 | 31 | 0 | 1044 | 503 | * |
| 608+35 | 140 | 2 | 28 | 0 | 1072 | 504 | * |
| 608+40 | 129 | 3 | 25 | 0 | 1097 | 504 | * |
| 608+45 | 106 | 0 | 22 | 0 | 1119 | 504 | * |
| 608+50 | 72 | 0 | 16 | 0 | 1136 | 504 | * |
| 608+55 | 43 | 0 | 11 | 0 | 1146 | 504 | * |
| 608+60 | 14 | 0 | 5 | 0 | 1151 | 504 | * |

9

9

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EARTHWORK SUMMARY | SHEET NO: 266 | E |
|---|---|---|---|---|---|

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

**B-52-0269 PROJECT LOCATION**

**STH 80**

| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
|---|---|---|---|---|---|---|---|
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 203+70 | 144 | 0 | 0 | 0 | 0 | 0 | * |
| 204+00 | 142 | 0 | 159 | 0 | 159 | 0 | * |
| 204+50 | 140 | 0 | 261 | 0 | 420 | 0 | * |
| 205+00 | 138 | 0 | 258 | 0 | 677 | 0 | * |
| 205+21 | 139 | 0 | 108 | 0 | 785 | 0 | * |
| 205+37 | 141 | 0 | 83 | 0 | 868 | 0 | * |
| 205+50 | 137 | 2 | 67 | 0 | 935 | 1 | * |
| 205+74.56 | 148 | 0 | 130 | 1 | 1064 | 2 | * |
| 205+81.02 | 153 | 0 | 36 | 0 | 1100 | 2 | * |
| 205+90.15 | 152 | 0 | 52 | 0 | 1152 | 2 | * |
| 205+95.69 | 153 | 0 | 31 | 0 | 1183 | 2 | * |
| 206+00 | 153 | 0 | 24 | 0 | 1208 | 2 | * |
| 206+10.37 | 149 | 0 | 58 | 0 | 1266 | 2 | * |
| 206+16.85 | 150 | 0 | 36 | 0 | 1301 | 2 | * |
| 206+28.48 | 147 | 0 | 64 | 0 | 1365 | 2 | * |
| 206+50 | 144 | 3 | 116 | 1 | 1481 | 3 | * |
| 206+81.48 | 157 | 7 | 175 | 6 | 1657 | 11 | * |
| 207+00 | 159 | 9 | 108 | 5 | 1765 | 17 | * |
| 207+34.48 | 165 | 13 | 207 | 14 | 1972 | 35 | * |
| 207+50 | 179 | 15 | 99 | 8 | 2070 | 45 | * |
| 207+54.15 | 180 | 15 | 28 | 2 | 2098 | 48 | * |
| 207+90.48 | 196 | 16 | 253 | 21 | 2351 | 74 | * |
| 208+00 | 199 | 14 | 70 | 5 | 2420 | 80 | * |
| 208+37.05 | 254 | 5 | 311 | 13 | 2731 | 97 | * |
| 208+50 | 275 | 4 | 127 | 2 | 2858 | 99 | * |
| 209+00 | 363 | 0 | 591 | 3 | 3448 | 103 | * |
| 209+50 | 399 | 0 | 705 | 0 | 4153 | 103 | * |
| 210+00 | 460 | 0 | 795 | 0 | 4948 | 104 | * |
| 210+50 | 479 | 0 | 870 | 0 | 5818 | 104 | * |
| 211+00 | 452 | 0 | 863 | 0 | 6681 | 104 | * |
| 211+50 | 424 | 0 | 812 | 0 | 7493 | 104 | * |
| 212+00 | 378 | 0 | 743 | 0 | 8236 | 104 | * |
| 212+15.66 | 215 | 4 | 172 | 1 | 8408 | 105 | * |
| 212+21.52 | 159 | 18 | 41 | 2 | 8449 | 108 | * |
| 212+27.4 | 162 | 16 | 35 | 4 | 8484 | 113 | * |
| 212+33.28 | 151 | 12 | 34 | 3 | 8518 | 116 | * |
| 212+40.43 | 190 | 6 | 45 | 2 | 8563 | 120 | * |
| 212+50 | 318 | 0 | 90 | 1 | 8653 | 121 | * |
| 212+60.94 | 375 | 0 | 140 | 0 | 8794 | 121 | * |
| 213+00 | 371 | 2 | 539 | 1 | 9333 | 123 | * |
| 213+50 | 357 | 4 | 674 | 6 | 10007 | 130 | * |
| 214+00 | 368 | 11 | 671 | 14 | 10678 | 147 | * |
| 214+15.11 | 319 | 14 | 192 | 7 | 10870 | 156 | * |
| 214+23.93 | 266 | 28 | 95 | 7 | 10965 | 165 | * |
| 214+31.1 | 214 | 32 | 64 | 8 | 11029 | 175 | * |
| 214+35.8 | 213 | 33 | 37 | 6 | 11066 | 182 | * |
| 214+40.5 | 218 | 32 | 37 | 6 | 11104 | 189 | * |

**B-52-0269 PROJECT LOCATION**

**STH 80 - CONTINUED**

| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
|---|---|---|---|---|---|---|---|
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 214+47.41 | 262 | 30 | 61 | 8 | 11165 | 199 | * |
| 214+50 | 284 | 26 | 26 | 3 | 11191 | 202 | * |
| 214+56.4 | 334 | 19 | 73 | 5 | 11264 | 209 | * |
| 215+00 | 403 | 18 | 595 | 30 | 11860 | 246 | * |
| 215+47.29 | 413 | 26 | 715 | 38 | 12574 | 294 | * |
| 215+50 | 418 | 27 | 42 | 3 | 12616 | 297 | * |
| 216+00 | 459 | 53 | 812 | 74 | 13428 | 389 | * |
| 216+34.85 | 462 | 90 | 594 | 92 | 14022 | 504 | * |
| 216+50 | 475 | 114 | 263 | 57 | 14285 | 576 | * |
| 217+00 | 530 | 173 | 930 | 266 | 15216 | 908 | * |
| 217+50 | 550 | 363 | 1000 | 496 | 16216 | 1528 | * |
| 217+80.15 | 520 | 542 | 598 | 505 | 16813 | 2159 | * |
| 217+85 | 525 | 555 | 94 | 98 | 16907 | 2282 | * |
| 217+90 | 545 | 528 | 99 | 100 | 17006 | 2407 | * |
| 217+95 | 558 | 495 | 102 | 95 | 17109 | 2526 | * |
| 218+00 | 564 | 449 | 104 | 87 | 17212 | 2635 | * |
| 218+05 | 573 | 308 | 105 | 70 | 17318 | 2723 | * |
| 218+10 | 593 | 171 | 108 | 44 | 17426 | 2778 | * |
| 218+15 | 622 | 63 | 113 | 22 | 17538 | 2805 | * |
| 218+20 | 675 | 2 | 120 | 6 | 17658 | 2813 | * |
| 218+25 | 738 | 0 | 131 | 0 | 17789 | 2813 | * |
| 218+30 | 736 | 0 | 136 | 0 | 17926 | 2813 | * |
| 218+35 | 720 | 0 | 135 | 0 | 18060 | 2813 | * |
| 218+40 | 706 | 0 | 132 | 0 | 18192 | 2813 | * |
| 218+45 | 703 | 0 | 130 | 0 | 18323 | 2813 | * |
| 218+50 | 701 | 0 | 130 | 0 | 18453 | 2813 | * |
| 218+55 | 681 | 3 | 128 | 0 | 18581 | 2813 | * |
| 218+60 | 631 | 46 | 121 | 5 | 18702 | 2819 | * |
| 218+65 | 591 | 149 | 113 | 18 | 18815 | 2842 | * |
| 218+70 | 566 | 302 | 107 | 42 | 18922 | 2894 | * |
| 218+75 | 556 | 490 | 104 | 73 | 19026 | 2985 | * |
| 218+80 | 551 | 635 | 102 | 104 | 19129 | 3116 | * |
| 218+85 | 546 | 700 | 102 | 124 | 19230 | 3270 | * |
| 218+90 | 543 | 742 | 101 | 134 | 19331 | 3437 | * |
| 218+95 | 541 | 774 | 100 | 140 | 19431 | 3613 | * |
| 219+00 | 540 | 795 | 100 | 145 | 19531 | 3794 | * |
| 219+05 | 535 | 806 | 100 | 148 | 19631 | 3980 | * |
| 219+10 | 526 | 811 | 98 | 150 | 19729 | 4167 | * |
| 219+15 | 466 | 816 | 92 | 151 | 19821 | 4355 | * |
| 219+20 | 0 | 767 | 43 | 147 | 19864 | 4538 | * |
| 219+25 | 0 | 677 | 0 | 134 | 19864 | 4705 | * |
| 219+30 | 0 | 546 | 0 | 113 | 19864 | 4847 | * |
| 219+35 | 0 | 0 | 0 | 51 | 19864 | 4910 | * |
| 219+40 | 0 | 0 | 0 | 0 | 19864 | 4910 | * |
| 219+45 | 0 | 0 | 0 | 0 | 19864 | 4910 | * |
| 219+47.03 | 0 | 0 | 0 | 0 | 19864 | 4910 | * |

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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EARTHWORK SUMMARY | SHEET NO: 267 | E |
|---|---|---|---|---|---|

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

| B-52-0269 PROJECT LOCATION | | | | | | | |
|---|---|---|---|---|---|---|---|
| STH 80 - CONTINUED | | | | | | | |
| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 220+67.27 | 0 | 0 | 0 | 0 | 19864 | 4910 | * |
| 220+74.03 | 0 | 0 | 0 | 0 | 19864 | 4910 | * |
| 220+85.2 | 228 | 0 | 47 | 0 | 19911 | 4910 | * |
| 221+00 | 383 | 771 | 167 | 211 | 20079 | 5174 | * |
| 221+06.01 | 405 | 764 | 88 | 171 | 20167 | 5388 | * |
| 221+50 | 440 | 685 | 688 | 1180 | 20855 | 6863 | * |
| 221+89.28 | 360 | 661 | 582 | 979 | 21437 | 8087 | * |
| 222+00 | 320 | 674 | 135 | 265 | 21572 | 8418 | * |
| 222+50 | 260 | 692 | 537 | 1265 | 22109 | 9999 | * |
| 222+75.2 | 256 | 705 | 241 | 652 | 22350 | 10814 | * |
| 223+00 | 336 | 649 | 272 | 622 | 22622 | 11591 | * |
| 223+09.85 | 310 | 627 | 118 | 233 | 22740 | 11882 | * |
| 223+18.41 | 204 | 613 | 81 | 196 | 22821 | 12128 | * |
| 223+25.53 | 122 | 606 | 43 | 161 | 22864 | 12329 | * |
| 223+30.27 | 116 | 603 | 21 | 106 | 22885 | 12461 | * |
| 223+35 | 122 | 596 | 21 | 105 | 22906 | 12592 | * |
| 223+42.13 | 172 | 586 | 39 | 156 | 22945 | 12788 | * |
| 223+50 | 194 | 598 | 53 | 173 | 22998 | 13003 | * |
| 223+88.37 | 219 | 532 | 294 | 803 | 23292 | 14007 | * |
| 224+00 | 212 | 530 | 93 | 229 | 23385 | 14293 | * |
| 224+50 | 205 | 498 | 386 | 952 | 23770 | 15483 | * |
| 225+00 | 182 | 458 | 358 | 885 | 24129 | 16590 | * |
| 225+50 | 156 | 500 | 313 | 887 | 24442 | 17699 | * |
| 226+00 | 148 | 449 | 282 | 879 | 24724 | 18798 | * |
| 226+50 | 133 | 417 | 260 | 802 | 24984 | 19800 | * |
| 227+00 | 120 | 364 | 234 | 723 | 25219 | 20704 | * |
| 227+50 | 127 | 185 | 229 | 508 | 25447 | 21339 | * |
| 227+61.28 | 138 | 151 | 55 | 70 | 25503 | 21427 | * |
| 227+65 | 142 | 127 | 19 | 19 | 25522 | 21451 | * |
| 227+70 | 147 | 101 | 27 | 21 | 25549 | 21478 | * |
| 227+75 | 160 | 94 | 28 | 18 | 25577 | 21500 | * |
| 227+80 | 164 | 92 | 30 | 17 | 25607 | 21522 | * |
| 227+85 | 169 | 91 | 31 | 17 | 25638 | 21543 | * |
| 227+90 | 182 | 88 | 33 | 17 | 25671 | 21564 | * |
| 227+95 | 171 | 92 | 33 | 17 | 25703 | 21585 | * |
| 228+00 | 157 | 95 | 30 | 17 | 25734 | 21606 | * |
| 228+05 | 144 | 99 | 28 | 18 | 25762 | 21629 | * |
| 228+10 | 131 | 104 | 25 | 19 | 25787 | 21652 | * |
| 228+15 | 124 | 110 | 24 | 20 | 25811 | 21677 | * |
| 228+20 | 132 | 115 | 24 | 21 | 25834 | 21703 | * |
| 228+25 | 139 | 118 | 25 | 22 | 25859 | 21730 | * |
| 228+30 | 147 | 120 | 26 | 22 | 25886 | 21757 | * |
| 228+35 | 154 | 121 | 28 | 22 | 25914 | 21785 | * |

| B-52-0269 PROJECT LOCATION | | | | | | | |
|---|---|---|---|---|---|---|---|
| STH 80 - CONTINUED | | | | | | | |
| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 228+40 | 162 | 120 | 29 | 22 | 25943 | 21813 | * |
| 228+45 | 168 | 118 | 31 | 22 | 25973 | 21841 | * |
| 228+50 | 173 | 117 | 32 | 22 | 26005 | 21868 | * |
| 228+55 | 178 | 116 | 33 | 22 | 26038 | 21895 | * |
| 228+60 | 184 | 117 | 34 | 22 | 26071 | 21922 | * |
| 228+65 | 192 | 118 | 35 | 22 | 26106 | 21949 | * |
| 228+70 | 194 | 118 | 36 | 22 | 26142 | 21976 | * |
| 228+75 | 175 | 131 | 34 | 23 | 26176 | 22005 | * |
| 228+80 | 164 | 144 | 31 | 25 | 26207 | 22037 | * |
| 228+85 | 155 | 155 | 30 | 28 | 26237 | 22072 | * |
| 228+90 | 148 | 167 | 28 | 30 | 26265 | 22109 | * |
| 228+95 | 140 | 180 | 27 | 32 | 26292 | 22149 | * |
| 229+00 | 135 | 205 | 25 | 36 | 26317 | 22194 | * |
| 229+05 | 133 | 237 | 25 | 41 | 26342 | 22245 | * |
| 229+06.37 | 132 | 248 | 7 | 12 | 26349 | 22260 | * |
| 229+50 | 132 | 346 | 214 | 480 | 26562 | 22860 | * |
| 230+00 | 129 | 374 | 242 | 667 | 26804 | 23693 | * |
| 230+50 | 131 | 327 | 241 | 649 | 27045 | 24504 | * |
| 231+00 | 133 | 295 | 245 | 576 | 27290 | 25224 | * |
| 231+50 | 144 | 214 | 257 | 471 | 27547 | 25814 | * |
| 232+00 | 152 | 119 | 274 | 308 | 27820 | 26199 | * |
| 232+50 | 154 | 52 | 283 | 158 | 28103 | 26397 | * |
| 233+00 | 170 | 5 | 300 | 52 | 28404 | 26462 | * |
| 233+10.82 | 171 | 0 | 68 | 1 | 28472 | 26463 | * |
| 233+19.09 | 162 | 11 | 51 | 2 | 28523 | 26465 | * |
| 233+29.44 | 150 | 12 | 60 | 4 | 28583 | 26471 | * |
| 233+38.23 | 143 | 21 | 48 | 5 | 28630 | 26477 | * |
| 233+43.16 | 139 | 21 | 26 | 4 | 28656 | 26482 | * |
| 233+50 | 135 | 27 | 35 | 6 | 28691 | 26490 | * |
| 233+57.57 | 143 | 16 | 39 | 6 | 28730 | 26498 | * |
| 233+64.77 | 154 | 2 | 40 | 3 | 28769 | 26501 | * |
| 233+74.74 | 108 | 0 | 48 | 0 | 28818 | 26501 | * |
| 233+75.16 | 16 | 0 | 1 | 0 | 28819 | 26501 | * |
| 233+93.8 | 13 | 0 | 10 | 0 | 28828 | 26501 | * |
| 233+93.9 | 13 | 0 | 0 | 0 | 28829 | 26501 | * |
| 233+93.9 | 13 | 0 | 0 | 0 | 28829 | 26501 | * |
| 234+00 | 12 | 0 | 3 | 0 | 28831 | 26501 | * |
| 234+13.57 | 11 | 0 | 6 | 0 | 28837 | 26501 | * |
| 234+50 | 12 | 0 | 15 | 0 | 28852 | 26502 | * |
| 234+66.57 | 14 | 0 | 8 | 0 | 28860 | 26502 | * |
| 235+00 | 19 | 0 | 21 | 0 | 28881 | 26502 | * |
| 235+19.57 | 19 | 0 | 14 | 0 | 28895 | 26502 | * |
| 235+45 | 20 | 0 | 19 | 0 | 28914 | 26502 | * |

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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | EARTHWORK SUMMARY | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

| B-52-0270 PROJECT LOCATION | | | | | | | |
|---|---|---|---|---|---|---|---|
| IRISH DRIVE | | | | | | | |
| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 00+75.16 | 56 | 0 | 0 | 0 | 0 | 0 | 0 |
| 00+80 | 61 | 0 | 10 | 0 | 10 | 0 | 10 |
| 00+85 | 64 | 0 | 12 | 0 | 22 | 0 | 22 |
| 00+90 | 66 | 0 | 12 | 0 | 34 | 0 | 34 |
| 00+95 | 60 | 0 | 12 | 0 | 46 | 0 | 46 |
| 01+00 | 53 | 2 | 10 | 0 | 56 | 0 | 56 |
| 01+05 | 48 | 1 | 9 | 0 | 65 | 0 | 65 |
| 01+10 | 42 | 0 | 8 | 0 | 74 | 0 | 73 |
| 01+14.9 | 28 | 0 | 6 | 0 | 80 | 0 | 80 |
| 01+15 | 28 | 0 | 0 | 0 | 80 | 0 | 80 |
| 01+20 | 14 | 1 | 4 | 0 | 84 | 1 | 83 |
| 01+25 | 6 | 4 | 2 | 0 | 86 | 1 | 85 |
| 01+30 | 2 | 7 | 1 | 1 | 87 | 2 | 84 |
| 01+35 | 0 | 20 | 0 | 2 | 87 | 6 | 81 |
| 01+40 | 0 | 33 | 0 | 5 | 87 | 12 | 75 |
| 01+45 | 0 | 48 | 0 | 7 | 87 | 21 | 66 |
| 01+50 | 0 | 63 | 0 | 10 | 87 | 34 | 53 |
| 01+55 | 0 | 90 | 0 | 14 | 87 | 52 | 35 |
| 01+60 | 0 | 115 | 0 | 19 | 87 | 75 | 12 |
| 01+65 | 0 | 143 | 0 | 24 | 87 | 105 | -18 |
| 01+70 | 0 | 173 | 0 | 29 | 87 | 142 | -55 |
| 01+75 | 0 | 198 | 0 | 34 | 87 | 185 | -98 |
| 01+80 | 0 | 203 | 0 | 37 | 87 | 231 | -144 |
| 01+85 | 0 | 226 | 0 | 40 | 87 | 281 | -194 |
| 01+90 | 0 | 227 | 0 | 42 | 87 | 333 | -246 |
| 01+95 | 0 | 202 | 0 | 40 | 87 | 383 | -296 |
| 02+00 | 0 | 182 | 0 | 36 | 87 | 427 | -340 |
| 02+05 | 2 | 154 | 0 | 31 | 87 | 466 | -379 |
| 02+07 | 2 | 139 | 0 | 11 | 87 | 480 | -392 |
| 02+07.9 | 2 | 132 | 0 | 5 | 87 | 485 | -398 |
| 02+10 | 3 | 116 | 0 | 10 | 88 | 497 | -410 |
| 02+15 | 4 | 75 | 1 | 18 | 88 | 519 | -431 |
| 02+20 | 7 | 35 | 1 | 10 | 89 | 532 | -443 |
| 02+25 | 10 | 9 | 2 | 4 | 91 | 537 | -446 |
| 02+30 | 13 | 0 | 2 | 1 | 93 | 538 | -445 |
| 02+35 | 12 | 0 | 2 | 0 | 95 | 538 | -443 |
| 02+40 | 37 | 0 | 5 | 0 | 100 | 538 | -438 |
| 02+45 | 17 | 0 | 5 | 0 | 105 | 538 | -433 |

