WKE

Sept 2018

PROJECT ID: 3150-05-70

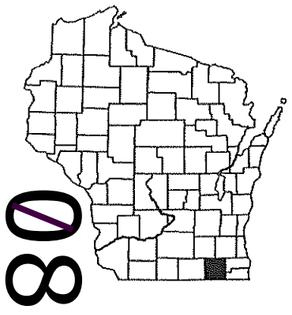
WITH: N/A

COUNTY: WALWORTH

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 = 368



N

DESIGN DESIGNATION

| | | | |
|---|---|---|---|
| A.A.D.T. | 2012 | = | 9,700 |
| A.A.D.T. | 2038 | = | 12,600 |
| D.H.V. | 2038 | = | 1,512 |
| D.D. | | = | 60/40 |
| T. | | = | 8.6% |
| DESIGN SPEED | | = | 55 MPH |
| ESALS | | = | 2,500,000 |

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

# JANESVILLE - DARIEN

STH 11 TO IH 43

## USH 14

## WALWORTH COUNTY

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 3150-05-70 | WISC 2018379 | 1 |
| | | |
| | | |
| | | |

STATE PROJECT NUMBER

**3150-05-70**

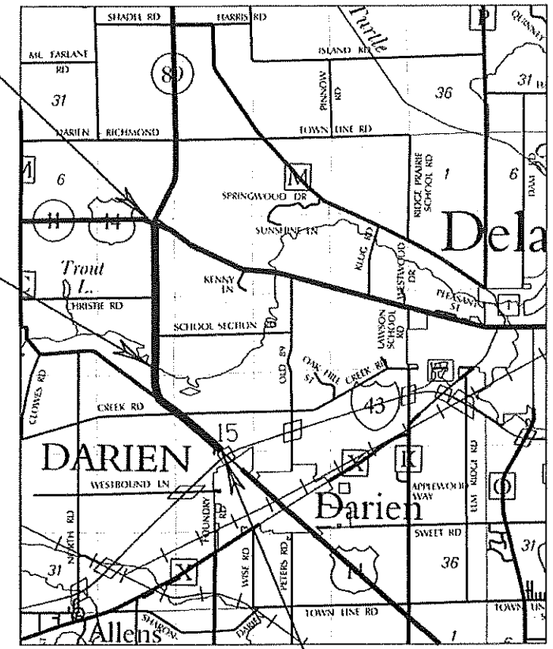
BEGIN PROJECT 3150-05-70
STA. 925+10
X = 708893.64
Y = 357993.31

STRUCTURE
B-64-191

T-2-N

Town of Bradford

R-15-E




END PROJECT 3150-05-70
STA. 1096+27

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 3.242 MI.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVO 29)

"COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), WALWORTH COUNTY, NAD 1983 (2007)"

ORIGINAL PLANS PREPARED BY


DAAR ENGINEERING, INC.
www.daarcorp.com
Milwaukee, WI 53202
414-225-9817


WISCONSIN
ANDREW J. SMIEJA
E-31137
WAUKESHA, WI
PROFESSIONAL ENGINEER

10/31/17 (Date)

(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | GAICONSULTANTS |
| Designer | DAAR ENGINEERING |
| Project Manager | JULIE JENKS, P.E. |
| Regional Examiner | STEVE CHOJNACKI, P.E. |
| Regional Supervisor | JANET CANNON, P.E. |
| C.O. Examiner | |

APPROVED FOR THE DEPARTMENT

DATE: 10/31/17 (Signature)

E

## GENERAL NOTES

CURVE DATA SHOWN ON THE PLAN IS "ARC DEFINITION".

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

DIMENSIONS GIVEN FOR EXISTING FEATURES SHALL BE CONSIDERED AS APPROXIMATE AND MEASURED IN FIELD FOR MATCHING PURPOSE.

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

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

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPALITY OR PUBLIC AGENCY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

A SAWED JOINT IS REQUIRED WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. NO WORK MAY BEGIN UNTIL PROPER TRAFFIC CONTROL DEVICES ARE PLACED AND APPROVED BY THE ENGINEER.

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

EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DEEMS THE MEASURE NO LONGER NECESSARY.

RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZE, AND MULCH/EROSION MAT TOPSOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED AND MULCH.

STOCKPILE EXCESS MATERIAL OF SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEE THE STOCKPILE WITH TEMPORARY SEED AND MULCH.

EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS AND PROVIDE DOCUMENTATION TO THE ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.

CROSS SECTION SHOWN INCLUDE THE THICKNESS OF TOPSOIL WHERE REQUIRED. TOPSOIL SHALL BE PLACED WITH 4-INCH TYPICAL DEPTH.

ALL RADII DIMENSIONED TO FLANGE OF CURB AND GUTTER OR EDGE OF ASPHALT PAVEMENT. PAVEMENT ELEVATIONS ARE AT FLANGE OF CURB AND GUTTER.

SEE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL EROSION CONTROL REQUIREMENTS TO BE FOLLOWED.

## UTILITY CONTACTS

SHARON TELEPHONE CO.
BRAD ELLEFSON, GENERAL MANAGER
105 PLAIN STREET
PO BOX 400
SHARON, WI 53585
PHONE 262-736-9981
brad@sharontelephone.com

WE ENERGIES (GAS OPERATIONS)
DAN SANDE, MANAGER
333 W. EVERETT STREET, ROOM A291
MILWAUKEE, WI 53203
PHONE 414-221-4578
dan.sande@we-energies.com

CHARTER COMMUNICATIONS
BRANDON OPHEIM, CONST COORD
510 BELOIT STREET
WALWORTH, WI 53184
PHONE 608-209-3195
brandon.opheim@charter.com

WISDOT SIGNALS
DAVE BRANTNER
141 NW BARSTOW
PO BOX 798
WAUKESHA, WI 53187
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david.brantner@dot.wi.gov

ATC MANAGEMENT, INC.
TONY MARCINIAK
PO BOX 47
WAUKESHA, WI 53187-0047
PHONE 262-506-6814
tmarciniak@atcllc.com

ALLIANT ENERGY CORPORATION
MICHAEL BROLIN
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MADISON, WI 53713-2148
PHONE 608-458-4871
MichaelBrolin@alliantenergy.com

VILLAGE OF DARIEN PUBLIC WORKS
GREG EPPING, DIRECTOR
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PHONE 262-882-5258
gepping@darienwi.com

FRONTIER - WISCONSIN
EDWARD STIEBER
100 COMMUNICATIONS DRIVE
SUN PRAIRIE, WI 53590
PHONE 608-837-1410
edward.o.stieber@ftr.com

## ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
PLAN DETAILS
EROSION CONTROL
PERMANENT SIGNING
PAVEMENT MARKING
TRAFFIC CONTROL
DETOUR PLAN
ALIGNMENT PLAN

## HMA LAYERS

| LOCATION | TOTAL PAVEMENT THICKNESS | LAYERS | TYPE |
|---|---|---|---|
| USH 14 RECONSTRUCT 1010+50 to 1031+75 | 6 3/4" | 2 3/4" LOWER-LOWER | 3 MT 58-28 S |
| | | 2 1/4" UPPER-LOWER | 3 MT 58-28 S |
| | | 1 3/4" UPPER | 4 MT 58-28 S |
| USH 14 925+10 TO 1010+50 1031+75 TO 1079+53 | 4" | 2¼" LOWER | 3 MT 58-28 S |
| | | 1¾" UPPER | 4 MT 58-28 S |
| USH 14 1079+53 TO 1096+27 | 3 1/2" | 1¾" LOWER | 4 MT 58-28 S |
| | | 1¾" UPPER | 4 MT 58-28 S |
| CTH C | 4" | 2¼" LOWER | 3 MT 58-28 S |
| | | 1¾" UPPER | 4 MT 58-28 S |

## OTHER CONTACTS

WISDOT SE REGION
JULIE JENKS, WISDOT PROJECT MANAGER
141 NW BARSTOW ST
WAUKESHA, WI 53187
OFFICE 262-548-6462
julie.jenks@dot.wi.gov

DAAR ENGINEERING, INC
ANDY SMIEJA, CONSULTANT PROJECT MANAGER
325 E. CHICAGO STREET
MILWAUKEE, WI 53202
OFFICE 414-935-4350
andy.smieja@daarcorp.com

## WDNR CONTACT

WISCONSIN DNR
CRAIG WEBSTER
141 NW BARSTOW STREET, ROOM 180
WAUKESHA, WI 53188
OFFICE 262-574-2141
craig.webster@wisconsin.gov

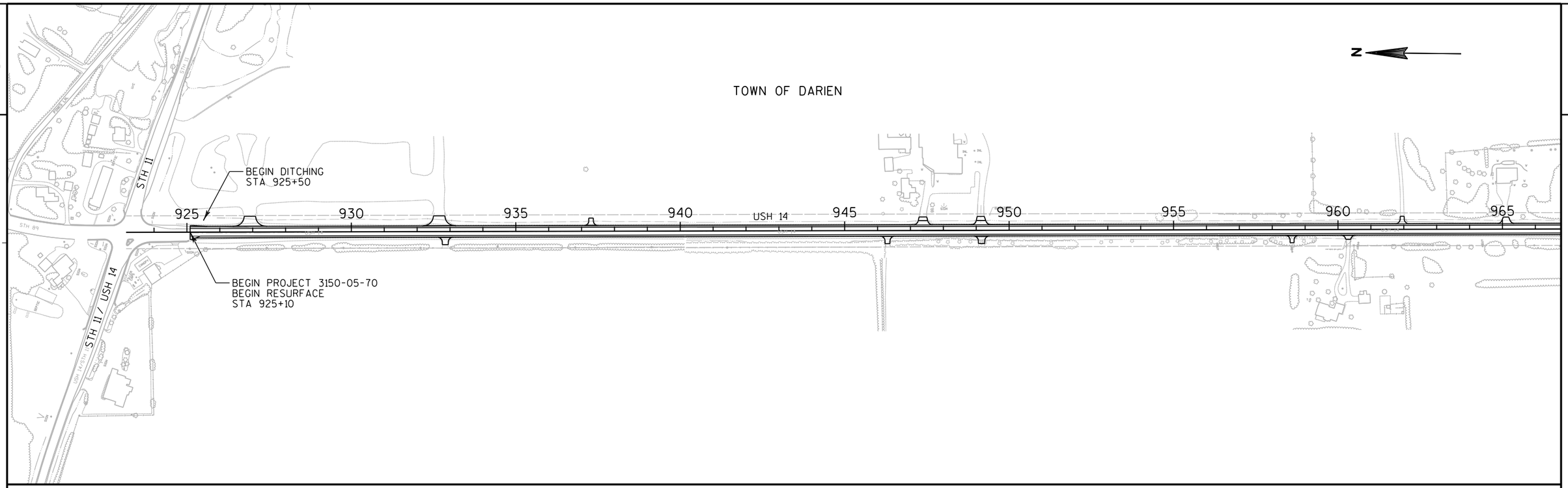
## SOUTHEASTERN WI REGIONAL PLANNING COMMISSION CONTACT

SOUTHEASTERN WI REGIONAL PLANNING COMMISSION
JOHN WASHBURN
PO BOX 1607
WAUKESHA, WI 53187-1607
PHONE: (262) 953-4295
FAX: (262) 547-1103
JWASHBURN@SEWRPC.ORG

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

## STANDARD ABBREVIATIONS

| | |
|---|---|
| AP | ACCESS POINT |
| AC | ACRE |
| ADJ | ADJUST |
| AECPRC | APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE |
| AGG AH | AGGREGATE AHEAD |
| AC | ASPHALT CEMENT |
| ASPH | ASPHALTIC |
| ACP | ASPHALTIC CONCRETE PAVEMENT |
| AVG | AVERAGE |
| ADT | AVERAGE DAILY TRAFFIC |
| BK | BACK |
| BAD | BASE AGGREGATE DENSE |
| BM | BENCHMARK |
| CB | CATCH BASIN |
| C/L | CENTER LINE |
| C/L CONST | CENTER LINE CONSTRUCTION |
| Δ | CENTRAL ANGLE OR DELTA |
| CL | CLASS |
| CONC | CONCRETE |
| CONST | CONSTRUCTION |
| CMCP | CORRUGATED METAL CULVERT PIPE |
| CTH | COUNTY TRUNK HIGHWAY |
| CABC | CRUSHED AGGREGATE BASE COURSE |
| CFS CE | CUBIC FEET PER SECOND COMMERCIAL ENTRANCE |
| CY | CUBIC YARD |
| CP | CULVERT PIPE |
| CPCS | CULVERT PIPE CORRUGATED STEEL |
| CPRC | CULVERT PIPE REINFORCED CONCRETE |
| CPRCHE | CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL |
| C & G | CURB AND GUTTER |
| D | DEGREE OF CURVE |
| DHV | DESIGN HOUR VOLUME |
| DIA | DIAMETER |
| DD | DIRECTIONAL DISTRIBUTION |
| DWY | DRIVEWAY |
| E | EAST |
| X | EAST GRID COORDINATE |
| EB | EASTBOUND |
| EL | ELEVATION |
| ESALS | EQUIVALENT SINGLE AXLE LOADS |
| EXC | EXCAVATION |
| EBS | EXCAVATION BELOW SUBGRADE |
| EXIST | EXISTING |
| FPS | FEET PER SECOND |
| FERT | FERTILIZE |
| FE | FIELD ENTRANCE |
| FL | FLOW LINE |
| FT | FOOT |
| GN | GRID NORTH |
| HES | HIGH EARLY STRENGTH |
| HP HW | HIGH POINT |
| HW | HIGH WATER |
| HMA | HOT MIX ASPHALT |
| CWT | HUNDREDWEIGHT |
| HWD | HYDRANT |
| INL | INLET |
| ID | INSIDE DIAMETER |
| I | INTERSECTION ANGLE |
| INV | INVERT |
| IP | IRON PIPE OR PIN |
| JT | JOINT |
| LT | LEFT |
| LT | LENGTH OF CURVE |
| LF | LINEAR FOOT |
| LP | LOW POINT |
| LS | LUMP SUM |
| MH | MANHOLE |
| MAX | MAXIMUM |
| Mgal | MEGAGALLON |
| MPH | MILES PER HOUR |
| MIN | MINIMUM |
| MON | MONUMENT |
| NOM | NOMINAL |
| NC | NORMAL CROWN |
| N | NORTH |
| Y | NORTH GRID COORDINATE |
| NB | NORTHBOUND |
| NO | NUMBER |
| OPT | OPTIONAL |
| OD | OUTSIDE DIAMETER |
| PAVT | PAVEMENT |
| PE PLE | PRIVATE ENTRANCE PERMANENT LIMITED EASEMENT |
| PACS | PIPE ARCH CORRUGATED STEEL |
| PT | POINT |
| PC | POINT OF CURVATURE |
| PI | POINT OF INTERSECTION |
| PT | POINT OF TANGENCY |
| PVC | POINT OF VERTICAL CURVE |
| PVI | POINT OF VERTICAL INTERSECTION |
| PVT | POINT OF VERTICAL TANGENCY |
| PVC | POLYVINYL CHLORIDE |
| PCC | PORTLAND CEMENT CONCRETE |
| LB | POUND |
| PSF | POUNDS PER SQUARE FOOT |
| PSI | POUNDS PER SQUARE INCH |
| PE | PRIVATE ENTRANCE |
| PGL | PROFILE GRADE LINE |
| PL | PROPERTY LINE |
| Q100 | 100-YEAR FLOW RATE |
| R | RADIUS |
| RR | RAILROAD |
| R | RANGE |
| R/L | R/L |
| REINF | REINFORCING OR REINFORCEMENT |
| REQD | REQUIRED |
| RT | RIGHT |
| R/W | RIGHT-OF-WAY |
| RD | ROAD |
| RDWY | ROADWAY |
| SEC | SECTION |
| SHLDR | SHOULDER |
| S | SOUTH |
| SB | SOUTHBOUND |
| SQ | SQUARE |
| SF | SQUARE FEET |
| SW | SIDEWALK |
| SY | SQUARE YARD |
| SDD | STANDARD DETAIL DRAWINGS |
| STH | STATE TRUNK HIGHWAYS |
| STA | STATION |
| SS | STORM SEWER |
| SSPRC | STORM SEWER PIPE REINFORCED CONCRETE |
| ST | STREET |
| STR | STRUCTURE OR STRUCTURAL |
| SEC | SUPERELEVATION |
| T | TANGENT |
| TEMP | TEMPORARY |
| TI | TEMPORARY INTEREST |
| TLE | TEMPORARY LIMITED EASEMENT |
| t | TON |
| T | TOWN |
| T/L | TRANSIT LINE |
| T | TRUCKS (PERCENT OF) |
| TYP | TYPICAL |
| USH | UNITED STATES HIGHWAY |
| VAR | VARIABLE |
| V | VELOCITY OF DESIGN SPEED |
| VERT | VERTICAL |
| VC | VERTICAL CURVE |
| VOL | VOLUME |
| WM | WATERMAIN |
| WV | WATER VALVE |
| W | WEST |
| WB | WESTBOUND |
| YD | YARD |

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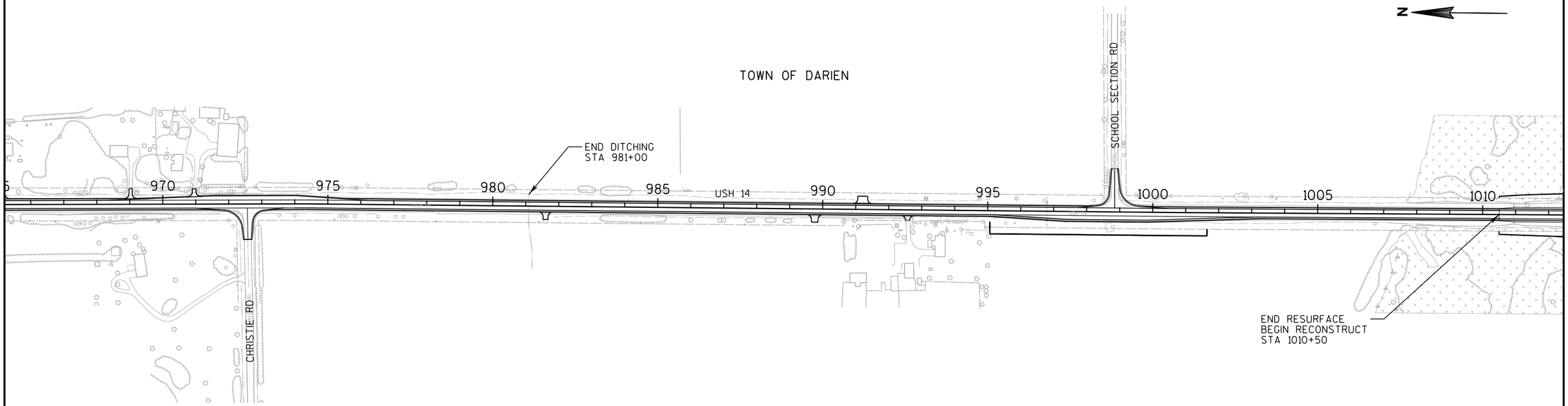



| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PROJECT OVERVIEW | SHEET 4 | E |
|---|---|---|---|---|---|

2

TOWN OF DARIEN

STRUCTURE B-64-191

CONSTRUCT DNR PARKING LOT
AT TURTLE CREEK
STA 1024+05

TURTLE CREEK

END RECONSTRUCT
BEGIN RESURFACE
STA. 1031+75

USH 14

CTH C

CREEK RD

1015 1020 1025 1030 1035 1040 1045 1050 1055 1060

TOWN OF DARIEN

CREEK RD

EXISTING STRUCTURES
B-64-133 & B-64-134

END PROJECT 3150-05-70
END RESURFACE
STA 1096+27

CONSTRUCT LEFT TURN LANES
AT FOUNDRY ROAD INTERSECTION
STA 1087+37 TO STA 1095+57

CONSTRUCT STEEL THRIE BEAM BULLNOSE TERMINALS
STA 1100+00 TO STA 1103+50

FOUNDRY RD

IH 43 NB

IH 43 SB

USH 14

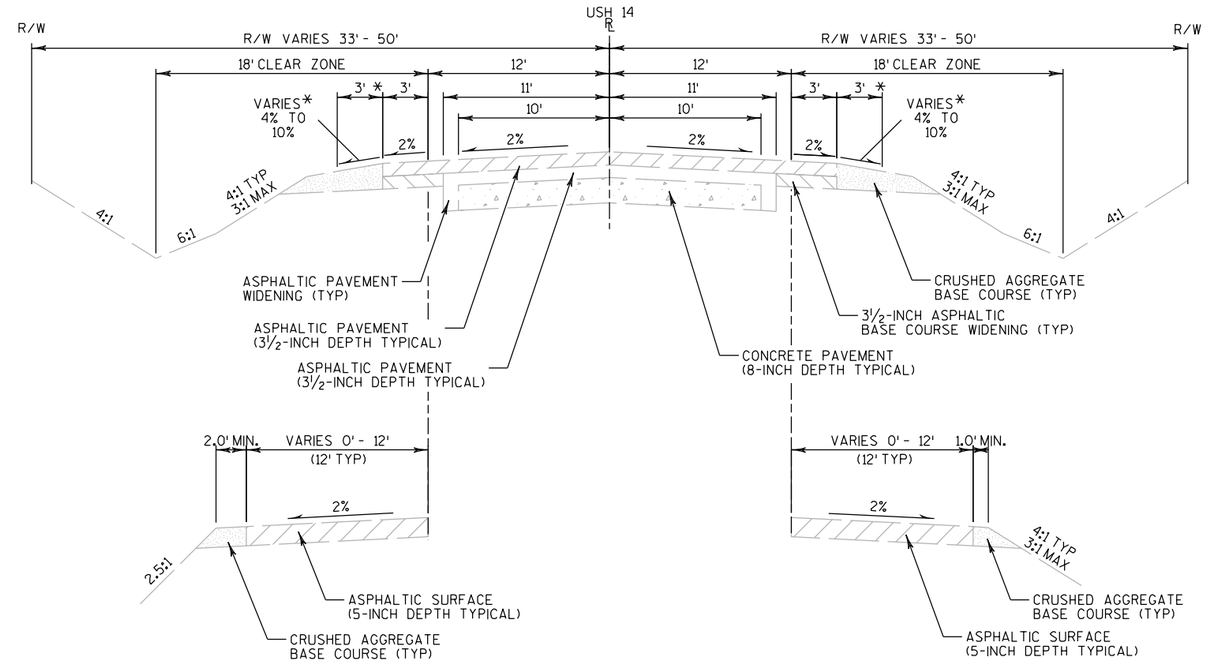
VILLAGE OF DARIEN

1065 1070 1075 1080 1085 1090 1095 1100 1105

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PROJECT OVERVIEW | SHEET 5 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\020202_po.dgn PLOT DATE : 10/31/2017 PLOT BY : tammy.tucker PLOT NAME : PLOT SCALE : 300.0000 ' / in.

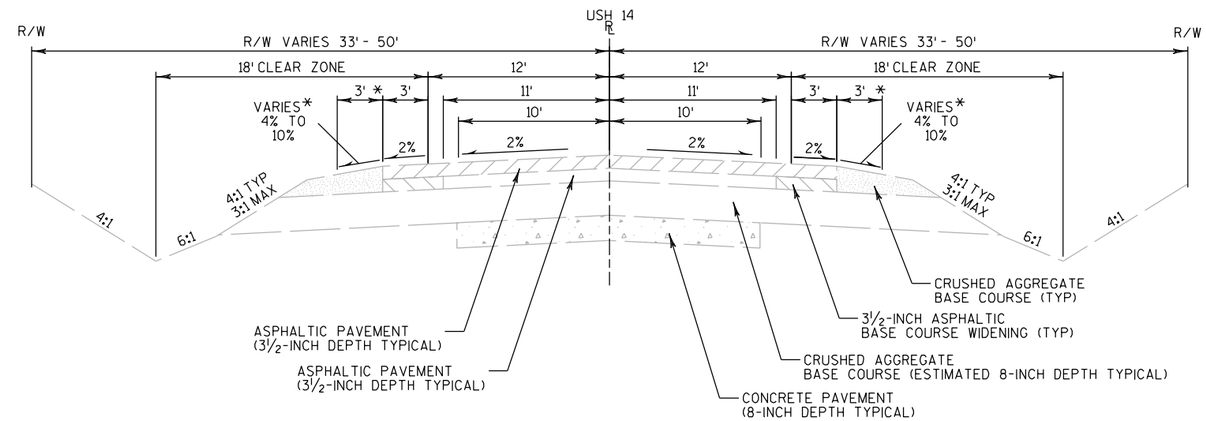
WISDOT/CADDS SHEET 42




STA 969+08 TO STA 975+95

STA 995+55 TO STA 1002+40

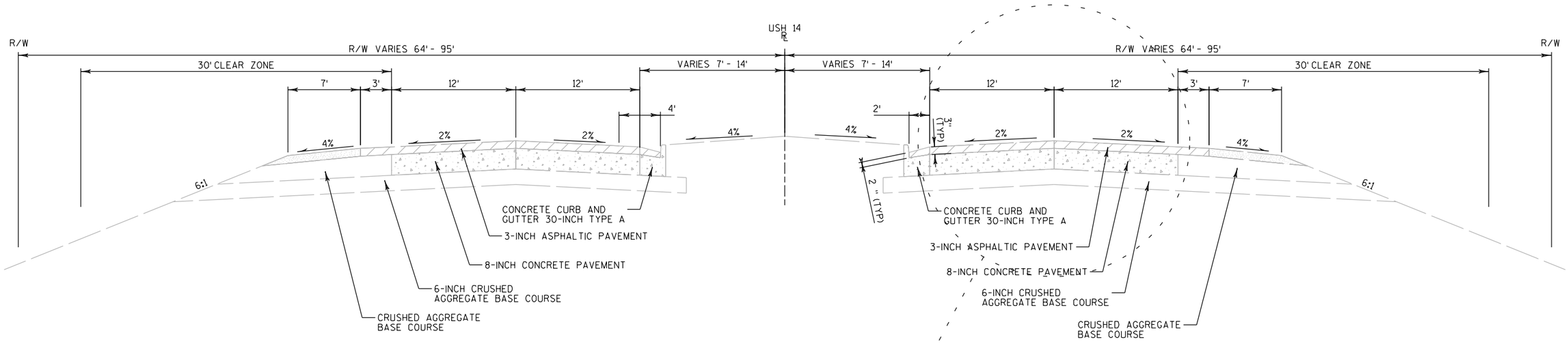
EXISTING TYPICAL SECTION
USH 14
STA 925+10 TO STA 1012+20
STA 1024+70 TO STA 1079+53




EXISTING TYPICAL SECTION
USH 14
STA 1012+20 TO STA 1024+70

* GRAVEL SHOULDER ERODED OVER TIME.

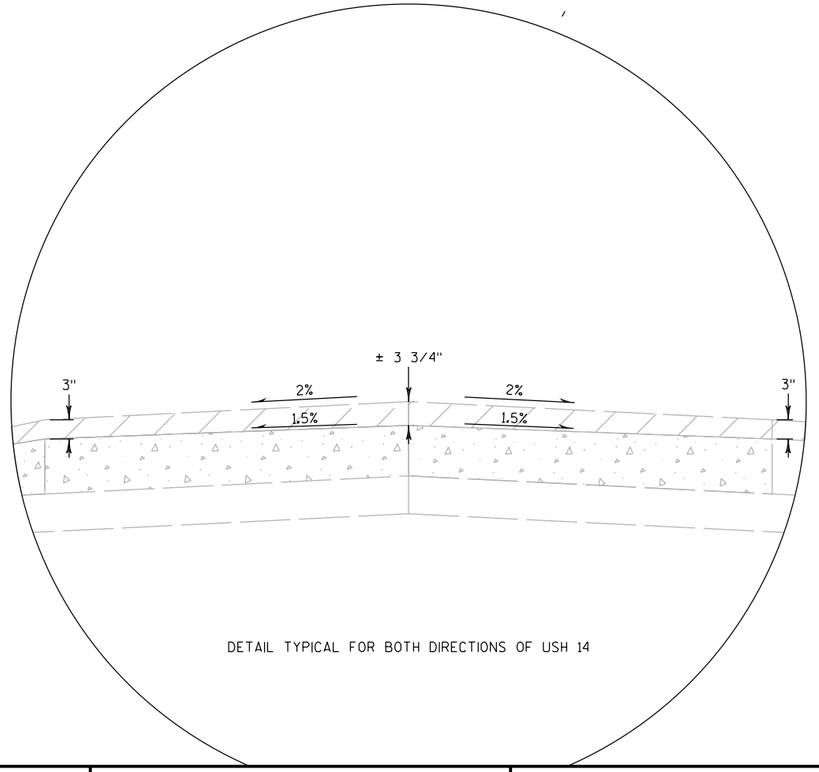
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TYPICAL SECTIONS | SHEET 6 | E |
|---|---|---|---|---|---|




EXISTING TYPICAL SECTION

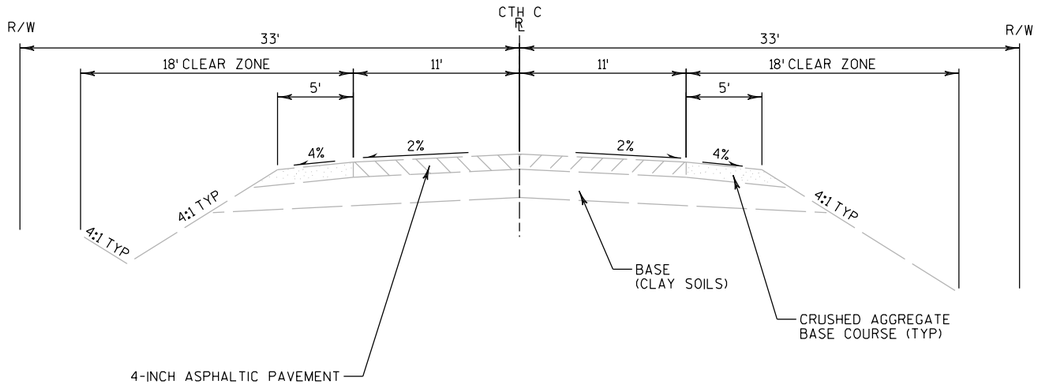
USH 14

STA 1079+53 TO STA 1096+27




DETAIL TYPICAL FOR BOTH DIRECTIONS OF USH 14

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TYPICAL SECTIONS | SHEET 7 | E |
|---|---|---|---|---|---|

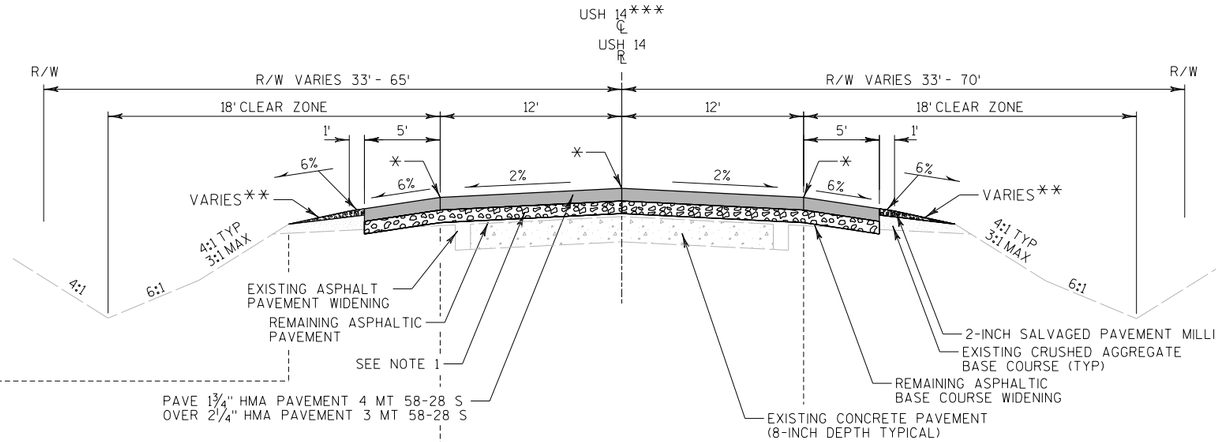



EXISTING TYPICAL SECTION
CTH C
STA 43+50 TO STA 46+05

NOTE: NO ASBUILT INFORMATION WAS AVAILABLE;
PAVEMENT STRUCTURE IS ASSUMED
FOR CTH C.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TYPICAL SECTIONS | SHEET 8 | E |
|---|---|---|---|---|---|

SEE EROSION CONTROL PLAN FOR RESTORATION TO BE INSTALLED THROUGHOUT THE PROJECT.



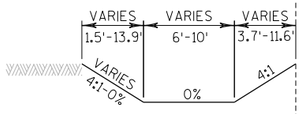

FINISHED TYPICAL SECTION
USH 14
STA 925+10 TO STA 1010+50
STA 1031+75 TO STA 1079+53

* CONSTRUCT CENTER LINE AND SHOULDER RUMBLE STRIPS ALONG USH 14. SEE SDD 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING - TYPE 1 FOR ADDITIONAL REQUIREMENTS

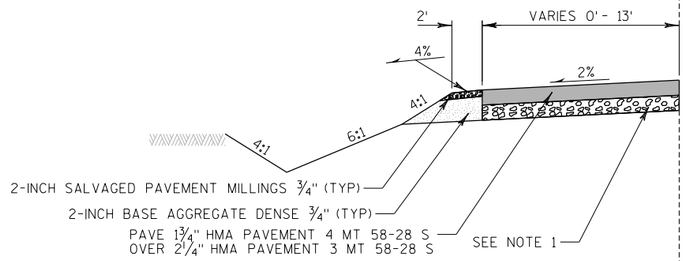
** BEYOND 1 FOOT SHOULDER, GRADE SALVAGED PAVEMENT MILLINGS TO MATCH EXISTING SHOULDER POINT, ESTIMATED TO RANGE BETWEEN 6% AND 18%.

*** USH 14 ℄ IS UTILIZED ONLY BETWEEN STA 1032+00 TO STA 1046+34 AND VARIES 0' - 2.13' FROM THE USH 14 R ℄

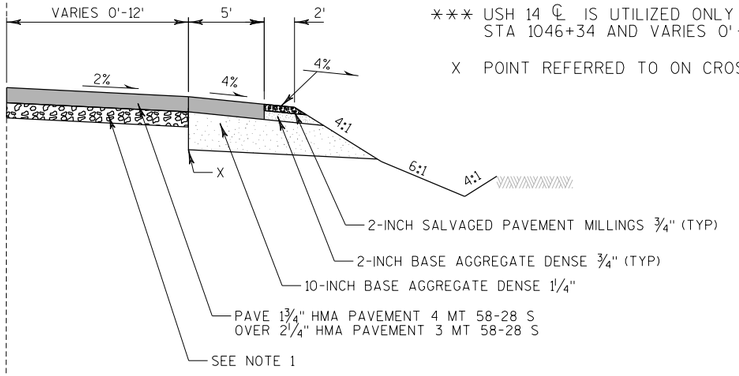
X POINT REFERRED TO ON CROSS SECTIONS



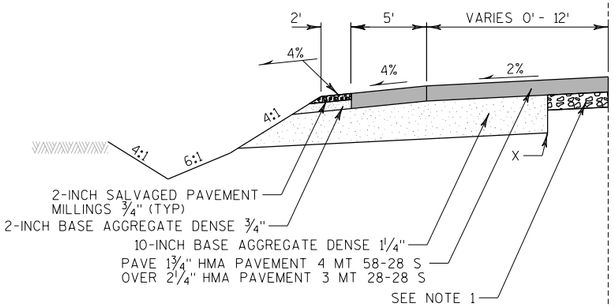

DITCHING
STA 925+50 TO STA 933+00
STA 936+00 TO STA 939+00
STA 941+00 TO STA 955+50
STA 960+00 TO STA 971+00
STA 974+50 TO STA 980+50



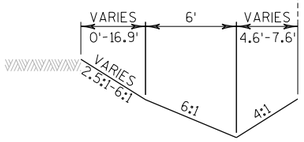

BYPASS LANE
STA 968+31 TO STA 976+23



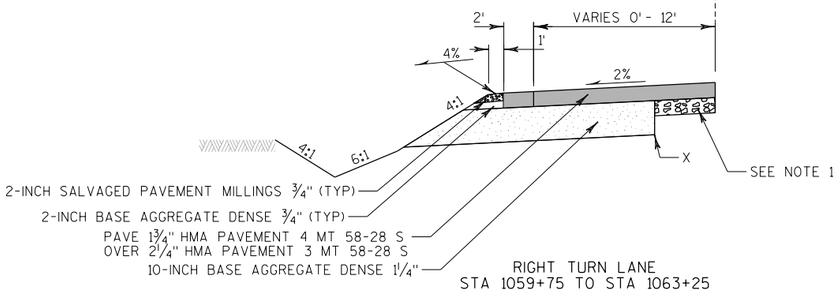

BYPASS LANE
STA 995+18 TO STA 1003+10



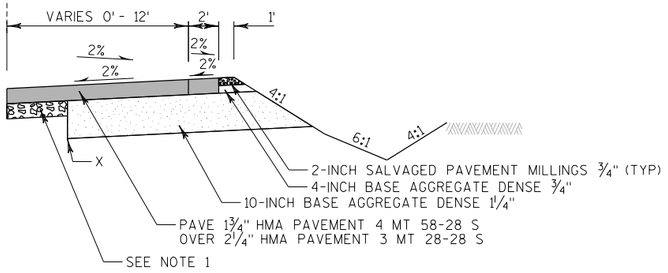

BYPASS LANE
STA 1037+03 TO STA 1044+54




DITCHING
STA 933+00 TO STA 936+00
STA 939+00 TO STA 941+00
STA 955+50 TO STA 960+00
STA 971+00 TO STA 974+50
STA 980+50 TO STA 981+00



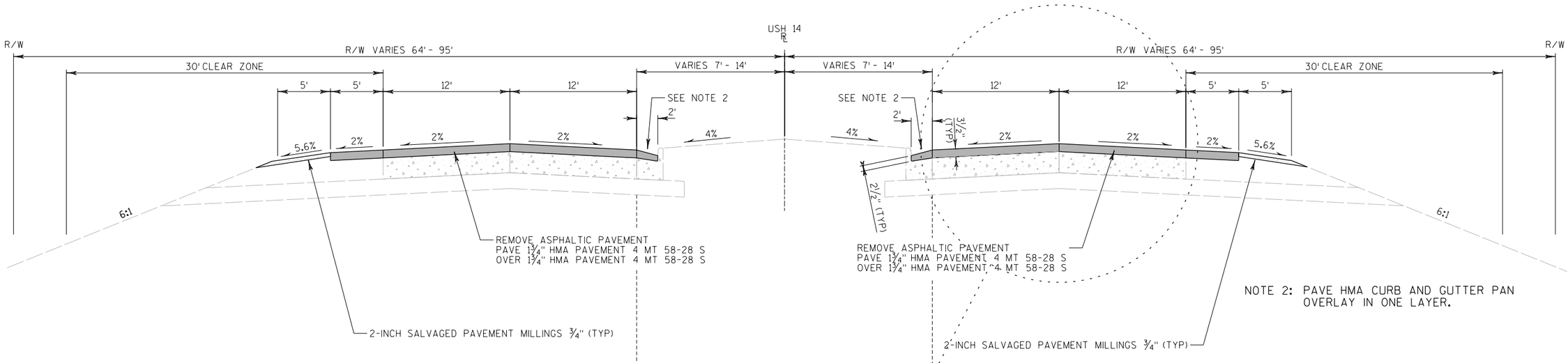

RIGHT TURN LANE
STA 1059+75 TO STA 1063+25




RIGHT TURN LANE
STA 1036+73 TO STA 1042+28
STA 1053+30 TO STA 1056+80

NOTE 1: MILL AND REMOVE TOP 2½-INCHES OF EXISTING ASPHALTIC PAVEMENT. MILL AND RELAY 4-INCHES MAXIMUM OF REMAINING ASPHALTIC PAVEMENT, OR TO EXISTING CONCRETE, AND SPREAD MATERIAL TO THE OUTSIDE LIMITS OF THE PROPOSED PAVED SHOULDERS, 4-INCH DEPTH TYPICAL AFTER EXPANSION, EXCEPT WHERE BYPASS LANES OR OTHER FEATURES ARE PRESENT. MAXIMUM OF 6½-INCHES OF EXISTING ASPHALTIC PAVEMENT TO BE IMPACTED. ASPHALT PAVEMENT BEYOND 6½-INCHES DEPTH TO REMAIN IN PLACE.

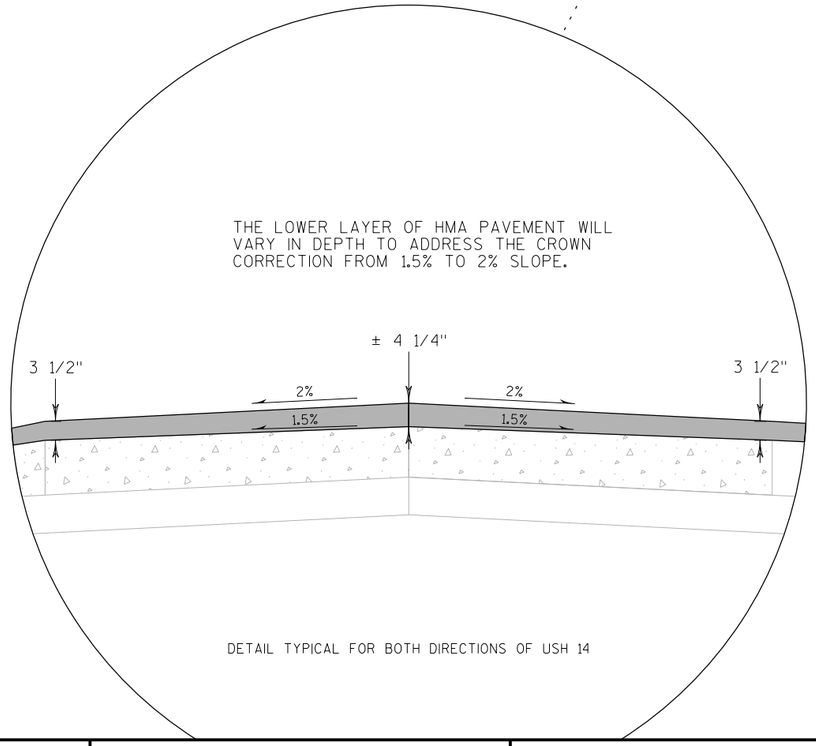
SEE EROSION CONTROL PLAN FOR
RESTORATION TO BE INSTALLED
THROUGHOUT THE PROJECT.



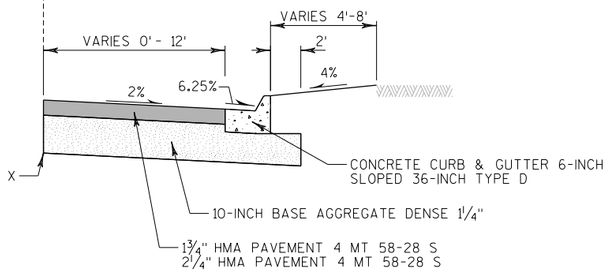

NOTE 2: PAVE HMA CURB AND GUTTER PAN OVERLAY IN ONE LAYER.

## FINISHED TYPICAL SECTION

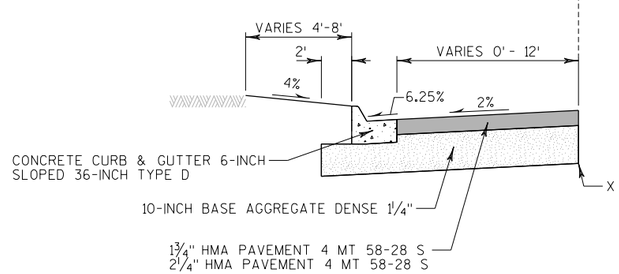
USH 14
STA 1079+53 TO STA 1096+27




DETAIL TYPICAL FOR BOTH DIRECTIONS OF USH 14




LEFT TURN LANE
STA 1091+84.03 TO STA 1095+56.94

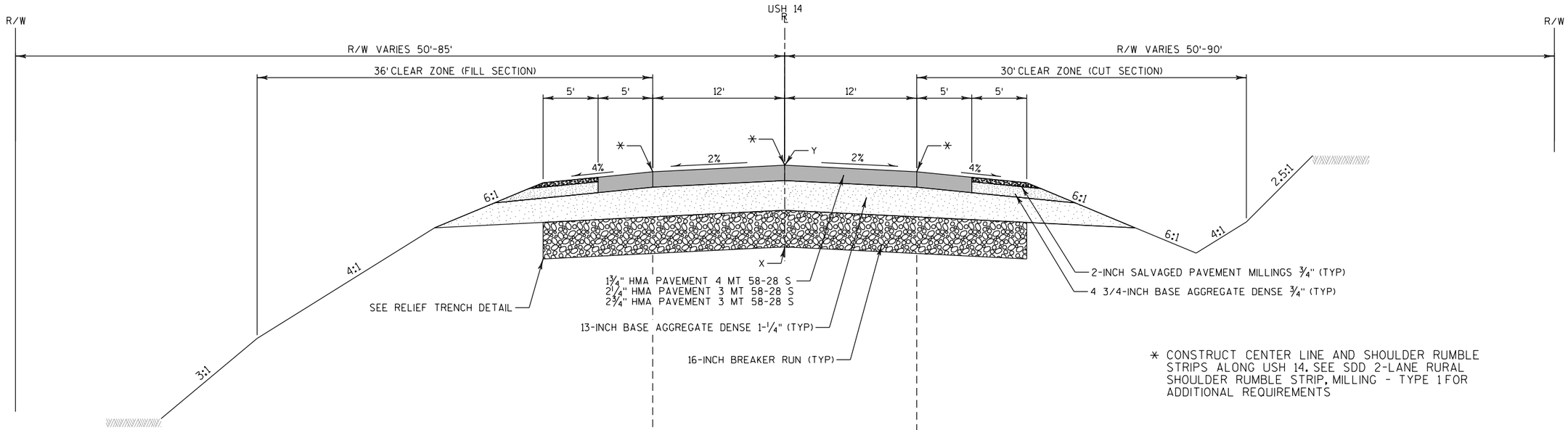



LEFT TURN LANE
STA 1087+37.31 TO STA 1091+09.94

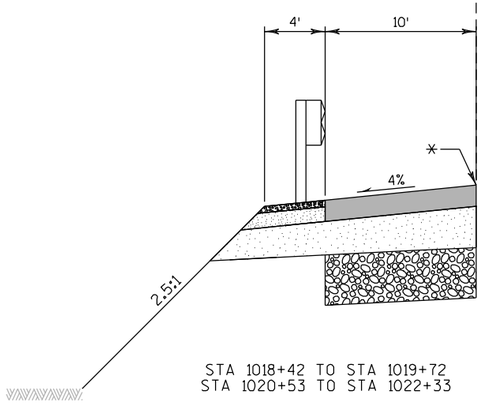
X - POINT REFERRED TO ON CROSS SECTIONS

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TYPICAL SECTIONS | SHEET 10 | E |
|---|---|---|---|---|---|

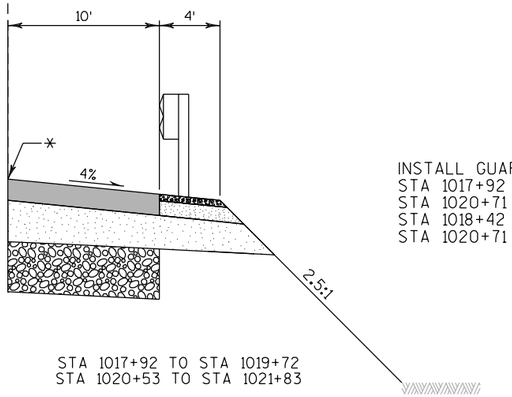
SEE EROSION CONTROL PLAN FOR RESTORATION TO BE INSTALLED THROUGHOUT THE PROJECT.




* CONSTRUCT CENTER LINE AND SHOULDER RUMBLE STRIPS ALONG USH 14. SEE SDD 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING - TYPE 1 FOR ADDITIONAL REQUIREMENTS




STA 1018+42 TO STA 1019+72
STA 1020+53 TO STA 1022+33




STA 1017+92 TO STA 1019+72
STA 1020+53 TO STA 1021+83

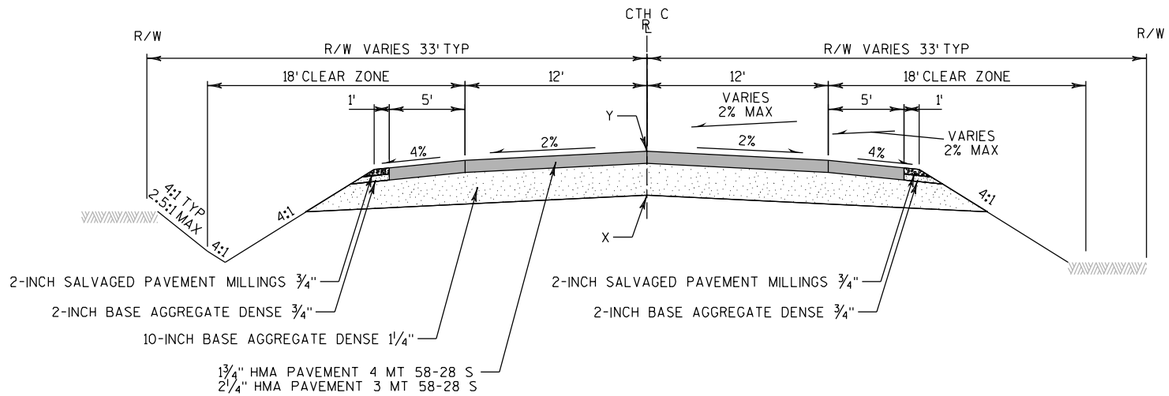
INSTALL GUARDRAIL MOW STRIP ASPHALT:
STA 1017+92 - STA 1019+53 RT
STA 1020+71 - STA 1021+83 RT
STA 1018+42 - STA 1019+53 LT
STA 1020+71 - STA 1022+32 RT

FINISHED TYPICAL SECTION
USH 14
STA 1010+50 TO STA 1019+71
STA 1020+53 TO STA 1031+75

X - POINT REFERRED TO ON CROSS SECTIONS
Y - POINT REFERRED TO ON PROFILE

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TYPICAL SECTIONS | SHEET 11 | E |
|---|---|---|---|---|---|

SEE EROSION CONTROL PLAN FOR RESTORATION TO BE INSTALLED THROUGHOUT THE PROJECT.



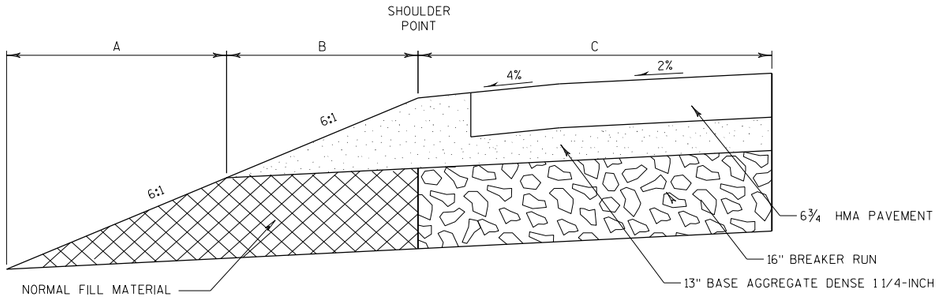

FINISHED TYPICAL SECTION
CTH C
STA 43+50 TO STA 46+05

X - POINT REFERRED TO ON CROSS SECTIONS
Y - POINT REFERRED TO ON PROFILE

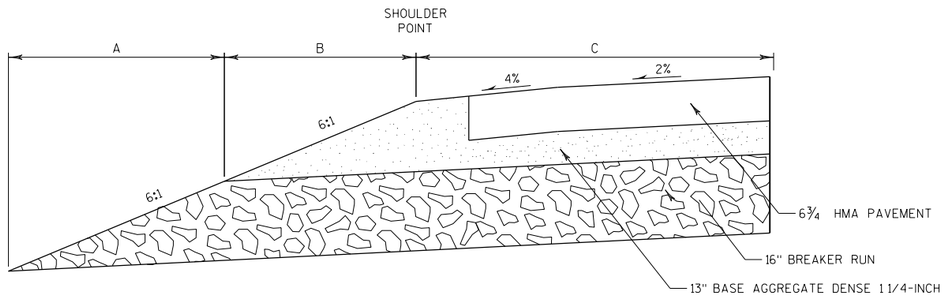
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TYPICAL SECTIONS | SHEET 12 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\020301_ts.DGN PLOT DATE : 11/1/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 10.0000 ' / in.

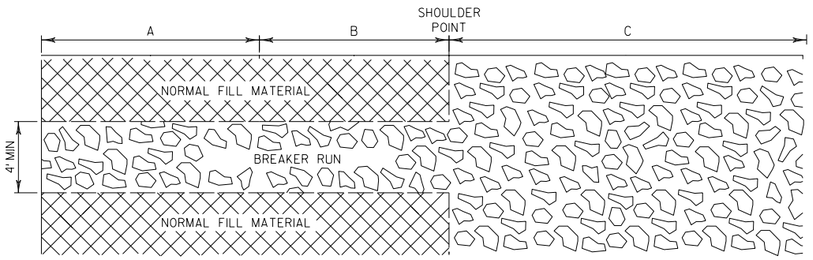
WISDOT/CADDS SHEET 42




TYPICAL HALF SECTION WITHOUT RELIEF TRENCH




TYPICAL HALF SECTION WITH RELIEF TRENCH




RELIEF TRENCH PLAN VIEW

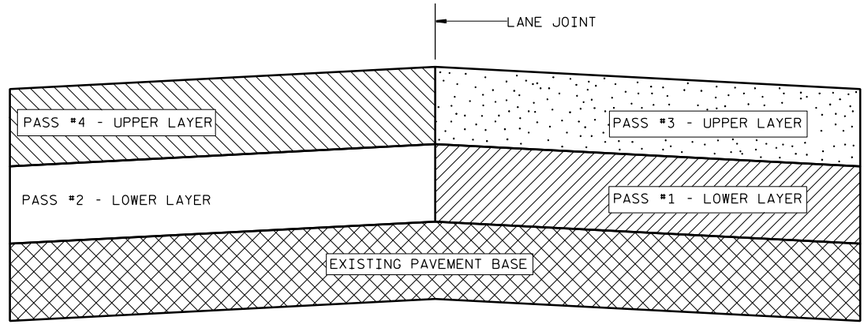
## RELIEF TRENCH

CONSTRUCT RELIEF TRENCH AT:

STA 1011+05, LT & RT (LP)
STA 1013+50, LT & RT
STA 1016+00, LT & RT
STA 1018+50, LT & RT
STA 1021+00, LT & RT
STA 1023+00, RT
STA 1023+50, LT

NOTE:

EXCAVATION FOR RELIEF TRENCHES TO BE PAID UNDER EXCAVATION COMMON

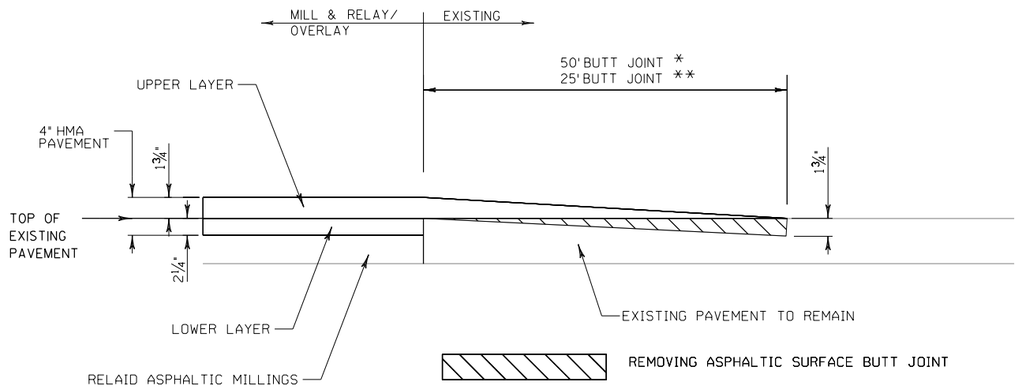



(LOWER AND UPPER LAYERS)

## TYPICAL PAVEMENT CROSS SECTIONS OF LONGITUDINAL JOINTS

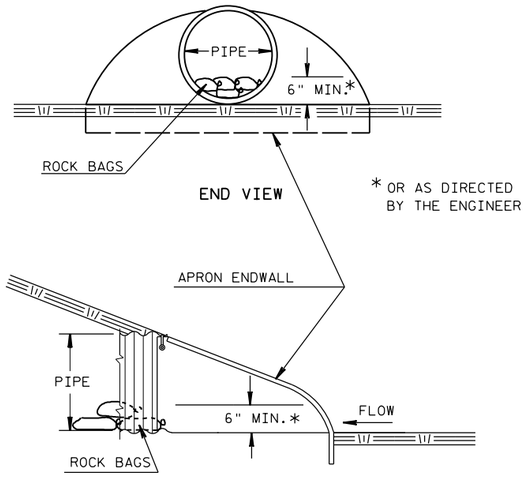
NOTES

1) WHEN THE ROAD IS CLOSED TO TRAFFIC THE LOWER LAYER PASS #1 AND PASS #2 ARE TO BE COMPLETED IN THE SAME DAY FOR THE SECTION OF ROADWAY BEING WORKED ON THAT DAY.
2) WHEN THE ROAD IS CLOSED TO TRAFFIC THE UPPER LAYER PASS #3 AND PASS #4 ARE TO BE COMPLETED IN THE SAME DAY FOR THE SECTION OF ROADWAY BEING WORKED ON THAT DAY.
3) IF THE CONTRACTOR ELECTS NOT TO COMPLETE THE LOWER LAYER OR UPPER LAYER IN THE SAME DAY, A NOTCH AND WEDGE ARE TO BE PLACED ON PASS #1 AND/OR PASS #3 ACCORDING TO STANDARD SPECIFICATION 450.3.2.8. WHEN RESUME PAVING THE CONTRACTOR WILL REMOVE THE NOTCH AND WEDGE PRIOR TO PLACING THE ADJACENT LAYER. ALL COSTS ASSOCIATED WITH PLACING AND REMOVING THE NOTCH AND WEDGE ARE THE RESPONSIBILITY OF THE CONTRACTOR.



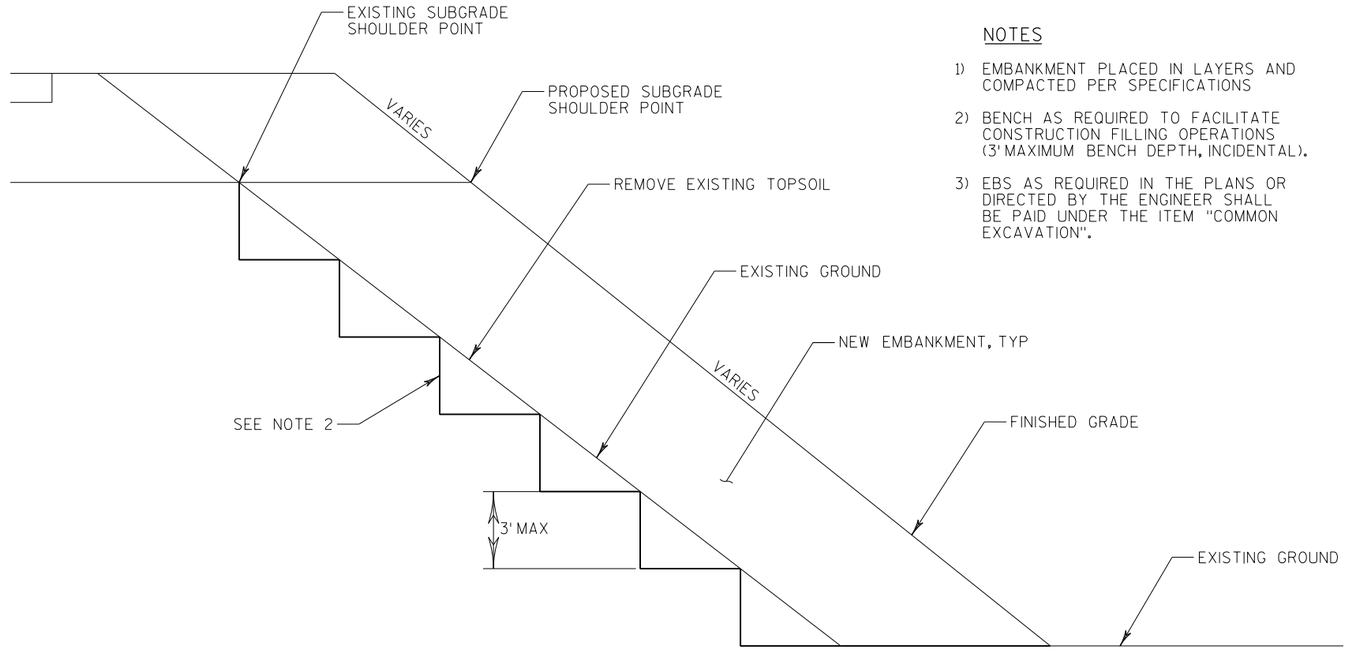

## BUTT JOINT DETAIL

* MAINLINE (NORTH PROJECT LIMITS)
** SIDE ROADS




## CULVERT PIPE CHECKS

| ESTIMATED BAG SIZE = 18" X 12" X 6" | |
|---|---|
| PIPE SIZE | ESTIMATED NUMBER OF BAGS |
| 12" | 1 |
| 15" | 2 |
| 18" | 2 |
| 24" | 3 |
| 30" | 5 |
| 36" | 7 |
| 42" | 7 |
| 48" | 10 |
| 54" | 10 |
| 60" | 13 |
| 66" | 14 |
| 72" | 16 |
| 17"X13" | 2 |
| 30"X19" | 5 |
| 38"X24" | 7 |
| 45"X29" | 10 |
| 53"X34" | 10 |
| 60"X38" | 13 |
| 76"X48" | 18 |

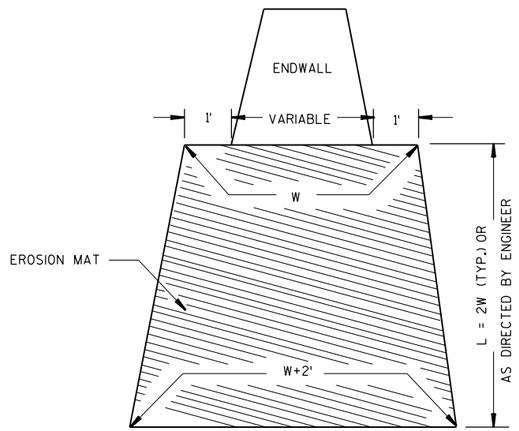



NOTES

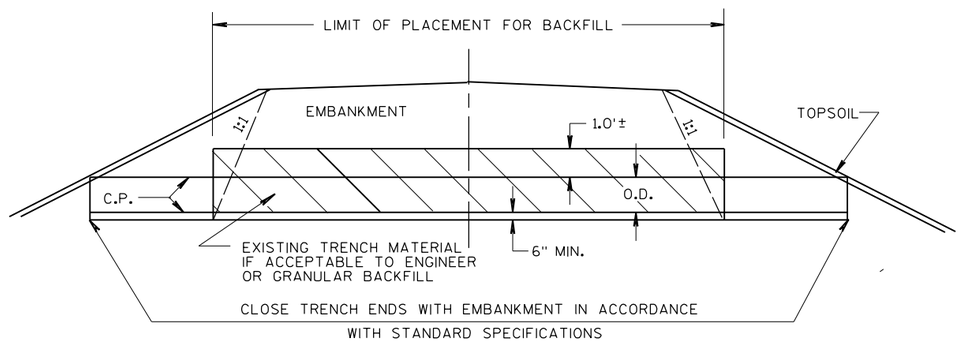
1) EMBANKMENT PLACED IN LAYERS AND COMPACTED PER SPECIFICATIONS
2) BENCH AS REQUIRED TO FACILITATE CONSTRUCTION FILLING OPERATIONS (3' MAXIMUM BENCH DEPTH, INCIDENTAL).
3) EBS AS REQUIRED IN THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE PAID UNDER THE ITEM "COMMON EXCAVATION".

## STEPPED EMBANKMENT

EXISTING EMBANKMENT TO REMAIN
STA 1010+50 TO STA 1019+71
STA 1020+53 TO STA 1031+75

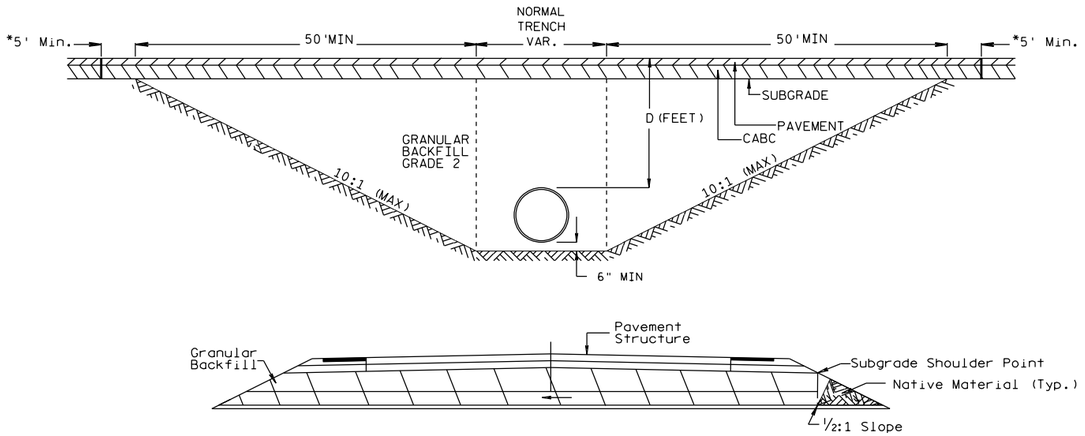



## EROSION MAT TREATMENT AT CULVERTS




## CULVERT BACKFILL DETAIL

STA 972+57, RT (CHRISTIE RD)
STA 981+03, LT & RT
STA 996+79, LT & RT
STA 998+84, LT (SCHOOL SECTION RD)
STA 100+95, LT & RT
STA 1057+65, RT (CREEK RD)
STA 1059+15, LT (CREEK RD)
STA 1063+91, LT & RT

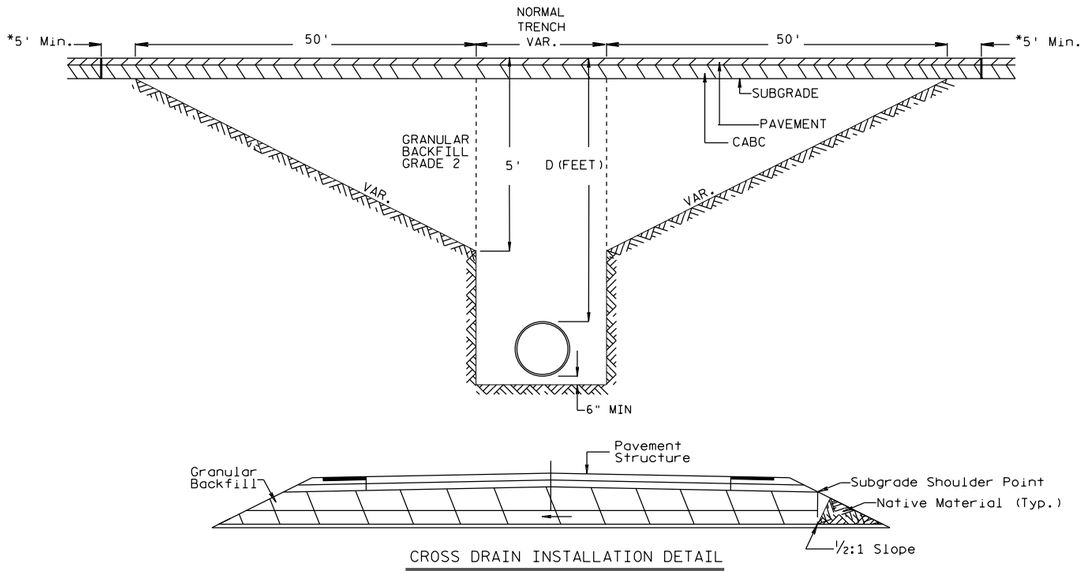



CROSS DRAIN INSTALLATION DETAIL

FOR D ≤ 5'

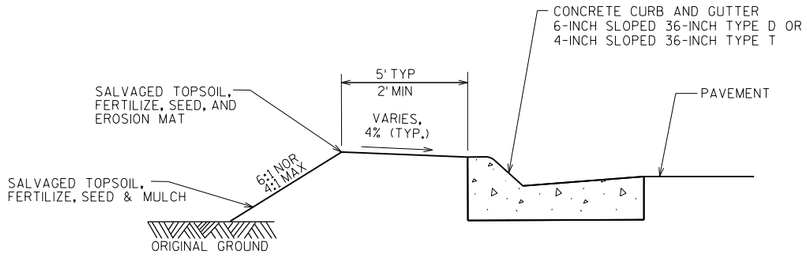
STA 972+57, RT (CHRISTIE RD)
STA 981+03, LT & RT
STA 996+79, LT & RT
STA 998+84, LT (SCHOOL SECTION RD)
STA 100+95, LT & RT
STA 1057+65, RT (CREEK RD)
STA 1059+15, LT (CREEK RD)
STA 1063+91, LT & RT

* Pavement Removal Limits (Typical)

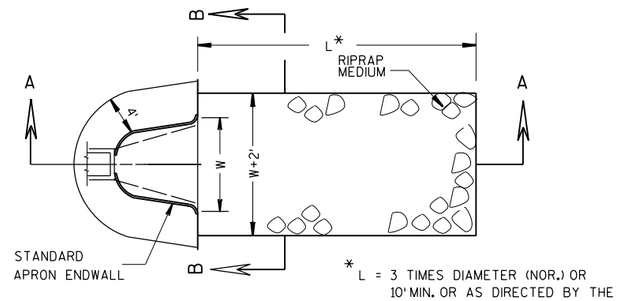



CROSS DRAIN INSTALLATION DETAIL

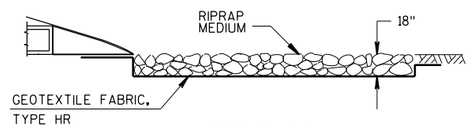
FOR D ≥ 5'



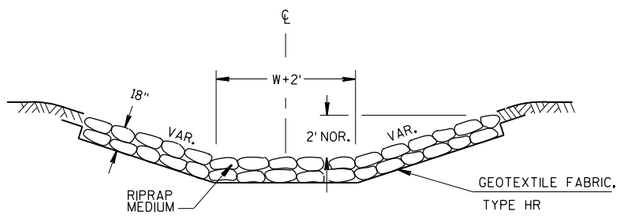

CONCRETE CURB AND GUTTER DETAIL




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

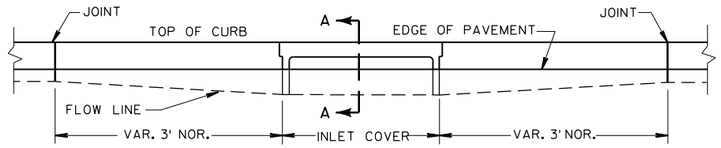



SECTION A-A

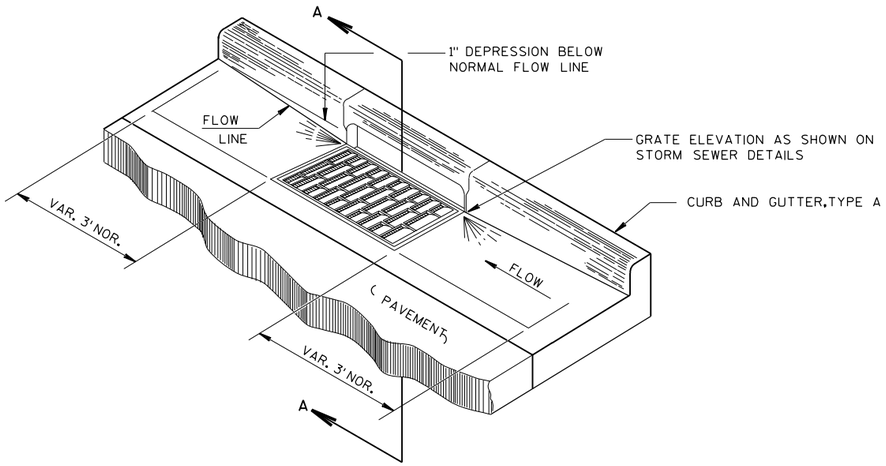


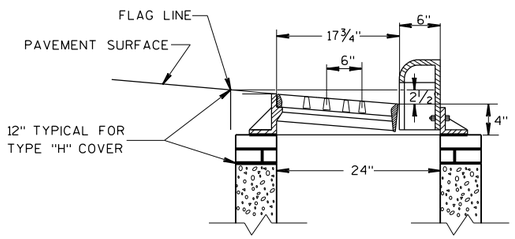

SECTION B-B

RIPRAP AND GEOTEXTILE FABRIC DETAIL
AT APRON ENDWALLS




ELEVATION

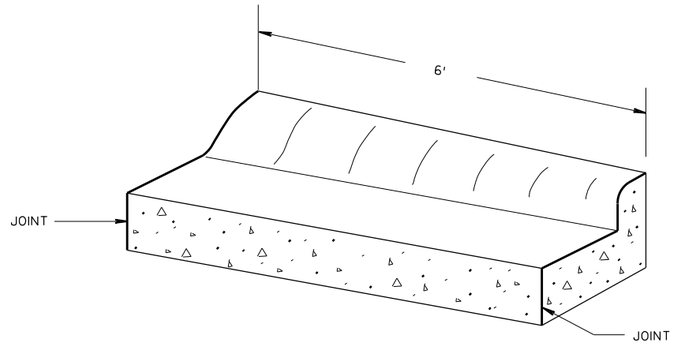



SECTION A-A

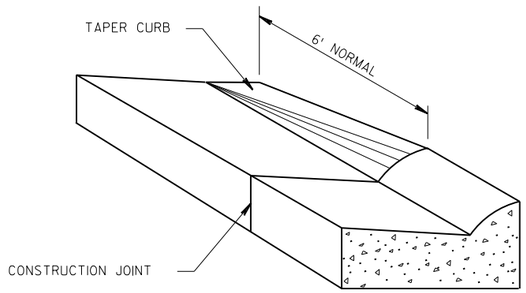
## DETAIL OF CURB AND GUTTER AT INLETS

(TYPE 3-H INLET SHOWN)




## CURB TRANSITION DETAIL

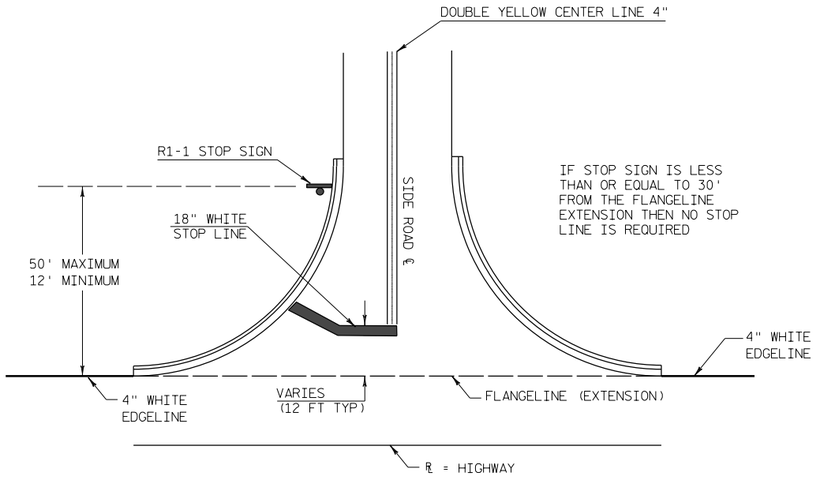
36" TYPE "D" CURB & GUTTER TO 30" TYPE "D" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS 36" CONC. C&G)



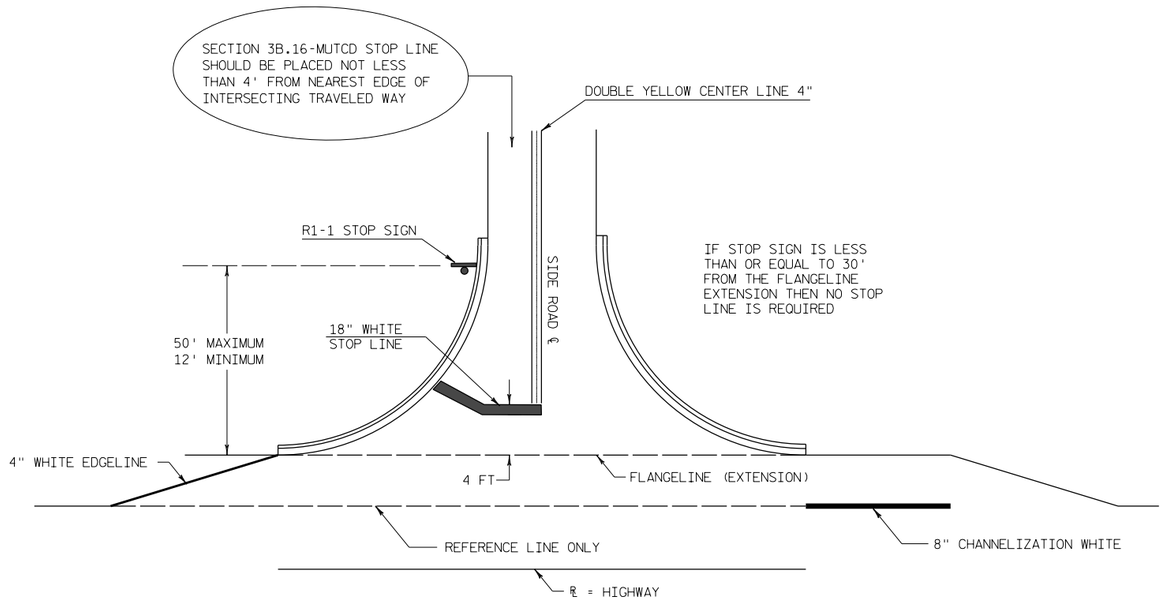

## DETAIL OF CURB & GUTTER TERMINI

NOTE: USE 6 FT TRANSITION FOR
CONCRETE AND ASPHALTIC CURB

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CONSTRUCTION DETAILS | SHEET 16 | E |
|---|---|---|---|---|---|




TYPICAL PAVEMENT MARKING FOR SIDEROADS




TYPICAL PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE

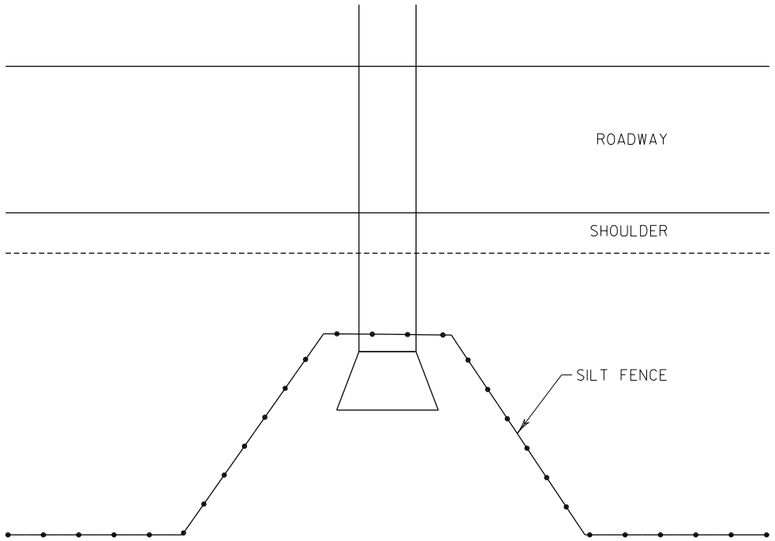
NOTES:

18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

STOP LINES REQUIRED WHERE:

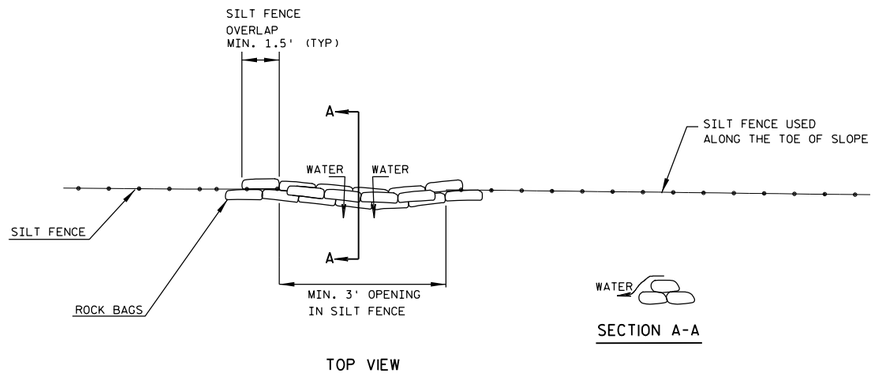
- CROSSWALK MARKINGS EXIST OR BEING PROVIDED
- LARGE RADII
- OFFSET LEFT TURNS WHERE STOP BAR FOR LEFT TURN IS SET BACK FROM THRU MOVEMENT.

2

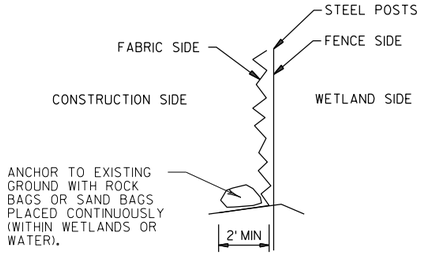


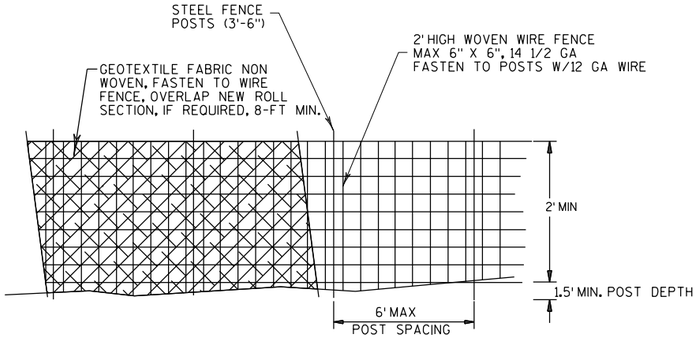

NOTE
SEE SILT FENCE SDD FOR ADDITIONAL INFORMATION.

## TYPICAL SILT FENCE DETAIL AT PIPE INLET




## ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

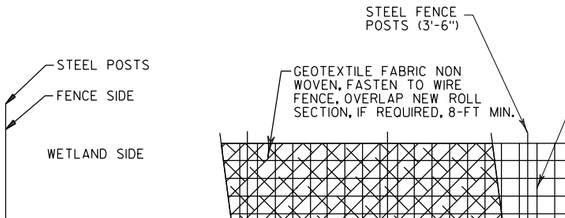



## HEAVY DUTY SILT FENCE

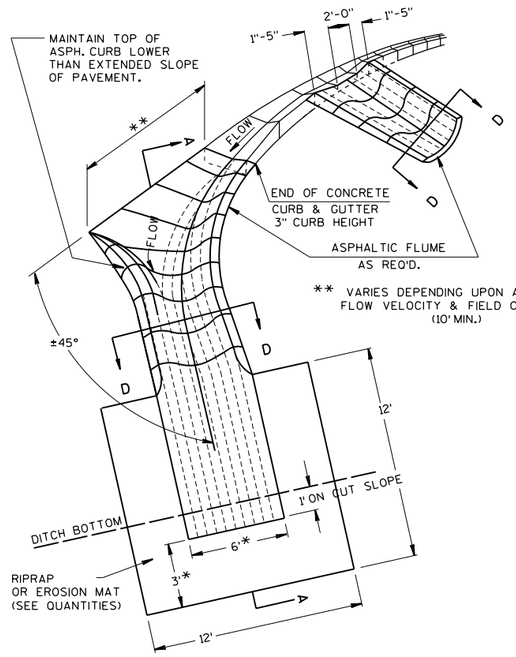
NOTES: **ANCHOR GROTEXTILE FABRIC A MINIMUM OF 6" BELOW GRADE. TRENCH, ANCHOR AND BACKFILL SIMILAR TO REGULAR SILT FENCE INSTALLATION OUTSIDE OF WETLANDS OR WHEN THE GROUND IS DRY ENOUGH FOR TRENCHING. THE CONTRACTOR SHALL NOT BE REQUIRED TO TRENCH IF THE HDSF IS WITHIN STANDING WATER AT THE TIME OF INSTALLATION.**

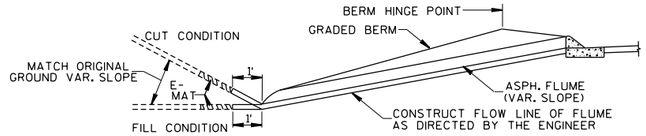
**ANCHOR MATERIAL INCIDENTAL TO HEAVY DUTY SILT FENCE.**



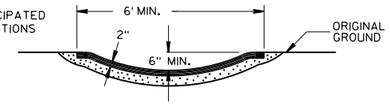

## SLOPED CURB SECTION DETAIL FOR CONCRETE SURFACE DRAINS

STA 1019+33 TO 1019+51 LT/RT



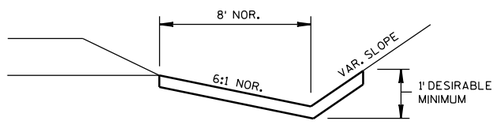




SECTION A-A



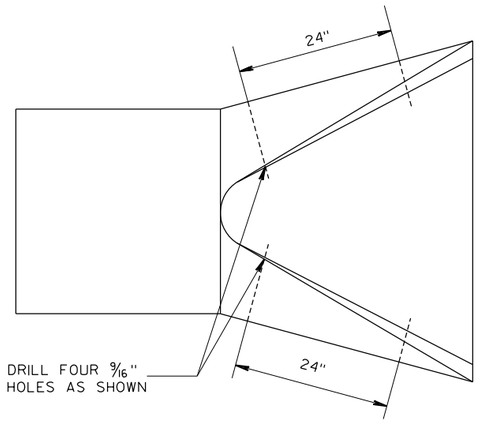

SECTION D-D

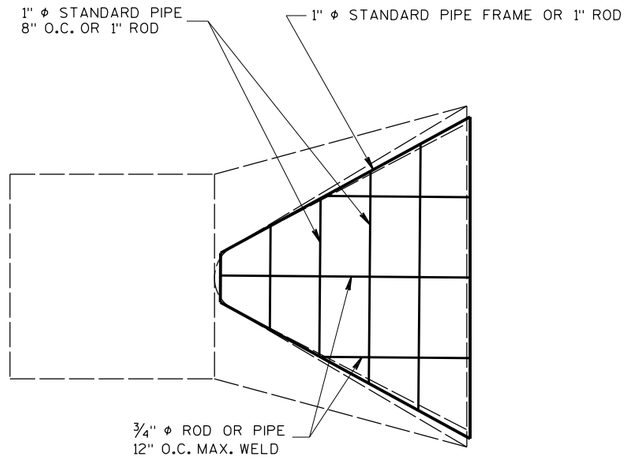
## ASPHALTIC FLUME DETAIL AT RURAL INTERSECTIONS



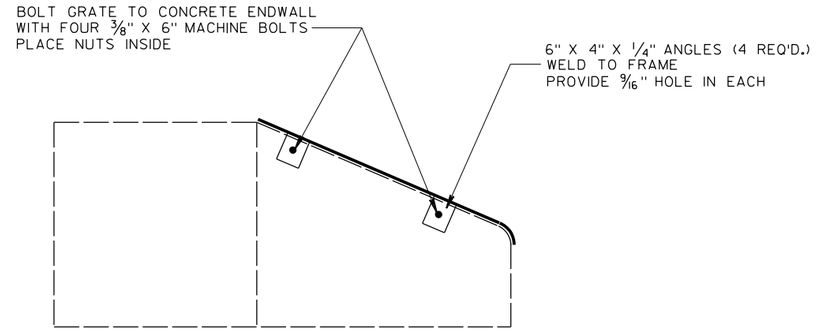

## EROSION MAT DETAIL FOR DITCHES

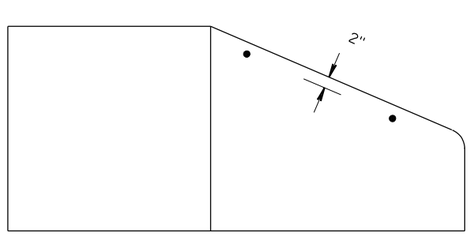
2

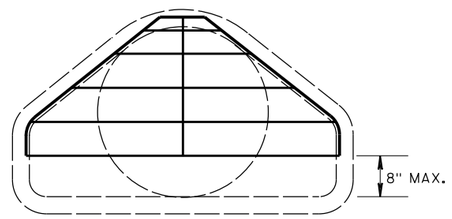



AT EACH PIPE



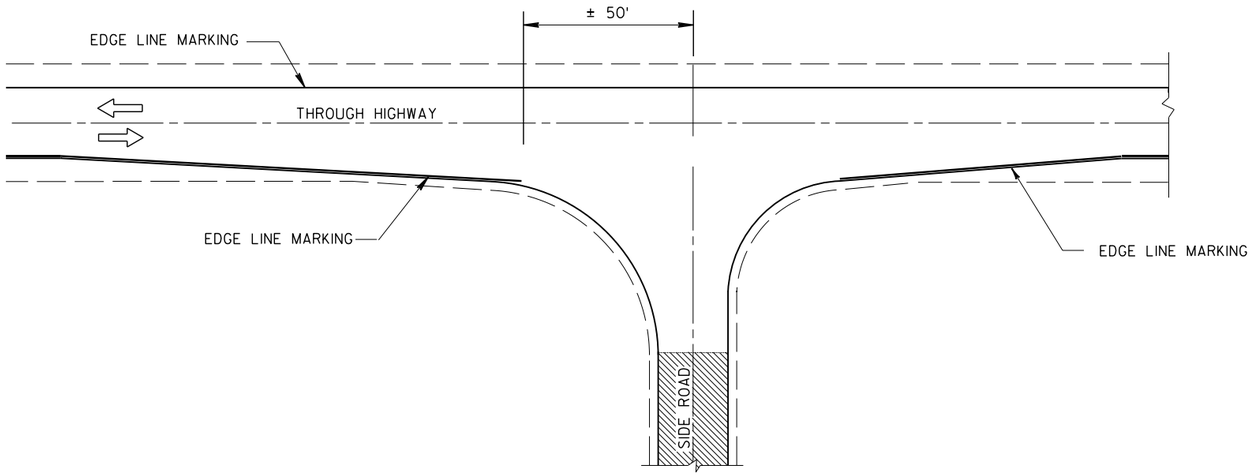



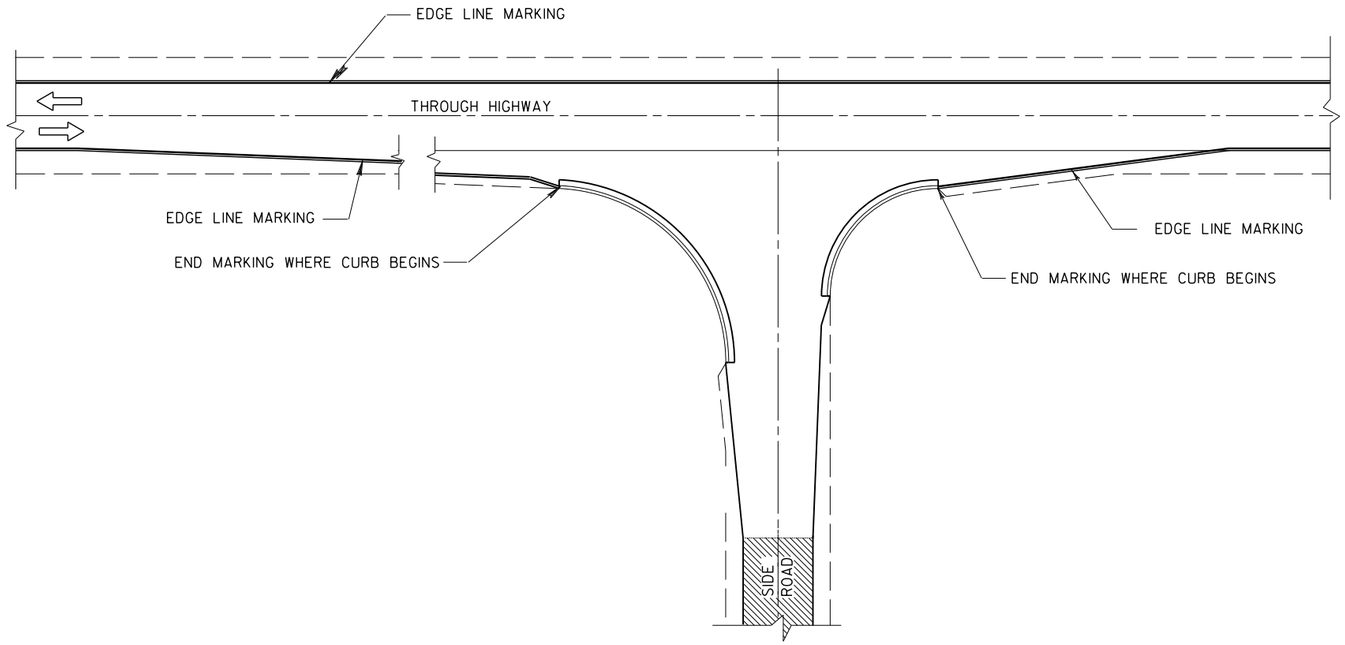

PIPE GRATE DETAIL

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CONSTRUCTION DETAILS | SHEET 20 | E |
|---|---|---|---|---|---|

2




MINOR INTERSECTION WITHOUT CURBS
(TYPICAL MARKING)

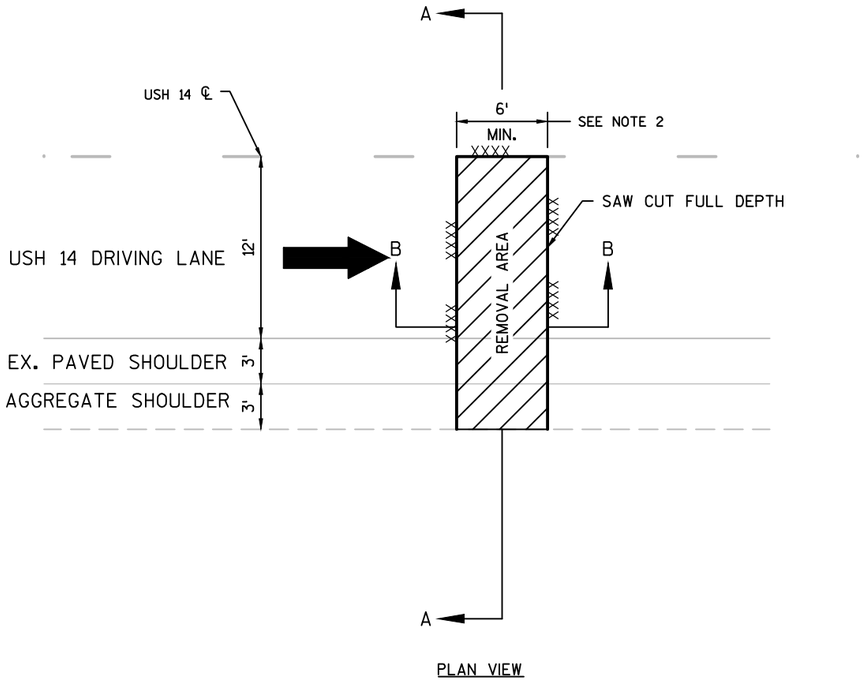



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)

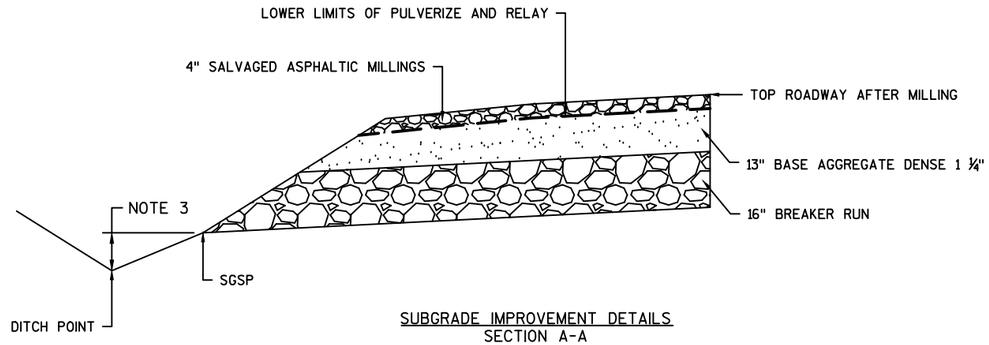
2

NOTES:

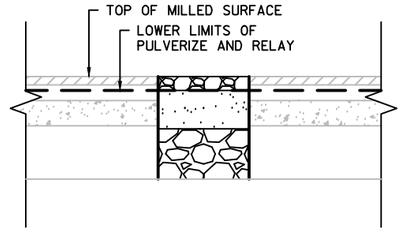
1. SAWCUT AND REMOVE SUBGRADE IMPROVEMENT LIMITS AFTER TOP 2 ½-INCHES OF EXISTING ASPHALTIC PAVEMENT ARE MILLED AND REMOVED.
2. EXACT LIMITS OF SUBGRADE IMPROVEMENT SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. SUBGRADE IMPROVEMENT MAY BE TRANSVERSE OR LONGITUDINAL
3. IF SUBGRADE SHOULDER POINT (SGSP) IS LOWER THAN DITCH POINT OR IF LONGITUDINAL IMPROVEMENT, OMIT OR REDUCE 16" BREAKER RUN SECTION AS DIRECTED BY THE ENGINEER IN THE FIELD.




PLAN VIEW




SUBGRADE IMPROVEMENT DETAILS
SECTION A-A




SUBGRADE IMPROVEMENT DETAILS
SECTION B-B

## SUBGRADE IMPROVEMENT DETAIL

LOCATIONS AS DIRECTED BY THE ENGINEER IN THE FIELD

2

N

MGS GUARDRAIL TERMINAL EAT

+35
30.0' LT

+29
35.0' LT

+06
34.7' LT

+15.5
22.0' LT

+30.6
17.0' LT

MGS GUARDRAIL 3
(2 PANELS OF 12.5')

CONNECT MGS THRIE BEAM TRANSITION
TO SINGLE SLOPE PARAPET 32SS

REMOVING GUARDRAIL

MGS GUARDRAIL 3
(6 PANELS OF 12.5')

MGS GUARDRAIL TERMINAL EAT

POST 1
+36
24.0' LT

POST 5
+61
23.0' LT

POST 9
+86
22.0' LT

POST 9
+88
22.0' LT

POST 5
+13
23.0' LT

POST 1
+38
24.0' LT

+38
30.0' LT

1018 1019 1020 1021 1022 1023

USH 14

℄ USH 14

POST 1
+86
24.0' RT

POST 5
+11
23.0' RT

POST 9
+36
22.0' RT

+86
30.0' RT

MGS GUARDRAIL 3
(6 PANELS OF 12.5')

REMOVING GUARDRAIL

CONCRETE SURFACE DRAIN
SEE CONSTRUCTION DETAIL "SLOPED
CURB SECTION DETAIL FOR CONCRETE
SURFACE DRAINS"

STRUCTURE B-64-191

POST 9
+38
22.0' RT

POST 5
+63
23.0' RT

POST 1
+88
24.0' RT

+88
30.0' RT

MGS GUARDRAIL 3
(2 PANELS OF 12.5')

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL TERMINAL EAT

TURTLE CREEK

NOTES:

1) REFER TO S.D.D. MIDWEST GUARDRAIL SYSTEM (MGS) FOR ADDITIONAL INFORMATION.

2) REFER TO S.D.D MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION FOR ADDITIONAL INFORMATION.

3) REFER TO S.D.D. MIDWEST GUARDRAIL SYSTEM (MGS) TERMINAL FOR ADDITIONAL INFORMATION.

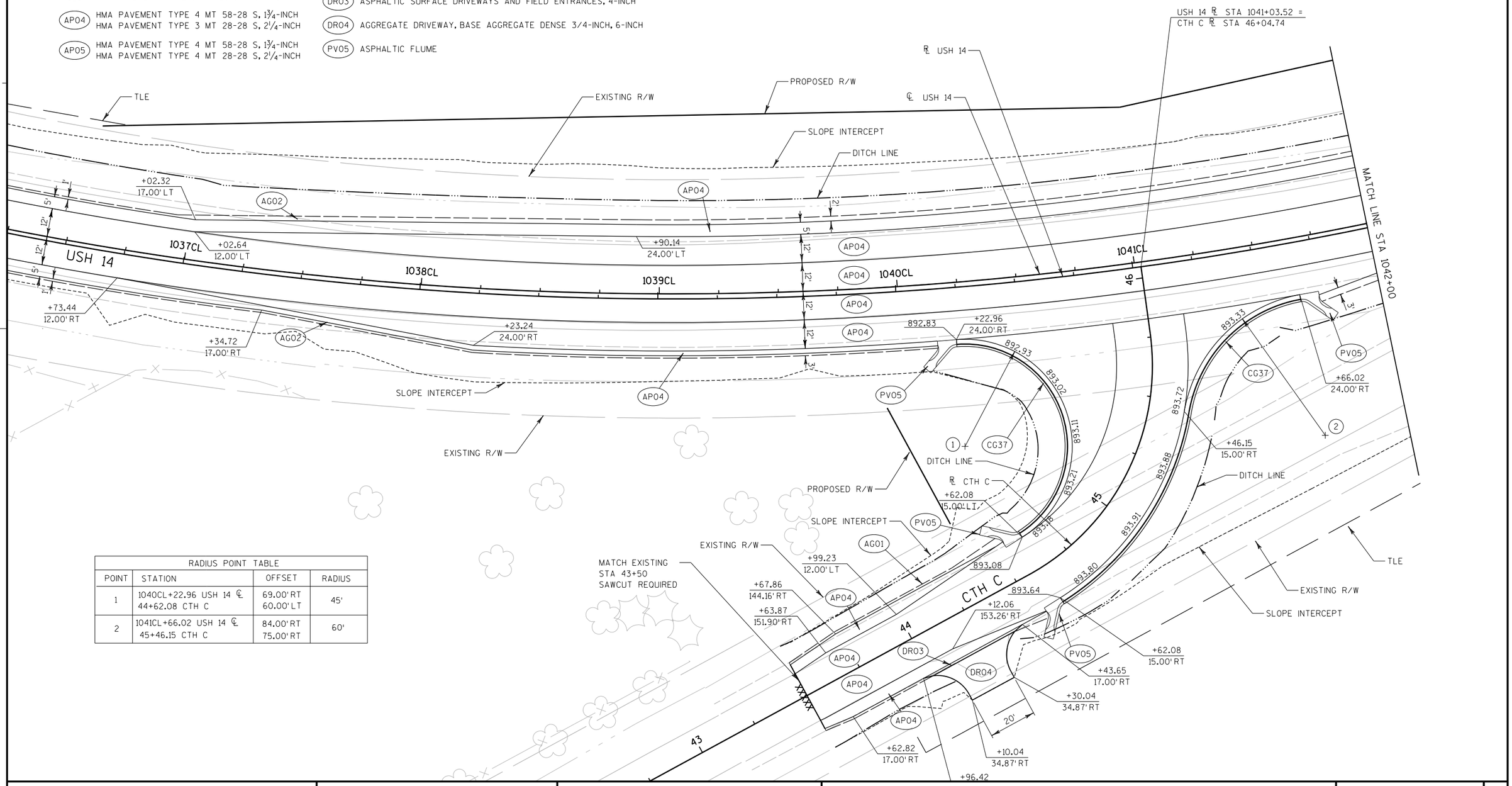
4) REFER TO S.D.D. CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES FOR ADDITIONAL INFORMATION.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CONSTRUCTION DETAILS - BEAM GUARD AT TURTLE CREEK | SHEET 23 | E |
|---|---|---|---|---|---|

LEGEND

- (AG02) SALVAGED PAVEMENT MILLINGS 3/4-INCH OVER BASE AGGREGATE DENSE 3/4-INCH
- (AG03) SALVAGED PAVEMENT MILLINGS ¾-INCH
- (AP03) HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH HMA PAVEMENT TYPE 3 MT 28-28 S, 1¾-INCH
- (AP04) HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH HMA PAVEMENT TYPE 3 MT 28-28 S, 2¼-INCH
- (AP05) HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH HMA PAVEMENT TYPE 4 MT 28-28 S, 2¼-INCH
- (CS04) CONCRETE SIDEWALK 4-INCH
- (CT01) CONCRETE TRUCK APRON 12-INCH & COLORING CONCRETE WISDOT RED
- (CG37) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG38) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE T
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
- (PV05) ASPHALTIC FLUME

NOTE:
FROM STATION 1032+00 TO STATION 1046+34 ALL STATION AND OFFSETS REFERENCE TEH USH 14 CENTERLINE ALIGNMENT (CONSTRUCTION ALIGNMENT), WHICH VARIES FROM 0' TO 2.13' FROM THE USH 14 REFERENCE LINE.




| RADIUS POINT TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | RADIUS |
| 1 | 1040CL+22.96 USH 14 ℄ 44+62.08 CTH C | 69.00' RT 60.00' LT | 45' |
| 2 | 1041CL+66.02 USH 14 ℄ 45+46.15 CTH C | 84.00' RT 75.00' RT | 60' |

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | INTERSECTION DETAILS | SHEET 24 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\021101_id.dgn PLOT DATE : 4/25/2018 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 40.0000 ' / in.

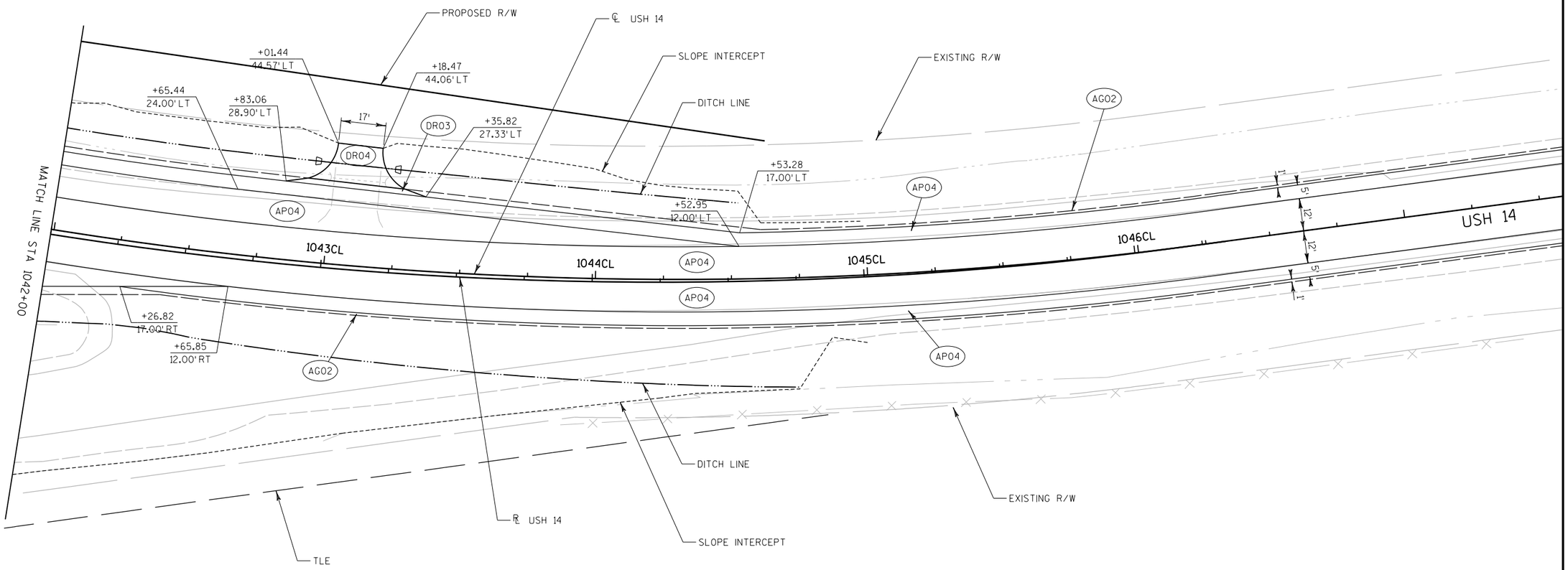
WISDOT/CADDS SHEET 42

LEGEND

- (AG02) SALVAGED PAVEMENT MILLINGS 3/4-INCH OVER BASE AGGREGATE DENSE 3/4-INCH
- (AG03) SALVAGED PAVEMENT MILLINGS ¾-INCH
- (AP03) HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH; HMA PAVEMENT TYPE 3 MT 28-28 S, 1¾-INCH
- (AP04) HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH; HMA PAVEMENT TYPE 3 MT 28-28 S, 2¼-INCH
- (AP05) HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH; HMA PAVEMENT TYPE 4 MT 28-28 S, 2¼-INCH
- (CS04) CONCRETE SIDEWALK 4-INCH
- (CT01) CONCRETE TRUCK APRON 12-INCH & COLORING CONCRETE WISDOT RED
- (CG37) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG38) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE T
- (DR03) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
- (PV05) ASPHALTIC FLUME

NOTE:

FROM STATION 1032+00 TO STATION 1046+34 ALL STATION AND OFFSETS REFERENCE THE USH 14 CENTERLINE ALIGNMENT (CONSTRUCTION ALIGNMENT), WHICH VARIES FROM 0' TO 2.13' FROM THE USH 14 REFERENCE LINE.




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | INTERSECTION DETAILS | SHEET 25 | E |
|---|---|---|---|---|---|

| RADIUS POINT TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | RADIUS |
| 1 | 1056+79.53 USH 14<br>15+08.81 CREEK RD | 51.00' RT<br>51.00' LT | 27' |
| 2 | 1058+40.97 USH 14<br>16+22.21 CREEK RD | 74.00' RT<br>66.00' RT | 50' |
| 3 | 1058+13.27 USH 14<br>16+90.88 CREEK RD | 74.00' LT<br>68.00' LT | 50' |
| 4 | 1059+75.05 USH 14<br>18+04.13 CREEK RD | 50.00' LT<br>50.00' RT | 26' |
| 5 | 1056+75.31 USH 14<br>15+04.19 CREEK RD | 52.76' RT<br>52.19' LT | 24' |
| 6 | 1059+96.78 USH 14<br>18+23.21 CREEK RD | 53.09' LT<br>60.86' RT | 25' |

N

USH 14

CREEK ROAD

SLOPE INTERCEPT

EXISTING R/W

PROPOSED R/W

MATCH EXISTING
STA 14+31.53
SAWCUT REQUIRED

MATCH EXISTING
STA 19+27.54
SAWCUT REQUIRED

SECTION CORNER
TO BE REPLACED

℄ CREEK ROAD

REVERSE
SLOPE

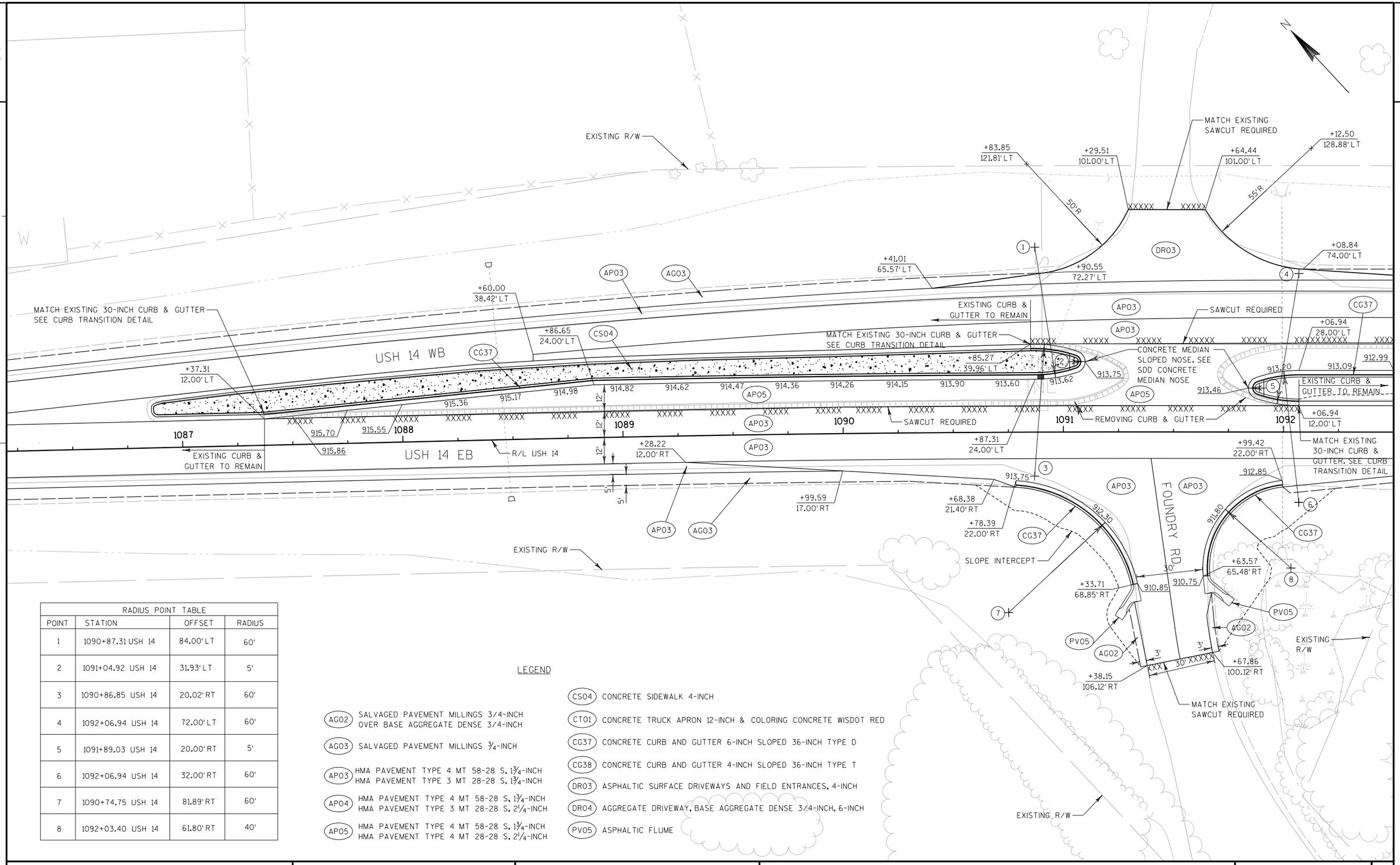
SAWCUT REQUIRED (TYP.)

LEGEND

| | |
|---|---|
| AG02 | SALVAGED PAVEMENT MILLINGS 3/4-INCH OVER BASE AGGREGATE DENSE 3/4-INCH |
| AG03 | SALVAGED PAVEMENT MILLINGS 3/4-INCH |
| AP03 | HMA PAVEMENT TYPE 4 MT 58-28 S, 1 3/4-INCH<br>HMA PAVEMENT TYPE 3 MT 28-28 S, 1 3/4-INCH |
| AP04 | HMA PAVEMENT TYPE 4 MT 58-28 S, 1 3/4-INCH<br>HMA PAVEMENT TYPE 3 MT 28-28 S, 2 1/4-INCH |
| AP05 | HMA PAVEMENT TYPE 4 MT 58-28 S, 1 3/4-INCH<br>HMA PAVEMENT TYPE 4 MT 28-28 S, 2 1/4-INCH |
| CS04 | CONCRETE SIDEWALK 4-INCH |
| CT01 | CONCRETE TRUCK APRON 12-INCH & COLORING CONCRETE WISDOT RED |
| CG37 | CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D |
| CG38 | CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE T |
| DR03 | ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH |
| DR04 | AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH |
| PV05 | ASPHALTIC FLUME |

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | INTERSECTION DETAILS | SHEET 26 | E |
|---|---|---|---|---|---|

2



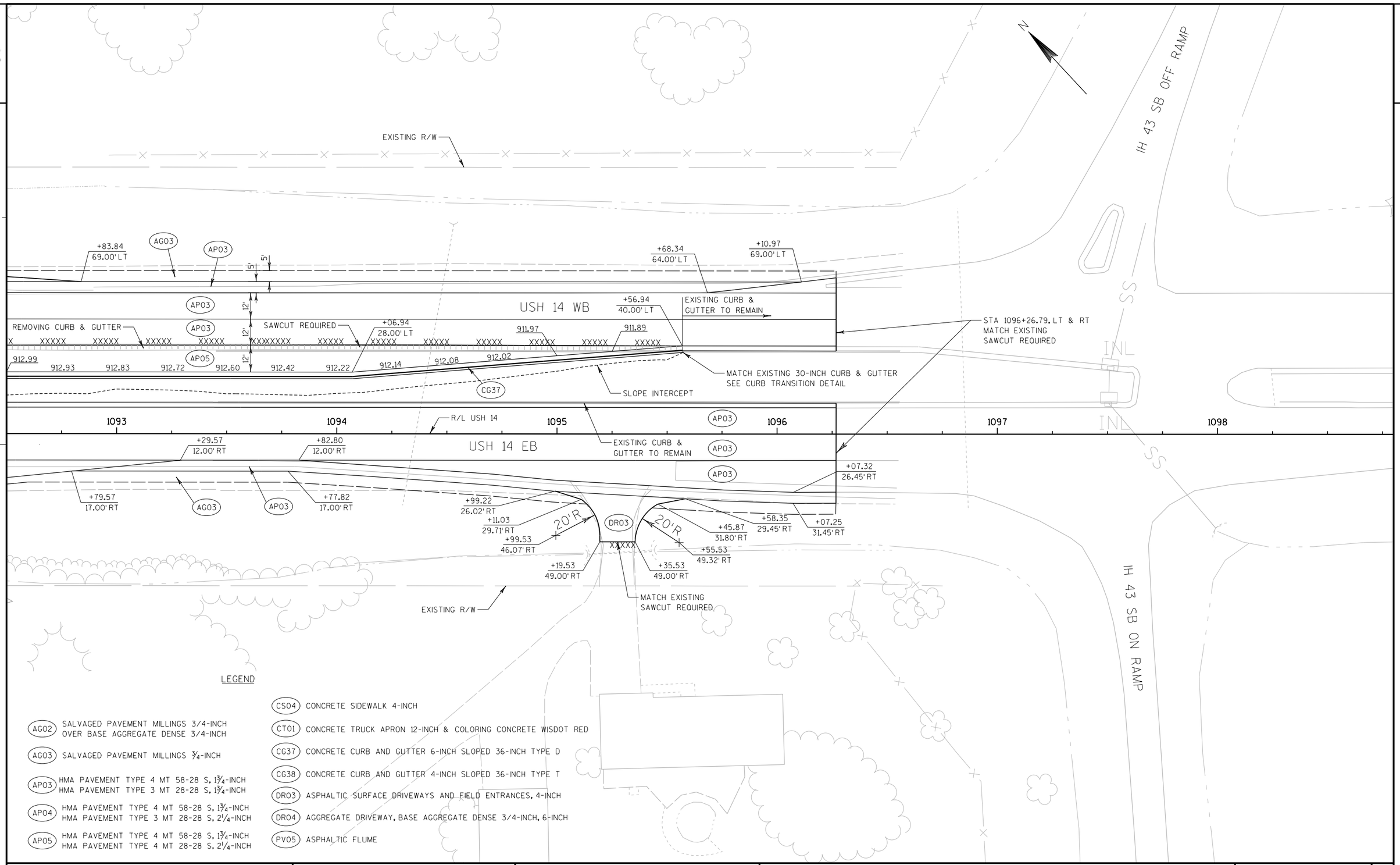

| RADIUS POINT TABLE | | | |
|---|---|---|---|
| POINT | STATION | OFFSET | RADIUS |
| 1 | 1090+87.31 USH 14 | 84.00' LT | 60' |
| 2 | 1091+04.92 USH 14 | 31.93' LT | 5' |
| 3 | 1090+86.85 USH 14 | 20.02' RT | 60' |
| 4 | 1092+06.94 USH 14 | 72.00' LT | 60' |
| 5 | 1091+89.03 USH 14 | 20.00' RT | 5' |
| 6 | 1092+06.94 USH 14 | 32.00' RT | 60' |
| 7 | 1090+74.75 USH 14 | 81.89' RT | 60' |
| 8 | 1092+03.40 USH 14 | 61.80' RT | 40' |

LEGEND

- (AG02) SALVAGED PAVEMENT MILLINGS 3/4-INCH OVER BASE AGGREGATE DENSE 3/4-INCH
- (AG03) SALVAGED PAVEMENT MILLINGS 3/4-INCH
- (AP03) HMA PAVEMENT TYPE 4 MT 58-28 S, 1 3/4-INCH; HMA PAVEMENT TYPE 3 MT 28-28 S, 1 3/4-INCH
- (AP04) HMA PAVEMENT TYPE 4 MT 58-28 S, 1 3/4-INCH; HMA PAVEMENT TYPE 3 MT 28-28 S, 2 1/4-INCH
- (AP05) HMA PAVEMENT TYPE 4 MT 58-28 S, 1 3/4-INCH; HMA PAVEMENT TYPE 4 MT 28-28 S, 2 1/4-INCH
- (CS04) CONCRETE SIDEWALK 4-INCH
- (CT01) CONCRETE TRUCK APRON 12-INCH & COLORING CONCRETE WISDOT RED
- (CG37) CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG38) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE T
- (DRO3) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- (DR04) AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
- (PV05) ASPHALTIC FLUME

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | INTERSECTION DETAILS | SHEET 27 | E |
|---|---|---|---|---|---|

2

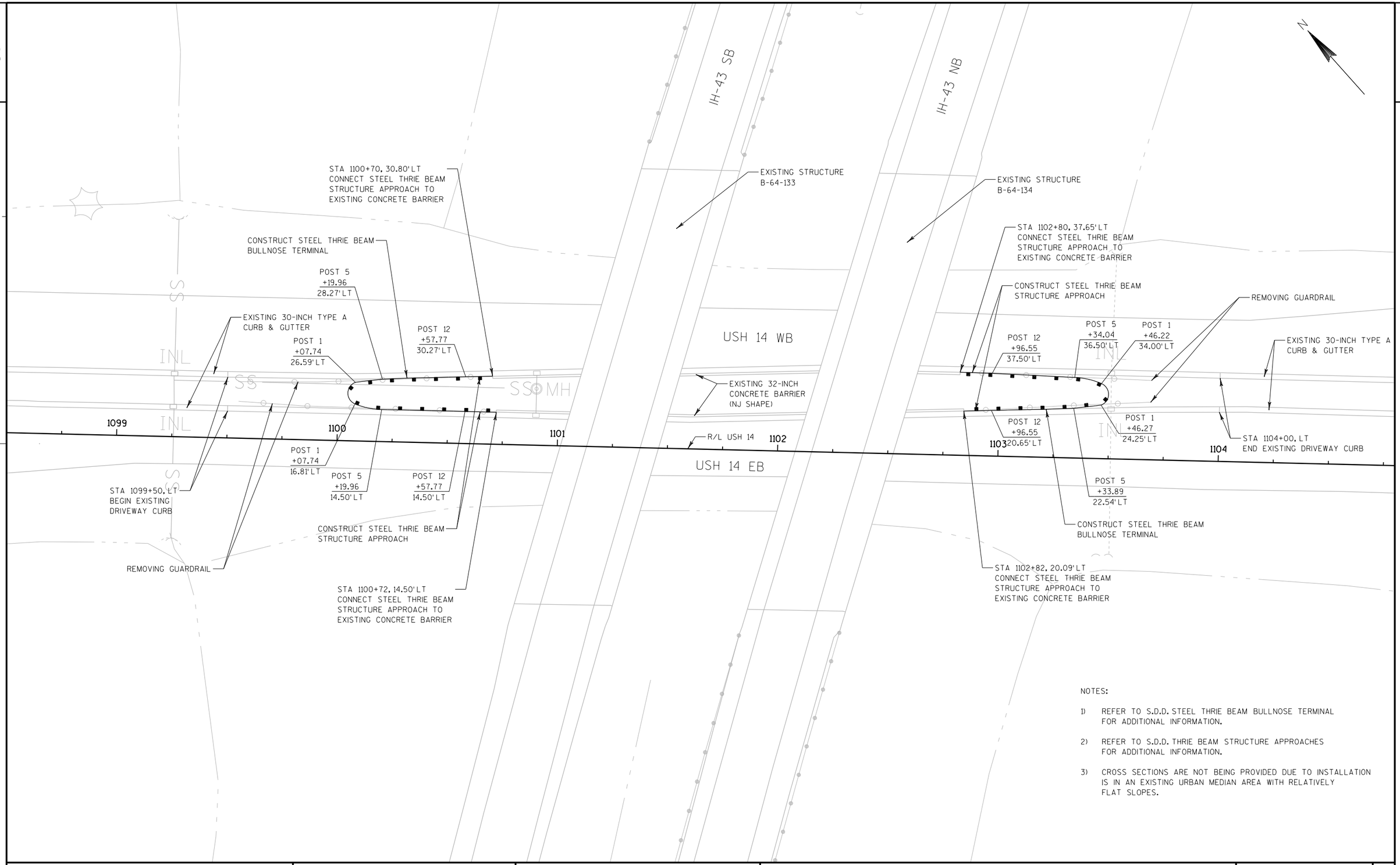



LEGEND

- AG02 — SALVAGED PAVEMENT MILLINGS 3/4-INCH OVER BASE AGGREGATE DENSE 3/4-INCH
- AG03 — SALVAGED PAVEMENT MILLINGS ¾-INCH
- AP03 — HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH; HMA PAVEMENT TYPE 3 MT 28-28 S, 1¾-INCH
- AP04 — HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH; HMA PAVEMENT TYPE 3 MT 28-28 S, 2¼-INCH
- AP05 — HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH; HMA PAVEMENT TYPE 4 MT 28-28 S, 2¼-INCH
- CS04 — CONCRETE SIDEWALK 4-INCH
- CT01 — CONCRETE TRUCK APRON 12-INCH & COLORING CONCRETE WISDOT RED
- CG37 — CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
- CG38 — CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE T
- DR03 — ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
- DR04 — AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
- PV05 — ASPHALTIC FLUME

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | INTERSECTION DETAILS | SHEET 28 | E |
|---|---|---|---|---|---|

2




NOTES:

1) REFER TO S.D.D. STEEL THRIE BEAM BULLNOSE TERMINAL FOR ADDITIONAL INFORMATION.

2) REFER TO S.D.D. THRIE BEAM STRUCTURE APPROACHES FOR ADDITIONAL INFORMATION.

3) CROSS SECTIONS ARE NOT BEING PROVIDED DUE TO INSTALLATION IS IN AN EXISTING URBAN MEDIAN AREA WITH RELATIVELY FLAT SLOPES.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CONSTRUCTION DETAILS - BULLNOSE TERMINAL LAYOUT | SHEET 29 | E |
|---|---|---|---|---|---|

CONSTRUCTION PERMIT/TEMPORARY RIGHT OF ENTY TO BE ACQUIRED FOR CONSTRUCTING GRAVEL PARKING AREA WITHIN STATE OF WISCONSIN CONSERVATION COMMISSION PROPERTY.

N

WETLAND BOUNDARY

SLOPE INTERCEPT - CLEARING AND GRUBBING LIMITS 50 FEET FROM PARKING LOT

SLOPE INTERCEPT GRADING LIMITS

DITCH LINE

+28.27 25.00' RT

58'

+91.34 37.20' RT

1%

872.23

DR04

872.36

℄ DNR

50'

1%

DR04

+09.27 25.00' LT

872.48

1%

1%

PROPOSED TLE

PROPOSED R/W

PROPOSED R/W

+28.27 25.00' LT

+53.00 27.00' LT

15' R

873.24

12'

+33.00 12.00' RT

+53.00 12.00' LT

12'

+33.00 12.00' LT

+33.00 27.00' RT

15' R

15' R

+33.00 27.00' LT

+18.00 27.00' RT

+17.00 37.00' RT

℄ 1.85%

1.85%

SLOPE INTERCEPT

EXISTING R/W

+17.00 37.00' LT

DR03

℄ USH 14

1021 1022 1023 1024 1025 1026 1027

USH 14

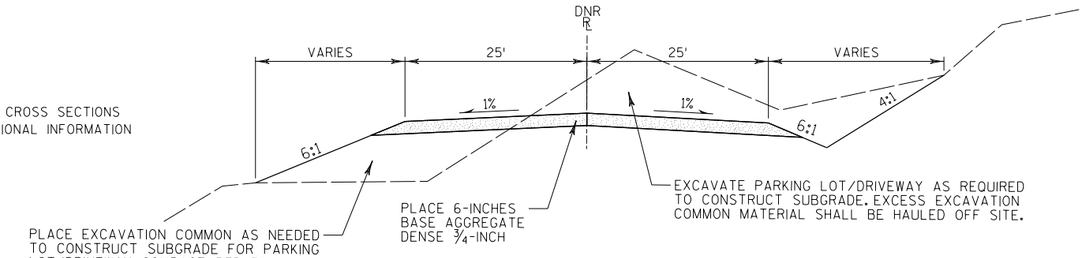
+18.00 27.00' LT

USH 14 ℄ STA 1024+08.20 = DNR PARKING LOT ℄ STA 0+00.00

LEGEND

| | |
|---|---|
| AG02 | SALVAGED PAVEMENT MILLINGS 3/4-INCH OVER BASE AGGREGATE DENSE 3/4-INCH |
| AG03 | SALVAGED PAVEMENT MILLINGS ¾-INCH |
| AP03 | HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH HMA PAVEMENT TYPE 3 MT 28-28 S, 1¾-INCH |
| AP04 | HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH HMA PAVEMENT TYPE 3 MT 28-28 S, 2¼-INCH |
| AP05 | HMA PAVEMENT TYPE 4 MT 58-28 S, 1¾-INCH HMA PAVEMENT TYPE 4 MT 28-28 S, 2¼-INCH |
| CS04 | CONCRETE SIDEWALK 4-INCH |
| CT01 | CONCRETE TRUCK APRON 12-INCH & COLORING CONCRETE WISDOT RED |
| CG37 | CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D |
| CG38 | CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE T |
| DR03 | ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH |
| DR04 | AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH |
| PV05 | ASPHALTIC FLUME |

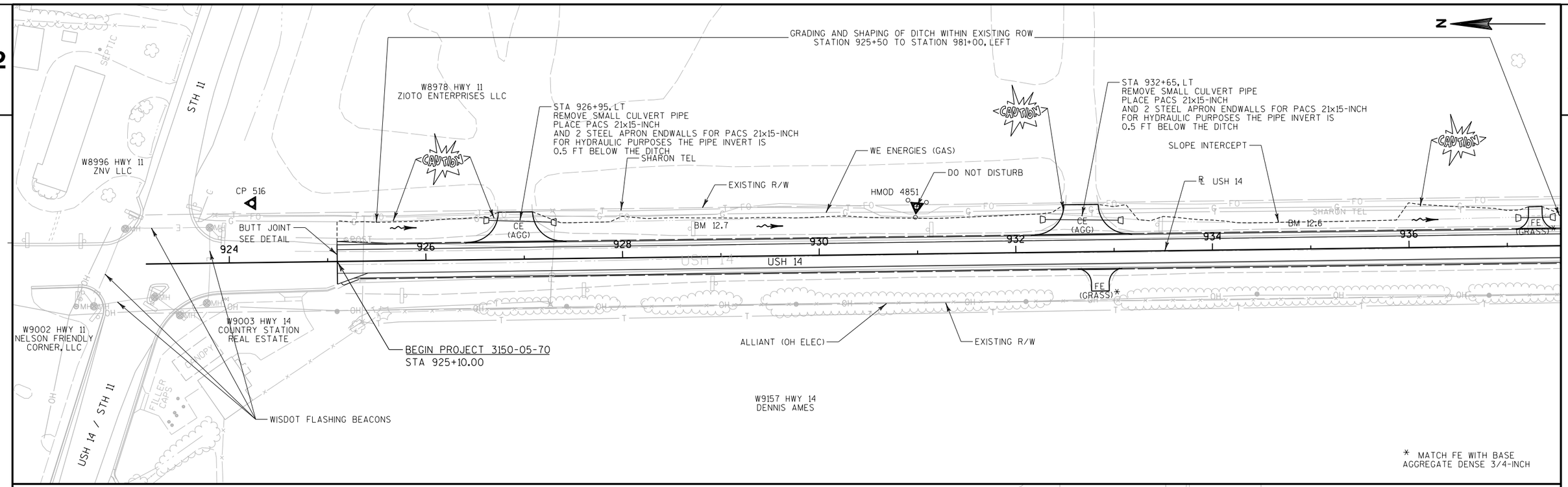
NOTE: SEE CROSS SECTIONS FOR ADDITIONAL INFORMATION

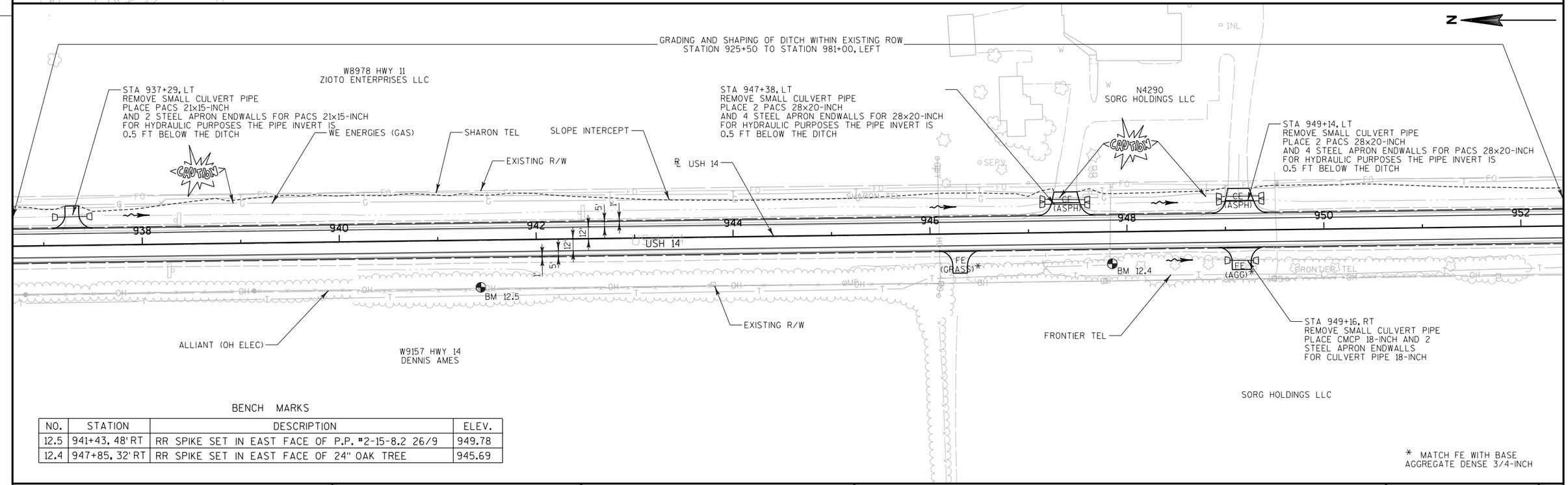



SECTION A-A

DNR PARKING LOT (NOT TO SCALE)

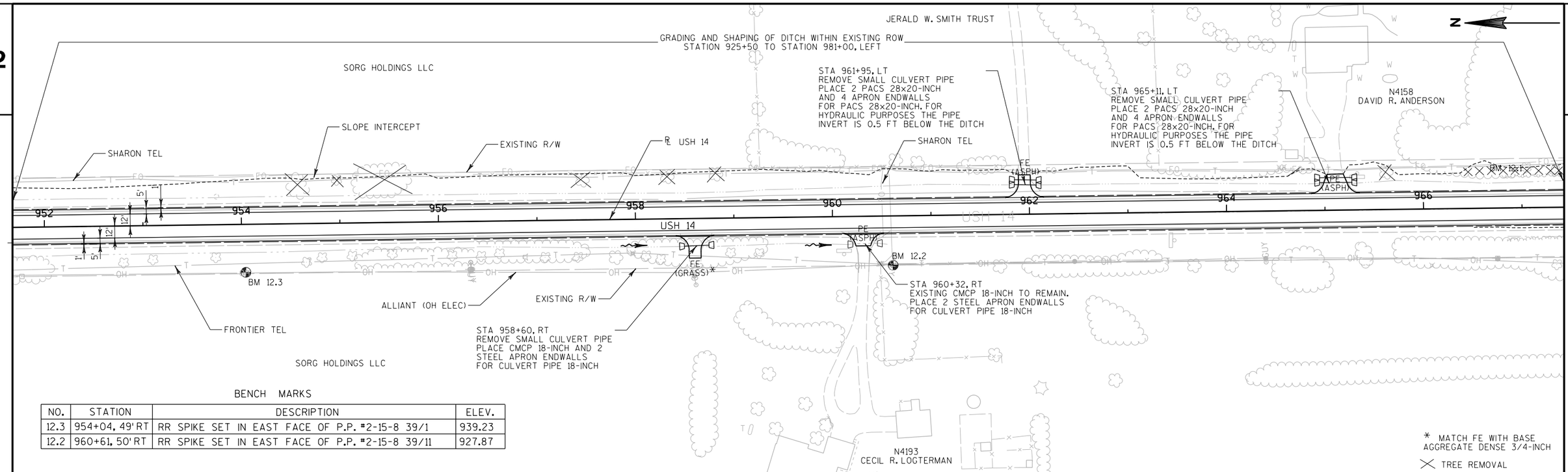
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CONSTRUCTION DETAILS - DNR PARKING LOT | SHEET 30 | E |
|---|---|---|---|---|---|



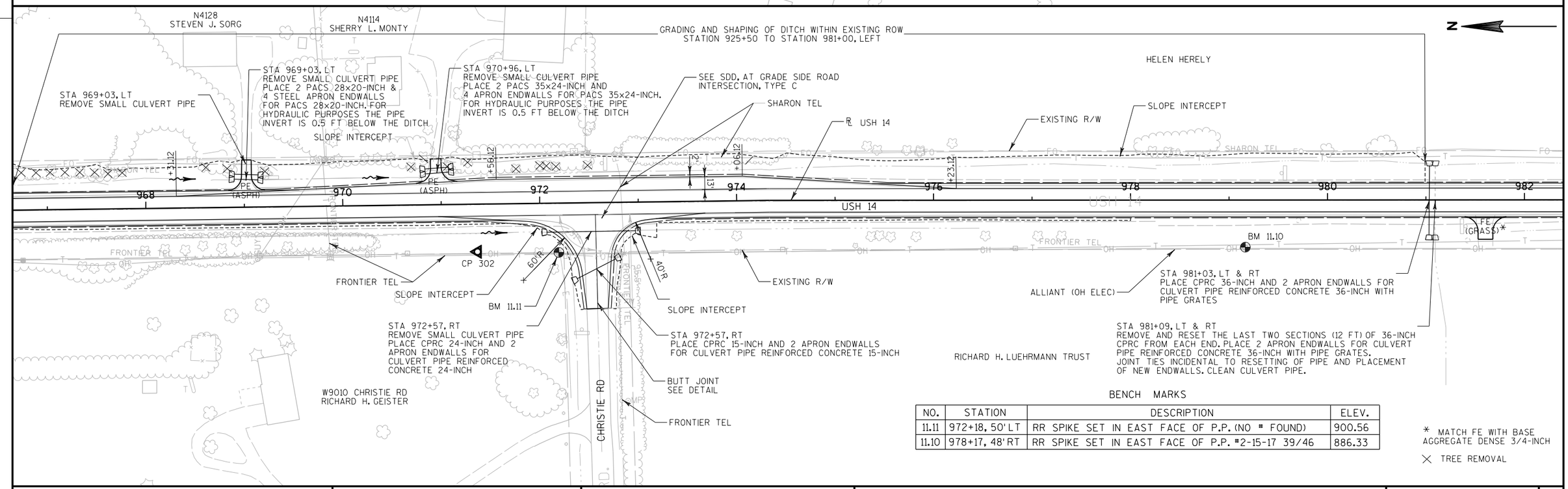

BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 12.5 | 941+43, 48' RT | RR SPIKE SET IN EAST FACE OF P.P. #2-15-8.2 26/9 | 949.78 |
| 12.4 | 947+85, 32' RT | RR SPIKE SET IN EAST FACE OF 24" OAK TREE | 945.69 |




BENCH MARKS

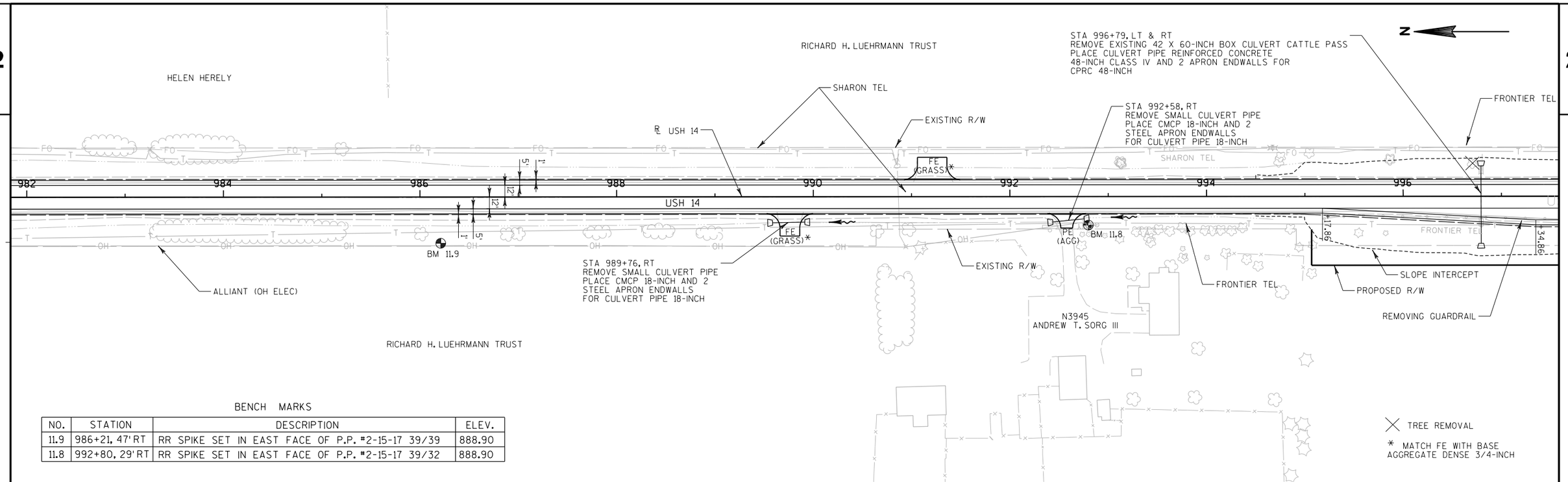
| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 12.3 | 954+04, 49' RT | RR SPIKE SET IN EAST FACE OF P.P. #2-15-8 39/1 | 939.23 |
| 12.2 | 960+61, 50' RT | RR SPIKE SET IN EAST FACE OF P.P. #2-15-8 39/11 | 927.87 |




BENCH MARKS

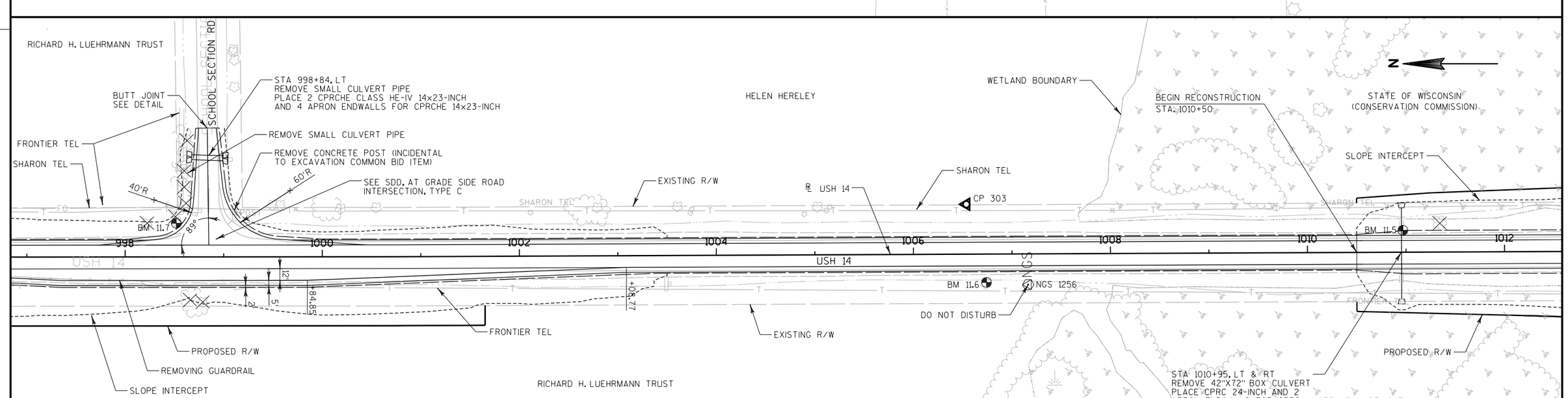
| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 11.11 | 972+18, 50' LT | RR SPIKE SET IN EAST FACE OF P.P. (NO # FOUND) | 900.56 |
| 11.10 | 978+17, 48' RT | RR SPIKE SET IN EAST FACE OF P.P. #2-15-17 39/46 | 886.33 |

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PLAN DETAILS | SHEET 32 | E |
|---|---|---|---|---|---|




BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 11.9 | 986+21, 47' RT | RR SPIKE SET IN EAST FACE OF P.P. #2-15-17 39/39 | 888.90 |
| 11.8 | 992+80, 29' RT | RR SPIKE SET IN EAST FACE OF P.P. #2-15-17 39/32 | 888.90 |




BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 11.7 | 998+52, 34' LT | RR SPIKE SET IN WEST FACE OF 30" DIA. OAK TREE | 875.47 |
| 11.6 | 1006+74, 29' RT | RR SPIKE SET IN EAST FACE OF 48" DIA. OAK TREE | 870.14 |
| 11.5 | 1010+97, 22' LT | CHISLED "U" ON TOP OF THE SOUTH SIDE OF BOX CULVERT | 865.28 |

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PLAN DETAILS | SHEET 33 | E |
|---|---|---|---|---|---|

CONSTRUCTION PERMIT/TEMPORARY RIGHT OF ENTY TO BE ACQUIRED FOR CONSTRUCTING GRAVEL PARKING AREA WITHIN STATE OF WISCONSIN CONSERVATION COMMISSION PROPERTY.

STATE OF WISCONSIN (CONSERVATION COMMISSION)

STATE OF WISCONSIN (CONSERVATION COMMISSION)

INSTALL MGS GUARDRAIL TERMINAL EAT MGS GUARDRAIL 3 MGS THRIE BEAM TRANSITION

ROBERT C. HANSEN

SLOPE INTERCEPT (CLEARING & GRUBBING)

REMOVE TREES IN PROPOSED PARKING LOT

SLOPE INTERCEPT (GRADING)

SHARON TEL

℄ USH 14

INSTALL MGS GUARDRAIL TERMINAL EAT MGS GUARDRAIL 3 MGS THRIE BEAM TRANSITION

TLE

SHARON TEL

BM 11.4

EXISTING R/W

1012 1014 1016 1018 1020 1022 1024 1026

USH 14

USH 14

BM 660

FRONTIER TEL

FRONTIER TEL

STRUCTURE B-64-191

INSTALL MGS GUARDRAIL TERMINAL EAT MGS GUARDRAIL 3 MGS THRIE BEAM TRANSITION

STA 1022+93, RT REMOVE SMALL PIPE CULVERT PLACE CMCP 24-INCH AND 2 STEEL APRON ENDWALLS FOR CULVERT PIPE 24-INCH

STA 1024+08, LT PLACE 2 PACS 42x29-INCH AND 4 APRON ENDWALLS FOR PACS 42x29-INCH

EXISTING R/W

FRONTIER TEL

SLOPE INTERCEPT

PROPOSED R/W

INSTALL MGS GUARDRAIL TERMINAL EAT MGS GUARDRAIL 3 MGS THRIE BEAM TRANSITION

TLE

TURTLE CREEK

WETLAND BOUNDARY

GERALD W. PELISHEK

INSTALL CONCRETE SURFACE DRAIN

TREE REMOVAL

BENCH MARKS

| NO. | STATION | | DESCRIPTION | ELEV. |
|---|---|---|---|---|
| 11.4 | 1017+95, 39' LT | RR SPIKE SET | IN 30" DIA. BIRCH TREE | 866.98 |
| 660 | 1019+82, 23' RT | CHSL BOX NW | CORNER N ABUTMENT | 867.09 |

OBLITERATE OLD ROAD

ROBERT C. HANSEN

CONCRETE CURB AND GUTTER 6-INCH SLOPED, 36-INCH TYPE D

SEE INTERSECTION DETAILS

PROPOSED R/W

TLE

SHARON TEL

EXISTING R/W

℄ USH 14

1028 1030 1032 1034 1036 1038 1040 1042

USH 14

TLE

SHARON TEL

SLOPE INTERCEPT

PROPOSED R/W

SLOPE INTERCEPT

TLE

END RECONSTRUCTION STA. 1031+75

EXISTING R/W

FRONTIER TEL

NGS 1255

NGS 1253

NGS 1254

ROBERT C. HANSEN

DO NOT DISTURB

GERALD W. PELISHEK

PROPOSED R/W

45'R

60'R

90°

45

43

42

ALLIANT (OH ELEC)

EXISTING R/W

SLOPE INTERCEPT

℄ CTH C

CTH C

TLE

MAURICE SCHMID TRUST

TREE REMOVAL

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PLAN DETAILS | SHEET 34 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\021204_pd.dgn PLOT DATE : 4/24/2018 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 100.0000 ' / in.

2

OBLITERATE OLD ROAD

PROPOSED R/W

REMOVE SMALL CULVERT PIPE
PLACE CMCP 18-INCH AND 2
STEEL APRON ENDWALLS FOR
CULVERT PIPE 18-INCH

SLOPE INTERCEPT

SHARON TEL

EXISTING R/W

℄ USH 14

EXISTING CMCP 18-INCH
TO REMAIN

ROBERT C. HANSEN

ROBERT C. HANSEN TRUST

1042 1044 1046 1048 1050 1052 1054 1056

USH 14

FE (GRASS) *

BM 10.11

TLE

ALLIANT (OH ELECTRIC)

EXISTING R/W

BM 10.10

FRONTIER TEL

BM 10.9

TOWN OF DARIEN

REPLACE SECTION CORNER
SEE ALIGNMENT PLAN

EXISTING R/W

CREEK RD

MARY K. HUISHEERE

EXISTING R/W

MAURICE SCHMID TRUST

* MATCH FE WITH BASE
AGGREGATE DENSE 3/4-INCH

BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 10.11 | 1043+17, 64' RT | RR SPIKE SET IN WEST FACE OF P.P. (NO # FOUND) | 891.69 |
| 10.10 | 1048+34, 48' RT | RR SPIKE SET IN EAST FACE OF P.P. (NO # FOUND) | 892.37 |
| 10.9 | 1053+60, 47' RT | RR SPIKE SET IN EAST FACE OF P.P. (NO # FOUND) | 893.44 |

EXISTING R/W

ROBERT C. HANSEN TRUST

PROPOSED R/W

SLOPE INTERCEPT

ATC (OH ELEC)

W8861 CREEK RD

CAUTION

ALLIANT (OH ELEC)

PLACE 2 CPRCHE CLASS HE-IV
14x23-INCH AND 4 APRON ENDWALLS
FOR CPRCHE 14x23-INCH

SLOPE INTERCEPT

DARIEN INVESTMENTS, LLC

MICHAEL SMILEY

CREEK RD

PROPOSED R/W

PRIVATE ELECTRICAL POWER STATIONS (TYP)
(TO BE REMOVED/RELOCATED BY OTHERS)

EXISTING R/W

REMOVE SMALL
CULVERT PIPE

℄ USH 14

N3450

SHARON TEL

1058 1060 1062 1064 1066 1068 1070 1072

USH 14

CP 301

BM 10.8

ATC (OH ELEC)

CAUTION

GRADE AROUND EXISTING ATC POWER POLE

PROPOSED R/W

FRONTIER TEL

ALLIANT (OH ELECTRIC)

EXISTING CMCP 18-INCH
TO REMAIN

BM 10.7

EXISTING CMCP 18-INCH
TO REMAIN

EXISTING R/W

PLACE 2 CPRCHE CLASS HE-IV 14x23-INCH
AND 4 APRON ENDWALLS FOR CPRCHE 14x23-INCH

STA 1063+91, LT & RT
REMOVE EXISTING 42"X72" BOX CULVERT
PLACE CULVERT PIPE, REINFORCED CONCRETE
24-INCH AND 2 APRON ENDWALLS FOR
CPRC 24-INCH

MARY H. HUISHEERE

N3439

℄ CREEK RD

EXISTING R/W

ALLIANT (OH ELEC)

MARY H. HUISHEERE

BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 10.8 | 1061+18, 47' RT | RR SPIKE SET IN EAST FACE OF P.P. #2-15-21 4/24 | 897.90 |
| 10.7 | 1068+37, 49' RT | RR SPIKE SET IN WEST FACE OF P.P. #2-15-21 9/19 | 920.83 |

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PLAN DETAILS | SHEET 35 | E |
|---|---|---|---|---|---|

BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 10.6 | 1074+74.48'RT | RR SPIKE SET IN WEST FACE OF P.P.(NO # FOUND) | 921.74 |

NORTH ROAD FARMS LLC

EXISTING GATE HAS BEEN IDENTIFIED AS AN ENCREACHMENT. PROPERTY OWNER ISSUED A REVOCABLE PERMIT FOR IT TO REMAIN AT CURRENT LOCATION.

N3368
STEVEN S. WALTER

END MILL AND RELAY
BEGIN RESURFACING
STA 1079+52.45

EXISTING 15" CMCP TO REMAIN

EXISTING 18" CMCP TO REMAIN

MARY H. HUISHEERE

SHARON TEL

EXISTING R/W

GATE

BOULDERS

CE (AGG)

PE (ASPH)

CE (ASPH)

1072 1074 1076 1078 1080 1082 1084 1086

USH 14

BM 10.6

BM 10.5

R USH 14

EXISTING R/W

FRONTIER TEL

ALLIANT (OH ELECTRIC)

EXISTING 4" HDPE PIPE TO REMAIN. REMOVE AND REPLACE 4-INCH CONCRETE APRON ENDWALLS.

WE ENERGIES (GAS)

EXISTING 4" HDPE PIPE TO REMAIN. REMOVE AND REPLACE 4-INCH CONCRETE APRON ENDWALLS

EXISTING TWIN 18" CMCP TO REMAIN

MARY H. HUISHEERE

WALWORTH FOUNDRIES INC

N3359

BENCH MARKS

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 10.3 | 1094+31.115'RT | RR SPIKE SET IN WEST FACE OF P.P. #2-121 30/2 | 908.76 |

N3320
TODD J. BROWN

N3368
STEVEN S. WALTER

EXISTING 4" HDPE PIPE TO REMAIN. REMOVE AND REPLACE 4-INCH CONCRETE APRON ENDWALLS

EXISTING 4" HDPE TO REMAIN

EXISTING 12" CPRC TO REMAIN

EXISTING 18" CMCP TO REMAIN

ALLIANT (OH ELECTRIC)

EXISTING R/W

FRONTIER TEL

ADJUST INLET COVERS

ATC (OH ELEC)

CE (ASPH)

BM 10.3

EXISTING 36" CPRC TO REMAIN

EXISTING 4" HDPE TO REMAIN

SHARON TEL

ALLIANT (OH ELECTRIC)

INLET 2x3-FT REQUIRED

USH 14

BUTT JOINT SEE DETAIL

IH 43 SB OFF RAMP

EXISTING STRUCTURE B-64-133

1088 1090 1092 1094 1096 1098 1100 1102

REMOVE INLET

USH 14

PE (ASPH)

R USH 14

FRONTIER TEL

WE ENERGIES (GAS)

ALLIANT (OH ELEC)

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

EXISTING R/W

EXISTING 18" CMCP TO REMAIN

ALLIANT (OH ELECTRIC)

CP 300

END PROJECT 3150-05-70
STA 1096+27.00

EXISTING STRUCTURE B-64-134

N3355
WALWORTH FOUNDRIES INC.

SEE SDD, AT GRADE SIDE ROAD INTERSECTION, TYPE D

ALLIANT (OH ELECTRIC)

BUTT JOINT SEE DETAIL

ATC (OH ELEC)

CAUTION

FOUNDRY RD

EXISTING R/W

N3305
IRVIN R. NIXON

IH 43 SB ON RAMP

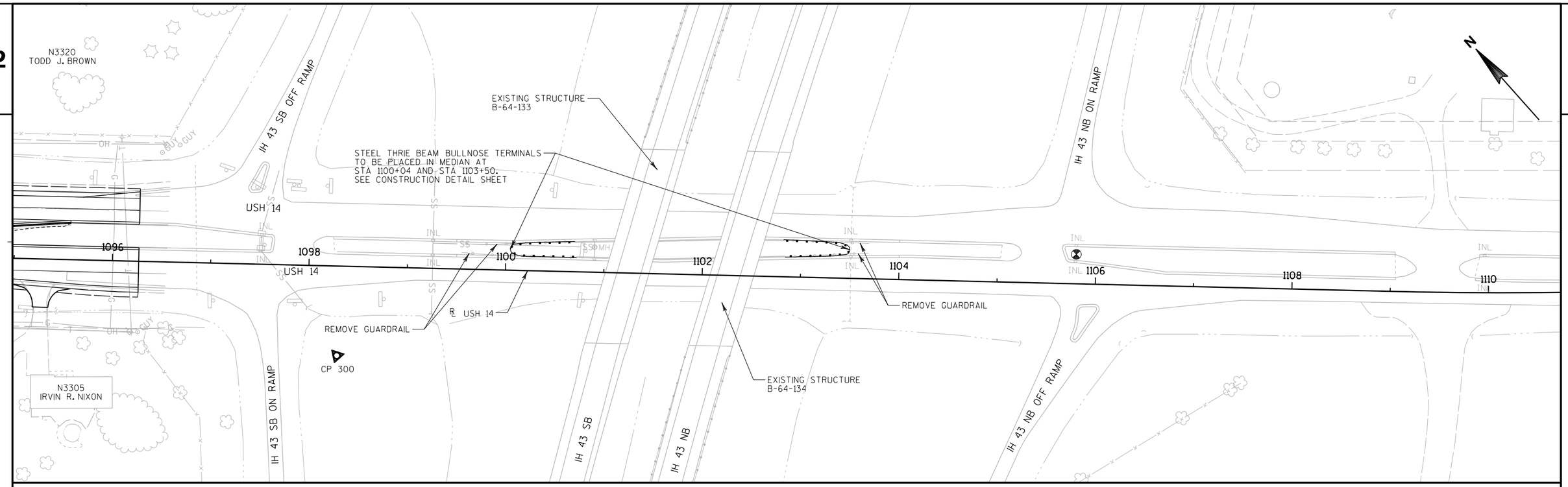
IH 43 SB

IH 43 NB

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PLAN DETAILS | SHEET 36 | E |
|---|---|---|---|---|---|

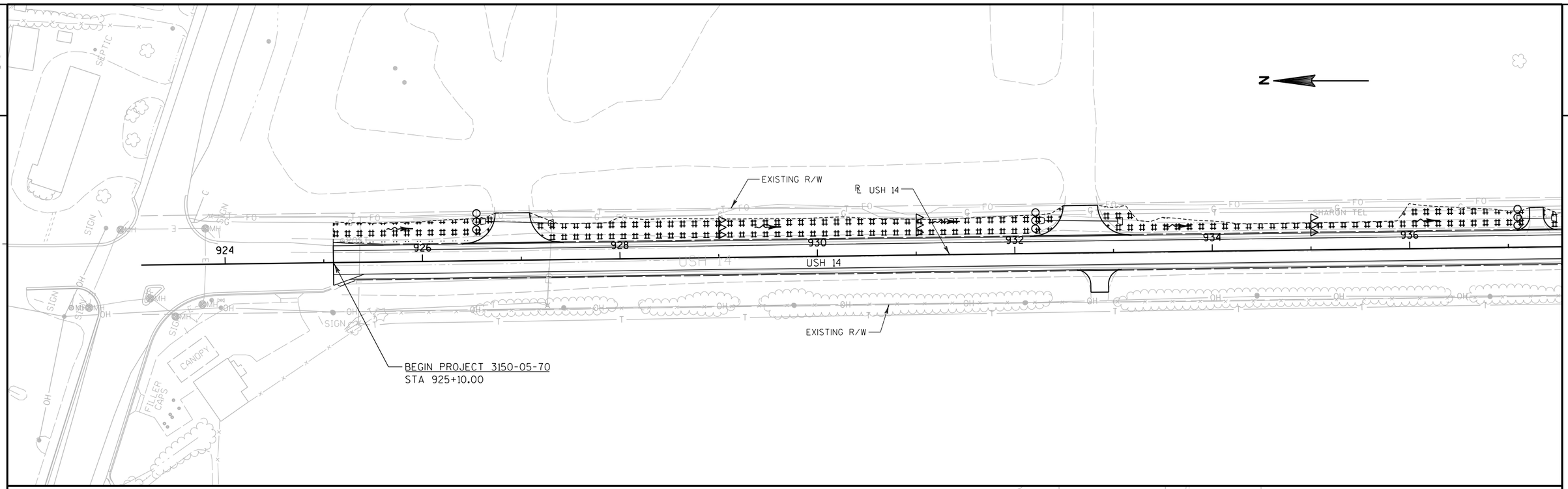
FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\021206_pd.dgn PLOT DATE : 4/24/2018 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 100.0000 ' / in.

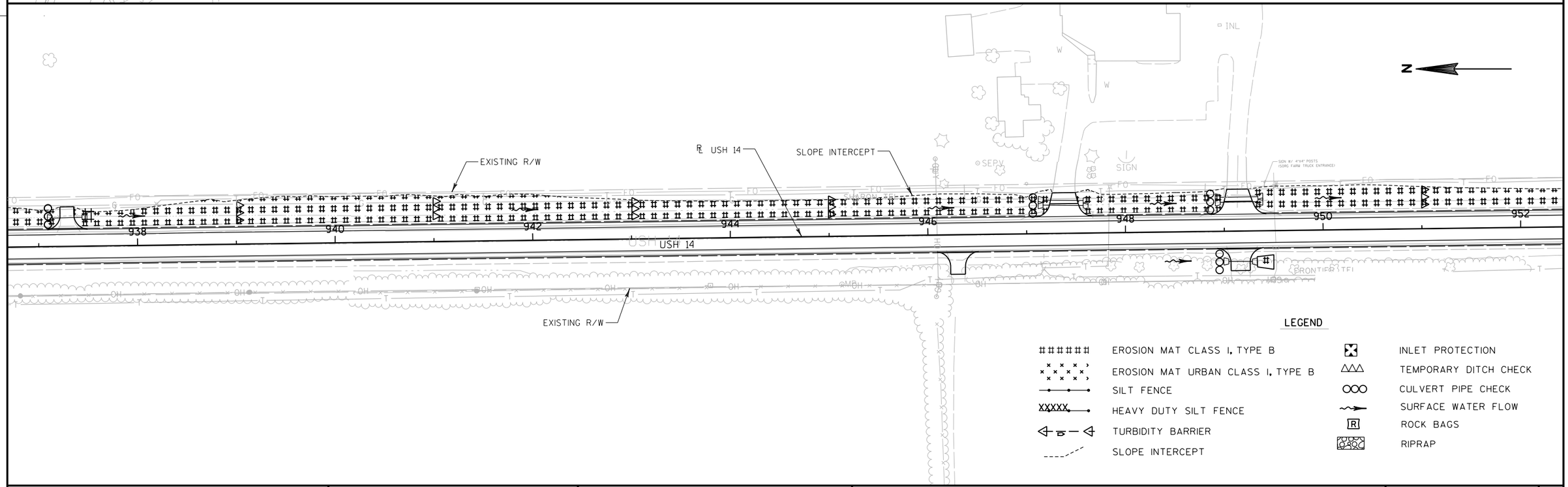
WISDOT/CADDS SHEET 42

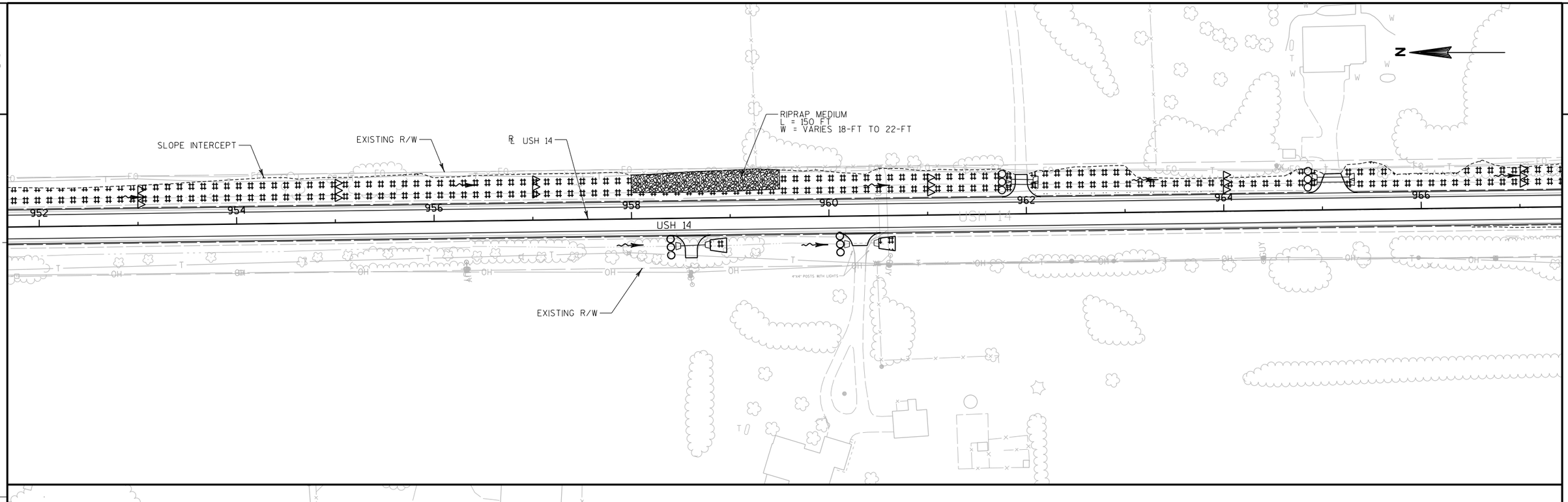



2

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PLAN DETAILS | SHEET 37 | E |
|---|---|---|---|---|---|

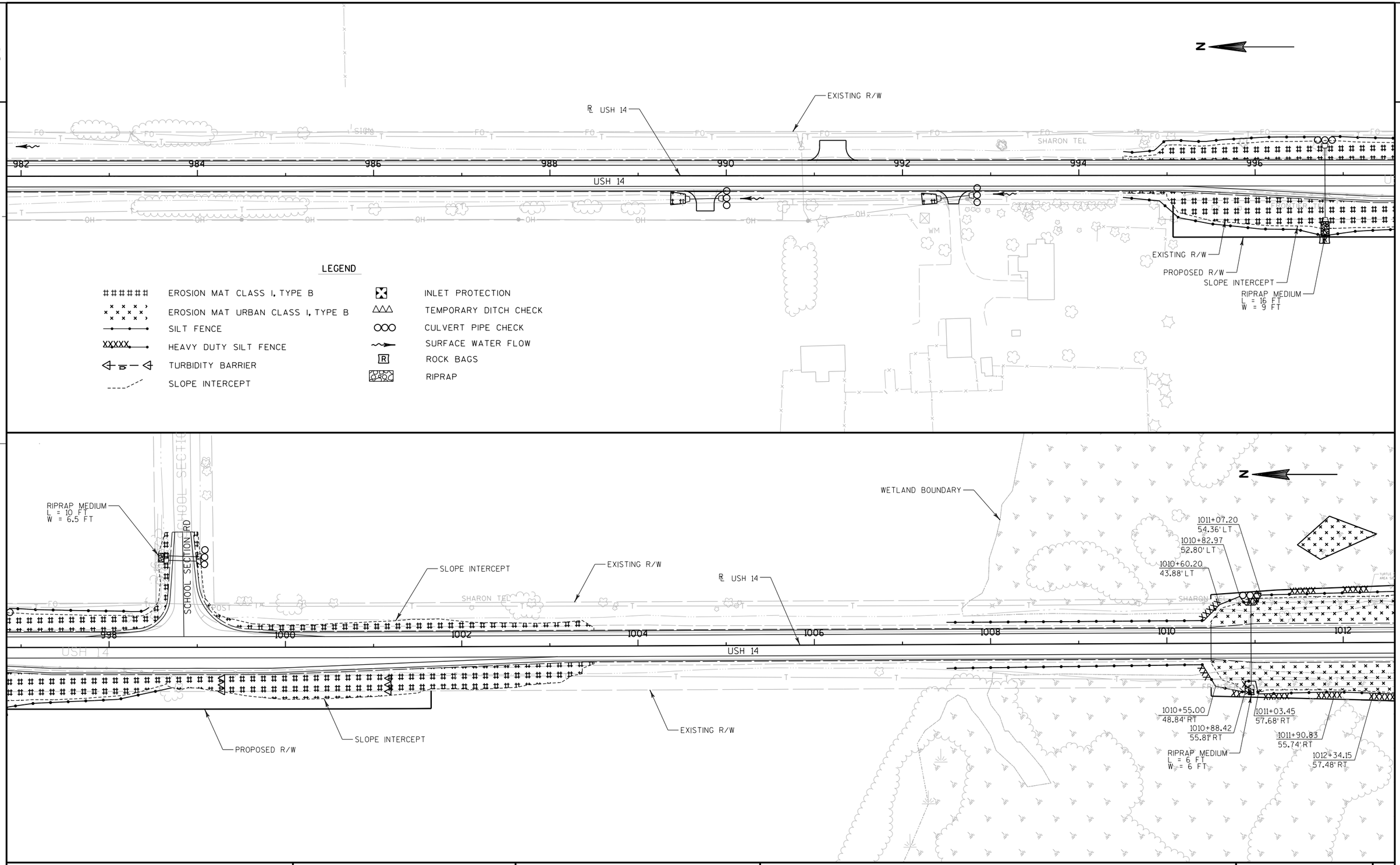

EXISTING R/W
℄ USH 14
924
926
928
930
932
934
936
USH 14
EXISTING R/W
BEGIN PROJECT 3150-05-70
STA 925+10.00
CANOPY
FILLER CAPS
SIGN
SEPTIC
N


EXISTING R/W
℄ USH 14
SLOPE INTERCEPT
938
940
942
944
946
948
950
952
USH 14
EXISTING R/W
INL
SEPV
SIGN
N
LEGEND
EROSION MAT CLASS I, TYPE B
EROSION MAT URBAN CLASS I, TYPE B
SILT FENCE
HEAVY DUTY SILT FENCE
TURBIDITY BARRIER
SLOPE INTERCEPT
INLET PROTECTION
TEMPORARY DITCH CHECK
CULVERT PIPE CHECK
SURFACE WATER FLOW
ROCK BAGS
RIPRAP




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | EROSION CONTROL | SHEET 39 | E |
|---|---|---|---|---|---|

2




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | EROSION CONTROL | SHEET 40 | E |
|---|---|---|---|---|---|

2

2

* SEE EROSION CONTROL STRUCTURES SPECIAL PROVISION REQUIREMENTS.

CONSTRUCTION PERMIT/TEMPORARY RIGHT OF ENTY TO BE ACQUIRED FOR CONSTRUCTING GRAVEL PARKING AREA WITHIN STATE OF WISCONSIN CONSERVATION COMMISSION PROPERTY.

N

*100'

*100'

TLE

RIPRAP HEAVY (SEE STRUCTURE PLANS)

RIPRAP MEDIUM
W = 11 FEET
L = 20 FEET

WETLAND BOUNDARY

PROPOSED DNR PARKING LOT

PROPOSED R/W

TLE

EXISTING R/W

1017+20.39
68.63' LT

1017+98.39
76.99' LT

1018+33.26
77.99' LT

1018+67.66
74.05' LT

1018+77.36
67.19' LT

1019+11.56
55.50' LT

1019+79.35
55.88' LT

TURBIDITY BARRIER

1020+52.55
56.74' LT

1020+77.69
56.43' LT

1021+82.36
62.88' LT

1021+98.78
75.20' LT

1022+50.20
80.22' LT

1022+76.25
76.38' LT

1012 1014 1016 1018 1020 1022 1024 1026

USH 14

R USH 14

WETLAND BOUNDARY

1011+90.82
55.74' RT

1013+64.20
62.36' RT

WETLAND BOUNDARY

1018+13.95
73.10' RT

1018+42.11
57.02' RT

TLE

1019+73.34
56.21' RT

TURBIDITY BARRIER

TURTLE CREEK

STRUCTURE B-64-191

RIPRAP HEAVY (SEE STRUCTURE PLANS)

1020+49.92
56.14' RT

1020+99.09
60.46' RT

1021+31.49
60.99' RT

1021+56.98
74.26' RT

1010+12.88
75.78' RT

RIPRAP MEDIUM
W = 6 FEET
L = 12 FEET

WETLAND BOUNDARY

1022+78.62
68.62' RT

EXISTING R/W

PROPOSED R/W

## LEGEND

| | |
|---|---|
| EROSION MAT CLASS I, TYPE B | INLET PROTECTION |
| EROSION MAT URBAN CLASS I, TYPE B | TEMPORARY DITCH CHECK |
| SILT FENCE | CULVERT PIPE CHECK |
| HEAVY DUTY SILT FENCE | SURFACE WATER FLOW |
| TURBIDITY BARRIER | ROCK BAGS |
| SLOPE INTERCEPT | RIPRAP |

N

TLE

PROPOSED R/W

SLOPE INTERCEPT

EXISTING R/W

1028 1030 1032 1034 1036 1038 1040 1042

R USH 14

USH 14

TLE

PROPOSED R/W

TLE

SLOPE INTERCEPT

PROPOSED R/W

EXISTING R/W

SHARON TEL

FRONTIER TEL

SIGN

OHP

CTH C

R CTH C

TLE

EXISTING R/W

41 42 43 44 45

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | EROSION CONTROL | SHEET 41 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\022004_ec.dgn PLOT DATE : 4/25/2018 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 100.0000 ' / in.