**B-52-0270 PROJECT LOCATION**

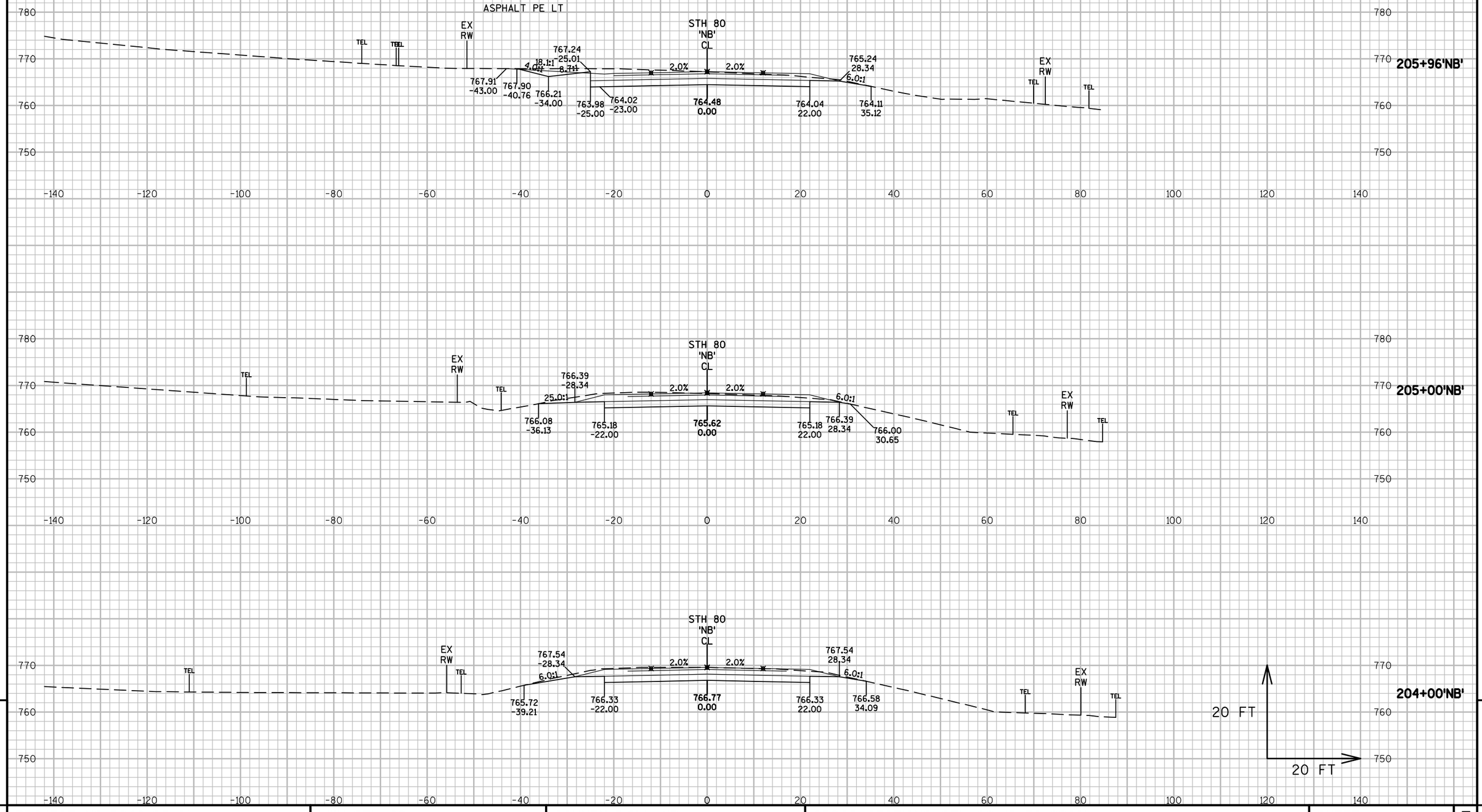
**STH 80**

| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
|---|---|---|---|---|---|---|---|
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 109+15 | 159 | 0 | 0 | 0 | 0 | 0 | 0 |
| 109+20 | 161 | 0 | 30 | 0 | 30 | 0 | 30 |
| 109+25 | 152 | 0 | 29 | 0 | 59 | 0 | 59 |
| 109+30 | 146 | 0 | 28 | 0 | 86 | 0 | 86 |
| 109+35 | 145 | 1 | 27 | 0 | 113 | 0 | 113 |
| 109+38.72 | 146 | 2 | 20 | 0 | 133 | 0 | 133 |
| 109+40 | 146 | 3 | 7 | 0 | 140 | 1 | 140 |
| 109+40.5 | 146 | 3 | 3 | 0 | 143 | 1 | 142 |
| 109+45 | 146 | 3 | 24 | 1 | 167 | 1 | 166 |
| 109+50 | 145 | 4 | 27 | 1 | 194 | 2 | 192 |
| 109+52 | 151 | 0 | 11 | 0 | 205 | 2 | 203 |
| 109+70 | 150 | 0 | 100 | 0 | 306 | 2 | 303 |
| 109+75 | 148 | 3 | 28 | 0 | 333 | 3 | 330 |
| 109+80 | 147 | 7 | 27 | 1 | 361 | 4 | 357 |
| 109+91.5 | 143 | 11 | 62 | 4 | 422 | 9 | 414 |
| 110+00 | 139 | 12 | 44 | 4 | 467 | 13 | 454 |
| 110+20 | 130 | 20 | 100 | 12 | 566 | 28 | 539 |
| 110+25 | 128 | 20 | 24 | 4 | 590 | 32 | 558 |
| 110+39.25 | 121 | 16 | 66 | 9 | 656 | 44 | 612 |
| 110+50 | 114 | 38 | 47 | 11 | 703 | 58 | 645 |
| 110+57.65 | 99 | 78 | 30 | 16 | 733 | 78 | 655 |
| 110+61.7 | 74 | 103 | 13 | 14 | 746 | 95 | 650 |
| 110+70.43 | 29 | 5 | 17 | 17 | 763 | 117 | 645 |
| 110+75 | 7 | 16 | 3 | 2 | 766 | 119 | 646 |
| 110+88.75 | 0 | 105 | 2 | 31 | 767 | 158 | 609 |
| 113+44.23 | 7 | 0 | 0 | 0 | 767 | 158 | 609 |
| 113+45 | 10 | 21 | 0 | 0 | 768 | 158 | 609 |
| 113+50 | 28 | 23 | 4 | 4 | 771 | 163 | 608 |
| 113+55 | 45 | 25 | 7 | 4 | 778 | 169 | 609 |
| 113+60 | 62 | 28 | 10 | 5 | 788 | 175 | 613 |
| 113+62.57 | 71 | 29 | 6 | 3 | 794 | 178 | 616 |
| 113+65 | 77 | 57 | 7 | 4 | 801 | 183 | 618 |
| 113+70 | 76 | 58 | 14 | 11 | 815 | 196 | 618 |
| 113+75 | 75 | 60 | 14 | 11 | 829 | 210 | 619 |
| 113+80 | 74 | 58 | 14 | 11 | 843 | 224 | 619 |
| 113+85 | 74 | 62 | 14 | 11 | 856 | 237 | 619 |
| 113+90 | 74 | 67 | 14 | 12 | 870 | 252 | 618 |
| 113+95 | 75 | 71 | 14 | 13 | 884 | 268 | 615 |
| 114+00 | 75 | 77 | 14 | 14 | 898 | 286 | 612 |
| 114+05 | 76 | 83 | 14 | 15 | 912 | 304 | 608 |
| 114+10 | 76 | 87 | 14 | 16 | 926 | 324 | 602 |
| 114+15 | 77 | 90 | 14 | 16 | 940 | 344 | 596 |
| 114+20 | 77 | 91 | 14 | 17 | 954 | 365 | 589 |
| 114+25 | 77 | 88 | 14 | 17 | 968 | 386 | 583 |

**B-52-0270 PROJECT LOCATION**

**STH 80 - CONTINUED**

| STATION | AREA (SF) | | INCR. VOL. (CY) | | CUM. VOL. (CY) | | |
|---|---|---|---|---|---|---|---|
| | CUT | FILL | CUT | FILL | CUT | EXPANDED FILL | MASS HAUL |
| | | | | | 1.00 | 1.25 | (CY) |
| 114+30 | 78 | 80 | 14 | 16 | 983 | 405 | 578 |
| 114+35 | 79 | 69 | 15 | 14 | 997 | 422 | 575 |
| 114+40 | 80 | 49 | 15 | 11 | 1012 | 436 | 576 |
| 114+45 | 80 | 32 | 15 | 7 | 1027 | 445 | 581 |
| 114+50 | 80 | 16 | 15 | 4 | 1042 | 451 | 591 |
| 114+55 | 80 | 6 | 15 | 2 | 1056 | 454 | 603 |
| 114+60 | 82 | 2 | 15 | 1 | 1071 | 454 | 617 |
| 114+65 | 81 | 0 | 15 | 0 | 1086 | 455 | 632 |
| 114+70 | 80 | 0 | 15 | 0 | 1101 | 455 | 647 |
| 114+75 | 77 | 5 | 14 | 0 | 1116 | 455 | 661 |
| 114+80 | 72 | 14 | 14 | 2 | 1130 | 457 | 672 |
| 114+85 | 64 | 17 | 13 | 3 | 1142 | 461 | 681 |
| 114+90 | 61 | 21 | 12 | 3 | 1154 | 465 | 689 |
| 114+95 | 68 | 20 | 12 | 4 | 1166 | 470 | 696 |
| 115+00 | 74 | 16 | 13 | 3 | 1179 | 474 | 705 |
| 115+05 | 75 | 14 | 14 | 3 | 1193 | 478 | 715 |
| 115+10 | 76 | 13 | 14 | 3 | 1207 | 481 | 726 |
| 115+15 | 75 | 14 | 14 | 3 | 1221 | 484 | 737 |
| 115+20 | 75 | 19 | 14 | 3 | 1235 | 488 | 747 |
| 115+25 | 74 | 26 | 14 | 4 | 1248 | 493 | 755 |
| 115+30 | 73 | 37 | 14 | 6 | 1262 | 500 | 761 |
| 115+35 | 73 | 43 | 14 | 7 | 1275 | 510 | 766 |
| 115+40 | 73 | 39 | 14 | 8 | 1289 | 519 | 770 |
| 115+45 | 73 | 25 | 14 | 6 | 1303 | 527 | 776 |
| 115+50 | 72 | 10 | 13 | 3 | 1316 | 531 | 785 |
| 115+55 | 72 | 7 | 13 | 2 | 1329 | 533 | 797 |
| 115+60 | 71 | 4 | 13 | 1 | 1342 | 534 | 809 |
| 115+65 | 70 | 3 | 13 | 1 | 1355 | 535 | 821 |
| 115+68.42 | 69 | 3 | 9 | 0 | 1364 | 535 | 829 |
| 115+75 | 68 | 2 | 17 | 1 | 1381 | 536 | 845 |
| 116+00 | 68 | 0 | 63 | 1 | 1444 | 537 | 907 |
| 116+25 | 71 | 0 | 64 | 0 | 1508 | 537 | 971 |
| 116+50 | 75 | 0 | 68 | 0 | 1576 | 537 | 1038 |
| 116+75 | 80 | 0 | 72 | 0 | 1648 | 537 | 1110 |
| 117+00 | 85 | 0 | 76 | 0 | 1724 | 537 | 1186 |
| 117+25 | 90 | 0 | 81 | 0 | 1805 | 537 | 1267 |
| 117+50 | 96 | 0 | 86 | 0 | 1891 | 537 | 1353 |
| 117+75 | 102 | 0 | 92 | 0 | 1983 | 537 | 1445 |
| 118+00 | 107 | 0 | 96 | 0 | 2079 | 537 | 1542 |
| 118+25 | 111 | 0 | 101 | 0 | 2180 | 537 | 1642 |
| 118+50 | 115 | 0 | 104 | 0 | 2284 | 537 | 1747 |
| 118+75 | 117 | 0 | 107 | 0 | 2391 | 537 | 1854 |
| 119+00 | 119 | 0 | 110 | 0 | 2501 | 537 | 1964 |
| 119+15 | 120 | 0 | 67 | 0 | 2568 | 537 | 2030 |



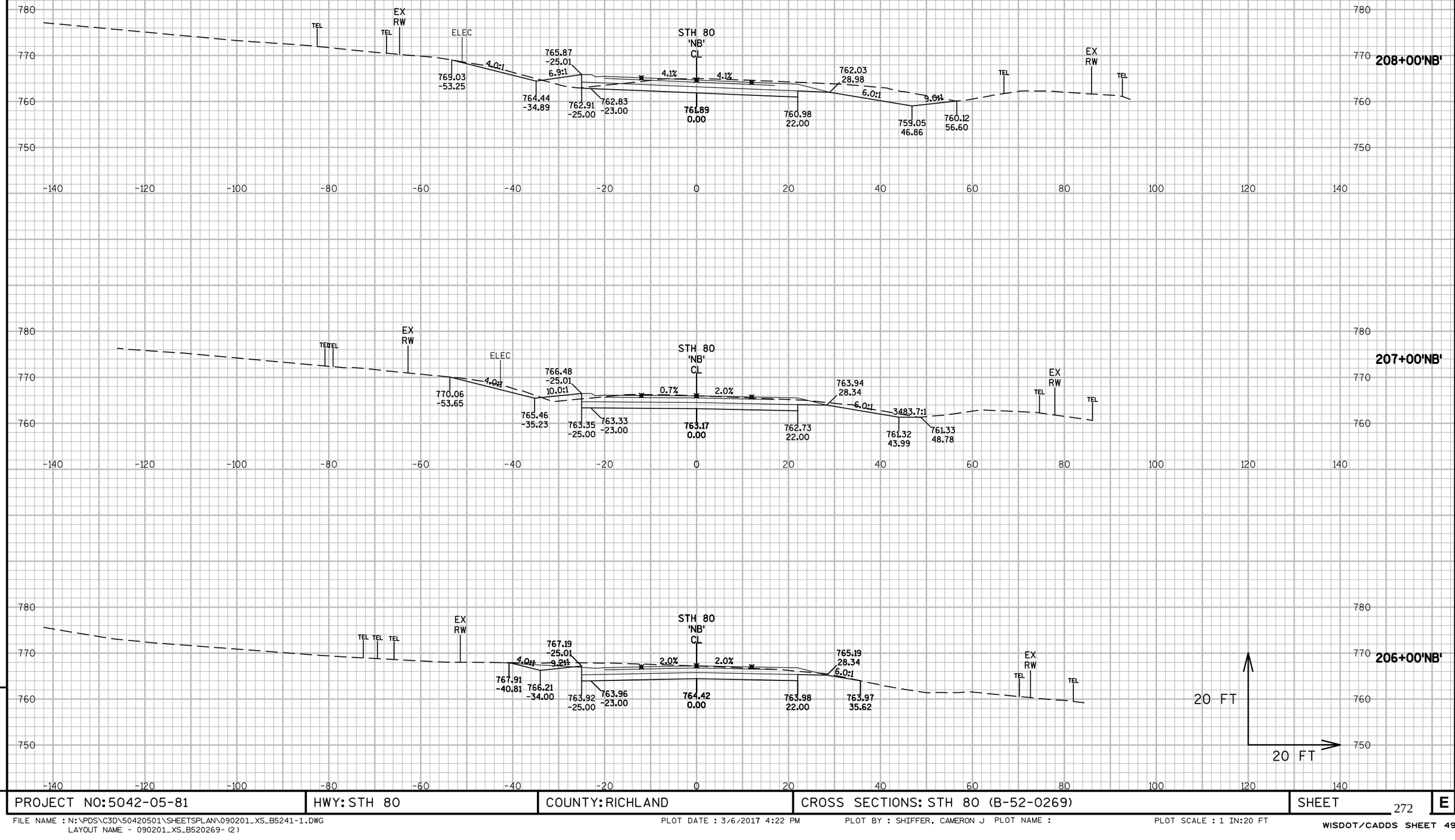

9

9

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 271 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5241-1.DWG
LAYOUT NAME - 090201_XS_B520269-(1)

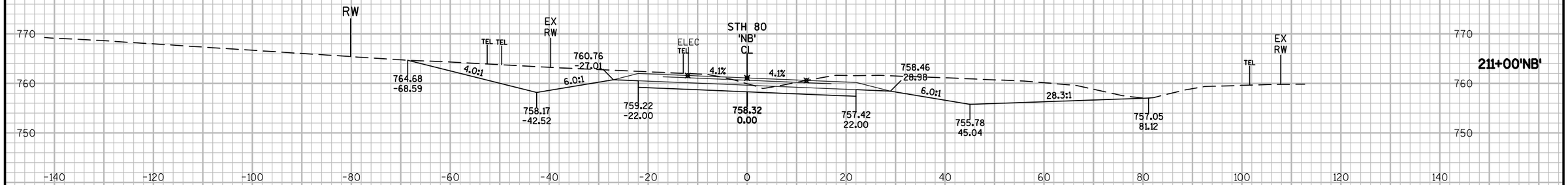
PLOT DATE : 3/6/2017 4:21 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT



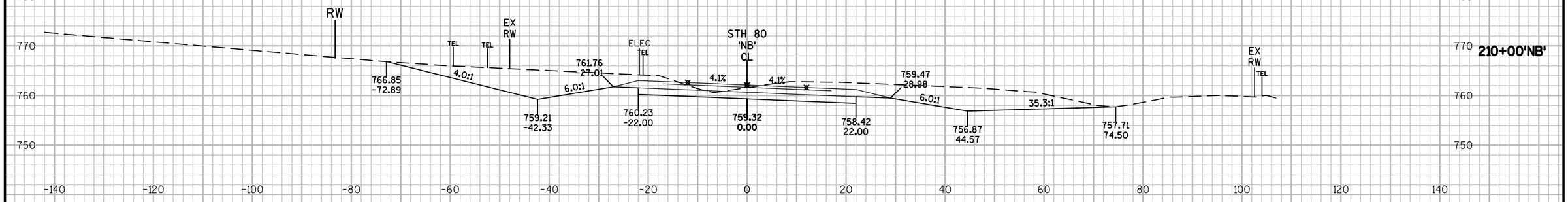

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 272 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5241-1.DWG
LAYOUT NAME - 090201_XS_B520269-(2)

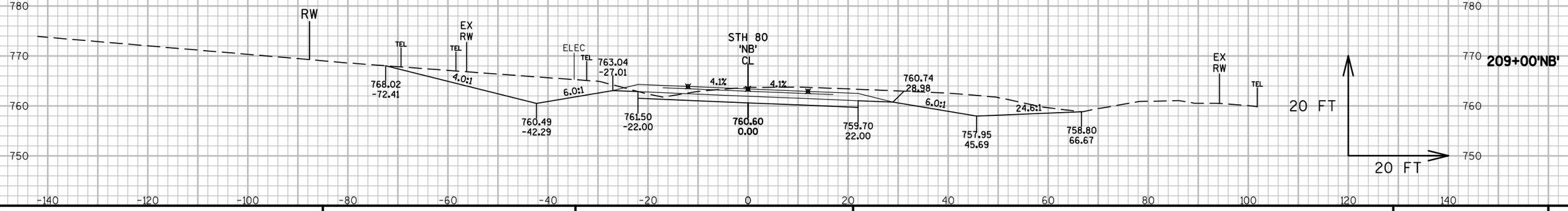
PLOT DATE : 3/6/2017 4:22 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT




211+00'NB'




210+00'NB'




209+00'NB'

9

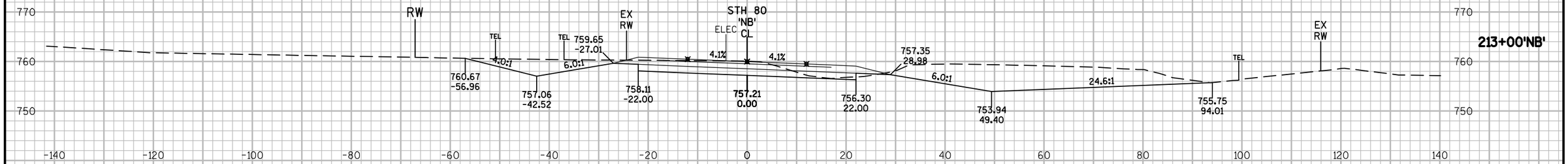
9

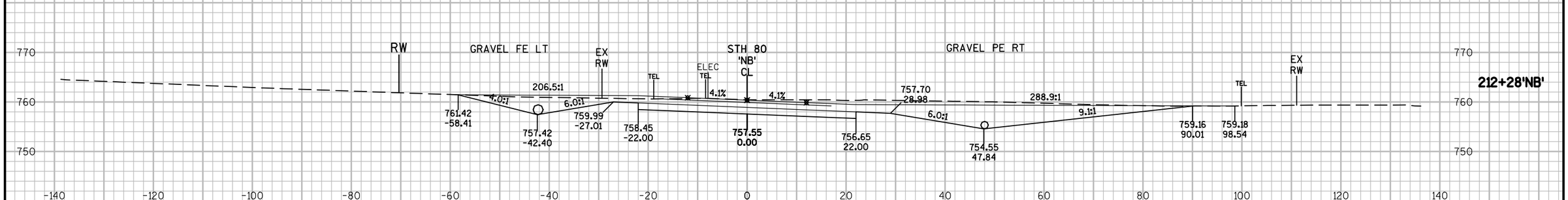
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 273 | E |
|---|---|---|---|---|---|

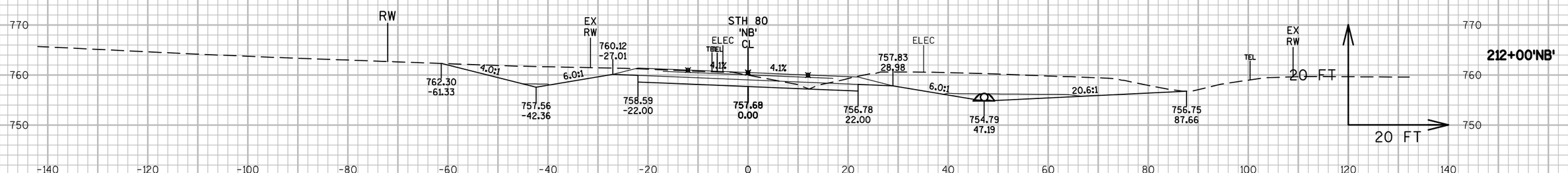
FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5241-1.DWG
LAYOUT NAME - 090201_XS_B520269-(3)

PLOT DATE : 3/6/2017 4:22 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49




9

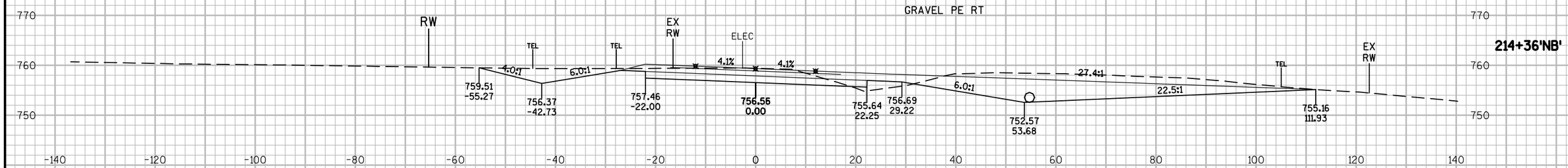
9

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 274 | E |
|---|---|---|---|---|---|

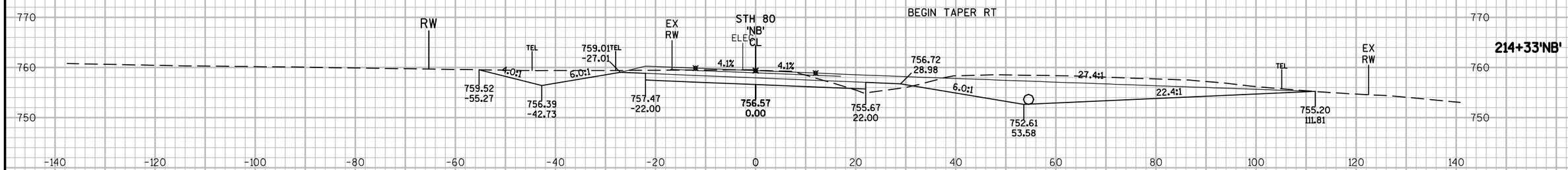
FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5241-1.DWG
LAYOUT NAME - 090201_XS_B520269-(4)

PLOT DATE : 3/6/2017 4:22 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

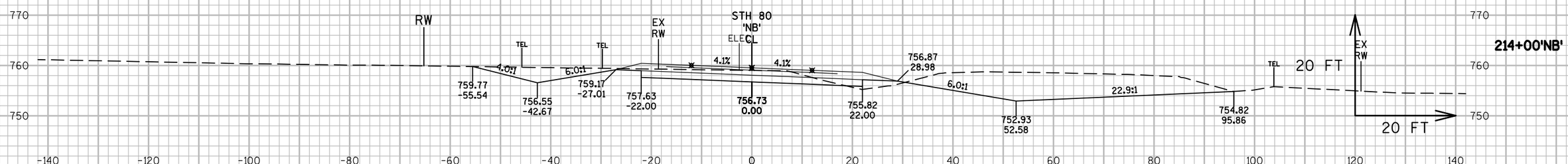
WISDOT/CADDS SHEET 49




214+36'NB'




214+33'NB'

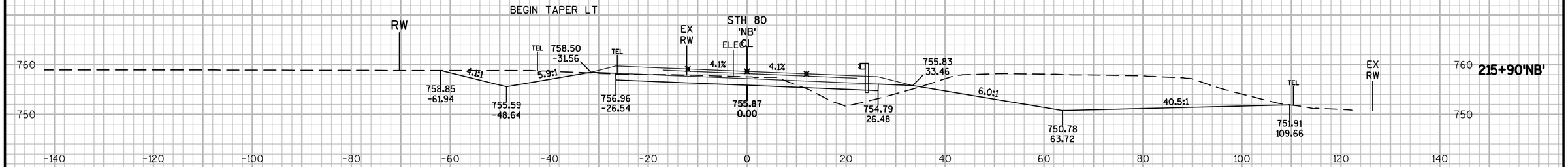


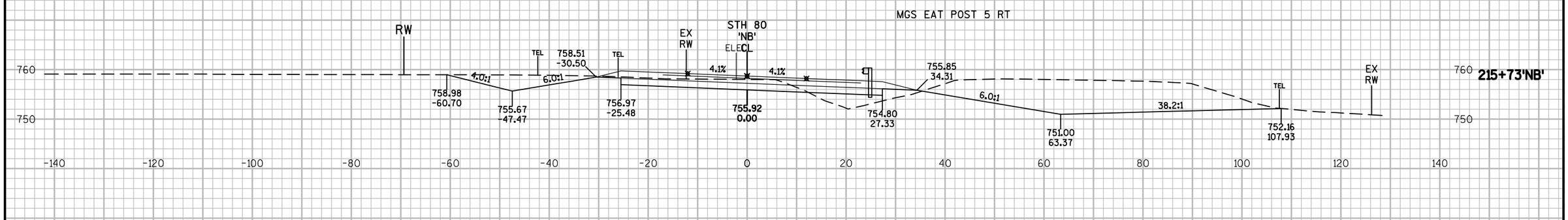

214+00'NB'

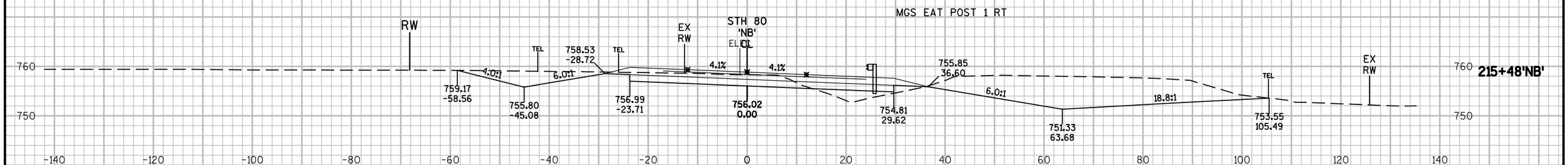
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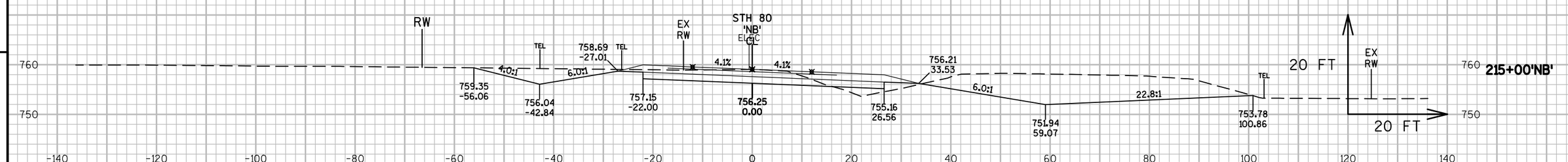
9

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 275 | E |
|---|---|---|---|---|---|



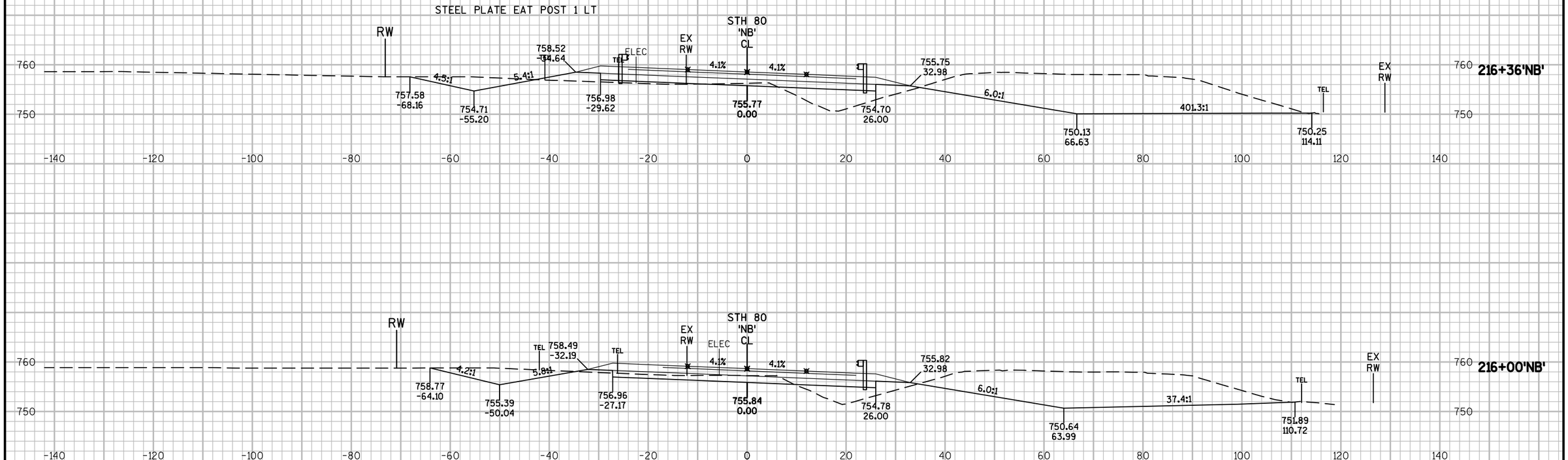

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9

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 276 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5241-1.DWG
LAYOUT NAME - 090201_XS_B520269-(6)

PLOT DATE : 3/6/2017 4:23 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

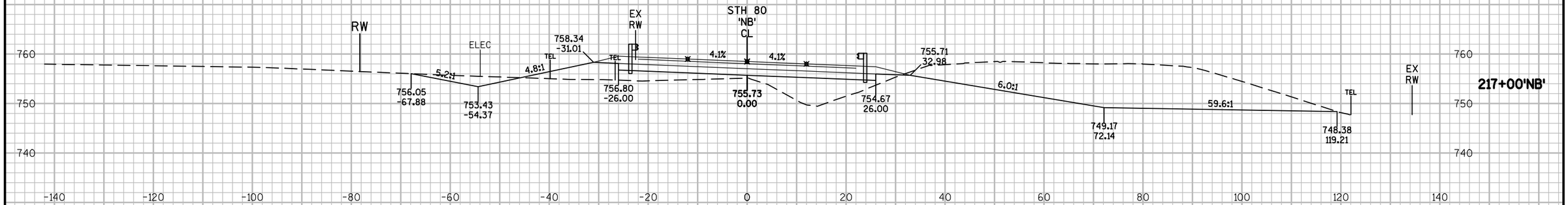



9

9

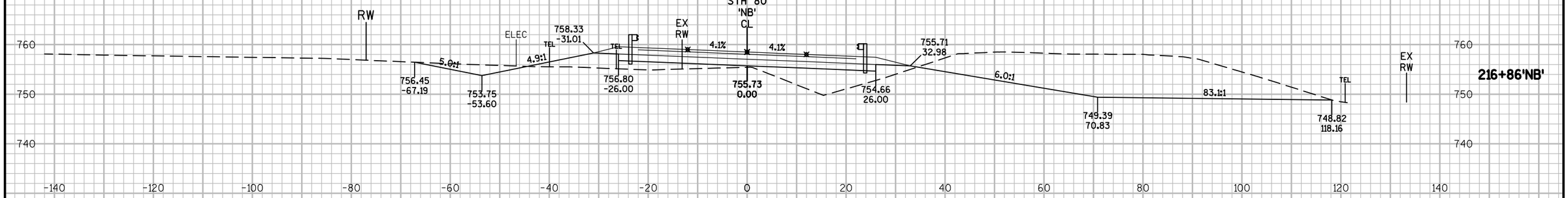
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 277 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5241-1.DWG
LAYOUT NAME - 090201_XS_B520269-(7)
PLOT DATE : 3/6/2017 4:23 PM
PLOT BY : SHIFFER, CAMERON J PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



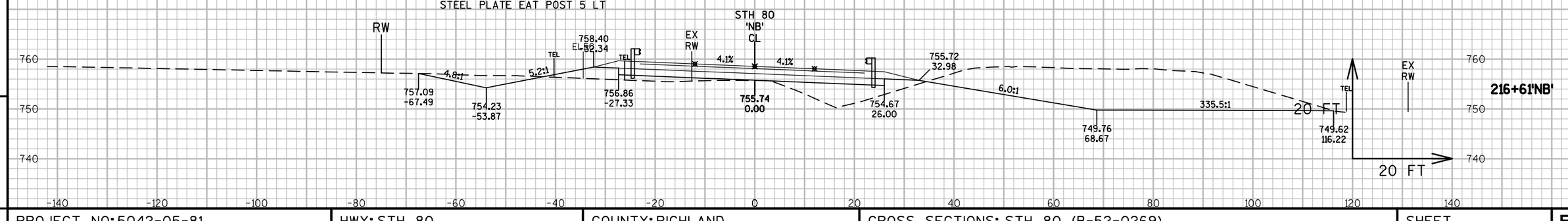

217+00'NB'

STEEL PLATE EAT POST 9 LT




216+86'NB'

STEEL PLATE EAT POST 5 LT




216+61'NB'

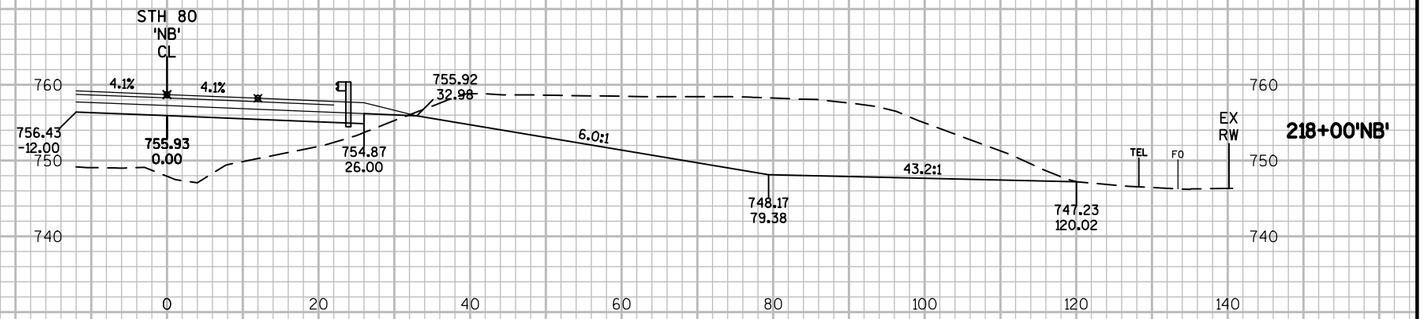
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9

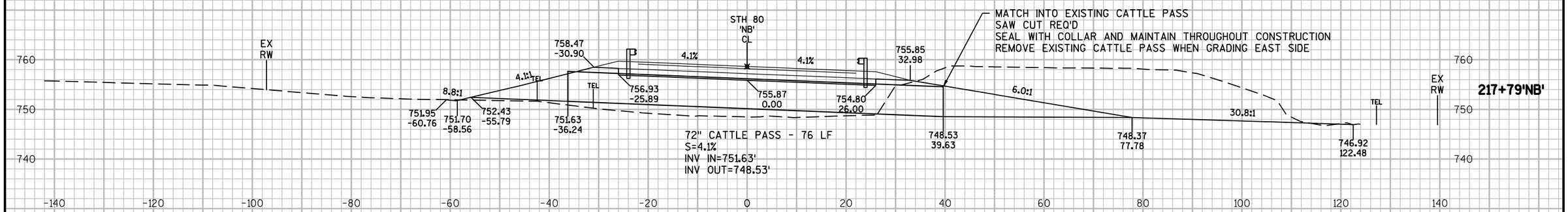
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 278 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5241-1.DWG
LAYOUT NAME - 090201_XS_B520269-(8)

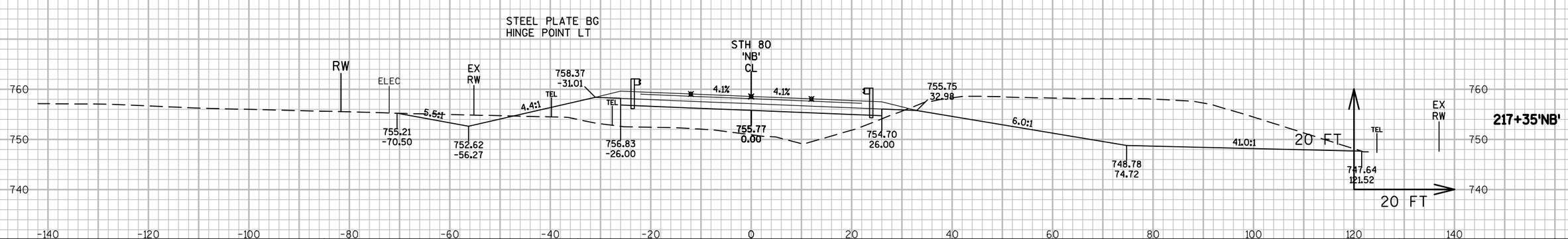
PLOT DATE : 3/6/2017 4:23 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT




218+00'NB'




217+79'NB'

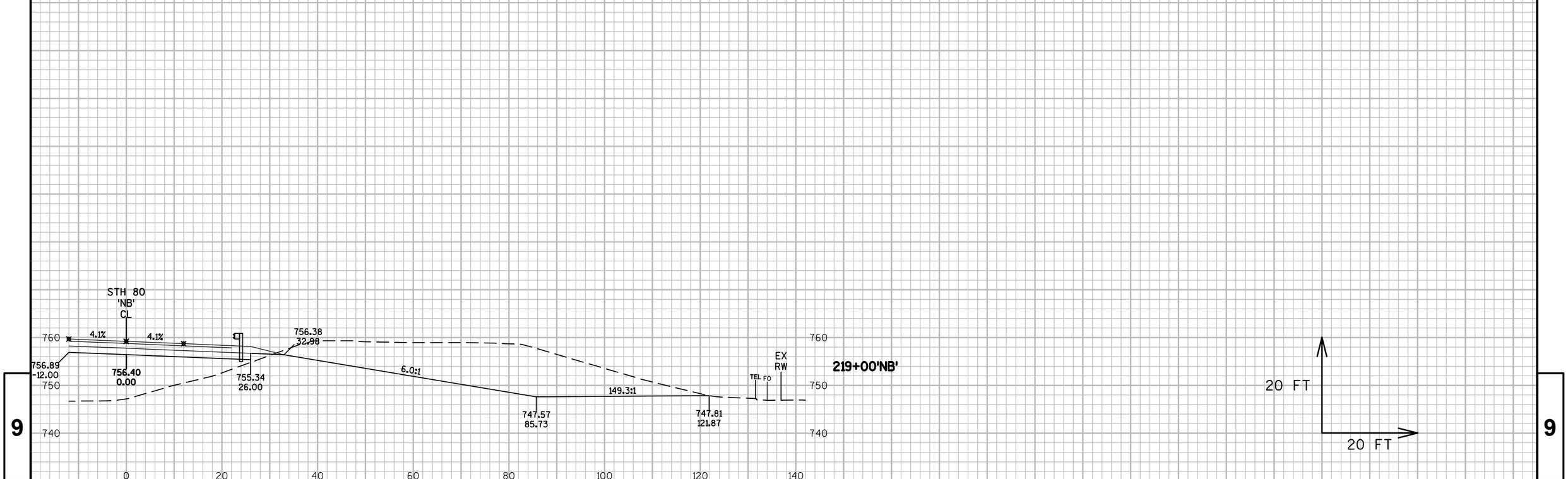



217+35'NB'

9

9

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 279 | E |
|---|---|---|---|---|---|

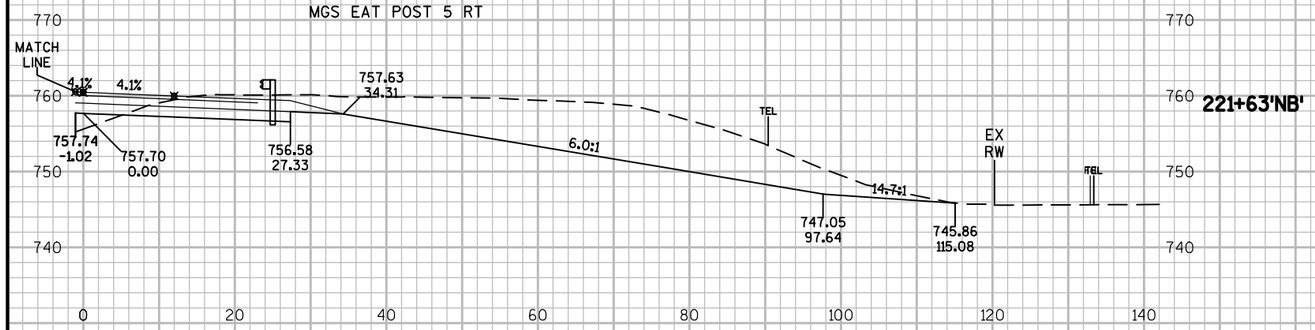



9

9

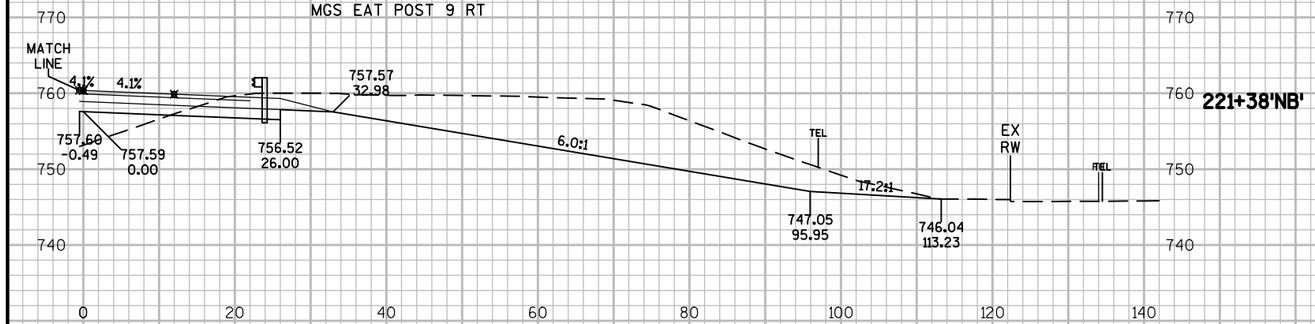
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 280 | E |
|---|---|---|---|---|---|

MGS EAT POST 5 RT

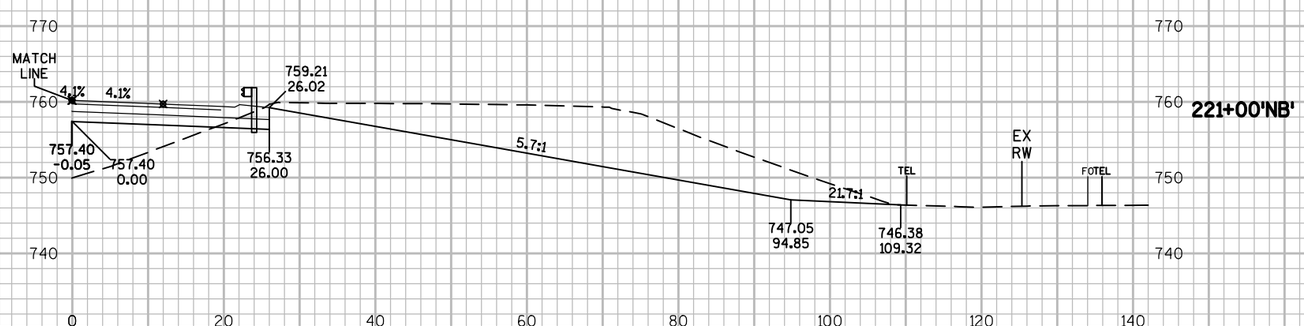



**221+63'NB'**

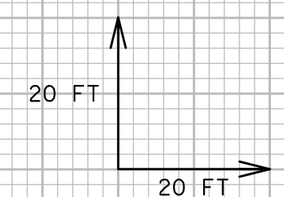
MGS EAT POST 9 RT




**221+38'NB'**



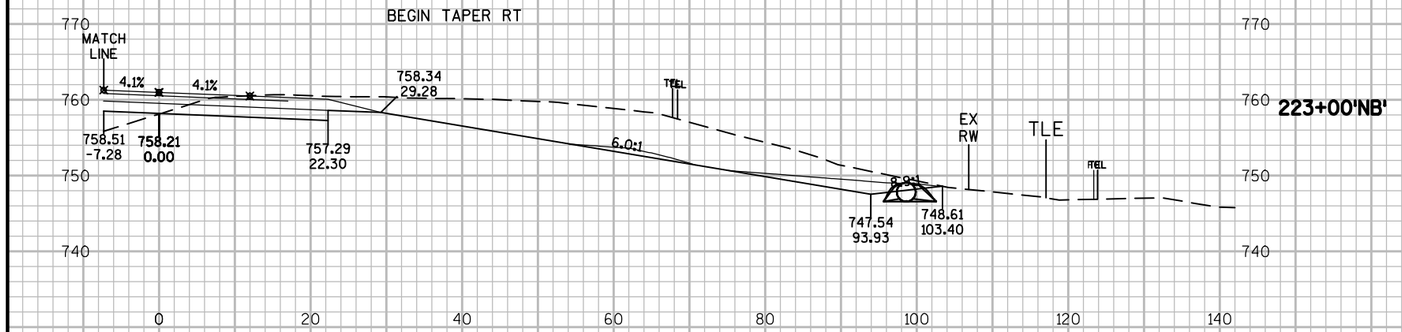

**221+00'NB'**

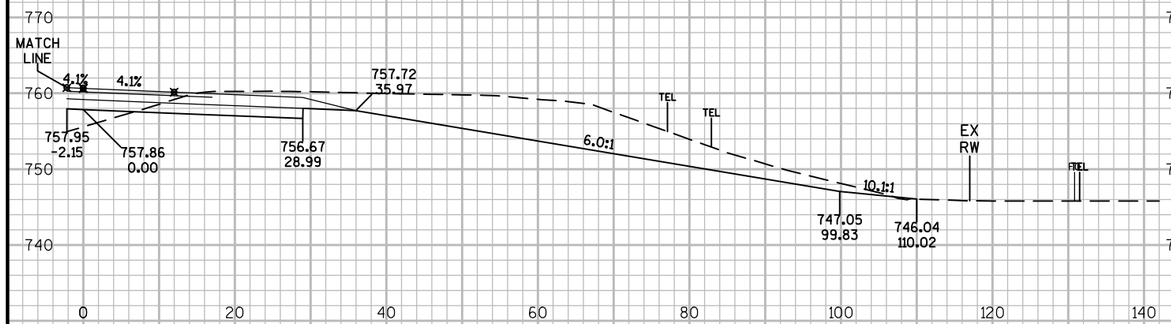


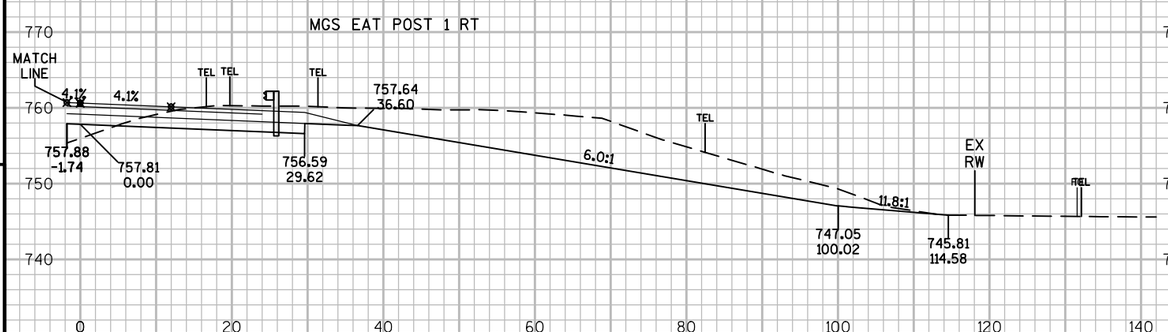

9

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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 281 | E |
|---|---|---|---|---|---|



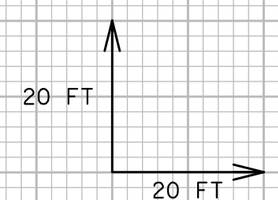




223+00'NB'

222+00'NB'