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- TURBIDITY BARRIER
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- ROCK BAGS
- RIPRAP

PROPOSED R/W
SLOPE INTERCEPT
EXISTING R/W
SLOPE INTERCEPT
TLE
EXISTING R/W
℄ USH 14
USH 14
SHARON TEL
FRONTIER TEL
+85.00
47.60'RT
INSTALL SILT FENCE 1FT INSIDE OF R/W LINE CONTRACTOR SHALL NOT DISTURB PARK PROPERTY
+85.23
47.60'RT
RIPRAP MEDIUM
L = 10 FEET
W = 6.5 FEET
+34.82
29.90'LT
+00.00
29.99'LT
CREEK RD
EXISTING R/W
℄ CREEK RD
EXISTING R/W

EXISTING R/W
PROPOSED R/W
RIPRAP MEDIUM
L = 10 FEET
W = 3.25 FEET
CREEK RD
PROPOSED R/W
SLOPE INTERCEPT
℄ CREEK RD
EXISTING R/W
PROPOSED R/W
SLOPE INTERCEPT
EXISTING R/W
℄ USH 14
USH 14
FRONTIER TEL
12" ROUND WOOD GUARD POSTS
EXISTING R/W
RIPRAP MEDIUM
L = 10 FT
W = 6 FT
SHARON TEL
FRONTIER TEL
RAILROAD TIES W/ FIELD STONE ENDWALLS
EXISTING R/W

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | EROSION CONTROL | SHEET 42 | E |
|---|---|---|---|---|---|

END MILL AND RELAY
BEGIN MILL & RESURFACING
STA 1079+52.45

EXISTING R/W

SIGN W/ 4"X4" POSTS (FIREWOOD FOR SALE)

GATE

BOULDERS

SHARON TEL

GATE

1072 1074 1076 1078 1080 1082 1084 1086

USH 14

R USH 14

SIGN

EXISTING R/W

FRONTIER TEL

## LEGEND

- EROSION MAT CLASS I, TYPE B
- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- HEAVY DUTY SILT FENCE
- TURBIDITY BARRIER
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- ROCK BAGS
- RIPRAP

EXISTING R/W

IH 43 SB OFF RAMP

EXISTING STRUCTURE B-64-133

USH 14

1088 1090 1092 1094 1096 1098 1100 1102

SLOPE INTERCEPT

SLOPE INTERCEPT

R USH 14

EXISTING R/W

WETLAND BOUNDARY

FOUNDRY RD

END PROJECT 3150-05-70
STA 1096+27.00

IH 43 SB ON RAMP

IH 43 SB

IH 43 NB

EXISTING STRUCTURE B-64-134

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | EROSION CONTROL | SHEET 43 | E |
|---|---|---|---|---|---|

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102 — EAST 14 / NORTH 89 — REMOVE — EAST 14 / NORTH 89 — J3-2(2S)

103 / 104 — STOP ALL WAY — REMOVE SIGN EXISTING POLE TO REMAIN — STOP R1-1(3) ALL WAY R1-3P(3)

STH 11

107 / 107A — STOP — REMOVE — STOP R1-1(3) ALL WAY R1-3P(3)

EAST 11 — ESTR

108 — WEST 14 / WEST 11 / NORTH 89 / EAST 11 / ALTERNATE INTERSTATE 43 — REMOVE — WEST 14 / WEST 11 / ALTERNATE INTERSTATE 43 / NORTH 89 / EAST 11 — J3-5(2S)

STOP ALL WAY — REMOVE SIGN EXISTING POLE TO REMAIN — STOP R1-1(3) ALL WAY R1-3P(3)

109 / 110

924 — 925 — USH 14 — 926

101 — NORTH 89 — REMOVE — NORTH 89 — J4-1(2S)

STH 89

STOP ALL WAY — REMOVE — STOP R1-1(3) ALL WAY R1-3P(3) — 105 / 106

STOP ALL WAY — REMOVE SIGN EXISTING POLE TO REMAIN — 111 / 112 — STOP R1-1(3) ALL WAY R1-3P(3)

EAST 11 / EAST 14 / WEST 14 / WEST 11 — REMOVE

TO COUNTY M

STOP ALL WAY — REMOVE — STOP R1-1(3) ALL WAY R1-3P(3) — 114 / 115

USH 14/STH 11

EAST 11 / EAST 14 / WEST 14 / WEST 11 / TO COUNTY M — J3-5(2S) — 113

REMOVE — W12-1D(2S) 2' MOUNTING HEIGHT — 116

ALTERNATE INTERSTATE 43 — EAST 14 — REMOVE — EAST ALTERNATE INTERSTATE 14 43 — J4-2(2S) — 120

CANOPY

FILLER CAPS

YIELD — REMOVE — YIELD R1-2(2S) — 119

STOP ALL WAY — REMOVE SIGN EXISTING POLE TO REMAIN — STOP R1-1(3) ALL WAY R1-3P(3) — 117 / 118

LEGEND

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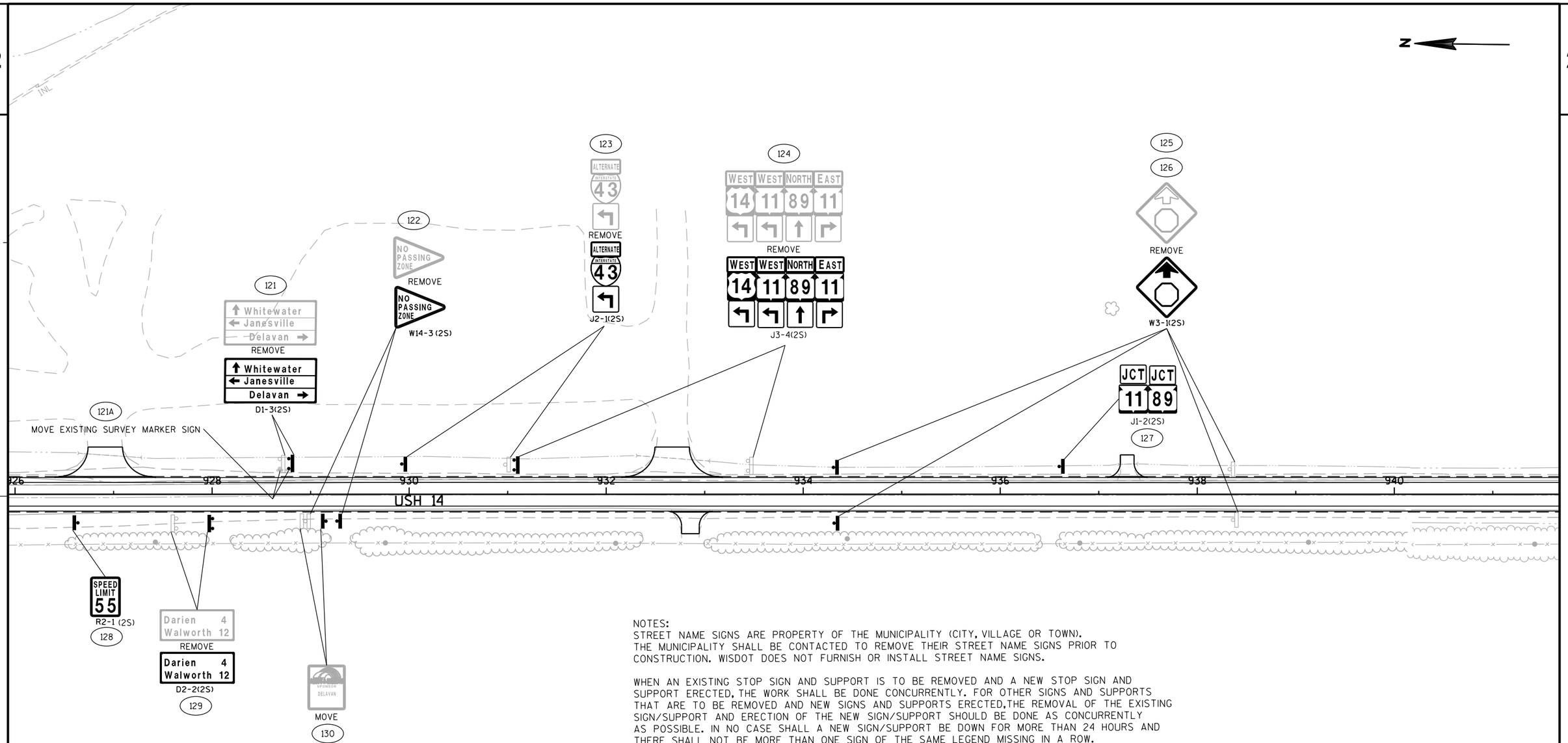
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- xxx — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 1 OF 16

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET 44 | E |
|---|---|---|---|---|---|

FILE NAME : J:\projects\d2_31500514\70\Sign\023201_ps.dgn PLOT DATE : 06-NOV-2017 09:26 PLOT BY : dotw3m PLOT NAME : PLOT SCALE : 40:1

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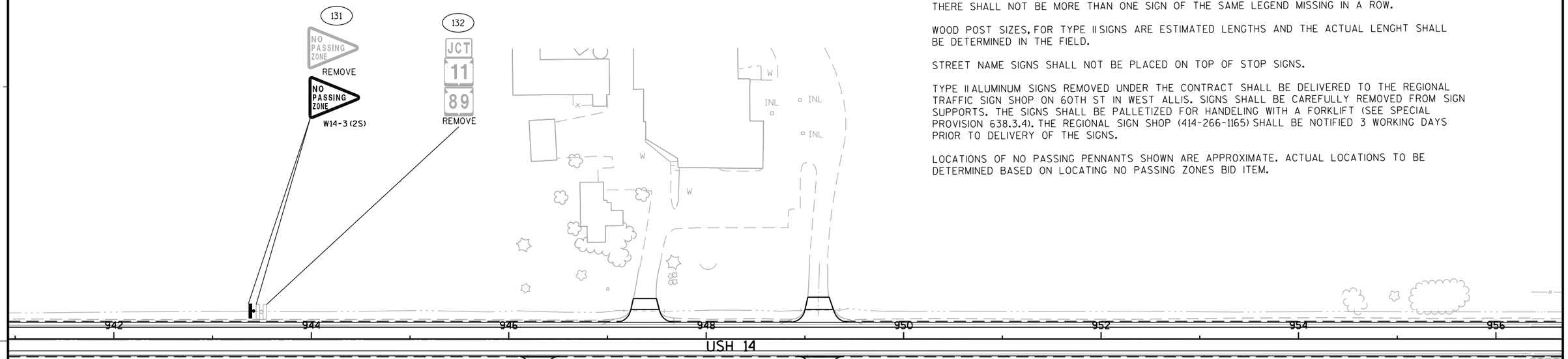
2

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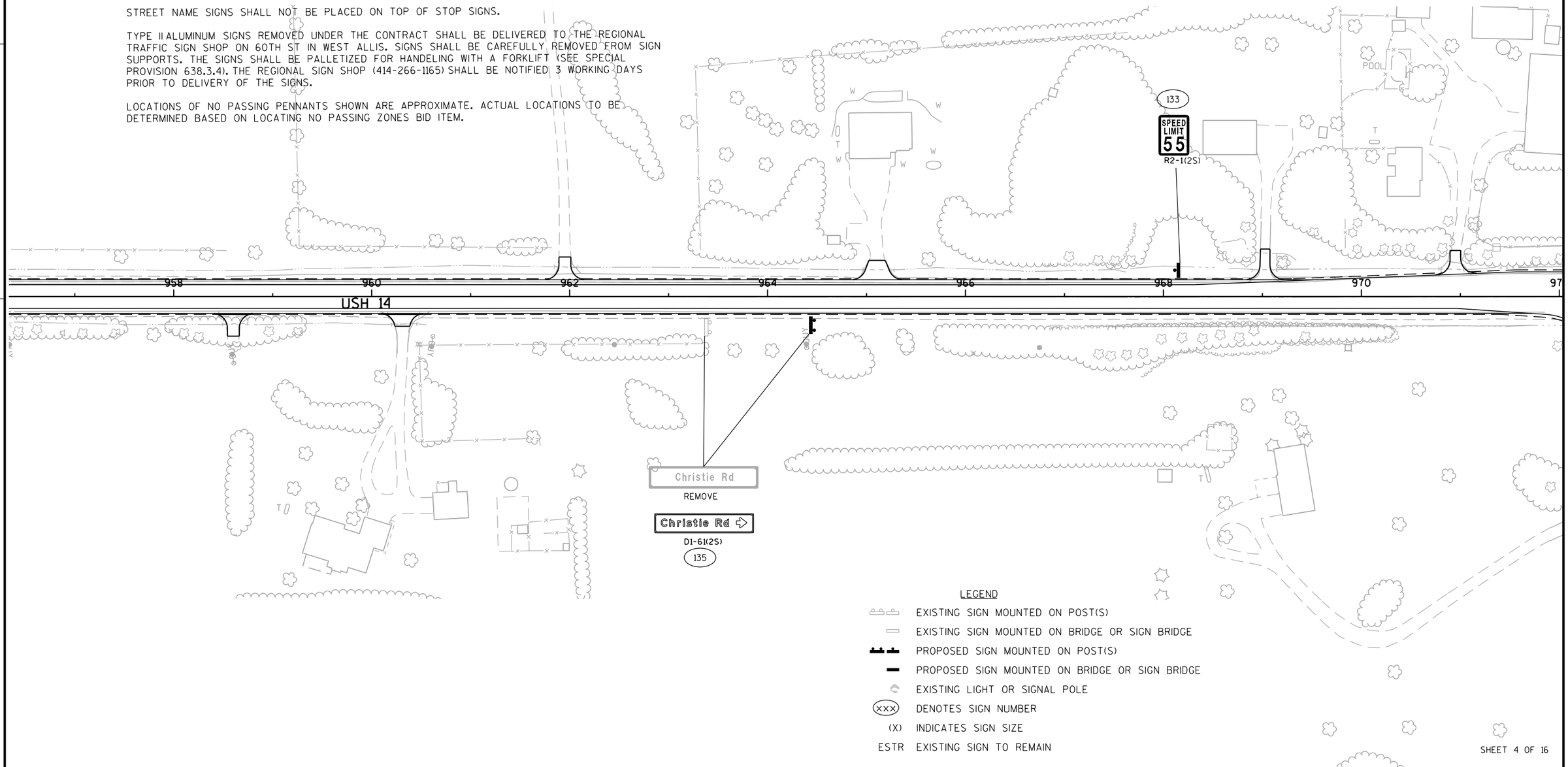


SHEET 4 OF 16

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET 47 | E |
|---|---|---|---|---|---|

2

N

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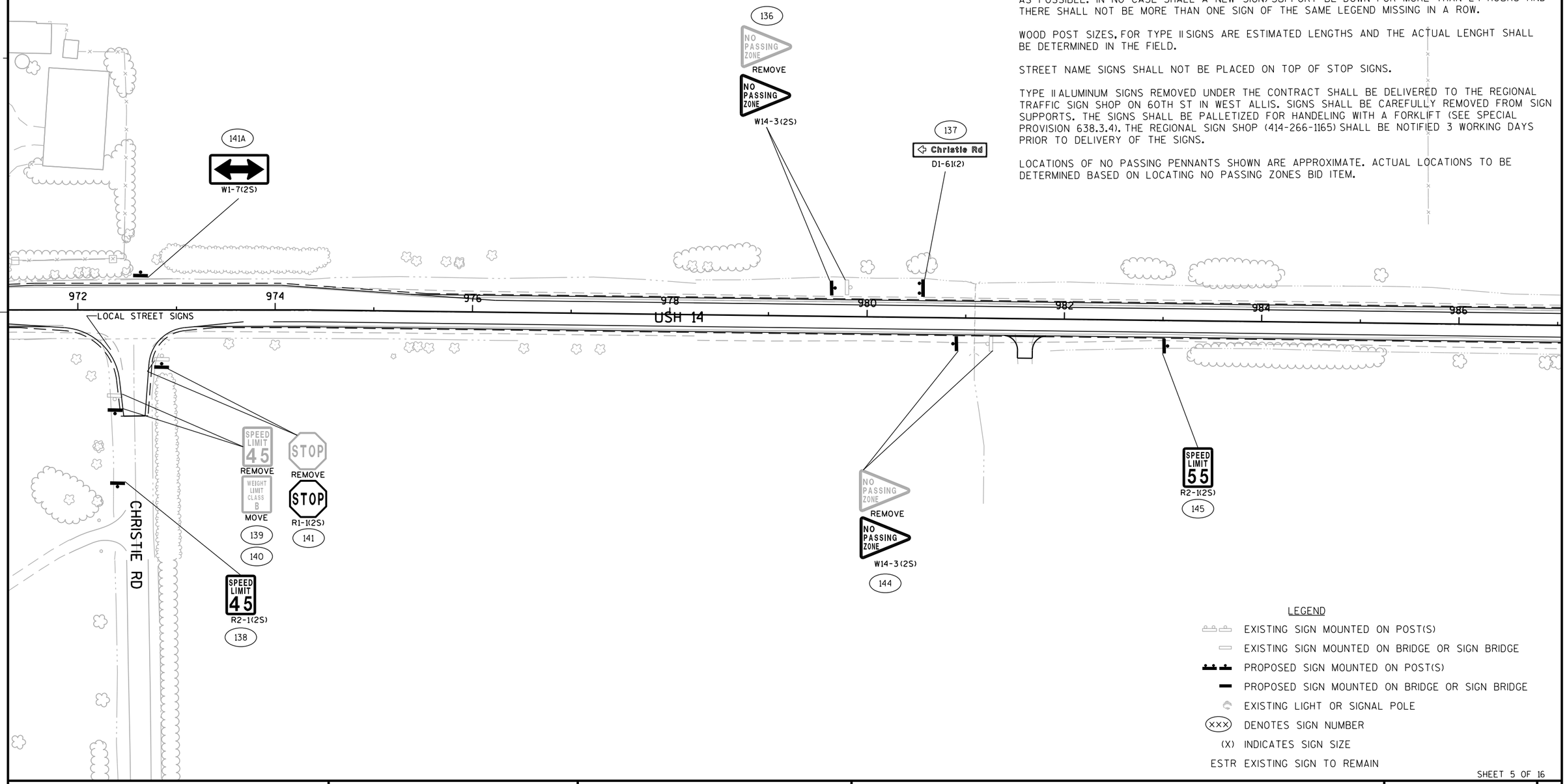


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- (X) INDICATES SIGN SIZE
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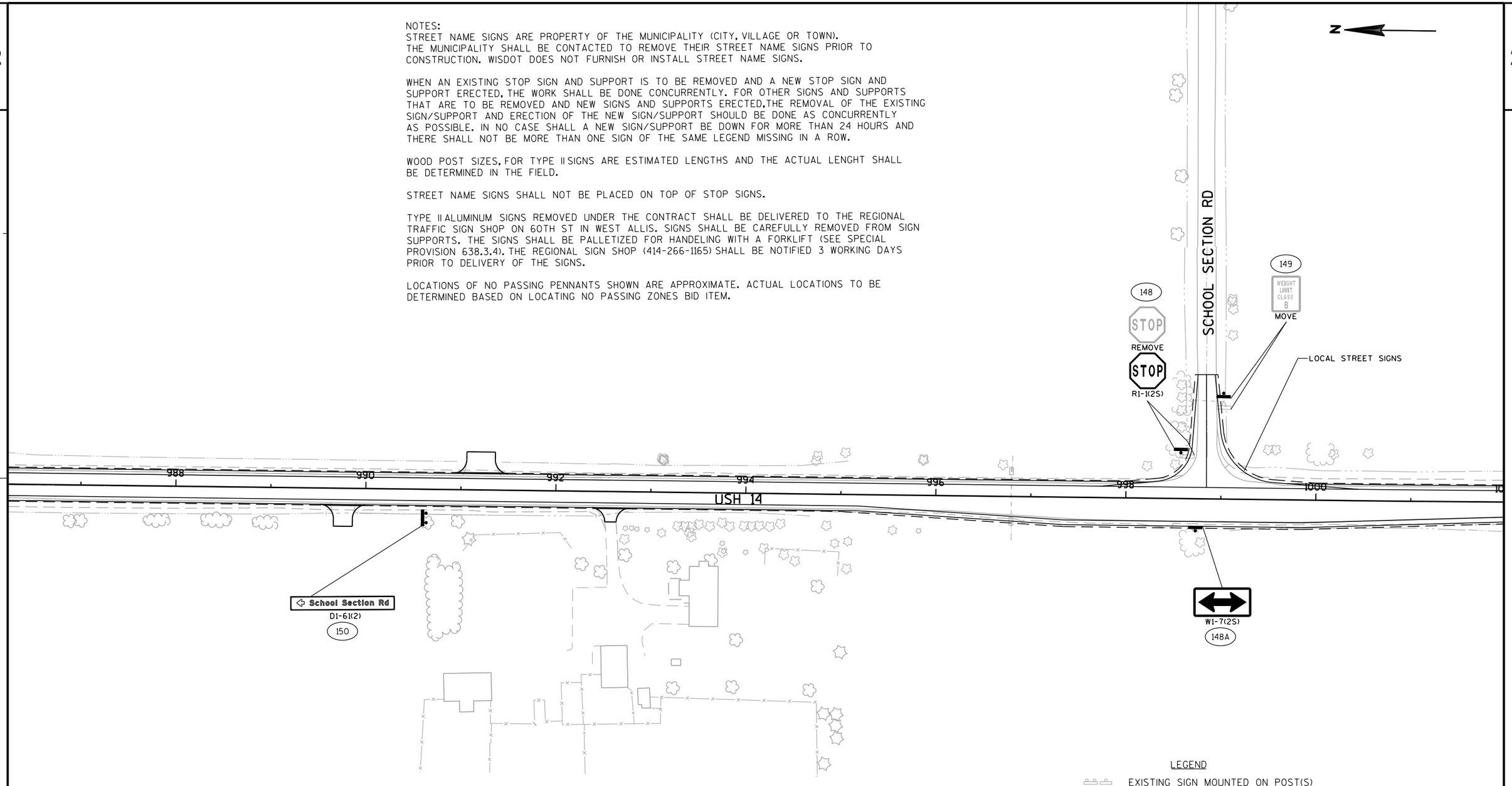


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N

School Section Rd
D1-6(2)
151

PUBLIC HUNTING GROUNDS

MOVE BY OTHER.
PROPERTY OWNER

1002 1004 1006 1008 1010 1012 1014 1016

USH 14

NO PASSING ZONE
REMOVE

NO PASSING ZONE
W14-3(2S)
153

SPEED LIMIT 55
R2-1(2S)
153A

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
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SHEET 7 OF 16

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET 50 | E |
|---|---|---|---|---|---|

FILE NAME : J:\projects\d2_31500514\70\Sign\023207_ps.dgn PLOT DATE : 06-NOV-2017 09:26 PLOT BY : dotw3m PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

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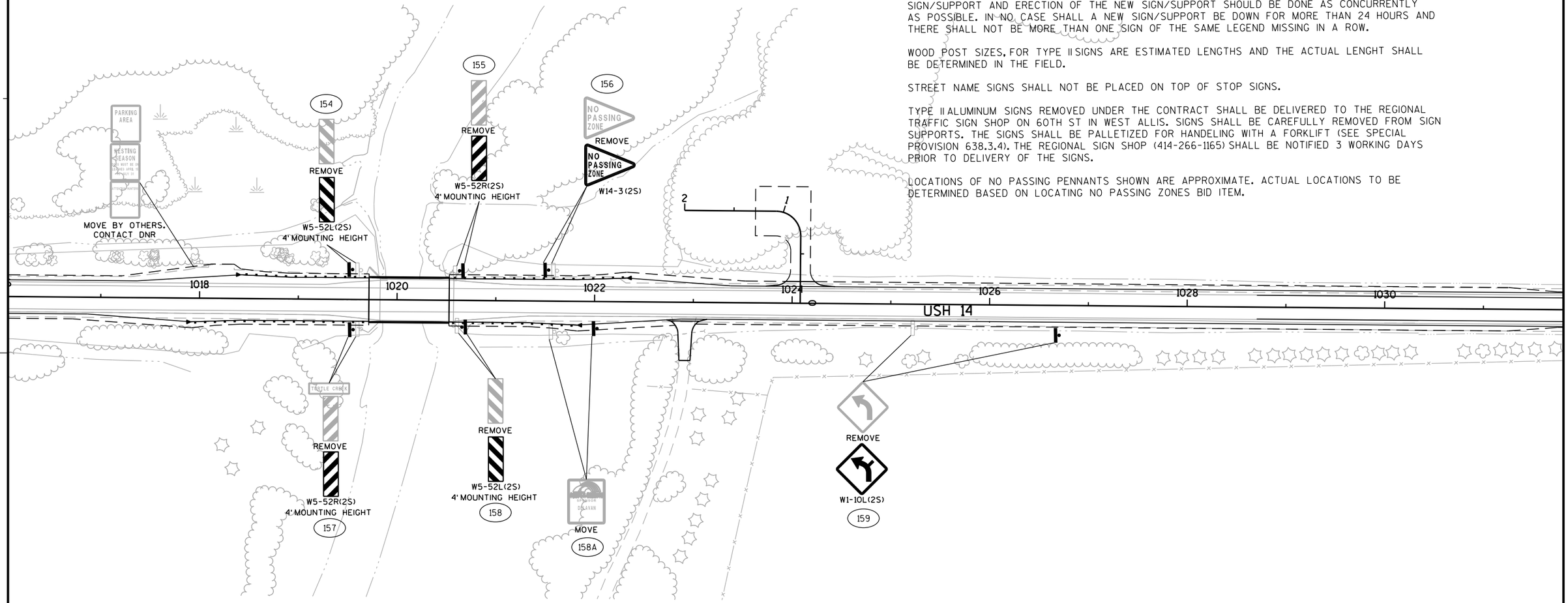


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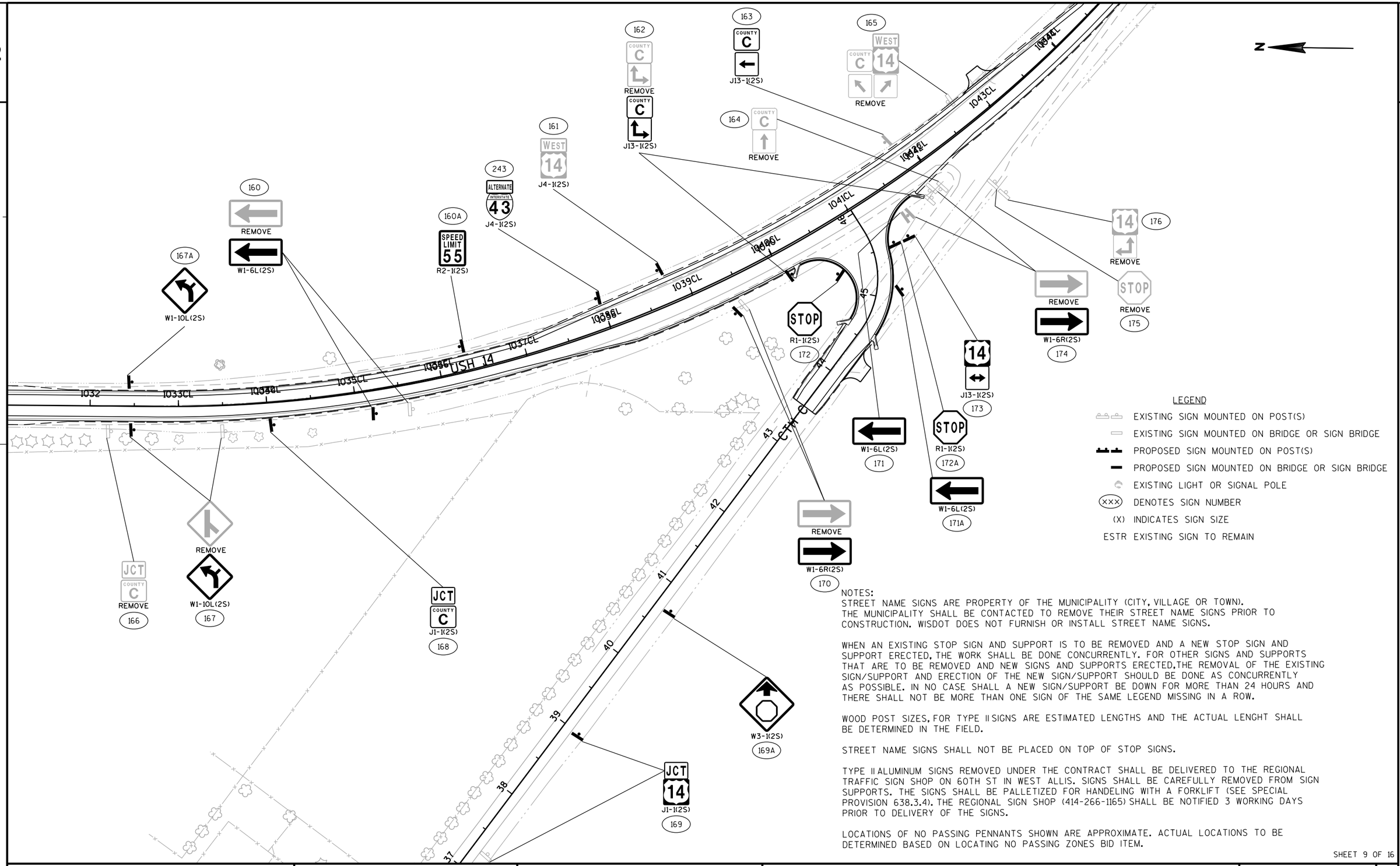


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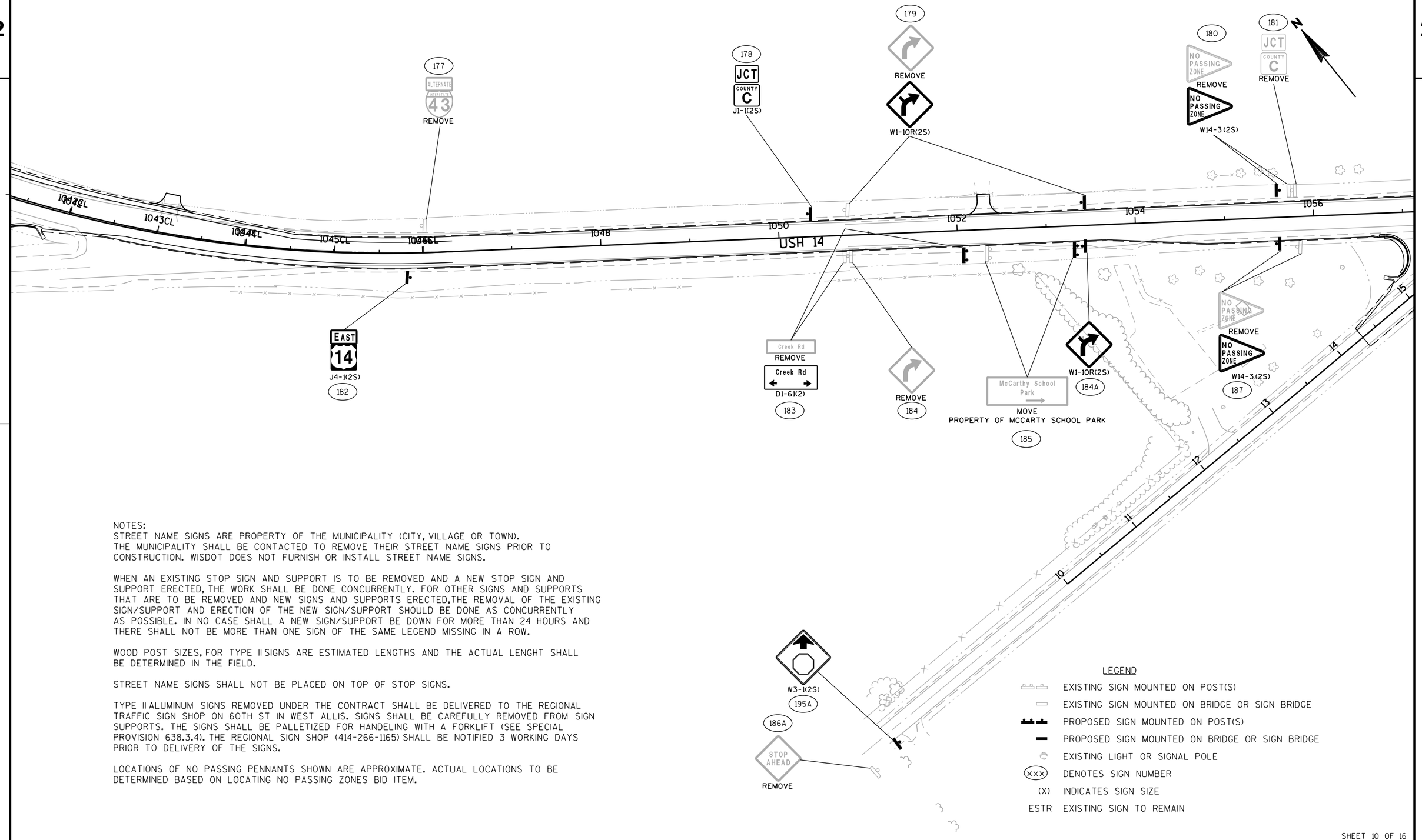
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET 52 | E |
|---|---|---|---|---|---|

FILE NAME : J:\projects\d2_31500514\70\Sign\023209_ps.dgn PLOT DATE : 06-NOV-2017 09:26 PLOT BY : dotw3m PLOT NAME : PLOT SCALE : 100:1
WISDOT/CADDS SHEET 42




NOTES:
STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (CITY, VILLAGE OR TOWN). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS.

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WOOD POST SIZES, FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGHT SHALL BE DETERMINED IN THE FIELD.

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TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC SIGN SHOP ON 60TH ST IN WEST ALLIS. SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDELING WITH A FORKLIFT (SEE SPECIAL PROVISION 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED 3 WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

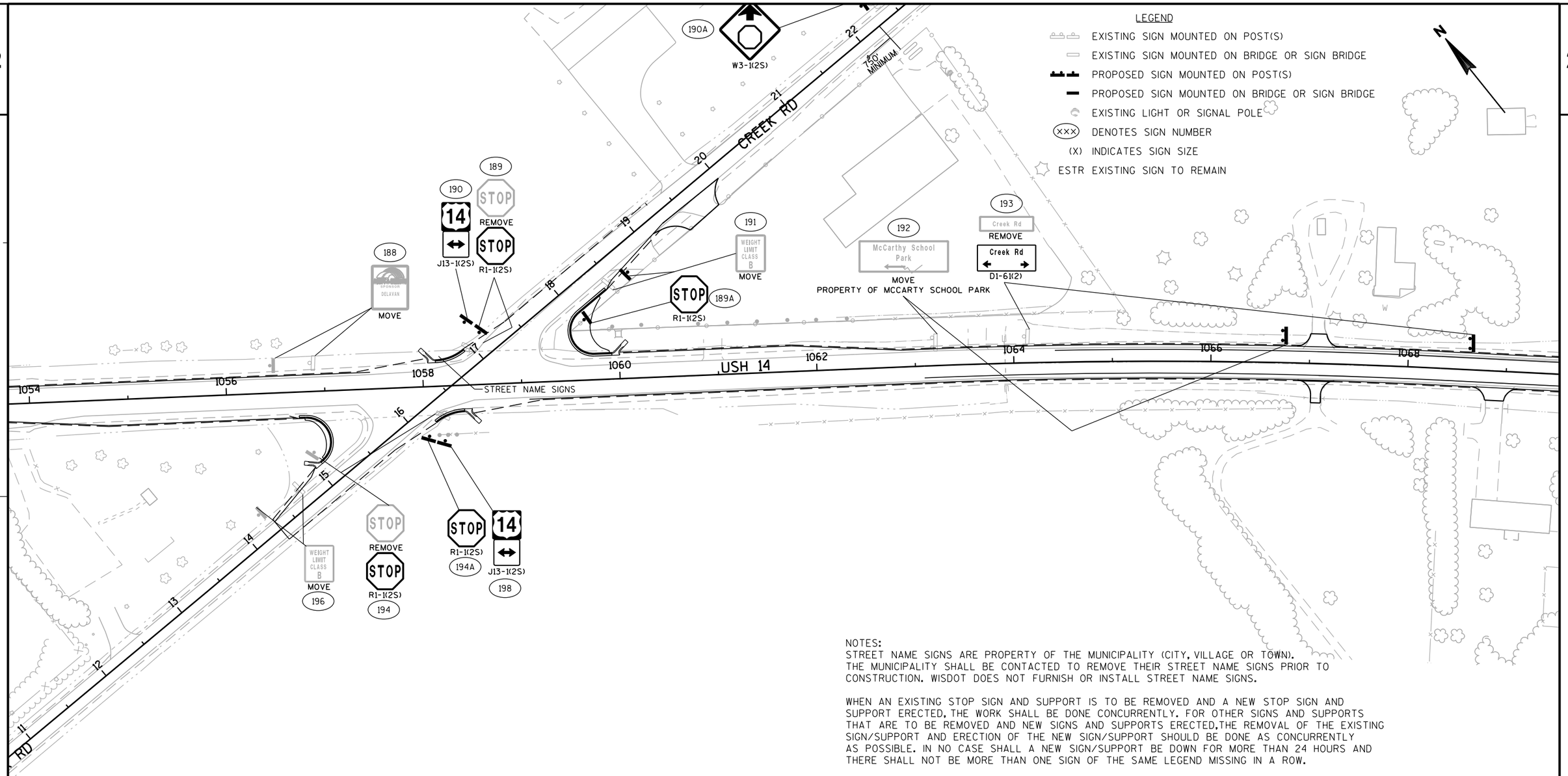
LOCATIONS OF NO PASSING PENNANTS SHOWN ARE APPROXIMATE. ACTUAL LOCATIONS TO BE DETERMINED BASED ON LOCATING NO PASSING ZONES BID ITEM.

LEGEND

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

SHEET 10 OF 16

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET 53 | E |
|---|---|---|---|---|---|

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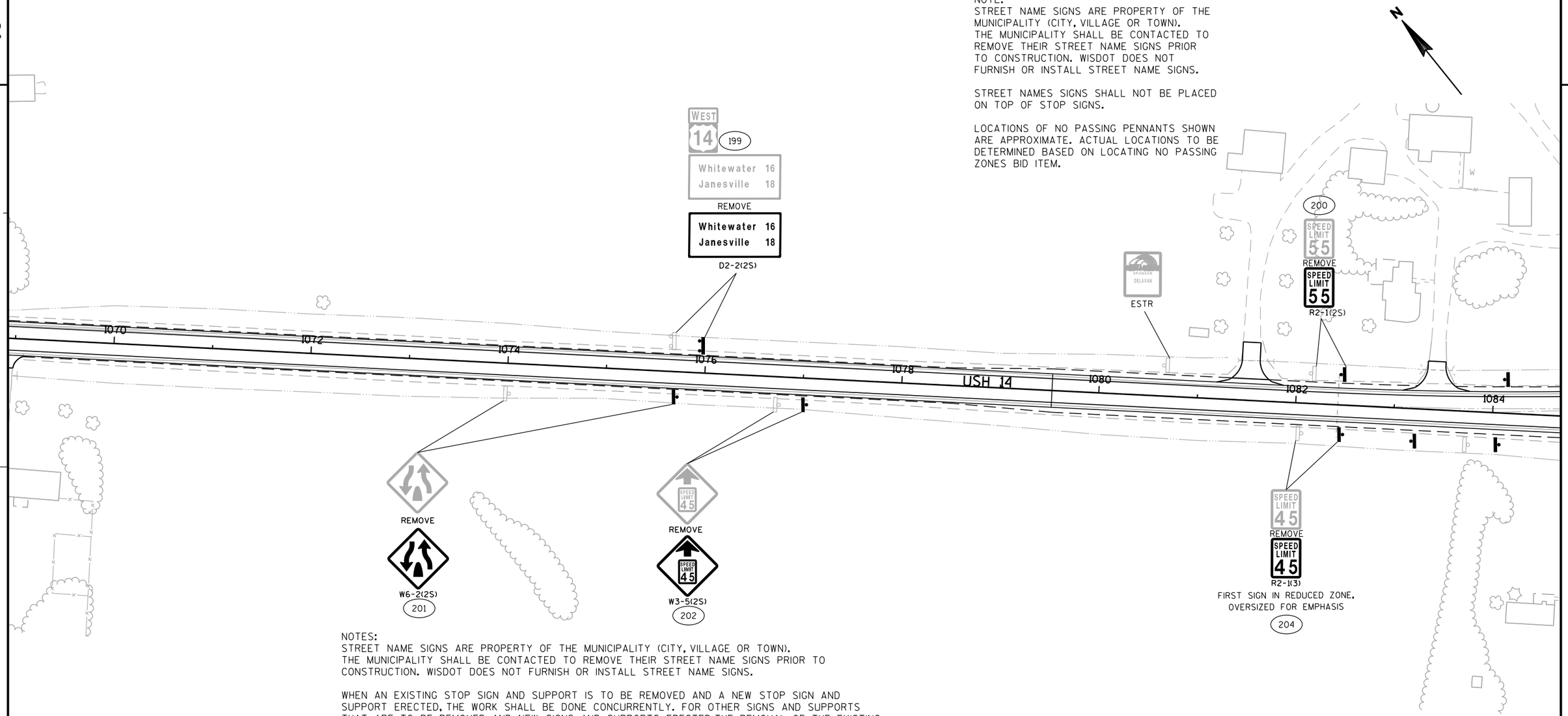


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LEGEND

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

NOTE:
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205 W6-3(2S)
206 DO NOT ENTER REMOVE; DO NOT ENTER R5-1(3)
207 NO PASSING ZONE REMOVE
208 SPEED LIMIT 45 REMOVE; SPEED LIMIT 45 R2-1(2S)
209 WEST 14 REMOVE
210 WRONG WAY R5-1A(2M)
211 W6-2(3)
212 213 REMOVE
214 215 W4-2R(2M)
216 NO PASSING ZONE W14-3(2S)
217 TRUCK ENTRANCE REMOVE; TRUCK ENTRANCE W54-57(2S)
218 JCT 43 REMOVE
219 220 R4-7(3) REMOVE; W5-56 (2M)
221 JCT 43 J1-1(2M)
222 SPEED LIMIT 45 REMOVE
223 WRONG WAY REMOVE
224 W12-2(2M); 1 MILE AHEAD W57-52(2M)
224A 13'-9" 1 MILE AHEAD REMOVE
225 13'-9" W12-2(2M)
225A DEAD END W14-1(2S)
226 DEAD END
227 STOP REMOVE; STOP R1-1(3)
228 NORTH EAST SOUTH 43 14 43 REMOVE; NORTH SOUTH 43 43 J2-2(2M)

USH 14
1084 1086 1088 1090 1092 1094 1096 1098
FOUNDARY RD
STREET NAME SIGNS

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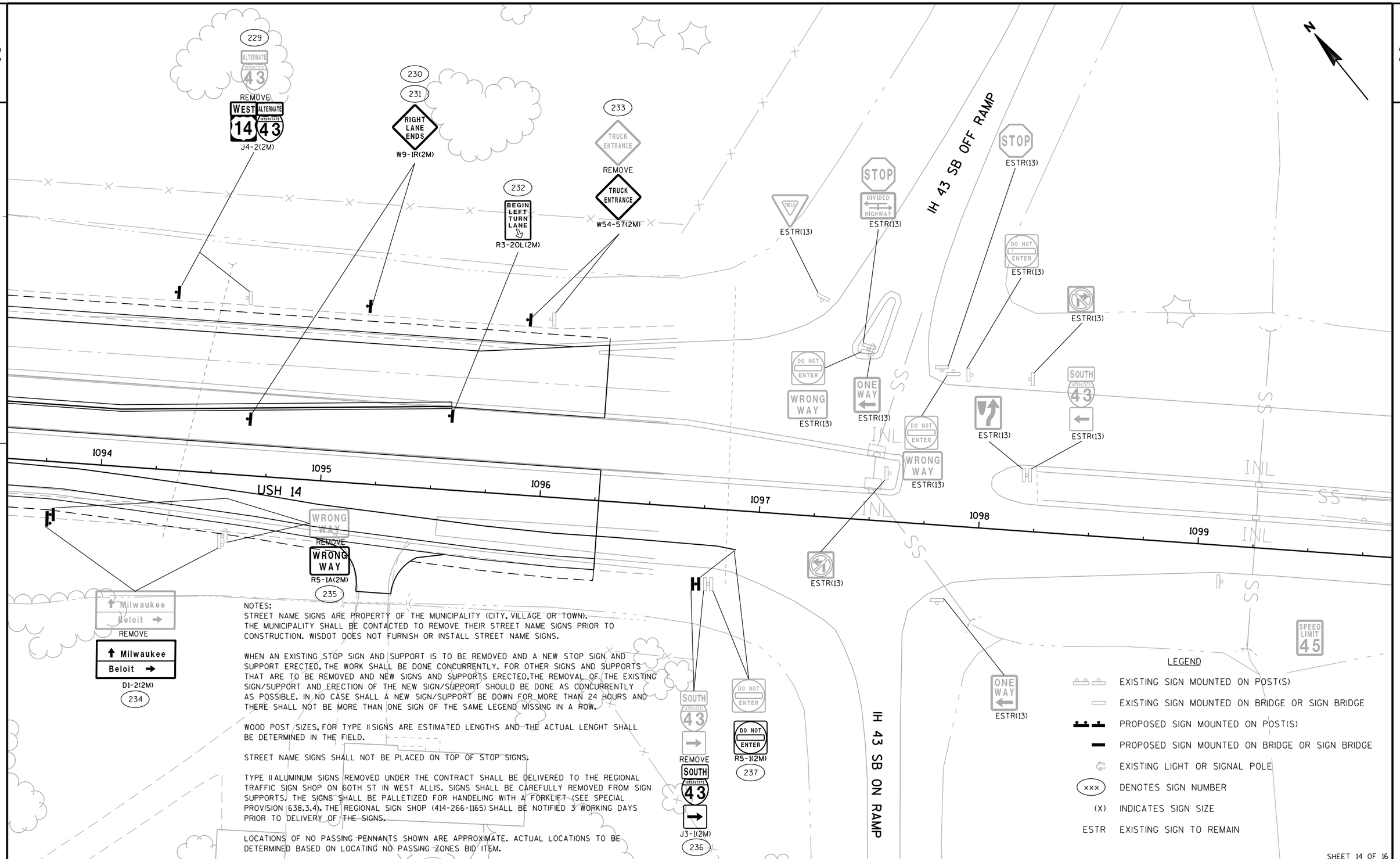
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 13 OF 16

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET 56 E |
|---|---|---|---|---|

FILE NAME : J:\projects\d2_31500514\70\Sign\023213_ps.dgn PLOT DATE : 06-NOV-2017 09:26 PLOT BY : dotw3m PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

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- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- xxx DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 14 OF 16

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET 57 | E |
|---|---|---|---|---|---|

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238
Beloit
REMOVE
Beloit
D1-1(2M)

IH 43 SB
IH 43 NB
USH 14
1099
1100
1101
1102
1103
1104
1105
INL
SS

SPEED LIMIT 45
ESTR(13)

WRONG WAY
REMOVE
WRONG WAY
R5-1A(2M)
240

NORTH INTERSTATE 43
ESTR(13)

SOUTH INTERSTATE 43
ESTR(13)

239
WRONG WAY
REMOVE
WRONG WAY
R5-1A(2M)

Beloit
Milwaukee
REMOVE FROM STA 1111+00 LT
Beloit
Milwaukee
D1-2(2M)
242
INSTALL AT STA 1111+00 LT

Milwaukee
REMOVE
Milwaukee
D1-1(2M)
241

LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- xxx DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 15 OF 16

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET 58 E |
|---|---|---|---|---|

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IH 43 NB ON-RAMP

IH 43 NB OFF-RAMP

USH 14

1105 1106 1107 1108 1109 1110 1111

ESTR(13)

REMOVE
Beloit
Milwaukee
D1-2(2M)
242

LEGEND

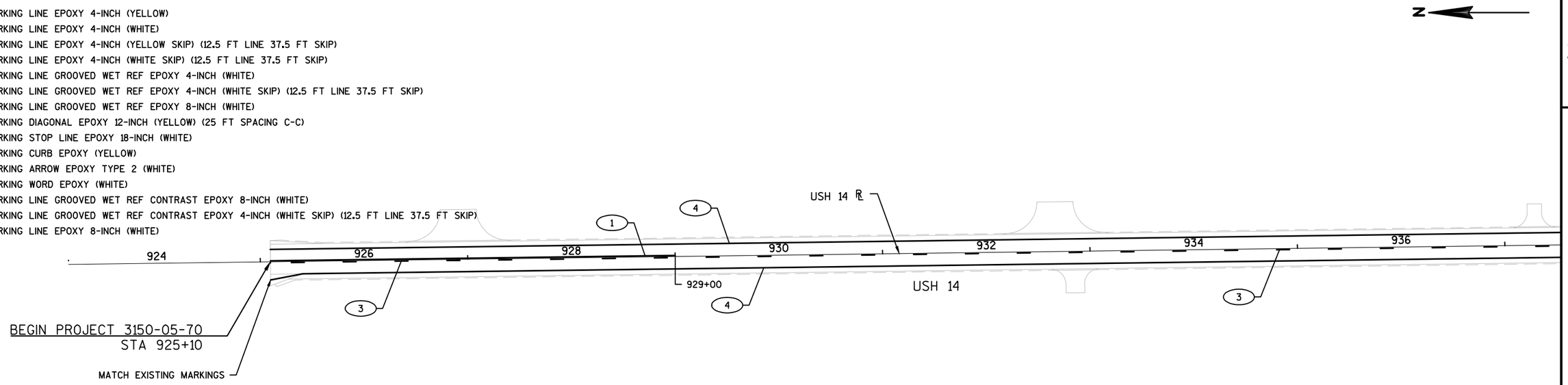
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- xxx DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

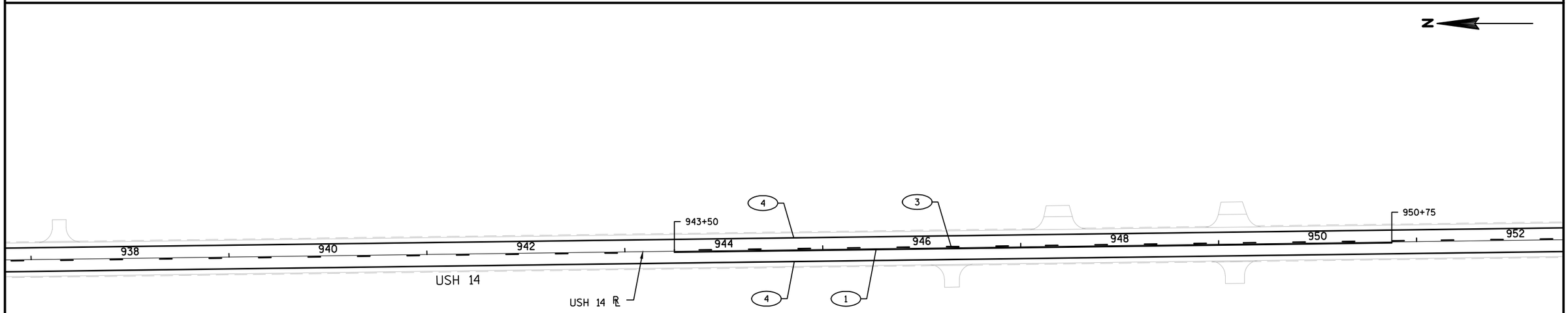
SHEET 16 OF 16

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET 59 E |
|---|---|---|---|---|

FILE NAME : J:\projects\d2_31500514\70\Sign\023216_ps.dgn PLOT DATE : 06-NOV-2017 09:26 PLOT BY : dotw3m PLOT NAME : PLOT SCALE : 40:1

1 MARKING LINE EPOXY 4-INCH (YELLOW)
2 MARKING LINE EPOXY 4-INCH (WHITE)
3 MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (12.5 FT LINE 37.5 FT SKIP)
3A MARKING LINE EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
4 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
5 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
6 MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
7 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
8 MARKING STOP LINE EPOXY 18-INCH (WHITE)
9 MARKING CURB EPOXY (YELLOW)
10 MARKING ARROW EPOXY TYPE 2 (WHITE)
11 MARKING WORD EPOXY (WHITE)
12 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE)
13 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
14 MARKING LINE EPOXY 8-INCH (WHITE)




NOTES:

EXACT LOCATIONS OF SIGN PENNANTS AND CENTERLINE MARKING TO BE DETERMINED UNDER THE LOCATING NO-PASSING ZONES BID ITEM.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PAVEMENT MARKING | SHEET 60 | E |
|---|---|---|---|---|---|

2

1 MARKING LINE EPOXY 4-INCH (YELLOW)
2 MARKING LINE EPOXY 4-INCH (WHITE)
3 MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (12.5 FT LINE 37.5 FT SKIP)
3A MARKING LINE EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
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8 MARKING STOP LINE EPOXY 18-INCH (WHITE)
9 MARKING CURB EPOXY (YELLOW)
10 MARKING ARROW EPOXY TYPE 2 (WHITE)
11 MARKING WORD EPOXY (WHITE)
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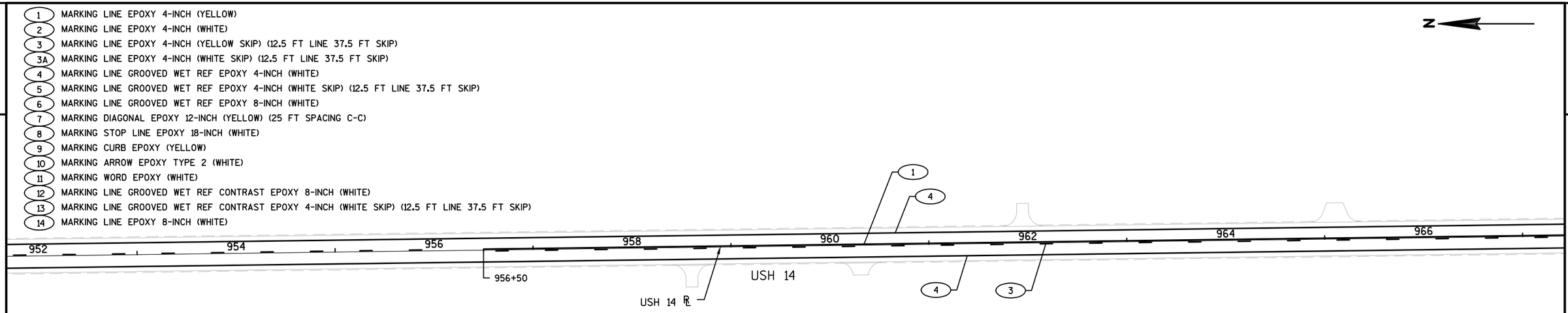


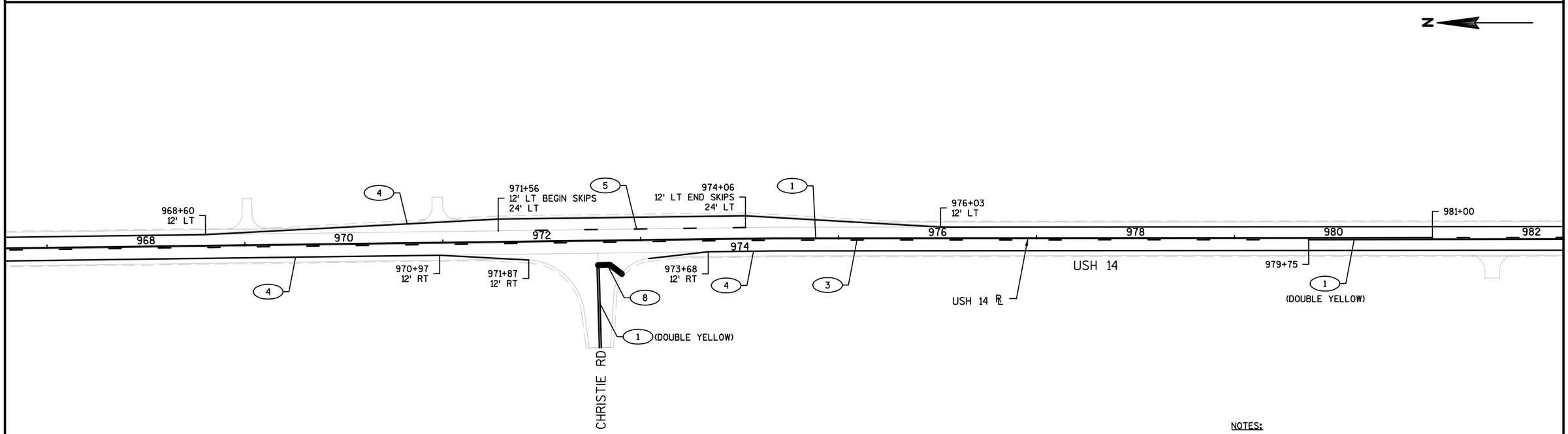


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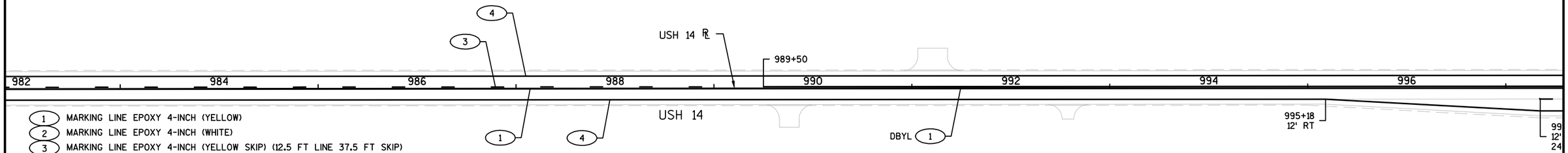
EXACT LOCATIONS OF SIGN PENNANTS AND CENTERLINE MARKING TO BE DETERMINED UNDER THE LOCATING NO-PASSING ZONES BID ITEM.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PAVEMENT MARKING | SHEET 61 | E |
|---|---|---|---|---|---|

2




(1) MARKING LINE EPOXY 4-INCH (YELLOW)
(2) MARKING LINE EPOXY 4-INCH (WHITE)
(3) MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (12.5 FT LINE 37.5 FT SKIP)
(3A) MARKING LINE EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
(4) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
(5) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
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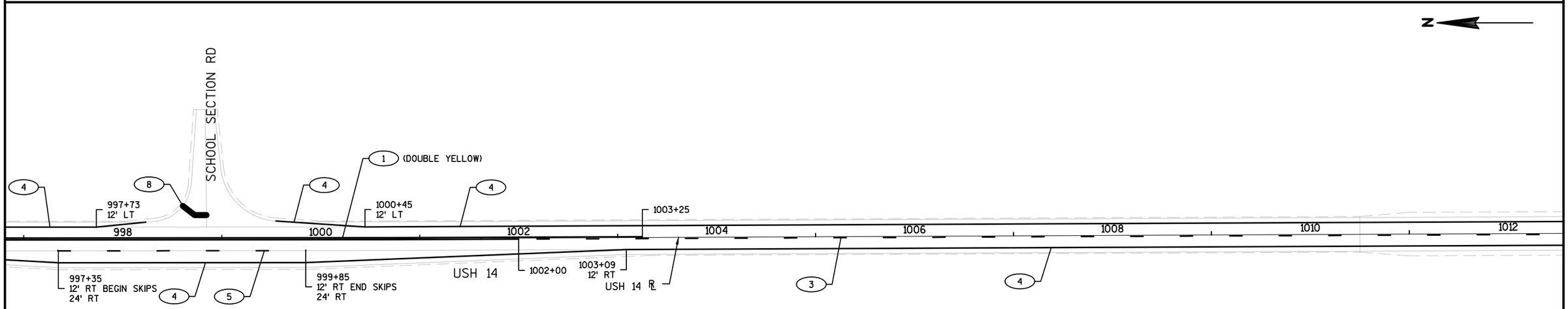
(9) MARKING CURB EPOXY (YELLOW)
(10) MARKING ARROW EPOXY TYPE 2 (WHITE)
(11) MARKING WORD EPOXY (WHITE)
(12) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE)
(13) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
(14) MARKING LINE EPOXY 8-INCH (WHITE)

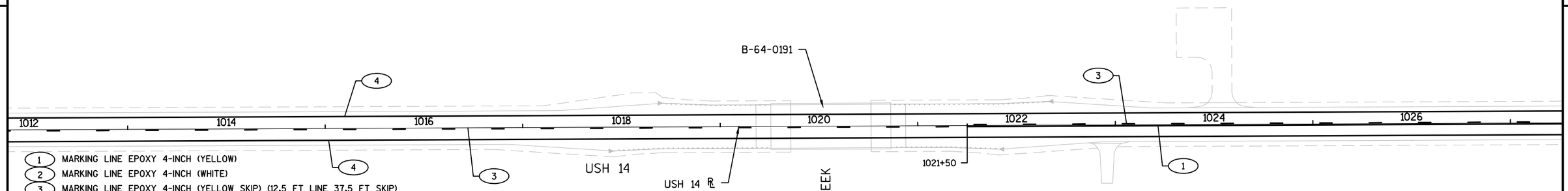



NOTES:

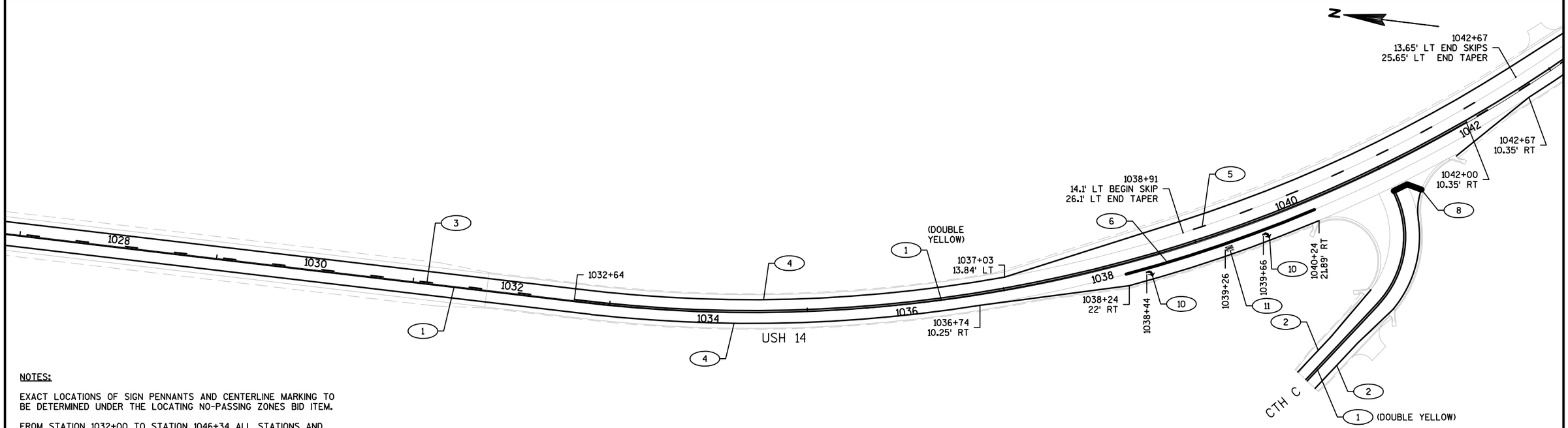
EXACT LOCATIONS OF SIGN PENNANTS AND CENTERLINE MARKING TO BE DETERMINED UNDER THE LOCATING NO-PASSING ZONES BID ITEM.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PAVEMENT MARKING | SHEET 62 | E |
|---|---|---|---|---|---|

2




1 MARKING LINE EPOXY 4-INCH (YELLOW)
2 MARKING LINE EPOXY 4-INCH (WHITE)
3 MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (12.5 FT LINE 37.5 FT SKIP)
3A MARKING LINE EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
4 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
5 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
6 MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
7 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
8 MARKING STOP LINE EPOXY 18-INCH (WHITE)
9 MARKING CURB EPOXY (YELLOW)
10 MARKING ARROW EPOXY TYPE 2 (WHITE)
11 MARKING WORD EPOXY (WHITE)
12 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE)
13 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
14 MARKING LINE EPOXY 8-INCH (WHITE)



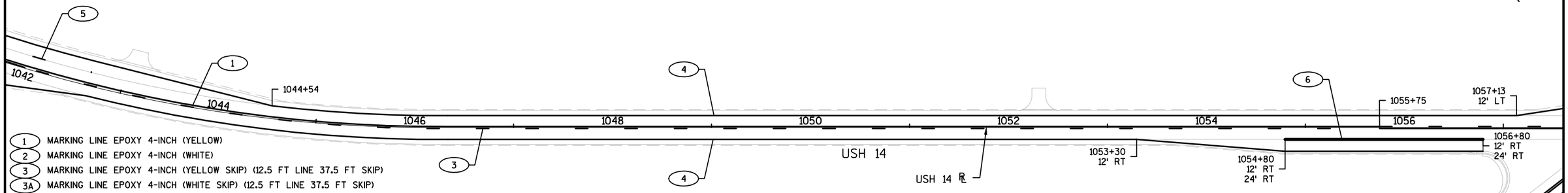

NOTES:

EXACT LOCATIONS OF SIGN PENNANTS AND CENTERLINE MARKING TO BE DETERMINED UNDER THE LOCATING NO-PASSING ZONES BID ITEM.

FROM STATION 1032+00 TO STATION 1046+34 ALL STATIONS AND OFFSETS REFERENCE THE USH 14 CENTERLINE ALIGNMENT (CONSTRUCTION ALIGNMENT), WHICH VARIES FROM 0' TO 2.13' FROM THE USH 14 REFERENCE LINE.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PAVEMENT MARKING | SHEET 63 | E |
|---|---|---|---|---|---|

2




1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (12.5 FT LINE 37.5 FT SKIP)
3A. MARKING LINE EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
4. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
5. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
6. MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
7. MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
8. MARKING STOP LINE EPOXY 18-INCH (WHITE)
9. MARKING CURB EPOXY (YELLOW)
10. MARKING ARROW EPOXY TYPE 2 (WHITE)
11. MARKING WORD EPOXY (WHITE)
12. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE)
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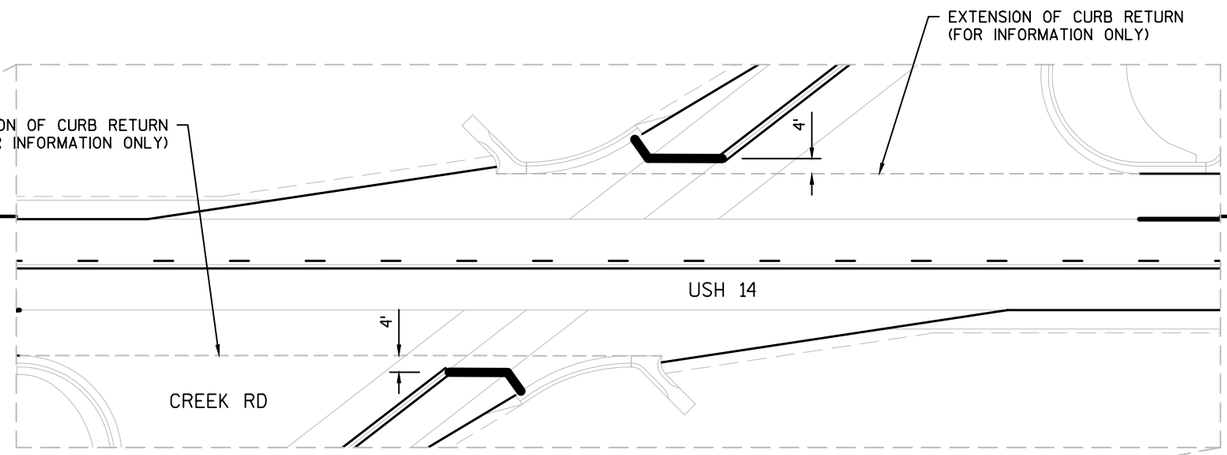
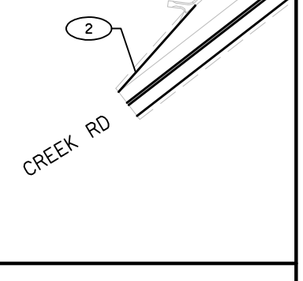
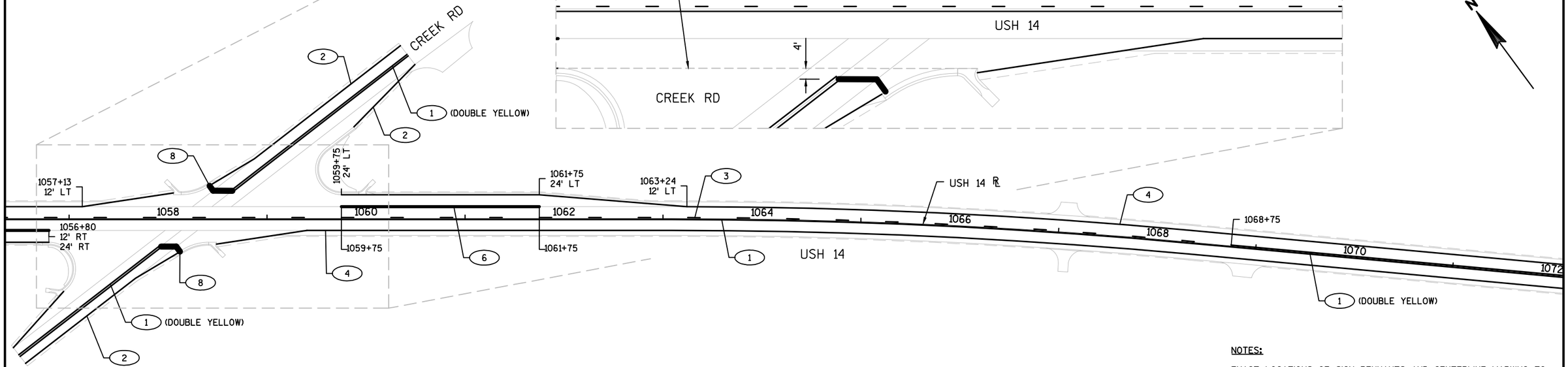
14. MARKING LINE EPOXY 8-INCH (WHITE)




NOTES:

EXACT LOCATIONS OF SIGN PENNANTS AND CENTERLINE MARKING TO BE DETERMINED UNDER THE LOCATING NO-PASSING ZONES BID ITEM.

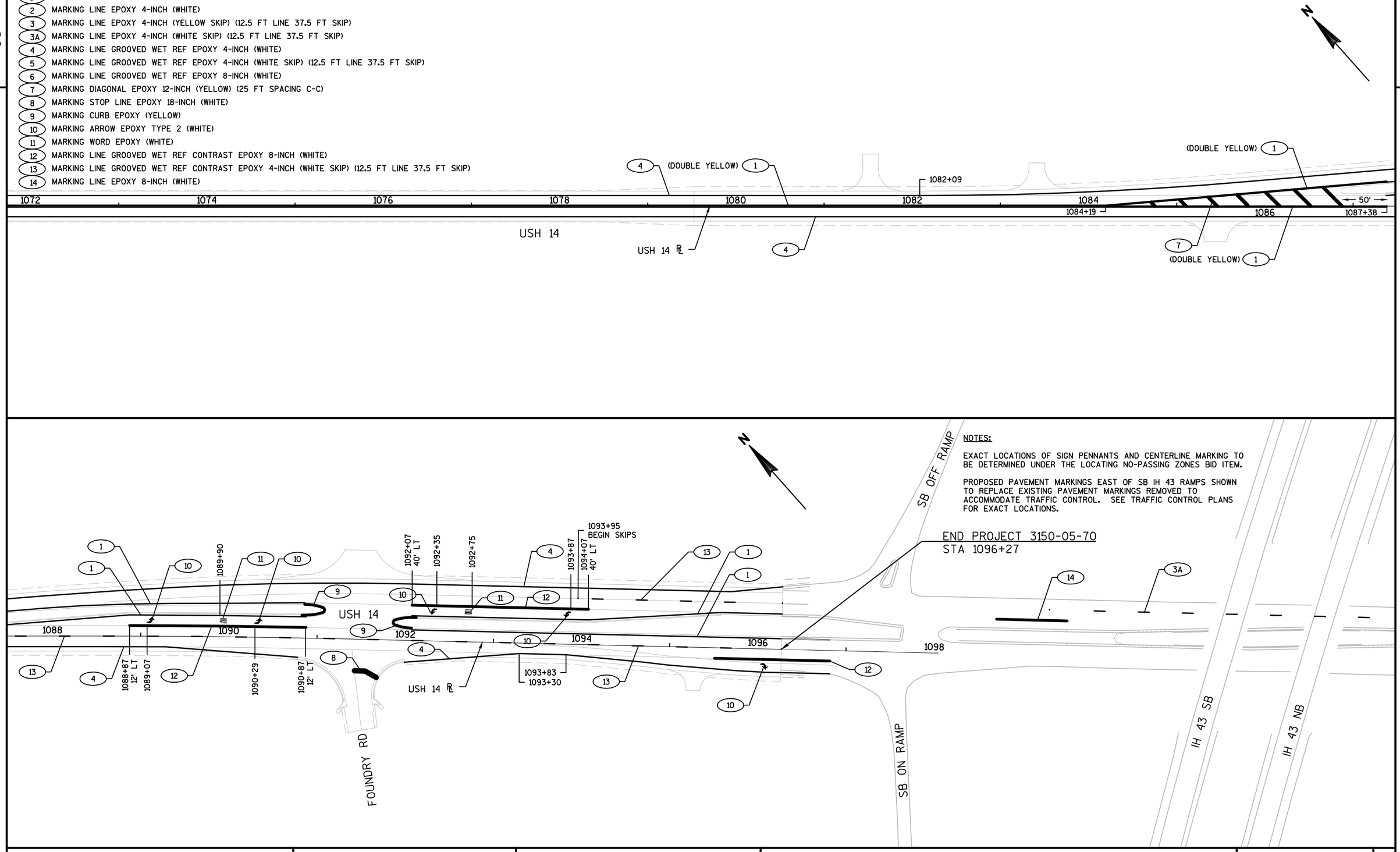
FROM STATION 1032+00 TO STATION 1046+34 ALL STATIONS AND OFFSETS REFERENCE THE USH 14 CENTERLINE ALIGNMENT (CONSTRUCTION ALIGNMENT), WHICH VARIES FROM 0' TO 2.13' FROM THE USH 14 REFERENCE LINE.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PAVEMENT MARKING | SHEET 64 | E |
|---|---|---|---|---|---|

FILE NAME : J:\ACTIVE\SE\3150-05-00 USH 14\MAIN\024501-PM.DWG
LAYOUT NAME - 05
PLOT DATE : 5/14/2018 10:22 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

1 MARKING LINE EPOXY 4-INCH (YELLOW)
2 MARKING LINE EPOXY 4-INCH (WHITE)
3 MARKING LINE EPOXY 4-INCH (YELLOW SKIP) (12.5 FT LINE 37.5 FT SKIP)
3A MARKING LINE EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
4 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
5 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
6 MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
7 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
8 MARKING STOP LINE EPOXY 18-INCH (WHITE)
9 MARKING CURB EPOXY (YELLOW)
10 MARKING ARROW EPOXY TYPE 2 (WHITE)
11 MARKING WORD EPOXY (WHITE)
12 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE)
13 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE SKIP) (12.5 FT LINE 37.5 FT SKIP)
14 MARKING LINE EPOXY 8-INCH (WHITE)




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PAVEMENT MARKING | SHEET 65 | E |
|---|---|---|---|---|---|

2

N

## NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"X48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR DIRECTED BY THE ENGINEER. NO "WORKING" LIGHT SHALL BE VISIBLE ON COVERED OR LAID DOWN SIGNS.
5. SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR ADDITIONAL DETAILS
6. SEE DETOUR PLAN AND FIXED MESSAGE SIGNS DETAIL SHEET FOR ADDITIONAL SIGNINGS.

## LEGEND

- TYPE III BARRICADE WITH WARNING LIGHTS, TYPE A
- TYPE III BARRICADE WITH ATTACHED SIGN WITH WARNING LIGHTS, TYPE A
- SIGN ON PERMANENT SUPPORT
- WORK ZONE

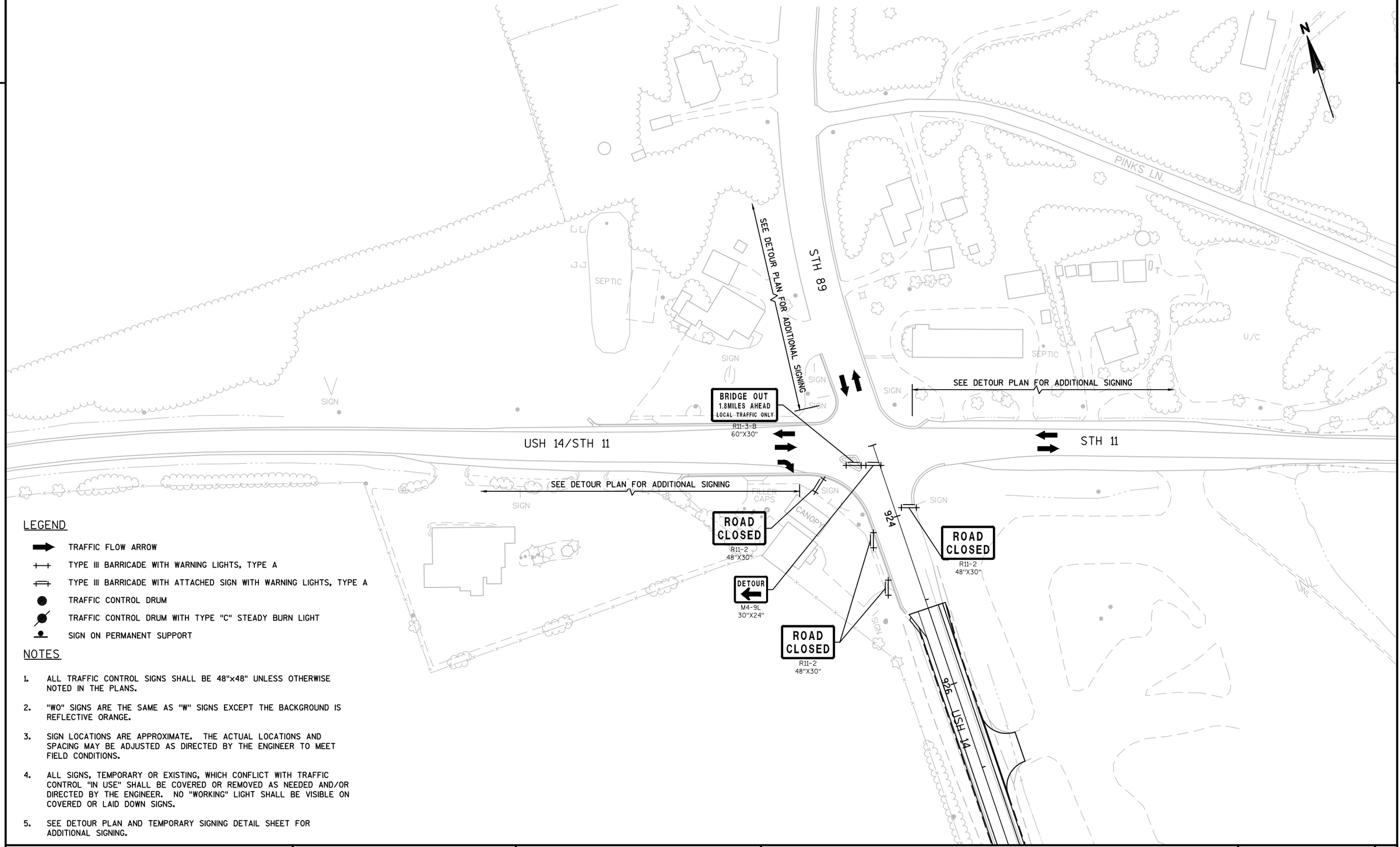
SEE TRAFFIC CONTROL: USH 14/STH 11/STH 89 INTERSECTION DETAIL SHEET

5 TYPE III BARRICADES WITH TYPE A WARNING LIGHTS SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL D

SEE TRAFFIC CONTROL: USH 14/IH-43 SHORT TERM AND LONG TERM WORK DETAIL SHEETS

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TRAFFIC CONTROL OVERVIEW | SHEET 66 | E |
|---|---|---|---|---|---|

2




## LEGEND

- TRAFFIC FLOW ARROW
- TYPE III BARRICADE WITH WARNING LIGHTS, TYPE A
- TYPE III BARRICADE WITH ATTACHED SIGN WITH WARNING LIGHTS, TYPE A
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT

## NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATIONS AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR DIRECTED BY THE ENGINEER. NO "WORKING" LIGHT SHALL BE VISIBLE ON COVERED OR LAID DOWN SIGNS.
5. SEE DETOUR PLAN AND TEMPORARY SIGNING DETAIL SHEET FOR ADDITIONAL SIGNING.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TRAFFIC CONTROL: USH 14/STH 11/STH 89 INTERSECTION | SHEET 67 | E |
|---|---|---|---|---|---|

2

LEGEND

- TRAFFIC FLOW ARROW
- TYPE III BARRICADE WITH WARNING LIGHTS, TYPE A
- TYPE III BARRICADE WITH ATTACHED SIGN WITH WARNING LIGHTS, TYPE A
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- WORK ZONE
- MARKING LINE REMOVAL
- TWO1 TEMPORARY MARKING LINE, REMOVABLE TAPE 4-INCH (WHITE)

ROAD CLOSED AHEAD
W20-3-A
WEST
M3-4
36"X18"
14
M1-4
36"X36"

500'

SB OFF RAMP

DETOUR
M4-9L
30"X24"

ROAD CLOSED
R11-2
48"X30"

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL B FOR ADDITIONAL DETAILS.

LANE CLOSED
R11-2-L
48"X30"

IH 43 SB

IH 43 NB

TWO1

50'
(TYP.)

NB ON RAMP

END ROAD WORK
G20-2A
48"X24"

1150'
(DISTANCE INCREASED TO MATCH SHORT TERM SIGN LAYOUT REQUIREMENTS)

USH 14

1096 1098 1100 1102 1104 1106 1108

MATCHLINE STA. 1110+00

END ROAD WORK
G20-2A
48"X24"

BRIDGE OUT
1.4MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3-B
60"X30"

END ROAD WORK
G20-2A
48"X24"

SB ON RAMP

ROAD CLOSED AHEAD
W20-3-A
WEST
M3-4
36"X18"
14
M1-4
36"X36"

NB OFF RAMP

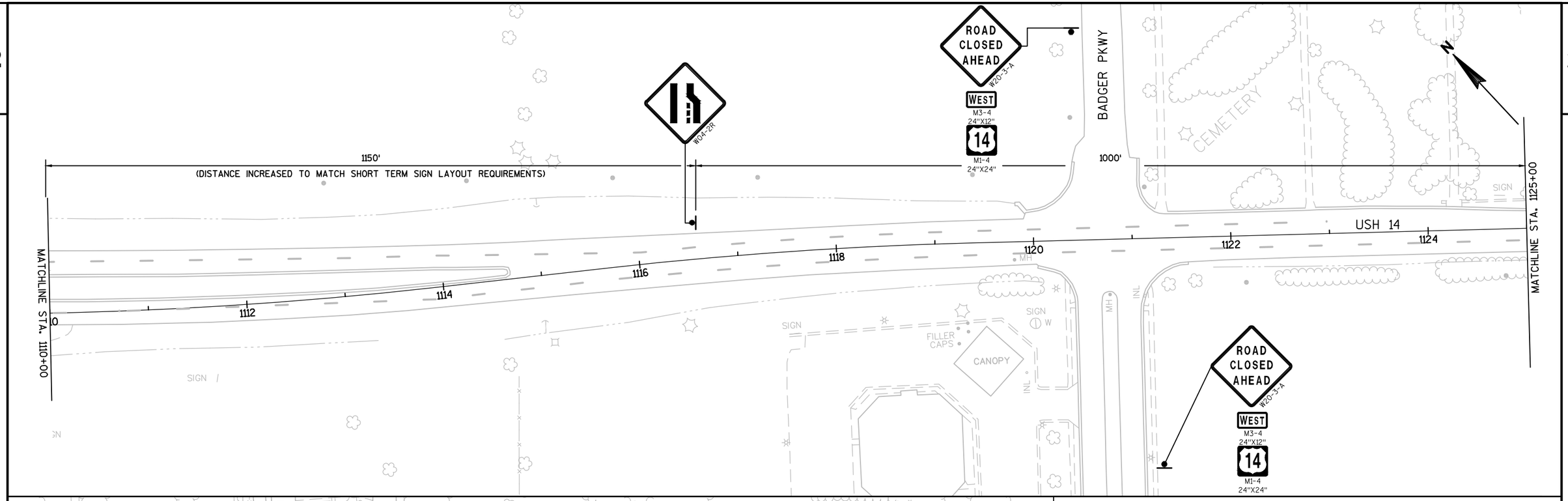
500'

NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATION ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEED AND/OR DIRECTED BY THE ENGINEER. NO "WORKING" LIGHT SHALL BE VISIBLE ON COVERED OR LAID DOWN SIGNS.
5. SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY" AND S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS
6. SEE DETOUR PLAN AND FIXED MESSAGE SIGNS DETAIL SHEET FOR ADDITIONAL SIGNING.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TRAFFIC CONTROL: USH 14/IH-43 - LONG TERM | SHEET 68 | E |
|---|---|---|---|---|---|

2




## NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATION ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEED AND/OR DIRECTED BY THE ENGINEER. NO "WORKING" LIGHT SHALL BE VISIBLE ON COVERED OR LAID DOWN SIGNS.
5. SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY" AND S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" DETAIL C FOR ADDITIONAL DETAILS
6. SEE DETOUR PLAN AND FIXED MESSAGE SIGNS DETAIL SHEET FOR ADDITIONAL SIGNING.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TRAFFIC CONTROL: USH 14/IH-43 - LONG TERM | SHEET 69 | E |
|---|---|---|---|---|---|

FILE NAME : J:\ACTIVE\SE\3150-05-00 USH 14\MAIN\025002-TC.DWG
LAYOUT NAME - 03
PLOT DATE : 10/29/2017 8:45 PM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TRAFFIC FLOW ARROW
- TYPE III BARRICADE WITH WARNING LIGHTS, TYPE A
- TYPE III BARRICADE WITH ATTACHED SIGN WITH WARNING LIGHTS, TYPE A
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- WORK ZONE
- MARKING LINE REMOVAL
- TY01 TEMPORARY MARKING LINE, REMOVABLE TAPE 4-INCH (YELLOW)

ROAD CLOSED AHEAD W20-3-A

WEST M3-4 36"X18"

14 M1-4 36"X36"

500'

SB OFF RAMP

IH 43 SB

IH 43 NB

NB ON RAMP

DETOUR M4-9L 30"X24"

ROAD CLOSED R11-2 48"X30"

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL B FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" DETAIL C FOR ADDITIONAL DETAILS.

BEGIN LEFT TURN LANE R3-20-L 24"X36"

LANE CLOSED R11-2-L 48"X30"

END ROAD WORK G20-2A 48"X24"

W01-6 48"X24"

50' (TYP.)

USH 14

TY01

MATCHLINE STA. 110+00

1096 1098 1100 1102 1104 1106 1108

BRIDGE OUT 1.4MILES AHEAD LOCAL TRAFFIC ONLY R11-3-B 60"X30"

W01-6 48"X24"

BEGIN LEFT TURN LANE R3-20-L 24"X36"

END ROAD WORK G20-2A 48"X24"

SB ON RAMP

ROAD CLOSED AHEAD W20-3-A

WEST M3-4 36"X18"

14 M1-4 36"X36"

NB OFF RAMP

500'

LEGEND

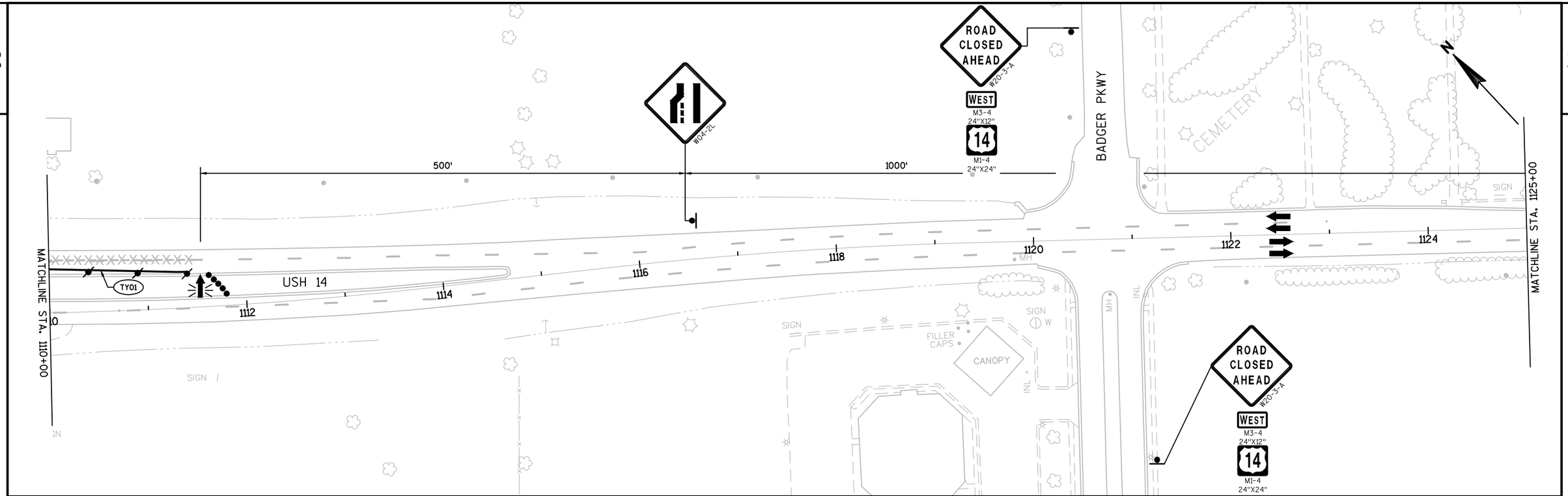
- TRAFFIC FLOW ARROW
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- WORK ZONE

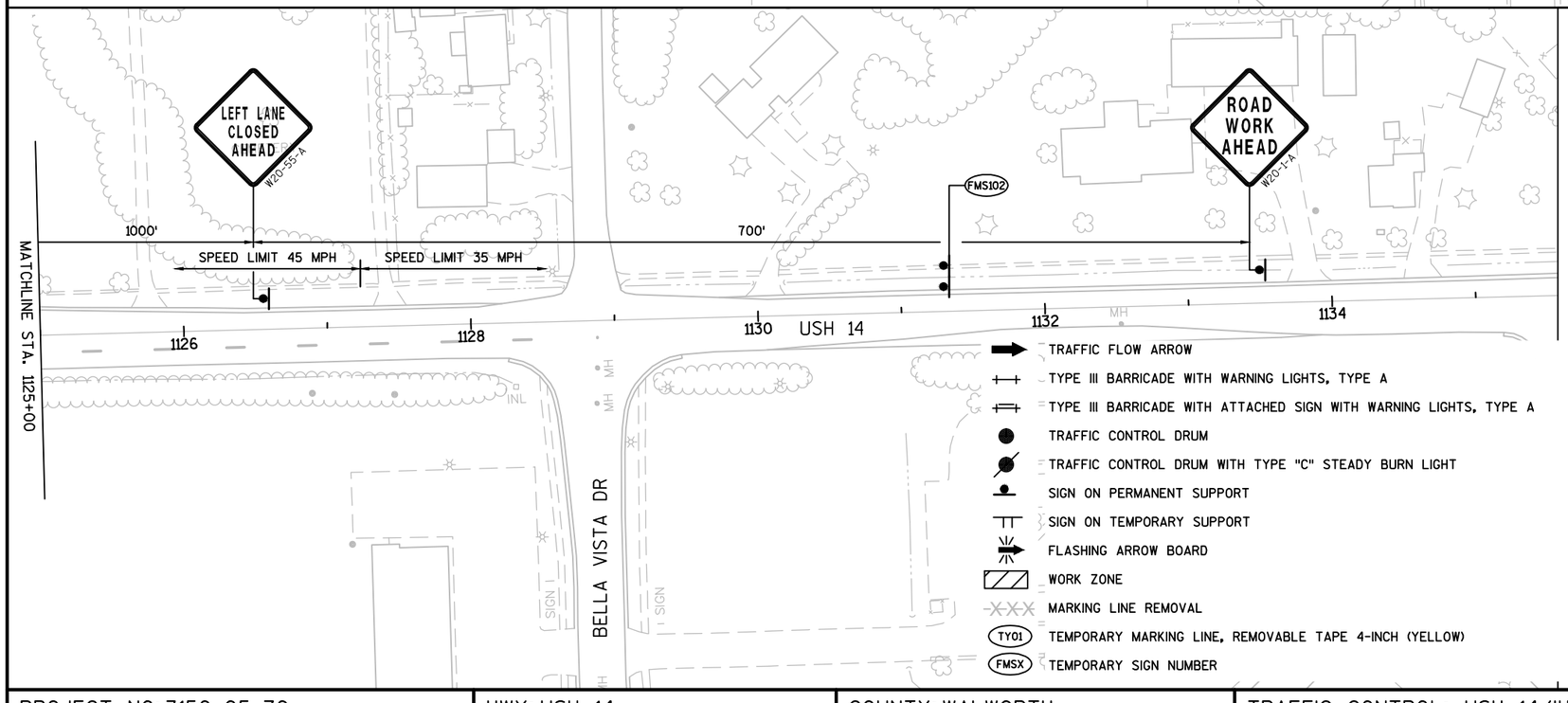
NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATION ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEED AND/OR DIRECTED BY THE ENGINEER. NO "WORKING" LIGHT SHALL BE VISIBLE ON COVERED OR LAID DOWN SIGNS.
5. SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY" AND S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" DETAIL C FOR ADDITIONAL DETAILS
6. SEE DETOUR PLAN AND FIXED MESSAGE SIGNS DETAIL SHEET FOR ADDITIONAL SIGNING.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TRAFFIC CONTROL: USH 14/IH-43 - SHORT TERM, BULLNOSE WORK | SHEET 70 | E |
|---|---|---|---|---|---|

2




TRAFFIC FLOW ARROW

TYPE III BARRICADE WITH WARNING LIGHTS, TYPE A

TYPE III BARRICADE WITH ATTACHED SIGN WITH WARNING LIGHTS, TYPE A

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

FLASHING ARROW BOARD

WORK ZONE

MARKING LINE REMOVAL

(TY01) TEMPORARY MARKING LINE, REMOVABLE TAPE 4-INCH (YELLOW)

(FMSX) TEMPORARY SIGN NUMBER

## NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATION ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEED AND/OR DIRECTED BY THE ENGINEER. NO "WORKING" LIGHT SHALL BE VISIBLE ON COVERED OR LAID DOWN SIGNS.
5. SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY" AND S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" DETAIL C FOR ADDITIONAL DETAILS
6. SEE DETOUR PLAN AND FIXED MESSAGE SIGNS DETAIL SHEET FOR ADDITIONAL SIGNING.

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TRAFFIC CONTROL: USH 14/IH-43 - SHORT TERM, BULLNOSE WORK | SHEET 71 | E |
|---|---|---|---|---|---|

2

N

## NOTES

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
3. ALL SIGNS ARE SIZE (2) UNLESS NOTED AS SIZE (3).
4. SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED AS DIRECTED BY THE ENGINEER AND PAID FOR UNDER THE ITEM "TRAFFIC CONTROL COVERING SIGNS TYPE II."
5. SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES," AND S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES," FOR ADDITIONAL DETAILS AND DIMENSIONS.
6. TEMPORARY ACCESS FOR EMERGENCY VEHICLES AND LOCAL ACCESS SHALL BE PROVIDED THROUGHOUT THE PROJECT DURING CONSTRUCTION.
7. WHEN COVERING EXISTING USH 14 DIRECTIONAL ARROWS, ADDITIONAL EXISTING SIGN PLATES OMITTED FOR CLARITY.

## LEGEND

- TRAFFIC FLOW ARROW
- PROPOSED SIGN MOUNTED ON POST
- PROPOSED SIGN MOUNTED ON EXISTING POST
- PROPOSED SIGN MOUNTED ON POSTS
- PROPOSED SIGN MOUNTED ON EXISTING POSTS
- COV. — COVER CONFLICTING SIGN
- WORK ZONE CLOSED TO TRAFFIC
- COVER EXISTING SIGN
- XX — SIGN NUMBER
- FMXXX — TEMPORARY SIGN NUMBER
- USH 14 EB/WB DETOUR ROUTE
- STH 89 SB DETOUR ROUTE
- (3) — SEE NOTE 3

## SIGN PLATE LEGEND

1. DETOUR AHEAD W20-2-A
2. ROAD CLOSED AHEAD W20-3-A
3. ROAD CLOSED 500 FT W20-3-D
4. DETOUR NEXT XX MILES G20-51 60"X24"

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | DETOUR PLAN | SHEET 72 | E |
|---|---|---|---|---|---|

2

# DETOUR SIGN PLATE LEGEND

## SIZE 2

M4-8
24"X12"




M4-8
24"X12"

M3-2
24"X12"

M3-4
24"X12"

M1-4
24"X24"

M1-4
24"X24"

M4-6
24"X12"

M05-1R
21"X21"

M06-1
21"X21"

M06-1
21"X21"

M06-1
21"X21"

M05-1L
21"X21'

M5-2R
21"X21"

M6-2
21"X21"

## SIZE 3

M4-8
36"X18"




M4-8
36"X18"

M3-2
36"X18"

M3-4
36"X18"

M1-4
36"X36"

M1-4
36"X36"

M06-1
30"X30"

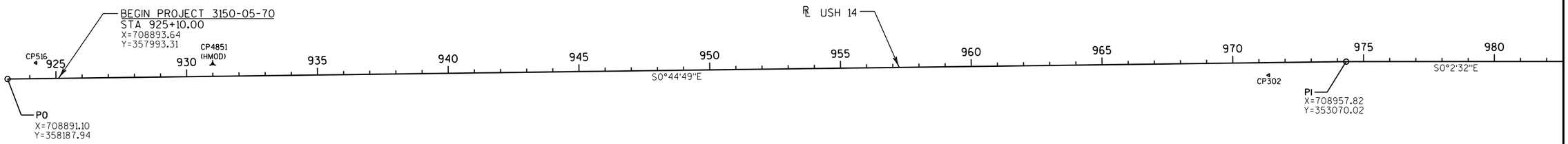
M06-1
30"X30"

M5-2R
30"X30"

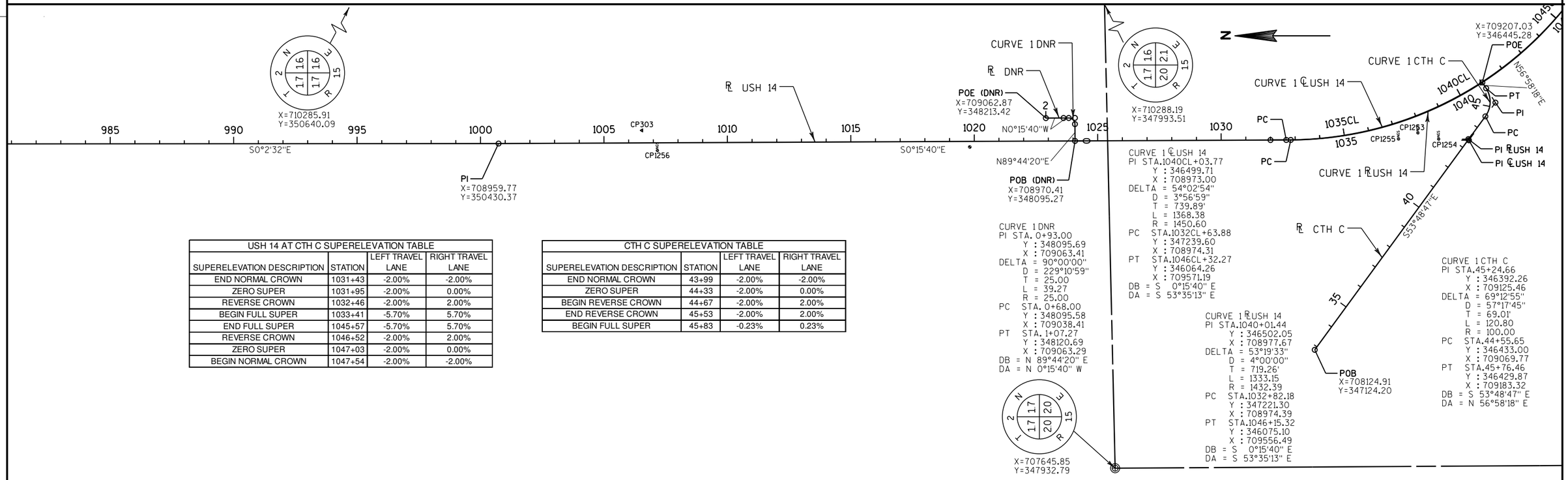
M6-2
30"X30"

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | DETOUR PLAN - SIGN PLATE LEGEND | SHEET 73 | E |
|---|---|---|---|---|---|

2




THE FOLLOWING CONTROL POINTS ARE
NOT TO BE DESTROYED OR DISTURBED
AVOID AT ALL COSTS:
CP4851 (HMOD)
CP1253 (NGS)
CP1254 (NGS)
CP1255 (NGS)
CP1256 (NGS)




CURVE 1 DNR
PI STA. 0+93.00
Y : 348095.69
X : 709063.41
DELTA = 90°00'00"
D = 229°10'59"
T = 25.00
L = 39.27
R = 25.00
PC STA. 0+68.00
Y : 348095.58
X : 709038.41
PT STA. 1+07.27
Y : 348120.69
X : 709063.29
DB = N 89°44'20" E
DA = N 0°15'40" W

CURVE 1 ℄USH 14
PI STA.1040CL+03.77
Y : 346499.71
X : 708973.00
DELTA = 54°02'54"
D = 3°56'59"
T = 739.89'
L = 1368.38
R = 1450.60
PC STA.1032CL+63.88
Y : 347239.60
X : 708974.31
PT STA.1046CL+32.27
Y : 346064.26
X : 709571.19
DB = S 0°15'40" E
DA = S 53°35'13" E

CURVE 1 ℄USH 14
PI STA.1040+01.44
Y : 346502.05
X : 708977.67
DELTA = 53°19'33"
D = 4°00'00"
T = 719.26'
L = 1333.15
R = 1432.39
PC STA.1032+82.18
Y : 347221.30
X : 708974.39
PT STA.1046+15.32
Y : 346075.10
X : 709556.49
DB = S 0°15'40" E
DA = S 53°35'13" E

CURVE 1 CTH C
PI STA.45+24.66
Y : 346392.26
X : 709125.46
DELTA = 69°12'55"
D = 57°17'45"
T = 69.01'
L = 120.80
R = 100.00
PC STA.44+55.65
Y : 346433.00
X : 709069.77
PT STA.45+76.46
Y : 346429.87
X : 709183.32
DB = S 53°48'47" E
DA = N 56°58'18" E

| USH 14 AT CTH C SUPERELEVATION TABLE | | | |
|---|---|---|---|
| SUPERELEVATION DESCRIPTION | STATION | LEFT TRAVEL LANE | RIGHT TRAVEL LANE |
| END NORMAL CROWN | 1031+43 | -2.00% | -2.00% |
| ZERO SUPER | 1031+95 | -2.00% | 0.00% |
| REVERSE CROWN | 1032+46 | -2.00% | 2.00% |
| BEGIN FULL SUPER | 1033+41 | -5.70% | 5.70% |
| END FULL SUPER | 1045+57 | -5.70% | 5.70% |
| REVERSE CROWN | 1046+52 | -2.00% | 2.00% |
| ZERO SUPER | 1047+03 | -2.00% | 0.00% |
| BEGIN NORMAL CROWN | 1047+54 | -2.00% | -2.00% |

| CTH C SUPERELEVATION TABLE | | | |
|---|---|---|---|
| SUPERELEVATION DESCRIPTION | STATION | LEFT TRAVEL LANE | RIGHT TRAVEL LANE |
| END NORMAL CROWN | 43+99 | -2.00% | -2.00% |
| ZERO SUPER | 44+33 | -2.00% | 0.00% |
| BEGIN REVERSE CROWN | 44+67 | -2.00% | 2.00% |
| END REVERSE CROWN | 45+53 | -2.00% | 2.00% |
| BEGIN FULL SUPER | 45+83 | -0.23% | 0.23% |

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | ALIGNMENT PLAN | SHEET 74 | E |
|---|---|---|---|---|---|

2

SECTION LINE

T 2 N R 15 E — 16, 17, 20, 21

X=710288.19
Y=347993.51

CURVE 1 ℄USH 14

CURVE 1 ℜUSH 14

℄ CTH C

CURVE 1 ℄USH 14
PI STA.1040CL+03.77
Y : 346499.71
X : 708973.00
DELTA = 54°02'54"
D = 3°56'59"
T = 739.89'
L = 1368.38
R = 1450.60
PC STA.1032CL+63.88
Y : 347239.60
X : 708974.31
PT STA.1046CL+32.27
Y : 346064.26
X : 709571.19
DB = S 0°15'40" E
DA = S 53°35'13" E

PC

1035CL

1035

CURVE 1 ℄USH 14

CP1255 (BRASS)

CP1253 (BRASS)

CP1254 (BRASS)

1040CL

1040

45

℄ CTH C

40

PI ℄USH 14

PI ℜUSH 14

CURVE 1 ℜUSH 14

1045CL

PT

1045

1050

1055

S53°35'13"E

THE FOLLOWING CONTROL POINTS ARE
NOT TO BE DESTROYED OR DISTURBED
AVOID AT ALL COSTS:
CP1253 (NGS)
CP1254 (NGS)
CP1255 (NGS)

CURVE 1 ℜUSH 14
PI STA.1040+01.44
Y : 346502.05
X : 708977.67
DELTA = 53°19'33"
D = 4°00'00"
T = 719.26'
L = 1333.15
R = 1432.39
PC STA.1032+82.18
Y : 347221.30
X : 708974.39
PT STA.1046+15.32
Y : 346075.10
X : 709556.49
DB = S 0°15'40" E
DA = S 53°35'13" E

X=710307.17
Y=345346.77

T 2 N R 15 E — 20, 21, 20, 21

℄ CREEK RD

REPLACE SECTION CORNER

PI

10

N89°43'17"E

POB
X=709875.32
Y=345341.39

POE
X=711163.49
Y=345368.58

N88°48'25"E

22

20

PI

1060

PC

1065

PI

PT

1070 CP301

1075

1080

1085

PC

1090

PI

CURVE 2 USH 14

ℜ USH 14

S48°20'35"E

CURVE 2 USH 14
PI STA.1065+71.30
Y : 344914.03
X : 711130.58
DELTA = 5°14'38"
D = 1°00'00"
T = 262.38'
L = 524.39
R = 5729.58
PC STA.1063+08.92
Y : 345069.77
X : 710919.43
PT STA.1068+33.31
Y : 344739.64
X : 711326.61
DB = S 53°35'13" E
DA = S 48°20'35" E

QUARTER SECTION LINE

T 2 N R 15 E — 21

X=712951.01
Y=345416.55

QUARTER SECTION LINE

CURVE 3 USH 14

CURVE 3 USH 14
PI STA.1090+00.00
Y : 343299.50
X : 712945.43
DELTA = 1°22'21"
D = 0°30'00"
T = 137.26'
L = 274.51
R = 11459.16
PC STA.1088+62.74
Y : 343390.73
X : 712842.88
PT STA.1091+37.25
Y : 343205.84
X : 713045.77
DB = S 48°20'35" E
DA = S 46°58'14" E

PT

1095

S46°58'14"E

END PROJECT 3150-05-70
STA 1096+27.00
X=713403.60
Y=342871.80

SECTION LINE

T 2 N R 15 E — 21, 21, 28, 28

X=712952.09
Y=342782.52

N

QUARTER SECTION LINE

T 2 N R 15 E — 20

X=707661.64
Y=345293.03

| USH 14 AT CTH C SUPERELEVATION TABLE | | | |
|---|---|---|---|
| SUPERELEVATION DESCRIPTION | STATION | LEFT TRAVEL LANE | RIGHT TRAVEL LANE |
| END NORMAL CROWN | 1031+43 | -2.00% | -2.00% |
| ZERO SUPER | 1031+95 | -2.00% | 0.00% |
| REVERSE CROWN | 1032+46 | -2.00% | 2.00% |
| BEGIN FULL SUPER | 1033+41 | -5.70% | 5.70% |
| END FULL SUPER | 1045+57 | -5.70% | 5.70% |
| REVERSE CROWN | 1046+52 | -2.00% | 2.00% |
| ZERO SUPER | 1047+03 | -2.00% | 0.00% |
| BEGIN NORMAL CROWN | 1047+54 | -2.00% | -2.00% |

| CTH C SUPERELEVATION TABLE | | | |
|---|---|---|---|
| SUPERELEVATION DESCRIPTION | STATION | LEFT TRAVEL LANE | RIGHT TRAVEL LANE |
| END NORMAL CROWN | 43+99 | -2.00% | -2.00% |
| ZERO SUPER | 44+33 | -2.00% | 0.00% |
| BEGIN REVERSE CROWN | 44+67 | -2.00% | 2.00% |
| END REVERSE CROWN | 45+53 | -2.00% | 2.00% |
| BEGIN FULL SUPER | 45+83 | -0.23% | 0.23% |

SECTION LINE

1100

S46°58'14"E

CP300

1105

ℜ USH 14

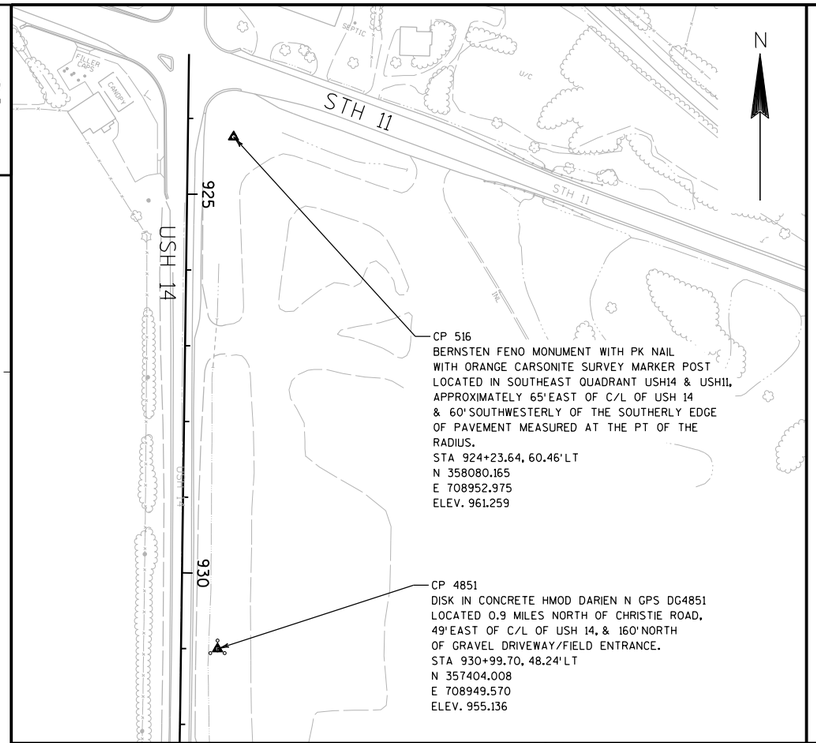
1110

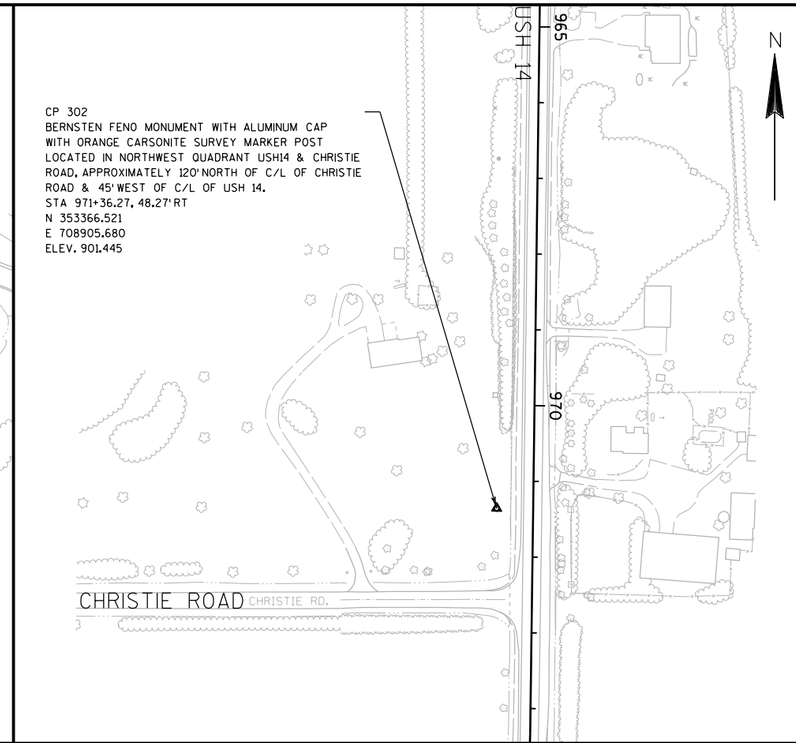
1115

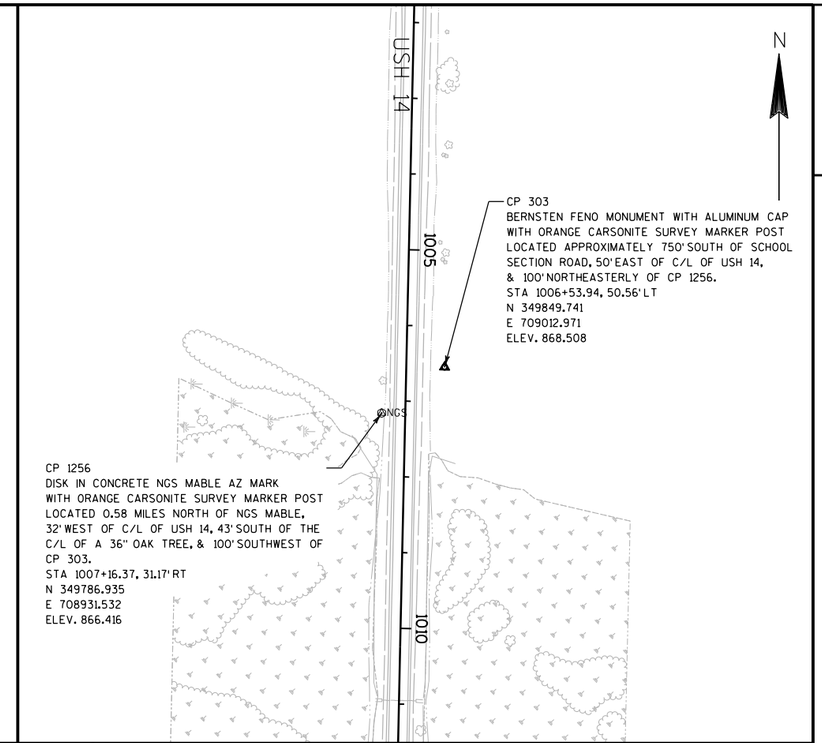
1120

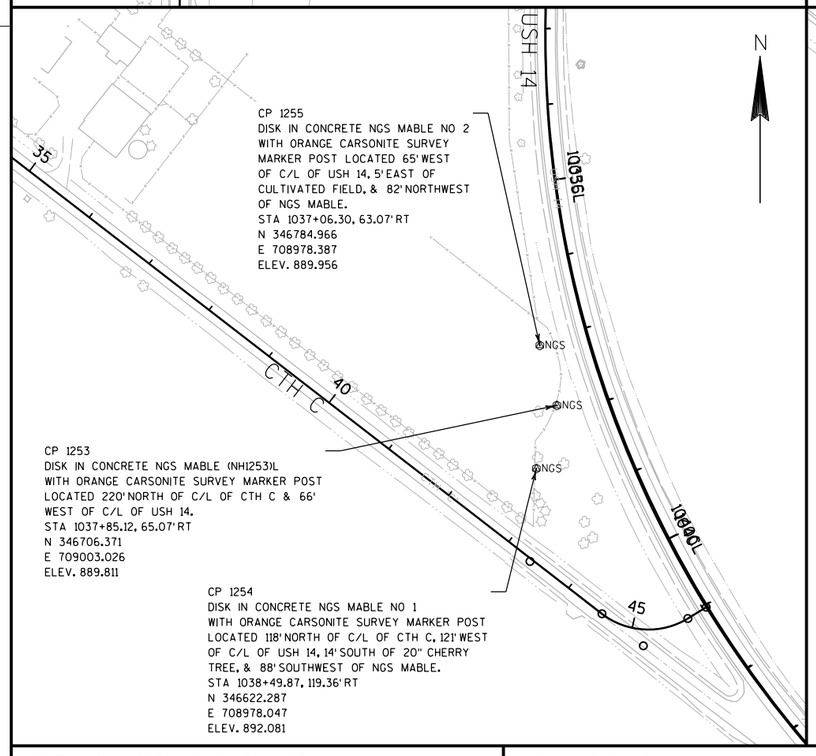
END CONSTRUCTION
STA 1103+50.00

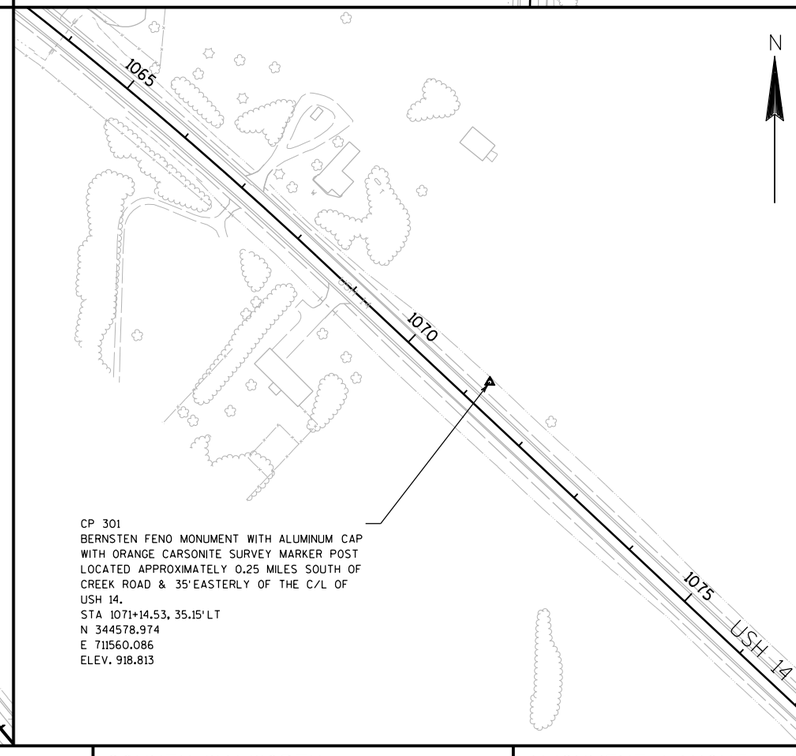
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | ALIGNMENT PLAN | SHEET 75 | E |
|---|---|---|---|---|---|

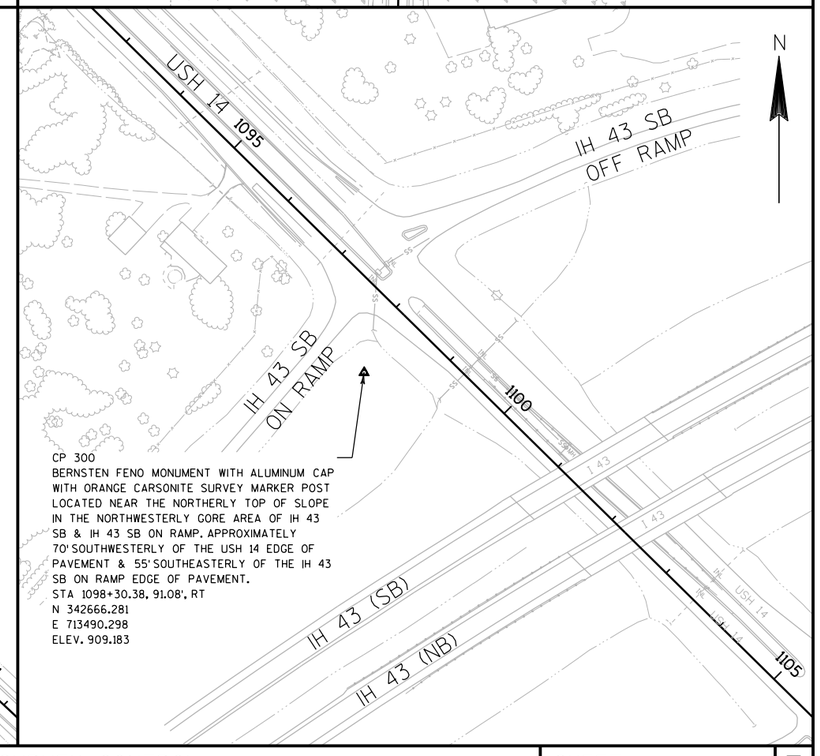



| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | ALIGNMENT LAYOUT - SURVEY CONTROL | SHEET 76 | E |
|---|---|---|---|---|---|

3150-05-70

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0002 | 201.0105 | Clearing | STA | 34.000 | 34.000 |
| 0004 | 201.0115 | Clearing | ACRE | 0.200 | 0.200 |
| 0006 | 201.0120 | Clearing | ID | 8.000 | 8.000 |
| 0008 | 201.0205 | Grubbing | STA | 34.000 | 34.000 |
| 0010 | 201.0215 | Grubbing | ACRE | 0.200 | 0.200 |
| 0012 | 201.0220 | Grubbing | ID | 8.000 | 8.000 |
| 0014 | 203.0100 | Removing Small Pipe Culverts | EACH | 21.000 | 21.000 |
| 0016 | 203.0200 | Removing Old Structure (station) 01. 996+80 | LS | 1.000 | 1.000 |
| 0018 | 203.0200 | Removing Old Structure (station) 02. 1010+95 | LS | 1.000 | 1.000 |
| 0020 | 203.0200 | Removing Old Structure (station) 03. 1063+91 | LS | 1.000 | 1.000 |
| 0022 | 203.0600.S | Removing Old Structure Over Waterway With Minimal Debris (station) 01. 1019+83.12 | LS | 1.000 | 1.000 |
| 0024 | 204.0100 | Removing Pavement | SY | 5,190.000 | 5,190.000 |
| 0026 | 204.0115 | Removing Asphaltic Surface Butt Joints | SY | 448.000 | 448.000 |
| 0028 | 204.0120 | Removing Asphaltic Surface Milling | SY | 57,740.000 | 57,740.000 |
| 0030 | 204.0165 | Removing Guardrail | LF | 1,445.000 | 1,445.000 |
| 0032 | 204.0220 | Removing Inlets | EACH | 1.000 | 1.000 |
| 0034 | 204.0245 | Removing Storm Sewer (size) 01. 12-INCH | LF | 12.000 | 12.000 |
| 0036 | 204.9060.S | Removing (item description) 01. APRON ENDWALL FOR UNDERDRAIN | EACH | 4.000 | 4.000 |
| 0038 | 205.0100 | Excavation Common | CY | 19,437.000 | 19,437.000 |
| 0040 | 206.1000 | Excavation for Structures Bridges (structure) 01. B-64-0191 | LS | 1.000 | 1.000 |
| 0042 | 208.0100 | Borrow | CY | 13,783.000 | 13,783.000 |
| 0044 | 209.2100 | Backfill Granular Grade 2 | CY | 550.000 | 550.000 |
| 0046 | 210.1100 | Backfill Structure Type A | CY | 792.000 | 792.000 |
| 0048 | 213.0100 | Finishing Roadway (project) 01. 3150-05-70 | EACH | 1.000 | 1.000 |
| 0050 | 214.0100 | Obliterating Old Road | STA | 3.000 | 3.000 |
| 0052 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 2,200.000 | 2,200.000 |
| 0054 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 15,698.000 | 15,698.000 |
| 0056 | 305.0410 | Aggregate Detours | TON | 50.000 | 50.000 |
| 0058 | 305.0500 | Shaping Shoulders | STA | 5.000 | 5.000 |
| 0060 | 311.0110 | Breaker Run | TON | 11,700.000 | 11,700.000 |
| 0062 | 330.0100 | Mill and Relay | SY | 48,625.000 | 48,625.000 |
| 0064 | 374.1010.S | QMP Mill and Relay Compaction | SY | 48,625.000 | 48,625.000 |
| 0066 | 405.0100 | Coloring Concrete WisDOT Red | CY | 12.000 | 12.000 |
| 0068 | 415.0120 | Concrete Pavement 12-Inch | SY | 58.000 | 58.000 |
| 0070 | 415.0410 | Concrete Pavement Approach Slab | SY | 80.000 | 80.000 |
| 0072 | 416.0512 | Concrete Truck Apron 12-Inch | SY | 130.000 | 130.000 |
| 0074 | 416.1010 | Concrete Surface Drains | CY | 8.000 | 8.000 |

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0076 | 440.4410 | Incentive IRI Ride | DOL | 12,960.000 | 12,960.000 |
| 0078 | 455.0605 | Tack Coat | GAL | 9,850.000 | 9,850.000 |
| 0080 | 460.2000 | Incentive Density HMA Pavement | DOL | 12,480.000 | 12,480.000 |
| 0082 | 460.6223 | HMA Pavement 3 MT 58-28 S | TON | 10,170.000 | 10,170.000 |
| 0084 | 460.6224 | HMA Pavement 4 MT 58-28 S | TON | 9,310.000 | 9,310.000 |
| 0086 | 465.0115 | Asphaltic Surface Detours | TON | 50.000 | 50.000 |
| 0088 | 465.0120 | Asphaltic Surface Driveways and Field Entrances | TON | 290.000 | 290.000 |
| 0090 | 465.0315 | Asphaltic Flumes | SY | 76.000 | 76.000 |
| 0092 | 465.0425 | Asphaltic Shoulder Rumble Strips 2-Lane Rural | LF | 30,600.000 | 30,600.000 |
| 0094 | 465.0475 | Asphalt Centerline Rumble Strips 2-Lane Rural | LF | 13,900.000 | 13,900.000 |
| 0096 | 495.1000.S | Cold patch | TON | 30.000 | 30.000 |
| 0098 | 502.0100 | Concrete Masonry Bridges | CY | 476.000 | 476.000 |
| 0100 | 502.3200 | Protective Surface Treatment | SY | 619.000 | 619.000 |
| 0102 | 502.3210 | Pigmented Surface Sealer | SY | 101.000 | 101.000 |
| 0104 | 503.0137 | Prestressed Girder Type I 36W-Inch | LF | 480.000 | 480.000 |
| 0106 | 505.0400 | Bar Steel Reinforcement HS Structures | LB | 7,360.000 | 7,360.000 |
| 0108 | 505.0600 | Bar Steel Reinforcement HS Coated Structures | LB | 51,170.000 | 51,170.000 |
| 0110 | 505.0800.S | Bar Steel Reinforcement HS Stainless Structures | LB | 1,640.000 | 1,640.000 |
| 0112 | 506.2605 | Bearing Pads Elastomeric Non-Laminated | EACH | 12.000 | 12.000 |
| 0114 | 506.4000 | Steel Diaphragms (structure) 01. B-64-0191 | EACH | 5.000 | 5.000 |
| 0116 | 516.0500 | Rubberized Membrane Waterproofing | SY | 22.000 | 22.000 |
| 0118 | 520.8700 | Cleaning Culvert Pipes | EACH | 1.000 | 1.000 |
| 0120 | 521.1018 | Apron Endwalls for Culvert Pipe Steel 18-Inch | EACH | 12.000 | 12.000 |
| 0122 | 521.1024 | Apron Endwalls for Culvert Pipe Steel 24-Inch | EACH | 2.000 | 2.000 |
| 0124 | 521.1721 | Apron Endwalls for Pipe Arch Sloped Side Drains Steel 21x15-Inch 6 to 1 | EACH | 6.000 | 6.000 |
| 0126 | 521.1728 | Apron Endwalls for Pipe Arch Sloped Side Drains Steel 28x20-Inch 6 to 1 | EACH | 20.000 | 20.000 |
| 0128 | 521.1735 | Apron Endwalls for Pipe Arch Sloped Side Drains Steel 35x24-Inch 6 to 1 | EACH | 4.000 | 4.000 |
| 0130 | 521.1742 | Apron Endwalls for Pipe Arch Sloped Side Drains Steel 42x29-Inch 6 to 1 | EACH | 4.000 | 4.000 |
| 0132 | 521.3118 | Culvert Pipe Corrugated Steel 18-Inch | LF | 160.000 | 160.000 |
| 0134 | 521.3124 | Culvert Pipe Corrugated Steel 24-Inch | LF | 40.000 | 40.000 |
| 0136 | 521.3721 | Pipe Arch Corrugated Steel 21x15-Inch | LF | 165.000 | 165.000 |
| 0138 | 521.3728 | Pipe Arch Corrugated Steel 28x20-Inch | LF | 380.000 | 380.000 |
| 0140 | 521.3735 | Pipe Arch Corrugated Steel 35x24-Inch | LF | 70.000 | 70.000 |
| 0142 | 521.3742 | Pipe Arch Corrugated Steel 42x29-Inch | LF | 180.000 | 180.000 |
| 0144 | 522.0415 | Culvert Pipe Reinforced Concrete Class IV 15-Inch | LF | 45.000 | 45.000 |
| 0146 | 522.0424 | Culvert Pipe Reinforced Concrete Class IV 24-Inch | LF | 240.000 | 240.000 |
| 0148 | 522.0436 | Culvert Pipe Reinforced Concrete Class IV 36-Inch | LF | 70.000 | 70.000 |

3150-05-70

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0150 | 522.0448 | Culvert Pipe Reinforced Concrete Class IV 48-Inch | LF | 75.000 | 75.000 |
| 0152 | 522.1015 | Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch | EACH | 2.000 | 2.000 |
| 0154 | 522.1024 | Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch | EACH | 6.000 | 6.000 |
| 0156 | 522.1036 | Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch | EACH | 4.000 | 4.000 |
| 0158 | 522.1048 | Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch | EACH | 2.000 | 2.000 |
| 0160 | 522.2414 | Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch | LF | 569.000 | 569.000 |
| 0162 | 522.2614 | Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch | EACH | 12.000 | 12.000 |
| 0164 | 550.1100 | Piling Steel HP 10-Inch X 42 Lb | LF | 1,560.000 | 1,560.000 |
| 0166 | 601.0557 | Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D | LF | 1,264.000 | 1,264.000 |
| 0168 | 601.0582 | Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type T | LF | 192.000 | 192.000 |
| 0170 | 602.0405 | Concrete Sidewalk 4-Inch | SF | 3,860.000 | 3,860.000 |
| 0172 | 606.0200 | Riprap Medium | CY | 270.000 | 270.000 |
| 0174 | 606.0300 | Riprap Heavy | CY | 252.000 | 252.000 |
| 0176 | 611.0627 | Inlet Covers Type HM | EACH | 1.000 | 1.000 |
| 0178 | 611.3230 | Inlets 2x3-FT | EACH | 1.000 | 1.000 |
| 0180 | 611.8115 | Adjusting Inlet Covers | EACH | 1.000 | 1.000 |
| 0182 | 611.9800.S | Pipe Grates 01. 36-INCH | EACH | 4.000 | 4.000 |
| 0184 | 611.9800.S | Pipe Grates 02. 48-INCH | EACH | 2.000 | 2.000 |
| 0186 | 612.0406 | Pipe Underdrain Wrapped 6-Inch | LF | 230.000 | 230.000 |
| 0188 | 612.0804 | Apron Endwalls for Underdrain Reinforced Concrete 4-Inch | EACH | 4.000 | 4.000 |
| 0190 | 614.0150 | Anchor Assemblies for Steel Plate Beam Guard | EACH | 4.000 | 4.000 |
| 0192 | 614.0200 | Steel Thrie Beam Structure Approach | LF | 84.000 | 84.000 |
| 0194 | 614.0220 | Steel Thrie Beam Bullnose Terminal | EACH | 2.000 | 2.000 |
| 0196 | 614.0396 | Guardrail Mow Strip Asphalt | SY | 260.000 | 260.000 |
| 0198 | 614.2300 | MGS Guardrail 3 | LF | 200.000 | 200.000 |
| 0200 | 614.2500 | MGS Thrie Beam Transition | LF | 156.000 | 156.000 |
| 0202 | 614.2610 | MGS Guardrail Terminal EAT | EACH | 4.000 | 4.000 |
| 0204 | 618.0100 | Maintenance And Repair of Haul Roads (project) 01. 3150-05-70 | EACH | 1.000 | 1.000 |
| 0206 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0208 | 620.0300 | Concrete Median Sloped Nose | SF | 124.000 | 124.000 |
| 0210 | 623.0200 | Dust Control Surface Treatment | SY | 78,000.000 | 78,000.000 |
| 0212 | 624.0100 | Water | MGAL | 765.000 | 765.000 |
| 0214 | 625.0500 | Salvaged Topsoil | SY | 47,080.000 | 47,080.000 |

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0216 | 627.0200 | Mulching | SY | 11,765.000 | 11,765.000 |
| 0218 | 628.1104 | Erosion Bales | EACH | 20.000 | 20.000 |
| 0220 | 628.1504 | Silt Fence | LF | 3,400.000 | 3,400.000 |
| 0222 | 628.1520 | Silt Fence Maintenance | LF | 3,400.000 | 3,400.000 |
| 0224 | 628.1905 | Mobilizations Erosion Control | EACH | 12.000 | 12.000 |
| 0226 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 6.000 | 6.000 |
| 0228 | 628.2004 | Erosion Mat Class I Type B | SY | 27,675.000 | 27,675.000 |
| 0230 | 628.2008 | Erosion Mat Urban Class I Type B | SY | 25,475.000 | 25,475.000 |
| 0232 | 628.6005 | Turbidity Barriers | SY | 350.000 | 350.000 |
| 0234 | 628.7015 | Inlet Protection Type C | EACH | 15.000 | 15.000 |
| 0236 | 628.7504 | Temporary Ditch Checks | LF | 660.000 | 660.000 |
| 0238 | 628.7555 | Culvert Pipe Checks | EACH | 150.000 | 150.000 |
| 0240 | 628.7570 | Rock Bags | EACH | 125.000 | 125.000 |
| 0242 | 629.0210 | Fertilizer Type B | CWT | 33.000 | 33.000 |
| 0244 | 630.0130 | Seeding Mixture No. 30 | LB | 860.000 | 860.000 |
| 0246 | 630.0200 | Seeding Temporary | LB | 340.000 | 340.000 |
| 0248 | 633.5200 | Markers Culvert End | EACH | 26.000 | 26.000 |
| 0250 | 634.0616 | Posts Wood 4x6-Inch X 16-FT | EACH | 74.000 | 74.000 |
| 0252 | 634.0618 | Posts Wood 4x6-Inch X 18-FT | EACH | 67.000 | 67.000 |
| 0254 | 637.2210 | Signs Type II Reflective H | SF | 751.200 | 751.200 |
| 0256 | 637.2220 | Signs Type II Reflective SH | SF | 2.250 | 2.250 |
| 0258 | 637.2230 | Signs Type II Reflective F | SF | 321.630 | 321.630 |
| 0260 | 638.2102 | Moving Signs Type II | EACH | 10.000 | 10.000 |
| 0262 | 638.2602 | Removing Signs Type II | EACH | 80.000 | 80.000 |
| 0264 | 638.3000 | Removing Small Sign Supports | EACH | 98.000 | 98.000 |
| 0266 | 642.5201 | Field Office Type C | EACH | 1.000 | 1.000 |
| 0268 | 643.0300 | Traffic Control Drums | DAY | 5,815.000 | 5,815.000 |
| 0270 | 643.0420 | Traffic Control Barricades Type III | DAY | 6,454.000 | 6,454.000 |
| 0272 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 7,960.000 | 7,960.000 |
| 0274 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 1,830.000 | 1,830.000 |
| 0276 | 643.0800 | Traffic Control Arrow Boards | DAY | 175.000 | 175.000 |
| 0278 | 643.0900 | Traffic Control Signs | DAY | 38,080.000 | 38,080.000 |
| 0280 | 643.0910 | Traffic Control Covering Signs Type I | EACH | 5.000 | 5.000 |
| 0282 | 643.0920 | Traffic Control Covering Signs Type II | EACH | 35.000 | 35.000 |
| 0284 | 643.1000 | Traffic Control Signs Fixed Message | SF | 236.000 | 236.000 |
| 0286 | 643.5000 | Traffic Control | EACH | 1.000 | 1.000 |
| 0288 | 645.0111 | Geotextile Type DF Schedule A | SY | 130.000 | 130.000 |
| 0290 | 645.0120 | Geotextile Type HR | SY | 1,179.000 | 1,179.000 |
| 0292 | 646.1020 | Marking Line Epoxy 4-Inch | LF | 24,577.000 | 24,577.000 |
| 0294 | 646.1040 | Marking Line Grooved Wet Ref Epoxy 4-Inch | LF | 33,812.000 | 33,812.000 |

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0296 | 646.1545 | Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch | LF | 280.000 | 280.000 |
| 0298 | 646.3020 | Marking Line Epoxy 8-Inch | LF | 80.000 | 80.000 |
| 0300 | 646.3040 | Marking Line Grooved Wet Ref Epoxy 8-Inch | LF | 601.000 | 601.000 |
| 0302 | 646.3545 | Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch | LF | 531.000 | 531.000 |
| 0304 | 646.5020 | Marking Arrow Epoxy | EACH | 7.000 | 7.000 |
| 0306 | 646.5120 | Marking Word Epoxy | EACH | 3.000 | 3.000 |
| 0308 | 646.6120 | Marking Stop Line Epoxy 18-Inch | LF | 161.000 | 161.000 |
| 0310 | 646.7120 | Marking Diagonal Epoxy 12-Inch | LF | 126.000 | 126.000 |
| 0312 | 646.8120 | Marking Curb Epoxy | LF | 104.000 | 104.000 |
| 0314 | 646.9000 | Marking Removal Line 4-Inch | LF | 295.000 | 295.000 |
| 0316 | 646.9100 | Marking Removal Line 8-Inch | LF | 80.000 | 80.000 |
| 0318 | 648.0100 | Locating No-Passing Zones | MI | 3.070 | 3.070 |
| 0320 | 649.0150 | Temporary Marking Line Removable Tape 4-Inch | LF | 1,175.000 | 1,175.000 |
| 0322 | 650.4500 | Construction Staking Subgrade | LF | 2,740.000 | 2,740.000 |
| 0324 | 650.5000 | Construction Staking Base | LF | 7,320.000 | 7,320.000 |
| 0326 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 1,264.000 | 1,264.000 |
| 0328 | 650.6000 | Construction Staking Pipe Culverts | EACH | 12.000 | 12.000 |
| 0330 | 650.6500 | Construction Staking Structure Layout (structure) 01. B-64-191 | LS | 1.000 | 1.000 |
| 0332 | 650.8000 | Construction Staking Resurfacing Reference | LF | 15,150.000 | 15,150.000 |
| 0334 | 650.9910 | Construction Staking Supplemental Control (project) 01. 3150-05-70 | LS | 1.000 | 1.000 |
| 0336 | 650.9920 | Construction Staking Slope Stakes | LF | 11,760.000 | 11,760.000 |
| 0338 | 690.0150 | Sawing Asphalt | LF | 1,625.000 | 1,625.000 |
| 0340 | 690.0250 | Sawing Concrete | LF | 2,000.000 | 2,000.000 |
| 0342 | 715.0502 | Incentive Strength Concrete Structures | DOL | 2,859.000 | 2,859.000 |
| 0344 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 1,400.000 | 1,400.000 |
| 0346 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 1,800.000 | 1,800.000 |
| 0348 | SPV.0060 | Special 01. SECTION CORNER MONUMENTS | EACH | 1.000 | 1.000 |
| 0350 | SPV.0090 | Special 01. REMOVE AND RESET CULVERT PIPE REINFORCED CONCRETE 36-INCH | LF | 24.000 | 24.000 |
| 0352 | SPV.0090 | Special 02. HEAVY DUTY SILT FENCE | LF | 3,500.000 | 3,500.000 |
| 0354 | SPV.0195 | Special 01. SALVAGED PAVEMENT MILLINGS 3/4-INCH | TON | 4,275.000 | 4,275.000 |

## EARTHWORK SUMMARY

| Division | From/To Station | Location | 205.0100* Common Excavation (1) | | Salvaged/ Unusable Pavement Material (4) | Available Material (5) | Unexpanded Fill | Expanded Fill (6) | Mass Ordinate +/- (7) | Waste | Borrow |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cut (2) | EBS Excavation (3) | | | | Factor 1.25 | | | (item #208.0100) |
| 1 | 925+50 - 981+00 | Ditching | 3,340 | 0 | 0 | 865 | 75 | 94 | 771 | 2,475 | |
| | 994+50 - 1003+50 | USH 14 @ School Section Road | 819 | 100 | 0 | 599 | 794 | 993 | -394 | 220 | 394 |
| | 1010+75 - 1031+75 | USH 14 Bridge Reconstruction | 8,177 | 0 | 2,258 | 5,919 | 17,711 | 22,139 | -16,220 | 0 | 16,220 |
| | 1035+00 - 1047+50 | USH 14 @ CTH C | 1,530 | 200 | 0 | 1,278 | 66 | 83 | 1,195 | 252 | |
| | 1053+00 - 1063+65 | USH 14 @ Creek Road | 1,110 | 150 | 0 | 698 | 172 | 215 | 483 | 412 | |
| | 1087+37 - 1095+57 | USH 14 @ Foundry Road | 797 | 100 | 0 | 0 | 0 | 0 | 0 | 797 | |
| | 971+72 - 973+18 | Christie Road | 55 | 25 | 0 | 0 | 79 | 99 | -99 | 55 | 99 |
| | 14+32 - 19+28 | Creek Road | 1,016 | 150 | 0 | 604 | 75 | 94 | 510 | 412 | |
| | 43+51 - 45+82 | CTH C Realignment | 181 | 50 | 0 | 181 | 192 | 240 | -59 | 0 | 59 |
| | 0+22 - 1+64 | DNR Parking Lot | 637 | 150 | 0 | 637 | 486 | 608 | 29 | 0 | |
| Division 1 Subtotal | | | 17,662 | 925 | 2,258 | 10,781 | 19,650 | 24,565 | -13,784 | 4,623 | 13,784 |
| | | | | | | | | | | | |
| Grand Total | | | 17,662 | 925 | 2,258 | 10,781 | 19,650 | 24,565 | -13,784 | 4,623 | 13,783 |
| | | Total Common Excavation | | 18,587 | | | | | | | |

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unusable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Breaker Run.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusable Pavement Material
6) Expanded Fill. Factor = 1.25. Expanded Fill = (Unexpanded Fill) * Fill Factor
7) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

A) Assumed that 2,475 CY of cut material will not be re-usable fill material. Based on 1' of topsoil in ditches.
B) Assumed that 220 CY of cut material will not be re-usable fill material. Based on 1' of topsoil in ditches.
C) Assumed that 252 CY of cut material will not be re-usable fill material. Based on 1' of topsoil in ditches.
D) Assumed that 412 CY of cut material will not be re-usable fill material. Based on 1' of topsoil in ditches.
E) Assumed that all cut material will not be re-usable fill material.
F) Assumed that 412 CY of cut material will not be re-usable fill material. Based on 1' of topsoil in ditches.

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## REMOVING APRON ENDWALLS FOR UNDERDRAIN

| ROADWAY | STATION | LOCATION | SIZE INCH | 204.9060.S REMOVING APRON ENDWALL FOR UNDERDRAIN EACH |
|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | |
| USH 14 | 1082+43 | 31' LT | 4 | 1 |
| USH 14 | 1082+43 | 33' RT | 4 | 1 |
| USH 14 | 1085+45 | 43' LT | 4 | 1 |
| USH 14 | 1085+98 | 28' RT | 4 | 1 |
| **TOTAL** | | | | **4** |

## REMOVING SMALL PIPE CULVERTS

| ROADWAY | STATION | | SIZE INCH | LENGTH FEET | TYPE | 203.0100 REMOVING SMALL PIPE CULVERTS EACH | COMMENTS |
|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | |
| USH 14 | 926+95 | 39' LT | 15 | 64 | CPCM | 1 | DRIVEWAY |
| USH 14 | 932+65 | 33' LT | 15 | 74 | CPCM | 1 | DRIVEWAY |
| USH 14 | 937+29 | 26' LT | 18 | 19 | CPCM | 1 | DRIVEWAY |
| USH 14 | 947+38 | 28' LT | 18 | 40 | CPCM | 1 | DRIVEWAY |
| USH 14 | 949+14 | 29' LT | 18 | 38 | CPCM | 1 | DRIVEWAY |
| USH 14 | 949+16 | 31' RT | 18 | 24 | CPCM | 1 | DRIVEWAY |
| USH 14 | 958+60 | 28' RT | 18 | 25 | CPCM | 1 | DRIVEWAY |
| USH 14 | 961+95 | 30' LT | 18 | 22 | CPCM | 1 | DRIVEWAY |
| USH 14 | 965+11 | 28' LT | 18 | 31 | CPCM | 1 | DRIVEWAY |
| USH 14 | 969+03 | 27' LT | 24 | 24 | CPCM | 1 | DRIVEWAY |
| USH 14 | 969+03 | 44' LT | 18 | 24 | CPCM | 1 | DRIVEWAY / 2ND PIPE |
| USH 14 | 970+96 | 28' LT | 36 | 31 | CPCM | 1 | DRIVEWAY |
| USH 14 | 972+57 | 38' RT | 24 | 58 | CPCM | 1 | AT CHRISTIE ROAD |
| USH 14 | 989+76 | 26' RT | 18 | 33 | CPCM | 1 | DRIVEWAY |
| USH 14 | 992+58 | 24' RT | 18 | 33 | CPCM | 1 | DRIVEWAY |
| USH 14 | 998+63 | 85' LT | 15 | 20 | CPCM | 1 | AT SCHOOL SECTION ROAD |
| USH 14 | 998+84 | 103' LT | 12 | 33 | CPCM | 1 | AT SCHOOL SECTION ROAD |
| USH 14 | 1022+93 | 32' RT | 24 | 40 | CPCM | 1 | DRIVEWAY |
| USH 14 | 1043+10 | 33' LT | 18 | 20 | CPCM | 1 | DRIVEWAY |
| USH 14 | 1057+75 | 29' RT | 24 | 76 | CPCM | 1 | AT CREEK ROAD |
| USH 14 | 1058+75 | 33' LT | 24 | 73 | CPCM | 1 | AT CREEK ROAD |
| **TOTAL** | | | | | | **21** | |

## CLEARING AND GRUBBING

| ROADWAY | STATION | TO | STATION | LT/RT | 201.0105 CLEARING STA | 201.0115 CLEARING ACRE | 201.0120 CLEARING ID | 201.0205 GRUBBING STA | 201.0215 GRUBBING ACRE | 201.0220 GRUBBING ID |
|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | | |
| USH 14 | 954+00 | - | 956+00 | LT ONLY | 2 | -- | -- | 2 | -- | -- |
| | 957+50 | | | LT | -- | -- | 8 | -- | -- | 8 |
| | 958+00 | | 959+00 | LT ONLY | 1 | -- | -- | 1 | -- | -- |
| | 965+00 | - | 973+00 | LT ONLY | 8 | -- | -- | 8 | -- | -- |
| | 996+00 | - | 997+00 | LT & RT | 1 | | -- | 1 | | -- |
| | 998+00 | - | 999+00 | LT & RT | 1 | -- | -- | 1 | -- | -- |
| | 1011+00 | - | 1012+00 | LT & RT | 1 | -- | -- | 1 | -- | -- |
| | 1013+00 | - | 1032+00 | LT & RT | 19 | -- | -- | 19 | -- | -- |
| SCHOOL SECTION ROAD | 100+00 | - | 101+00 | LT ONLY | 1 | -- | -- | 1 | -- | -- |
| DNR PARKING LOT | 1024+00 | - | 1024+00 | | -- | 0.20 | -- | -- | 0.20 | -- |
| **TOTALS** | | | | | **34** | **0.20** | **8** | **34** | **0.20** | **8** |

3

## REMOVING OLD STRUCTURE

| ROADWAY | LOCATION | 203.0200.01 REMOVING OLD STRUCTURE (STA. 996+80) LS | 203.0200.02 REMOVING OLD STRUCTURE (STA. 1010+95) LS | 203.0200.03 REMOVING OLD STRUCTURE (STA. 1063+91) LS | COMMENT |
|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | |
| USH 14 | 996+80 | 1 | -- | -- | 42"x60" CATTLE PASS |
| USH 14 | 1010+95 | -- | 1 | -- | 42"x72" BOX CULVERT |
| USH 14 | 1063+91 | -- | -- | 1 | 42"x72" BOX CULVERT |
| **TOTALS** | | **1** | **1** | **1** | |

## REMOVING GUARDRAIL

| ROADWAY | STATION | TO | STATION | LOCATION | 204.0165 REMOVING GUARDRAIL LF |
|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | |
| USH 14 | 995+18 | | 998+46 | RT | 326 |
| USH 14 | 1018+34 | | 1022+00 | LT | 355 |
| USH 14 | 1018+40 | | 1022+11 | RT | 360 |
| USH 14 | 1099+55 | | 1100+70 | LT | 115 |
| USH 14 | 1099+55 | | 1100+72 | LT | 117 |
| USH 14 | 1102+82 | | 1103+69 | LT | 87 |
| USH 14 | 1102+84 | | 1103+69 | LT | 85 |
| **TOTAL** | | | | | **1,445** |

3

## REMOVING PAVEMENT

| ROADWAY | STATION | TO | STATION | 204.0100* REMOVING PAVEMENT SY | 204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY | 204.0120 REMOVING ASPHALTIC SURFACE MILLING SY | 214.0100 OBLITERATING OLD ROAD STA | 330.0100 MILL AND RELAY SY | 374.1010.S QMP MILL AND RELAY COMPACTION SY | 624.0100* WATER MGAL |
|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | | |
| USH 14 | 925+10 | | 1010+50 | -- | 168 | 30,310 | -- | 30,310 | 30,310 | 185 |
| USH 14 | 1010+50 | | 1031+75 | 4,540 | -- | -- | -- | -- | -- | -- |
| USH 14 | 1031+75 | | 1079+52 | -- | -- | 16,975 | -- | 16,975 | 16,975 | 105 |
| USH 14 | 1079+52 | | 1096+27 | -- | -- | 9,115 | -- | -- | -- | -- |
| CTH C | 43+50 | | 45+90 | -- | -- | -- | 3 | -- | -- | -- |
| CHRISTIE RD | -- | | -- | -- | 56 | -- | -- | -- | -- | -- |
| SCHOOL SECTION RD | -- | | -- | -- | 56 | -- | -- | -- | -- | -- |
| CREEK RD | 14+32 | | 16+19 | -- | 56 | 485 | -- | 485 | 485 | 5 |
| CREEK RD | 16+87 | | 19+28 | -- | 56 | 855 | -- | 855 | 855 | 10 |
| FOUNDRY RD | -- | | -- | -- | 56 | -- | -- | -- | -- | -- |
| **TOTALS** | | | | **4,540** | **448** | **57,740** | **3** | **48,625** | **48,625** | **305** |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## MOBILIZATION

| LOCATION | 619.1000 MOBILIZATION EACH |
|---|---|
| CATEGORY CODE 0010 | |
| PROJECT | 1 |
| **TOTAL** | **1** |

## HAUL ROADS

| LOCATION | 618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS (3150-05-70) EACH |
|---|---|
| CATEGORY CODE 0010 | |
| PROJECT | 1 |
| **TOTAL** | **1** |

## SUBGRADE IMPROVEMENT

| LOCATION | 204.0100* REMOVING PAVEMENT SY | 205.0100* EXCAVATION COMMON CY | SPV.0195.01* SALVAGED PAVEMENT MILLINGS 3/4-INCH TON | 305.0120* BASE AGGREGATE DENSE 1 1/4-INCH TON | 311.0110* BREAKER RUN TON | 690.0250* SAWING CONCRETE LF |
|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | |
| USH 14 | 650 | 850 | 175 | 600 | 700 | 1750 |
| **TOTALS** | **650** | **850** | **175** | **600** | **700** | **1750** |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## FINISHING ROADWAY

| LOCATION | 213.0100 FINISHING ROADWAY (3150-05-70) EACH |
|---|---|
| CATEGORY CODE 0010 | |
| PROJECT | 1 |
| **TOTAL** | **1** |

3

## BASE AGGREGATE ITEMS

| ROADWAY | STATION | TO | STATION | 209.2100 BACKFILL GRANULAR GRADE 2 CY | 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON | SPV.0195.01* SALVAGED PAVEMENT MILLINGS 3/4-INCH TON | 305.0120* BASE AGGREGATE DENSE 1 1/4-INCH TON | 305.0500 SHAPING SHOULDERS STA | 311.0110* BREAKER RUN TON | 623.0200 DUST CONTROL SURFACE TREATMENT SY | 624.0100* WATER MGAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | | | | |
| USH 14 EB | 925+10 | - | 1010+50 | -- | 50 | 1,000 | -- | -- | -- | -- | 25 | |
| USH 14 EB | 1010+50 | - | 1031+75 | -- | 450 | 150 | 4,775 | -- | 4,000 | -- | 110 | |
| USH 14 EB | 1031+75 | - | 1079+53 | -- | 50 | 500 | -- | -- | -- | -- | 15 | |
| USH 14 EB | 1079+53 | - | 1096+27 | -- | -- | 150 | 420 | -- | -- | -- | 15 | |
| USH 14 EB DRIVEWAYS | 925+10 | - | 1096+27 | -- | 200 | | -- | -- | -- | -- | 5 | |
| USH 14 WB | 925+10 | - | 1010+50 | -- | 75 | 1,025 | -- | -- | -- | -- | 25 | |
| USH 14 WB | 1010+50 | - | 1031+75 | -- | 450 | 150 | 4,775 | -- | 4,000 | -- | 110 | |
| USH 14 WB | 1031+75 | - | 1079+53 | -- | 75 | 500 | -- | -- | -- | -- | 15 | |
| USH 14 WB | 1079+53 | - | 1096+27 | -- | -- | 150 | 420 | -- | -- | -- | 15 | |
| USH 14 WB DRIVEWAYS | 925+10 | - | 1096+27 | -- | 370 | | -- | -- | -- | -- | 10 | |
| CULVERT | 981+03 | | | 120 | -- | | -- | -- | -- | -- | -- | |
| CATTLE PASS | 996+80 | | | 120 | -- | | -- | -- | -- | -- | 3 | |
| CATTLE PASS | 1010+95 | | | 120 | -- | | -- | -- | -- | -- | 3 | |
| BOX CULVERT | 1063+91 | | | 120 | -- | | -- | -- | -- | -- | 3 | |
| CHRISTIE RD | -- | | | -- | 10 | | 50 | 2 | -- | -- | 2 | |
| SCHOOL SECTION RD | -- | | | -- | 5 | 5 | 70 | 2 | -- | -- | 2 | |
| CTH C | 43+50 | - | 46+05 | -- | 10 | 10 | 730 | -- | -- | -- | 15 | |
| CTH C DRIVEWAYS | -- | | | -- | 20 | | -- | -- | -- | -- | 1 | |
| CREEK RD | 14+32 | - | 16+19 | -- | 10 | 10 | 600 | -- | -- | -- | 15 | |
| CREEK RD | 16+87 | - | 19+28 | -- | 10 | 10 | 900 | -- | -- | -- | 20 | |
| CREEK RD DRIVEWAYS | -- | | | -- | 50 | -- | -- | -- | -- | -- | 1 | |
| FOUNDRY RD | -- | | | -- | -- | 10 | 100 | 1 | -- | -- | 2 | |
| DNR PARKING AREA | 0+22 | - | 0+64 | -- | 160 | -- | -- | -- | -- | -- | 4 | |
| UNDISTRIBUTED | -- | | | 70 | 205 | 430 | 1,960 | -- | 3,000 | 78,000 | 44 | INCL ADDITIONAL BREAKER RUN FOR EBS |
| **TOTALS** | | | | **550** | **2,200** | **4,100** | **14,800** | **5** | **11,000** | **78,000** | **460** | |

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

## CONCRETE PAVEMENT

| ROADWAY | STATION | TO | STATION | 415.0120 CONCRETE PAVEMENT 12-INCH SY | 415.0410 CONCRETE PAVEMENT APPROACH SLAB SY |
|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | |
| USH 14 | 1019+36 | | 1019+51 | 24 | 40 |
| USH 14 | 1020+73 | | 1020+88 | 34 | 40 |
| **TOTALS** | | | | **58** | **80** |

## CONCRETE SURFACE DRAINS

| ROADWAY | STATION | LOCATION | 416.1010 CONCRETE SURFACE DRAINS CY |
|---|---|---|---|
| CATEGORY CODE 0010 | | | |
| USH 14 | 1019+41 | LT | 4 |
| USH 14 | 1019+41 | RT | 4 |
| **TOTAL** | | | **8** |

## COLD PATCH

| ROADWAY | LOCATION | 495.1000.S COLD PATCH TON |
|---|---|---|
| CATEGORY CODE 0010 | | |
| UNDISTRIBUTED | PROJECT | 30 |
| **TOTAL** | | **30** |

3

## ASPHALT PAVEMENT ITEMS

| ROADWAY | STATION | TO | STATION | 455.0605 TACK COAT GAL | 460.6223 HMA PAVEMENT 3 MT 58-28 S TON | 460.6224 HMA PAVEMENT 4 MT 58-28 S TON | 465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON | 465.0315 ASPHALTIC FLUMES SY | 465.0425 ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL TYPE 1 LF | 465.0475 ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL TYPE 1 LF |
|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | | |
| USH 14 | 925+10 | | 1096+27 | 9,230 | 9,600 | 8,700 | 260 | -- | 30,600 | 13,900 |
| CHRISTIE RD | | -- | | 65 | 70 | 55 | -- | -- | -- | -- |
| SCHOOL SECTION RD | | -- | | 70 | 80 | 60 | -- | -- | -- | -- |
| CTH C | 43+50 | | 46+05 | 130 | 140 | 110 | -- | 34 | -- | -- |
| CREEK RD | 14+32 | | 19+28 | 255 | 280 | 220 | 30 | 25 | -- | -- |
| FOUNDRY RD | | -- | | 100 | 0 | 165 | -- | 17 | -- | -- |
| **TOTALS** | | | | **9,850** | **10,170** | **9,310** | **290** | **76** | **30,600** | **13,900** |

## DRIVEWAY CULVERT ITEMS

| STATION | OFFSET | SEE NOTE 3 UP ELEV | SEE NOTE 3 DOWN ELEV | SLOPE | 521.3118 CULVERT PIPE CORRUGATED STEEL 18-INCH LF | 521.3124 CULVERT PIPE CORRUGATED STEEL 24-INCH LF | 521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH EACH | 521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH EACH | 521.3721 PIPE ARCH CORRUGATED STEEL 21x15-INCH LF | 521.3728 PIPE ARCH CORRUGATED STEEL 28x20-INCH LF | 521.3735 PIPE ARCH CORRUGATED STEEL 35x24-INCH LF | 521.3742 PIPE ARCH CORRUGATED STEEL 42x29-INCH LF | 521.1721 APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL 6 TO 1 21x15-INCH EACH | 521.1728 APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL 6 TO 1 28x20-INCH EACH | 521.1735 APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL 6 TO 1 35x24-INCH EACH | 521.1742 APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL 6 TO 1 42x29-INCH EACH | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | | | | | | | | | |
| 926+95 | 39' LT | 957.31 | 956.30 | 1.68% | -- | -- | -- | -- | 60 | -- | -- | -- | 2 | -- | -- | -- | COMMERCIAL ENTRANCE; SEE NOTE 3 |
| 932+65 | 33' LT | 952.29 | 951.92 | 0.49% | -- | -- | -- | -- | 75 | -- | -- | -- | 2 | -- | -- | -- | COMMERCIAL ENTRANCE; SEE NOTE 3 |
| 937+29 | 26' LT | 949.43 | 949.28 | 0.50% | -- | -- | -- | -- | 30 | -- | -- | -- | 2 | -- | -- | -- | FIELD ENTRANCE; SEE NOTE 3 |
| 947+38 | 28' LT | 943.56 | 943.27 | 0.72% | -- | -- | -- | -- | -- | 40 | -- | -- | -- | 2 | -- | -- | COMMERCIAL ENTRANCE; SEE NOTE 3 |
| 947+38 | 33' LT | 943.56 | 943.27 | 0.72% | -- | -- | -- | -- | -- | 40 | -- | -- | -- | 2 | -- | -- | COMM ENTRANCE/2ND PIPE; SEE NOTE 3 |
| 949+14 | 29' LT | 942.40 | 942.04 | 0.91% | -- | -- | -- | -- | -- | 40 | -- | -- | -- | 2 | -- | -- | COMMERCIAL ENTRANCE; SEE NOTE 3 |
| 949+14 | 34' LT | 942.40 | 942.04 | 0.91% | -- | -- | -- | -- | -- | 40 | -- | -- | -- | 2 | -- | -- | COMM ENTRANCE/2ND PIPE; SEE NOTE 3 |
| 949+16 | 31' RT | 942.64 | 942.48 | 0.64% | 25 | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | FIELD ENTRANCE |
| 958+60 | 28' RT | 929.11 | 928.78 | 1.32% | 25 | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | FIELD ENTRANCE |
| 960+32 | 28' RT | N/A | N/A | N/A | -- | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | PRIVATE ENTRANCE; AEW TO MATCH EXIST |
| 961+95 | 30' LT | 922.00 | 921.45 | 1.81% | -- | -- | -- | -- | -- | 30 | -- | -- | -- | 2 | -- | -- | FIELD ENTRANCE; SEE NOTE 3 |
| 961+95 | 35' LT | 922.00 | 921.45 | 1.81% | -- | -- | -- | -- | -- | 30 | -- | -- | -- | 2 | -- | -- | FIELD ENTRANCE/2ND PIPE; SEE NOTE 3 |
| 965+11 | 28' LT | 915.55 | 914.54 | 2.26% | -- | -- | -- | -- | -- | 45 | -- | -- | -- | 2 | -- | -- | PRIVATE ENTRANCE; SEE NOTE 3 |
| 965+11 | 33' LT | 915.55 | 914.54 | 2.26% | -- | -- | -- | -- | -- | 45 | -- | -- | -- | 2 | -- | -- | PRIVATE ENTRANCE/2ND PIPE; SEE NOTE 3 |
| 969+03 | 28' LT | 905.34 | 904.58 | 2.20% | -- | -- | -- | -- | -- | 35 | -- | -- | -- | 2 | -- | -- | PRIVATE ENTRANCE; SEE NOTE 3 |
| 969+03 | 33' LT | 905.34 | 904.58 | 2.20% | -- | -- | -- | -- | -- | 35 | -- | -- | -- | 2 | -- | -- | PRIVATE ENTRANCE/2ND PIPE; SEE NOTE 3 |
| 970+96 | 32' LT | 901.30 | 900.03 | 3.61% | -- | -- | -- | -- | -- | -- | 35 | -- | -- | -- | 2 | -- | PRIVATE ENTRANCE; SEE NOTE 3 |
| 970+96 | 37' LT | 901.30 | 900.03 | 3.61% | -- | -- | -- | -- | -- | -- | 35 | -- | -- | -- | 2 | -- | PRIVATE ENTRANCE/2ND PIPE; SEE NOTE 3 |
| 989+76 | 26' RT | 887.22 | 887.06 | 0.46% | 35 | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | FIELD ENTRANCE |
| 992+58 | 24' RT | 886.88 | 885.89 | 2.83% | 35 | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | PRIVATE ENTRANCE |
| 1022+93 | 52' RT | 864.11 | 861.33 | 6.95% | -- | 40 | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | FIELD ENTRANCE |
| 1024+08 | 38' LT | 871.75 | 868.67 | 3.42% | -- | -- | -- | -- | -- | -- | -- | 90 | -- | -- | -- | 2 | DNR ENTRANCE |
| 1024+08 | 43' LT | 871.75 | 868.67 | 3.42% | -- | -- | -- | -- | -- | -- | -- | 90 | -- | -- | -- | 2 | DNR ENTRANCE/2ND PIPE |
| 1043+10 | 39' LT | 888.28 | 888.16 | 0.30% | 40 | -- | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | FIELD ENTRANCE |
| **TOTALS** | | | | | **160** | **40** | **12** | **2** | **165** | **380** | **70** | **180** | **6** | **20** | **4** | **4** | |

NOTE

1) PIPE OFFSETS AND ELEVATIONS ARE TO THE CENTERLINE AND INVERT OF PIPE.
2) PIPE LENGTH IS FROM END OF PIPE TO END OF PIPE AND DOES NOT INCLUDE LENGTH OF APRON ENDWALL.
3) FOR HYDRAULIC PURPOSES THE INVERT OF PIPE IS SET 0.50-FT BELOW DITCH BOTTOM

3

## CROSS CULVERT ITEMS

| ROADWAY | INLET END STATION | INLET END OFFSET | INLET END ELEVATION | DISCHARGE END STATION | DISCHARGE END OFFSET | DISCHARGE END ELEVATION | SLOPE | 520.8700 CLEANING CULVERT PIPES EACH | 522.0415 CULVERT PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF | 522.0424 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF | 522.0436 CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF | 522.0448 CULVERT PIPE REINFORCED CONCRETE CLASS IV 48-INCH LF | 522.2414 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 14x23-INCH LF | SPV.0090.01 REMOVE AND RESET CULVERT PIPE REINFORCED CONCRETE 36-INCH LF | JOINT TIES[1] EACH | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | | | | | | | | |
| USH 14 | 972+07 | 29' RT | 898.85 | 972+97 | 29' RT | 896.11 | 3.04% | -- | -- | 90 | -- | -- | -- | -- | 12 | AT CHRISTIE ROAD |
| USH 14 | 972+37 | 77' RT | 897.47 | 972+77 | 57' RT | 897.25 | 0.49% | -- | 45 | -- | -- | -- | -- | -- | 10 | AT CHRISTIE ROAD |
| USH 14 | 981+03 | 35' LT | 883.30 | 981+03 | 35' RT | 882.48 | 1.17% | -- | -- | -- | 70 | -- | -- | -- | 12 | |
| USH 14 | 981+09 | 35' LT | 883.30 | 981+09 | 35' RT | 882.48 | 1.17% | 1 | -- | -- | -- | -- | -- | 24 | 4 | |
| USH 14 | 996+79 | 31' LT | 871.54 | 996+79 | 44' RT | 871.38 | 0.21% | -- | -- | -- | -- | 75 | -- | -- | 12 | REPLACE CATTLE PASS |
| USH 14 | 998+99 | 98' LT | 873.14 | 998+67 | 99' LT | 872.94 | 0.57% | -- | -- | -- | -- | -- | 35 | -- | 8 | AT SCHOOL SECTION ROAD |
| USH 14 | 998+99 | 103' LT | 873.14 | 998+67 | 104' LT | 872.94 | 0.57% | -- | -- | -- | -- | -- | 35 | -- | 8 | AT SCHOOL SECTION ROAD |
| USH 14 | 1010+95 | 45' LT | 859.82 | 1010+95 | 45' RT | 859.02 | 0.89% | -- | -- | 90 | -- | -- | -- | -- | 12 | REPLACE CATTLE PASS |
| USH 14 | 1063+91 | 29' LT | 901.83 | 1063+91 | 31' RT | 900.61 | 2.03% | -- | -- | 60 | -- | -- | -- | -- | 12 | REPLACE CATTLE PASS |
| USH 14 | N/A | N/A | N/A | 1082+43 | 31' LT | N/A | N/A | -- | -- | -- | -- | -- | -- | -- | -- | |
| USH 14 | N/A | N/A | N/A | 1082+43 | 33' RT | N/A | N/A | -- | -- | -- | -- | -- | -- | -- | -- | |
| USH 14 | N/A | N/A | N/A | 1085+45 | 43' LT | N/A | N/A | -- | -- | -- | -- | -- | -- | -- | -- | |
| USH 14 | N/A | N/A | N/A | 1085+98 | 28' RT | N/A | N/A | -- | -- | -- | -- | -- | -- | -- | -- | |
| CREEK RD | 16+35 | 41' RT | 893.37 | 15+16 | 52' LT | 892.77 | 0.50% | -- | -- | -- | -- | -- | 121 | -- | 12 | |
| CREEK RD | 16+38 | 37' RT | 893.37 | 15+19 | 56' LT | 892.77 | 0.50% | -- | -- | -- | -- | -- | 121 | -- | 12 | |
| CREEK RD | 18+11 | 56' RT | 894.45 | 17+04 | 25' LT | 893.89 | 0.42% | -- | -- | -- | -- | -- | 134 | -- | 12 | |
| CREEK RD | 18+14 | 52' RT | 894.45 | 17+16 | 23' LT | 893.93 | 0.42% | -- | -- | -- | -- | -- | 123 | -- | 12 | |
| **TOTALS** | | | | | | | | **1** | **45** | **240** | **70** | **75** | **569** | **24** | **138** | |

NOTES

1) JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL CONCRETE APRON ENDWALLS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE.

2) STATION, OFFSETS, AND ELEVATIONS SHOWN ARE TO THE END OF PIPE (NOT THE APRON END OF ENDWALLS).

3

## CROSS CULVERT ENDWALL ITEMS

| ROADWAY | INLET END STATION | INLET END OFFSET | INLET END ELEVATION | DISCHARGE END STATION | DISCHARGE END OFFSET | DISCHARGE END ELEVATION | SLOPE | 522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH | 522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH | 522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH | 522.1048 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH EACH | 522.2614 AEWS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 14x23-INCH EACH | 612.0804 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 4-INCH EACH | 633.5200 MARKERS CULVERT END EACH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | | | | | | |
| USH 14 | 972+07 | 29' RT | 898.85 | 972+97 | 29' RT | 896.11 | 3.04% | -- | 2 | -- | -- | -- | -- | 2 |
| USH 14 | 972+37 | 77' RT | 897.47 | 972+77 | 57' RT | 897.25 | 0.49% | 2 | -- | -- | -- | -- | -- | 2 |
| USH 14 | 981+03 | 35' LT | 883.30 | 981+03 | 35' RT | 882.48 | 1.17% | -- | -- | 2 | -- | -- | -- | 2 |
| USH 14 | 981+09 | 35' LT | 883.30 | 981+09 | 35' RT | 882.48 | 1.17% | -- | -- | 2 | -- | -- | -- | 2 |
| USH 14 | 996+79 | 31' LT | 871.54 | 996+79 | 44' RT | 871.38 | 0.21% | -- | -- | -- | 2 | -- | -- | 2 |
| USH 14 | 998+99 | 98' LT | 873.14 | 998+67 | 99' LT | 872.94 | 0.57% | -- | -- | -- | -- | 2 | -- | 2 |
| USH 14 | 998+99 | 103' LT | 873.14 | 998+67 | 104' LT | 872.94 | 0.57% | -- | -- | -- | -- | 2 | -- | 2 |
| USH 14 | 1010+95 | 45' LT | 859.82 | 1010+95 | 45' RT | 859.02 | 0.89% | -- | 2 | -- | -- | -- | -- | 2 |
| USH 14 | 1063+91 | 29' LT | 901.83 | 1063+91 | 31' RT | 900.61 | 2.03% | -- | 2 | -- | -- | -- | -- | 2 |
| USH 14 | N/A | N/A | N/A | 1082+43 | 31' LT | N/A | N/A | -- | -- | -- | -- | -- | 1 | -- |
| USH 14 | N/A | N/A | N/A | 1082+43 | 33' RT | N/A | N/A | -- | -- | -- | -- | -- | 1 | -- |
| USH 14 | N/A | N/A | N/A | 1085+45 | 43' LT | N/A | N/A | -- | -- | -- | -- | -- | 1 | -- |
| USH 14 | N/A | N/A | N/A | 1085+98 | 28' RT | N/A | N/A | -- | -- | -- | -- | -- | 1 | -- |
| CREEK RD | 16+35 | 41' RT | 893.37 | 15+16 | 52' LT | 892.77 | 0.50% | -- | -- | -- | -- | 2 | -- | 2 |
| CREEK RD | 16+38 | 37' RT | 893.37 | 15+19 | 56' LT | 892.77 | 0.50% | -- | -- | -- | -- | 2 | -- | 2 |
| CREEK RD | 18+11 | 56' RT | 894.45 | 17+04 | 25' LT | 893.89 | 0.42% | -- | -- | -- | -- | 2 | -- | 2 |
| CREEK RD | 18+14 | 52' RT | 894.45 | 17+16 | 23' LT | 893.93 | 0.42% | -- | -- | -- | -- | 2 | -- | 2 |
| **TOTALS** | | | | | | | | **2** | **6** | **4** | **2** | **12** | **4** | **26** |

NOTES

STATION, OFFSETS, AND ELEVATIONS SHOWN ARE TO THE END OF PIPE (NOT THE APRON END OF ENDWALLS).

## STORM SEWER ITEMS

| ROADWAY | STATION | OFFSET | RIM OR FLANGE ELEV. | LOWEST INV. | STR. DEPTH | 204.0220 REMOVING INLETS EACH | 204.0245 REMOVING STORM SEWER 12-INCH LF | 611.0627 INLET COVERS TYPE HM EACH | 611.3230 INLETS 2X3 FT EACH | 611.8115 ADJUSTING INLET COVERS EACH |
|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY 0010 | | | | | | | | | | |
| USH 14 | 1090+90 | 14' LT | --- | | --- | 1 | 12 | -- | -- | -- |
| USH 14 | 1090+90 | 24' LT | 913.61 | 907.06 | 5.72 | -- | -- | 1 | 1 | -- |
| USH 14 | 1090+90 | 38' LT | --- | | --- | -- | -- | -- | -- | 1 |
| **TOTALS** | | | | | | **1** | **12** | **1** | **1** | **1** |

NOTES

1) STATIONS, OFFSETS AND ELEVATIONS ARE TO THE FLANGE FOR CURB INLETS
2) STRUCTURE DEPTH = RIM ELEVATION MINUS LOWEST INVERT PLUS PIPE THICKNESS MINUS CASTING HEIGHT MINUS ADJUSMENT RINGS. CASTING HEIGHT EQUALS 0.50 FT FOR TYPE HM COVERS; ADJUSTMENT RING HEIGHT EQUALS 0.5 FT

## PIPE GRATES

| ROADWAY | STATION | LOCATION | 611.9800.S.01 PIPE GRATES 36-INCH EACH | 611.9800.S.02 PIPE GRATES 48-INCH EACH |
|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | |
| USH 14 | 981+03 | LT/RT | 2 | -- |
| USH 14 | 981+09 | LT/RT | 2 | -- |
| USH 14 | 996+79 | LT/RT | -- | 2 |
| **TOTALS** | | | **4** | **2** |

3

## CURB AND GUTTER ITEMS

| ROADWAY | STATION | LOCATION | 601.0557 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D LF | 601.0582 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE T LF | 620.0300 CONCRETE MEDIAN SLOPED NOSE SF | COMMENTS |
|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | |
| USH 14 | 1087+37 | LT | 390 | -- | 62 | |
| USH 14 | 1090+78 | RT | 75 | -- | -- | |
| USH 14 | 1091+66 | RT | 60 | -- | -- | |
| USH 14 | 1092+07 | LT | 390 | -- | 62 | |
| CTH C | 44+62 | LT | 115 | -- | | |
| CTH C | 44+62 | RT | 170 | -- | -- | |
| CREEK RD | 15+07 | LT | -- | 71 | -- | |
| CREEK RD | 16+62 | LT | 32 | -- | -- | |
| CREEK RD | 18+10 | RT | -- | 121 | -- | REVERSE SLOPE |
| CREEK RD | 16+22 | RT | 32 | -- | -- | |
| **TOTALS** | | | **1,264** | **192** | **124** | |

## CONCRETE SIDEWALK ITEMS

| ROADWAY | LOCATION | 602.0405 CONCRETE SIDEWALK 4-INCH SF | 416.0512 CONCRETE TRUCK APRON 12-INCH SY | 405.0100 COLORING CONCRETE WISDOT RED CY |
|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | |
| USH 14 | MEDIAN AT FOUNDRY RD | 3,860 | -- | -- |
| CREEK RD | NORTHWEST CURB RETURN | -- | 25 | 3 |
| CREEK RD | SOUTHEAST CURB RETURN | -- | 105 | 9 |
| **TOTALS** | | **3,860** | **130** | **12** |

3

## RESTORATION ITEMS

| ROADWAY | 627.0200 MULCHING SY | 625.0500 SALVAGED TOPSOIL SY | 629.0210 FERTILIZER TYPE B CWT | 630.0130 SEEDING MIXTURE NO. 30 LB | 630.0200 SEEDING TEMPORARY LB |
|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | |
| USH 14 EB | 2,767 | 11,070 | 7 | 200 | 75 |
| USH 14 WB | 5,946 | 23,785 | 15 | 430 | 165 |
| CHRISTIE RD | 36 | 145 | 1 | 5 | 5 |
| SCHOOL SECTION RD | 338 | 1,350 | 1 | 25 | 10 |
| CTH C | 730 | 2,920 | 2 | 55 | 20 |
| CREEK RD | 816 | 3,265 | 3 | 60 | 25 |
| FOUNDRY RD | 67 | 265 | 1 | 5 | 5 |
| UNDISTRIBUTED | 1,065 | 4,280 | 3 | 80 | 35 |
| **TOTALS** | **11,765** | **47,080** | **33** | **860** | **340** |

## ROADWAY BARRIER ITEMS

| ROADWAY | STATION | TO | STATION | LOCATION | 614.2300 MGS GUARDRAIL 3 LF | 614.2500 MGS THRIE BEAM TRANSITION LF | 614.2610 MGS GUARDRAIL TERMINAL EAT EACH | 614.0396 GUARDRAIL MOW STRIP ASPHALT SY | 614.0200 STEEL THRIE BEAM STRUCTURE APPROACH LF | 614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH |
|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | | |
| USH 14 | 1017+86 | | 1019+53 | RT | 75 | 39 | 1 | 75 | -- | -- |
| USH 14 | 1020+71 | | 1021+88 | RT | 25 | 39 | 1 | 55 | -- | -- |
| USH 14 | 1018+35 | | 1019+53 | LT | 25 | 39 | 1 | 52 | -- | -- |
| USH 14 | 1020+71 | | 1022+38 | LT | 75 | 39 | 1 | 78 | -- | -- |
| USH 14 | 1100+08 | | 1100+72 | LT | -- | -- | -- | -- | 42 | 1 |
| USH 14 | 1102+80 | | 1103+50 | LT | -- | -- | -- | -- | 42 | 1 |
| **TOTALS** | | | | | **200** | **156** | **4** | **260** | **84** | **2** |

3

## EROSION CONTROL ITEMS

| ROADWAY | 628.1104 EROSION BALES EACH | 628.1504 SILT FENCE LF | 628.1520 SILT FENCE MAINTENANCE LF | 628.2004 EROSION MAT CLASS I TYPE B SY | 628.2008 EROSION MAT URBAN CLASS I TYPE B SY | 628.6005 TURBIDITY BARRIERS SY | 628.7504 TEMPORARY DITCH CHECKS LF | 628.7555 CULVERT PIPE CHECKS EACH | 628.7570 ROCK BAGS EACH | 628.7015 INLET PROTECTION TYPE C EACH | SPV.0090.02 HEAVY DUTY SILT FENCE LF |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | | | |
| USH 14 | -- | 2,360 | 2,360 | 14,195 | 20,380 | 280 | 525 | 96 | -- | 11 | 2,690 |
| CHRISTIE RD | -- | -- | -- | 145 | -- | -- | -- | 6 | -- | -- | -- |
| SCHOOL SECTION RD | -- | -- | -- | 1,350 | -- | -- | -- | 6 | -- | -- | -- |
| CREEK RD | -- | 220 | 220 | 3,265 | -- | -- | -- | 12 | -- | -- | -- |
| CTH C | -- | -- | -- | 2,920 | -- | -- | -- | -- | -- | -- | -- |
| FOUNDRY RD | -- | 120 | 120 | 265 | -- | -- | -- | -- | -- | -- | 110 |
| UNDISTRIBUTED | 20 | 700 | 700 | 5,535 | 5,095 | 70 | 135 | 30 | 125 | 4 | 700 |
| **TOTALS** | **20** | **3,400** | **3,400** | **27,675** | **25,475** | **350** | **660** | **150** | **125** | **15** | **3,500** |

## EROSION CONTROL MOBILIZATION

| LOCATION | 628.1905 MOBILIZATIONS EROSION CONTROL EACH | 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH |
|---|---|---|
| CATEGORY CODE 0010 | | |
| PROJECT | 12 | 6 |
| **TOTALS** | **12** | **6** |

3

## TRAFFIC CONTROL ITEMS

| ROADWAY | DURATION (DAYS) | 643.0300 TRAFFIC CONTROL DRUMS EACH** | 643.0300 TRAFFIC CONTROL DRUMS DAY | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH** | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH** | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH** | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY | 643.0800 TRAFFIC CONTROL ARROW BOARDS EACH** | 643.0800 TRAFFIC CONTROL ARROW BOARDS DAY | 643.0900* TRAFFIC CONTROL SIGNS EACH** | 643.0900* TRAFFIC CONTROL SIGNS DAY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY 0010 | | | | | | | | | | | | | |
| USH 14/STH 11/STH 89 INTERSECTION | 150 | 5 | 750 | 6 | 900 | 12 | 1,800 | -- | -- | -- | -- | 6 | 900 |
| USH 14/IH-43 - LONG TERM | 143 | 24 | 3,432 | 5 | 715 | 10 | 1,430 | 11 | 1,573 | 1 | 143 | 24 | 3,432 |
| USH 14/IH-43 - SHORT TERM, BULLNOSE WORK | 7 | 92 | 644 | 8 | 56 | 12 | 84 | 12 | 84 | 1 | 7 | 26 | 182 |
| SIDE ROAD CLOSURES | 150 | -- | -- | 28 | 4,200 | 26 | 3,900 | -- | -- | -- | -- | 22 | 3,300 |
| UNDISTRIBUTED | | 989 | | 583 | | 746 | | 173 | | 25 | | 791 | |
| **TOTALS** | | **5,815** | | **6,454** | | **7,960** | | **1,830** | | **175** | | **8,605** | |

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

** INFORMATION ONLY

3

## RIPRAP ITEMS

| ROADWAY | 606.0200 RIPRAP MEDIUM CY | 645.0120 GEOTEXTILE TYPE HR SY |
|---|---|---|
| CATEGORY CODE 0010 | | |
| STA 958+00 - 968+00 | 170 | 391 |
| STA 968+00 - 982+00 | 11 | 37 |
| STA 982+00 - 997+00 | 8 | 25 |
| STA 997+00 - 1012+00 | 6 | 23 |
| STA 1012+00 - 1027+00 | 16 | 51 |
| STA 1027+00 - 1064+00 | 3 | 13 |
| CREEK RD | 7 | 27 |
| UNDISTRIBUTED | 49 | 123 |
| **TOTALS** | **270** | **690** |

## MAINTAINING DETOURS

| LOCATION | 305.0410 AGGREGATE DETOURS TON | 465.0115 ASPHALTIC SURFACE DETOURS TON |
|---|---|---|
| CATEGORY CODE 0010 | | |
| PROJECT | 50 | 50 |
| **TOTALS** | **50** | **50** |

## FIELD OFFICE

| LOCATION | 642.5201 FIELD OFFICE TYPE C EACH |
|---|---|
| CATEGORY CODE 0010 | |
| PROJECT | 1 |
| **TOTAL** | **1** |

## TRAFFIC CONTROL

| LOCATION | 643.5000 TRAFFIC CONTROL EACH |
|---|---|
| CATEGORY CODE 0010 | |
| PROJECT | 1 |
| **TOTAL** | **1** |

## TRAFFIC CONTROL DETOUR ITEMS

| ROADWAY | DETOUR DURATION (DAYS) | 643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH | CYCLES | SIGNS | 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH | CYCLES | SIGNS | 643.0900* TRAFFIC CONTROL SIGNS EACH** | DAY |
|---|---|---|---|---|---|---|---|---|---|
| CATEGORY 0010 | 150 | | | | | | | | |
| USH 14 DETOUR | | 2 | 1 | 2 | 23 | 1 | 23 | 175 | 26,250 |
| SUBTOTAL | | 2 | | | 23 | | | 26,250 | |
| UNDISTRIBUTED | | 3 | -- | -- | 12 | -- | -- | 3,225 | |
| **TOTALS** | | **5** | | | **35** | | | **29,475** | |

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

** INFORMATION ONLY

## TEMPORARY TRAFFIC CONTROL SIGNS

| ROADWAY | SIGN NO. | 643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF |
|---|---|---|
| CATEGORY 0010 | | |
| STH 11 EB | FMS 100, 104 | 32 |
| STH 11 WB | FMS 101, 104 | 25.5 |
| USH 14 WB | FMS 102, 104 | 25.5 |
| STH 89 SB | FMS 101, 104 | 25.5 |
| IH 43 NB | FMS 103, 105 | 63.75 |
| IH 43 SB | FMS 103, 105 | 63.75 |
| **TOTAL** | | **236.00** |

## PAVEMENT MARKING ITEMS

| LOCATION | STATION | TO STATION | 646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF | 646.1020 MARKING LINE EPOXY 4-INCH WHITE LF | 646.1020 MARKING LINE EPOXY 4-INCH 12.5 FT LINE 37.5 FT SKIP YELLOW LF | 646.1020 MARKING LINE EPOXY 4-INCH 12.5 FT LINE 37.5 FT SKIP WHITE LF | 646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH WHITE LF | 646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH 12.5 FT LINE 37.5 FT SKIP WHITE LF | 646.1545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH 12.5 FT LINE 37.5 FT SKIP WHITE LF | 646.3020 MARKING LINE EPOXY 8-INCH WHITE LF | 646.3040 MARKING LINE GROOVED WET REF EPOXY 8-INCH WHITE LF | 646.3545 GROOVED WET REF CONTRAST EPOXY 8-INCH WHITE LF | 646.5020 MARKING ARROW EPOXY WHITE EACH | 646.5120 MARKING WORD EPOXY WHITE EACH | 646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE LF | 646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW LF | 646.8120 MARKING CURB EPOXY YELLOW LF | 648.0100 LOCATING NO-PASSING ZONES MI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | | | | | | | | | | |
| USH 14 | 925+10 | 929+00 | 490 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.08 |
| USH 14 | 929+00 | 943+50 | -- | -- | 460 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.28 |
| USH 14 | 943+50 | 981+00 | 3,300 | -- | 906 | -- | -- | 63 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.72 |
| USH 14 | 981+00 | 989+50 | 850 | -- | 213 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.17 |
| USH 14 | 989+50 | 1002+00 | 2,500 | -- | -- | -- | -- | 63 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.24 |
| USH 14 | 1002+00 | 1021+50 | 125 | -- | 488 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.37 |
| USH 14 | 1021+50 | 1042+00 | 2,984 | -- | 279 | -- | -- | 93 | -- | -- | 201 | -- | 2 | 1 | -- | -- | -- | 0.39 |
| USH 14 | 1042+00 | 1055+75 | 2,674 | -- | 669 | -- | -- | -- | -- | -- | 400 | -- | -- | -- | -- | -- | -- | 0.27 |
| USH 14 | 1055+75 | 1068+75 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.25 |
| USH 14 | 1068+75 | 1084+19 | 3,088 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.30 |
| USH 14 | 1084+19 | 1096+27 | 2,902 | -- | -- | -- | -- | -- | 280 | -- | -- | 531 | 5 | 2 | -- | 126 | 104 | -- |
| USH 14 | 925+10 | 1046+34 | -- | -- | -- | -- | 23,903 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| USH 14 | 1046+34 | 1096+27 | -- | -- | -- | -- | 9,690 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| CHRISTIE RD | 972+00 | 973+00 | 167 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 28 | -- | -- | -- |
| SCHOOL SECTION | 998+00 | 1000+00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 27 | -- | -- | -- |
| CTH C | 1040+00 | 1042+00 | 458 | 351 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 31 | -- | -- | -- |
| CREEK RD | 1056+00 | 1058+33 | 361 | 257 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 26 | -- | -- | -- |
| CREEK RD | 1058+33 | 1061+00 | 448 | 312 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 22 | -- | -- | -- |
| FOUNDRY RD | 1091+00 | 1092+00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 27 | -- | -- | -- |
| USH14 AT IH 43 | 1099+32 | 1111+50 | -- | -- | -- | 295 | -- | -- | -- | 80 | -- | -- | -- | -- | -- | -- | -- | -- |
| SUBTOTALS | | | 20,347 | 920 | 3,015 | 295 | 33,593 | 219 | 280 | 80 | 601 | 531 | 7 | 3 | 161 | 126 | 104 | 3.07 |
| **TOTALS** | | | | | **24,577** | | | **33,812** | **280** | **80** | **601** | **531** | **7** | **3** | **161** | **126** | **104** | **3.07** |

## TEMPORARY MARKING ITEMS

| ROADWAY | STATION | | STATION | 646.9000 MARKING REMOVAL LINE 4-INCH LF | 646.9100 MARKING REMOVAL LINE 8-INCH LF | 649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF |
|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | |
| USH 14 LONG TERM CLOSURE AT IH-43 | 1099+32 | - | 1105+55 | 155 | -- | 625 |
| USH 14 SHORT TERM CLOSURE AT IH-43 | 1098+65 | - | 1111+50 | 140 | 80 | 550 |
| **TOTALS** | | | | **295** | **80** | **1,175** |

## SECTION CORNER MONUMENTS

| LOCATION | SPV.0060.01 SECTION CORNER MONUMENTS EACH |
|---|---|
| CATEGORY CODE 0010 | |
| CREEK RD | 1 |
| **TOTAL** | **1** |

## CONSTRUCTION STAKING ITEMS

| LOCATION | STA | STA | 650.4500 CONSTRUCTION STAKING SUBGRADE LF | 650.5000 CONSTRUCTION STAKING BASE LF | 650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF | 650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH | 650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF | 650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL PROJECT 3150-05-70 LS | 650.9920 CONSTRUCTION STAKING SLOPE STAKES LF |
|---|---|---|---|---|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | | | | | | |
| USH 14 | 925+10 | 966+50 | -- | -- | -- | -- | 4,140 | -- | 4,140 |
| USH 14 | 966+50 | 978+00 | -- | 1,150 | -- | -- | 1,150 | -- | 1,150 |
| USH 14 | 978+00 | 981+00 | -- | -- | -- | -- | 300 | -- | 300 |
| USH 14 | 981+00 | 994+50 | -- | -- | -- | 1 | 1,350 | -- | -- |
| USH 14 | 994+50 | 1003+50 | -- | 900 | -- | 1 | 900 | -- | 900 |
| USH 14 | 1003+50 | 1010+50 | -- | -- | -- | -- | 700 | -- | -- |
| USH 14 | 1010+50 | 1019+73 | 925 | 925 | -- | 1 | -- | -- | 925 |
| USH 14 | 1020+52 | 1031+75 | 1,125 | 1,125 | -- | -- | -- | -- | 1,125 |
| USH 14 | 1031+75 | 1035+00 | -- | -- | -- | -- | 330 | -- | -- |
| USH 14 | 1035+00 | 1047+50 | -- | 1,250 | -- | -- | 1,250 | -- | 1,250 |
| USH 14 | 1047+50 | 1053+00 | -- | -- | -- | -- | 550 | -- | -- |
| USH 14 | 1053+00 | 1063+65 | -- | 1,070 | -- | -- | 1,070 | -- | 1,070 |
| USH 14 | 1063+65 | 1095+57 | -- | -- | 915 | 1 | 3,200 | -- | -- |
| CHRISTIE RD | -- | | -- | 90 | -- | 2 | 90 | -- | 90 |
| SCHOOL SECTION RD | -- | | -- | 120 | -- | 2 | 120 | -- | 120 |
| CTH C | 43+50 | 46+05 | 255 | 255 | 285 | -- | -- | -- | 255 |
| CREEK RD | 14+32 | 16+19 | 190 | 190 | 32 | 2 | -- | -- | 190 |
| CREEK RD | 16+87 | 19+28 | 245 | 245 | 32 | 2 | -- | -- | 245 |
| **TOTALS** | | | **2,740** | **7,320** | **1,264** | **12** | **15,150** | **1** | **11,760** |

## SAW CUTTING ITEMS

| ROADWAY | STATION | STATION | 690.0150 SAWING ASPHALT LF | 690.0250* SAWING CONCRETE LF |
|---|---|---|---|---|
| CATEGORY CODE 0010 | | | | |
| USH 14 | 925+10 - | 1096+27 | 519 | 44 |
| CROSS CULVERT | 981+03 | | 16 | 44 |
| CATTLE PASS | 996+80 | | 16 | 44 |
| RECONSTRUCT | 1010+50 - | 1031+75 | 16 | 44 |
| CATTLE PASS | 1063+91 | | 16 | 44 |
| CHRISTIE RD | MATCH POINT | | 25 | -- |
| CHRISTIE RD | CULVERTS | | 142 | -- |
| SCHOOL SECTION RD | MATCH POINT | | 20 | -- |
| SCHOOL SECTION RD | CULVERTS | | 40 | -- |
| CTH C | 43+50 | | 25 | -- |
| CREEK RD | 14+32 | | 25 | -- |
| CREEK RD | 19+28 | | 100 | -- |
| CREEK RD | CULVERTS | | 190 | -- |
| CREEK RD | PARKING LOT | | 340 | -- |
| FOUNDRY RD | MATCH POINT | | 35 | -- |
| UNDISTRIBUTED | | | 100 | 30 |
| **TOTALS** | | | **1,625** | **250** |

## STRUCTURE B-64-191

| LOCATION | 650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT B-64-191 LS |
|---|---|
| CATEGORY CODE 0100 | |
| PROJECT | 1 |
| **TOTALS** | **1** |

**TYPE I & II PERMANENT SIGNING**

CATEGORY CODE 0010

| SIGN NO. | | SIGN MESSAGE | TYPE II SIGN SIZE W x H [IN.] x [IN.] | 637.2210 SIGNS TYPE II REFLECTIVE H [SF] | 637.2230 SIGNS TYPE II REFLECTIVE F [SF] | 637.2220 SIGNS TYPE II REFLECTIVE SH [SF] | 634.0616 WOOD POSTS 4"x 6"X16' [EA] | 634.0618 WOOD POSTS 4"x 6"X18' [EA] | 638.2102 MOVING SIGNS TYPE II [EA] | 638.2602 REMOVING SIGNS TYPE II [EA] | 638.3000 REMOVING SMALL SIGN SUPPORTS [EA] | MOUNT ON SAME POST AS SIGN # | REMARKS NEW SIGN LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 101 | J4-1(2S) | -- | 24 x 36 | 6.00 | -- | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| | M3-1 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 89 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 102 | J3-2(2S) | -- | 24 x 57 | 9.50 | -- | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| | M3-2 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M3-1 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 89 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 103 | R1-1(3) | -- | 36 x 36 | 7.46 | -- | -- | -- | -- | -- | 1 | -- | 104 | EXISTING BEACON AND TYPE I POLE TO REMAIN |
| 104 | R1-3P(3) | -- | 30 x 12 | 2.50 | -- | -- | -- | -- | -- | -- | -- | 103 | -- |
| 105 | R1-1(3) | -- | 36 x 36 | 7.46 | -- | -- | 1 | -- | -- | 1 | 1 | 106 | -- |
| 106 | R1-3P(3) | -- | 30 x 12 | 2.50 | -- | -- | -- | -- | -- | -- | -- | 105 | -- |
| 107 | R1-1(3) | -- | 36 x 36 | 7.46 | -- | -- | 1 | -- | -- | 1 | 1 | 107A | -- |
| 107A | R1-3P(3) | -- | 30 x 12 | 2.50 | -- | -- | -- | -- | -- | -- | -- | 107 | -- |
| 108 | J3-5(2S) | -- | 120 x 57 | 47.50 | -- | -- | -- | 3 | -- | 1 | 2 | -- | -- |
| | M3-4 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M3-4 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 11 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M3-1 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 89 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M3-2 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 11 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | MB4-1 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-1 | IH 43 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | MB6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 109 | R1-1(3) | -- | 36 x 36 | 7.46 | -- | -- | -- | -- | -- | 1 | -- | 110 | EXISTING BEACON AND TYPE I POLE TO REMAIN |
| 110 | R1-3P(3) | -- | 30 x 12 | 2.50 | -- | -- | -- | -- | -- | -- | -- | 109 | -- |
| 111 | R1-1(3) | -- | 36 x 36 | 7.46 | -- | -- | -- | -- | -- | 1 | -- | 112 | EXISTING BEACON AND TYPE I POLE TO REMAIN |

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**TYPE I & II PERMANENT SIGNING**

CATEGORY CODE 0010

| SIGN NO. | | SIGN MESSAGE | TYPE II SIGN SIZE W [IN.] x H [IN.] | 637.2210 SIGNS TYPE II REFLECTIVE H [SF] | 637.2230 SIGNS TYPE II REFLECTIVE F [SF] | 637.2220 SIGNS TYPE II REFLECTIVE SH [SF] | 634.0616 WOOD POSTS 4"x 6"X16' [EA] | 634.0618 WOOD POSTS 4"x 6"X18' [EA] | 638.2102 MOVING SIGNS TYPE II [EA] | 638.2602 REMOVING SIGNS TYPE II [EA] | 638.3000 REMOVING SMALL SIGN SUPPORTS [EA] | MOUNT ON SAME POST AS SIGN # | REMARKS NEW SIGN LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 112 | R1-3P(3) | -- | 30 x 12 | 2.50 | -- | -- | -- | -- | -- | -- | -- | 111 | -- |
| 113 | J3-5(2S) | -- | 120 x 57 | 47.50 | -- | -- | -- | 3 | -- | 1 | 2 | -- | -- |
| | M3-2 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 11 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M3-2 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M3-4 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M3-4 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 11 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M4-5 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M5-1A | CTH M | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 114 | R1-1(3) | -- | 36 x 36 | 7.46 | -- | -- | 1 | -- | -- | 1 | 1 | 115 | -- |
| 115 | R1-3P(3) | -- | 30 x 12 | 2.50 | -- | -- | -- | -- | -- | -- | -- | 114 | -- |
| 116 | W12-1D(2S) | -- | 24 x 24 | -- | 4.00 | -- | 1 | -- | -- | 1 | 1 | -- | 2' MOUNTING HEIGHT |
| 117 | R1-1(3) | -- | 36 x 36 | 7.46 | -- | -- | -- | -- | -- | 1 | -- | 118 | EXISTING BEACON AND TYPE I POLE TO REMAIN |
| 118 | R1-3P(3) | -- | 30 x 12 | 2.50 | -- | -- | -- | -- | -- | -- | -- | 117 | -- |
| 119 | R1-2(2S) | -- | 36 x 31 | -- | 3.88 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 120 | J4-2(2S) | -- | 48 x 36 | 12.00 | -- | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| | M3-2 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | MB4-1 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-1 | IH 43 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 121 | D1-3 | UA WHITEWATER, LA JANESVILLE, DELAVAN RA | 78 x 42 | 22.75 | -- | -- | 2 | -- | -- | 1 | 2 | -- | -- |
| 121A | -- | SURVEY MARKER SIGN | -- x -- | -- | -- | -- | -- | -- | 1 | -- | -- | -- | -- |
| 122 | W14-3(2S) | -- | 48 x 36 | -- | 6.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 123 | J2-1(2S) | -- | 24 x 57 | 9.50 | -- | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| | MB4-1 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-1 | IH 43 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | MB5-1L | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

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**TYPE I & II PERMANENT SIGNING**

CATEGORY CODE 0010

| SIGN NO. | | SIGN MESSAGE | TYPE II SIGN SIZE W x H [IN.] x [IN.] | 637.2210 SIGNS TYPE II REFLECTIVE H [SF] | 637.2230 SIGNS TYPE II REFLECTIVE F [SF] | 637.2220 SIGNS TYPE II REFLECTIVE SH [SF] | 634.0616 WOOD POSTS 4"x 6"X16' [EA] | 634.0618 WOOD POSTS 4"x 6"X18' [EA] | 638.2102 MOVING SIGNS TYPE II [EA] | 638.2602 REMOVING SIGNS TYPE II [EA] | 638.3000 REMOVING SMALL SIGN SUPPORTS [EA] | MOUNT ON SAME POST AS SIGN # | REMARKS NEW SIGN LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 124 | J3-4(2S) | -- | 96 x 57 | 38.00 | -- | -- | -- | 2 | -- | 1 | 2 | -- | -- |
| | M3-4 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M5-1L | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M3-4 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 11 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M5-1L | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M3-1 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 89 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M3-2 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 11 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M5-1R | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 125 | W3-1(2S) | -- | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 126 | W3-1(2S) | -- | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 127 | J1-2(2S) | -- | 48 x 39 | 13.00 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M2-1 | -- | 21 x 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 11 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M2-1 | -- | 21 x 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-6 | STH 89 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 128 | R2-1(2S) | 55 MPH | 24 x 30 | 5.00 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 129 | D2-2(2) | DARIEN 4, WALWORTH 12 | 72 x 24 | 12.00 | -- | -- | 2 | -- | -- | 1 | 2 | -- | -- |
| 130 | -- | ADOPT A HWY | -- x -- | -- | -- | -- | 1 | -- | 1 | -- | -- | -- | -- |
| 131 | W14-3(2S) | -- | 48 x 36 | -- | 6.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 132 | JI-2 | EXISTING JUNCTION ASSEMBLY | x | -- | -- | -- | -- | -- | -- | -- | -- | -- | REMOVED WITH #131 |
| 133 | R2-1(2S) | 55 MPH | 24 x 30 | 5.00 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 134 | J4-1(2S) | -- | 24 x 36 | 6.00 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M3-4 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 135 | D1-61(2M) | CHRISTIE RD, RA | 78 x 15 | 8.125 | -- | -- | 2 | -- | -- | 1 | 2 | -- | -- |
| 136 | W14-3(2S) | -- | 48 x 36 | -- | 6.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 137 | D1-61(2M) | CHRISTIE RD, LA | 78 x 15 | 8.125 | -- | -- | 2 | -- | -- | -- | -- | -- | -- |
| 138 | R2-1(2S) | 45 MPH | 24 x 30 | 5.00 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 139 | R2-1 | 45 MPH | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 140 | -- | WEIGHT LIMIT CLASS B | -- x -- | -- | -- | -- | 1 | -- | 1 | -- | -- | -- | -- |

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**TYPE I & II PERMANENT SIGNING**

CATEGORY CODE 0010

| SIGN NO. | | SIGN MESSAGE | TYPE II SIGN SIZE W x H [IN.] x [IN.] | 637.2210 SIGNS TYPE II REFLECTIVE H [SF] | 637.2230 SIGNS TYPE II REFLECTIVE F [SF] | 637.2220 SIGNS TYPE II REFLECTIVE SH [SF] | 634.0616 WOOD POSTS 4"x 6"X16' [EA] | 634.0618 WOOD POSTS 4"x 6"X18' [EA] | 638.2102 MOVING SIGNS TYPE II [EA] | 638.2602 REMOVING SIGNS TYPE II [EA] | 638.3000 REMOVING SMALL SIGN SUPPORTS [EA] | MOUNT ON SAME POST AS SIGN # | REMARKS NEW SIGN LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 141 | R1-1(2S) | -- | 30 x 30 | 5.18 | -- | -- | 1 | -- | -- | 1 | 1 | -- | -- |
| 141A | W1-7(2S) | -- | 48 x 24 | 8.00 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 142 | J13-1(2S) | -- | 24 x 45 | 7.50 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-4 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 143 | J4-1(2S) | -- | 24 x 36 | 6.00 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M3-2 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 144 | W14-3(2S) | -- | 48 x 36 | -- | 6.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 145 | R2-1(2S) | 55 MPH | 24 x 30 | 5.00 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 146 | J4-1(2S) | -- | 24 x 36 | 6.00 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M3-4 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 147 | J13-1(2S) | -- | 24 x 45 | 7.50 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-4 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 148 | R1-1(2S) | -- | 30 x 30 | 5.18 | -- | -- | 1 | -- | -- | 1 | 1 | -- | -- |
| 148A | W1-7(2S) | -- | 48 x 24 | 8.00 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 149 | -- | WEIGHT LIMIT CLASS B | -- x -- | -- | -- | -- | 1 | -- | 1 | -- | 1 | -- | -- |
| 150 | D1-61(2) | SCHOOL SECTION RD, LA | 114 x 15 | 11.875 | -- | -- | 2 | -- | -- | -- | -- | -- | -- |
| 151 | D1-61(2) | SCHOOL SECTION RD, RA | 114 x 15 | 11.875 | -- | -- | 2 | -- | -- | -- | -- | -- | -- |
| 152 | J4-1(2S) | -- | 24 x 36 | 6.00 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M3-2 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 153 | W14-3(2S) | -- | 48 x 36 | -- | 6.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 153A | R2-1(2S) | 55 MPH | 24 x 30 | 5.00 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 154 | W5-52L(2S) | -- | 12 x 36 | -- | 3.00 | -- | 1 | -- | -- | 1 | 1 | -- | 4' MOUNTING HEIGHT |
| 155 | W5-52R(2S) | -- | 12 x 36 | -- | 3.00 | -- | 1 | -- | -- | 1 | 1 | -- | 4' MOUNTING HEIGHT |
| 156 | W14-3(2S) | -- | 48 x 36 | -- | 6.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 157 | W5-52R(2S) | -- | 12 x 36 | -- | 3.00 | -- | 1 | -- | -- | 1 | 1 | -- | 4' MOUNTING HEIGHT |
| 158 | W5-52L(2S) | -- | 12 x 36 | -- | 3.00 | -- | 1 | -- | -- | 1 | 1 | -- | 4' MOUNTING HEIGHT |
| 158A | -- | ADOPT A HWY | -- x -- | -- | -- | -- | 1 | -- | 1 | -- | 1 | -- | -- |
| 159 | W1-10L(2S) | -- | 30 x 30 | -- | 6.25 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 160 | W1-6L(2S) | -- | 48 x 24 | -- | 8.00 | -- | 1 | -- | -- | 1 | 1 | -- | -- |
| 160A | R2-1(2S) | 55 MPH | 24 x 30 | 5.00 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |

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**TYPE I & II PERMANENT SIGNING**

CATEGORY CODE 0010

| SIGN NO. | | SIGN MESSAGE | TYPE II SIGN SIZE W [IN.] x H [IN.] | 637.2210 SIGNS TYPE II REFLECTIVE H [SF] | 637.2230 SIGNS TYPE II REFLECTIVE F [SF] | 637.2220 SIGNS TYPE II REFLECTIVE SH [SF] | 634.0616 WOOD POSTS 4"x 6"X16' [EA] | 634.0618 WOOD POSTS 4"x 6"X18' [EA] | 638.2102 MOVING SIGNS TYPE II [EA] | 638.2602 REMOVING SIGNS TYPE II [EA] | 638.3000 REMOVING SMALL SIGN SUPPORTS [EA] | MOUNT ON SAME POST AS SIGN # | REMARKS NEW SIGN LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 161 | J4-1(2S) | -- | 24 x 36 | 6.00 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M3-4 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 162 | J13-1(2S) | -- | 24 x 45 | 7.50 | -- | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| | M5-1A | CTH C | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-6 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 163 | J13-1(2S) | -- | 24 x 45 | 7.50 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M5-1A | CTH C | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 164 | J13-1 | -- | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 165 | J3-2 | -- | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 166 | J1-1 | -- | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 167 | W1-10L(2S) | -- | 30 x 30 | -- | 6.25 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 167A | W1-10L(2S) | -- | 30 x 30 | -- | 6.25 | -- | -- | 1 | -- | -- | -- | -- | -- |
| 168 | J1-1(2S) | -- | 24 x 39 | 6.50 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M2-1 | -- | 21 x 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M5-1A | CTH C | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 169 | J1-1(2S) | -- | 24 x 39 | 6.50 | -- | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| | M2-1 | -- | 21 x 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 169A | W3-1(2S) | -- | 36 x 36 | -- | 9.00 | -- | 1 | -- | -- | -- | -- | -- | -- |
| 170 | W1-6R(2M) | -- | 48 x 24 | -- | 8.00 | -- | 1 | -- | -- | 1 | 1 | -- | -- |
| 171 | W1-6L(2S) | -- | 48 x 24 | -- | 8.00 | -- | 1 | -- | -- | -- | -- | 174 | -- |
| 171A | W1-6L(2S) | -- | 48 x 24 | -- | 8.00 | -- | 1 | -- | -- | -- | -- | -- | -- |
| 172 | R1-1(2S) | -- | 30 x 30 | 5.18 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 172A | R1-1(2S) | -- | 30 x 30 | 5.18 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 173 | J13-1(2S) | -- | 24 x 45 | 7.50 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-4 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 174 | W1-6R(2S) | -- | 48 x 24 | -- | 8.00 | -- | -- | -- | -- | 1 | 1 | 171 | -- |
| 175 | R1-1 | -- | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 176 | J13-1 | -- | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 177 | J4-1(2S) | -- | 24 x 36 | 6.00 | -- | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| | MB4-1 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-1 | IH 43 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

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**TYPE I & II PERMANENT SIGNING**

CATEGORY CODE 0010

| SIGN NO. | | SIGN MESSAGE | TYPE II SIGN SIZE W [IN.] x H [IN.] | 637.2210 SIGNS TYPE II REFLECTIVE H [SF] | 637.2230 SIGNS TYPE II REFLECTIVE F [SF] | 637.2220 SIGNS TYPE II REFLECTIVE SH [SF] | 634.0616 WOOD POSTS 4"x 6"X16' [EA] | 634.0618 WOOD POSTS 4"x 6"X18' [EA] | 638.2102 MOVING SIGNS TYPE II [EA] | 638.2602 REMOVING SIGNS TYPE II [EA] | 638.3000 REMOVING SMALL SIGN SUPPORTS [EA] | MOUNT ON SAME POST AS SIGN # | REMARKS NEW SIGN LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 178 | J1-1(2S) | -- | 24 x 39 | 6.50 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M2-1 | -- | 21 x 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M5-1A | CTH C | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 179 | W1-10R(2S) | -- | 30 x 30 | -- | 6.25 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 180 | W14-3(2S) | -- | 48 x 36 | -- | 6.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 181 | J1-1 | -- | -- x -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | REMOVED WITH #180 |
| 182 | J4-1(2S) | -- | 24 x 36 | 6.00 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M3-2 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 183 | D1-61(2) | CREEK RD | 54 x 24 | 9.00 | -- | -- | 2 | -- | -- | 1 | 1 | -- | -- |
| 184 | W1-2R | -- | -- x -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | REMOVED WITH #183 |
| 184A | W1-10R(2S) | -- | 30 x 30 | -- | 6.25 | -- | 1 | -- | -- | -- | -- | -- | -- |
| 185 | -- | MCCARTHY SCHOOL PARK, RA | -- x -- | -- | -- | -- | -- | 2 | 1 | -- | 2 | -- | -- |
| 186 | NOT USED | -- | -- x -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 186A | W3-1 | -- | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 187 | W14-3(2S) | -- | 48 x 36 | -- | 6.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 187A | NOT USED | -- | -- x -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 188 | -- | ADOPT A HWY | -- x -- | -- | -- | -- | 1 | -- | 1 | -- | 1 | -- | -- |
| 189 | R1-1(2S) | -- | 30 x 30 | 5.18 | -- | -- | 1 | -- | -- | 1 | 1 | -- | -- |
| 189A | R1-1(2S) | -- | 30 x 30 | 5.18 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 190 | J13-1(2S) | -- | 24 x 45 | 7.50 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-4 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 190A | W3-1(2S) | -- | 36 x 36 | -- | 9.00 | -- | 1 | -- | -- | -- | -- | -- | -- |
| 191 | -- | WEIGHT LIMIT CLASS B | -- x -- | -- | -- | -- | 1 | -- | 1 | -- | 1 | -- | -- |
| 191A | NOT USED | -- | -- x -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 192 | -- | MCCARTHY SCHOOL PARK, RA | -- x -- | -- | -- | -- | -- | 2 | 1 | -- | 2 | -- | -- |
| 193 | D1-61(2) | CREEK RD | 54 x 24 | 9.00 | -- | -- | 2 | -- | -- | 1 | 2 | -- | -- |
| 194 | R1-1(2S) | -- | 30 x 30 | 5.18 | -- | -- | 1 | -- | -- | 1 | 1 | -- | -- |
| 194A | R1-1(2S) | -- | 30 x 30 | 5.18 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 195 | NOT USED | -- | -- x -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 195A | W3-1(2S) | -- | 36 x 36 | -- | 9.00 | -- | 1 | -- | -- | -- | -- | -- | -- |
| 196 | -- | WEIGHT LIMIT CLASS B | -- x -- | -- | -- | -- | 1 | -- | 1 | -- | 1 | -- | -- |
| 197 | W1-6L(2S) | -- | 48 x 24 | -- | 8.00 | -- | 1 | -- | -- | -- | -- | -- | -- |
| 198 | J13-1(2S) | -- | 24 x 45 | 7.50 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |

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CATEGORY CODE 0010

| SIGN NO. | | SIGN MESSAGE | TYPE II SIGN SIZE W [IN.] x H [IN.] | 637.2210 SIGNS TYPE II REFLECTIVE H [SF] | 637.2230 SIGNS TYPE II REFLECTIVE F [SF] | 637.2220 SIGNS TYPE II REFLECTIVE SH [SF] | 634.0616 WOOD POSTS 4"x 6"X16' [EA] | 634.0618 WOOD POSTS 4"x 6"X18' [EA] | 638.2102 MOVING SIGNS TYPE II [EA] | 638.2602 REMOVING SIGNS TYPE II [EA] | 638.3000 REMOVING SMALL SIGN SUPPORTS [EA] | MOUNT ON SAME POST AS SIGN # | REMARKS NEW SIGN LOCATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M6-4 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 198A | NOT USED | -- | -- x -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 199 | D2-2(2) | WHITEWATER 16, JANESVILLE 18 | 84 x 24 | 14.00 | -- | -- | 2 | -- | -- | 1 | 2 | -- | -- |
| 200 | R2-1(2S) | 55 MPH | 24 x 30 | 5.00 | -- | -- | 1 | -- | -- | 1 | 1 | -- | -- |
| 201 | W6-2(2S) | -- | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 202 | W3-5(2S) | 45 MPH | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 203 | NOT USED | -- | x | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 204 | R2-1(3) | 45 MPH | 36 x 48 | 12.00 | -- | -- | 1 | -- | -- | 1 | 1 | -- | -- |
| 205 | W6-3(2S) | -- | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | -- | -- | -- | -- |
| 206 | R5-1(3) | -- | 36 x 36 | 9.00 | -- | -- | 1 | -- | -- | 1 | 1 | -- | -- |
| 207 | W14-3 | | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 208 | R2-1(2S) | 45 MPH | 24 x 30 | 5.00 | -- | -- | 1 | -- | -- | -- | -- | -- | REMOVED WITH #206 |
| 209 | J4-1 | -- | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 210 | R5-1A(2M) | -- | 42 x 30 | 8.75 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 211 | W6-2(3) | -- | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | -- | -- | -- | -- |
| 212 | W6-2 | -- | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 213 | W6-2 | -- | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 214 | W4-2R(2M) | -- | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | -- | -- | -- | -- |
| 215 | W4-2R(2M) | -- | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | -- | -- | -- | -- |
| 216 | W14-3(2S) | -- | 48 x 36 | -- | 6.00 | -- | -- | 1 | -- | -- | -- | -- | -- |
| 217 | W54-57(2S) | -- | 30 x 30 | -- | 6.25 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 218 | J1-1 | -- | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 219 | R4-7(3) | -- | 36 x 48 | 12.00 | -- | -- | -- | 1 | -- | -- | -- | 220 | REMOVED WITH #207 |
| 220 | W5-56(2M) | -- | 18 x 18 | -- | -- | 2.25 | -- | -- | -- | -- | -- | 219 | -- |
| 221 | J1-1(2M) | -- | 24 x 39 | 6.50 | -- | -- | -- | 1 | -- | -- | -- | -- | -- |
| | MB2-1 | -- | 21 x 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-1 | IH 43 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 222 | R2-1 | 45 MPH | -- x -- | -- | -- | -- | -- | -- | -- | 1 | 1 | -- | -- |
| 223 | R5-1A | -- | x | -- | -- | -- | -- | -- | -- | -- | -- | -- | REMOVED WITH #209 |
| 224 | W12-2(2M) | 13'9" | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | 1 | 1 | 224A | -- |
| 224A | W57-52(2M) | 1 MILE AHEAD | 36 x 24 | -- | 6.00 | -- | -- | -- | -- | -- | -- | 224 | REMOVED WITH 224 |
| 225 | W12-2(2M) | 13'9" | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | 1 | 1 | 225A | -- |
| 225A | W57-52(2M) | 1 MILE AHEAD | 36 x 24 | -- | 6.00 | -- | -- | -- | -- | -- | -- | 225 | REMOVED WITH 225 |
| 226 | W14-1(2S) | -- | 30 x 30 | -- | 6.25 | -- | 1 | -- | -- | 1 | 1 | -- | -- |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 227 | R1-1(3) | -- | 36 x 36 | 7.16 | -- | -- | 1 | -- | -- | 1 | 1 | -- | -- |
| 228 | J2-2(2M) | -- | 48 x 57 | 19.00 | -- | -- | -- | 1 | -- | 1 | 2 | -- | -- |
| | MB3-1 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-1 | IH 43 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | MB6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | MB3-3 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-1 | IH 43 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | MB5-1R | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 229 | J4-2(2M) | -- | 48 x 36 | 12.00 | -- | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| | M3-4 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-4 | USH 14 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | MB4-1 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-1 | IH 43 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 230 | W9-1R(2M) | -- | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | -- | -- | -- | -- |
| 231 | W9-1R(2M) | -- | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | -- | -- | -- | -- |
| 232 | R3-20L(2M) | -- | 24 x 36 | 6.00 | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| 233 | W54-57(2M) | -- | 36 x 36 | -- | 9.00 | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| 234 | D1-2(2M) | UA MILWAUKEE, BELOIT RA | 72 x 30 | 15.00 | -- | -- | 2 | -- | -- | 1 | 2 | -- | -- |
| 235 | R5-1A(2M) | -- | 42 x 30 | 8.75 | -- | -- | -- | -- | -- | -- | -- | 234 | REMOVED WITH #234 |
| 236 | J3-1(2M) | -- | 24 x 57 | 9.50 | -- | -- | -- | 1 | -- | 1 | 1 | -- | -- |
| | MB3-3 | -- | 24 x 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | M1-1 | IH 43 | 24 x 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| | MB6-1 | -- | 21 x 21 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 237 | R5-1(2M) | -- | 36 x 36 | 9.00 | -- | -- | -- | -- | -- | -- | -- | 236 | REMOVED WITH #236 |
| 238 | D1-1(2M) | LA BELOIT | 54 x 15 | 5.63 | -- | -- | 2 | -- | -- | 1 | 2 | 240 | -- |
| 239 | R5-1A(2M) | -- | 42 x 30 | 8.75 | -- | -- | -- | -- | -- | 1 | 2 | 241 | -- |
| 240 | R5-1A(2M) | -- | 42 x 30 | 8.75 | -- | -- | -- | -- | -- | -- | -- | 238 | REMOVED WITH #238 |
| 241 | D1-1(2M) | LA MILWAUKEE | 72 x 15 | 7.50 | -- | -- | 2 | -- | -- | -- | -- | 239 | REMOVED WITH #239 |
| 242 | D1-2(2M) | UA BELOIT, MILWAUKEE RA | 72 x 30 | 15.00 | -- | -- | 2 | -- | -- | 1 | 2 | -- | -- |
| TOTALS | | | | 751.20 | 321.63 | 2.25 | 74 | 67 | 10 | 80 | 98 | -- | -- |

# SCHEDULE OF LANDS & INTERESTS REQUIRED

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

| PARCEL NUMBER | OWNER (S) | INTEREST REQUIRED | R/W ACRES OR S.F. REQUIRED | | | T.L.E. ACRES OR S.F. |
|---|---|---|---|---|---|---|
| | | | NEW | EXISTING | TOTAL | |
| 1 | RICHARD H. LUEHRMANN & TAMMALEE LUEHRMANN | FEE | 0.302 | 0.774 | 1.076 | - |

| HIGHWAY | BASIS OF EXISTING R/W | WIDTH | YEAR |
|---|---|---|---|
| USH 14 A/K/A STH 89 | DIVISION JOB NO. 2997 | 100'/83' | 1931 |
| USH 14 A/K/A STH 89 | C.S.M. 2194 | VARIES | 1992 |
| SCHOOL SECTION ROAD | BY STATE STATUE 82.18 | 66' | N/A |

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WALWORTH COUNTY ZONE, NAD83 (2007) 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 (TYPICAL 3/4" X 24" REBAR), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY AYRES ASSOCIATES.

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

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

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

FOR CURRENT ACCESS/DRIVEWAY INFORMATION CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGION OFFICE IN WAUKESHA.

# TRANSPORTATION PROJECT PLAT NO: 3150-05-20 - 4.01

THAT PART OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 AND PART OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 17, TOWNSHIP 2 NORTH, RANGE 15 EAST, TOWN OF DARIEN, WALWORTH COUNTY, WISCONSIN.

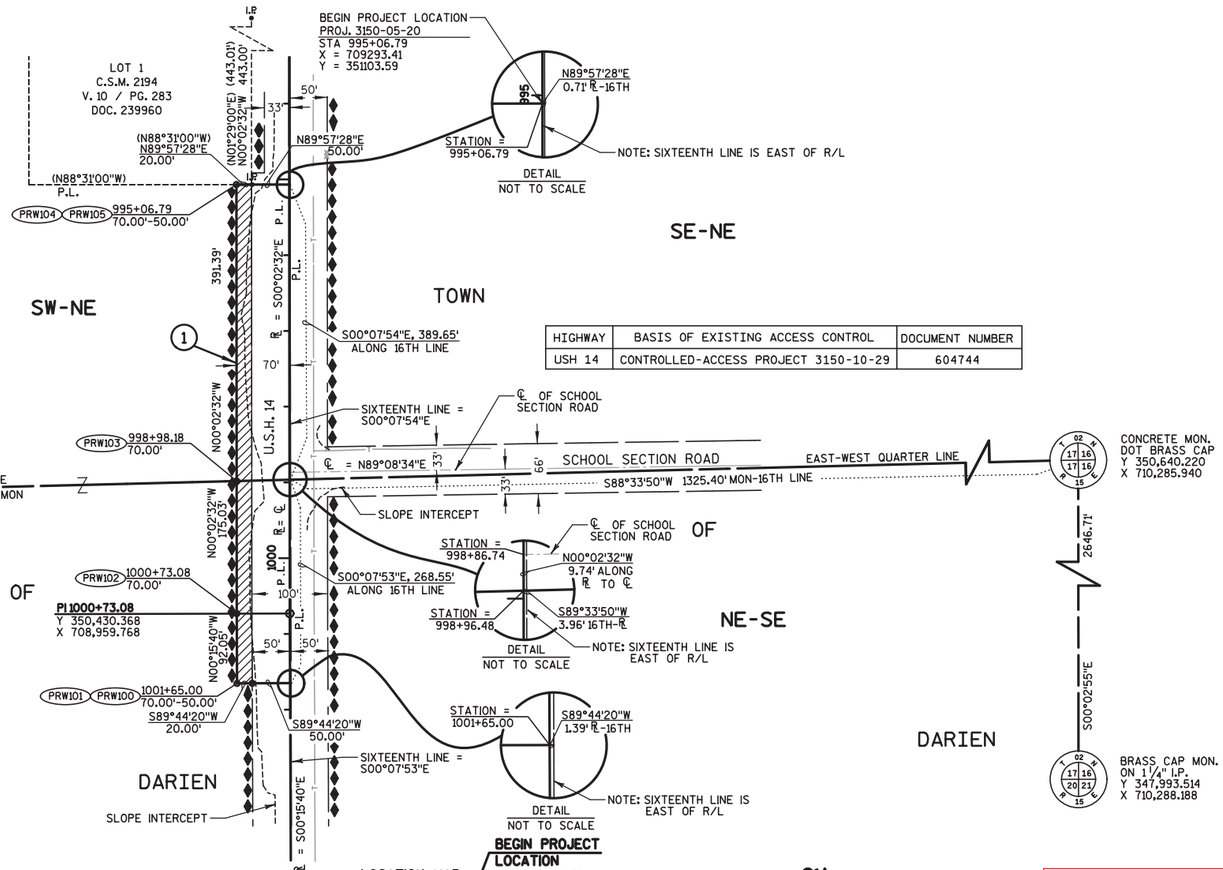
RELOCATION ORDER USH 14 - USH 11 TO IH 43 WALWORTH COUNTY

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

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


Doc # 937408
Recorded
December 06, 2016 9:59 AM
DONNA R PRUESS
REGISTER OF DEEDS
WALWORTH COUNTY, WI
Fee Amount: $25.00
Total Pages: 1


RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3150-05-20 - 4.01
AMENDMENT NO:




## CONVENTIONAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| ACCESS POINT | AP | REFERENCE LINE | R/L |
| ACCESS RIGHTS | AR | REMAINING | REM. |
| ACRES | AC. | RIGHT-OF-WAY | R/W |
| AND OTHERS | ET.AL. | SECTION | SEC. |
| CENTERLINE | C/L | STATION | STA. |
| CERTIFIED SURVEY MAP | CSM | TEMPORARY LIMITED EASEMENT | TLE |
| CORNER | COR. | VOLUME | V. |
| CONVEYANCE OF RIGHTS | CR | | |
| DOCUMENT | DOC. | CURVE DATA | |
| EASEMENT | EASE. | LONG CHORD | LCH |
| HIGHWAY EASEMENT | H.E. | LONG CHORD BEARING | LCB |
| LAND CONTRACT | LC | RADIUS | R |
| MONUMENT | MON. | DEGREE OF CURVE | D |
| PAGE | P. | CENTRAL ANGLE OR DELTA | Δ |
| PERMANENT LIMITED EASEMENT | PLE | LENGTH OF CURVE | L |
| PROPERTY LINE | PL | TANGENT | T |
| RECORDED AS | (100') | | |

## CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN I.P. ●1" UNLESS NOTED
R/W MONUMENT ○ ●(SET)
R/W STANDARD △ ▲(SET)
SIGN | SIGN
SECTION CORNER MONUMENT
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT PRW20
PARCEL NUMBER 102
SIGN NUMBER (OFF PREMISE) 21-1
BUILDING

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

## CONVENTIONAL UTILITY SYMBOLS

| | NON COMPENSABLE | COMPENSABLE |
|---|---|---|
| WATER | W | |
| GAS | G | |
| TELEPHONE | T | |
| OVERHEAD TRANSMISSION LINES | OH | |
| ELECTRIC | E | |
| CABLE TELEVISION | TV | |
| FIBER OPTIC | FO | |
| SANITARY SEWER | SAN | |
| STORM SEWER | SS | |
| POWER POLE | ○ | ■ |
| TELEPHONE POLE | ⌀ | ⌀ |
| TELEPHONE PEDESTAL | ⌑ | ⌑ |
| ELECTRIC TOWER | ☒ | |

THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE WALWORTH COUNTY REGISTER OF DEEDS.

AYRES ASSOCIATES

I, JAMEY L. REID, 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JAMEY L. REID Portage, WI S-2559 PROFESSIONAL LAND SURVEYOR

SIGNATURE Jamey L. Reid DATE 11-07-2016
PRINTED NAME JAMEY L. REID
REGISTRATION NUMBER S-2559

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE Robert L Duffek DATE 12-01-2016
PRINTED NAME ROBERT L

# TRANSPORTATION PROJECT PLAT NO: 3150-05-20 - 4.02 AMENDMENT NO. 1

AMENDS TPP 3150-05-20-4.02 RECORDED AS DOCUMENT NO. 937409 BY ADDING PARCELS 102 AND 104 AND REVISING UTILITY NUMBER 201

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 17, AND THAT PART OF LOT 2, C.S.M. 3942 LOCATED IN AND INCLUDING THAT PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, AND PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 AND PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 20, AND ALL IN TOWNSHIP 2 NORTH, RANGE 15 EAST, TOWN OF DARIEN, WALWORTH COUNTY, WISCONSIN.

RELOCATION ORDER USH 14 - STH 11 TO IH 43 WALWORTH COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

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


Doc # 947211
Recorded
May 30, 2017 10:39 AM
DONNA R PRUESS
REGISTER OF DEEDS
WALWORTH COUNTY, WI
Fee Amount: $25.00
Total Pages: 1


RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3150-05-20 - 4.02
AMENDMENT NO: 1

THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE WALWORTH COUNTY REGISTER OF DEEDS.

## SCHEDULE OF LANDS & INTERESTS REQUIRED

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

| PARCEL NUMBER | OWNER (S) | INTEREST REQUIRED | R/W ACRES OR S.F. REQUIRED | | | T.L.E. ACRES OR S.F. |
|---|---|---|---|---|---|---|
| | | | NEW | EXISTING | TOTAL | |
| 2 | ROBERT C. & GAIL A. HANSEN | FEE & TLE | 0.227 | - | 0.227 | 0.003 |
| 3 | DEAN KINCAID ENTERPRISES LLP | FEE & TLE | - | 0.576 | 0.576 | 0.134 |
| 4 | GERALD W. PELISHEK | FEE | 0.242 | 4.898 | 5.140 | - |
| 102 | ROBERT C. & GAIL A. HANSEN | TLE | - | - | - | 0.071 |
| 104 | GERALD W. PELISHEK | TLE | - | - | - | 0.045 |

## SCHEDULE OF UTILITIES & INTERESTS REQUIRED

| UTILITY NUMBER | OWNER NAME | INTEREST REQUIRED |
|---|---|---|
| 201 | FRONTIER COMMUNICATIONS | RELEASE OF RIGHTS |

(201) FRONTIER COMMUNICATIONS
V. 26 / P. 105 / DOC. 623291 - PARCELS 2 & 102
V. 635 / P. 7721 / DOC. 309037 - PARCEL 4
NO RECORDED EASEMENT - PARCEL 3

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WALWORTH COUNTY ZONE, NAD83 (2007) 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 (TYPICAL 3/4" X 24" REBAR), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY AYRES ASSOCIATES.

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

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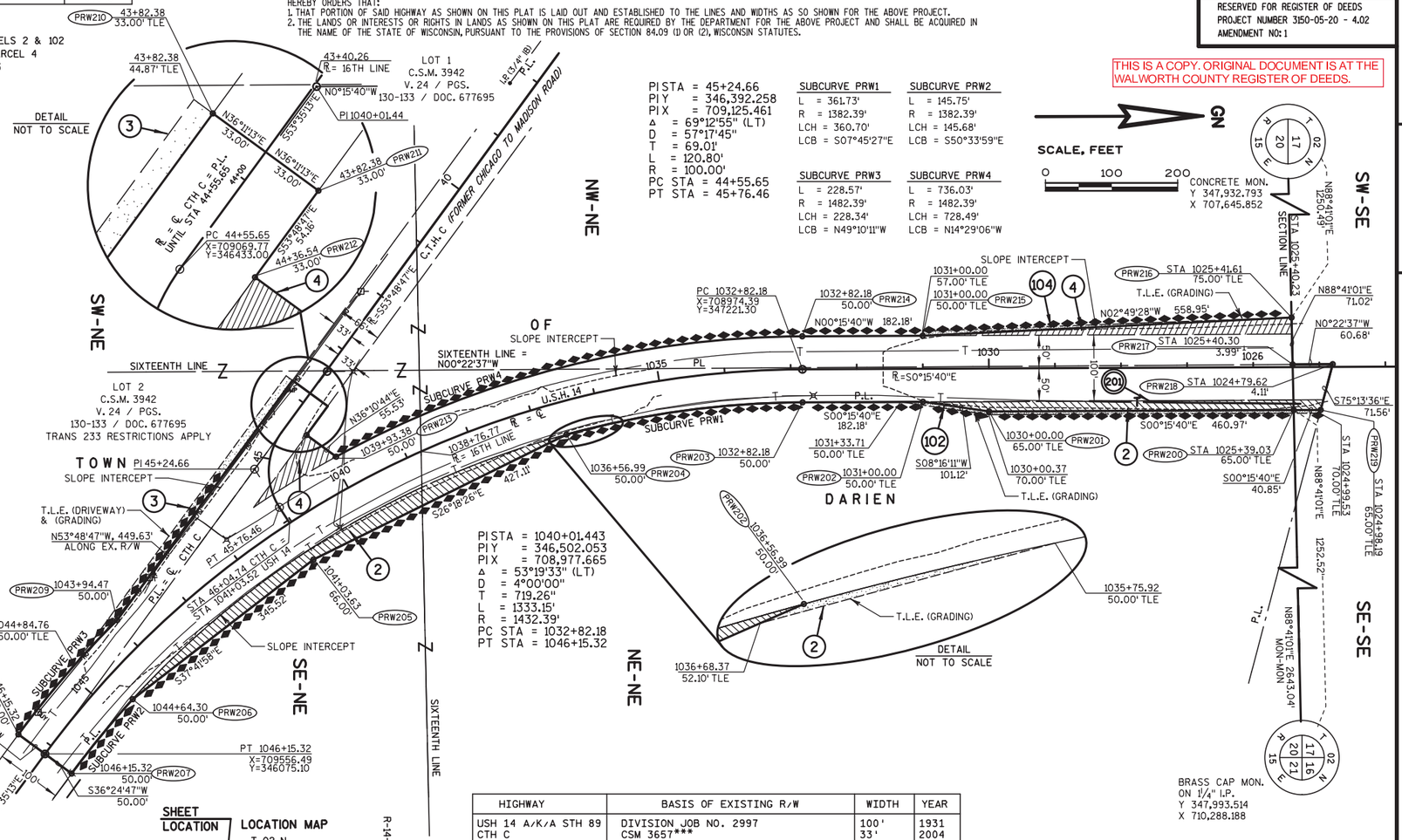
FOR CURRENT ACCESS/DRIVEWAY INFORMATION CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGION OFFICE IN WAUKESHA.




### CONVENTIONAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| ACCESS POINT | AP | REFERENCE LINE | R/L |
| ACCESS RIGHTS | AR | REMAINING | REM. |
| ACRES | AC. | RIGHT-OF-WAY | R/W |
| AND OTHERS | ET. AL. | SECTION | SEC. |
| CENTERLINE | C/L | STATION | STA. |
| CERTIFIED SURVEY MAP | CSM | TEMPORARY LIMITED EASEMENT | TLE |
| CORNER | COR. | VOLUME | V. |
| CONVEYANCE OF RIGHTS | CR | | |
| DOCUMENT | DOC. | **CURVE DATA** | |
| EASEMENT | EASE. | | |
| HIGHWAY EASEMENT | H.E. | LONG CHORD | LCH |
| LAND CONTRACT | LC | LONG CHORD BEARING | LCB |
| MONUMENT | MON. | RADIUS | R |
| PAGE | P. | DEGREE OF CURVE | D |
| PERMANENT LIMITED EASEMENT | PLE | CENTRAL ANGLE OR DELTA | Δ |
| PROPERTY LINE | PL | LENGTH OF CURVE | L |
| RECORDED AS | (100') | TANGENT | T |

### CONVENTIONAL SYMBOLS

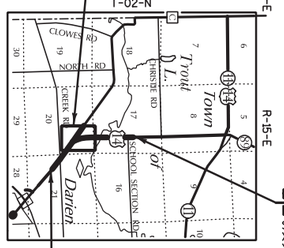
FOUND IRON PIPE/PIN I.P. ● (I" UNLESS NOTED)
R/W MONUMENT ○ ●(SET)
R/W STANDARD △ ▲(SET)
SIGN | SIGN
SECTION CORNER MONUMENT ⊕
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT RWB20
PARCEL NUMBER 102
SIGN NUMBER (OFF PREMISE) 21-1
BUILDING

PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
LOT & TIE LINES
SLOPE INTERCEPTS
CORPORATE LIMITS
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
EXISTING CENTERLINE
PROPOSED REFERENCE LINE
PARALLEL OFFSET

### CONVENTIONAL UTILITY SYMBOLS

| | NON COMPENSABLE | COMPENSABLE |
|---|---|---|
| WATER | W | |
| GAS | G | |
| TELEPHONE | T | |
| OVERHEAD TRANSMISSION LINES | OH | |
| ELECTRIC | E | |
| CABLE TELEVISION | TV | |
| FIBER OPTIC | FO | |
| SANITARY SEWER | SAN | |
| STORM SEWER | SS | |
| POWER POLE | ⊡ | ■ |
| TELEPHONE POLE | ⌀ | ⌀ |
| TELEPHONE PEDESTAL | ⌂ | ⌂ |
| ELECTRIC TOWER | ⊠ | |

SHEET LOCATION

LOCATION MAP T-02-N R-14-E R-15-E



BEGIN PROJECT LOCATION
STA 995+06.79
X = 709293.41
Y = 351103.59

END PROJECT LOCATION
STA 1065+56.88
X = 711115.74
Y = 344918.31

NET CENTERLINE LENGTH 1.288 MILES

| HIGHWAY | BASIS OF EXISTING R/W | WIDTH | YEAR |
|---|---|---|---|
| USH 14 A/K/A STH 89 | DIVISION JOB NO. 2997 | 100' | 1931 |
| CTH C | CSM 3657*** | 33' | 2004 |
| CTH C | CSM 3942 | 33' | 2006 |
| CTH C | BY STATE STATUE 82.18 | 66' | N/A |
| CTH C (FORMER CHICAGO TO MADISON ROAD) | VOL. 1, PG. 11, TOWN OF DARIEN | 66' | 1839 |

***CSM 3942 SHOWS THE SAME EXTERIOR BOUNDARY AS CSM 3657 BUT HAS A DIFFERENT MINOR LOT LINE DIVISION. THE DIFFERENCE BETWEEN THE TWO CSMS HAS NO BEARING ON THIS PLAT

| HIGHWAY | BASIS OF EXISTING ACCESS CONTROL | DOCUMENT NUMBER |
|---|---|---|
| USH 14 | CONTROLLED-ACCESS PROJECT 3150-10-29 | 604744 |
| CTH C | C.S.M. 3942 - V.24 / P.130-133 | 677965 |

AYRES ASSOCIATES

I, JAMEY L. REID, 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JAMEY L. REID Portage, WI S-2559 PROFESSIONAL LAND SURVEYOR

SIGNATURE Jamey L. Reid DATE 05-23-2017
PRINTED NAME JAMEY L. REID
REGISTRATION NUMBER S-2559

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE Robert A. Dorff DATE 5-25-2017
PRINTED NAME ROBERT L.



FILE NAME : V:\Survey\WK\45-0319.01 CTH C HWY14 TPP\CTH C TPP\31500520_402_Amend1.dgn
PLOT DATE : 5/24/2017
PLOT BY : badtkec
PLOT NAME :
PLOT SCALE : 1:100
CONT. 3150-05-70 USH 14 R/W 3150-05-20 4.02 AMEND 1

# TRANSPORTATION PROJECT PLAT NO: 3150-05-20-4.03

THAT PART OF THE SOUTHWEST ¼ OF THE NORTHWEST ¼, AND PART OF THE NORTHWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 21, TOWNSHIP 2 NORTH, RANGE 15 EAST, TOWN OF DARIEN, WALWORTH COUNTY, WISCONSIN.

## RELOCATION ORDER USH 14 - STH 11 TO IH 43 WALWORTH 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 NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02(3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED 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 SUBSECTION 84.09 (1), WISCONSIN STATUTES.

Doc # 937410
Recorded
December 06, 2016 9:59 AM

DONNA R PRUESS
REGISTER OF DEEDS
WALWORTH COUNTY, WI
Fee Amount: $25.00
Total Pages: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3150-05-20-4.03
AMENDMENT NO:

SCALE, FEET
0 50 100

GN

| R/W COURSE TABLE | | |
|---|---|---|
| LINE | LENGTH | DIRECTION |
| 300-301 | 80.03' | N00°24'33"W |
| 302-303 | 272.87' | S53°35'13"E |
| 303-304 | 88.74' | S71°36'44"E |
| 304-305 | 195.00' | N88°29'23"E |
| 305-306 | 7.00' | S01°19'30"E |
| 306-307 | 70.00' | N88°29'23"E |
| 308-309 | 10.00' | S01°19'29"E |
| 309-310 | 82.00' | S88°29'23"W |
| 310-311 | 63.92' | S78°55'52"W |
| 311-312 | 16.45' | S59°04'30"W |
| 312-313 | 130.06' | S51°49'28"E |
| 313-314 | 58.55' | S45°44'01"E |
| 314-315 | 108.92' | S53°35'13"E |
| 315-316 | SEE CURVE TABLE | |
| 317-318 | SEE CURVE TABLE | |
| 318-319 | 438.92' | N53°35'13"W |
| 319-320 | 97.42' | N73°43'03"W |
| 320-321 | 135.70' | S88°29'23"W |

## SCHEDULE OF LANDS & INTERESTS REQUIRED

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

| PARCEL NUMBER | OWNER(S) | INTEREST REQUIRED | R/W NEW ACRES | R/W EXISTING ACRES | R/W TOTAL ACRES | TLE ACRES |
|---|---|---|---|---|---|---|
| 6 | ROBERT C. & GAIL A. HANSEN TRUST | FEE | 0.053 | 0.762 | 0.815 | ---- |
| 7 | DARIEN INVESTMENTS, LLC. | FEE | 0.111 | 1.121 | 1.232 | ---- |
| 8 | HUISHEERE FAMILY FARM, LLC | FEE | 0.019 | 1.467 | 1.486 | ---- |

## SCHEDULE OF UTILITIES & INTERESTS REQUIRED

| PARCEL NO. | OWNER(S) | INTEREST REQUIRED |
|---|---|---|
| 200 | ALLIANT ENERGY | RELEASE OF RIGHTS |
| 201 | FRONTIER COMMUNICATIONS | RELEASE OF RIGHTS |
| 202 | AMERICAN TRANSMISSION COMPANY | RELEASE OF RIGHTS |

| R/W CURVE TABLE | | | | |
|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | CHORD LENGTH | CHORD BEARING |
| 315-316 | 214.82' | 5779.57' | 214.81' | S52°31'20"E |
| 317-318 | 245.80' | 5679.57' | 245.78' | N52°20'50"W |

| HIGHWAY | BASIS OF EXISTING R/W | WIDTH | YEAR |
|---|---|---|---|
| USH 14 A/K/A STH 89 | DIVISION JOB NO. 2997 | 100' | 1931 |
| USH 14 A/K/A STH 89 | DIVISION PROJECT T 033-1(5)AUX 3.1 | VARIES | 1955 |
| CREEK ROAD | DIVISION JOB NO. 2997 | 66' | 1931 |
| CREEK ROAD | CSM 3942 | 66' | 2006 |

| HIGHWAY | BASIS OF EXISTING ACCESS CONTROL | DOCUMENT NUMBER |
|---|---|---|
| USH 14 | CONTROLLED-ACCESS PROJECT 3150-10-29 | 604744 |

## CONVENTIONAL UTILITY SYMBOLS

| | |
|---|---|
| WATER | W |
| GAS | G |
| TELEPHONE | T |
| OVERHEAD TRANSMISSION LINES ELECTRIC | OH |
| | E |
| CABLE TELEVISION | TV |
| FIBER OPTIC | FO |
| SANITARY SEWER | SAN |
| STORM SEWER | SS |
| NON COMPENSABLE | |
| POWER POLE | |
| TELEPHONE POLE | |
| TELEPHONE PEDESTAL | |
| ELECTRIC TOWER | |

## CONVENTIONAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| ACCESS POINT/ DRIVEWAY CONNECTION | AP | RELEASE OF RIGHTS | ROR |
| ACCESS RIGHTS | AR | REMAINING | REM. |
| ACRES | AC. | RIGHT-OF-WAY | R/W |
| AND OTHERS | ET.AL. | SECTION | SEC. |
| CENTERLINE | C/L | STATION | STA. |
| CERTIFIED SURVEY MAP | CSM | TEMPORARY LIMITED EASEMENT | TLE |
| CORNER | COR. | VOLUME | V. |
| DOCUMENT | DOC. | | |
| EASEMENT | EASE. | | |
| HIGHWAY EASEMENT | H.E. | | |
| LAND CONTRACT | LC | | |
| MONUMENT | MON. | | |
| PAGE | P. | | |
| PERMANENT LIMITED EASEMENT | PLE | | |
| PROPERTY LINE | PL | | |
| RECORDED AS | (100') | | |
| REFERENCE LINE | R/L | | |

### CURVE DATA

| | |
|---|---|
| LONG CHORD | LCH |
| LONG CHORD BEARING | LCB |
| RADIUS | R |
| DEGREE OF CURVE | D |
| CENTRAL ANGLE OR DELTA | DELTA |
| LENGTH OF CURVE | L |
| TANGENT | TAN |

## CONVENTIONAL SYMBOLS

| | |
|---|---|
| FOUND IRON PIPE/PIN | I.P. (1" UNLESS NOTED) |
| R/W MONUMENT | ○ (SET) |
| R/W STANDARD | △ ▲ (SET) |
| SIGN | SIGN |
| SECTION CORNER MONUMENT | |
| SECTION CORNER SYMBOL | |
| FEE (HATCH VARIES) | |
| TEMPORARY LIMITED EASEMENT | |
| PERMANENT LIMITED EASEMENT | |
| R/W BOUNDARY POINT | RWB20 |
| PARCEL NUMBER | 102 |
| UTILITY INTEREST | 40 |
| SIGN NUMBER (OFF PREMISE) | 21 |
| BUILDING | |
| PROPOSED R/W LINE | |
| EXISTING H.E. LINE | |
| PROPERTY LINE | |
| LOT & TIE LINES | |
| SLOPE INTERCEPTS (S.I.) | |
| CORPORATE LIMITS | |
| ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL) | |
| ACCESS RESTRICTED (BY ACQUISITION) | |
| NO ACCESS (BY STATUTORY AUTHORITY) | |
| SECTION LINE | |
| QUARTER LINE | |
| SIXTEENTH LINE | |
| EXISTING CENTERLINE | |
| PROPOSED REFERENCE LINE | |
| PARALLEL OFFSET | |

## NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WALWORTH COUNTY ZONE, NAD83 (2007) 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 (TYPICAL ¾" X 24" REBAR), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY AYRES ASSOCIATES.

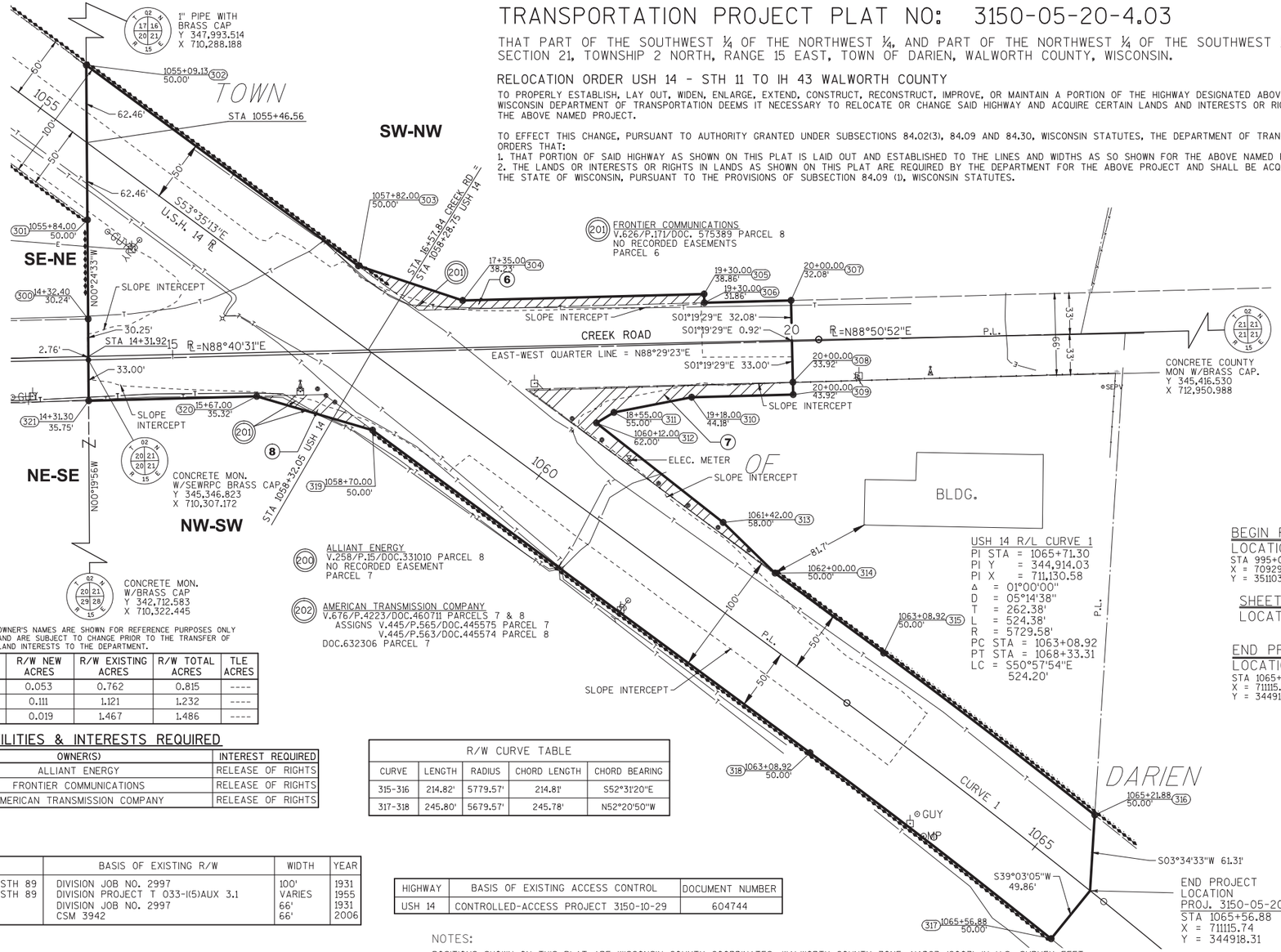
RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OF OTHER SURVEYS OF RECORD.

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.

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

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

FOR CURRENT ACCESS/DRIVEWAY INFORMATION CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGION OFFICE IN WAUKESHA.




THIS IS A COPY. ORIGINAL DOCUMENT IS AT THE WALWORTH COUNTY REGISTER OF DEEDS.

AYRES ASSOCIATES

I, JAMEY L. REID, 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JAMEY L. REID Portage, WI S-2559 PROFESSIONAL LAND SURVEYOR

SIGNATURE Jamey L Reid DATE 11/07/2016
PRINTED NAME JAMEY L. REID
REGISTRATION NUMBER S-2559

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

SIGNATURE Robert L Duffec DATE 12-01-2016
PRINTED NAME ROBERT L. DUFFEC



FILE NAME : V:\SURVEY\WK\45-0319.01 CTH C HWY14 TPP\CREEK ROAD TPP\2015 TPP\45031901_TPP.DWG PLOT DATE : 11/28/2016 8:09 AM PLOT BY : BADTKE, CHRISTOPHER PLOT NAME : PLOT SCALE : **********

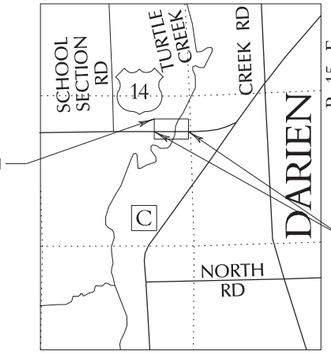
CONT. 3150-05-70 3150-05-20 4.03

| SCHEDULE OF LANDS & INTERESTS REQUIRED | NOTE:OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION. | | | | | | |
|---|---|---|---|---|---|---|---|
| PARCEL NUMBER | OWNER | INTERESTS REQUIRED | R/W REQUIRED (ACRES) NEW | EXISTING | TOTAL | T.L.E. TEMP ACRES | P.L.E. PERM ACRES |
| 1 | STATE OF WISCONSIN (CONSERVATION COMMISSION) | FEE,TLE | 0.67 | 1.65 | 2.32 | 0.35 | x |
| 2 | HELEN HERELEY | FEE | 0.05 | 0.19 | 0.24 | X | x |
| 3 | GERALD W. PELISHEK | FEE,TLE | 0.74 | 1.52 | 2.26 | 0.19 | x |

| HWY | BASIS OF EXISTING R/W | YEAR | WIDTH |
|---|---|---|---|
| USH 14 | DIVISION JOB 2997 | 1931 | 100 |

| HWY | BASIS OF EXISTING ACCESS CONTROL | DOCUMENT NUMBER |
|---|---|---|
| USH 14 | CONTROLLED ACCESS PROJECT 3150-10-29 | 604744 |

| UTILITY INTEREST REQUIRED | | |
|---|---|---|
| PARCEL NUMBER | OWNER | INTERESTS REQUIRED |
| 121 | SHARON TELEPHONE | RELEASE OF RIGHTS |




I, JEFFREY B. JOHNSON, 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 3150-05-21 - 4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

(SIGNATURE) _____ DATE: 11/9/16

(PRINTED NAME) JEFFREY B. JOHNSON

(REGISTRATION NUMBER) S-1734

WISCONSIN JEFFREY B. JOHNSON S-1734 SPRING GREEN WI LAND SURVEYOR

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

(SIGNATURE) _____ DATE: 11/11/2016

(PRINTED NAME) ROBERT L. DUFFECK PLS


DAAR
www.daarcorp.com
325 E. CHICAGO ST. SUITE 500
MILWAUKEE, WISCONSIN 53202
PHONE: (414)935-4350



Doc # 736353
Recorded
November 18, 2016 10:24 AM
DONNA R PRUESS
REGISTER OF DEEDS
WALWORTH COUNTY, WI
Fee Amount: $25.00
Total Pages: 1


RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 3150-05-21 - 4.01
AMENDMENT NO:

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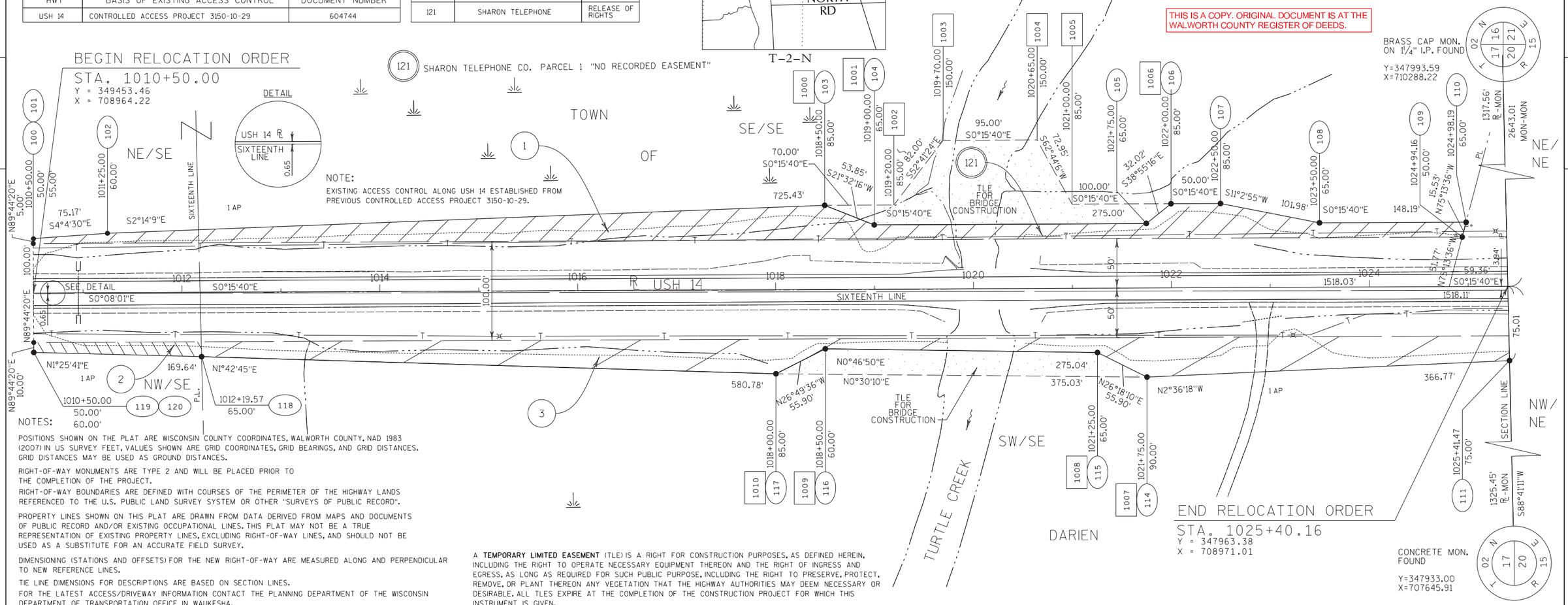



NOTES:

POSITIONS SHOWN ON THE PLAT ARE WISCONSIN COUNTY COORDINATES, WALWORTH COUNTY, NAD 1983 (2007) IN US SURVEY FEET, VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 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.

DIMENSIONING (STATIONS AND OFFSETS) FOR THE NEW RIGHT-OF-WAY ARE MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

TIE LINE DIMENSIONS FOR DESCRIPTIONS ARE BASED ON SECTION LINES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

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 TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

## CONVENTIONAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| ACCESS POINT/ DRIVEWAY CONNECTION | AP | RELEASE OF RIGHTS | ROR |
| ACCESS RIGHTS | AR | REMAINING | REM. |
| ACRES | AC. | RIGHT-OF-WAY | R/W |
| AND OTHERS | ET.AL. | SECTION | SEC. |
| CENTERLINE | C/L | STATION | STA. |
| CERTIFIED SURVEY MAP | CSM | TEMPORARY LIMITED EASEMENT | TLE |
| CORNER | COR. | VOLUME | V. |
| DOCUMENT | DOC. | | |
| EASEMENT | EASE. | | |
| HIGHWAY EASEMENT | H.E. | | |
| LAND CONTRACT | LC | | |
| MONUMENT | MON. | | |
| PAGE | P. | | |
| PERMANENT LIMITED EASEMENT | PLE | | |
| PROPERTY LINE | PL | | |
| RECORDED AS | (100') | | |
| REFERENCE LINE | R/L | | |

### CURVE DATA

| | |
|---|---|
| LONG CHORD | LCH |
| LONG CHORD BEARING | LCB |
| RADIUS | R |
| DEGREE OF CURVE | D |
| CENTRAL ANGLE OR DELTA | DELTA |
| LENGTH OF CURVE | L |
| TANGENT | TAN |

| | |
|---|---|
| • FOUND IRON PIPE/PIN | LS (1" UNLESS NOTED) |
| R/W MONUMENT | ∘ •(SET) |
| R/W STANDARD | △ •(SET) |
| SIGN | ISIGN |
| SECTION CORNER MONUMENT | |
| SECTION CORNER SYMBOL | |
| FEE (HATCH VARIES) | |
| TEMPORARY LIMITED EASEMENT | |
| PERMANENT LIMITED EASEMENT | |
| R/W BOUNDARY POINT | RWB20 |
| PARCEL NUMBER | 102 |
| SIGN NUMBER (OFF PREMISE) | 21- |
| BUILDING | |

## CONVENTIONAL SYMBOLS

| | |
|---|---|
| PROPOSED R/W LINE | |
| EXISTING H.E. LINE | |
| PROPERTY LINE | |
| LOT & TIE LINES | |
| SLOPE INTERCEPTS | |
| CORPORATE LIMITS | |
| NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL) | |
| NO ACCESS (BY ACQUISITION) | |
| NO ACCESS (BY STATUTORY AUTHORITY) | |
| SECTION LINE | |
| QUARTER LINE | |
| SIXTEENTH LINE | |
| EXISTING CENTERLINE | |
| PROPOSED REFERENCE LINE | |
| PARALLEL OFFSET | |

## CONVENTIONAL UTILITY SYMBOLS

| | NON COMPENSABLE | COMPENSABLE |
|---|---|---|
| WATER | W | |
| GAS | G | |
| TELEPHONE | T | |
| OVERHEAD | OH | |
| TRANSMISSION LINES ELECTRIC | E | |
| CABLE TELEVISION | TV | |
| FIBER OPTIC | FO | |
| SANITARY SEWER | SAN | |
| STORM SEWER | SS | |
| POWER POLE | | |
| TELEPHONE POLE | | |
| TELEPHONE PEDESTAL | | |
| ELECTRIC TOWER | | |

GN

SCALE, FEET
0 50 100

# TRANSPORTATION PROJECT PLAT NO: 3150-05-21 - 4.01

THAT PART OF THE NE 1/4 OF THE SE 1/4, THE NW 1/4 OF THE SE 1/4, THE SW 1/4 OF THE SE 1/4, AND THE SE 1/4 OF THE SE 1/4 OF SECTION 17 TOWNSHIP 2 NORTH, RANGE 15 EAST, TOWN OF DARIEN, WALWORTH COUNTY, WISCONSIN.

RELOCATION ORDER USH 14 WALWORTH COUNTY, USH 11 TO IH 43, WALWORTH COUNTY.

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

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



FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\040101_rp.DGN PLOT DATE : 11/9/2016 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 50.0000 ' / in. CONST. 3150-05-70 R/W 3150-05-21 - 4.01

HELEN HERELEY

SHARON TELEPHONE

PROPOSED R/W

℄ USH 14

SAW CUT REQUIRED

SLOPE INTERCEPT

TLE

STATE OF WISCONSIN

TURTLE CREEK

CONSTRUCTION PERMIT/TEMPORARY RIGHT OF ENTRY TO BE ACQUIRED FOR CONSTRUCTING GRAVEL PARKING AREA WITHIN STATE OF WISCONSIN CONSERVATION COMMISSION PROPERTY.

SLOPE INTERCEPT (CLEARING & GRUBBING)

SLOPE INTERCEPT (GRADING)

MATCHLINE STA. 1024+00

1010 1012 1014 1016 1018 1020 1022

USH 14

B-64-191

FRONTIER TEL

EXISTING R/W

PROPOSED R/W

FRONTIER TELEPHONE

TLE

WETLAND BOUNDARY

HELEN HERELEY

GERALD M. PELISHEK

BEGIN RECONSTRUCTION
STA. 1010+50.00

VPC STA 1010+56.51
VPC EL 867.13

LP STA 1010+99.45
LP EL 867.10

VPT STA 1012+36.51
VPT EL 867.44

VCL = 180'
K = 274

VPI STA 1010+50.00
VPI EL 867.14

VPI STA 1011+46.51
VPI EL 866.99

-0.16%

0.50%

FINISHED PROFILE

EXISTING PROFILE

VPC STA 1021+63.00
VPC EL 872.07

VCL = 274'
K = 177

VPI STA 1023+00.00
VPI EL 872.76

STA 1019+83.12
REMOVE STRUCTURE B-64-660
2 SPAN STEEL GIRDER
73'-8" OVERALL LENGTH
42'-10" OVERALL WIDTH

STA 1019+51.25
STRUCTURE B-64-191 REQUIRED
SINGLE SPAN 36" W PRESTRESSED GIRDERS
44' CLEAR ROADWAY
SKEW 0°00'-00"

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

876.28

885 880 875 870 865 860 855 850

867.27 867.14 867.02 866.96 867.14 866.89 867.10 866.82 867.14 866.74 867.28 866.67 867.51 866.59 867.76 866.46 868.01 866.36 868.26 866.36 868.51 866.39 868.76 866.49 869.01 866.60 869.26 866.80 869.51 866.95 869.76 867.06 870.01 867.10 870.26 867.17 870.51 867.24 870.76 867.32 871.01 867.42 871.26 867.49 871.51 867.61 871.76 868.07 872.01 868.53 872.29 868.97 872.72 869.40 873.29 869.84 873.99 870.27 874.84

1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PLAN AND PROFILE: TURTLE CREEK BRIDGE | SHEET 107 | E |
|---|---|---|---|---|---|

CONSTRUCTION PERMIT/TEMPORARY RIGHT OF ENTRY TO BE ACQUIRED FOR CONSTRUCTING GRAVEL PARKING AREA WITHIN STATE OF WISCONSIN CONSERVATION COMMISSION PROPERTY.

N

ROBERT C. HANSEN

SLOPE INTERCEPT (CLEARING AND GRUBBING)

SLOPE INTERCEPT (GRADING)

PROPOSED R/W

T.L.E.

SLOPE INTERCEPT

℄ USH 14

SAW CUT REQUIRED

SHARON TELEPHONE

MATCHLINE STA. 1024+00

1024 1026 1028 1030 1032 1034 1036 1038

SHARON TEL

USH 14

FRONTIER T

ROBERT C. HANSEN

T.L.E.

EXISTING R/W

PROPOSED R/W

FRONTIER TELEPHONE

GERALD W. PELISHEK

CTH "C"

END RECONSTRUCTION
STA 1031+75.00

5

5

VPI STA 1031+75.00
VPI EL 884.72

VCL = 290'
K = 144

2.32?

VPRC STA 1024+37.00
VPRC EL 875.56

FINISHED PROFILE

VPI STA 1026+57.00
VPI EL 880.07

VCL = 440'
K = 252

VPRC STA 1028+77.00
VPRC EL 880.74

VPI STA 1030+22.00
VPI EL 881.17

VPT STA 1031+67.00
VPT EL 884.53

EXISTING PROFILE

876.28

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

885 880 875 870 865 860 855 850

| | | |

GERALD W. PELISHEK

EXISTING R/W

FRONTIER TEL

SLOPE INTERCEPT

EXISTING R/W

ROBERT C. HANSEN

PROPOSED R/W

SHARON TEL

ROBERT C. HANSEN

PROPOSED R/W

℄ USH 14

℞ USH 14

SLOPE INTERCEPT

EXISTING R/W

CTH C

EXISTING R/W

SLOPE INTERCEPTS

FRONTIER TEL

℞ CTH C

TLE

ALLIANT ENERGY
(OH ELEC)

MAURICE SCHMID TRUST

USH 14

BEGIN CONSTRUCTION
STA 43+50
SAWCUT AND
MATCH EXISTING

OBLITERATE OLD ROAD

5

5

VPI STA 43+50.00
VPI EL 892.32

VPC STA 44+66.52
VPC EL 893.51

HP STA 45+09.75
HP EL 893.73

VPI STA 45+30.52
VPI EL 894.16

VPT STA 45+94.52
VPI STA 892.88

VPI STA 45+94.76
VPI EL 892.88

VPI STA 46+04.74
VPI EL 892.31

FINISHED PROFILE

1.02%

-2.00%

-5.70%

VCL = 128'
K = 42

EXISTING PROFILE

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 892.10 | 892.32 | 892.32 | 892.52 | 892.58 | 892.68 | 892.83 | 892.83 | 893.09 | 892.85 | 893.34 | 892.83 | 893.59 |
| 892.66 | 893.72 | 891.03 | 893.70 | 891.67 | 893.54 | 891.16 | 893.23 | 892.23 | 892.58 | | | |

43+25 43+50 43+75 44+00 44+25 44+50 44+75 45+00 45+25 45+50 45+75 46+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PLAN AND PROFILE: CTH C | SHEET | E |
|---|---|---|---|---|---|



FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\050103_pp.DGN PLOT DATE : 4/25/2018 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 40.0000 ' / in.

WISDOT/CADDS SHEET 30

TOWN OF DARIEN

EXISTING R/W

SLOPE INTERCEPT

℄ CREEK RD

USH 14

1057

SHARON TEL

CONCRETE CURB AND GUTTER 6-INCH SLOPED, 36-INCH TYPE D (TYP)

ROBERT C. HANSEN TRUST

PROPOSED R/W

SLOPE INTERCEPT

EXISTING R/W

N

℄ USH 14

1058

14 CREEK ROAD 15 16 17 18 19 20

SECTION CORNER TO BE REPLACED

EXISTING R/W

FRONTIER TEL

ATC (OH ELEC) - ABOVE
ALLIANT (OH ELEC) - BELOW

PROPOSED R/W

1059

EXISTING R/W

PROPOSED R/W

FRONTIER TEL

SHARON TEL

DARIEN INVESTMENTS, LLC

5

5

BEGIN CONSTRUCTION
STA 14+31.53
SAWCUT AND
MATCH EXISTING

MARY H. HUISHEERE

ALLIANT ENERGY
(OH ELEC)

1060

END CONSTRUCTION
STA 19+27.64
SAWCUT AND
MATCH EXISTING

VPI STA 14+31.53
VPI EL 894.08

EXISTING PROFILE

FINISHED PROFILE

VPI STA 16+18.62
VPI EL 895.69

VPI STA 16+57.84
VPI EL 896.24

VPI STA 16+97.05
VPI EL 895.84

VPI STA 18+75.00
VPI EL 898.57

VPI STA 19+27.54
VPI EL 899.54

0.86%

1.40%

-1.01%

1.54%

1.84%

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

| | | |

# Standard Detail Drawing List

| | |
|---|---|
| 08A05-19C | INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S |
| 08C07-02 | INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT |
| 08D01-20A | CONCRETE CURB & GUTTER |
| 08D01-20B | CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS |
| 08D02-06 | CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES |
| 08D04-05 | CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES |
| 08D22-01 | DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL |
| 08E08-03 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E09-06 | SILT FENCE |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 08E11-02 | TURBIDITY BARRIER |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F02-01 | APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE |
| 08F04-07 | JOINT TIES FOR CONCRETE PIPE  AND CONCRETE COLLAR DETAIL |
| 08F06-04 | REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN |
| 08F07-05 | STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS |
| 09A01-13A | AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND  D AND TEE INTERSECTION BYPASS LANE |
| 11B02-02 | CONCRETE MEDIAN NOSE |
| 12A03-10 | NAME PLATE (STRUCTURES) |
| 13A03-06 | CONCRETE PAVEMENT SHOULDERS |
| 13A10-01A | 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING |
| 13A10-01B | 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING |
| 13A10-01C | 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING |
| 13A10-01D | 2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING |
| 13A11-02A | 2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING |
| 13A11-02B | 2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING |
| 13B02-08A | CONCRETE PAVEMENT APPROACH SLAB |
| 13B02-08B | STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB |
| 13C01-18 | CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES |
| 13C11-11A | RURAL DOWELED CONCRETE PAVEMENT |
| 13C11-11B | RURAL DOWELED CONCRETE PAVEMENT |
| 13C18-05A | CONCRETE PAVEMENT JOINTING |
| 13C18-05B | CONCRETE PAVEMENT STEEL REINFORCEMENT |
| 13C18-05C | CONCRETE PAVEMENT JOINT TYPES |
| 13C18-05D | CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES |
| 14B20-11A | STEEL THRIE BEAM STRUCTURE APPROACH |
| 14B20-11B | STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO  SQUARE END PARAPETS |
| 14B26-03A | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-03B | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-03C | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-03D | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B26-03E | STEEL THRIE BEAM BULLNOSE TERMINAL |
| 14B28-03 | GUARDRAIL MOW STRIP |
| 14B29-01 | SAFETY EDGE |
| 14B42-05A | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-05B | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-05C | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B44-03A | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B44-03B | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B44-03C | 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) |
| 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 |
| 15C03-04 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C07-14B | PAVEMENT MARKING WORDS |
| 15C07-14C | PAVEMENT MARKING ARROWS |
| 15C08-18A | LONGITUDINAL MARKING (MAINLINE) |
| 15C08-18B | PAVEMENT MARKING (TURN LANES) |
| 15C11-07B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15C21-08 | SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS |
| 15C27-02B | PAVEMENT MARKING (ISLANDS) |

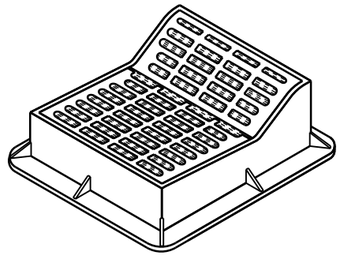
6

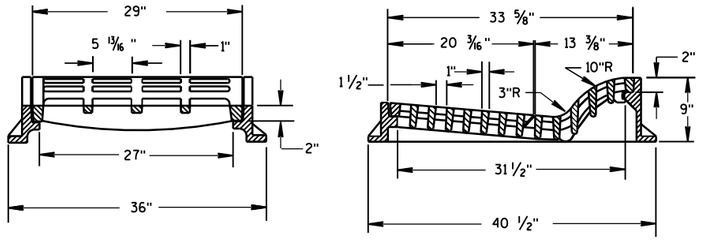
# Standard Detail Drawing List

| | |
|---|---|
| 15C33-03 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15C35-02A | PAVEMENT MARKING (INTERSECTIONS) |
| 15D20-04 | TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY |
| 15D21-05 | TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE |
| 15D38-02A | TEMPORARY TRAFFIC CONTROL SIGN MOUNTING |
| 15D38-02B | ATTACHMENT OF SIGNS TO POSTS |
| 16A01-07 | LANDMARK REFERENCE MONUMENTS AND COVERS |



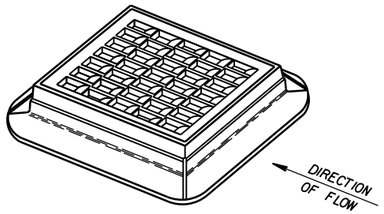
6

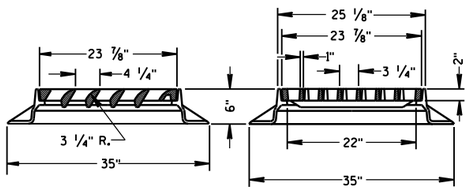




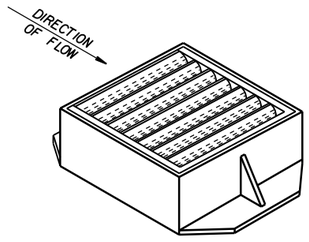

## TYPE "F"

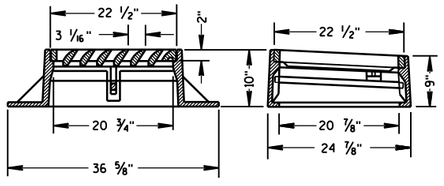
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



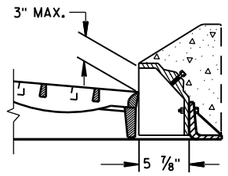




## TYPE "S"




## TYPE "V"




## ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

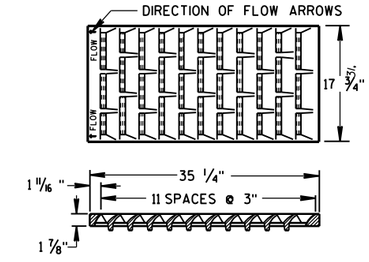
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

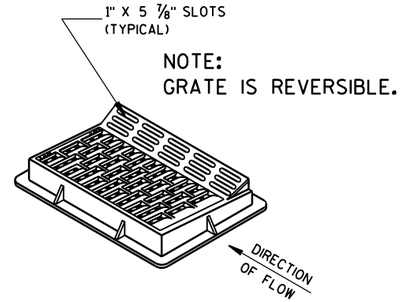
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

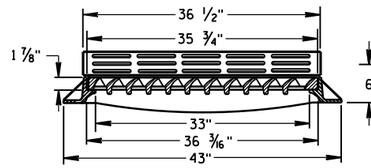
## GENERAL NOTES

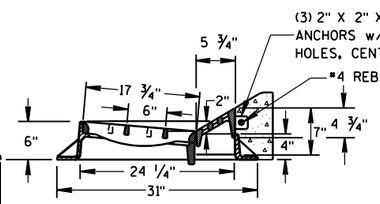
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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



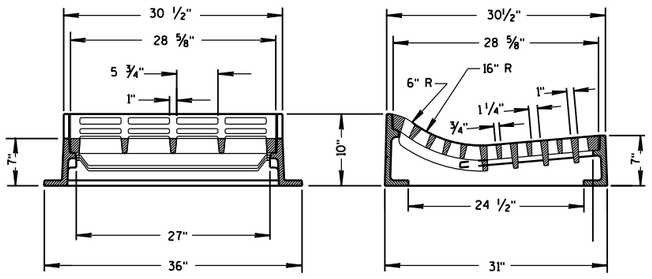



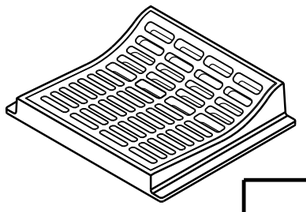




## TYPE "HM"

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

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



## TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

# INLET COVERS
# TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

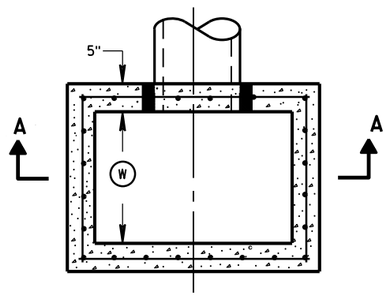
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

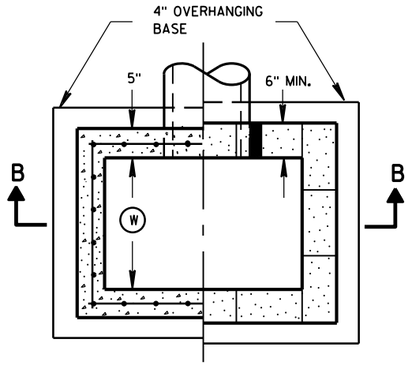



6

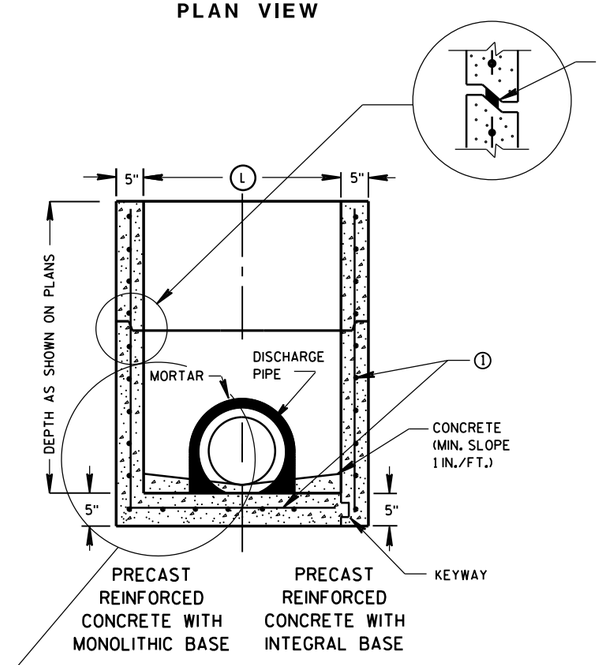

S.D.D. 8 A 5-19c



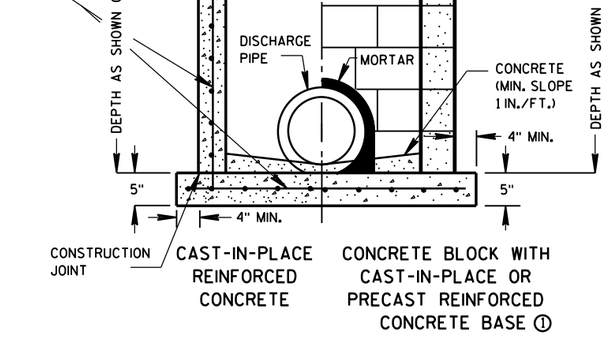

PLAN VIEW



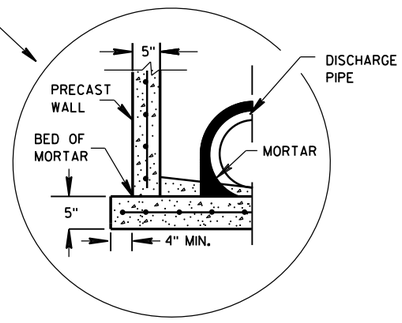

PLAN VIEW




SECTION A-A




SECTION B-B




SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

## GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

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

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

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

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

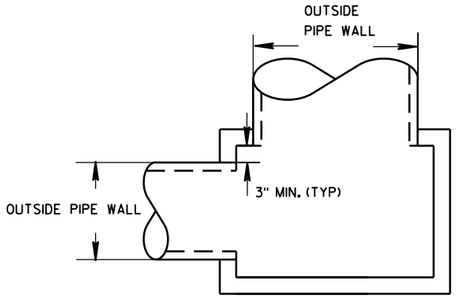
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

## INLET COVER MATRIX

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

## PIPE MATRIX

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




DETAIL "A"

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

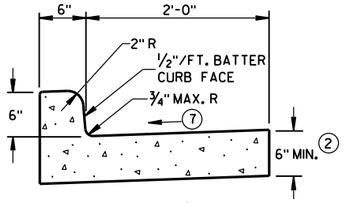
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

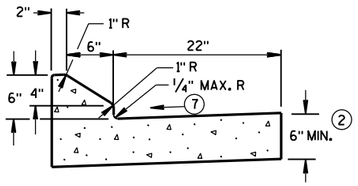




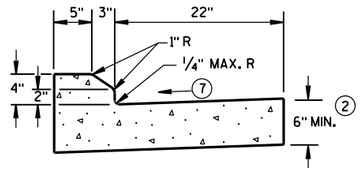
6
S.D.D. 8 C 7-2



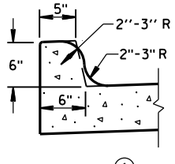

TYPES A (1) & D



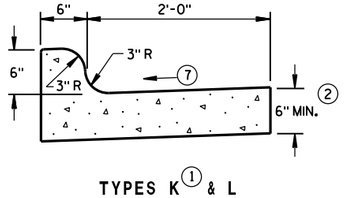

6" SLOPED CURB TYPES G (1) & J




4" SLOPED CURB TYPES G (1) & J

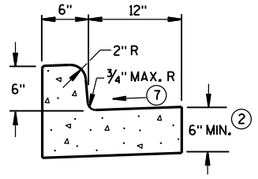



TYPES K (1) & L
(OPTIONAL CURB SHAPE)



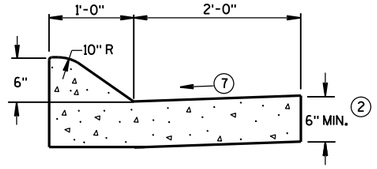

TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

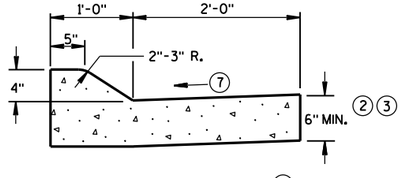



TYPES A (1) & D

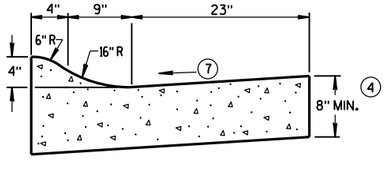
CONCRETE CURB & GUTTER 18"




6" SLOPED CURB TYPES A (1) & D

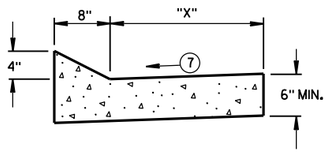



4" SLOPED CURB TYPES A (1) & D




4" SLOPED CURB TYPES R (1) & T (5)

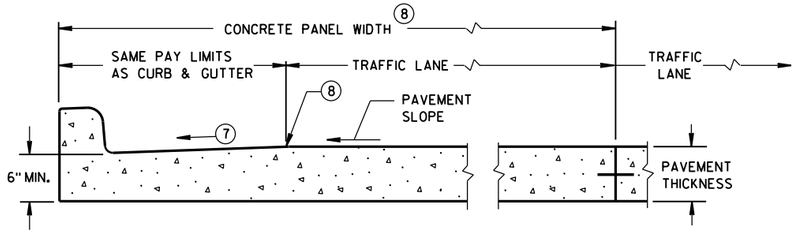
CONCRETE CURB & GUTTER 36"



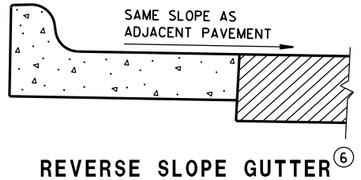

TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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




PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER




REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

## GENERAL NOTES

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

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

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

### PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

| PAVEMENT THICKNESS | MAXIMUM PANEL WIDTH |
|---|---|
| LESS THAN 10" | 12' |
| 10" & ABOVE | 15' |

* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...



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S.D.D. 8 D 1-20a

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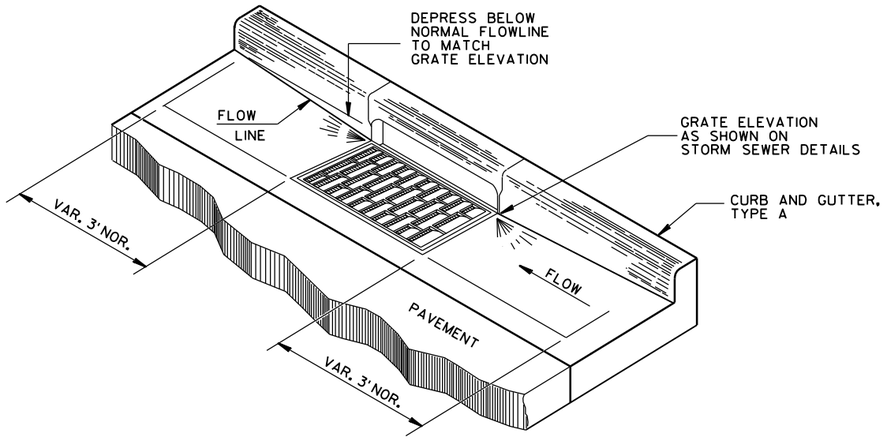
S.D.D. 8 D 1-20a




## DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

## GENERAL NOTES

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

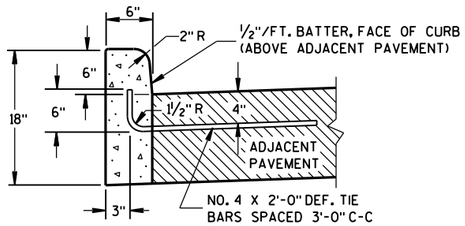
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

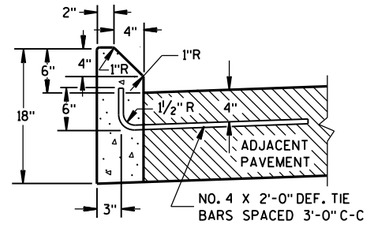
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(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.

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

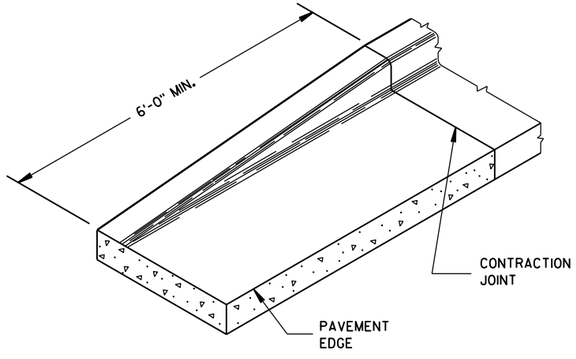



TYPES A(1) & D

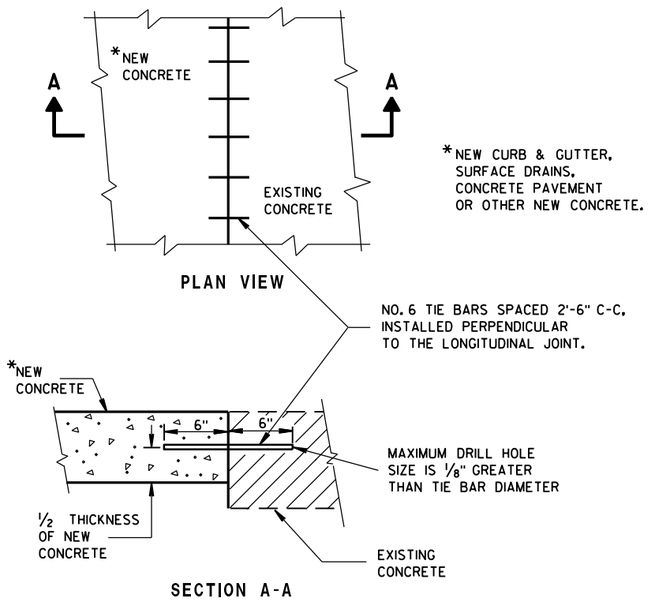



TYPES G(1) & J

## CONCRETE CURB



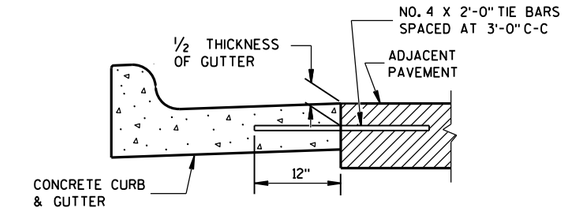

## END SECTION CURB & GUTTER



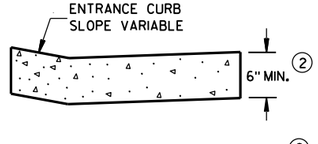

PLAN VIEW

SECTION A-A

## TIE BARS DRILLED INTO EXISTING PAVEMENT




## TYPICAL TIE BAR LOCATION (1)




## DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

## CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

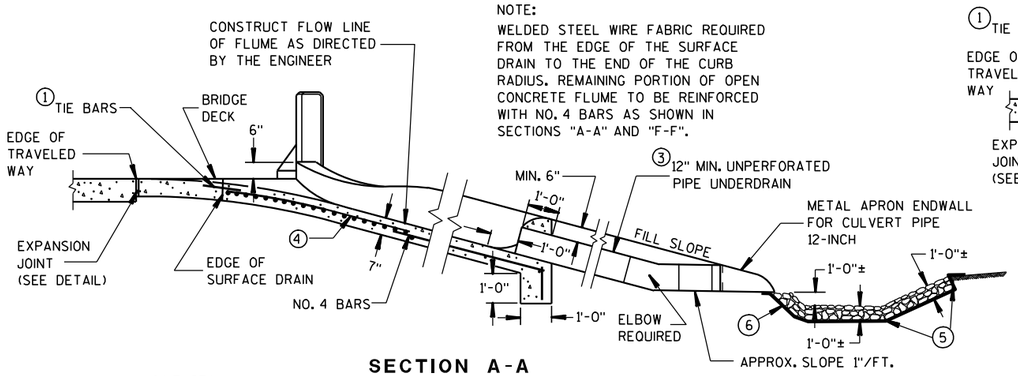
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

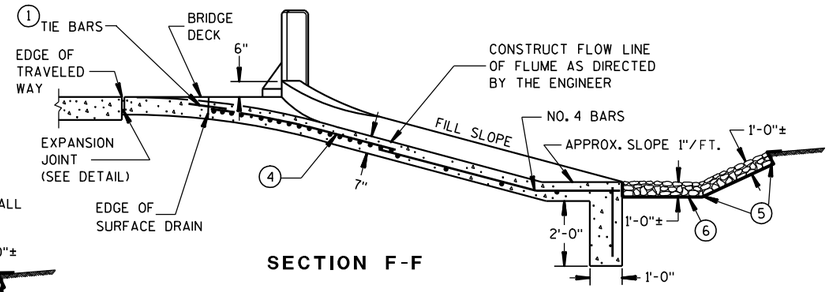


6

S.D.D. 8 D 1-20b




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.

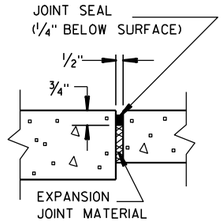
(4) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

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

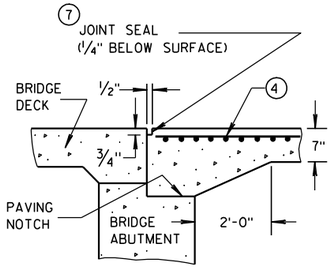
(6) GEOTEXTILE FABRIC, TYPE 'R"

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

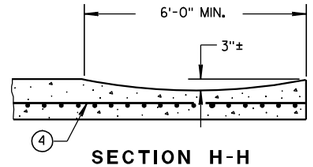
(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½".



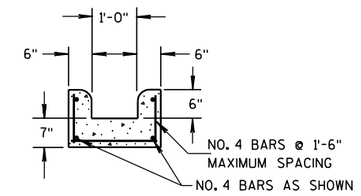

EXPANSION JOINT DETAIL



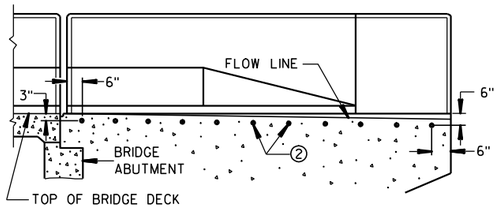

SECTION D-D



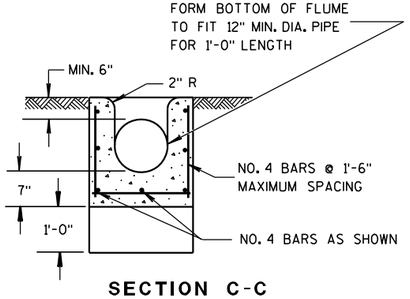

SECTION H-H



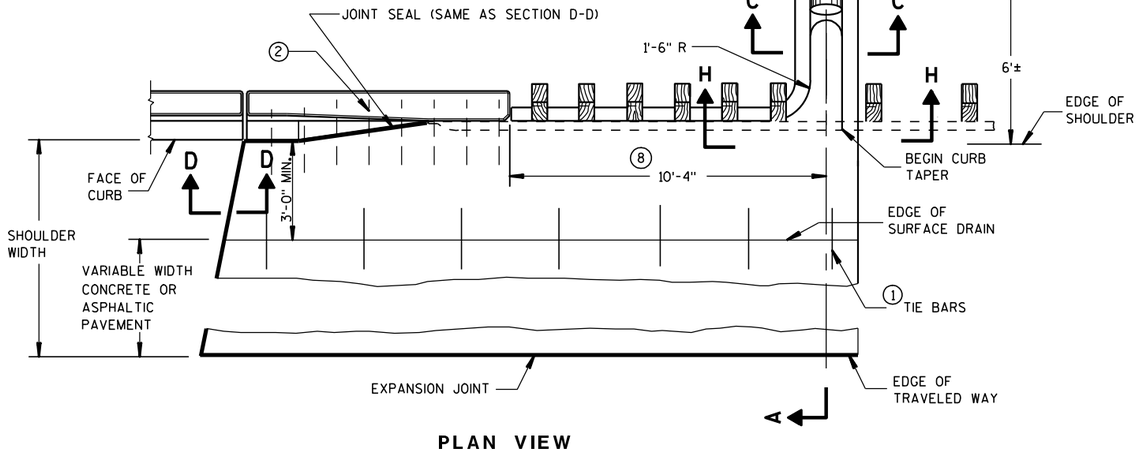

SECTION E-E



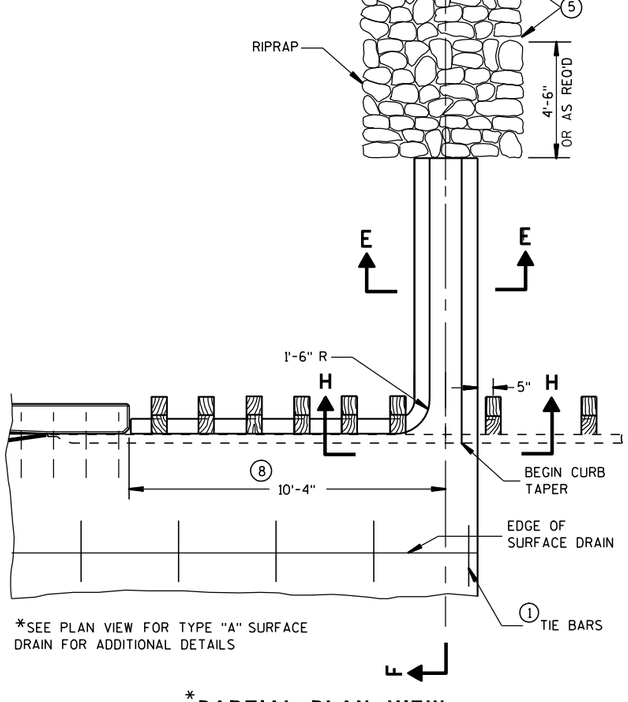

LOCATION OF TIE BARS IN WINGWALL




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

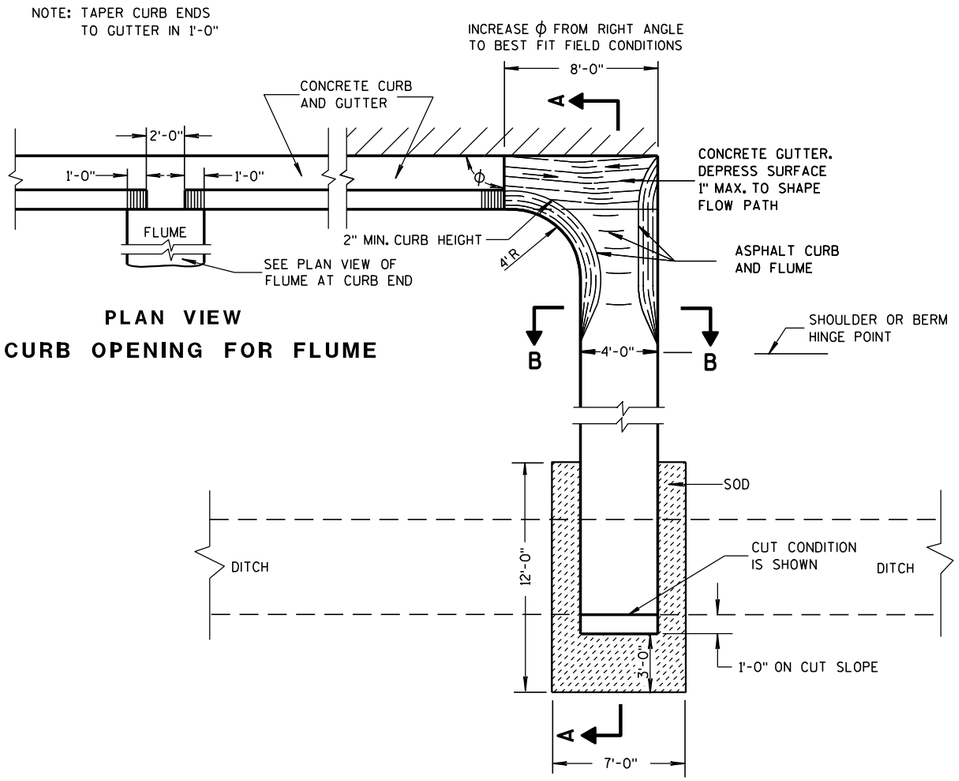
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



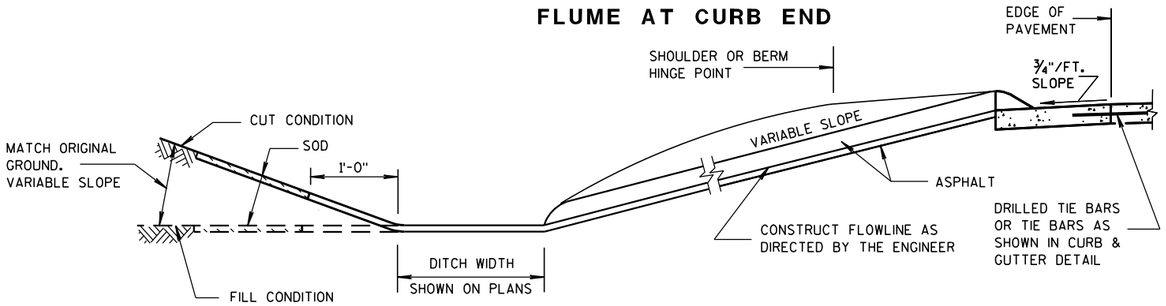

6
S.D.D. 8 D 2-6

## ASPHALTIC FLUME

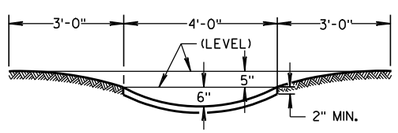



### PLAN VIEW
### CURB OPENING FOR FLUME

### 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.

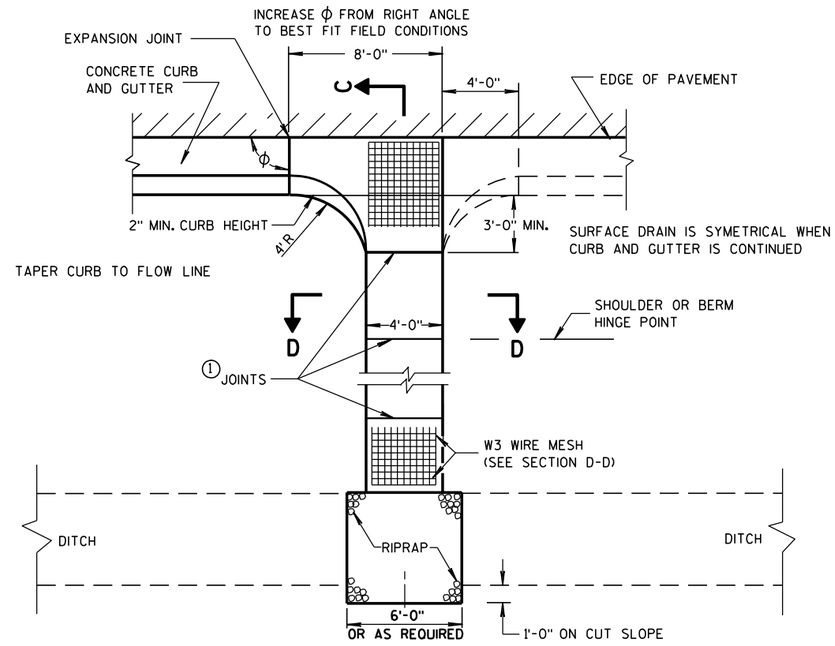
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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.

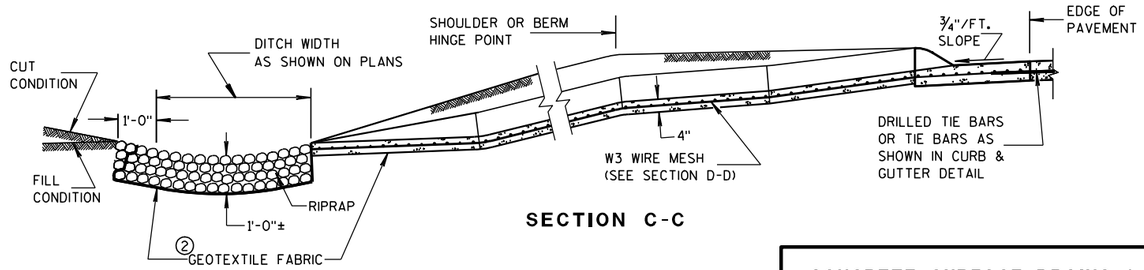
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

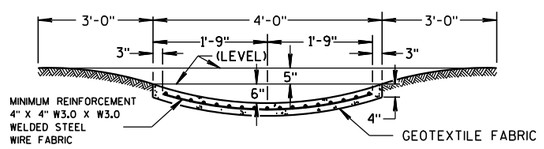
## ③ CONCRETE SURFACE DRAIN




### 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
MENT
FHWA



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S.D.D. 8 D 4-5

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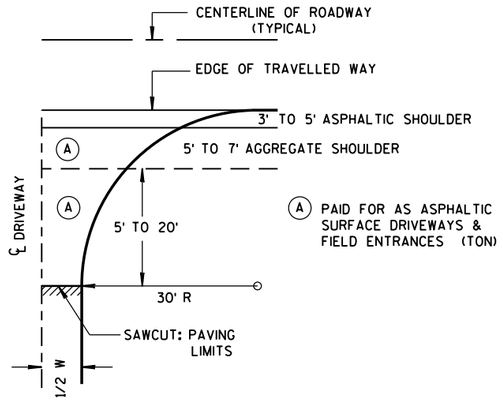
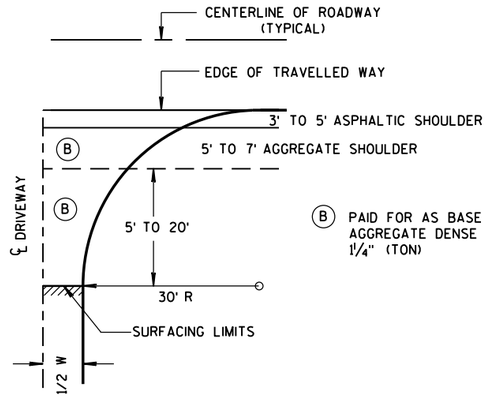
S.D.D. 8 D 4-5




**PLAN VIEW**
**HALF SECTION**

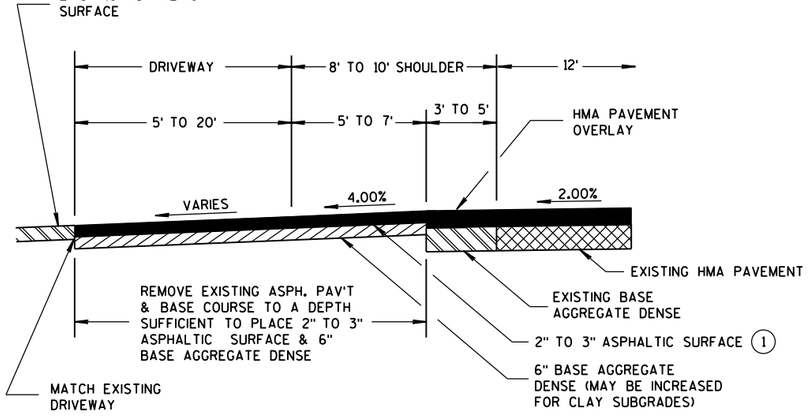
W MIN. = 16'
W MAX. = 24'




**PLAN VIEW**
**HALF SECTION**

## GENERAL NOTES

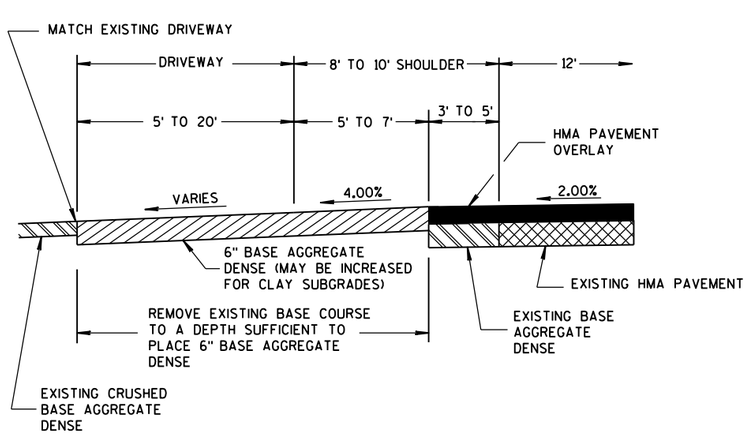
(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.




**PROFILE VIEW**

## RURAL ENTRANCE WITH ASPHALTIC SURFACE

**RESURFACING PROJECTS**




**PROFILE VIEW**

## RURAL ENTRANCE WITH AGGREGATE SURFACE

**6" BASE AGGREGATE DENSE**
**RESURFACING PROJECTS**

## DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA



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S.D.D. 8 D 22-1

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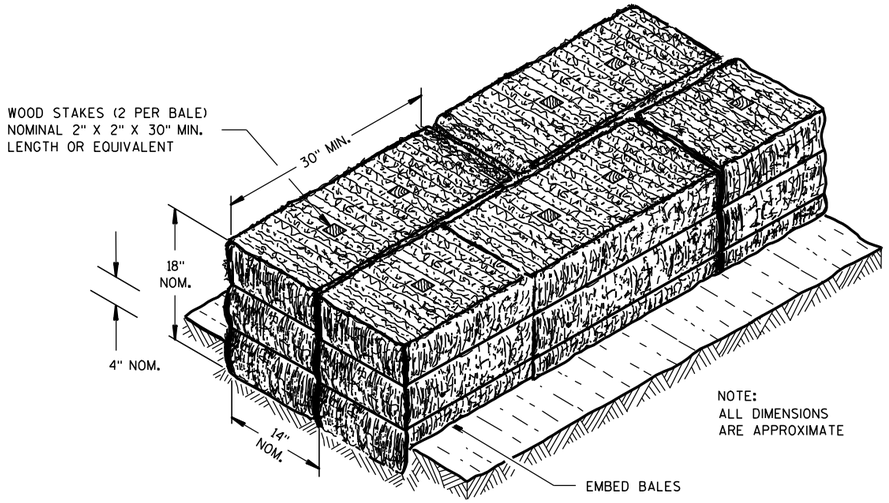
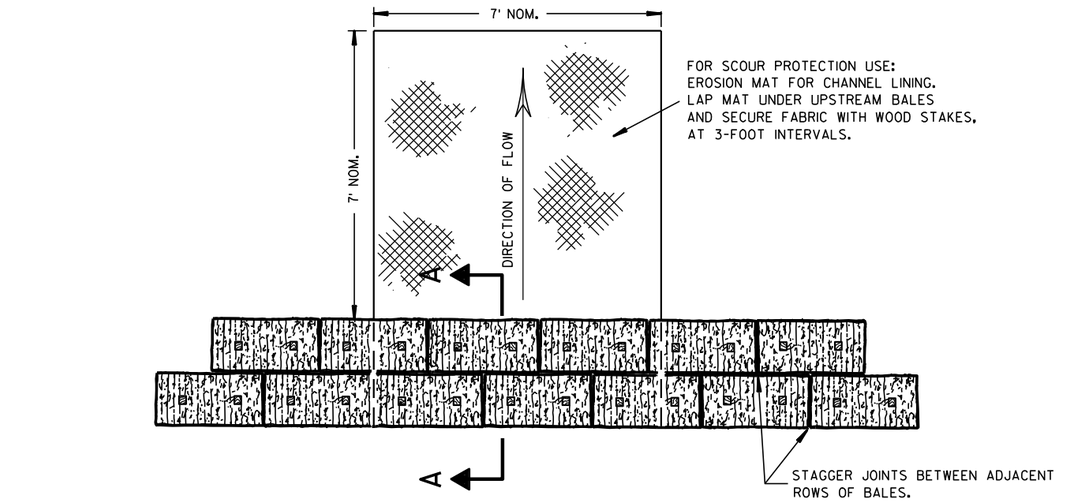
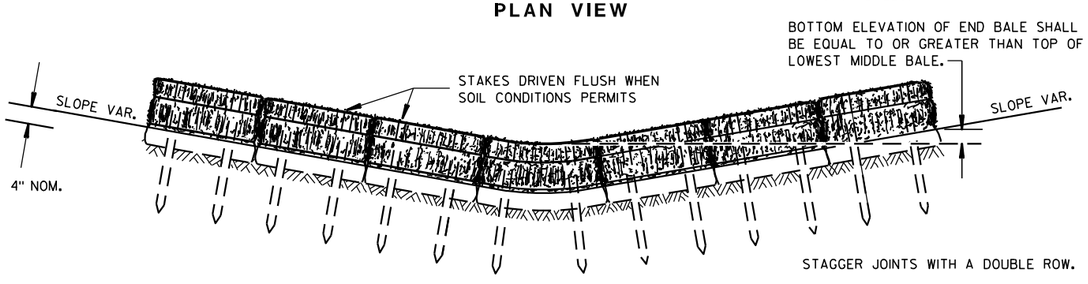
S.D.D. 8 D 22-1




**SECTION A-A**




**PLAN VIEW**



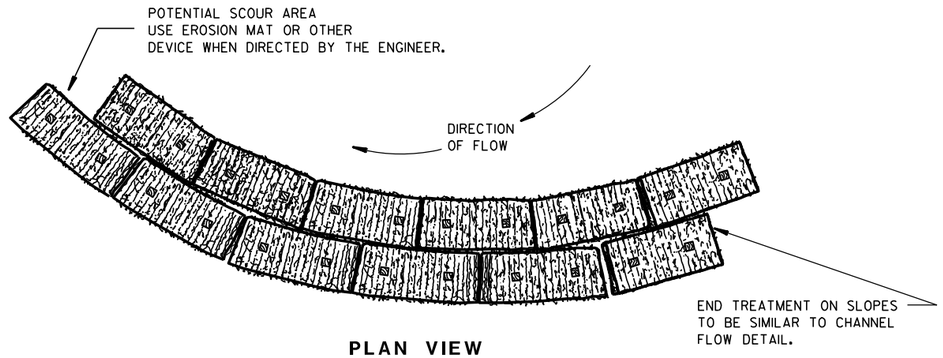

**FRONT ELEVATION**

## TEMPORARY DITCH CHECK USING EROSION BALES (1)

## GENERAL NOTES

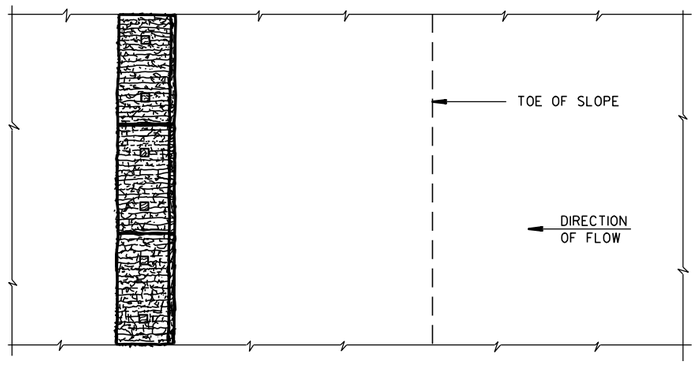
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

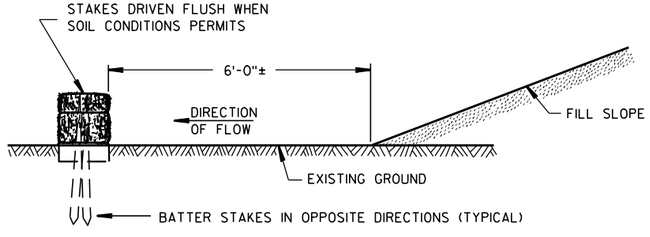



**PLAN VIEW**

WHEN ALTERING THE DIRECTION OF FLOW




**PLAN VIEW**




**FRONT ELEVATION**

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

## EROSION BALES FOR SHEET FLOW

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



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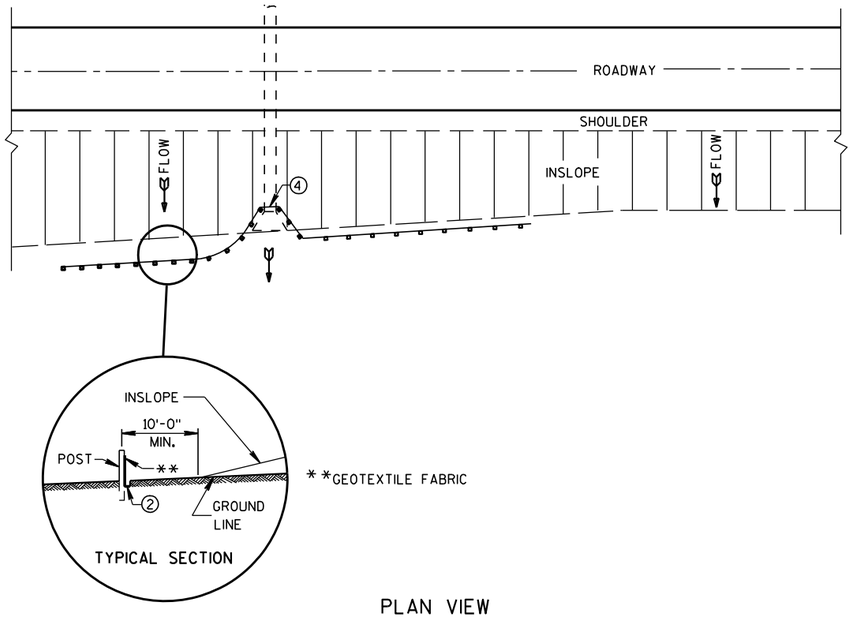
S.D.D. 8 E 8-3

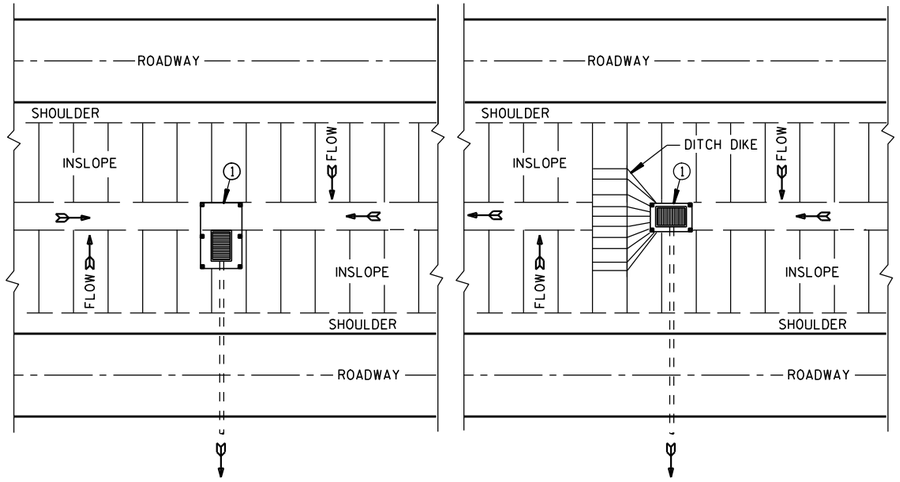
6

S.D.D. 8 E 8-3




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE



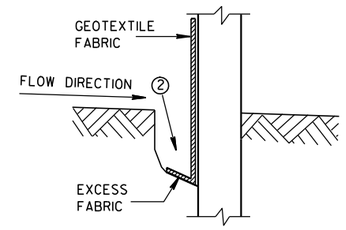

PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

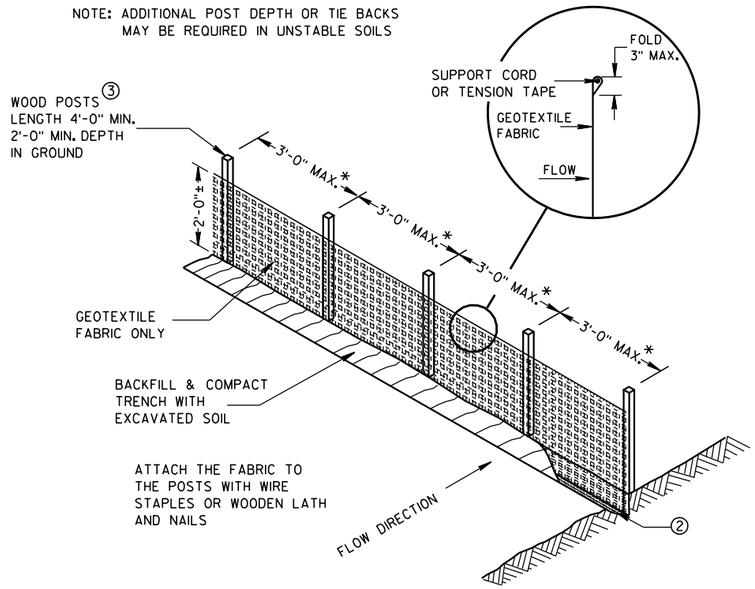
## GENERAL NOTES

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

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

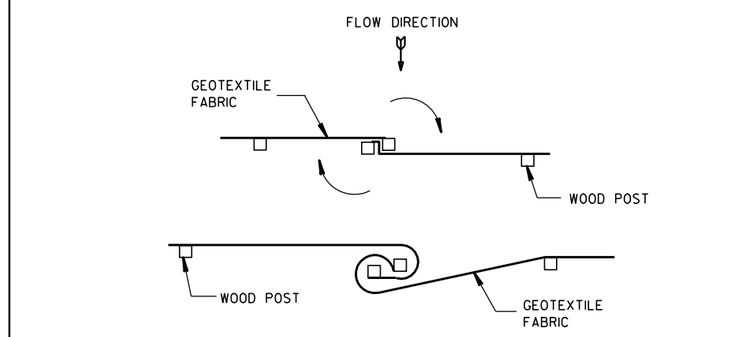



## TRENCH DETAIL

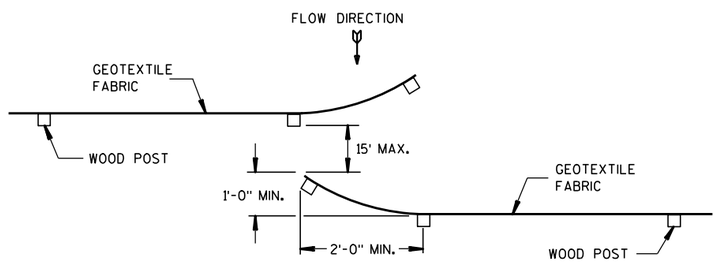



*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

## SILT FENCE

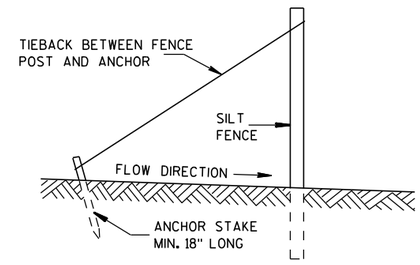



TWIST METHOD




HOOK METHOD

## JOINING TWO LENGTHS OF SILT FENCE 5




## SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

**SILT FENCE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

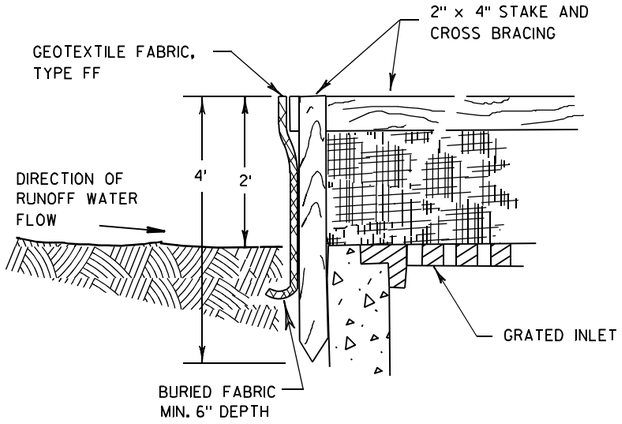


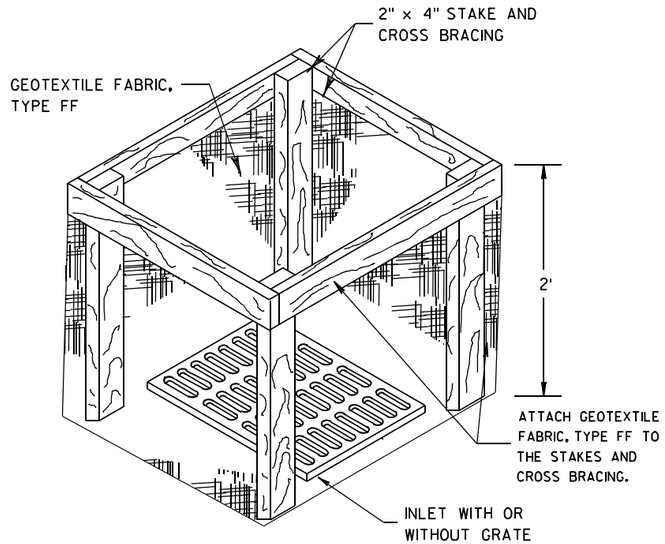
6

S.D.D. 8 E 9-6

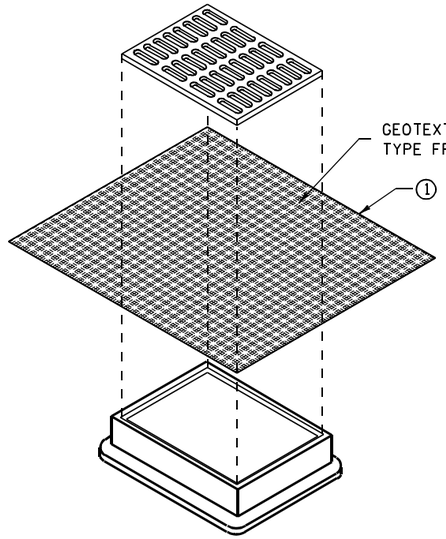
6

S.D.D. 8 E 9-6



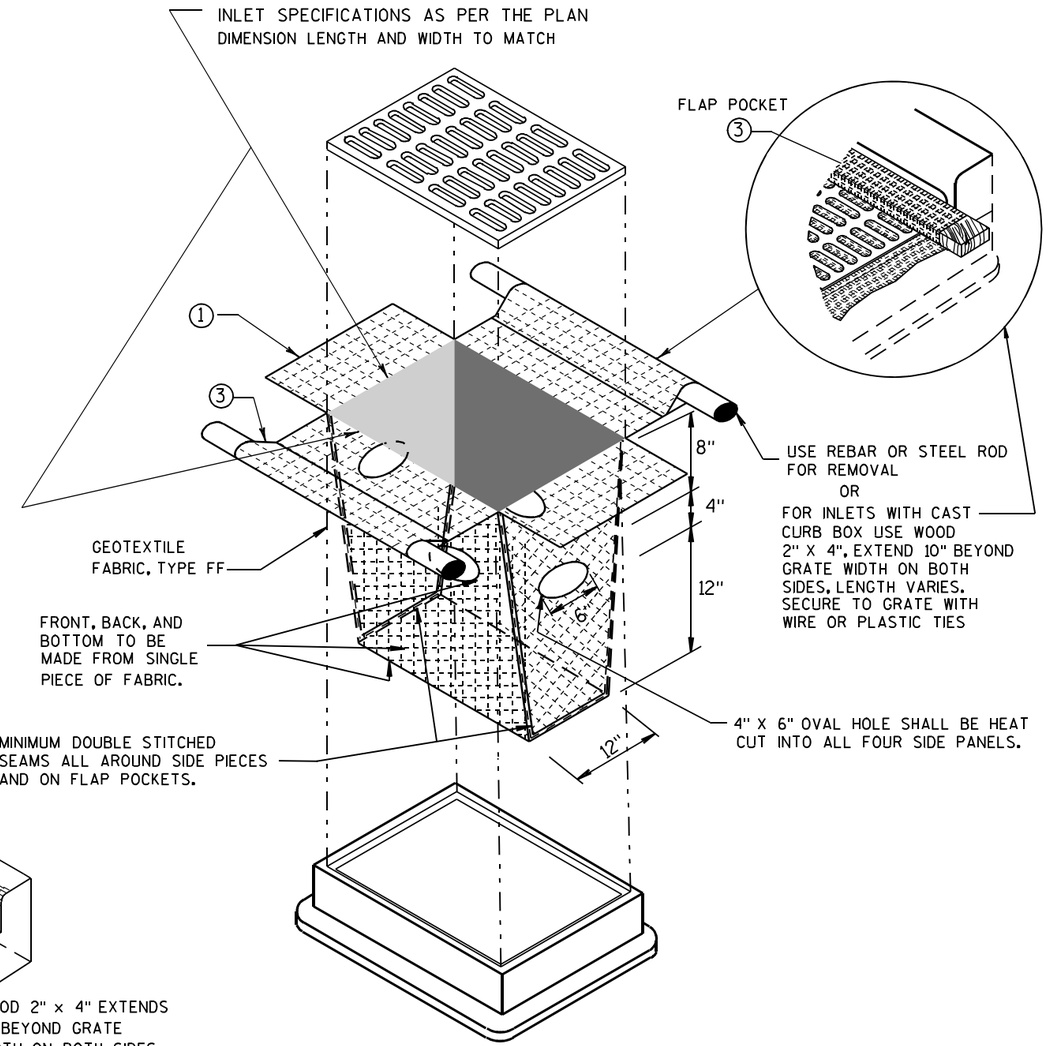




## INLET PROTECTION, TYPE A



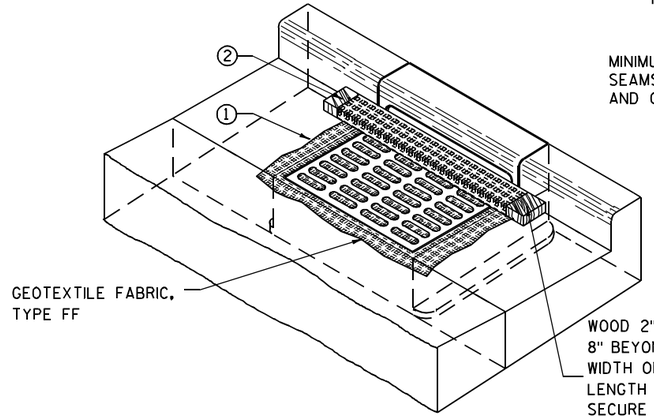

## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

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




## INLET PROTECTION, TYPE D

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




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

## GENERAL NOTES

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

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

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

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

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

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

## INSTALLATION NOTES

### TYPE B & C

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

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

### TYPE D

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

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

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

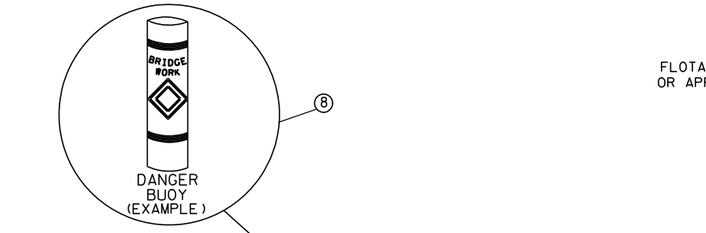
10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

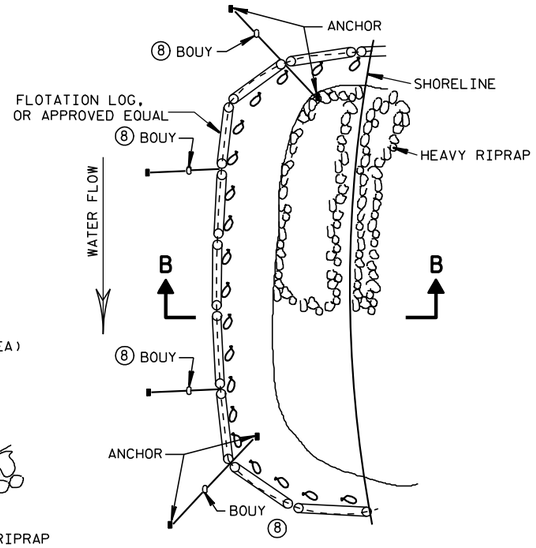
FHWA

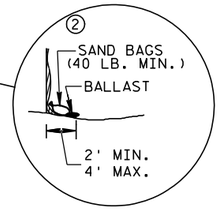



6
S.D.D. 8 E 10-2

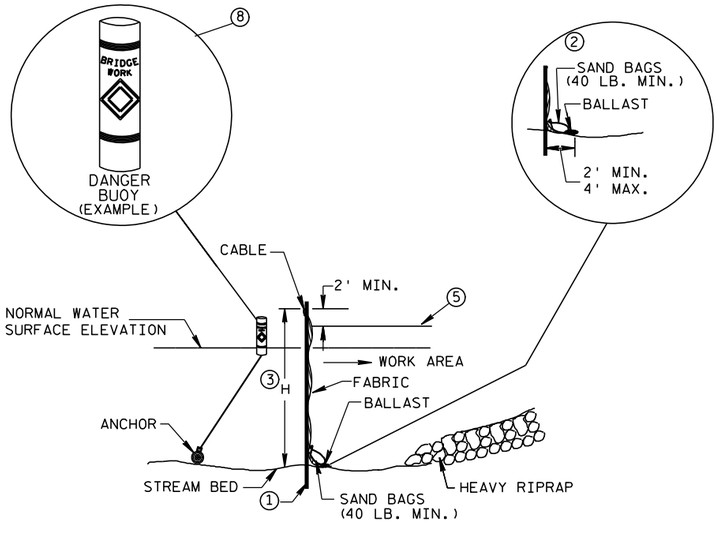



**SECTION B-B**



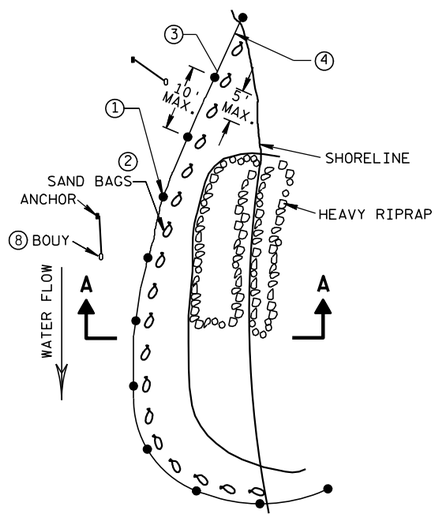




**TURBIDITY BARRIER FLOAT ALTERNATIVE**
**CAUTION - SEE NOTE 6**




**SECTION A-A**




**PLAN VIEW**

**TURBIDITY BARRIER STANDARD POST INSTALLATION**

**TURBIDITY BARRIER PLACEMENT DETAILS**

## GENERAL NOTES

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

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

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

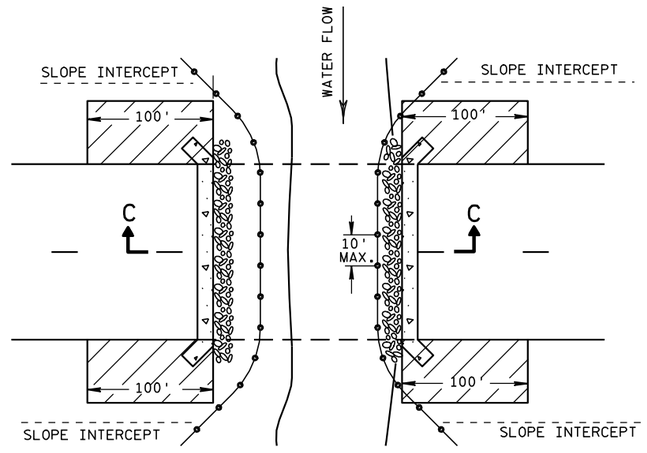
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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

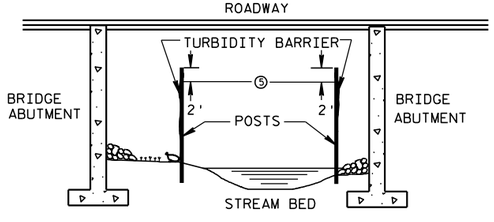
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.




**PLAN VIEW**




**SECTION C-C**

**TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES**

**TURBIDITY BARRIER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



6

S.D.D. 8 E 11-2

6

S.D.D. 8 E 11-2

## METAL APRON ENDWALLS

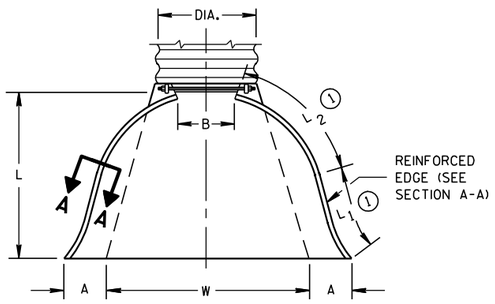
| PIPE DIA. (IN.) | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | .064 | .060 | 6 | 6 | 6 | 21 | 12 | 17 1/2 | 24 | 2 1/2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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

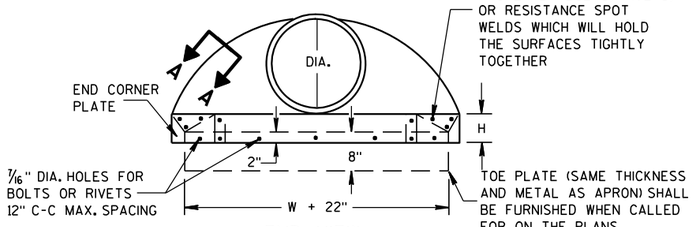
## REINFORCED CONCRETE APRON ENDWALLS

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

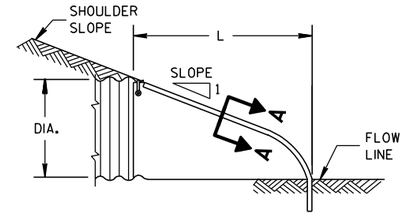
*MINIMUM
**MAXIMUM




PLAN VIEW

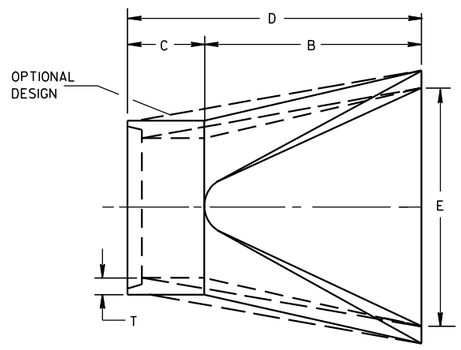



END VIEW

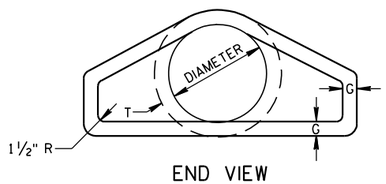



SIDE ELEVATION

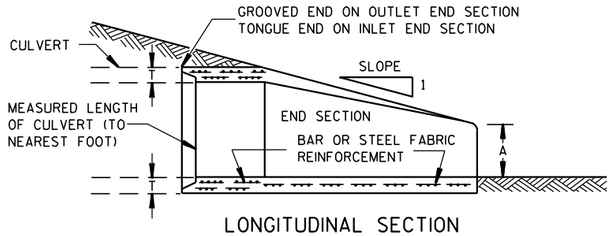
## METAL ENDWALLS




PLAN

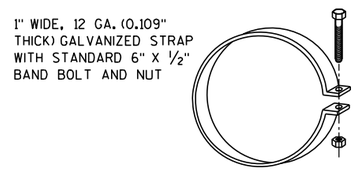



END VIEW



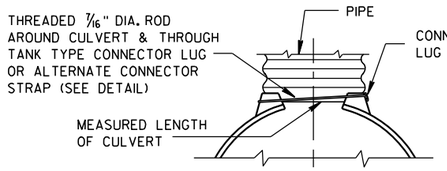

LONGITUDINAL SECTION

## CONCRETE ENDWALLS

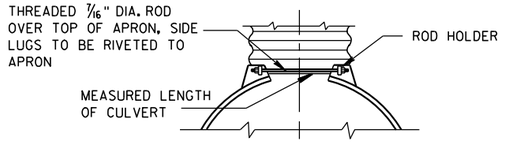



ALTERNATE FOR TYPE 1 CONNECTION

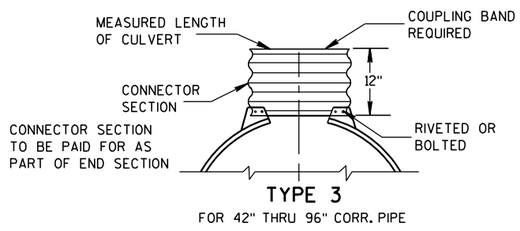
## END SECTION CONNECTOR STRAP



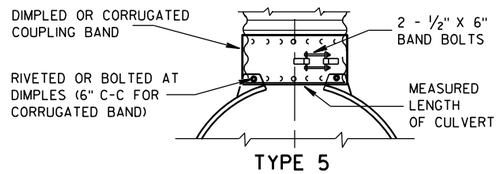

TYPE 1
FOR 12" THRU 24" CORR. PIPE




TYPE 2
FOR 30" THRU 96" CORR. PIPE




TYPE 3
FOR 42" THRU 96" CORR. PIPE




TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

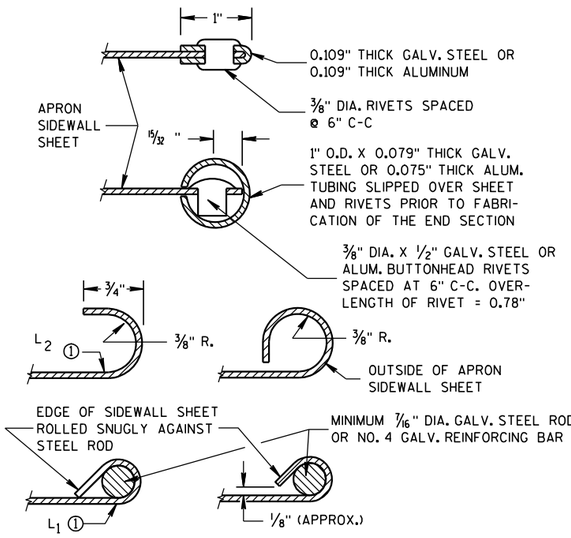
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

## CONNECTION DETAILS




## SECTION A-A

## GENERAL NOTES

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

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

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

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

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

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

# APRON ENDWALLS FOR CULVERT PIPE

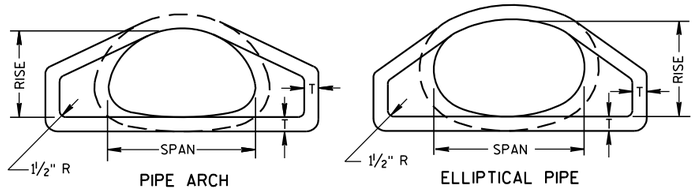
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

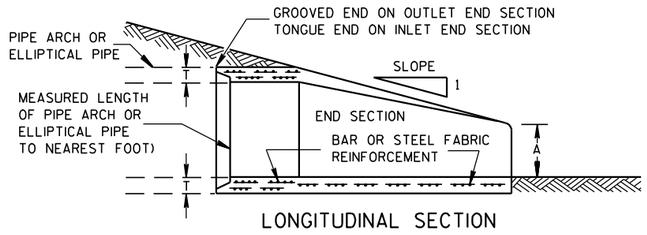


6

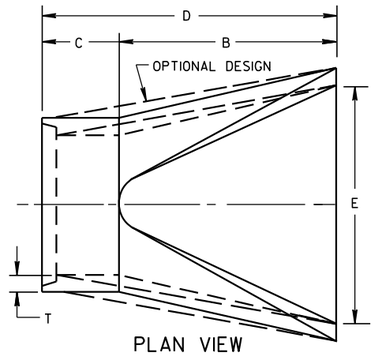
S.D.D. 8 F 1-11




END VIEW

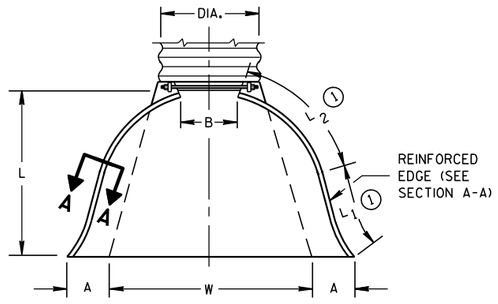



LONGITUDINAL SECTION

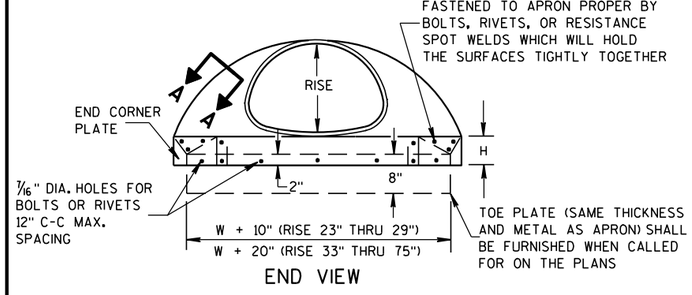



PLAN VIEW

# CONCRETE ENDWALLS

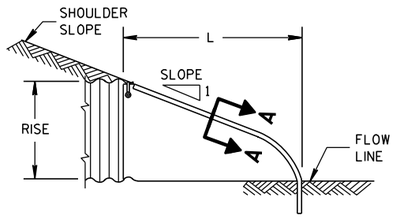



PLAN VIEW



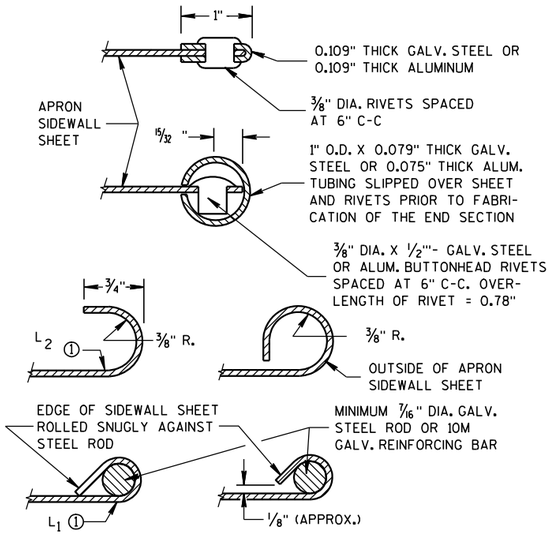

END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW




SIDE ELEVATION

## METAL ENDWALLS




## SECTION A-A

| 2- ⅔" X ½" CORRUGATIONS | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EQUIV. DIA. (Inches) | (Inches) | | MIN. THICK. (Inches) | | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE | BODY |
| | SPAN | RISE | STEEL | ALUM. | A (±1") | B (MAX.) | H (±1") | L (±1½") | L1 ① | L2 ① | W (±2") | | |
| 15 | 17 | 13 | .064 | .060 | 7 | 9 | 6 | 19 | 14 | 16 | 30 | 2½ to 1 | 1 Pc. |
| 18 | 21 | 15 | .064 | .060 | 7 | 10 | 6 | 23 | 14 | 19⅜ | 36 | 2½ to 1 | 1 Pc. |
| 21 | 24 | 18 | .064 | .060 | 8 | 12 | 6 | 28 | 18 | 21¾ | 42 | 2½ to 1 | 1 Pc. |
| 24 | 28 | 20 | .064 | .060 | 9 | 14 | 6 | 32 | 18 | 27½ | 48 | 2½ to 1 | 1 Pc. |
| 30 | 35 | 24 | .079 | .075 | 10 | 16 | 6 | 39 | 18 | 37⅝ | 60 | 2½ to 1 | 1 Pc. |
| 36 | 42 | 29 | .079 | .075 | 12 | 18 | 8 | 46 | 24 | 45⅜ | 75 | 2½ to 1 | 1 Pc. |
| 42 | 49 | 33 | .109 | .105 | 13 | 21 | 9 | 53 | 24 | 54¾ | 85 | 2½ to 1 | 2 Pc. |
| 48 | 57 | 38 | .109 | .105 | 18 | 26 | 12 | 63 | 24 | 68 | 90 | 2½ to 1 | 3 Pc. |
| 54 | 64 | 43 | .109 | .105 | 18 | 30 | 12 | 70 | 24 | 72¾ | 102 | 2¼ to 1 | 3 Pc. |
| 60 | 71 | 47 | .109* | .105* | 18 | 33 | 12 | 77 | 30 | 82¼ | 114 | 2¼ to 1 | 3 Pc. |
| 66 | 77 | 52 | .109* | .105* | 18 | 36 | 12 | 77 | — | — | 126 | 2 to 1 | 3 Pc. |
| 72 | 83 | 57 | .109* | .105* | 18 | 39 | 12 | 77 | — | — | 138 | 2 to 1 | 3 Pc. |

| 3" X 1" CORRUGATIONS | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EQUIV. DIA. (Inches) | (Inches) | | MIN. THICK. (Inches) | | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE | BODY |
| | SPAN | RISE | STEEL | ALUM. | A (±1") | B (MAX.) | H (±1") | L (±1½") | L1 ① | L2 ① | W (±2") | | |
| 48 | 53 | 41 | .109 | .105 | 18 | 26 | 12 | 63 | 24 | 72¾ | 90 | 2½ to 1 | 2 Pc. |
| 54 | 60 | 46 | .109 | .105 | 18 | 30 | 12 | 70 | 30 | 82¼ | 102 | 2 to 1 | 2 Pc. |
| 60 | 66 | 51 | .109* | .105* | 18 | 33 | 12 | 77 | — | — | 114 | 1½ to 1 | 3 Pc. |
| 66 | 73 | 55 | .109* | .105* | 18 | 36 | 12 | 77 | — | — | 126 | 1½ to 1 | 3 Pc. |
| 72 | 81 | 59 | .109* | .105* | 18 | 39 | 12 | 77 | — | — | 138 | 2 to 1 | 3 Pc. |
| 78 | 87 | 63 | .109* | .105* | 22 | 38 | 12 | 77 | — | — | 148 | 1½ to 1 | 3 Pc. |
| 84 | 95 | 67 | .109* | .105* | 22 | 34 | 12 | 77 | — | — | 162 | 1½ to 1 | 3 Pc. |
| 90 | 103 | 71 | .109* | .105* | 22 | 38 | 12 | 77 | — | — | 174 | 1½ to 1 | 3 Pc. |
| 96 | 112 | 75 | .109* | .105* | 24 | 40 | 12 | 77 | — | — | 174 | 1½ to 1 | 3 Pc. |

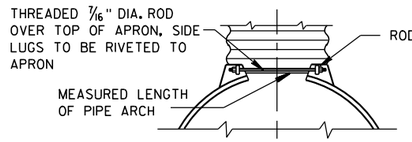
NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

| REINFORCED CONCRETE PIPE ARCH | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EQUIV. DIA. (Inches) | DIMENSIONS (Inches) | | | | | | | | APPROX. SLOPE |
| | ** SPAN | ** RISE | T | A | B | C | D | E | |
| 24 | 29 | 18 | 3 | 8½ | 39 | 33 | 72 | 48 | 3 to 1 |
| 30 | 36 | 22 | 3½ | 9½ | 50 | 46 | 96 | 60 | 3 to 1 |
| 36 | 44 | 27 | 4 | 11⅛ | 60 | 36 | 96 | 72 | 3 to 1 |
| 42 | 51 | 31 | 4½ | 15 13/16 | 60 | 36 | 96 | 78 | 3 to 1 |
| 48 | 58 | 36 | 5 | 21 | 60 | 36 | 96 | 84 | 3 to 1 |
| 54 | 65 | 40 | 5½ | 25½ | 60 | 36 | 96 | 90 | 3 to 1 |
| 60 | 73 | 45 | 6 | 31 | 60 | 36 | 96 | 96 | 3 to 1 |
| 72 | 88 | 54 | 7 | 31 | 60 | 39 | 99 | 120 | 2 to 1 |
| 84 | 102 | 62 | 8 | 28½ | 83 | 19 | 102 | 144 | 2 to 1 |

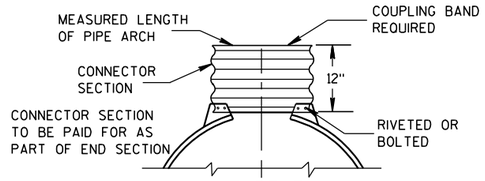
| REINFORCED CONCRETE ELLIPTICAL PIPE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EQUIV. DIA. (Inches) | DIMENSIONS (Inches) | | | | | | | | APPROX. SLOPE |
| | ** SPAN | ** RISE | T | A | B | C | D | E | |
| 24 | 30 | 19 | 3¼ | 8½ | 39 | 33 | 72 | 48 | 3 to 1 |
| 30 | 38 | 24 | 3¾ | 9½ | 54 | 18 | 72 | 60 | 3 to 1 |
| 36 | 45 | 29 | 4½ | 11⅛ | 60 | 24 | 84 | 72 | 2½ to 1 |
| 42 | 53 | 34 | 5 | 15¾ | 60 | 36 | 96 | 78 | 2½ to 1 |
| 48 | 60 | 38 | 5½ | 21 | 60 | 36 | 96 | 84 | 2½ to 1 |
| 54 | 68 | 43 | 6 | 25½ | 60 | 36 | 96 | 90 | 2½ to 1 |
| 60 | 76 | 48 | 6½ | 30 | 60 | 36 | 96 | 96 | 2½ to 1 |

**NOMINAL SIZE



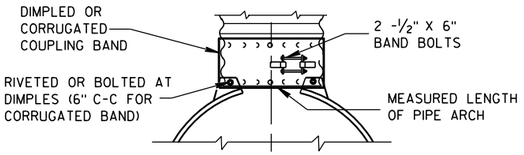

TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH




TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH




TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

## CONNECTION DETAILS

# GENERAL NOTES

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

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

**APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94
DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



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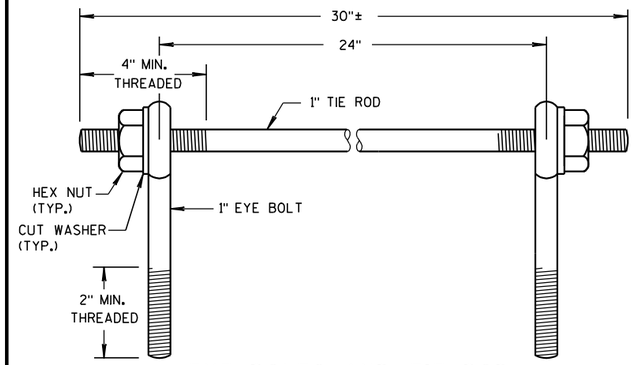
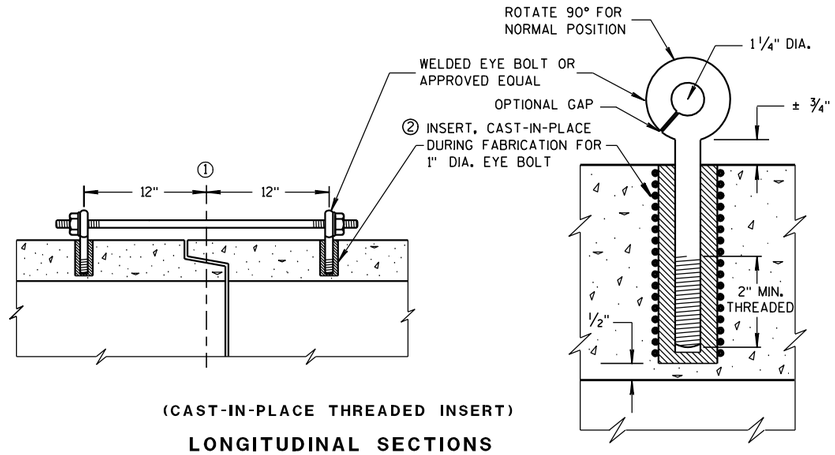
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1




EYE BOLTS AND TIE ROD




(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

## GENERAL NOTES

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

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

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

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

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

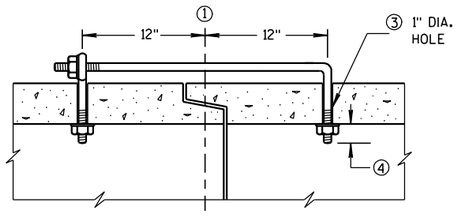
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

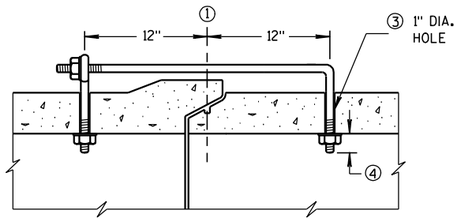
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

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




(TONGUE & GROOVE PIPE)

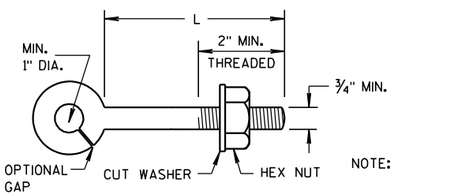



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

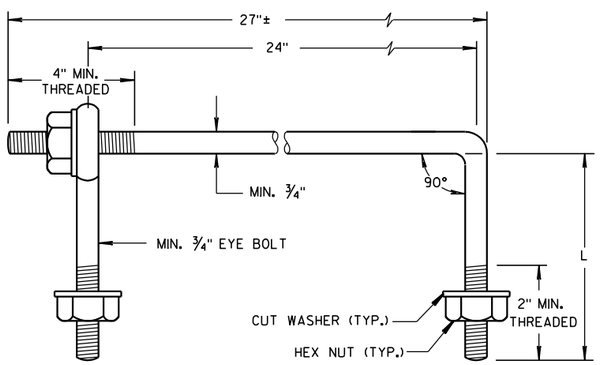
**EYE BOLT DIMENSION TABLE**

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




EYE BOLT

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




EYE BOLT AND TIE ROD

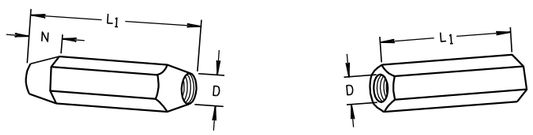
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

**ADJUSTABLE TIE ROD TABLE**

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

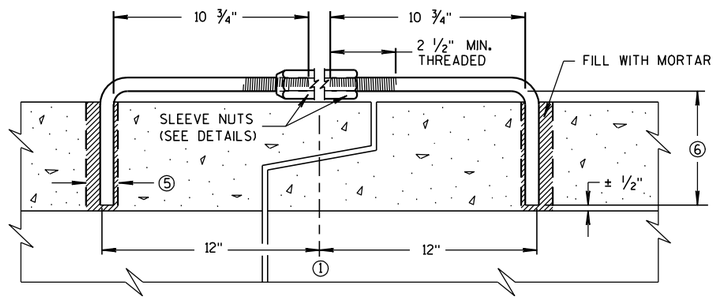
DIMENSIONS SHOWN ARE IN INCHES




TAPERED PLAIN

RIGHT AND LEFT THREADS

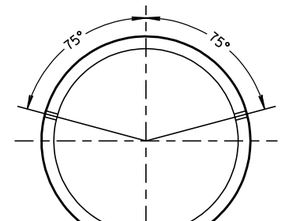
SLEEVE NUTS




LONGITUDINAL SECTION

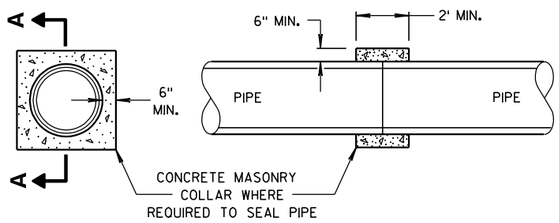
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

# ADJUSTABLE TIE ROD (ALTERNATE NO. 3)




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

TRANSVERSE SECTION




SECTION A-A

# CONCRETE COLLAR DETAIL

**JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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S.D.D. 8 F 4-7

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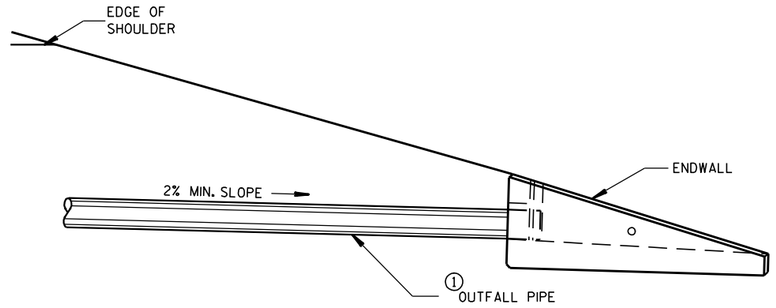
S.D.D. 8 F 4-7

| DIMENSIONS IN INCHES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PIPE DIA. | A | B | C | D | E | F | G | H | J | L | Z |
| **4 | 6 | 12 | 5 1/4 | 9 | 8 | 32 | 36 | 11 | 2 3/8 | 6 1/2 | 4 |
| 6 | 8 | 14 | 7 1/4 | 11 | 10 | 42 | 44 | 13 | 3 5/8 | 8 1/2 | 6 |

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)




INSTALLATION DETAIL

## GENERAL NOTES

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

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

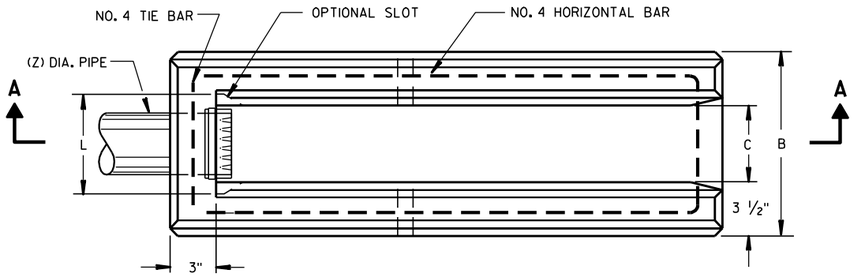
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

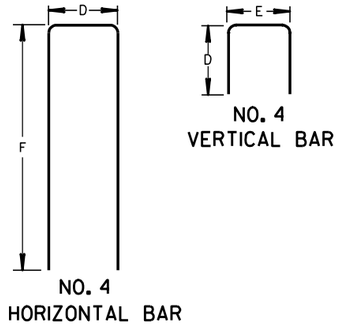
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



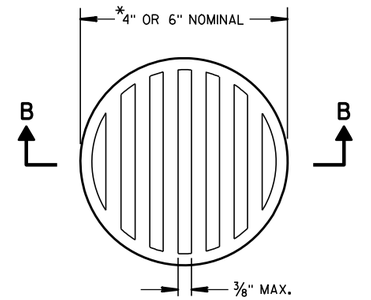

PLAN VIEW



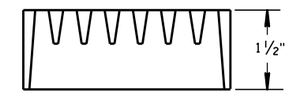




BAR STEEL REINFORCEMENT DETAILS



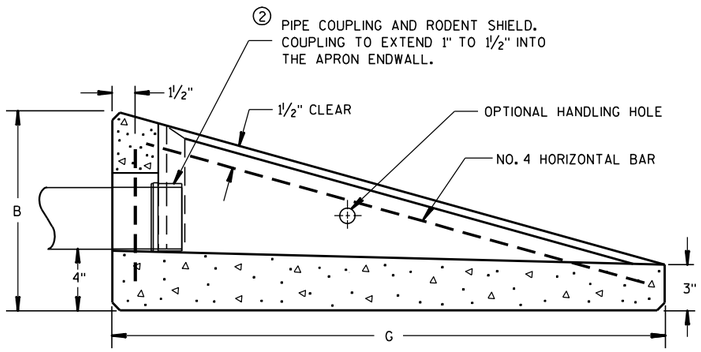

NOTE: ORIENT SHIELD SO SLOTS ARE VERTICAL.



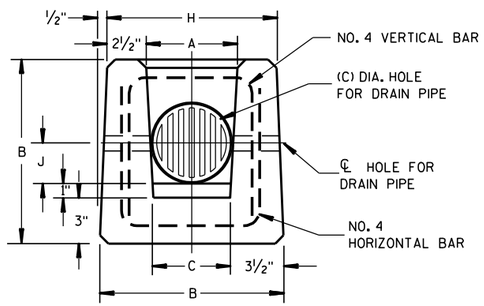

SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.




SECTION A-A




END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

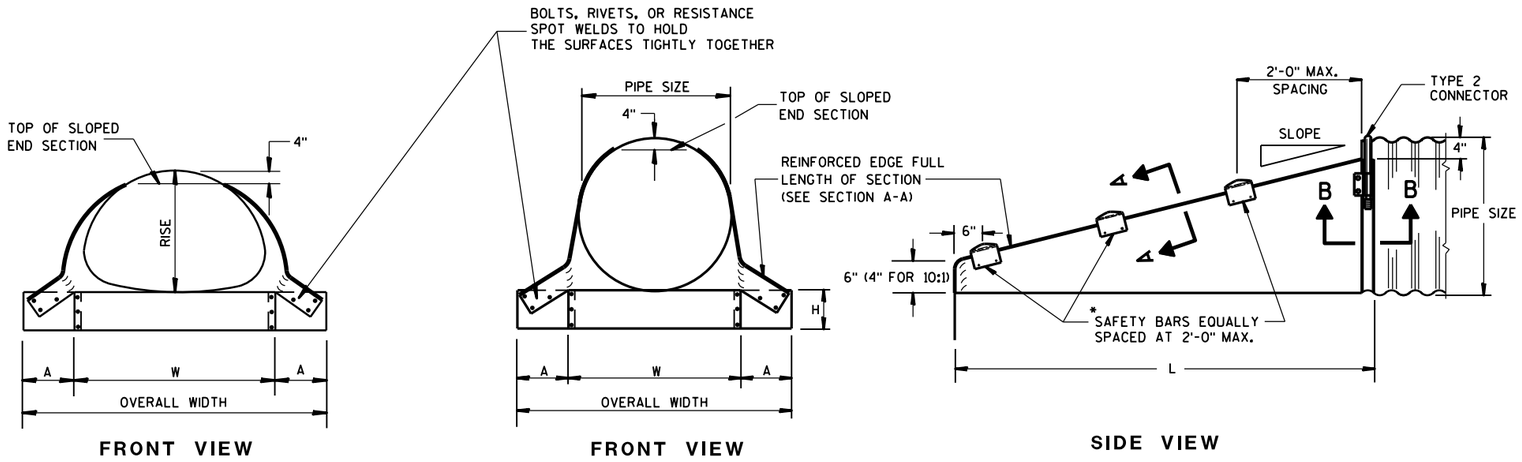
**REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/10/98 DATE
/S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA




6
S.D.D. 8 F 6-4




## GENERAL NOTES

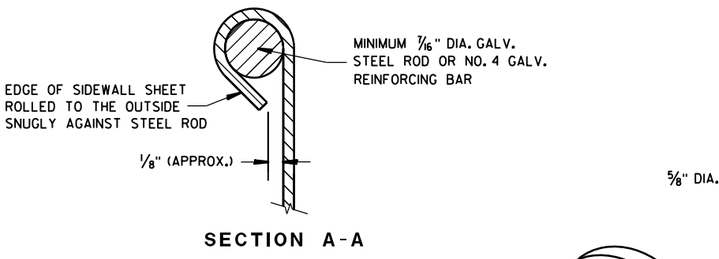
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

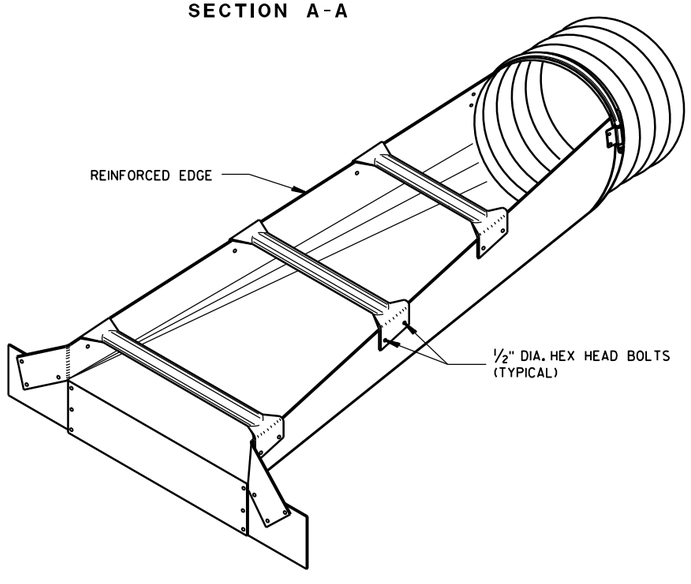
SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

**STEEL APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS**

| PIPE DIA. (IN.) | MIN. THICK. (Inches) | DIMENSIONS (Inches) | | | | L DIMENSIONS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | H | W | OVERALL WIDTH | SLOPE | LENGTH INCHES | SLOPE | LENGTH INCHES | SLOPE | LENGTH INCHES |
| 15 | .064 | 8 | 6 | 21 | 37 | 4:1 | 20 | 6:1 | 30 | 10:1 | 70 |
| 18 | .064 | 8 | 6 | 24 | 40 | 4:1 | 32 | 6:1 | 48 | 10:1 | 100 |
| 21 | .064 | 8 | 6 | 27 | 43 | 4:1 | 44 | 6:1 | 66 | 10:1 | 130 |
| 24 | .064 | 8 | 6 | 30 | 46 | 4:1 | 56 | 6:1 | 84 | 10:1 | 160 |
| 30 | .109 | 12 | 9 | 36 | 60 | 4:1 | 80 | 6:1 | 120 | 10:1 | 220 |
| 36 | .109 | 12 | 9 | 42 | 66 | 4:1 | 104 | 6:1 | 156 | 10:1 | 280 |
| 42 | .109 | 16 | 12 | 48 | 80 | 4:1 | 128 | 6:1 | 192 | —— | —— |
| 48 | .109 | 16 | 12 | 54 | 86 | 4:1 | 152 | 6:1 | 228 | —— | —— |
| 54 | .109 | 16 | 12 | 60 | 92 | 4:1 | 176 | 6:1 | 264 | —— | —— |
| 60 | .109 | 16 | 12 | 66 | 98 | 4:1 | 200 | 6:1 | 300 | —— | —— |



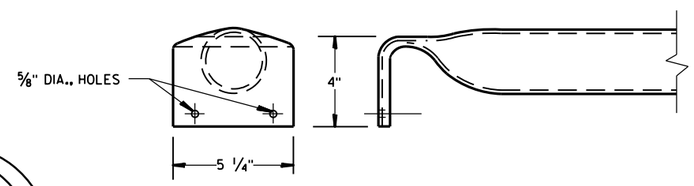

SECTION A-A




ISOMETRIC VIEW

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

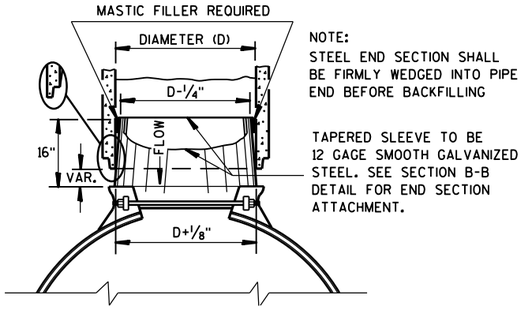



DETAIL OF SAFETY BAR

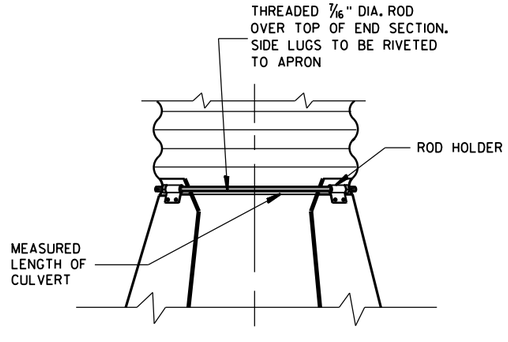
**STEEL APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS**

| EQUIV. DIA. (Inches) | (Inches) SPAN | (Inches) RISE | MIN. THICK. (Inches) ① | DIMENSIONS (Inches) A | H | W | OVERALL WIDTH | L DIMENSIONS SLOPE | LENGTH INCHES | SLOPE | LENGTH INCHES | SLOPE | LENGTH INCHES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 17 | 13 | .064 * | 7 | 6 | 30 | 44 | 4:1 | 19 | 6:1 | 30 | 10:1 ② | 70 |
| 18 | 21 | 15 | .064 * | 8 | 6 | 27 | 43 | 4:1 | 20 | 6:1 | 30 | 10:1 | 70 |
| 21 | 24 | 18 | .064 * | 8 | 6 | 30 | 46 | 4:1 | 32 | 6:1 | 48 | 10:1 | 100 |
| 24 | 28 | 20 | .064 * | 8 | 6 | 34 | 50 | 4:1 | 40 | 6:1 | 60 | 10:1 | 120 |
| 30 | 35 | 24 | .079 * | 12 | 9 | 41 | 65 | 4:1 | 56 | 6:1 | 84 | 10:1 | 160 |
| 36 | 42 | 29 | .109 * | 12 | 9 | 48 | 72 | 4:1 | 76 | 6:1 | 114 | 10:1 | 210 |
| 42 | 49 | 33 | .109 | 16 | 12 | 55 | 87 | 4:1 | 92 | 6:1 | 138 | —— | —— |
| 48 | 57 | 38 | .109 | 16 | 12 | 63 | 95 | 4:1 | 112 | 6:1 | 168 | —— | —— |
| 54 | 64 | 43 | .109 | 16 | 12 | 70 | 102 | 4:1 | 132 | 6:1 | 198 | —— | —— |

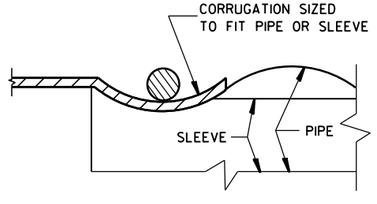
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.




STEEL ADAPTER SLEEVE FOR CONCRETE PIPE




TYPE 2 CONNECTION DETAIL




SECTION B-B

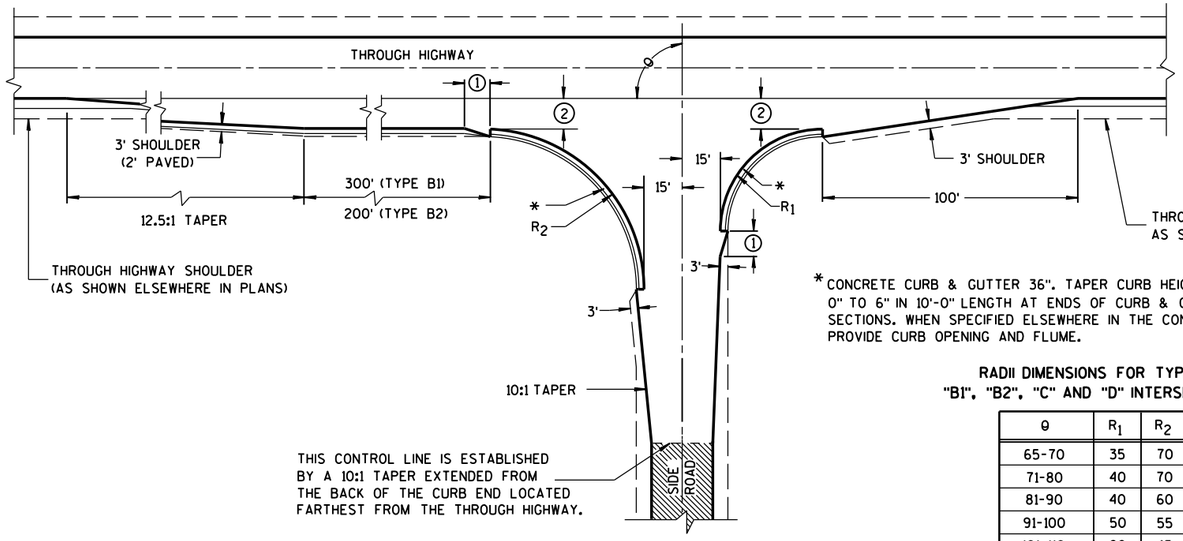
**STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/2012 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA




6
S.D.D. 8 F 7-5

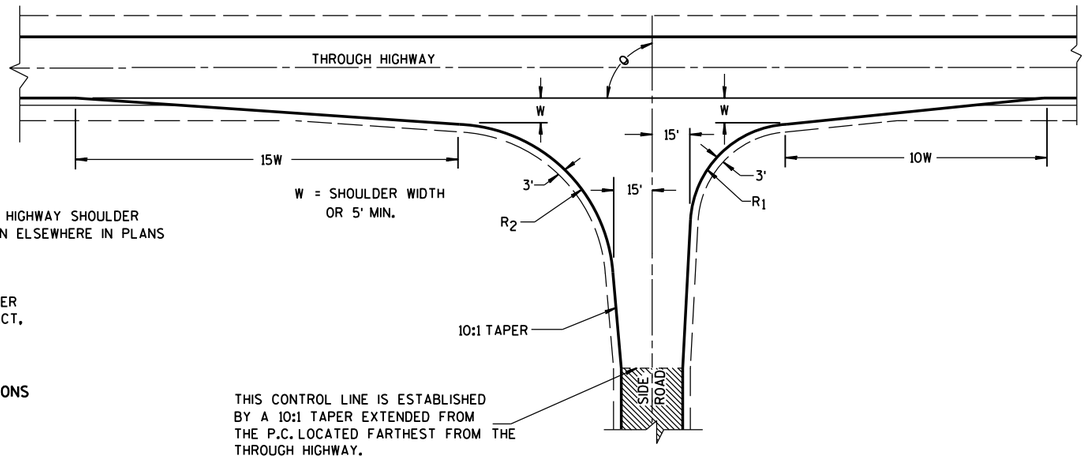



TYPE "B1" AND "B2"

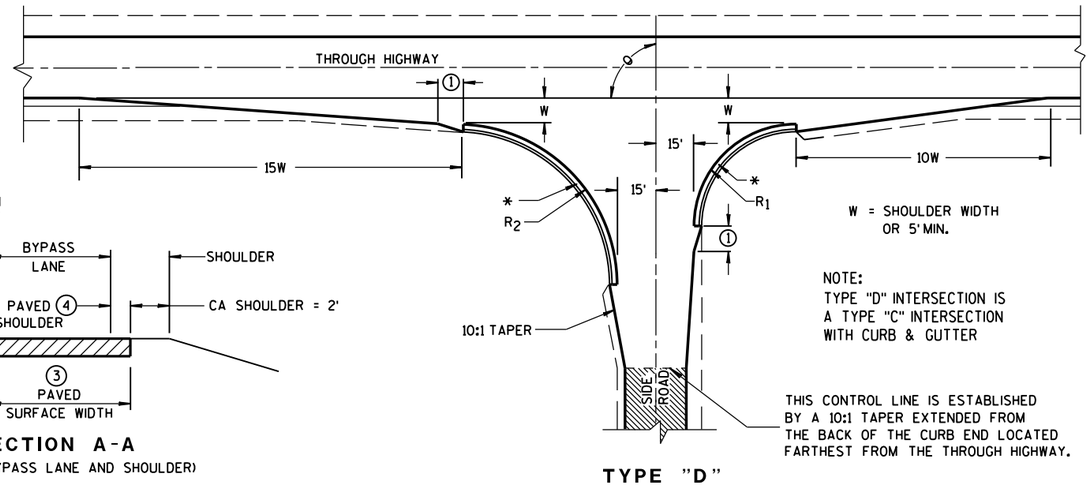
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

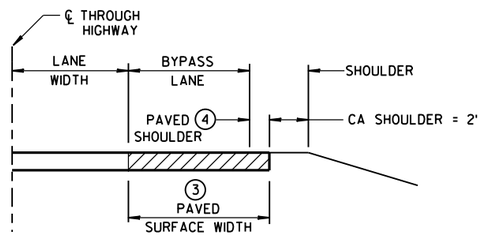
(1) 10-FT TYPICAL.

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

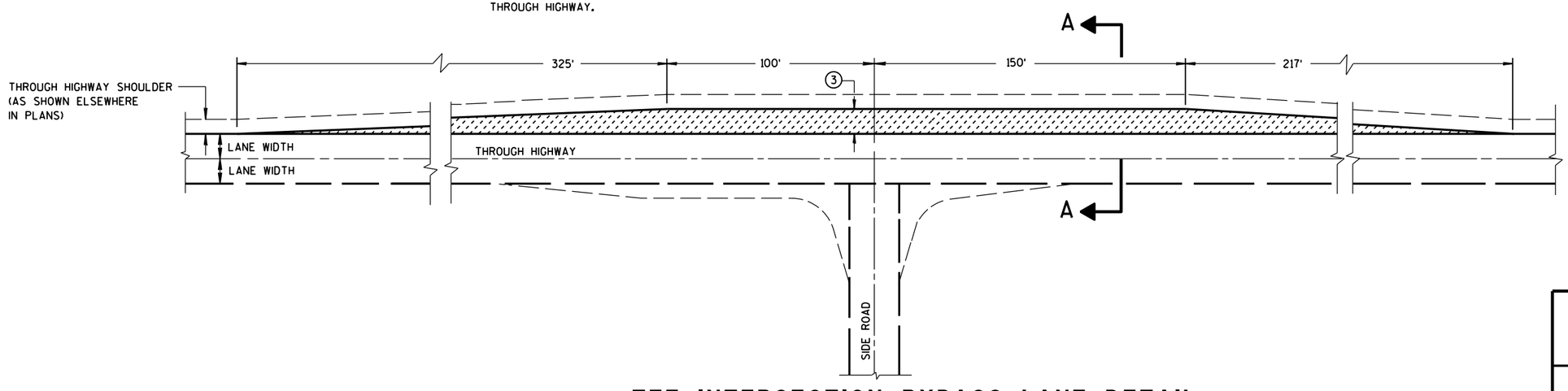
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(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

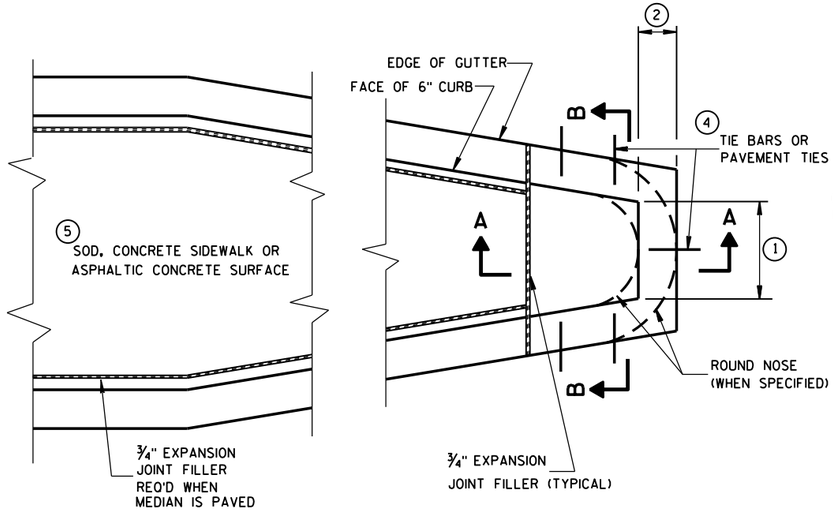
AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

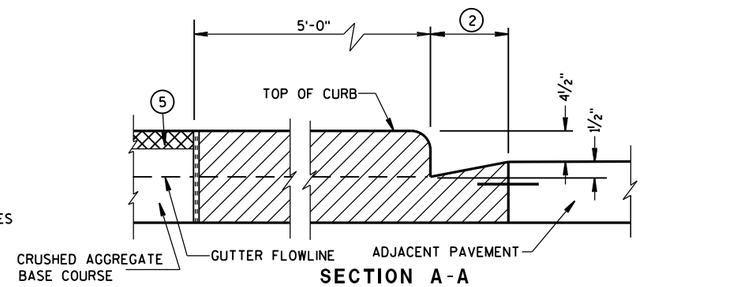
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

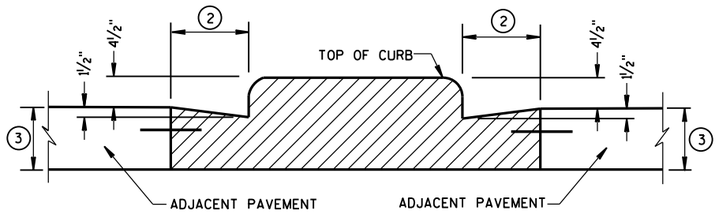



6


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




## CONCRETE MEDIAN BLUNT NOSE DETAIL

## GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

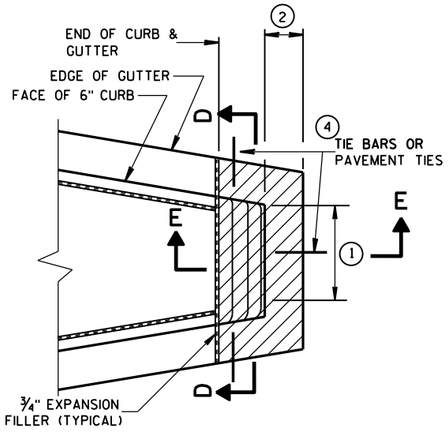
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

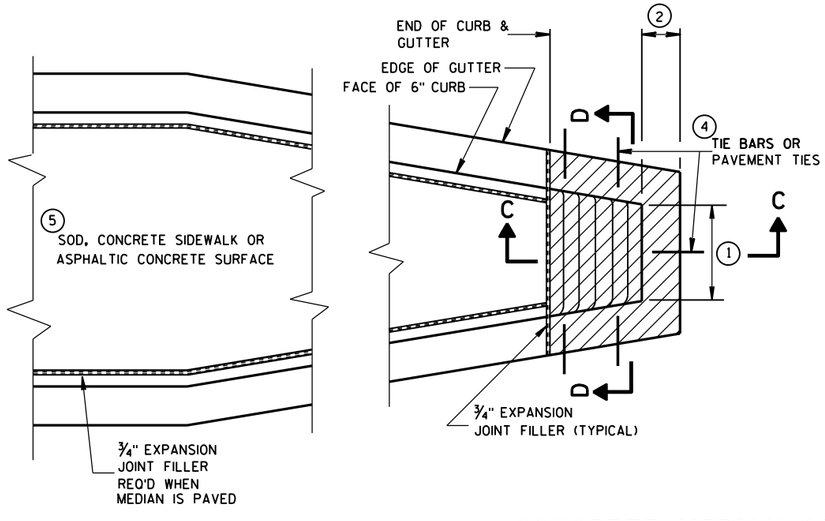
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

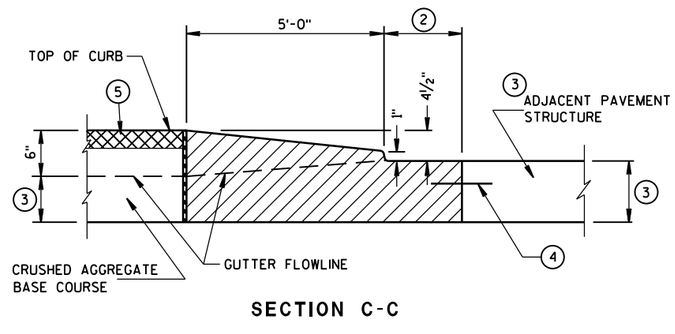
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

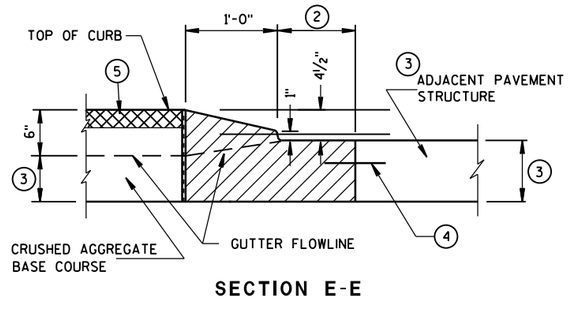
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



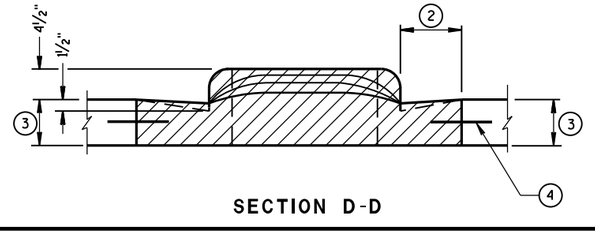




## CONCRETE MEDIAN SLOPED NOSE TYPE 2

## CONCRETE MEDIAN SLOPED NOSE TYPE 1




CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER

FHWA

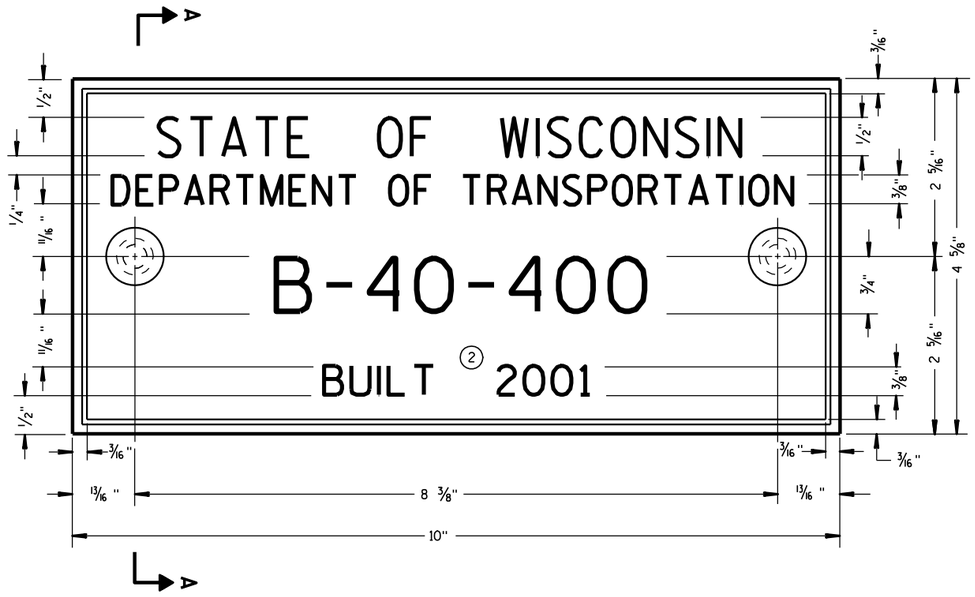


6

S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2




## TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

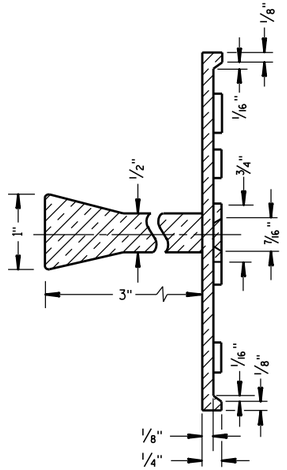
## GENERAL NOTES

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.