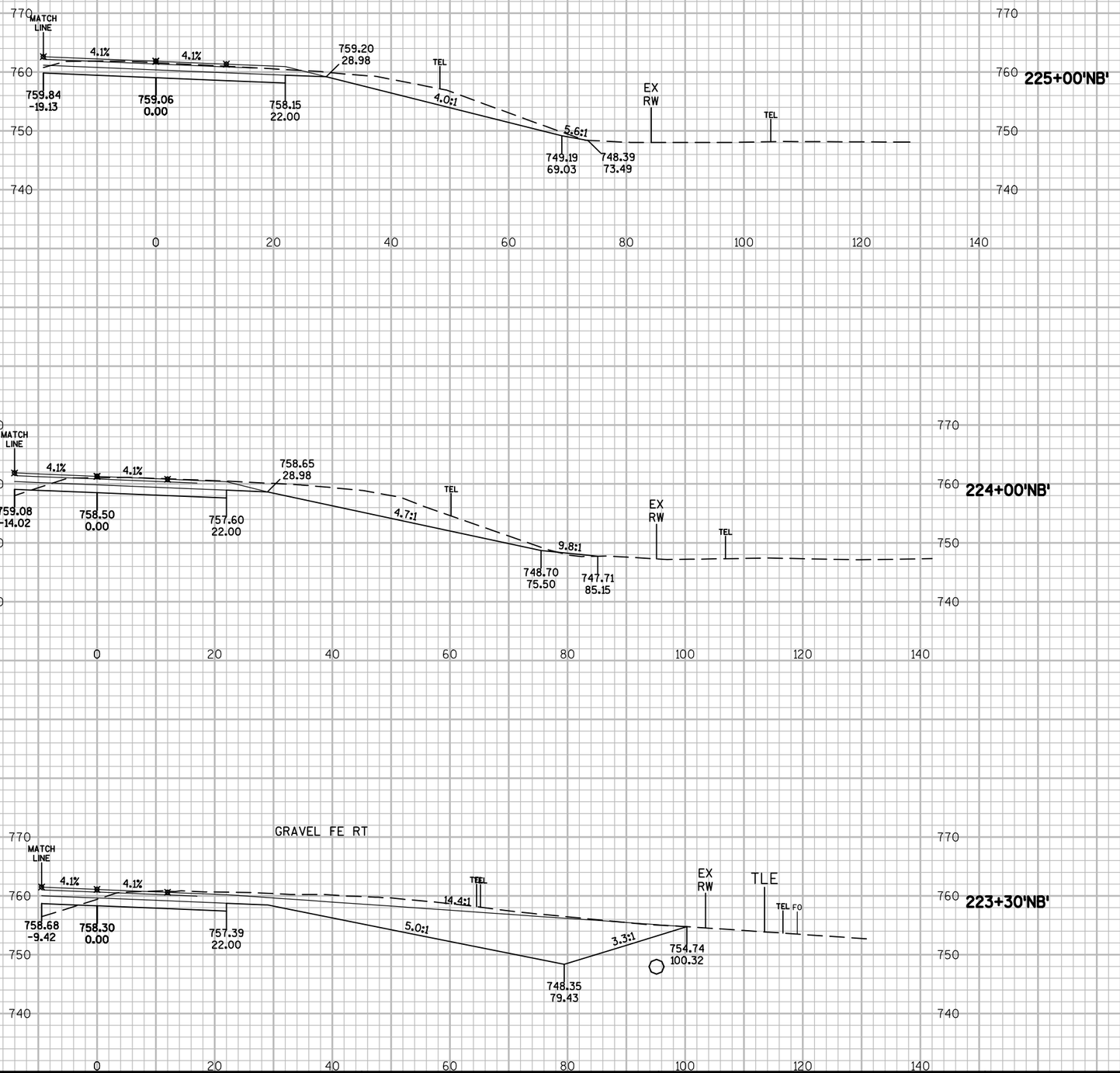
221+88'NB'




9

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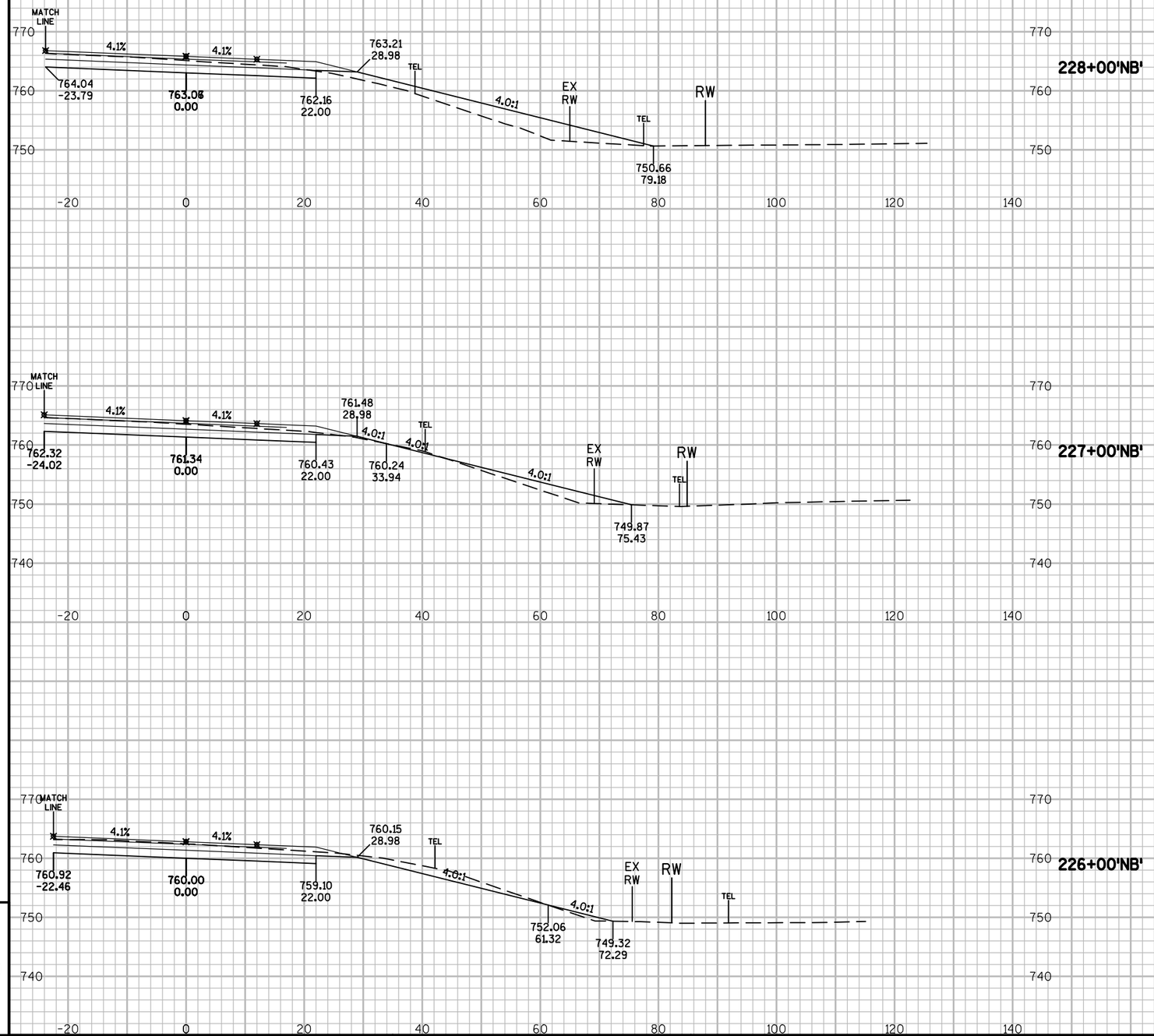
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 282 | E |
|---|---|---|---|---|---|




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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 283 | E |
|---|---|---|---|---|---|



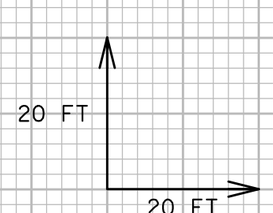

**228+00'NB'**




**227+00'NB'**



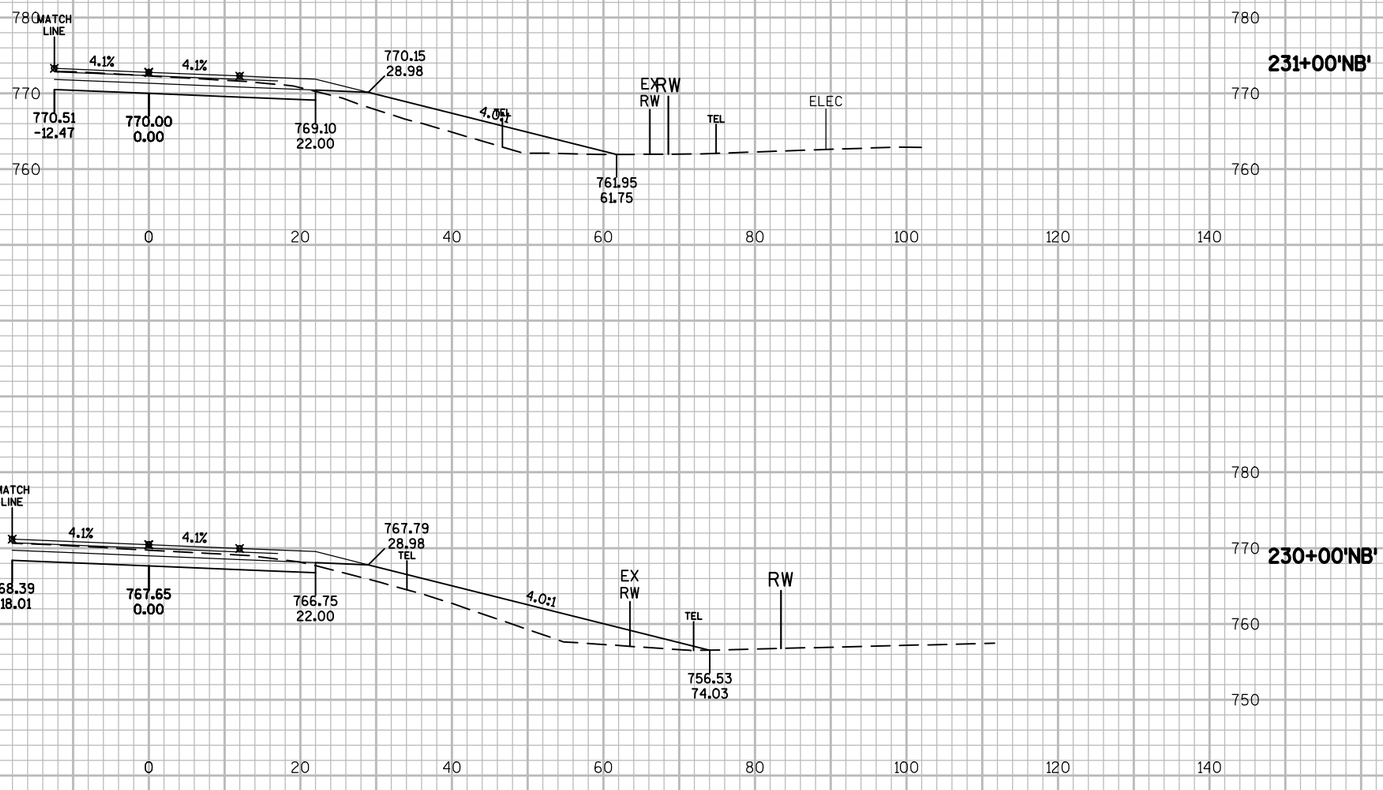

**226+00'NB'**




9

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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 284 | E |
|---|---|---|---|---|---|




231+00'NB'




230+00'NB'




229+00'NB'

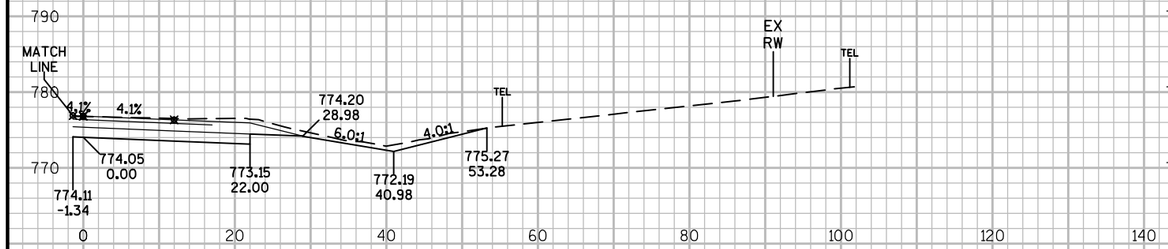


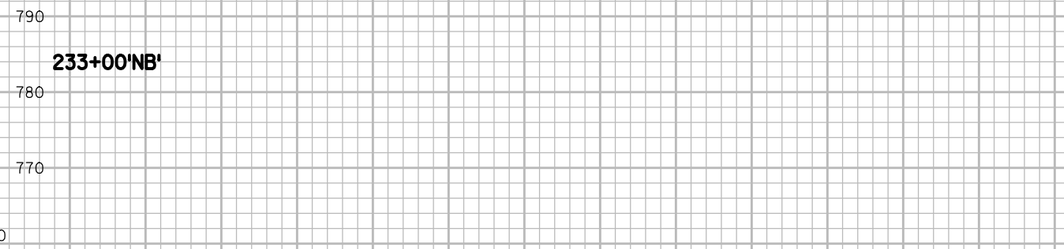

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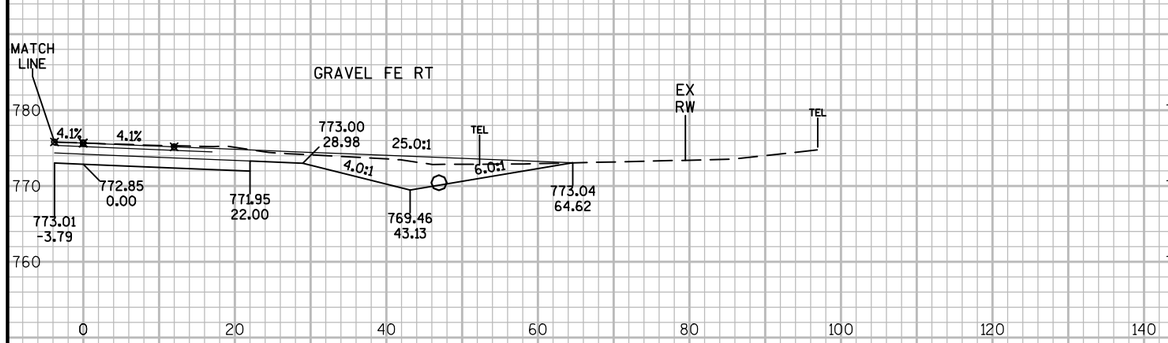
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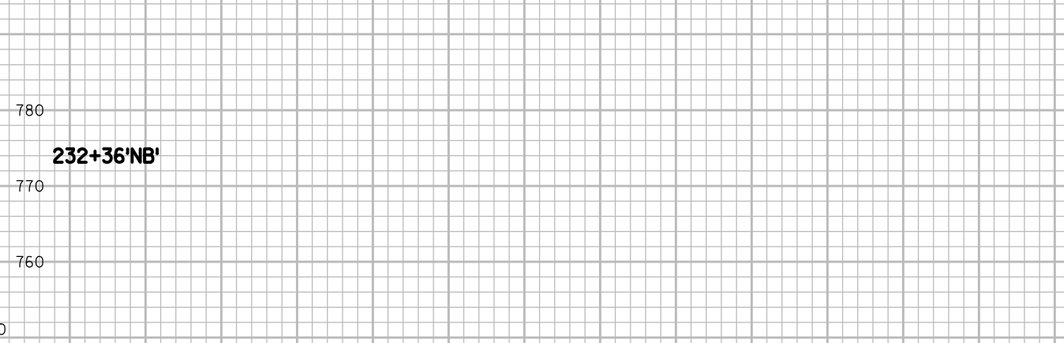
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 285 | E |
|---|---|---|---|---|---|

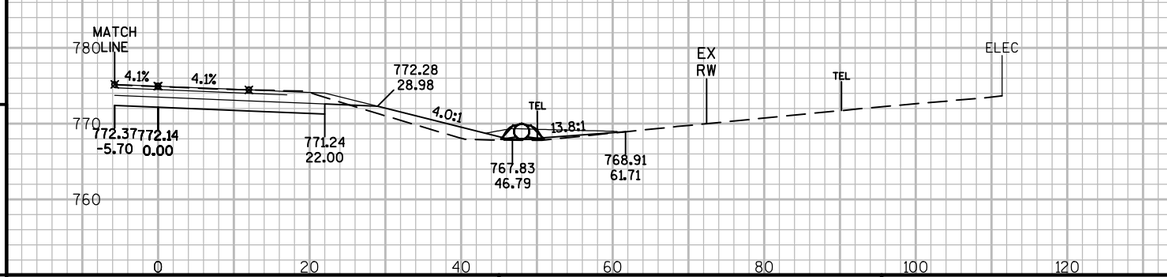
FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5241-1.DWG
LAYOUT NAME - 090201_XS_B520269-(15)
PLOT DATE : 3/6/2017 4:25 PM
PLOT BY : SHIFFER, CAMERON J PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

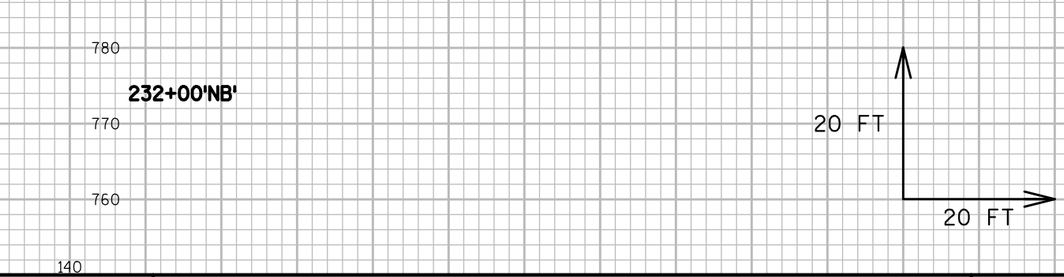






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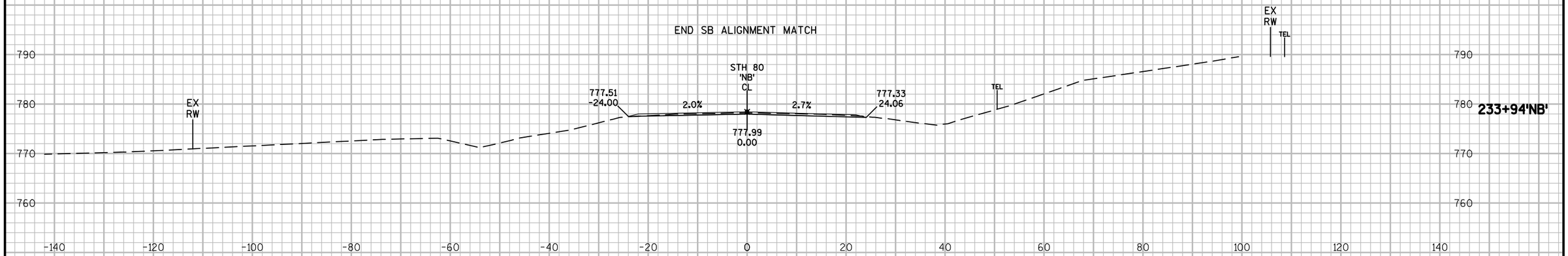
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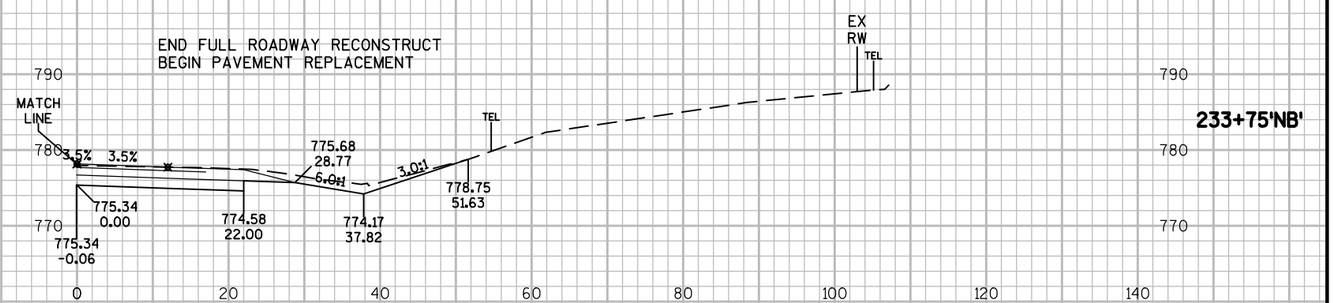
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 286 | E |
|---|---|---|---|---|---|

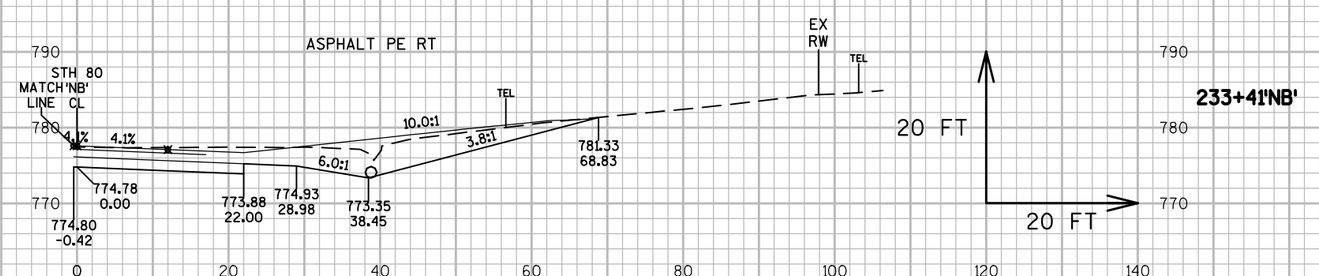
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LAYOUT NAME - 090201_XS_B520269-(16)

PLOT DATE : 3/6/2017 4:25 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



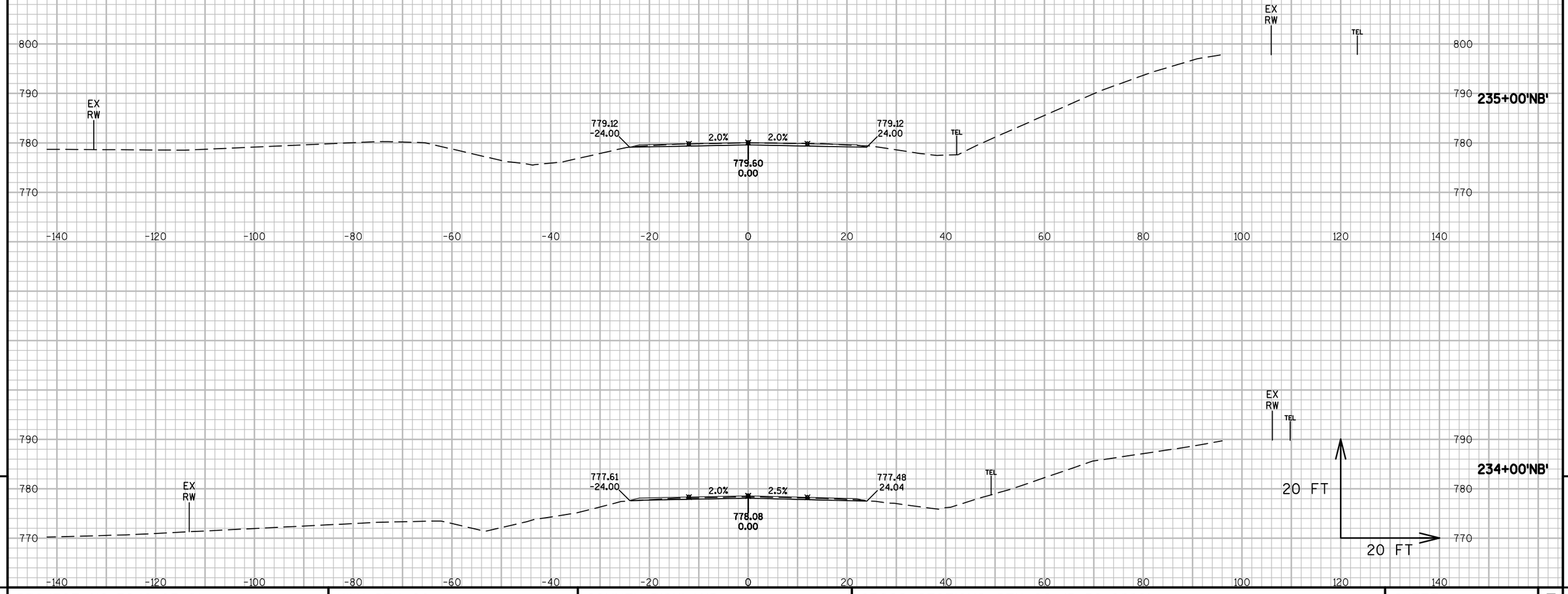




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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 287 | E |
|---|---|---|---|---|---|