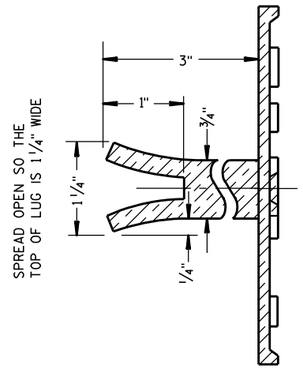
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(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

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

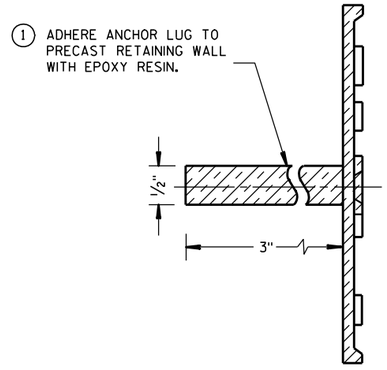
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

## NUMBERING DESIGNATION MULTI-UNIT STRUCTURES




## 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

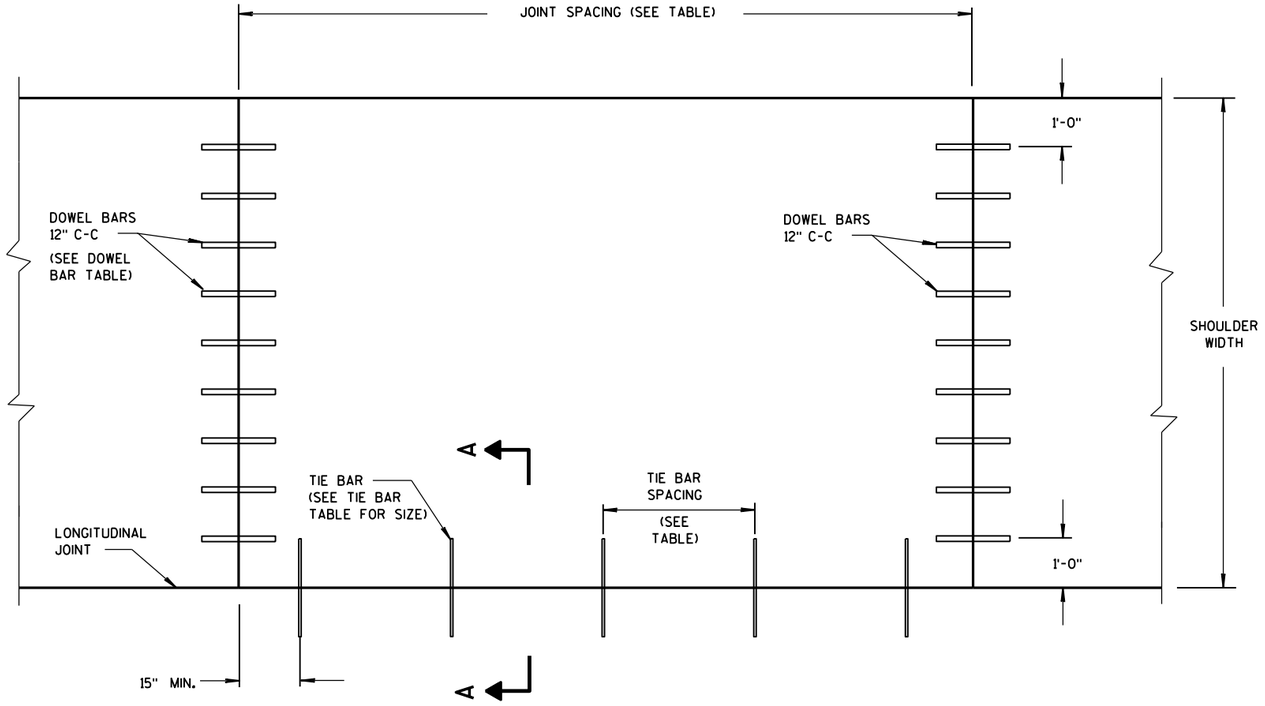


6

S.D.D. 12 A 3-10

6

S.D.D. 12 A 3-10




PLAN VIEW

## CONCRETE PAVEMENT SHOULDER

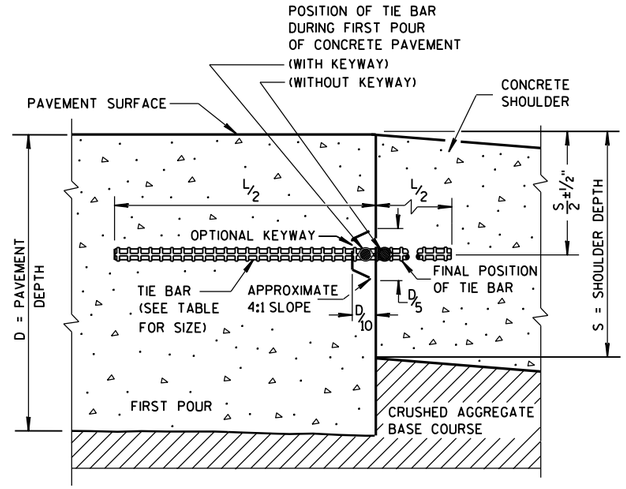
## GENERAL NOTES

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



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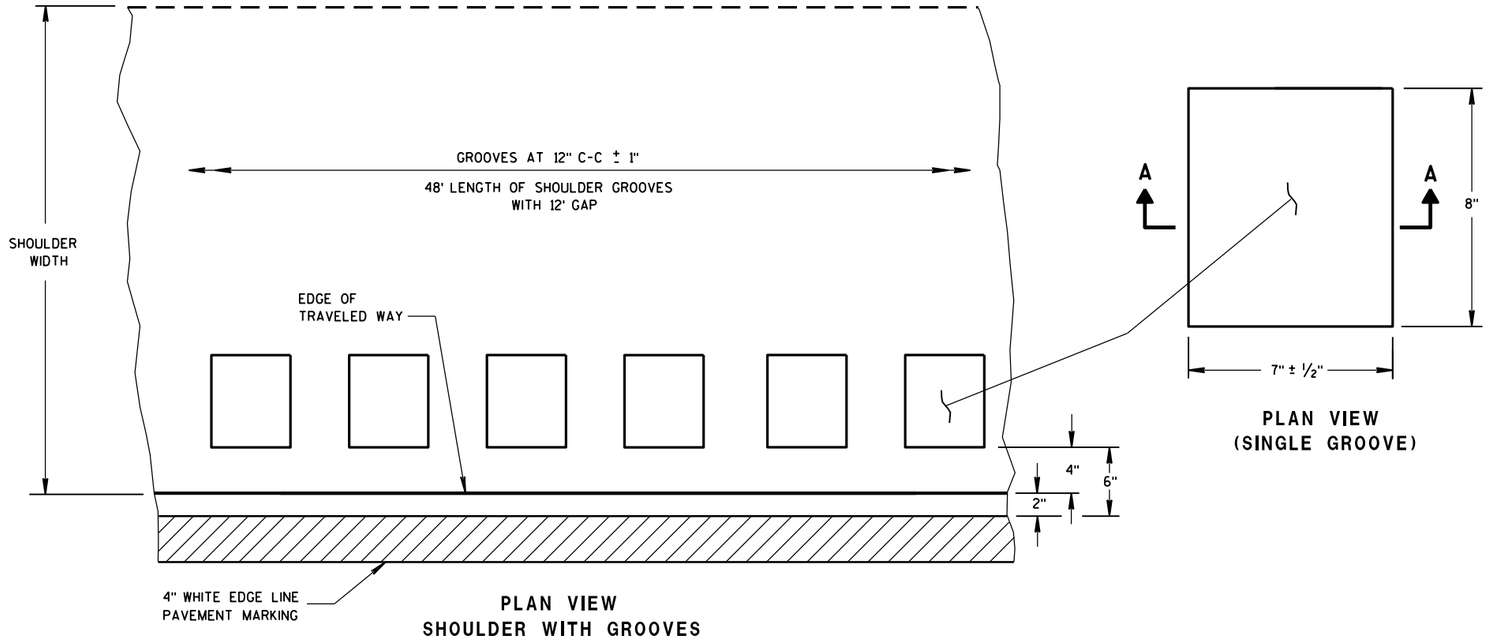
S.D.D. 13 A 3-6

6

S.D.D. 13 A 3-6




PLAN VIEW
SHOULDER WITH GROOVES



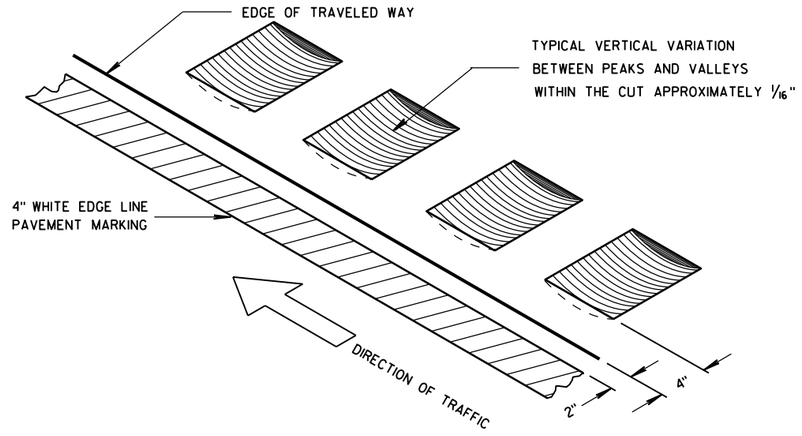

PLAN VIEW
(SINGLE GROOVE)

## GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

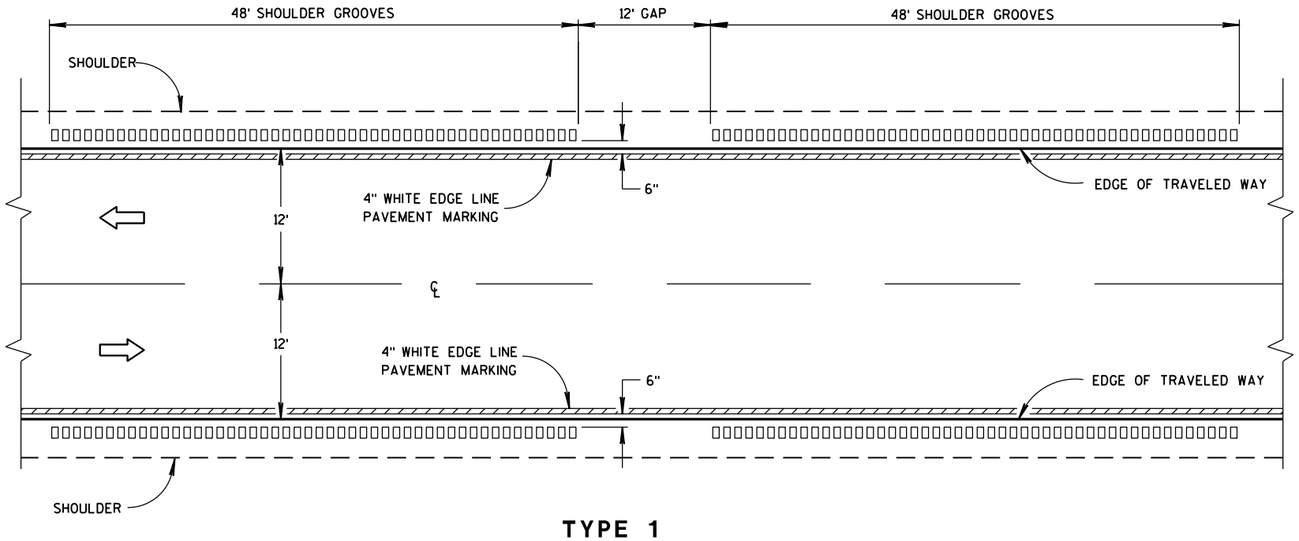
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.

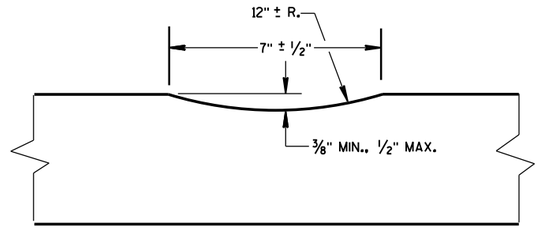



ISOMETRIC

## PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP




TYPE 1
2-LANE SHOULDER RUMBLE STRIP




SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

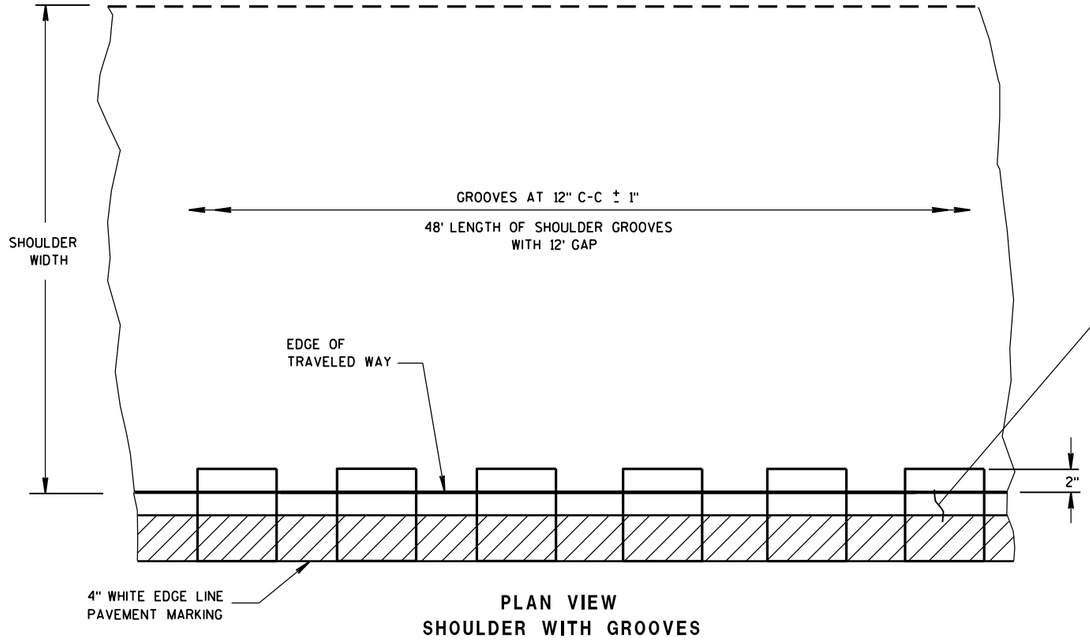


6

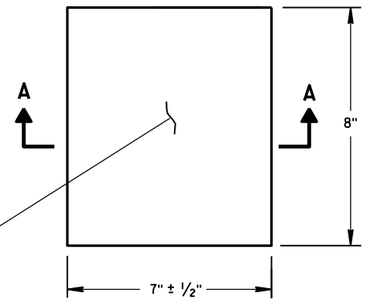
S.D.D. 13 A 10-1a

6

S.D.D. 13 A 10-1a




PLAN VIEW
SHOULDER WITH GROOVES




PLAN VIEW
(SINGLE GROOVE)

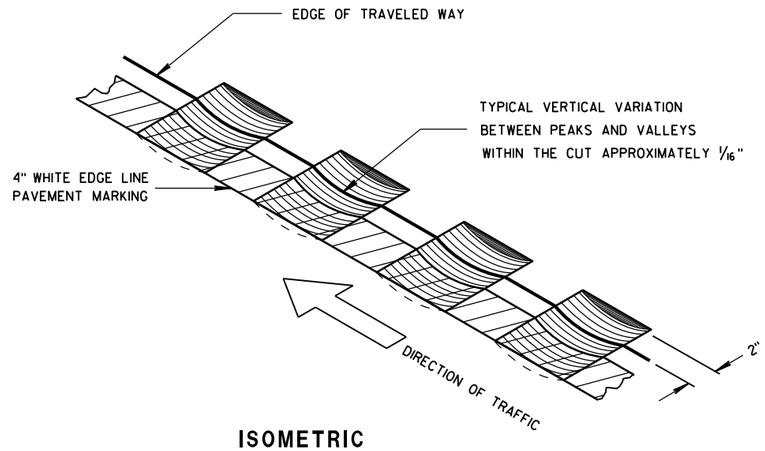
## PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP

## GENERAL NOTES

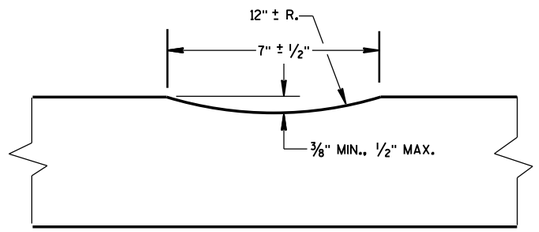
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

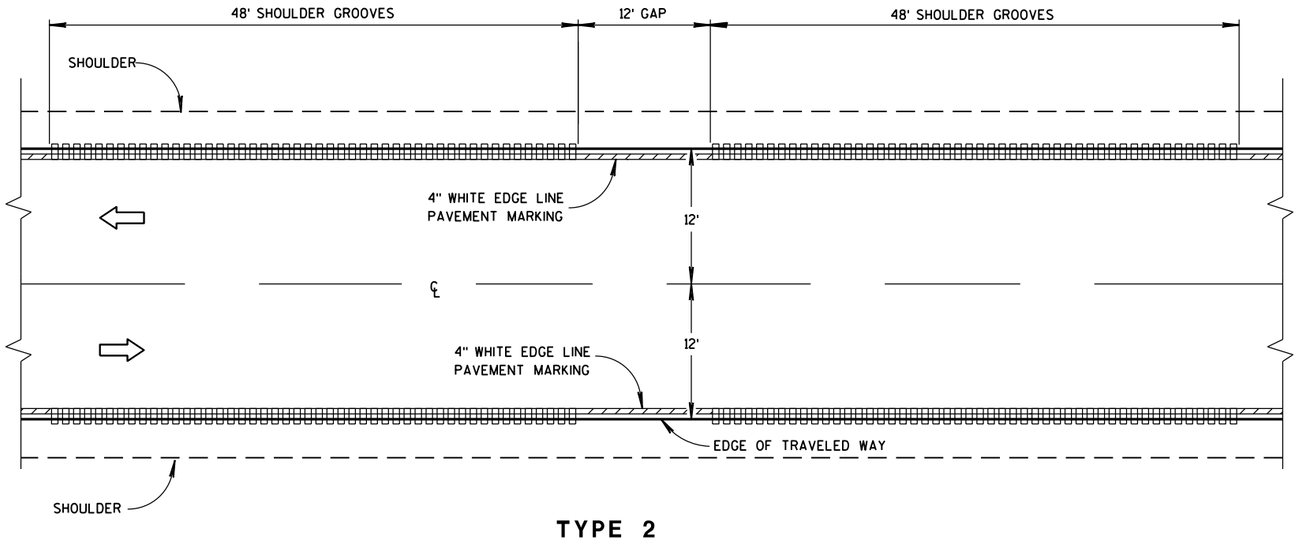
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.




ISOMETRIC




SECTION A-A




## TYPE 2
## 2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

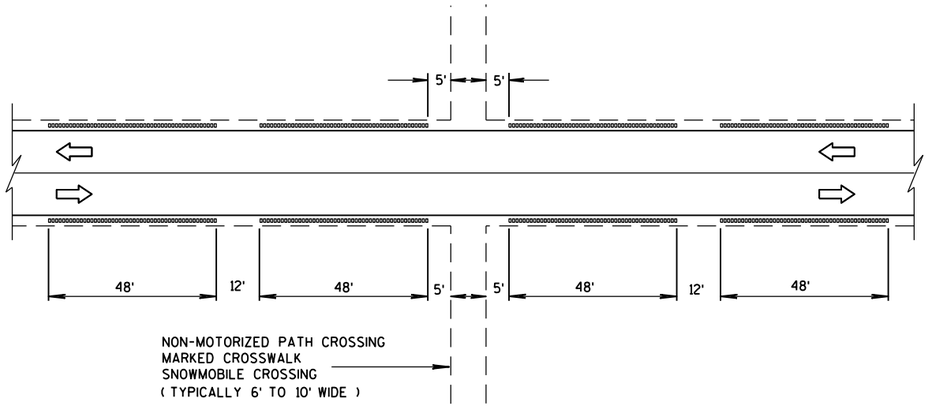


6

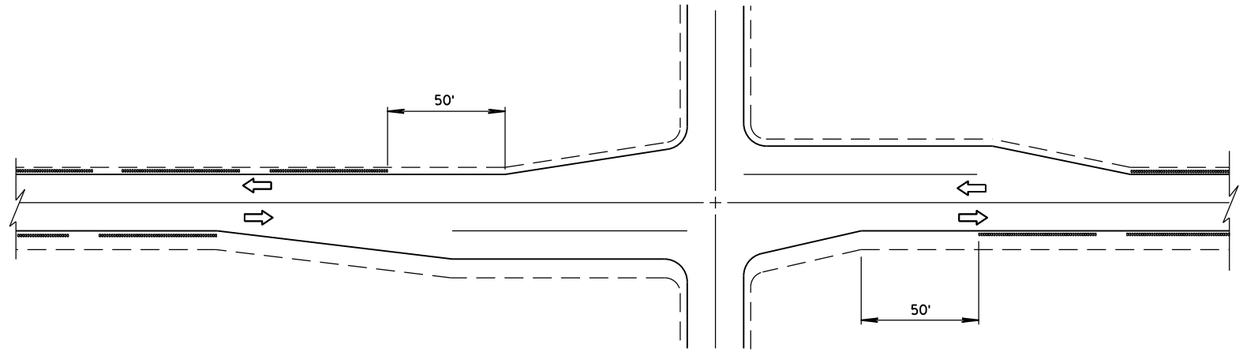
S.D.D. 13 A 10-1b

6

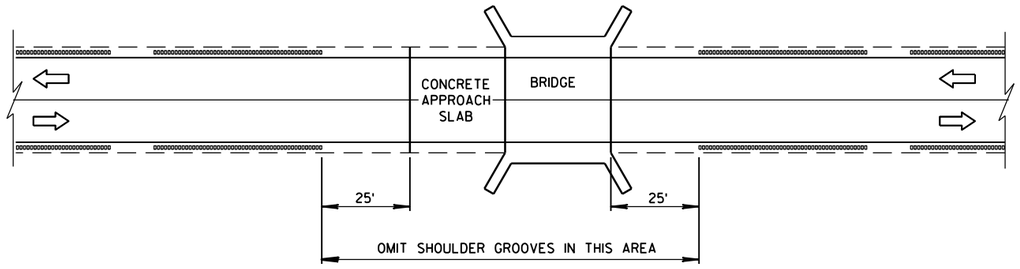
S.D.D. 13 A 10-1b



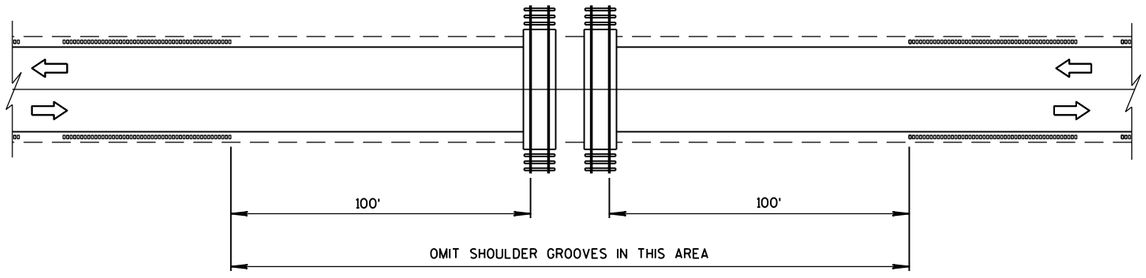

SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



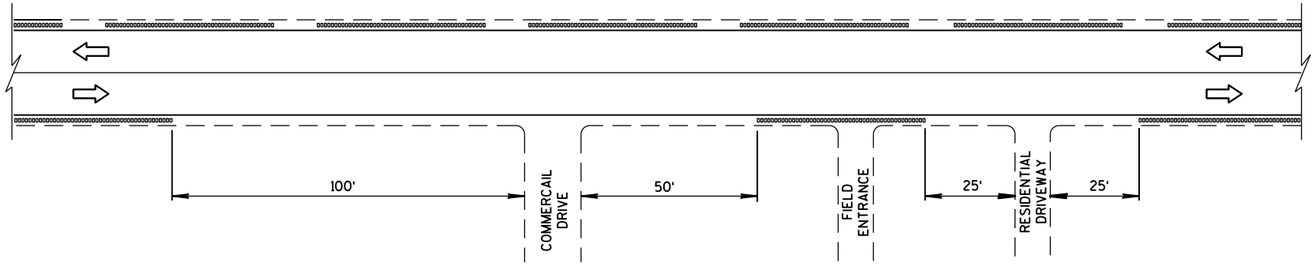

SHOULDER GROOVES AT INTERSECTIONS




SHOULDER GROOVES AT BRIDGES




SHOULDER GROOVES AT RAILROADS




SHOULDER GROOVES AT DRIVEWAYS (1)

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

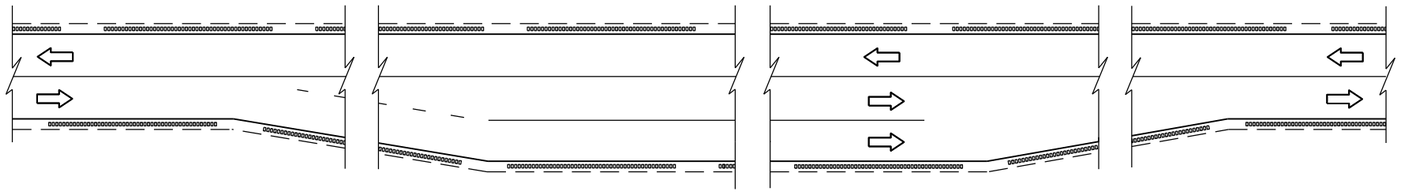


6

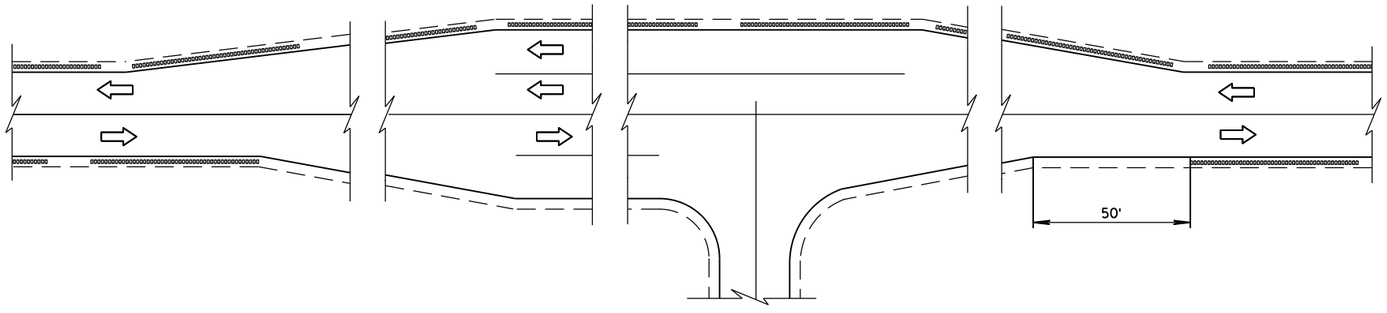
S.D.D. 13 A 10-1c

6

S.D.D. 13 A 10-1c



SHOULDER GROOVES AT PASSING AND CLIMBING LANES




SHOULDER GROOVES AT BYPASS LANES

6

6

S.D.D. 13 A 10-1d

S.D.D. 13 A 10-1d

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

## GENERAL NOTES

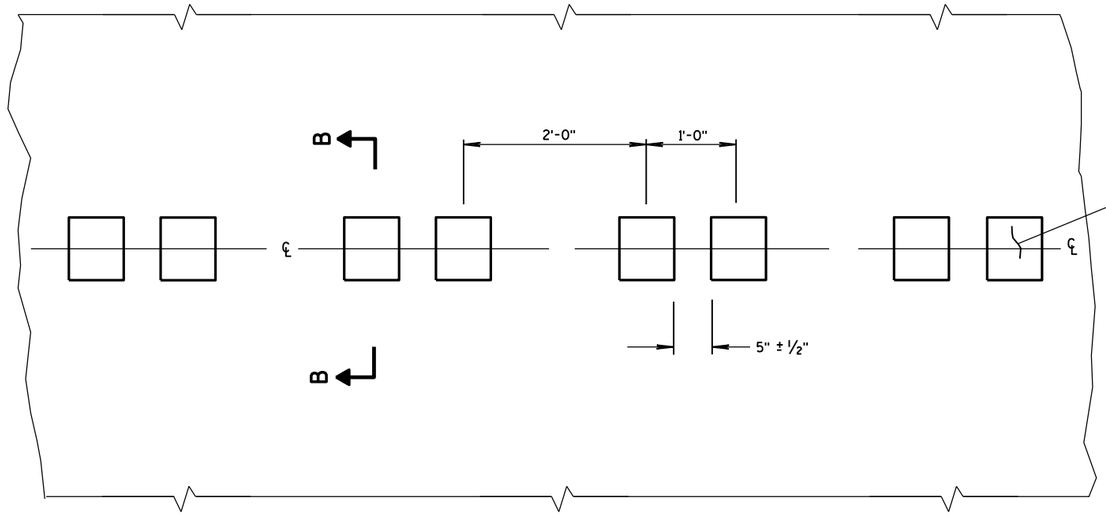
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

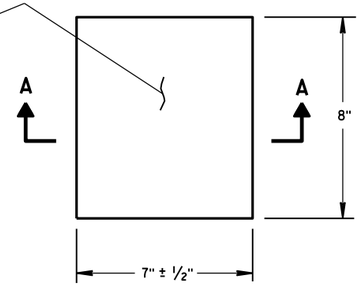
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

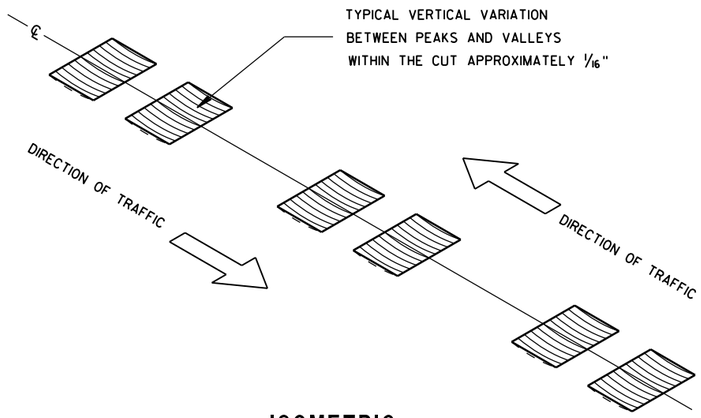
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.




PLAN VIEW
CENTER LINE WITH GROOVES

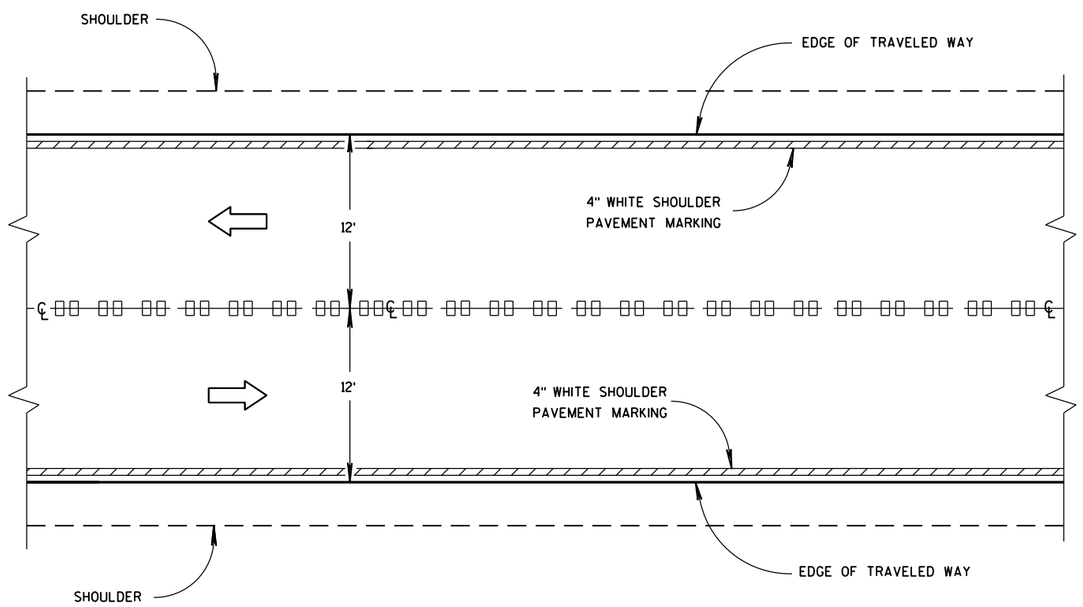



PLAN VIEW
(SINGLE GROOVE)

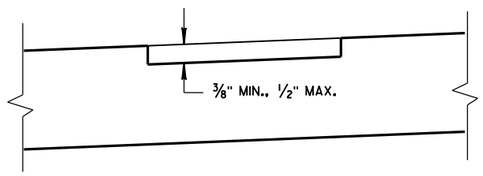



ISOMETRIC

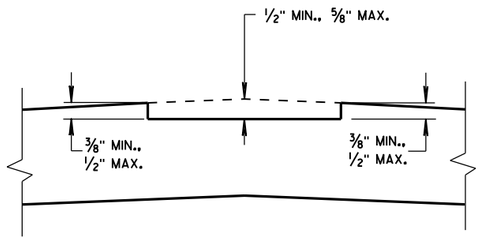
## PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



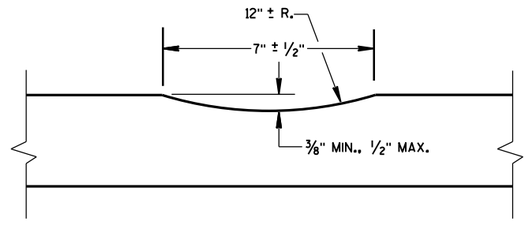

CENTER LINE GROOVES ON TWO-WAY ROADWAYS




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

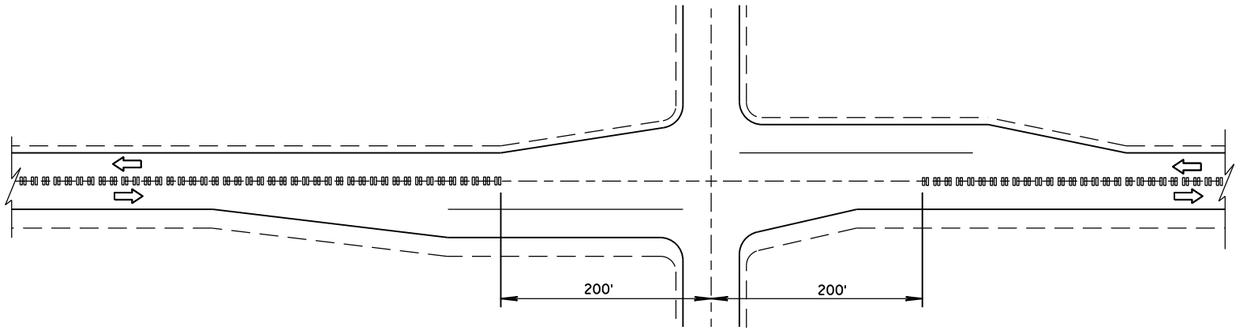


6

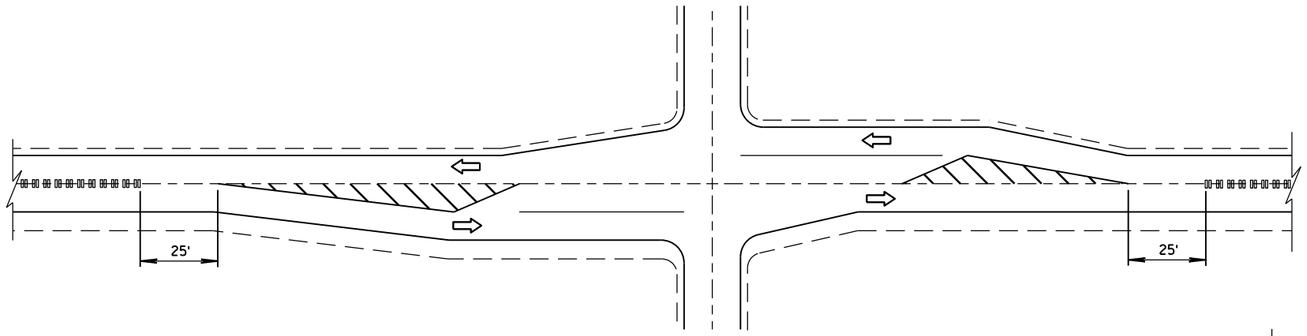
S.D.D. 13 A 11-2a

6

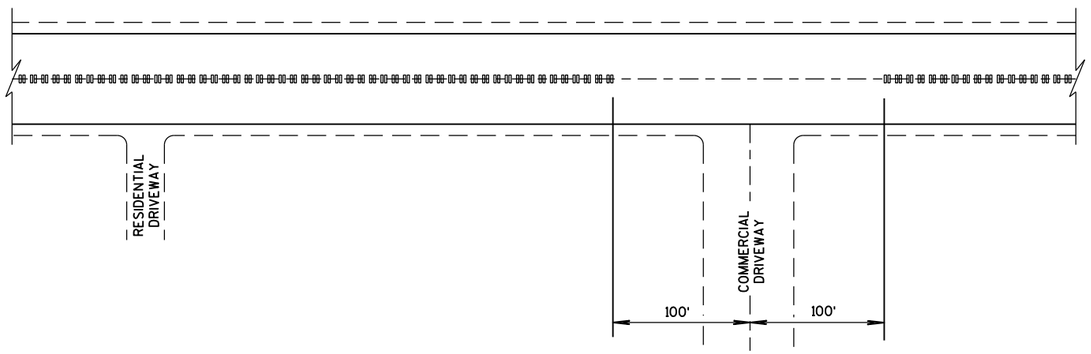
S.D.D. 13 A 11-2a




## CENTER LINE GROOVES AT INTERSECTIONS

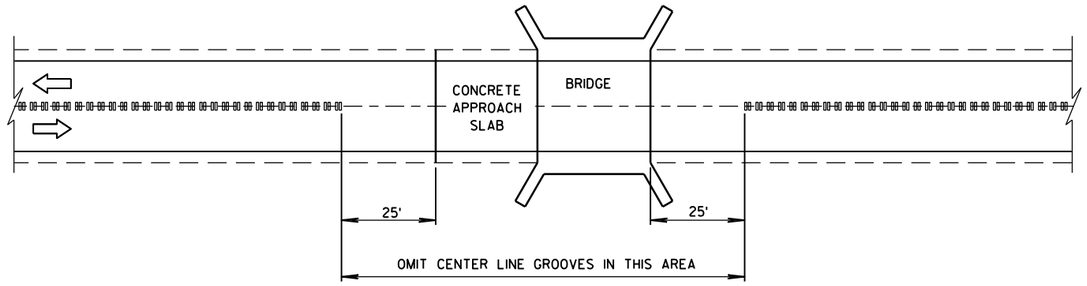



## CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

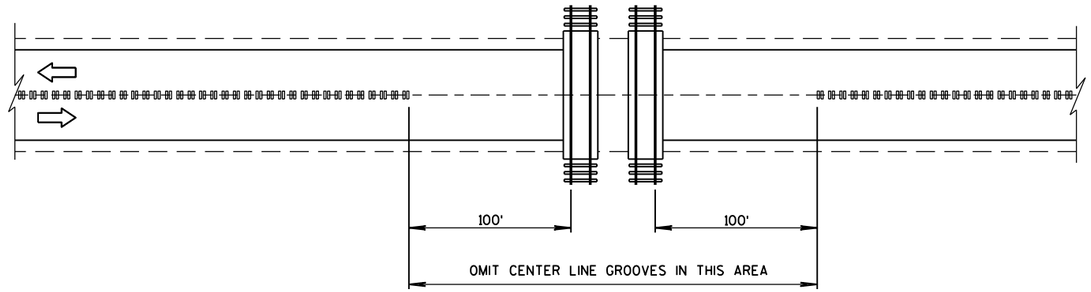



## CENTER LINE GROOVES AT DRIVEWAYS (1)

(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

6

S.D.D. 13 A 11-2b

**2-LANE RURAL**
**CENTER LINE RUMBLE STRIP, MILLING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

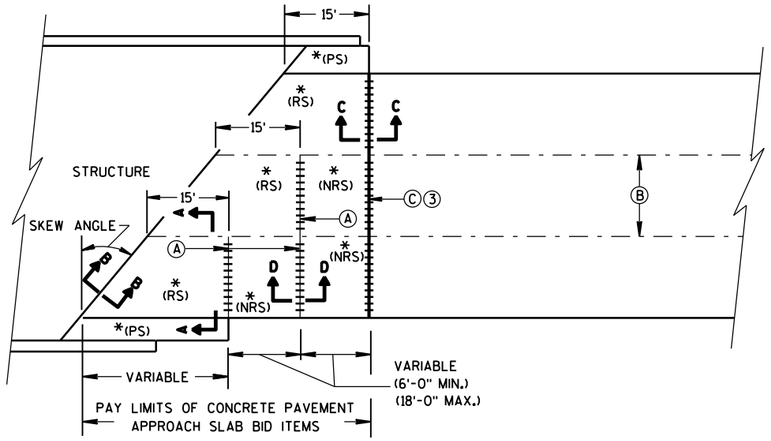
APPROVED

5/15/2013
DATE

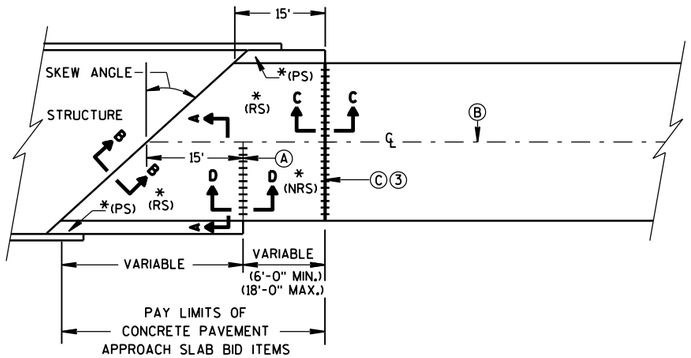
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

NT

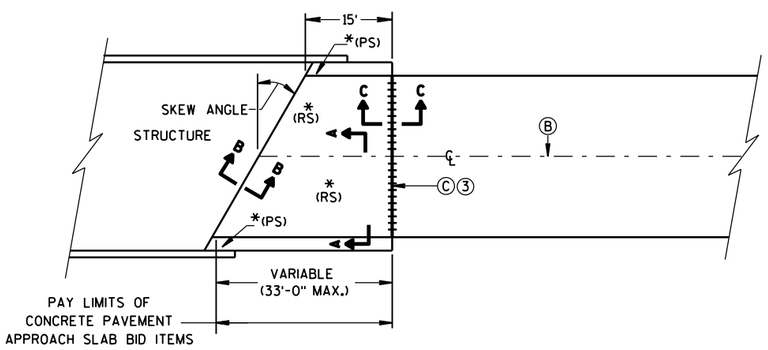
FHWA




**SKEWED APPROACH**
**(PAVEMENT MORE THAN 2 LANES)**




**SKEWS >20°**
**(PAVEMENT WIDTH ≤30')**




**SKEWS ≤20°**
**(PAVEMENT WIDTH ≤30')**

**APPROACH SLAB AND ADJACENT PAVEMENT**

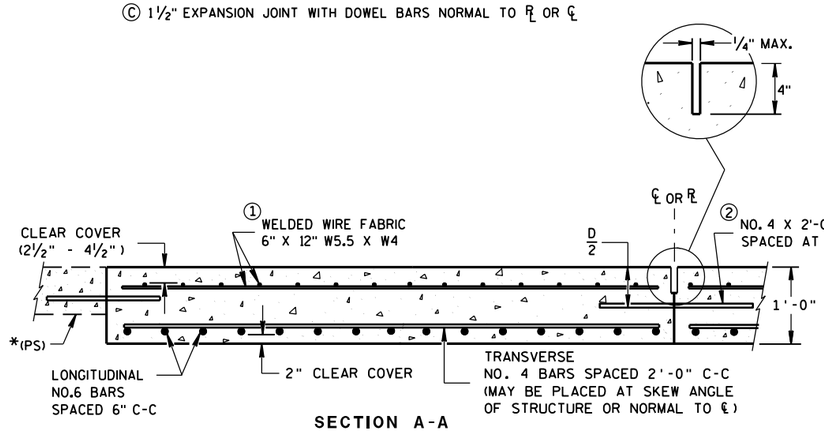
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

***STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

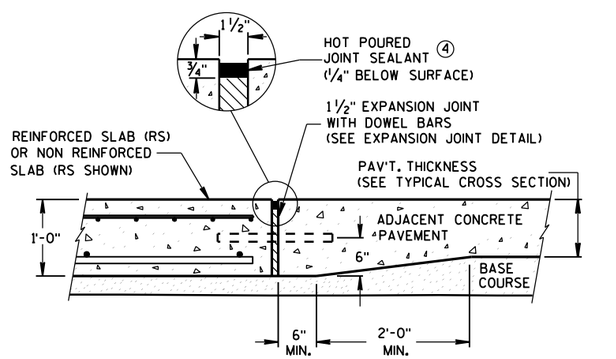
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.

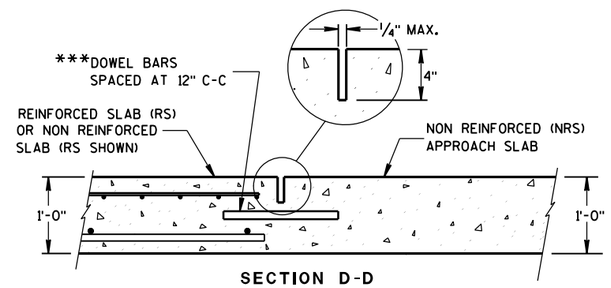
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄




**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.

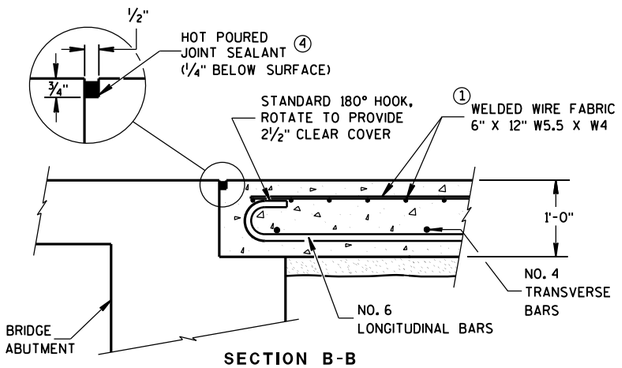
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

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

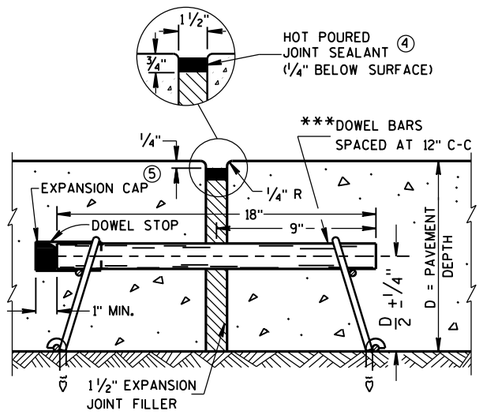
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

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



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S.D.D. 13 B 2-8a

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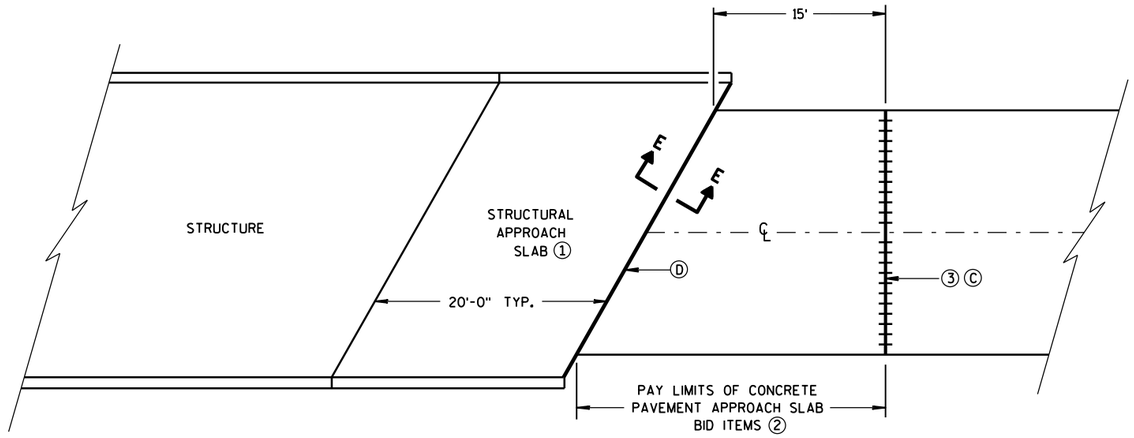
S.D.D. 13 B 2-8a

## BRIDGE APPROACHES




## GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

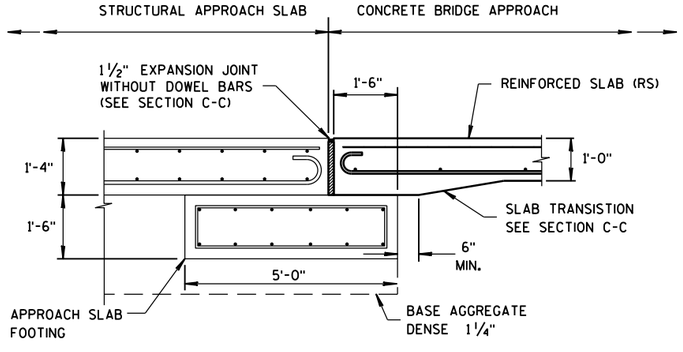
① SEE BRIDGE PLAN.

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

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PAVEMENT SUPEF

FHWA



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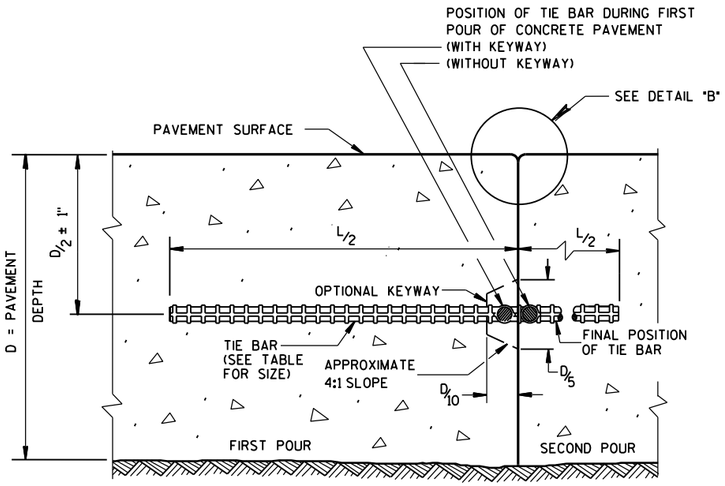
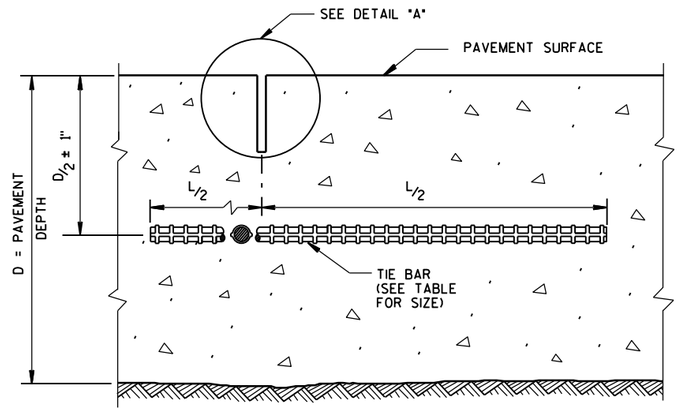
S.D.D. 13 B 2-8b




## 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"



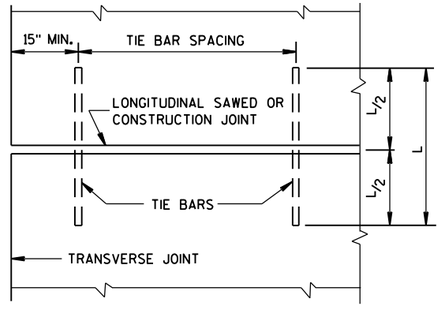

DETAIL "C"

### 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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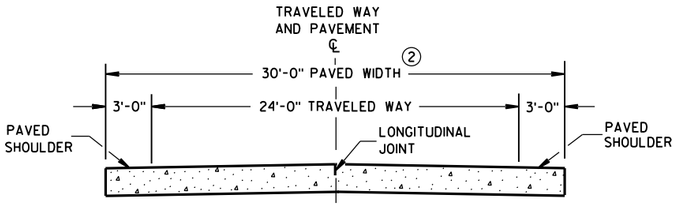
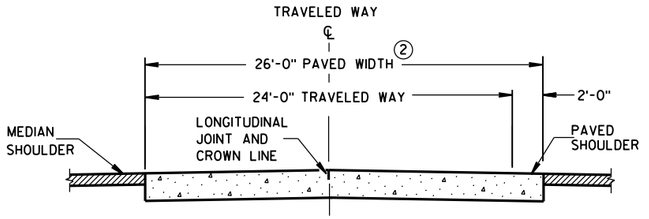
S.D.D. 13 C 1-18

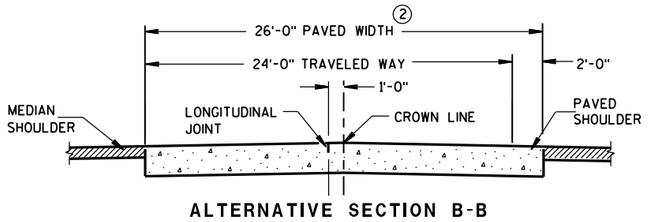



SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY




SECTION B-B




ALTERNATIVE SECTION B-B ①

DIVIDED HIGHWAY

## GENERAL NOTES

CONTRACTION JOINTS

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

DO NOT SEAL OR FILL CONTRACTION JOINTS.

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

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

CONSTRUCTION JOINTS

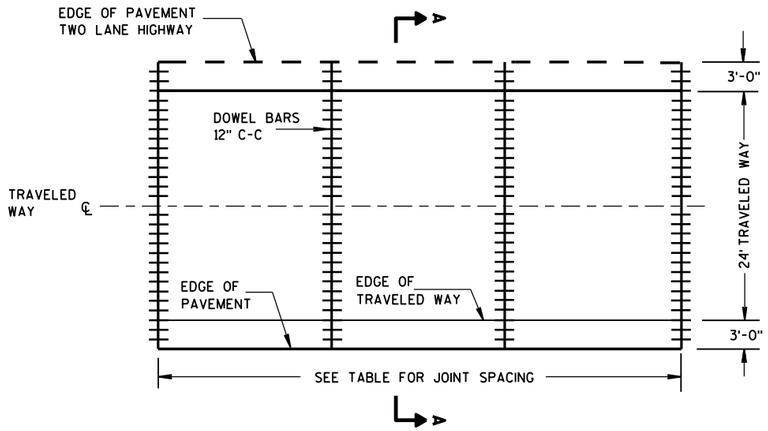
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

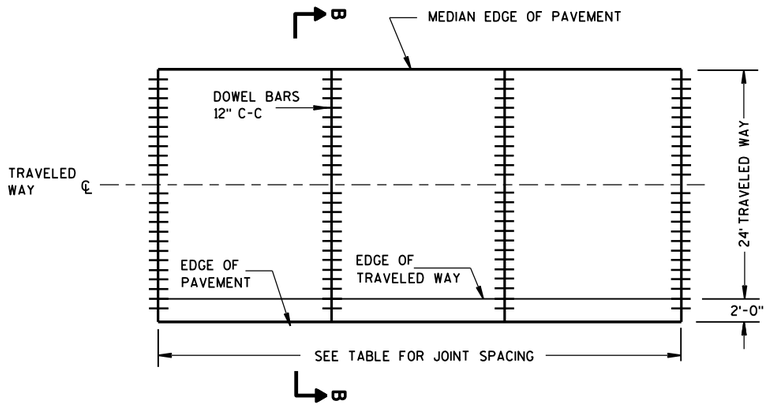
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

### 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' |




CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY




CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI







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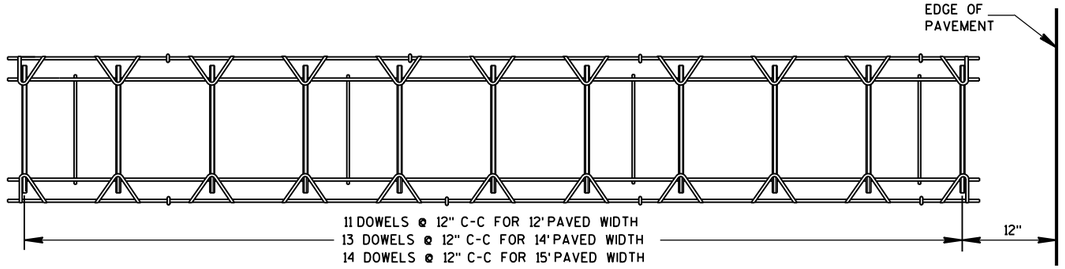
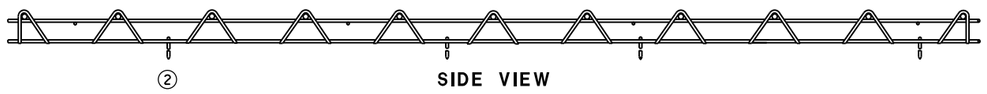
S.D.D. 13 C 11-11a



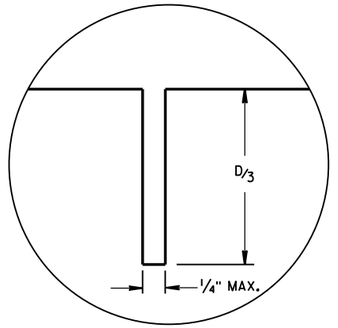

PLAN VIEW




SIDE VIEW

(NORMAL TO CENTERLINE)

## CONTRACTION JOINT DOWEL ASSEMBLY ①




JOINT DETAIL

## GENERAL NOTES

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

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

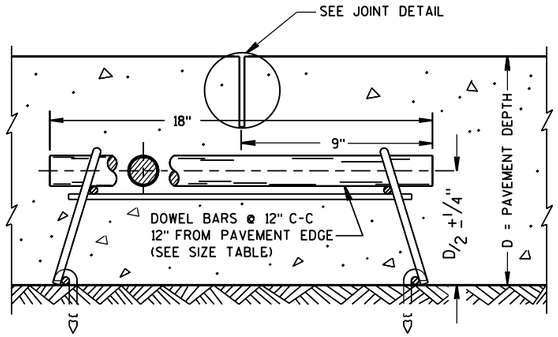
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

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

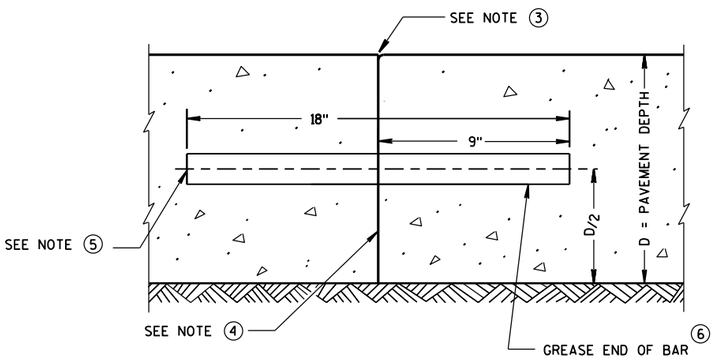
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL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

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

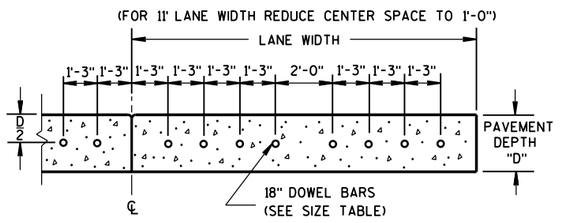
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.




DOWELED CONTRACTION JOINT




TRANSVERSE CONSTRUCTION JOINT




DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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

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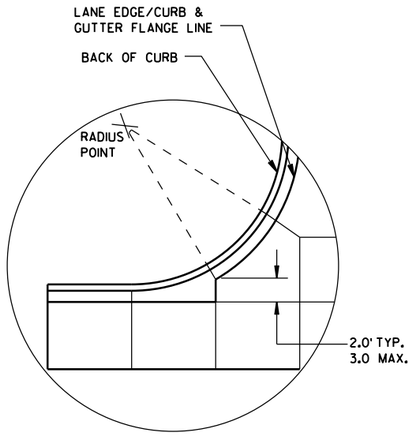
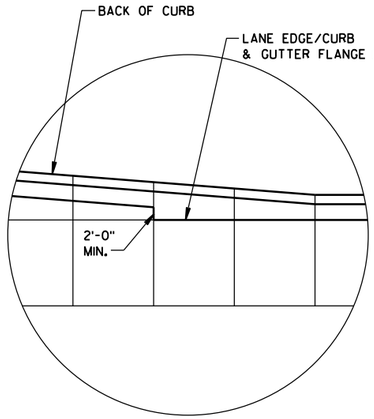
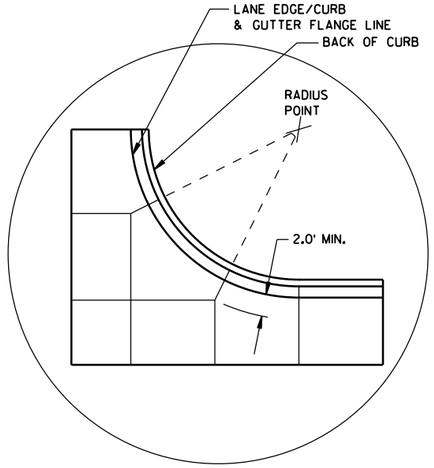
S.D.D. 13 C 11-11b



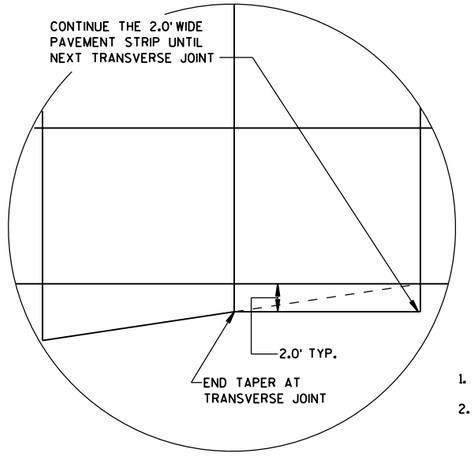

DETAIL "A"




DETAIL "B"




DETAIL "C"




DETAIL "D"

## GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

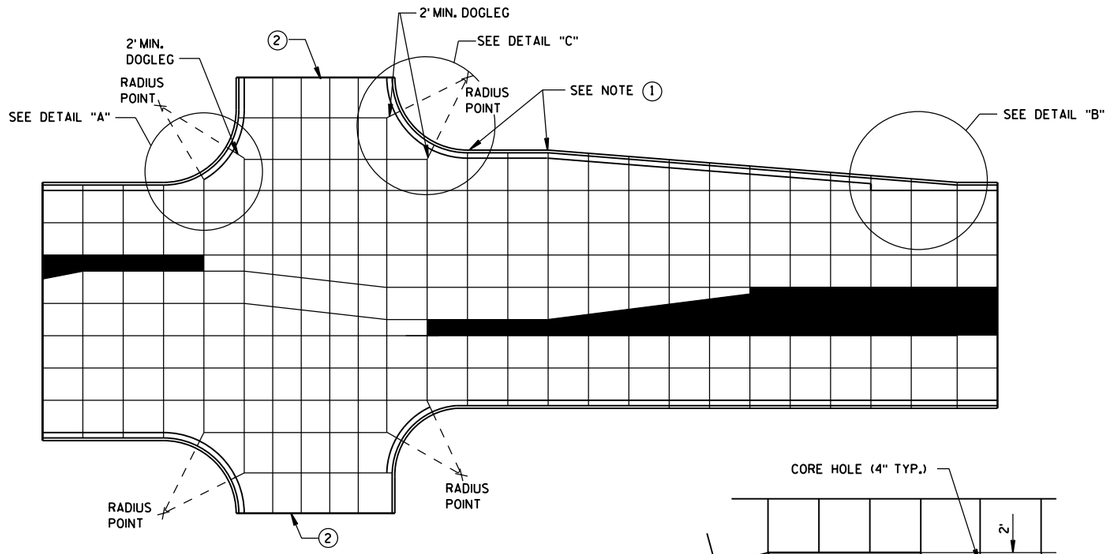
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

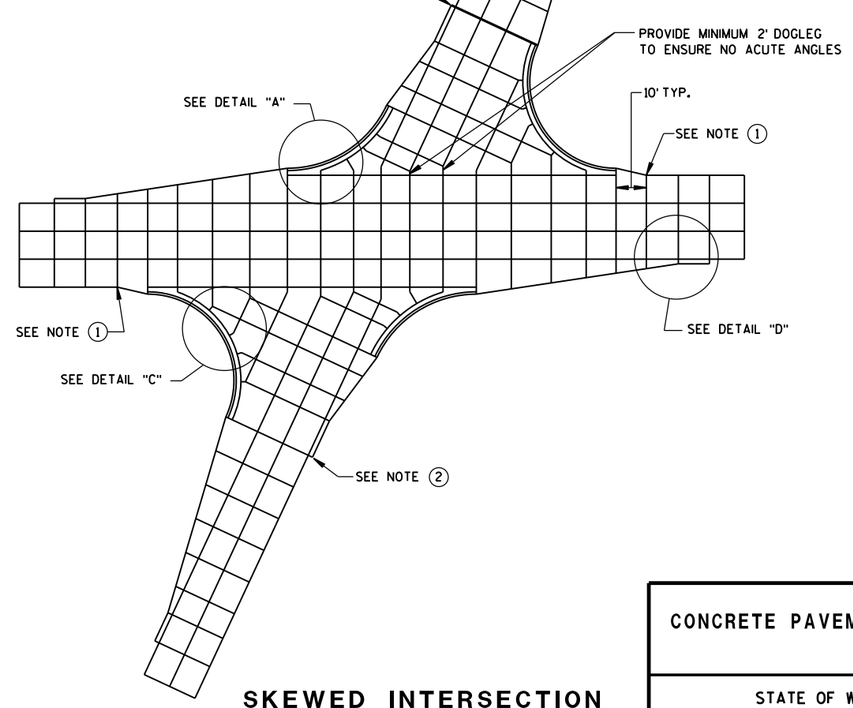
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



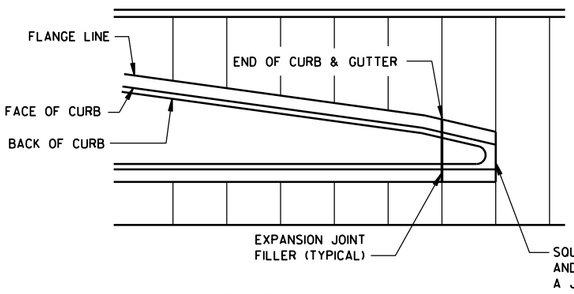

STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

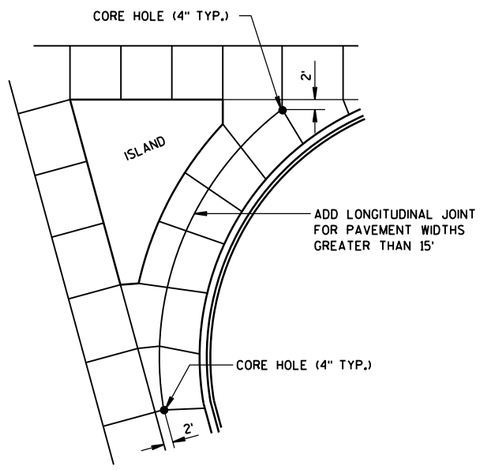
| PAVEMENT DEPTH (D) | CONTRACTION JOINT SPACING |
|---|---|
| 6", 6½" | 12' |
| 7", 7½" | 14' |
| 8" & ABOVE | 15' |




SKEWED INTERSECTION




APPROACH TO MEDIAN




LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR



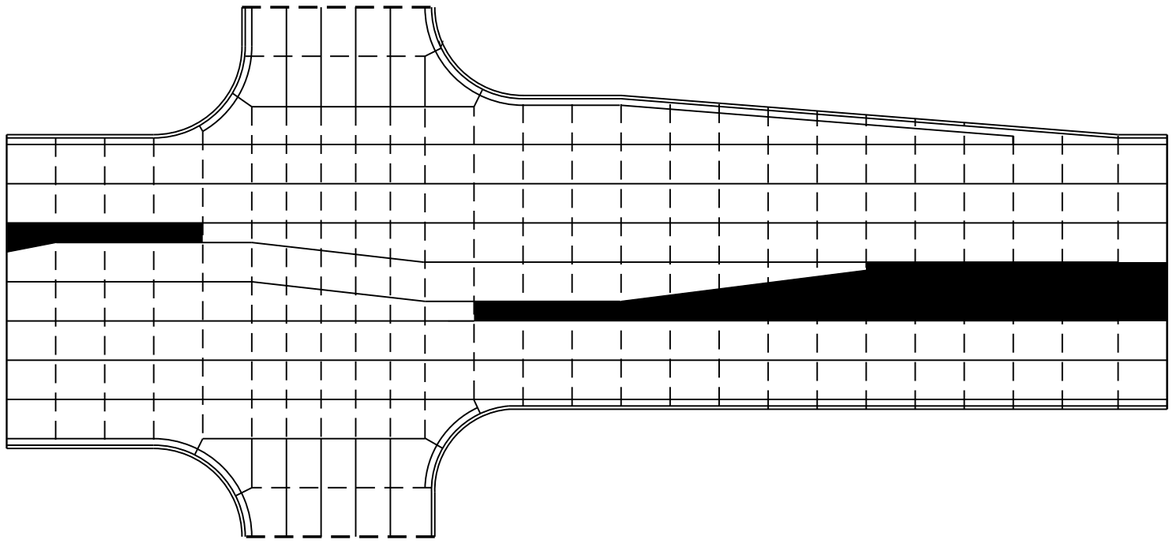

6
S.D.D. 13 C 18-5a

## LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

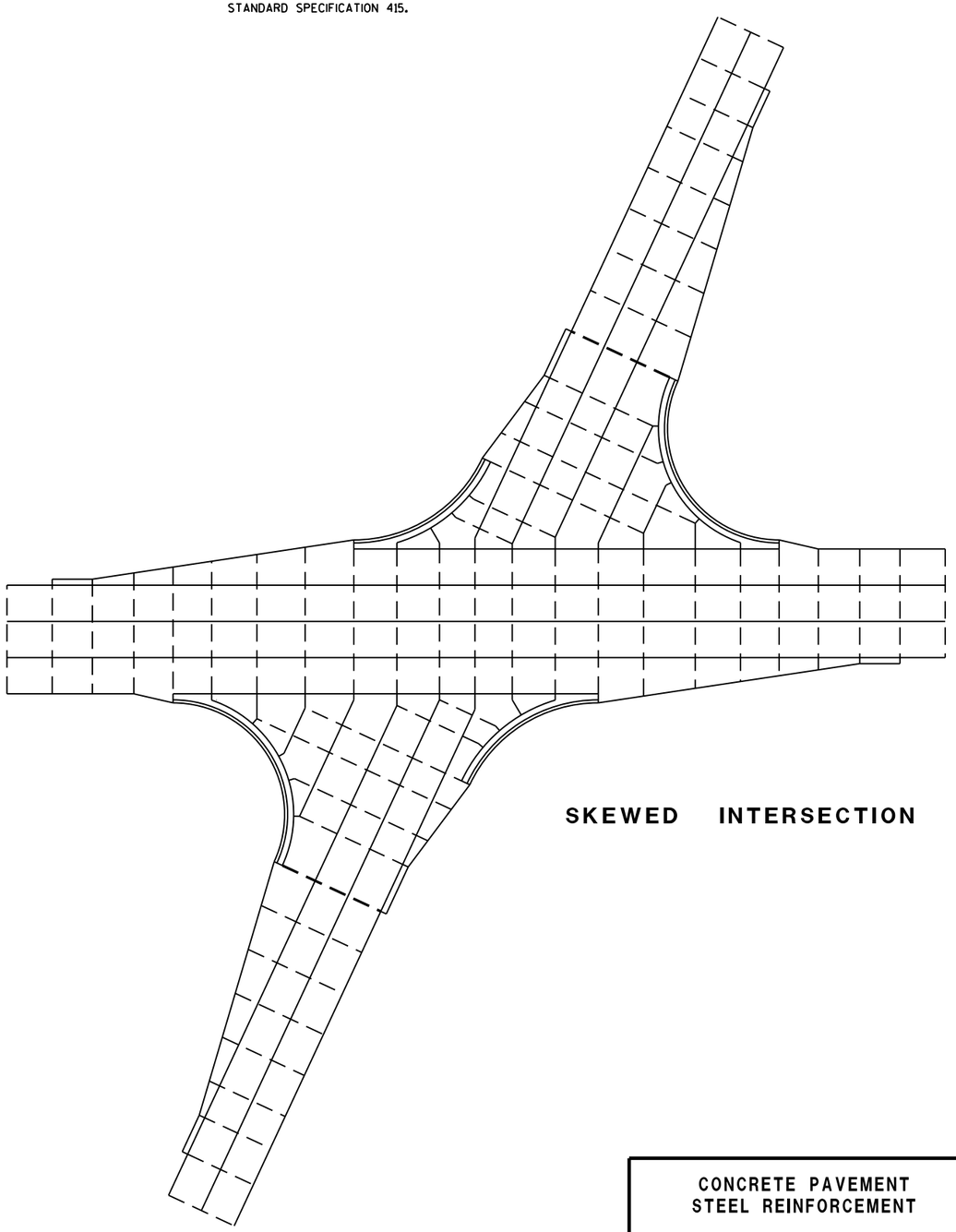
TIED JOINT



STANDARD INTERSECTION

## GENERAL NOTES

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



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR



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S.D.D. 13 C 18-5b

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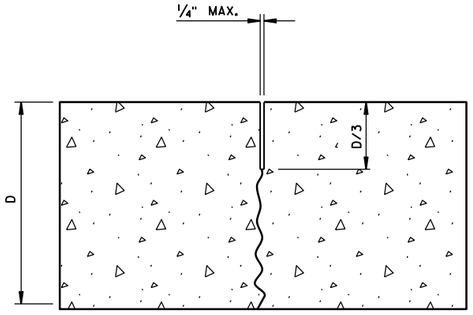
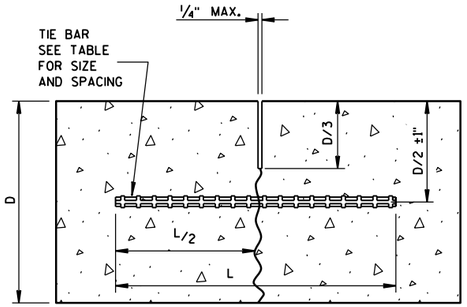
S.D.D. 13 C 18-5b




UNDOWELED-TRANSVERSE




TIED LONGITUDINAL

## TIE BAR TABLE

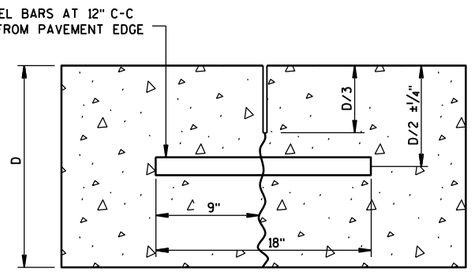
| PAVEMENT DEPTH (D) | TIE BAR SIZE | TIE BAR LENGTH (L) | MAX. TIE BAR SPACING |
|---|---|---|---|
| < 10 1/2" | NO. 4 | 30" | 36" |
| ≥ 10 1/2" | NO. 5 | 36" | 36" |
| | NO. 4* | 30" | 24"** |

* 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.

## GENERAL NOTES

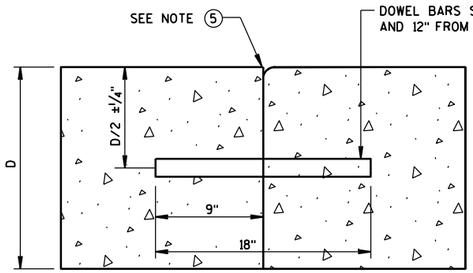
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF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



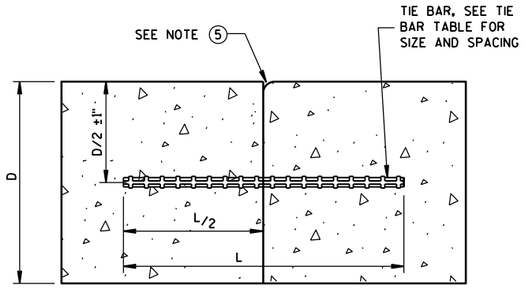

DOWELED-TRANSVERSE

## CONTRACTION JOINTS

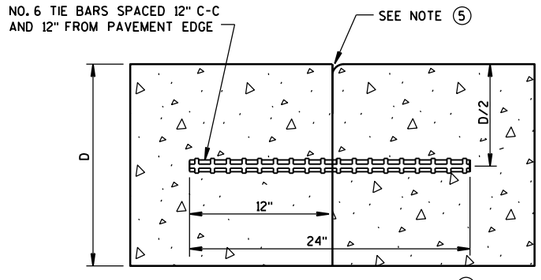
SEE NOTE (2)




DOWELED TRANSVERSE (3)

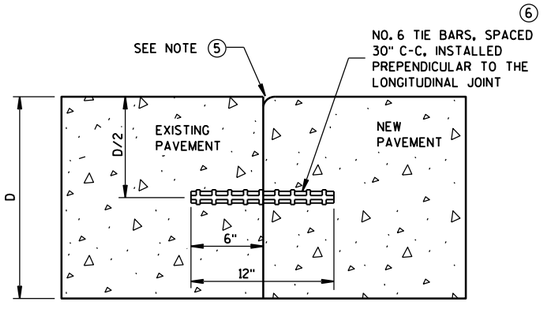



TIED LONGITUDINAL




TIED TRANSVERSE (3)

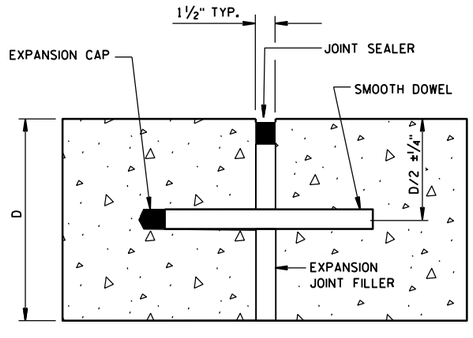
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)




TIED LONGITUDINAL TO EXISTING

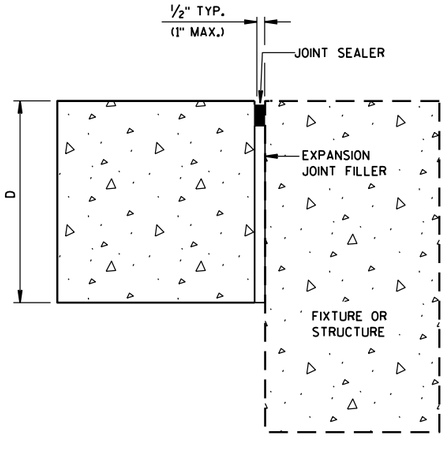
## CONSTRUCTION JOINTS

SEE NOTE (4)




DOWELED-TRANSVERSE

SEE NOTE (1)




UNTIED-LONGITUDINAL

## EXPANSION JOINTS

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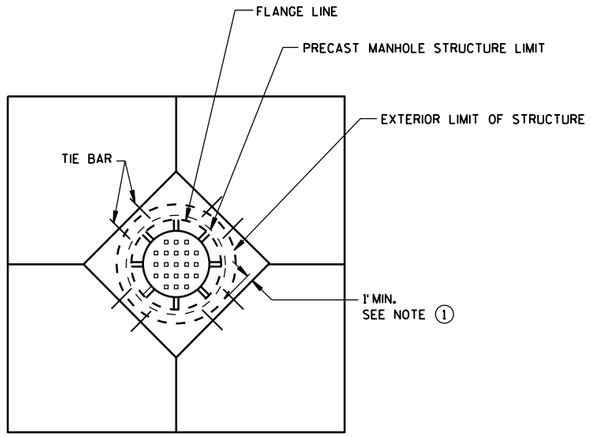
S.D.D. 13 C 18-5c

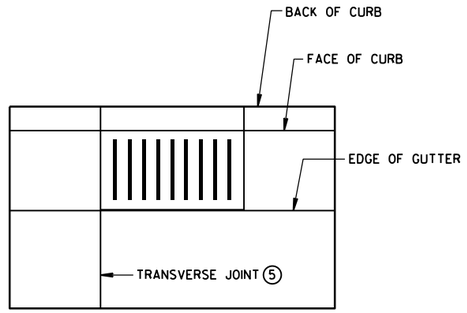
S.D.D. 13 C 18-5c

CONCRETE PAVEMENT
JOINT TYPES

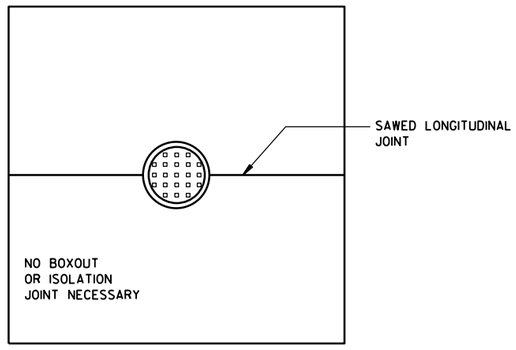
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



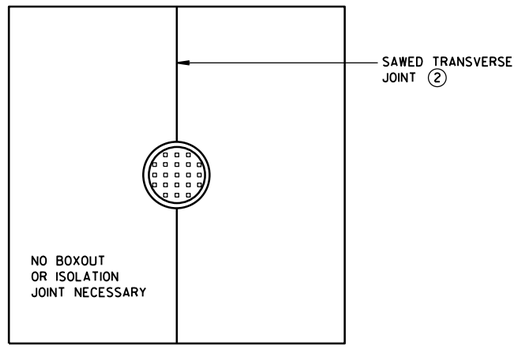

## DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



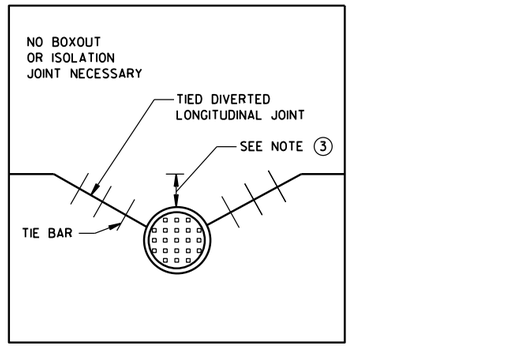

## INLET WITH TRANSVERSE JOINT



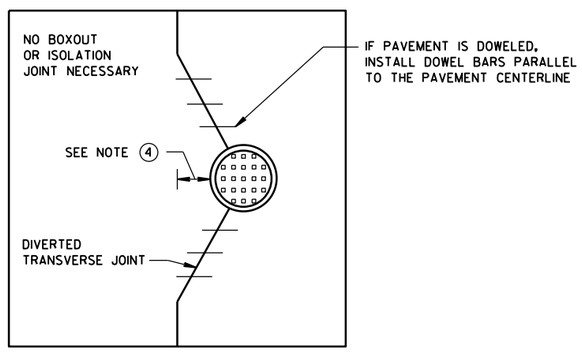

## MANHOLE WITH LONGITUDINAL JOINT




## MANHOLE WITH TRANSVERSE JOINT




## MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT




## MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

## GENERAL NOTES

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

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

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

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

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

# CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPEF
FHWA

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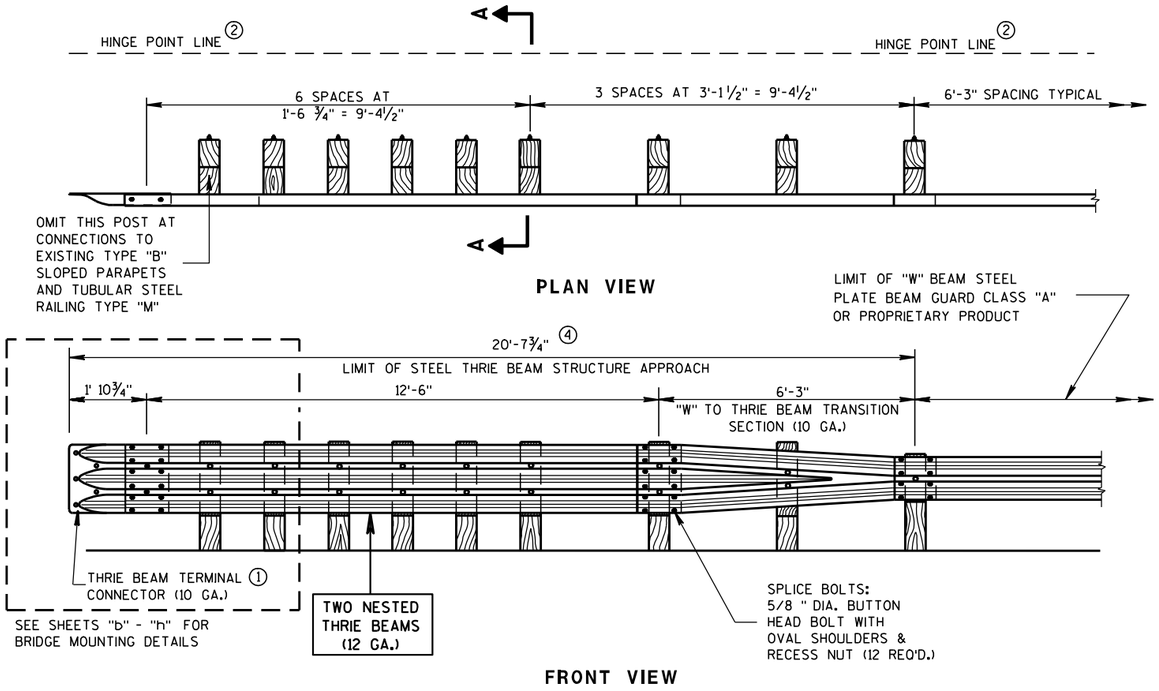


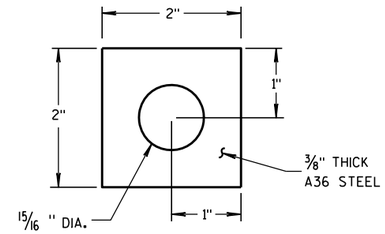




PLATE WASHER DETAIL

## GENERAL NOTES

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

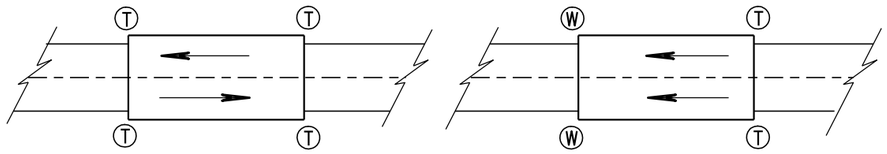
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.

③ POST BOLTS ARE 5/8" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A 5/8" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.

④ ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.



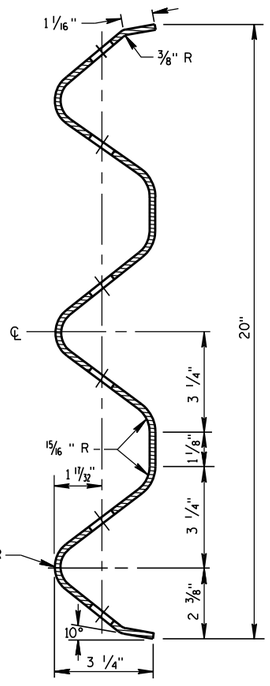

TWO WAY TRAFFIC

ONE WAY TRAFFIC

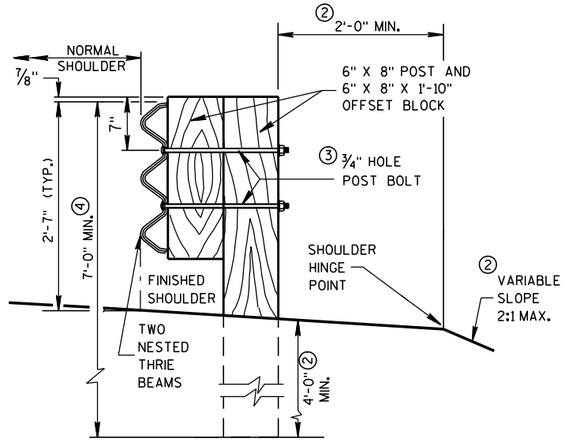
(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

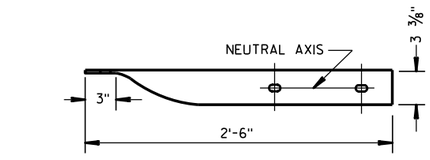
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

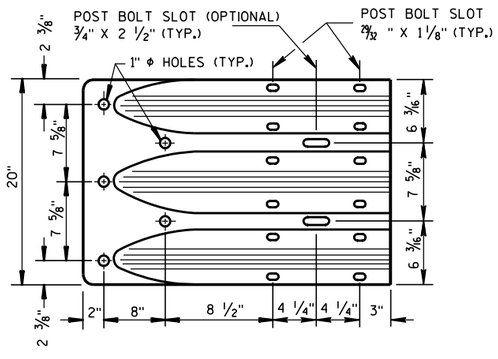



SECTION THRU THRIE BEAM RAIL ELEMENT

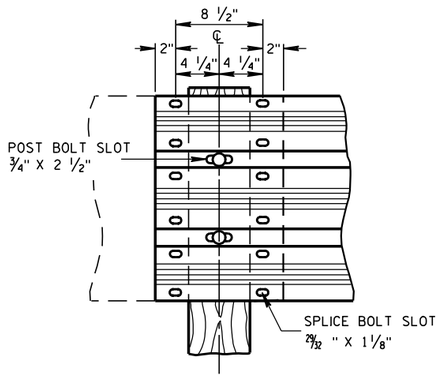



SECTION A-A




THRIE BEAM TERMINAL CONNECTOR




THRIE BEAM SPLICE

**STEEL THRIE BEAM STRUCTURE APPROACH**

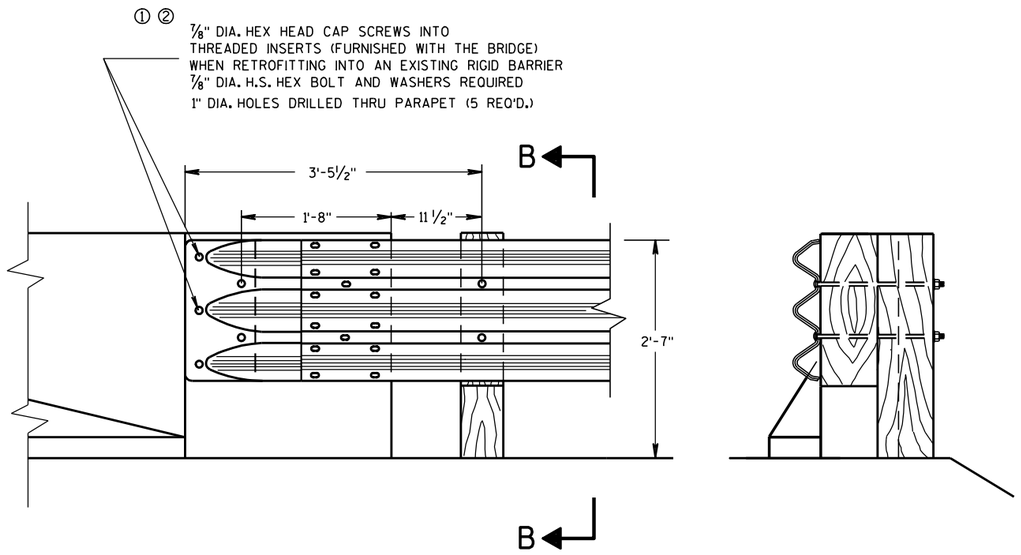
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

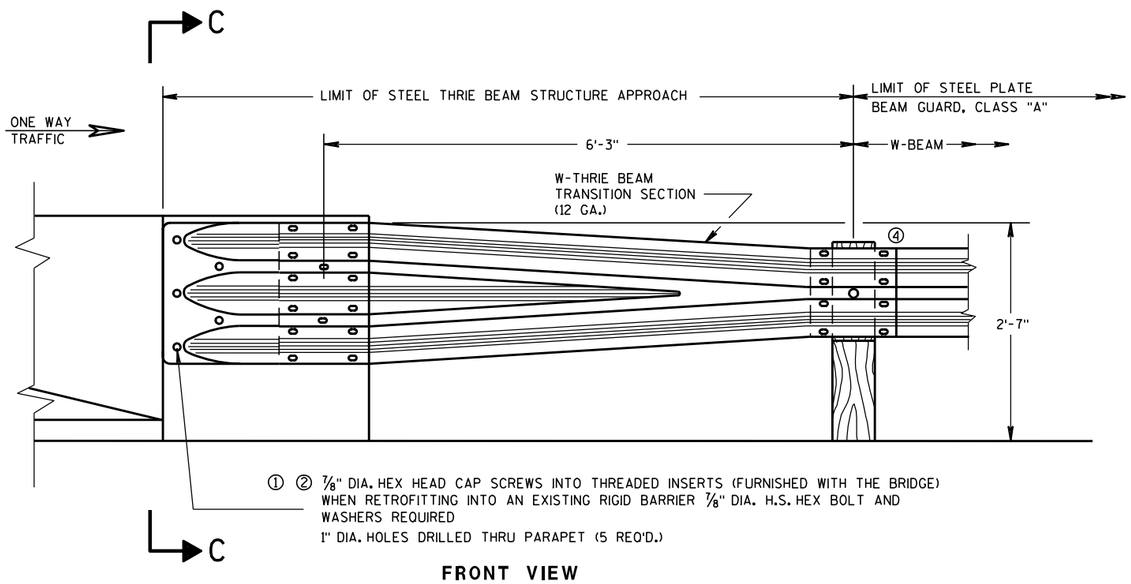
FHWA




FRONT VIEW

SECTION B-B

## THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS




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.

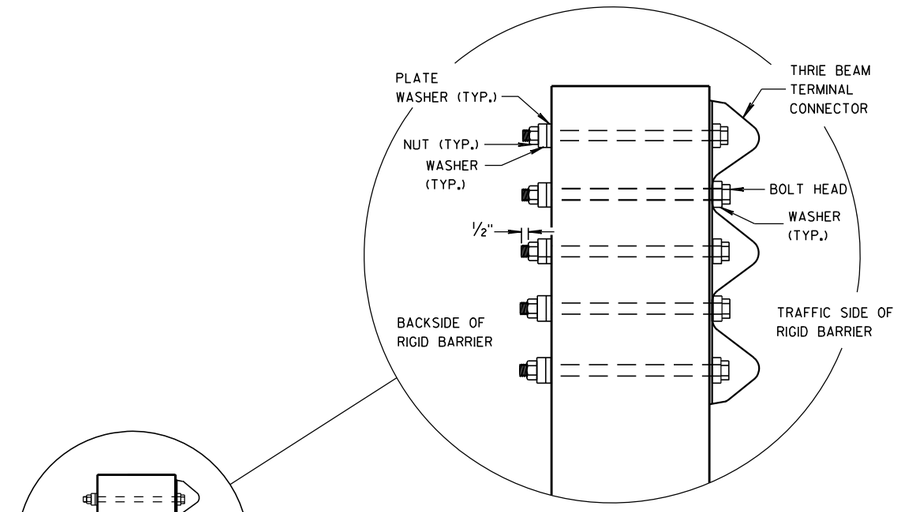
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

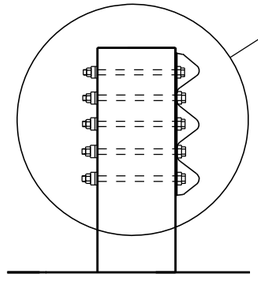
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR.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



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

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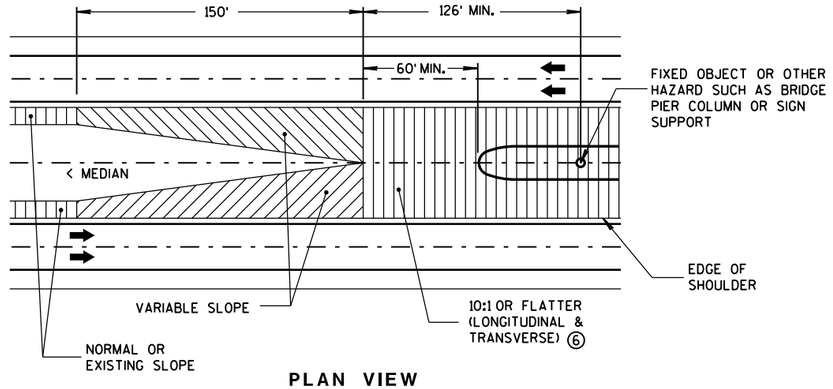
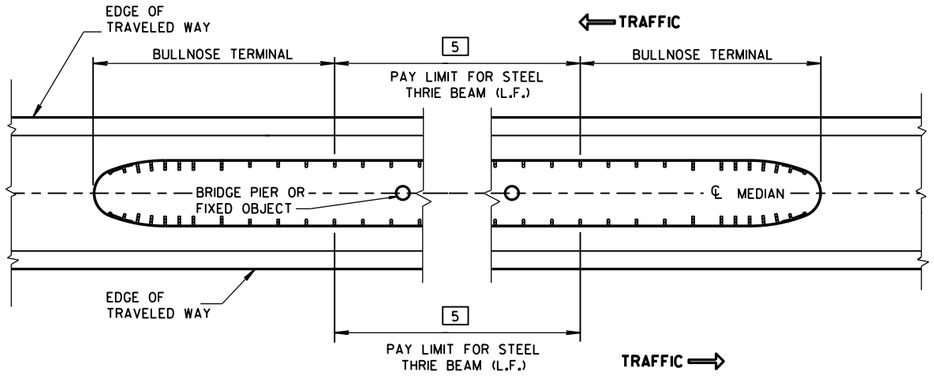
S.D.D. 14 B 20-11b

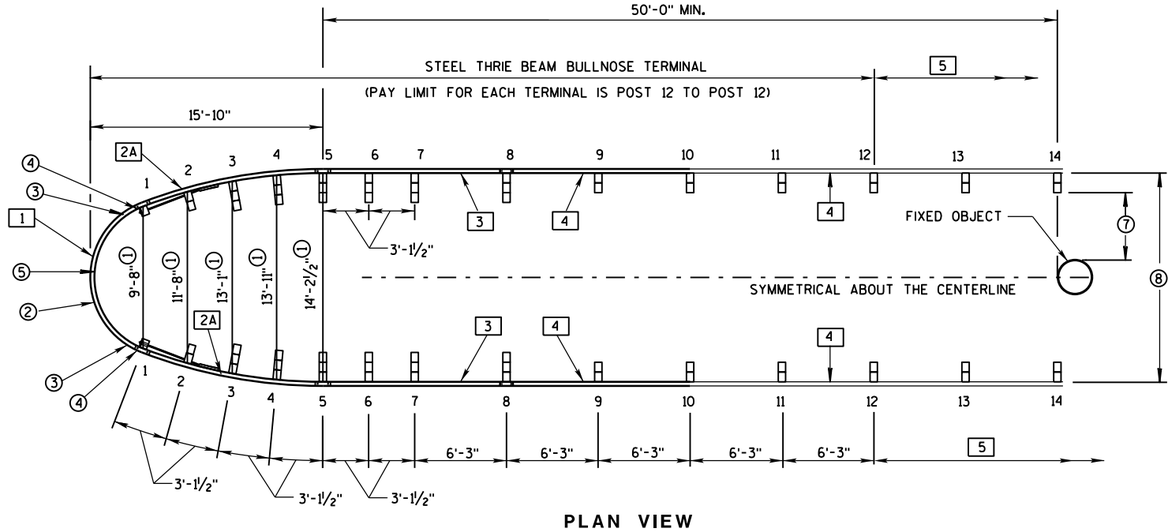



PLAN VIEW

## GRADING AT BULLNOSE
(ALL INSTALLATIONS)

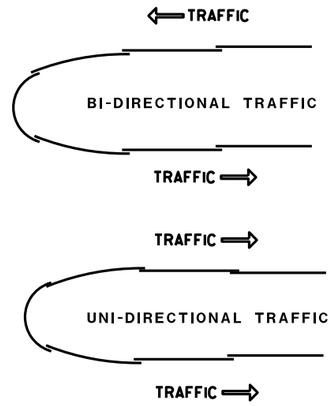



## MEDIAN HAZARD PROTECTION PAY LIMITS




PLAN VIEW

## TYPICAL BULLNOSE LAYOUT




## LAPPING DETAIL
(ALL INSTALLATIONS)

# GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

PUNCHING, DRILLING, CUTTING OR WELDING IS NOT PERMITTED ON ANY GALVANIZED THRIE BEAM ACCESSORY OR TERMINAL ACCESSORY.

OTHER ANCHOR CABLE ASSEMBLIES HAVING 40,000 LBS. MIN. BREAKING STRENGTH MAY BE USED.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

THE USE OF STEEL POSTS ON THE BULLNOSE IS NOT ALLOWED.

BOLTS AND ALL NECESSARY HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

ALL THRIE BEAM SHALL BE 12-GAUGE.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½" AND 12" DIAMETER AROUND POST. SEE SDD 14B15 OR SDD 14B42 FOR MORE INFORMATION.

[1] SLOTTED THRIE BEAM RAIL NO. 1. ( POST 1 TO POST 1 )

[2A] SLOTTED THRIE BEAM RAIL NO. 2A. ( POST 1 TO POST 5 )

[3] SLOTTED THRIE BEAM RAIL NO. 3. ( POST 5 TO POST 8 )

[4] UNBENT STANDARD THRIE-BEAM RAIL NO.4. ( POST 8 TO POST 10 & POST 10 TO POST 12 )

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.

② U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.

③ NOSE CABLE W/SWAGGED END BUTTONS.

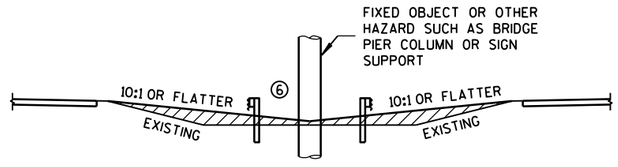
④ NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).

⑤ THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.

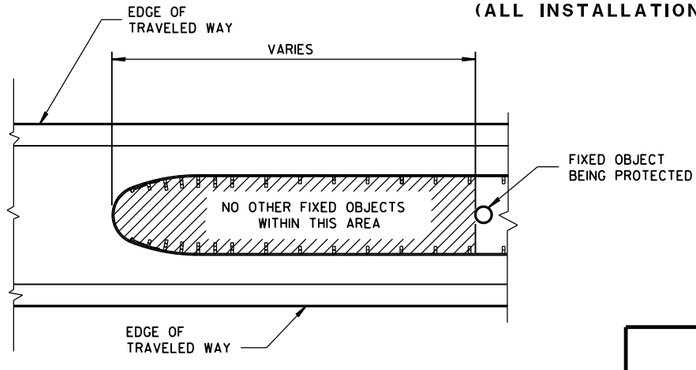
⑥ PROVIDE SUITABLE DRAINAGE WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.

⑦ 2'-6" MINIMUM LATERAL DISTANCE BETWEEN BACK OF POST AND FACE OF FIXED OBJECT.

⑧ MAXIMUM WIDTH OF SYSTEM IS 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.




## MEDIAN GRADING SECTION
(ALL INSTALLATIONS)




## HAZARD FREE AREA INSIDE BULLNOSE

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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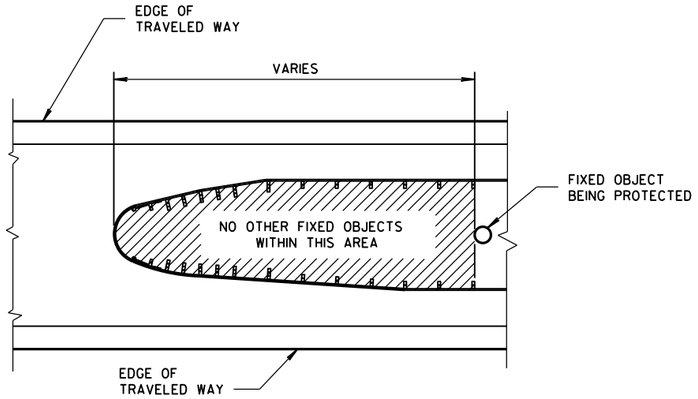
S.D.D. 14 B 26-3a




## HAZARD FREE
## AREA INSIDE BULLNOSE

## GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

[1] SLOTTED THRIE BEAM RAIL NO. 1. ( POST 1 TO POST 1 )

[2A] SLOTTED THRIE BEAM RAIL NO. 2A, ( POST 1 TO POST 5 )

[2B] SLOTTED THRIE BEAM RAIL NO. 2B, ( POST 1 TO POST 5 )

[3] SLOTTED THRIE BEAM RAIL NO. 3. ( POST 5 TO POST 8 )

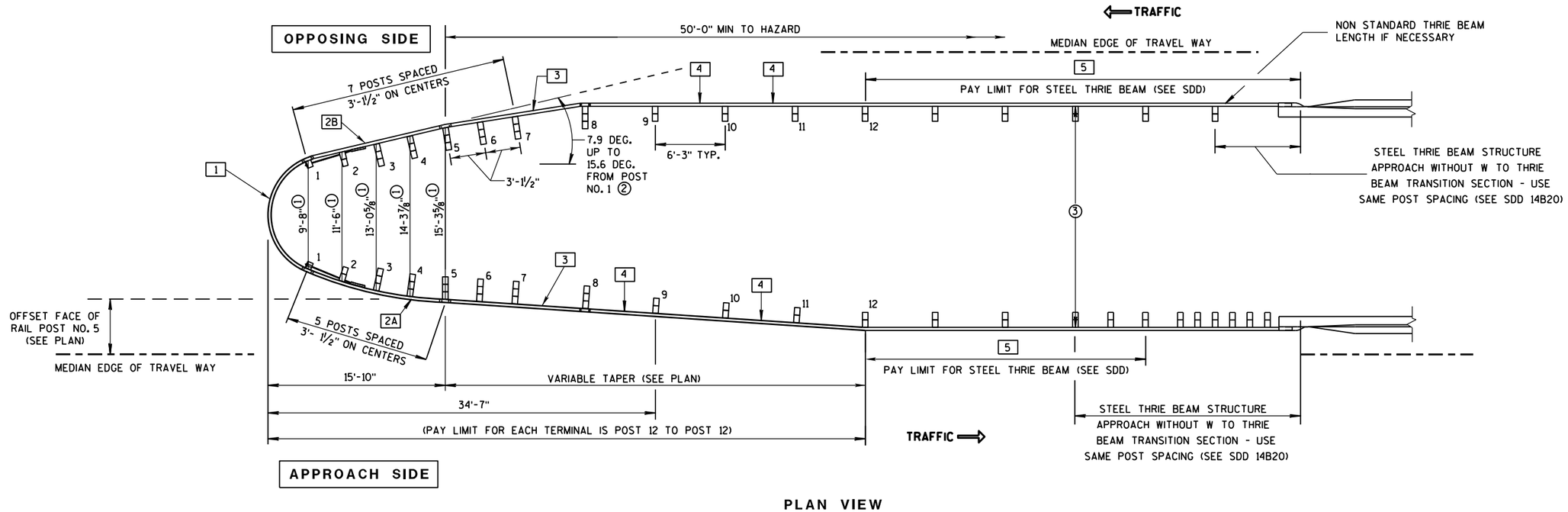
[4] UNBENT STANDARD THRIE-BEAM RAIL NO. 4, ( POST 8 TO POST 10 & POST 10 TO POST 12 )

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST.

② TAPER BEGINNING AT POST NO. 1 MUST CONTINUE TO POST NO. 5. PAST POST NO. 5 TAPER MAY END OR BE EXTENDED UP TO 15.6 DEGREES TO FIT VARIABLE MEDIAN WIDTHS. (SEE PLAN)

③ FOR MEDIANS WIDER THAN 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.




PLAN VIEW

## WIDENED BULLNOSE DESIGN

( INSTALLATION AT TWIN BRIDGES WITH BI-DIRECTIONAL TRAFFIC SHOWN )

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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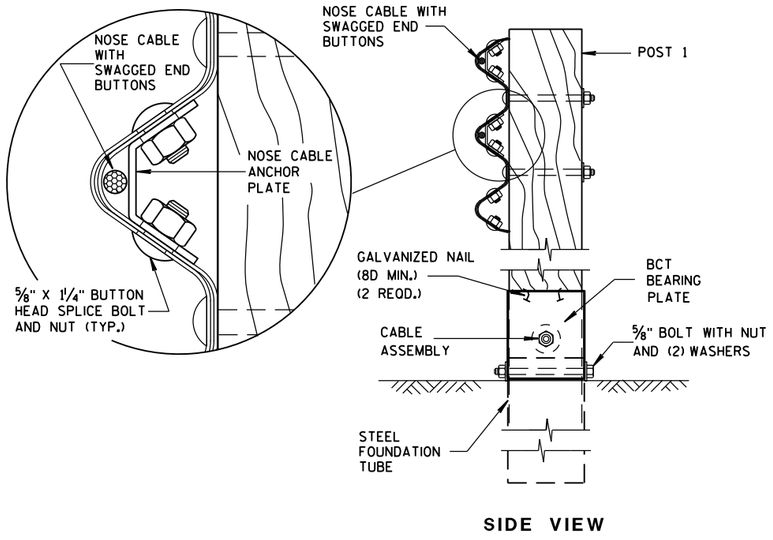
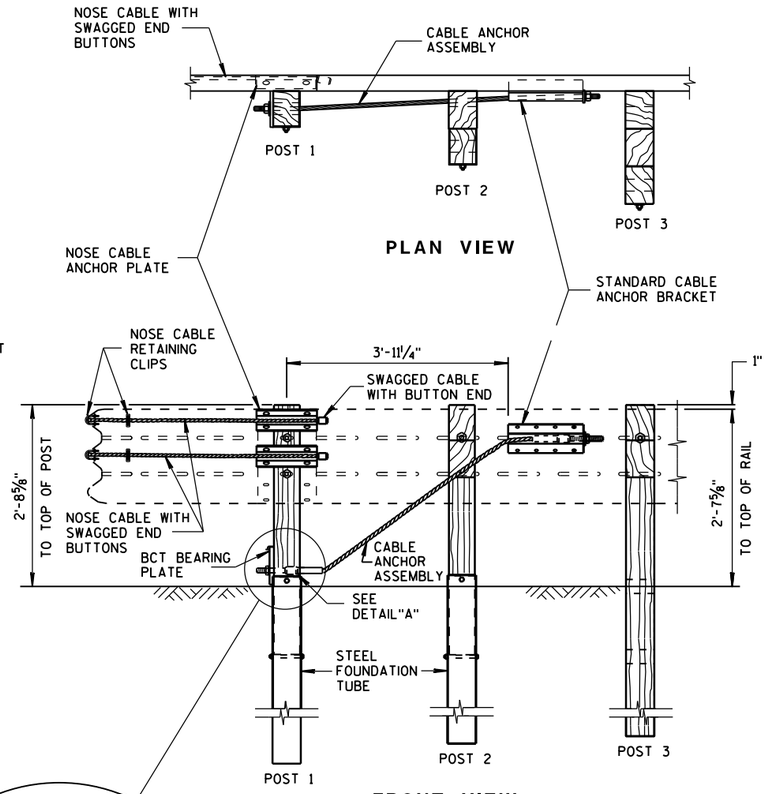
S.D.D. 14 B 26-3b




SIDE VIEW

## NOSE CABLE ASSEMBLY AT POST NO. 1



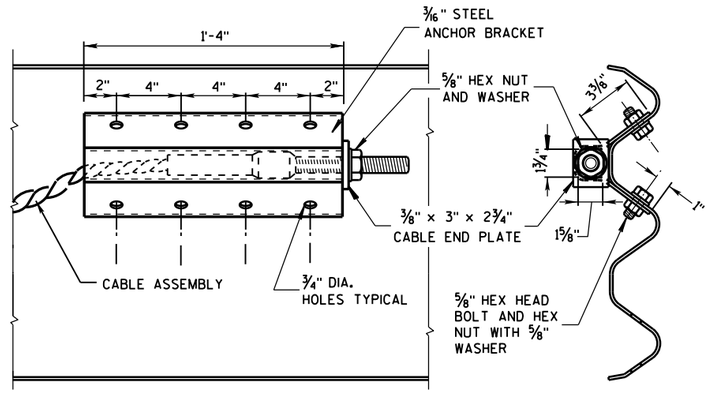

PLAN VIEW

FRONT VIEW

## NOSE CABLE ANCHOR AND STANDARD BRACKET ASSEMBLY

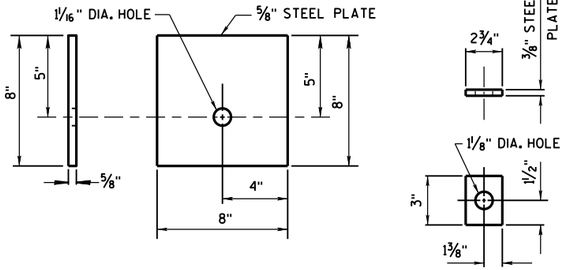
## GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



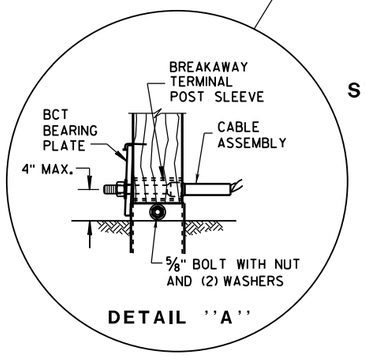

FRONT VIEW END VIEW

## DETAILS OF CABLE ANCHOR BRACKET

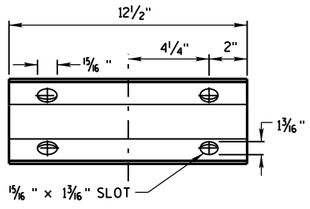



## BCT BEARING PLATE

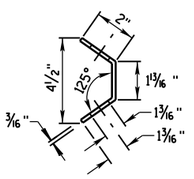
## CABLE END PLATE




DETAIL ''A''



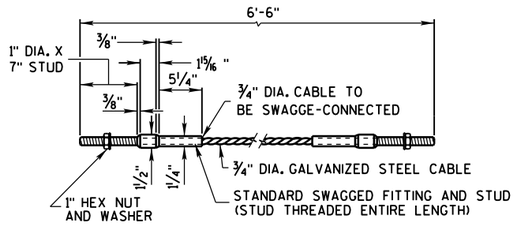

ELEVATION VIEW



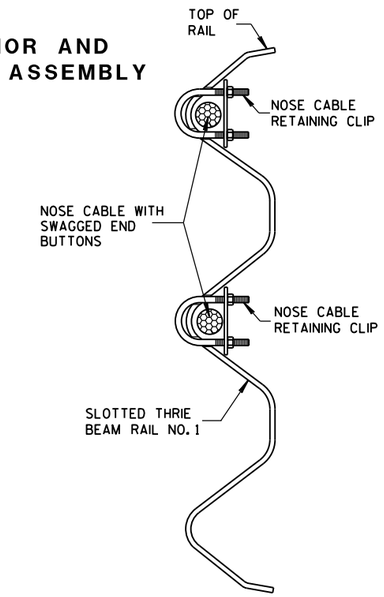

END VIEW

## NOSE CABLE ANCHOR PLATE

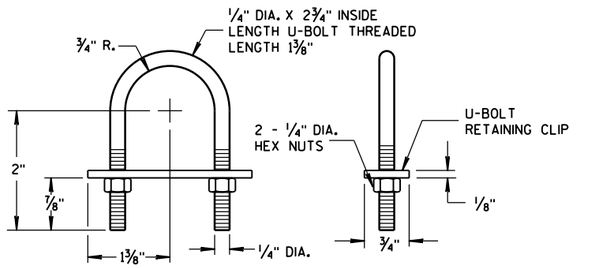
NOTE: 12 1/2" x 5 13/16" x 3/16" STEEL PLATE (A306)



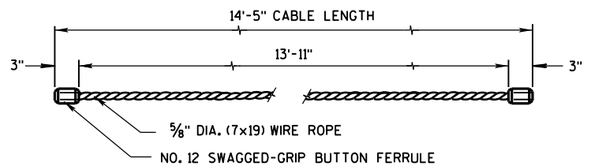

## DETAILS OF CABLE ANCHOR ASSEMBLY




## PLACEMENT OF NOSE CABLE RETAINING CLIP




## NOSE CABLE RETAINING CLIP




## NOSE CABLE WITH SWAGGED END BUTTONS

TO PULL OFF SWAGGED GRIP BUTTON FERRULE FROM WIRE ROPE REQUIRES A FORCE EQUAL TO 98% OF THE WIRE ROPE'S BREAKING STRENGHT.

STEEL THRIE BEAM BULLNOSE TERMINAL

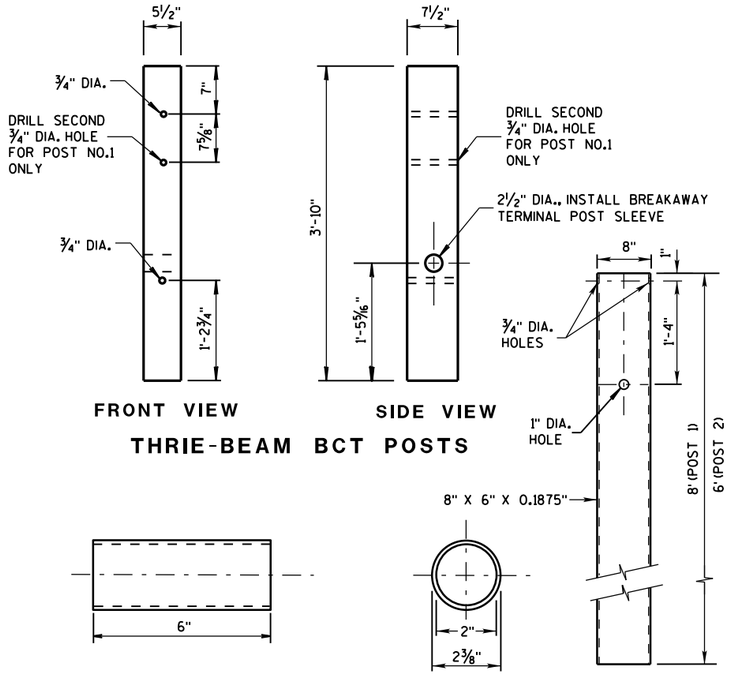
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI







S.D.D. 14 B 26-3c



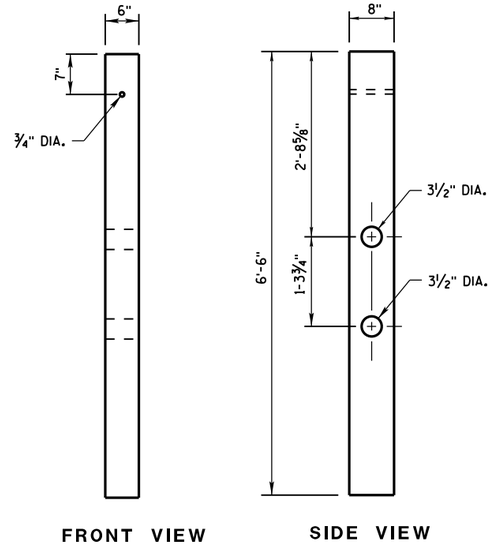

## THRIE-BEAM BCT POSTS




## BREAKAWAY TERMINAL POST SLEEVE



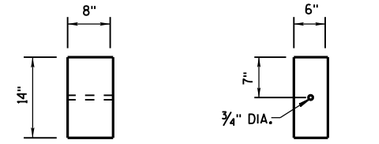

## STEEL FOUNDATION TUBE



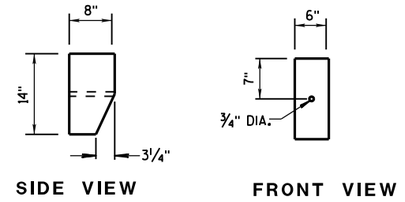

## THRIE-BEAM CRT WOOD POSTS

## GENERAL NOTES

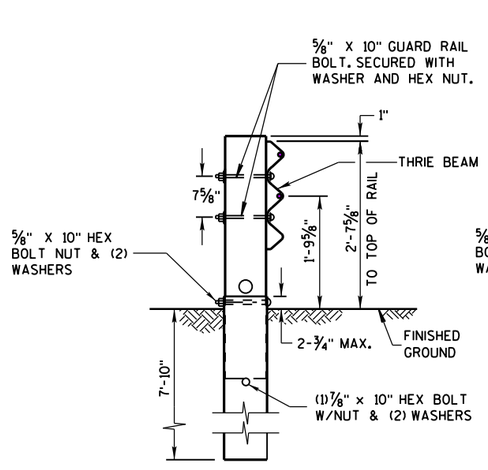
SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.




## STANDARD WOOD BLOCK

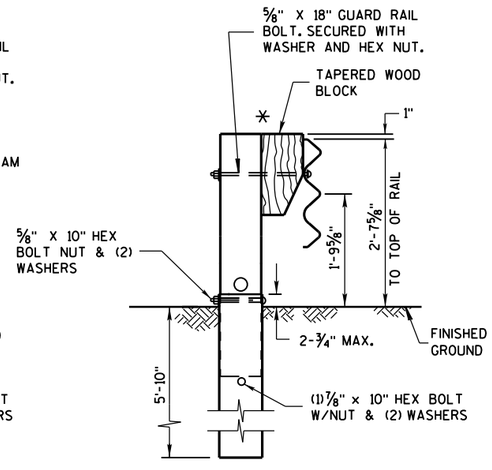



## TAPERED WOOD BLOCK



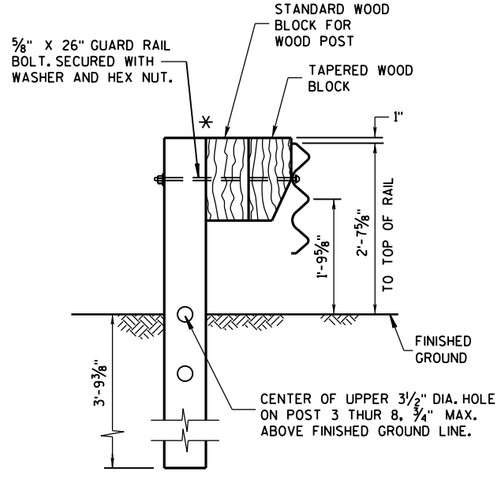

## THRIE-BEAM BCT POST
### (WITH 8'-0" FOUNDATION TUBE)

POST NO. 1



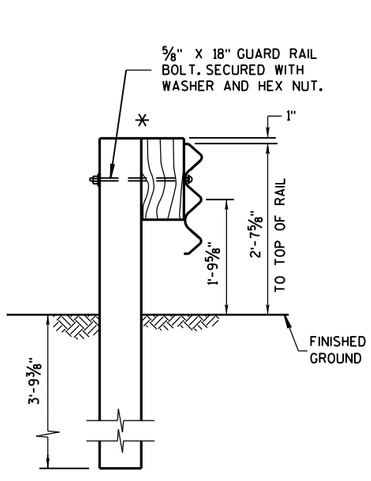

## THRIE-BEAM BCT POST
### (WITH 6'-0" FOUNDATION TUBE AND 1'-2" TAPERED BLOCK)

POST NO. 2




## THRIE-BEAM CRT POST
### (6'-6" LONG POST WITH 1'-2" BLOCK AND 1'-2" TAPERED BLOCK)

POST NO. 3,4,5,6,7, & 8




## THRIE-BEAM POST
### (6'-6" LONG POST WITH 1'-2" BLOCK)

POST NO. 9,10,11,& 12

(ALSO USE FOR STEEL THRIE BEAM BEYOND POST 12)

* IF NEEDED DUE TO AN UNDERGROUND OBSTACLE ADD 1 ADDITIONAL STANDARD BLOCKOUT TO POST.

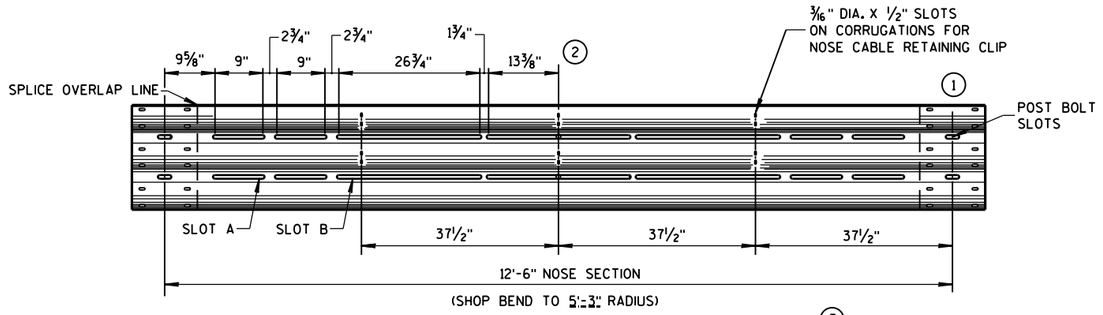
**STEEL THRIE BEAM BULLNOSE TERMINAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

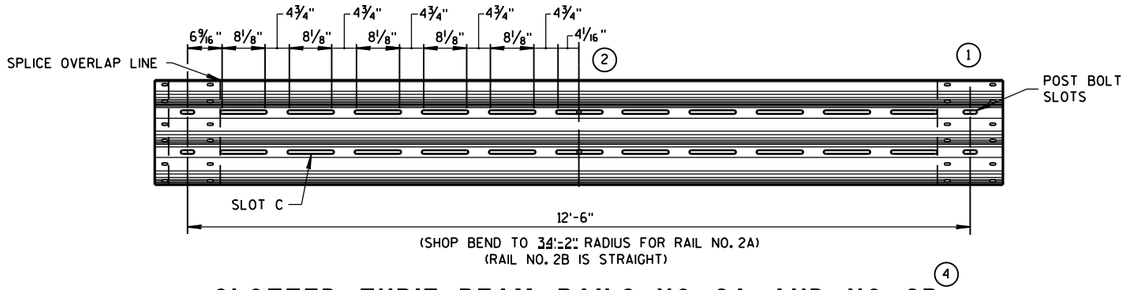



6

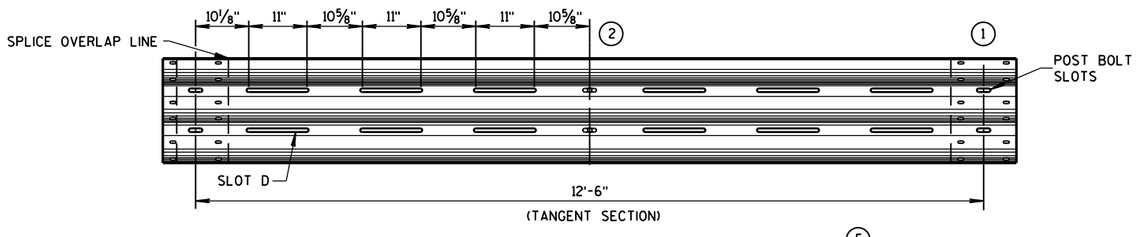

S.D.D. 14 B 26-3d



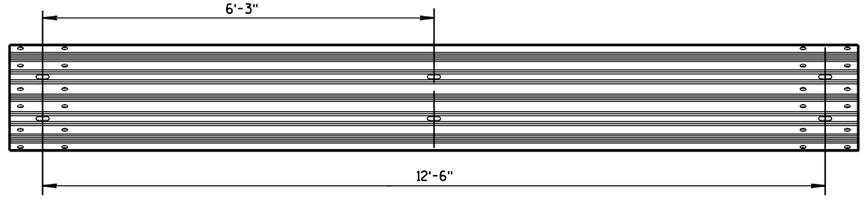

## SLOTTED THRIE BEAM RAIL NO. 1 (3)




## SLOTTED THRIE BEAM RAILS NO. 2A AND NO. 2B (4)




## SLOTTED THRIE BEAM RAIL NO. 3 (5)




## UNBENT STANDARD THRIE BEAM RAIL NO. 4 AND NO. 5

## GENERAL NOTES

SEE STANADRD DETAIL DRAWINGS 14 B 26a-e.

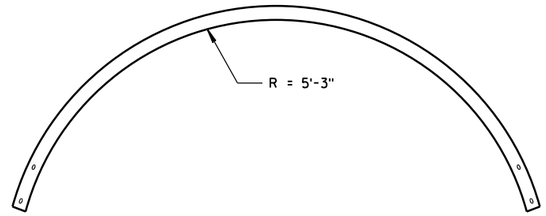
(1) SLOTTED THRIE BEAM RAIL DIMENSIONS SHOWN ARE BEFORE BENDING TO THE RADIUS SHOWN.

(2) SLOT SIZE AND SPACING SYMMETRIC.

(3) SLOTTED THRIE BEAM RAIL NO. 1, 12'-6", SHOP BEND TO R=5'-3".

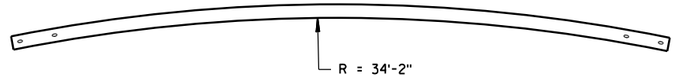
(4) SLOTTED THRIE BEAM RAIL NO. 2A, 12'-6", SHOP BEND TO R=34'-2".
SLOTTED THRIE BEAM RAIL NO. 2B, 12'-6", RAIL IS STRAIGHT.

(5) SLOTTED THRIE BEAM RAIL NO. 3, 12'-6", TANGENT.



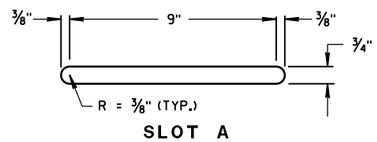

PLAN VIEW

## SLOTTED THRIE BEAM RAIL NO. 1

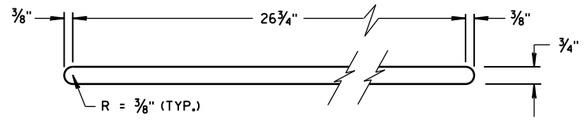



PLAN VIEW

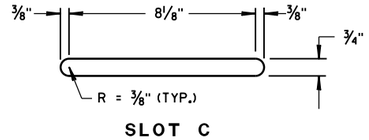
## SLOTTED THRIE BEAM RAIL NO. 2A



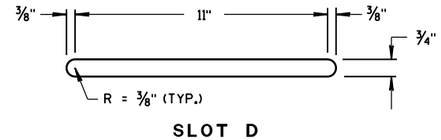

SLOT A




SLOT B




SLOT C




SLOT D

## SLOT DETAILS

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



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S.D.D. 14 B 26-3e

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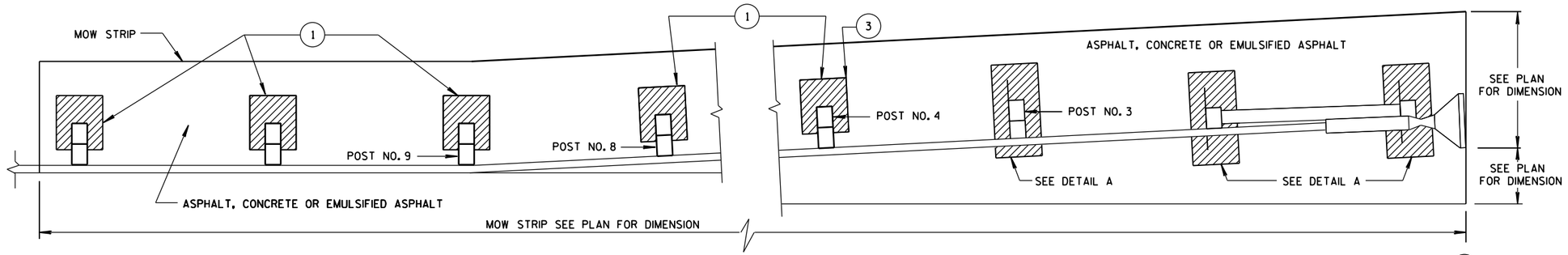
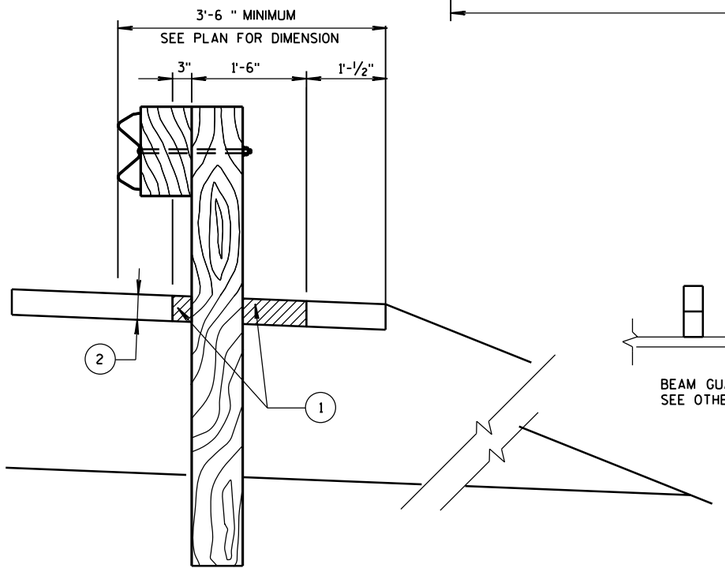
S.D.D. 14 B 26-3e

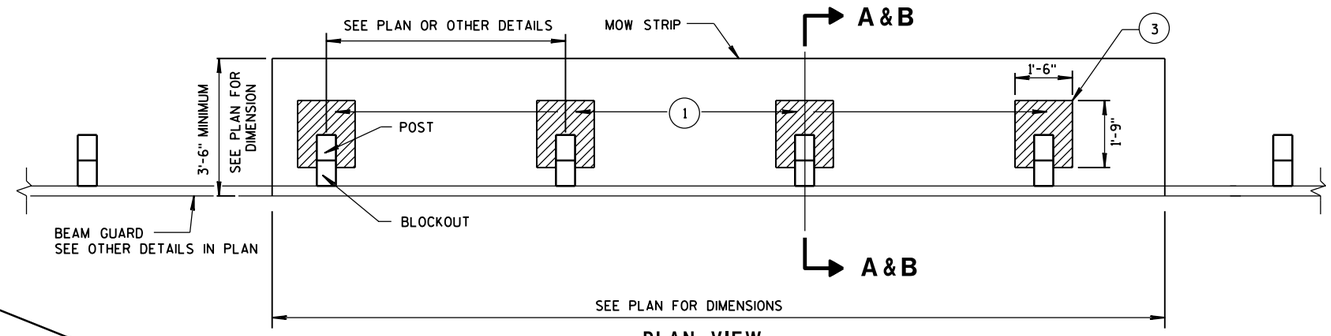



PLAN VIEW

## MOW STRIP LAYOUT FOR ENERGY ABORBING TERMINAL

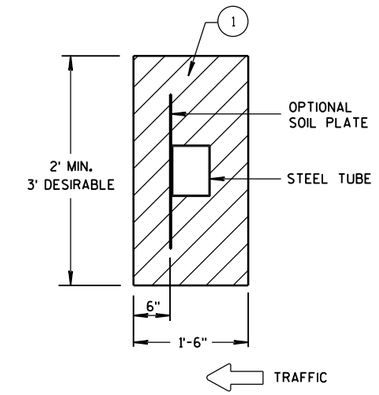



SECTION A-A

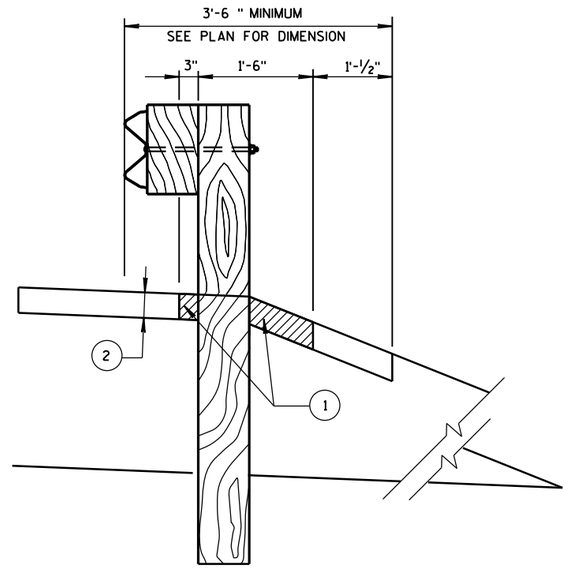



PLAN VIEW

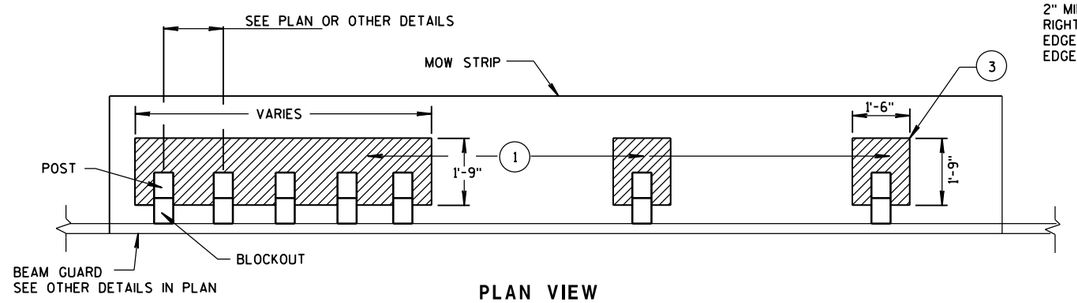
## MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT




DETAIL A

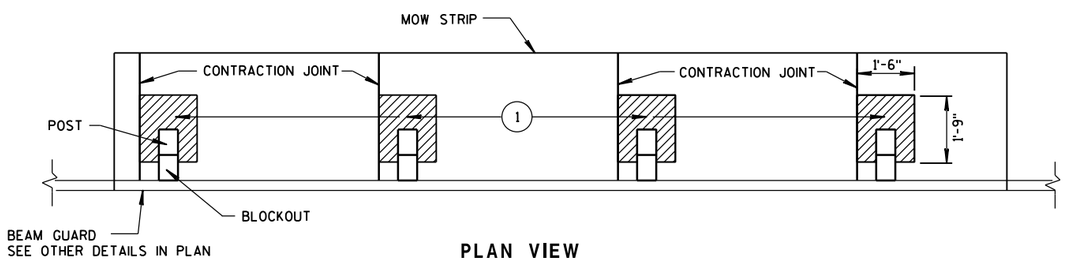



SECTION B-B



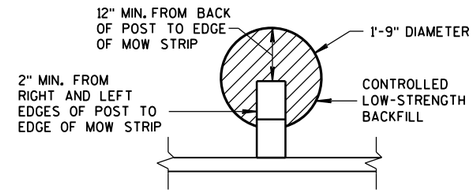

PLAN VIEW

## MOW STRIP FOR TIGHT SPACING LAYOUT




PLAN VIEW

## JOINT PLACEMENT FOR CONCRETE MOW STRIP




ALTERNATIVE HMA
MOW STRIP DESIGN

(1) CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.

(2) DEPTH OF MOW STRIP:
ASPHALT - 4"
CONCRETE - 4"
EMULSIFIED ASPHALT - 1" OR LESS

(3) FOR EMULSIFIED ASPHALT MOW STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS.)

# GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



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S.D.D. 14 B 28-3

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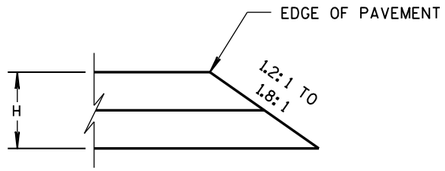
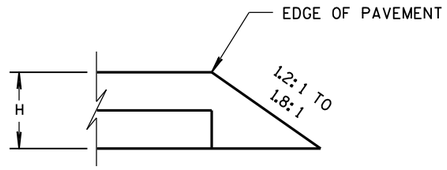
S.D.D. 14 B 28-3



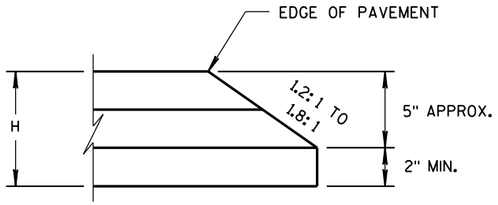

CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



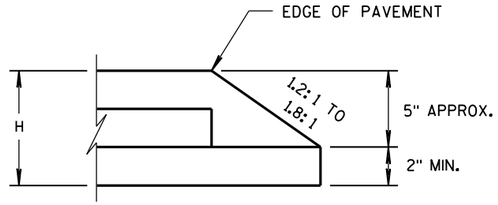

CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS




CONSTRUCTED WITH FINAL TWO LAYERS

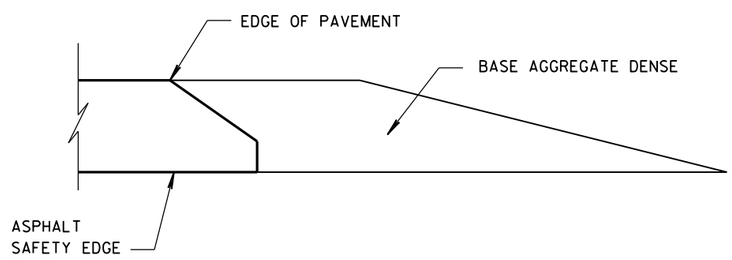
FOR H GREATER THAN 5"




CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

## HMA PAVEMENT AND HMA OVERLAYS




## FINISHED SHOULDER AGGREGATE PLACEMENT

6

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

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.

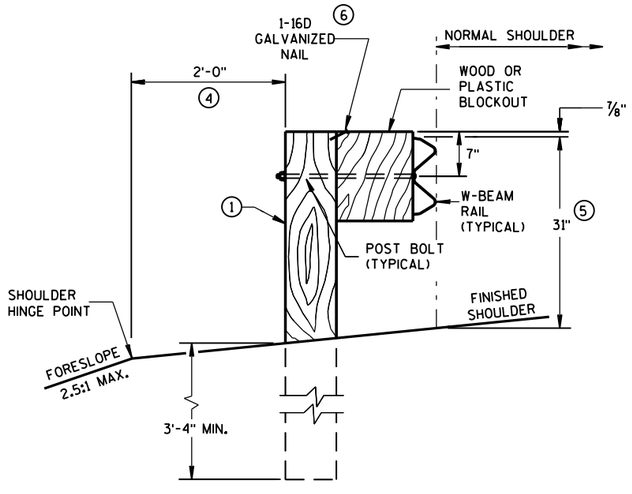
② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

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).

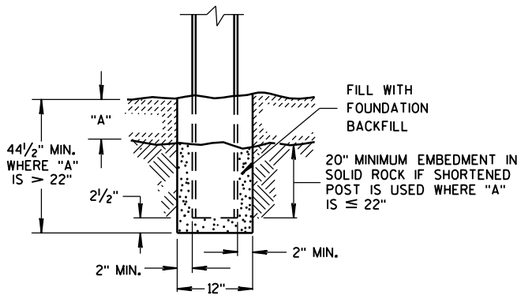
⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

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.



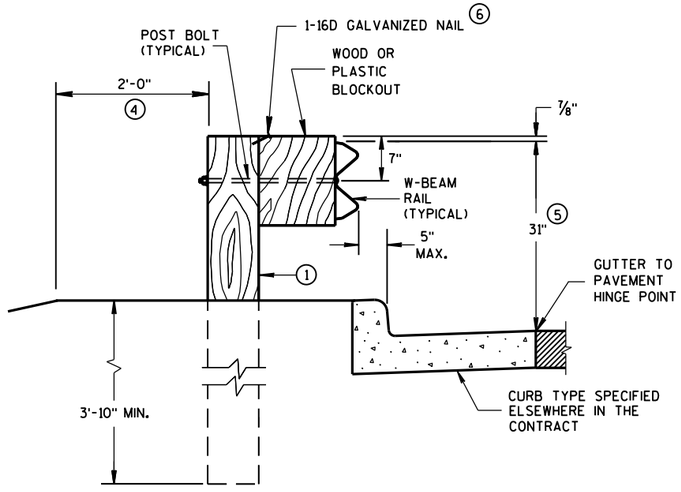

END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



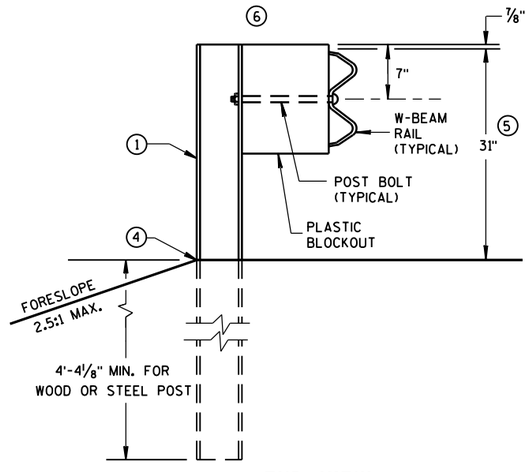

END VIEW

SETTING STEEL OR WOOD POST IN ROCK ③



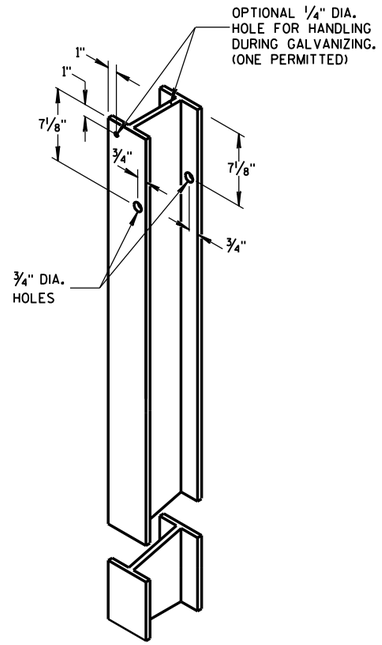

END VIEW

LOCATED ALONG A CURBED ROADWAY

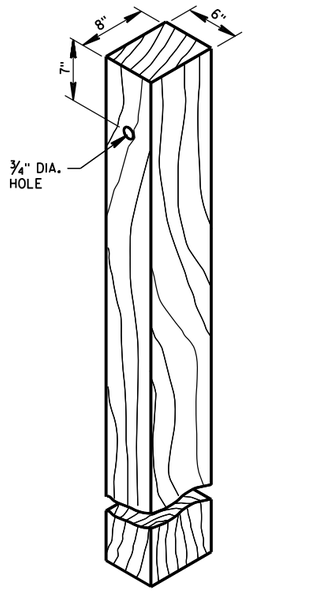



END VIEW

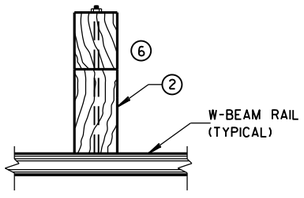
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



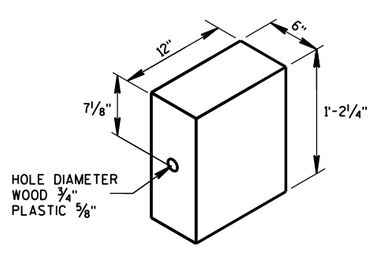

STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



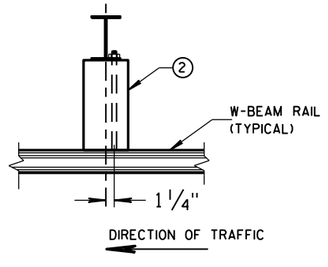

WOOD POST
(6" X 8") NOMINAL ①




PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM




WOOD OR
PLASTIC BLOCKOUT ②




PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

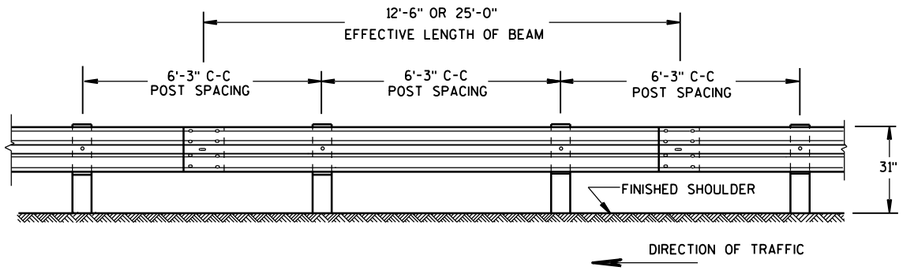
MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



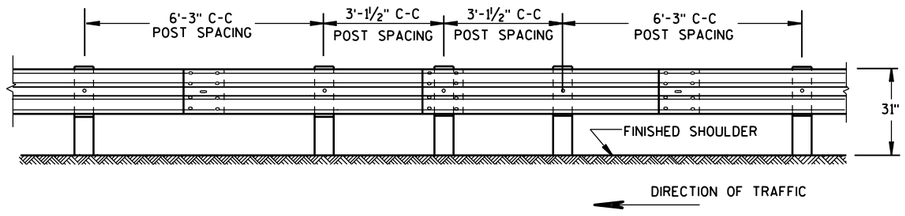


6
S.D.D. 14 B 42-5a



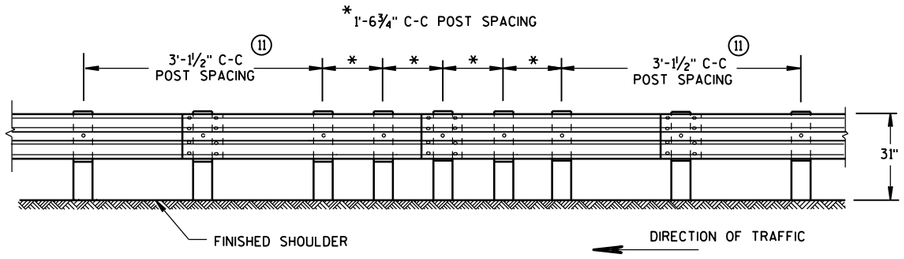

FRONT VIEW

## POST SPACING STANDARD INSTALLATION



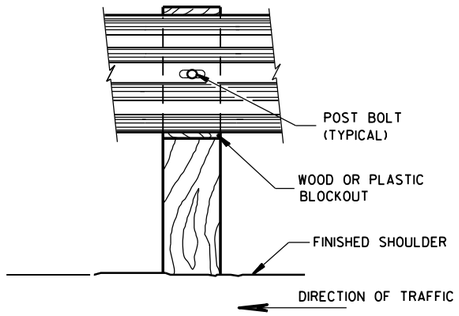

FRONT VIEW

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

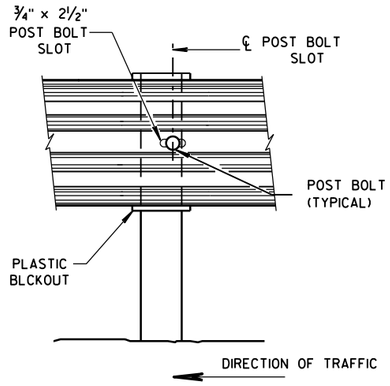



FRONT VIEW

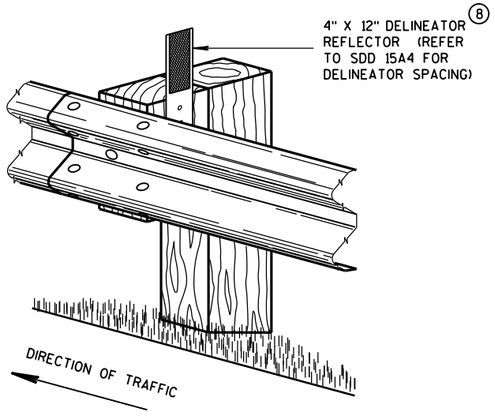
## QUARTER POST SPACING (QS)




FRONT VIEW AT WOOD POST




FRONT VIEW AT STEEL POST




## ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

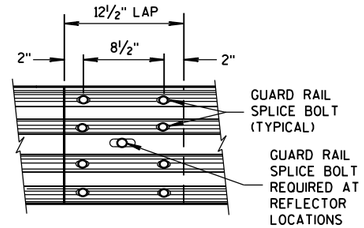
## GENERAL NOTES

(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.

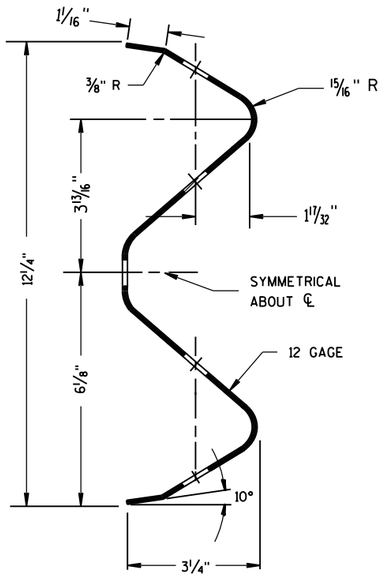
(11) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.




FRONT VIEW
MID-SPAN BEAM SPLICE




SECTION THRU W-BEAM RAIL

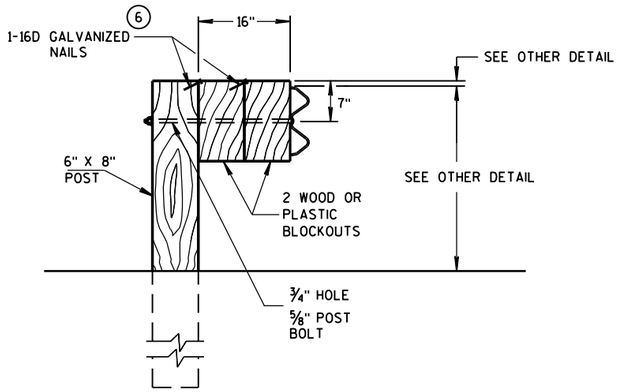
MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO



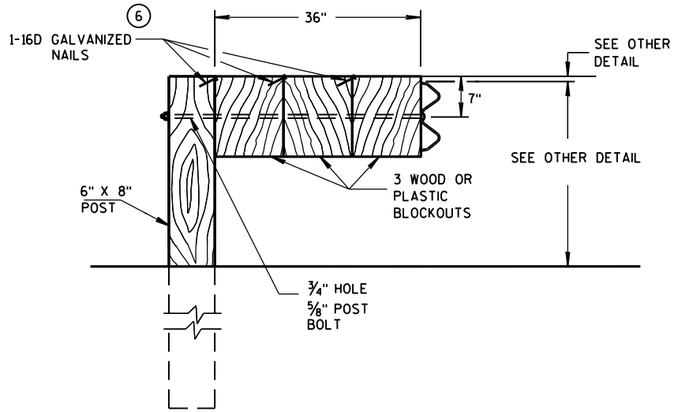

6


S.D.D. 14 B 42-5b




## DETAIL FOR 16" BLOCKOUT DEPTH

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

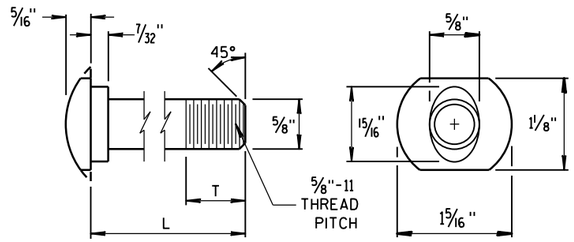



## DETAIL FOR 36" BLOCKOUT DEPTH

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

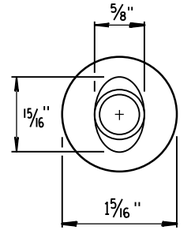
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

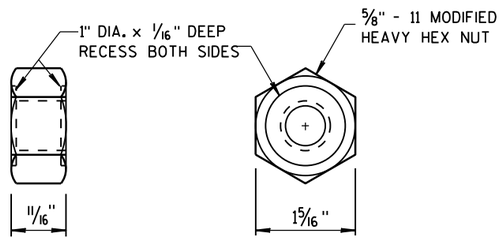



### POST BOLT TABLE

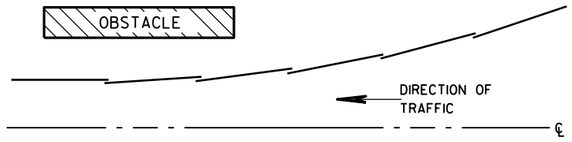
| L | T (MIN.) |
|---|---|
| 1 1/4" | 1 1/8" |
| 2" | 1 3/4" |
| 10" | 4" |
| 14" | 4 1/16" |
| 18" | 4" |
| 21" | 4 1/16" |
| 25" | 4" |




ALTERNATE BOLT HEAD

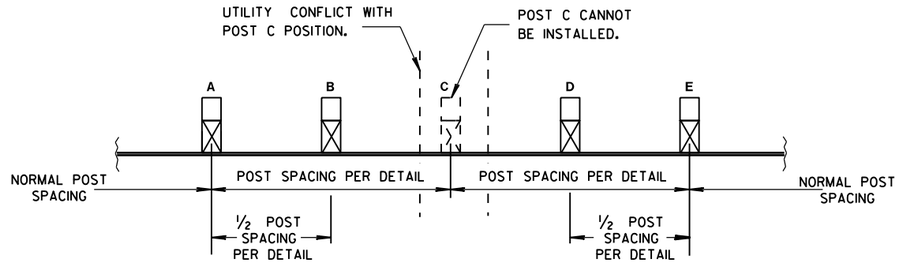



## POST BOLT, SPLICE BOLT AND RECESS NUT

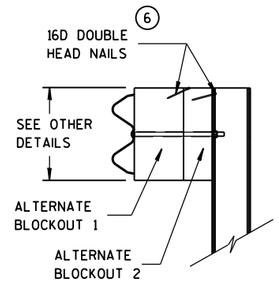



PLAN VIEW

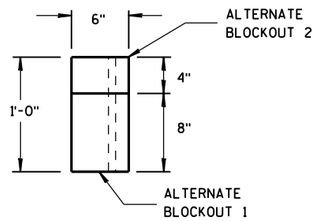
## BEAM LAPPING DETAIL




## POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION




SIDE VIEW




TOP VIEW

## ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI




6

S.D.D. 14 B 42-5c

## 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.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

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

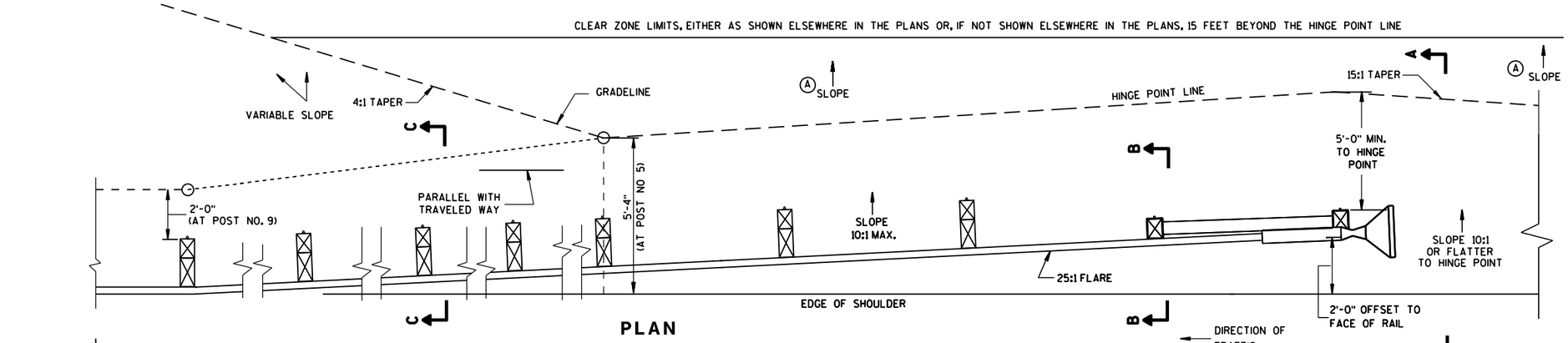
SEE SDD 14B42 FOR MORE INFORMATION.

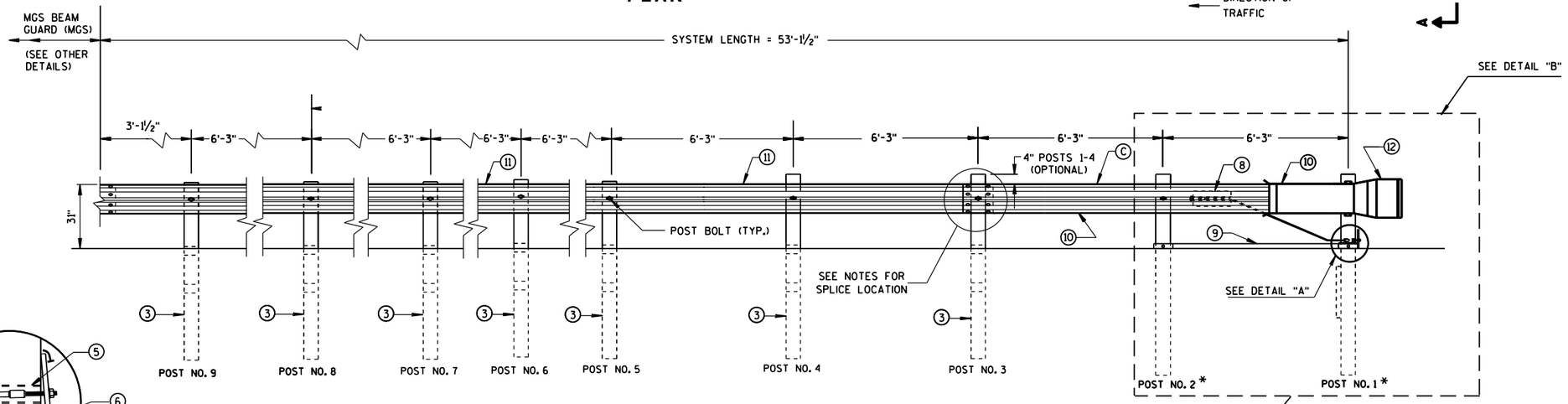
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

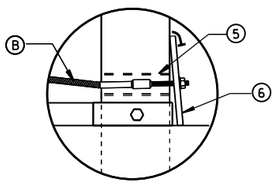
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

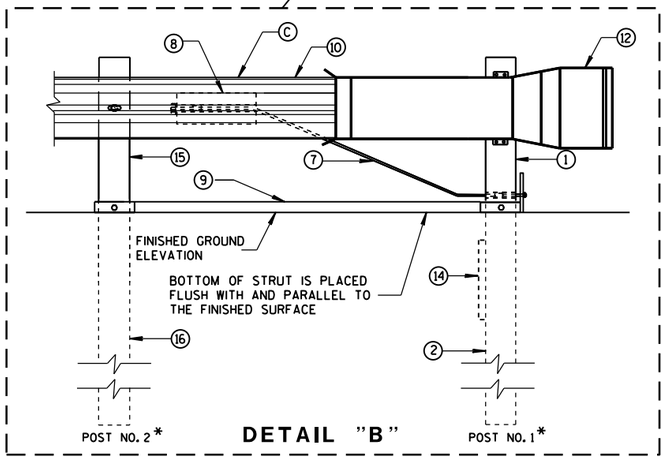
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

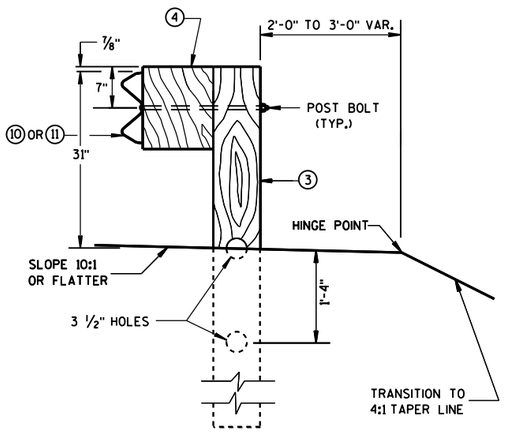
THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.



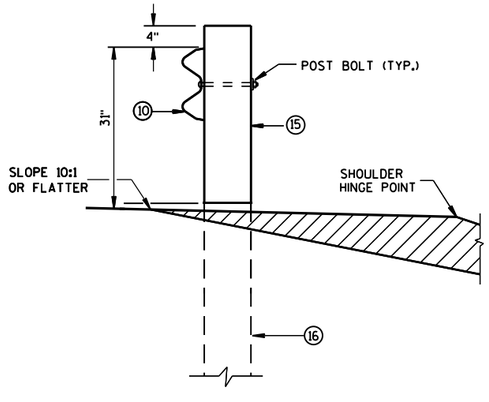



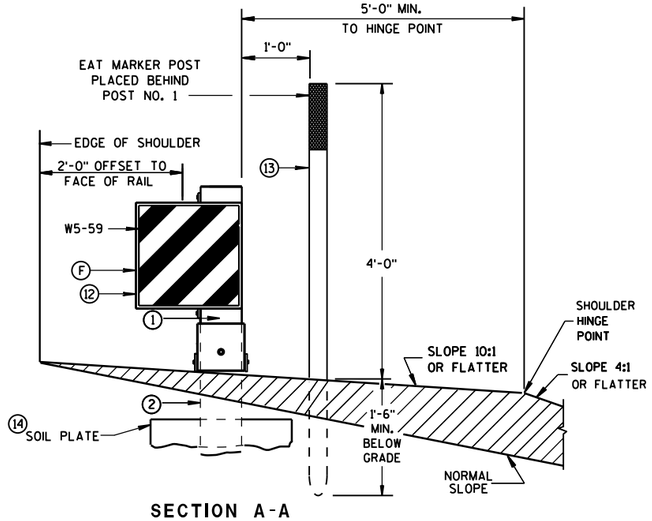




SECTION C-C
TYPICAL AT POST NOS. 3-9




SECTION B-B
TYPICAL AT POST NO. 2*




SECTION A-A
TYPICAL AT POST NO. 1*

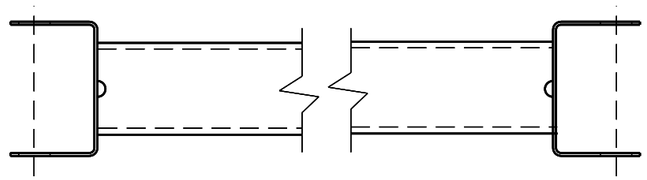
| MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) | |
|---|---|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPO | 160 |

6

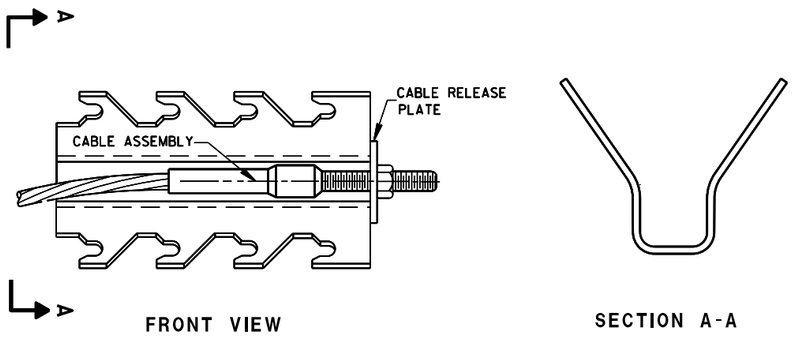
S.D.D. 14 B 44-3a

6

S.D.D. 14 B 44-3a



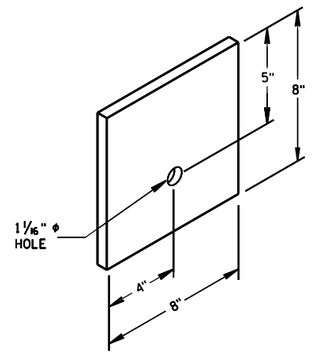
GENERIC GROUND STRUT (9) (H)




GENERIC ANCHOR CABLE BOX (8) (H)

## BILL OF MATERIALS

| PART NO. | DESCRIPTION<br>MATERIALS PROVIDED BY MGS EAT MANUFACTURER.<br>SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION. |
|---|---|
| (1) | UPPER POST NO. 1 6" X 6" TUBE |
| (2) | LOWER POST NO. 1 |
| (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) | IMPACT HEAD |
| (13) | EAT MARKER POST - YELLOW<br>(SEE APPROVED PRODUCTS LIST) |
| (14) | SOIL PLATE |
| (15) | UPPER POST NO. 2 |
| (16) | LOWER POST NO. 2 |




BEARING PLATE (6)

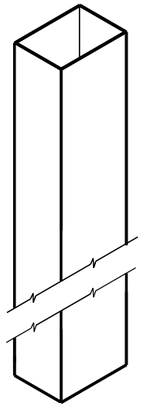
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

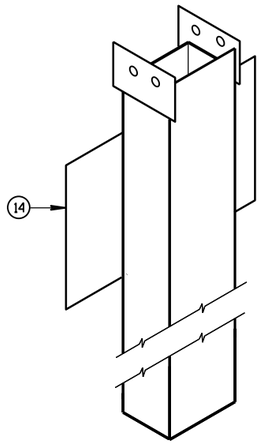



6

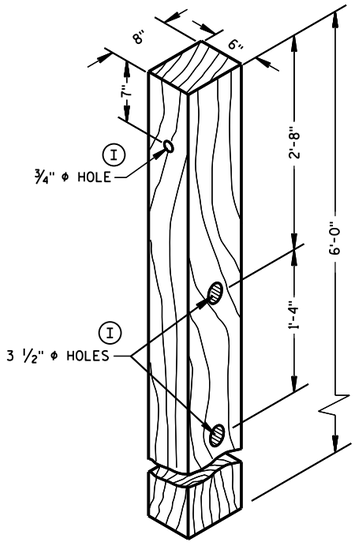

S.D.D. 14 B 44-3b



UPPER POST NO. 1 (1)

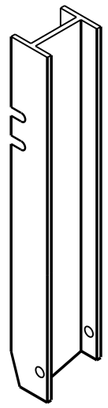



LOWER POST NO. 1 (2)

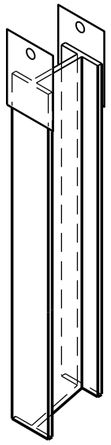



POSTS NUMBER 3-9

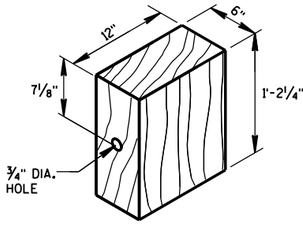
WOOD CRT POST (3)



UPPER POST NO. 2 (15)

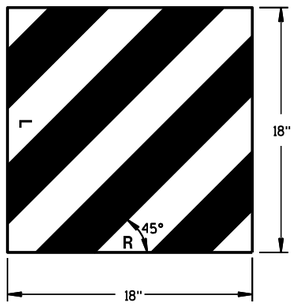


LOWER POST NO. 2 (16)



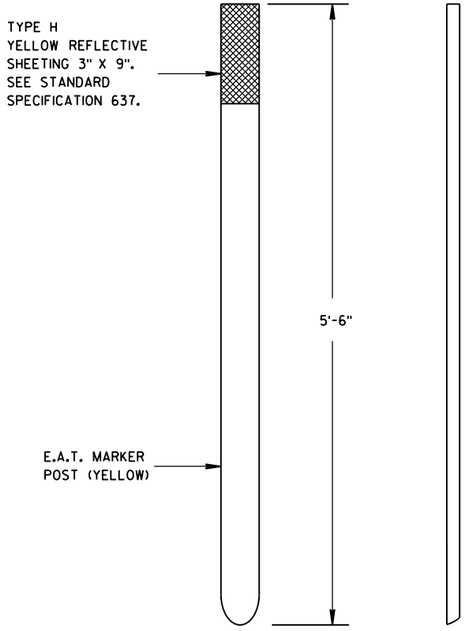

WOOD BLOCKOUT (4)

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



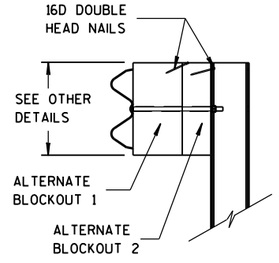

W5-59

REFLECTIVE SHEETING DETAIL (H)

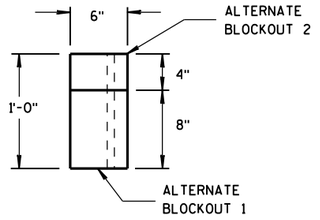



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)




SIDE VIEW




TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERVISOR

FHWA

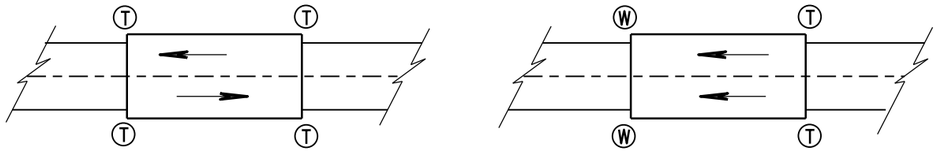




6



S.D.D. 14 B 44-3c




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

## GENERAL NOTES

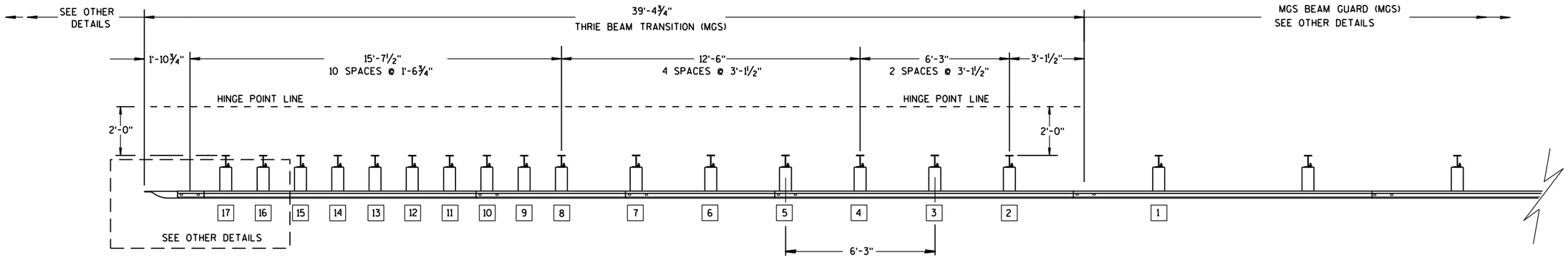
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

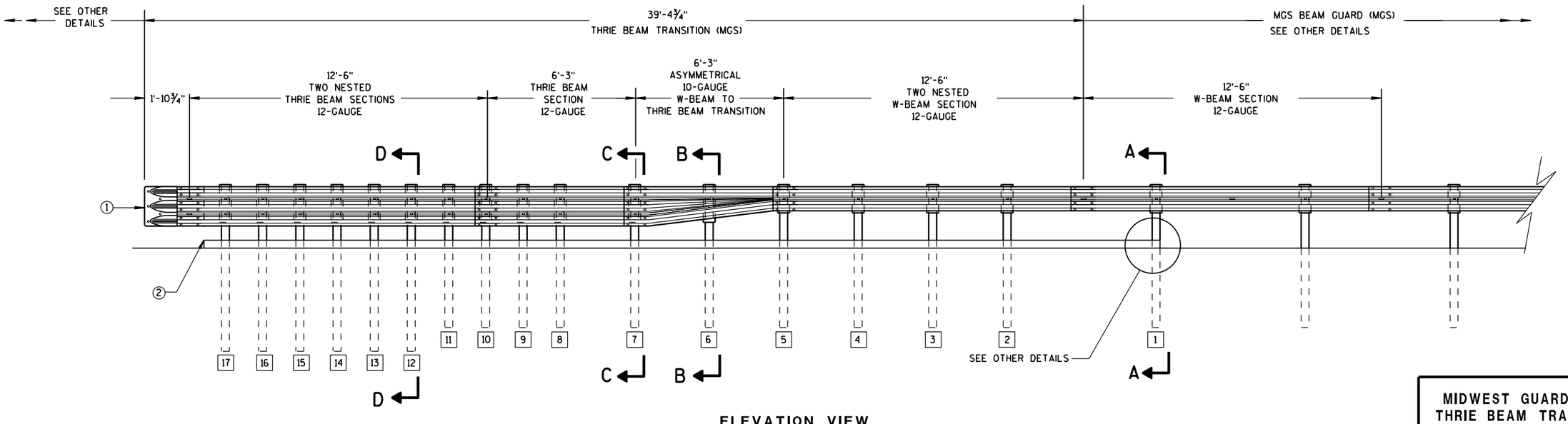
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

(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

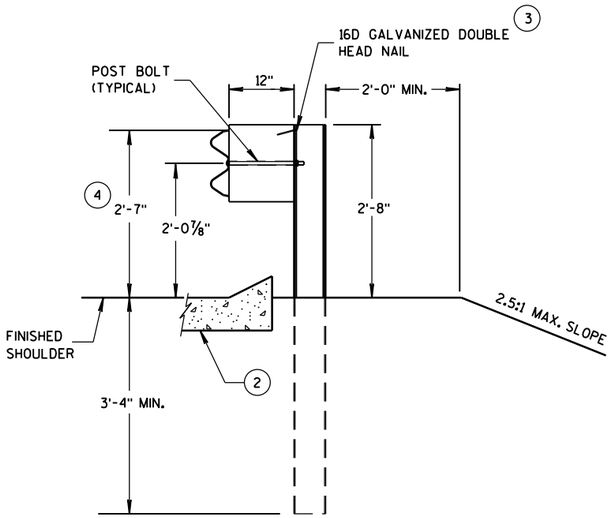
S.D.D. 14 B 45-4a

## GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE_FEATURE SEE PLAN FOR INFORMATION.

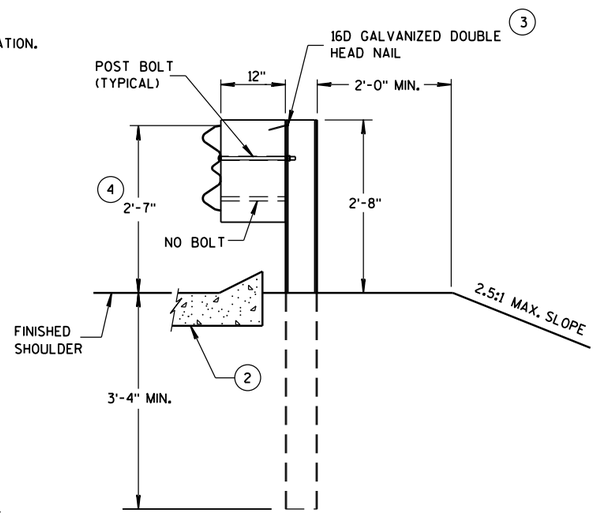
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



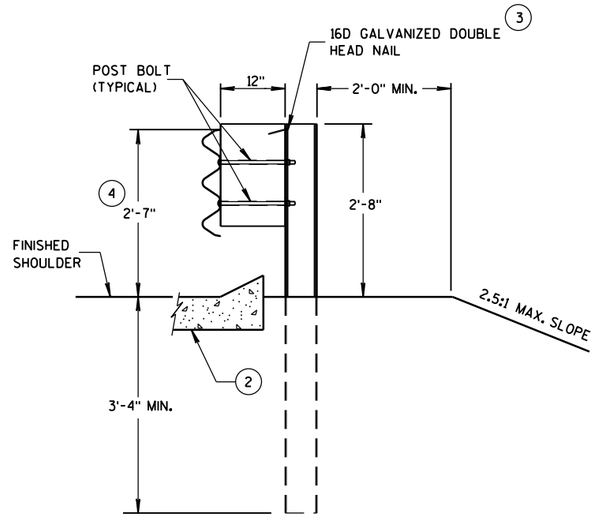

SECTION A-A

**POSTS 1-5**



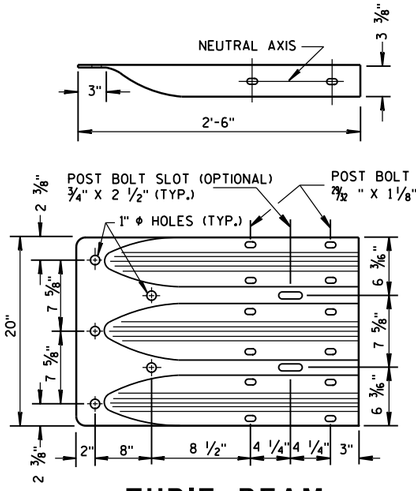

SECTION B-B

**POST 6**




SECTION C-C

**POSTS 7-11**




**THRIE BEAM TERMINAL CONNECTOR**

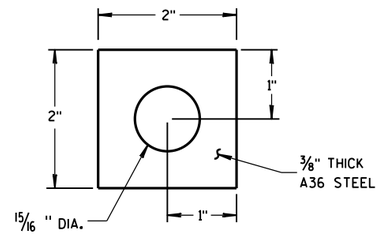
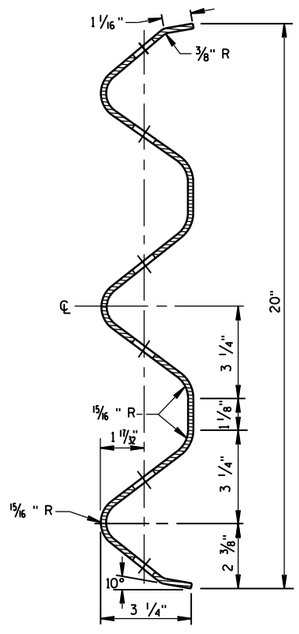
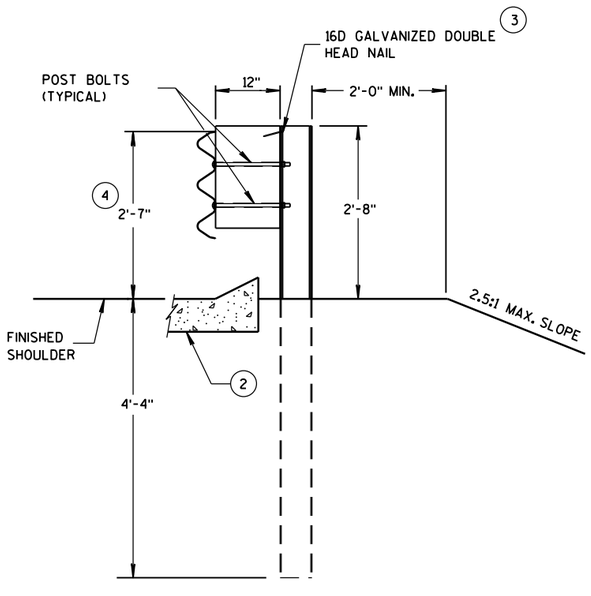



**PLATE WASHER DETAIL**

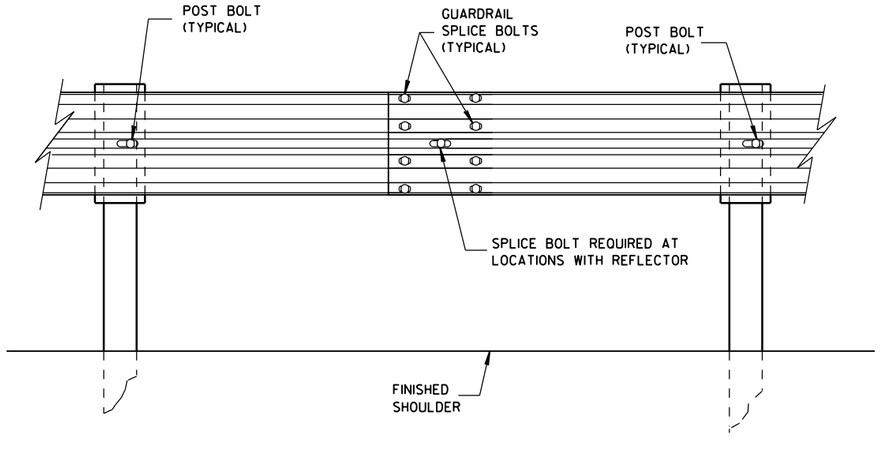



**SECTION THRU THRIE BEAM RAIL ELEMENT**




SECTION D-D

**POSTS 12-17**




**SPLICE DETAIL**

**MIDWEST GUARDRAIL SYSTEM**
**THRIE BEAM TRANSITION (MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

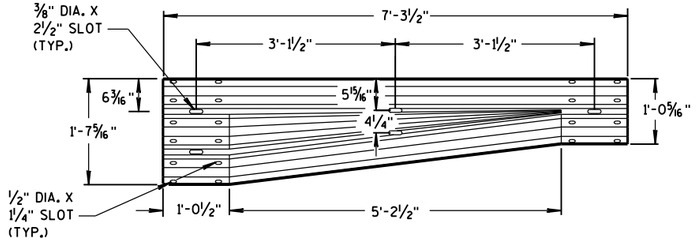




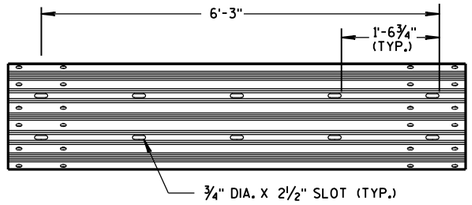


6

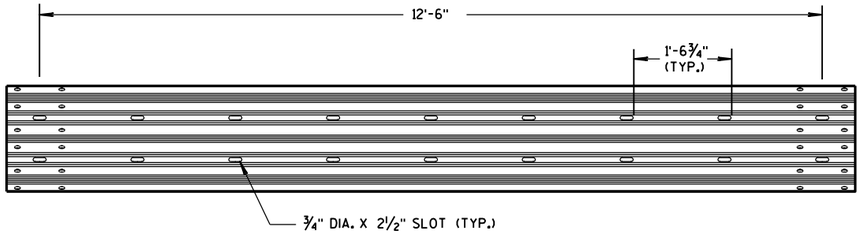
S.D.D. 14 B 45-4b



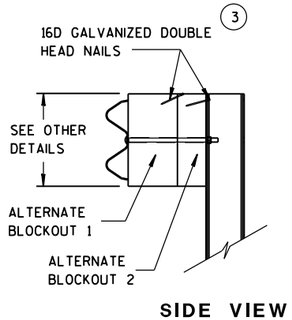

## W-BEAM TO THRIE BEAM TRANSITION SECTION



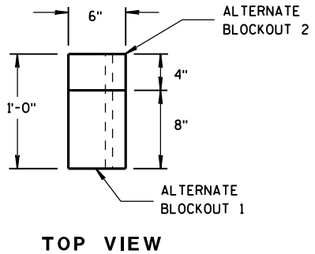

## 6'-3" THRIE BEAM SECTION




## 12'-6" THRIE BEAM SECTION

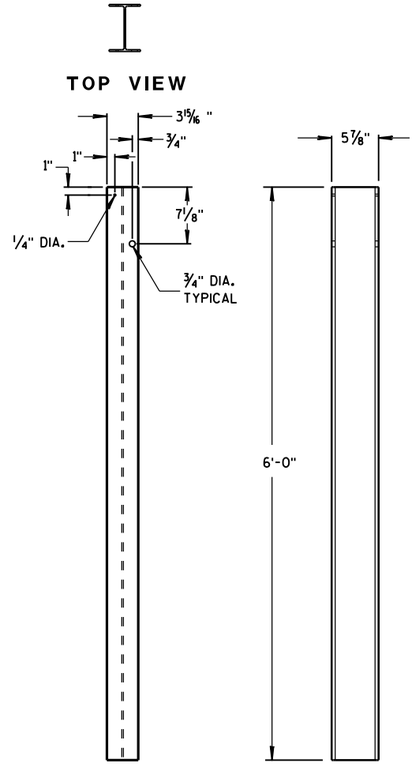



SIDE VIEW



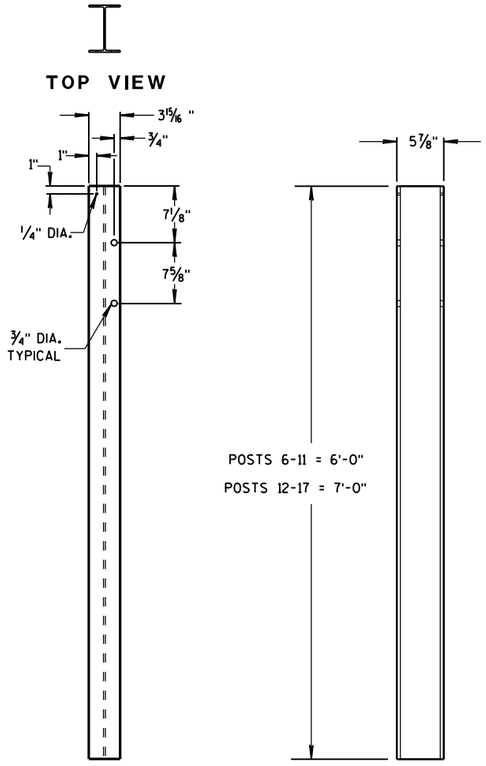

TOP VIEW

## ALTERNATE WOOD BLOCKOUT DETAIL



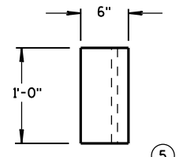

FRONT VIEW SIDE VIEW

## STEEL POSTS 1-5

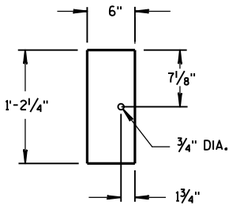



FRONT VIEW SIDE VIEW

## STEEL POSTS 6-17

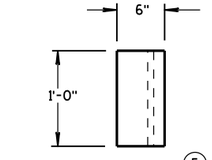



TOP VIEW

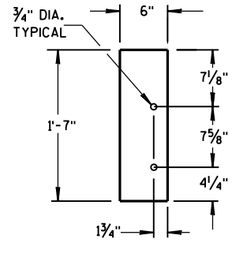



FRONT VIEW

## BLOCKOUT POSTS 1-5




TOP VIEW




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.