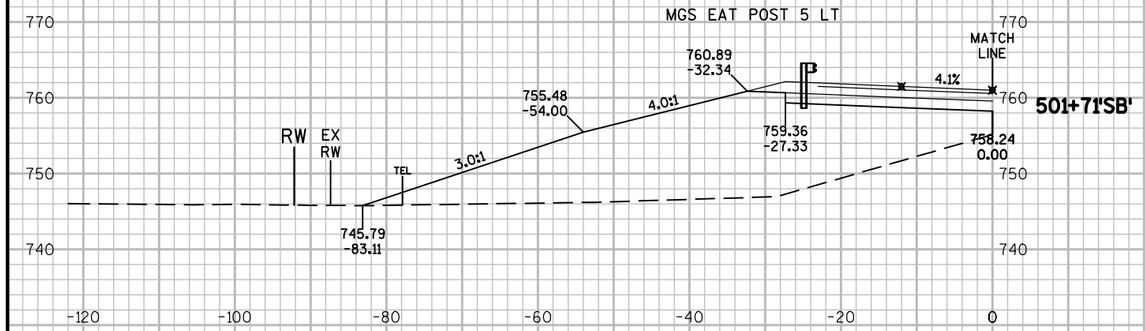

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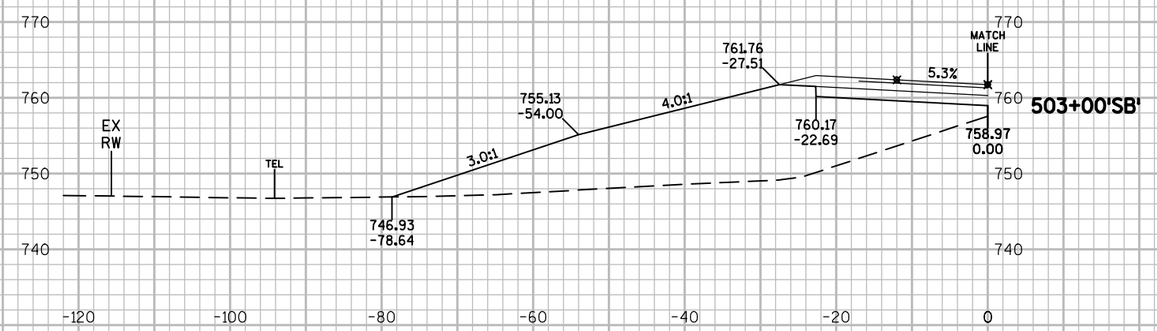
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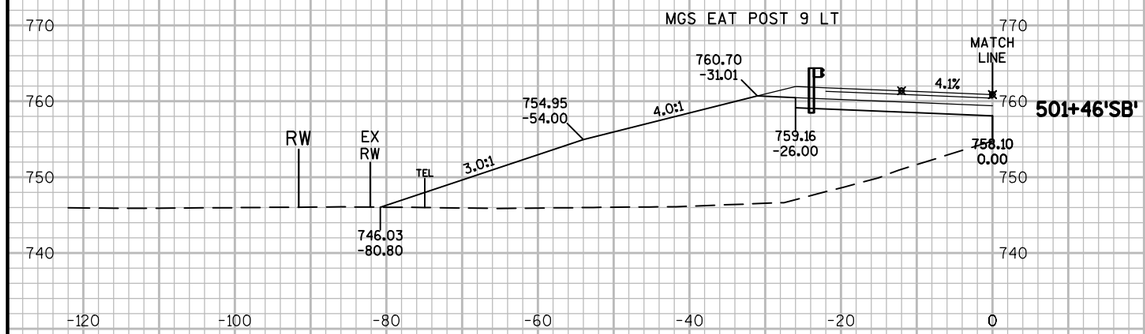
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 288 | E |
|---|---|---|---|---|---|

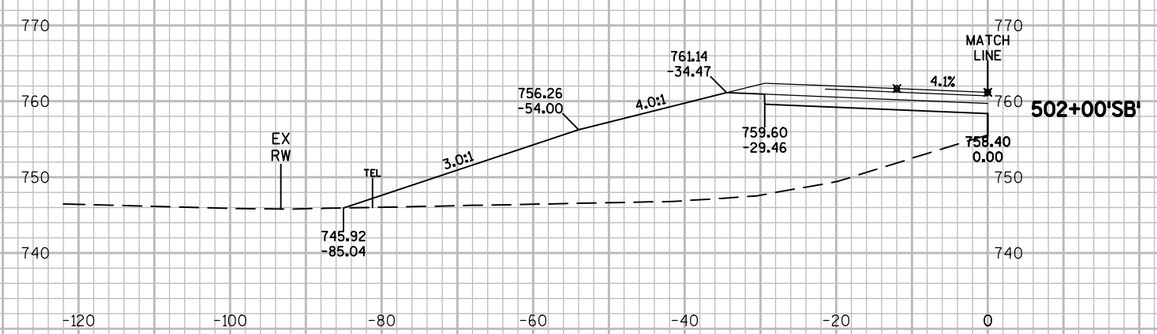
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LAYOUT NAME - 090201_XS_B520269-(18)

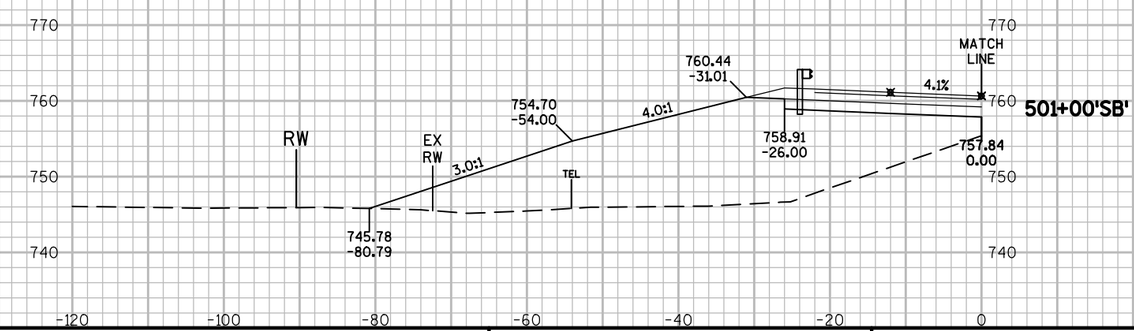
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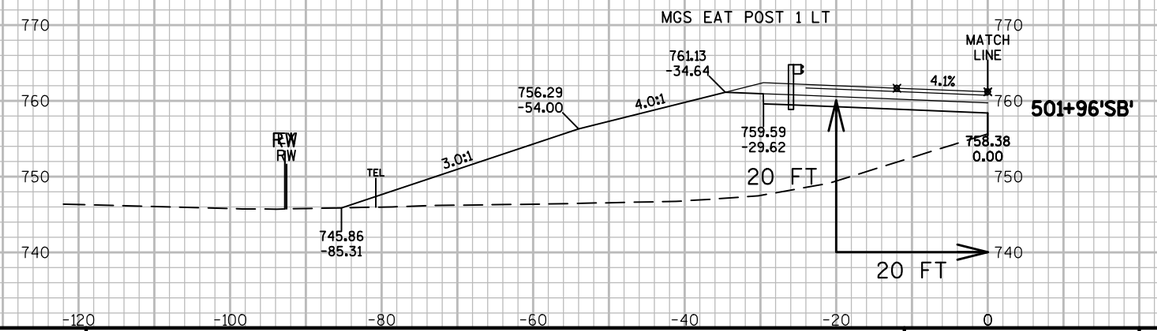


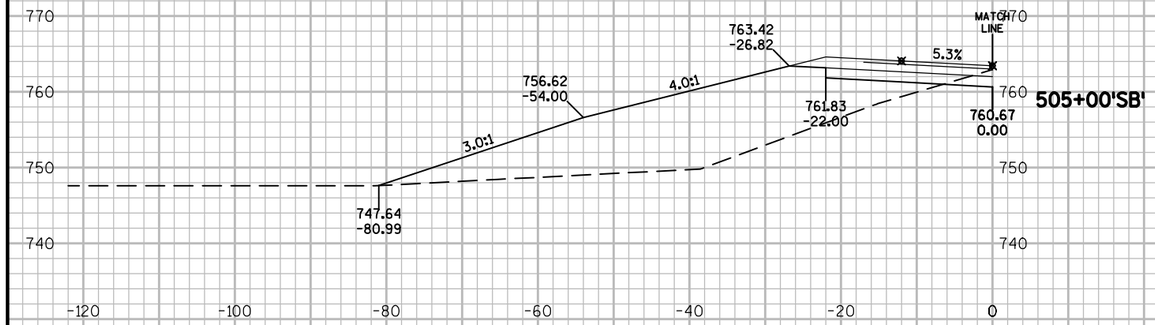



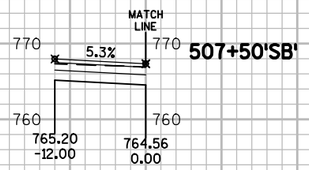

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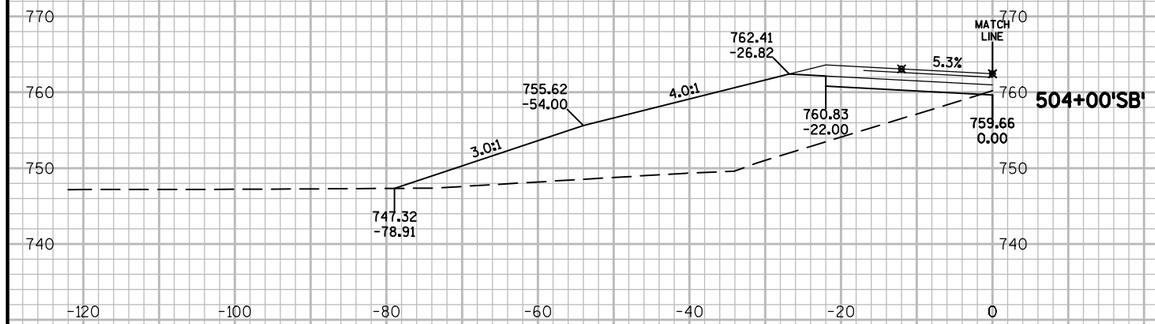
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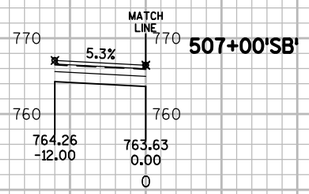
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 289 | E |
|---|---|---|---|---|---|

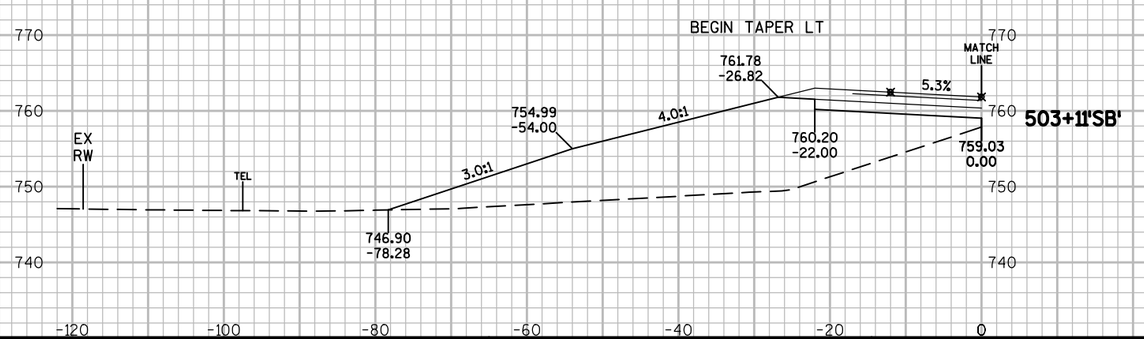
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LAYOUT NAME - 090201_XS_B520269-(19)
PLOT DATE : 3/6/2017 4:26 PM
PLOT BY : SHIFFER, CAMERON J PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

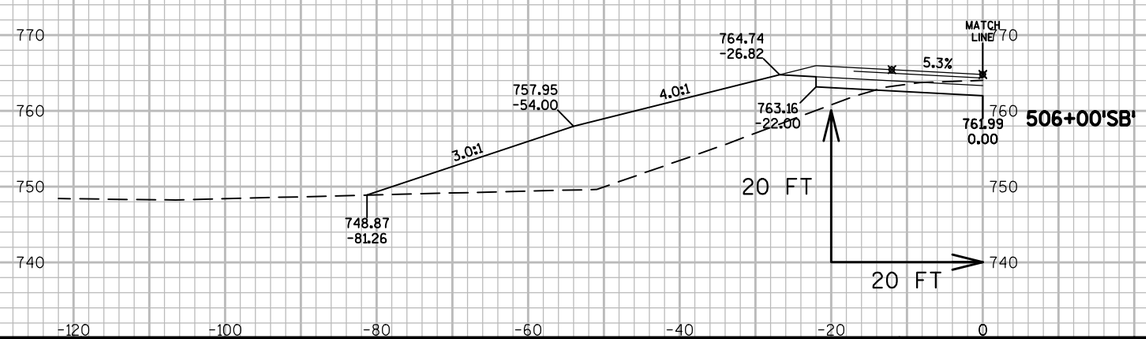


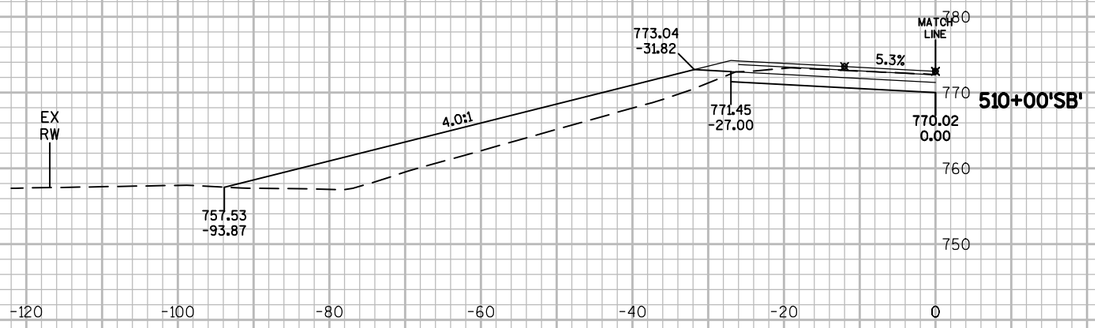



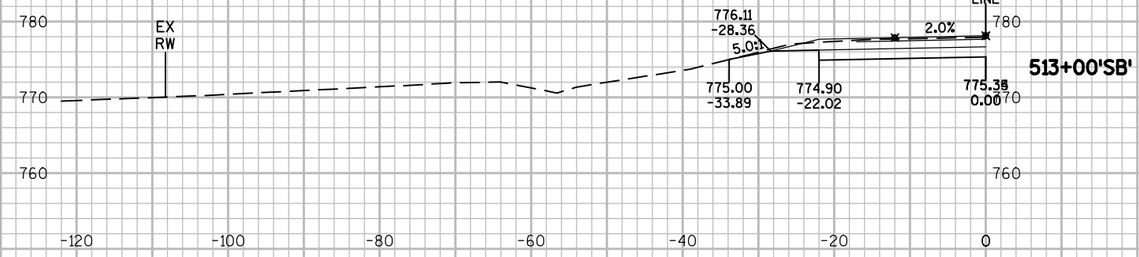

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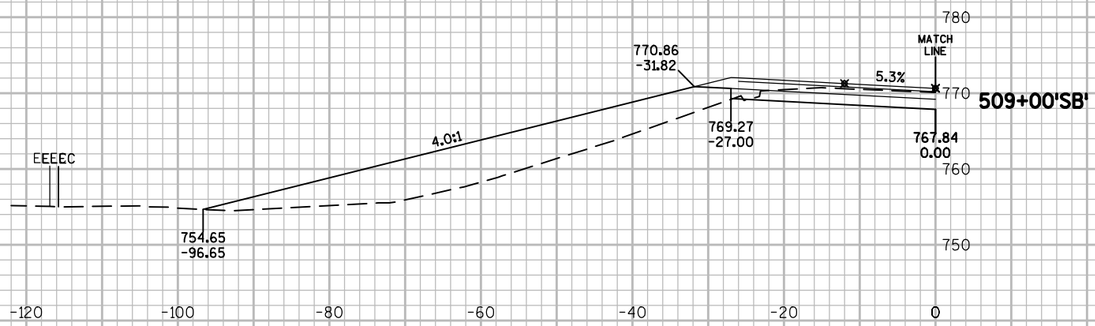
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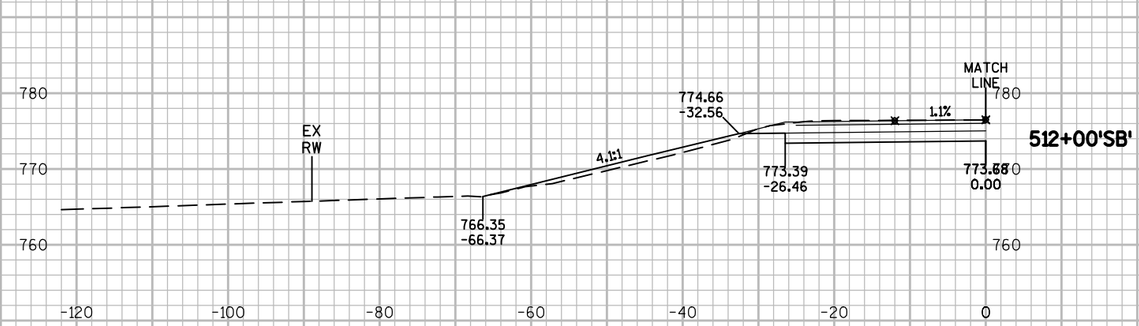
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 290 | E |
|---|---|---|---|---|---|

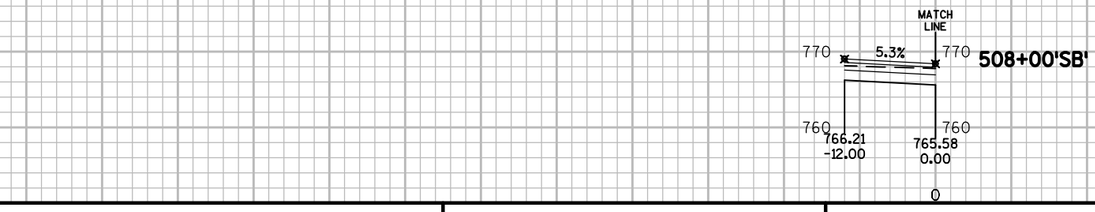


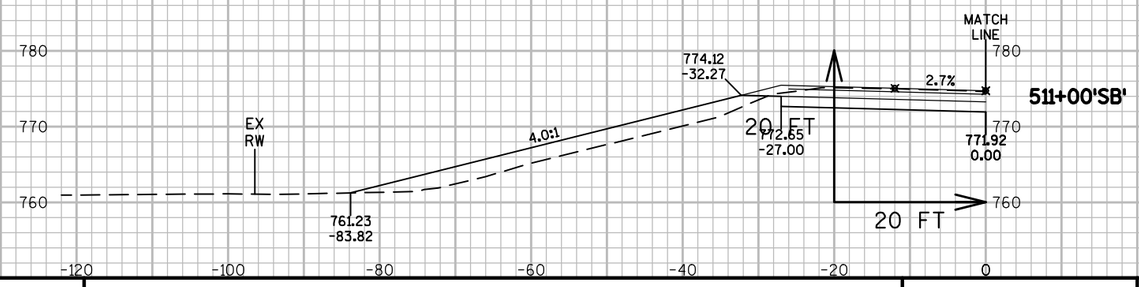

END FULL ROADWAY RECONSTRUCT
BEGIN PAVEMENT REPLACEMENT



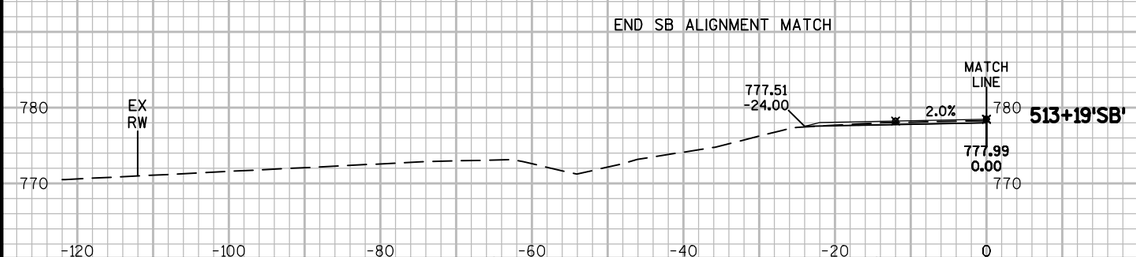



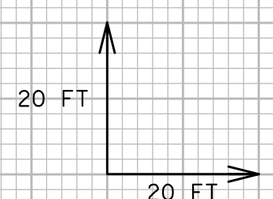

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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 291 | E |
|---|---|---|---|---|---|

END SB ALIGNMENT MATCH



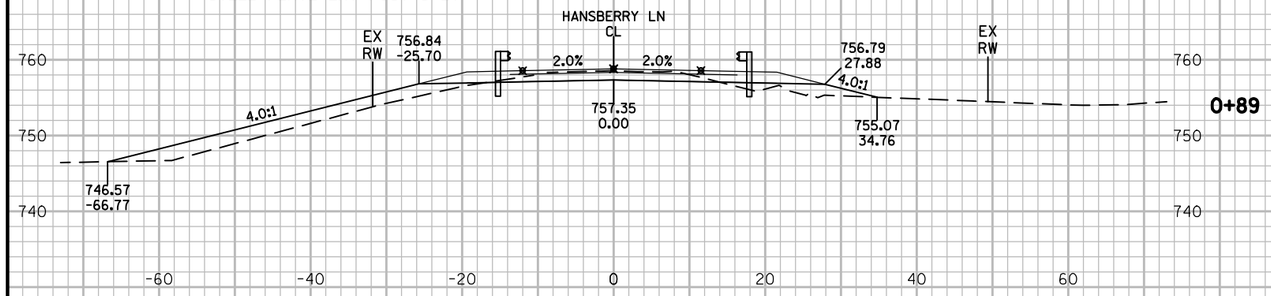




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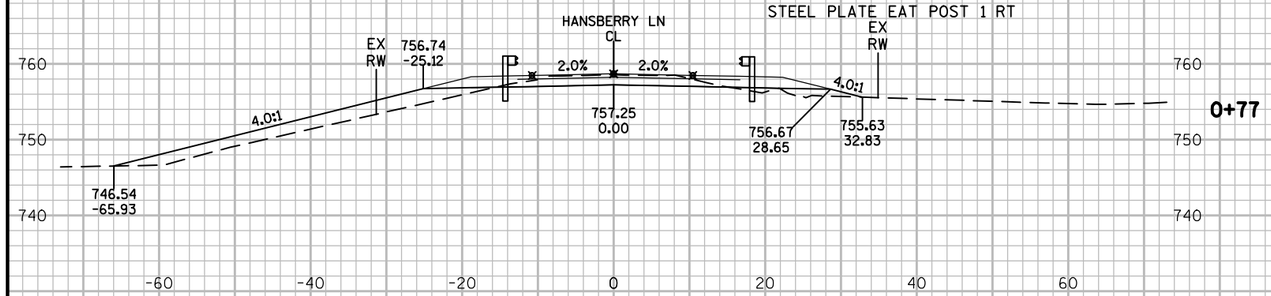
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0269) | SHEET 292 | E |
|---|---|---|---|---|---|