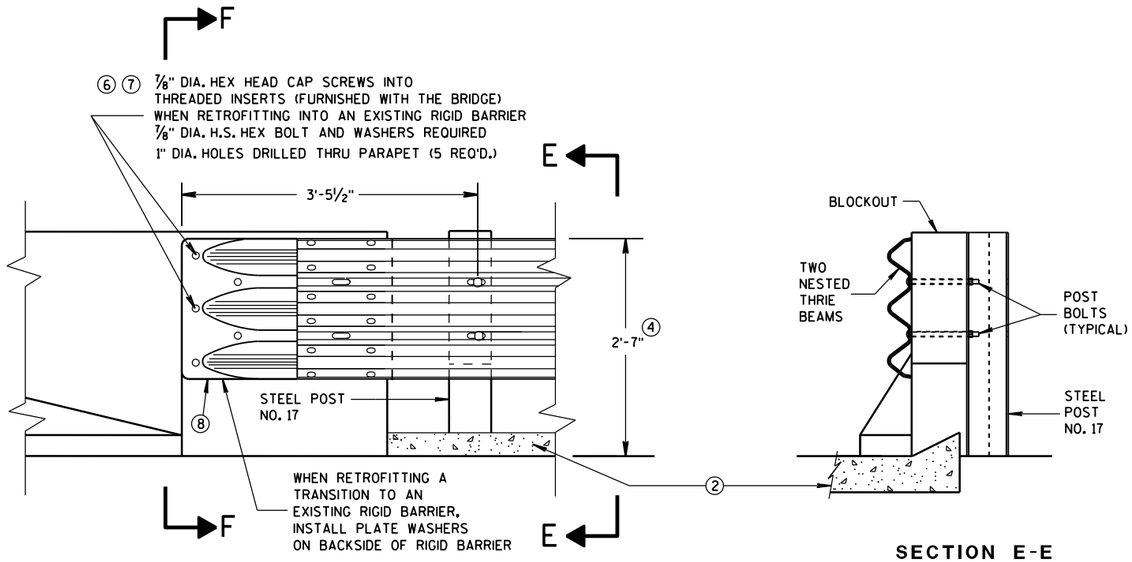
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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.

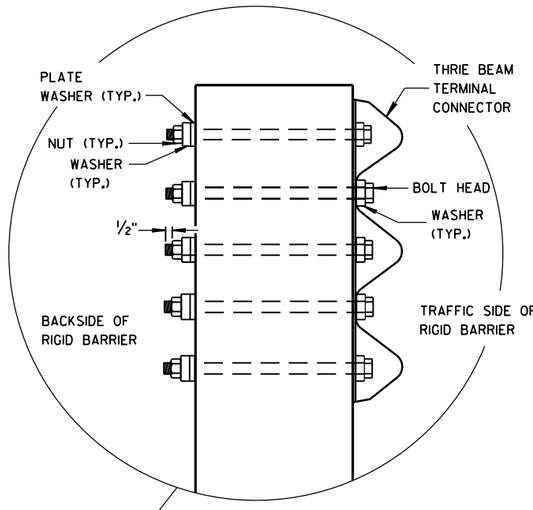
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

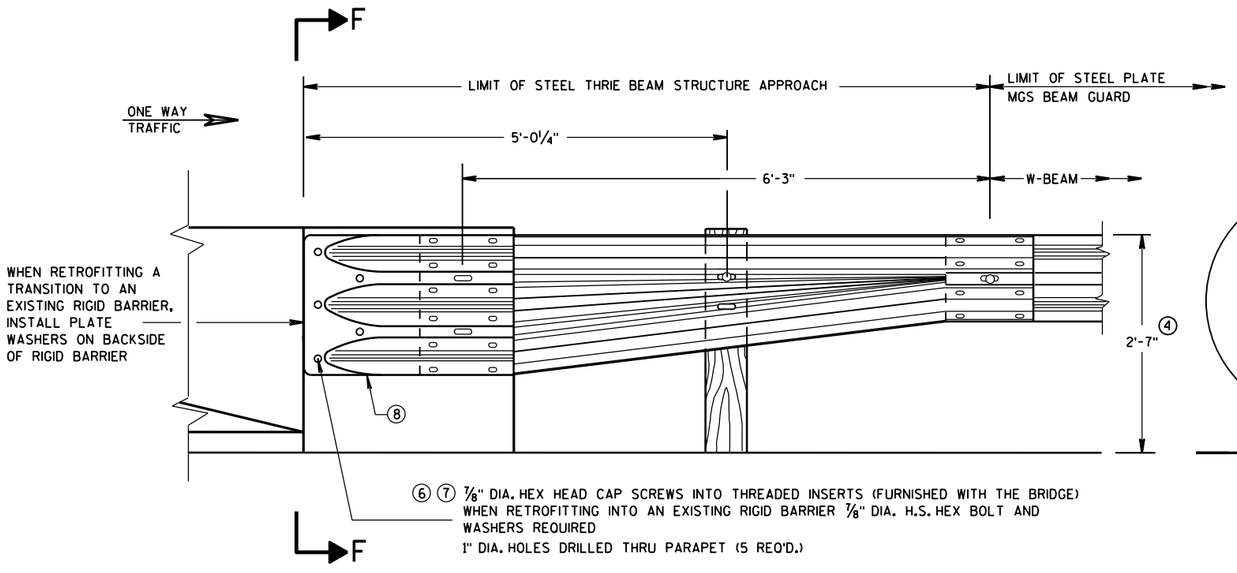
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

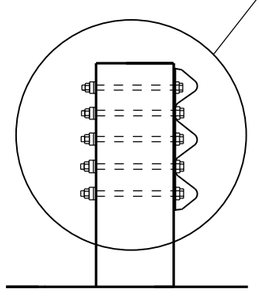
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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".

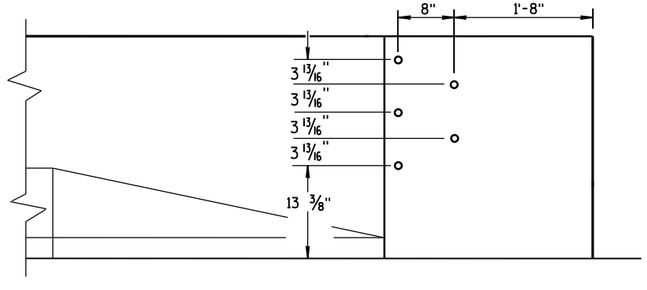



FRONT VIEW



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
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER



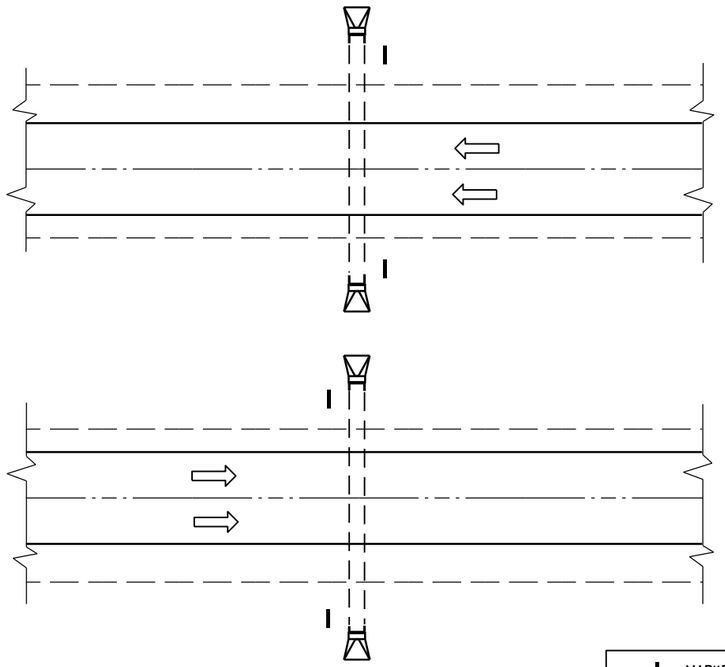
NT

6

S.D.D. 14 B 45-4d

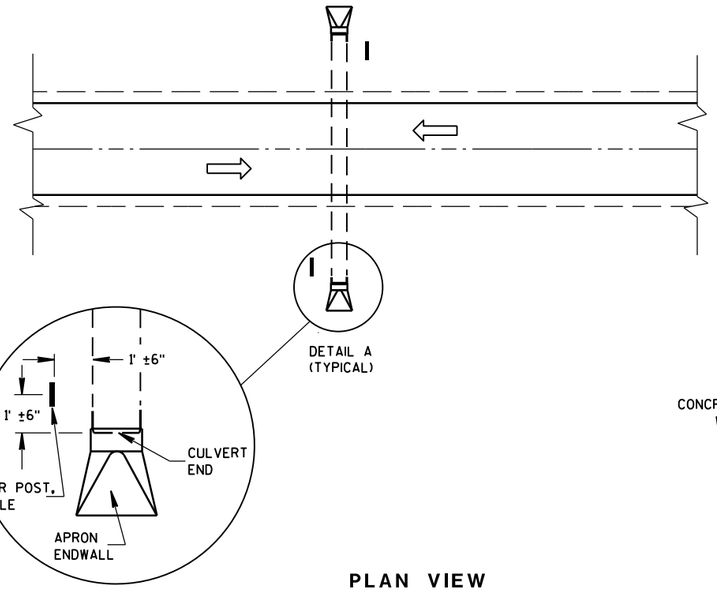
6

S.D.D. 14 B 45-4d



PLAN VIEW

**DIVIDED HIGHWAY**




DETAIL A
(TYPICAL)

PLAN VIEW

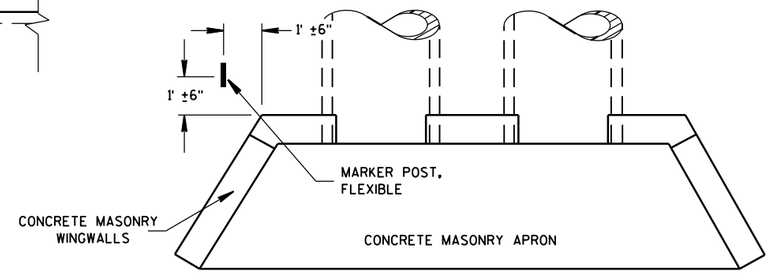
**UNDIVIDED HIGHWAY**

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

## GENERAL NOTES

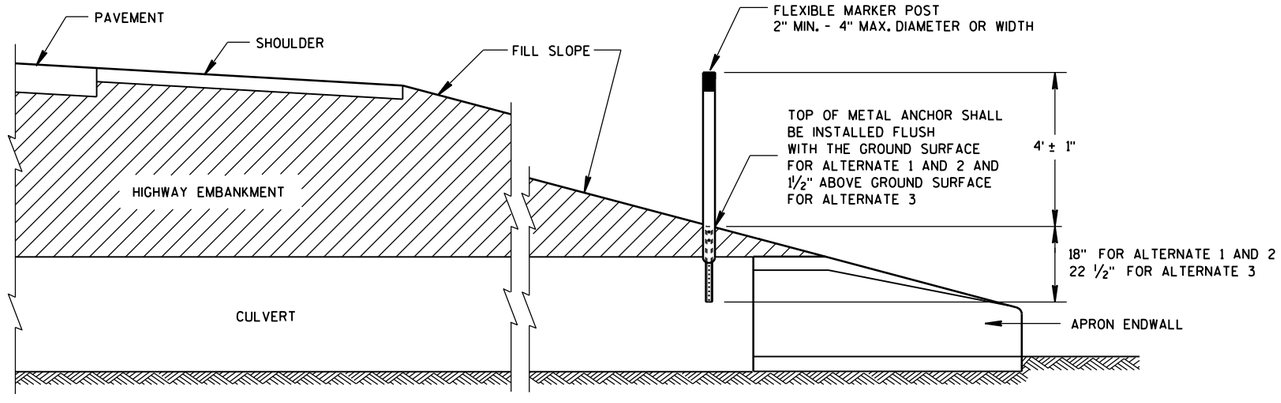
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.




PLAN VIEW

**CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH**

## FLEXIBLE MARKER POST LOCATION




CROSS SECTION

**FLEXIBLE MARKER POST**

**FLEXIBLE MARKER POST FOR CULVERT END**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

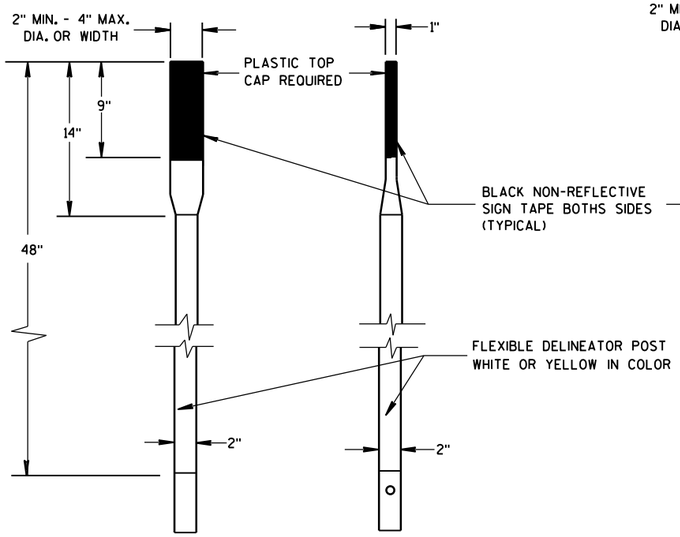


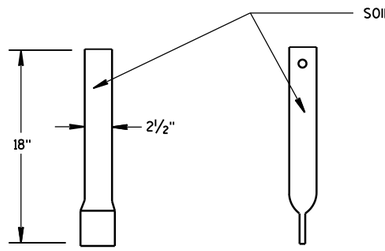
6

S.D.D. 15 A 3-2a

6

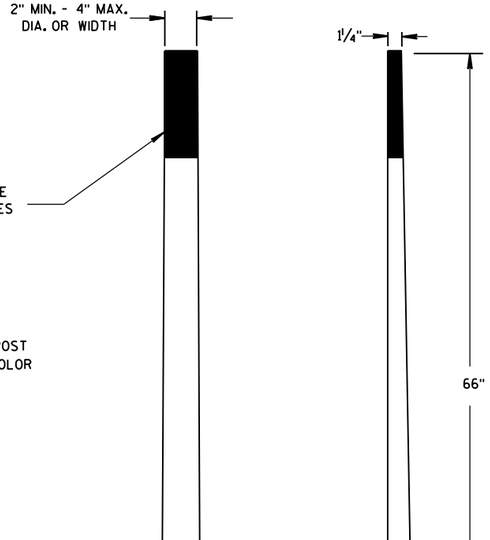
S.D.D. 15 A 3-2a



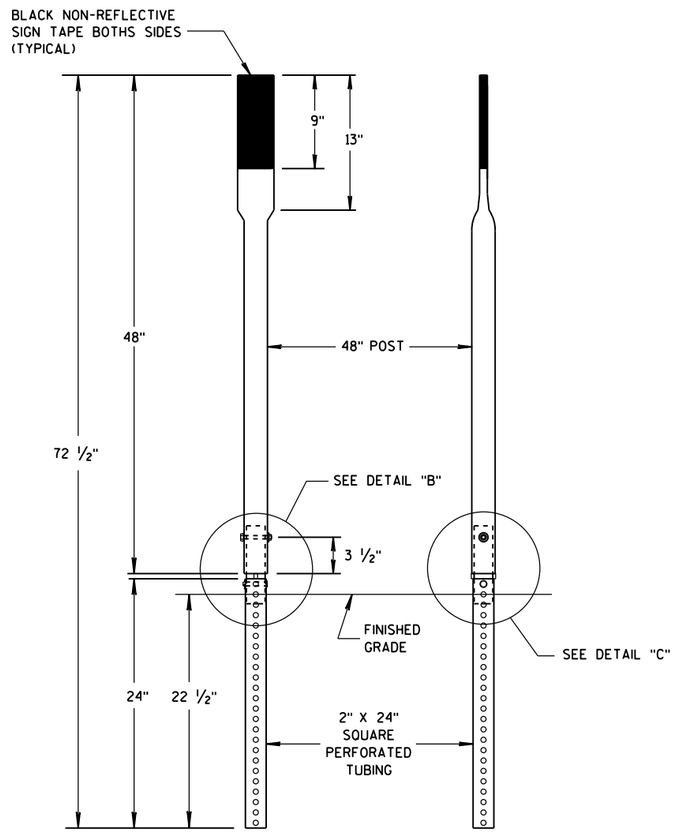

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

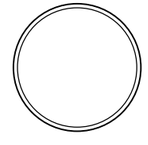
ALTERNATE 2



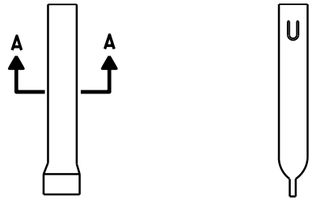

FRONT VIEW SIDE VIEW

ALTERNATE 3

## FLEXIBLE MARKER POSTS

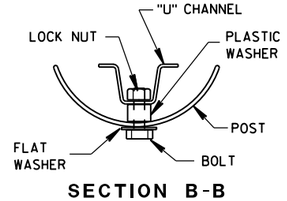


SECTION A-A

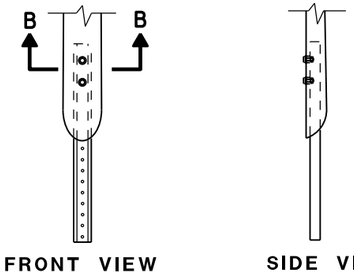



FRONT VIEW SIDE VIEW

ALTERNATE 1

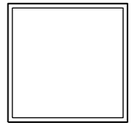



SECTION B-B

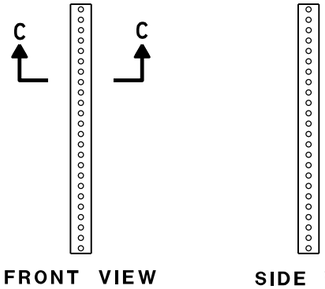



FRONT VIEW SIDE VIEW

ALTERNATE 2



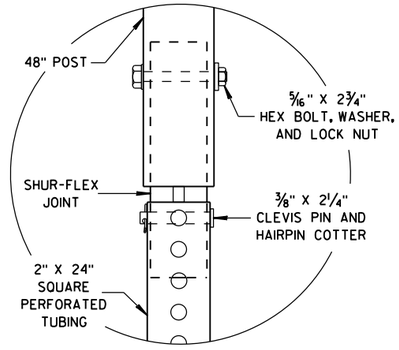
SECTION C-C



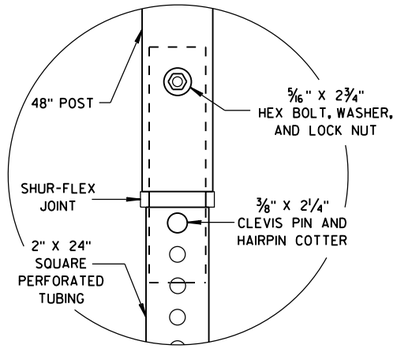

FRONT VIEW SIDE VIEW

ALTERNATE 3

## FLEXIBLE MARKER POST ANCHORS




DETAIL B




DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

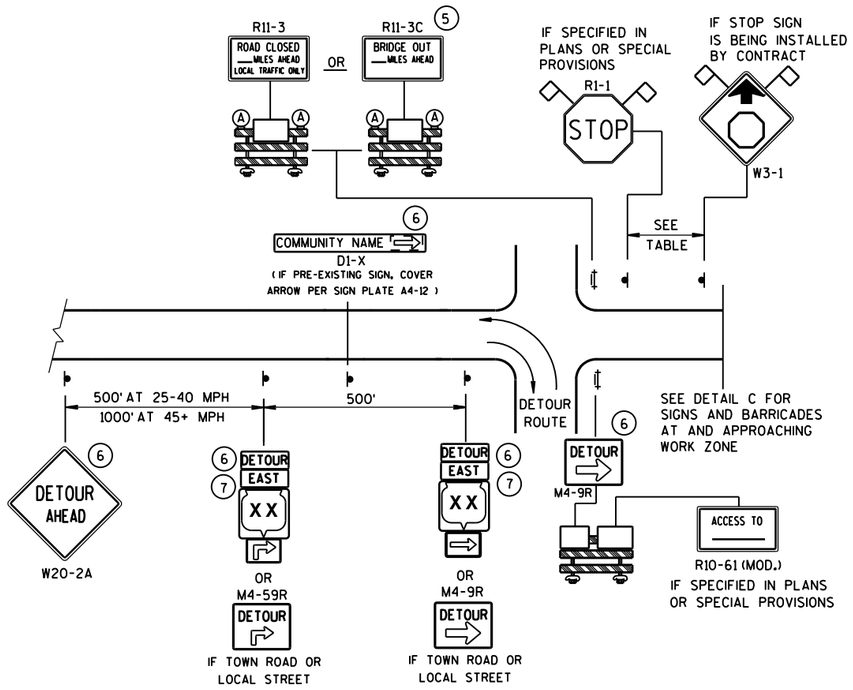


6

S.D.D. 15 A 3-2b

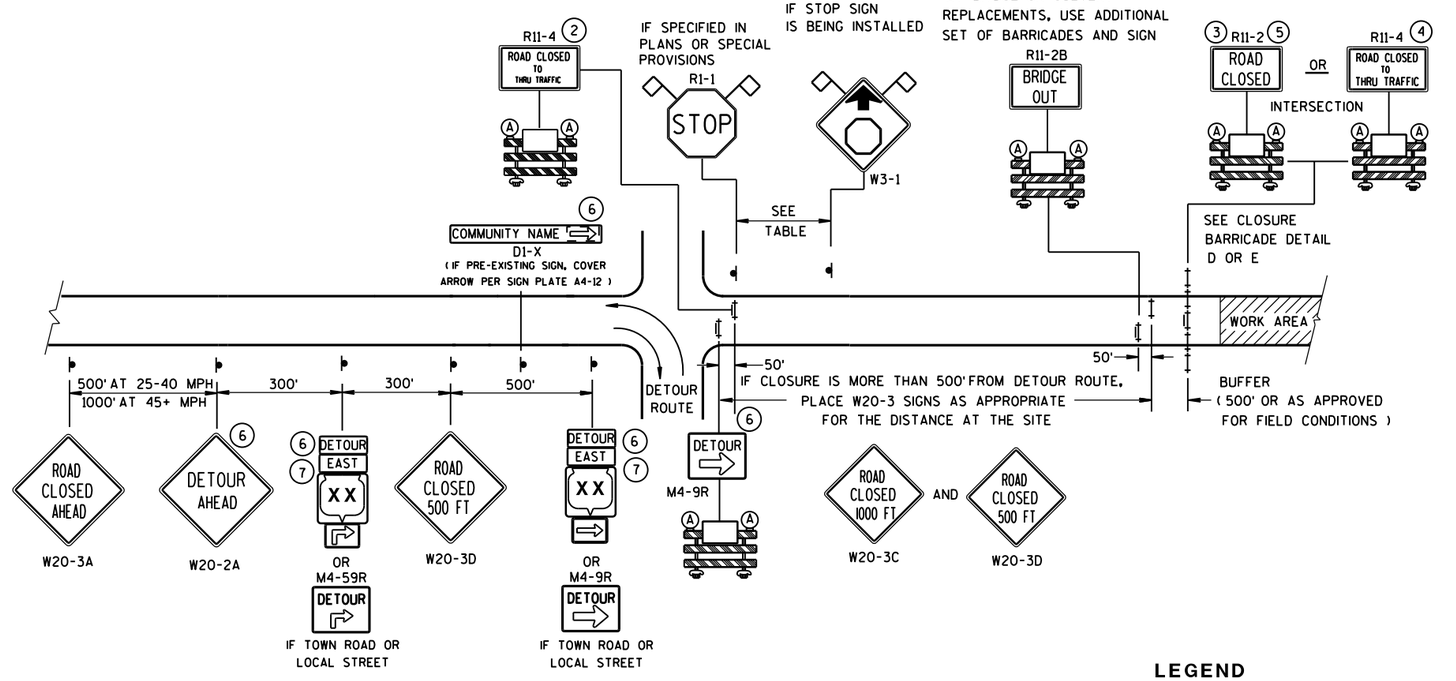
6

S.D.D. 15 A 3-2b



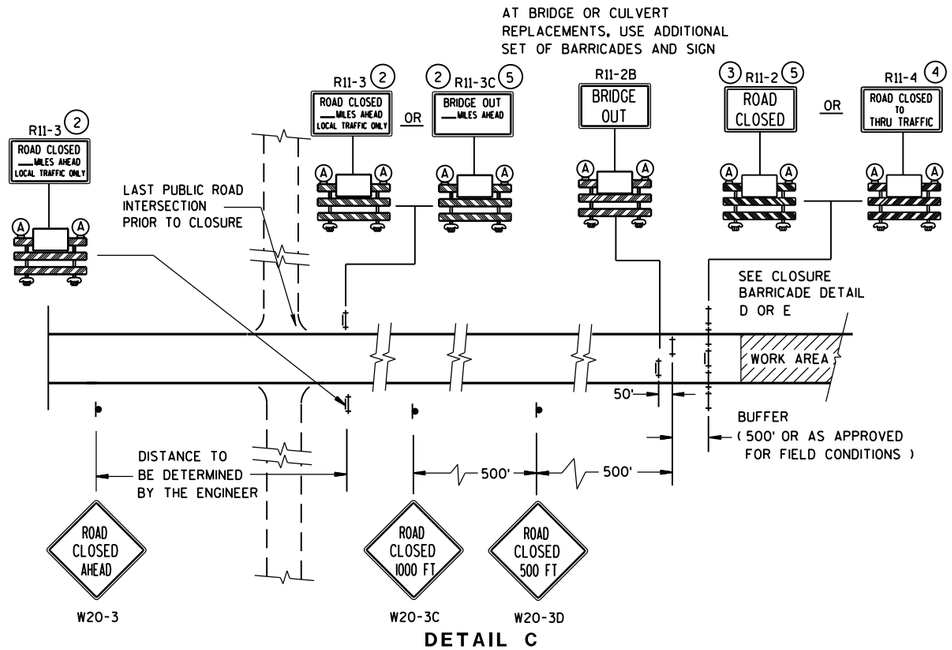

## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR

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




## DETAIL 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**

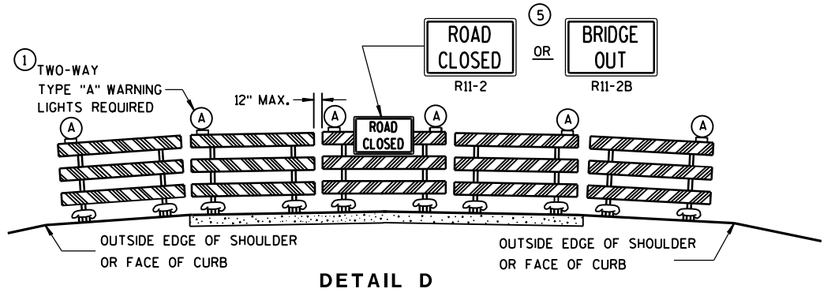
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA



S.D.D. 15 C 2-6a

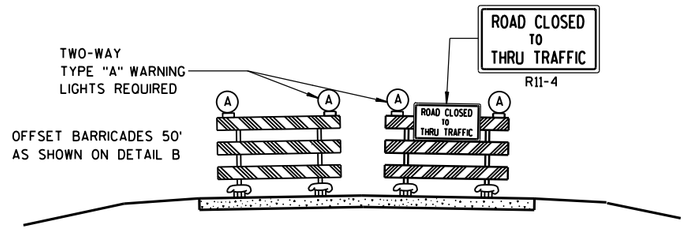
S.D.D. 15 C 2-6a




**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.

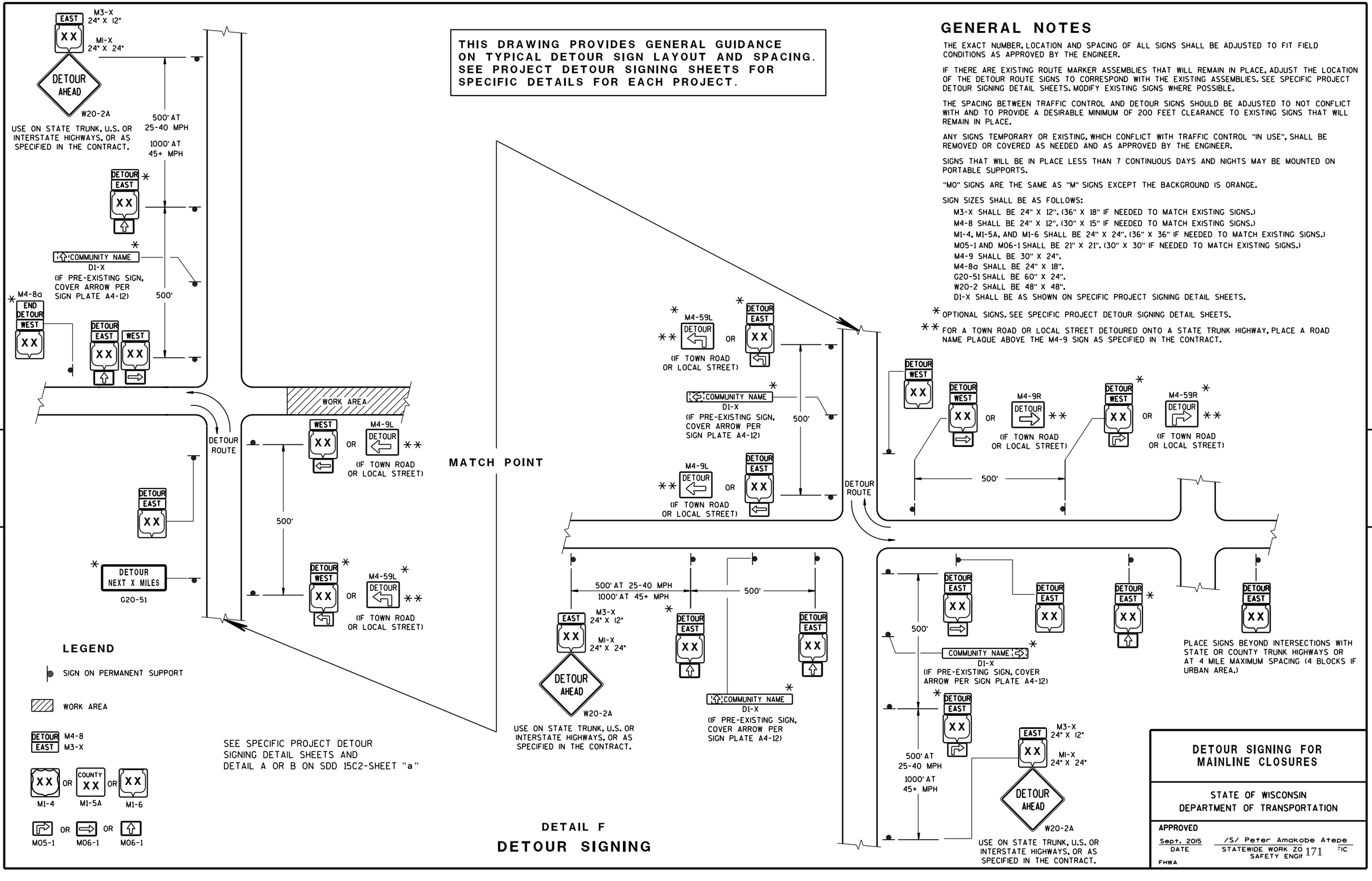
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.




**DETAIL F**

**DETOUR SIGNING**

**DETOUR SIGNING FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

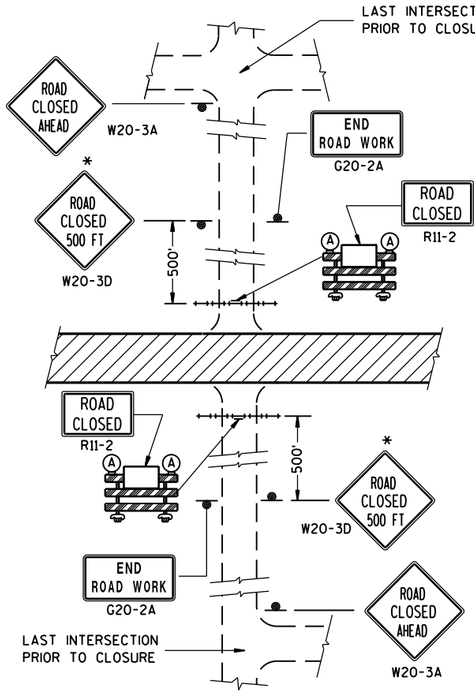
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA



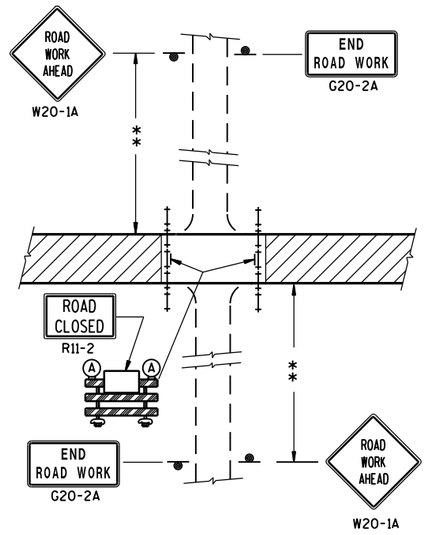
S.D.D. 15 C 2-6c

S.D.D. 15 C 2-6c



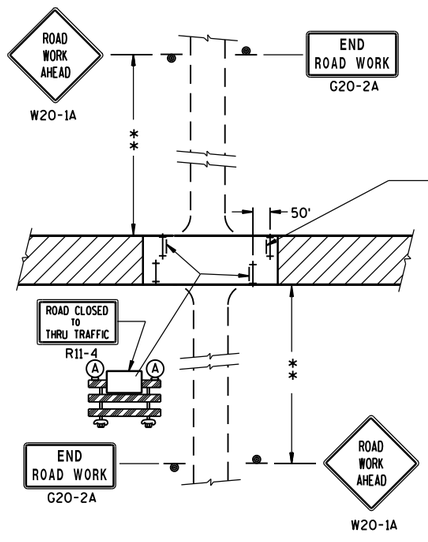

**DETAIL 1**

(NO ACCESS TO PROJECT)



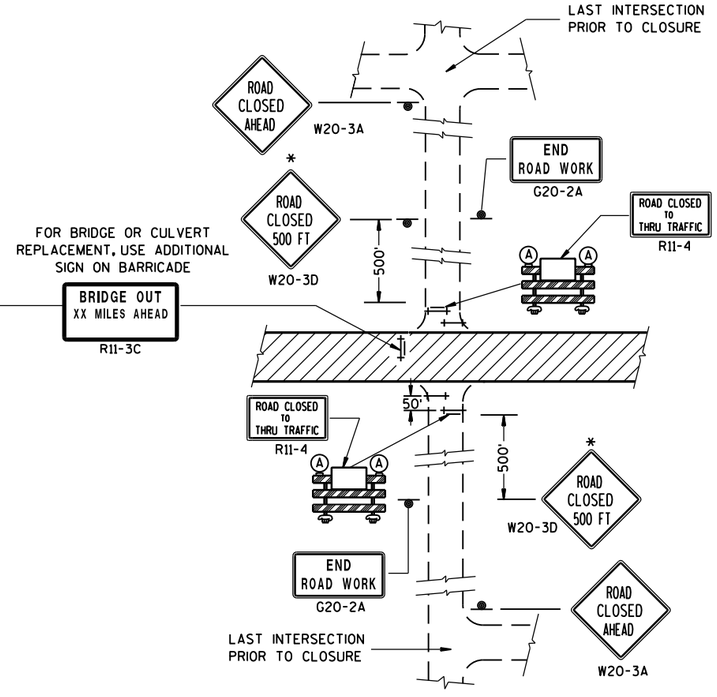

**DETAIL 2**

(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. 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA



6

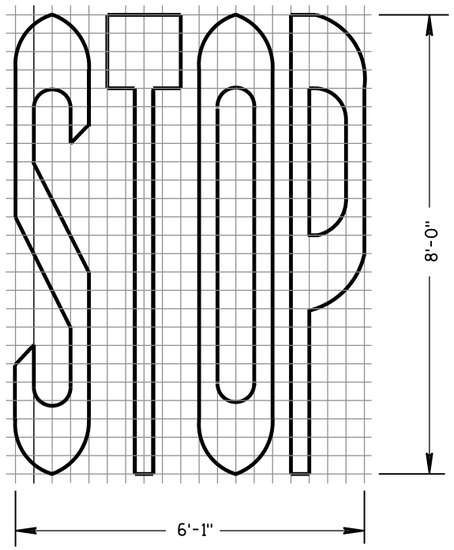
S.D.D. 15 C 3-4

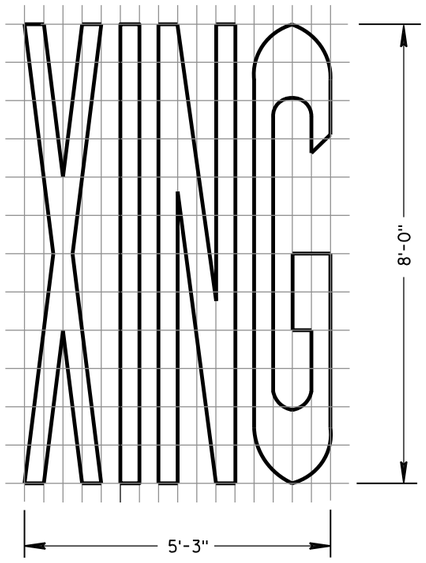
6

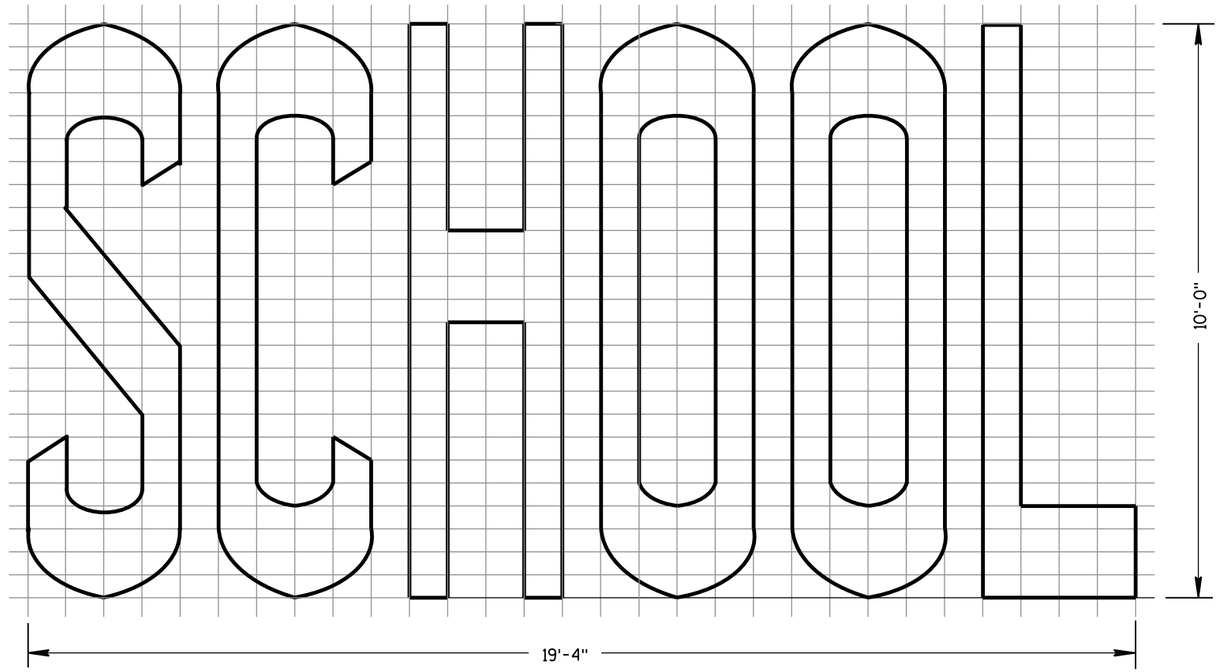
S.D.D. 15 C 3-4

## GENERAL NOTES

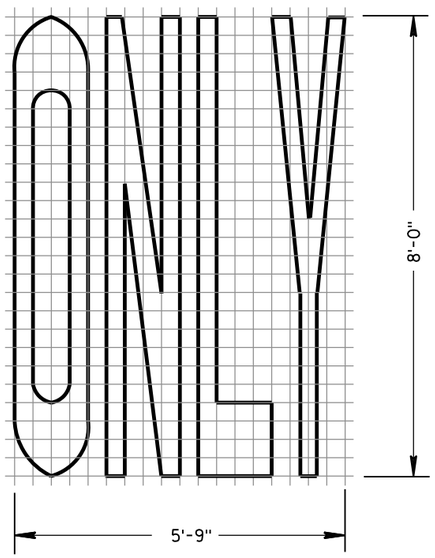
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

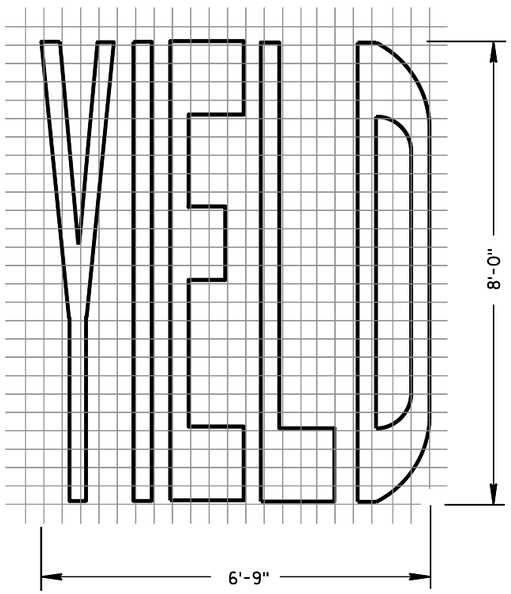


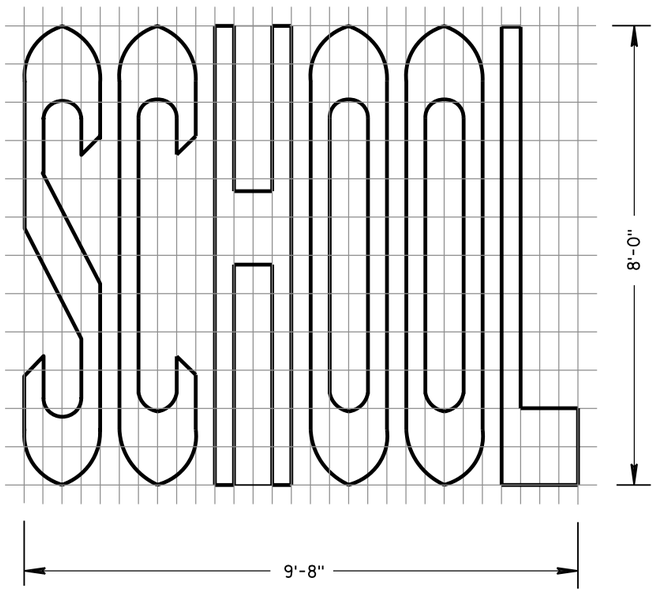




**TWO-LANE**




**SINGLE-LANE**

**PAVEMENT MARKING WORDS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
EER
FHWA

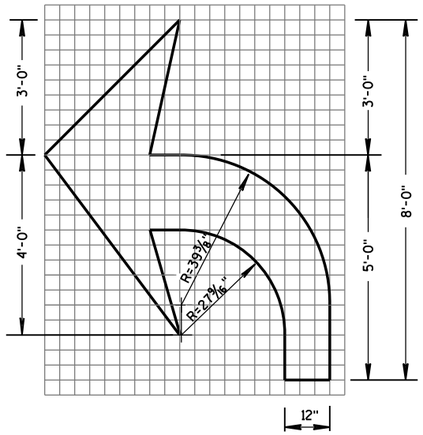


6

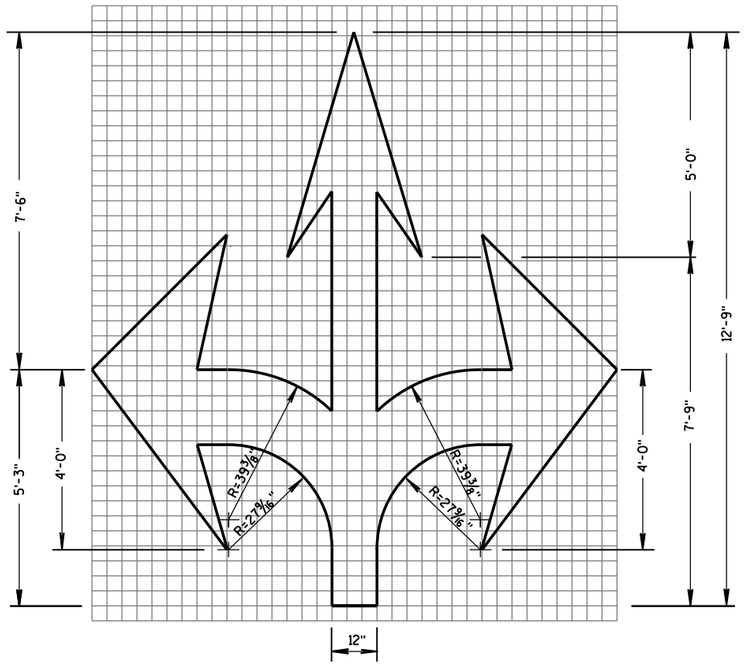
S.D.D. 15 C 7-14b

6

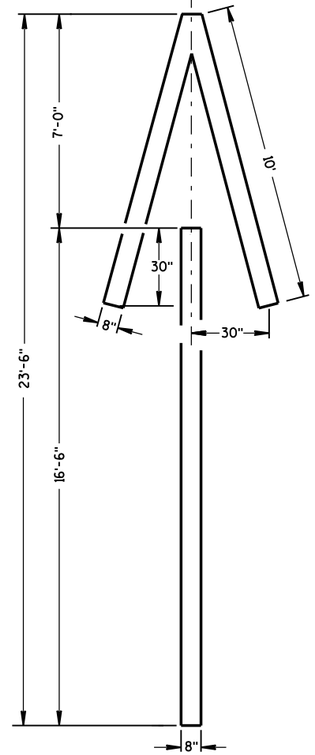
S.D.D. 15 C 7-14b




TYPE 2



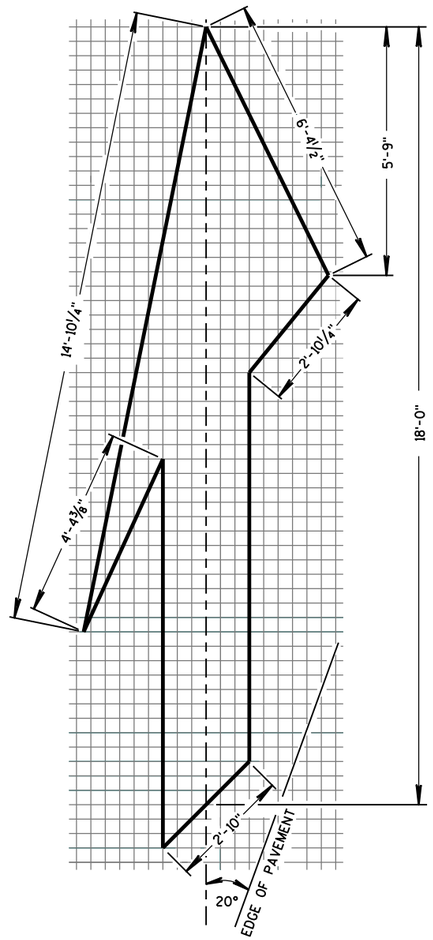

TYPE 6



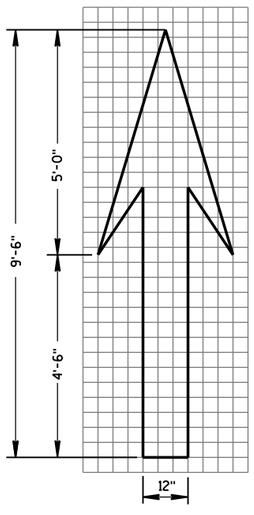

TYPE 4

## GENERAL NOTES

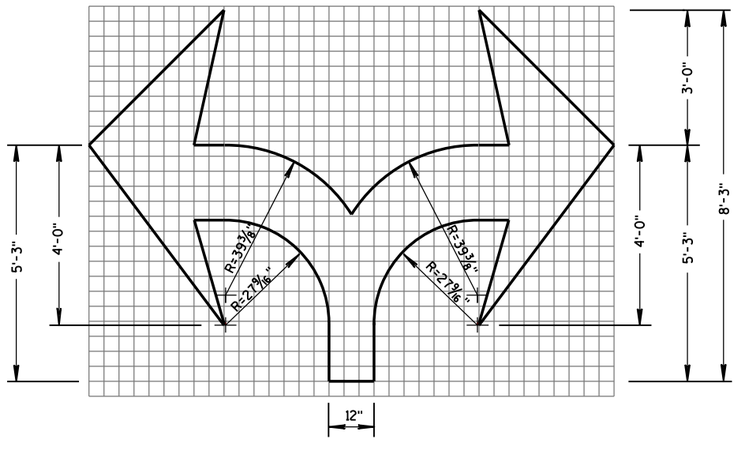
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



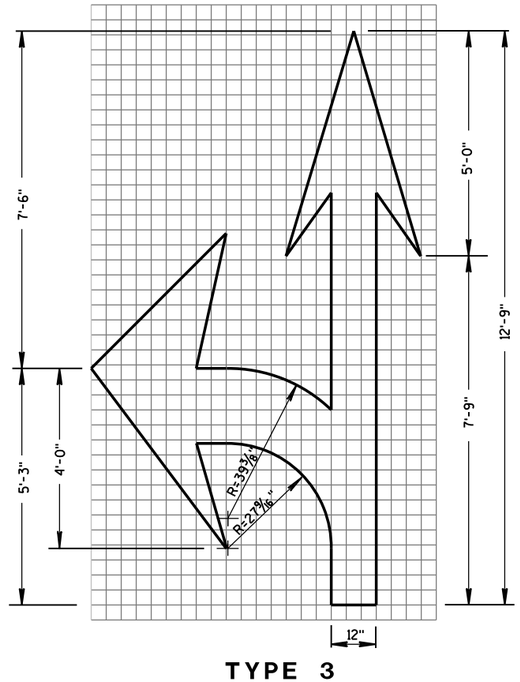

TYPE 5 LANE DROP ARROW




TYPE 1




TYPE 7




TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR
NEER
FHWA

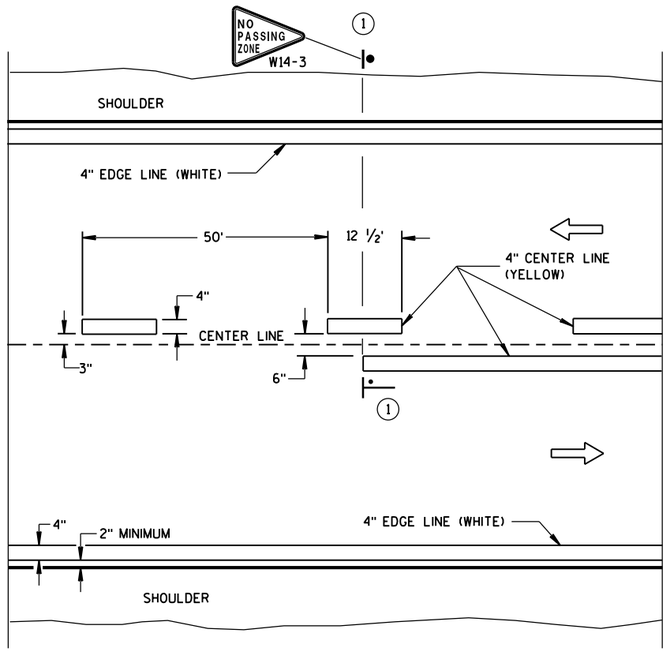


6

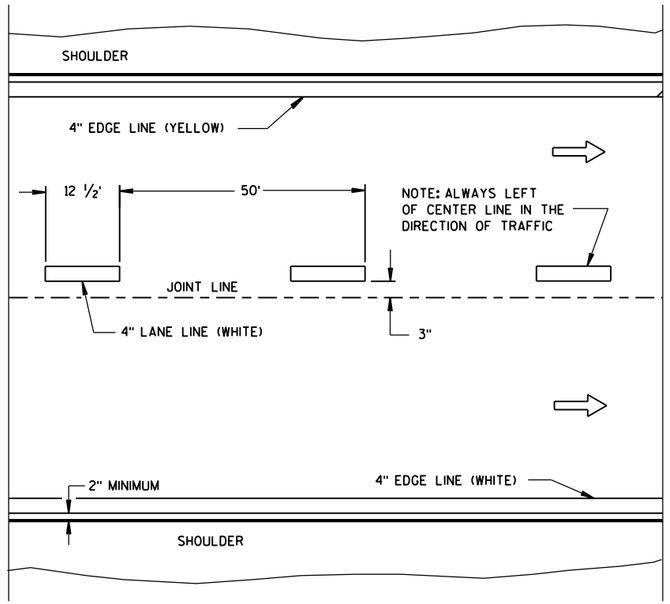
S.D.D. 15 C 7-14c

6

S.D.D. 15 C 7-14c




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) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

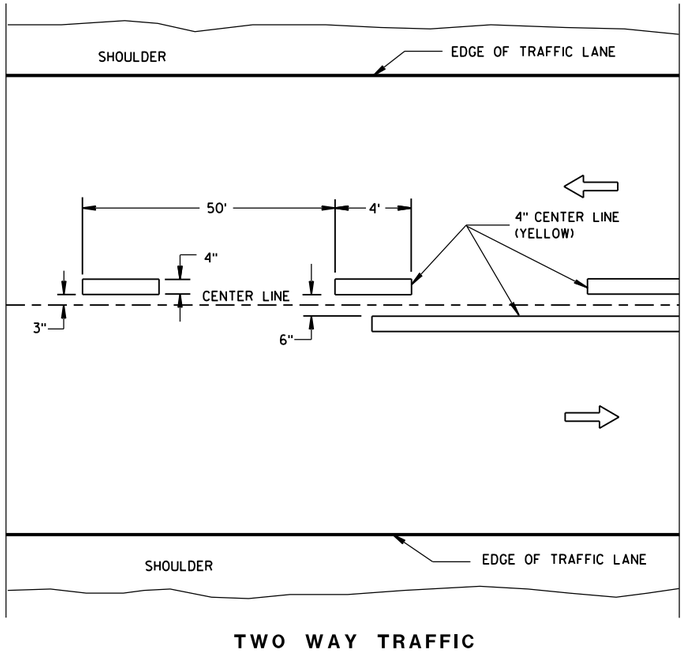
## NOTE

ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL

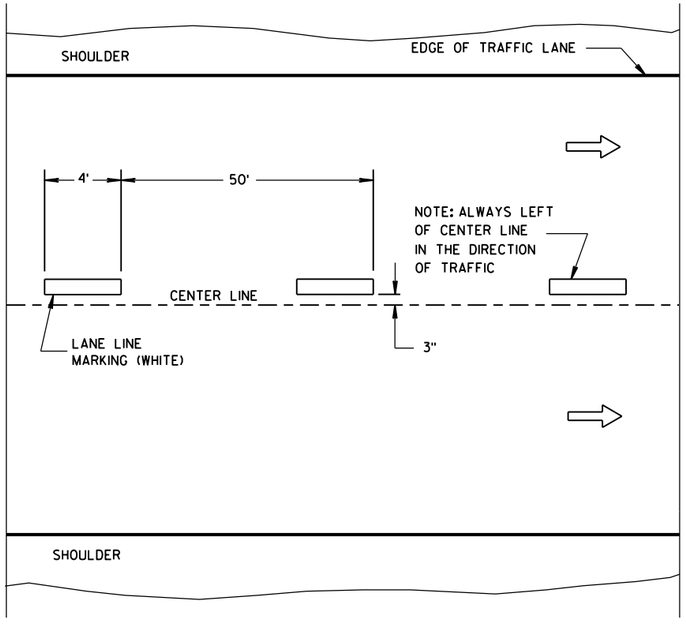
## LEGEND

"T" MARKING

POST MOUNTED SIGN




TWO WAY TRAFFIC




ONE WAY TRAFFIC

## TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]INEER
FHWA

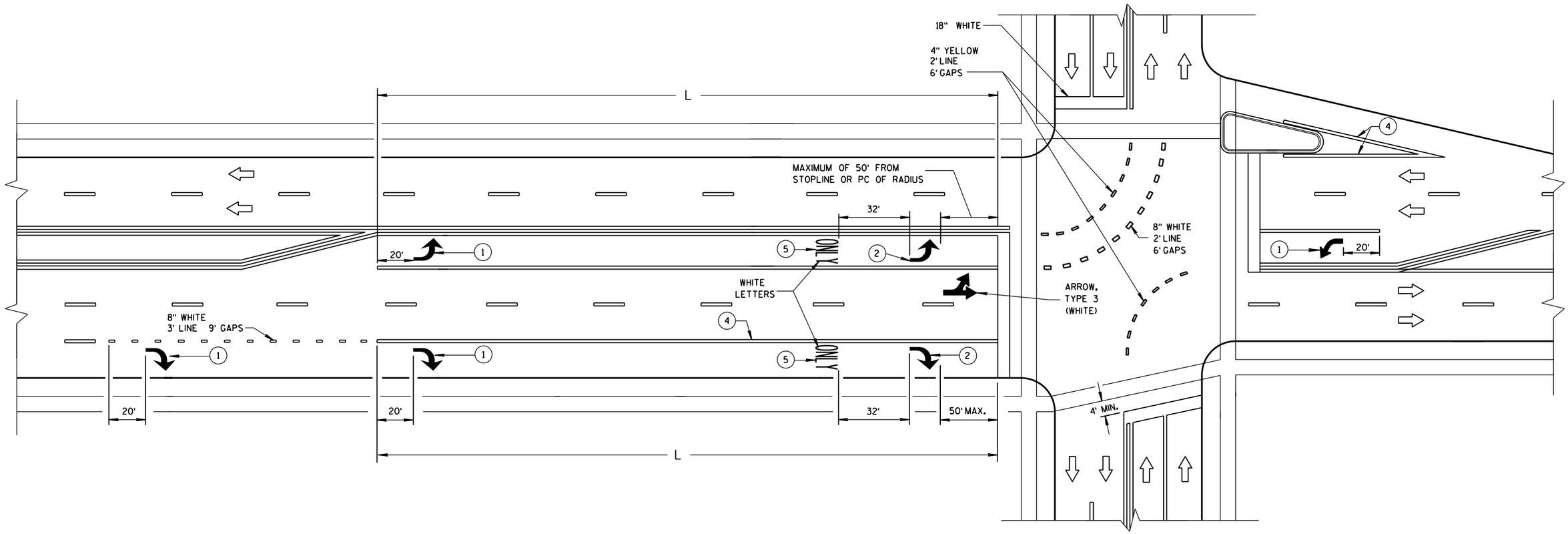


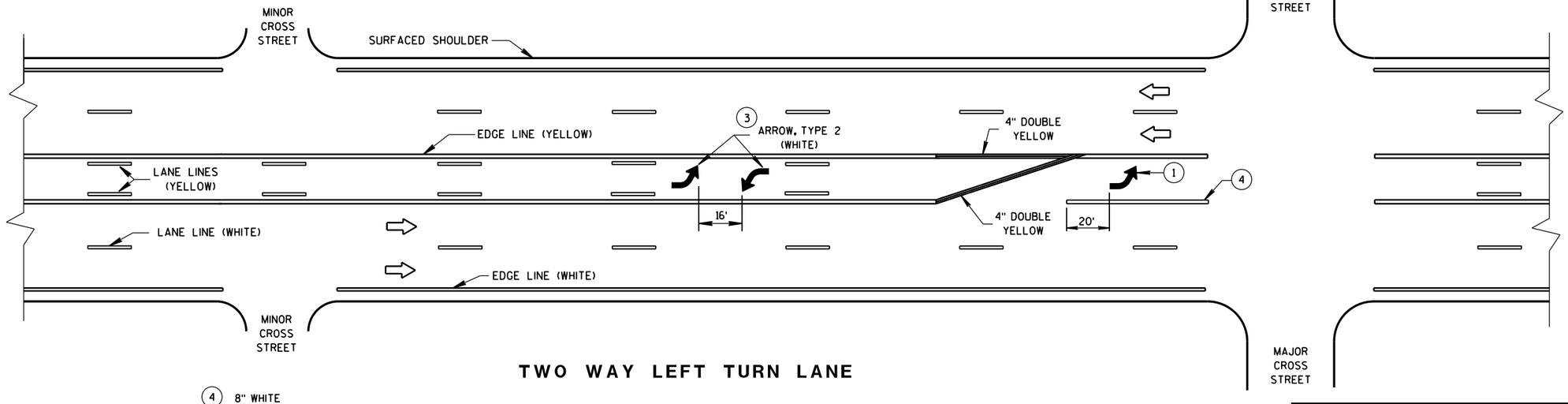
6

S.D.D. 15 C 8-18a

6

S.D.D. 15 C 8-18a




## GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL ( ⇨ )
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

# TWO WAY LEFT TURN LANE

**PAVEMENT MARKING (TURN LANES)**

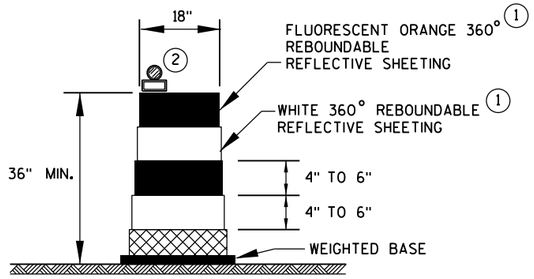
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



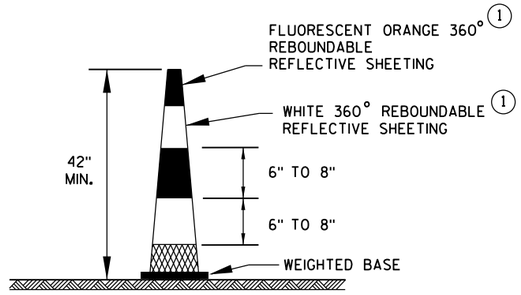


6

S.D.D. 15 C 8-18b




## DRUM

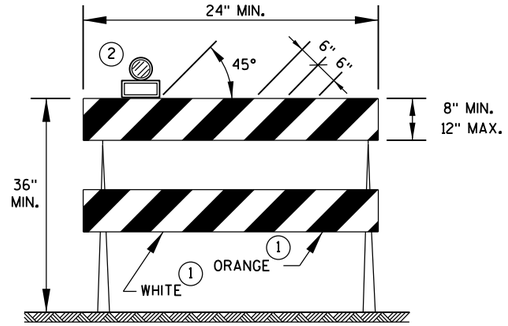



## 42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

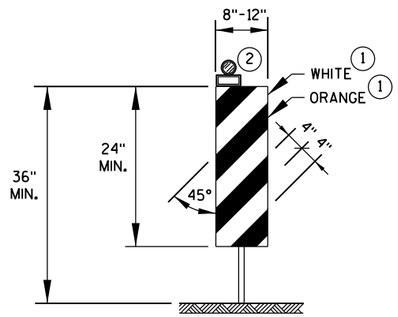
## GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



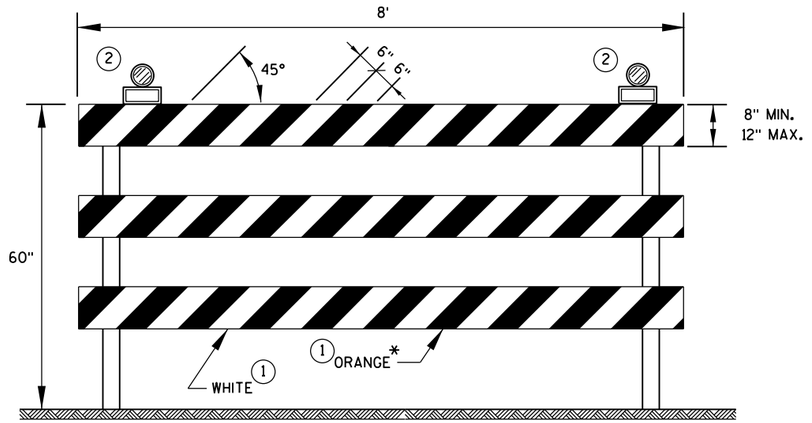

## TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.




## VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.




## TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

**CHANNELIZING DEVICES**
**DRUMS, CONES, BARRICADES**
**AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENG
FHWA




6

S.D.D. 15 C 11-7b

## GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

**A** DISTANCE DEPENDENT ON SPEED (SEE TABLE)

(1) USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

### SYMBOLS

* SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT

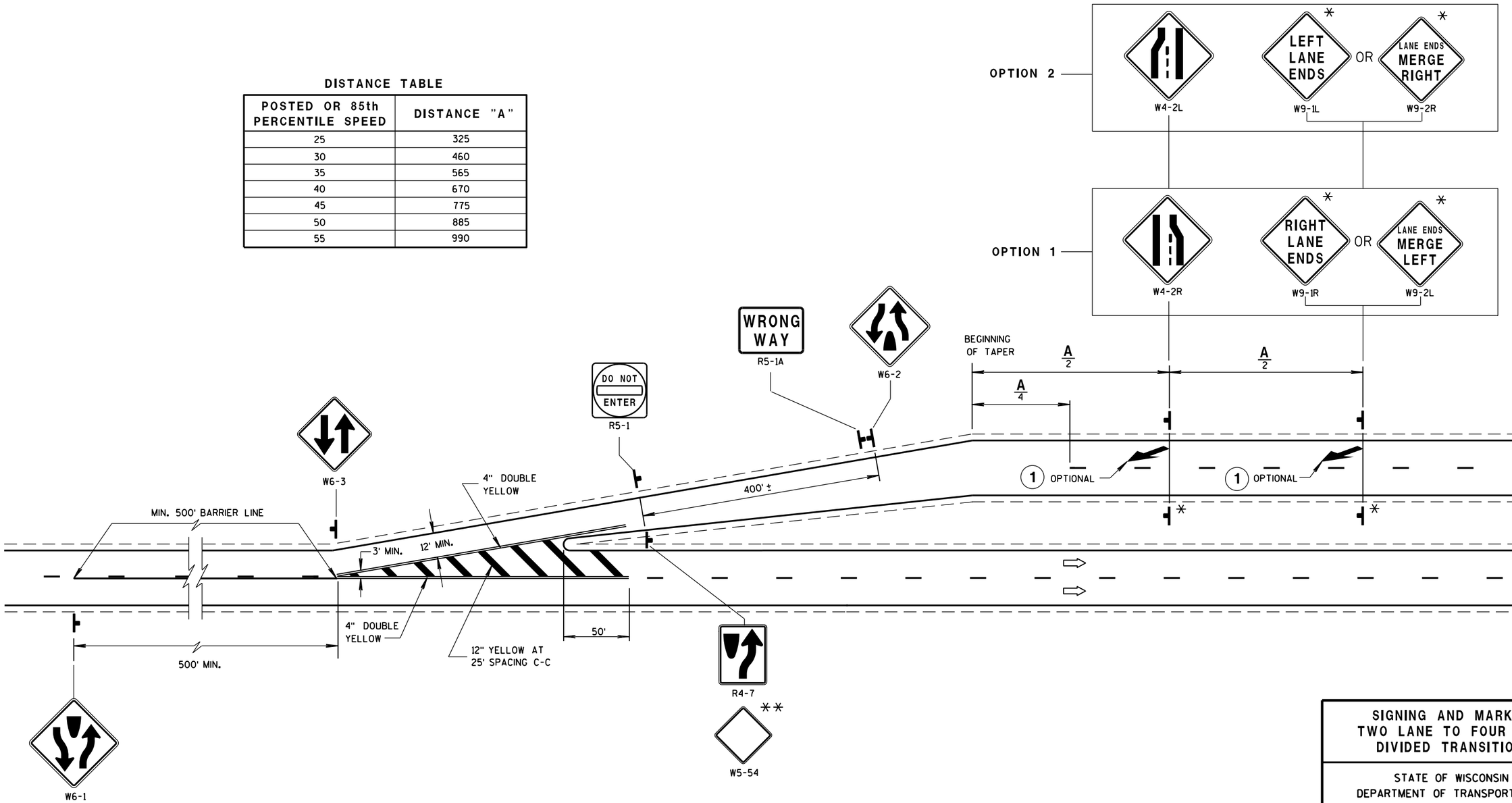
** IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

### DISTANCE TABLE

| POSTED OR 85th PERCENTILE SPEED | DISTANCE "A" |
|---|---|
| 25 | 325 |
| 30 | 460 |
| 35 | 565 |
| 40 | 670 |
| 45 | 775 |
| 50 | 885 |
| 55 | 990 |




**SIGNING AND MARKING**
**TWO LANE TO FOUR LANE**
**DIVIDED TRANSITIONS**

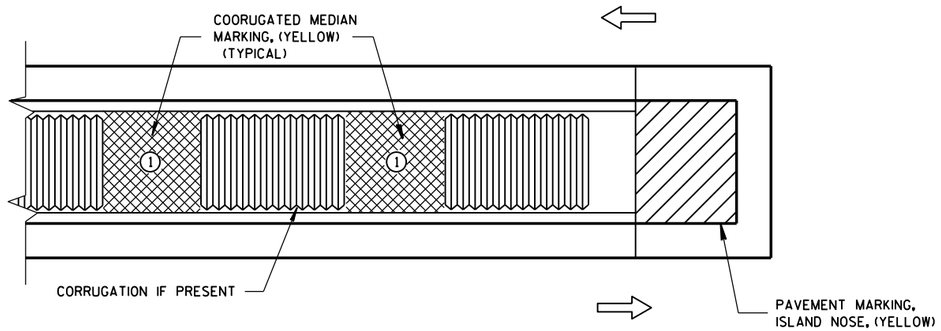
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

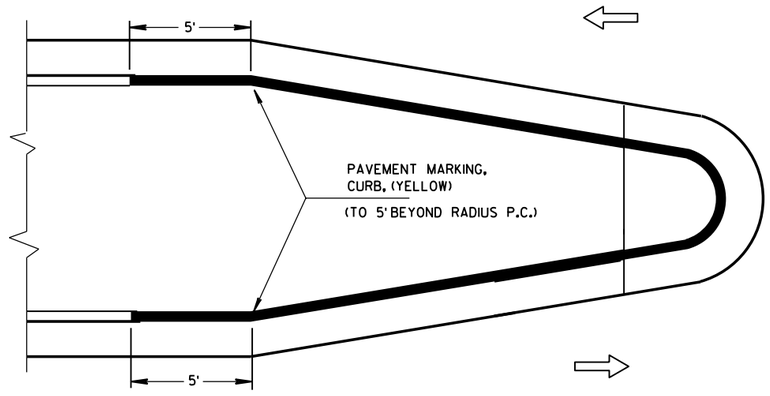



6

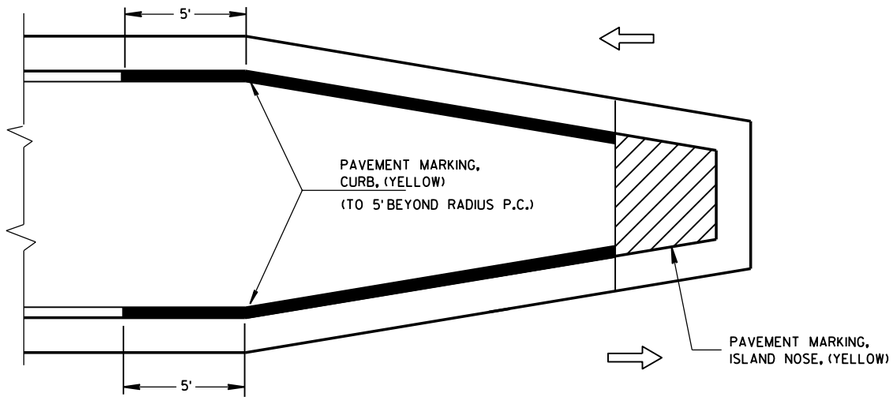
S.D.D. 15 C 21-8




MEDIAN ISLAND WITH SQUARE BLUNT NOSE




MEDIAN ISLAND WITH ROUND BLUNT NOSE




MEDIAN ISLAND WITH SLOPED NOSE

## TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

## GENERAL NOTES

(1) WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARK ENGINEER
FHWA



6

S.D.D. 15 C 27-2b

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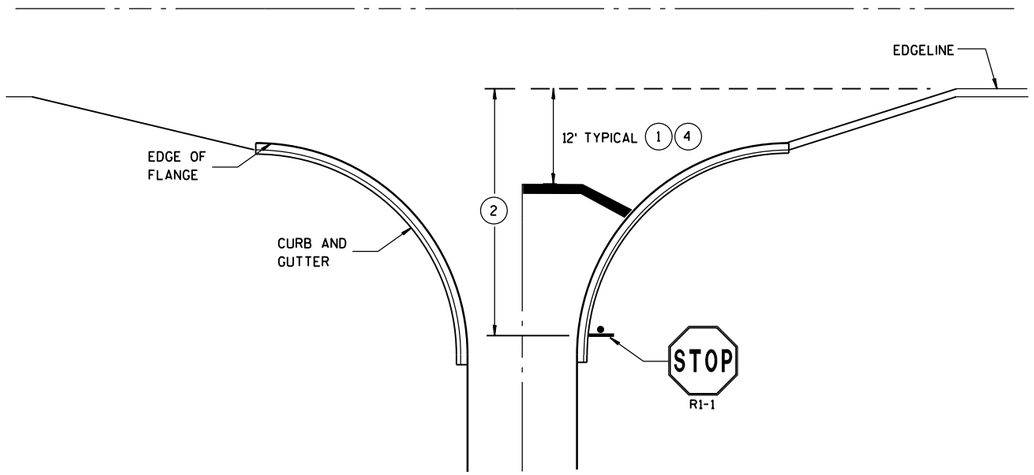
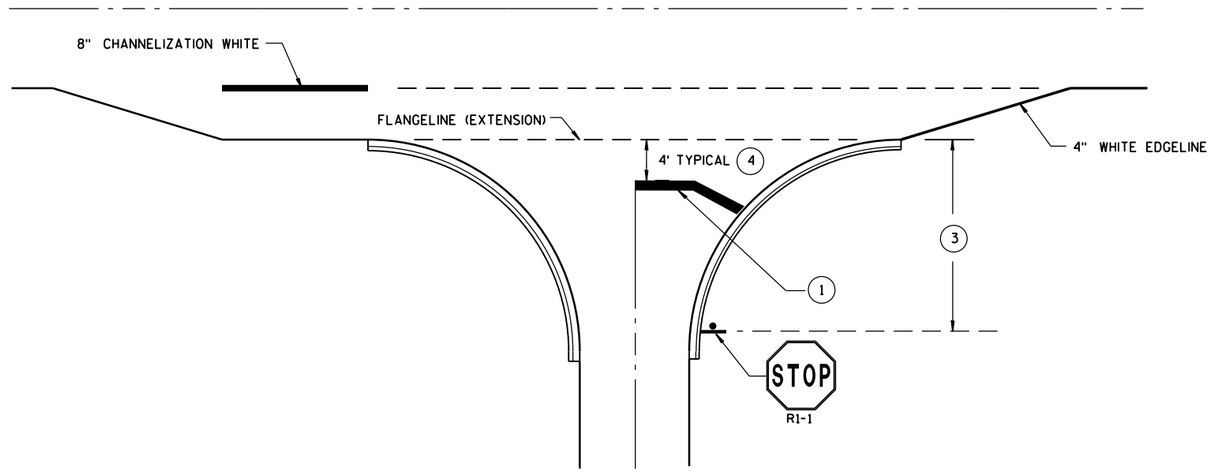
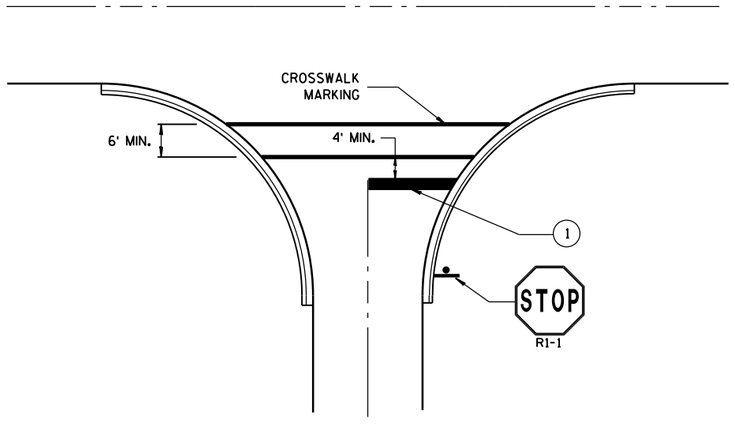
S.D.D. 15 C 27-2b



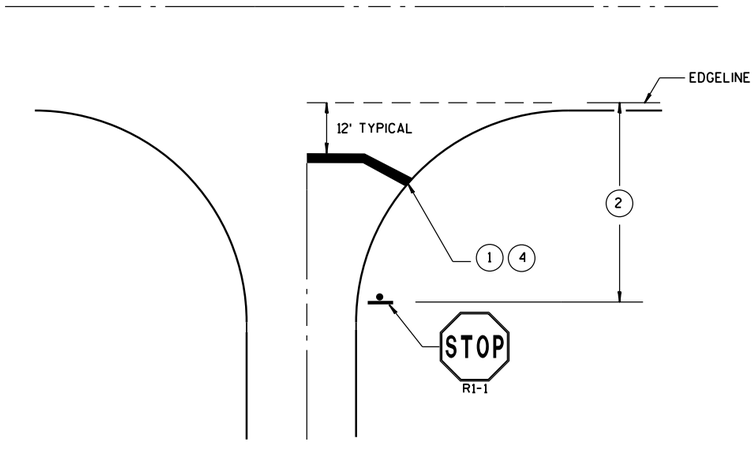

**TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER**




**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

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

(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

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER

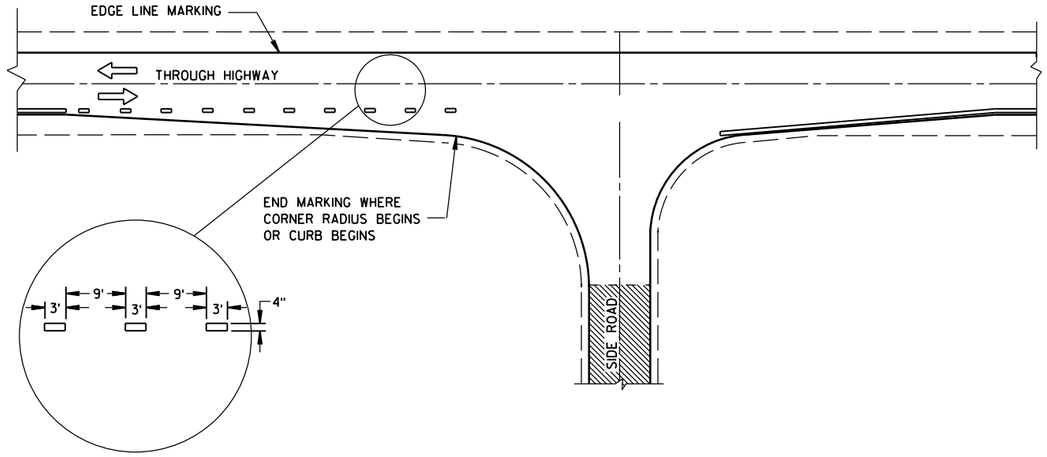
FHWA





6

S.D.D. 15 C 33-3




## MINOR INTERSECTION

## GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

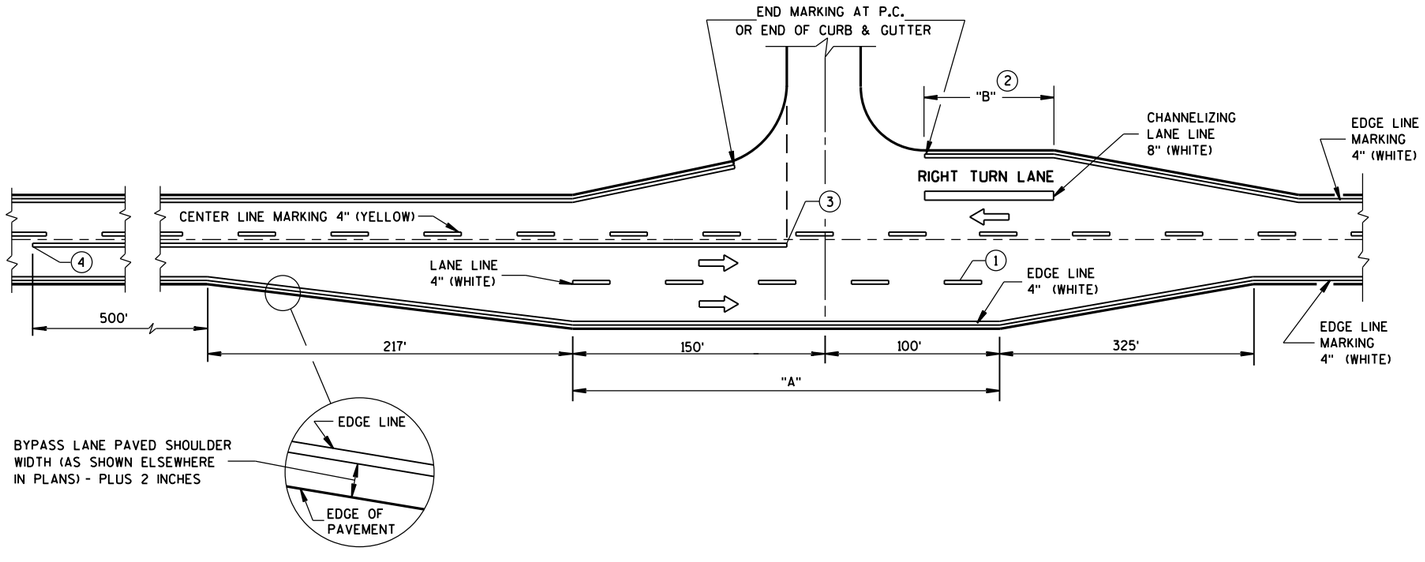
(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

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

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

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

ARROW SYMBOL ( ⇨ ) SHOWS DIRECTION OF TRAVEL




## MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

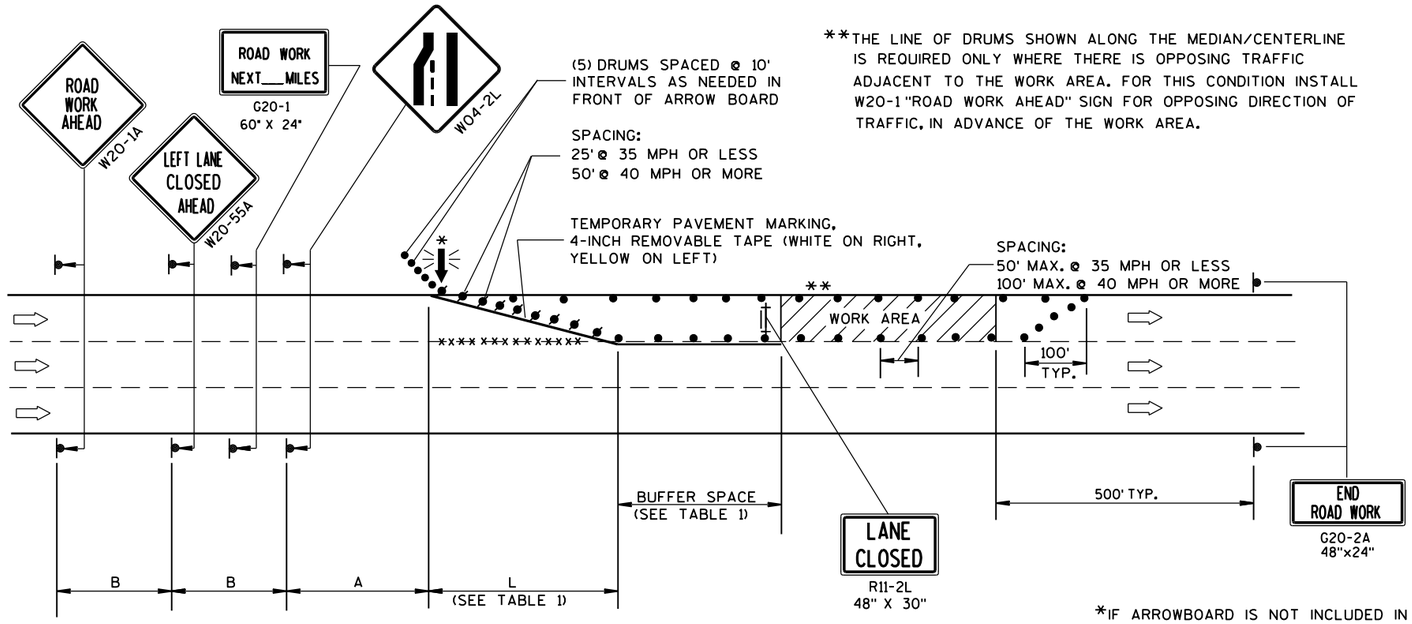
PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI




6


S.D.D. 15 C 35-2a




**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

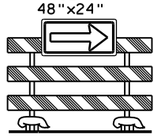


TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

| S | L | BUFFER SPACE |
|---|---|---|
| 25 | 125' | 55' |
| 30 | 180' | 85' |
| 35 | 245' | 120' |
| 40 | 320' | 170' |
| 45 | 540' | 220' |
| 50 | 600' | 280' |
| 55 | 660' | 335' |

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

## LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

## GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

# TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

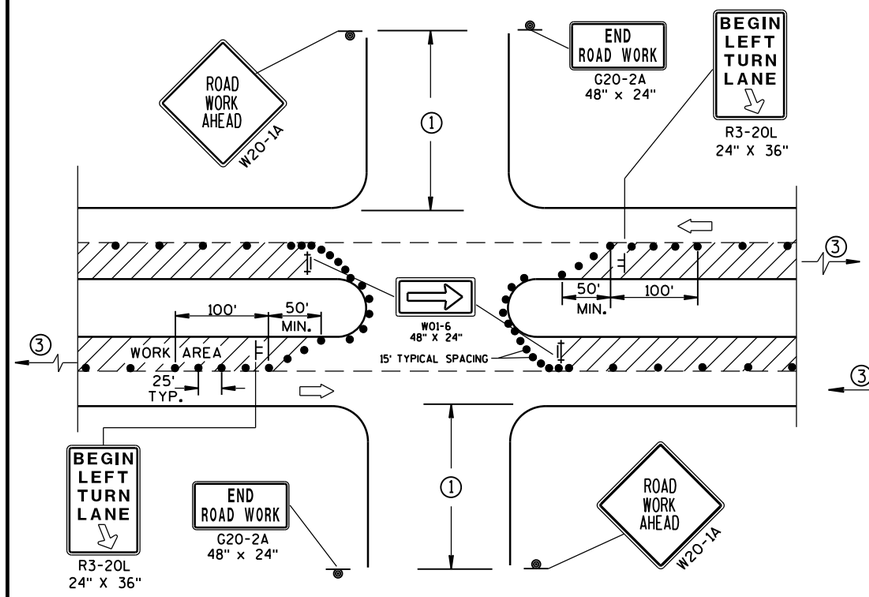


6

S.D.D. 15 D 20-4

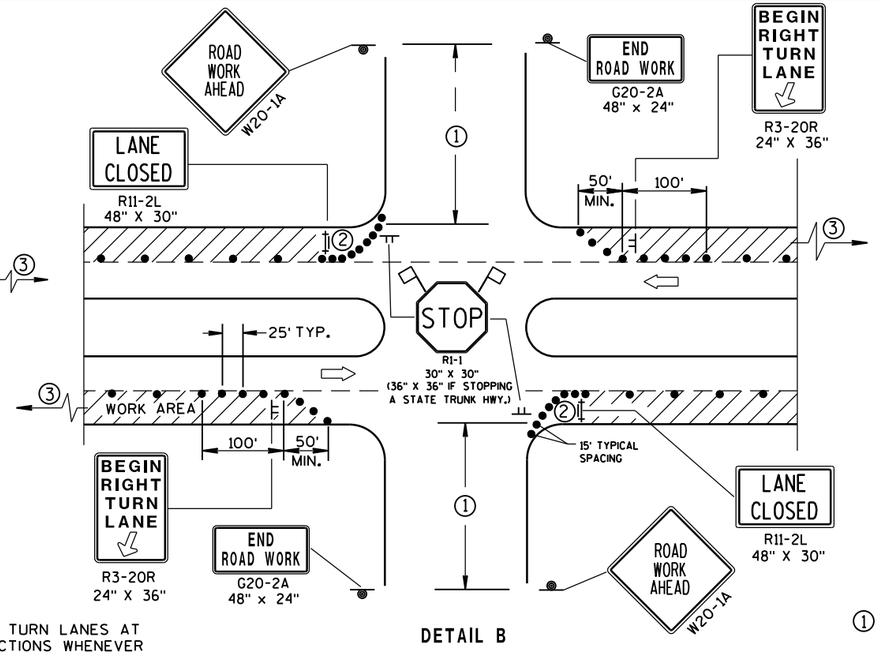
6

S.D.D. 15 D 20-4




DETAIL A

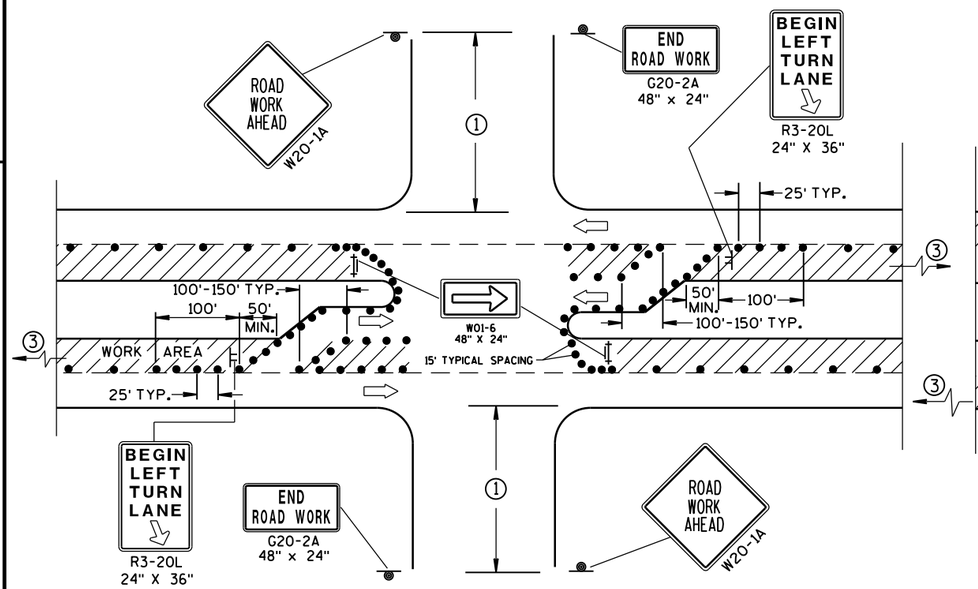
## FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING




DETAIL B

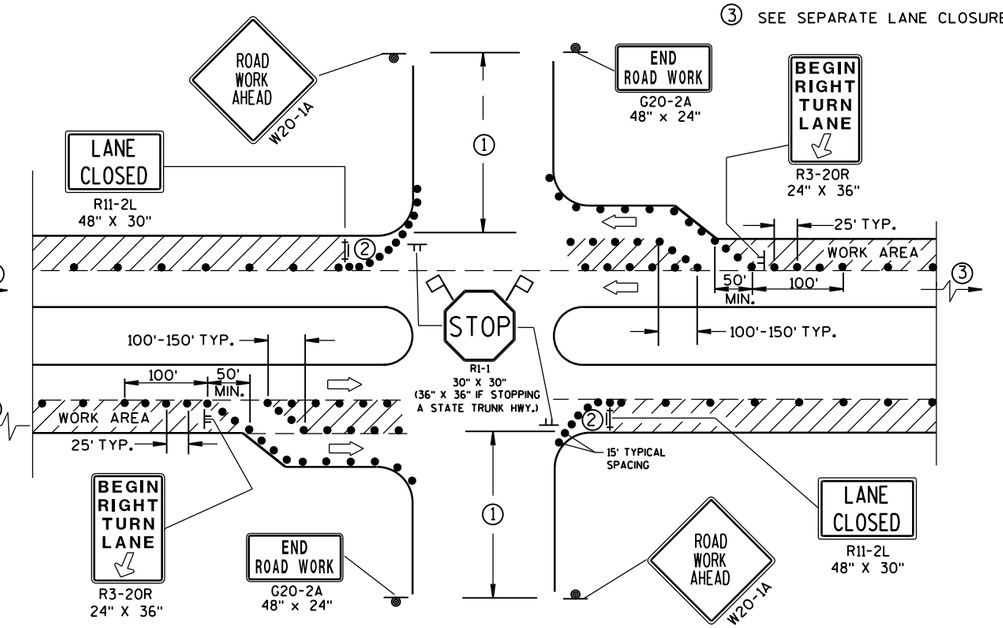
## FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.




DETAIL C

## FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)




DETAIL D

## FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

## GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

## LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

**TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE**

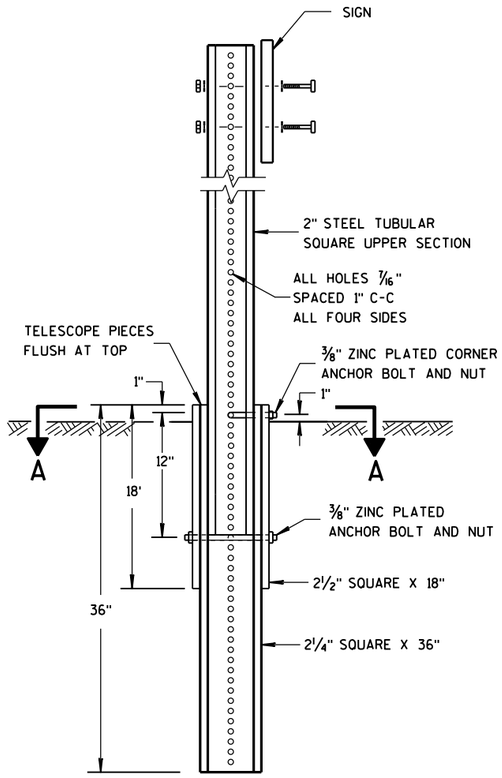
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENG
FHWA

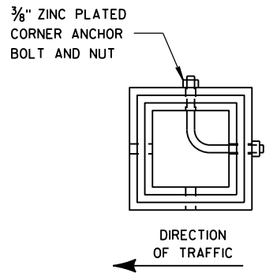



6

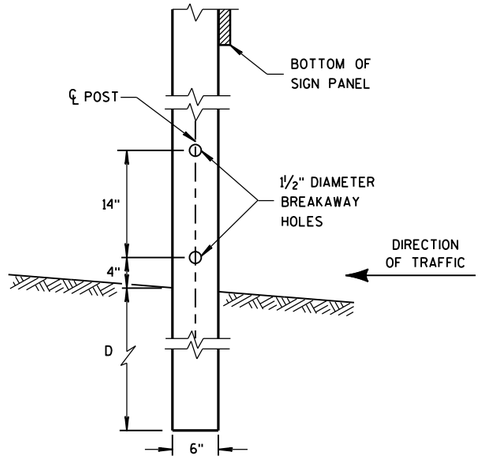
S.D.D. 15 D 21-5




## DETAIL OF TUBULAR STEEL SIGN POST




## SECTION A-A



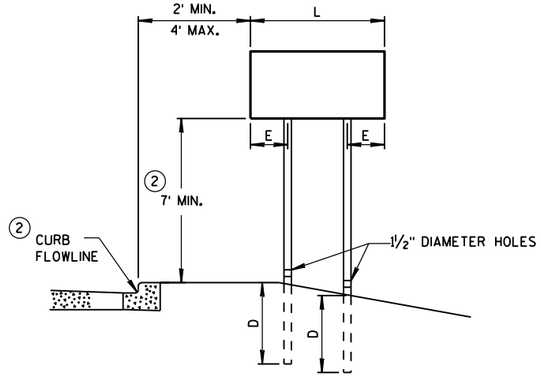

## 4"x6" WOOD POST MODIFICATION

## GENERAL NOTES

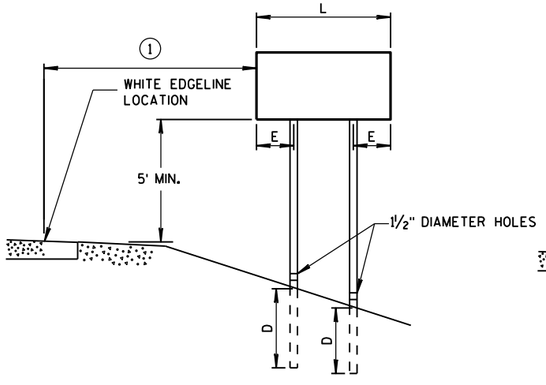
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

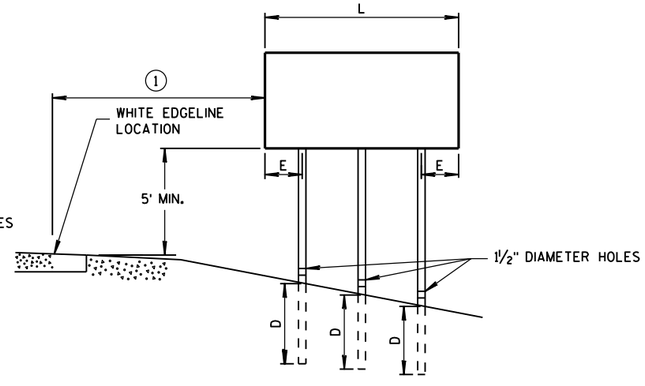
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK 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)

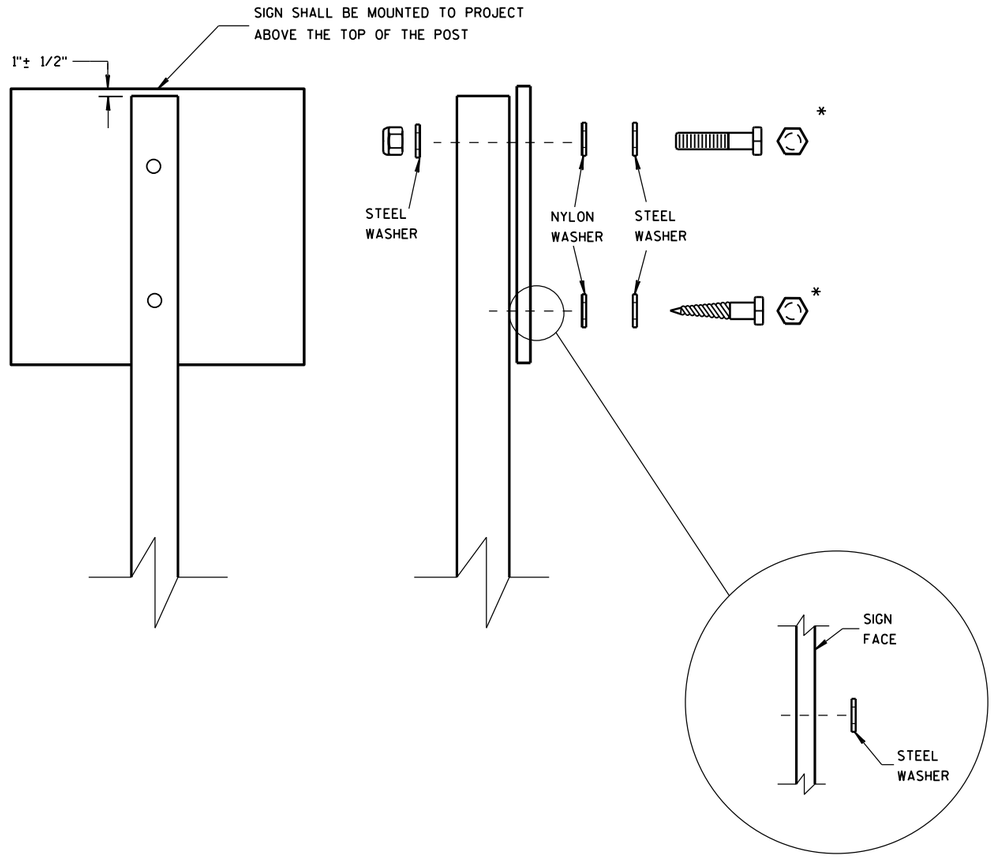
TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI




6

S.D.D. 15 D 38-2a




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 38-2b

S.D.D. 15 D 38-2b

# ATTACHMENT OF SIGNS TO POSTS

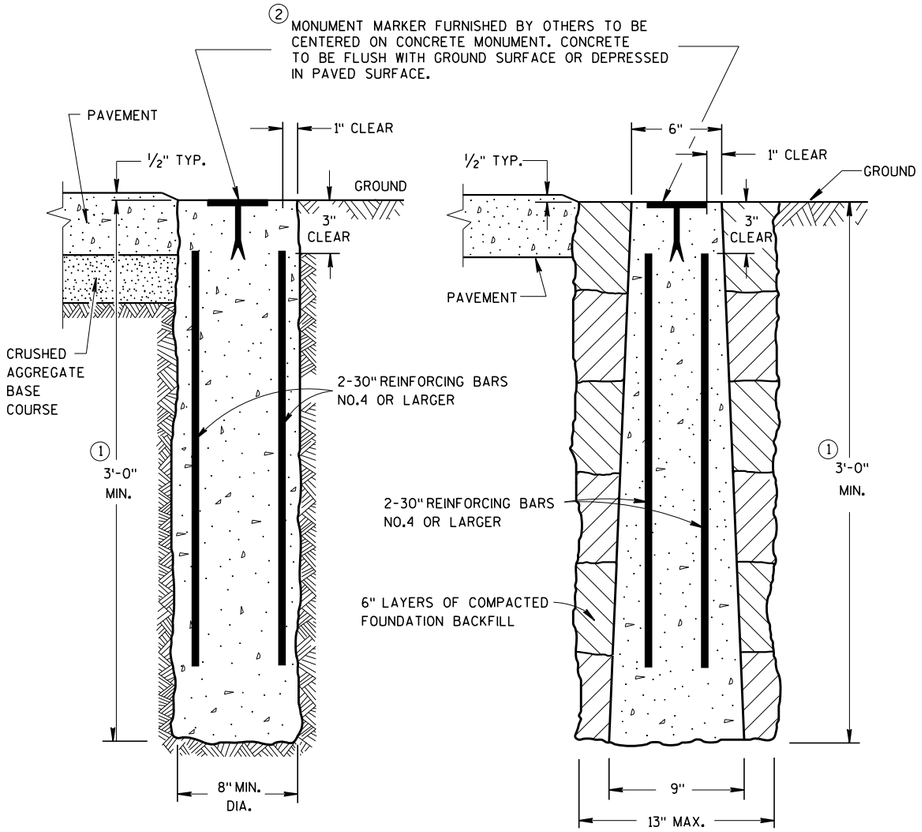
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

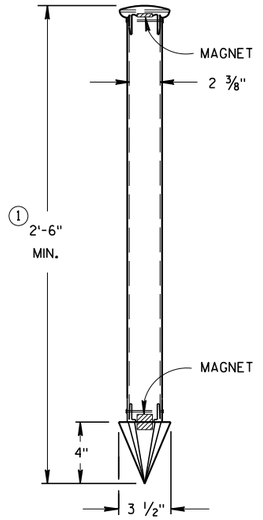



CAST-IN-PLACE

PRECAST

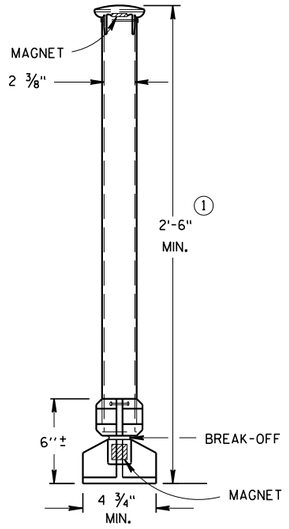
## CONCRETE MONUMENTS

TYPE A




TYPE C

DRIVE-IN MONUMENT




TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

## ALUMINUM MONUMENTS

(INCLUDES MARKER)

## GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

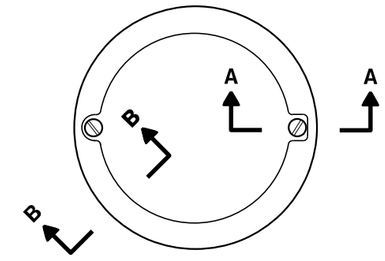
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

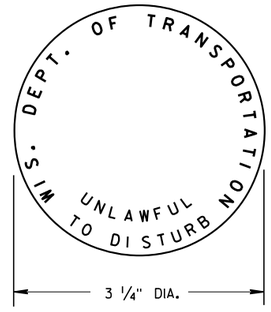
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

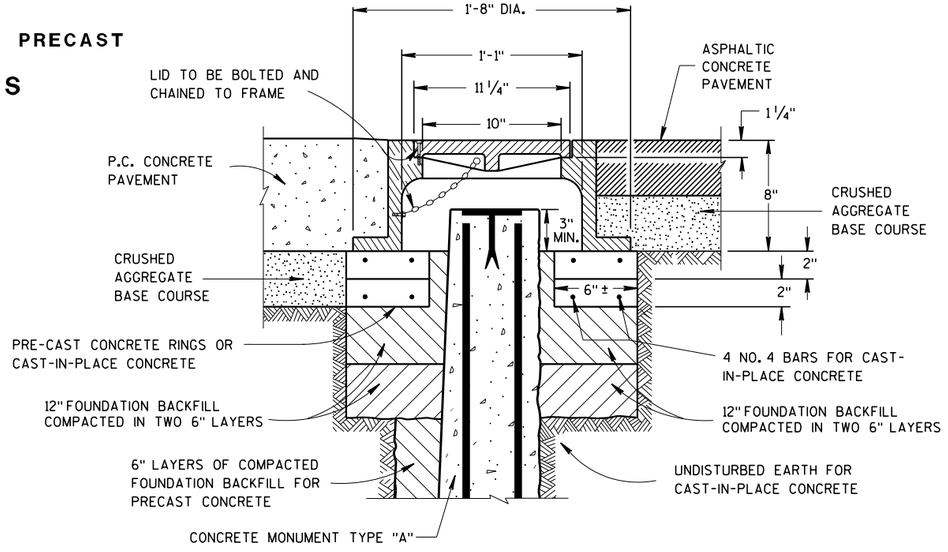



TOP VIEW



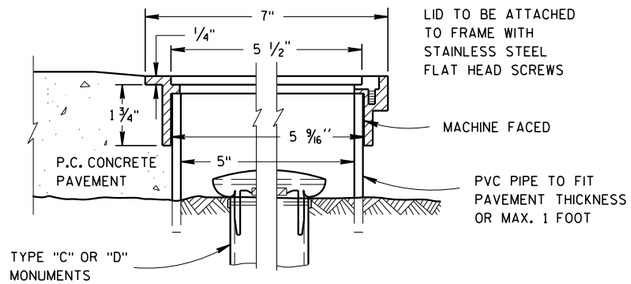

② WIS DOT MONUMENT MARKER LOGO

FOR TYPES "A", "C", & "D"




## CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)




SECTION B-B SECTION A-A

## ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Raymond A. Krumenyl — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA



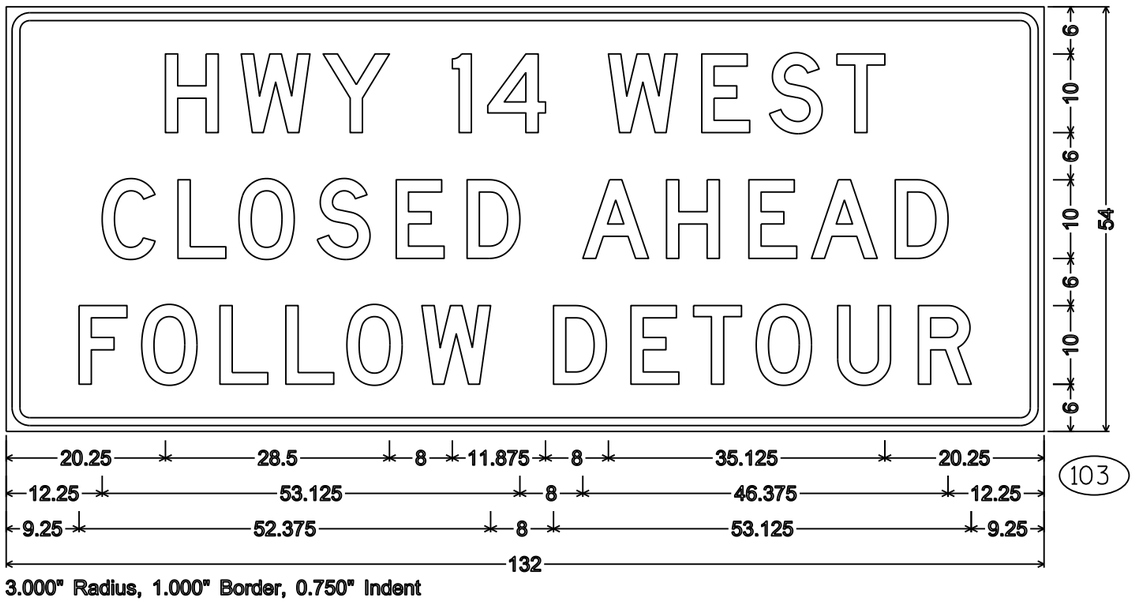


6

S.D.D. 16 A 1-7

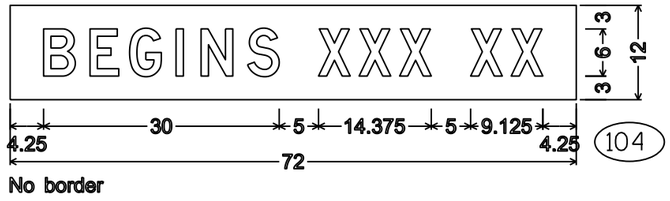
NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D

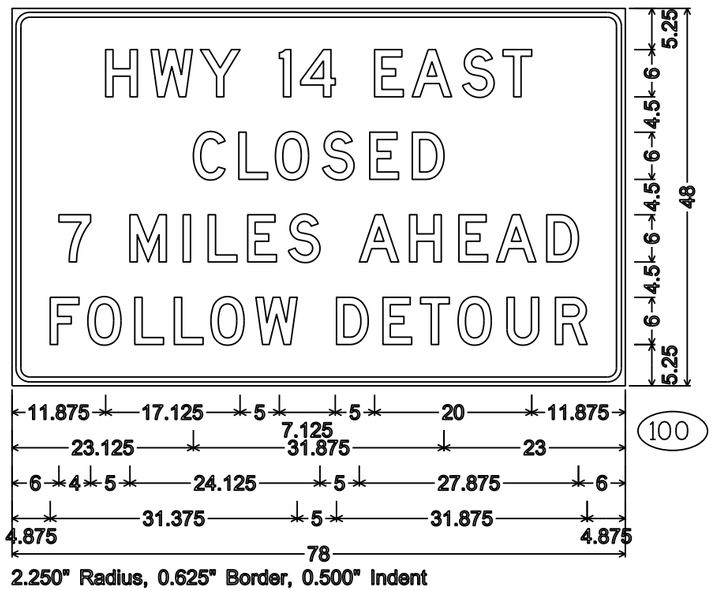



3.000" Radius, 1.000" Border, 0.750" Indent

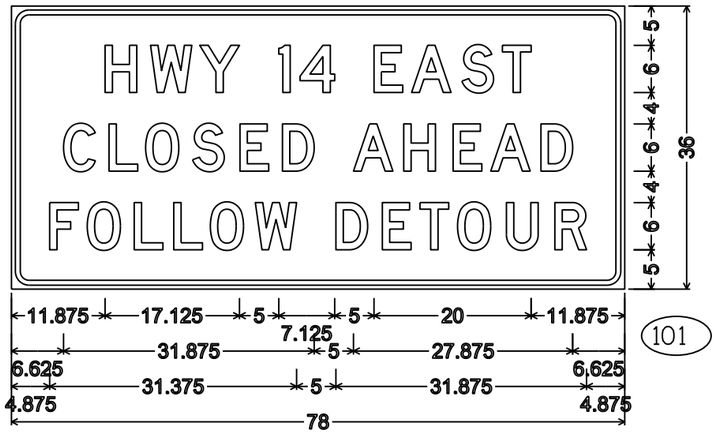
Base Material is .040" aluminum



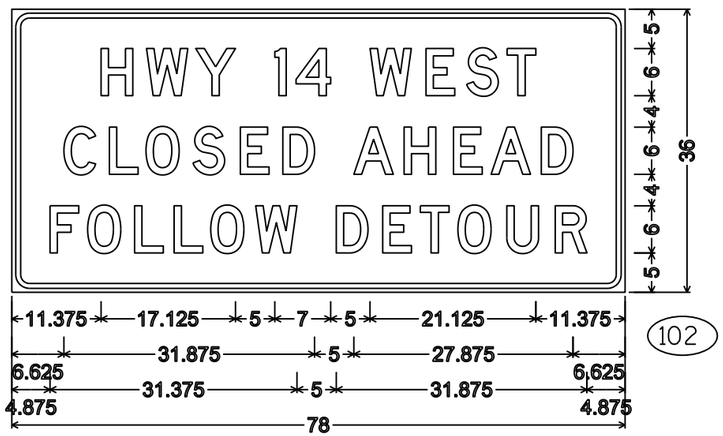

No border



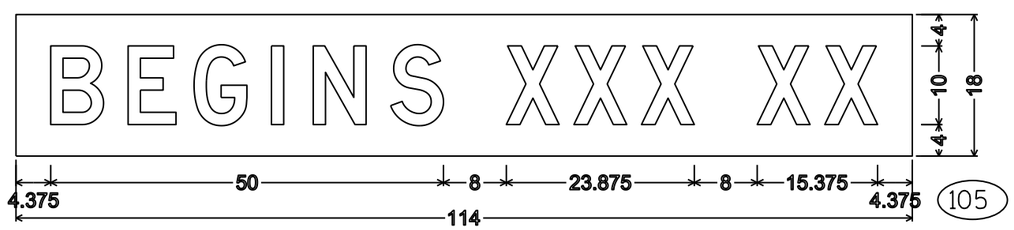

2.250" Radius, 0.625" Border, 0.500" Indent




2.250" Radius, 0.625" Border, 0.500" Indent




2.250" Radius, 0.625" Border, 0.500" Indent

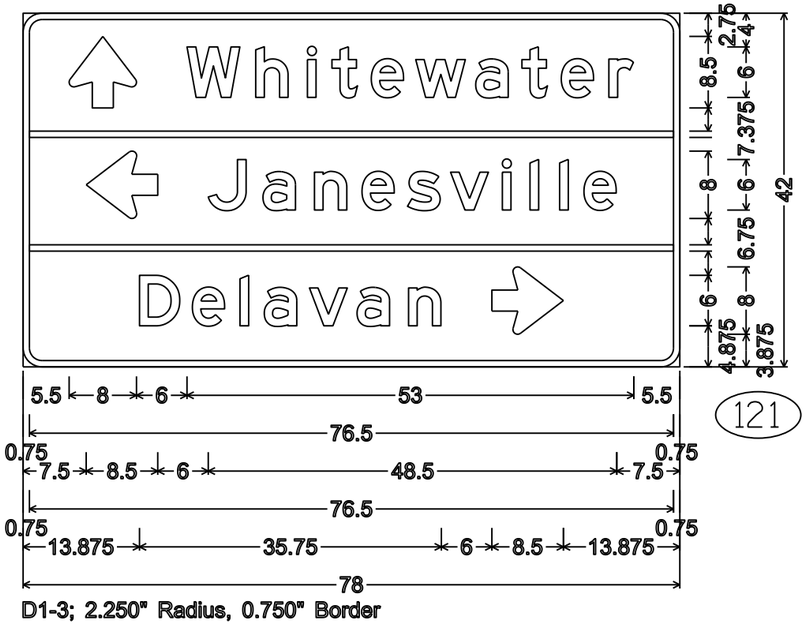



No border

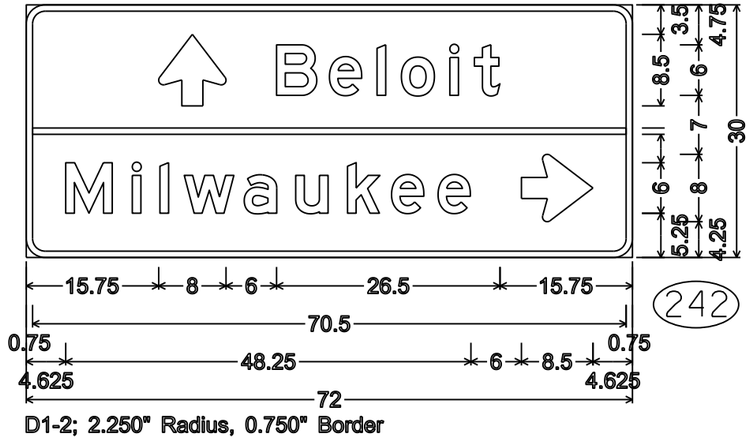
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | TEMPORARY SIGNING | SHEET NO: 187 | E |
|---|---|---|---|---|---|

NOTES

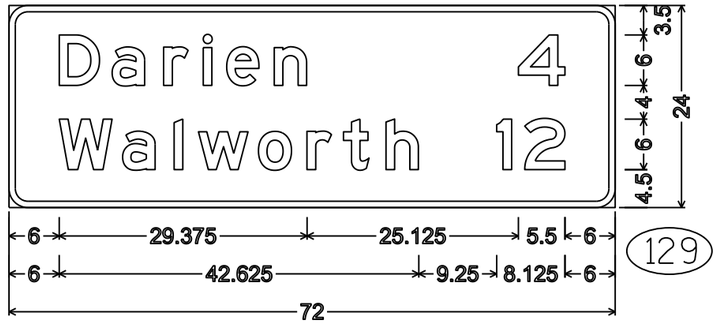
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



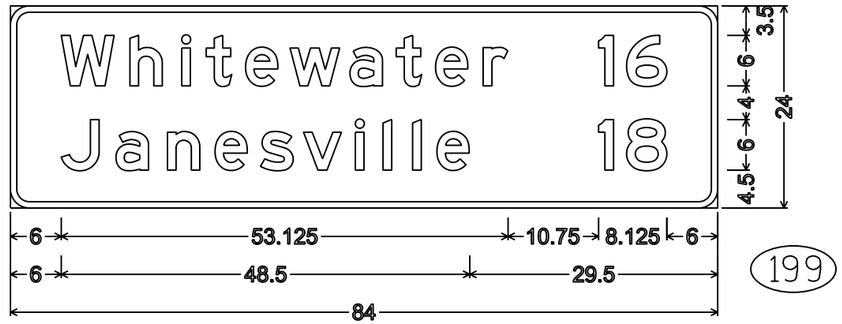

D1-3; 2.250" Radius, 0.750" Border



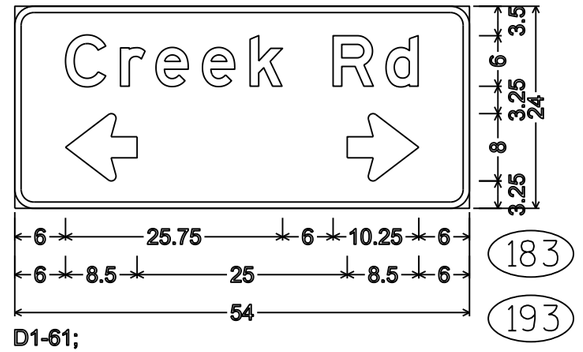

D1-2; 2.250" Radius, 0.750" Border



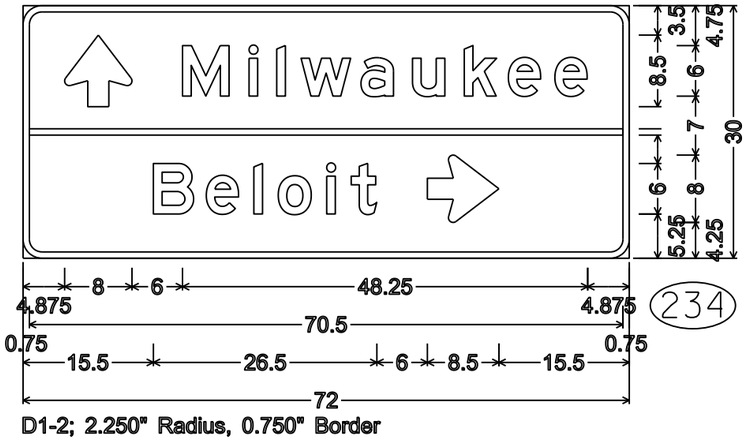

D2-2; 2.250" Radius, 0.750" Border




D2-2; 2.250" Radius, 0.750" Border




D1-61;
2.250" Radius, 0.750" Border




D1-2; 2.250" Radius, 0.750" Border



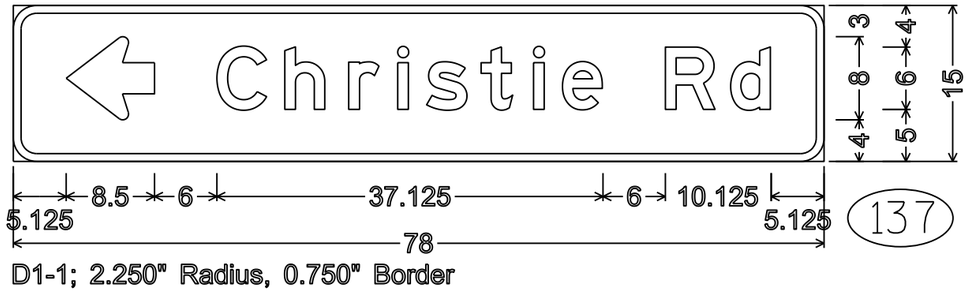

D1-1; 2.250" Radius, 0.750" Border

D1-1;
2.250" Radius, 0.750" Border

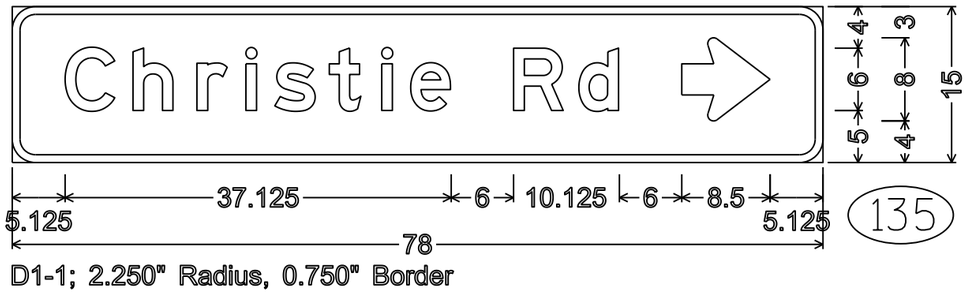
7

7

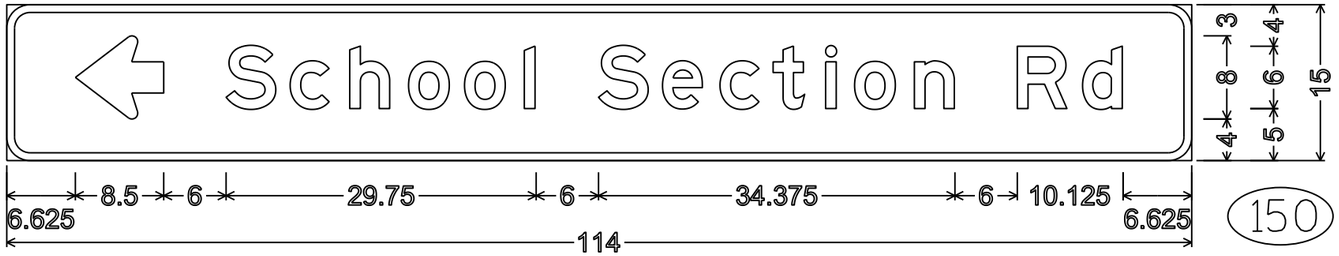
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET NO: 188 | E |
|---|---|---|---|---|---|




D1-1; 2.250" Radius, 0.750" Border




D1-1; 2.250" Radius, 0.750" Border




D1-1; 2.250" Radius, 0.750" Border

D1-1; 2.250" Radius, 0.750" Border

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E

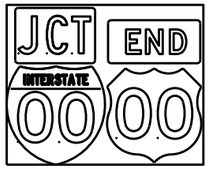
7

7

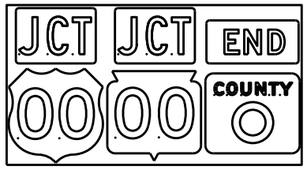
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | PERMANENT SIGNING | SHEET NO: 189 | E |
|---|---|---|---|---|---|

## TYPICAL ASSEMBLIES

J1-1

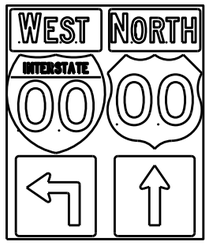


J1-2

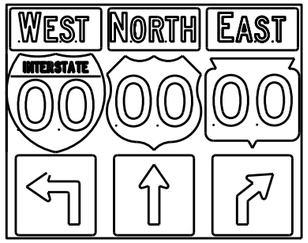


J1-3

J2-1



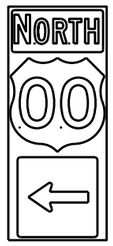
J2-2



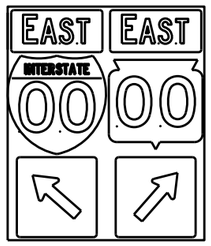
J2-3

JV

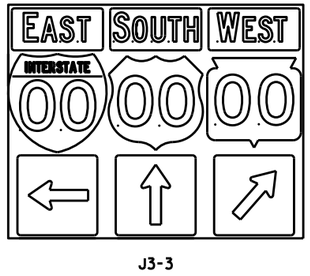
( Typical Vertical J-Assembly
See Note 10 and 11 )



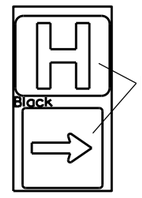
J3-1



J3-2



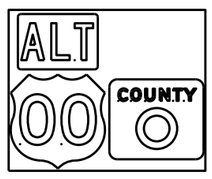
J3-3



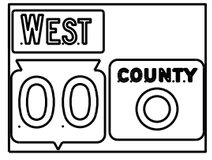
Blue Background

JH-1

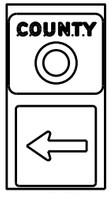
J4-1



J4-2



J4-2



J13-1

J12-1

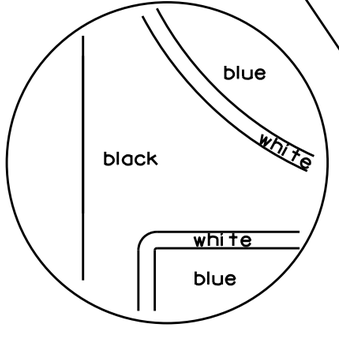
J32-1

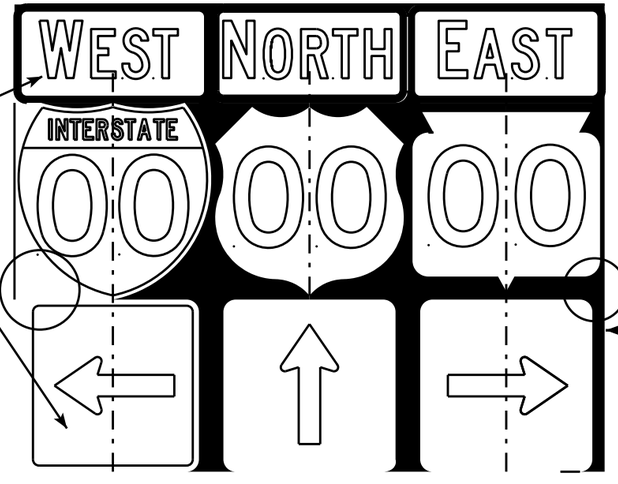
J33-1

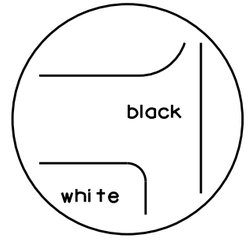
J23-1

J22-1

[blue background with interstate]




[black background]

### NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

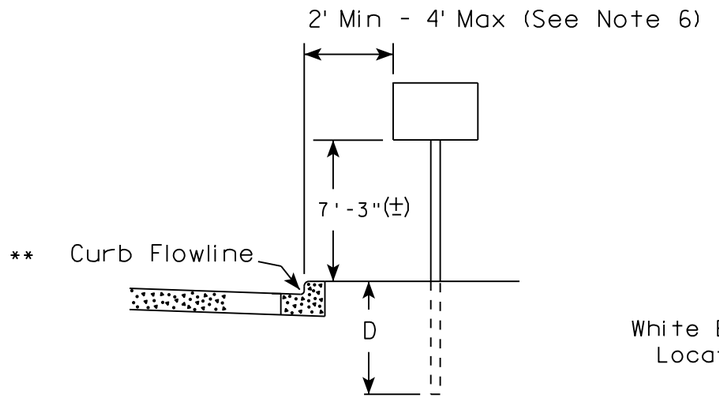


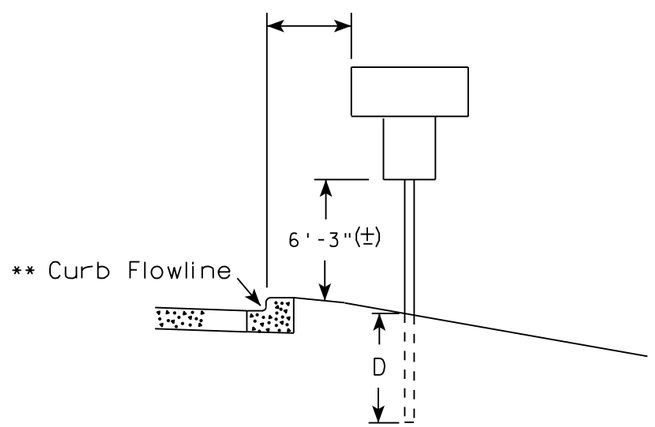
PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

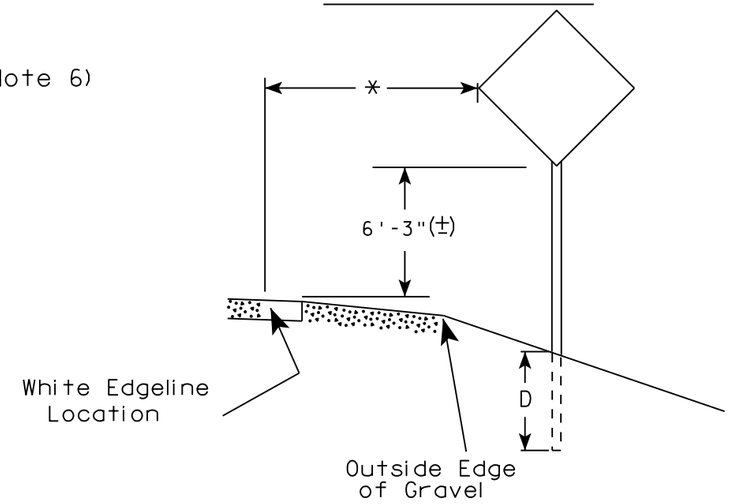
WISDOT/CADDS SHEET 42

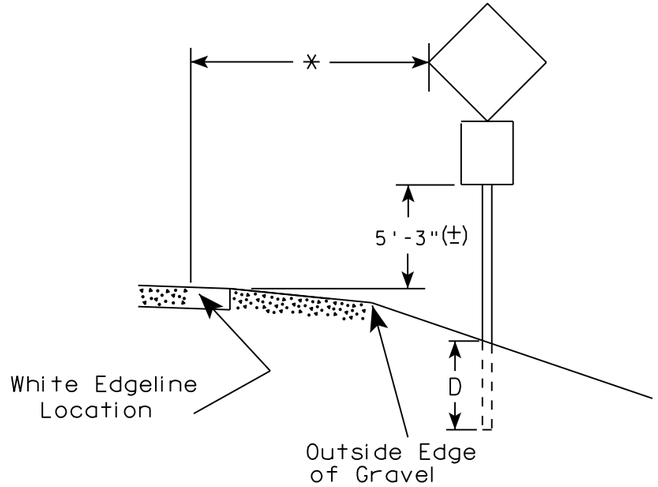
## URBAN AREA




## RURAL AREA (See Note 2)




## GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. 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" (±).

POST EMBEDMENT DEPTH

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

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

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

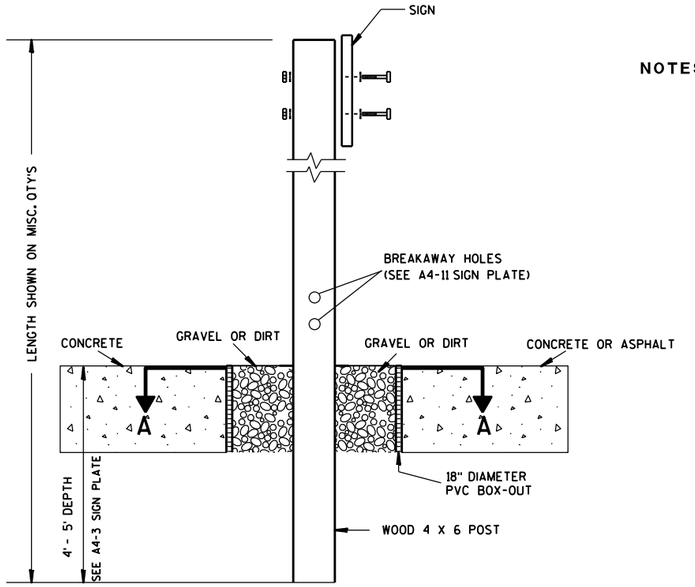
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

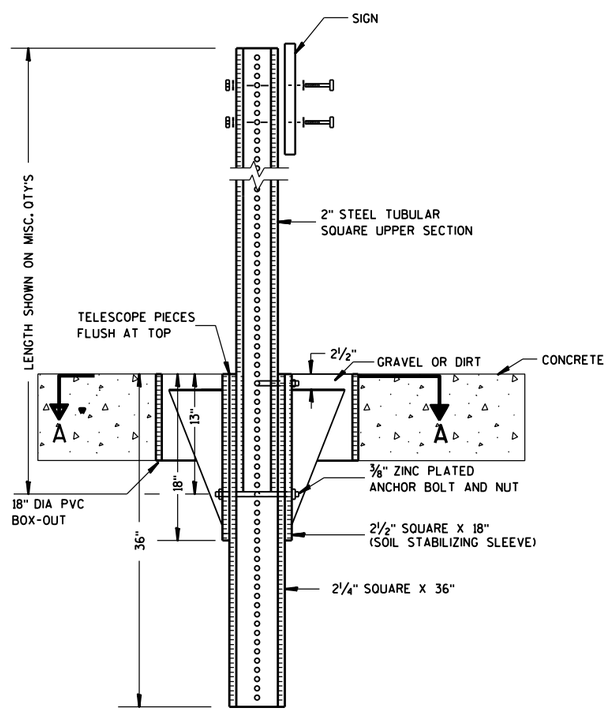
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 191 | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

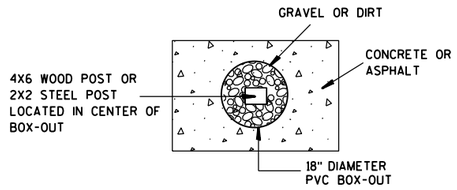
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.




**ELEVATION VIEW**

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




**PLAN VIEW**

**FOR NEW CONCRETE/ASPHALT INSTALLATIONS**

# SIGN POST BOX-OUTS A4-3B

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

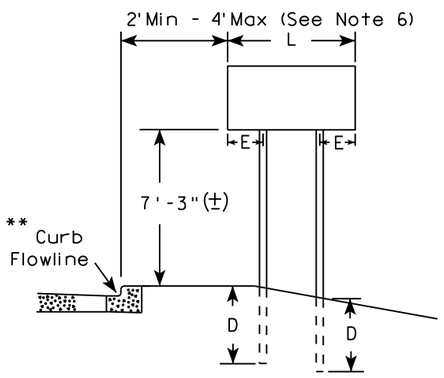
DATE 1/27/14 PLATE NO. A4-3B.1



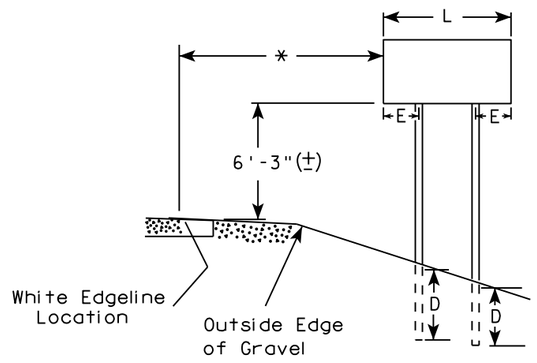
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

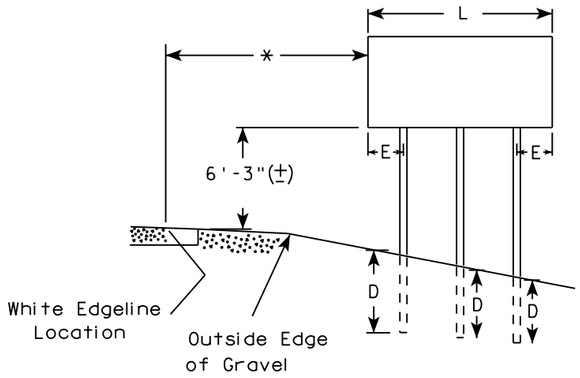
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

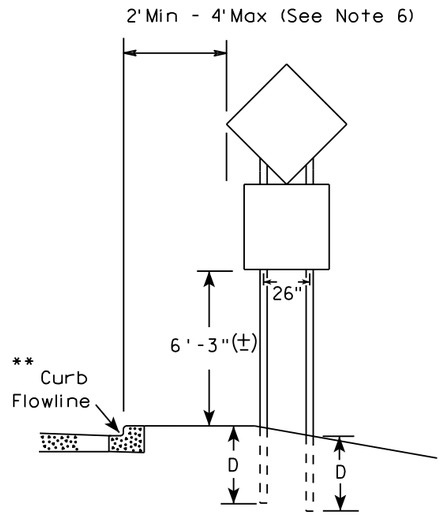
URBAN AREA



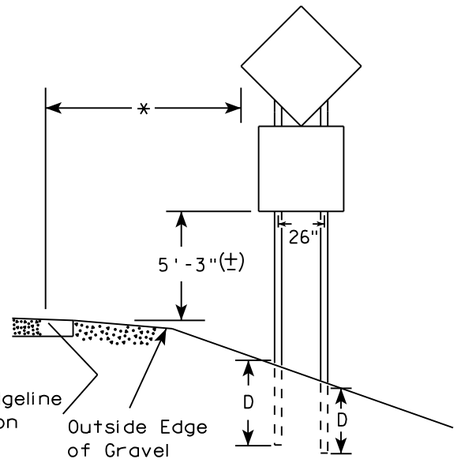

RURAL AREA (See Note 3)




48" DIAMOND WARNING SIGN




48" DIAMOND WARNING SIGN

| *** | 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*

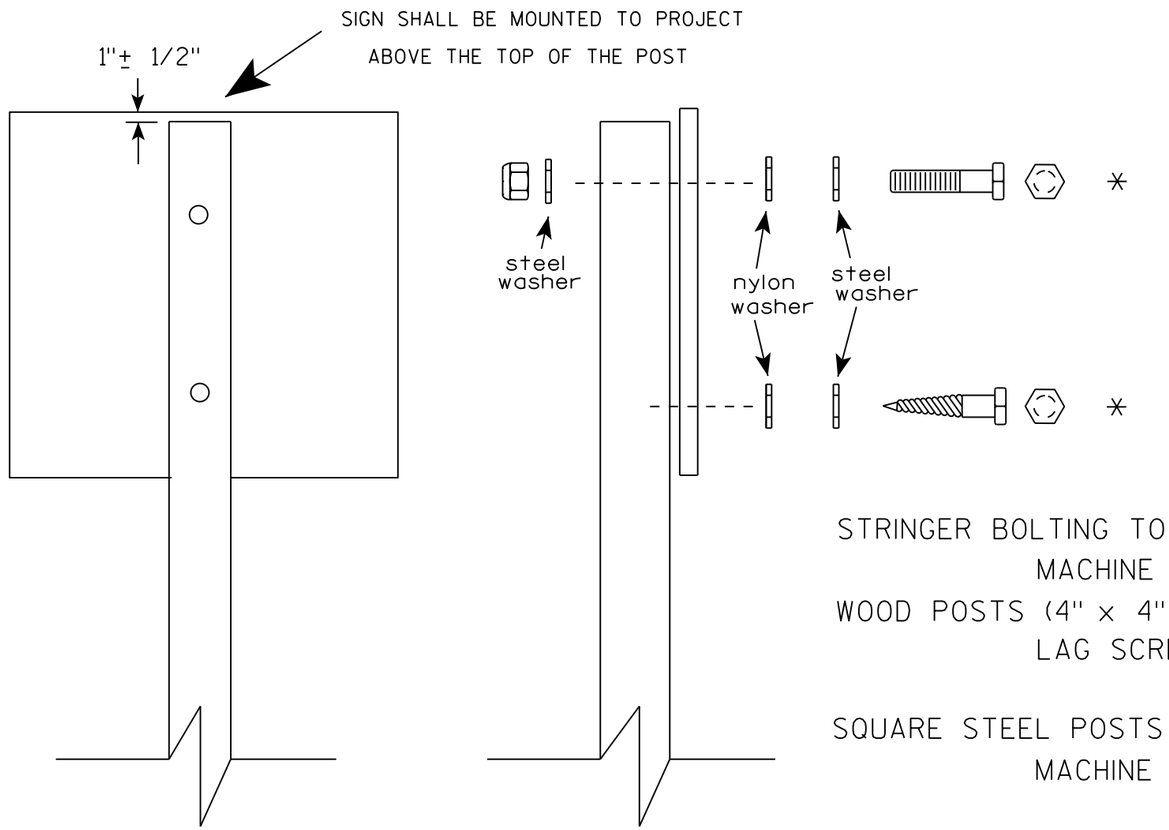
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

7

7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 193 | E




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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)
SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

# ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

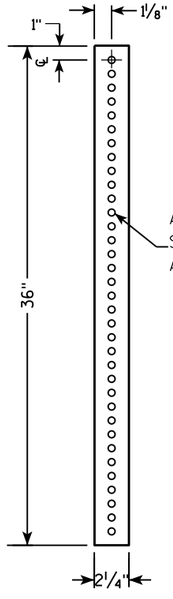


PROJECT NO: SHEET NO: E

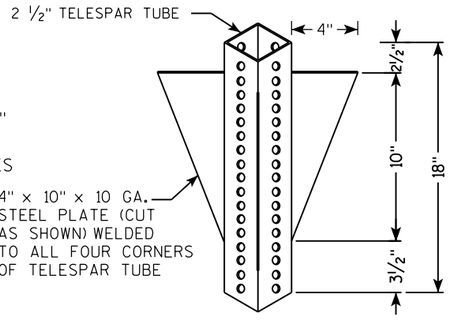
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

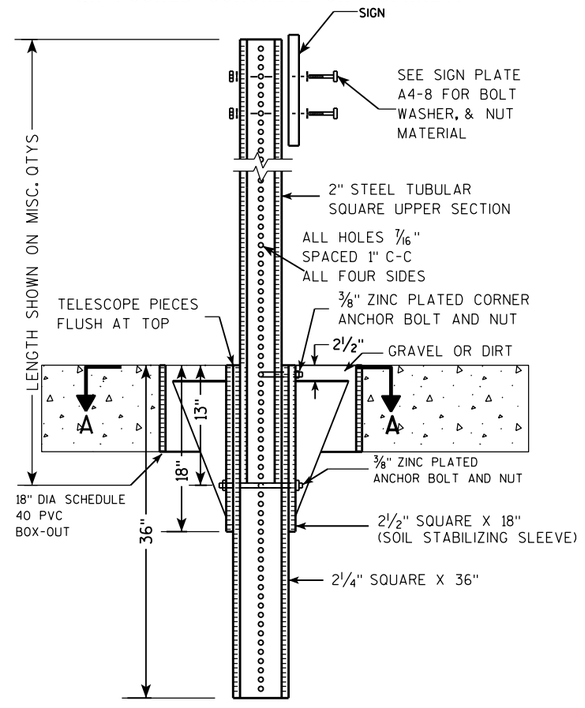
**2 1/4 " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



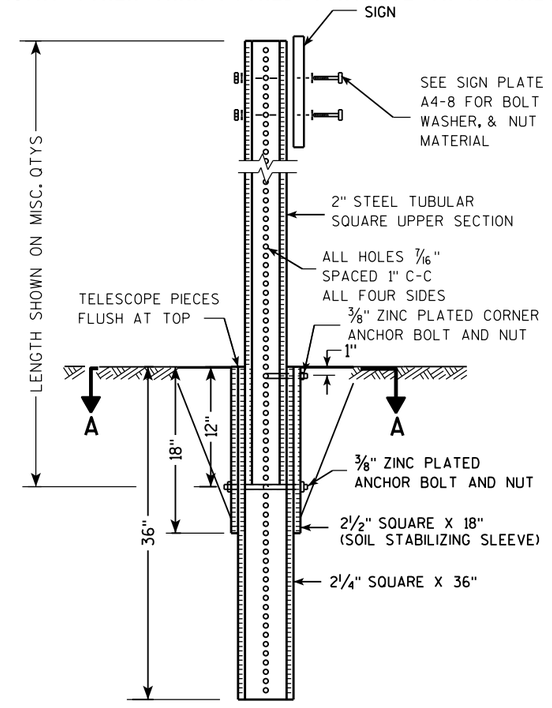

**2 1/2 " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

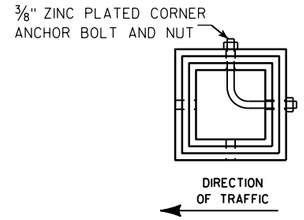



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




## DETAIL OF TUBULAR STEEL SIGN POST
**(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)**




**SECTION A-A**

| Area of Sign Installation (Sq. Ft.) | Number of Required Posts |
|---|---|
| 9 or less | 1 |
| Greater than 9 less than or equal to 18 | 2 |
| Greater than 18 less than or equal to 27 | 3 |

**Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).**

TUBULAR STEEL
SIGN POST
A4-9

*WISCONSIN DEPT OF TRANSPORTATION*

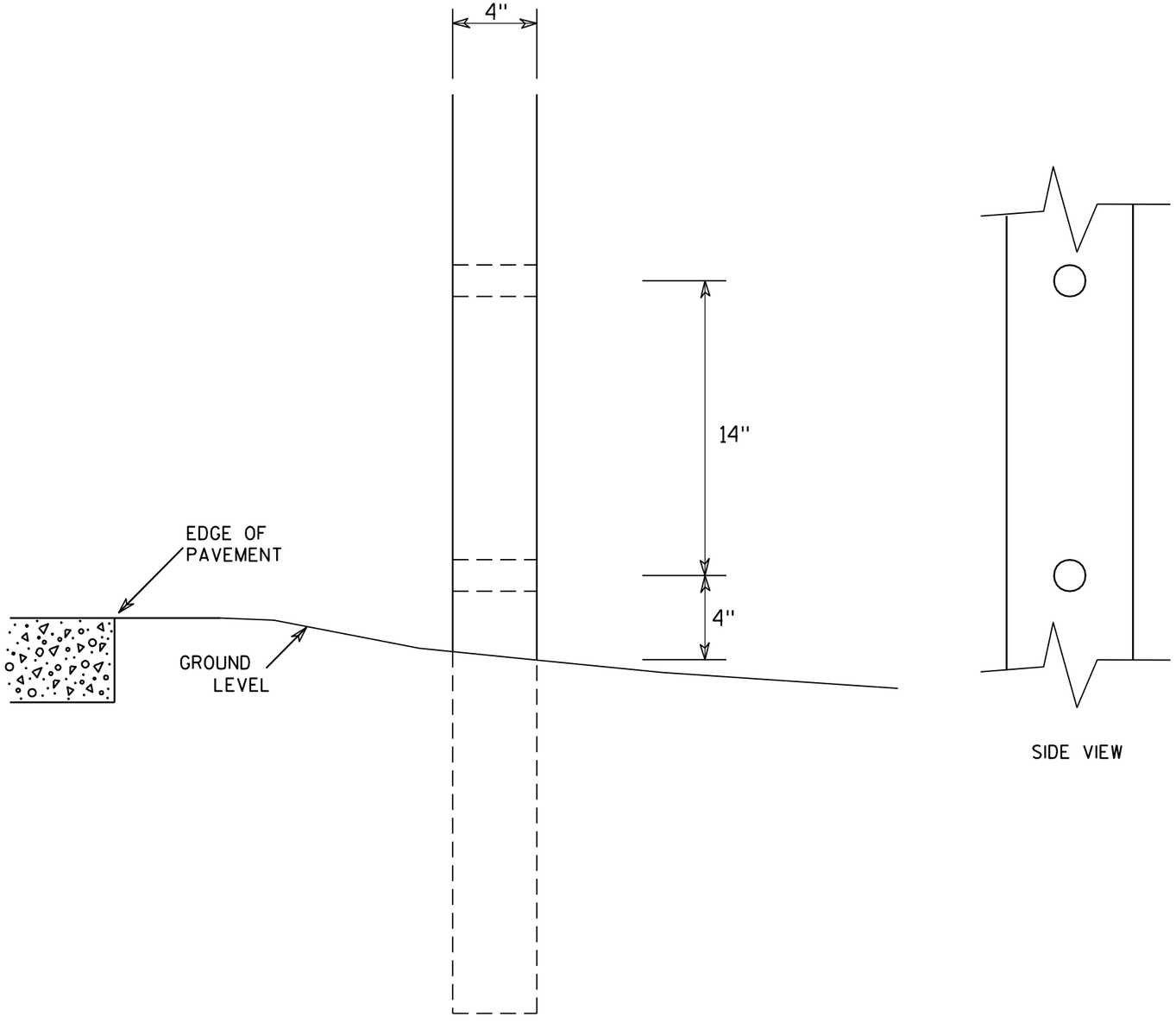
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE 195 A4-9.9

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42






SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

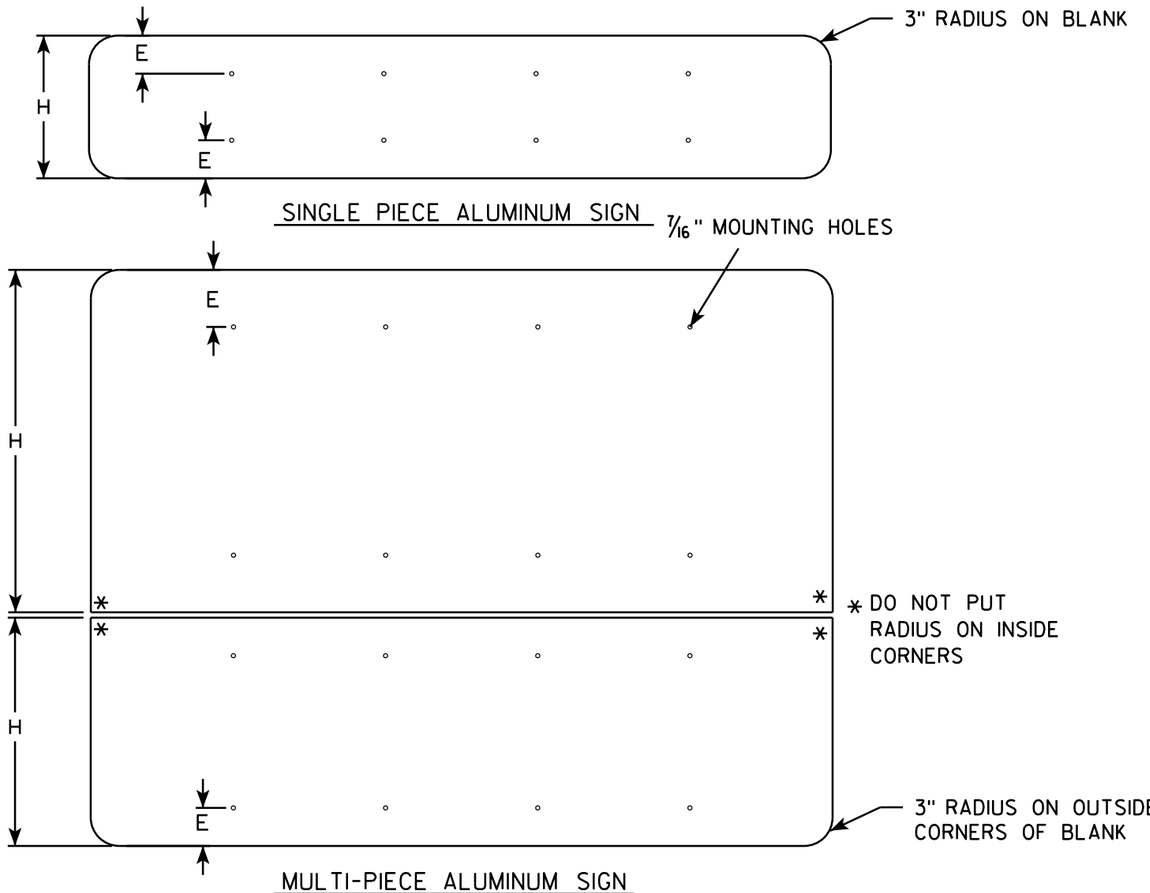
# 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

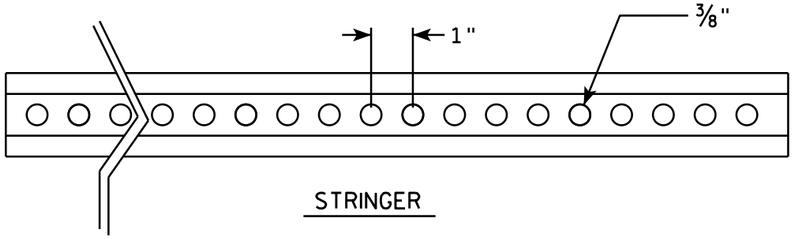
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 196 | E |
|---|---|---|---|---|---|




# GENERAL NOTES

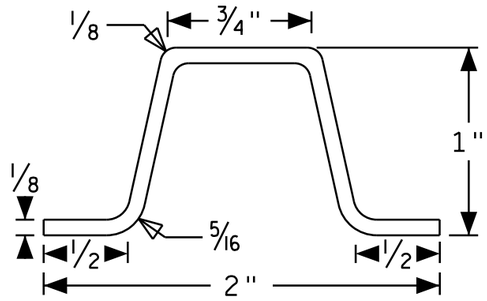
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

| SIGN WIDTH | STRINGER WIDTH | POSTS | HOLE SPACING | MOUNTING HOLES |
|---|---|---|---|---|
| 78" | 72" | 2 | 16" | 15" 31" 47" 63" |
| 84" | 72" | 2 | 17" | 16½" 33½" 50½" 67½" |
| 90" | 72" | 2 | 18" | 18" 36" 54" 72" |
| 96" | 90" | 2 | 19" | 19½" 38½" 57½" 76½" |
| 102" | 90" | 2 | 20" | 21" 41" 61" 81" |
| 108" | 90" | 2 | 21" | 22½" 43½" 64½" 85½" |
| 114" | 108" | 3 | 15" | 12" 27" 42" 57" 72" 87" 102" |
| 120" | 108" | 3 | 16" | 12" 28" 44" 60" 76" 92" 108" |
| 126" | 108" | 3 | 17" | 12" 29" 46" 63" 80" 97" 114" |
| 132" | 126" | 3 | 18" | 12" 30" 48" 66" 84" 102" 120" |
| 138" | 126" | 3 | 19" | 12" 31" 50" 69" 88" 107" 126" |
| 144" | 126" | 3 | 20" | 12" 32" 52" 72" 92" 112" 132" |

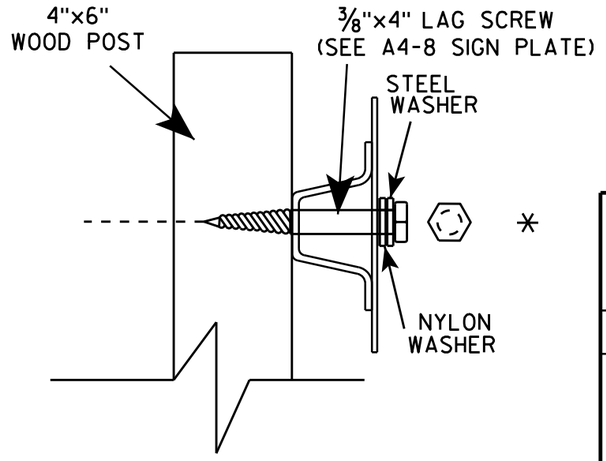



STRINGER

CROSS SECTION VIEW OF CHANNEL




POST MOUNTING




## SIGN STRINGER MOUNTING REQUIREMENTS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch

*for* State Traffic Engineer

DATE 4/26/16 PLATE NO A4-18.1

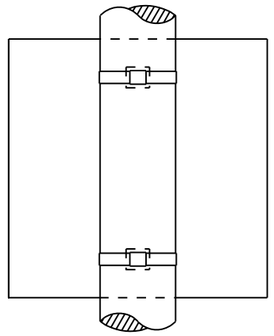
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

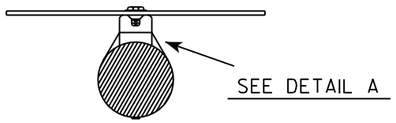


FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

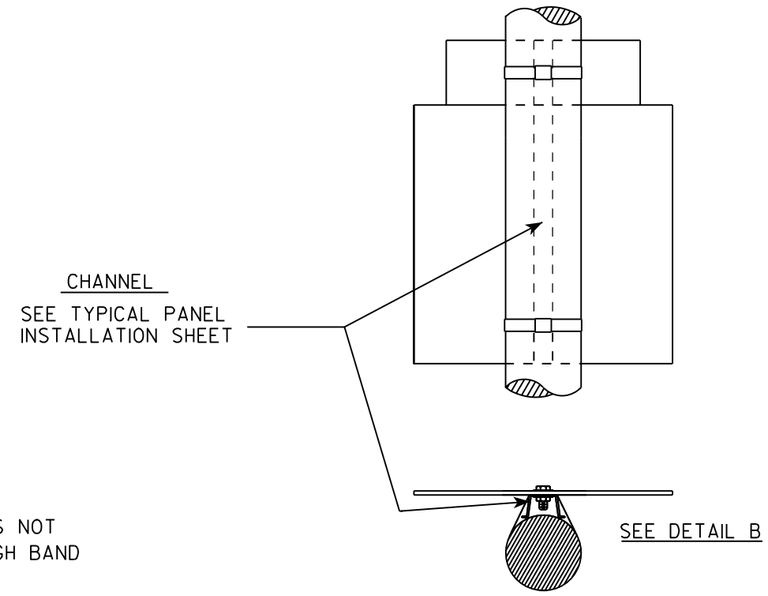
# BANDING

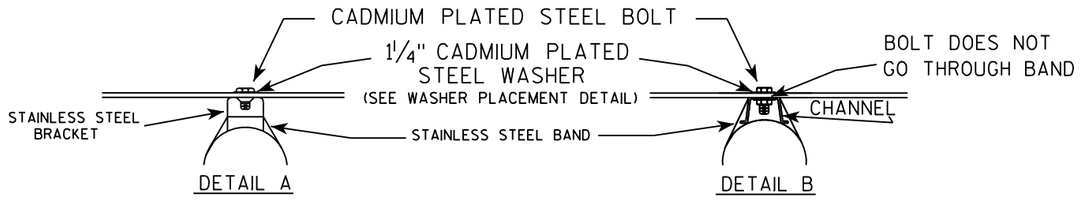
SINGLE SIGN



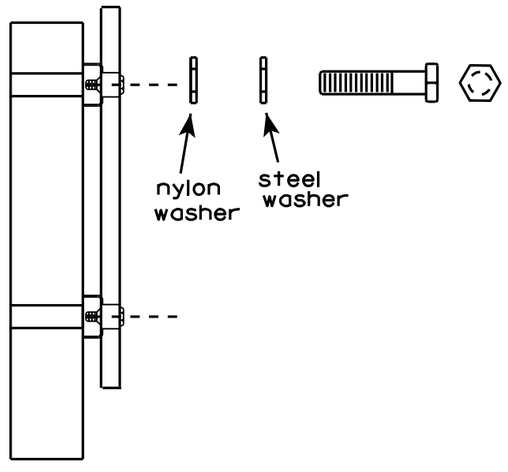



"J" ASSEMBLY




WASHER PLACEMENT




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

GENERAL NOTES

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

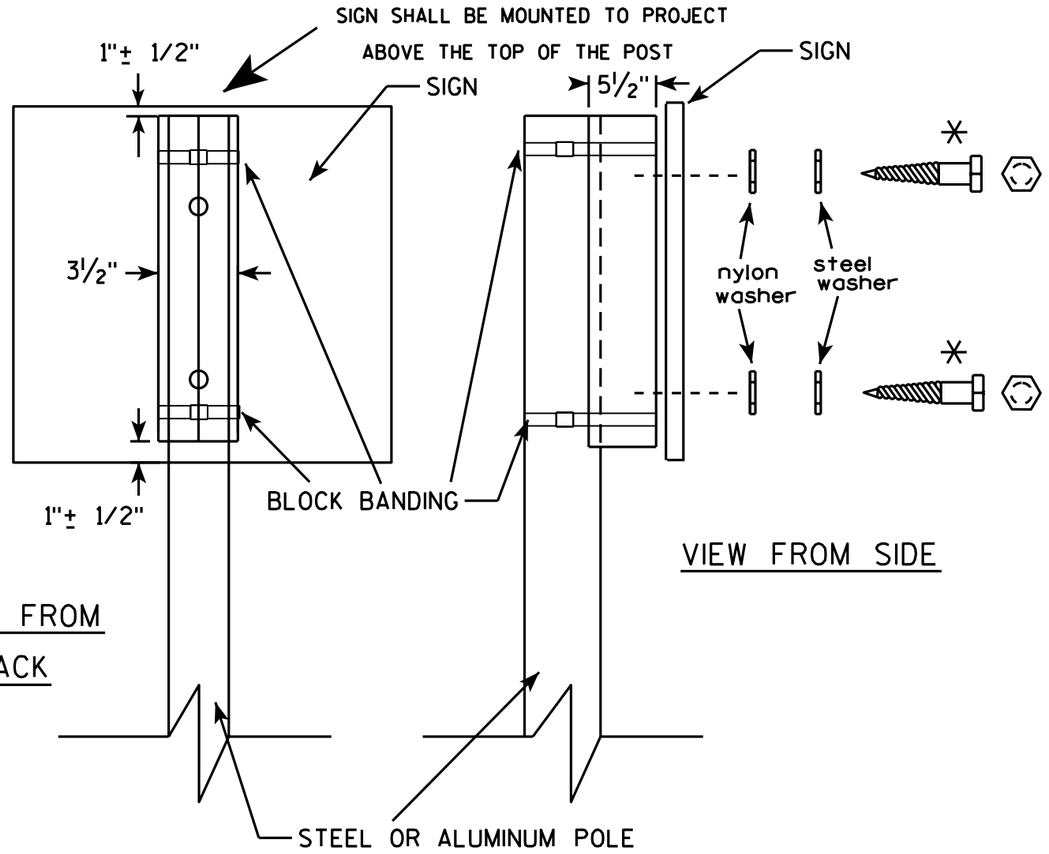
STANDARD SIGN
SIGN BANDING DETAILS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

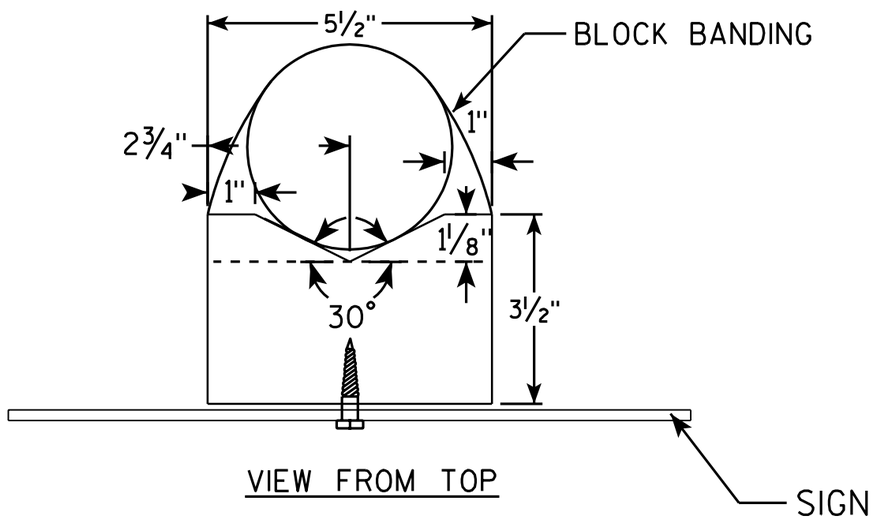
DATE 8/16/13 PLATE NO. A5-9.3

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 198 | E |
|---|---|---|---|---|---|




VIEW FROM SIDE

VIEW FROM BACK




VIEW FROM TOP

## GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

# BLOCK BANDING DETAIL ( V-BLOCK OPTION )

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

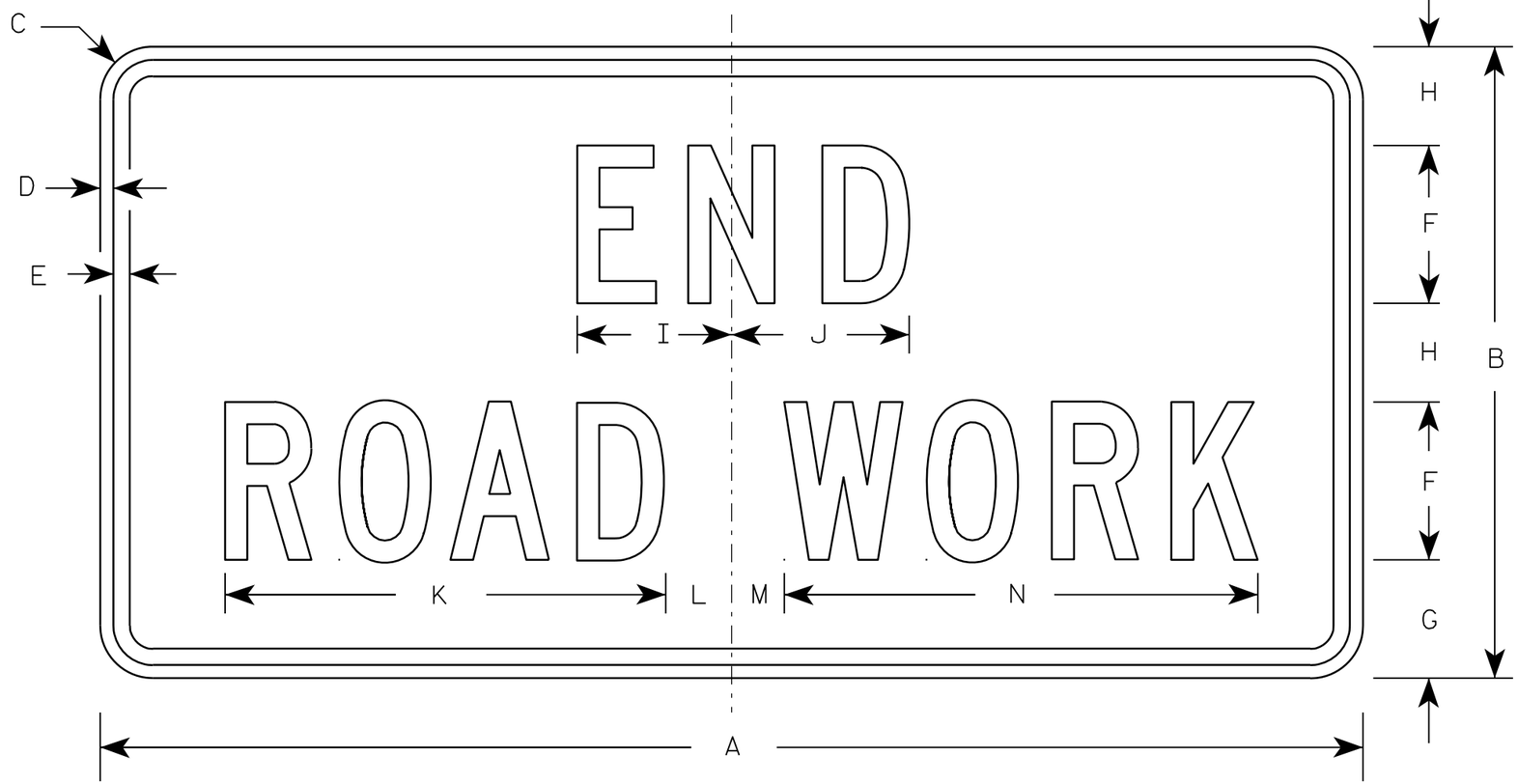
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 199 E

FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

WISDOT/CADDS SHEET 42




G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

| SIZE | |
|---|---|
| 1 | 900 mm X 450 mm |
| 2 | 1200 mm X 600 mm |
| 3 | 1200 mm X 600 mm |
| 4 | 1200 mm X 600 mm |
| 5 | 1200 mm X 600 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 4 | 3 3/4 | 2 1/2 | 4 1/8 | 4 1/8 | 11 1/8 | 2 | 1 | 12 1/8 | | | | | | | | | | | | | 4.5 | 0.41 |
| 2 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 3 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 4 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 5 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |

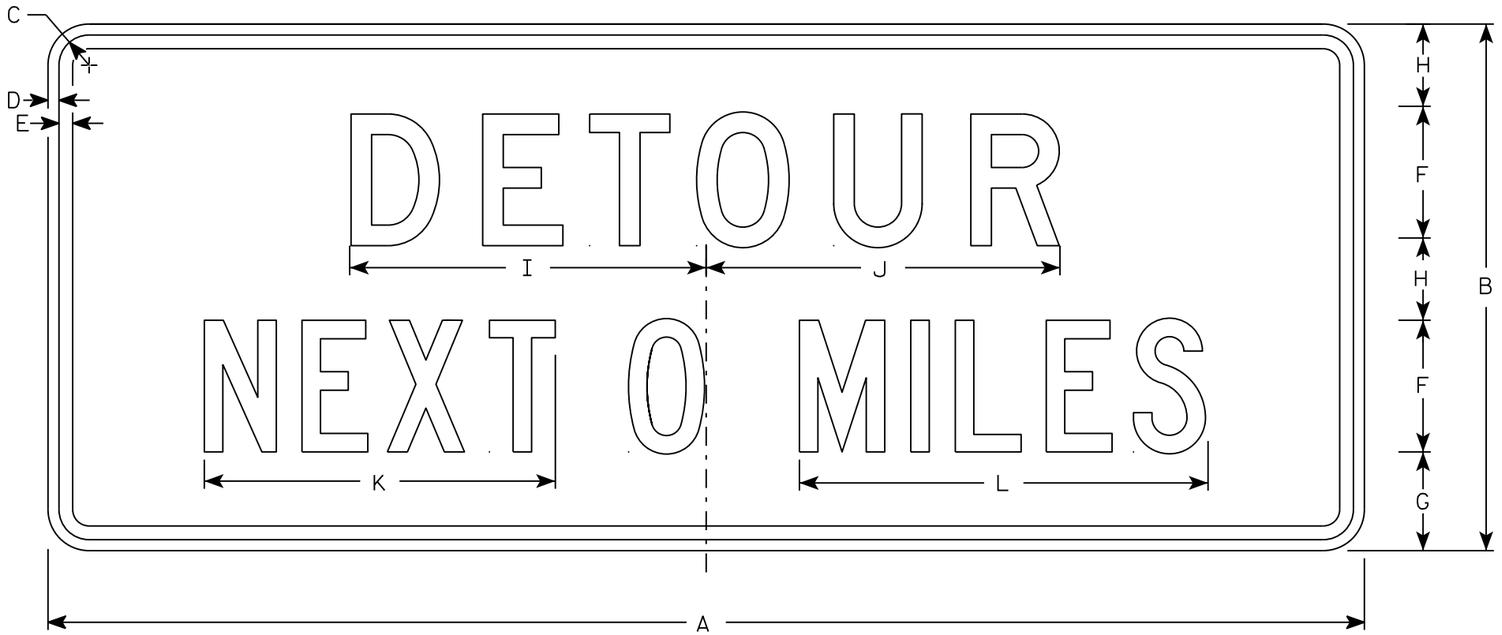
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 200 | E |
|---|---|---|---|---|---|




G20-51

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - Line 1 is D and Line 2 is 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. Round distance to nearest whole Mile and 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 60 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 16 1/4 | 16 1/8 | 16 | 18 5/8 | | | | | | | | | | | | | | | 10 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 60 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 16 1/4 | 16 1/8 | 16 | 18 5/8 | | | | | | | | | | | | | | | 10 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

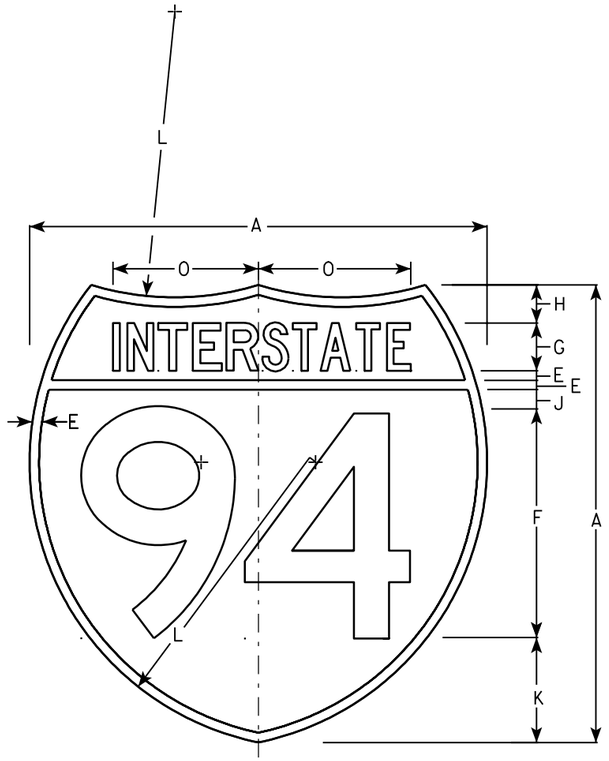
STANDARD SIGN
G20-51

*WISCONSIN DEPT OF TRANSPORTATION*

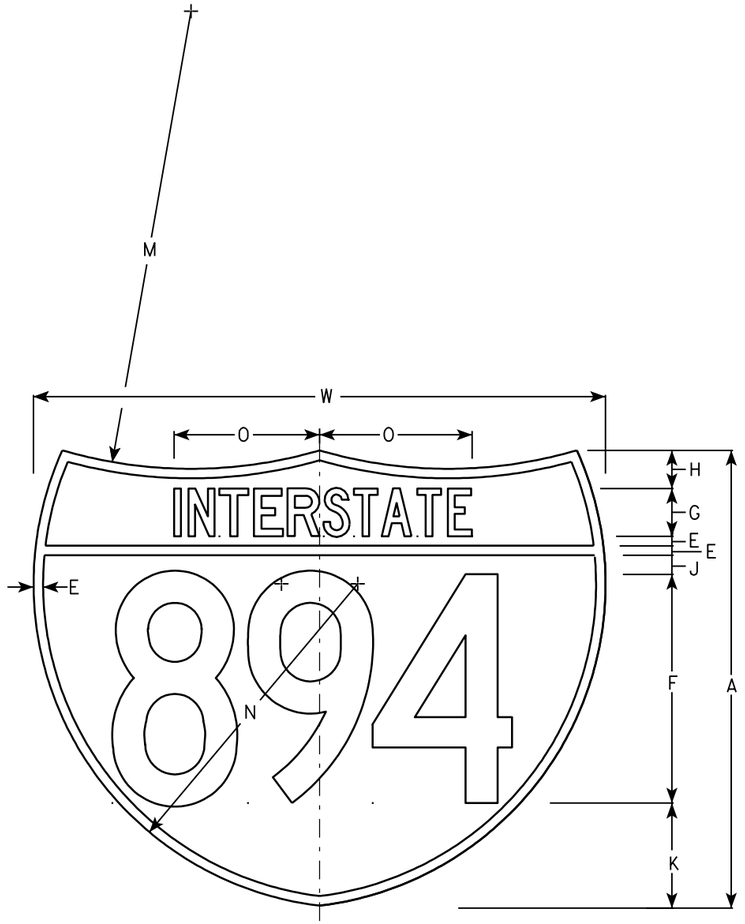
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-51.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 201 | E |
|---|---|---|---|---|---|




M1-1




M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

| SIZE | M1-1 | SIZE | M1-1A |
|---|---|---|---|
| 1 | | | |
| 2 | 600 mm X 600 mm | 2 | 600 mm X 750 mm |
| 3 | 900 mm X 900 mm | 3 | 900 mm X 1125 mm |
| 4 | 900 mm X 900 mm | 4 | 900 mm X 1125 mm |
| 5 | 900 mm X 900 mm | 5 | 900 mm X 1125 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 | M1-1 Area sq. ft. | M1-1A Area sq. ft. | M1-1 Area m2 | M1-1A Area m2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | | | 1/2 | 12 | 2 1/2 | 2 | | 1 | 5 1/2 | 15 | 24 | 17 | 7 7/8 | | | | | | | | 30 | | | 3.13 | 3.91 | .36 | .46 |
| 3 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 | .81 | 1.05 |
| 4 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 | .81 | 1.05 |
| 5 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 | .81 | 1.05 |

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

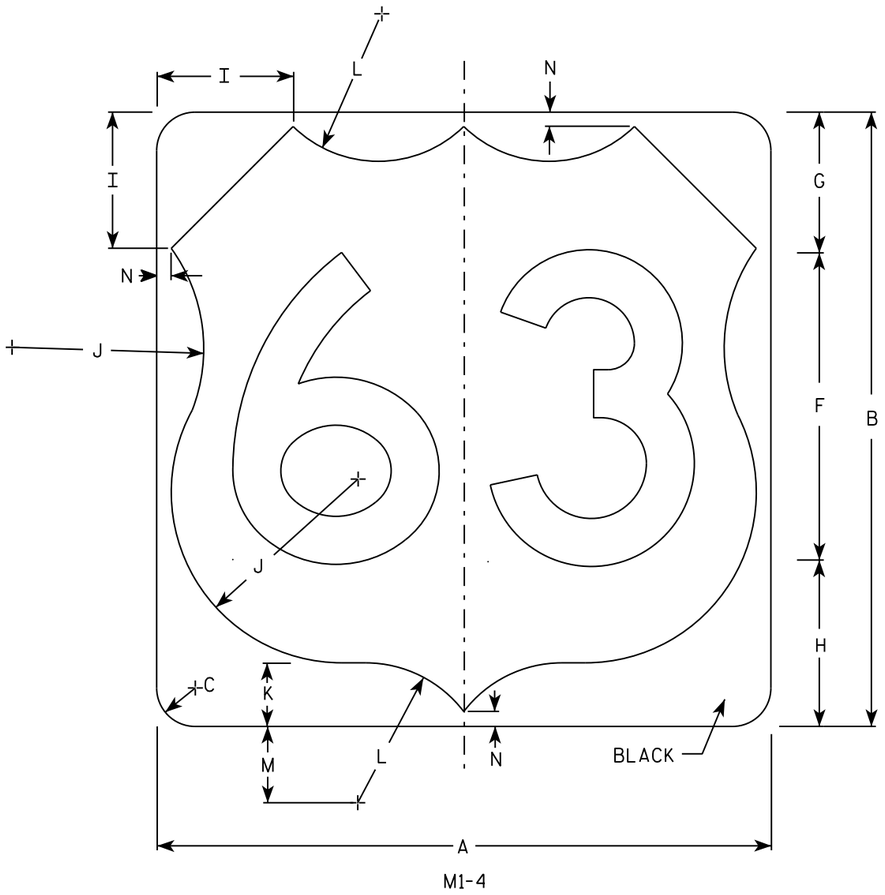
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

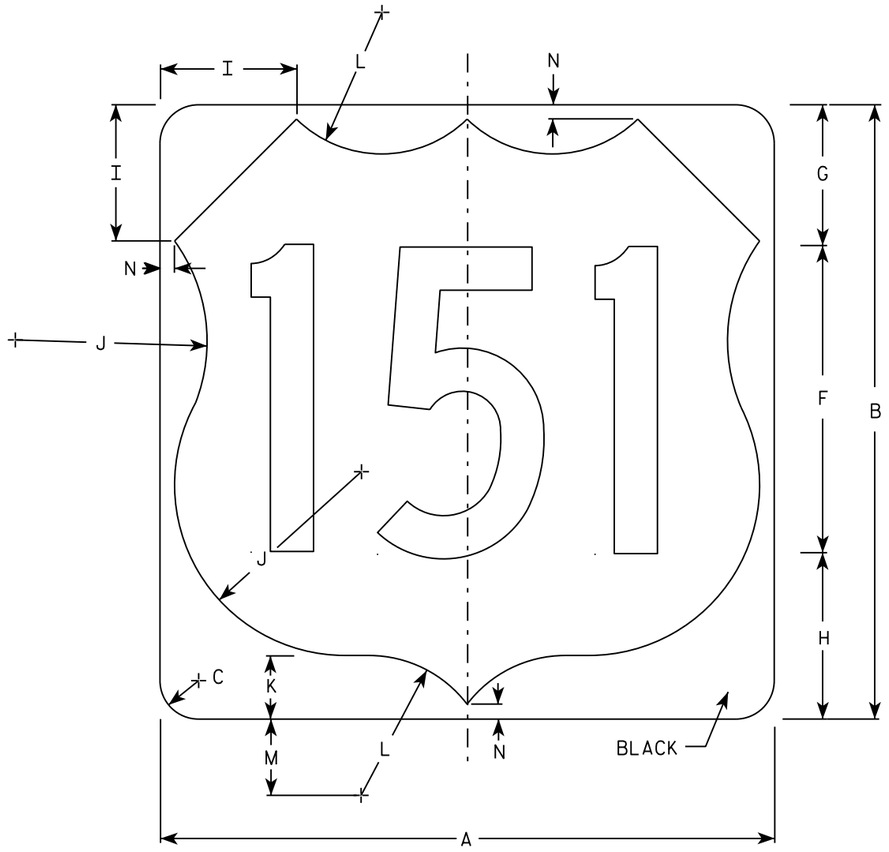
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 202 | E |
|---|---|---|---|---|---|

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs 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.




M1-4




M1-4

| 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 | 24 | 1 1/2 | | | 12 | 5 1/2 | 6 1/2 | 5 | 7 1/2 | 2 1/2 | 5 1/2 | 3 | 1/2 | | | | | | | | | | | | | 4.0 |
| 3 | 36 | 36 | 2 1/4 | | | 18 | 8 1/4 | 9 1/4 | 7 1/4 | 11 1/4 | 3 3/4 | 8 1/4 | 4 1/2 | 3/4 | | | | | | | | | | | | | 9.0 |
| 4 | 36 | 36 | 2 1/4 | | | 18 | 8 1/4 | 9 1/4 | 7 1/4 | 11 1/4 | 3 3/4 | 8 1/4 | 4 1/2 | 3/4 | | | | | | | | | | | | | 9.0 |
| 5 | 36 | 36 | 2 1/4 | | | 18 | 8 1/4 | 9 1/4 | 7 1/4 | 11 1/4 | 3 3/4 | 8 1/4 | 4 1/2 | 3/4 | | | | | | | | | | | | | 9.0 |

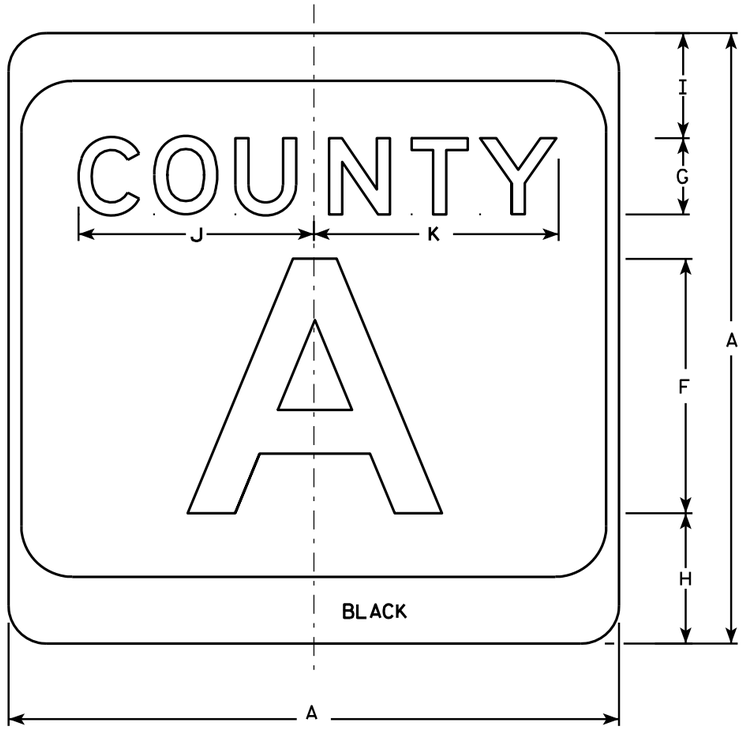
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

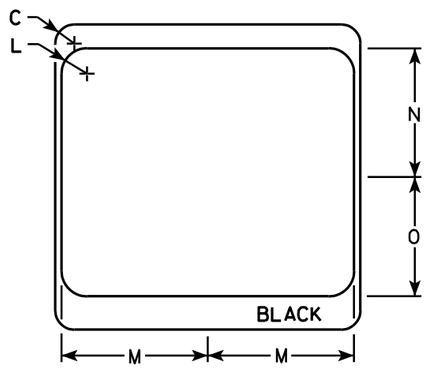
APPROVED Matthew R Rauch
for State Traffic Engineer

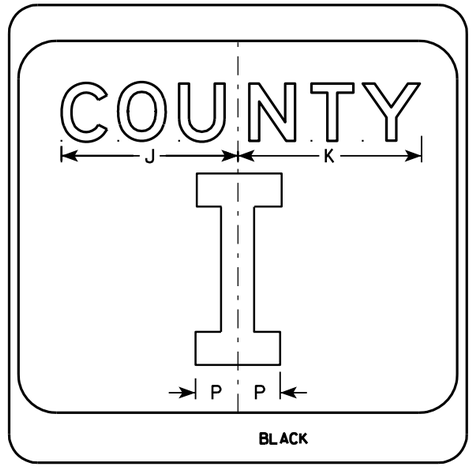
DATE 3/16/18 PLATE NO. M1-4.10

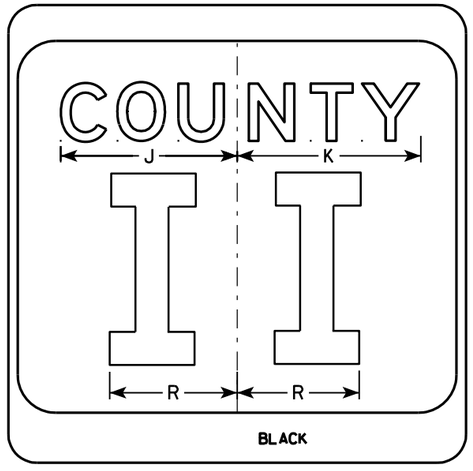
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 203 | E |
|---|---|---|---|---|---|




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 |

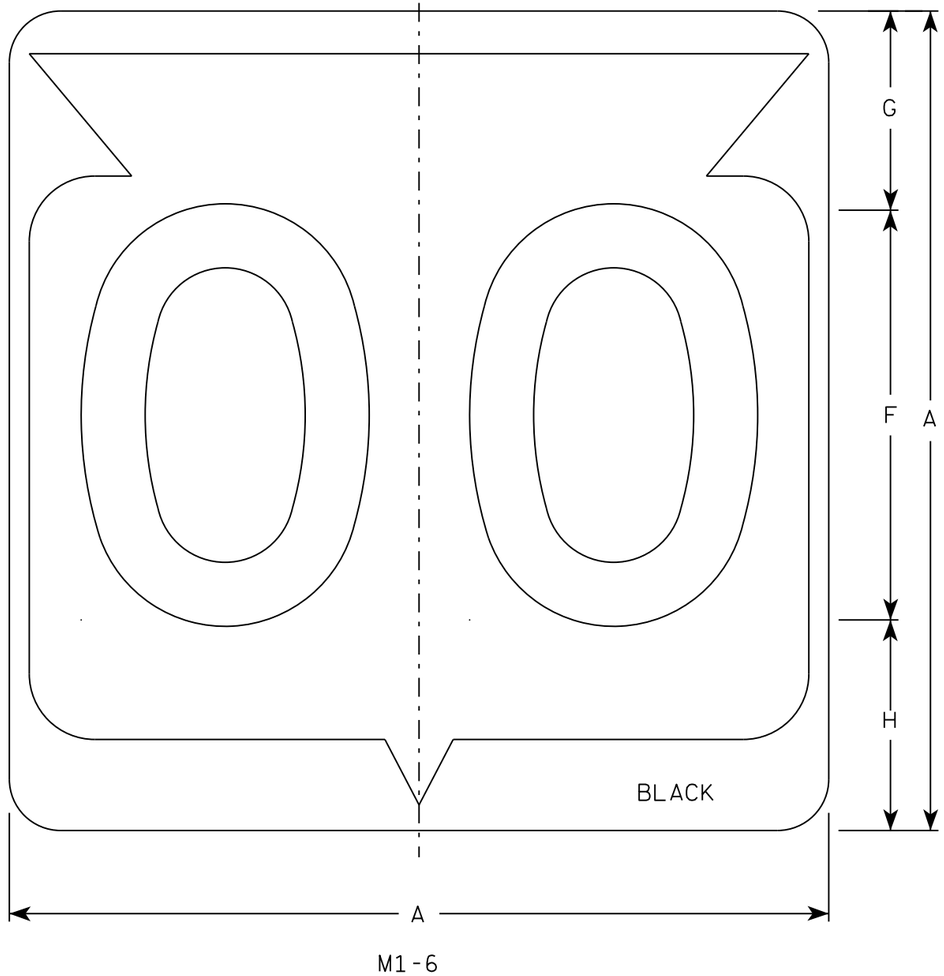
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

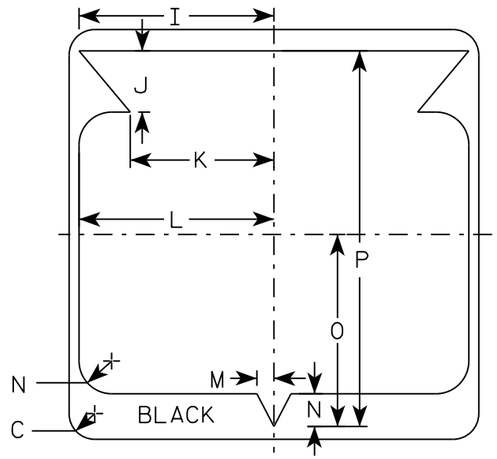
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 204 | E |
|---|---|---|---|---|---|




M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 |
| 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 |
| 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 |
| 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 |

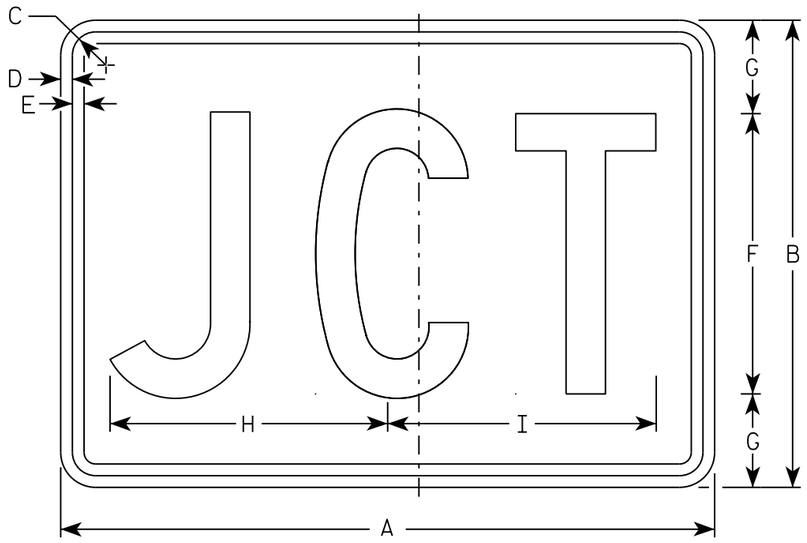
# STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

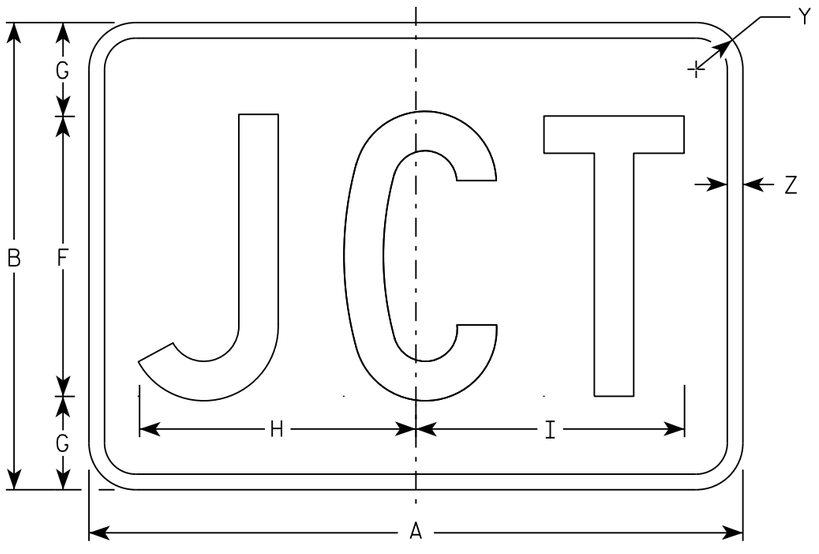
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 205 | 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

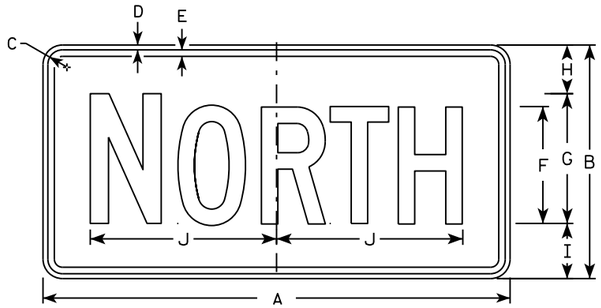
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 206 12-1.12

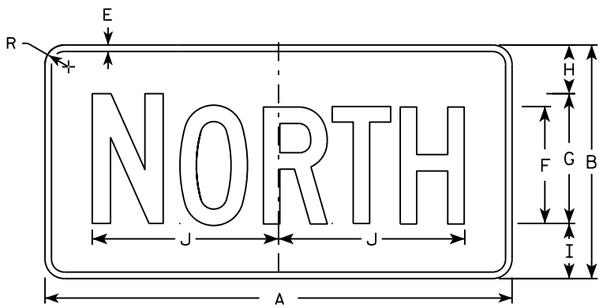
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



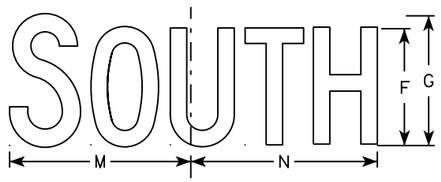

M3-1
MM3-1
MP3-1



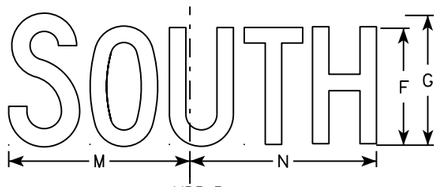

MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

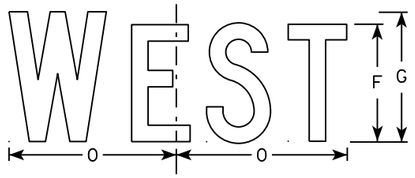
MB3-2
MK3-2
MN3-2



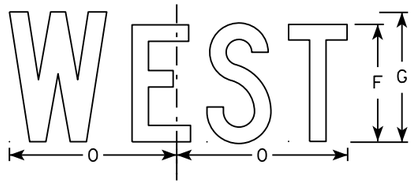

M3-3
MM3-3
MP3-3




MB3-3
MK3-3
MN3-3




M3-4
MM3-4
MP3-4




MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 7 | 2 1/4 | 2 3/4 | 10 1/4 | 7 7/8 | 8 3/8 | 10 1/4 | 9 3/4 | 8 3/4 | | | 1 1/2 | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |

STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

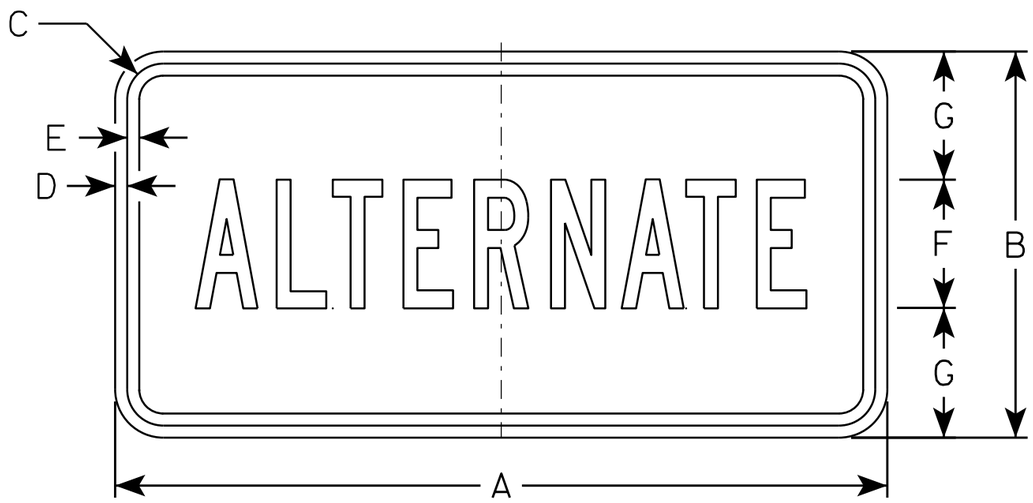
APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

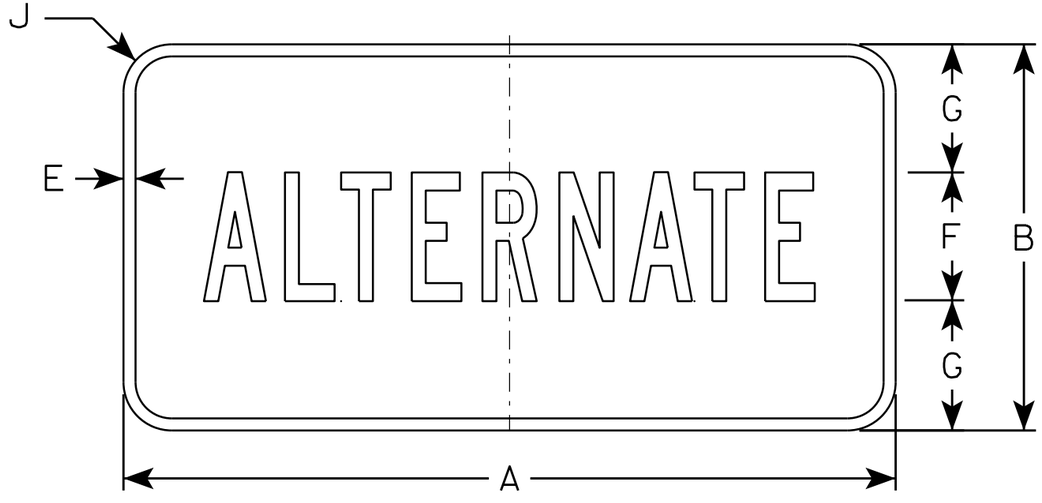


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000




M4-1
M04-1




MB4-1

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
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.
5. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   M04-1 Background - Orange - Type F
   Message - Black

| 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 | 4 | 4 | 9 3/4 | 9 1/2 | 1 1/2 | | | | | | | | | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 7 | 5 1/2 | 16 3/8 | 16 1/2 | 1 1/2 | | | | | | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 7 | 5 1/2 | 16 3/8 | 16 1/2 | 1 1/2 | | | | | | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 7 | 5 1/2 | 16 3/8 | 16 1/2 | 1 1/2 | | | | | | | | | | | | | | | | | 4.5 |

STANDARD SIGN
M4-1

WISCONSIN DEPT OF TRANSPORTATION

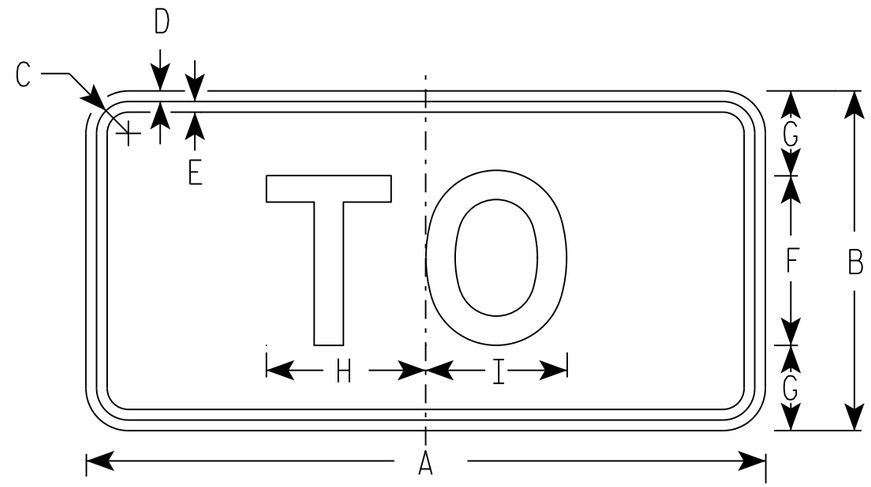
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/14 PLATE 14-1.8

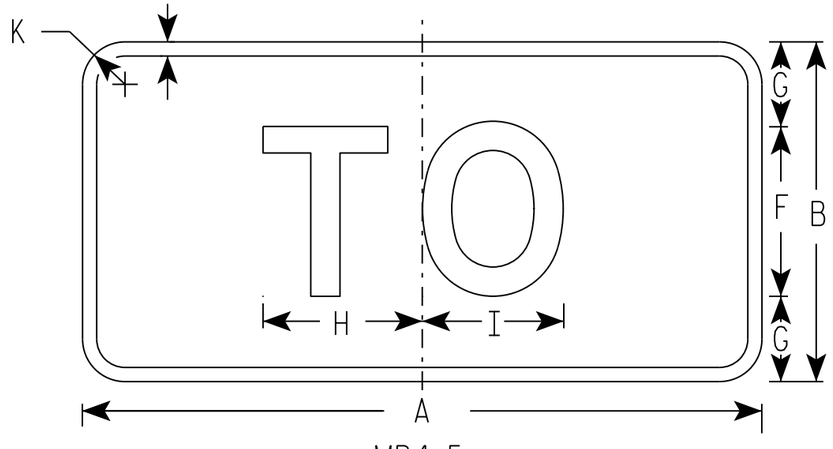


| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M41.DGN PLOT DATE : 30-JUN-2014 15:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 4.708937:1.000000
WISDOT/CADDS SHEET 42




M4-5
MM4-5
MP4-5




MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
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. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

| 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 | 5 3/8 | 5 1/4 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 3/8 | 3/8 | 1/2 | 9 | 4 1/2 | 8 1/4 | 8 3/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 3/8 | 3/8 | 1/2 | 9 | 4 1/2 | 8 1/4 | 8 3/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 3/8 | 3/8 | 1/2 | 9 | 4 1/2 | 8 1/4 | 8 3/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |

STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

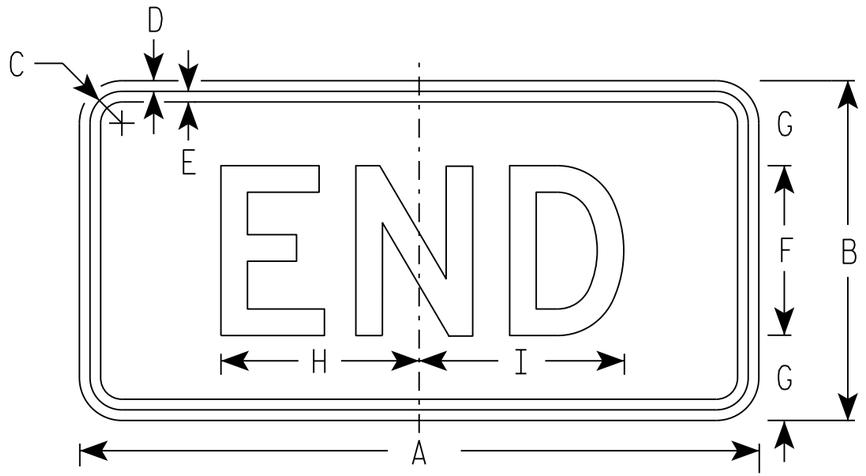
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 209 M4-5.8

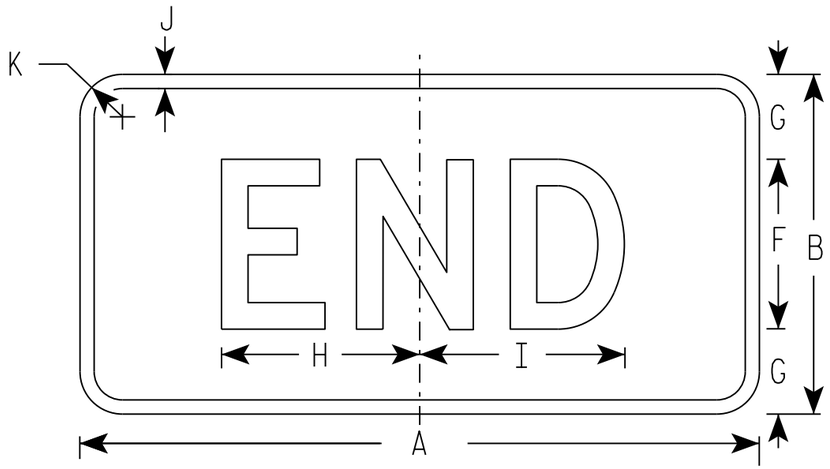
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M45.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000




M4-6
MM4-6
MP4-6




MB4-6
MK4-6
MN4-6
MR4-6

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
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. M4-6 Background - White
   Message - Black

   MB4-6 Background - Blue
   Message - White

   MK4-6 Background - Green
   Message - White

   MM4-6 Background - White
   Message - Green

   MN4-6 Background - Brown
   Message - White

   MP4-6 Background - White
   Message - Blue

   MR4-6 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 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 3 | 7 | 7 1/4 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 12 | 11 7/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 12 | 11 7/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 12 | 11 7/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |

STANDARD SIGN
M4-6

WISCONSIN DEPT OF TRANSPORTATION

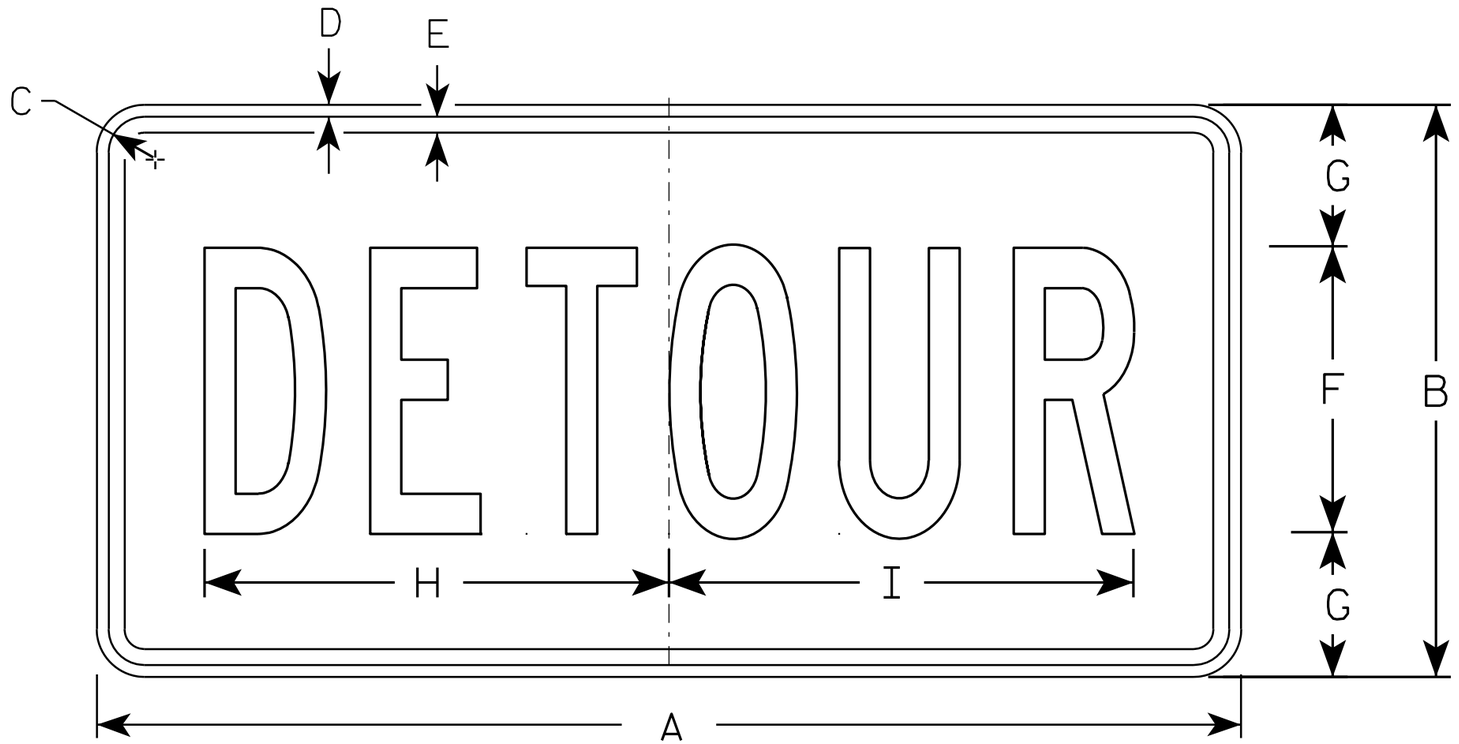
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 210 '14-7.9

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



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M46.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000




M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 3 | 10 | 10 1/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

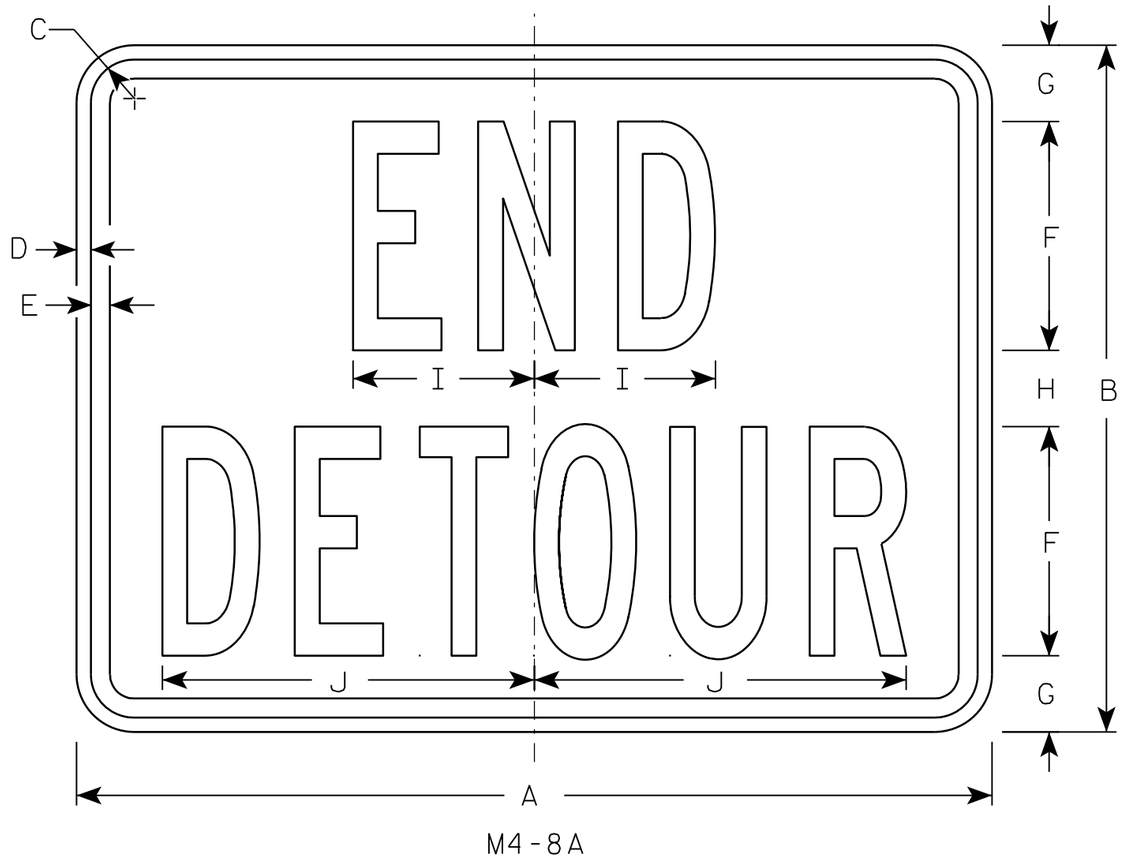
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 211 | E |
|---|---|---|---|---|---|




M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 18 | 1 1/8 | 3/8 | 1/2 | 6 | 2 | 2 | 4 3/4 | 9 3/4 | | | | | | | | | | | | | | | | | 3.0 |
| 3 | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 8 | 2 1/2 | 3 | 6 3/4 | 13 | | | | | | | | | | | | | | | | | 5.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

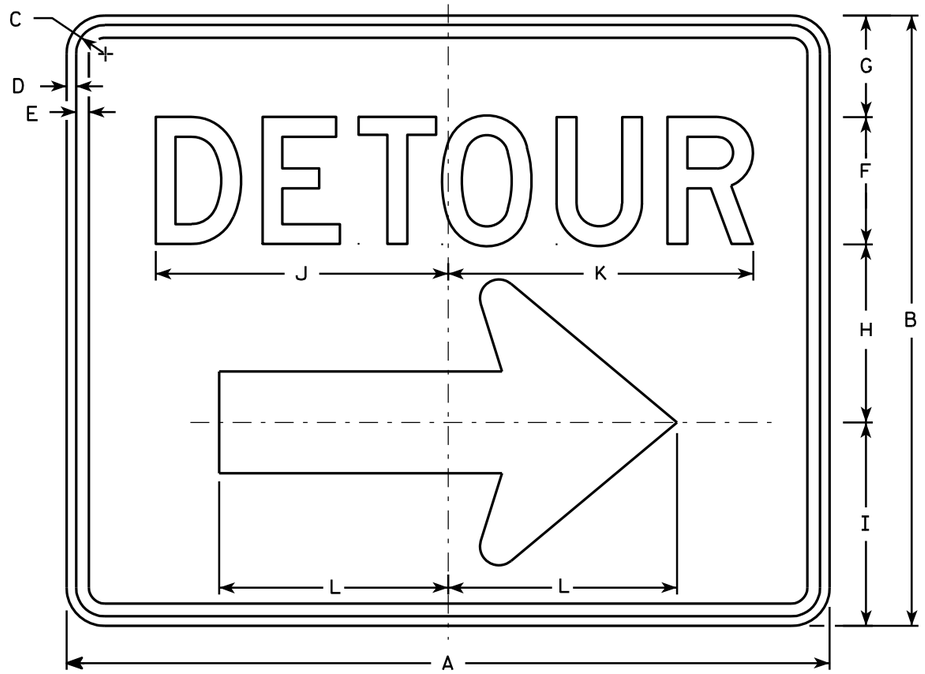
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

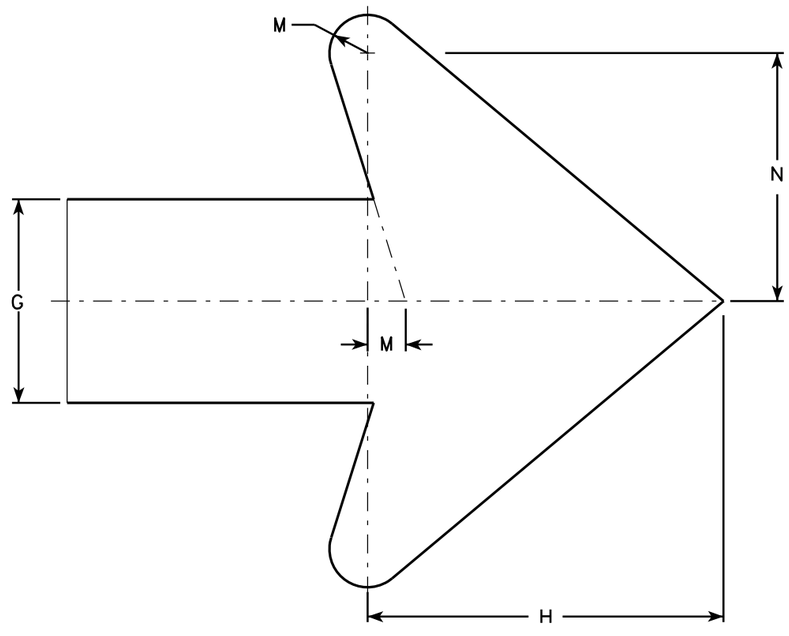
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 212 | E |
|---|---|---|---|---|---|




M4-9R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
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. M4-9L is the same as M4-9R except the arrow is reversed.




Arrow Detail

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 5 | 4 | 7 | 8 | 11 1/2 | 12 | 9 | 3/4 | 4 7/8 | | | | | | | | | | | | | 5.00 |
| 3 | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 5 | 4 | 7 | 8 | 11 1/2 | 12 | 9 | 3/4 | 4 7/8 | | | | | | | | | | | | | 5.00 |
| 4 | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 6 | 10 1/2 | 11 5/8 | 20 5/8 | 20 1/2 | 13 1/4 | 1 1/8 | 6 7/8 | | | | | | | | | | | | | 12.0 |
| 5 | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 6 | 10 1/2 | 11 5/8 | 20 5/8 | 20 1/2 | 13 1/4 | 1 1/8 | 6 7/8 | | | | | | | | | | | | | 12.0 |

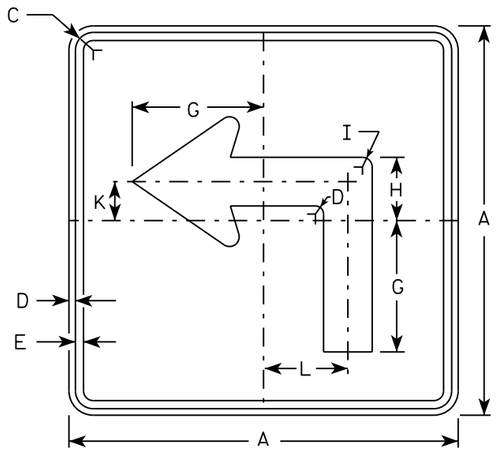
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

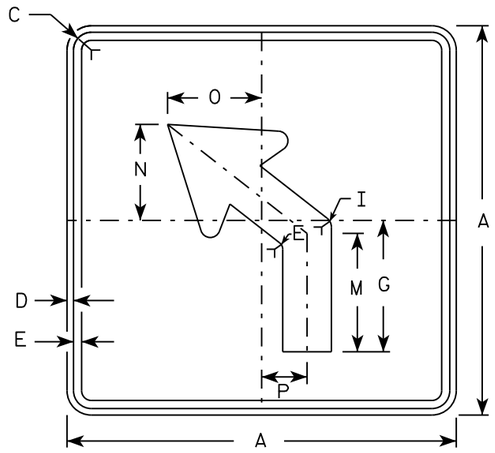
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

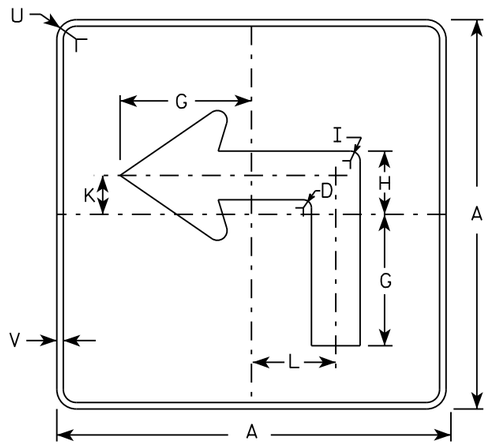
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 213 | E



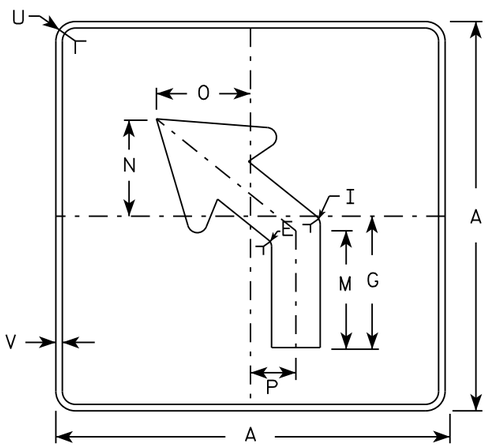

M5-1L
MM5-1L
MO5-1L
MP5-1L



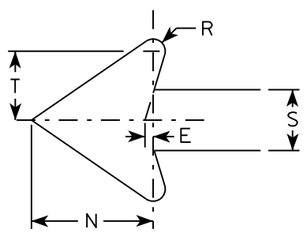

M5-2L
MM5-2L
MO5-2L
MP5-2L




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

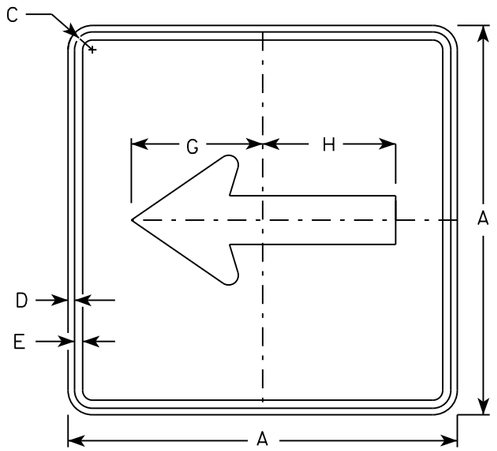
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M5-1.13

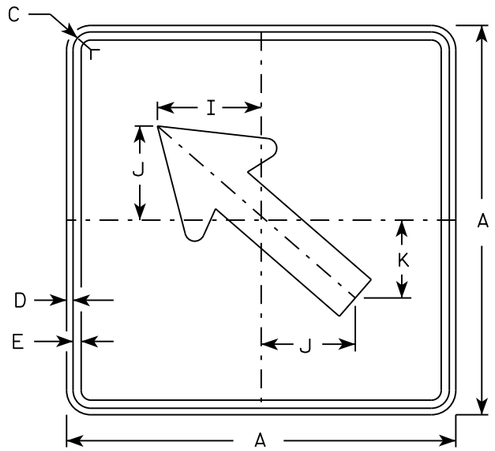


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

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



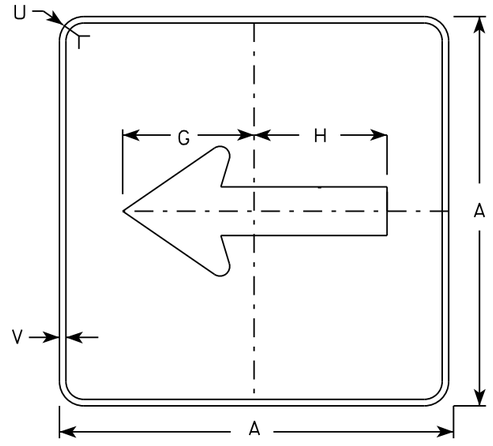

M6-1
MM6-1
MO6-1
MP6-1



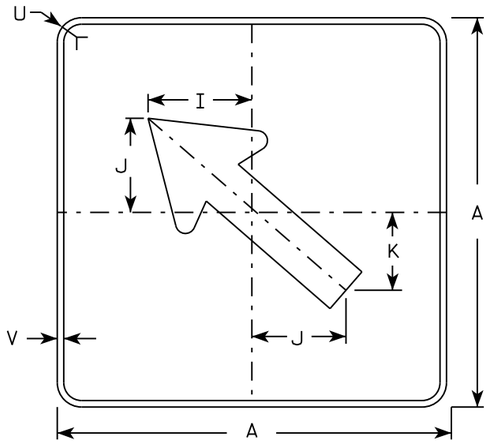

M6-2
MM6-2
MO6-2
MP6-2

NOTES

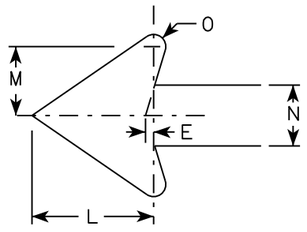
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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*

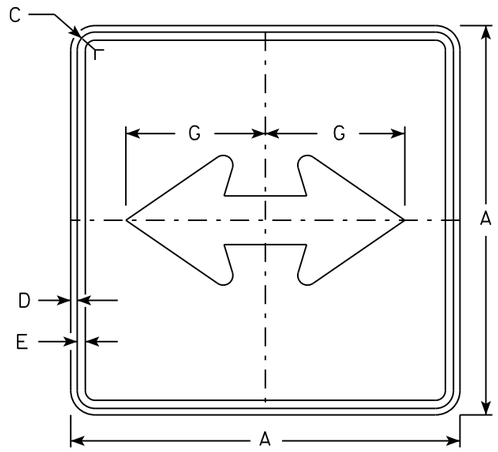
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 10/15/15 PLATE 215 M6-1.15

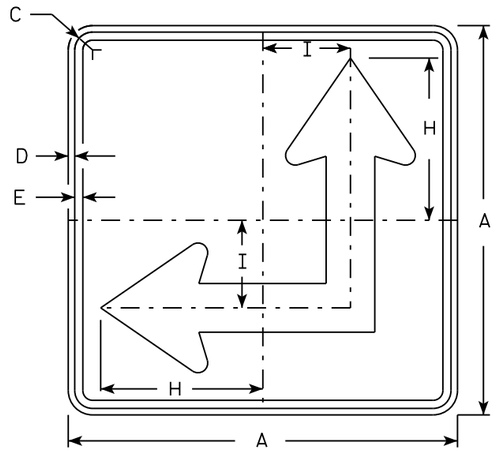
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|



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



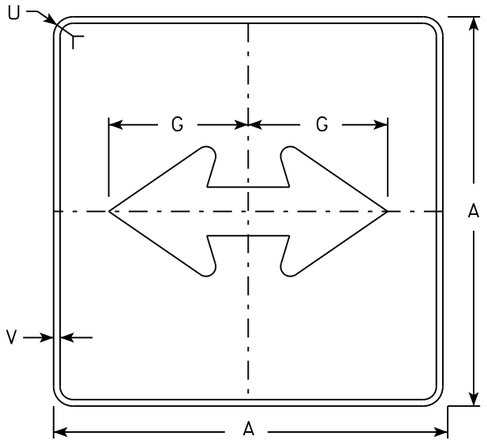

M6-4
MM6-4
MO6-4
MP6-4



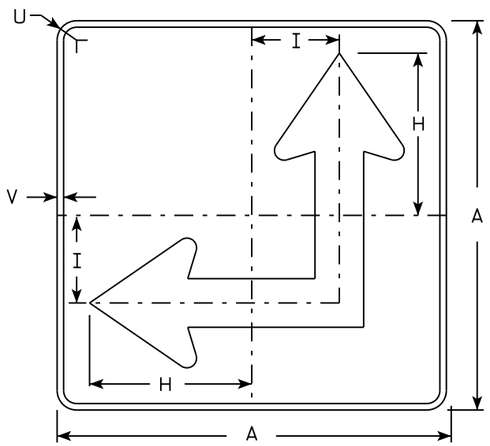

M6-6
MM6-6
MO6-6
MP6-6

NOTES

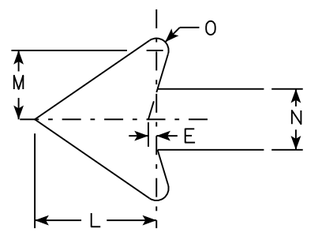
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - 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

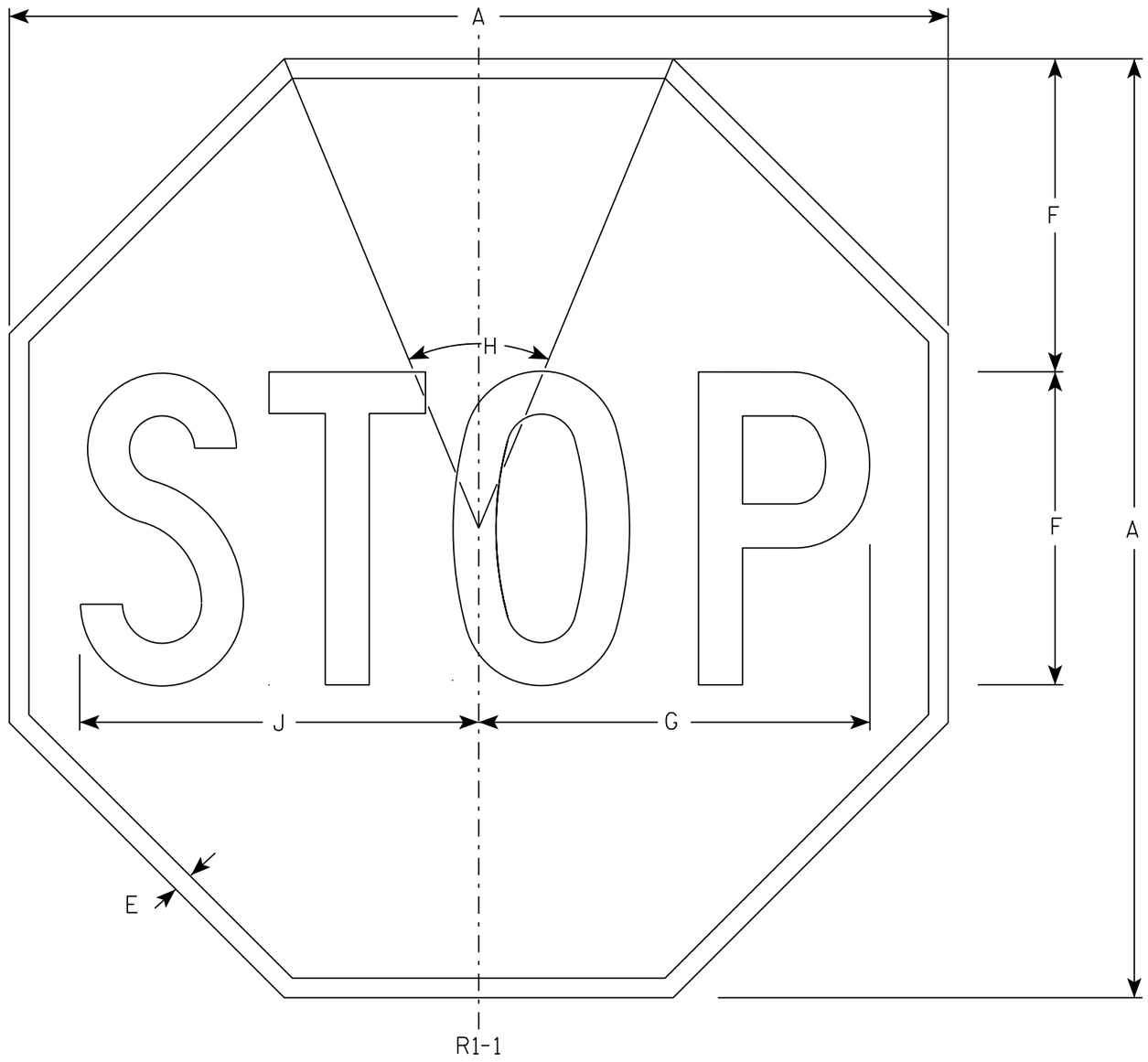
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 216 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 |

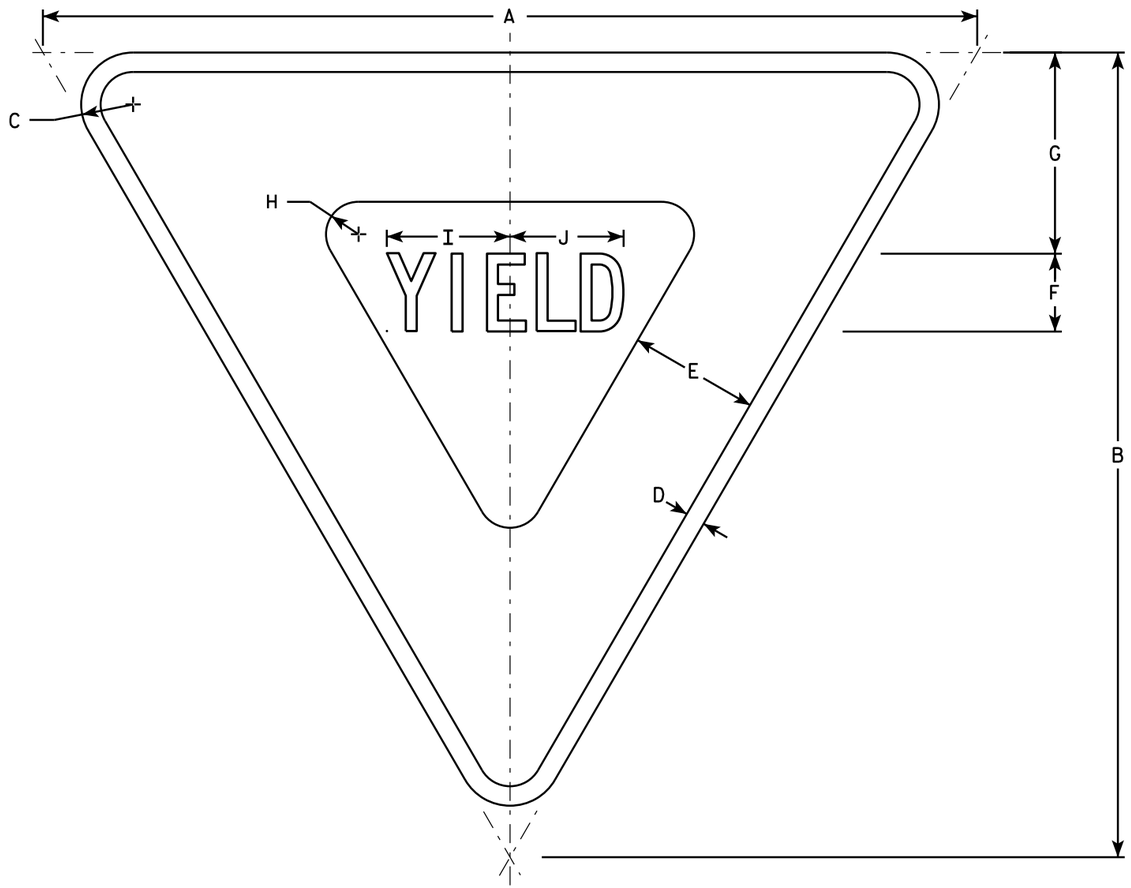
# STANDARD SIGN
# R1-1

*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: 217 | E |
|---|---|---|---|---|---|




R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

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

STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

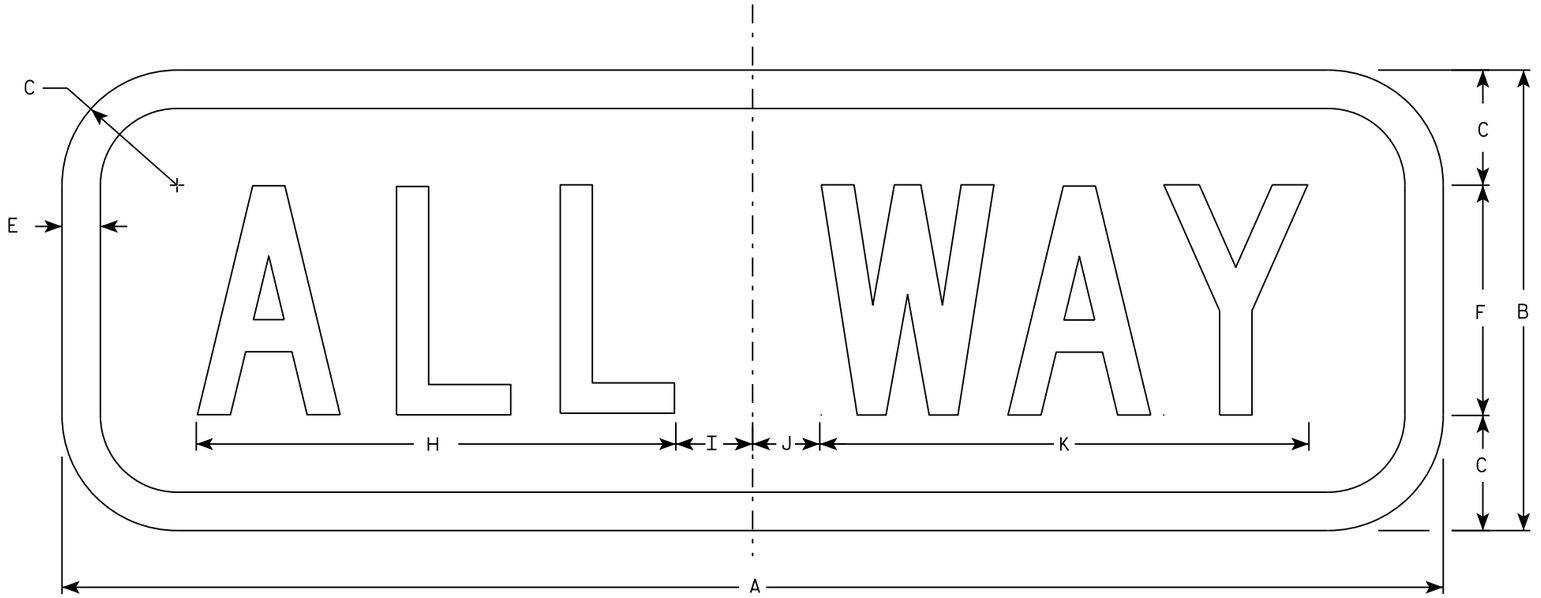


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. For 30"x30" R1-1 use 18"x6" R1-3P sign
   For 36"x36" R1-1 use 24"x9" R1-3P sign
   For 48"x48" R1-1 use 30"x12" R1-3P sign




R1-3P

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 | 6 | 1 ½ | | ½ | 3 | | 6 ¼ | 1 ¼ | ⅞ | 6 ⅜ | | | | | | | | | | | | | | | | 0.75 |
| 2S | 18 | 6 | 1 ½ | | ½ | 3 | | 6 ¼ | 1 ¼ | ⅞ | 6 ⅜ | | | | | | | | | | | | | | | | 1.5 |
| 2M | 24 | 9 | 1 ½ | | ½ | 5 | | 9 ¼ | 1 ¼ | ¾ | 9 ¾ | | | | | | | | | | | | | | | | 1.5 |
| 3 | 24 | 9 | 1 ½ | | ½ | 5 | | 9 ¼ | 1 ¼ | ¾ | 9 ¾ | | | | | | | | | | | | | | | | 1.5 |
| 4 | 30 | 12 | 2 ¼ | | ⅝ | 6 | | 11 | 2 ¼ | 1 ½ | 11 ¾ | | | | | | | | | | | | | | | | 2.5 |
| 5 | 30 | 12 | 2 ¼ | | ⅝ | 6 | | 11 | 2 ¼ | 1 ½ | 11 ¾ | | | | | | | | | | | | | | | | 2.5 |

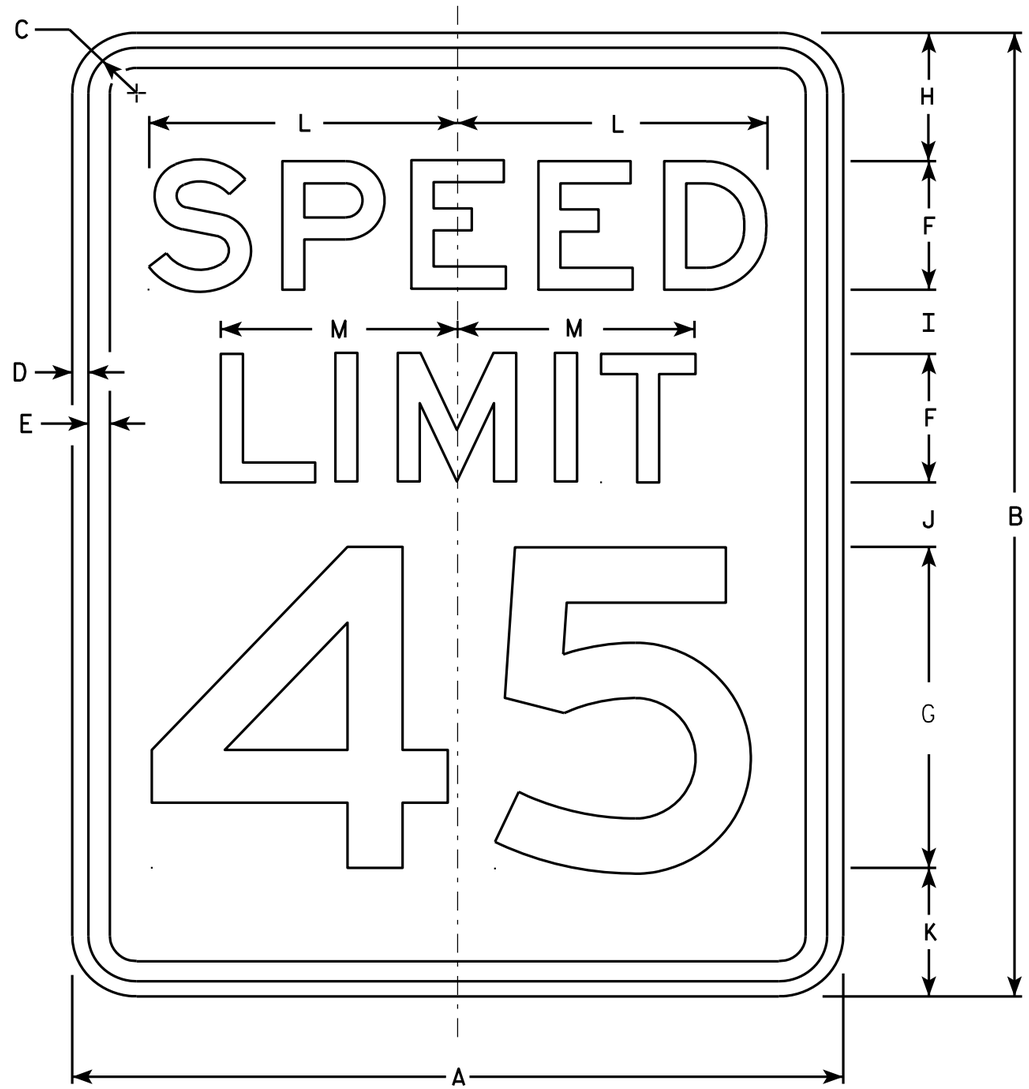
STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R1-3P.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 219 | 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 |

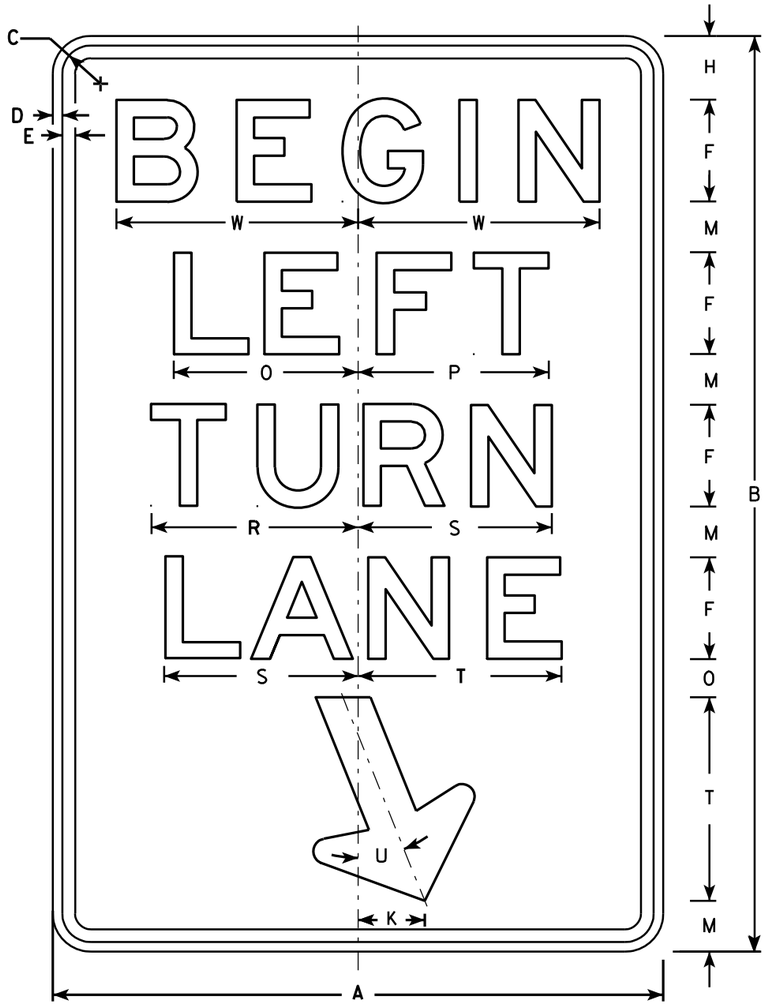
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

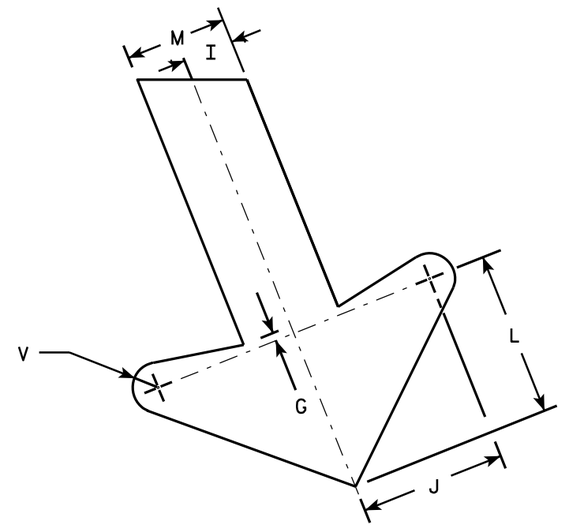
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 220 | E




R3-20L

NOTES

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




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 7 1/4 | 7 1/2 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 2M | 24 | 36 | 1 1/8 | 3/8 | 1/2 | 4 | 1/4 | 2 1/2 | 1 | 2 7/8 | 2 5/8 | 3 1/4 | 2 | 1 1/2 | 7 1/4 | 7 1/2 | | 8 1/8 | 7 5/8 | 8 | 22° | 1/2 | 9 1/2 | | | | 6.0 |
| 3 | 36 | 54 | 1 3/4 | 1/2 | 5/8 | 6 | 3/8 | 3 3/4 | 1 1/2 | 4 1/4 | 4 | 4 7/8 | 3 | 2 1/4 | 10 7/8 | 11 1/4 | | 12 1/4 | 11 1/2 | 12 | 22° | 3/4 | 13 1/4 | | | | 13.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

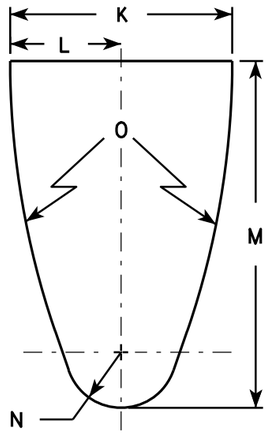
STANDARD SIGN
R3-20L

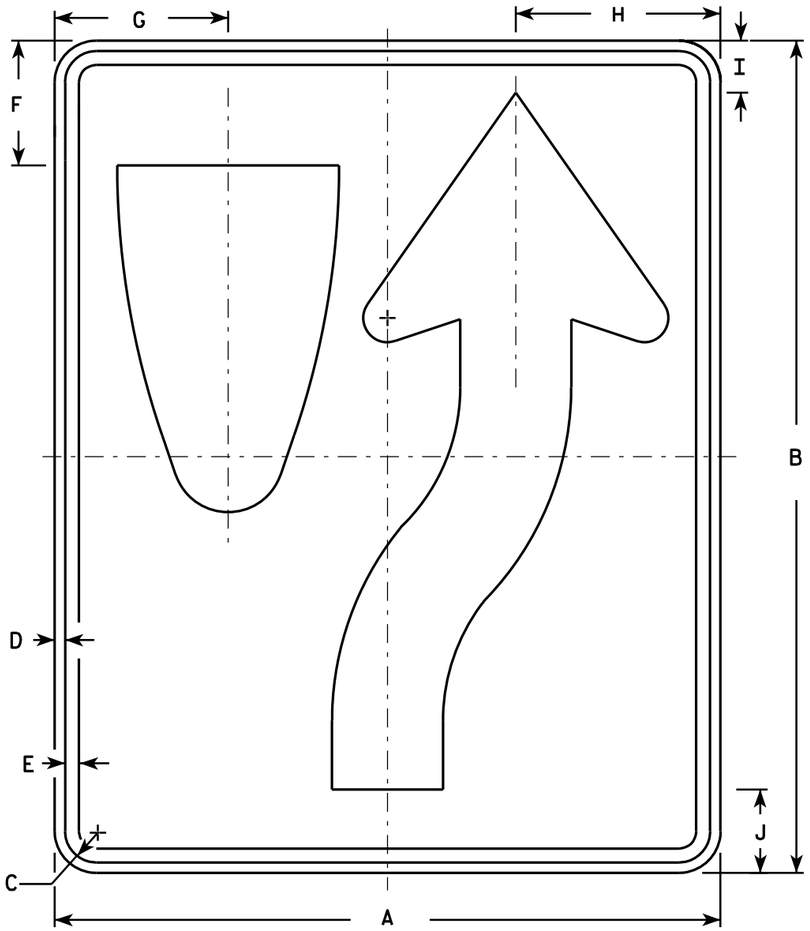
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 221 | E |
|---|---|---|---|---|---|

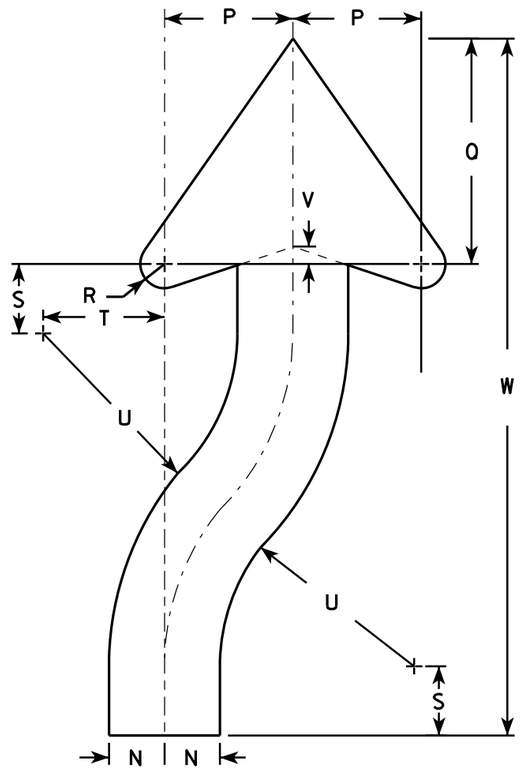



R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 | 24 | 1 1/8 | 3/8 | 1/2 | 3 3/8 | 4 3/4 | 5 1/2 | 1 3/8 | 2 1/4 | 6 | 3 | 9 3/8 | 1 1/2 | 22 1/2 | 3 1/2 | 6 1/8 | 5/8 | 1 7/8 | 3 1/4 | 6 3/4 | 1/2 | 20 3/8 | | | | 3.0 |
| 2S | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 4 1/2 | 6 1/4 | 7 3/8 | 1 7/8 | 3 | 8 | 4 | 12 1/2 | 2 | 30 | 4 5/8 | 8 1/8 | 7/8 | 2 1/2 | 4 3/8 | 9 | 5/8 | 25 1/8 | | | | 5.0 |
| 2M | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 4 1/2 | 6 1/4 | 7 3/8 | 1 7/8 | 3 | 8 | 4 | 12 1/2 | 2 | 30 | 4 5/8 | 8 1/8 | 7/8 | 2 1/2 | 4 3/8 | 9 | 5/8 | 25 1/8 | | | | 5.0 |
| 3 | 36 | 48 | 1 3/4 | 1/2 | 5/8 | 6 3/4 | 9 3/8 | 11 1/8 | 2 7/8 | 4 1/2 | 12 | 6 | 18 3/4 | 3 | 45 | 6 7/8 | 12 1/4 | 1 1/4 | 3 3/4 | 6 5/8 | 13 1/2 | 1 | 40 3/4 | | | | 12.0 |
| 4 | 36 | 48 | 1 3/4 | 1/2 | 5/8 | 6 3/4 | 9 3/8 | 11 1/8 | 2 7/8 | 4 1/2 | 12 | 6 | 18 3/4 | 3 | 45 | 6 7/8 | 12 1/4 | 1 1/4 | 3 3/4 | 6 5/8 | 13 1/2 | 1 | 40 3/4 | | | | 12.0 |
| 5 | 48 | 60 | 2 1/4 | 3/4 | 1 | 9 | 12 1/2 | 14 3/4 | 3 3/4 | 6 | 16 | 8 | 25 | 4 | 60 | 9 1/4 | 16 1/4 | 1 5/8 | 5 | 8 3/4 | 18 | 1 1/4 | 50 1/4 | | | | 20.0 |

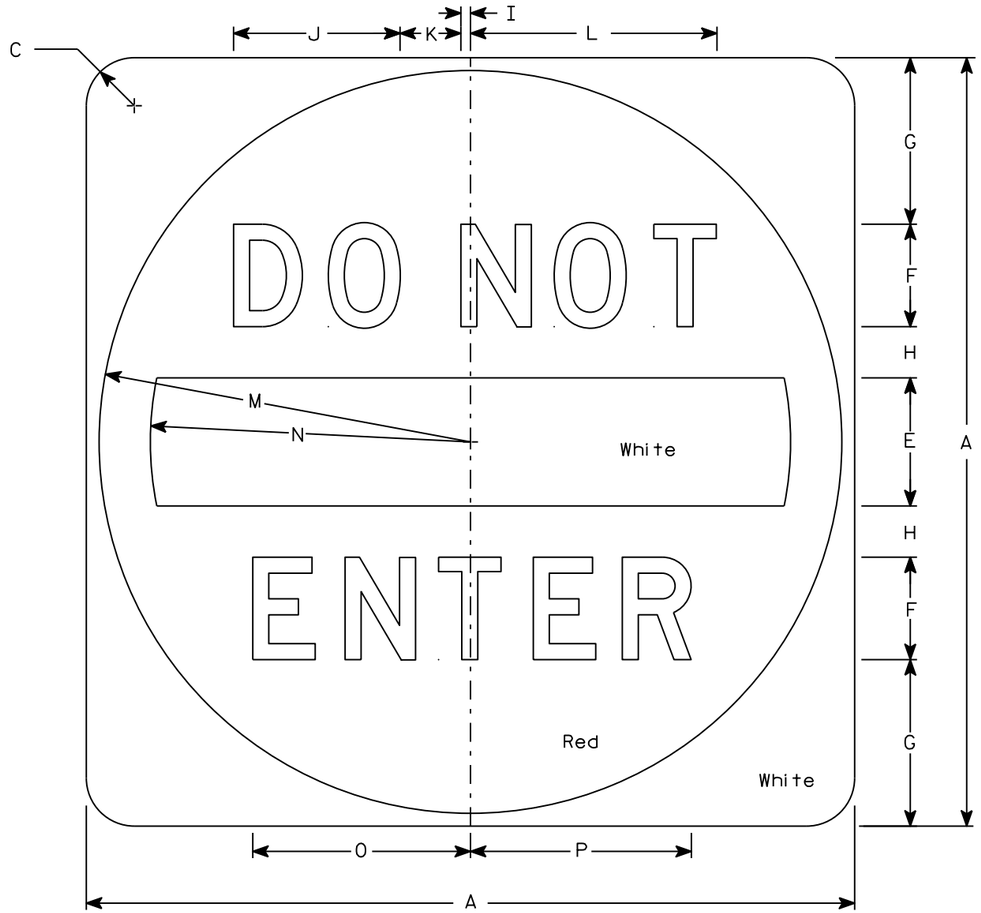
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 222 | E |
|---|---|---|---|---|---|




R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | | 1 7/8 | | 5 | 4 | 6 1/2 | 2 | 3/8 | 6 1/2 | 2 3/8 | 9 5/8 | 14 1/2 | 12 1/2 | 8 1/2 | 8 5/8 | | | | | | | | | | | 6.25 |
| 2M | 36 | | 2 1/4 | | 6 | 5 | 7 1/2 | 2 1/2 | 1/2 | 8 1/8 | 3 | 12 1/8 | 17 1/2 | 15 | 10 5/8 | 10 3/4 | | | | | | | | | | | 9.0 |
| 3 | 36 | | 2 1/4 | | 6 | 5 | 7 1/2 | 2 1/2 | 1/2 | 8 1/8 | 3 | 12 1/8 | 17 1/2 | 15 | 10 5/8 | 10 3/4 | | | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | | 6 | 5 | 7 1/2 | 2 1/2 | 1/2 | 8 1/8 | 3 | 12 1/8 | 17 1/2 | 15 | 10 5/8 | 10 3/4 | | | | | | | | | | | 9.0 |
| 5 | 48 | | 3 | | 8 | 6 | 11 | 3 | 5/8 | 9 3/4 | 3 5/8 | 14 1/2 | 23 1/2 | 20 | 12 3/4 | 12 7/8 | | | | | | | | | | | 16.0 |

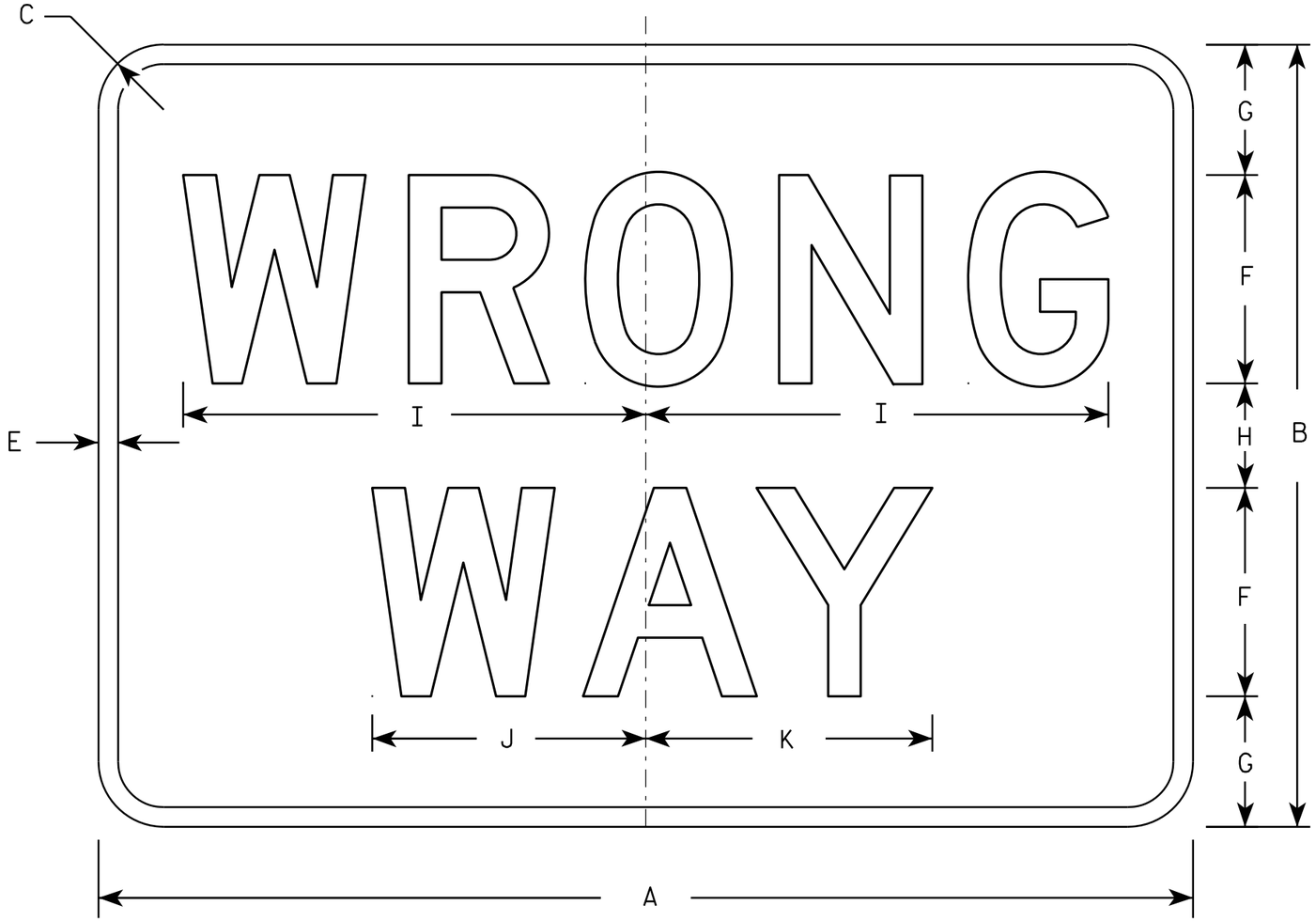
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 223 | E




R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | 18 | 1 1/2 | | 1/2 | 5 | 3 | 2 | 11 | 6 1/2 | 6 7/8 | | | | | | | | | | | | | | | | 3.75 |
| 2S | 36 | 24 | 2 | | 5/8 | 6 | 4 1/2 | 3 | 13 1/4 | 7 7/8 | 8 1/4 | | | | | | | | | | | | | | | | 6.00 |
| 2M | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 3 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 4 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |
| 5 | 42 | 30 | 2 1/2 | | 3/4 | 8 | 5 | 4 | 17 3/4 | 10 1/2 | 11 | | | | | | | | | | | | | | | | 8.75 |

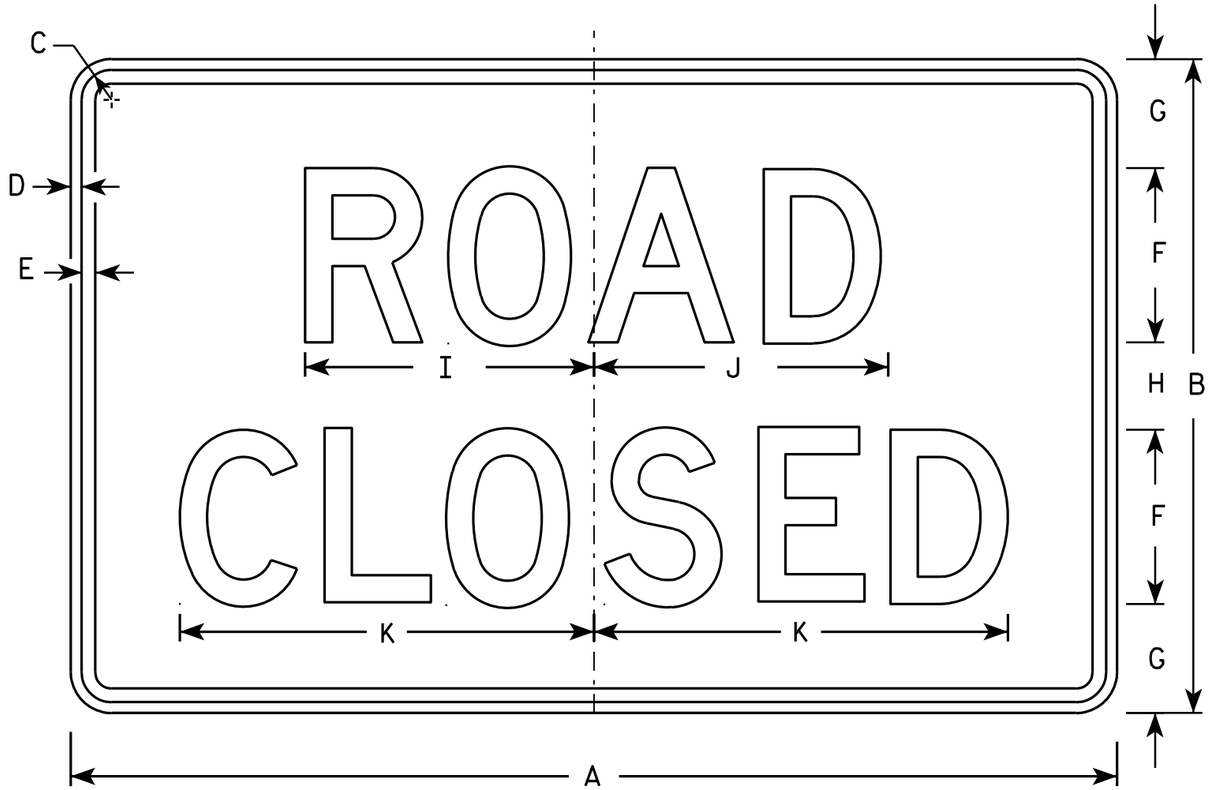
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

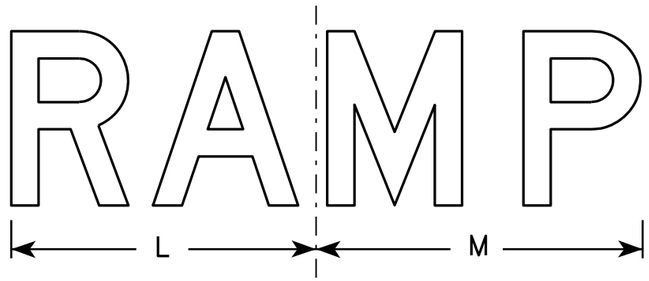
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 224 | E



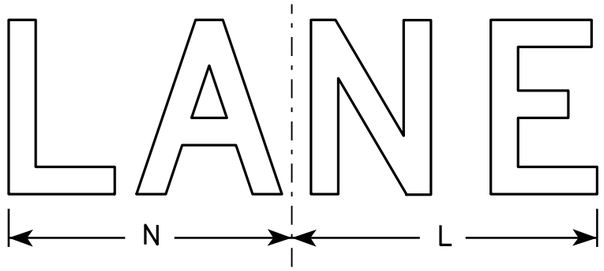

R11-2

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 |

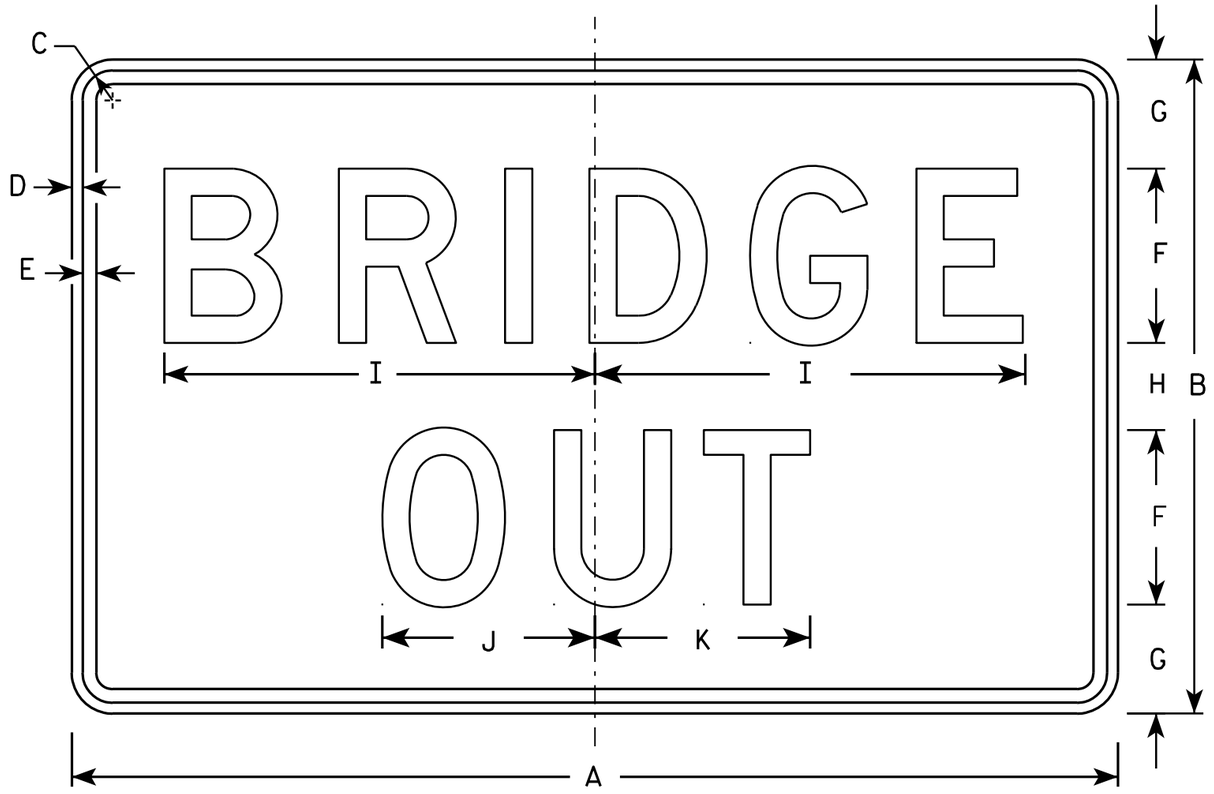
STANDARD SIGN
R11-2

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: 225 | E |
|---|---|---|---|---|---|




R11-2B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 19 3/4 | 9 3/4 | 9 7/8 | | | | | | | | | | | | | | | | 10.0 |
| 2M | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 19 3/4 | 9 3/4 | 9 7/8 | | | | | | | | | | | | | | | | 10.0 |
| 3 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 19 3/4 | 9 3/4 | 9 7/8 | | | | | | | | | | | | | | | | 10.0 |
| 4 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 19 3/4 | 9 3/4 | 9 7/8 | | | | | | | | | | | | | | | | 10.0 |
| 5 | 48 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 5 | 4 | 19 3/4 | 9 3/4 | 9 7/8 | | | | | | | | | | | | | | | | 10.0 |

STANDARD SIGN
R11-2B

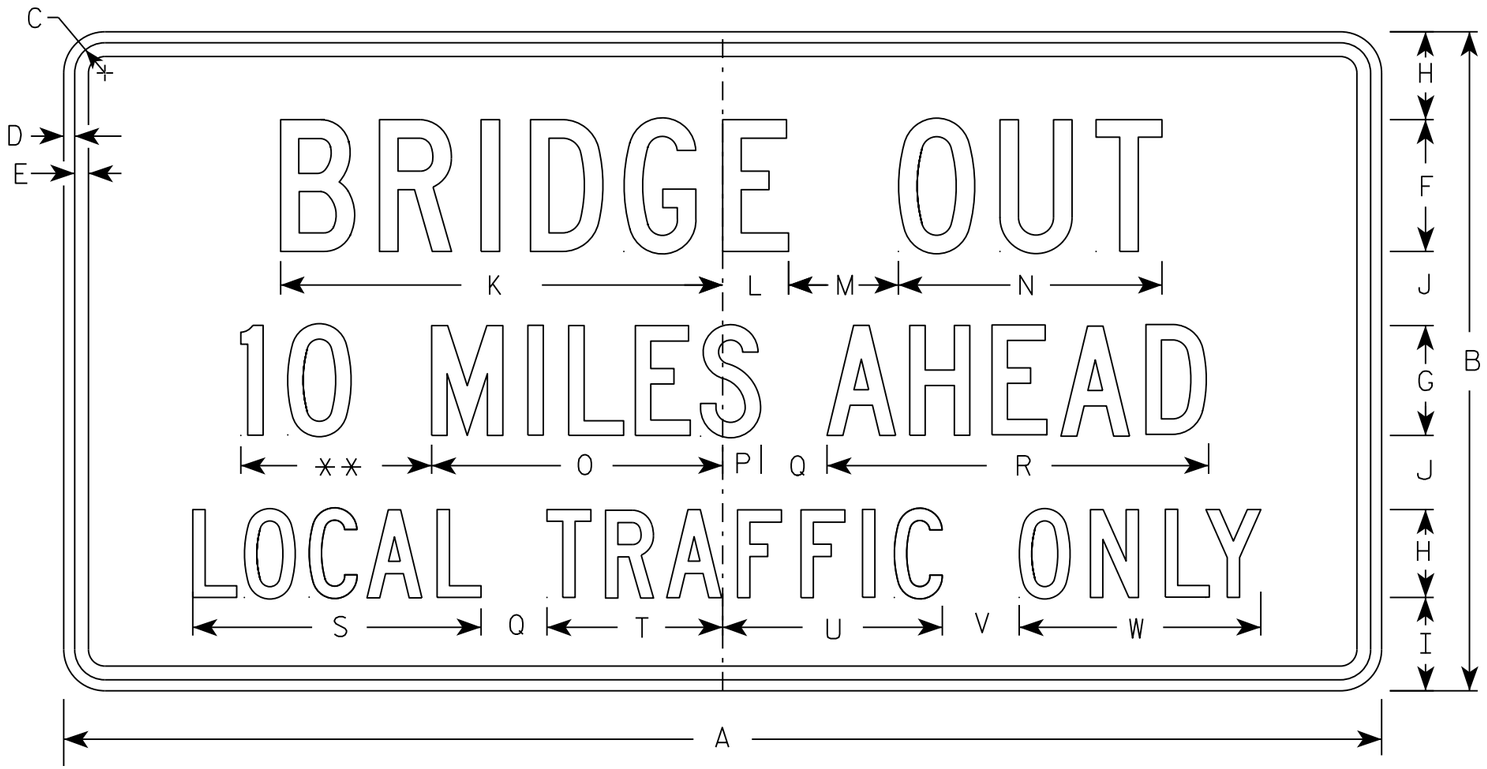
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2B.2

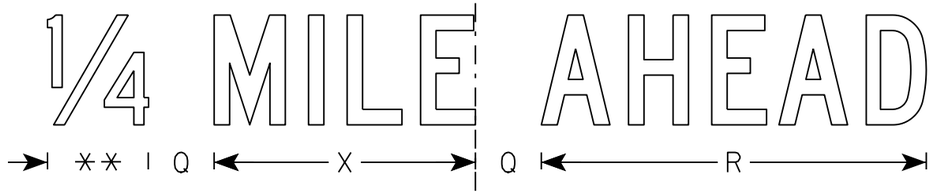
PROJECT NO:

SHEET NO: 226 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

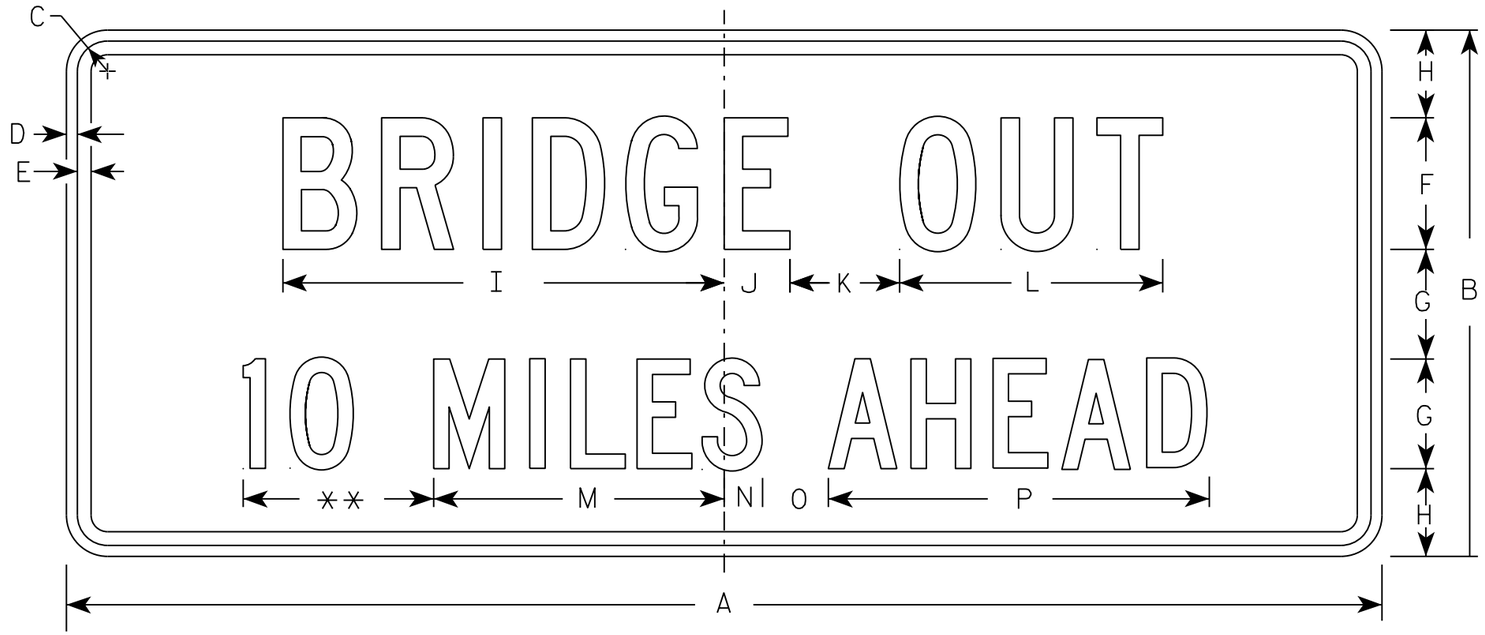
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. R11-3B.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 227 | E

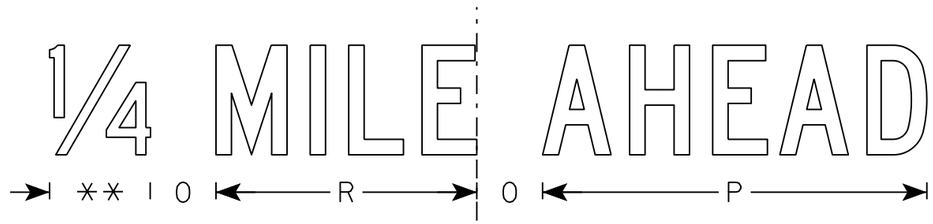
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.




R11-3C

** 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 | 15 | 1 3/8 | 1/2 | 5/8 | 4 | 3 | 2 1/2 | 13 1/4 | 2 1/4 | 3 | 8 | 8 | 1 1/2 | 2 | 10 3/4 | | 7 1/8 | | | | | | | | | 3.75 |
| 2S | 60 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 20 1/8 | 3 | 5 | 12 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | | 11 7/8 | | | | | | | | | 10.0 |
| 2M | 60 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 20 1/8 | 3 | 5 | 12 | 13 1/4 | 1 3/4 | 3 | 17 3/8 | | 11 7/8 | | | | | | | | | 10.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R11-3C

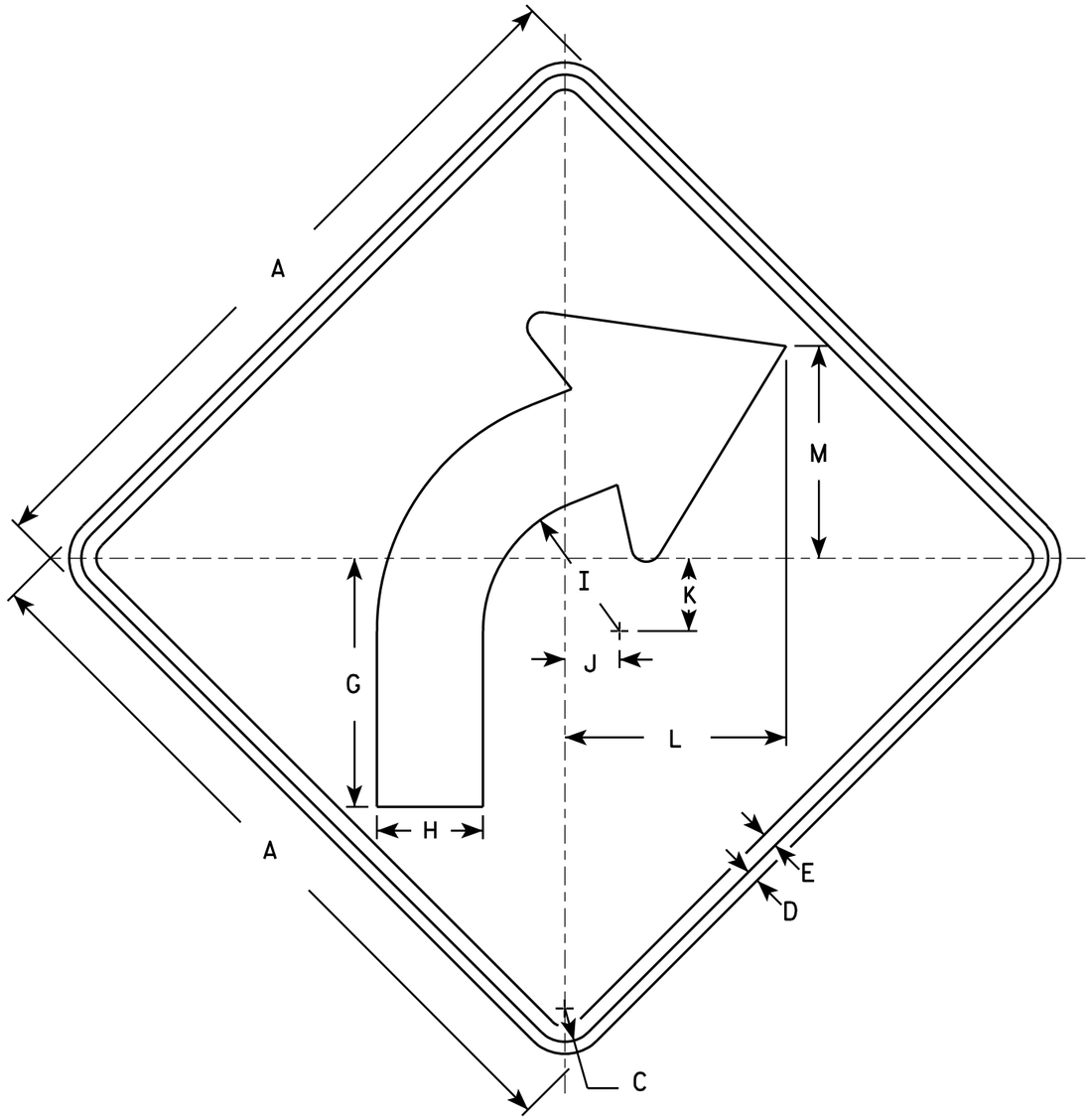
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/16 PLATE NO. R11-3C.3

PROJECT NO:

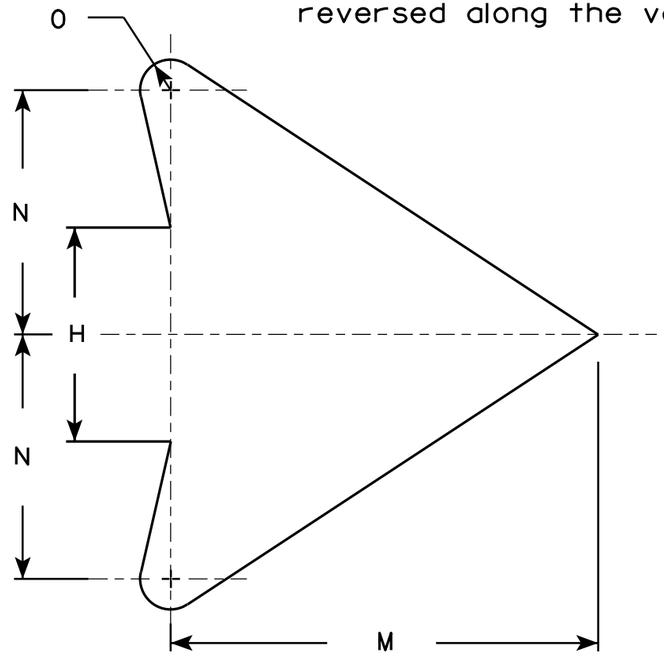
SHEET NO: 228 E




W1-2R

NOTES

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




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | | 8 1/4 | 3 1/2 | 4 1/2 | 1 3/4 | 2 3/8 | 7 1/4 | 7 | 4 | 1/2 | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/4 | 4 3/8 | 5 5/8 | 2 1/4 | 3 | 9 1/8 | 8 3/4 | 5 | 5/8 | | | | | | | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | | | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |

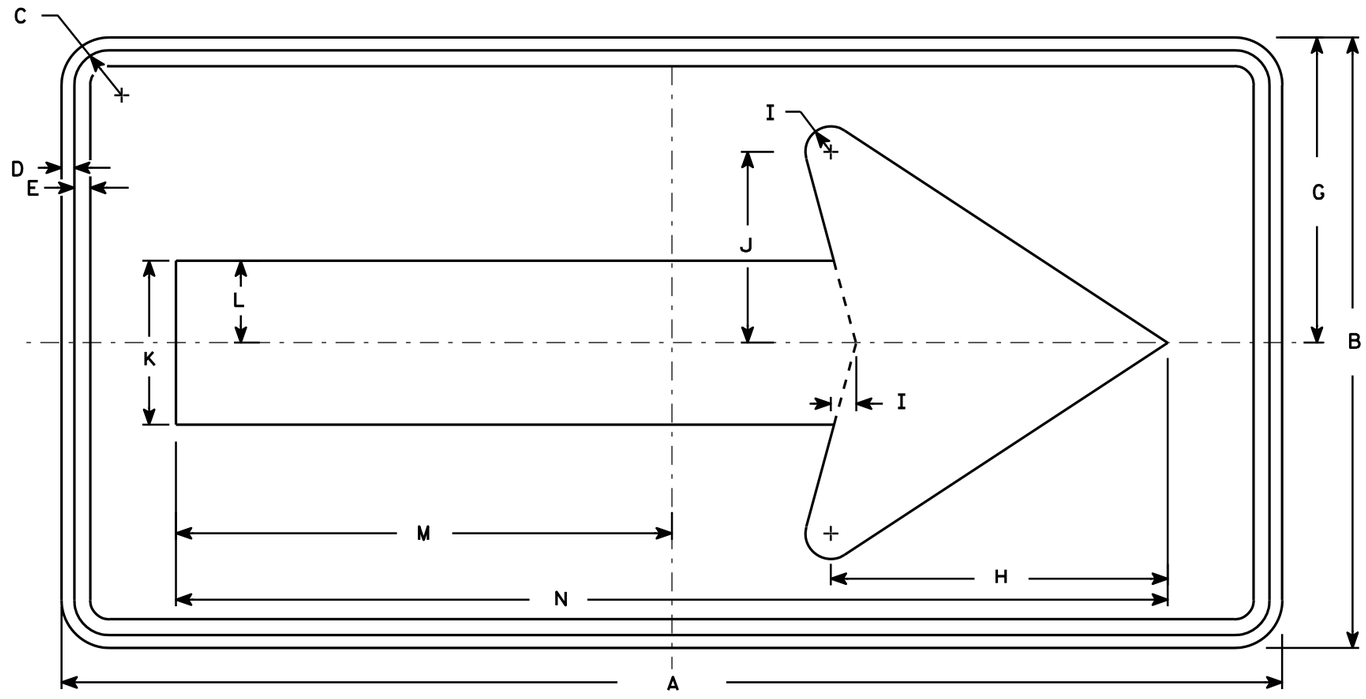
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 229 | E |
|---|---|---|---|---|---|




W1-6

## NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | 18 | 1 1/8 | 3/8 | 3/8 | | 9 | 10 | 3/4 | 5 5/8 | 4 3/4 | 2 3/8 | 14 5/8 | 29 1/4 | | | | | | | | | | | | | 4.5 |
| 2S | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 5 | 96 | 48 | 2 1/4 | 3/4 | 1 | | 24 | 26 1/2 | 2 | 15 | 13 | 6 1/2 | 39 | 78 | | | | | | | | | | | | | 32.0 |

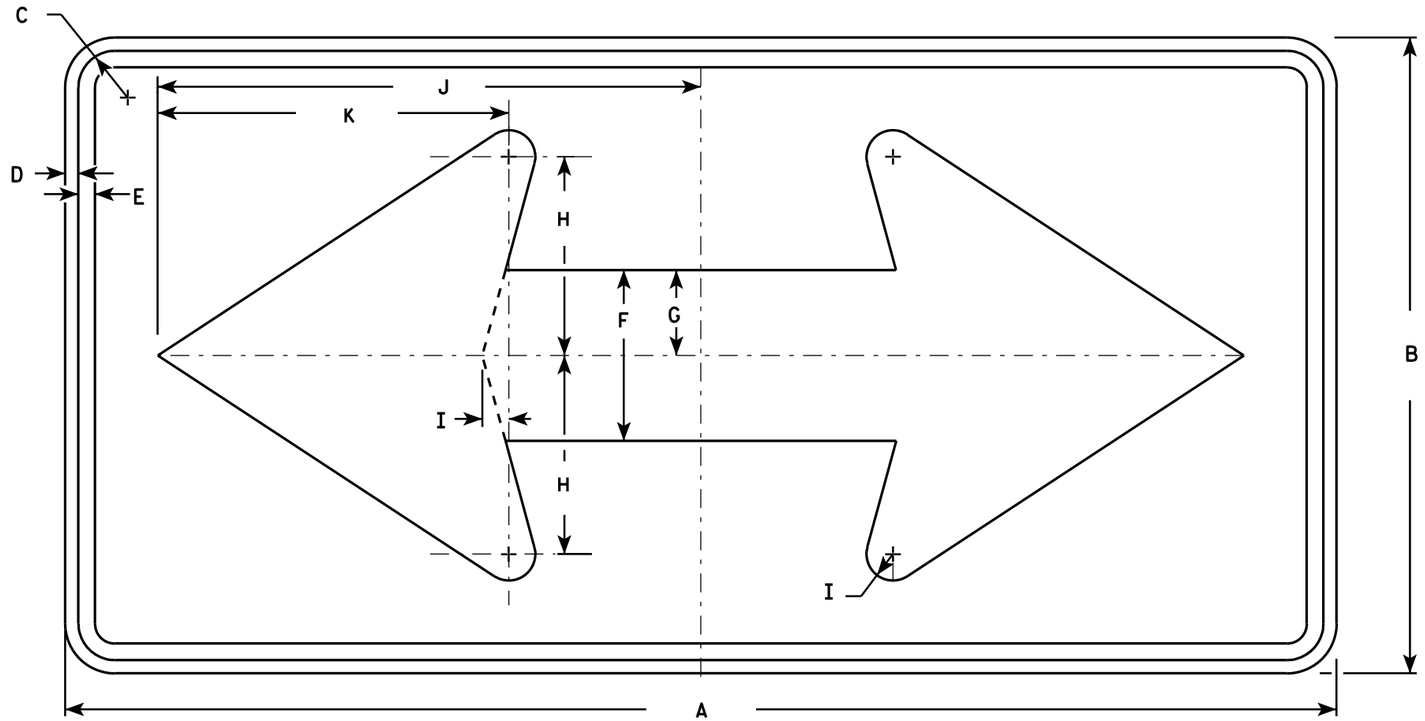
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 230




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 |

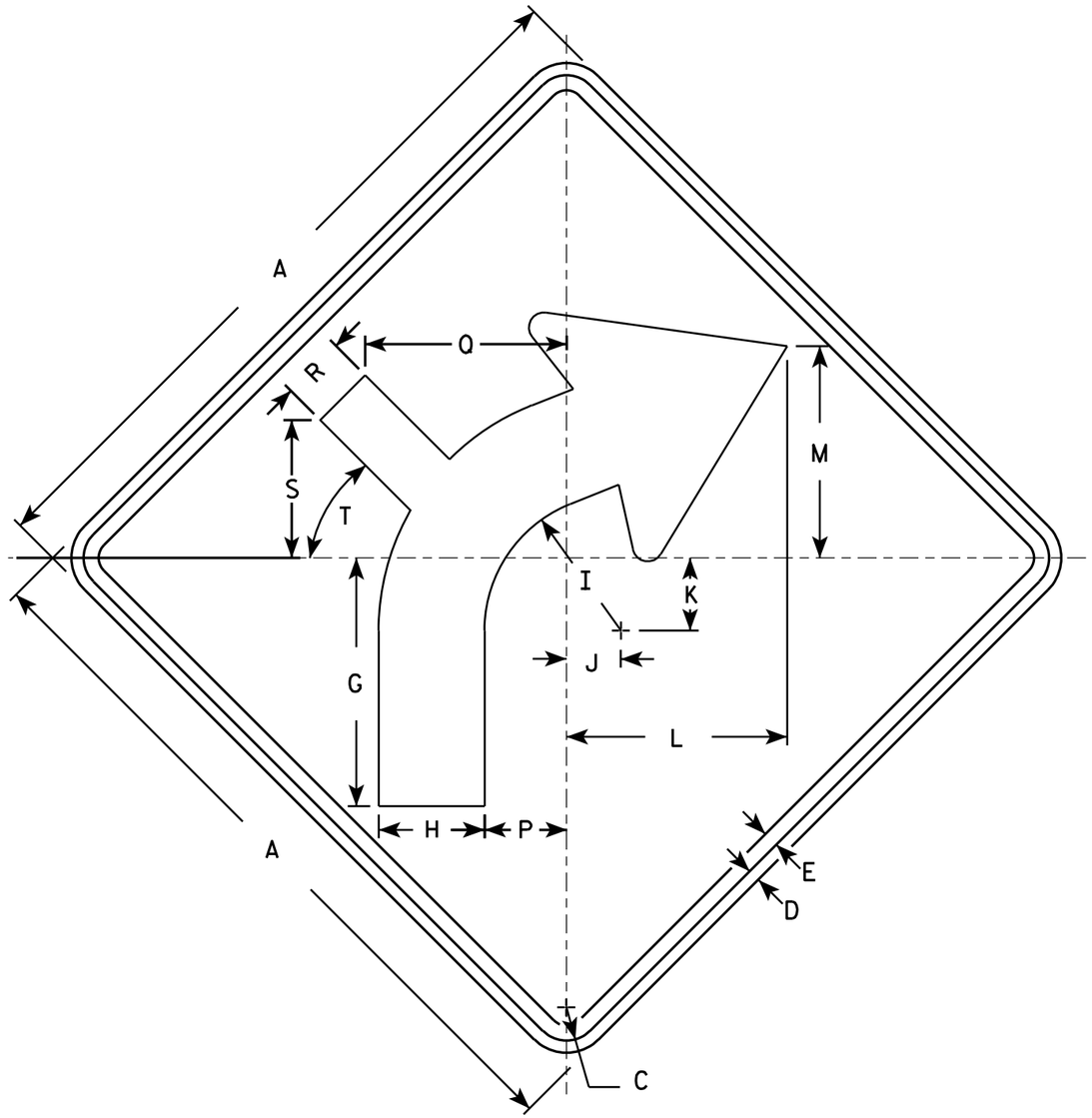
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

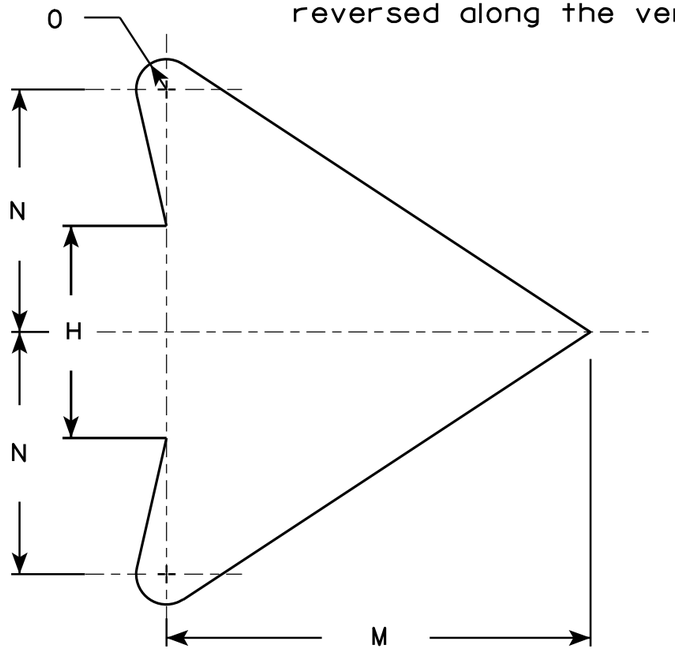
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 231 | E




W1-10R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-10L is the same as W1-10R except the arrow is reversed along the vertical centerline.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | | 8 1/4 | 3 1/2 | 4 1/2 | 1 3/4 | 2 3/8 | 7 1/4 | 7 | 4 | 1/2 | 2 5/8 | 6 5/8 | 2 1/8 | 4 1/2 | 45° | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/4 | 4 3/8 | 5 5/8 | 2 1/4 | 3 | 9 1/8 | 8 3/4 | 5 | 5/8 | 3 3/8 | 8 3/8 | 2 5/8 | 5 3/4 | 45° | | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | 4 | 10 | 3 1/4 | 6 7/8 | 45° | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | 4 | 10 | 3 1/4 | 6 7/8 | 45° | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | 4 | 10 | 3 1/4 | 6 7/8 | 45° | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | 5 3/8 | 13 1/4 | 4 1/4 | 9 1/8 | 45° | | | | | | | 16.0 |

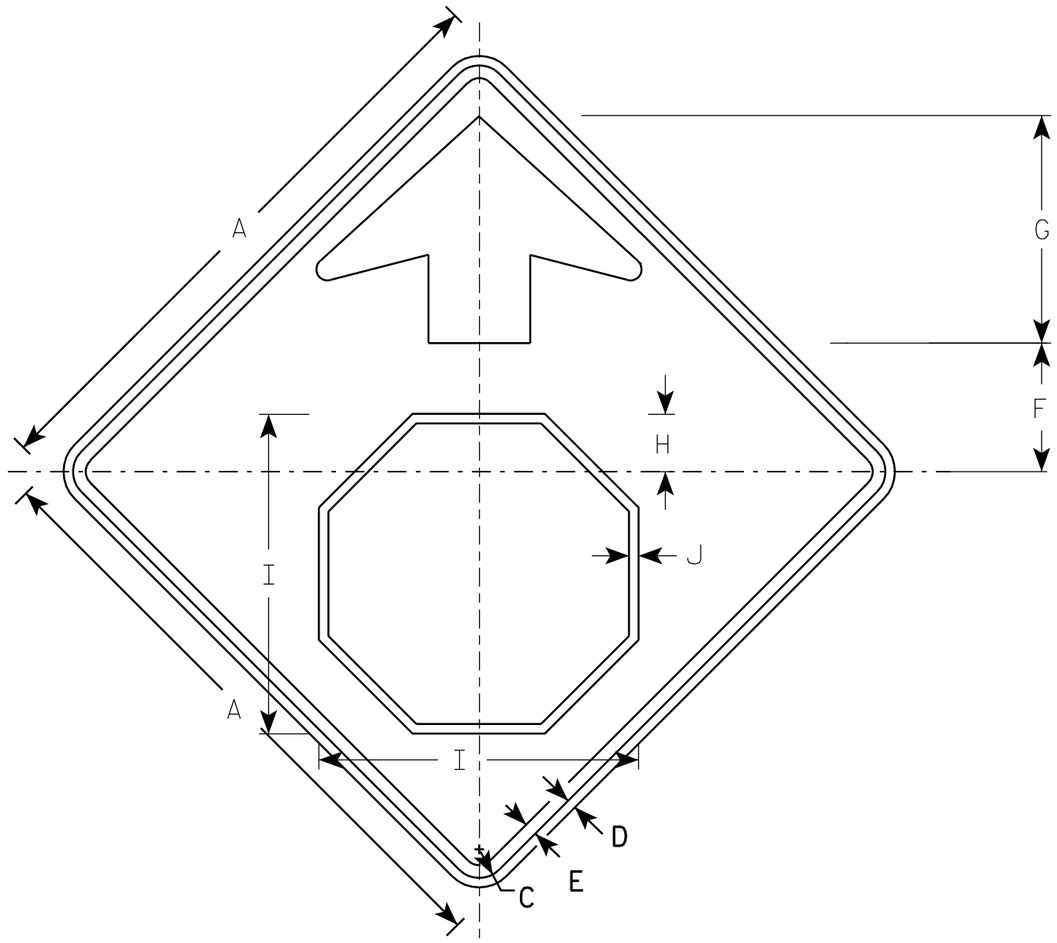
STANDARD SIGN
W1-10

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-10.3

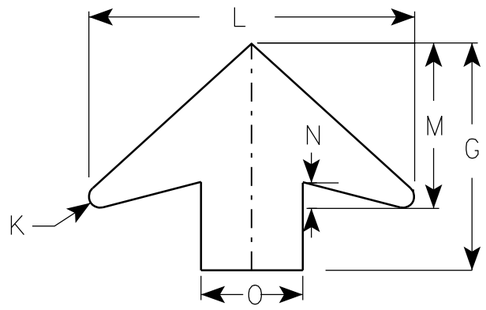
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 232 | E




W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 6 1/4 | 11 1/4 | 2 7/8 | 15 3/4 | 1/2 | 1/2 | 16 | 8 | 1 1/4 | 5 | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 3 1/2 | 19 | 5/8 | 5/8 | 19 1/4 | 9 3/4 | 1 5/8 | 6 | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 3 1/2 | 19 | 5/8 | 5/8 | 19 1/4 | 9 3/4 | 1 5/8 | 6 | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 3 1/2 | 19 | 5/8 | 5/8 | 19 1/4 | 9 3/4 | 1 5/8 | 6 | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 25 1/8 | 3/4 | 7/8 | 25 5/8 | 13 | 2 | 8 | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 10 | 17 7/8 | 4 1/2 | 25 1/8 | 3/4 | 7/8 | 25 5/8 | 13 | 2 | 8 | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W3-1

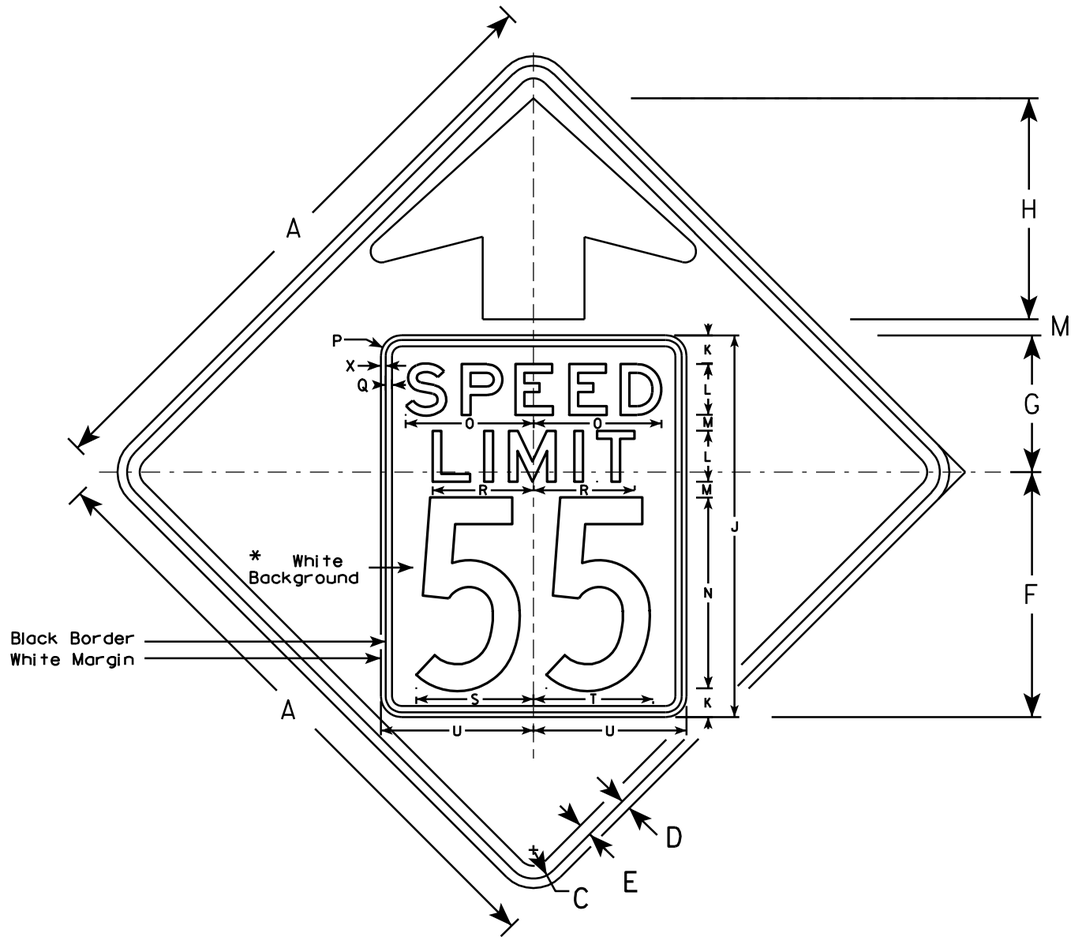
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 233 E

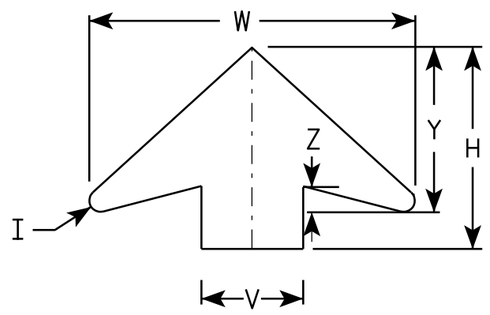



W3-5

NOTES

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

*Speed Limit Sign shall have a White Background




ARROW DETAIL

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

STANDARD SIGN
W3-5

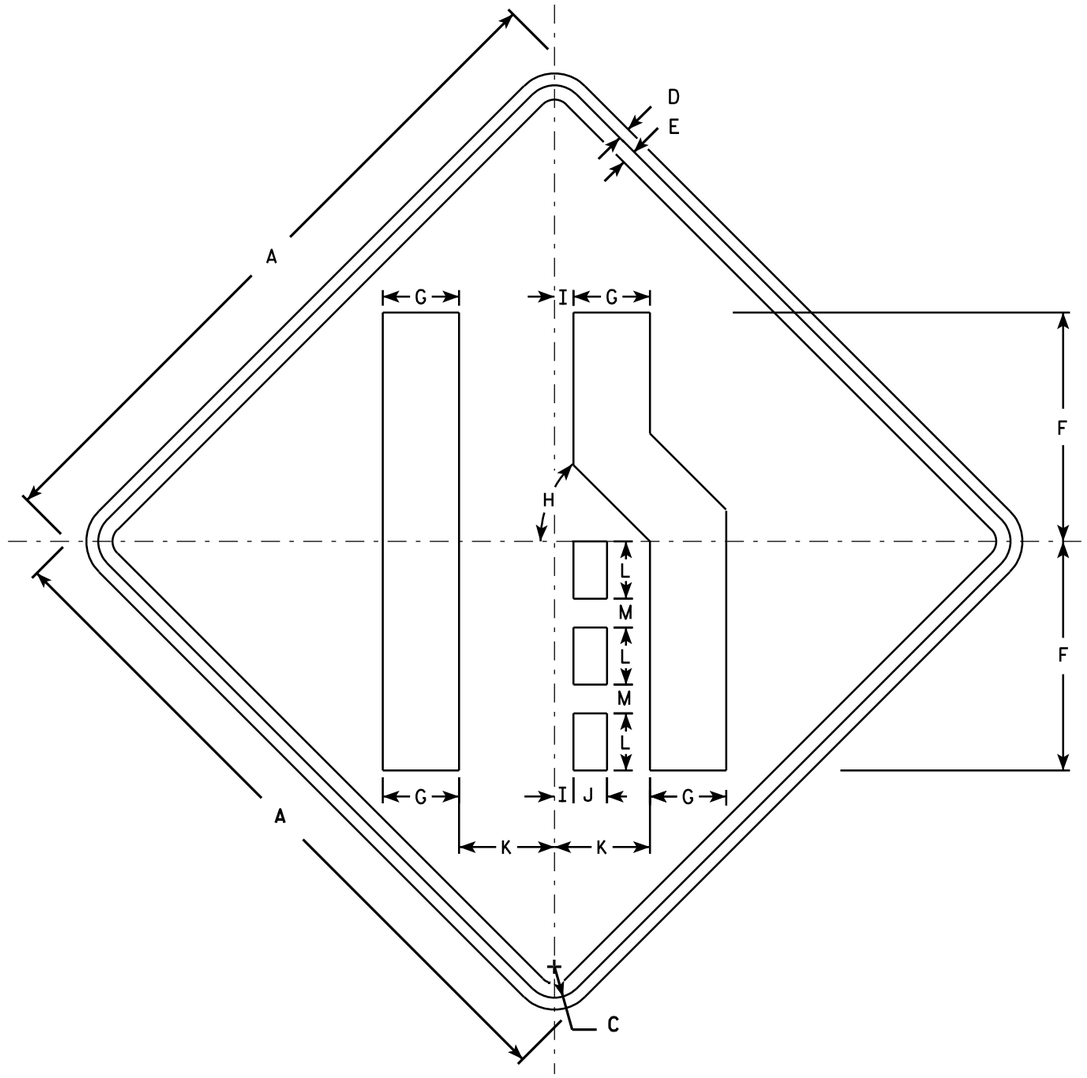
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 234 E




W4-2R

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 10 | 3 3/8 | 45° | 7/8 | 1 1/2 | 4 1/4 | 2 1/2 | 1 1/4 | | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W4-2

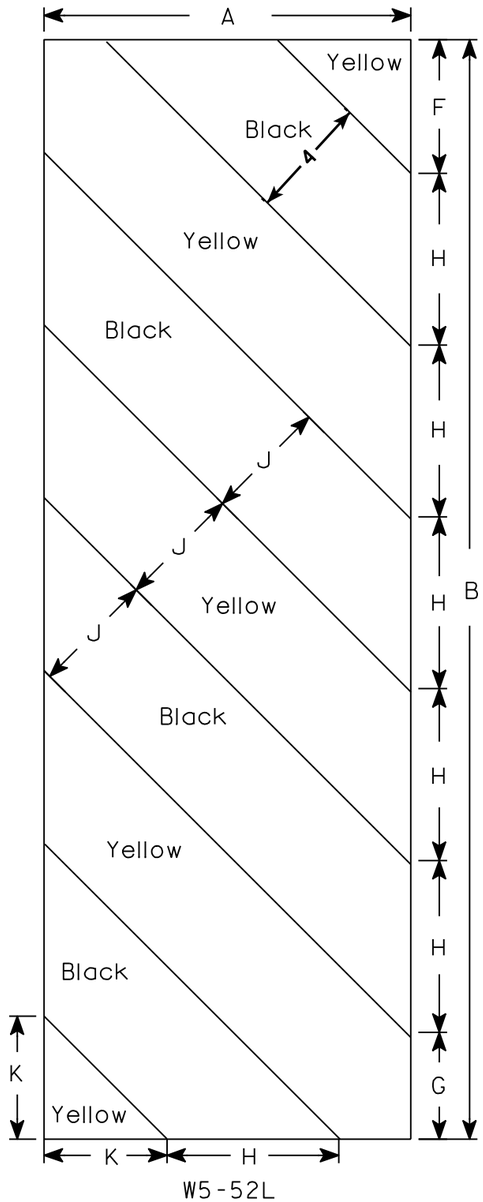
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

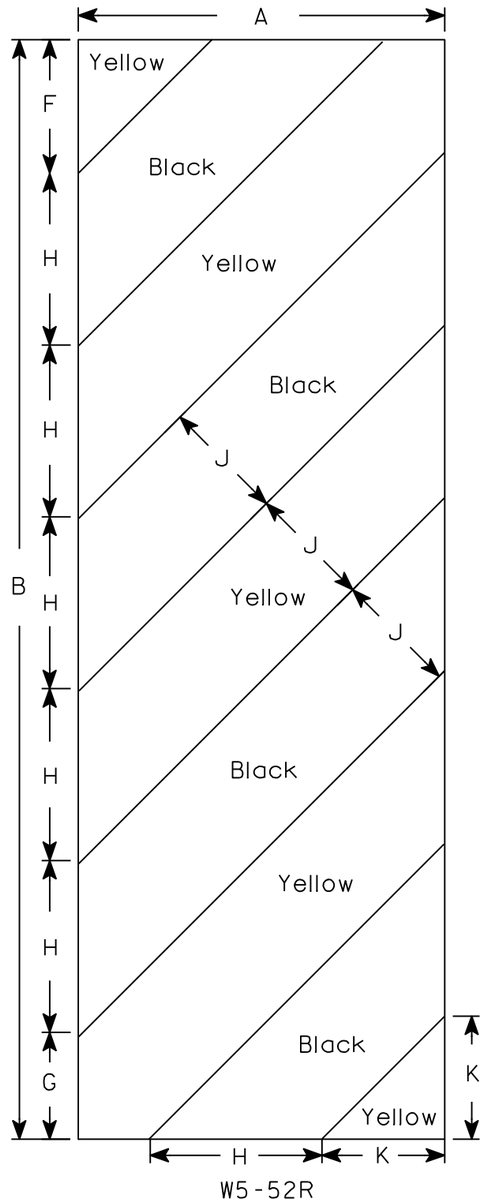
DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 235 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

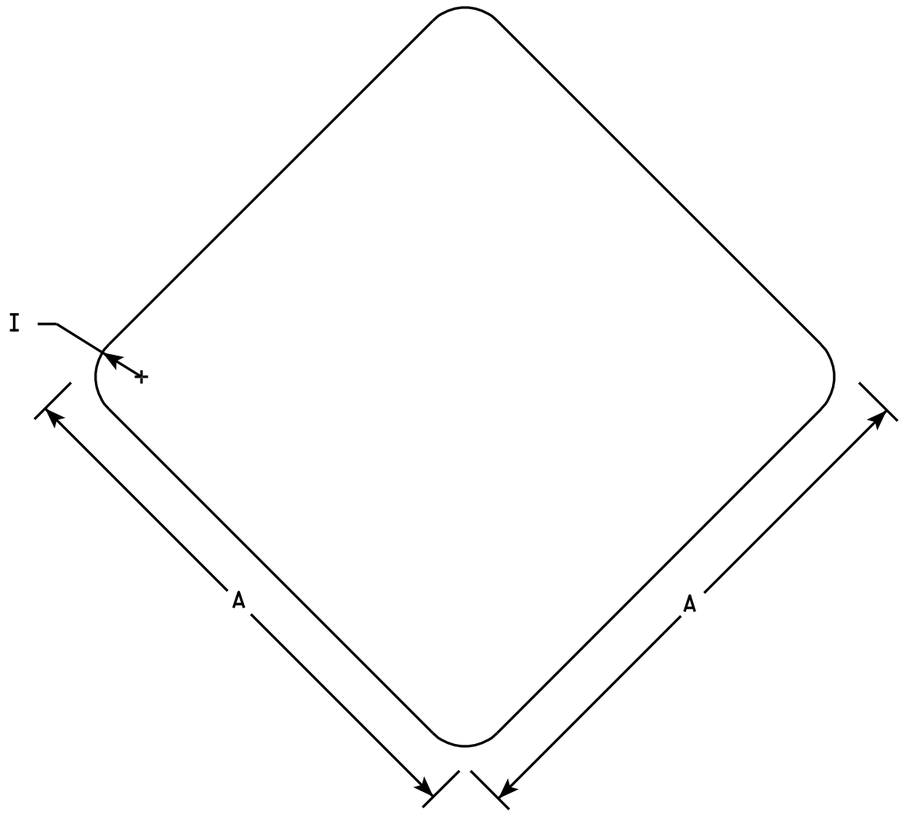
W5-52L & W5-52R

*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: 236 | E




W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | | | | | | | | 1 | | | | | | | | | | | | | | | | | | 1.0 |
| 2S | 18 | | | | | | | | 1 ½ | | | | | | | | | | | | | | | | | | 2.25 |
| 2M | 18 | | | | | | | | 1 ½ | | | | | | | | | | | | | | | | | | 2.25 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

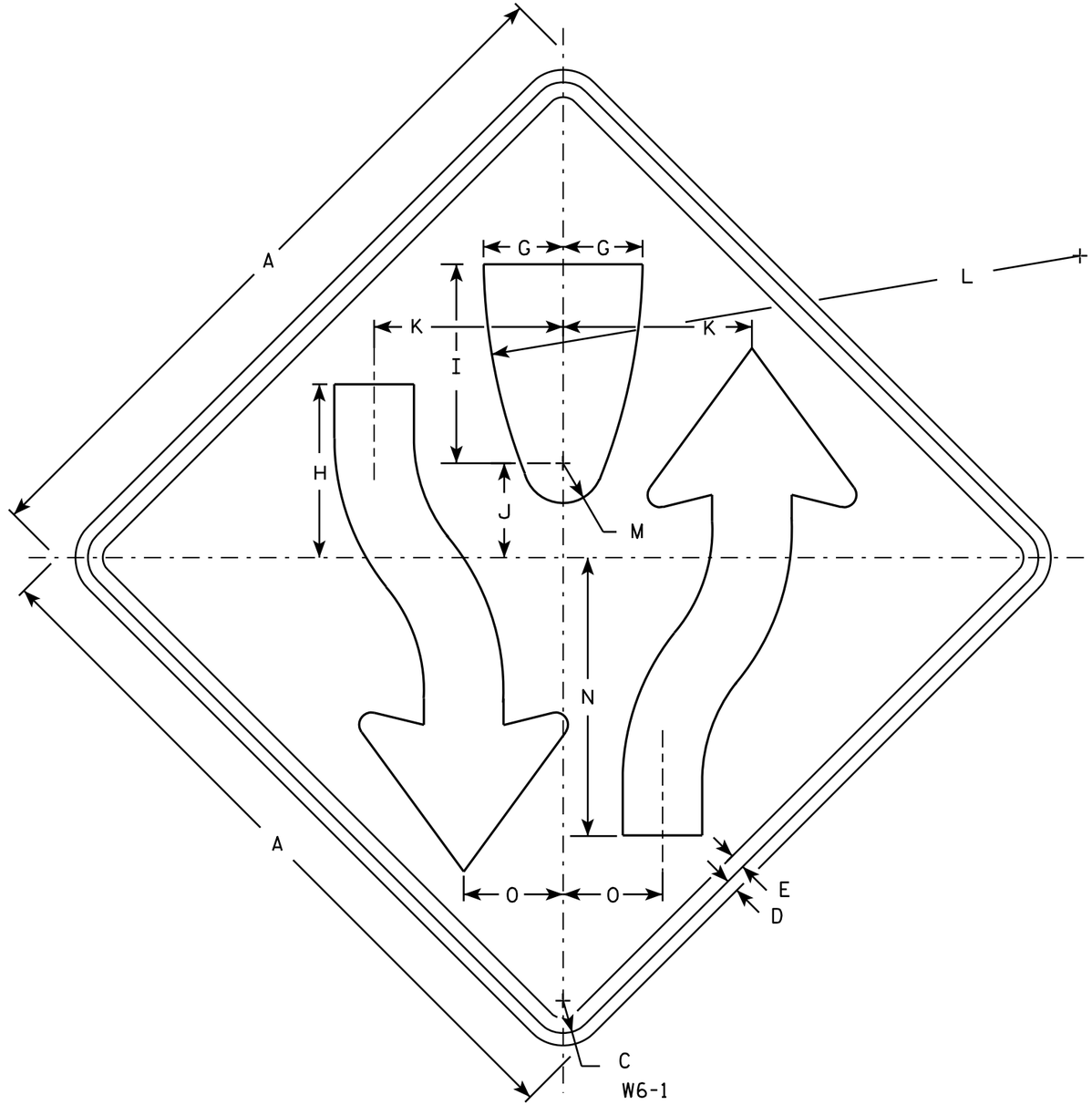
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

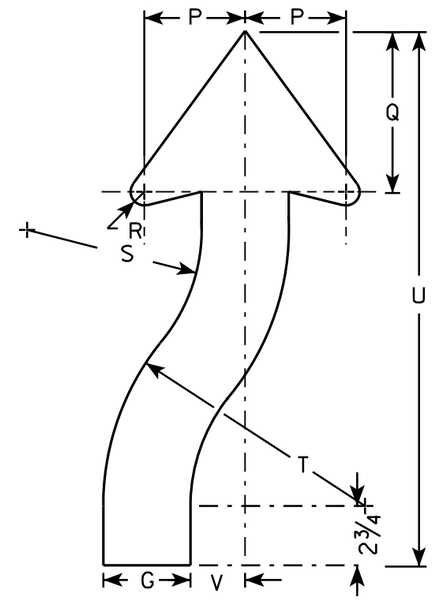
DATE 11/2/10 PLATE NO. W5-56.6

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 237 | E |
|---|---|---|---|---|---|




NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | | 3 1/4 | 8 | 8 1/4 | 4 1/8 | 7 7/8 | 25 | 1 3/4 | 11 5/8 | 4 1/8 | 3 7/8 | 6 3/4 | 5/8 | 6 5/8 | 9 7/8 | 21 5/8 | 2 | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | | 4 | 8 3/4 | 10 | 4 3/4 | 9 1/2 | 30 | 2 | 14 | 5 | 4 5/8 | 7 3/8 | 7/8 | 8 | 12 | 24 1/2 | 2 1/2 | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | | 4 | 8 3/4 | 10 | 4 3/4 | 9 1/2 | 30 | 2 | 14 | 5 | 4 5/8 | 7 3/8 | 7/8 | 8 | 12 | 24 1/2 | 2 1/2 | | | | | 9.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 5 3/8 | 11 5/8 | 13 3/8 | 6 3/8 | 12 5/8 | 40 | 2 5/8 | 18 5/8 | 6 5/8 | 6 1/4 | 9 7/8 | 1 1/4 | 10 5/8 | 16 | 32 5/8 | 3 3/8 | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 5 3/8 | 11 5/8 | 13 3/8 | 6 3/8 | 12 5/8 | 40 | 2 5/8 | 18 5/8 | 6 5/8 | 6 1/4 | 9 7/8 | 1 1/4 | 10 5/8 | 16 | 32 5/8 | 3 3/8 | | | | | 16.0 |

# STANDARD SIGN
## W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

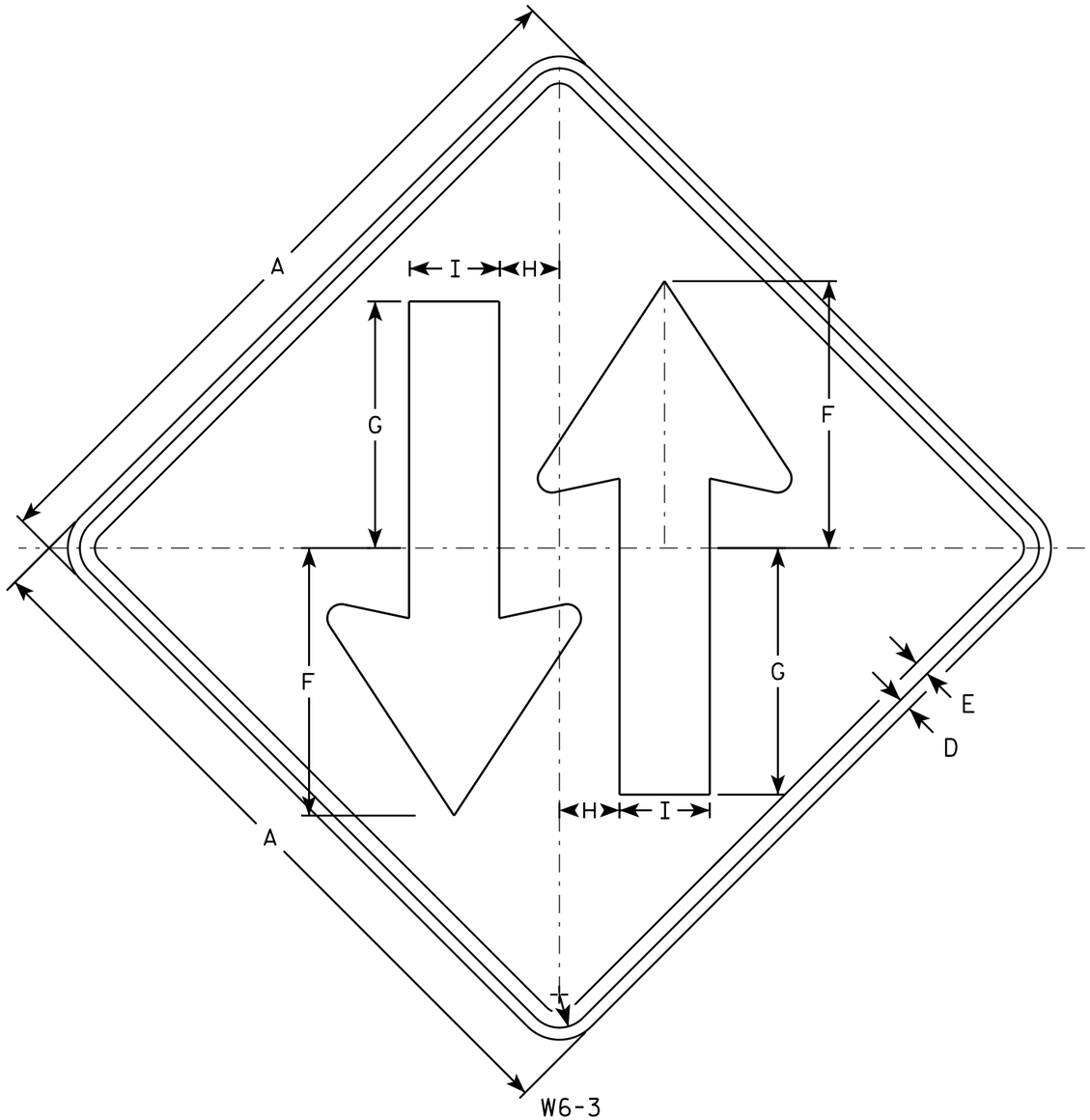
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 238 | E |
|---|---|---|---|---|---|



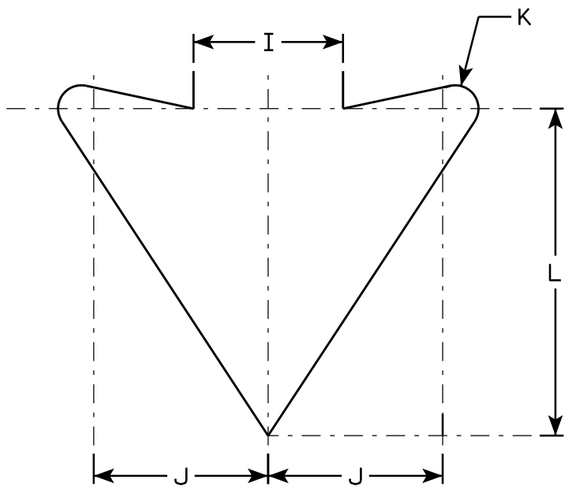
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42




W6-3

NOTES

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




ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 11 1/8 | 10 1/4 | 2 1/2 | 3 3/4 | 4 3/8 | 5/8 | 8 1/4 | | | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 13 3/8 | 12 1/4 | 3 | 4 1/2 | 5 1/4 | 3/4 | 9 7/8 | | | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 13 3/8 | 12 1/4 | 3 | 4 1/2 | 5 1/4 | 3/4 | 9 7/8 | | | | | | | | | | | | | | | 9.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 17 3/4 | 16 3/8 | 4 | 6 | 7 | 1 | 13 1/8 | | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 17 3/4 | 16 3/8 | 4 | 6 | 7 | 1 | 13 1/8 | | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

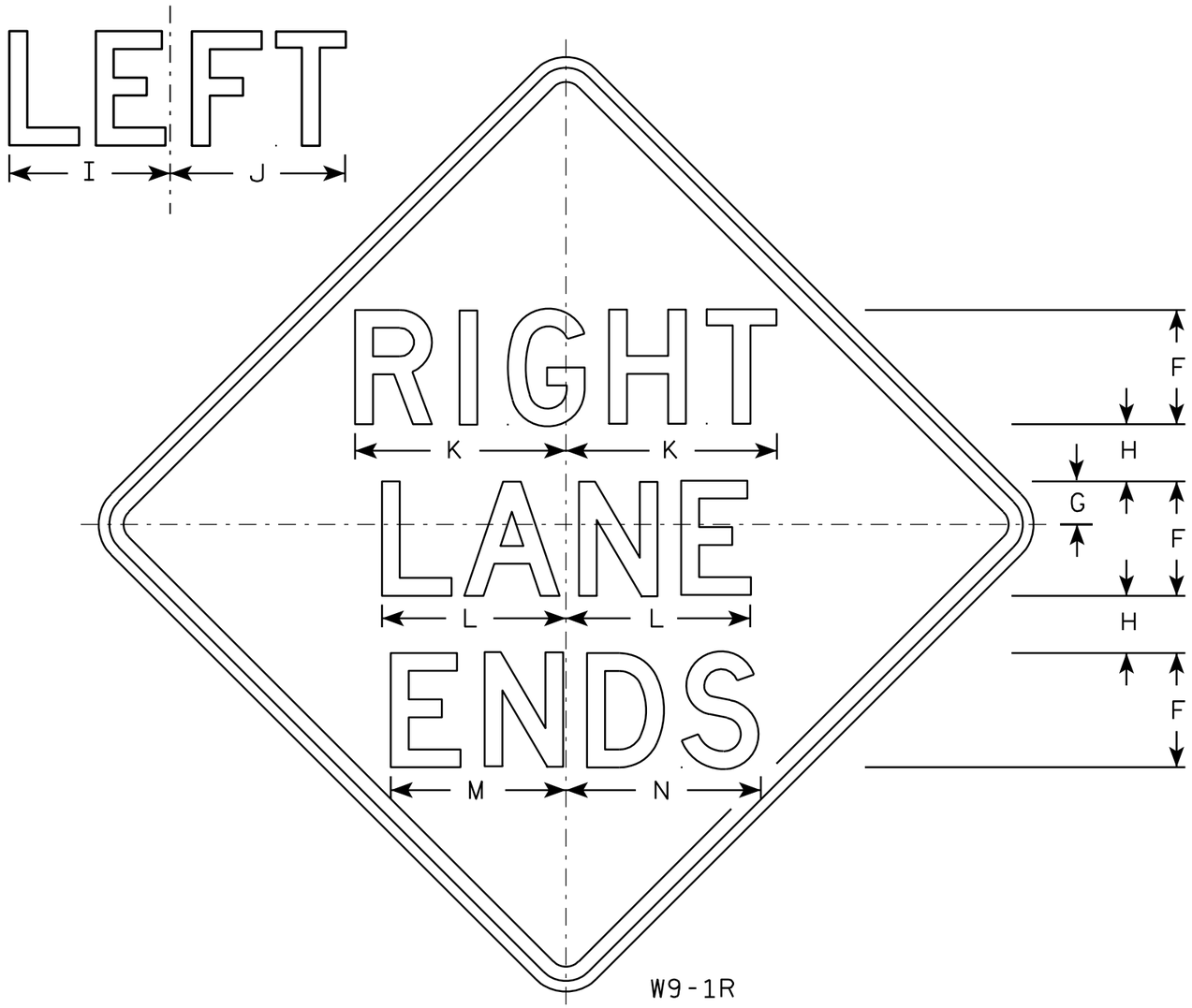
DATE 3/10/16 PLATE W6-3.11



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


7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000
WISDOT/CADDS SHEET 42




W9-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W9-1L same as W9-1R except the word Left replaces Right.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 1 1/2 | 2 1/2 | 7 1/8 | 7 5/8 | 9 1/4 | 8 1/8 | 7 5/8 | 8 5/8 | | | | | | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 2 | 3 | 8 1/2 | 9 1/8 | 11 | 9 3/4 | 9 | 10 3/8 | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 2 | 3 | 8 1/2 | 9 1/8 | 11 | 9 3/4 | 9 | 10 3/8 | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 2 | 3 | 8 1/2 | 9 1/8 | 11 | 9 3/4 | 9 | 10 3/8 | | | | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 2 | 3 | 8 1/2 | 9 1/8 | 11 | 9 3/4 | 9 | 10 3/8 | | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 | 4 | 11 1/4 | 12 1/4 | 14 3/4 | 12 7/8 | 12 1/4 | 13 5/8 | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W9-1

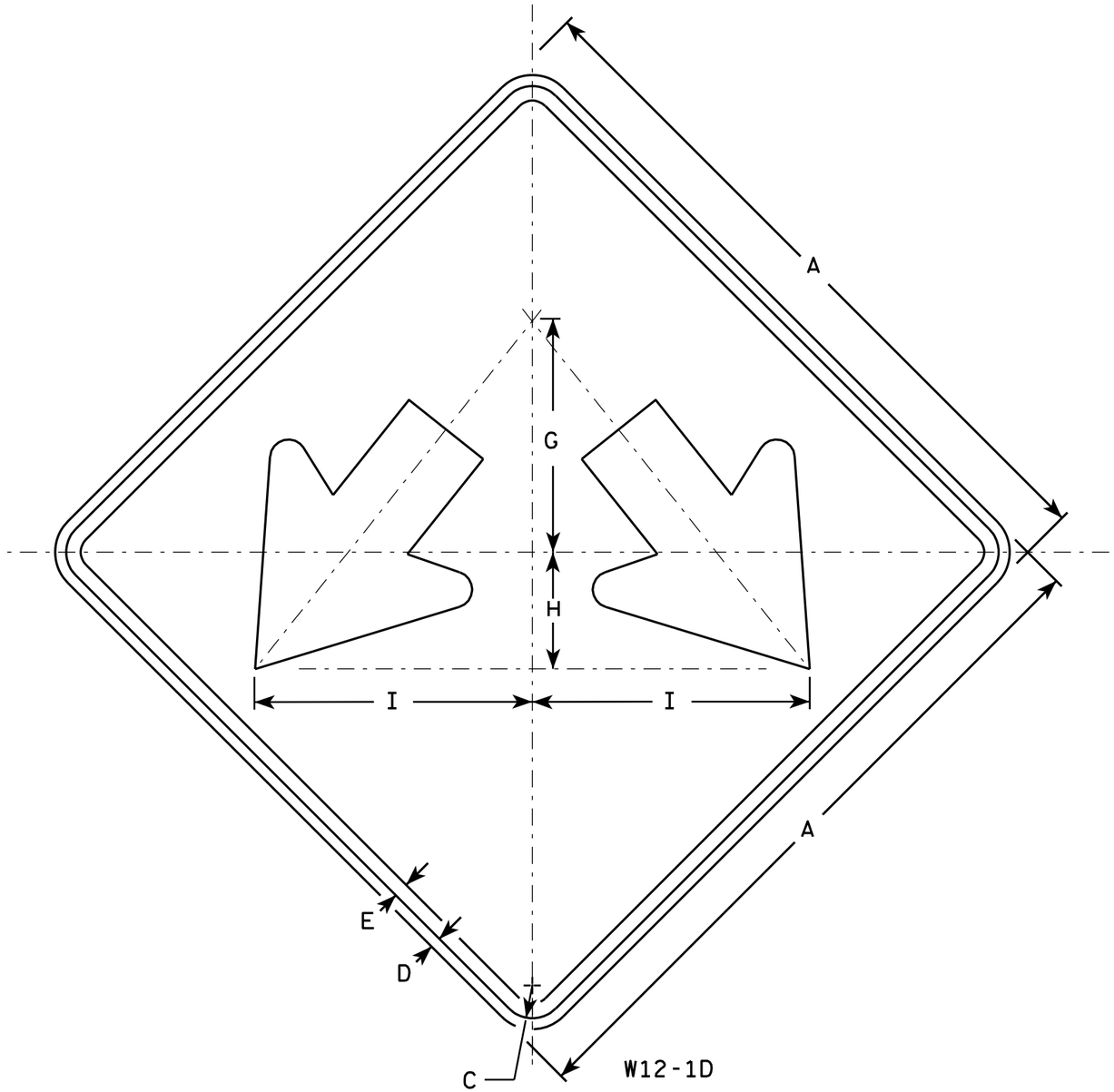
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

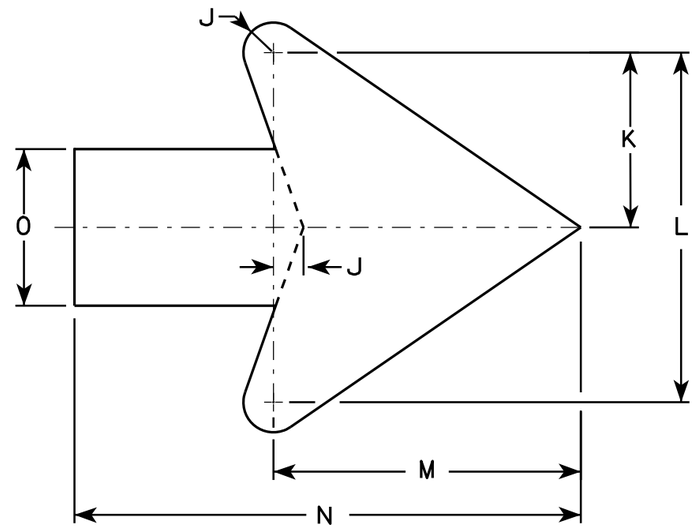
PROJECT NO:

SHEET NO: 240 E




NOTES

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




Arrow Detail

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | | 1 1/8 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 2M | 24 | | 1 1/8 | 1/2 | 3/8 | | 8 | 4 | 9 1/2 | 3/8 | 3 3/8 | 7 1/4 | 6 3/8 | 10 3/8 | 3 1/4 | | | | | | | | | | | | 4.0 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 | 5 | 11 7/8 | 3/4 | 4 1/2 | 9 | 7 7/8 | 13 | 4 | | | | | | | | | | | | 6.25 |
| 4 | 36 | | 1 3/8 | 1/2 | 5/8 | | 12 | 6 | 14 1/4 | 1 | 5 1/2 | 10 7/8 | 9 5/8 | 15 3/4 | 4 3/4 | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 16 | 8 | 19 | 1 1/4 | 7 1/4 | 14 1/2 | 12 3/4 | 21 | 6 1/4 | | | | | | | | | | | | 16.0 |

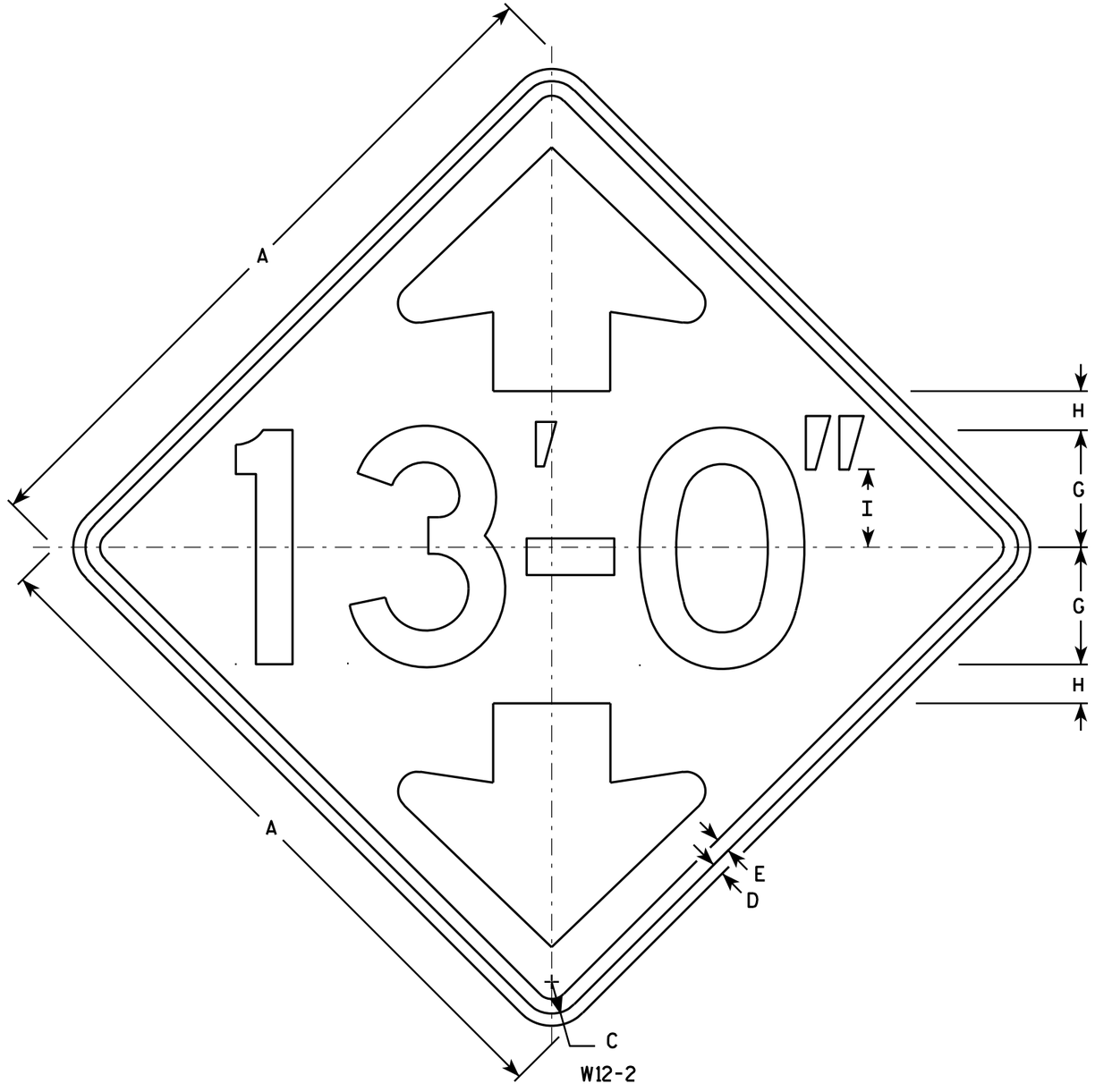
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 241 | E |
|---|---|---|---|---|---|

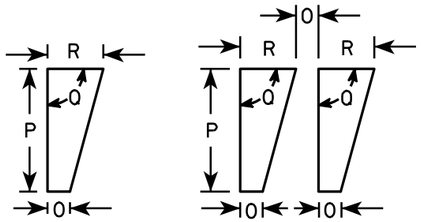



NOTES

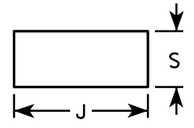
1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded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




Arrow Detail




Foot Mark & Inch Mark Detail




Hyphen Detail

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | | 5 | 1 5/8 | 3 3/8 | 3 3/4 | 6 5/8 | 5 3/4 | 3/4 | 2 1/2 | 1/2 | 2 1/4 | 90° | 1 | 1 5/8 | | | | | | | | 6.25 |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | | 6 | 2 | 4 | 4 1/2 | 8 | 6 7/8 | 1 | 3 | 1/2 | 2 3/4 | 90° | 1 1/4 | 1 7/8 | | | | | | | | 9.00 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | | 6 | 2 | 4 | 4 1/2 | 8 | 6 7/8 | 1 | 3 | 1/2 | 2 3/4 | 90° | 1 1/4 | 1 7/8 | | | | | | | | 9.00 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 6 | 2 | 4 | 4 1/2 | 8 | 6 7/8 | 1 | 3 | 1/2 | 2 3/4 | 90° | 1 1/4 | 1 7/8 | | | | | | | | 9.00 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | | 6 | 2 | 4 | 4 1/2 | 8 | 6 7/8 | 1 | 3 | 1/2 | 2 3/4 | 90° | 1 1/4 | 1 7/8 | | | | | | | | 9.00 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 8 | 2 5/8 | 5 1/2 | 5 7/8 | 10 5/8 | 9 1/4 | 1 3/8 | 4 | 5/8 | 3 5/8 | 90° | 1 5/8 | 2 1/2 | | | | | | | | 16.00 |

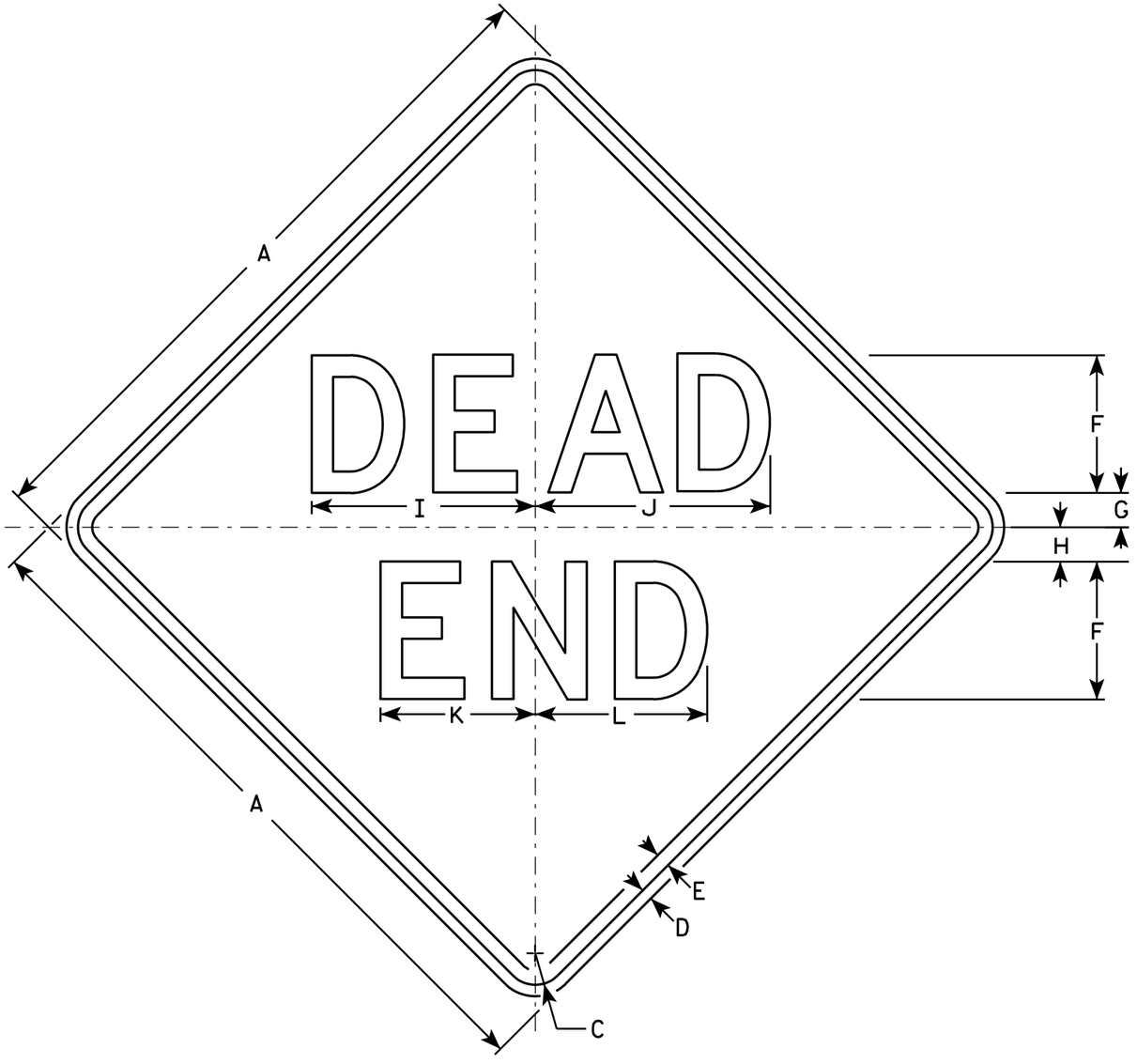
STANDARD SIGN
W12-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-2.9

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 242 | E |
|---|---|---|---|---|---|




W14-1

NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 5 | 1 | 2 | 8 1/4 | 8 5/8 | 5 5/8 | 6 1/4 | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 6 | 1 1/2 | 2 1/2 | 9 3/4 | 10 1/4 | 6 3/4 | 7 1/2 | | | | | | | | | | | | | | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | 6 | 1 1/2 | 2 1/2 | 9 3/4 | 10 1/4 | 6 3/4 | 7 1/2 | | | | | | | | | | | | | | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 7 | 2 | 3 | 11 3/8 | 12 | 7 7/8 | 8 3/4 | | | | | | | | | | | | | | | 9.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

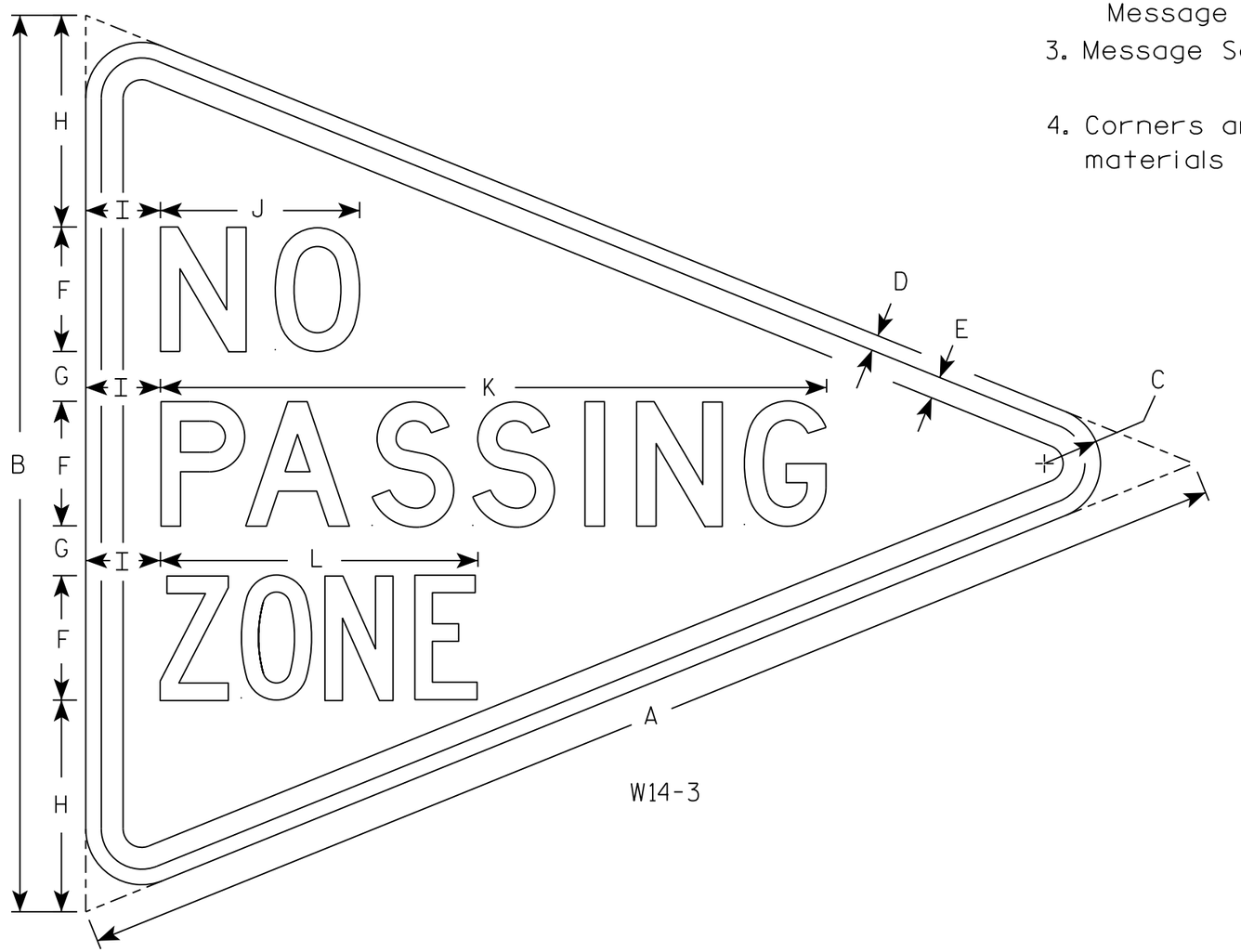
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W14-1.7

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 243 | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

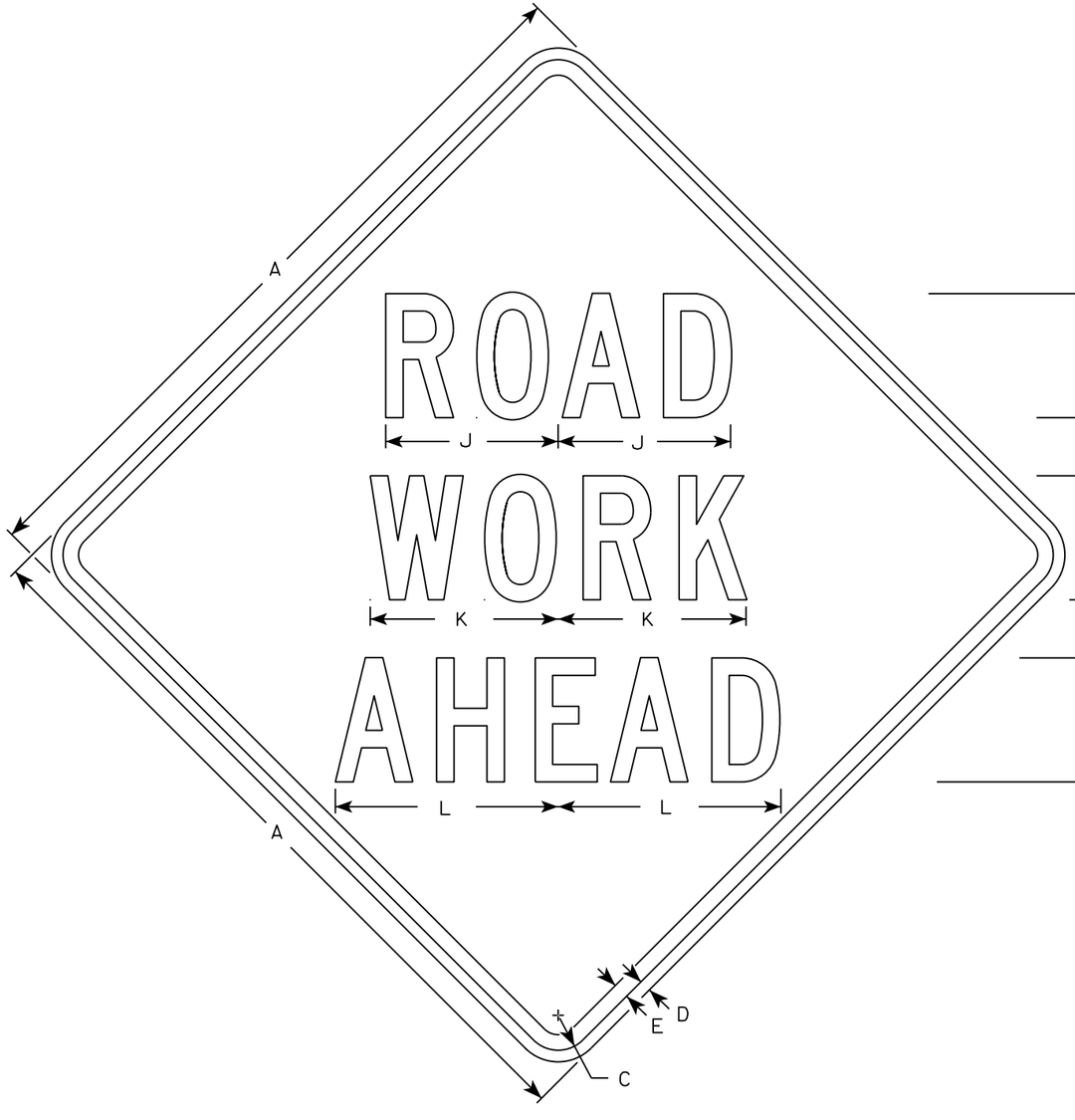
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

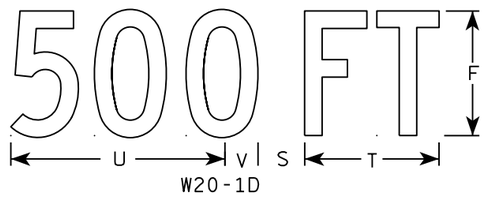
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

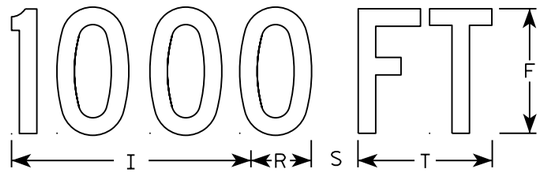
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 244 | E



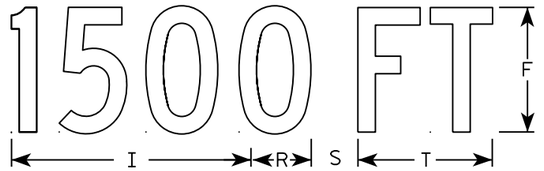

W20-1A




W20-1D

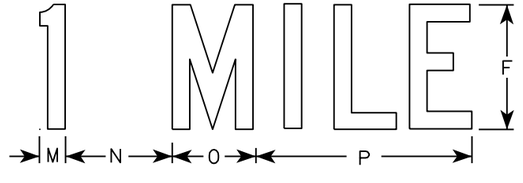



W20-1C

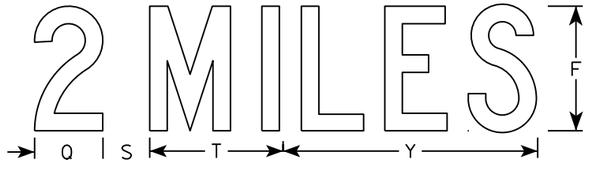



W20-1B

W20-1G




W20-1F




W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 5/8 | 3 1/4 | 10 1/8 | 7 | 7 5/8 | 8 7/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | | 2 1/2 | 2 1/4 | 5 5/8 | 9 | 1 3/8 | 8 | 1 3/4 | 10 3/4 | 6 | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

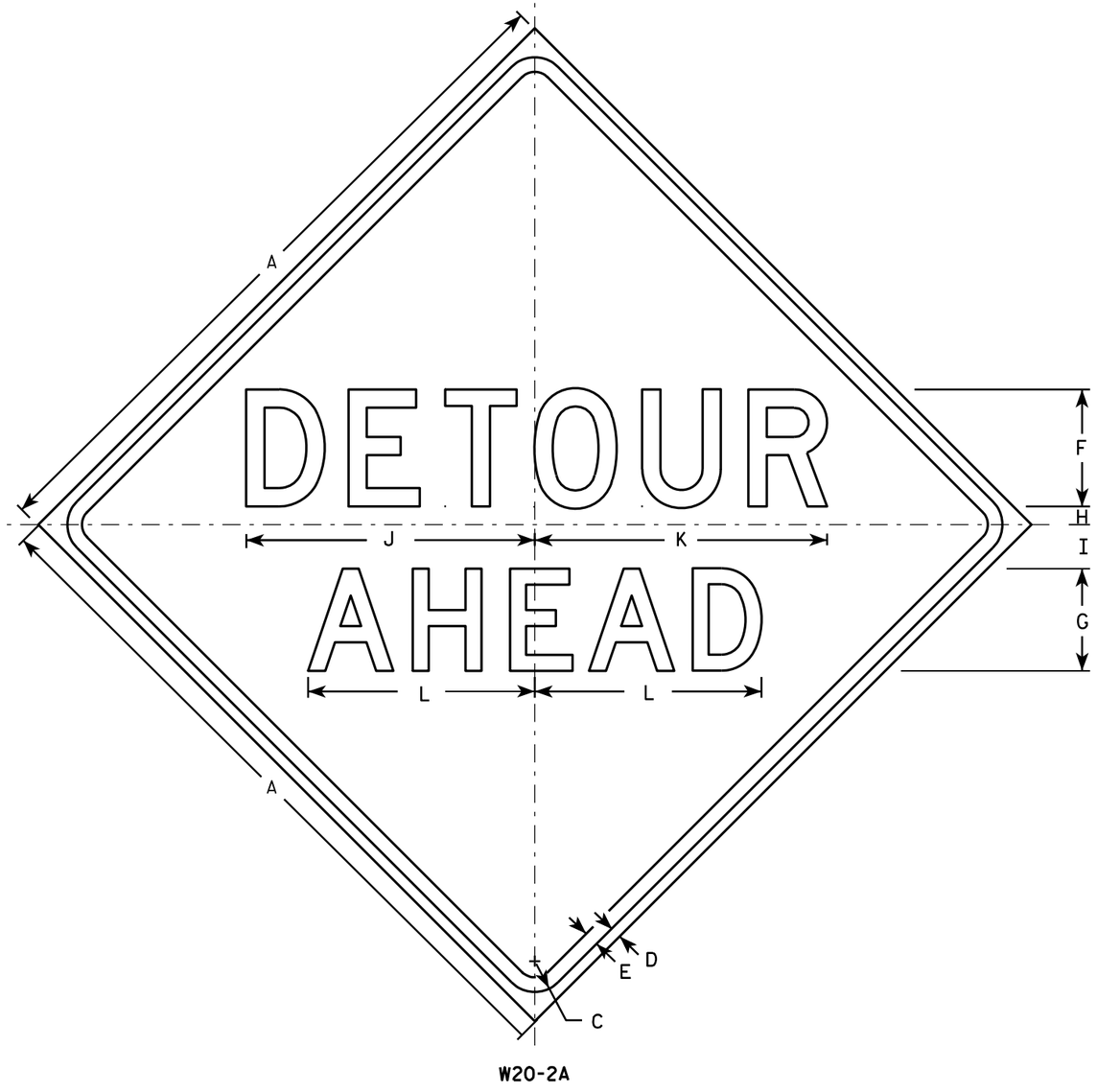


PROJECT NO:

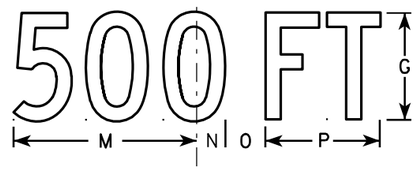
SHEET NO: E



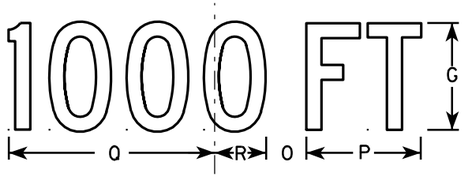
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



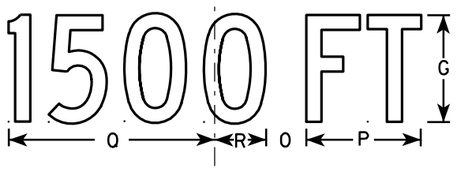

W20-2A



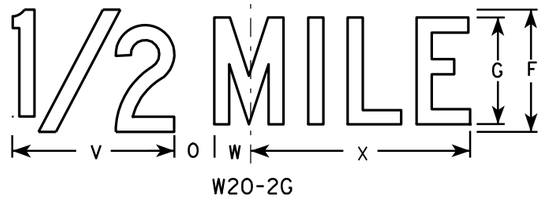

W20-2D



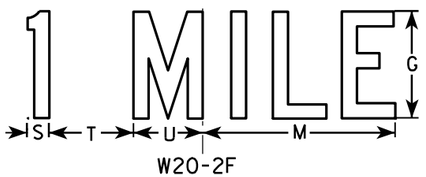

W20-2C




W20-2B




W20-2G




W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 5 | 1 | 2 1/4 | 14 3/4 | 15 | 11 5/8 | 9 | 1 3/8 | 1 7/8 | 5 5/8 | 10 1/8 | 2 1/2 | 1 1/8 | 4 1/2 | 3 1/2 | 8 | 1 3/4 | 10 3/4 | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

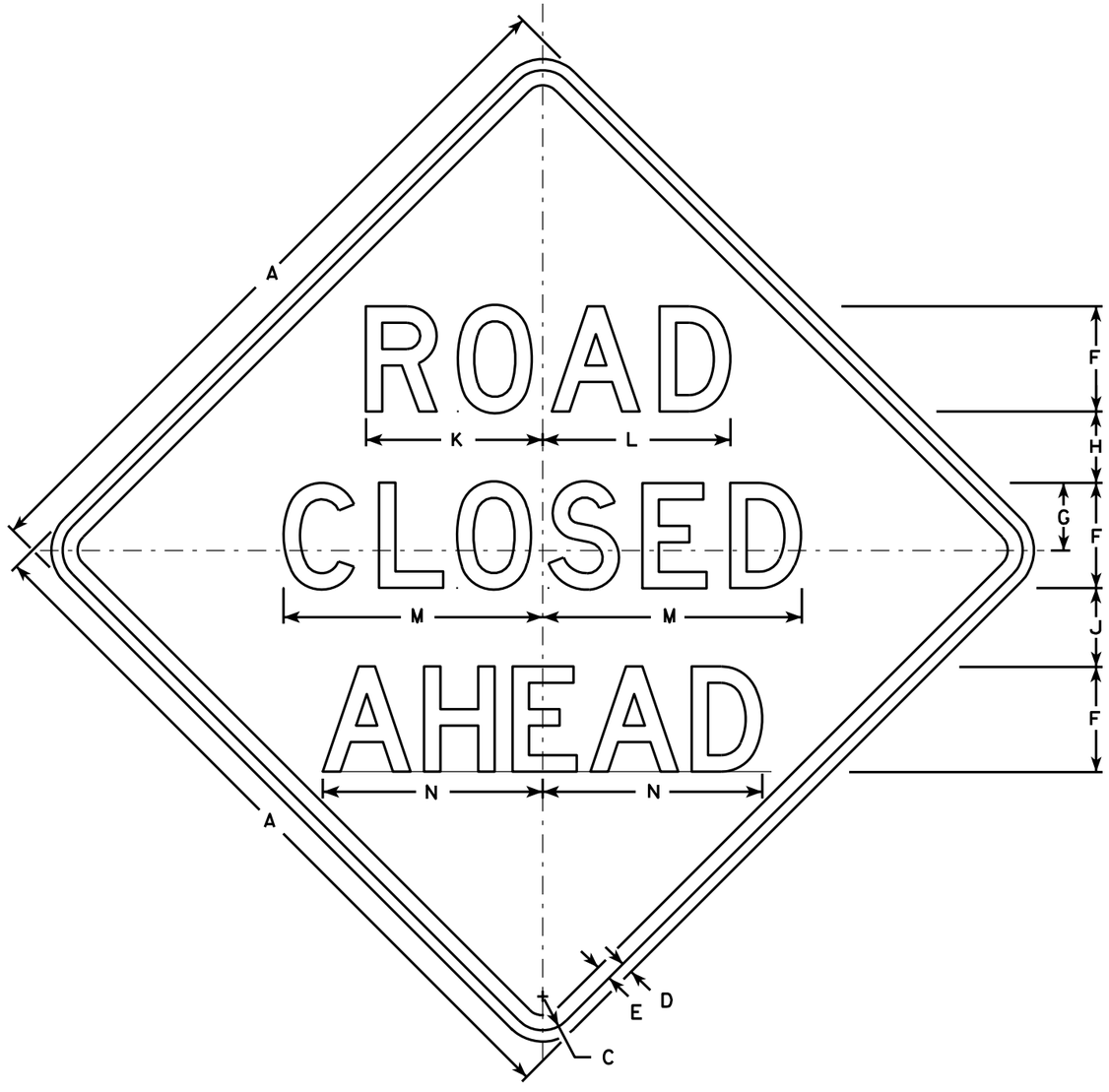
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