STEEL PLATE EAT POST 5 LT



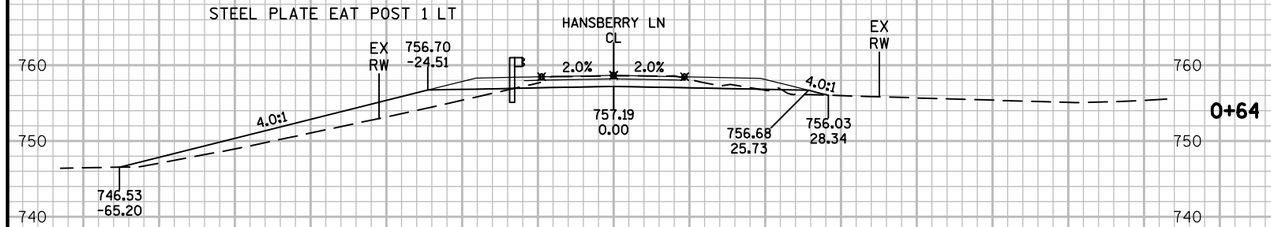

0+89

STEEL PLATE EAT POST 1 RT



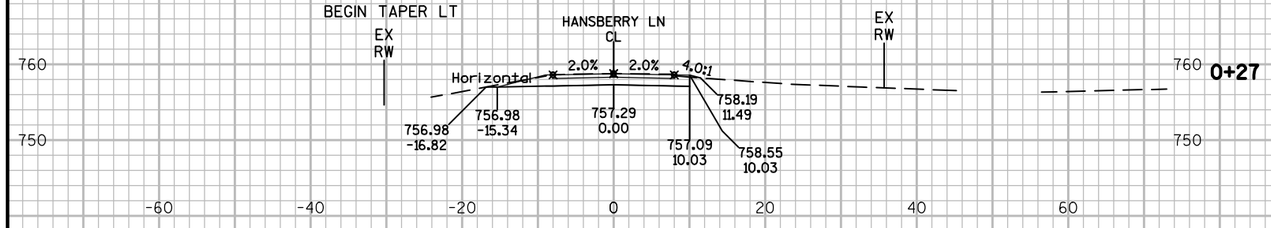

0+77

STEEL PLATE EAT POST 1 LT



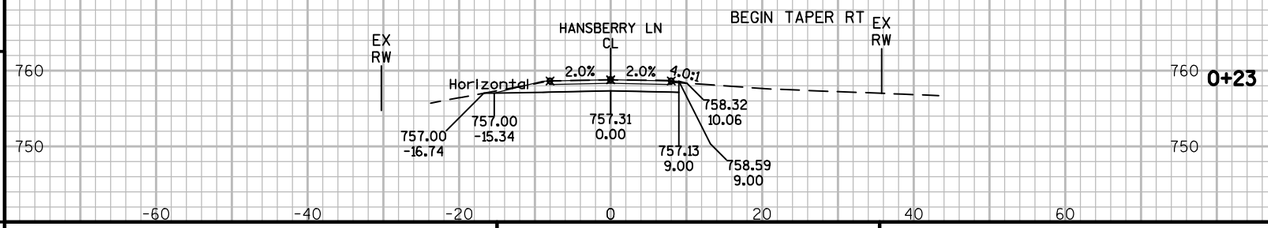

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BEGIN TAPER LT

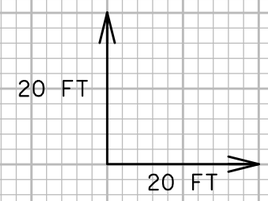



0+27

BEGIN TAPER RT




0+23

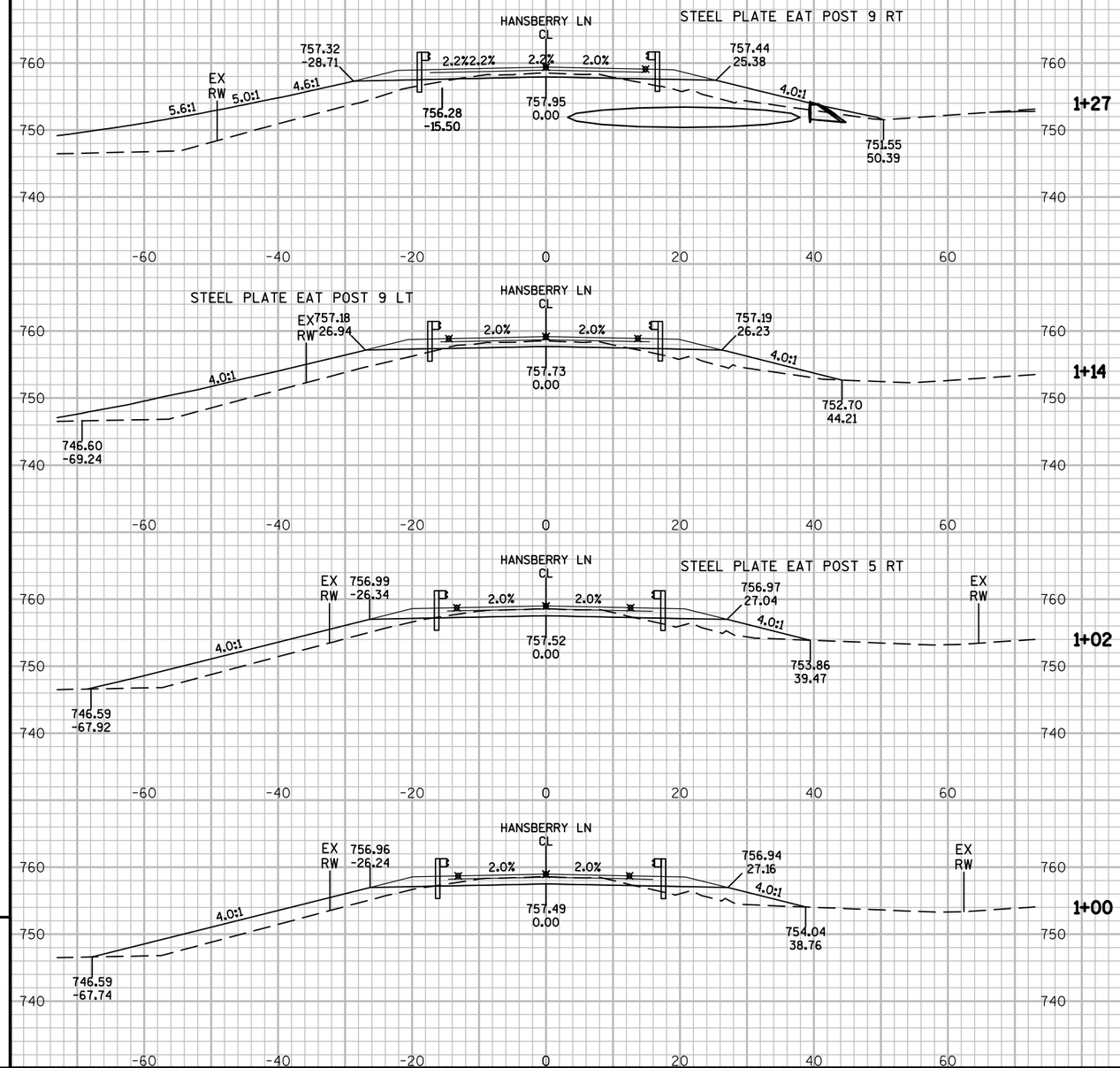



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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: HANSBERRY LANE (B-52-0269) | SHEET 293 | E |
|---|---|---|---|---|---|

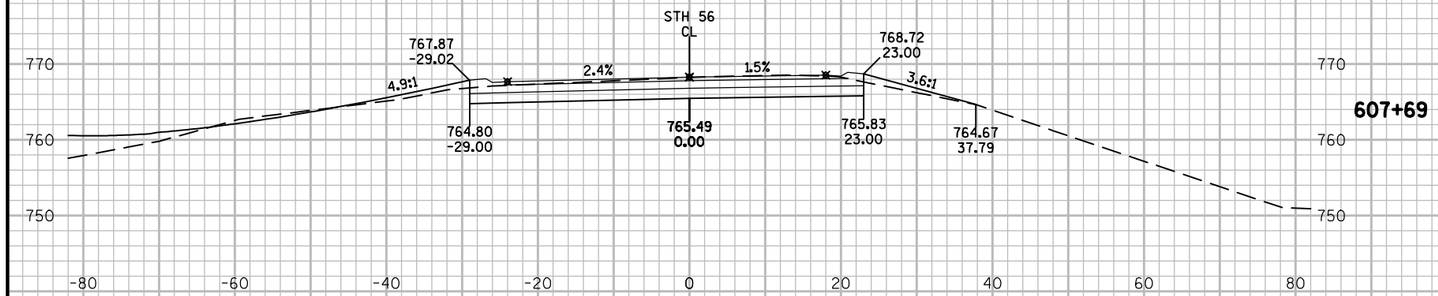
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LAYOUT NAME - 090201_XS_B520269-(23)
PLOT DATE : 3/6/2017 4:27 PM
PLOT BY : SHIFFER, CAMERON J PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



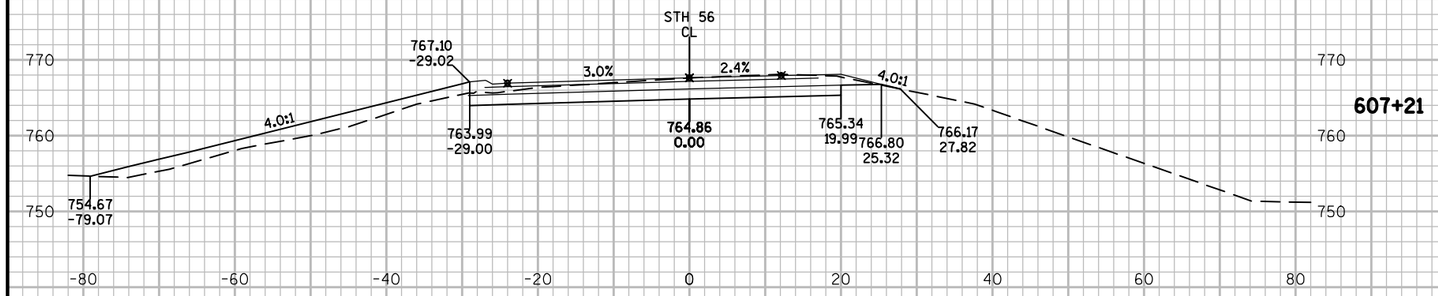

9

9

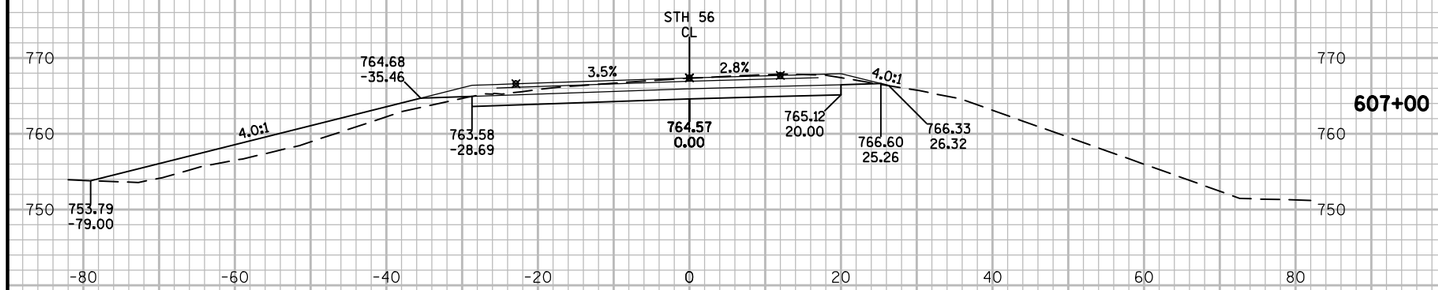
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: HANSBERRY LANE (B-52-0269) | SHEET 294 | E |
|---|---|---|---|---|---|



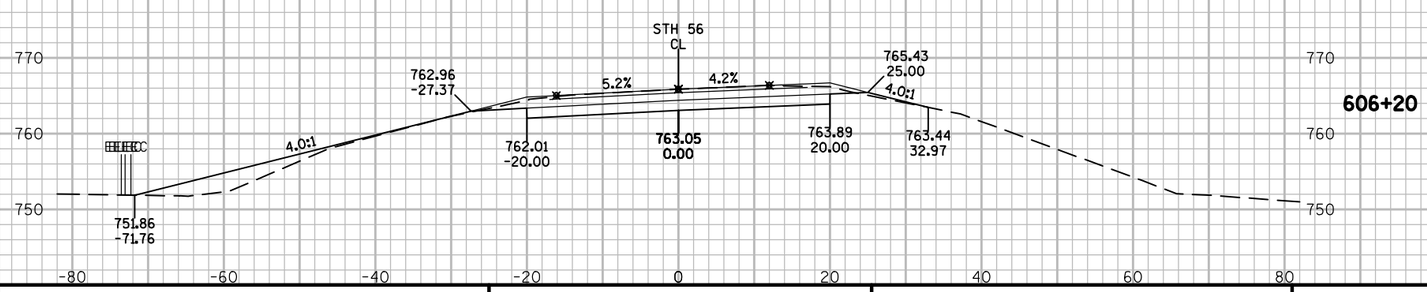

**607+69**



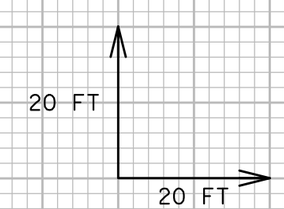

**607+21**




**607+00**




**606+20**




9

9

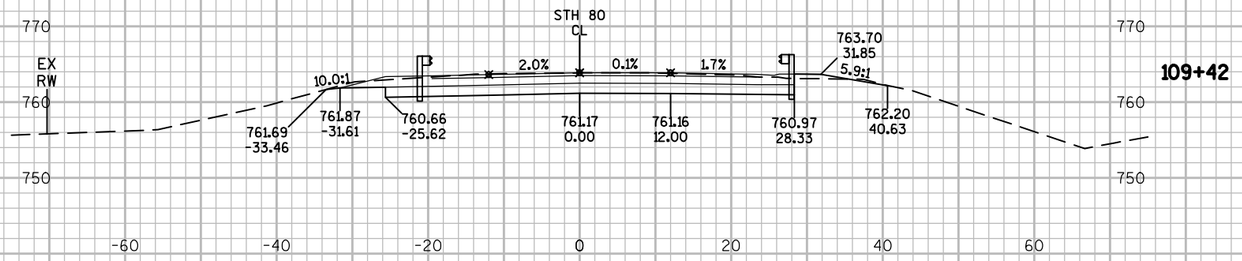
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 56 (B-52-0269) | SHEET 295 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5241-1.DWG
LAYOUT NAME - 090201_XS_B520269-(24)

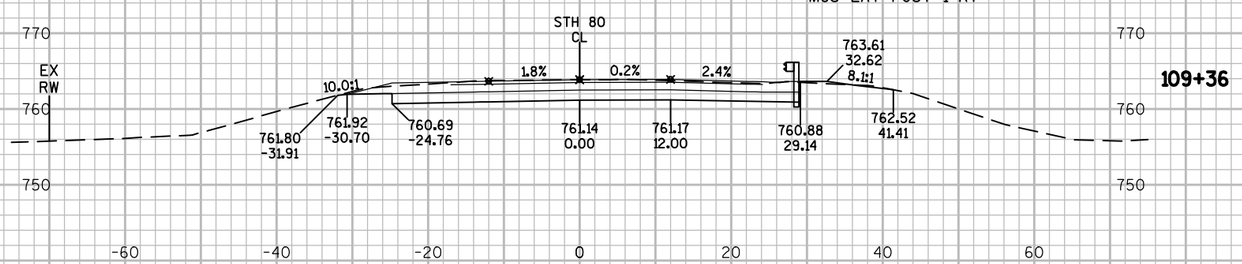
PLOT DATE : 3/6/2017 4:28 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

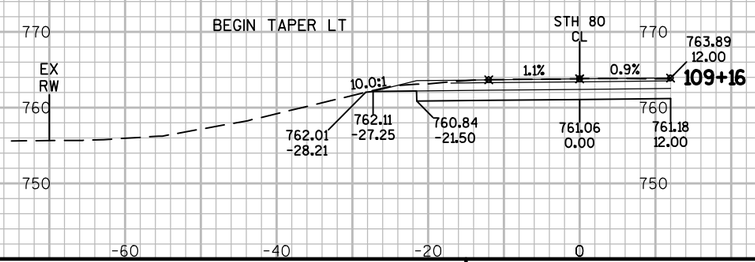
MGS EAT POST 1 LT

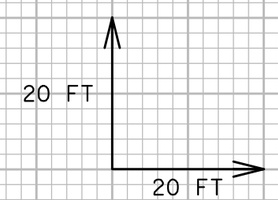



MGS EAT POST 1 RT




BEGIN TAPER LT



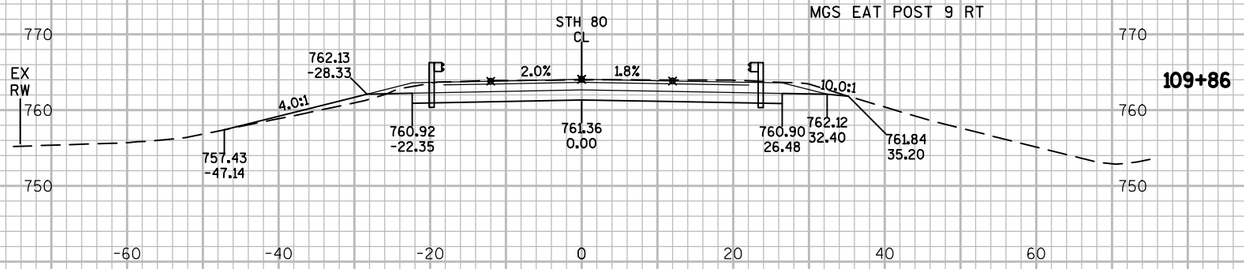




9

9

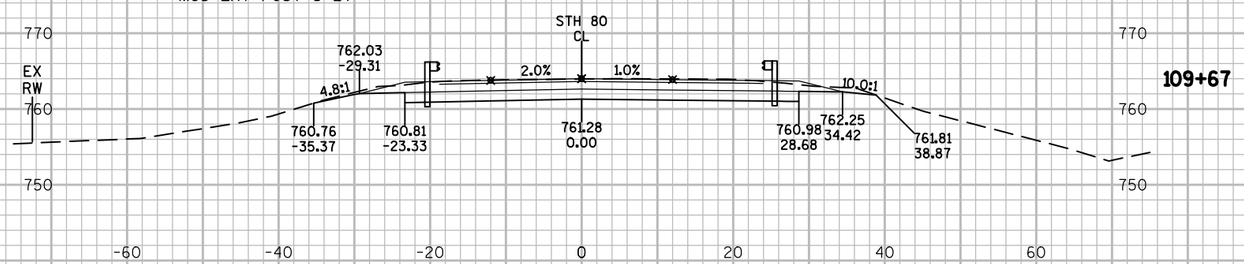
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0270) | SHEET 296 | E |
|---|---|---|---|---|---|

MGS EAT POST 9 RT



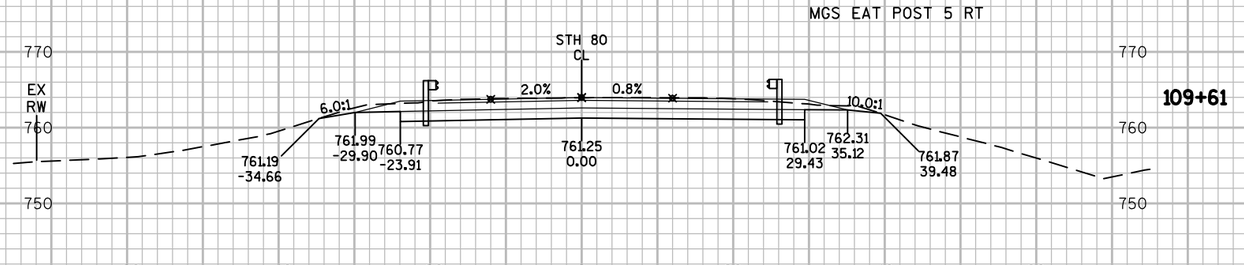

109+86

MGS EAT POST 5 LT

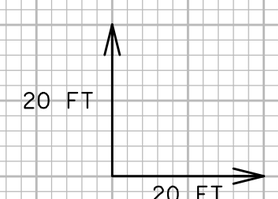



109+67

MGS EAT POST 5 RT




109+61




9

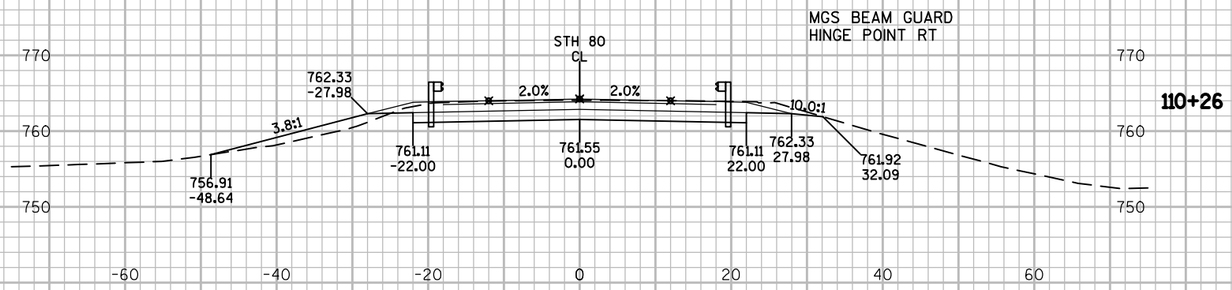
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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0270) | SHEET 297 | E |
|---|---|---|---|---|---|

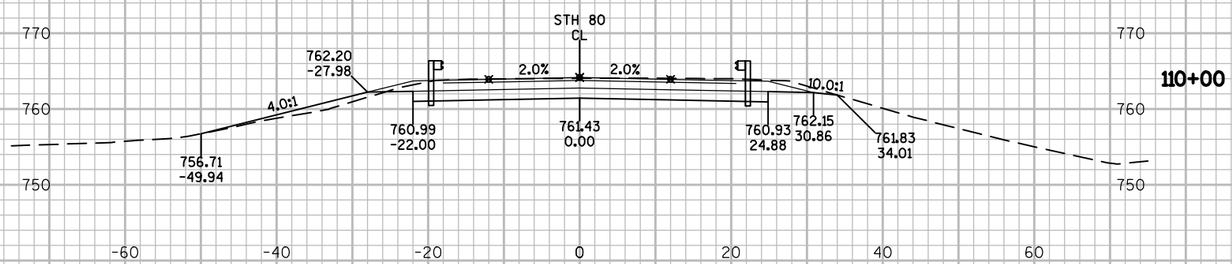
FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5244-1.DWG
LAYOUT NAME - 090201_XS_B520270-(2)

PLOT DATE : 2/20/2017 4:58 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

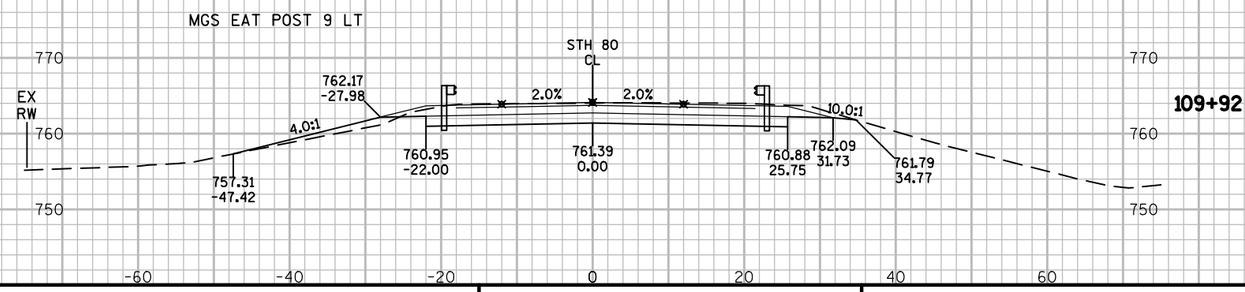
WISDOT/CADDS SHEET 49



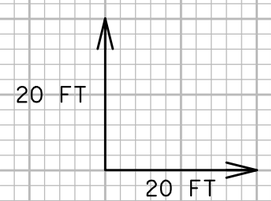

**110+26**




**110+00**



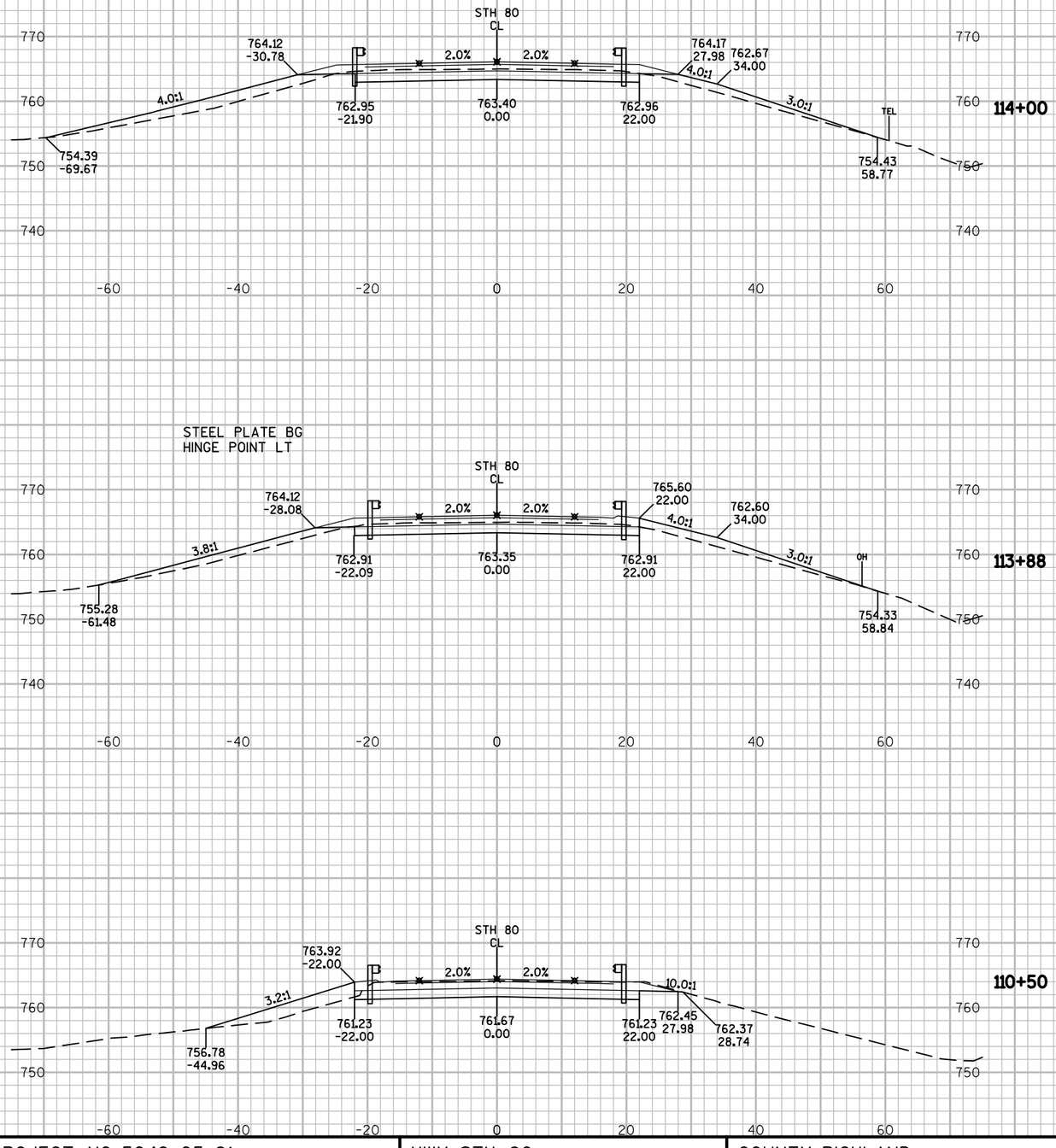

**109+92**




9

9

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0270) | SHEET 298 | E |
|---|---|---|---|---|---|

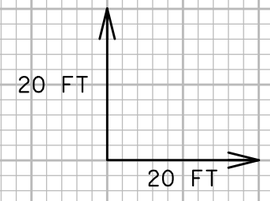



STEEL PLATE BG
HINGE POINT LT










9

9

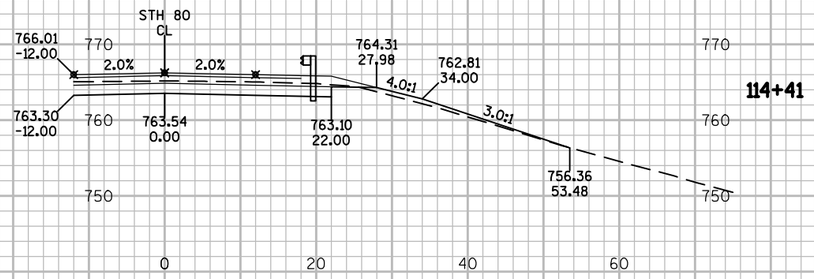
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0270) | SHEET 299 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5244-1.DWG
LAYOUT NAME - 090201_XS_B520270-(4)

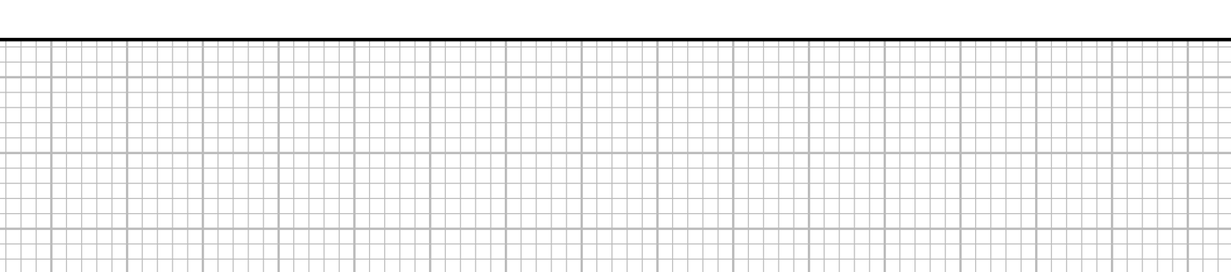
PLOT DATE : 2/20/2017 4:58 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

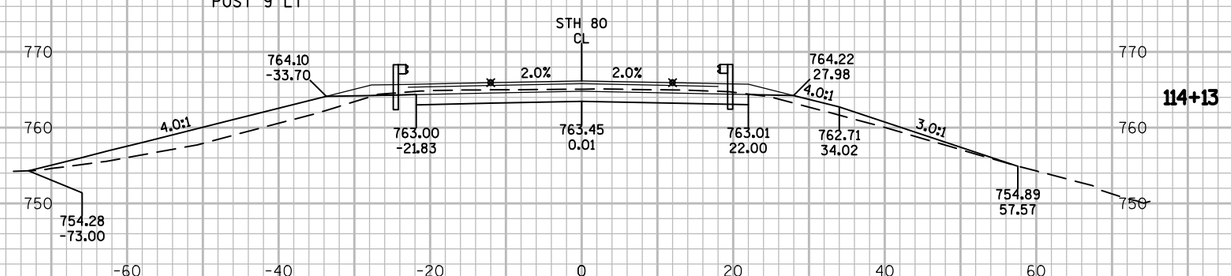
MGS EAT POST 9 RT

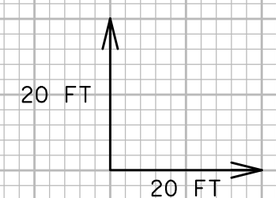



STEEL PLATE EAT
POST 5 LT




STEEL PLATE EAT
POST 9 LT




9

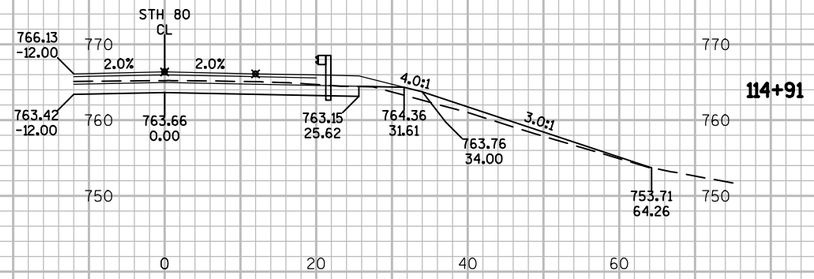
9

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0270) | SHEET 300 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5244-1.DWG
LAYOUT NAME - 090201_XS_B520270-(5)

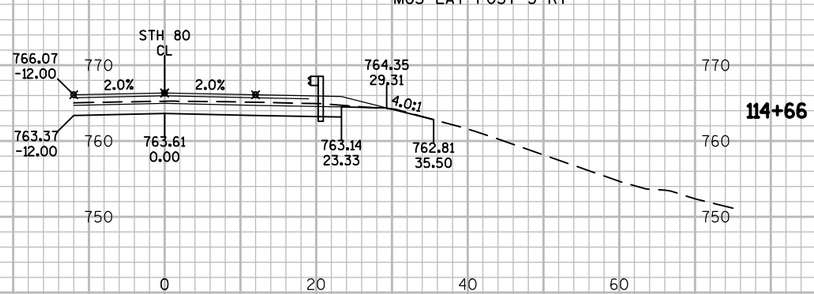
PLOT DATE : 2/20/2017 4:58 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

MGS EAT POST 1 RT



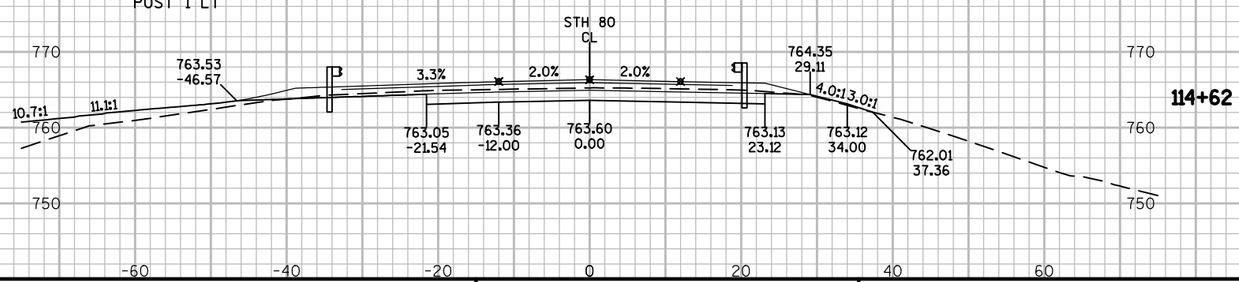

**114+91**

MGS EAT POST 5 RT

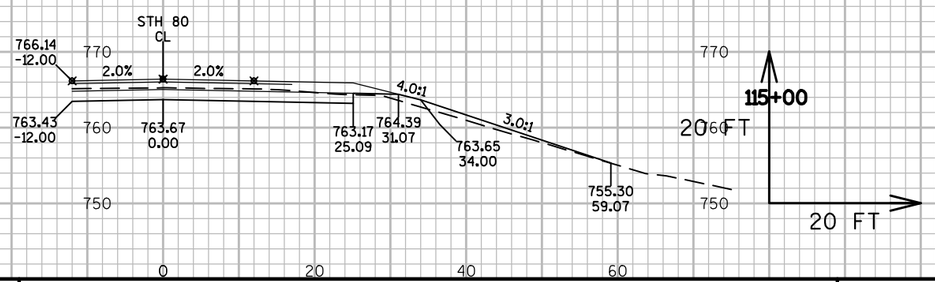



**114+66**

STEEL PLATE EAT
POST 1 LT




**114+62**



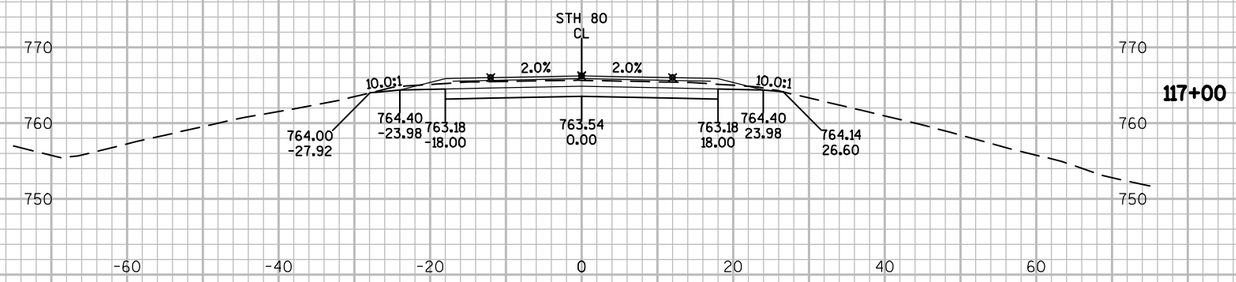

**115+00**



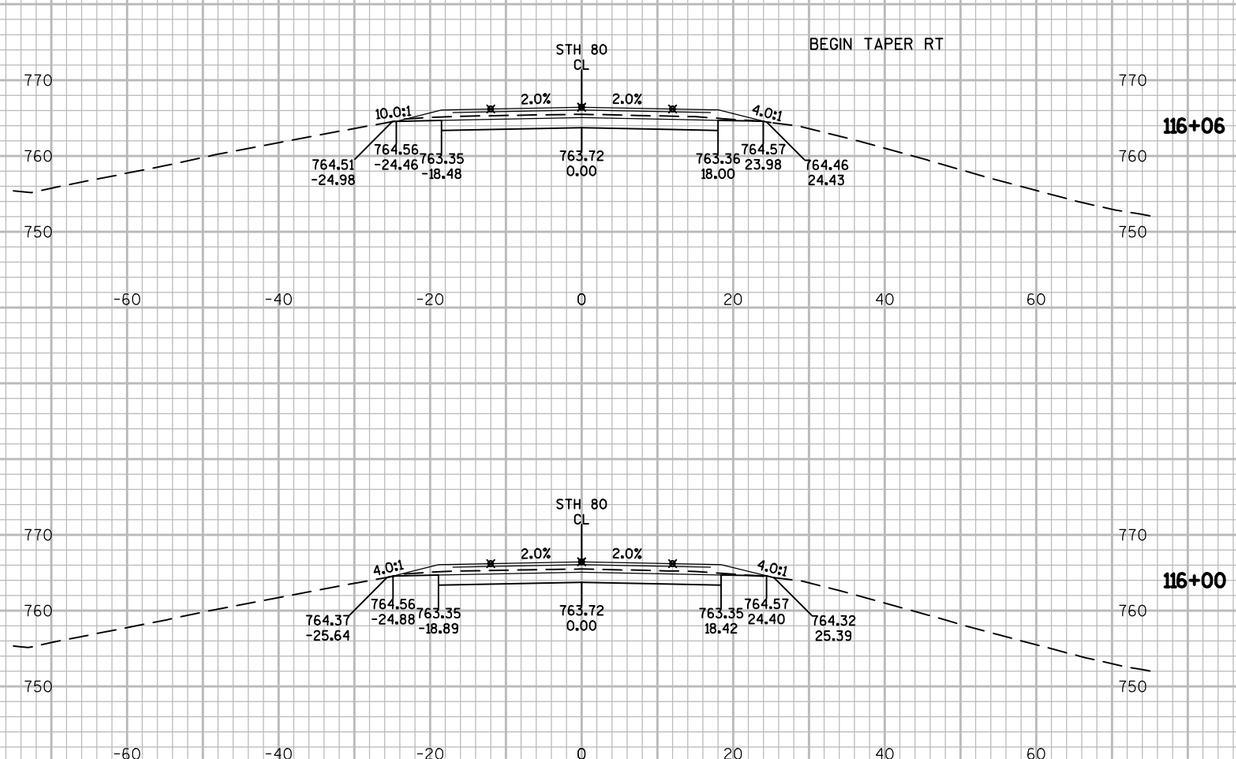

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0270) | SHEET 301 E |
|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5244-1.DWG
LAYOUT NAME - 090201_XS_B520270-(6)

PLOT DATE : 2/20/2017 4:58 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT



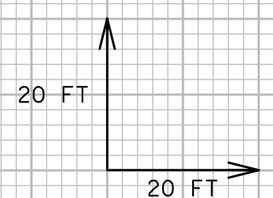

**117+00**




**116+06**




**116+00**




9

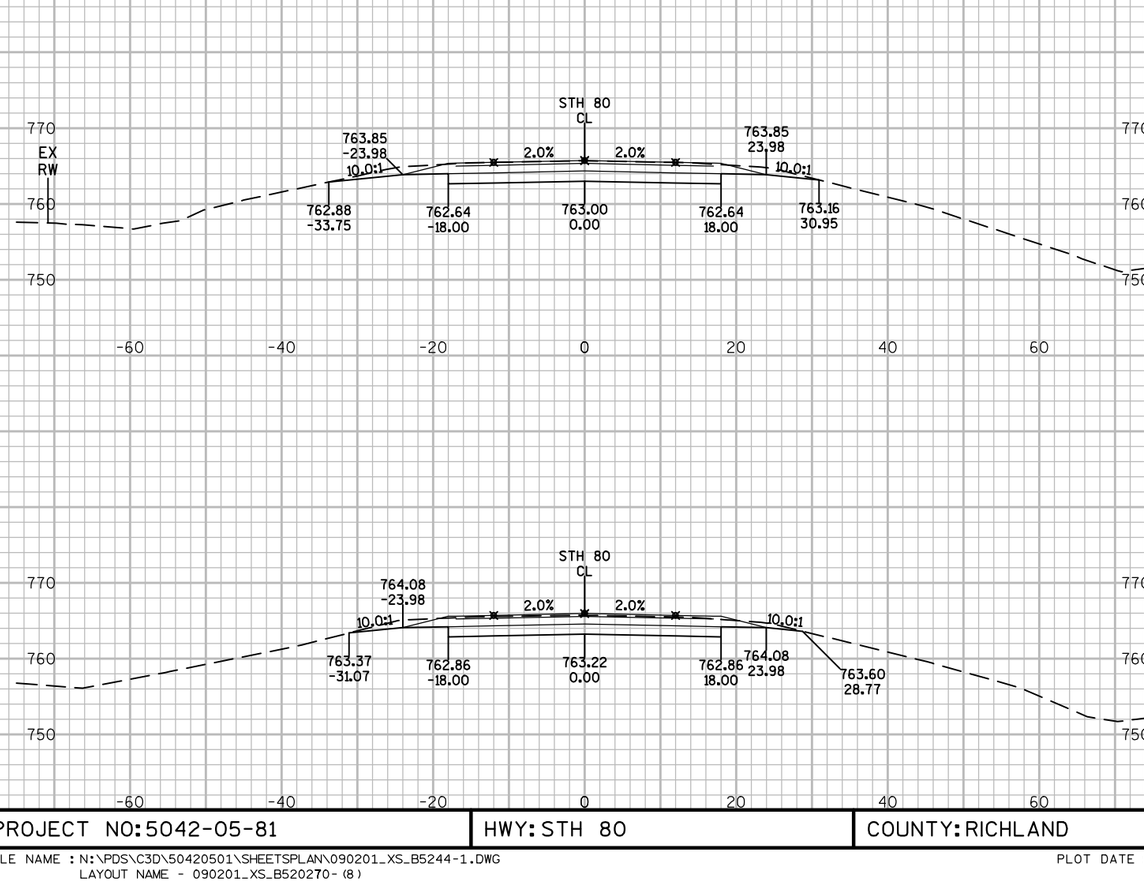
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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0270) | SHEET 302 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5244-1.DWG
LAYOUT NAME - 090201_XS_B520270-(7)

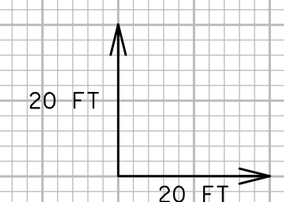
PLOT DATE : 2/20/2017 4:58 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





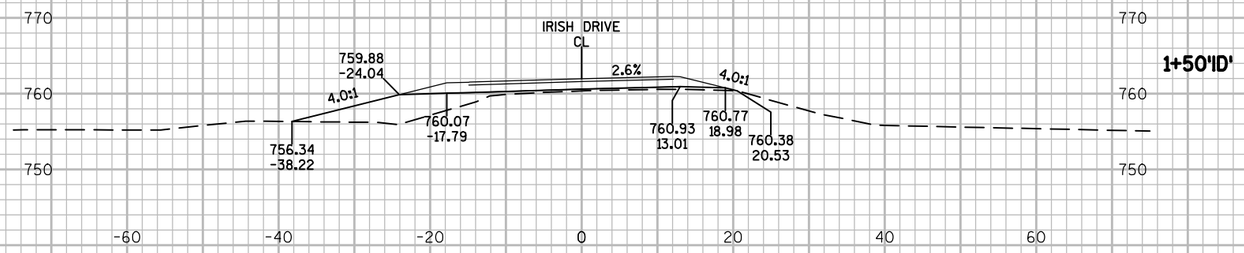




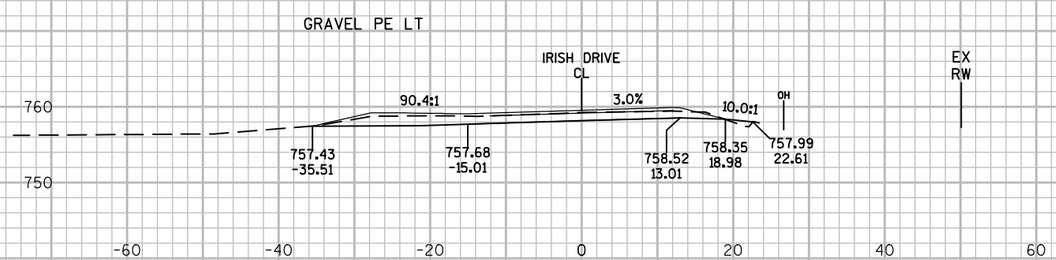

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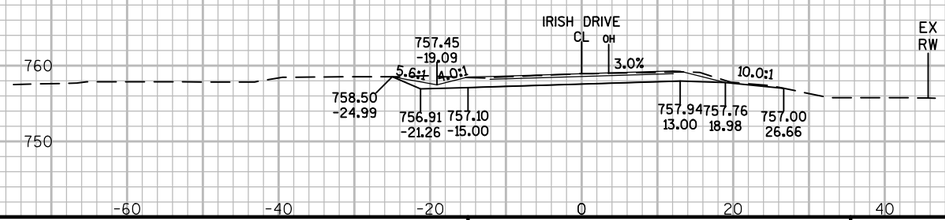
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0270) | SHEET 303 | E |
|---|---|---|---|---|---|