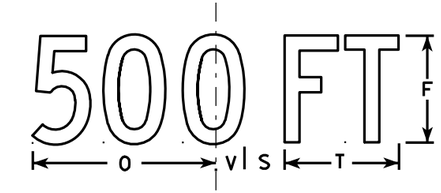
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 246 | E


7

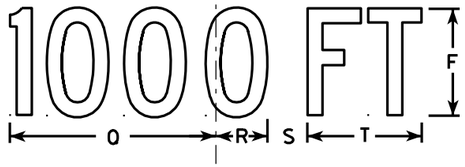
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



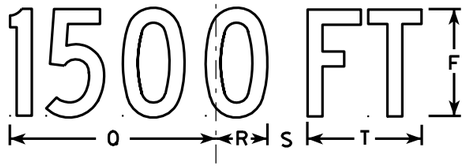

W20-3A



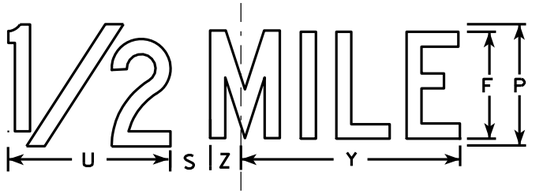

W20-3D



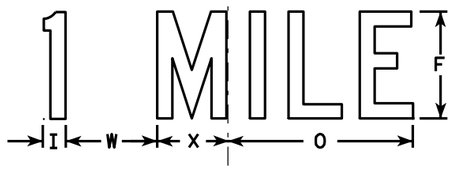

W20-3C




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

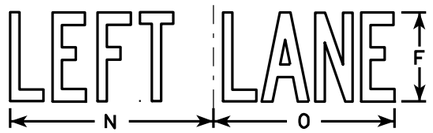
APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 247 | E

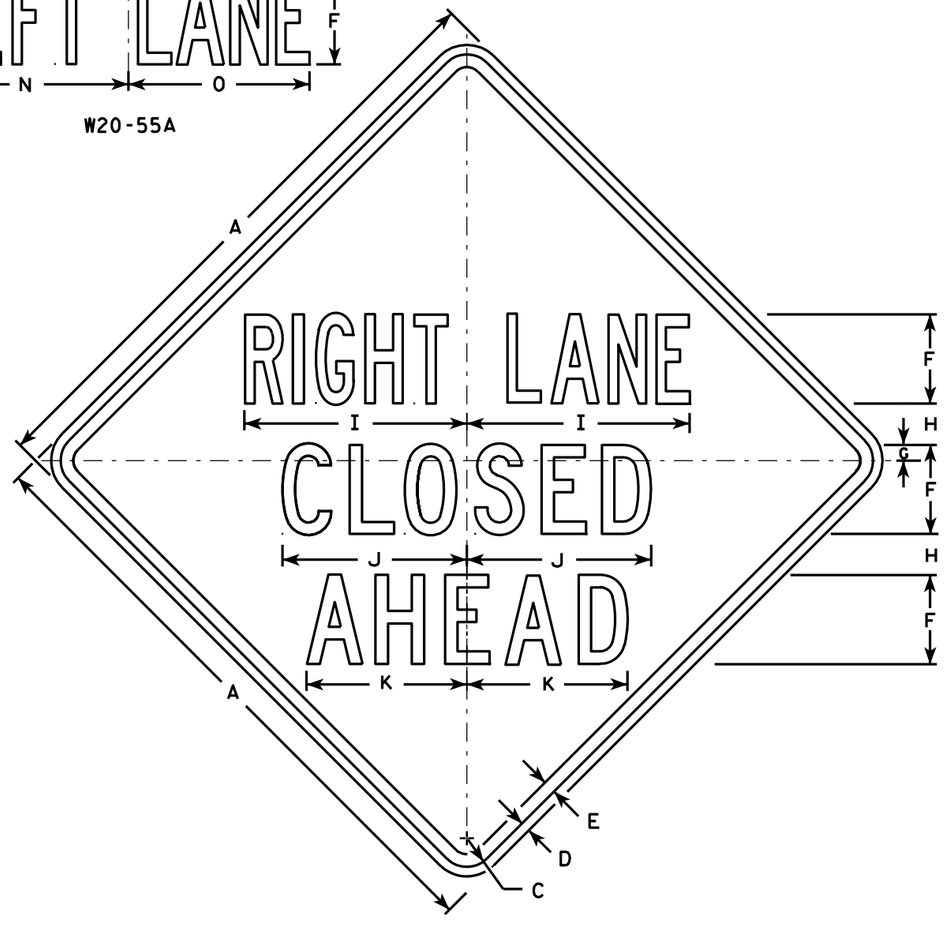

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42

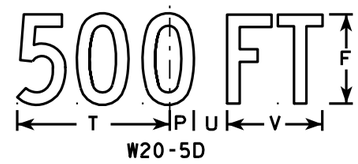
W20-56A



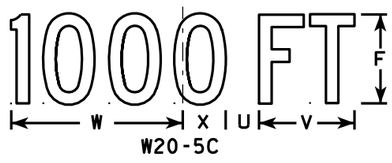

W20-55A



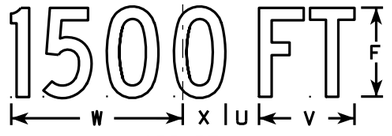

W20-5A




W20-5D




W20-5C




W20-5B

W20-5G

W20-5F

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. " _____ LANE" is Series B.
   All other copy is 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 | 36 | 6 | 1 5/8 | 5/8 | 3/4 | 5 | 1/8 | 2 1/2 | 13 1/8 | 10 3/4 | 9 1/2 | 14 1/4 | 13 5/8 | 12 | 12 | 1 3/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | 1 1/8 | 5 5/8 | 10 1/8 | 2 1/2 | 1 3/4 | 8 | 9.0 |
| 2S | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 2M | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 3 | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 4 | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |
| 5 | 48 | 8 | 2 1/4 | 3/4 | 1 | 7 | 1 1/4 | 3 1/4 | 17 1/2 | 14 3/8 | 12 5/8 | 19 | 18 3/8 | 16 | 14 1/4 | 1 7/8 | 1 1/2 | 6 | 4 5/8 | 12 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 2 3/8 | 10 5/8 | 16.0 |

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

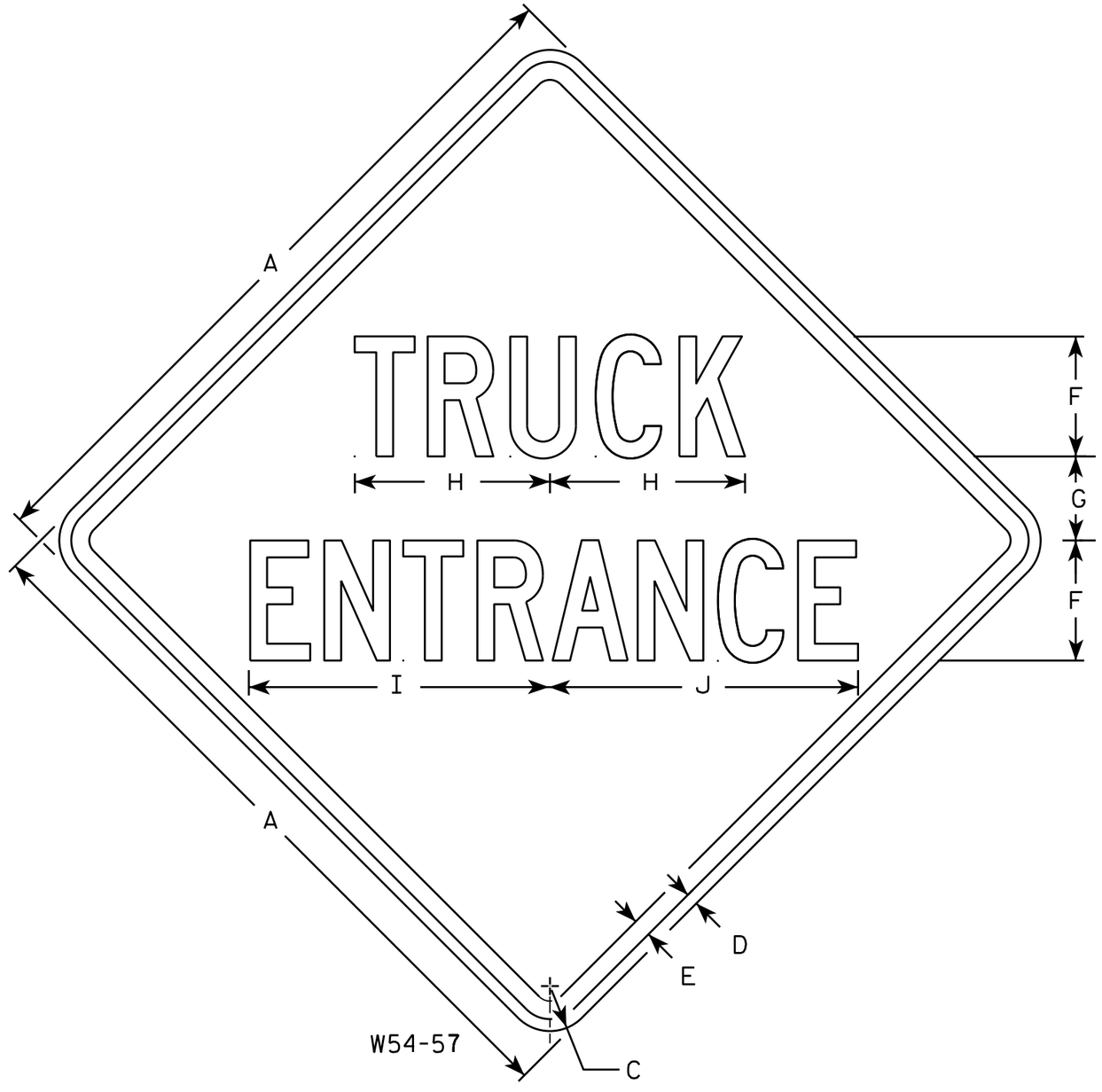
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 248 | E |
|---|---|---|---|---|---|



FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42




NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 3 1/2 | 8 1/8 | 12 1/2 | 12 7/8 | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 4 1/4 | 9 5/8 | 15 | 15 3/8 | | | | | | | | | | | | | | | | | 9.00 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 4 1/4 | 9 5/8 | 15 | 15 3/8 | | | | | | | | | | | | | | | | | 9.00 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 5 1/2 | 13 | 20 | 20 5/8 | | | | | | | | | | | | | | | | | 16.00 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W54-57

WISCONSIN DEPT OF TRANSPORTATION

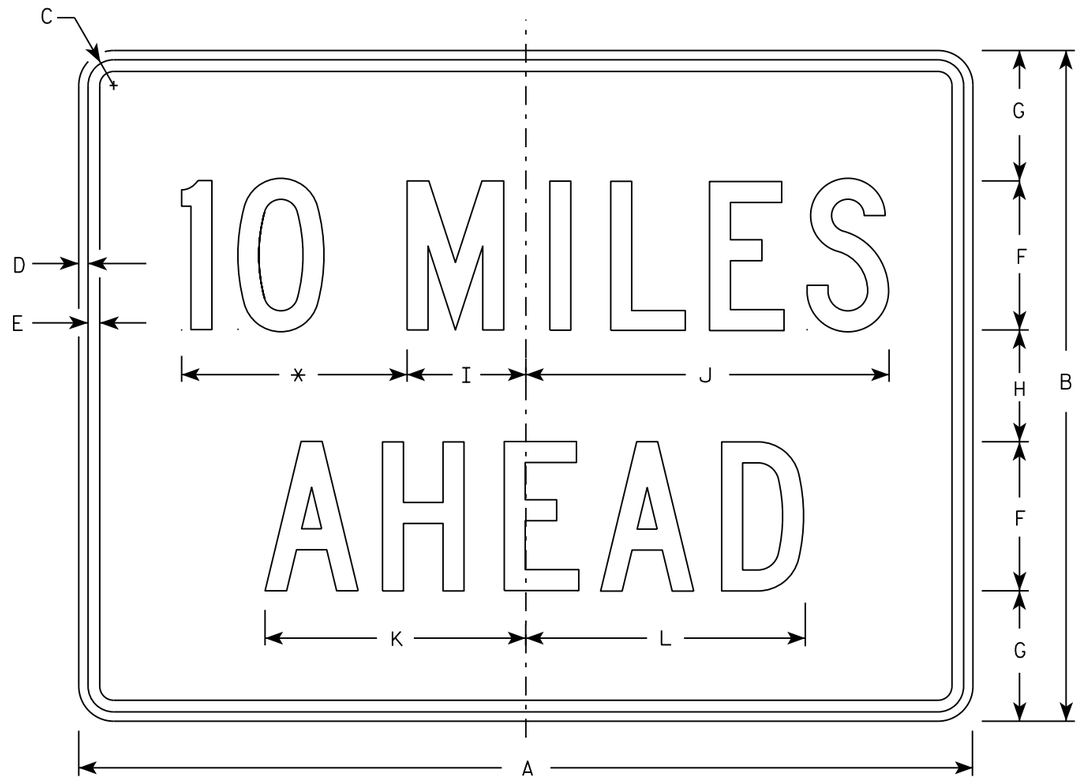
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE W54-57.9

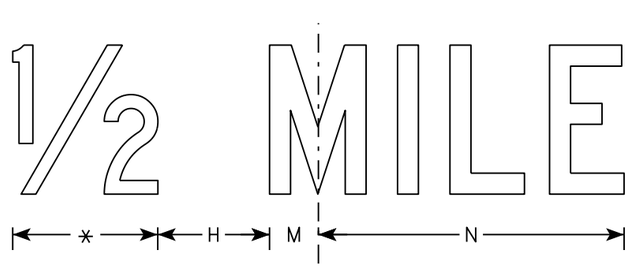


PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W5457.DGN PLOT DATE : 27-APR-2016 10:05 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.594294:1.000000 WISDOT/CADDS SHEET 42




W57-52




* See note 5

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C
4. Corners and borders shall be rounded.
5. Substitute appropriate numerals to the 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 | 24 | 18 | 1 1/8 | 3/8 | 1/2 | 4 | 3 1/2 | 3 | 3 1/8 | 9 3/4 | 7 | 7 1/2 | 1 3/8 | 8 1/4 | | | | | | | | | | | | | 3.0 |
| 2S | 36 | 24 | 1 1/8 | 3/8 | 1/2 | 6 | 4 1/2 | 3 | 4 3/4 | 14 5/8 | 10 5/8 | 11 3/8 | 2 | 12 | | | | | | | | | | | | | 6.0 |
| 2M | 36 | 24 | 1 1/8 | 3/8 | 1/2 | 6 | 4 1/2 | 3 | 4 3/4 | 14 5/8 | 10 5/8 | 11 3/8 | 2 | 12 | | | | | | | | | | | | | 6.0 |
| 3 | 36 | 24 | 1 1/8 | 3/8 | 1/2 | 6 | 4 1/2 | 3 | 4 3/4 | 14 5/8 | 10 5/8 | 11 3/8 | 2 | 12 | | | | | | | | | | | | | 6.0 |
| 4 | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7 | 6 | 6 3/8 | 19 1/2 | 14 | 15 | 2 3/4 | 16 3/8 | | | | | | | | | | | | | 12.0 |
| 5 | 48 | 36 | 1 3/8 | 1/2 | 5/8 | 8 | 7 | 6 | 6 3/8 | 19 1/2 | 14 | 15 | 2 3/4 | 16 3/8 | | | | | | | | | | | | | 12.0 |

STANDARD SIGN
W57-52

WISCONSIN DEPT OF TRANSPORTATION

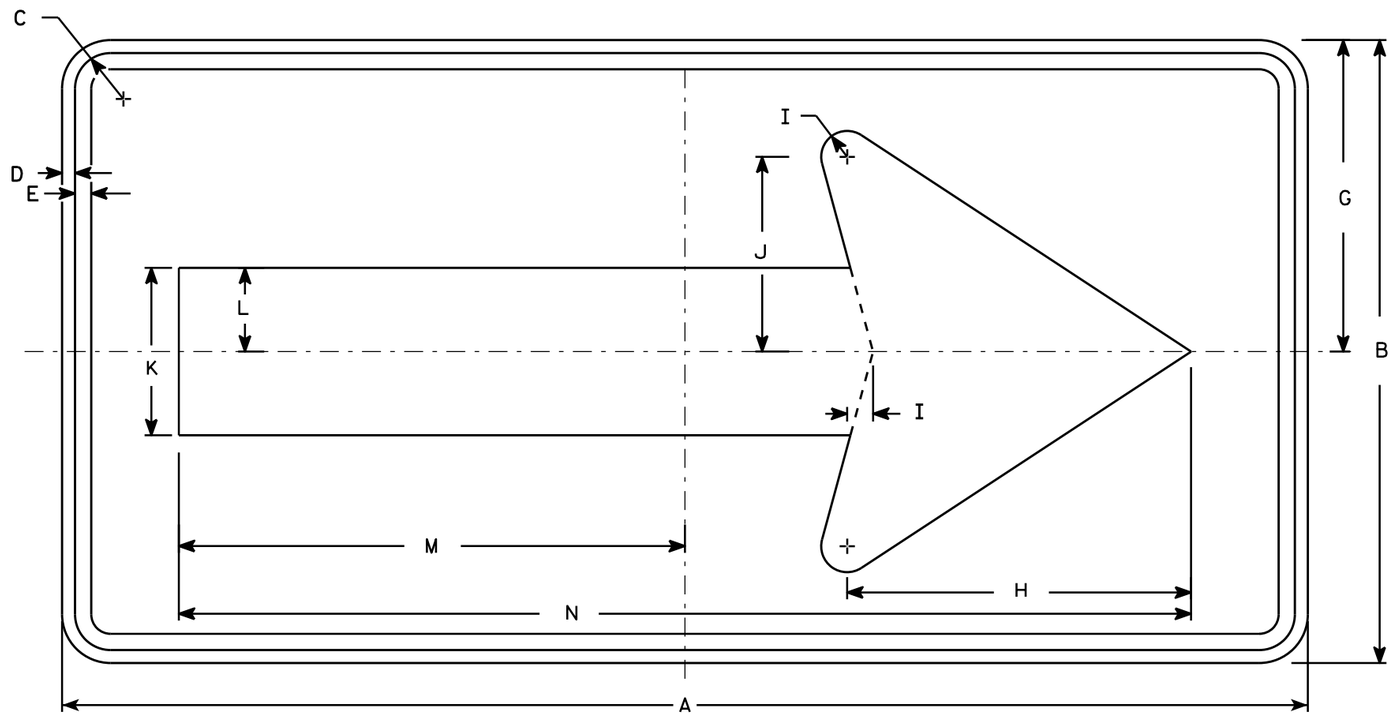
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/21/17 PLATE NO. W57-52.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 250 | E |
|---|---|---|---|---|---|



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W5752.DGN PLOT DATE : 21-MAR-2017 08:50 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 8.131582:1.000000 WISDOT/CADDS SHEET 42




W01-6

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 5 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |

# STANDARD SIGN
# W01-6

WISCONSIN DEPT OF TRANSPORTATION

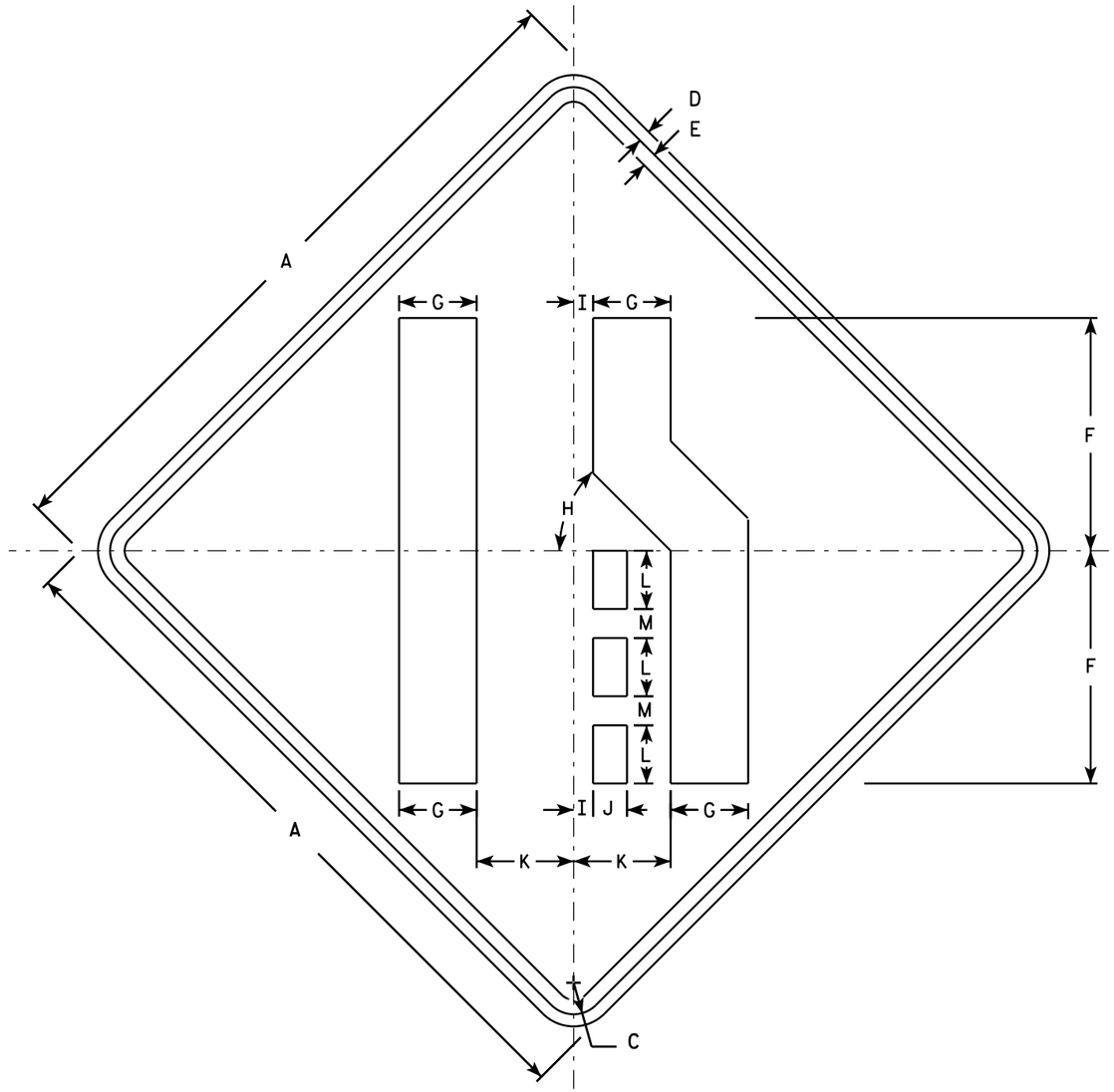
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1



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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42




W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 12 | 4 | 45° | 1 | 1 3/4 | 5 | 3 | 1 1/2 | | | | | | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 16 | 5 3/8 | 45° | 1 1/4 | 2 3/8 | 6 3/4 | 4 | 2 | | | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W04-2

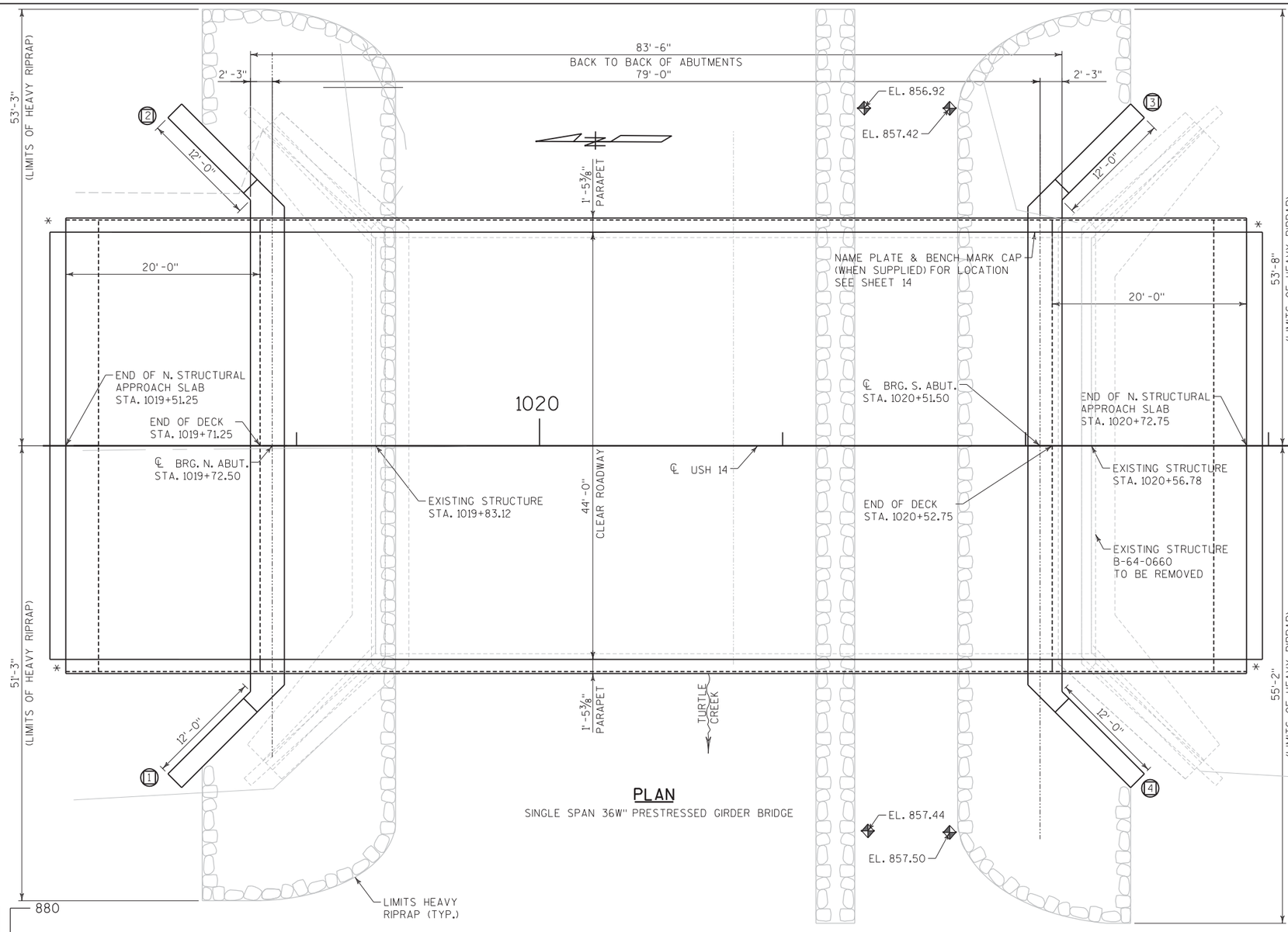
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 252 W04-2.1

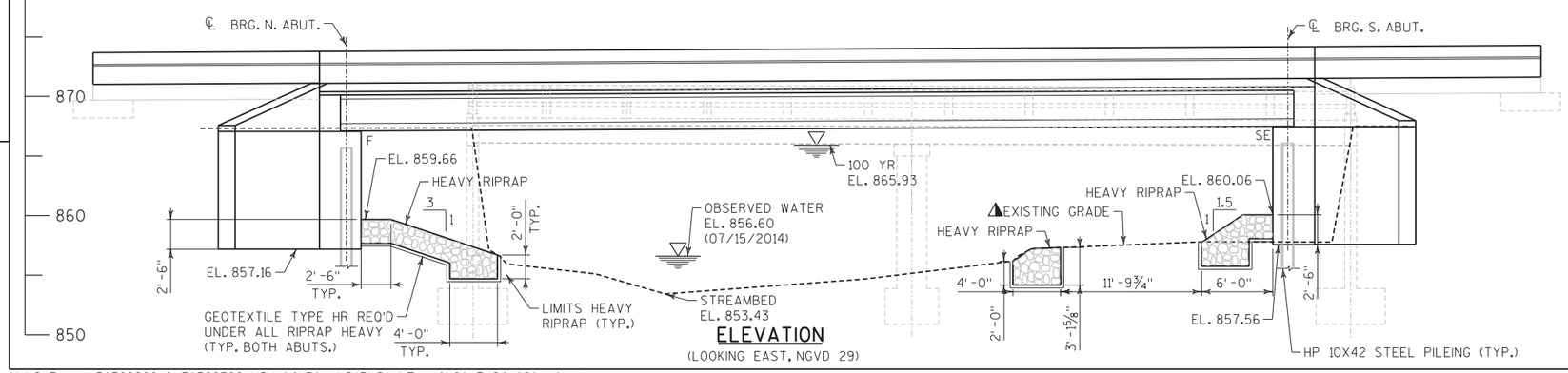
PROJECT NO:

SHEET NO: E




## PLAN

SINGLE SPAN 36W" PRESTRESSED GIRDER BRIDGE




## ELEVATION

(LOOKING EAST, NGVD 29)

## LIST OF DRAWINGS


1. GENERAL PLAN & ELEVATION
2. CROSS-SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. NORTH ABUTMENT
5. NORTH ABUTMENT DETAILS
6. SOUTH ABUTMENT
7. SOUTH ABUTMENT DETAILS
8. 36W" PRESTRESSED GIRDER
9. 36W" PRESTRESSED GIRDER DETAILS
10. STEEL DIAPHRAGM
11. SUPERSTRUCTURE
12. SUPERSTRUCTURE CROSS-SECTION
13. SUPERSTRUCTURE BILL OF BARS
14. SINGLE SLOPE 32SS
15. STRUCTURAL APPROACH SLAB
16. STRUCTURAL APPROACH SLAB DETAILS

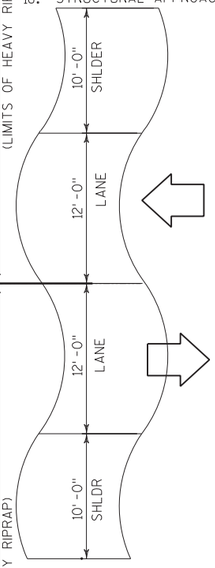

STATE PROJECT NUMBER

3150-05-70

## HYDRAULIC DATA: ☆

| | |
|---|---|
| $Q_{100}$ | 4,945 c.f.s |
| DRAINAGE AREA | 95 SQ. MI. |
| WATERWAY AREA | 757.8 SQ. FT. |
| VELOCITY | 7.19 f.p.s. |
| HIGH WATER$_{100}$ ELEVATION | 865.93 |
| SCOUR CRITICAL CODE | 5 |
| $Q_2$ | 1,190 c.f.s |
| HIGH WATER$_2$ ELEVATION | 860.2 |

☆ VERTICAL DATUM USED IS NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).




## 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 55'-0" LONG AT NORTH ABUTMENT.
ESTIMATED 65'-0" LONG AT SOUTH 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.

## DESIGN DATA

LIVE LOAD:
- DESIGN LOAD ..... HL-93
- INVENTORY RATING FACTOR ..... 1.13
- OPERATING RATING FACTOR ..... 1.66
- WIS-SPV RATING ..... 250 KIPS

THE STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF.

MATERIAL PROPERTIES:
- CONCRETE MASONRY
  - SUPERSTRUCTURE ..... f'c=4,000 PSI
  - ALL OTHER ..... f'c=3,500 PS
- HIGH STRENGTH BAR STEEL REINFORCEMENT GRADE 60 ..... fy=60,000 PSI

36W-INCH PRESTRESSED GIRDERS
- CONCRETE MASONRY ..... f'c=8,000 PSI
- PRESTRESSING STRANDS = 0.6 INCH DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 PSI

## TRAFFIC DATA:

### USH 14

A.D.T. = 8500 (2017)
A.D.T. = 11000 (2037)
R.D.S. = 60 M.P.H.

## LEGEND

- * PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT
- ⬡ INDICATES WING NUMBER
- ◭ THE EXISTING GRADE UNDER THE SOUTH END OF THE STRUCTURE IS TO BE MAINTAINED AFTER CONSTRUCTION. IF DISTURBED DURING STRUCTURE CONSTRUCTION, RESTORE IT WITH NATIVE MATERIAL. WORK IS INCIDENTAL TO OTHER STRUCTURE CONSTRUCTION ITEMS.
- ◆ EXISTING ELEVATIONS TO BE MAINTAINED POST STRUCTURE CONSTRUCTION.

BUREAU OF STRUCTURES:
WILLIAM DREHER (608) 266-8489

CONSULTANT CONTACT:
ANN THIELMANN (608)-229-1414

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

WISCONSIN
ANN C. THIELMANN
E-42457
MADISON
WI
PROFESSIONAL ENGINEER
9/25/17

DAAR ENGINEERING, INC.
www.daarcorp.com
Madison, WI 53703
608-249-8340

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 11/07/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-64-191

USH 14 OVER TURTLE CREEK

| COUNTY | TOWN |
|---|---|
| WALWORTH | DARIEN |

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

| DESIGNED BY | DESIGN CK'D. | DRAWN BY | PLANS CK'D. |
|---|---|---|---|
| ACT | CBM | ACT | CBM |

GENERAL PLAN & ELEVATION

SHEET 1 OF 16

253

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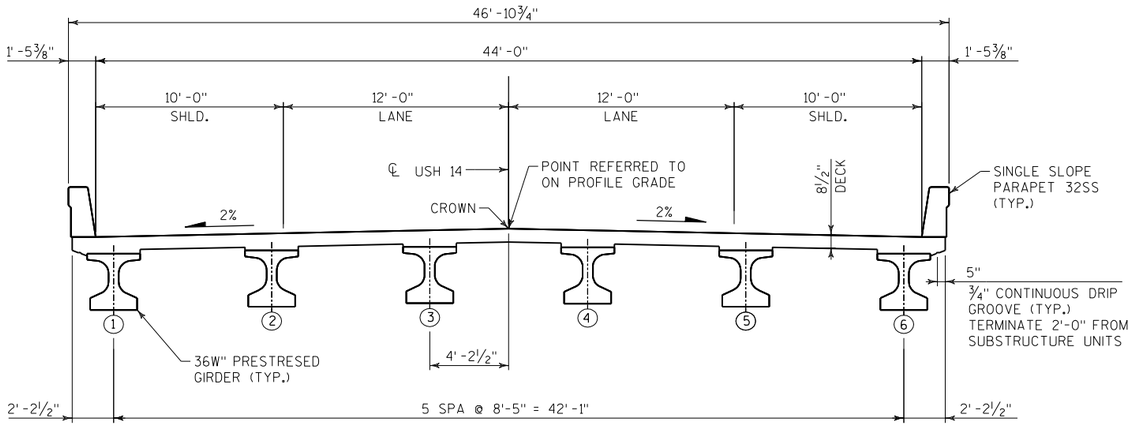
9/25/2017

STATE PROJECT NUMBER

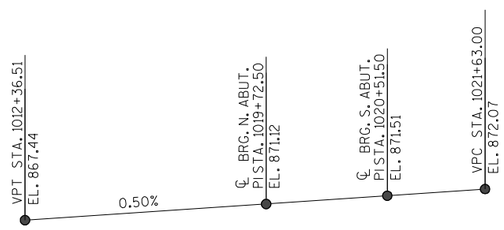
3150-05-70



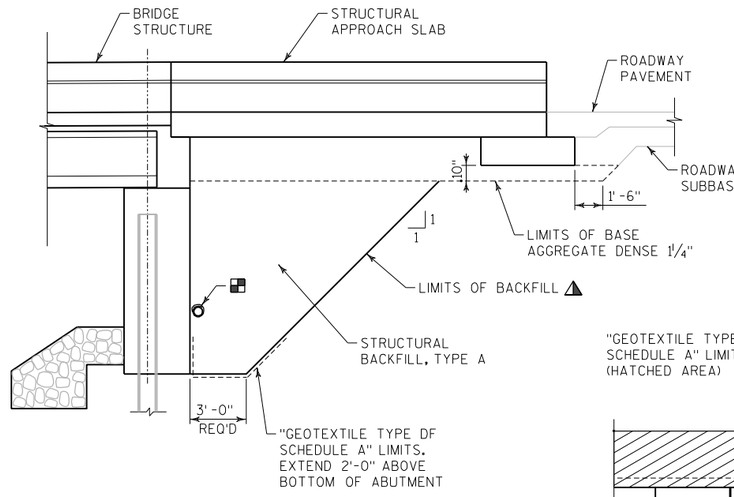

## TYPICAL SECTION

36W" PRESTRESSED CONCRETE GIRDER
(LOOKING SOUTH)

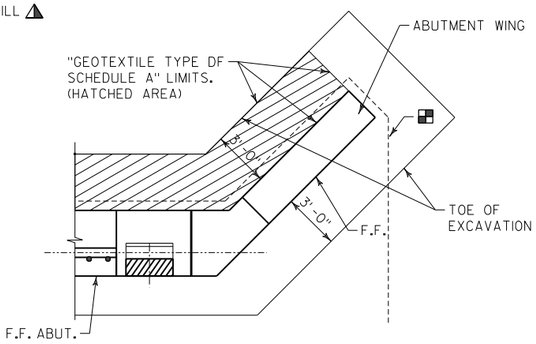
| BENCH MARKS | | |
|---|---|---|
| NO. | DESCRIPTION | ELEVATION |
| BM 11.3 | REBAR SET ON BACKSLOPE. EAST SIDE OF HWY 14. 150'± SOUTH OF GAURDRAIL FOR TURTLE CREEK BRIDGE. 19'± OFF EDGE OF PAVEMENT | 869.01 (NGVD 29) |




## PROPOSED GRADE LINE
## USH 14




## TYPICAL SECTION THRU ABUTMENT




## ABUTMENT PLAN WITH WING

## TOTAL ESTIMATED QUANTITIES

| | BID ITEM NUMBER | BID ITEMS | UNIT | NORTH APPROACH | NORTH ABUT. | SOUTH ABUT. | SOUTH APPROACH | SUPER. | TOTALS |
|---|---|---|---|---|---|---|---|---|---|
| | 203.0600.S | REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 1019+83.12 | LS | - | - | - | - | - | 1 |
| | 206.1000 | EXCAVATION FOR STRUCTURE, BRIDGES B-64-0191 | LS | - | - | - | - | - | 1 |
| | 210.1500 | BACKFILL STRUCTURE TYPE A | TON | - | 396 | 396 | - | - | 792 |
| | 305.0120 | BASE AGGREGATE DENSE 1 1/4-INCH | TON | - | 149 | 149 | - | - | 298 |
| * | 502.0100 | CONCRETE MASONRY BRIDGES | CY | 63 | 88 | 88 | 63 | 174 | 476 |
| | 502.3200 | PROTECTIVE SURFACE TREATMENT | SY | 98 | - | - | 98 | 423 | 619 |
| | 502.3210 | PIGMENTED SURFACE SEALER | SY | 17 | - | - | 17 | 67 | 101 |
| | 503.0137 | PRESTRESSED GIRDER TYPE I 36W-INCH | LF | - | - | - | - | 480 | 480 |
| | 505.0400 | BAR STEEL REINFORCEMENT HS STRUCTURES | LB | - | 3690 | 3670 | - | - | 7360 |
| * | 505.0600 | BAR STEEL REINFORCEMENT HS COATED STRUCTURES | LB | 10650 | 2260 | 2350 | 10650 | 25260 | 51170 |
| | 505.0800.S | BAR STEEL REINFORCEMENT HS STAINLESS STEEL STRUCTURES | LB | 820 | - | - | 820 | - | 1640 |
| | 506.2605 | BEARING PADS ELASTOMERIC NON-LAMINATED | EACH | - | 6 | 6 | - | - | 12 |
| | 506.4000 | STEEL DIAPHRAGMS B-64-0191 | EACH | - | - | - | - | 5 | 5 |
| | 516.0500 | RUBBERIZED MEMBRANE WATERPROOFING | SY | - | 11 | 11 | - | - | 22 |
| | 550.1100 | PILING STEEL HP 10-INCH X 42 LB | LF | - | 715 | 845 | - | - | 1560 |
| | 606.0300 | RIPRAP HEAVY | CY | - | 110 | 142 | - | - | 252 |
| | 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | - | 115 | 115 | - | - | 230 |
| | 614.0150 | ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD | EACH | - | 2 | 2 | - | - | 4 |
| | 645.0111 | GEOTEXTILE TYPE DF SCHEDULE A | SY | - | 65 | 65 | - | - | 130 |
| | 645.0120 | GEOTEXTILE TYPE HR | SY | - | 213 | 276 | - | - | 489 |
| | | | | | | | | | |
| | | NON-BID ITEMS | | | | | | | |
| | | FILLER | SIZE | | | | | | ½" & ¾" |

* SUPERSTRUCTURE QUANTITIES INCLUDE THE CONCRETE AND REINFORCEMENT OF THE PARAPET ON THE DECK.

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL DIMENSIONS ARE IN FEET AND INCHES. ALL STATIONS AND ELEVATIONS ARE IN FEET.

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

THE UPPER LIMITS OF " EXCAVATION FOR STRUCTURES BRIDGES B-64-0191" SHALL BE THE EXISTING GROUND LINE.

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

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 TYPE A.

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.

▪ PIPE UNDERDRAIN WRAPPED (6-INCH). SEE ABUTMENT SHEETS FOR DETAILS.

THE STREAMBED IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE FABRIC TYPE HR TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

THE EXISTING STRUCTURE, B-64-0660, IS A TWO SPAN STEEL GIRDER BRIDGE WITH AN OVERALL WIDTH OF 42'-10" AND AN OVERALL LENGTH OF 73'-8" AND IS TO BE REMOVED.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF DECK, PAVING NOTCH AND STRUCTURAL APPROACH SLABS.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE TOP AND ROADWAY FACES OF THE PARAPETS.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

DRAWN BY ACT | PLANS CK'D. CBM

CROSS-SECTION & QUANTITIES

SHEET 2 OF 16

254

8

8

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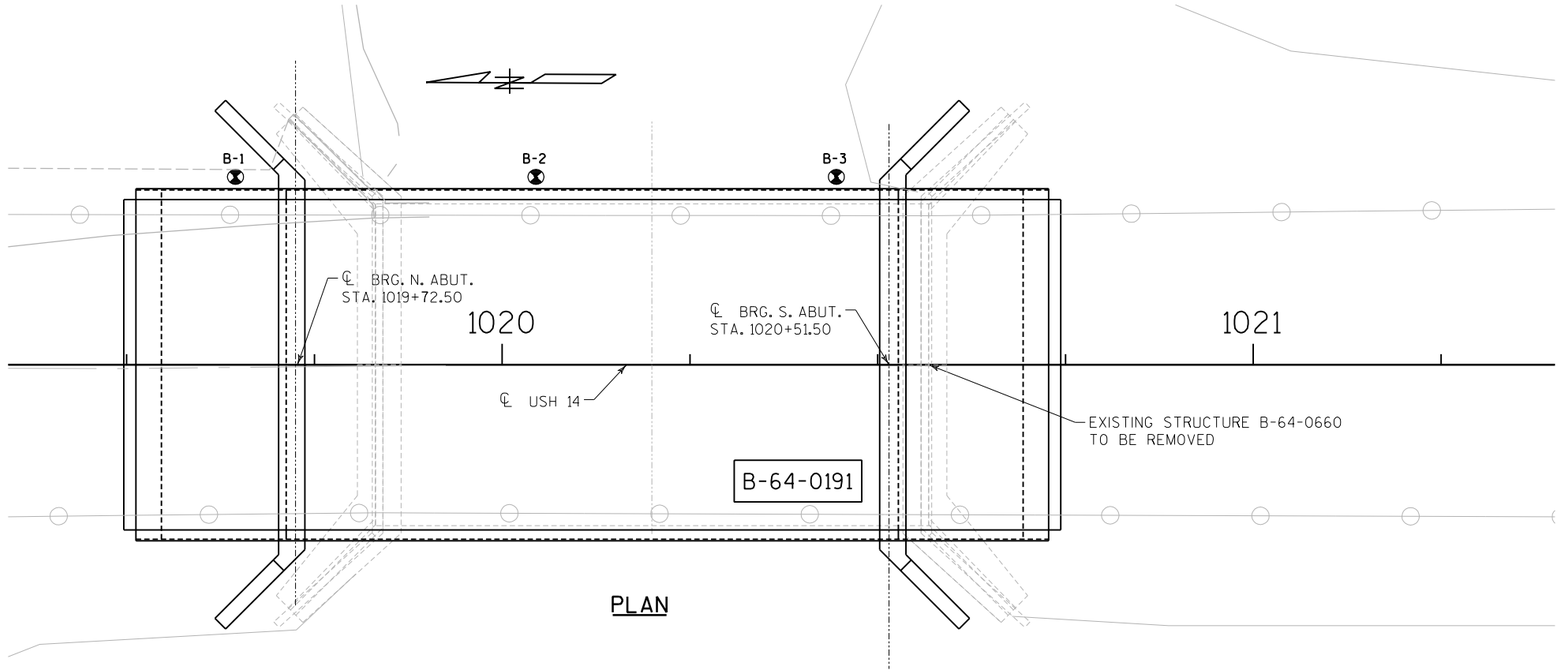
9/22/2017




PLAN

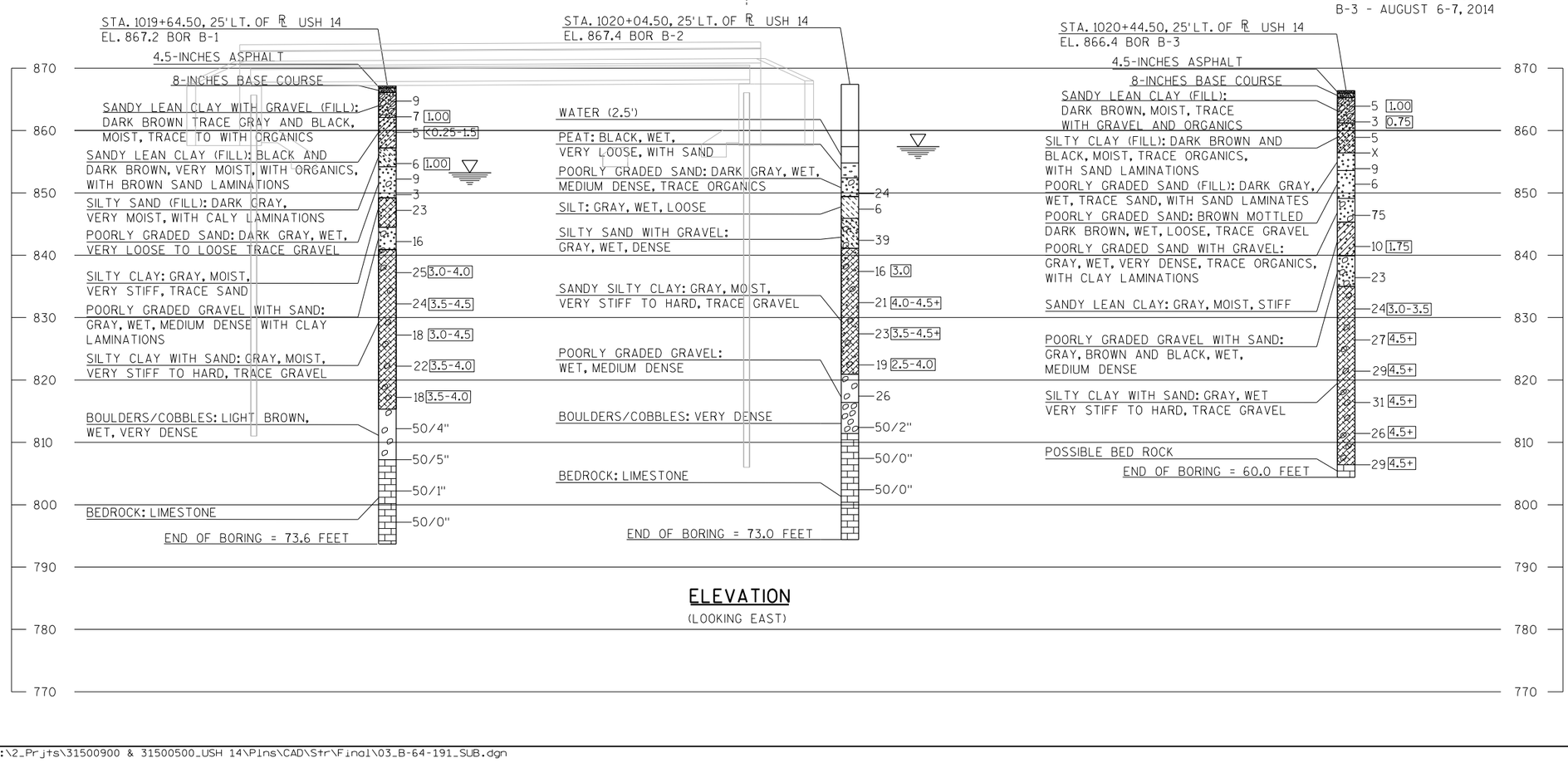
## NOTES:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

⊠ DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY:
GESTRA ENGINEERING, INC.

SOIL BORINGS TAKEN:
B-1 - AUGUST 6-7, 2014
B-2 - AUGUST 7, 2014
B-3 - AUGUST 6-7, 2014




ELEVATION
(LOOKING EAST)

STATE PROJECT NUMBER

3150-05-70

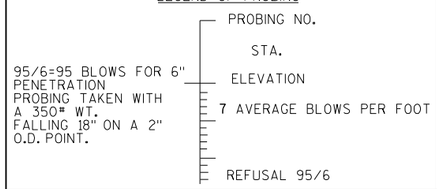
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

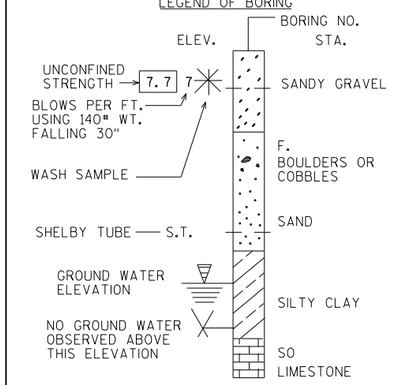
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING




LEGEND OF BORING




UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

DRAWN BY ACT | PLANS CK'D. CBM

SUBSURFACE EXPLORATION

SHEET 3 OF 16

255

8

8

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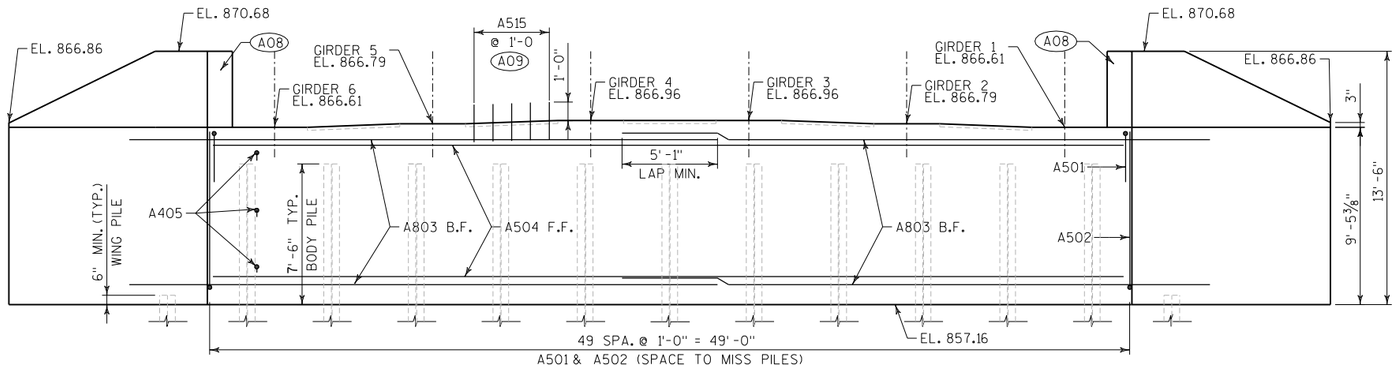
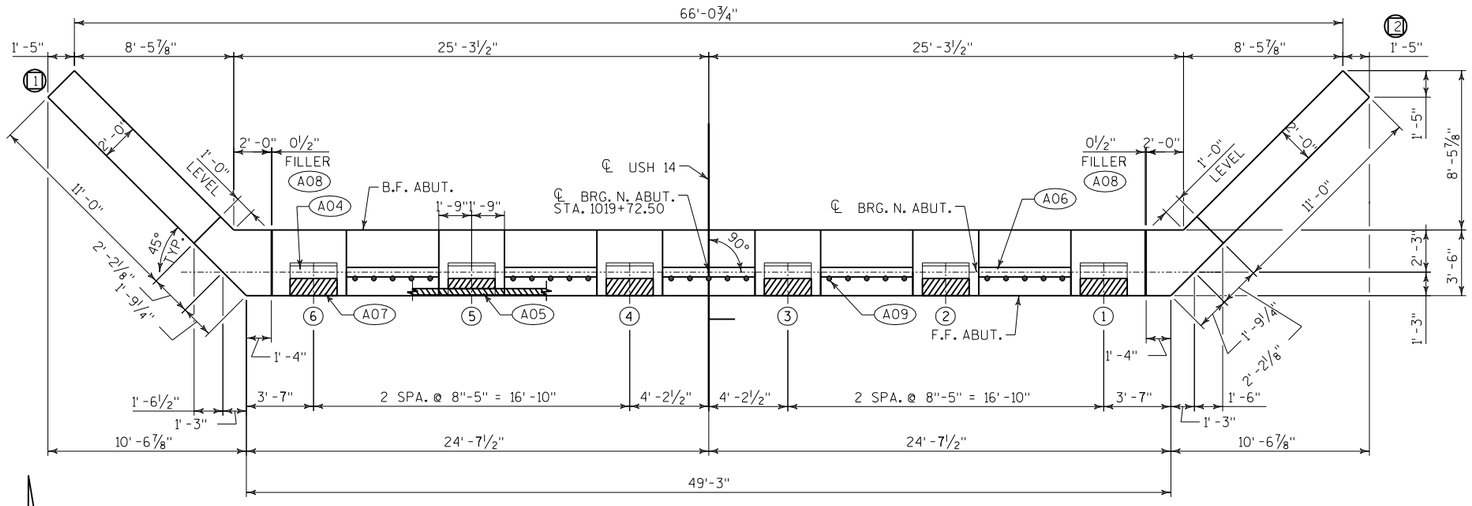
9/16/2017

STATE PROJECT NUMBER

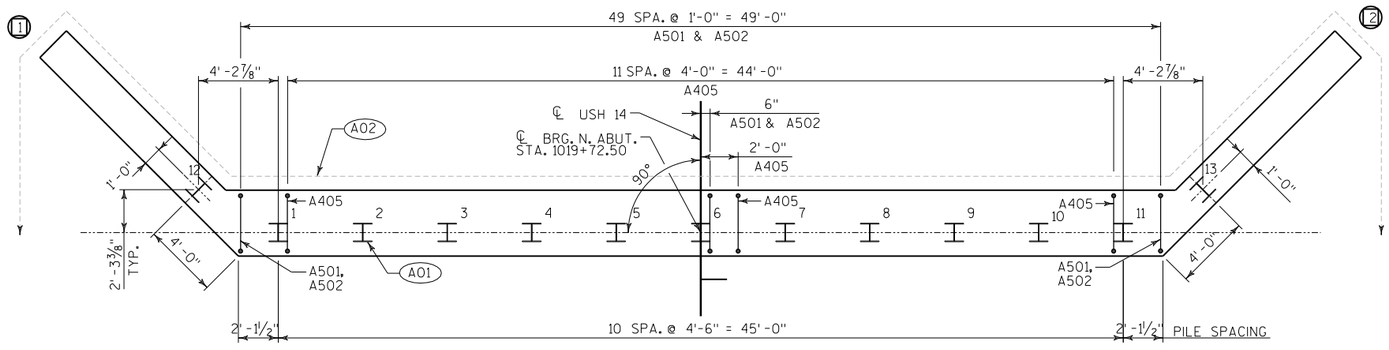
3150-05-70



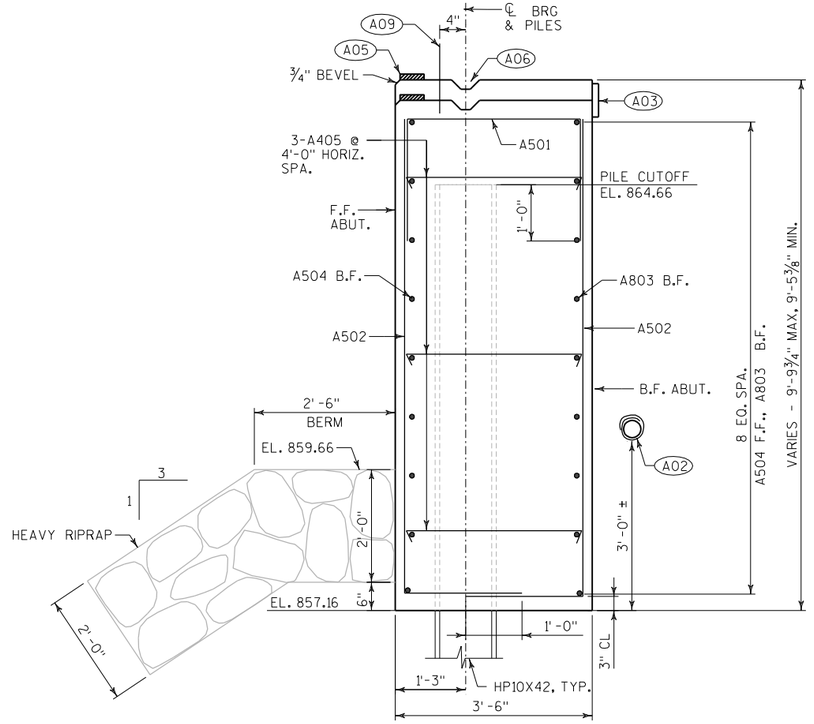

## ELEVATION
(LOOKING NORTH)




## PLAN




## PILE PLAN




## SECTION THRU BODY

## LEGEND:

(A01) ABUTMENTS TO BE SUPPORTED ON HP 10X42 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 55'-0" LONG.

(A02) PIPE UNDERDRAIN WRAPPED, 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END AND CAP UPPER END. THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THE DETAIL SHOWN ON SHEET 5. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH (2) TWO OR MORE NO. 10X1-INCH STAINLESS SHEET METAL SCREWS AND SHALL BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(A04) 1/2" X 8" X 2'-6" NON-LAMINATED ELASTOMERIC BEARING PAD.

(A05) 4" X 3/4" FILLER LENGTH OF ABUTMENT

(A06) KEYED CONST. JOINT FORMED BY BEVLED 2" X 6".

(A07) 3/4" PREFORMED FILLER (TYP.).

(A08) 1/2" FILLER - TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).

(A09) A515 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

DO NOT PLACE FILL ABOVE 3'-0" FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SEE SHEET 5 FOR PILE SPLICE DETAIL.

SEE SHEET 13 FOR BEARING PAD DETAIL.

SEE SHEET 5 FOR BILL OF BARS AND BENDING DIAGRAMS.

(X) INDICATES GIRDER NUMBER.

(12) INDICATES WING WALL NUMBER.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

DRAWN BY ACT | PLANS CK'D. CBM

NORTH ABUTMENT

SHEET 4 OF 16

256

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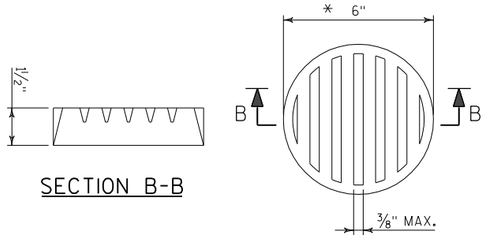
9/22/2017

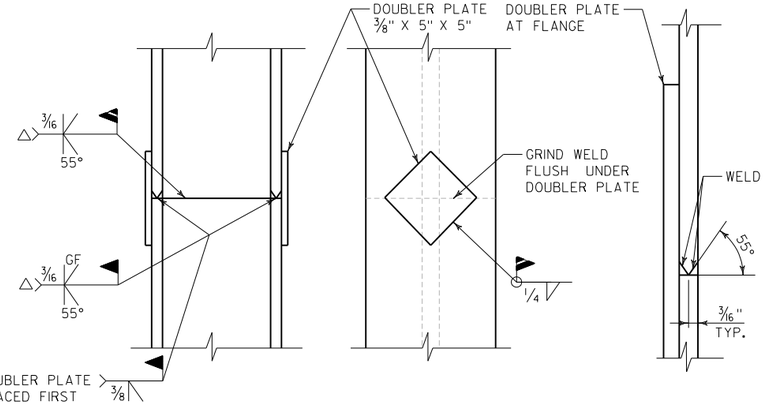
STATE PROJECT NUMBER

3150-05-70




## RODENT SHIELD

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.




## HP 10X42 PILE SPLICE DETAIL

△ SEE HP WELD DETAIL

## 'HP' WELD DETAIL

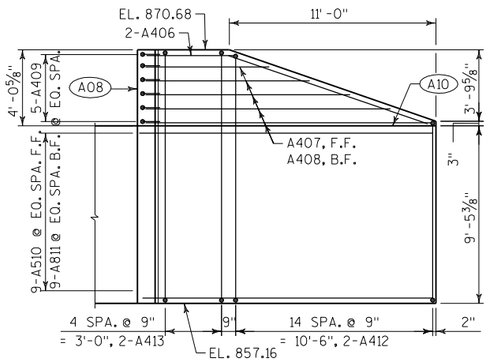
FLANGE SHOWN, WEB SIMILAR

## BILL OF BARS

| BAR MARK | COAT | NO REQ'D | LENGTH | BENT | BAR SERIES ⚠ | LOCATION | |
|---|---|---|---|---|---|---|---|
| A501 | - | 50 | 8'-11" | X | - | ABUTMENT BODY - TOP | VERTICAL |
| A502 | - | 100 | 11'-0" | X | - | ABUTMENT BODY - F.F. & B.F. | VERTICAL |
| A803 | - | 18 | 31'-9" | X | - | ABUTMENT BODY - B.F. | HORIZONTAL |
| A504 | - | 9 | 49'-1" | - | - | ABUTMENT BODY - F.F. | HORIZONTAL |
| A405 | - | 36 | 3'-9" | X | - | ABUTMENT BODY - TIES | HORIZONTAL |
| A406 | X | 4 | 15'-3" | X | - | WINGS - TOP | HORIZONTAL |
| A407 | X | 10 | 11'-4" | X | X | WINGS - F.F. | HORIZONTAL |
| A408 | X | 10 | 9'-6" | X | X | WINGS - B.F. | HORIZONTAL |
| A409 | X | 12 | 6'-1 | X | - | WINGS - END | HORIZONTAL |
| A510 | X | 18 | 16'-3" | X | - | WINGS - F.F. | HORIZONTAL |
| A811 | X | 18 | 17'-11" | X | - | WINGS - B.F. | HORIZONTAL |
| A412 | X | 60 | 13'-9" | X | X | WINGS - F.F. & B.F. | VERTICAL |
| A413 | X | 20 | 15'-9" | X | - | WINGS - F.F. & B.F. | VERTICAL |
| A414 | X | 4 | 17'-3" | X | - | WINGS - F.F. & B.F. | VERTICAL |
| A515 | X | 25 | 2'-0" | - | - | ABUTMENT BODY - TOP DOWELS | VERTICAL |

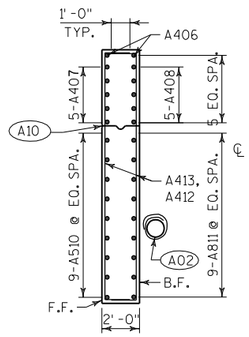
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USEDS FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



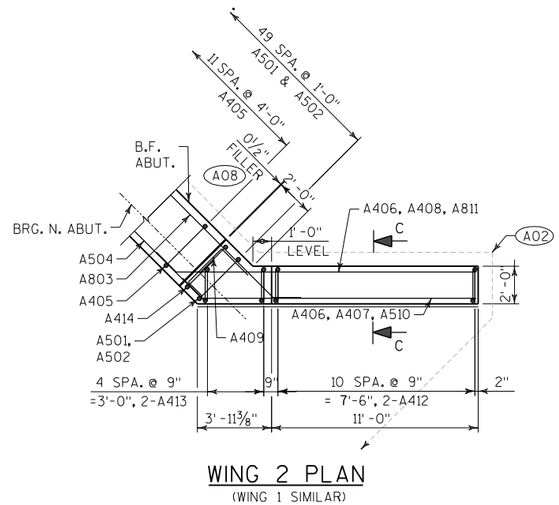

## WING 2 ELEVATION

(WING 1 SIMILAR)




## WING 2 SECTION

(WING 1 SIMILAR)

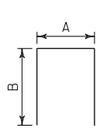



## WING 2 PLAN

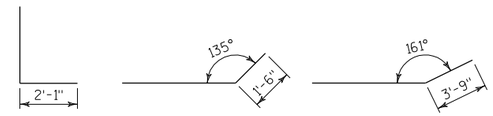
(WING 1 SIMILAR)

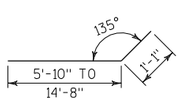
## BAR SERIES TABLE

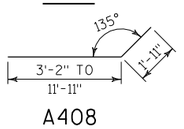
| BAR MARK | NO. REQD. | TOTAL BAR LENGTH |
|---|---|---|
| A407 | 2 SERIES OF 5 | 6'-11" TO 15'-9" |
| A408 | 2 SERIES OF 5 | 5'-1" TO 13'-10" |
| A412 | 4 SERIES OF 11 | 11'-11" TO 15'-7" |
| | | |

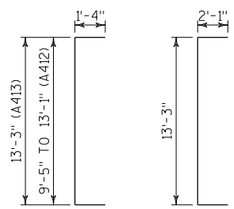


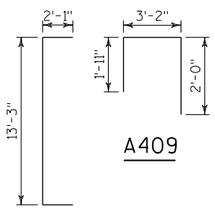

| BAR MARK | "A" | "B" |
|---|---|---|
| A501 | 3'-2" | 3'-0" |
| A405 | 3'-2" | 4½" |
| | | |
| | | |

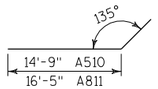



## LEGEND:

(A02) PIPE UNDERDRAIN WRAPPED, 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END AND CAP UPPER END. THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THE DETAIL SHOWN ON THIS SHEET. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH (2) TWO OR MORE NO. 10X1-INCH STAINLESS SHEET METAL SCREWS AND SHALL BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(A08) ½" FILLER - TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. 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).

(A10) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2" X 6". (18" RUBBERIZED MEMBRANE WATERPROOFING AT B.F. & ¾" "V" GROOVE ON F.F. IF JOINT IS USED.)

## NOTES

SEE SHEET 4 FOR ABUTMENT PLAN AND ELEVATION.

SEE SHEET 13 FOR BEARING PAD DETAIL.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

DRAWN BY ACT | PLANS CK'D. CBM

NORTH ABUTMENT DETAIL

SHEET 5 OF 16

257

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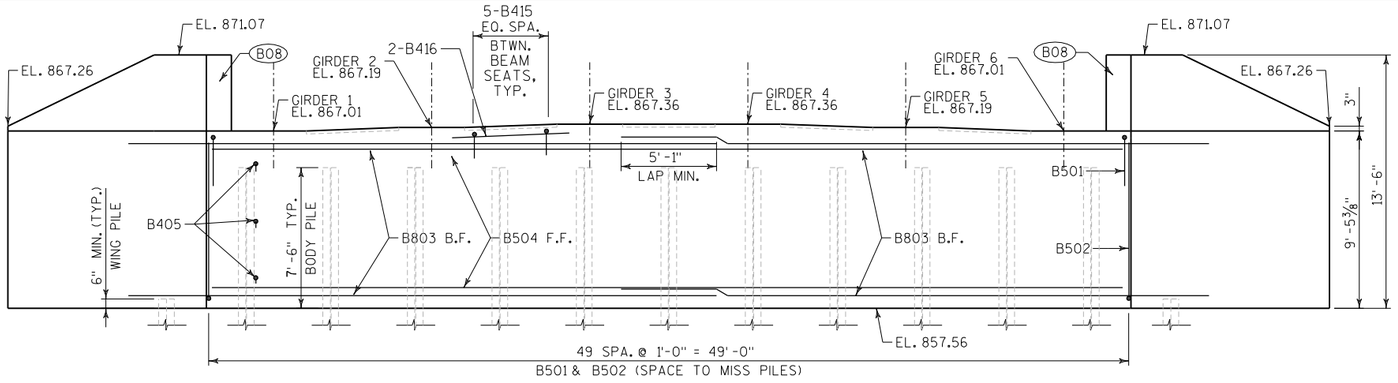
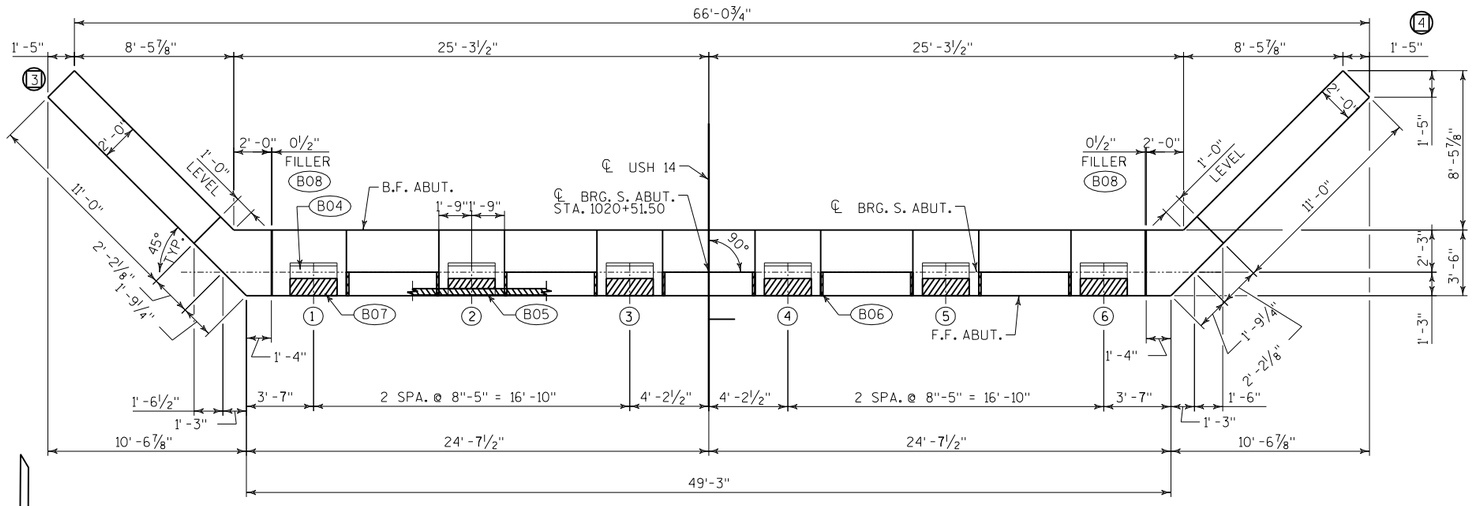
9/16/2017

STATE PROJECT NUMBER

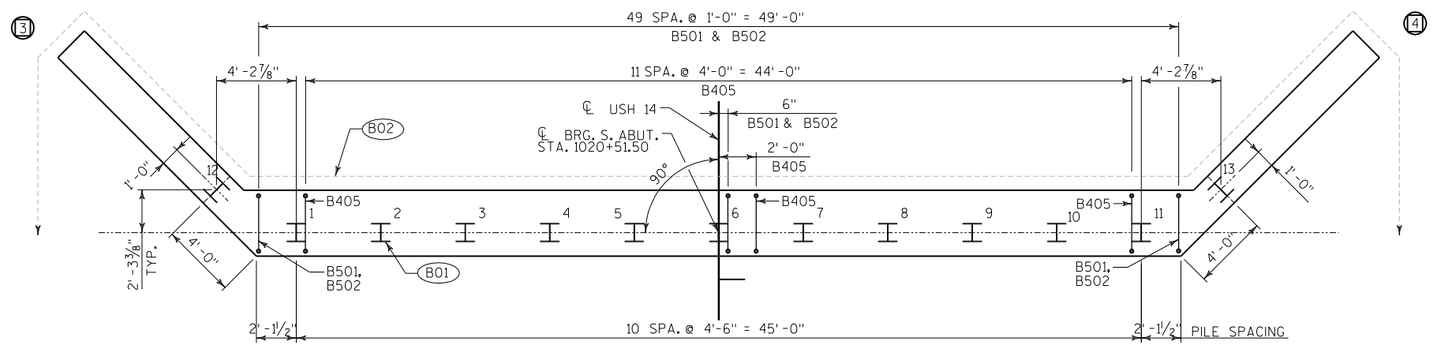
3150-05-70



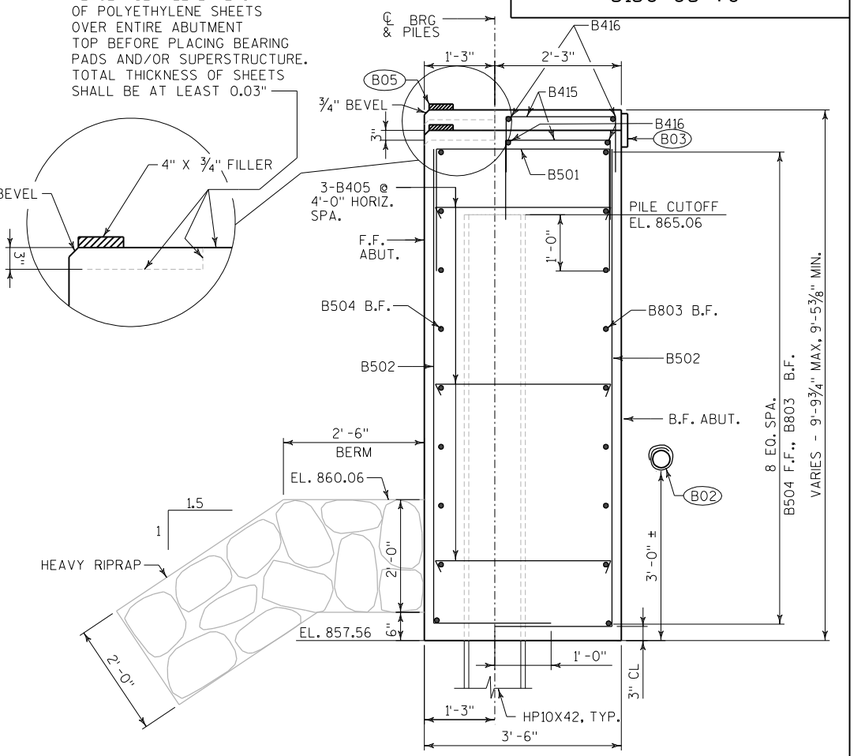

## ELEVATION
(LOOKING SOUTH)




## PLAN




## PILE PLAN




## SECTION THRU BODY

## LEGEND:

(B01) ABUTMENTS TO BE SUPPORTED ON HP 10X42 STEEL PILING DRIVEN TO A REQUIRED RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 65'-0" LONG.

(B02) PIPE UNDERDRAIN WRAPPED, 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END AND CAP UPPER END. THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THE DETAIL SHOWN ON SHEET 5. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH (2) TWO OR MORE NO. 10X1-INCH STAINLESS SHEET METAL SCREWS AND SHALL BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(B03) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS AT BACKFACE.

(B04) 1/2" X 8" X 2'-10" NON-LAMINATED ELASTOMERIC BEARING PAD.

(B05) 4" X 3/4" FILLER LENGTH OF ABUTMENT

(B06) 3/4" CORK FILLER ON VERTICAL BEAM SEAT FACES.

(B07) 3/4" PREFORMED FILLER (TYP.).

(B08) 1/2" FILLER - TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).

DO NOT PLACE FILL ABOVE 3'-0" FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SEE SHEET 5 FOR PILE SPLICE DETAIL.

SEE SHEET 13 FOR BEARING PAD DETAIL.

SEE SHEET 7 FOR BILL OF BARS AND BENDING DIAGRAMS.

(X) INDICATES GIRDER NUMBER.

⬠ INDICATES WING WALL NUMBER.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

DRAWN BY ACT | PLANS CK'D. CBM

SOUTH ABUTMENT

SHEET 6 OF 16

258

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9/16/2017

STATE PROJECT NUMBER

3150-05-70

## BILL OF BARS

| BAR MARK | COAT | NO REQ'D | LENGTH | BENT | BAR SERIES ⚠ | LOCATION | |
|---|---|---|---|---|---|---|---|
| B501 | - | 50 | 8'-11" | X | - | ABUTMENT BODY - TOP | VERTICAL |
| B502 | - | 100 | 10'-9" | X | - | ABUTMENT BODY - F.F. & B.F. | VERTICAL |
| B803 | - | 18 | 31'-9" | X | - | ABUTMENT BODY - B.F. | HORIZONTAL |
| B504 | - | 9 | 49'-1" | - | - | ABUTMENT BODY - F.F. | HORIZONTAL |
| B405 | - | 36 | 3'-9" | X | - | ABUTMENT BODY - TIES | HORIZONTAL |
| B406 | X | 4 | 15'-3" | X | - | WINGS - TOP | HORIZONTAL |
| B407 | X | 12 | 11'-2" | X | X | WINGS - F.F. | HORIZONTAL |
| B408 | X | 12 | 9'-2" | X | X | WINGS - B.F. | HORIZONTAL |
| B409 | X | 14 | 6'-1 | X | - | WINGS - END | HORIZONTAL |
| B510 | X | 18 | 16'-3" | X | - | WINGS - F.F. | HORIZONTAL |
| B811 | X | 18 | 17'-11" | X | - | WINGS - B.F. | HORIZONTAL |
| B412 | X | 60 | 13'-9" | X | X | WINGS - F.F. & B.F. | VERTICAL |
| B413 | X | 20 | 15'-9" | X | - | WINGS - F.F. & B.F. | VERTICAL |
| B414 | X | 4 | 17'-3" | X | - | WINGS - F.F. & B.F. | VERTICAL |
| B415 | X | 25 | 3'-9" | X | - | ABUTMENT BODY - TOP BTWN BEAM SEATS | VERTICAL |
| B416 | X | 10 | 6'-11" | - | - | ABUTMENT BODY - TOP BTWN BEAM SEATS | HORIZONTAL |
| | | | | | | | |
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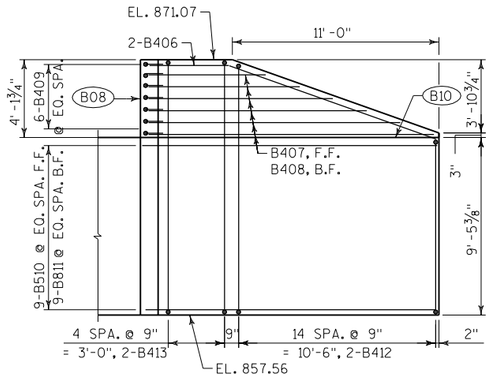
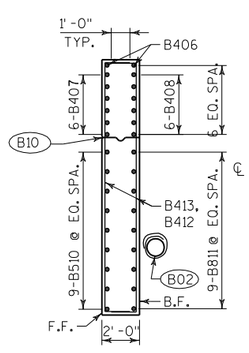
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USEDS FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



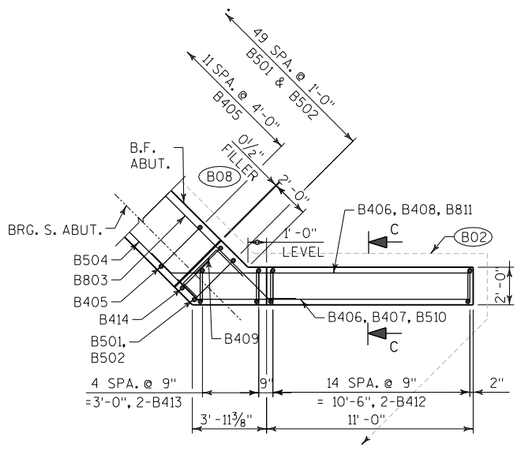

WING 4 ELEVATION

(WING 3 SIMILAR)




WING 4 SECTION

(WING 3 SIMILAR)

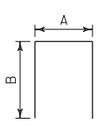



WING 4 PLAN

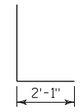
(WING 3 SIMILAR)

## BAR SERIES TABLE

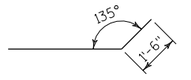
| BAR MARK | NO. REQD. | TOTAL BAR LENGTH |
|---|---|---|
| B407 | 2 SERIES OF 6 | 6'-6" TO 15'-9" |
| B408 | 2 SERIES OF 6 | 4'-6" TO 13'-10" |
| B412 | 4 SERIES OF 15 | 11'-11" TO 15'-7" |
| | | |



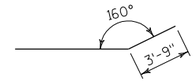

| BAR MARK | "A" | "B" |
|---|---|---|
| B501 | 3'-2" | 3'-0" |
| B405 | 3'-2" | 4½" |
| B415 | 1'-11" | 1'-0" |
| | | |



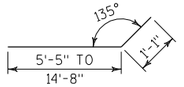

B502



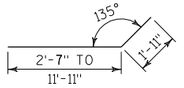

B803



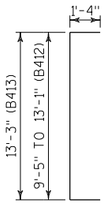

A406




B407

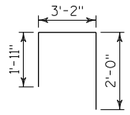



B408




B412, B413

B414

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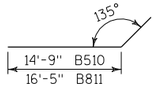


B510, B811

## LEGEND:

(B02) PIPE UNDERDRAIN WRAPPED, 6-INCH. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT END AND CAP UPPER END. THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THE DETAIL SHOWN ON SHEET 5. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH (2) TWO OR MORE NO. 10X1-INCH STAINLESS SHEET METAL SCREWS AND SHALL BE INCLUDED IN BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

(B08) ½" FILLER - TO EXTEND FROM BRIDGE SEAT TO TOP OF WING. 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).

(B10) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2" X 6". (18" RUBBERIZED MEMBRANE WATERPROOFING AT B.F. & ¾" "V" GROOVE ON F.F. IF JOINT IS USED.)

## NOTES

SEE SHEET 6 FOR ABUTMENT PLAN AND ELEVATION.

SEE SHEET 13 FOR BEARING PAD DETAIL.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

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SOUTH ABUTMENT DETAIL

SHEET 7 OF 16

259

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9/16/2017

| STATE PROJECT NUMBER |
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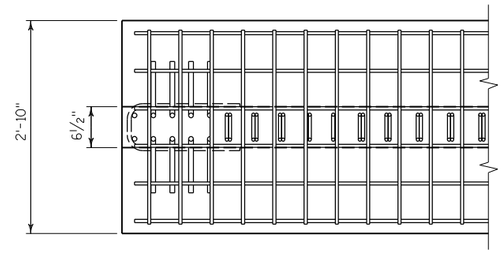
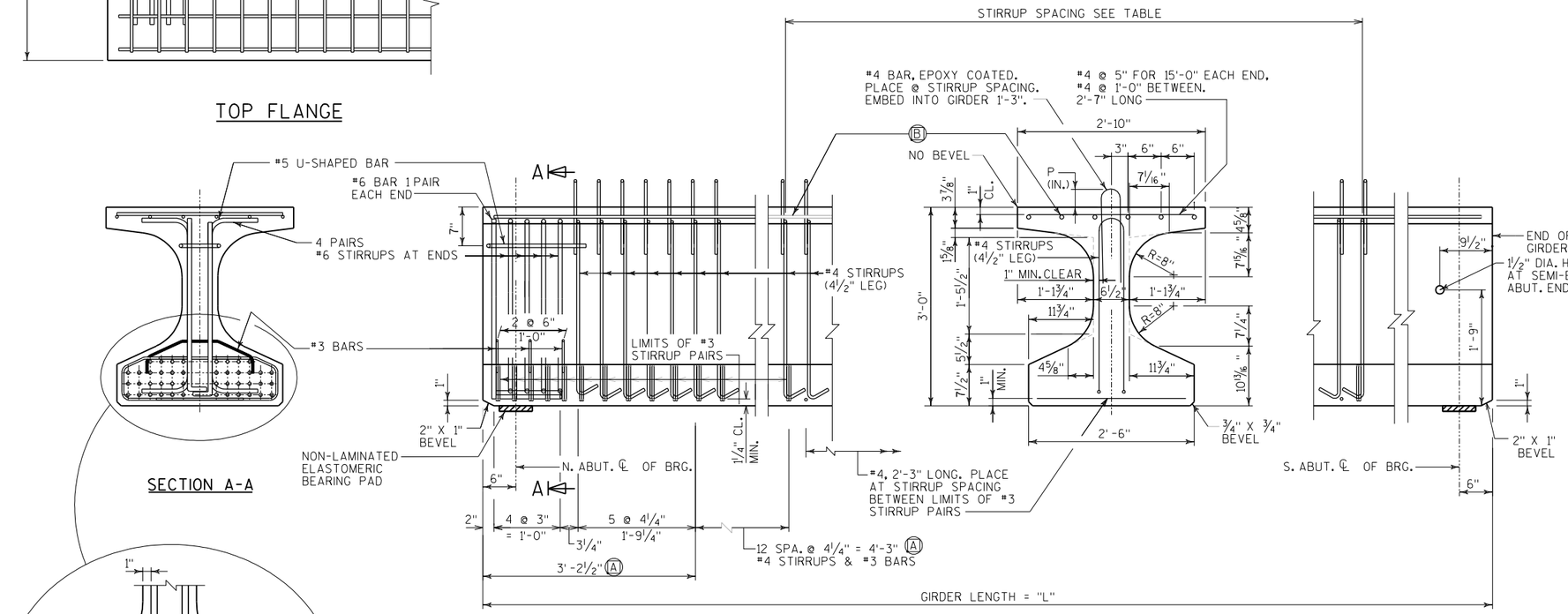
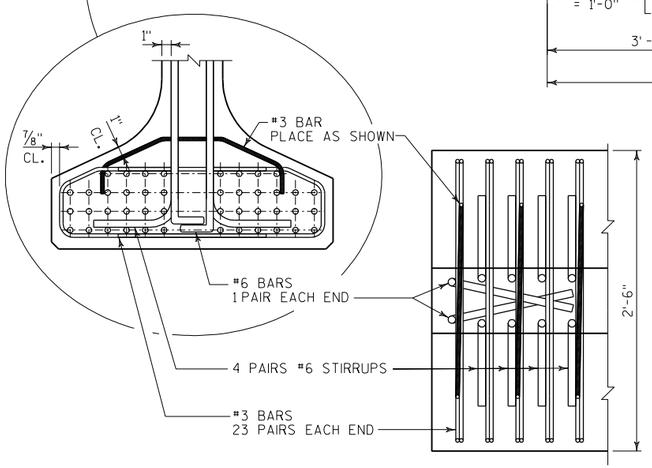
| 3150-05-70 |




TOP FLANGE




SECTION A-A




BOTTOM FLANGE

## SIDE VIEW & TYP. SECTION IN SPAN

STRANDS NOT SHOWN

(A) DETAIL TYP. AT EACH END

(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 2'-5"

## NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

STRANDS SHALL BE FLUSH WITH THE END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, ENDS 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, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

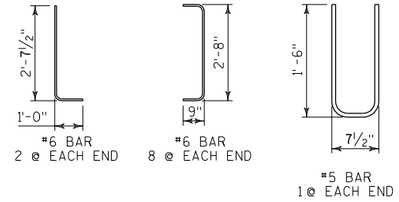
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, ONE OPTION IS AVAILABLE:

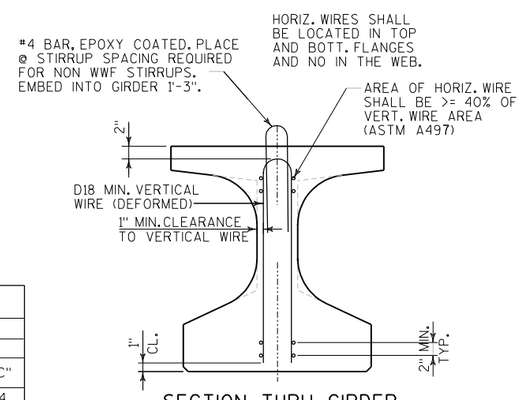
USE ASTM A706, GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.

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.

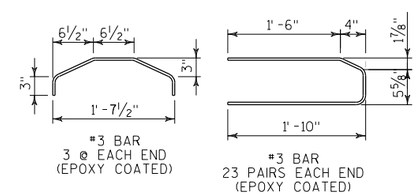
FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.




SECTION THRU GIRDER

SHOWING WELDED WIRE FABRIC (WWF) STIRRUPS ASTM A1064 (FY = 70 KSI)




## STIRRUP SPACING

| LOCATION | BAR SIZE | SPACING |
|---|---|---|
| FROM END TO 7'-5½" | AS SHOWN | AS SHOWN |
| FROM 7'-5½" TO MIDSPAN | #4 | 12" |

SPACING IS SYMETRICAL ABOUT MIDSPAN OF GIRDER

## GIRDER DATA

| GIRDER | GIRDER LENGTH "L" | DEAD LOAD DEFL. (IN.) 1/10 | 2/10 | 3/10 | 4/10 | 5/10 | CONC. STRGTH. f'c (p.s.i.) | "P" 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.) * | ("A" (IN.) | "B" MIN. (IN.) | "B" MAX. (IN.) | "C" (IN.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 80'-0" | 0.4 | 0.7 | 1.0 | 1.2 | 1.3 | 8,000 | 7" | 7" | 7" | 0.6 | 28 | 6,000 | 32 | 11 | 14 | 4 |
| 2-5 | 80'-0" | 0.4 | 0.8 | 1.2 | 1.4 | 1.4 | 8,000 | 7" | 7" | 7" | 0.6 | 28 | 6,000 | 32 | 11 | 14 | 4 |
| 6 | 80'-0" | 0.4 | 0.7 | 1.0 | 1.2 | 1.3 | 8,000 | 7" | 7" | 7" | 0.6 | 28 | 6,000 | 32 | 11 | 14 | 4 |

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

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36W" PRESTRESSED GIRDER

SHEET 8 OF 16

260

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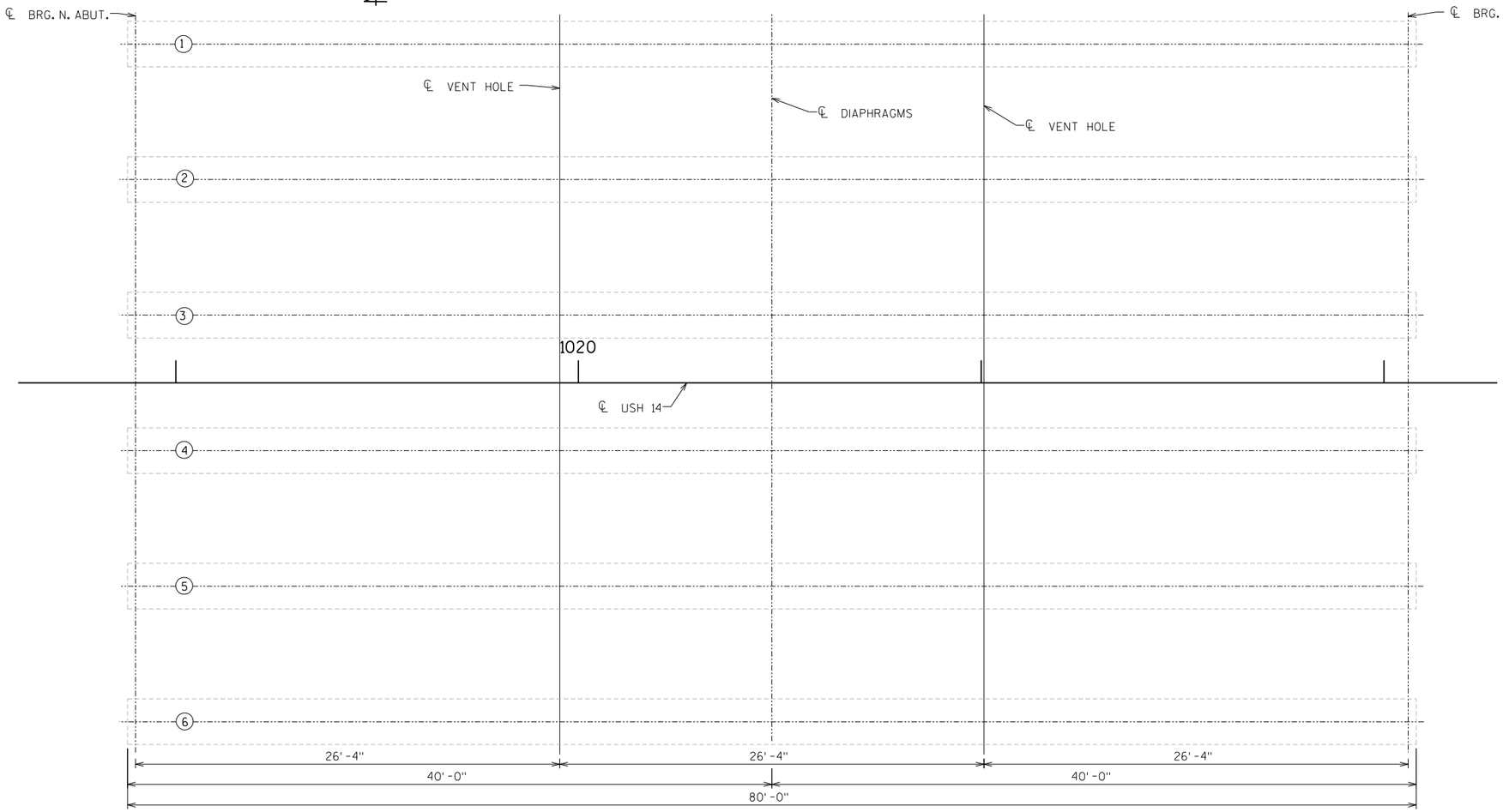
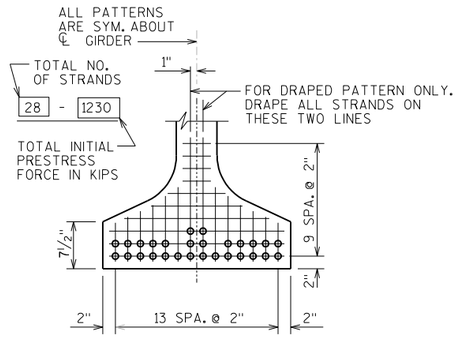
9/16/2017

STATE PROJECT NUMBER

3150-05-70



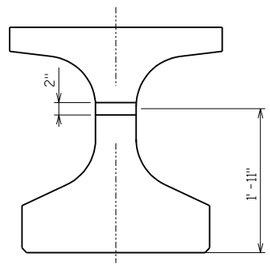

FRAMING PLAN




TYP. STRAND PATTERN

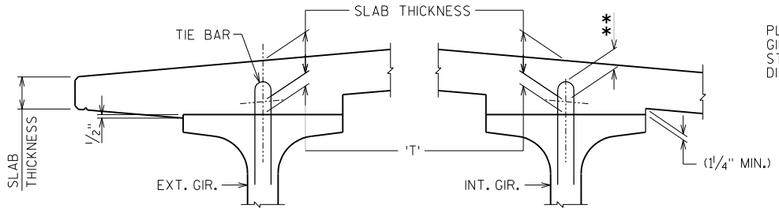
*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

| SPAN | CAMBER (IN.) * |
|---|---|
| 1 | 2.9 |




VENT HOLE LOCATION

PLACE 2" DIA. VENT HOLES NEAR 1/3 POINT OF GIRDERS, CLEARING REINFORCING STEEL OR STRANDS BY 1½" MIN. AND STEEL INTERMEDIATE DIAPHRAGM BOLT CONNECTION BY 6" MIN.




SLAB HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

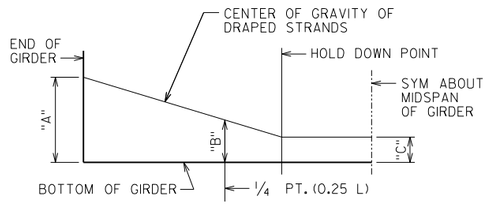
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

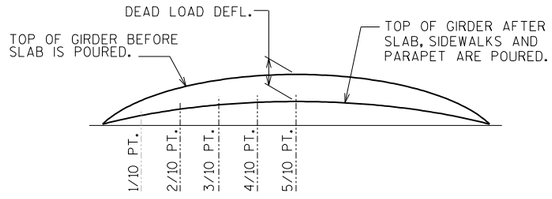
NOTE: AN AVERAGE HAUNCH ('T') OF 2.96" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

**THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.**

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.




DRAPED STRAND PROFILE




DEAD LOAD DEFLECTION DIAGRAM

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

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36W" PRESTRESSED GIRDER DETAILS

SHEET 9 OF 16

261

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9/16/2017

STATE PROJECT NUMBER

3150-05-70

## NOTES

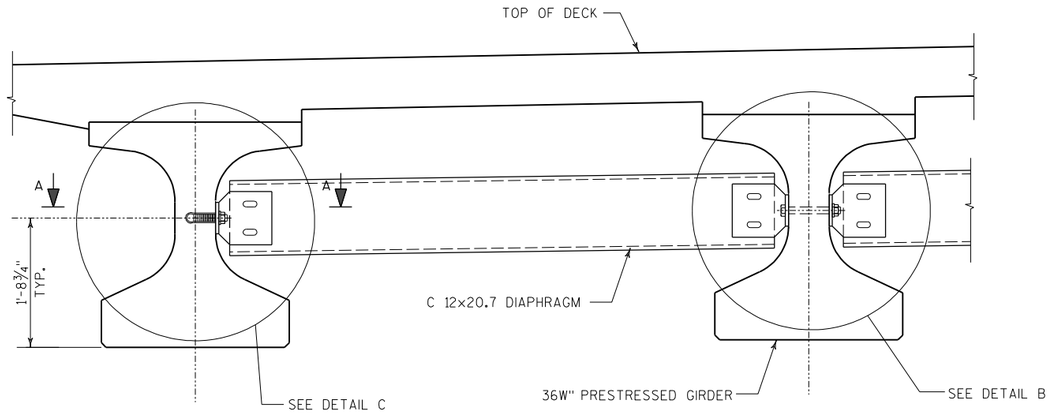
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-64-191", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIALS INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

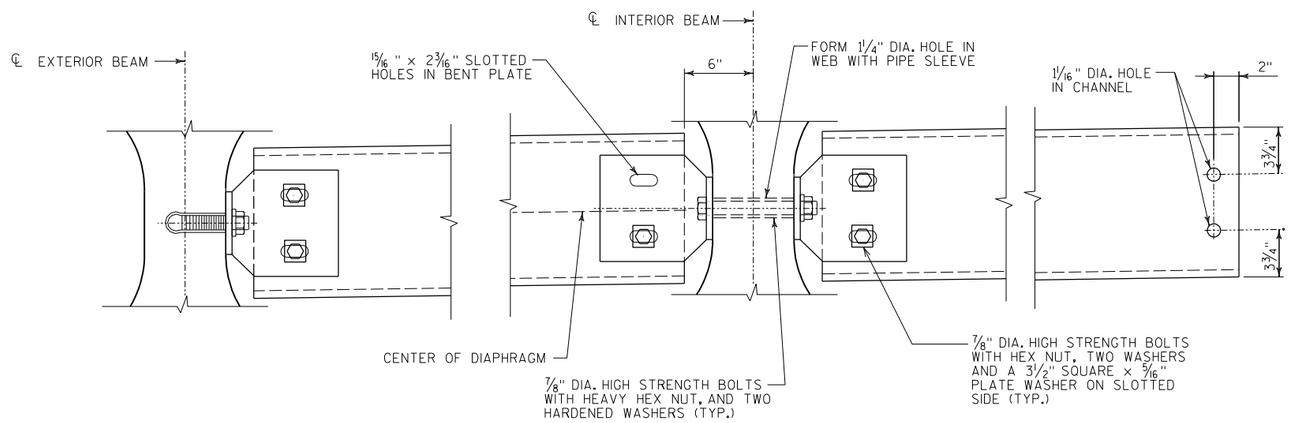
STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.




EXTERIOR GIRDER

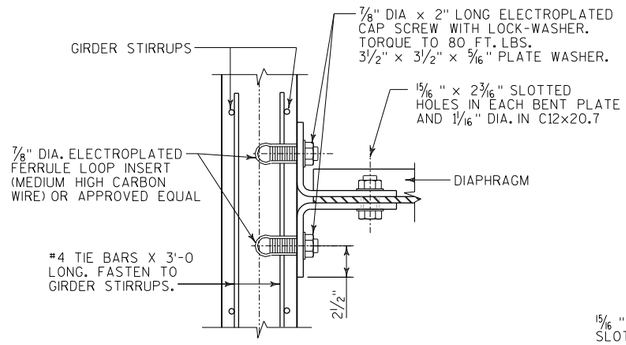
INTERIOR GIRDER

## PART TRANSVERSE SECTION AT DIAPHRAGM



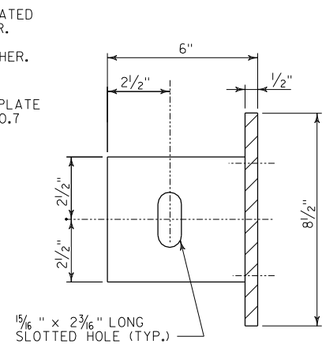

DETAIL C

DETAIL B

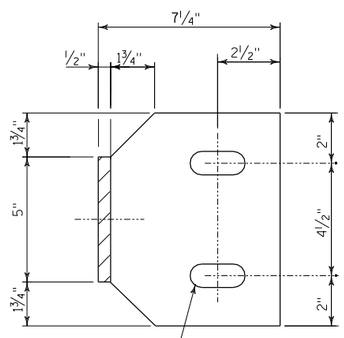



SECTION A-A

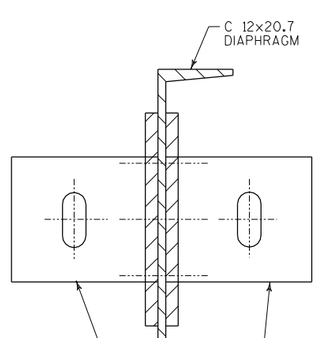
(FOR EXTERIOR ATTACHMENT)




BEAM FACE




DIAPHRAGM FACE




ATTACHMENT TO CHANNEL

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

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STEEL DIAPHRAGM

SHEET 10 OF 16

262

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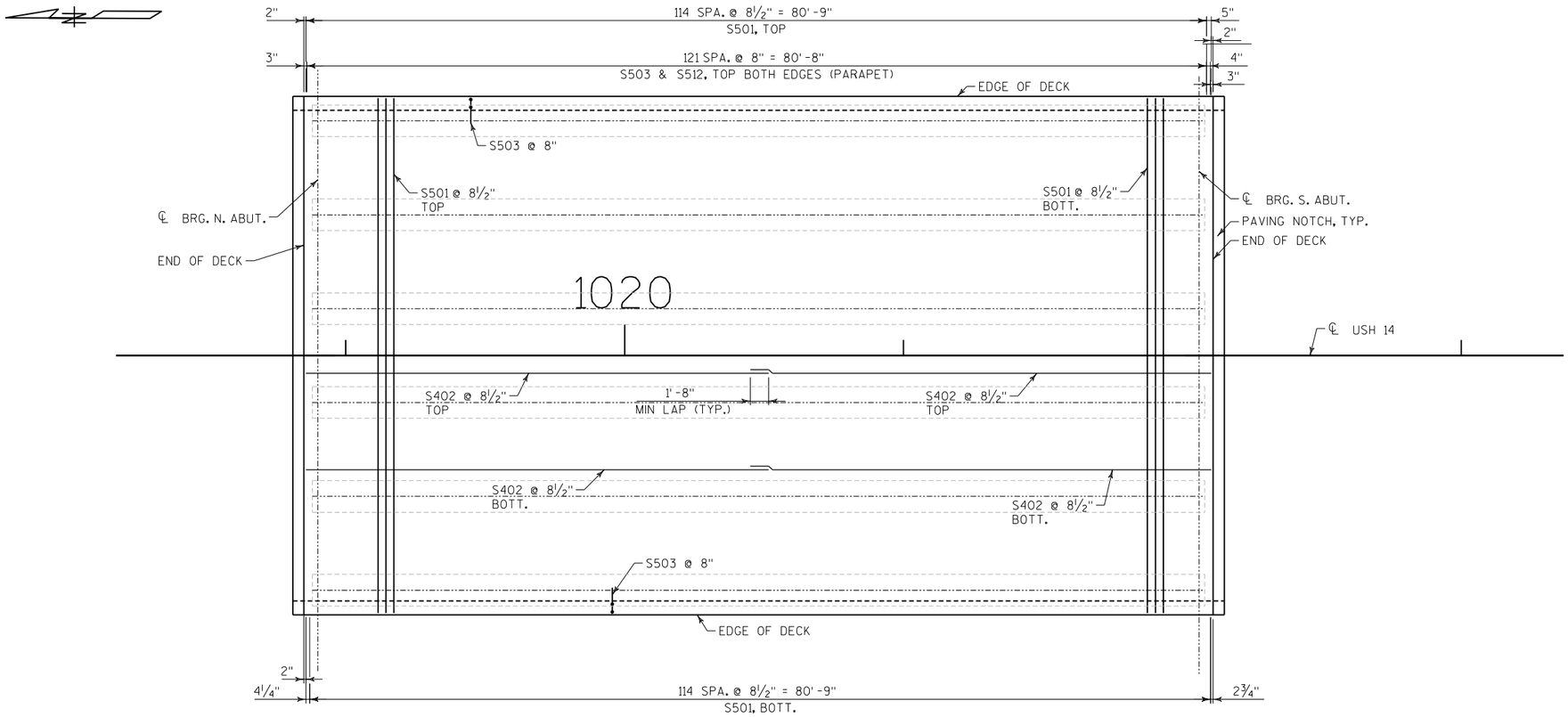
9/16/2017




PLAN

## TOP OF DECK ELEVATIONS

| LOCATION | ℄ BRG. N. ABUT. | SPAN 1 | | | | | | | | | ℄ BRG. S. ABUT. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.1 PT. | 0.2 PT. | 0.3 PT. | 0.4 PT. | 0.5 PT. | 0.6 PT. | 0.7 PT. | 0.8 PT. | 0.9 PT. | |
| FF PARAPET | 870.68 | 870.72 | 870.76 | 870.80 | 870.84 | 870.88 | 870.92 | 870.95 | 870.99 | 871.03 | 871.07 |
| G1 | 870.70 | 870.74 | 870.78 | 870.82 | 870.86 | 870.90 | 870.93 | 870.97 | 871.01 | 871.05 | 871.09 |
| G2 | 870.87 | 870.91 | 870.95 | 870.98 | 871.02 | 871.06 | 871.10 | 871.14 | 871.18 | 871.22 | 871.26 |
| G3 | 871.03 | 871.07 | 871.11 | 871.15 | 871.19 | 871.23 | 871.27 | 871.31 | 871.35 | 871.39 | 871.43 |
| PLG | 871.12 | 871.16 | 871.20 | 871.24 | 871.28 | 871.32 | 871.36 | 871.39 | 871.43 | 871.47 | 871.51 |
| G4 | 871.03 | 871.07 | 871.11 | 871.15 | 871.19 | 871.23 | 871.27 | 871.31 | 871.35 | 871.39 | 871.43 |
| G5 | 870.87 | 870.91 | 870.95 | 870.98 | 871.02 | 871.06 | 871.10 | 871.14 | 871.18 | 871.22 | 871.26 |
| G6 | 870.70 | 870.74 | 870.78 | 870.82 | 870.86 | 870.90 | 870.93 | 870.97 | 871.01 | 871.05 | 871.09 |
| FF PARAPET | 870.68 | 870.72 | 870.76 | 870.80 | 870.84 | 870.88 | 870.92 | 870.95 | 870.99 | 871.03 | 871.07 |

## NOTES

1. TRANSVERSE BAR STEEL REINFORCEMENT (S501) AND PARAPET REINFORCEMENT (S507) SHALL BE PLACED PERPENDICULAR TO GIRDERS.
2. THE BOTTOM TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS WITH A CENTER TO CENTER SPACING NOT TO EXCEED 4'-0". ONE LINE OF CONTINUOUS BAR CHAIRS SHALL BE PLACED NEAR EACH EDGE OF SLAB TO SUPPORT THE ENDS OF THE BOTTOM TRANSVERSE BAR STEEL.
3. THE TOP LONGITUDINAL BAR STEEL REINFORCEMENT SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS IN TRANSVERSE DIRECTION ON 4'-0" CENTERS.
4. SEE SHEET 13 FOR BILL OF BARS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

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SUPERSTRUCTURE



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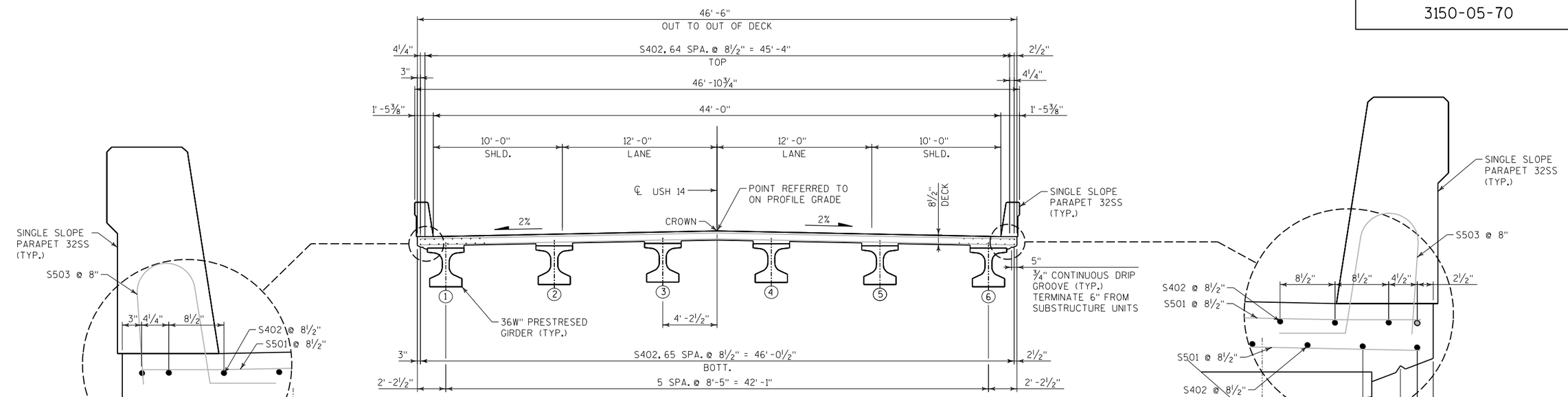
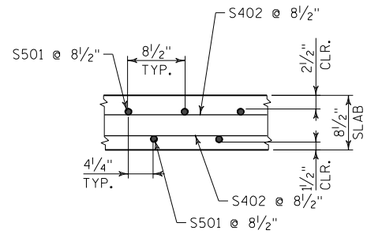
STATE PROJECT NUMBER

3150-05-70

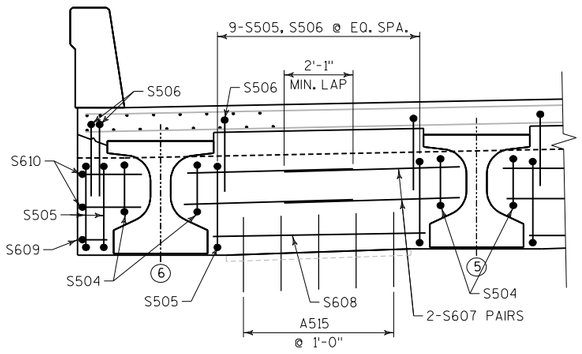



## TYPICAL SECTION

36W" PRESTRESSED CONCRETE GIRDER
(LOOKING SOUTH)

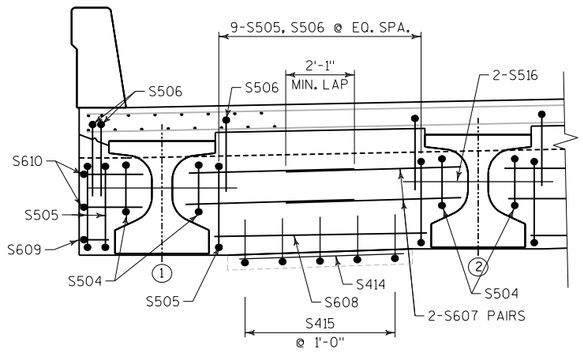



## SECTION S-S




## DIAPH. AT N. ABUT.

BEAMS ⑤ & ⑥ SHOWN, OTHER LOCATIONS SIMILAR
(LOOKING NORTH)




## DIAPH. AT S. ABUT.

BEAMS ① & ② SHOWN, OTHER LOCATIONS SIMILAR
(LOOKING SOUTH)

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| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

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SUPERSTRUCTURE CROSS-SECTION

SHEET 12 OF 16

264

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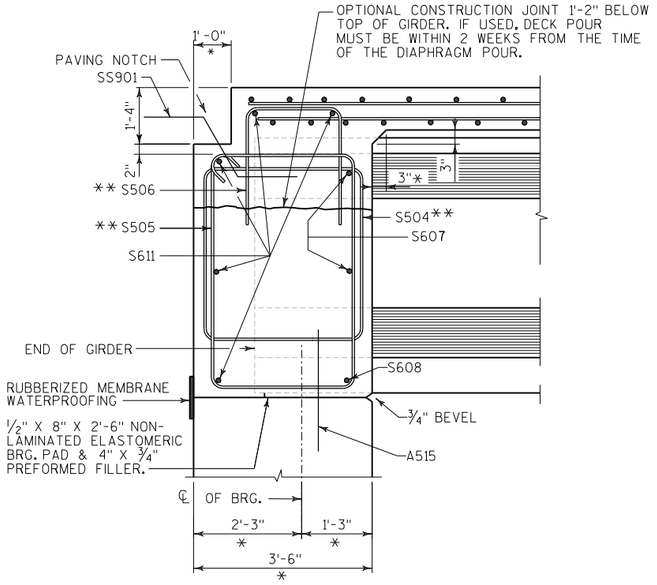
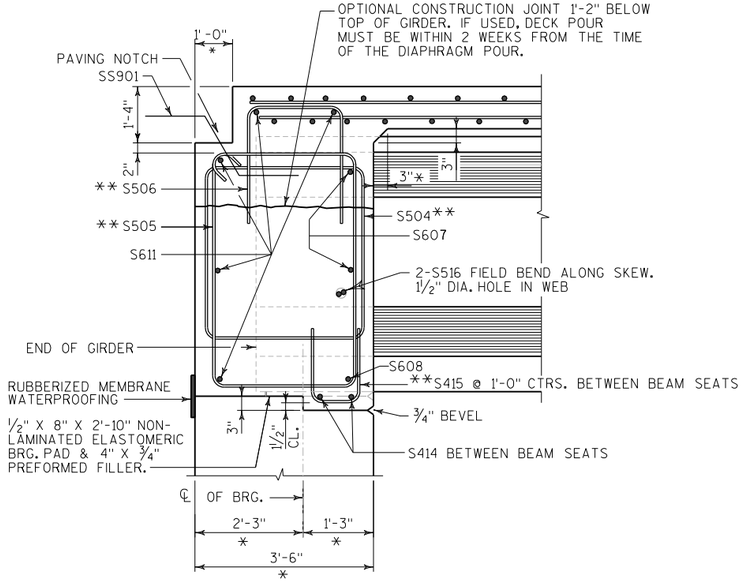
9/22/2017



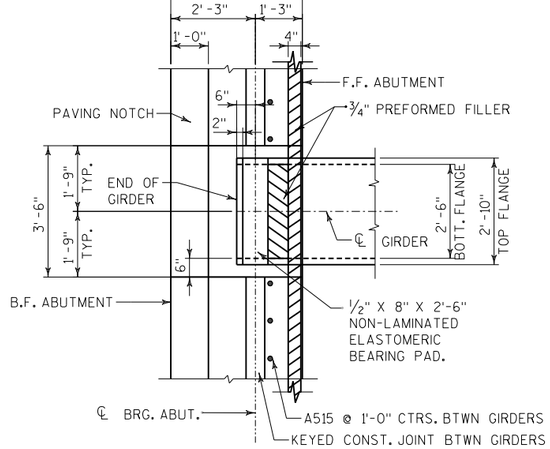

PART LONGIT. SECTION N. ABUT. DIAPHRAGM

(BTWN. GIRDERS, TYP.)

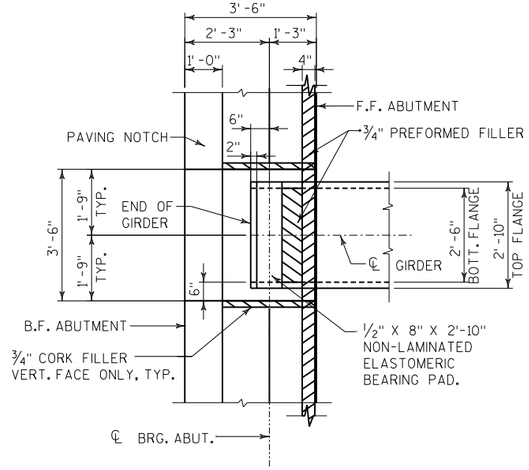



PART LONGIT. SECTION S. ABUT. DIAPHRAGM

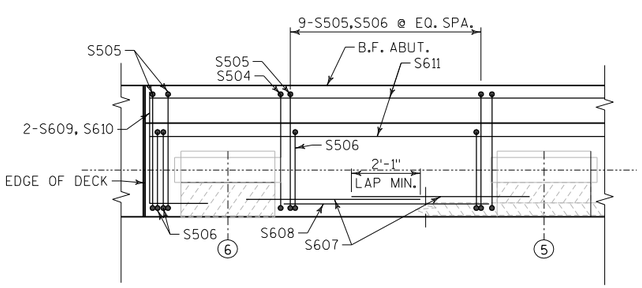
(BTWN. GIRDERS, TYP.)




N. ABUT. BEARING PAD DETAILS




S. ABUT. BEARING PAD DETAILS




TOP VIEW OF DIAPHRAGM

BEAMS (5) & (6) AT N. ABUT. SHOWN, OTHER LOCATIONS SIMILAR

LEGEND

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

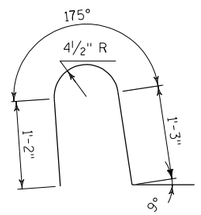
** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

## BILL OF BARS

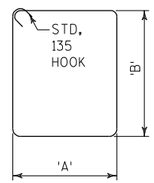
| BAR MARK | COAT | NO REQ'D | LENGTH | BENT | BAR SERIES ▲ | LOCATION | |
|---|---|---|---|---|---|---|---|
| S501 | X | 232 | 46'-2" | - | - | SLAB - TOP & BOTT | TRANSVERSE |
| S402 | X | 266 | 41'-6" | - | - | SLAB - TOP & BOTT | LONGITUDINAL |
| S503 | X | 246 | 4'-5" | X | - | PARAPET | VERTICAL |
| S504 | X | 24 | 9'-9" | X | - | ABUT DIAPHRAGM - GIRDER STIRRUPS | VERTICAL |
| S505 | X | 98 | 11'-7" | X | - | ABUT DIAPHRAGM - STIRRUPS | VERTICAL |
| S506 | X | 98 | 5'-1" | X | - | ABUT DIAPHRAGM - STIRRUPS | VERTICAL |
| S607 | X | 40 | 4'-7" | - | - | ABUT DIAPHRAGM - BTWN GIRDERS | HORIZONTAL |
| S608 | X | 12 | 5'-7" | - | - | ABUT DIAPHRAGM - BTWN GIRDERS | HORIZONTAL |
| S609 | X | 8 | 4'-6" | X | - | ABUT DIAPHRAGM - ENDS | HORIZONTAL |
| S610 | X | 4 | 3'-7" | X | - | ABUT DIAPHRAGM - ENDS | HORIZONTAL |
| S611 | X | 10 | 46'-0" | - | - | ABUT DIAPHRAGM - B.F., TOP | HORIZONTAL |
| S512 | X | 246 | 5'-0" | X | - | PARAPET | VERTICAL |
| S513 | X | 24 | 41'-6" | - | - | PARAPET | HORIZONTAL |
| S414 | X | 10 | 4'-7" | - | - | S. ABUT DIAPHRAGM - BTWN GIRDERS | HORIZONTAL |
| S415 | X | 25 | 3'-3" | X | - | S. ABUT DIAPHRAGM - BTWN GIRDERS | VERTICAL |
| S516 | X | 12 | 6'-0" | - | - | S. ABUT DIAPHRAGM - THRU GIRDERS | HORIZONTAL |

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

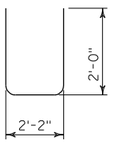
▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



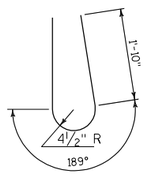

S503



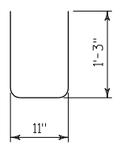

| BAR MARK | DIM. 'A' | DIM. 'B' |
|---|---|---|
| S504 | 3'-2" | 1'-5" |
| S505 | 3'-2" | 2'-4" |
| | | |
| | | |




S506




S512

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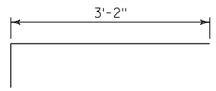


S609, S610

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

DRAWN BY ACT | PLANS CK'D. CBM

SUPERSTURCTURE BILL OF BARS

SHEET 13 OF 16

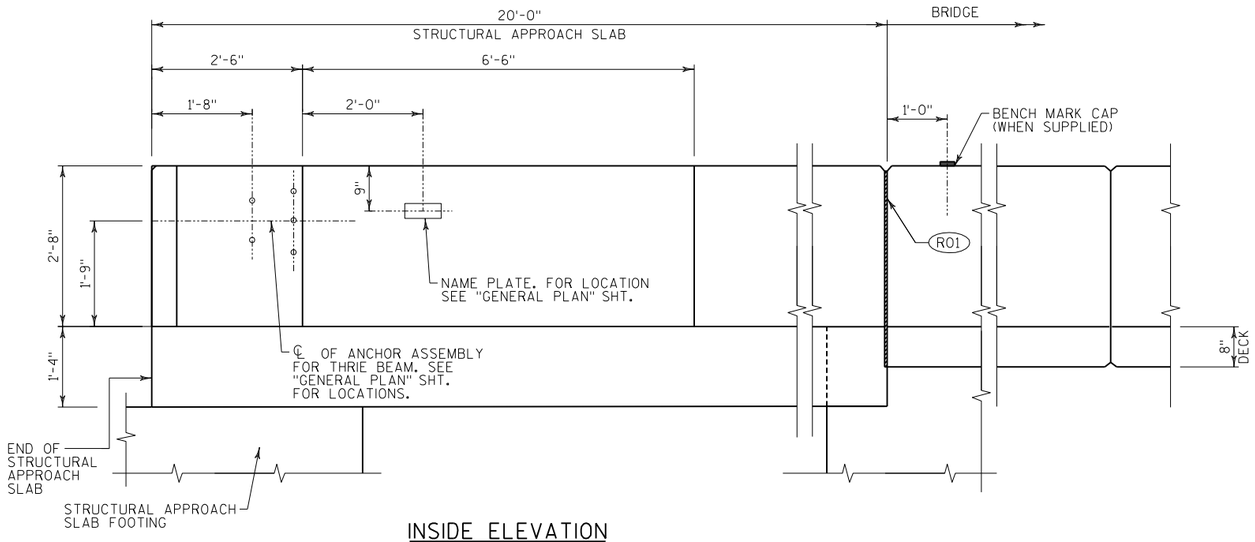
265

8

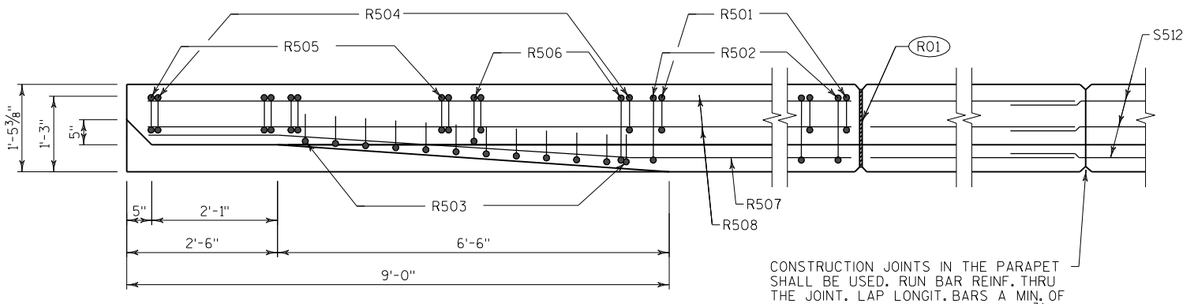
8

STATE PROJECT NUMBER

3150-05-70

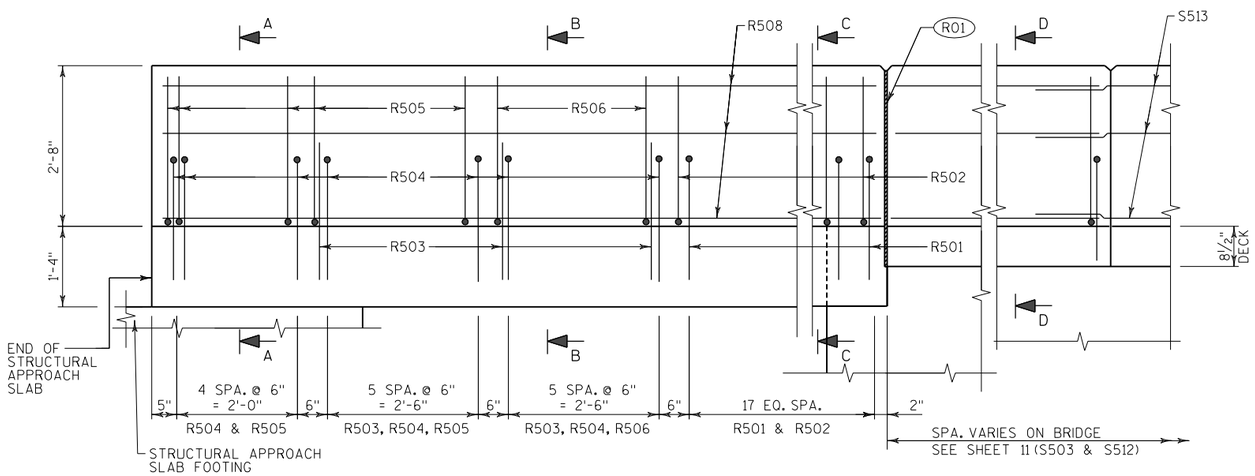



INSIDE ELEVATION

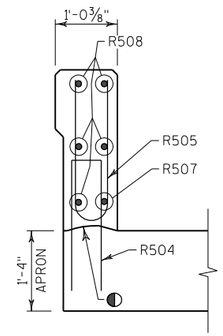



PLAN

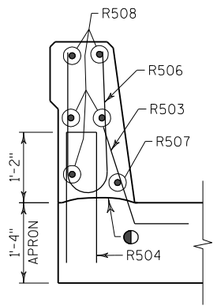
CONSTRUCTION JOINTS IN THE PARAPET SHALL BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". DEFINE CONST. JOINT WITH A ¾" 'V'-GROOVE.




OUTSIDE ELEVATION




SECTION A

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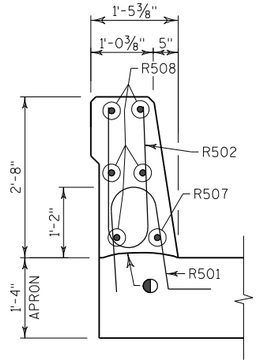


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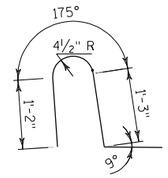
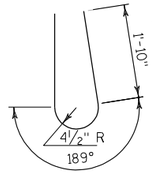
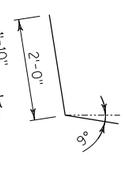


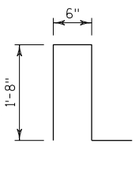

R501/S503




R502/S512




R503

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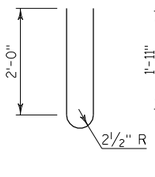


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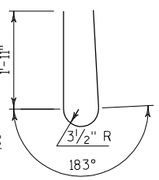


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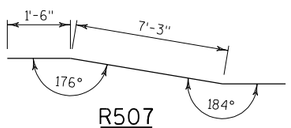
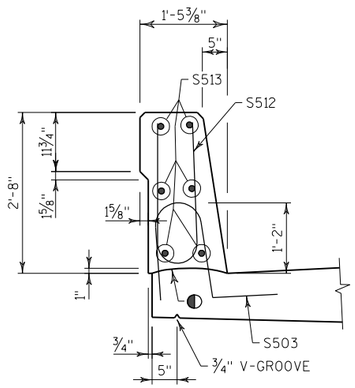



R507

## BILL OF BARS

| BAR MARK | COAT | NO REQ'D | LENGTH | BENT | BAR SERIES | LOCATION | |
|---|---|---|---|---|---|---|---|
| R501 | X | 72 | 4'-5" | X | - | PARAPET | VERTICAL |
| R502 | X | 72 | 5'-0" | X | - | PARAPET | VERTICAL |
| R503 | X | 48 | 2'-9" | X | - | PARAPET | VERTICAL |
| R504 | X | 68 | 4'-4" | X | - | PARAPET | VERTICAL |
| R505 | X | 44 | 4'-9" | X | - | PARAPET | VERTICAL |
| R506 | X | 24 | 4'-10" | X | - | PARAPET | VERTICAL |
| R507 | X | 4 | 19'-5" | X | - | PARAPET | HORIZONTAL |
| R508 | X | 20 | 19'-8" | - | - | PARAPET | HORIZONTAL |

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.




SECTION D THRU PARAPET ON BRIDGE

SEE SHEET 11 FOR REBAR SPACING ON BRIDGE.
SEE SHEET 13 FOR BILL OF BARS.

## NOTE

(R01) ½" FILLER. SEAL ALL EXPOSED HORIZ. & VERT. SURFACE 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.

(R02) SLOPE FOR DRAINAGE.

◐ CONST. JOINT - STRIKE OFF AS SHOWN

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

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SINGLE SLOPE PARAPET 32SS

SHEET 14 OF 16

266

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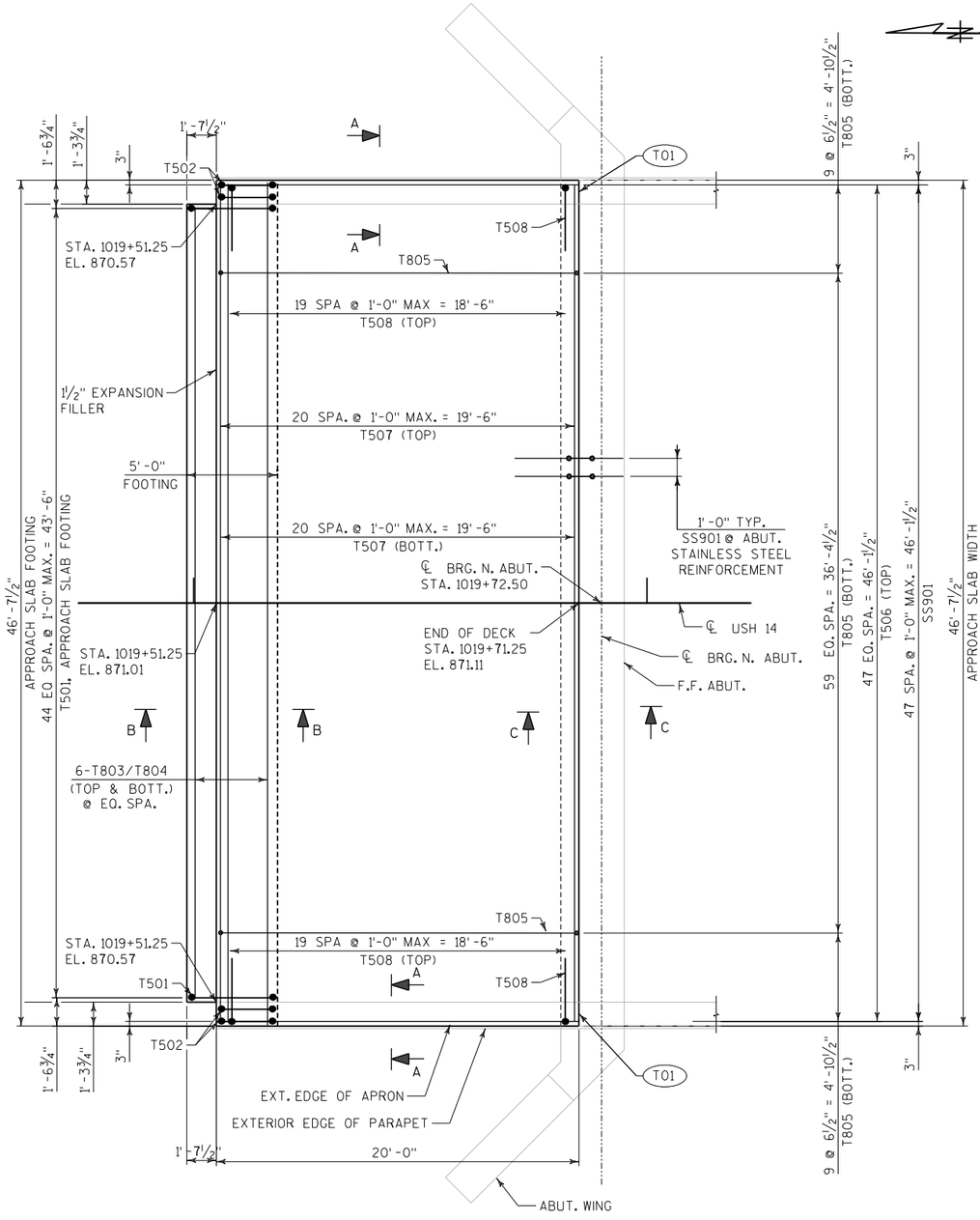
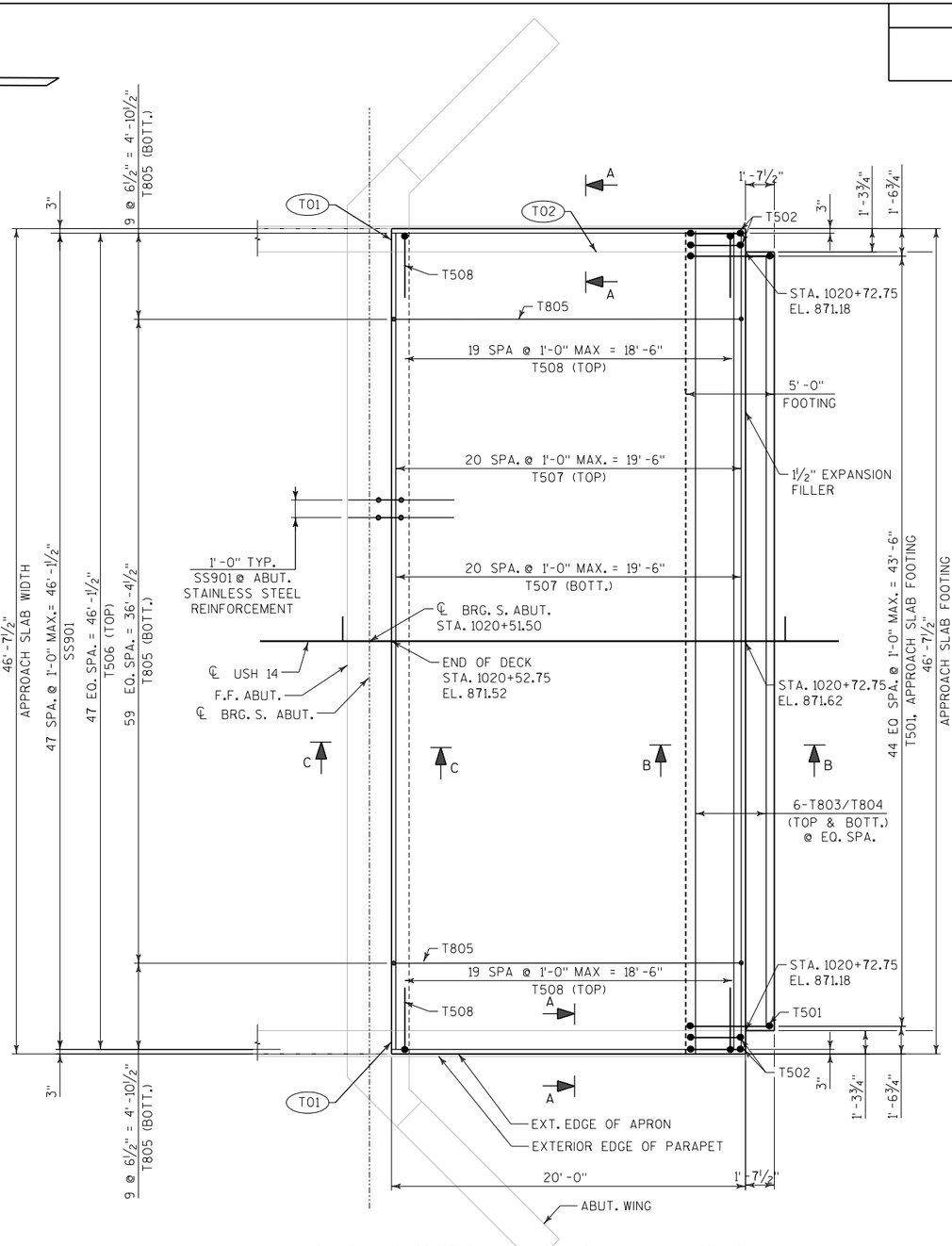
| STATE PROJECT NUMBER |
|---|
| 3150-05-70 |




PLAN - NORTH STRUCTURAL APPROACH SLAB




PLAN - SOUTH STRUCTURAL APPROACH SLAB

## DESIGN DATA:

| | |
|---|---|
| ALLOWABLE SOIL BEARING PRESSURE: | 2,000 P.S.F. |
| CONCRETE STRENGTH F'C: | 4,000 P.S.I. |
| BAR STEEL REINFORCEMENT, GRADE 60, FY: | 60,000 P.S.I. |

NOTE:
FOR NEW STRUCTURES ON NEW ALIGMENTS, BASE AGGREGATE DENSE 1¼-INCH AS PER FDM 14-5 AND BRIDGE MANUAL FIGURE 12.6-2 SHALL BE UTILIZED. FOR REPLACEMENT STRUCTURES ON EXISTING ALIGNMENTS, THE EXISTING SOIL MAY REMAIN IN PLACE IF THE REGIONS SOILS ENGINEER DETERMINES THAT THE EXISTING SOIL BEARING PRESSURE MEETS THE REQUIREMENT ABOVE.

## NOTES AND LEGEND:

(T01) 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).

(T02) SEE SHEET 14 FOR REINFORCEMENT, LOCATION OF NAME PLATE AND BENCH MARK WITH RESPECT TO THE END OF PARAPET.

ELEVATIONS GIVEN ARE AT TOP OF STRUCTURAL APPROACH SLAB.

ELEVATION AT EDGE OF STRUCTRUAL APPROACH SLAB ARE SAME AS ELEVATIONS GIVEN AT CORRESPONEDING TRAFFIC FACE OF PARAPET.

SEE SHEET 16 FOR SECTION CUTS.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

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STRUCTURAL APPROACH SLAB

SHEET 15 OF 16

267

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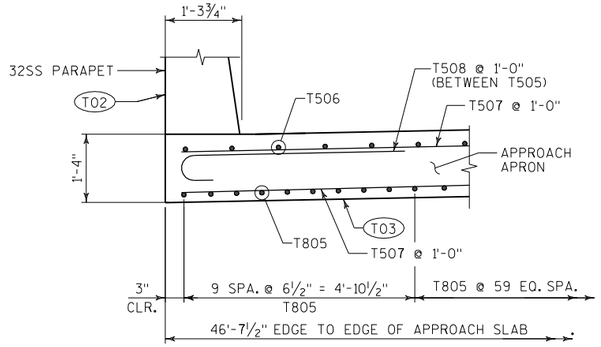
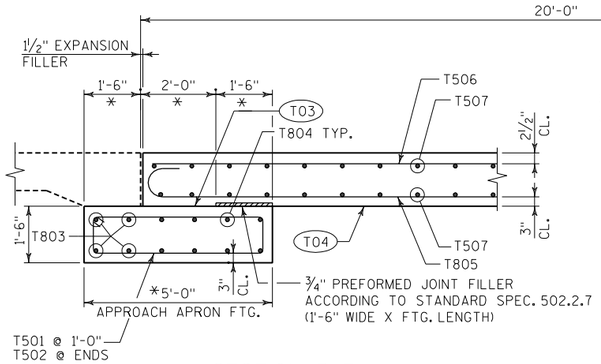
STATE PROJECT NUMBER

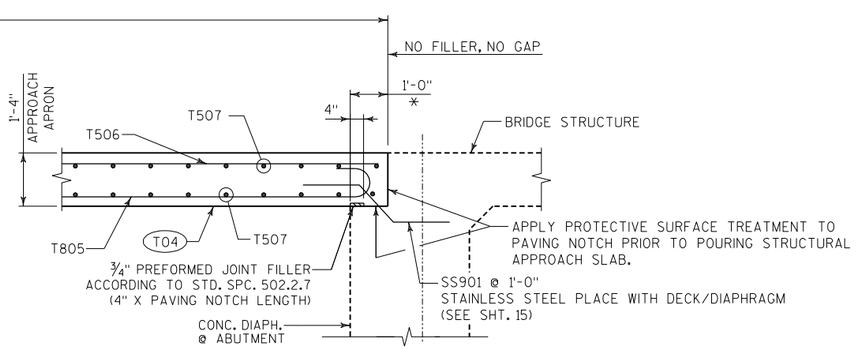
3150-05-70




SECTION A-A



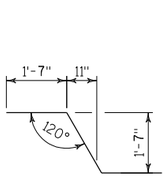

SECTION B-B



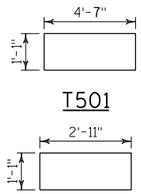

SECTION C-C

## TRANSVERSE SECTION THRU APPROACH APRON

* MEASURED NORMAL TO ABUTMENT

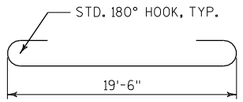



SS901

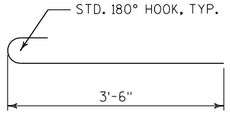



T501

T502




T805




T508

## BILL OF BARS

| BAR MARK | COAT | NO REQ'D | LENGTH | BENT | BAR SERIES | LOCATION | |
|---|---|---|---|---|---|---|---|
| T501 | X | 45 | 45 | 90 | 11'-11" | APPROACH SLAB FTG. - STIRRUP | VERTICAL |
| T502 | X | 4 | 4 | 8 | 8'-7" | APPROACH SLAB FTG. - STIRRUP ENDS | VERTICAL |
| T803 | X | 4 | 4 | 8 | 43'-6" | APPROACH SLAB FTG. - TOP & BOTT | TRANSVERSE |
| T804 | X | 8 | 8 | 16 | 46'-1" | APPROACH SLAB FTG. - TOP & BOTT | TRANSVERSE |
| T805 | X | 78 | 78 | 156 | 21'-4" | APPROACH SLAB - BOTT. | LONGITUDINAL |
| T506 | X | 48 | 48 | 96 | 19'-6" | APPROACH SLAB - TOP | LONGITUDINAL |
| T507 | X | 42 | 42 | 84 | 46'-2" | APPROACH SLAB - TOP & BOTT. | TRANSVERSE |
| T508 | X | 40 | 40 | 80 | 4'-1" | APPROACH SLAB - TOP. EDGE | TRANSVERSE |

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

## BILL OF BARS

| | BAR MARK | COAT | NO REQ'D | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|---|
| STAINLESS STEEL → | SS901 | - | 96 | 5'-0" | X | - | CONC. ABUT. DIAPH. TO APPROACH SLAB |

## LEGEND:

(T01) ½" FILLER (INCLUDED IN PARAPET/SLAB LENGTH). SEAL ALL EXPOSED HORIZ. & VERT. SURFACE OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(T02) SEE SHEET 14 FOR REINFORCEMENT, LOCATION OF NAME PLATE AND BENCH MARK WITH RESPECT TO THE END OF PARAPET.

(T03) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

(T04) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-64-191

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STRUCTURAL APPROACH SLAB DETAILS

SHEET 16 OF 16

268

8

8

M:\2_Prjts\31500900 & 31500500_USH 14\Plns\CAD\Str\Final\16_B-64-191_ApproachSlab Det.dgn

9/16/2017

## DITCHING USH 14

| Station | Real Station | Distance | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 925+50.00 | 92550 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 926+00.00 | 92600 | 50 | 14 | 0 | 0 | 26 | 0 | 0 | 26 | 0 | 26 |
| 926+50.00 | 92650 | 50 | 15 | 0 | 0 | 27 | 0 | 0 | 53 | 0 | 53 |
| 926+95.00 | 92695 | 45 | 23 | 0 | 0 | 32 | 0 | 0 | 85 | 0 | 85 |
| 927+00.00 | 92700 | 5 | 23 | 0 | 0 | 4 | 0 | 0 | 89 | 0 | 89 |
| 927+50.00 | 92750 | 50 | 13 | 0 | 0 | 33 | 0 | 0 | 123 | 0 | 123 |
| 928+00.00 | 92800 | 50 | 13 | 0 | 0 | 24 | 0 | 0 | 147 | 0 | 147 |
| 928+50.00 | 92850 | 50 | 11 | 0 | 0 | 22 | 0 | 0 | 169 | 0 | 169 |
| 929+00.00 | 92900 | 50 | 10 | 0 | 0 | 19 | 0 | 0 | 188 | 0 | 188 |
| 929+50.00 | 92950 | 50 | 11 | 0 | 0 | 20 | 0 | 0 | 208 | 0 | 208 |
| 930+00.00 | 93000 | 50 | 10 | 0 | 0 | 20 | 0 | 0 | 228 | 0 | 228 |
| 930+50.00 | 93050 | 50 | 10 | 0 | 0 | 19 | 0 | 0 | 247 | 0 | 247 |
| 931+00.00 | 93100 | 50 | 9 | 0 | 0 | 18 | 0 | 0 | 264 | 0 | 264 |
| 931+50.00 | 93150 | 50 | 9 | 0 | 0 | 17 | 0 | 0 | 282 | 0 | 282 |
| 932+00.00 | 93200 | 50 | 12 | 0 | 0 | 20 | 0 | 0 | 302 | 0 | 302 |
| 932+50.00 | 93250 | 50 | 28 | 0 | 0 | 37 | 0 | 0 | 339 | 0 | 339 |
| 932+65.00 | 93265 | 15 | 27 | 0 | 0 | 15 | 0 | 0 | 354 | 0 | 354 |
| 933+00.00 | 93300 | 35 | 24 | 0 | 0 | 33 | 0 | 0 | 388 | 0 | 388 |
| 933+50.00 | 93350 | 50 | 4 | 0 | 0 | 27 | 0 | 0 | 414 | 0 | 414 |
| 934+00.00 | 93400 | 50 | 4 | 0 | 0 | 7 | 0 | 0 | 422 | 0 | 422 |
| 934+50.00 | 93450 | 50 | 2 | 0 | 0 | 5 | 0 | 0 | 427 | 0 | 427 |
| 935+00.00 | 93500 | 50 | 2 | 0 | 0 | 4 | 0 | 0 | 432 | 0 | 432 |
| 935+50.00 | 93550 | 50 | 3 | 0 | 0 | 5 | 0 | 0 | 436 | 0 | 436 |
| 936+00.00 | 93600 | 50 | 24 | 0 | 0 | 25 | 0 | 0 | 461 | 0 | 461 |
| 936+50.00 | 93650 | 50 | 12 | 0 | 0 | 33 | 0 | 0 | 494 | 0 | 494 |
| 937+00.00 | 93700 | 50 | 7 | 0 | 0 | 17 | 0 | 0 | 511 | 0 | 511 |
| 937+29.00 | 93729 | 29 | 8 | 0 | 0 | 8 | 0 | 0 | 519 | 0 | 519 |
| 937+50.00 | 93750 | 21 | 6 | 0 | 0 | 5 | 0 | 0 | 524 | 0 | 524 |
| 938+00.00 | 93800 | 50 | 8 | 0 | 0 | 13 | 0 | 0 | 537 | 0 | 537 |
| 938+50.00 | 93850 | 50 | 16 | 0 | 0 | 22 | 0 | 0 | 559 | 0 | 559 |
| 939+00.00 | 93900 | 50 | 21 | 0 | 0 | 34 | 0 | 0 | 593 | 0 | 593 |
| 939+50.00 | 93950 | 50 | 31 | 0 | 0 | 48 | 0 | 0 | 641 | 0 | 641 |
| 940+00.00 | 94000 | 50 | 22 | 0 | 0 | 48 | 0 | 0 | 689 | 0 | 689 |
| 940+50.00 | 94050 | 50 | 25 | 0 | 0 | 43 | 0 | 0 | 733 | 0 | 733 |
| 941+00.00 | 94100 | 50 | 25 | 0 | 0 | 46 | 0 | 0 | 779 | 0 | 779 |
| 941+50.00 | 94150 | 50 | 27 | 0 | 0 | 48 | 0 | 0 | 827 | 0 | 827 |
| 942+00.00 | 94200 | 50 | 27 | 0 | 0 | 50 | 0 | 0 | 877 | 0 | 877 |
| 942+50.00 | 94250 | 50 | 16 | 0 | 0 | 40 | 0 | 0 | 917 | 0 | 917 |

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**DITCHING USH 14**

| Station | Real Station | Distance | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 943+00.00 | 94300 | 50 | 11 | 0 | 0 | 25 | 0 | 0 | 942 | 0 | 942 |
| 943+50.00 | 94350 | 50 | 8 | 0 | 0 | 18 | 0 | 0 | 959 | 0 | 959 |
| 944+00.00 | 94400 | 50 | 7 | 0 | 0 | 15 | 0 | 0 | 974 | 0 | 974 |
| 944+50.00 | 94450 | 50 | 7 | 0 | 0 | 13 | 0 | 0 | 987 | 0 | 987 |
| 945+00.00 | 94500 | 50 | 7 | 0 | 0 | 13 | 0 | 0 | 1,000 | 0 | 1,000 |
| 945+50.00 | 94550 | 50 | 9 | 0 | 0 | 15 | 0 | 0 | 1,015 | 0 | 1,015 |
| 946+00.00 | 94600 | 50 | 12 | 0 | 0 | 19 | 0 | 0 | 1,034 | 0 | 1,034 |
| 946+50.00 | 94650 | 50 | 12 | 0 | 0 | 22 | 0 | 0 | 1,056 | 0 | 1,056 |
| 947+00.00 | 94700 | 50 | 4 | 0 | 7 | 15 | 0 | 6 | 1,071 | 8 | 1,063 |
| 947+38.00 | 94738 | 38 | 32 | 0 | 0 | 25 | 0 | 5 | 1,096 | 13 | 1,083 |
| 947+50.00 | 94750 | 12 | 26 | 0 | 0 | 13 | 0 | 0 | 1,109 | 13 | 1,095 |
| 948+00.00 | 94800 | 50 | 8 | 0 | 0 | 32 | 0 | 0 | 1,141 | 13 | 1,127 |
| 948+50.00 | 94850 | 50 | 8 | 0 | 0 | 15 | 0 | 0 | 1,155 | 13 | 1,142 |
| 949+00.00 | 94900 | 50 | 27 | 0 | 0 | 33 | 0 | 0 | 1,188 | 13 | 1,174 |
| 949+14.00 | 94914 | 14 | 37 | 0 | 0 | 17 | 0 | 0 | 1,204 | 13 | 1,191 |
| 949+50.00 | 94950 | 36 | 17 | 0 | 0 | 36 | 0 | 0 | 1,241 | 13 | 1,227 |
| 950+00.00 | 95000 | 50 | 19 | 0 | 0 | 34 | 0 | 0 | 1,274 | 13 | 1,261 |
| 950+50.00 | 95050 | 50 | 21 | 0 | 0 | 37 | 0 | 0 | 1,311 | 13 | 1,298 |
| 951+00.00 | 95100 | 50 | 15 | 0 | 0 | 33 | 0 | 0 | 1,345 | 13 | 1,331 |
| 951+50.00 | 95150 | 50 | 10 | 0 | 0 | 23 | 0 | 0 | 1,368 | 13 | 1,354 |
| 952+00.00 | 95200 | 50 | 7 | 0 | 0 | 16 | 0 | 0 | 1,384 | 13 | 1,370 |
| 952+50.00 | 95250 | 50 | 7 | 0 | 0 | 13 | 0 | 0 | 1,397 | 13 | 1,383 |
| 953+00.00 | 95300 | 50 | 10 | 0 | 0 | 15 | 0 | 0 | 1,412 | 13 | 1,399 |
| 953+50.00 | 95350 | 50 | 17 | 0 | 0 | 24 | 0 | 0 | 1,436 | 13 | 1,423 |
| 954+00.00 | 95400 | 50 | 22 | 0 | 0 | 36 | 0 | 0 | 1,473 | 13 | 1,459 |
| 954+50.00 | 95450 | 50 | 28 | 0 | 0 | 47 | 0 | 0 | 1,519 | 13 | 1,506 |
| 955+00.00 | 95500 | 50 | 24 | 0 | 0 | 48 | 0 | 0 | 1,567 | 13 | 1,554 |
| 955+50.00 | 95550 | 50 | 25 | 0 | 0 | 45 | 0 | 0 | 1,612 | 13 | 1,599 |
| 956+00.00 | 95600 | 50 | 12 | 0 | 0 | 34 | 0 | 0 | 1,646 | 14 | 1,633 |
| 956+50.00 | 95650 | 50 | 14 | 0 | 0 | 24 | 0 | 0 | 1,670 | 14 | 1,656 |
| 957+00.00 | 95700 | 50 | 17 | 0 | 0 | 29 | 0 | 0 | 1,699 | 14 | 1,685 |
| 957+50.00 | 95750 | 50 | 22 | 0 | 0 | 37 | 0 | 0 | 1,736 | 14 | 1,722 |
| 958+00.00 | 95800 | 50 | 19 | 0 | 0 | 38 | 0 | 0 | 1,774 | 14 | 1,760 |
| 958+50.00 | 95850 | 50 | 26 | 0 | 1 | 41 | 0 | 1 | 1,815 | 15 | 1,800 |
| 959+00.00 | 95900 | 50 | 25 | 0 | 2 | 47 | 0 | 3 | 1,862 | 19 | 1,843 |
| 959+50.00 | 95950 | 50 | 17 | 0 | 0 | 39 | 0 | 3 | 1,901 | 22 | 1,879 |
| 960+00.00 | 96000 | 50 | 13 | 0 | 0 | 28 | 0 | 0 | 1,929 | 23 | 1,906 |

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| DITCHING USH 14 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | |
| Station | Real Station | Distance | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | Mass Ordinate |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 960+50.00 | 96050 | 50 | 21 | 0 | 0 | 31 | 0 | 0 | 1,961 | 23 | 1,938 |
| 961+00.00 | 96100 | 50 | 15 | 0 | 0 | 33 | 0 | 0 | 1,994 | 23 | 1,971 |
| 961+50.00 | 96150 | 50 | 11 | 0 | 0 | 25 | 0 | 0 | 2,019 | 23 | 1,996 |
| 961+95.00 | 96195 | 45 | 27 | 0 | 0 | 32 | 0 | 0 | 2,050 | 23 | 2,028 |
| 962+00.00 | 96200 | 5 | 25 | 0 | 0 | 5 | 0 | 0 | 2,055 | 23 | 2,032 |
| 962+50.00 | 96250 | 50 | 10 | 0 | 0 | 33 | 0 | 0 | 2,088 | 23 | 2,065 |
| 963+00.00 | 96300 | 50 | 21 | 0 | 0 | 29 | 0 | 0 | 2,117 | 23 | 2,094 |
| 963+50.00 | 96350 | 50 | 8 | 0 | 0 | 27 | 0 | 0 | 2,143 | 23 | 2,120 |
| 964+00.00 | 96400 | 50 | 8 | 0 | 0 | 15 | 0 | 0 | 2,158 | 23 | 2,135 |
| 964+50.00 | 96450 | 50 | 12 | 0 | 0 | 18 | 0 | 0 | 2,176 | 23 | 2,153 |
| 965+00.00 | 96500 | 50 | 34 | 0 | 0 | 43 | 0 | 0 | 2,219 | 23 | 2,196 |
| 965+11.00 | 96511 | 11 | 41 | 0 | 0 | 15 | 0 | 0 | 2,234 | 23 | 2,211 |
| 965+50.00 | 96550 | 39 | 25 | 0 | 0 | 48 | 0 | 0 | 2,281 | 23 | 2,259 |
| 966+00.00 | 96600 | 50 | 12 | 0 | 0 | 35 | 0 | 0 | 2,316 | 23 | 2,293 |
| 966+50.00 | 96650 | 50 | 21 | 0 | 0 | 30 | 0 | 0 | 2,346 | 23 | 2,323 |
| 967+00.00 | 96700 | 50 | 15 | 0 | 1 | 33 | 0 | 1 | 2,379 | 24 | 2,355 |
| 967+50.00 | 96750 | 50 | 21 | 0 | 0 | 33 | 0 | 1 | 2,412 | 25 | 2,387 |
| 968+00.00 | 96800 | 50 | 8 | 0 | 0 | 26 | 0 | 0 | 2,438 | 26 | 2,412 |
| 968+50.00 | 96850 | 50 | 9 | 0 | 1 | 15 | 0 | 1 | 2,453 | 27 | 2,426 |
| 969+00.00 | 96900 | 50 | 37 | 0 | 0 | 42 | 0 | 1 | 2,495 | 28 | 2,467 |
| 969+03.00 | 96903 | 3 | 38 | 0 | 0 | 4 | 0 | 0 | 2,499 | 28 | 2,471 |
| 969+50.00 | 96950 | 47 | 14 | 0 | 0 | 45 | 0 | 0 | 2,544 | 28 | 2,516 |
| 970+00.00 | 97000 | 50 | 18 | 0 | 0 | 30 | 0 | 1 | 2,574 | 29 | 2,545 |
| 970+50.00 | 97050 | 50 | 15 | 0 | 3 | 30 | 0 | 3 | 2,604 | 33 | 2,571 |
| 970+96.00 | 97096 | 46 | 30 | 0 | 0 | 38 | 0 | 3 | 2,642 | 37 | 2,605 |
| 971+00.00 | 97100 | 4 | 31 | 0 | 0 | 5 | 0 | 0 | 2,647 | 37 | 2,610 |
| 971+50.00 | 97150 | 50 | 24 | 0 | 2 | 51 | 0 | 2 | 2,697 | 40 | 2,658 |
| 972+00.00 | 97200 | 50 | 22 | 0 | 5 | 42 | 0 | 7 | 2,740 | 48 | 2,691 |



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9

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| DITCHING USH 14 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | |
| Station | Real Station | Distance | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | Mass Ordinate |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 972+50.00 | 97250 | 50 | 26 | 0 | 5 | 45 | 0 | 9 | 2,784 | 60 | 2,725 |
| 973+00.00 | 97300 | 50 | 14 | 0 | 4 | 37 | 0 | 8 | 2,822 | 69 | 2,752 |
| 973+50.00 | 97350 | 50 | 20 | 0 | 2 | 31 | 0 | 6 | 2,853 | 76 | 2,777 |
| 974+00.00 | 97400 | 50 | 20 | 0 | 3 | 37 | 0 | 5 | 2,890 | 82 | 2,808 |
| 974+50.00 | 97450 | 50 | 17 | 0 | 0 | 35 | 0 | 2 | 2,925 | 85 | 2,840 |
| 975+00.00 | 97500 | 50 | 15 | 0 | 0 | 29 | 0 | 0 | 2,954 | 85 | 2,869 |
| 975+50.00 | 97550 | 50 | 17 | 0 | 0 | 29 | 0 | 0 | 2,984 | 85 | 2,898 |
| 976+00.00 | 97600 | 50 | 18 | 0 | 0 | 32 | 0 | 0 | 3,016 | 85 | 2,931 |
| 976+50.00 | 97650 | 50 | 24 | 0 | 0 | 39 | 0 | 0 | 3,055 | 85 | 2,970 |
| 977+00.00 | 97700 | 50 | 27 | 0 | 0 | 48 | 0 | 0 | 3,102 | 85 | 3,017 |
| 977+50.00 | 97750 | 50 | 28 | 0 | 0 | 51 | 0 | 0 | 3,154 | 85 | 3,068 |
| 978+00.00 | 97800 | 50 | 23 | 0 | 0 | 47 | 0 | 0 | 3,201 | 85 | 3,115 |
| 978+50.00 | 97850 | 50 | 18 | 0 | 0 | 37 | 0 | 0 | 3,238 | 85 | 3,153 |
| 979+00.00 | 97900 | 50 | 14 | 0 | 0 | 29 | 0 | 0 | 3,267 | 85 | 3,182 |
| 979+50.00 | 97950 | 50 | 11 | 0 | 1 | 22 | 0 | 1 | 3,290 | 87 | 3,203 |
| 980+00.00 | 98000 | 50 | 9 | 0 | 1 | 18 | 0 | 2 | 3,308 | 89 | 3,218 |
| 980+50.00 | 98050 | 50 | 10 | 0 | 1 | 18 | 0 | 2 | 3,326 | 91 | 3,234 |
| 981+00.00 | 98100 | 50 | 5 | 0 | 1 | 15 | 0 | 2 | 3,340 | 94 | 3,246 |
| | | | | TOTALS | | 3,340 | 0 | 75 | | | |

| Notes: | |
|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material |
| 2 - Salvaged/Unusable Pavement Material | This does not show up in cross sections |
| 3 - Fill | Does not include Unusable Pavement Exc volume |

## USH 14 AT SCHOOL SECTION ROAD

| Station | Real Station | Distance | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 994+50.00 | 99450 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 995+00.00 | 99500 | 50 | 16 | 0 | 0 | 15 | 0 | 0 | 15 | 0 | 15 |
| 995+50.00 | 99550 | 50 | 8 | 0 | 48 | 22 | 0 | 45 | 38 | 57 | -19 |
| 996+00.00 | 99600 | 50 | 6 | 0 | 86 | 12 | 0 | 124 | 50 | 212 | -162 |
| 996+50.00 | 99650 | 50 | 7 | 0 | 85 | 12 | 0 | 159 | 62 | 411 | -349 |
| 997+00.00 | 99700 | 50 | 5 | 0 | 77 | 11 | 0 | 150 | 73 | 598 | -526 |
| 997+50.00 | 99750 | 50 | 2 | 0 | 68 | 7 | 0 | 135 | 79 | 766 | -687 |
| 998+00.00 | 99800 | 50 | 0 | 0 | 53 | 2 | 0 | 112 | 81 | 906 | -825 |
| 998+50.00 | 99850 | 50 | 1 | 0 | 11 | 1 | 0 | 59 | 82 | 980 | -898 |
| 999+00.00 | 99900 | 50 | 7 | 0 | 0 | 7 | 0 | 10 | 89 | 993 | -904 |
| 999+50.00 | 99950 | 50 | 36 | 0 | 0 | 40 | 0 | 0 | 129 | 993 | -864 |
| 1000+00.00 | 100000 | 50 | 68 | 0 | 0 | 96 | 0 | 0 | 225 | 993 | -768 |
| 1000+50.00 | 100050 | 50 | 74 | 0 | 0 | 132 | 0 | 0 | 357 | 993 | -636 |
| 1001+00.00 | 100100 | 50 | 64 | 0 | 0 | 128 | 0 | 0 | 485 | 993 | -508 |
| 1001+50.00 | 100150 | 50 | 56 | 0 | 0 | 111 | 0 | 0 | 596 | 993 | -397 |
| 1002+00.00 | 100200 | 50 | 37 | 0 | 0 | 86 | 0 | 0 | 683 | 993 | -310 |
| 1002+50.00 | 100250 | 50 | 33 | 0 | 0 | 65 | 0 | 0 | 747 | 993 | -246 |
| 1003+00.00 | 100300 | 50 | 23 | 0 | 0 | 51 | 0 | 0 | 799 | 993 | -194 |
| 1003+50.00 | 100350 | 50 | 0 | 0 | 0 | 21 | 0 | 0 | 819 | 993 | -174 |
| | | | | TOTALS | | 819 | 0 | 794 | | | |

Notes:

| | |
|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material |
| 2 - Salvaged/Unusable Pavement Material | This does not show up in cross sections |
| 3 - Fill | Does not include Unusable Pavement Exc volume |

| 1010+50 - 1031+75 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | |
| Station | Real Station | Distance | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | Mass Ordinate |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 1010+50.00 | 101050 | 0 | 86 | 30 | 96 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1011+00.00 | 101100 | 50 | 93 | 30 | 164 | 166 | 55 | 241 | 166 | 301 | -191 |
| 1011+50.00 | 101150 | 50 | 99 | 30 | 161 | 178 | 55 | 301 | 344 | 678 | -444 |
| 1012+00.00 | 101200 | 50 | 97 | 30 | 135 | 182 | 55 | 275 | 526 | 1,021 | -661 |
| 1012+50.00 | 101250 | 50 | 93 | 30 | 118 | 176 | 55 | 234 | 701 | 1,313 | -833 |
| 1013+00.00 | 101300 | 50 | 82 | 30 | 159 | 161 | 55 | 256 | 863 | 1,633 | -1,046 |
| 1013+50.00 | 101350 | 50 | 68 | 30 | 193 | 139 | 55 | 325 | 1,002 | 2,039 | -1,369 |
| 1014+00.00 | 101400 | 50 | 62 | 30 | 227 | 121 | 55 | 389 | 1,122 | 2,525 | -1,790 |
| 1014+50.00 | 101450 | 50 | 56 | 30 | 260 | 109 | 55 | 452 | 1,232 | 3,090 | -2,300 |
| 1015+00.00 | 101500 | 50 | 49 | 30 | 282 | 97 | 55 | 502 | 1,329 | 3,718 | -2,886 |
| 1015+50.00 | 101550 | 50 | 49 | 30 | 291 | 90 | 55 | 530 | 1,419 | 4,380 | -3,514 |
| 1016+00.00 | 101600 | 50 | 45 | 30 | 285 | 87 | 55 | 533 | 1,505 | 5,047 | -4,149 |
| 1016+50.00 | 101650 | 50 | 41 | 30 | 286 | 80 | 55 | 529 | 1,585 | 5,708 | -4,786 |
| 1016+71.60 | 101672 | 22 | 44 | 30 | 298 | 34 | 24 | 234 | 1,619 | 6,000 | -5,068 |
| 1017+00.00 | 101700 | 28 | 37 | 30 | 318 | 42 | 31 | 324 | 1,661 | 6,405 | -5,462 |
| 1017+01.60 | 101702 | 2 | 41 | 30 | 324 | 2 | 2 | 19 | 1,663 | 6,429 | -5,485 |
| 1017+21.60 | 101722 | 20 | 44 | 30 | 349 | 32 | 22 | 249 | 1,695 | 6,740 | -5,787 |
| 1017+50.00 | 101750 | 28 | 45 | 30 | 395 | 47 | 31 | 391 | 1,742 | 7,229 | -6,261 |
| 1017+91.60 | 101792 | 42 | 45 | 30 | 408 | 69 | 46 | 618 | 1,810 | 8,002 | -7,011 |
| 1018+00.00 | 101800 | 8 | 45 | 30 | 409 | 14 | 9 | 127 | 1,824 | 8,161 | -7,166 |
| 1018+11.93 | 101812 | 12 | 45 | 30 | 421 | 20 | 13 | 183 | 1,844 | 8,390 | -7,389 |
| 1018+16.60 | 101817 | 5 | 45 | 30 | 422 | 8 | 5 | 73 | 1,851 | 8,482 | -7,477 |
| 1018+34.86 | 101835 | 18 | 45 | 30 | 344 | 30 | 20 | 259 | 1,882 | 8,805 | -7,791 |
| 1018+41.60 | 101842 | 7 | 45 | 30 | 304 | 11 | 7 | 81 | 1,893 | 8,906 | -7,888 |
| 1018+50.00 | 101850 | 8 | 45 | 30 | 298 | 14 | 9 | 94 | 1,907 | 9,023 | -8,001 |
| 1018+66.60 | 101867 | 17 | 45 | 30 | 286 | 27 | 18 | 180 | 1,934 | 9,248 | -8,216 |
| 1018+91.60 | 101892 | 25 | 45 | 30 | 181 | 41 | 28 | 217 | 1,975 | 9,518 | -8,473 |
| 1019+00.00 | 101900 | 8 | 45 | 30 | 186 | 14 | 9 | 57 | 1,989 | 9,590 | -8,540 |
| 1019+50.00 | 101950 | 50 | 45 | 30 | 251 | 82 | 55 | 405 | 2,071 | 10,096 | -9,019 |
| 1019+71.50 | 101972 | 22 | 45 | 30 | 258 | 35 | 24 | 203 | 2,107 | 10,349 | -9,261 |

9

9

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FILE NAME : T:\Design\01 Projects\WisDOT SE Region\USH-14_GAI\11.0 PS&E\Misc. Quantities\090101-ew.pptx PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

**1010+50 - 1031+75**

| Station | Real Station | Distance | AREA (SF) Cut | AREA (SF) Salvaged/ Unusable Pavement Material | AREA (SF) Fill | Incremental Vol (CY) (Unadjusted) Cut Note 1 | Incremental Vol (CY) (Unadjusted) Salvaged/ Unusable Pavement Material Note 2 | Incremental Vol (CY) (Unadjusted) Fill Note 3 | Cumulative Vol (CY) Cut 1.00 Note 1 | Cumulative Vol (CY) Expanded Fill 1.25 | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Structure B-64-191 | | | | | | | | | | | |
| 1020+52.75 | 102053 | 0 | 45 | 30 | 399 | 0 | 0 | 0 | 2,107 | 10,349 | -9,261 |
| 1021+00.00 | 102100 | 47 | 45 | 30 | 401 | 78 | 52 | 700 | 2,185 | 11,225 | -10,110 |
| 1021+32.65 | 102133 | 33 | 45 | 30 | 405 | 54 | 36 | 487 | 2,238 | 11,834 | -10,702 |
| 1021+50.00 | 102150 | 17 | 45 | 30 | 486 | 29 | 19 | 286 | 2,267 | 12,191 | -11,050 |
| 1021+57.65 | 102158 | 8 | 45 | 30 | 530 | 13 | 8 | 144 | 2,280 | 12,371 | -11,226 |
| 1021+82.65 | 102183 | 25 | 45 | 30 | 561 | 41 | 28 | 505 | 2,321 | 13,003 | -11,844 |
| 1021+82.75 | 102183 | 0 | 45 | 30 | 561 | 0 | 0 | 2 | 2,321 | 13,006 | -11,846 |
| 1022+00.00 | 102200 | 17 | 45 | 30 | 651 | 28 | 19 | 387 | 2,349 | 13,490 | -12,321 |
| 1022+07.65 | 102208 | 8 | 45 | 30 | 695 | 13 | 8 | 191 | 2,362 | 13,728 | -12,555 |
| 1022+32.65 | 102233 | 25 | 45 | 30 | 660 | 41 | 28 | 627 | 2,403 | 14,512 | -13,325 |
| 1022+50.00 | 102250 | 17 | 45 | 30 | 599 | 29 | 19 | 405 | 2,432 | 15,018 | -13,822 |
| 1022+72.65 | 102273 | 23 | 45 | 30 | 440 | 37 | 25 | 436 | 2,469 | 15,562 | -14,354 |
| 1023+00.00 | 102300 | 27 | 45 | 30 | 263 | 45 | 30 | 356 | 2,514 | 16,007 | -14,784 |
| 1023+22.65 | 102323 | 23 | 45 | 30 | 262 | 38 | 25 | 220 | 2,552 | 16,283 | -15,047 |
| 1023+50.00 | 102350 | 27 | 97 | 30 | 228 | 72 | 30 | 248 | 2,624 | 16,593 | -15,315 |
| 1023+52.65 | 102353 | 3 | 105 | 30 | 222 | 10 | 3 | 22 | 2,634 | 16,620 | -15,336 |
| 1024+00.00 | 102400 | 47 | 229 | 30 | 201 | 293 | 52 | 371 | 2,927 | 17,084 | -15,559 |
| 1024+50.00 | 102450 | 50 | 200 | 30 | 232 | 398 | 55 | 401 | 3,324 | 17,585 | -15,718 |
| 1025+00.00 | 102500 | 50 | 139 | 30 | 254 | 314 | 55 | 450 | 3,639 | 18,148 | -16,021 |
| 1025+50.00 | 102550 | 50 | 134 | 30 | 277 | 253 | 55 | 491 | 3,892 | 18,762 | -16,438 |
| 1026+00.00 | 102600 | 50 | 144 | 30 | 286 | 258 | 55 | 522 | 4,149 | 19,414 | -16,887 |
| 1026+50.00 | 102650 | 50 | 148 | 30 | 260 | 270 | 55 | 506 | 4,420 | 20,047 | -17,305 |
| 1027+00.00 | 102700 | 50 | 151 | 30 | 233 | 276 | 55 | 457 | 4,696 | 20,617 | -17,655 |
| 1027+50.00 | 102750 | 50 | 144 | 30 | 206 | 273 | 55 | 406 | 4,969 | 21,125 | -17,944 |
| 1028+00.00 | 102800 | 50 | 143 | 30 | 168 | 266 | 55 | 346 | 5,235 | 21,557 | -18,165 |
| 1028+50.00 | 102850 | 50 | 168 | 30 | 105 | 288 | 55 | 253 | 5,524 | 21,873 | -18,248 |
| 1029+00.00 | 102900 | 50 | 201 | 30 | 49 | 342 | 55 | 143 | 5,866 | 22,051 | -18,140 |
| 1029+50.00 | 102950 | 50 | 238 | 30 | 12 | 407 | 55 | 57 | 6,273 | 22,123 | -17,859 |
| 1030+00.00 | 103000 | 50 | 275 | 30 | 0 | 475 | 55 | 12 | 6,748 | 22,138 | -17,454 |
| 1030+50.00 | 103050 | 50 | 280 | 30 | 0 | 514 | 55 | 0 | 7,262 | 22,138 | -16,996 |
| 1031+00.00 | 103100 | 50 | 211 | 30 | 0 | 455 | 55 | 0 | 7,717 | 22,138 | -16,596 |
| 1031+50.00 | 103150 | 50 | 152 | 30 | 0 | 336 | 55 | 0 | 8,053 | 22,138 | -16,315 |
| 1031+75.00 | 103175 | 25 | 114 | 30 | 0 | 124 | 28 | 0 | 8,177 | 22,138 | -16,219 |
| | | | | TOTALS | | 8,177 | 2,258 | 17,711 | | | |

| Notes: | |
|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material |
| 2 - Salvaged/Unusable Pavement Material | This does not show up in cross sections |
| 3 - Fill | Does not include Unusable Pavement Exc volume |

CONTINUED FROM PREVIOUS PAGE

## USH 14 AT CTH C

| Station | Real Station | Distance | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 1035+00.00 | 103500 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1035+50.00 | 103550 | 50 | 9 | 0 | 1 | 8 | 0 | 1 | 8 | 1 | 7 |
| 1036+00.00 | 103600 | 50 | 12 | 0 | 1 | 19 | 0 | 1 | 27 | 3 | 24 |
| 1036+50.00 | 103650 | 50 | 14 | 0 | 0 | 24 | 0 | 1 | 51 | 3 | 48 |
| 1037+00.00 | 103700 | 50 | 30 | 0 | 0 | 41 | 0 | 0 | 92 | 4 | 89 |
| 1037+50.00 | 103750 | 50 | 49 | 0 | 1 | 73 | 0 | 1 | 165 | 4 | 161 |
| 1038+00.00 | 103800 | 50 | 55 | 0 | 4 | 96 | 0 | 4 | 262 | 10 | 252 |
| 1038+50.00 | 103850 | 50 | 59 | 0 | 6 | 106 | 0 | 9 | 367 | 21 | 346 |
| 1039+00.00 | 103900 | 50 | 62 | 0 | 2 | 112 | 0 | 8 | 480 | 31 | 448 |
| 1039+50.00 | 103950 | 50 | 61 | 0 | 2 | 114 | 0 | 4 | 594 | 36 | 558 |
| 1040+00.00 | 104000 | 50 | 58 | 0 | 2 | 110 | 0 | 4 | 704 | 40 | 664 |
| 1040+50.00 | 104050 | 50 | 52 | 0 | 0 | 101 | 0 | 2 | 806 | 43 | 763 |
| 1041+00.00 | 104100 | 50 | 44 | 0 | 0 | 89 | 0 | 0 | 894 | 43 | 851 |
| 1041+50.00 | 104150 | 50 | 41 | 0 | 0 | 79 | 0 | 0 | 973 | 43 | 930 |
| 1042+00.00 | 104200 | 50 | 46 | 0 | 2 | 80 | 0 | 2 | 1,053 | 46 | 1,007 |
| 1042+50.00 | 104250 | 50 | 56 | 0 | 0 | 94 | 0 | 2 | 1,146 | 48 | 1,098 |
| 1043+00.00 | 104300 | 50 | 55 | 0 | 0 | 103 | 0 | 0 | 1,249 | 49 | 1,200 |
| 1043+50.00 | 104350 | 50 | 55 | 0 | 1 | 102 | 0 | 1 | 1,351 | 50 | 1,301 |
| 1044+00.00 | 104400 | 50 | 42 | 0 | 0 | 90 | 0 | 1 | 1,440 | 51 | 1,389 |
| 1044+50.00 | 104450 | 50 | 28 | 0 | 1 | 65 | 0 | 1 | 1,505 | 52 | 1,453 |
| 1045+00.00 | 104500 | 50 | 0 | 0 | 2 | 25 | 0 | 3 | 1,530 | 56 | 1,475 |
| 1045+50.00 | 104550 | 50 | 0 | 0 | 5 | 0 | 0 | 7 | 1,530 | 64 | 1,466 |
| 1046+00.00 | 104600 | 50 | 0 | 0 | 3 | 0 | 0 | 7 | 1,530 | 73 | 1,457 |
| 1046+50.00 | 104650 | 50 | 0 | 0 | 2 | 0 | 0 | 5 | 1,530 | 79 | 1,451 |
| 1047+00.00 | 104700 | 50 | 0 | 0 | 1 | 0 | 0 | 3 | 1,530 | 83 | 1,448 |
| 1047+50.00 | 104750 | 50 | 0 | 0 | 0 | 0 | 0 | 1 | 1,530 | 84 | 1,447 |
| | | | | TOTALS | | 1,530 | 0 | 67 | | | |

Notes:

| | |
|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material |
| 2 - Salvaged/Unusable Pavement Material | This does not show up in cross sections |
| 3 - Fill | Does not include Unusable Pavement Exc volume |

## USH 14 AT CREEK ROAD

| Station | Real Station | Distance | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 1053+00.00 | 105300 | 0 | 30 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1053+50.00 | 105350 | 50 | 32 | 0 | 4 | 57 | 0 | 7 | 57 | 9 | 48 |
| 1054+00.00 | 105400 | 50 | 29 | 0 | 3 | 57 | 0 | 6 | 114 | 17 | 97 |
| 1054+50.00 | 105450 | 50 | 27 | 0 | 7 | 52 | 0 | 10 | 166 | 29 | 137 |
| 1055+00.00 | 105500 | 50 | 28 | 0 | 12 | 51 | 0 | 18 | 217 | 51 | 166 |
| 1055+50.00 | 105550 | 50 | 28 | 0 | 11 | 52 | 0 | 22 | 269 | 79 | 191 |
| 1056+00.00 | 105600 | 50 | 28 | 0 | 18 | 52 | 0 | 27 | 321 | 113 | 208 |
| 1056+50.00 | 105650 | 50 | 30 | 0 | 5 | 54 | 0 | 21 | 375 | 140 | 235 |
| 1057+00.00 | 105700 | 50 | 23 | 0 | 5 | 50 | 0 | 9 | 424 | 151 | 273 |
| 1057+50.00 | 105750 | 50 | 22 | 0 | 1 | 42 | 0 | 6 | 467 | 158 | 308 |
| 1058+00.00 | 105800 | 50 | 27 | 0 | 0 | 45 | 0 | 1 | 512 | 159 | 353 |
| 1058+50.00 | 105850 | 50 | 46 | 0 | 0 | 68 | 0 | 0 | 580 | 159 | 421 |
| 1059+00.00 | 105900 | 50 | 32 | 0 | 0 | 73 | 0 | 0 | 653 | 159 | 494 |
| 1059+50.00 | 105950 | 50 | 14 | 0 | 1 | 43 | 0 | 1 | 696 | 161 | 535 |
| 1060+00.00 | 106000 | 50 | 14 | 0 | 1 | 26 | 0 | 2 | 722 | 164 | 558 |
| 1060+50.00 | 106050 | 50 | 49 | 0 | 7 | 58 | 0 | 8 | 780 | 174 | 606 |
| 1061+00.00 | 106100 | 50 | 42 | 0 | 3 | 84 | 0 | 9 | 864 | 185 | 679 |
| 1061+50.00 | 106150 | 50 | 48 | 0 | 4 | 84 | 0 | 7 | 948 | 194 | 754 |
| 1062+00.00 | 106200 | 50 | 24 | 0 | 2 | 67 | 0 | 5 | 1,015 | 200 | 815 |
| 1062+50.00 | 106250 | 50 | 16 | 0 | 3 | 37 | 0 | 4 | 1,052 | 206 | 847 |
| 1063+00.00 | 106300 | 50 | 10 | 0 | 1 | 24 | 0 | 4 | 1,076 | 211 | 866 |
| 1063+50.00 | 106350 | 50 | 17 | 0 | 2 | 25 | 0 | 3 | 1,101 | 214 | 887 |
| 1063+65.00 | 106365 | 15 | 13 | 0 | 1 | 8 | 0 | 1 | 1,110 | 215 | 895 |
| | | | | TOTALS | | 1,110 | 0 | 172 | | | |

Notes:

| | |
|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material |
| 2 - Salvaged/Unusable Pavement Material | This does not show up in cross sections |
| 3 - Fill | Does not include Unusable Pavement Exc volume |

## USH 14 AT FOUNDRY ROAD

| Station | Real Station | Distance | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 1087+37.31 | 108737 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1087+50.00 | 108750 | 13 | 8 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 4 |
| 1088+00.00 | 108800 | 50 | 17 | 0 | 0 | 23 | 0 | 0 | 27 | 0 | 27 |
| 1088+50.00 | 108850 | 50 | 25 | 0 | 0 | 38 | 0 | 0 | 65 | 0 | 65 |
| 1088+89.33 | 108889 | 39 | 30 | 0 | 0 | 40 | 0 | 0 | 105 | 0 | 105 |
| 1089+00.00 | 108900 | 11 | 30 | 0 | 0 | 12 | 0 | 0 | 117 | 0 | 117 |
| 1089+50.00 | 108950 | 50 | 32 | 0 | 0 | 57 | 0 | 0 | 174 | 0 | 174 |
| 1090+00.00 | 109000 | 50 | 30 | 0 | 0 | 57 | 0 | 0 | 232 | 0 | 232 |
| 1090+50.00 | 109050 | 50 | 32 | 0 | 0 | 58 | 0 | 0 | 290 | 0 | 290 |
| 1090+90.00 | 109090 | 40 | 36 | 0 | 0 | 51 | 0 | 0 | 340 | 0 | 340 |
| 1091+00.00 | 109100 | 10 | 37 | 0 | 0 | 14 | 0 | 0 | 354 | 0 | 354 |
| 1091+50.00 | 109150 | 50 | 34 | 0 | 0 | 66 | 0 | 0 | 420 | 0 | 420 |
| 1092+00.00 | 109200 | 50 | 38 | 0 | 0 | 67 | 0 | 0 | 487 | 0 | 487 |
| 1092+50.00 | 109250 | 50 | 29 | 0 | 0 | 63 | 0 | 0 | 550 | 0 | 550 |
| 1093+00.00 | 109300 | 50 | 25 | 0 | 0 | 51 | 0 | 0 | 600 | 0 | 600 |
| 1093+50.00 | 109350 | 50 | 28 | 0 | 0 | 49 | 0 | 0 | 650 | 0 | 650 |
| 1094+00.00 | 109400 | 50 | 26 | 0 | 0 | 50 | 0 | 0 | 699 | 0 | 699 |
| 1094+06.94 | 109407 | 7 | 26 | 0 | 0 | 7 | 0 | 0 | 706 | 0 | 706 |
| 1094+50.00 | 109450 | 43 | 21 | 0 | 0 | 37 | 0 | 0 | 743 | 0 | 743 |
| 1095+00.00 | 109500 | 50 | 14 | 0 | 0 | 32 | 0 | 0 | 775 | 0 | 775 |
| 1095+50.00 | 109550 | 50 | 7 | 0 | 0 | 20 | 0 | 0 | 795 | 0 | 795 |
| 1095+56.94 | 109557 | 7 | 7 | 0 | 0 | 2 | 0 | 0 | 797 | 0 | 797 |
| | | | | TOTALS | | 797 | 797 | 0 | | | |

Notes:

| | |
|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material |
| 2 - Salvaged/Unusable Pavement Material | This does not show up in cross sections |
| 3 - Fill | Does not include Unusable Pavement Exc volume |