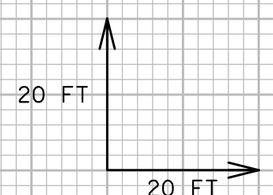

1+50'ID'




1+00'ID'




0+75'ID'




9

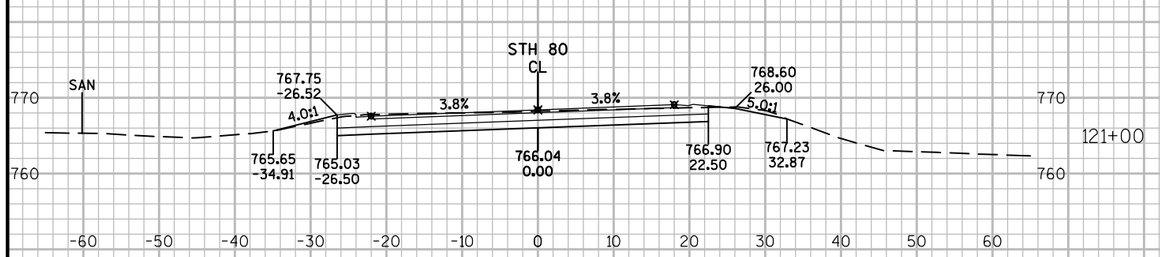
9

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: IRISH DRIVE (B-52-0270) | SHEET 304 | E |
|---|---|---|---|---|---|

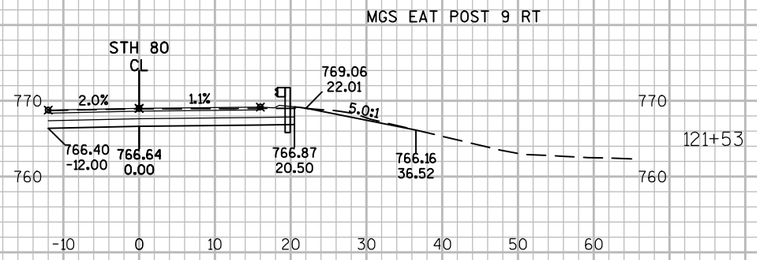
FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5244-1.DWG
LAYOUT NAME - 090201_XS_B520270-(9)

PLOT DATE : 2/20/2017 4:58 PM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

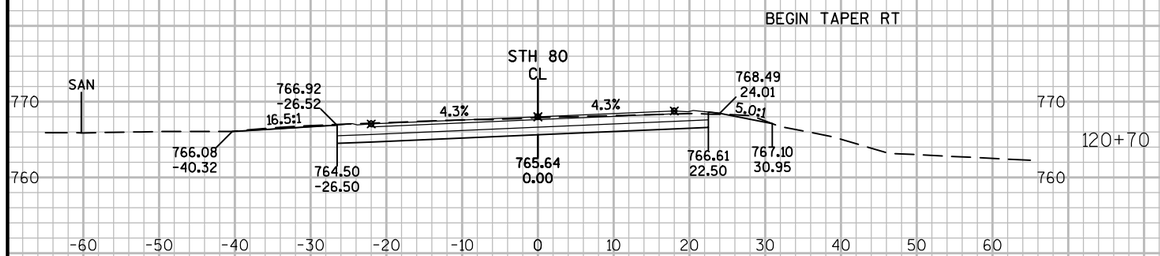
WISDOT/CADDS SHEET 49



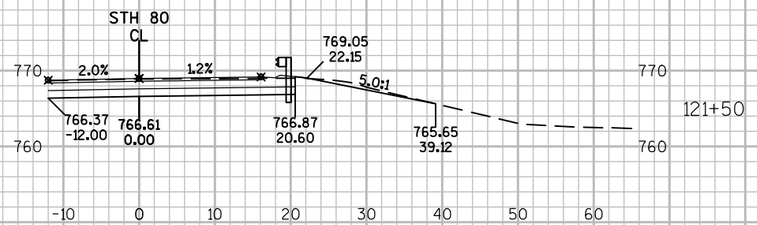

121+00



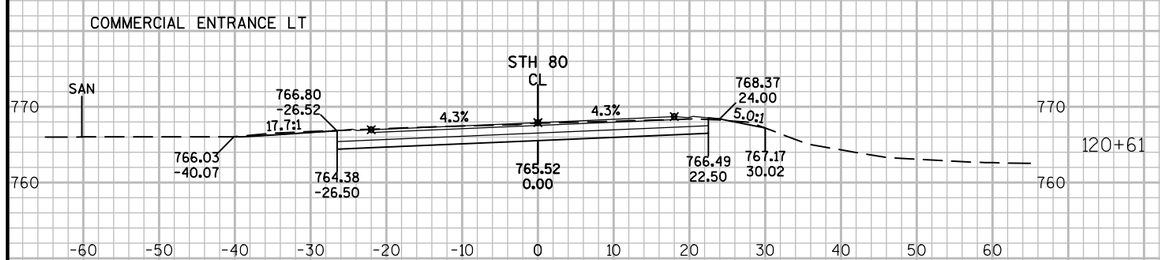

121+53



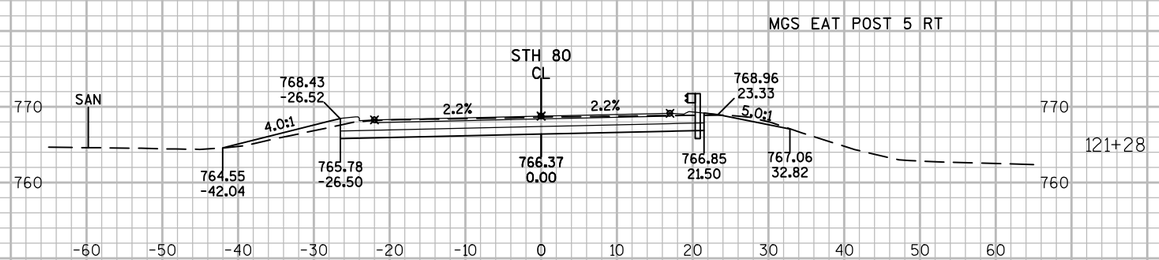

120+70



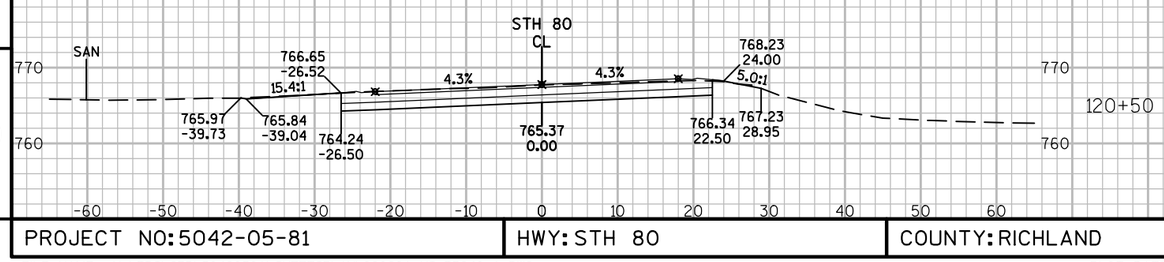

121+50



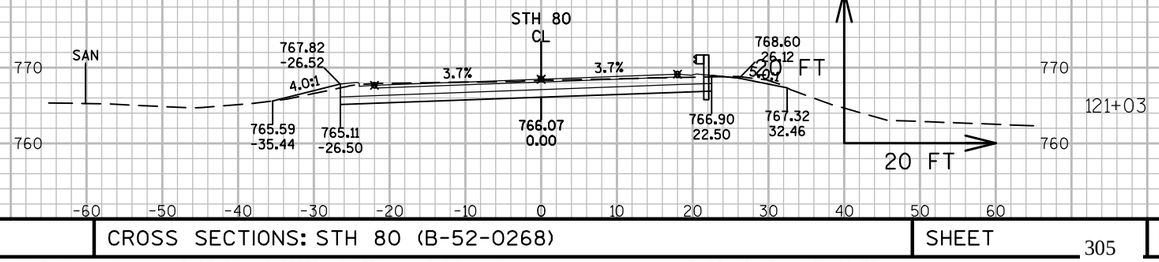

120+61




121+28




120+50

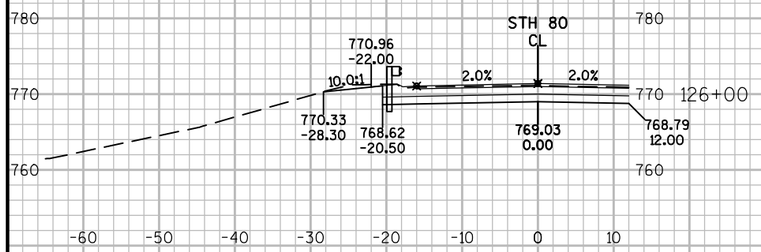



121+03

9

9

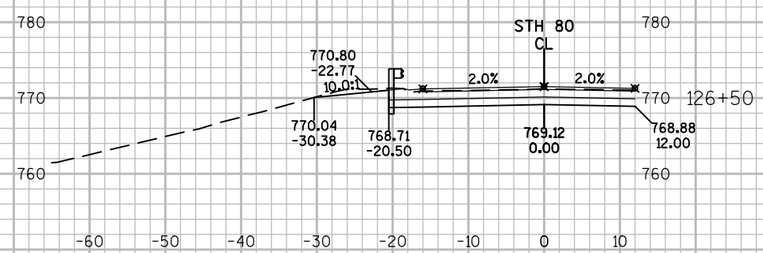
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0268) | SHEET 305 E |
|---|---|---|---|---|

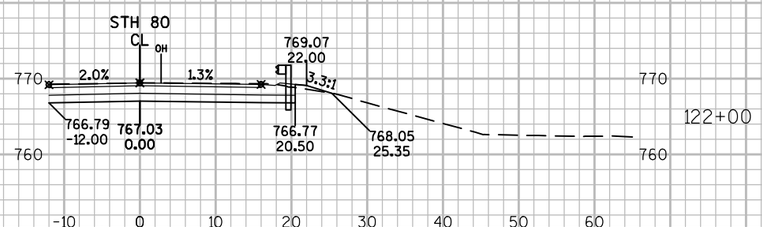


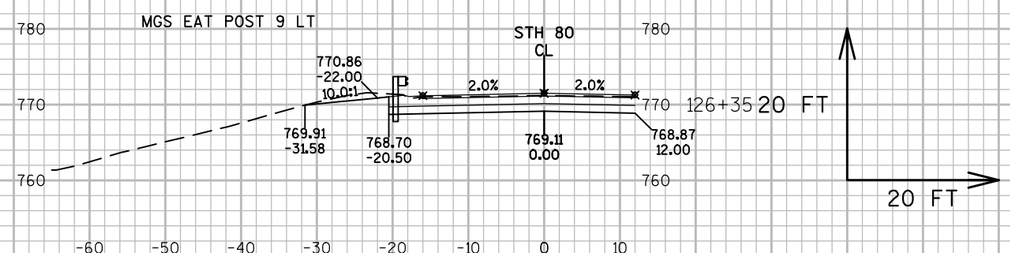






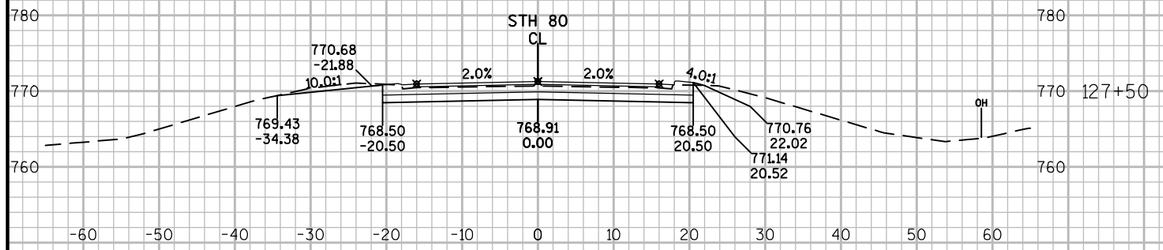


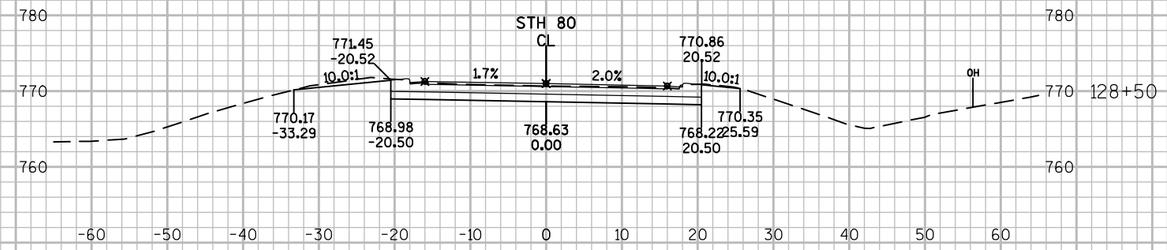


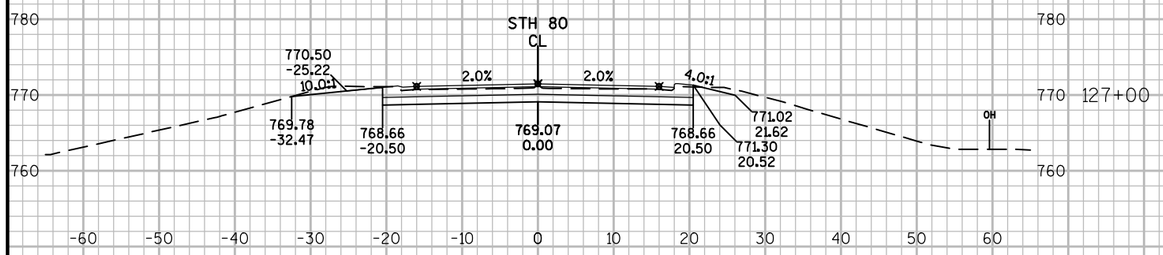
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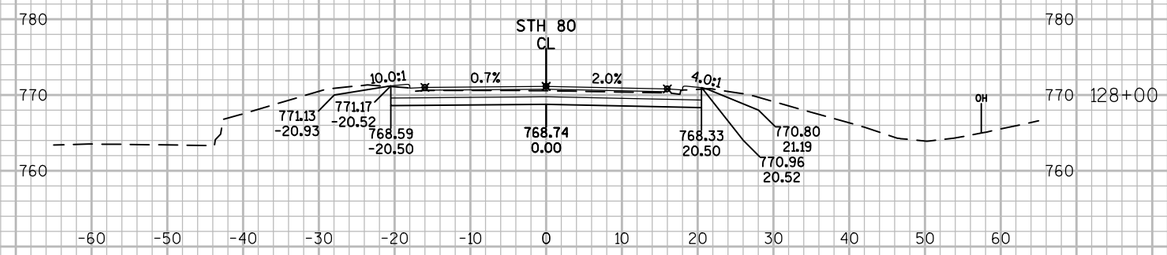
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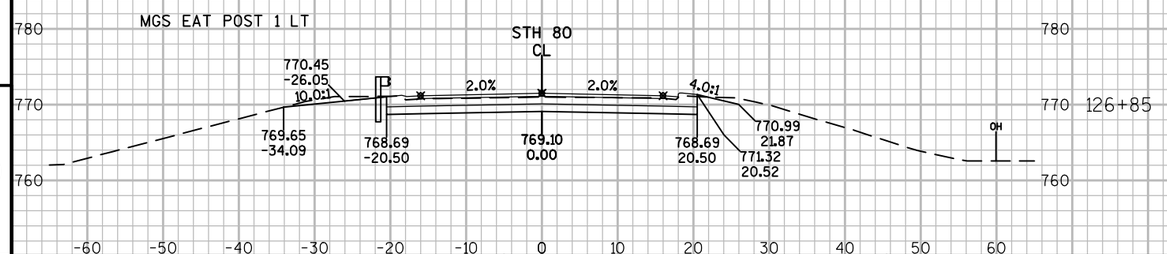
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0268) | SHEET 306 | E |
|---|---|---|---|---|---|

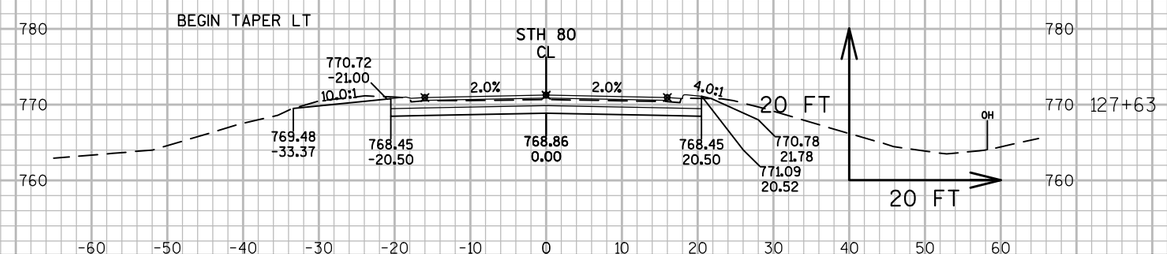


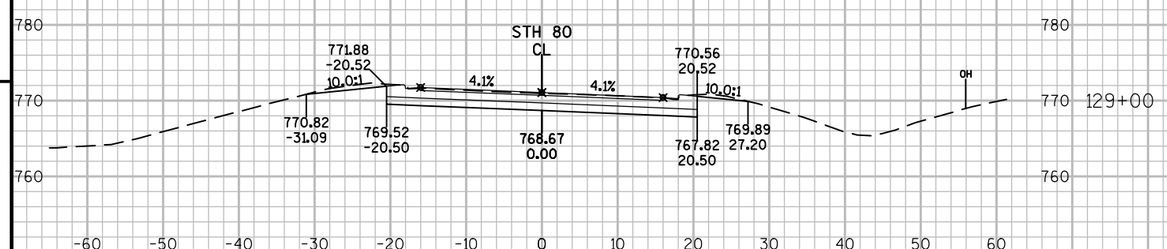



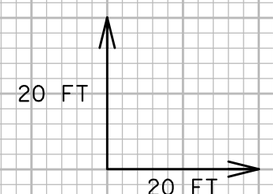

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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0268) | SHEET 307 | E |
|---|---|---|---|---|---|



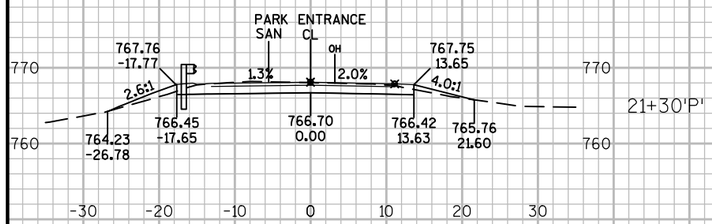

129+00



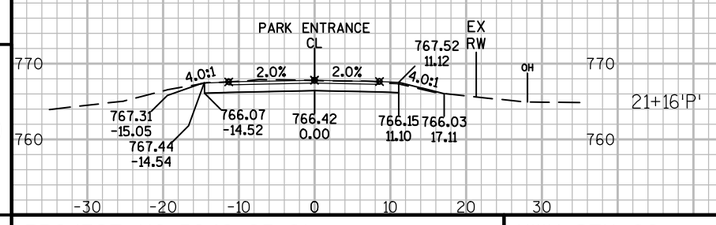

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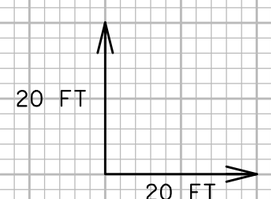
| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: STH 80 (B-52-0268) | SHEET 308 | E |
|---|---|---|---|---|---|




21+30'P'




21+16'P'

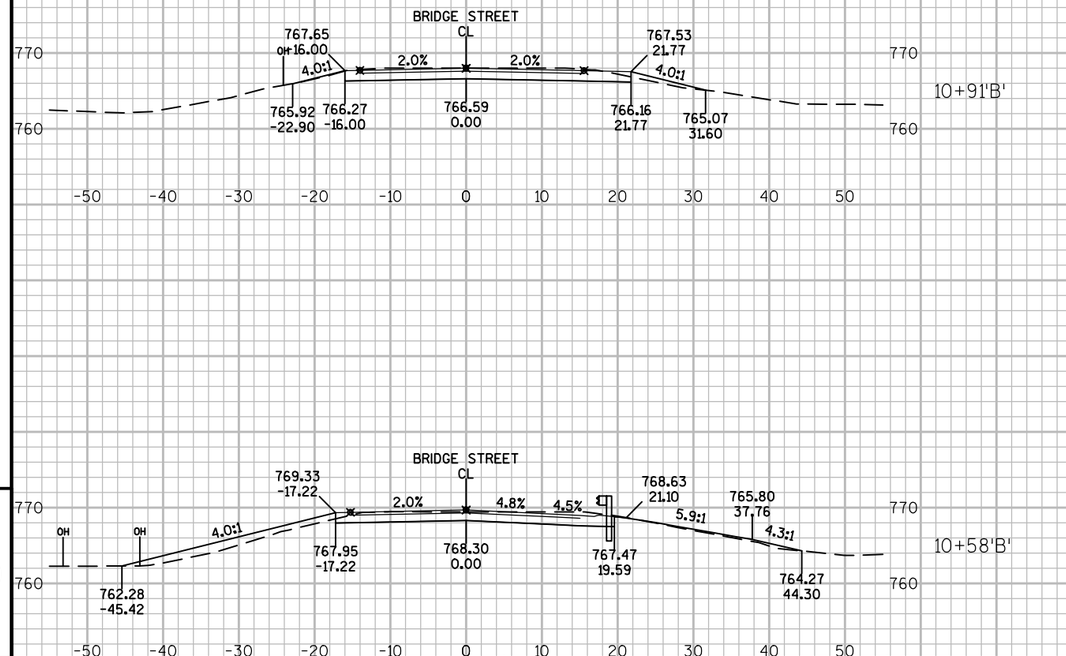



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| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: PARK ENTRANCE (B-52-0268) | SHEET 309 | E |
|---|---|---|---|---|---|

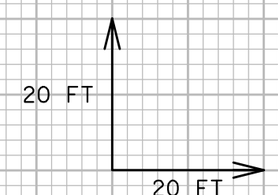
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LAYOUT NAME - 090202_PARKST
PLOT DATE : 1/26/2017 10:41 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49




10+91'B'




10+58'B'




9

9

| PROJECT NO: 5042-05-81 | HWY: STH 80 | COUNTY: RICHLAND | CROSS SECTIONS: BRIDGE ST (B-52-0268) | SHEET 310 | E |
|---|---|---|---|---|---|

FILE NAME : N:\PDS\C3D\50420501\SHEETSPLAN\090201_XS_B5240-1.DWG
LAYOUT NAME - 090203_XS_BRIDGEST

PLOT DATE : 1/26/2017 10:41 AM PLOT BY : SHIFFER, CAMERON J PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

Notes

**Wisconsin Department of Transportation**

Dedicated people creating transportation solutions
through innovation and exceptional service.

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