## CREEK ROAD

| Station | Real Station | Distance | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 14+32.00 | 1432 | 0 | 33 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14+50.00 | 1450 | 18 | 34 | 7 | 0 | 22 | 5 | 0 | 22 | 0 | 17 |
| 15+00.00 | 1500 | 50 | 58 | 7 | 2 | 85 | 14 | 2 | 108 | 2 | 87 |
| 15+50.00 | 1550 | 50 | 52 | 7 | 29 | 101 | 14 | 29 | 209 | 38 | 139 |
| 16+00.00 | 1600 | 50 | 66 | 7 | 0 | 109 | 14 | 27 | 317 | 72 | 200 |
| 16+50.00 | 1650 | 50 | 1 | 7 | 3 | 62 | 14 | 3 | 379 | 76 | 245 |
| 17+00.00 | 1700 | 50 | 51 | 7 | 0 | 0 | 14 | 0 | 379 | 76 | 279 |
| 17+50.00 | 1750 | 50 | 60 | 7 | 5 | 103 | 14 | 5 | 482 | 82 | 362 |
| 18+00.00 | 1800 | 50 | 123 | 7 | 2 | 169 | 14 | 7 | 651 | 91 | 509 |
| 18+50.00 | 1850 | 50 | 84 | 7 | 0 | 191 | 14 | 2 | 842 | 93 | 684 |
| 19+00.00 | 1900 | 50 | 67 | 7 | 0 | 139 | 14 | 0 | 982 | 93 | 810 |
| 19+28.00 | 1928 | 28 | 0 | 7 | 0 | 35 | 8 | 0 | 1,016 | 93 | 837 |
| | | | | TOTALS | | 1,016 | 135 | 74 | | | |

## CTH C

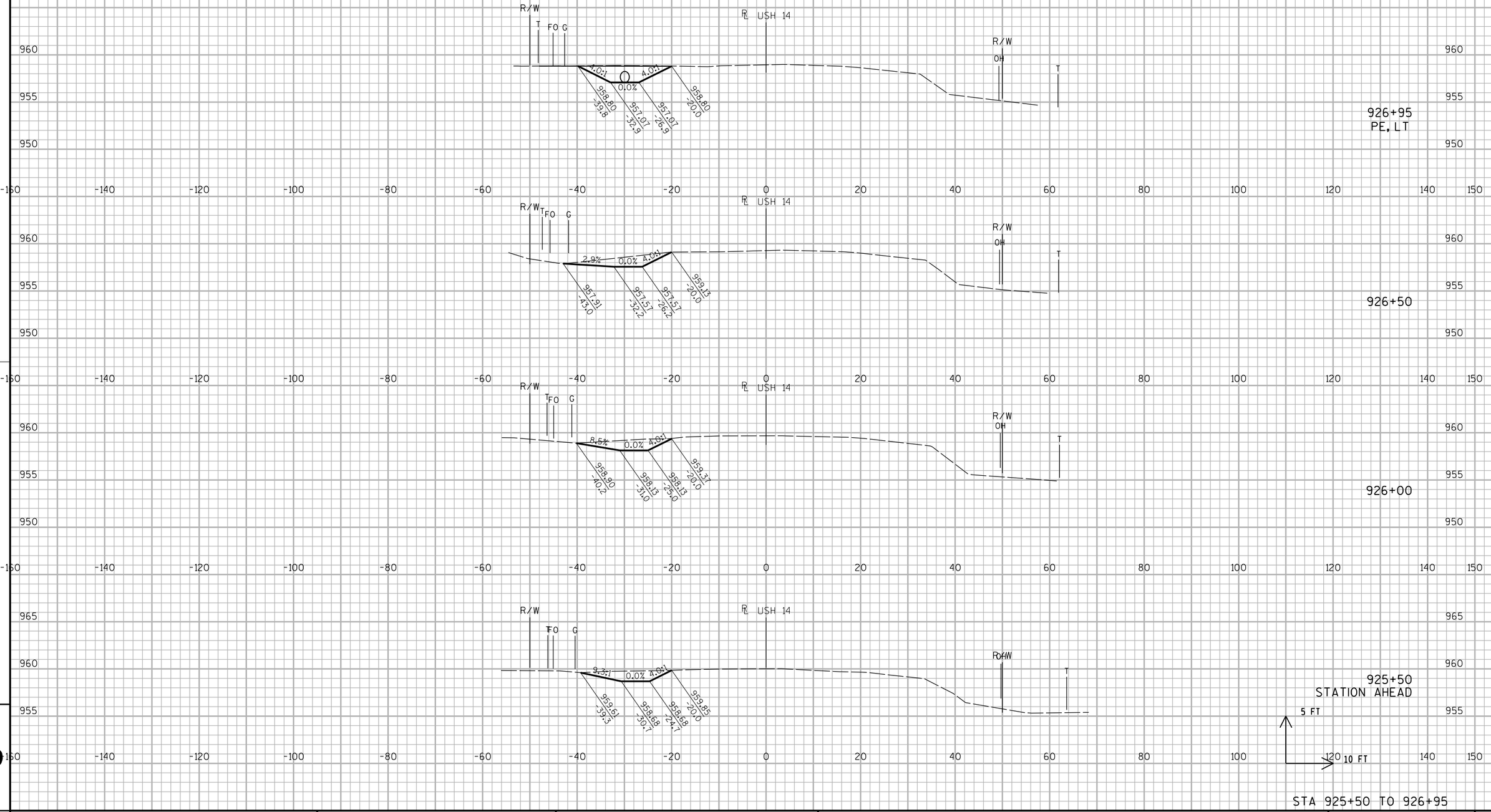
| Station | Real Station | Distance | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | Mass Ordinate |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 43+50.00 | 4350 | 0 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 44+00.00 | 4400 | 50 | 39 | 0 | 0 | 74 | 0 | 0 | 74 | 0 | 75 |
| 44+50.00 | 4450 | 50 | 20 | 0 | 8 | 55 | 0 | 8 | 128 | 10 | 120 |
| 45+00.00 | 4500 | 50 | 11 | 0 | 31 | 28 | 0 | 36 | 157 | 54 | 104 |
| 45+50.00 | 4550 | 50 | 2 | 0 | 77 | 11 | 0 | 100 | 168 | 180 | -10 |
| 45+75.00 | 4575 | 25 | 20 | 0 | 5 | 13 | 0 | 49 | 181 | 240 | -61 |
| | | | | TOTALS | | 181 | 0 | 192 | | | |

Notes:

| | |
|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material |
| 2 - Salvaged/Unusable Pavement Material | This does not show up in cross sections |
| 3 - Fill | Does not include Unusable Pavement Exc volume |

| DNR PARKING LOT | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AREA (SF) | | | Incremental Vol (CY) (Unadjusted) | | | Cumulative Vol (CY) | | |
| Station | Real Station | Distance | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut | Salvaged/ Unusable Pavement Material | Fill | Cut 1.00 | Expanded Fill 1.25 | Mass Ordinate |
| | | | | | | Note 1 | Note 2 | Note 3 | Note 1 | | |
| 0+22.00 | 22 | 0 | 0 | 0 | 277 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0+30.00 | 30 | 8 | 0 | 0 | 285 | 0 | 0 | 83 | 0 | 104 | -104 |
| 0+40.00 | 40 | 10 | 64 | 0 | 5 | 12 | 0 | 54 | 12 | 171 | -159 |
| 0+50.00 | 50 | 10 | 385 | 0 | 2 | 83 | 0 | 1 | 95 | 173 | -78 |
| 0+60.00 | 60 | 10 | 369 | 0 | 15 | 140 | 0 | 3 | 234 | 177 | 57 |
| 0+70.00 | 70 | 10 | 335 | 0 | 46 | 130 | 0 | 11 | 365 | 191 | 174 |
| 0+80.00 | 80 | 10 | 219 | 0 | 8 | 103 | 0 | 10 | 467 | 204 | 264 |
| 0+90.00 | 90 | 10 | 233 | 0 | 0 | 84 | 0 | 1 | 551 | 205 | 345 |
| 1+00.00 | 100 | 10 | 69 | 0 | 31 | 56 | 0 | 6 | 607 | 213 | 394 |
| 1+10.00 | 110 | 10 | 46 | 0 | 105 | 21 | 0 | 25 | 628 | 244 | 384 |
| 1+20.00 | 120 | 10 | 0 | 0 | 176 | 9 | 0 | 52 | 637 | 309 | 327 |
| 1+30.00 | 130 | 10 | 0 | 0 | 263 | 0 | 0 | 81 | 637 | 411 | 226 |
| 1+40.00 | 140 | 10 | 0 | 0 | 168 | 0 | 0 | 80 | 637 | 511 | 126 |
| 1+50.00 | 150 | 10 | 0 | 0 | 105 | 0 | 0 | 50 | 637 | 574 | 63 |
| 1+60.00 | 160 | 10 | 0 | 0 | 26 | 0 | 0 | 24 | 637 | 604 | 33 |
| 1+63.82 | 164 | 4 | 0 | 0 | 5 | 0 | 0 | 2 | 637 | 607 | 30 |
| | | | | TOTALS | | 637 | 0 | 485 | | | |

| Notes: | |
|---|---|
| 1 - Cut | Cut includes Salvaged/Unusable Pavement material |
| 2 - Salvaged/Unusable Pavement Material | This does not show up in cross sections |
| 3 - Fill | Does not include Unusable Pavement Exc volume |




STA 925+50 TO 926+95

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 281 | E |
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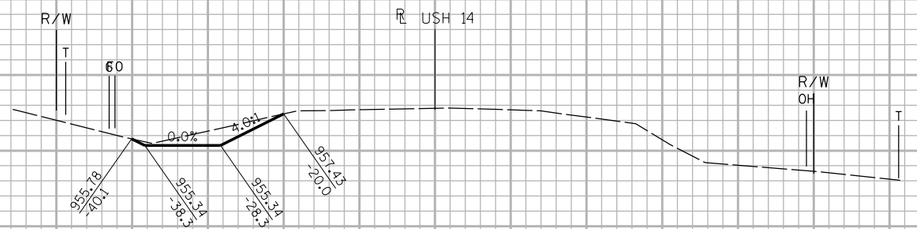
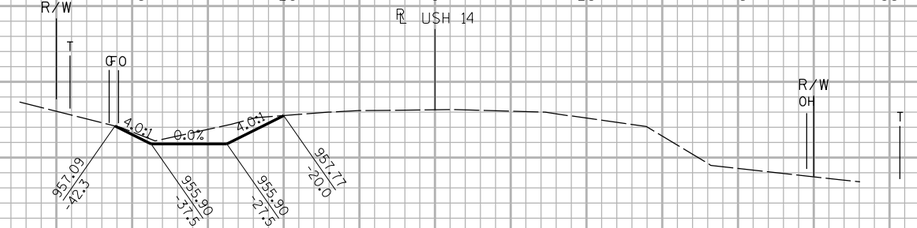
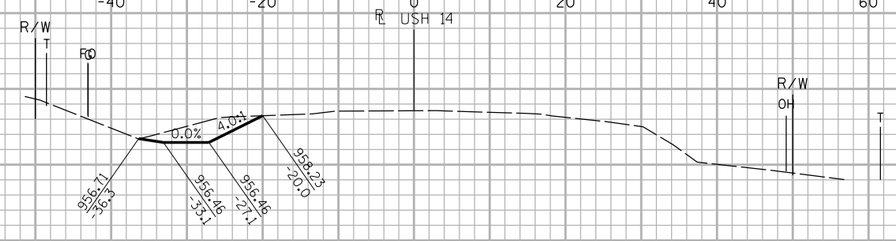
WISDOT/CADDS SHEET 21



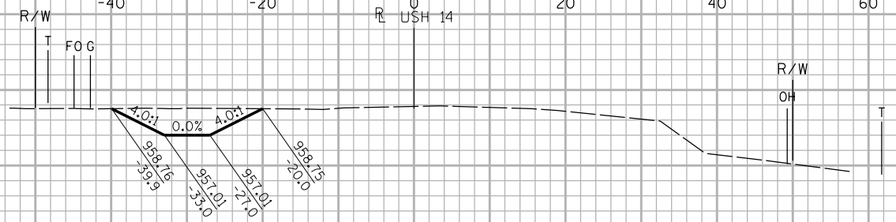

928+50



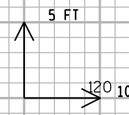

928+00




927+50




927+00




STA 927+00 TO 928+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 282 | E |
|---|---|---|---|---|---|

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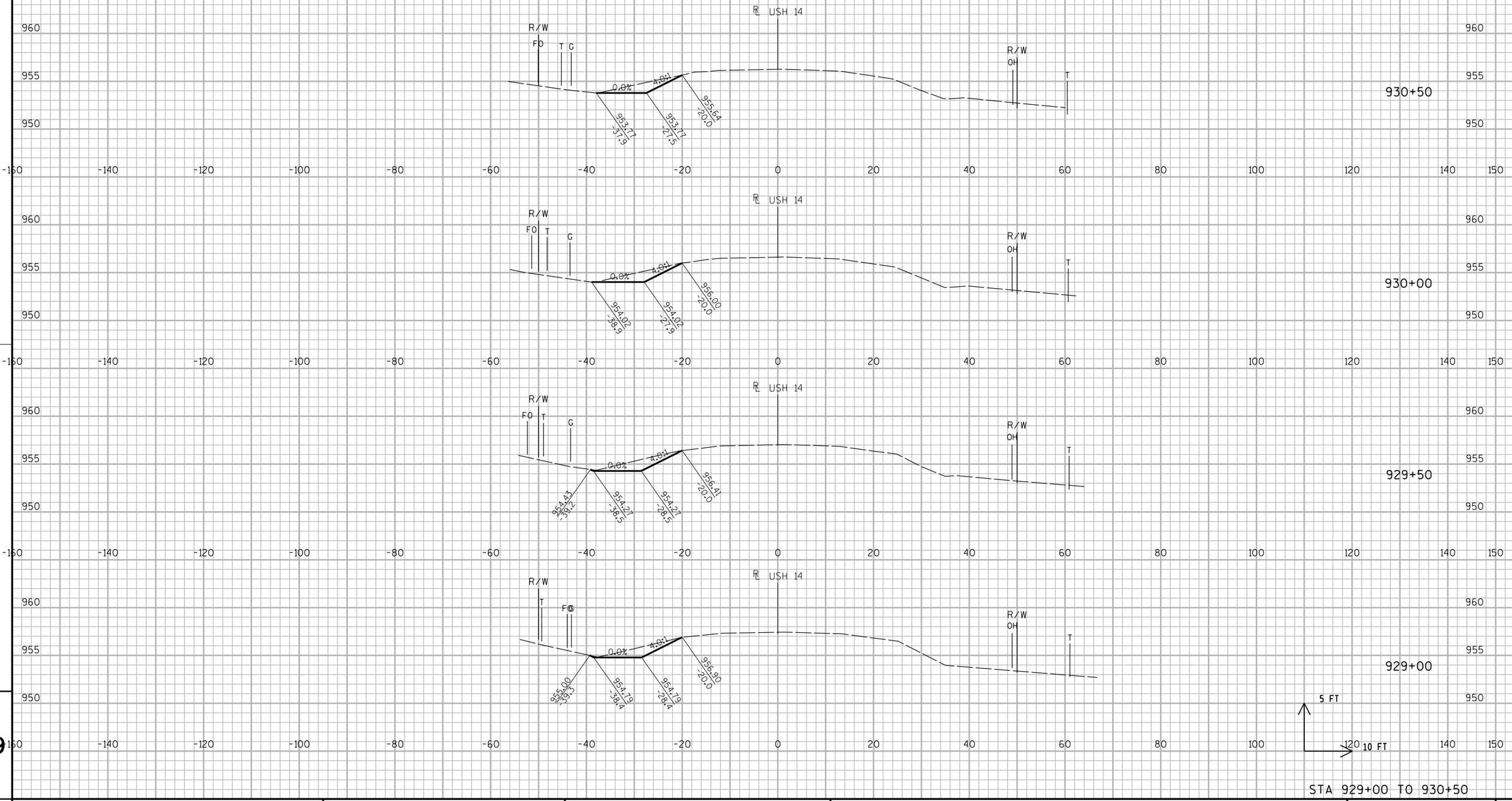
WISDOT/CADDS SHEET 21




9

9

STA 929+00 TO 930+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 283 | E |
|---|---|---|---|---|---|

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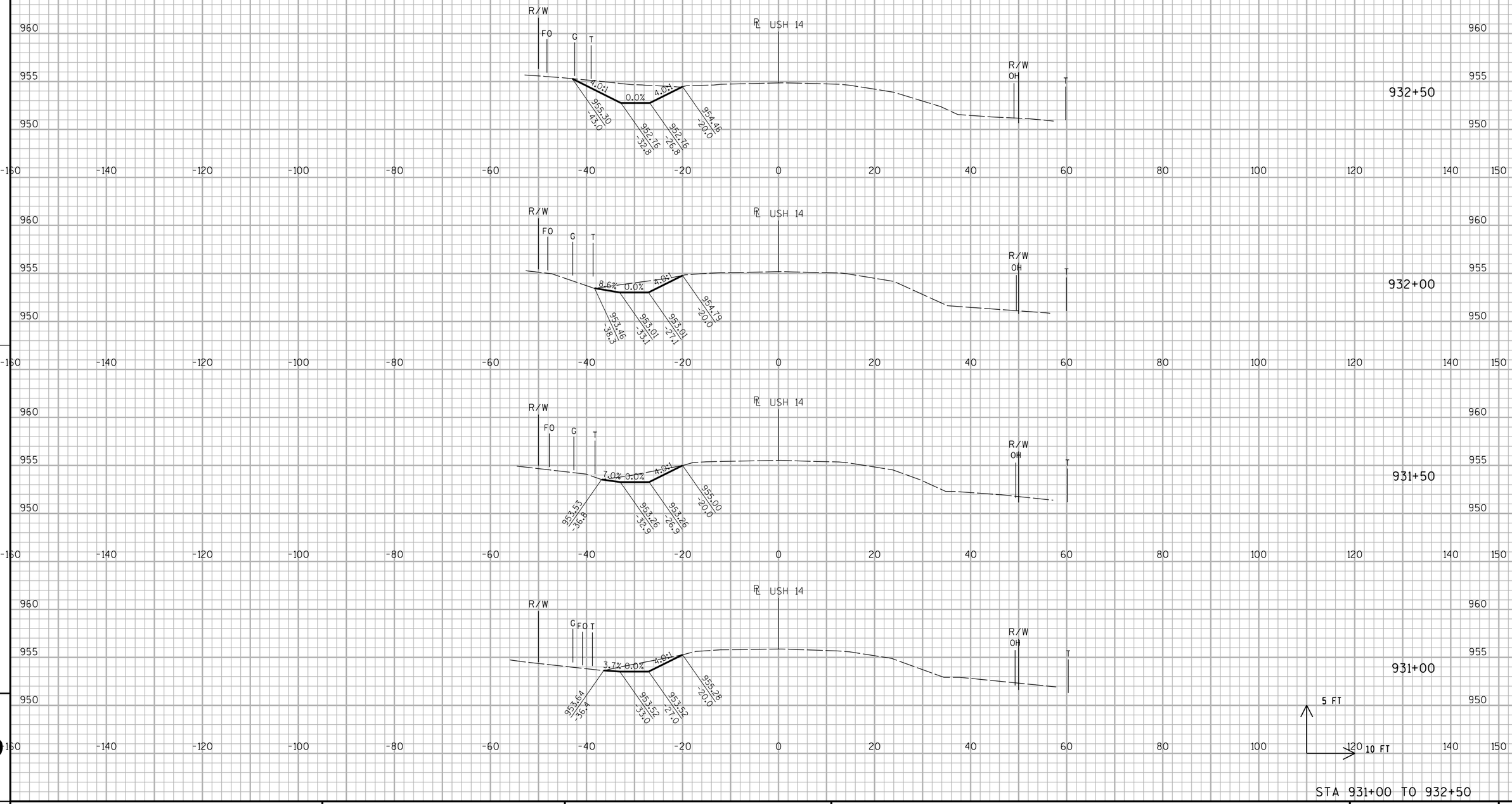
WISDOT/CADDS SHEET 21




STA 931+00 TO 932+50

9

9

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 284 | E |
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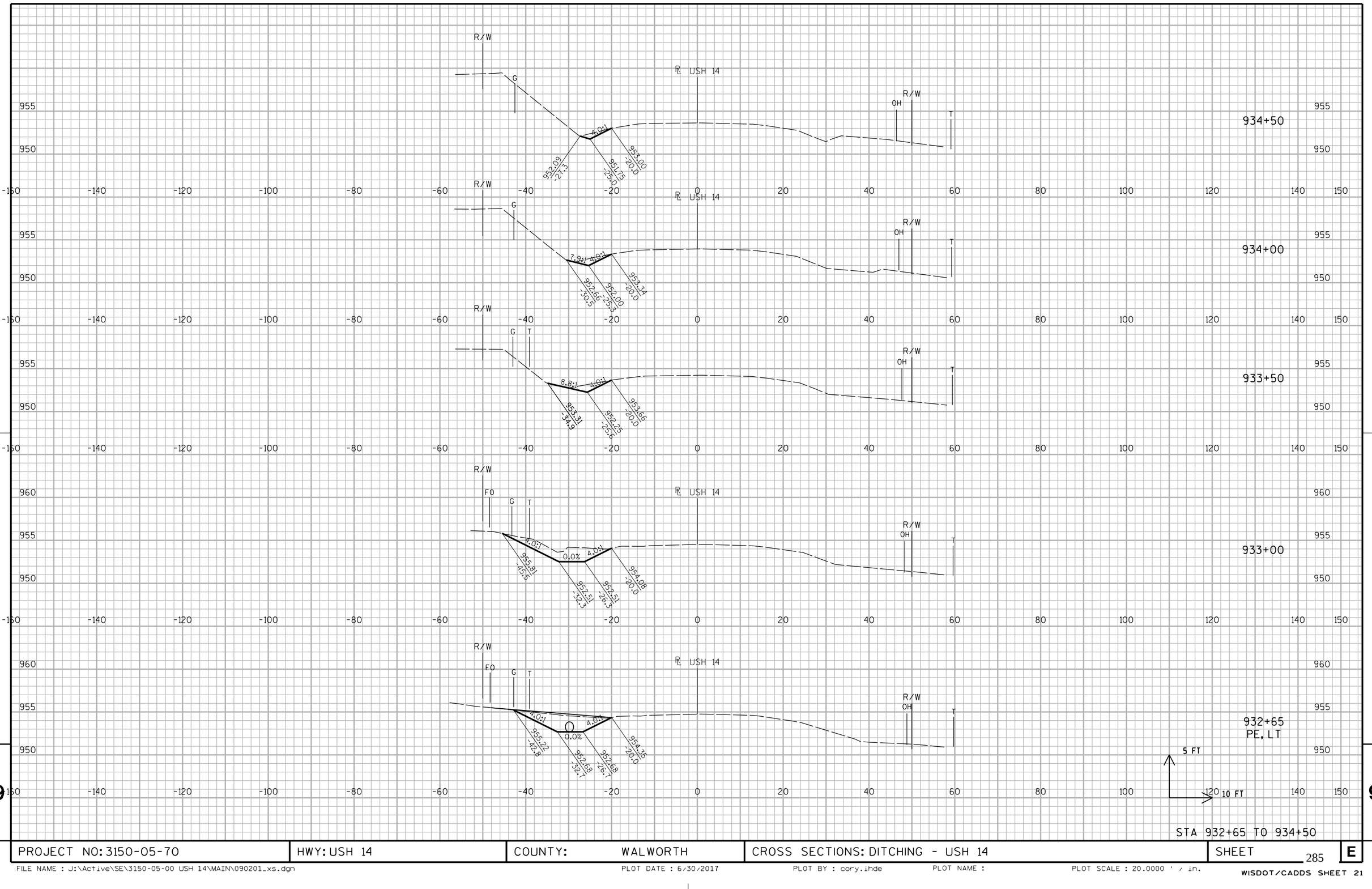


| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 285 | E |
|---|---|---|---|---|---|

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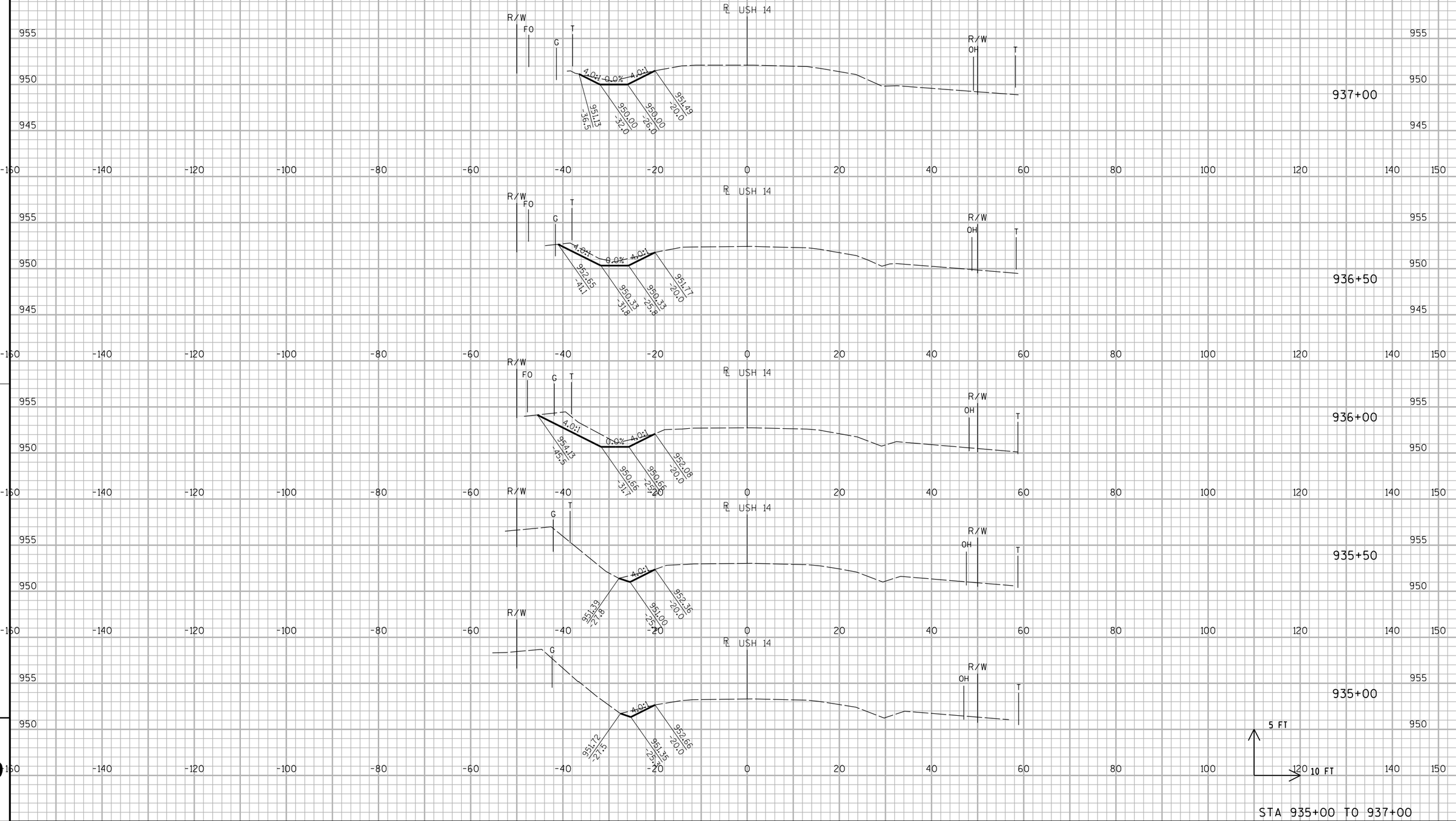
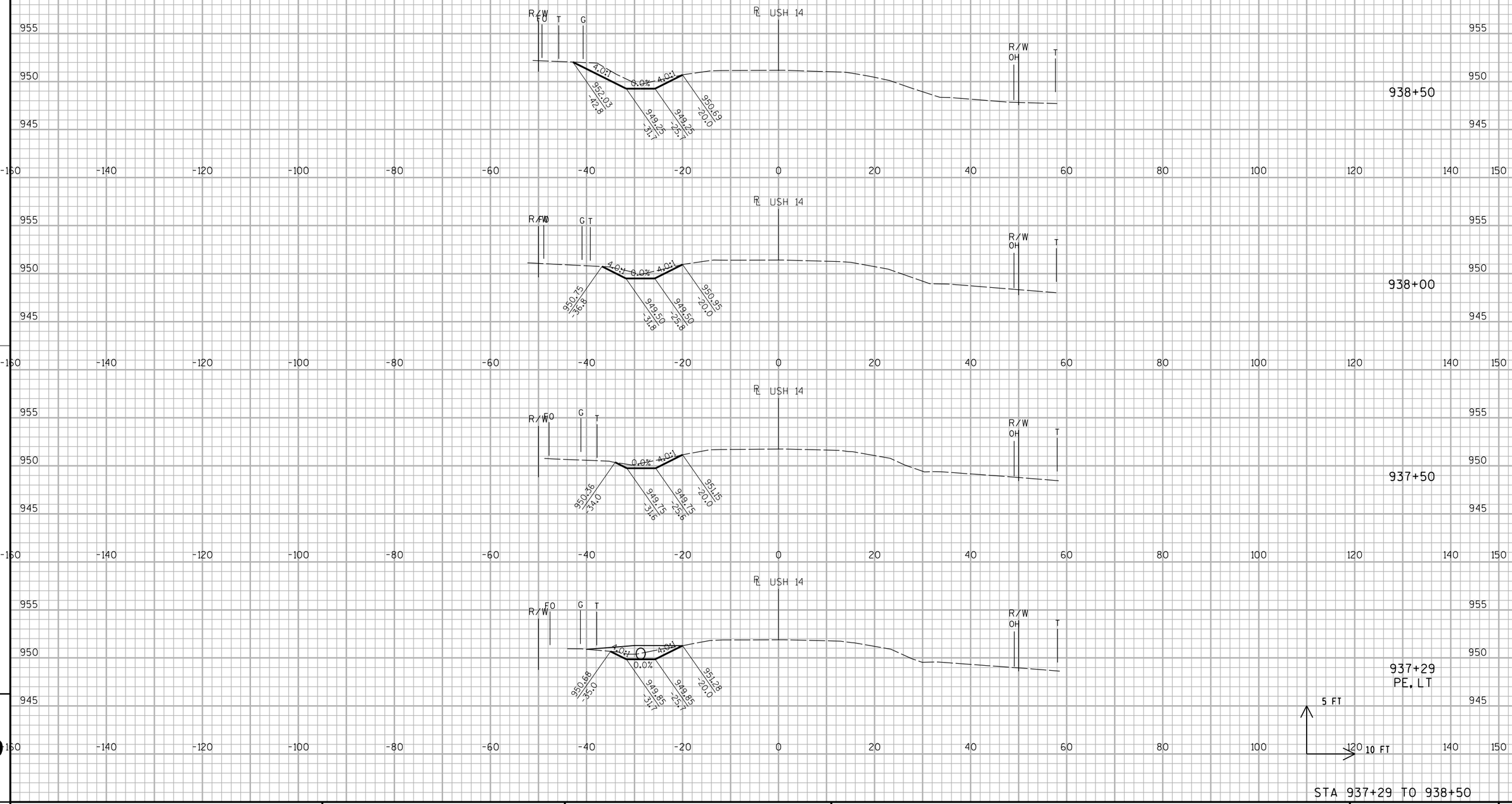
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 286 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21




STA 937+29 TO 938+50

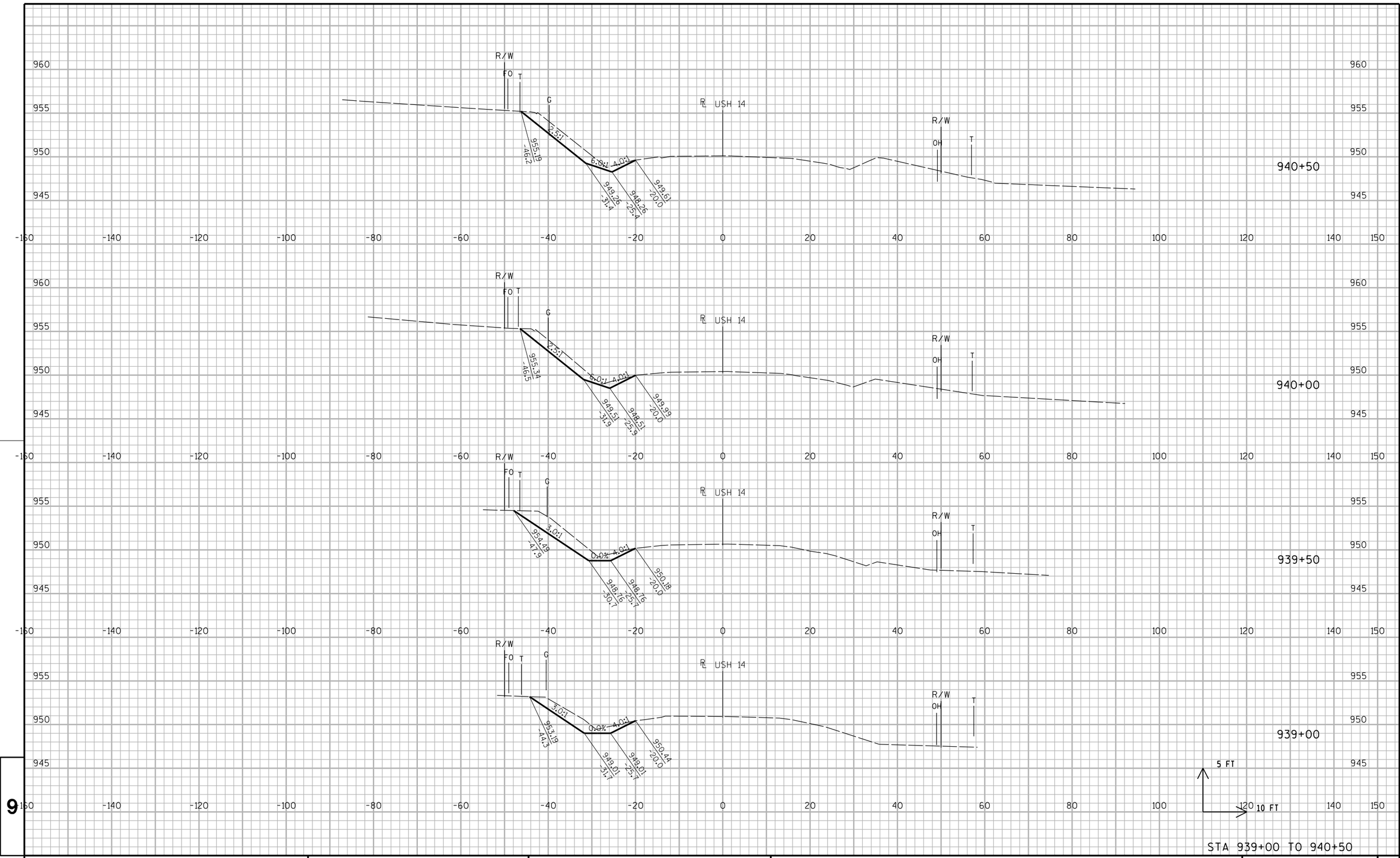
9

9

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 287 | E |
|---|---|---|---|---|---|

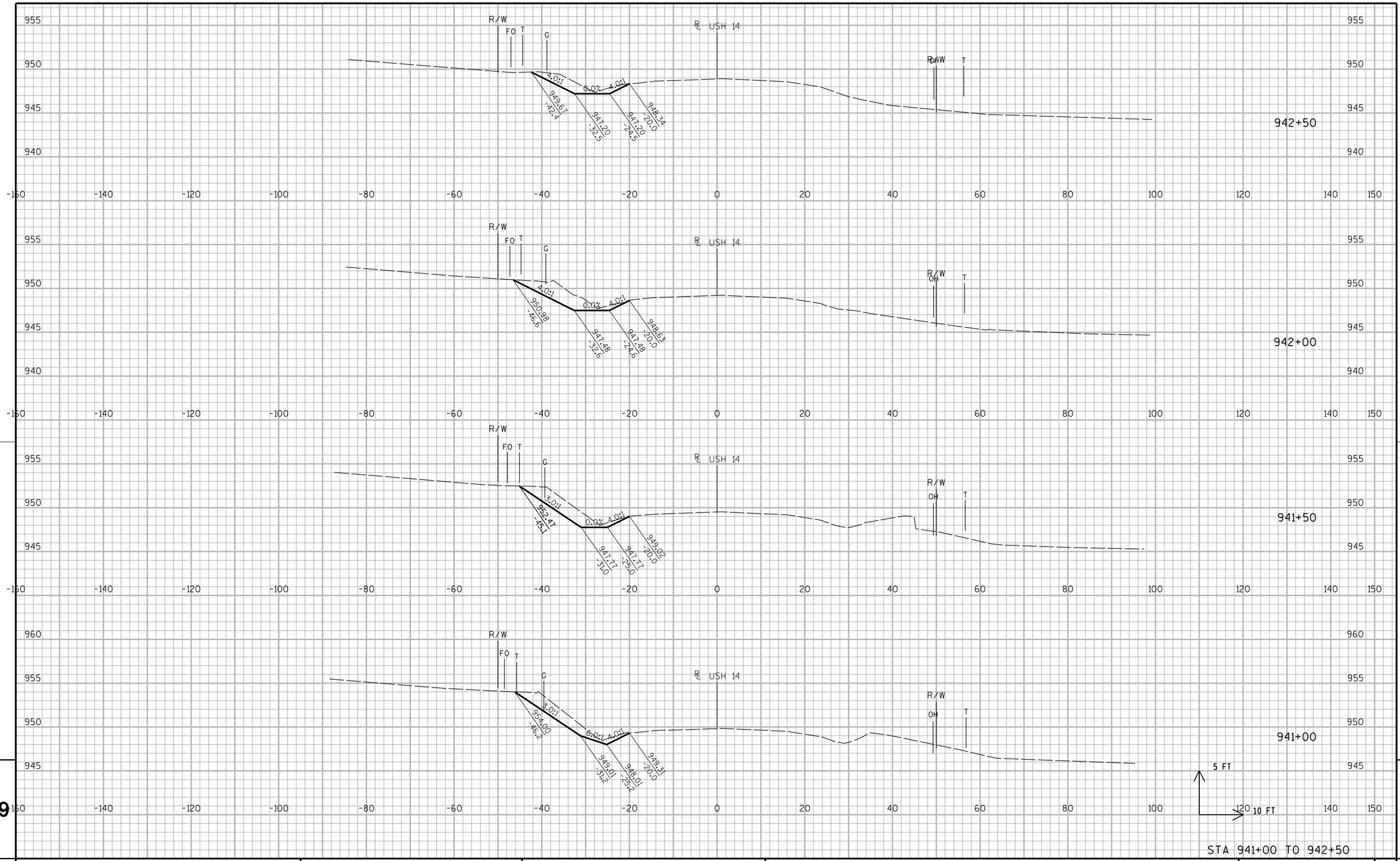
FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21




STA 939+00 TO 940+50

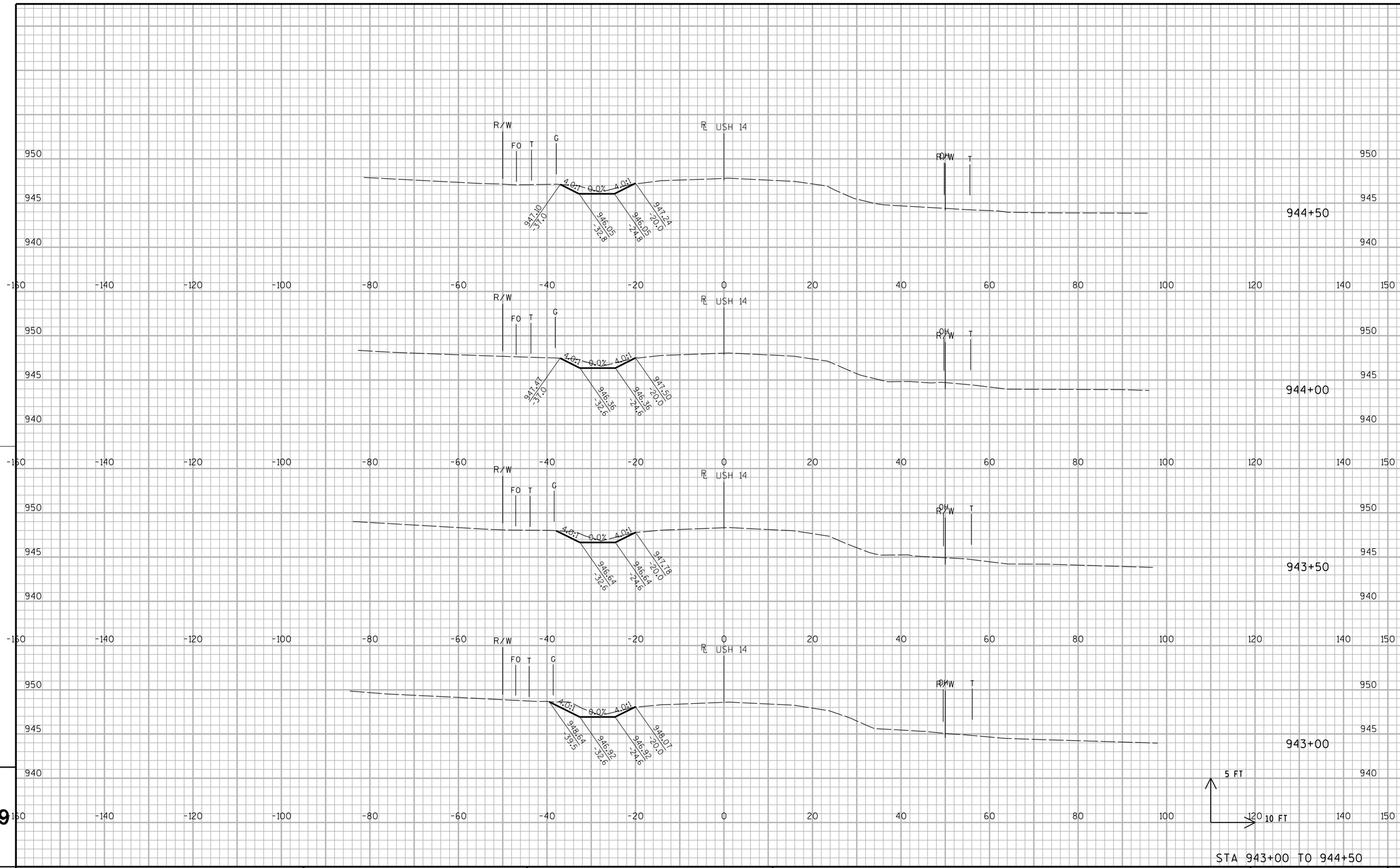
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 288 | E |
|---|---|---|---|---|---|




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 289 | E |
|---|---|---|---|---|---|

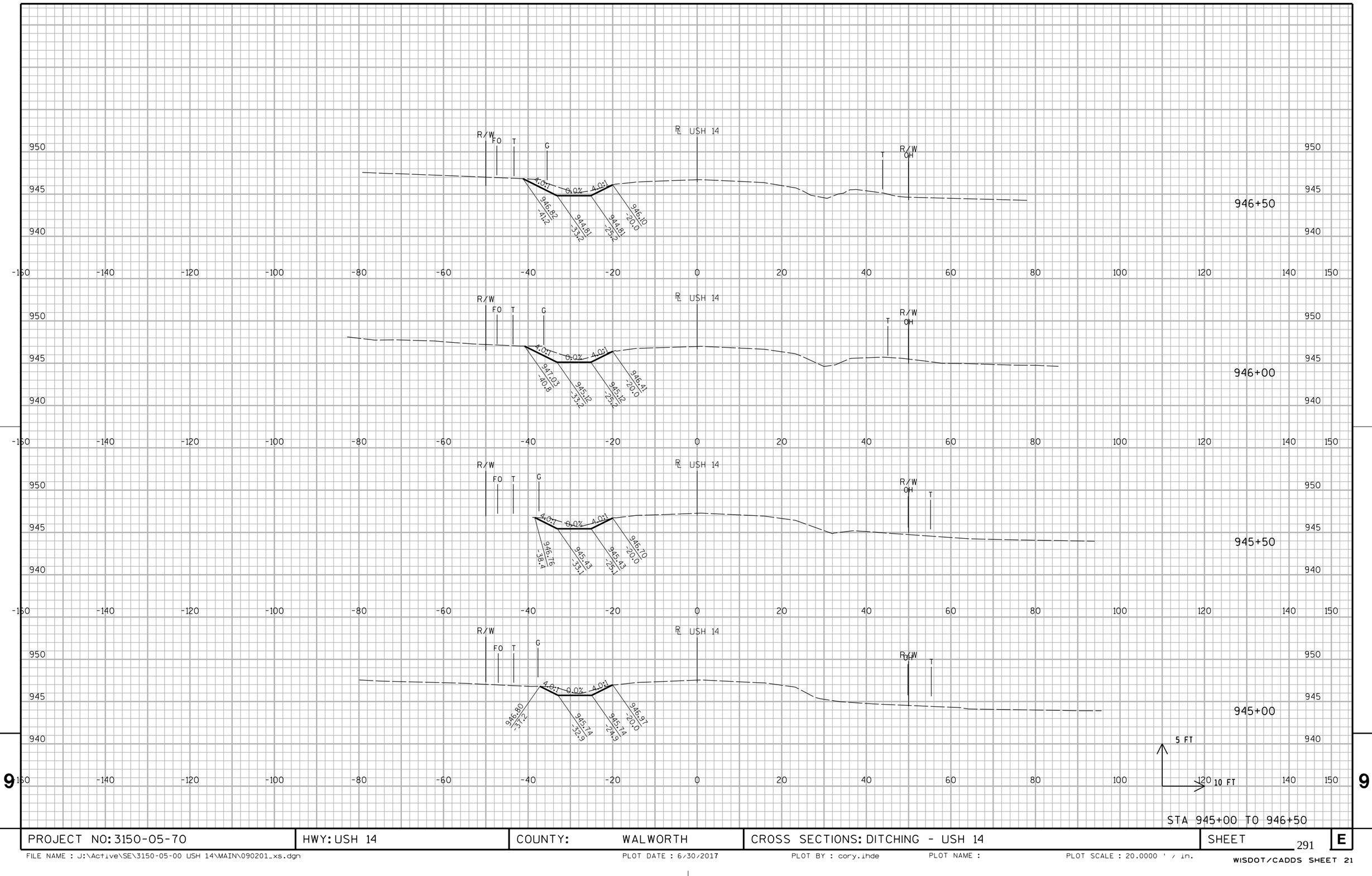
FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21




STA 943+00 TO 944+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 290 | E |
|---|---|---|---|---|---|




9

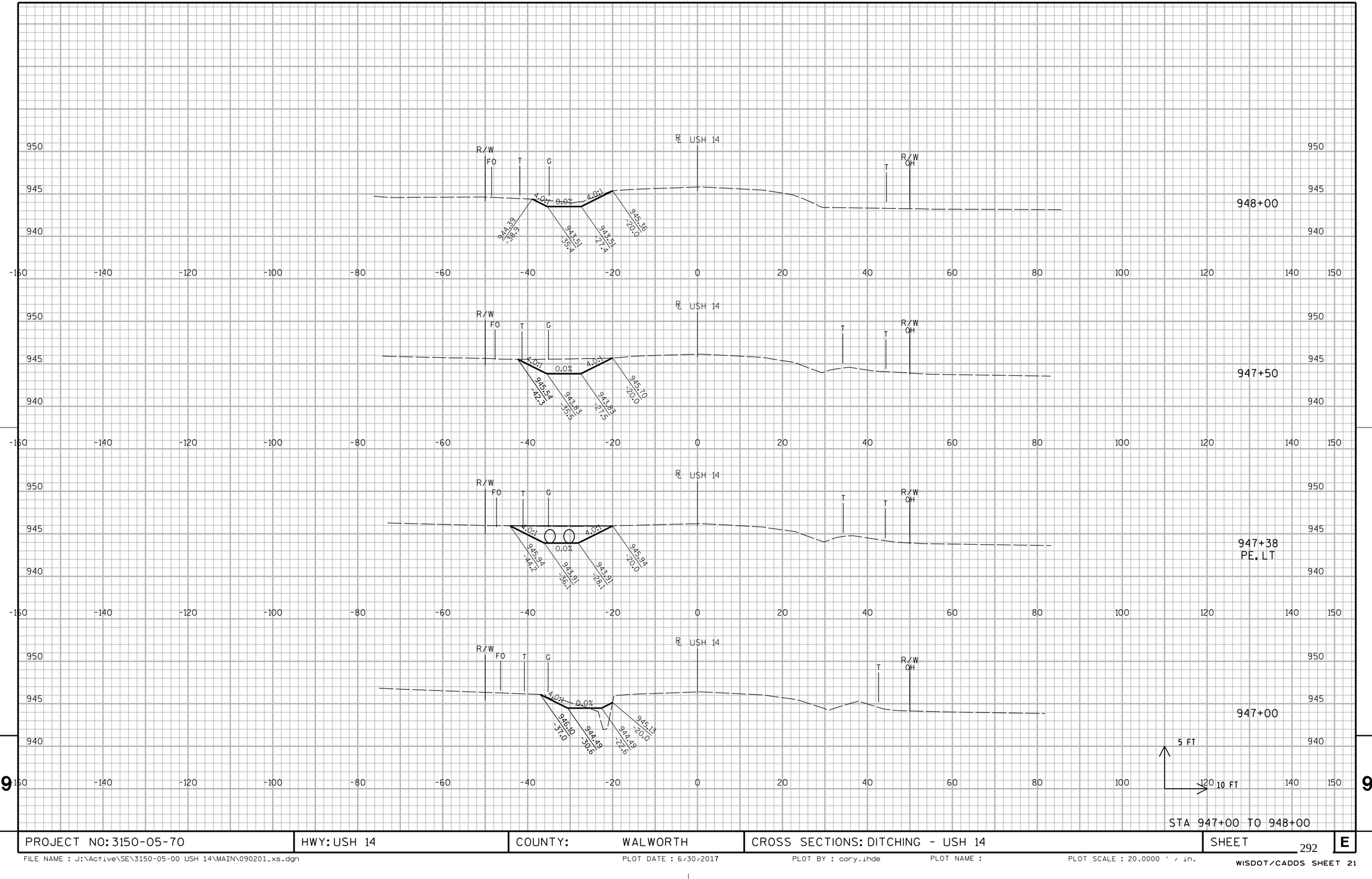
STA 945+00 TO 946+50

9

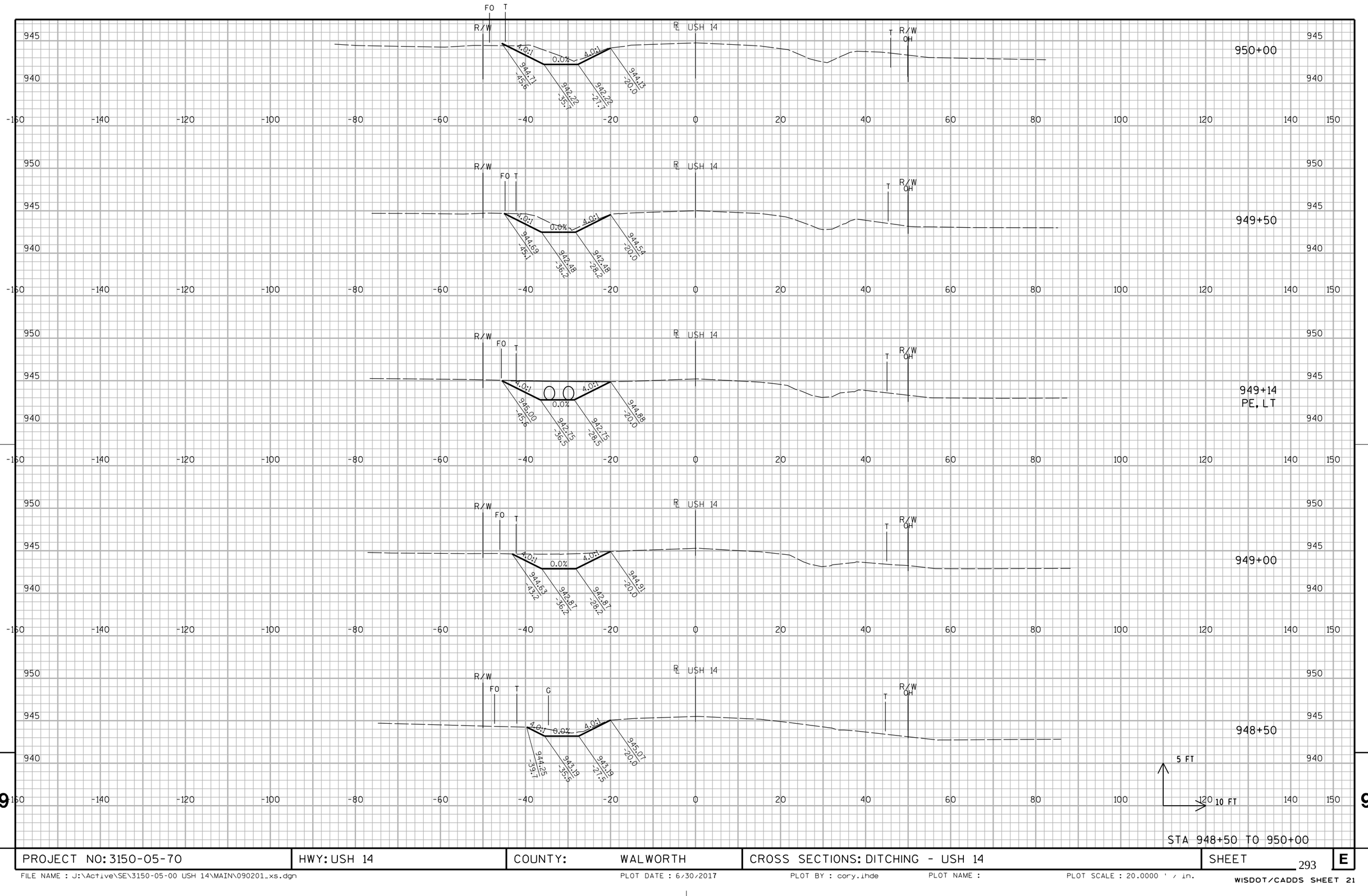
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 291 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

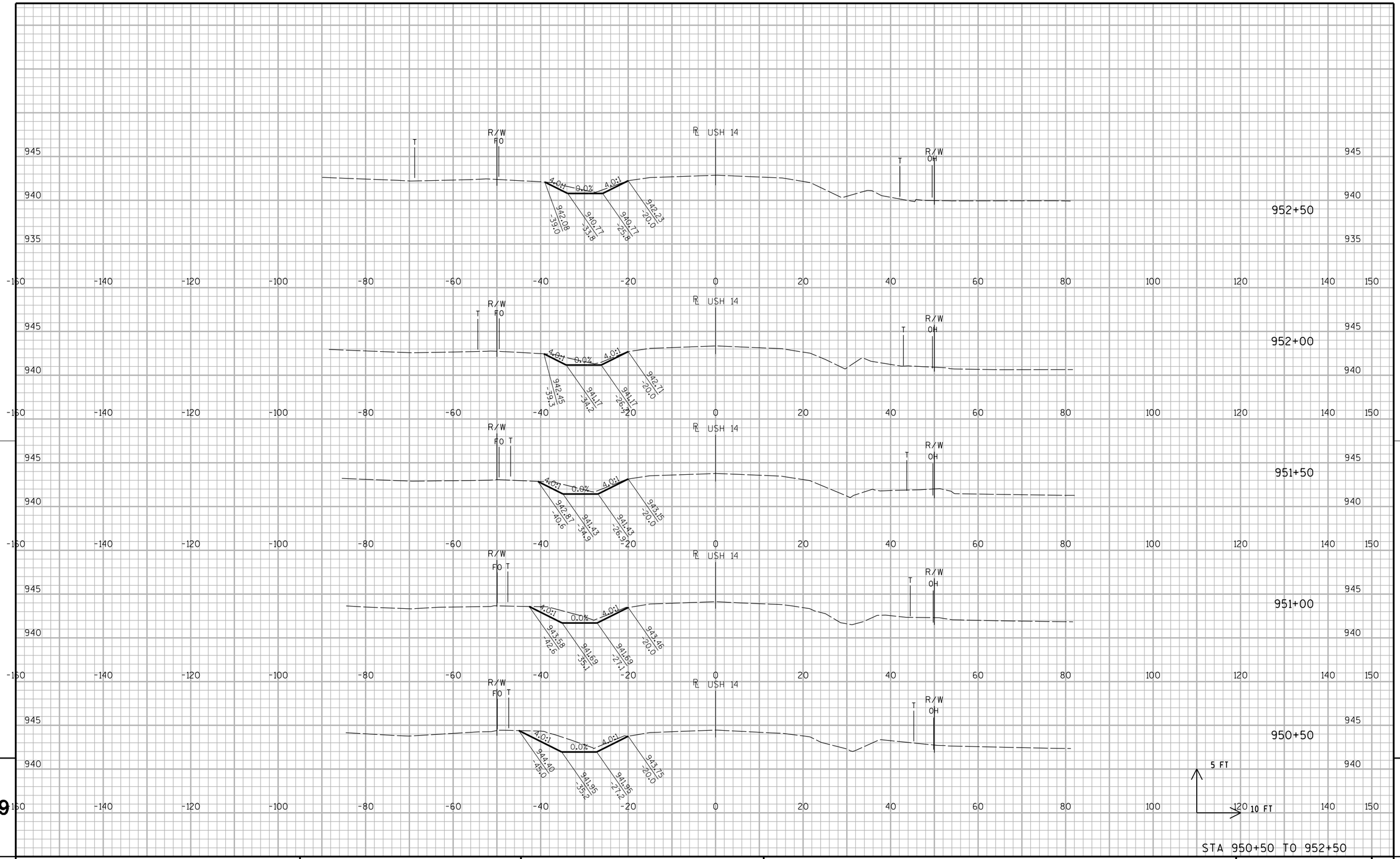
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 292 | E |
|---|---|---|---|---|---|

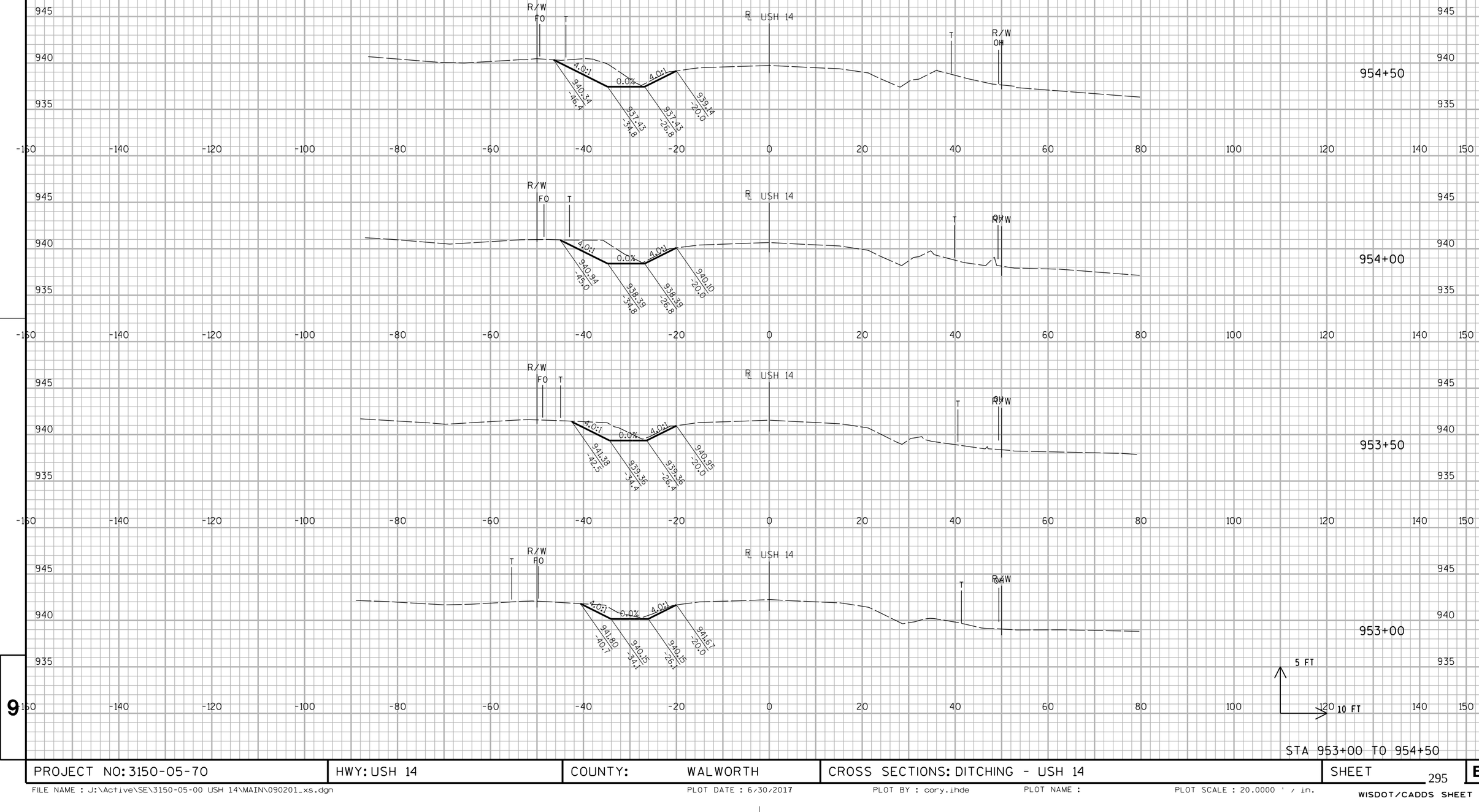



| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 293 | E |
|---|---|---|---|---|---|



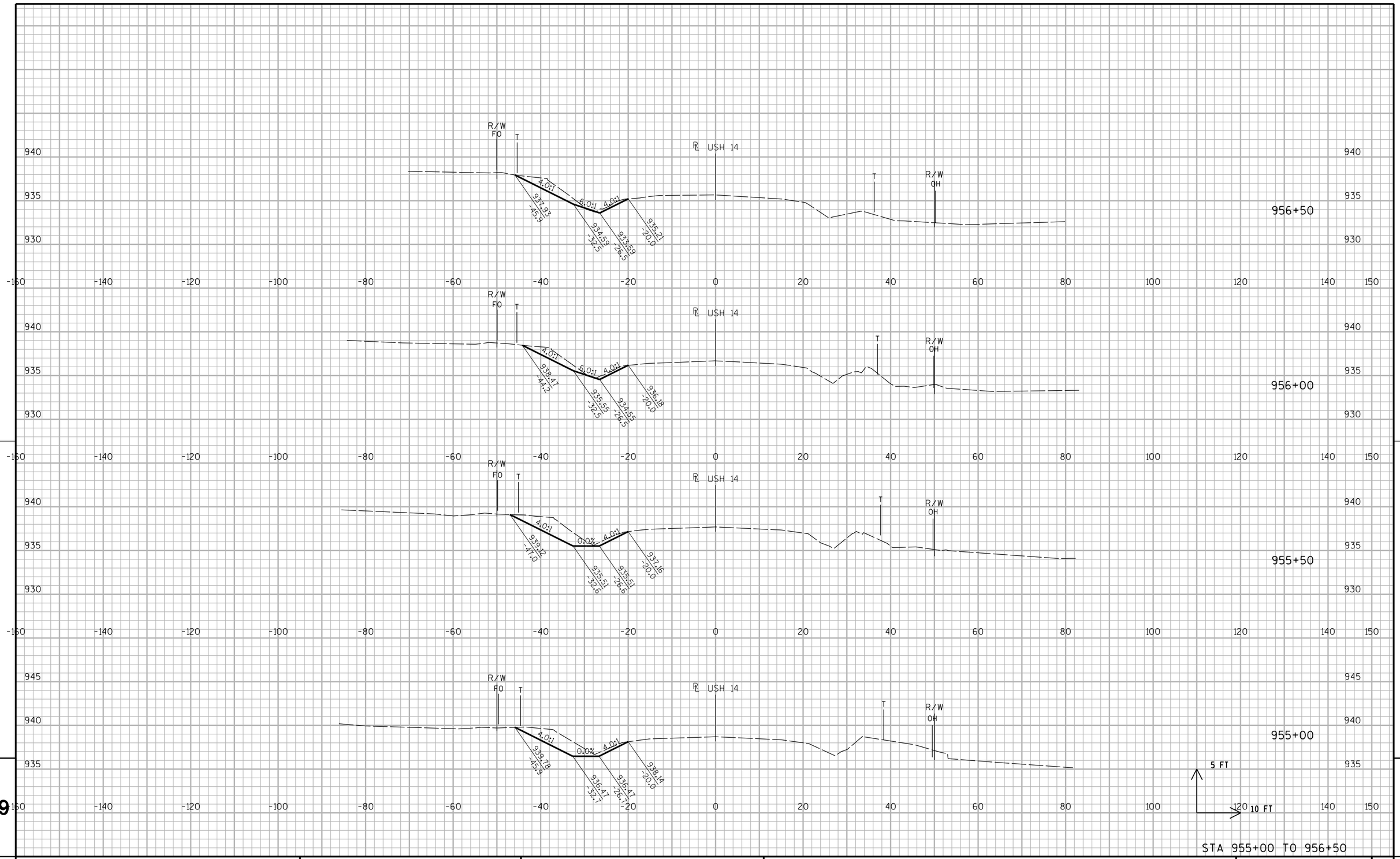

STA 950+50 TO 952+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 294 | E |
|---|---|---|---|---|---|



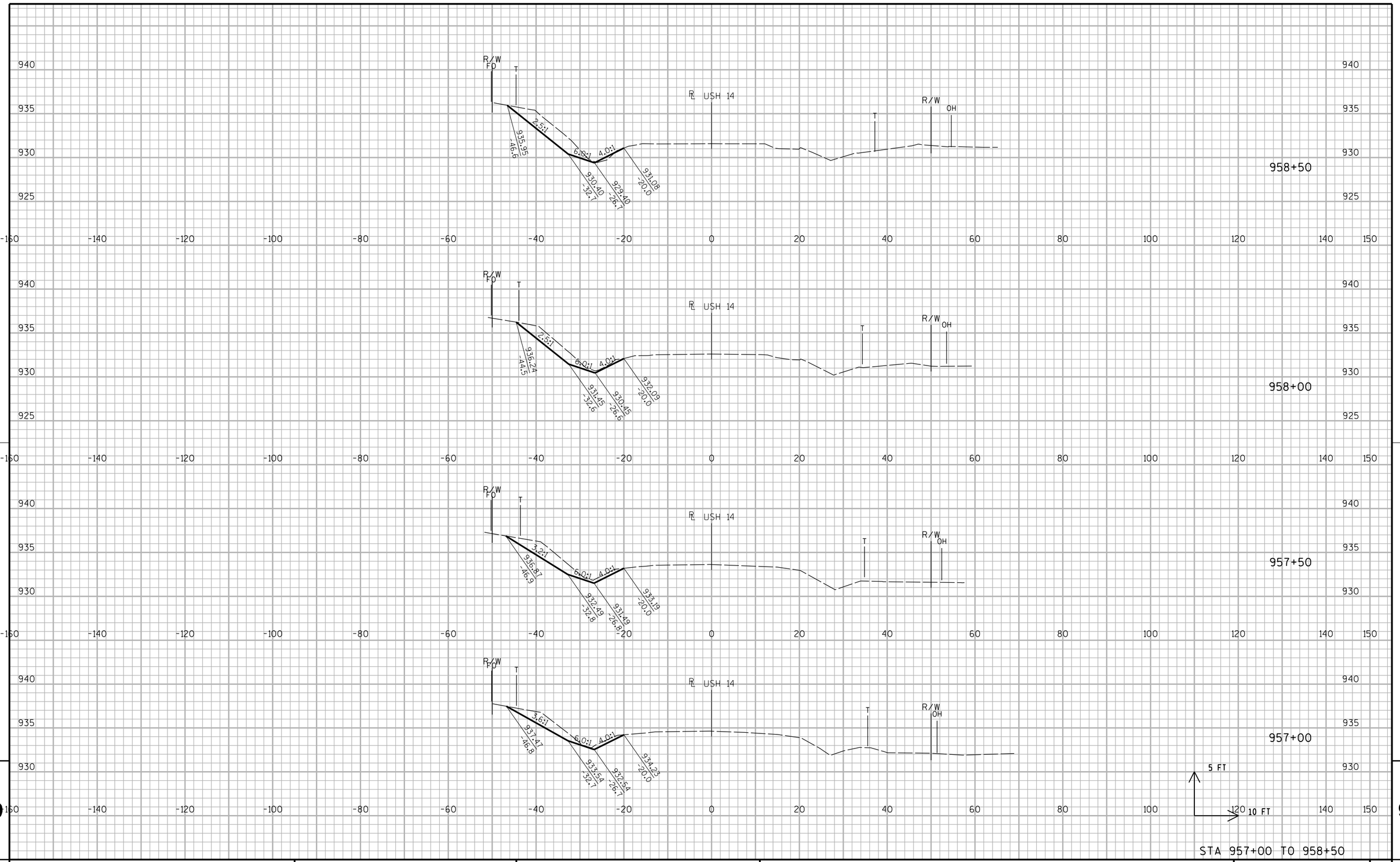

STA 953+00 TO 954+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 295 | E |
|---|---|---|---|---|---|




STA 955+00 TO 956+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 296 | E |
|---|---|---|---|---|---|

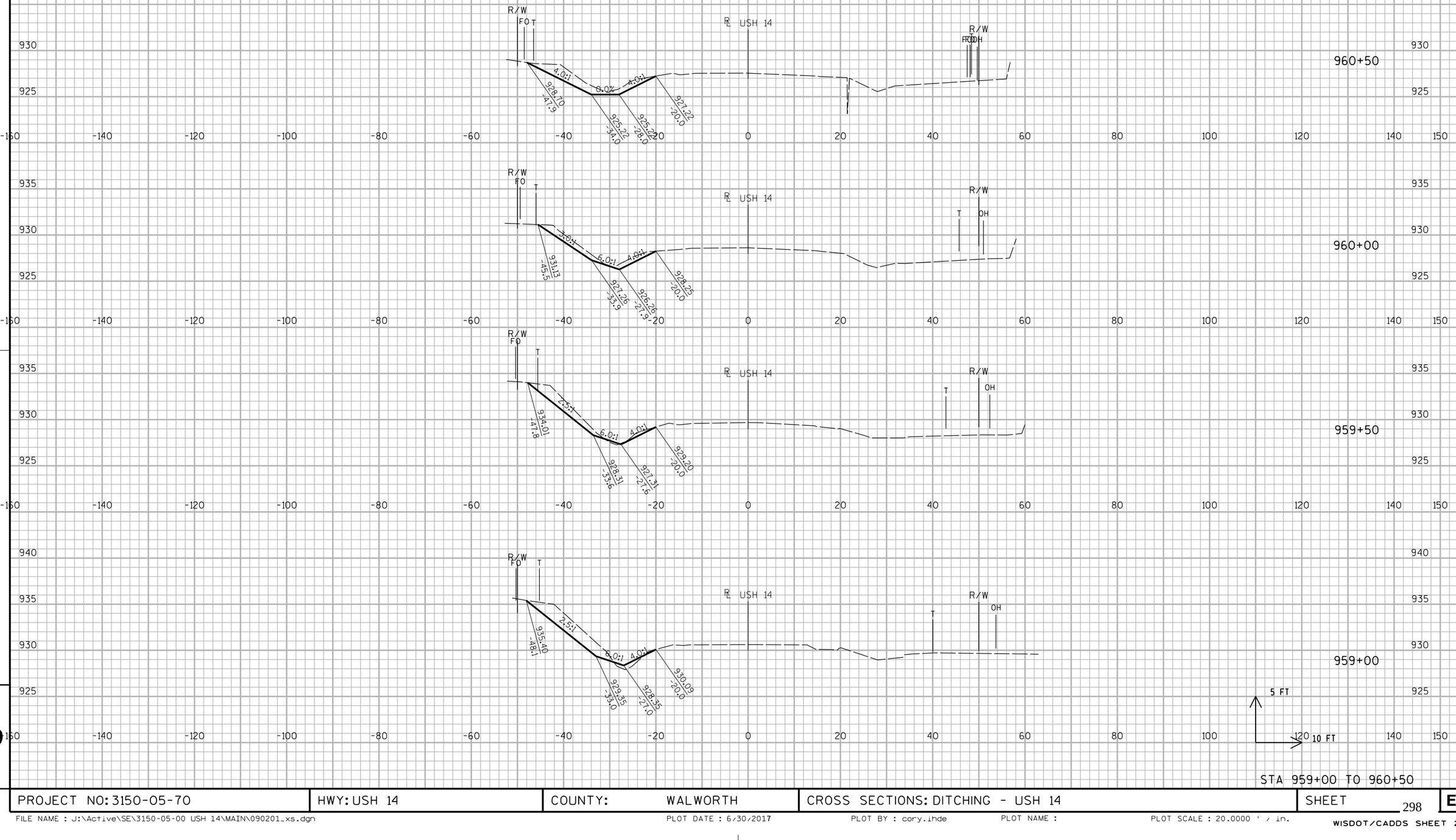



STA 957+00 TO 958+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 297 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

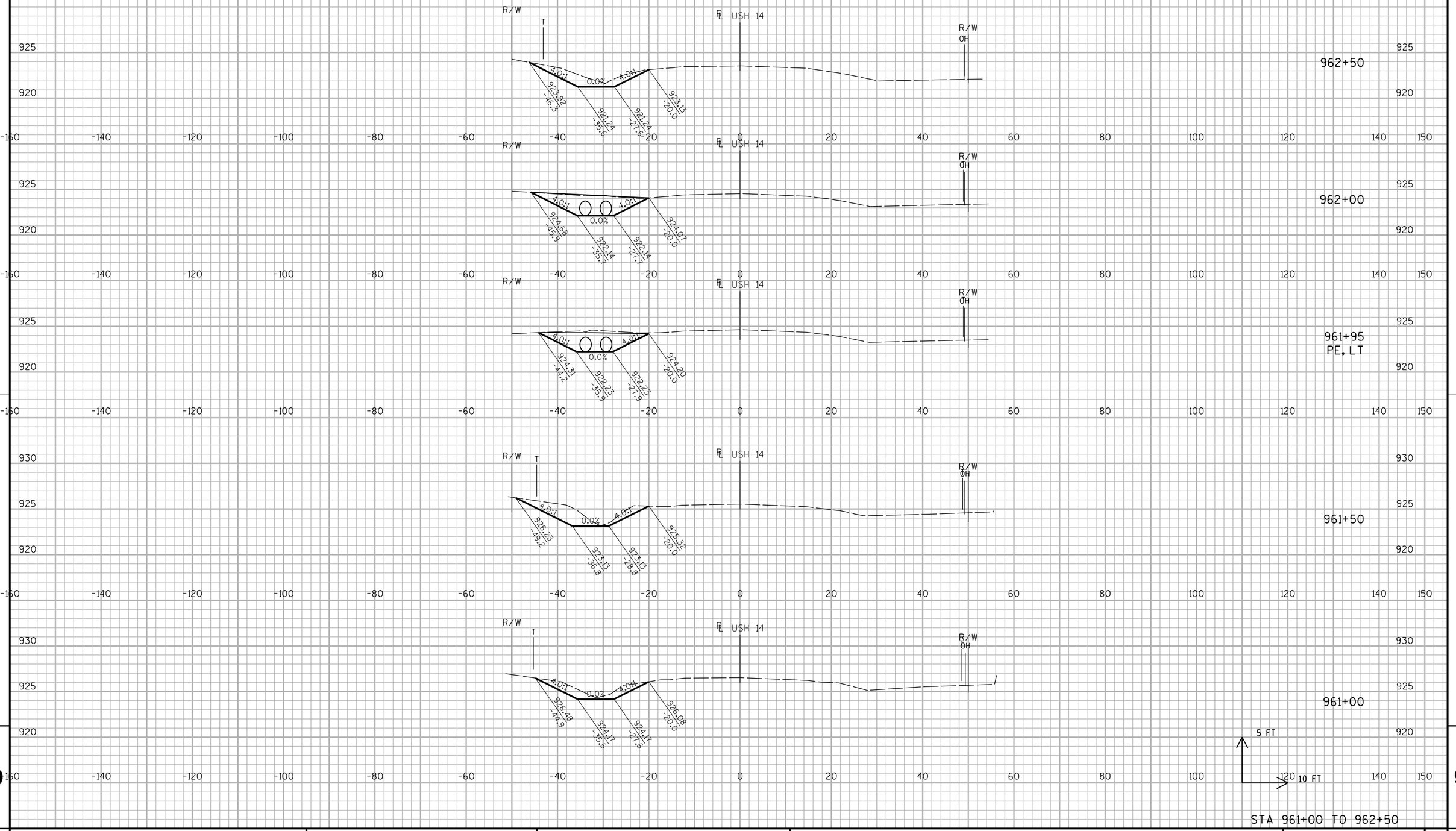



STA 959+00 TO 960+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 298 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

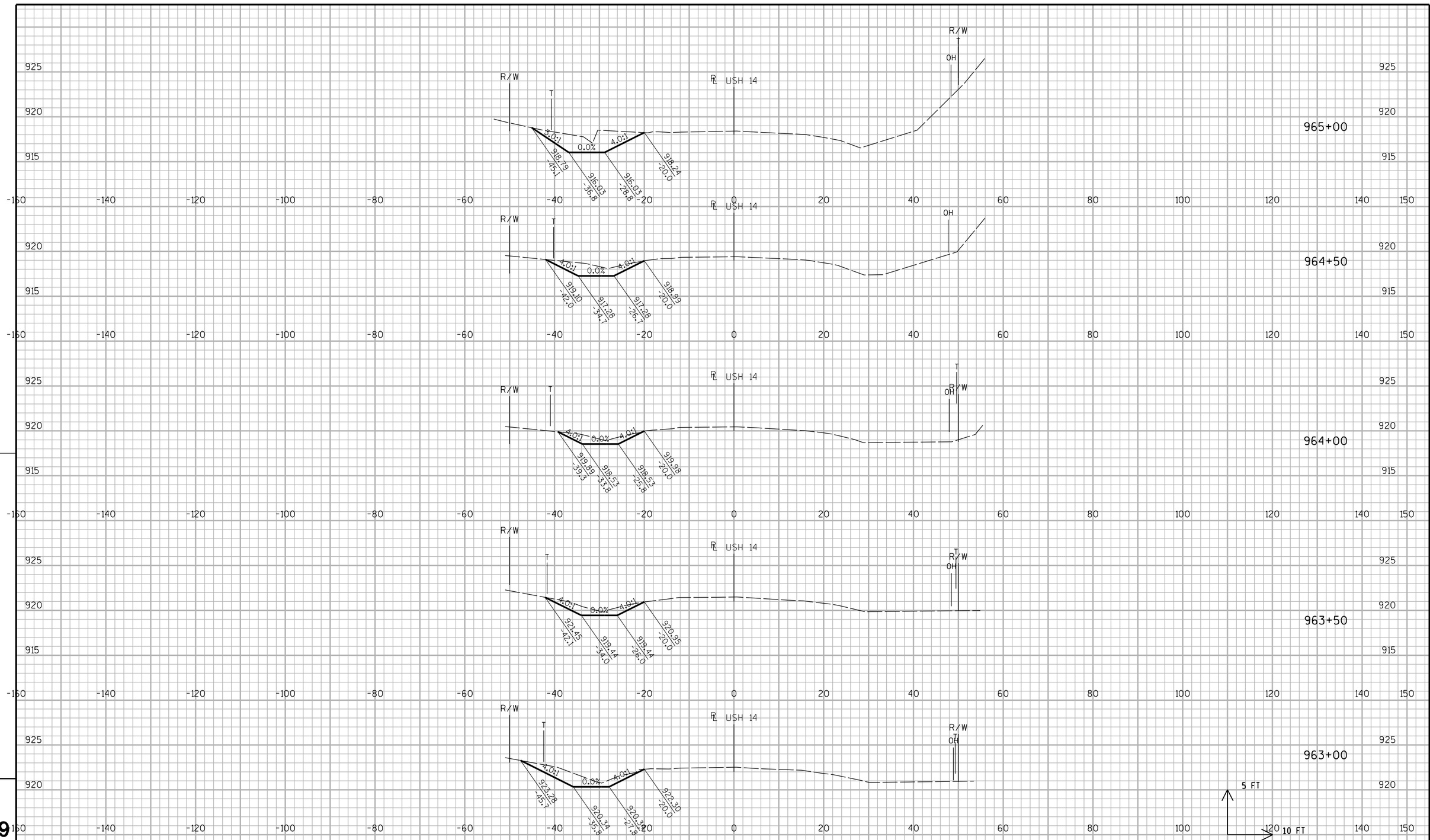
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 299 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

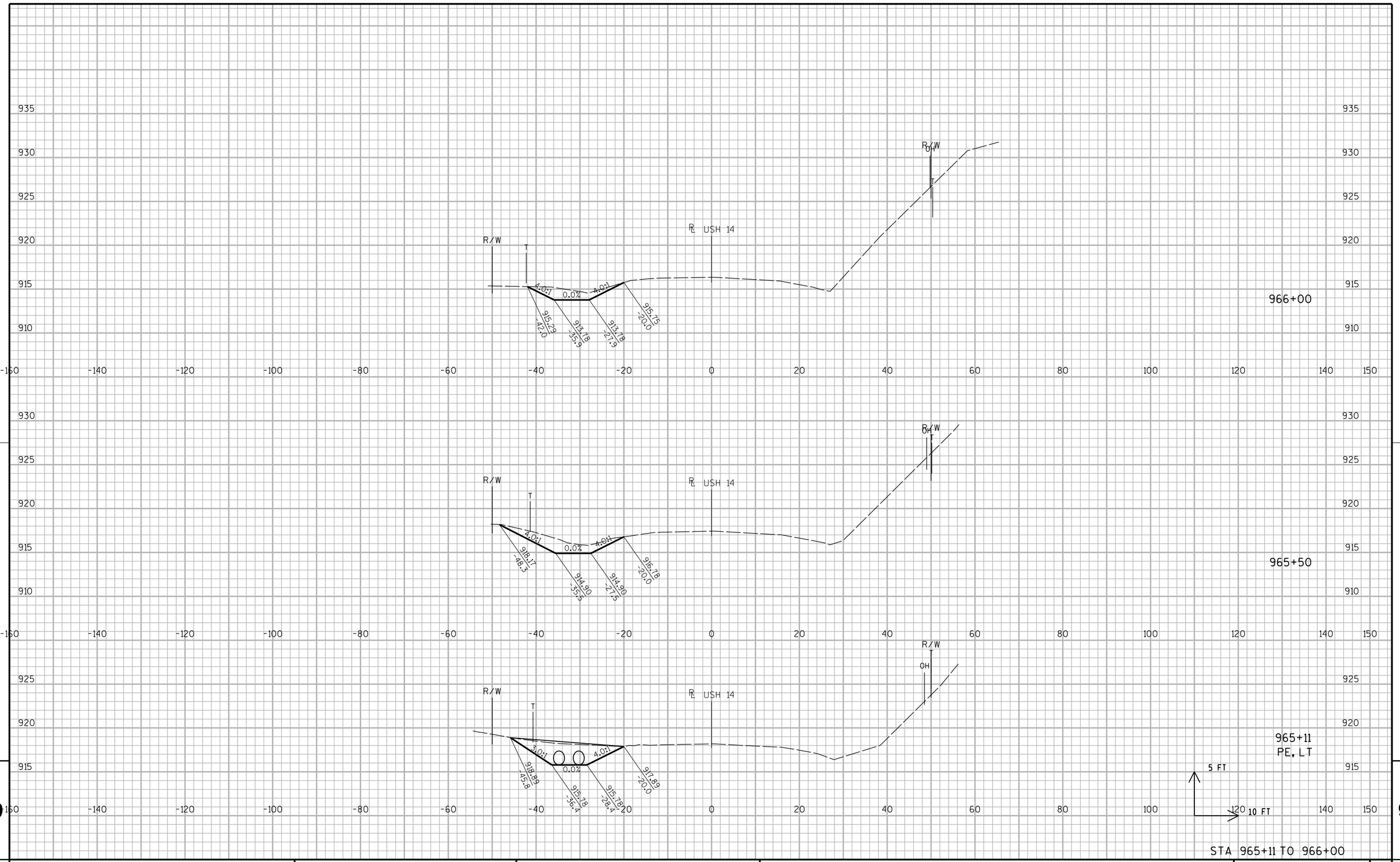



STA 963+00 TO 965+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 300 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

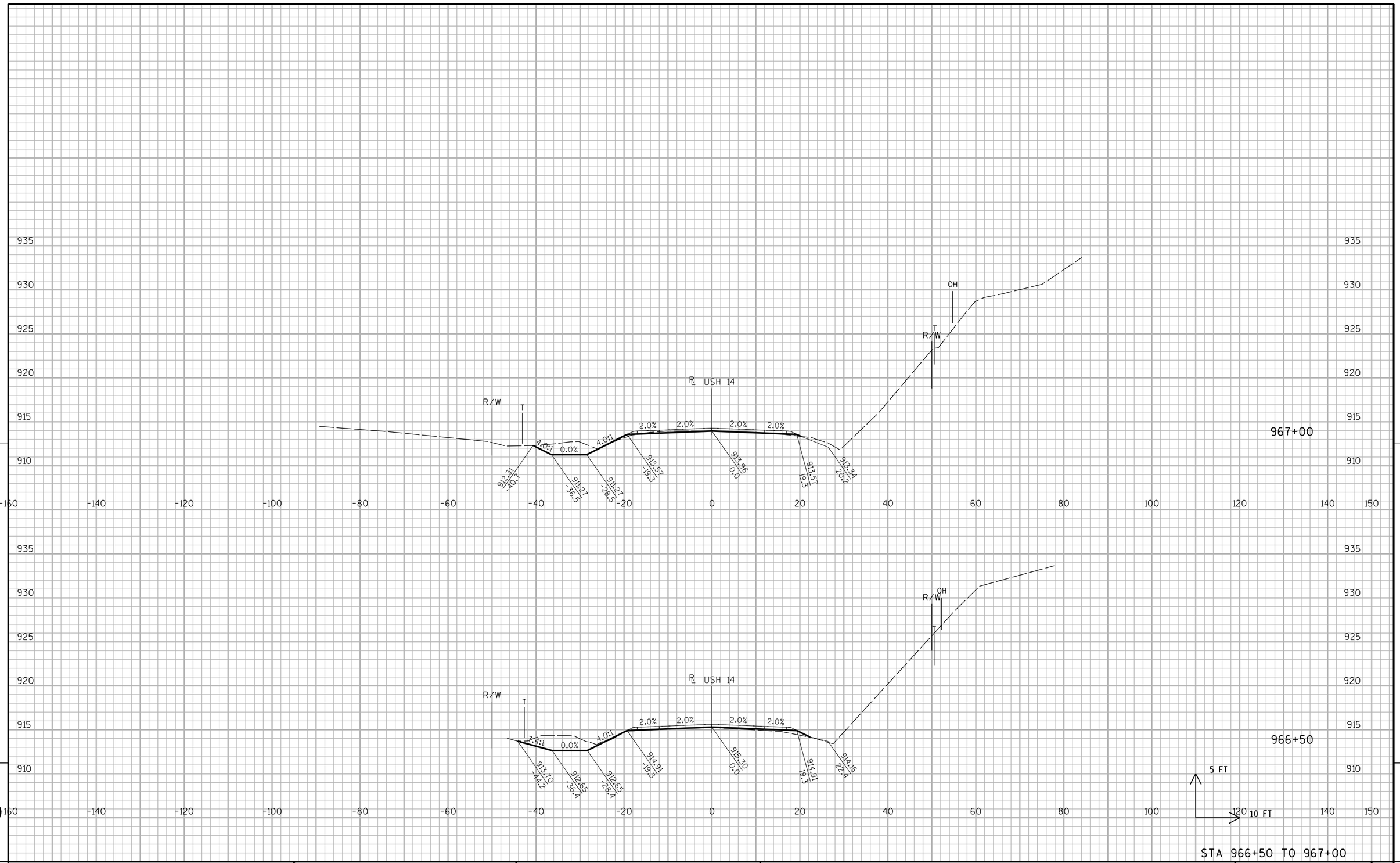



STA 965+11 TO 966+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 301 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

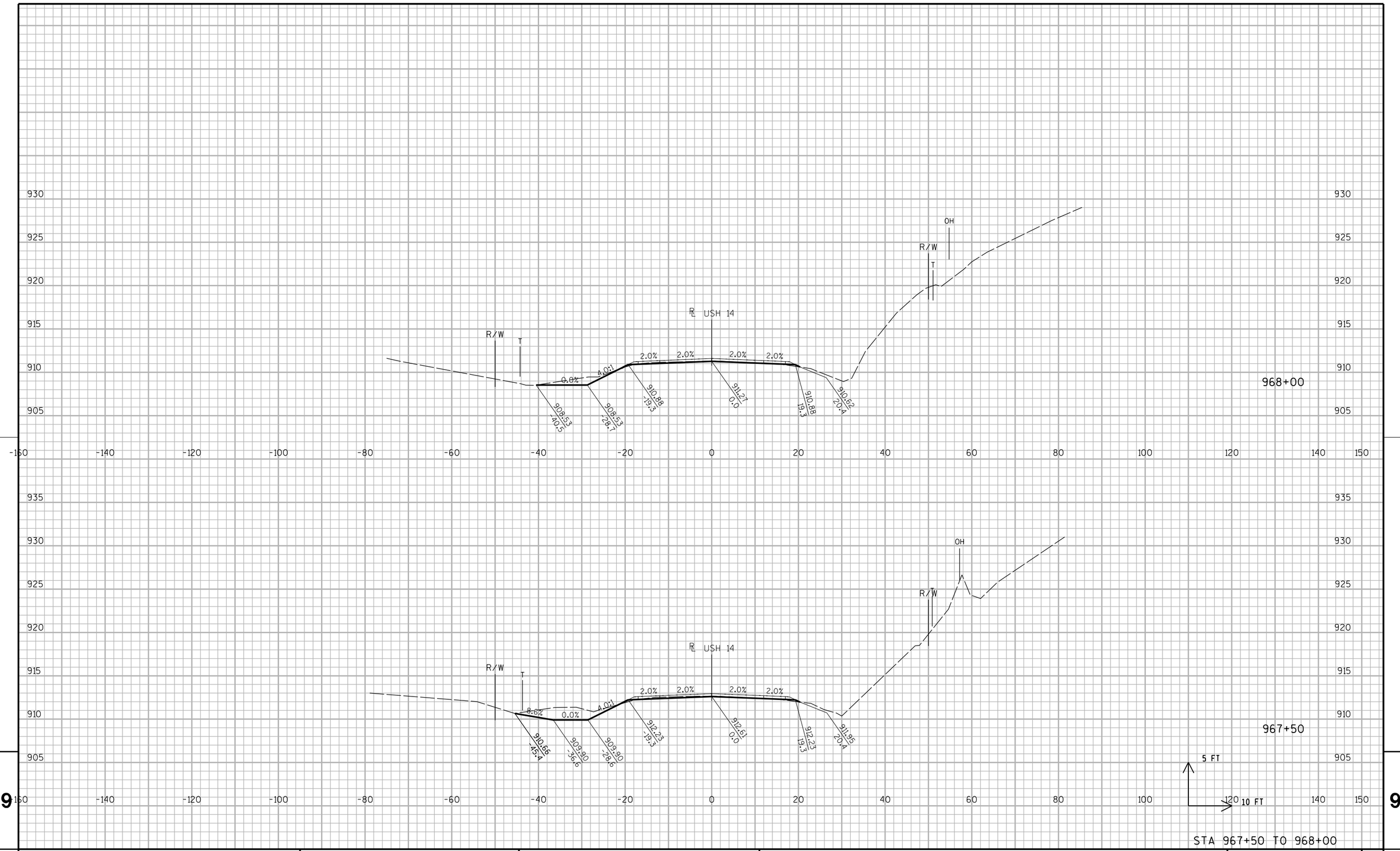



STA 966+50 TO 967+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 302 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21




9

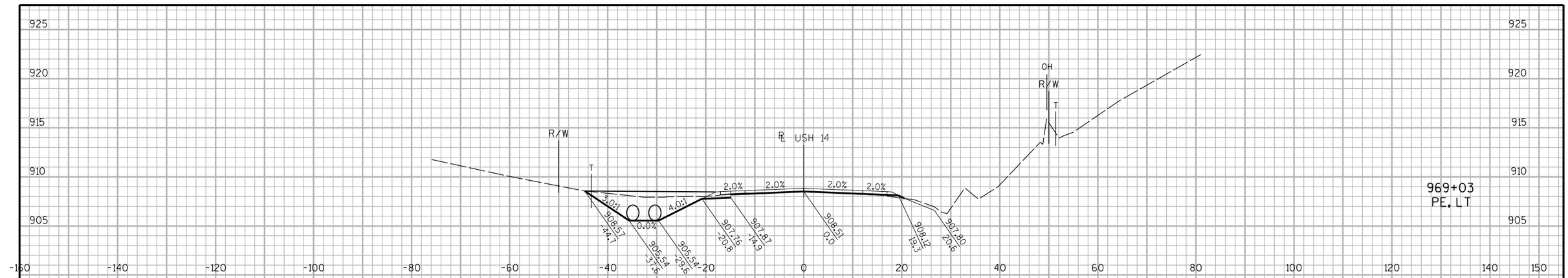
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 303 | E |
|---|---|---|---|---|---|

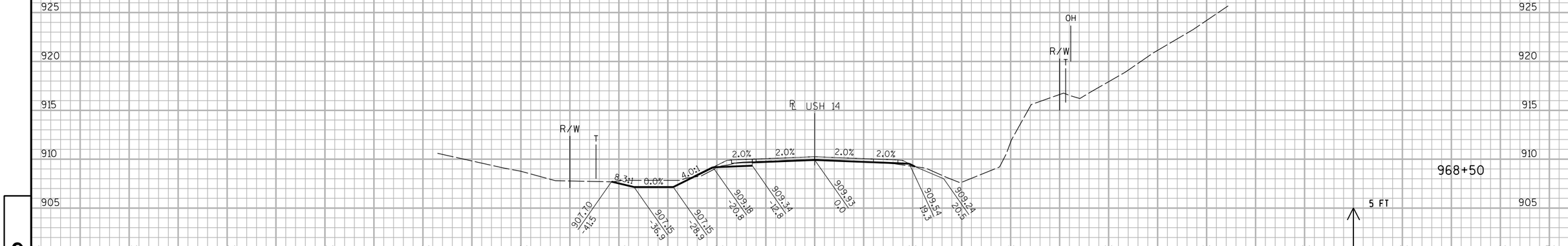
STA 967+50 TO 968+00

9

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



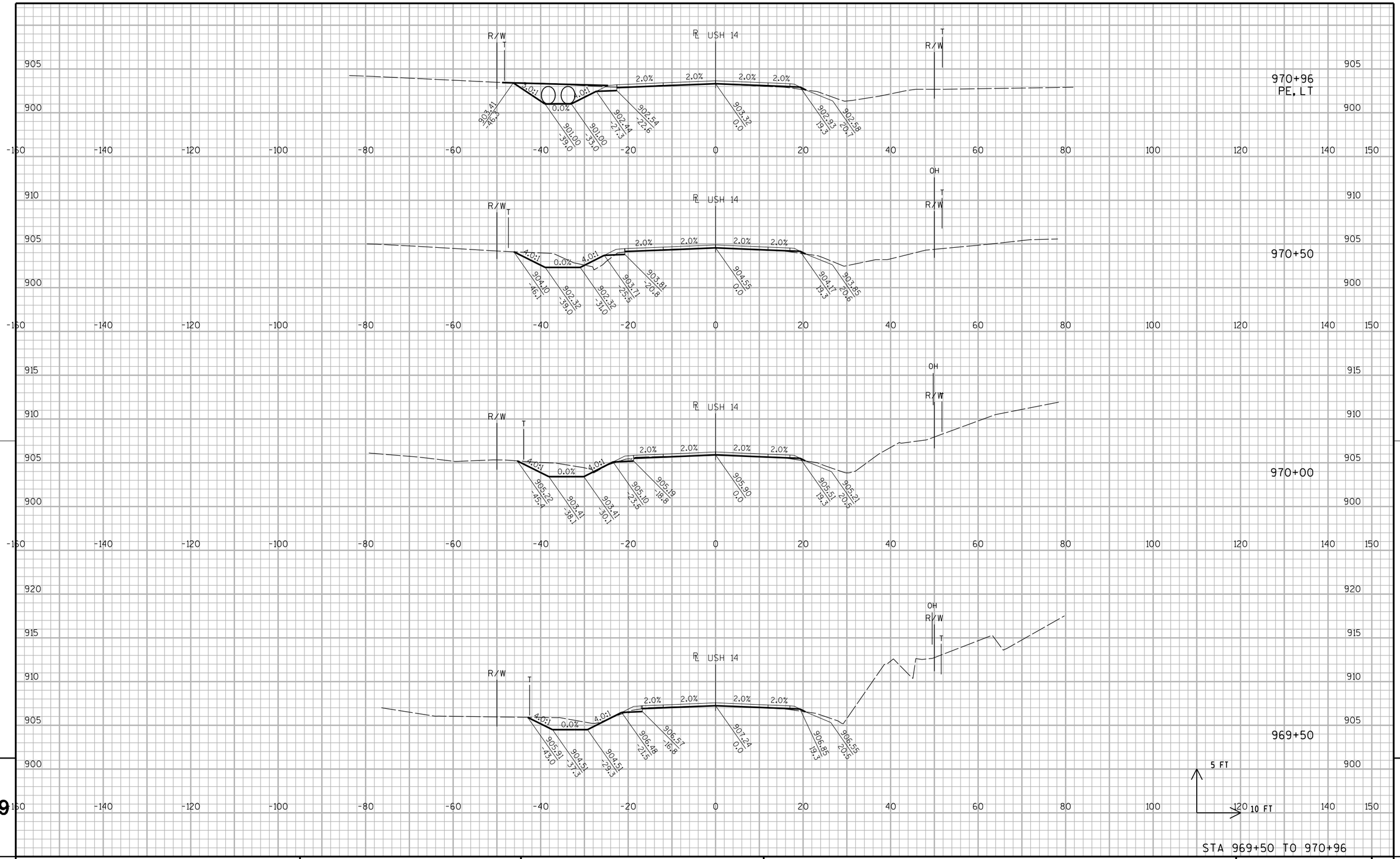



STA 968+50 TO 969+03

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 304 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

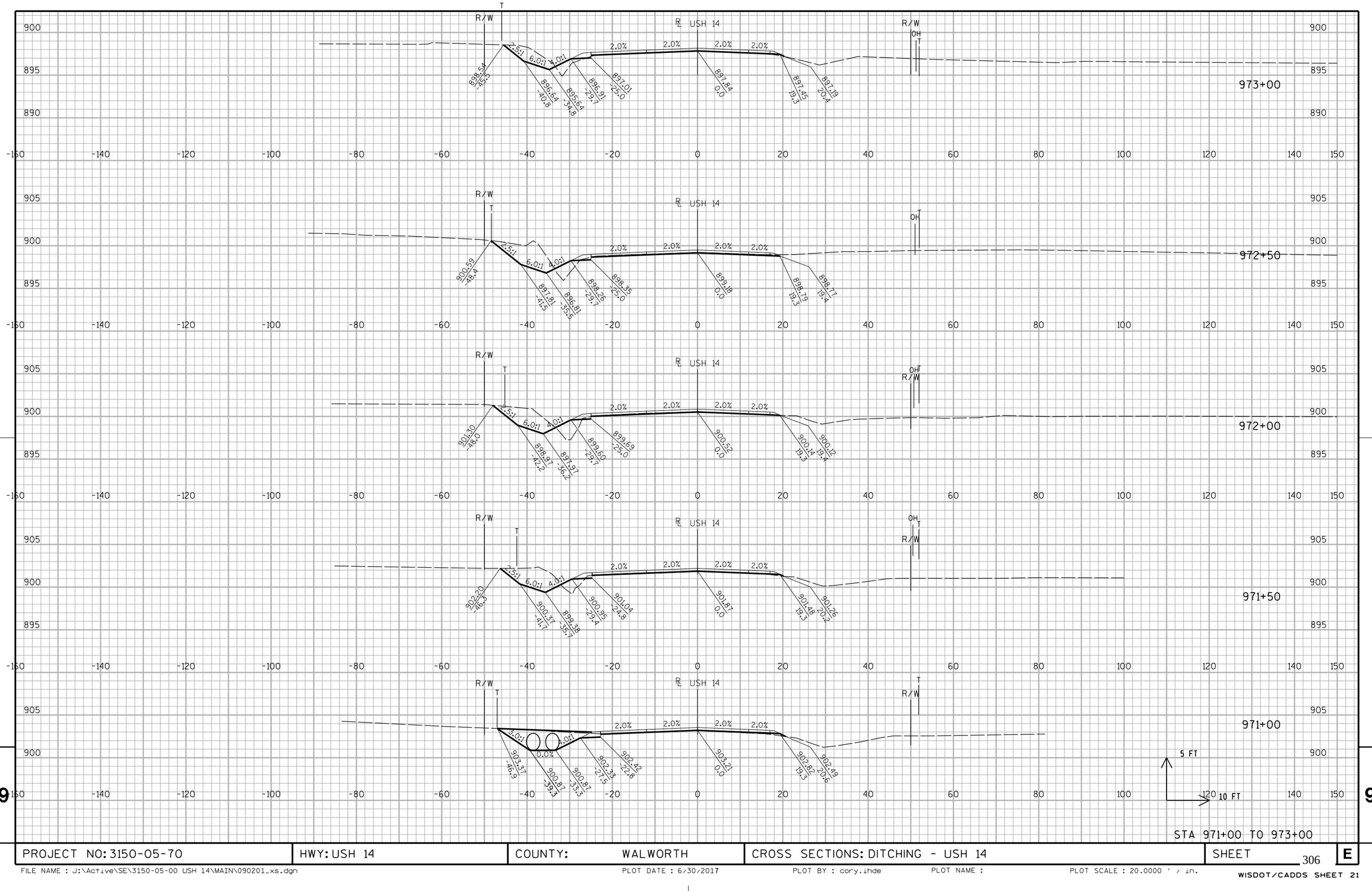
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 305 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

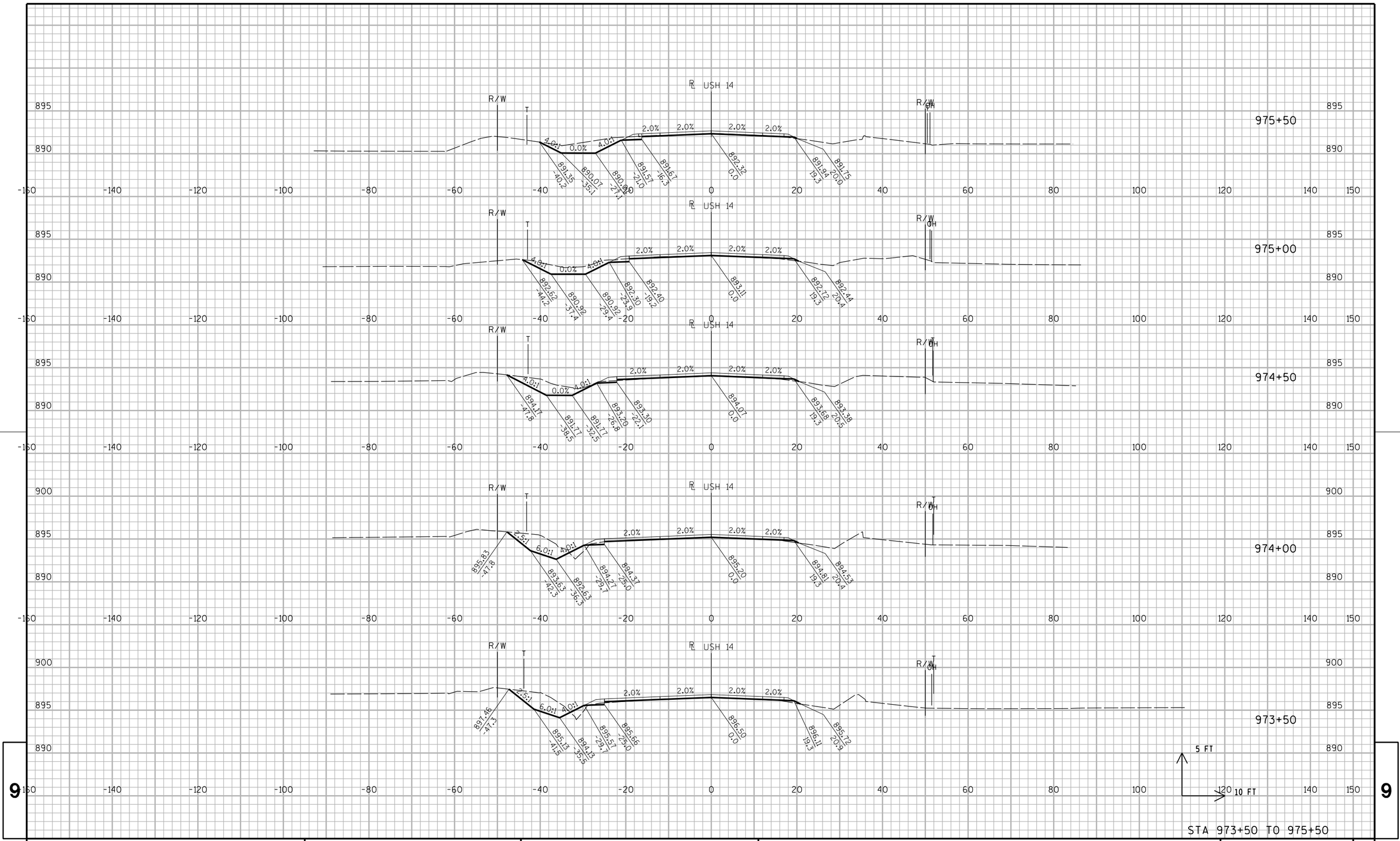
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 306 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

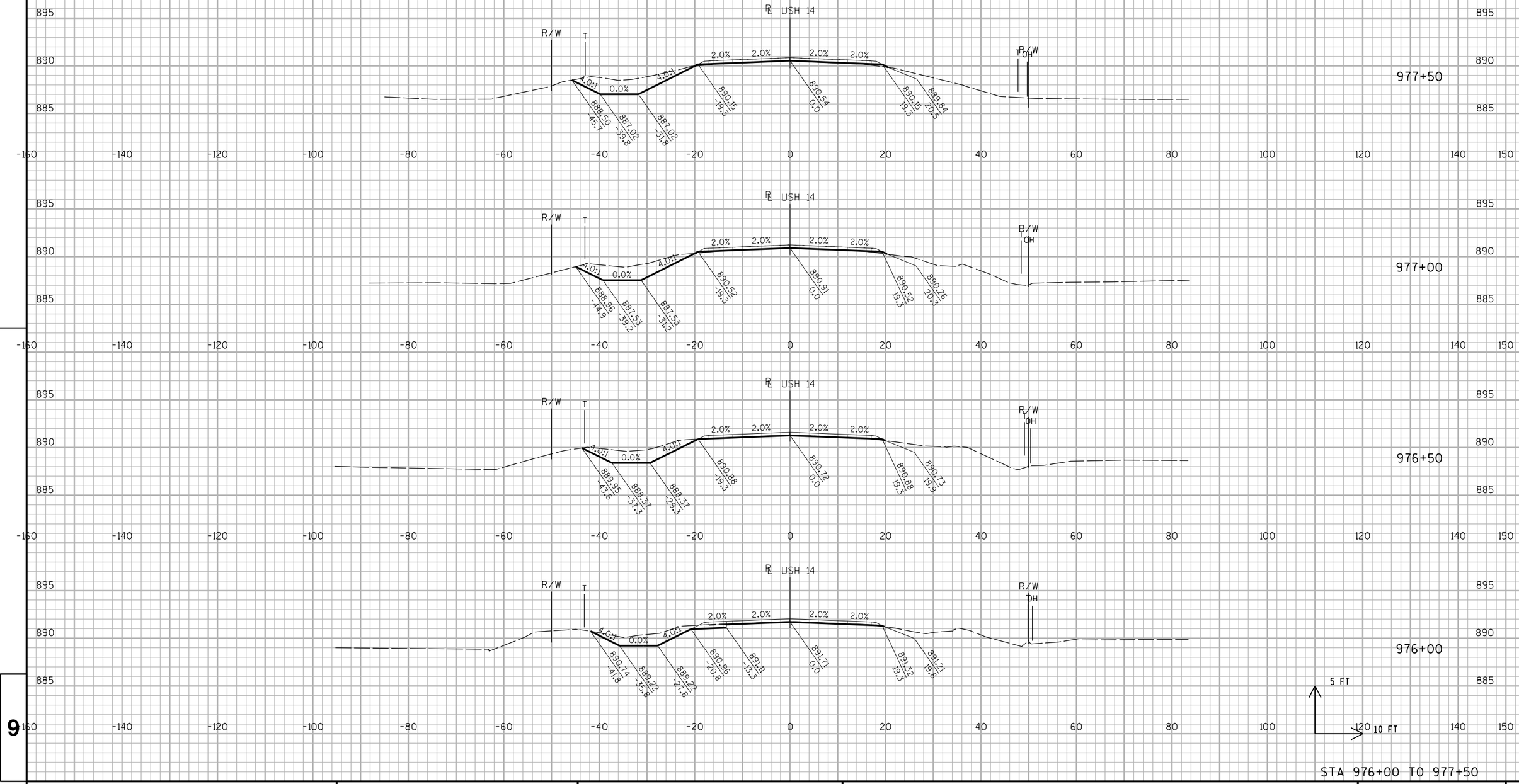
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 307 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



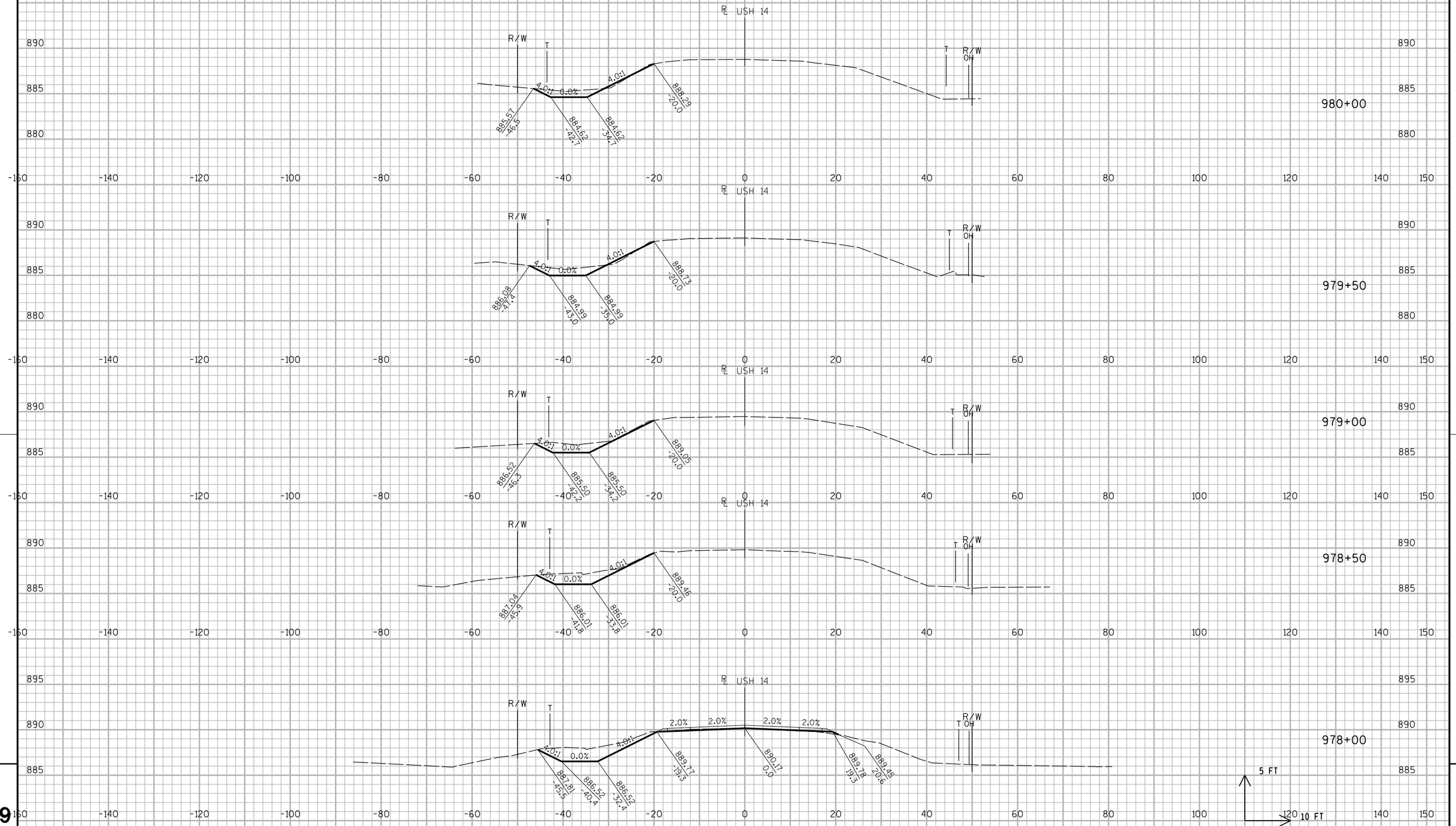

9

9

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 308 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

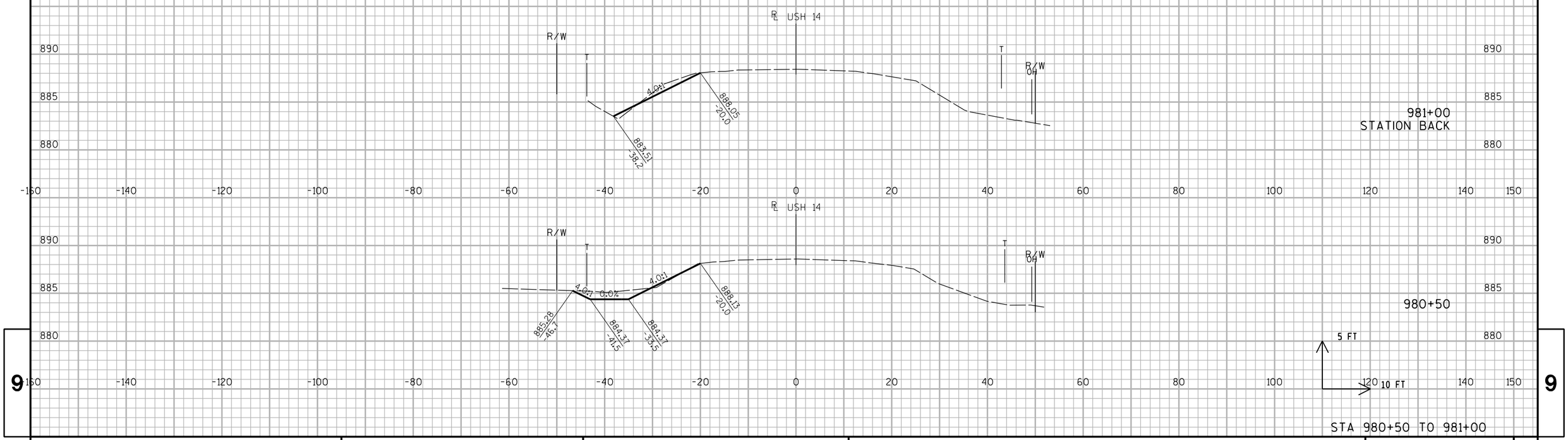



9

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 309 E |
|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

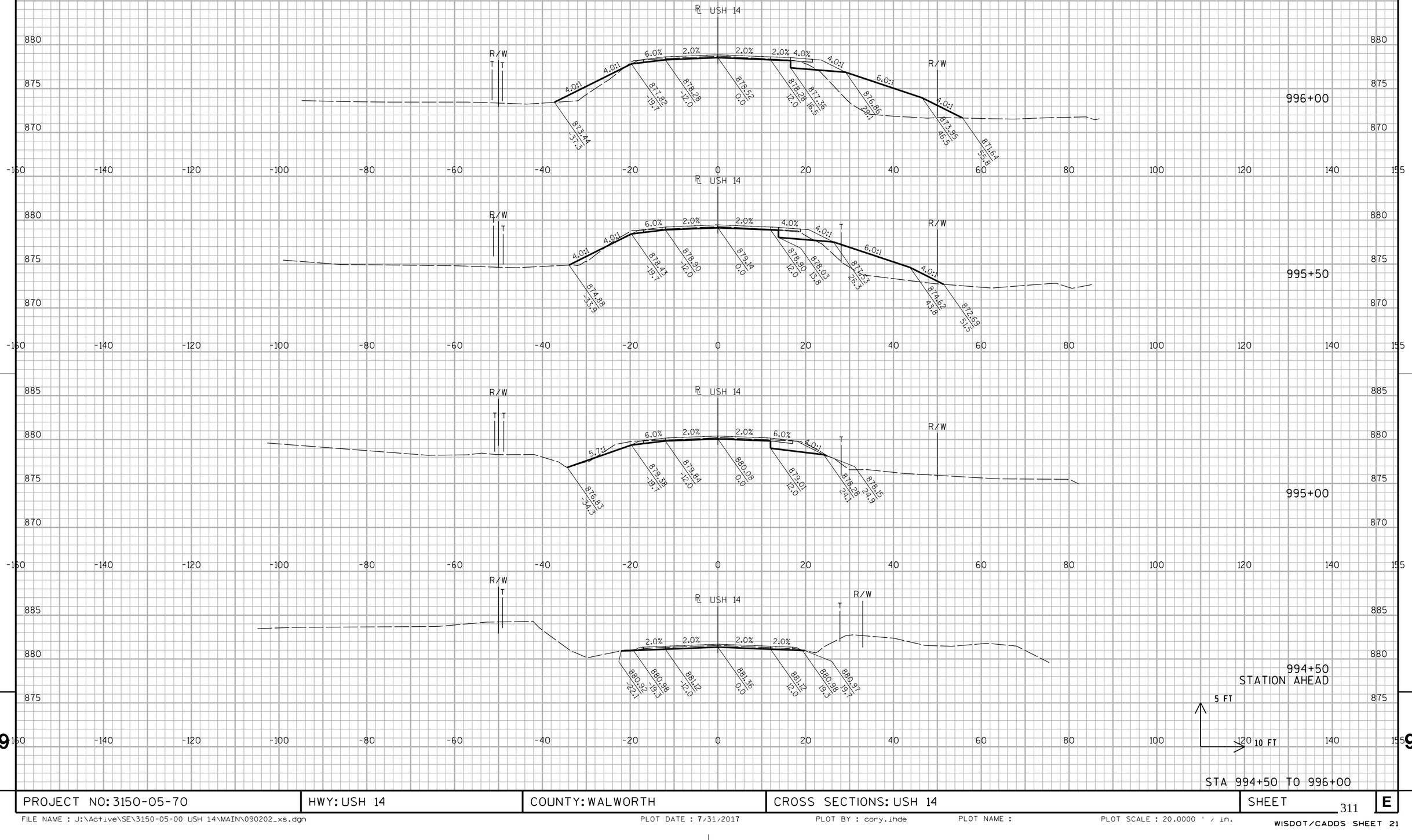



STA 980+50 TO 981+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DITCHING - USH 14 | SHEET 310 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090201_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

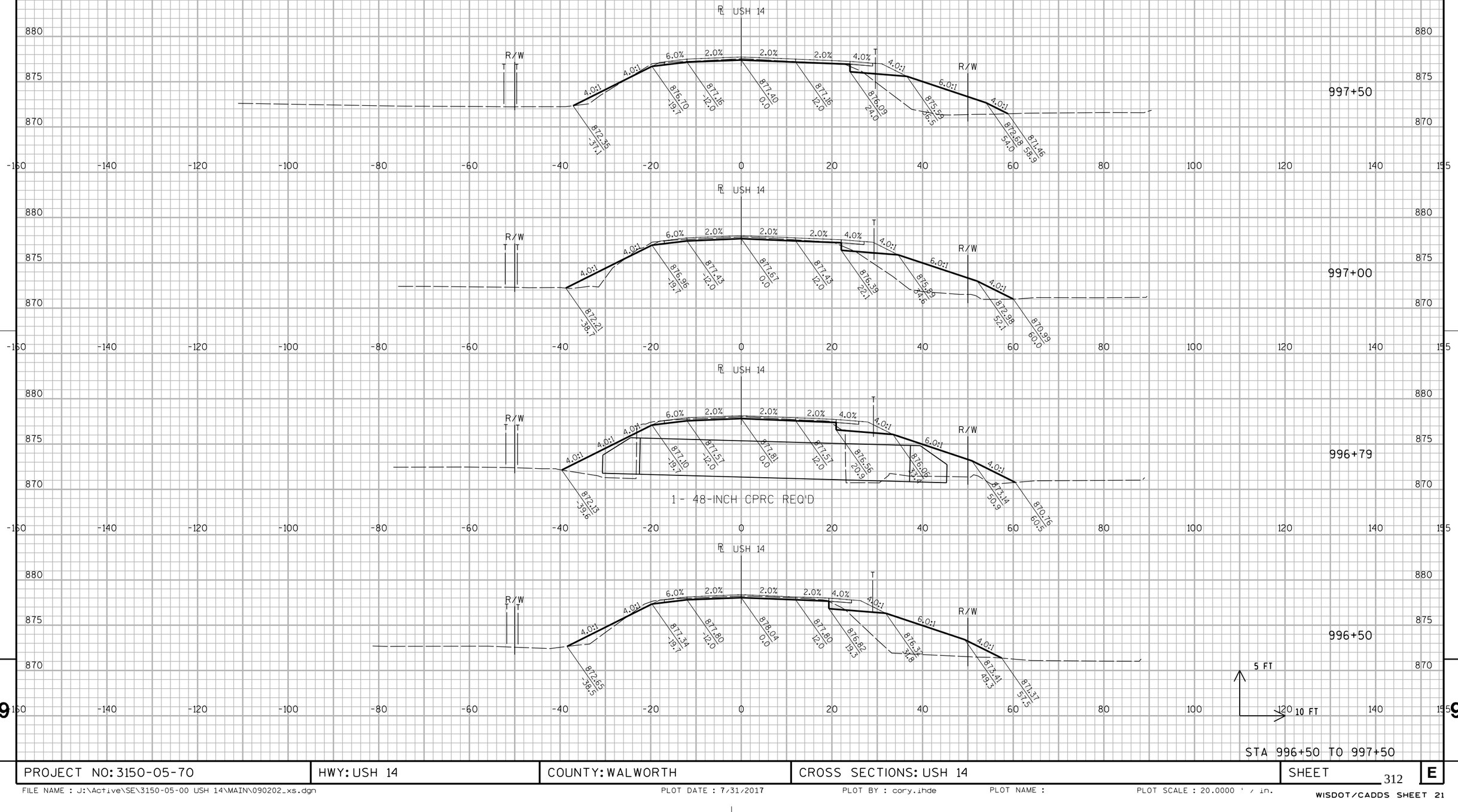
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 311 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090202_xs.dgn PLOT DATE : 7/31/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

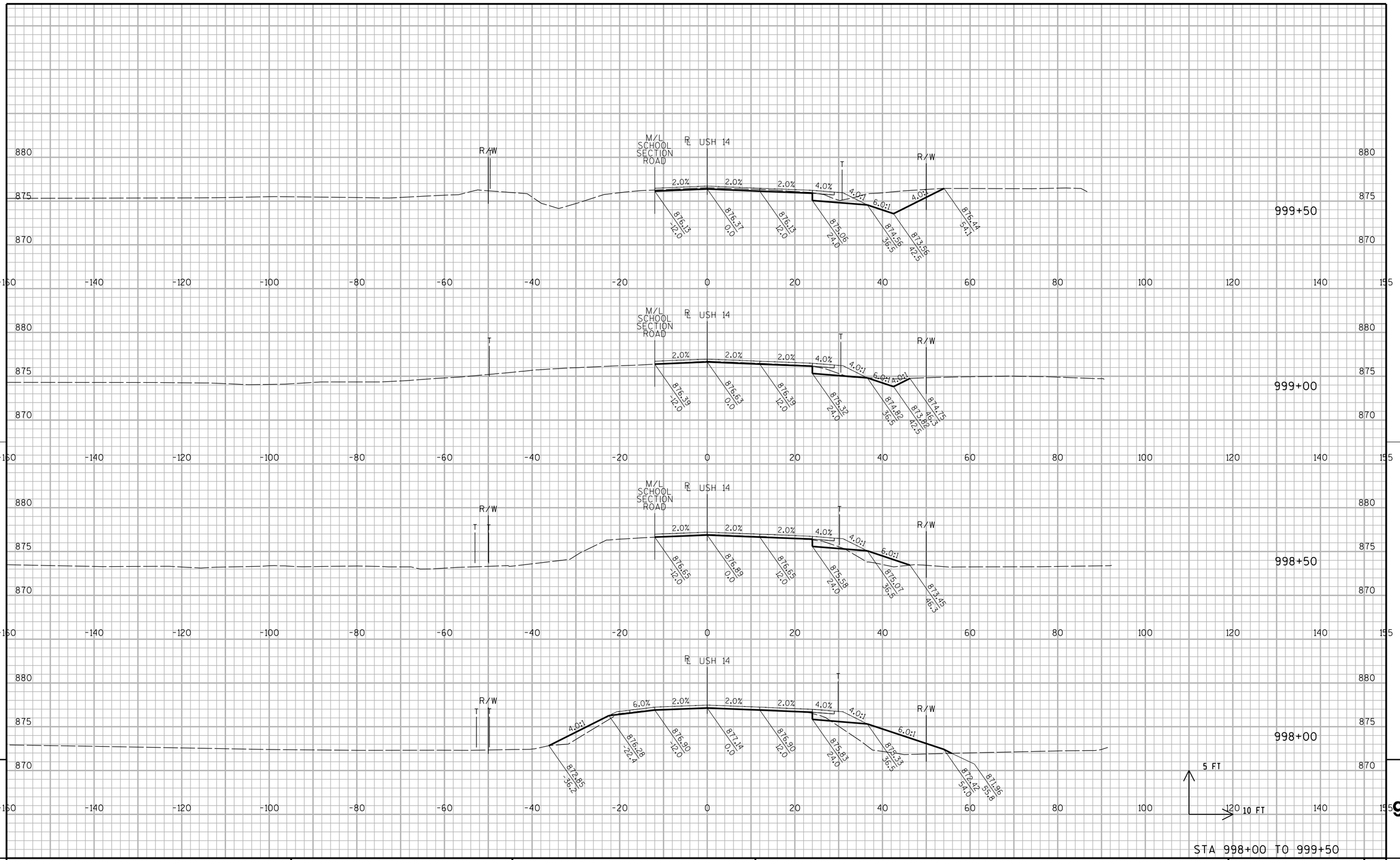



STA 996+50 TO 997+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 312 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090202_xs.dgn PLOT DATE : 7/31/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

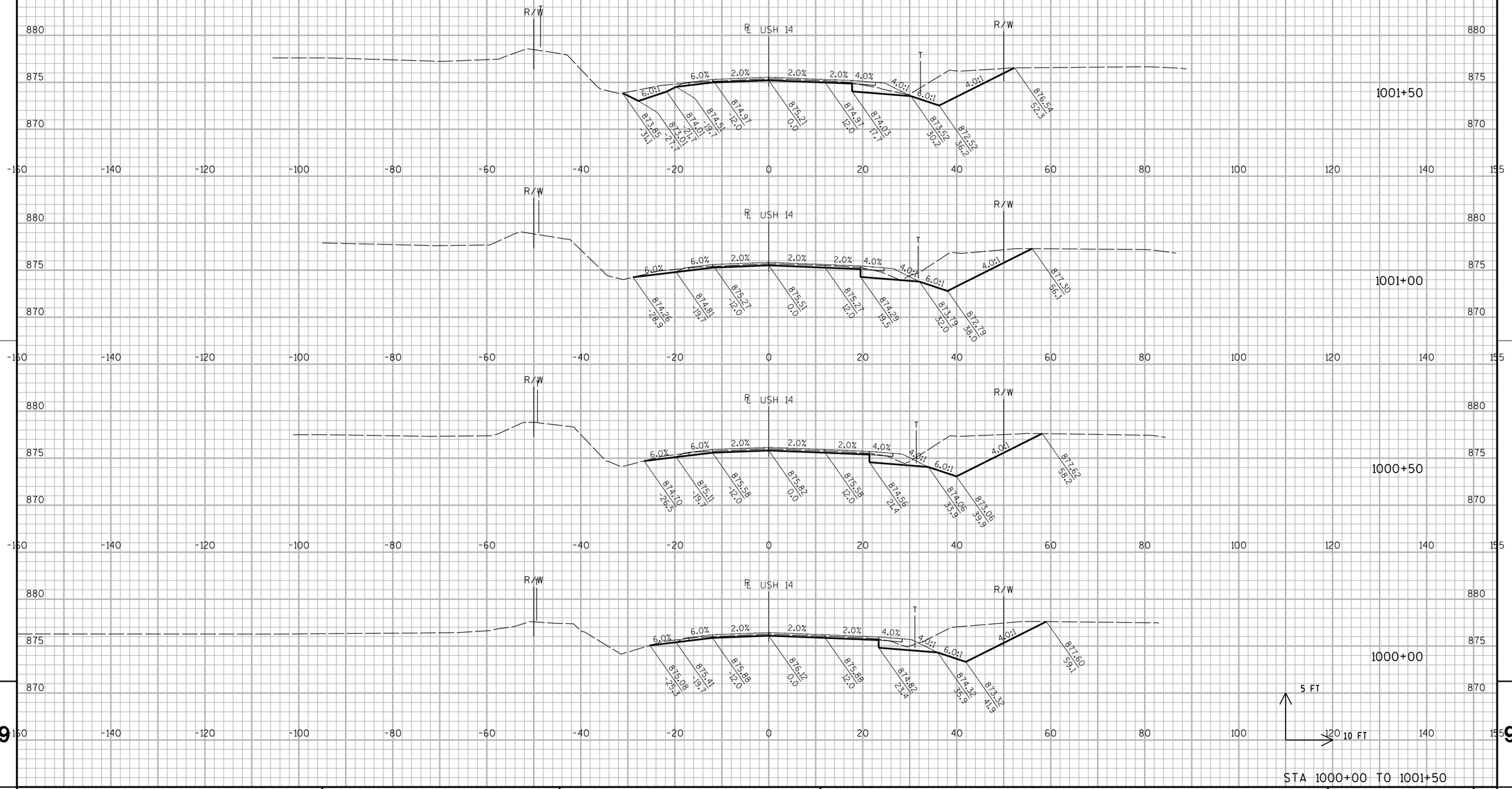



STA 998+00 TO 999+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 313 | E |
|---|---|---|---|---|---|

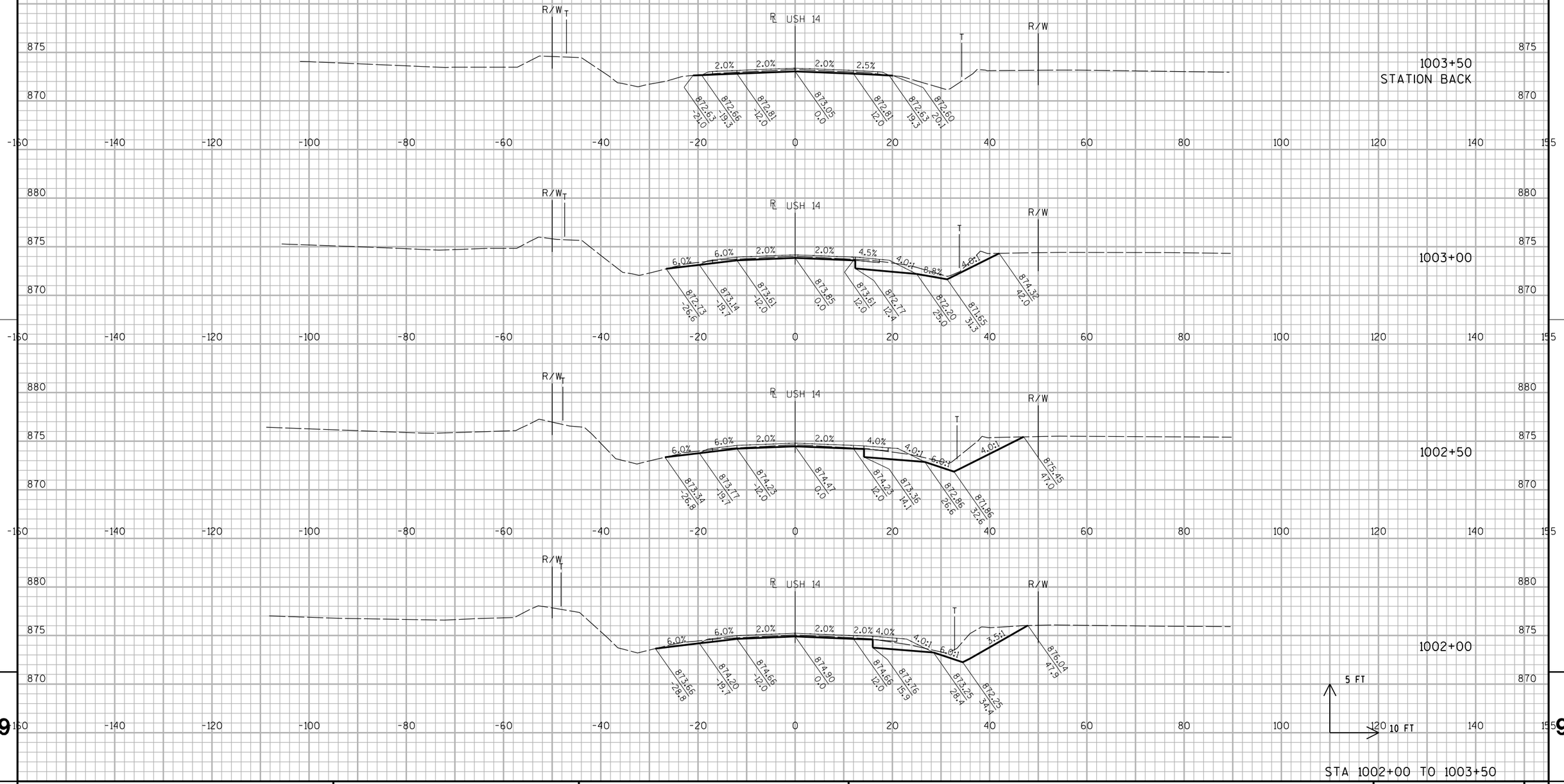
FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090202_xs.dgn PLOT DATE : 7/31/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21




STA 1000+00 TO 1001+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 314 | E |
|---|---|---|---|---|---|




STA 1002+00 TO 1003+50

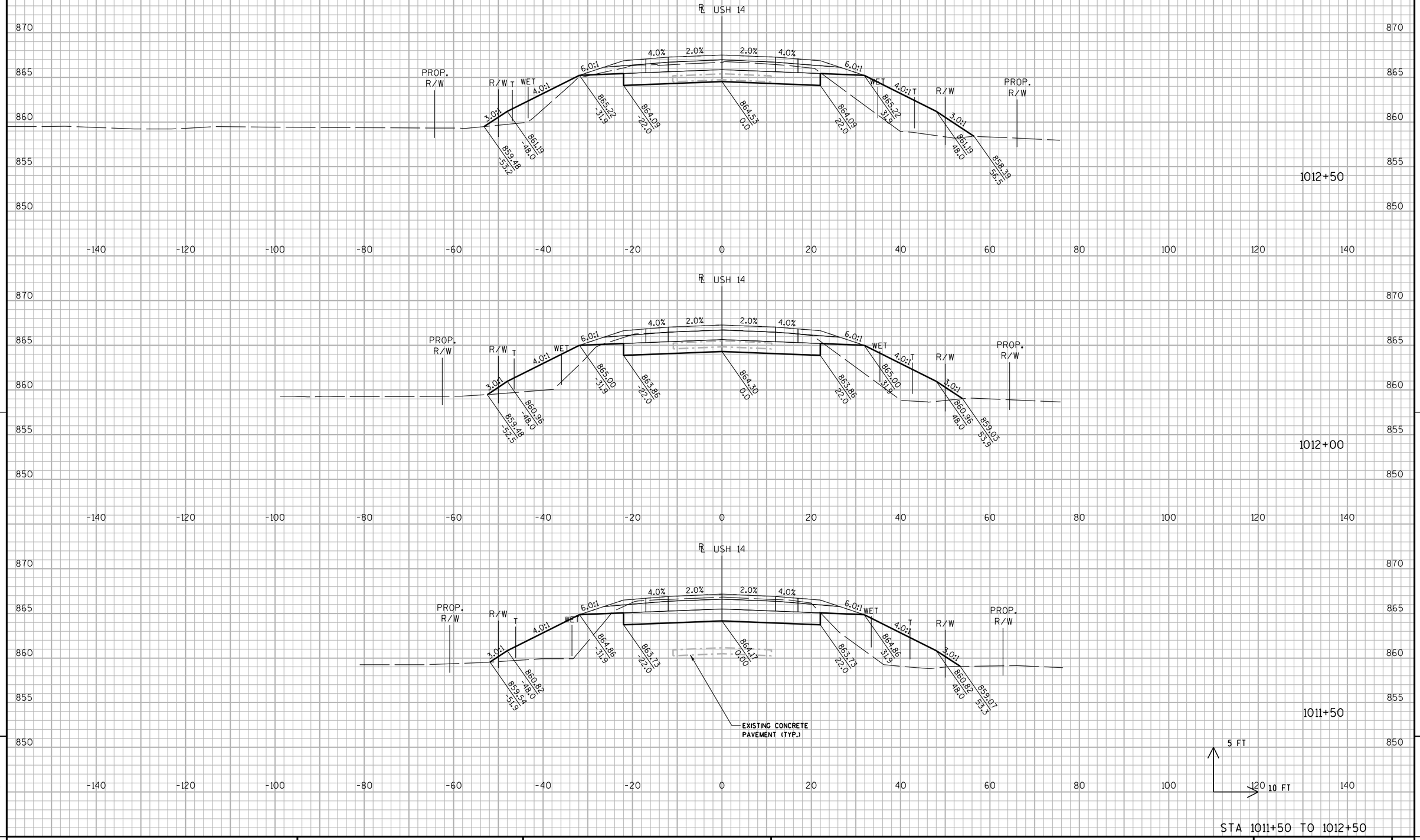
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 315 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090202_xs.dgn PLOT DATE : 7/31/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 316 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090203_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

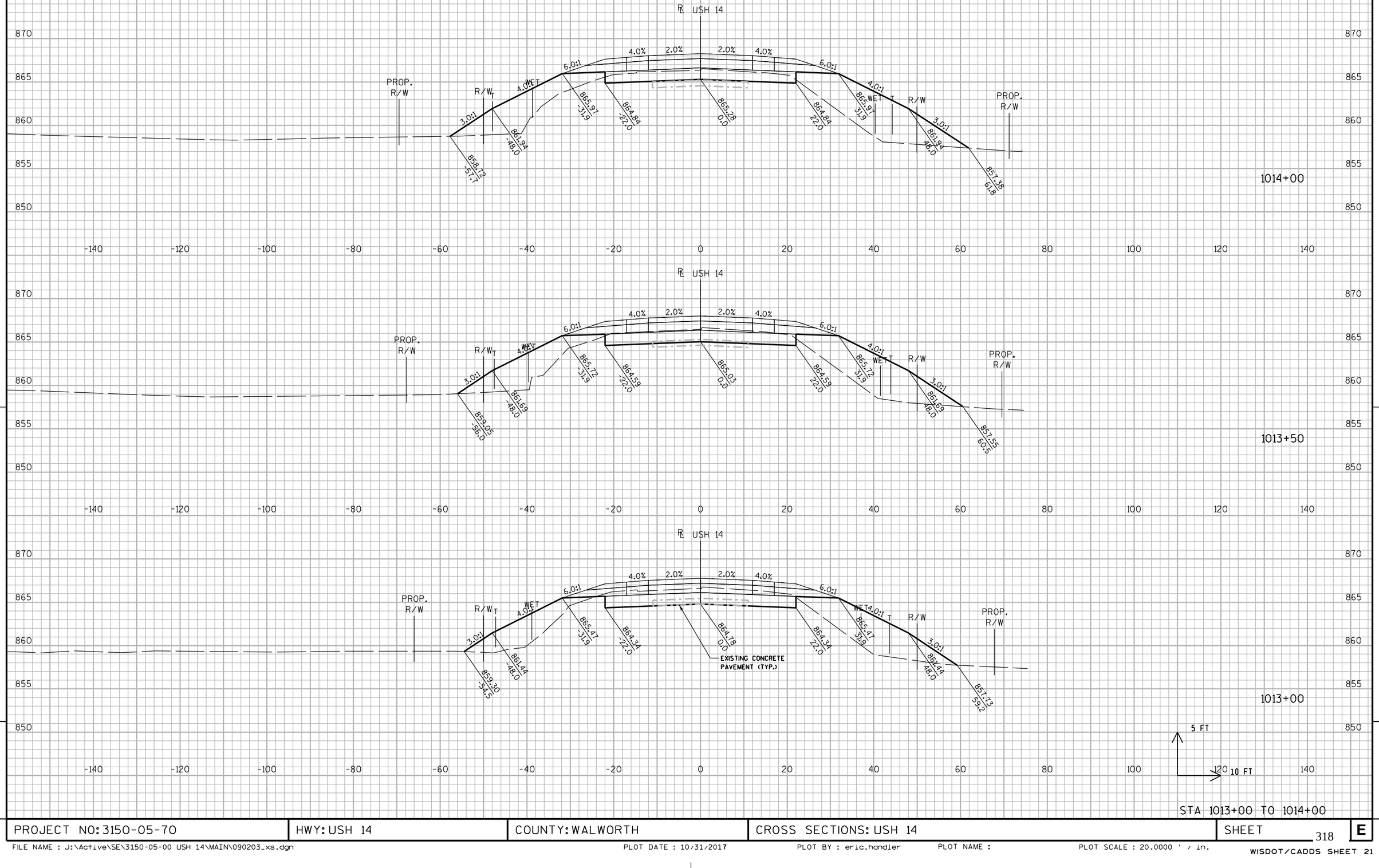



STA 1011+50 TO 1012+50

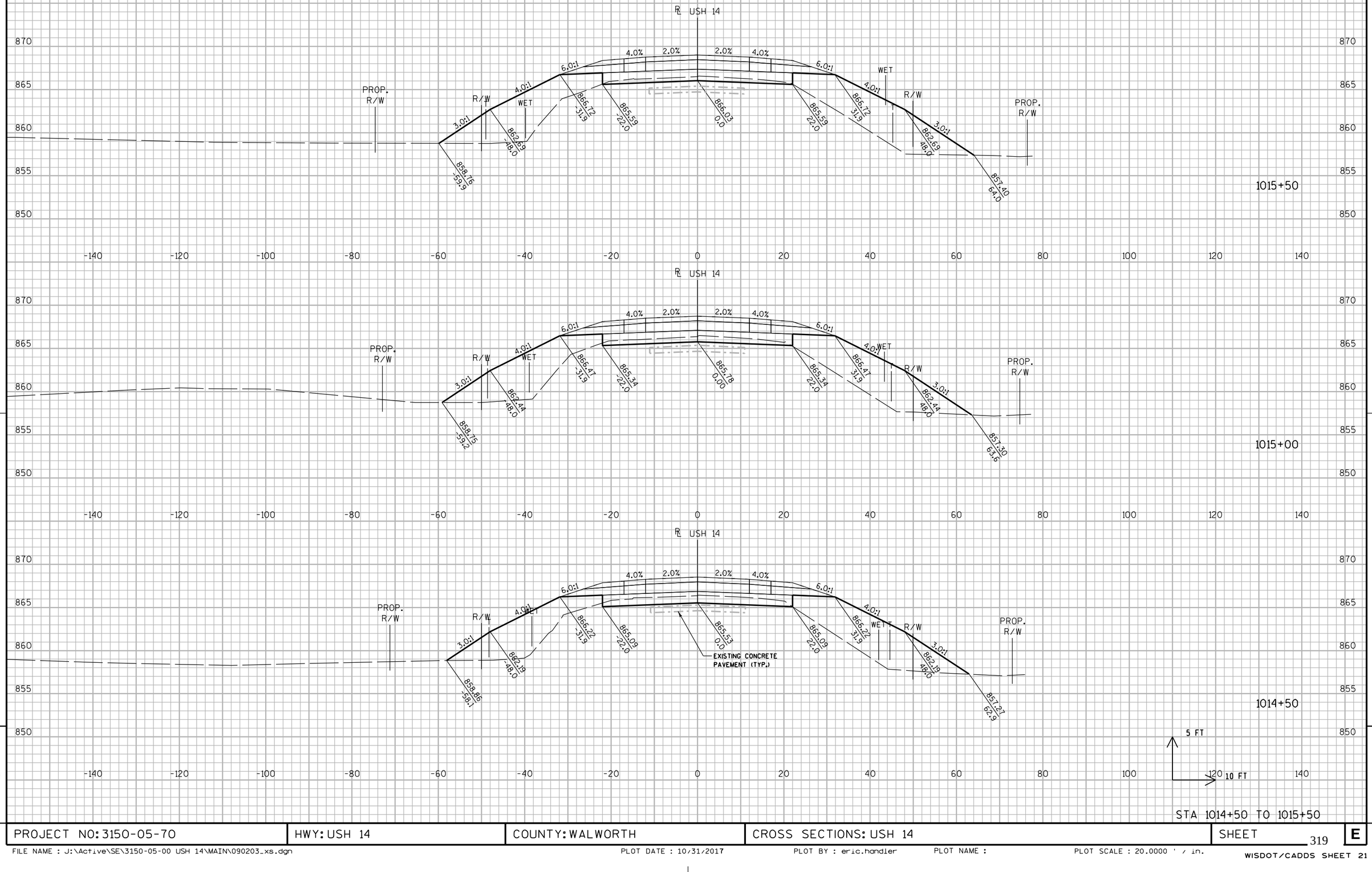
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 317 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090203_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

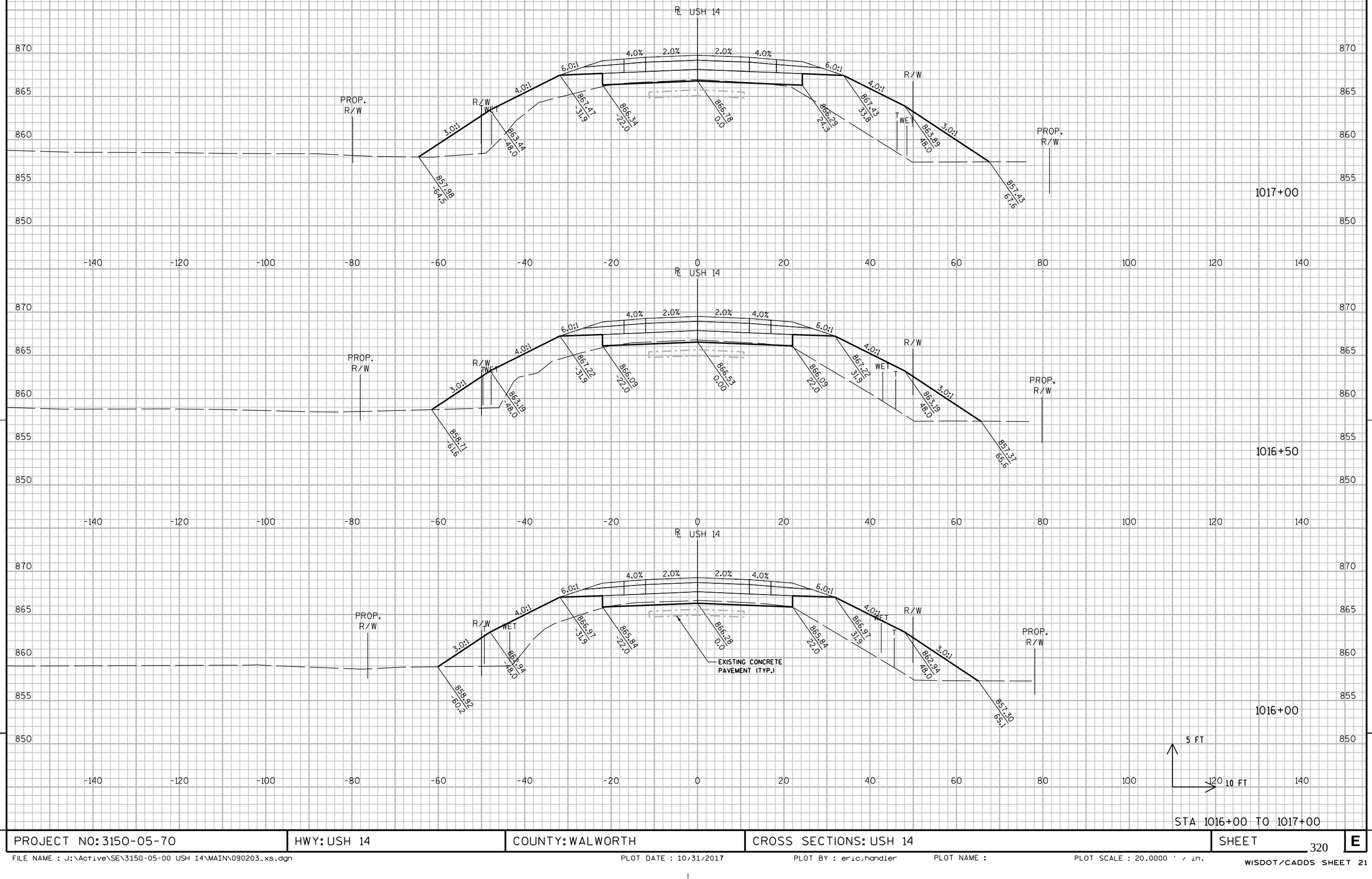



| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 318 | E |
|---|---|---|---|---|---|

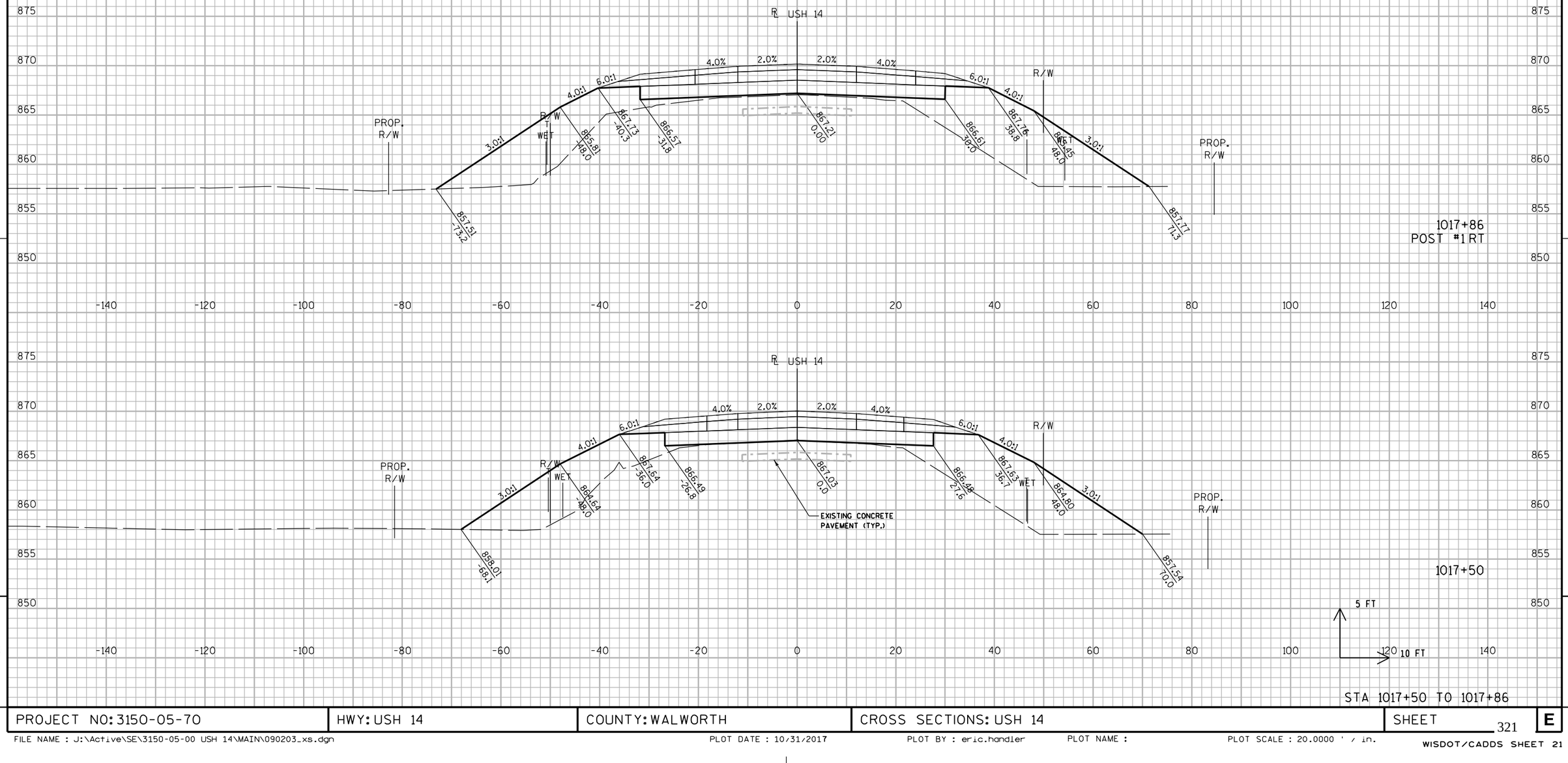



STA 1014+50 TO 1015+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 319 | E |
|---|---|---|---|---|---|




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 320 | E |
|---|---|---|---|---|---|

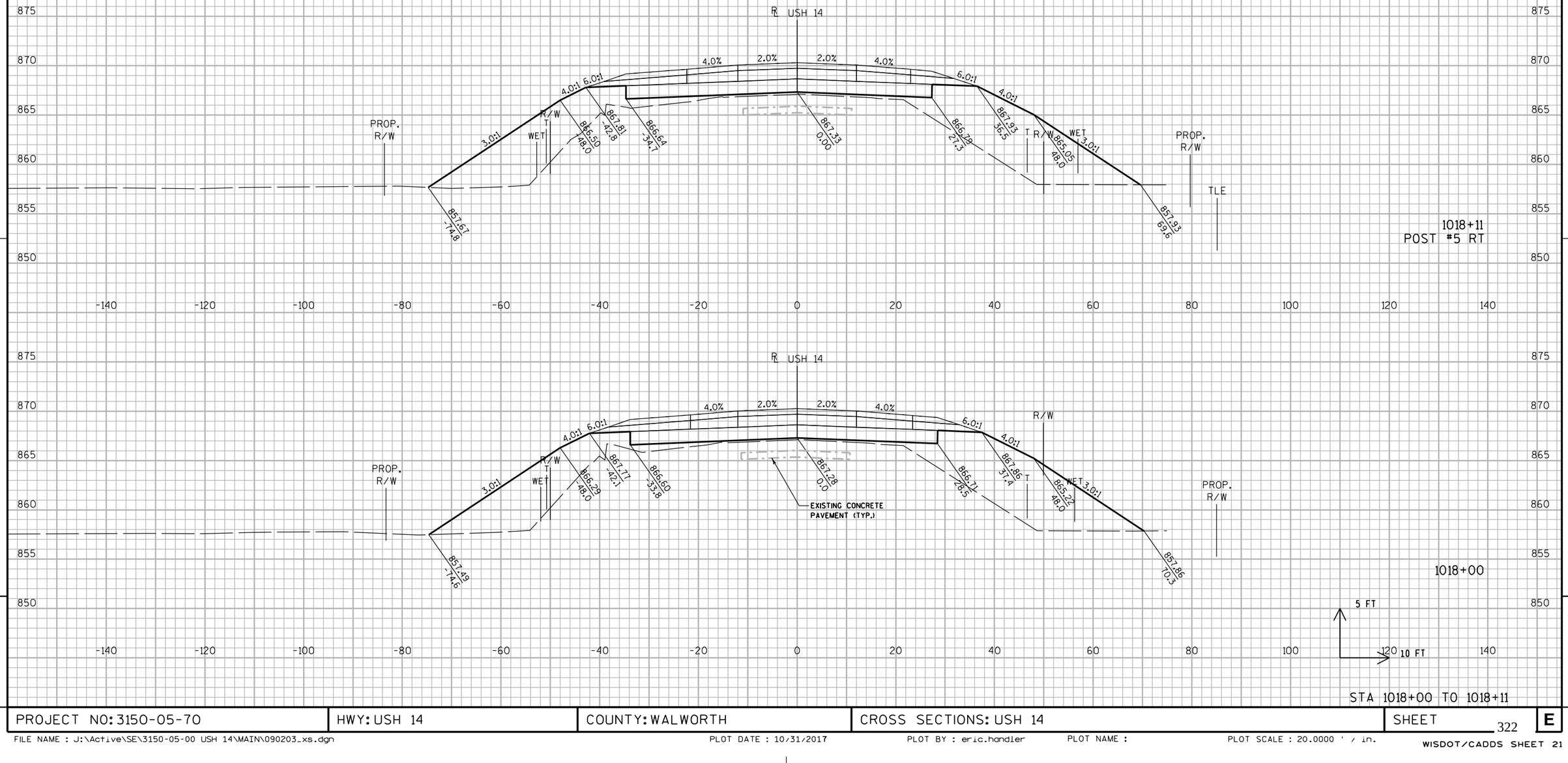



STA 1017+50 TO 1017+86

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 321 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090203_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

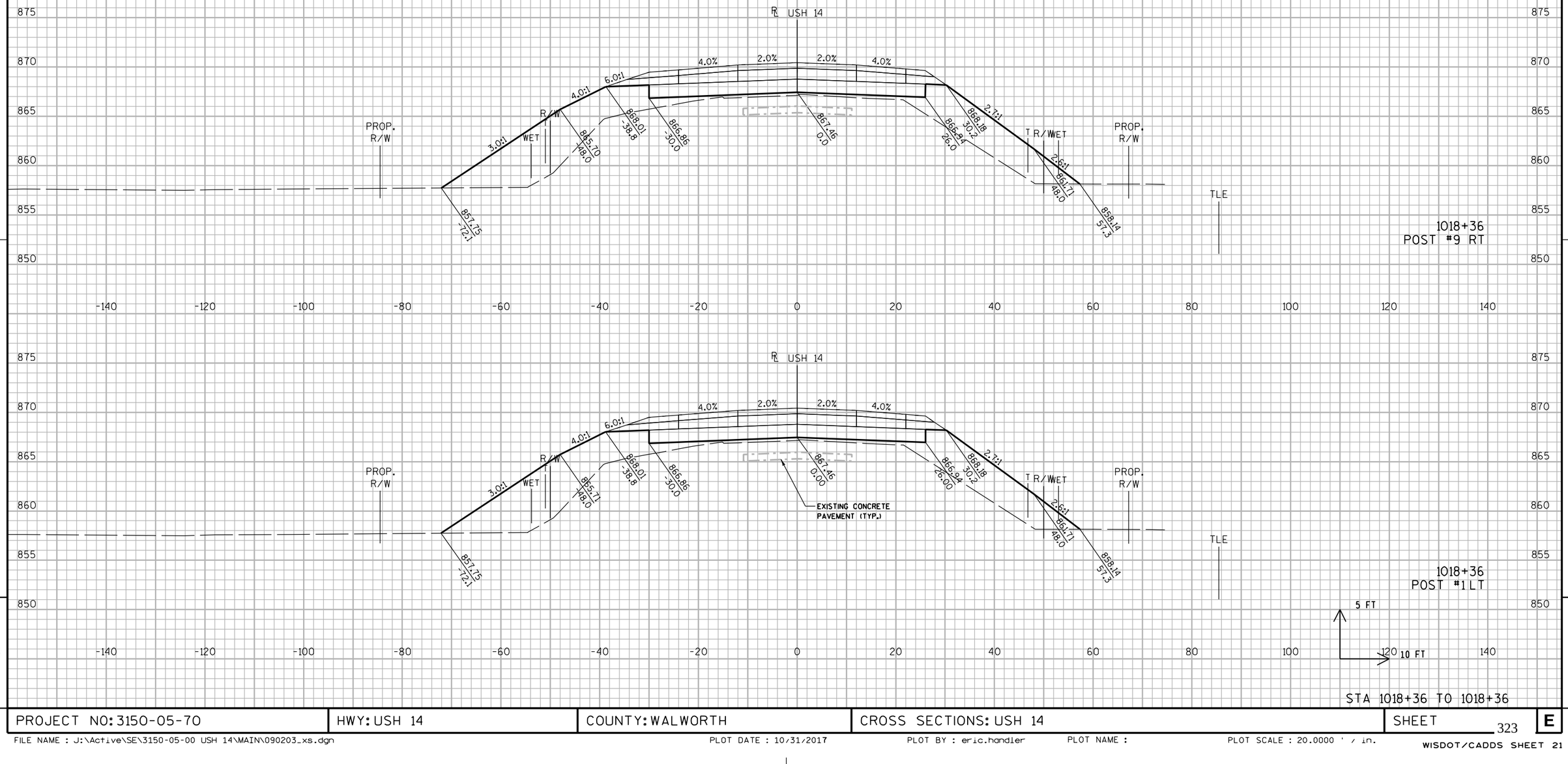
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET E |
|---|---|---|---|---|



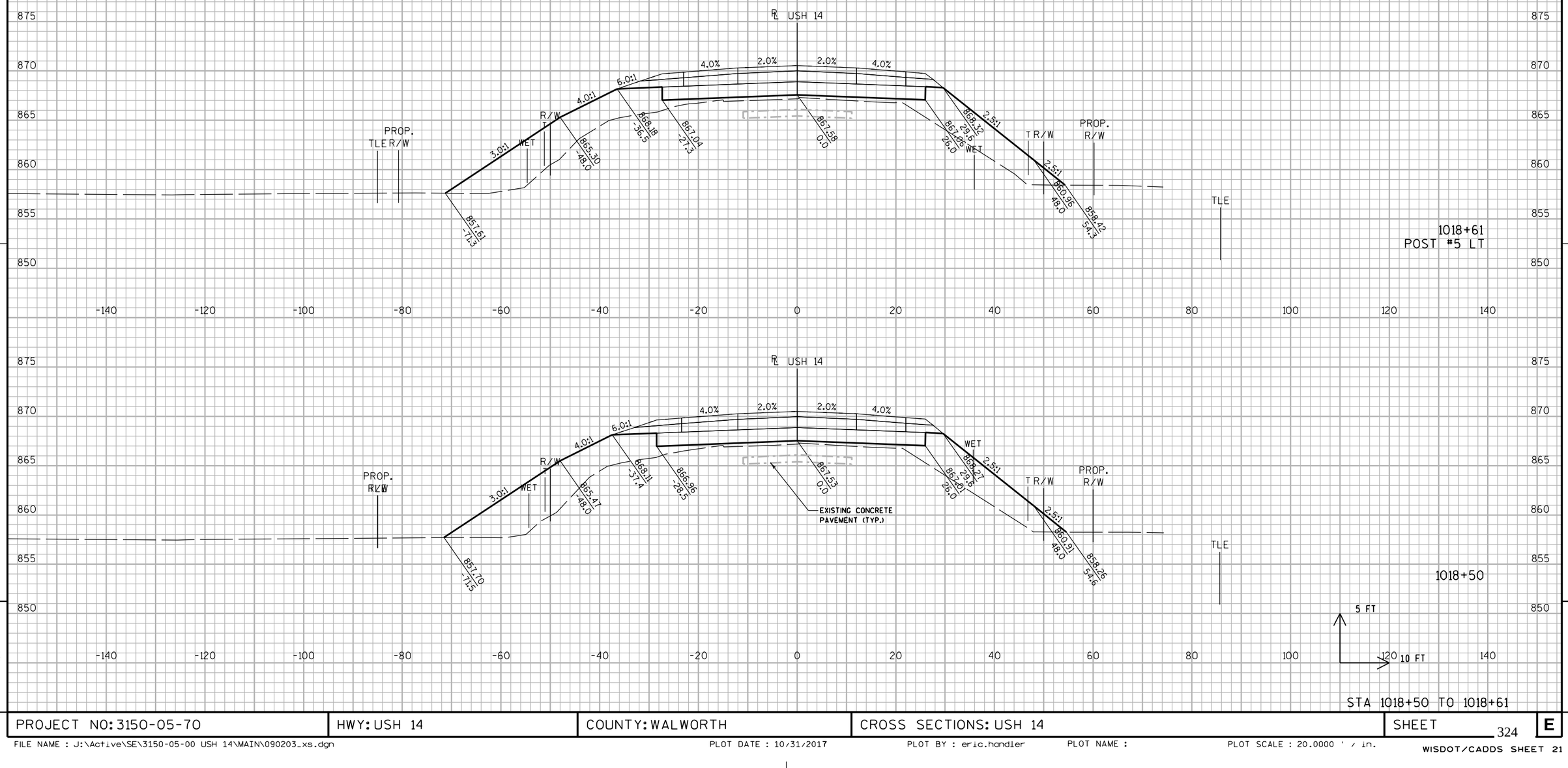
FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090203_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 323 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090203_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

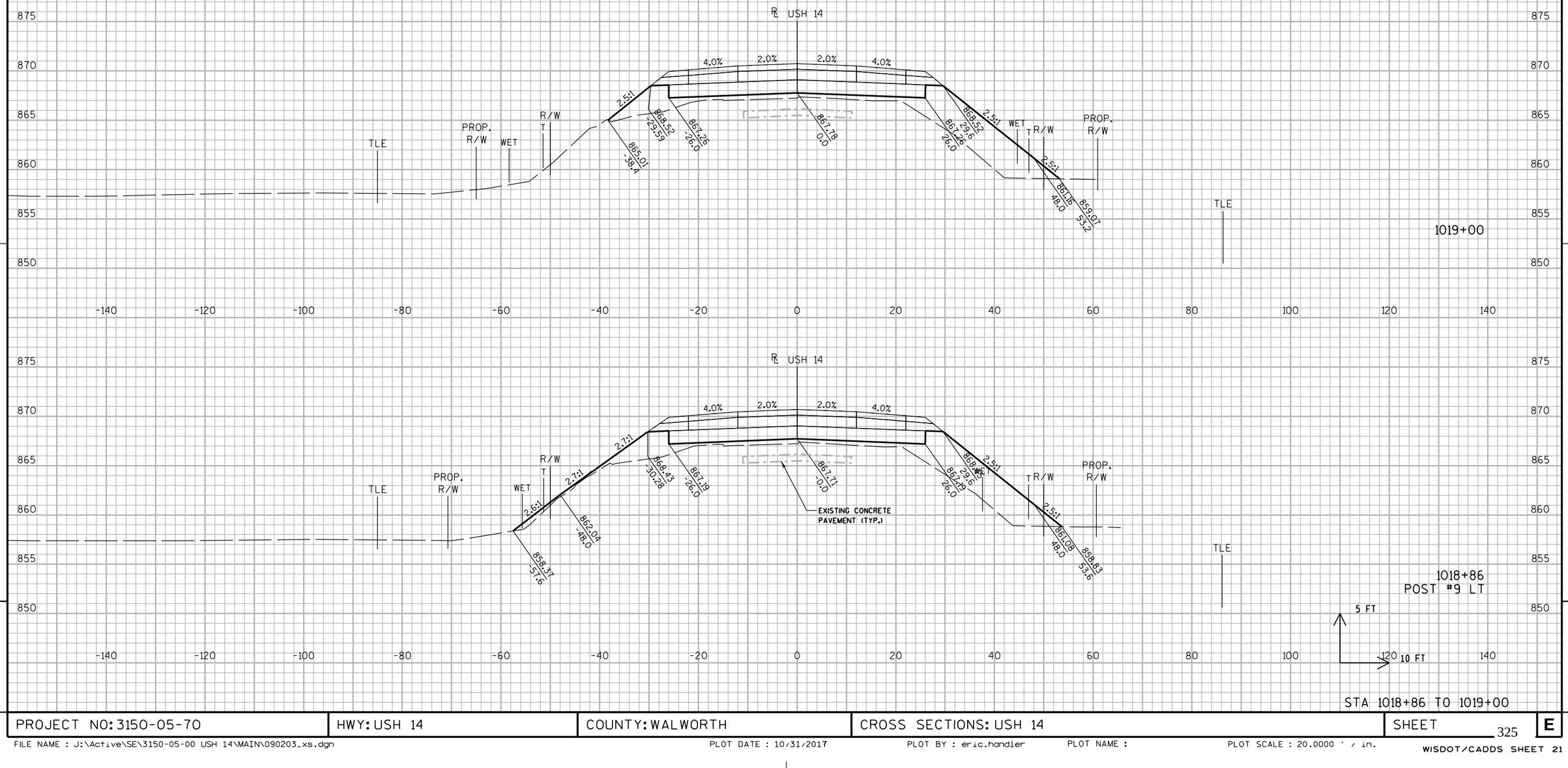



9

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 324 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090203_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

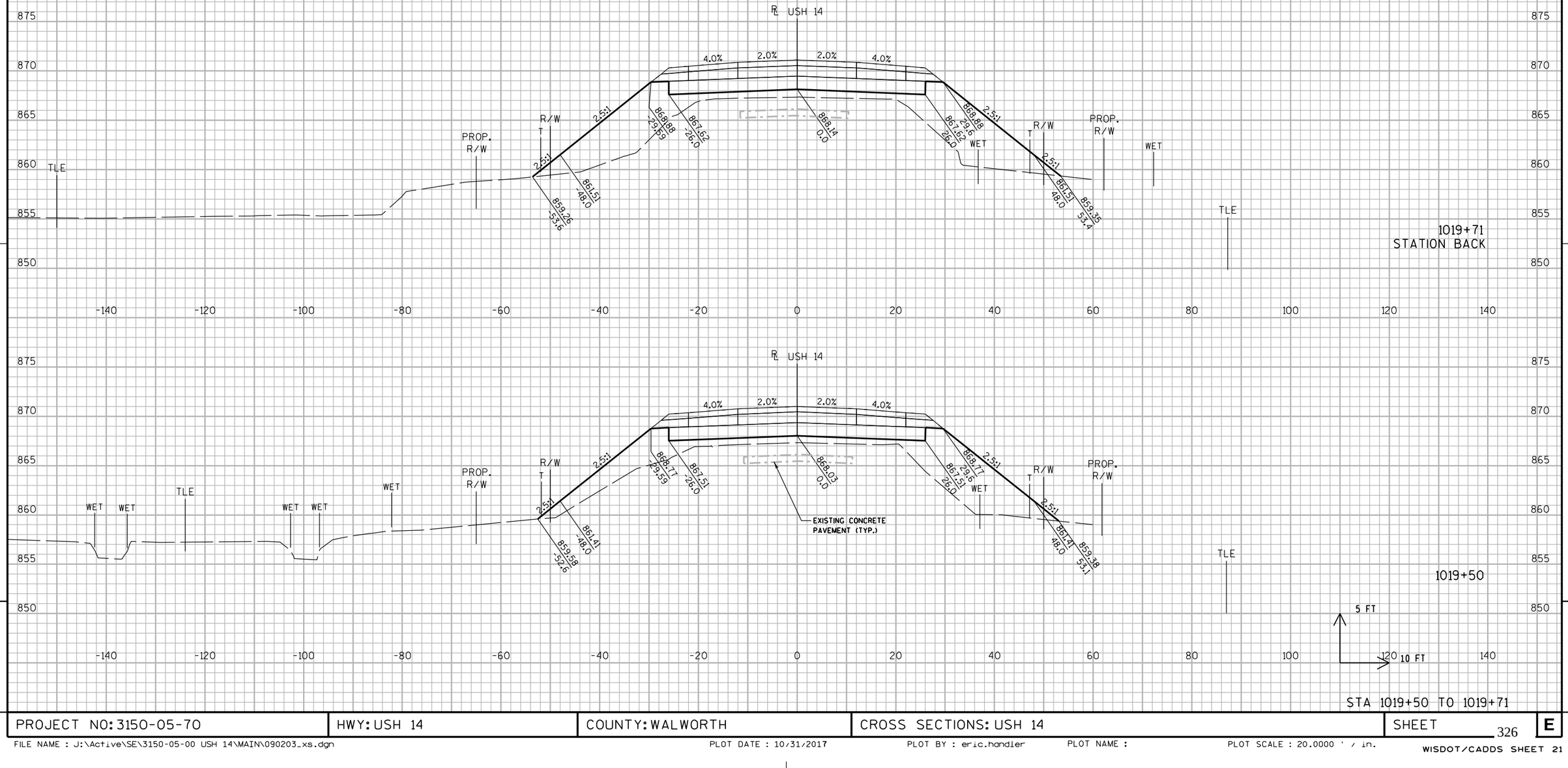



STA 1018+86 TO 1019+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 325 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090203_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

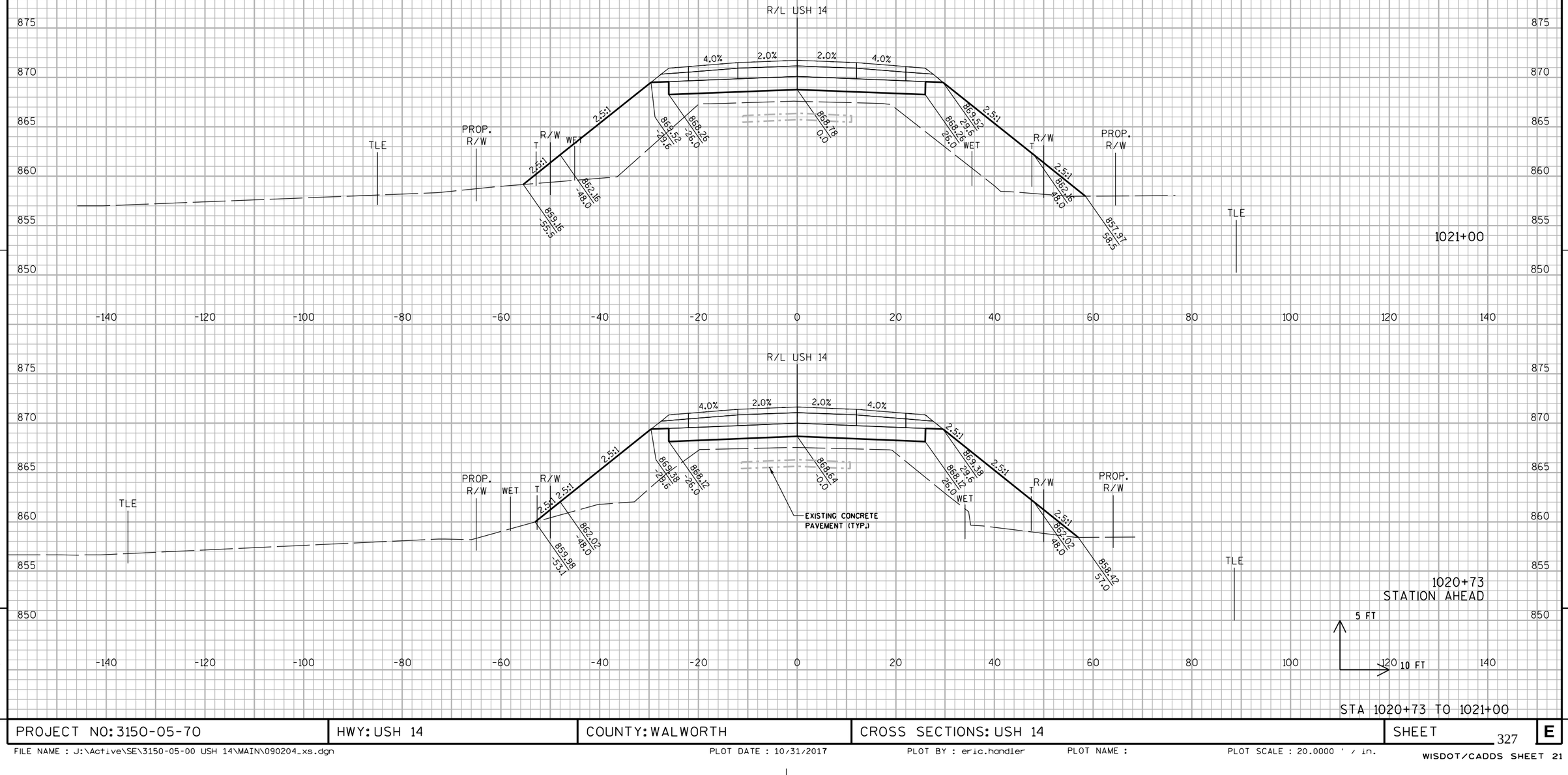
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET | E |
|---|---|---|---|---|---|



FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090203_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

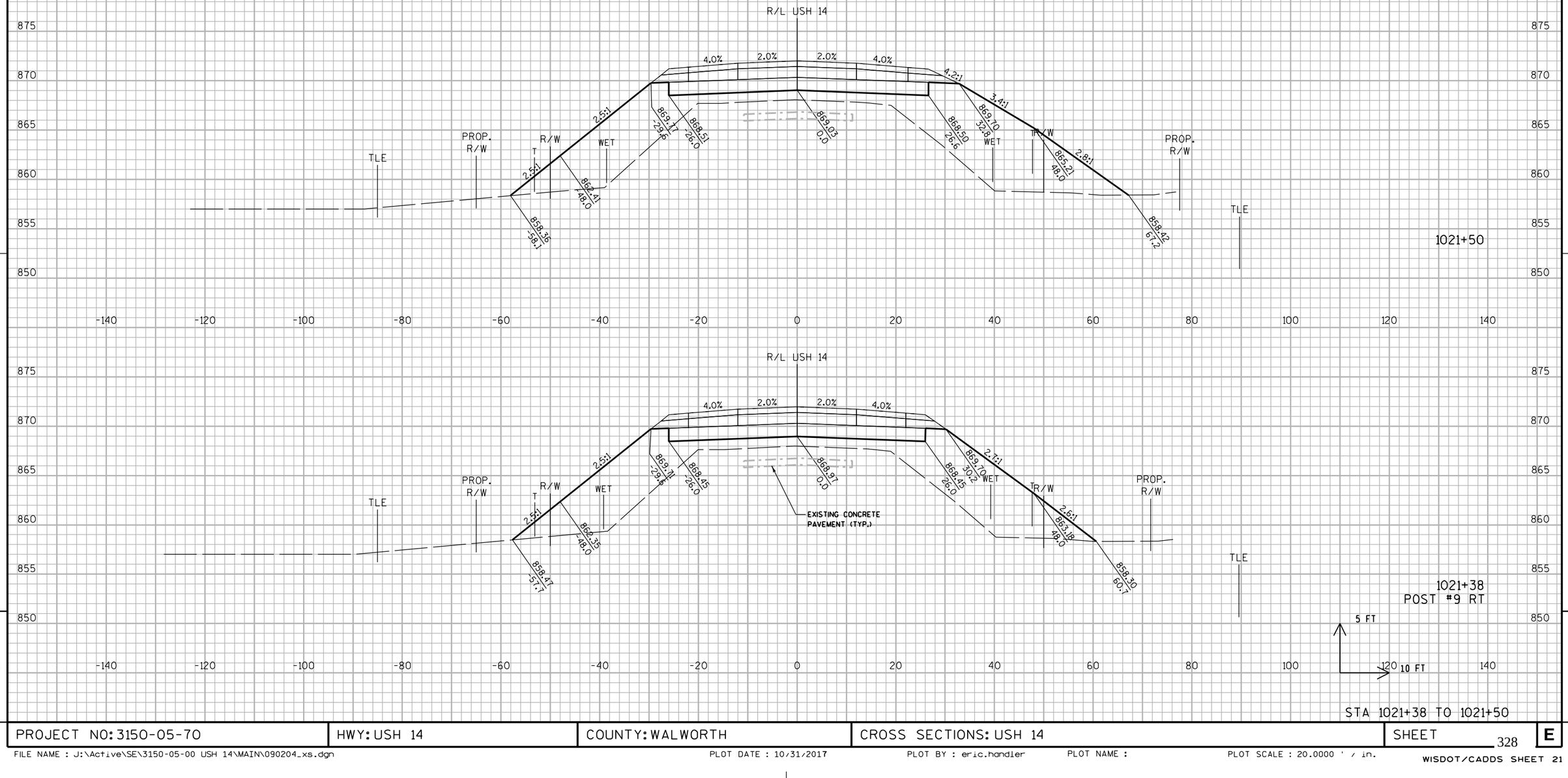



STA 1020+73 TO 1021+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 327 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090204_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

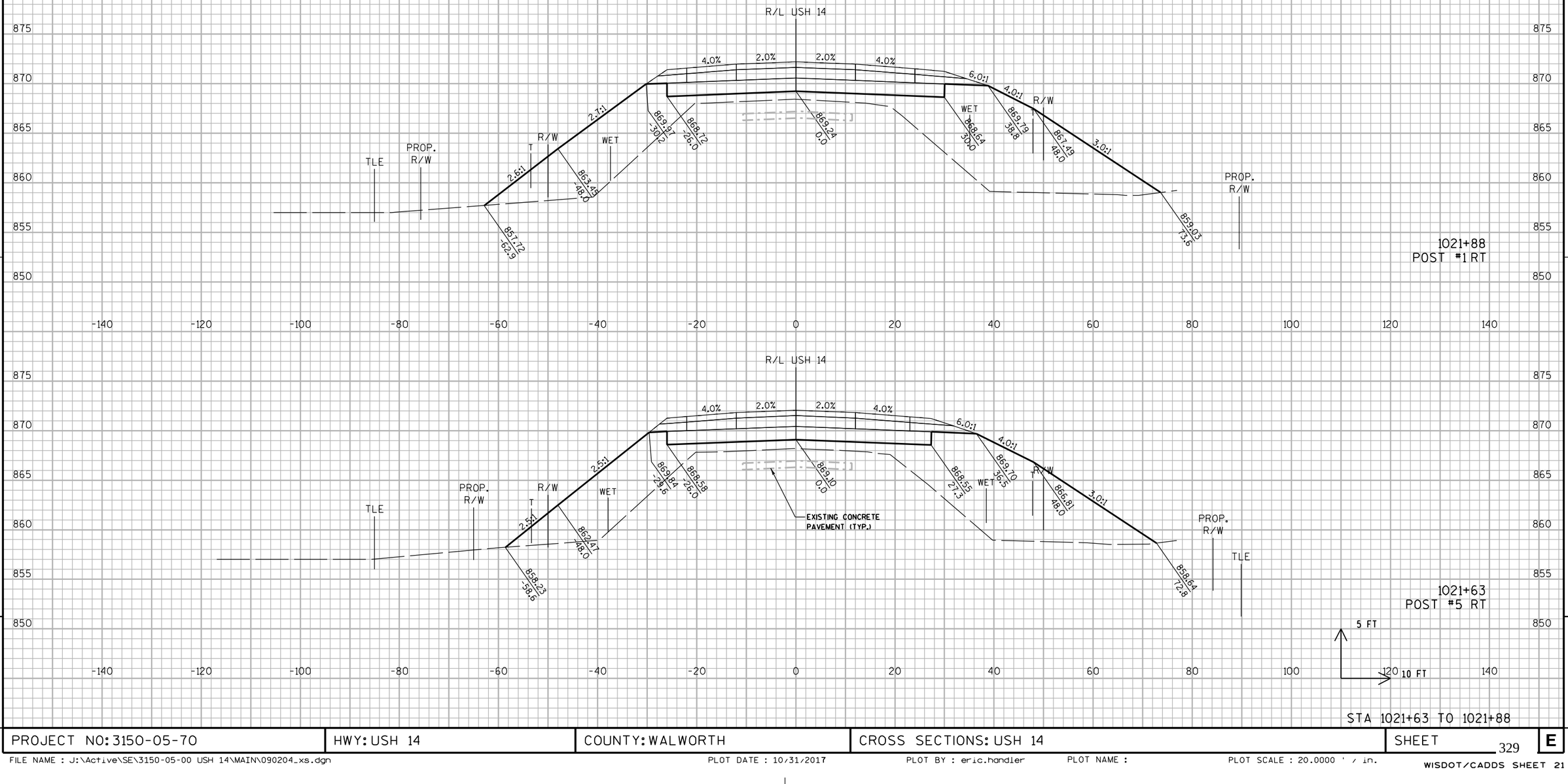
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 328 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090204_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

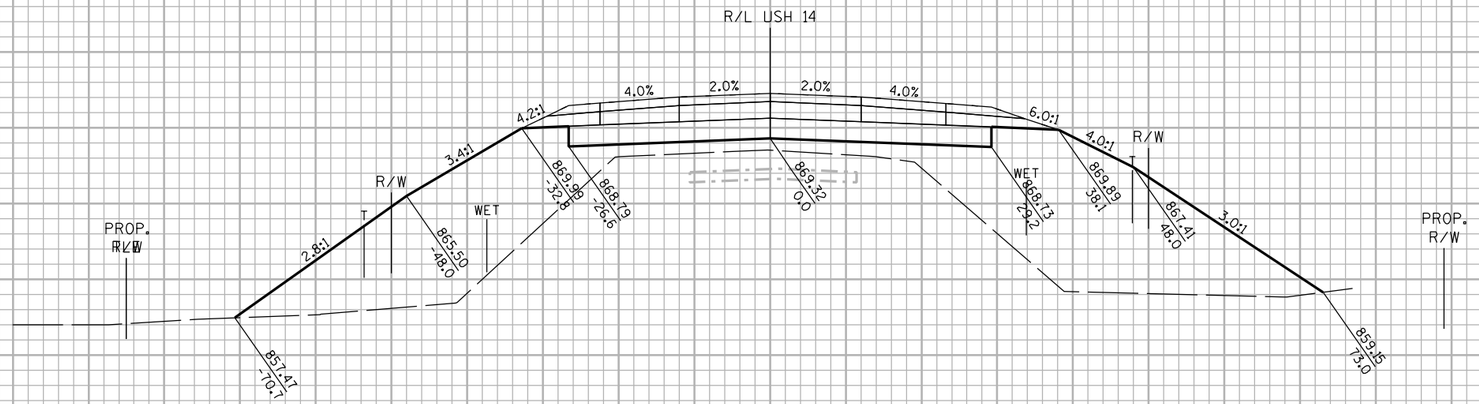
WISDOT/CADDS SHEET 21



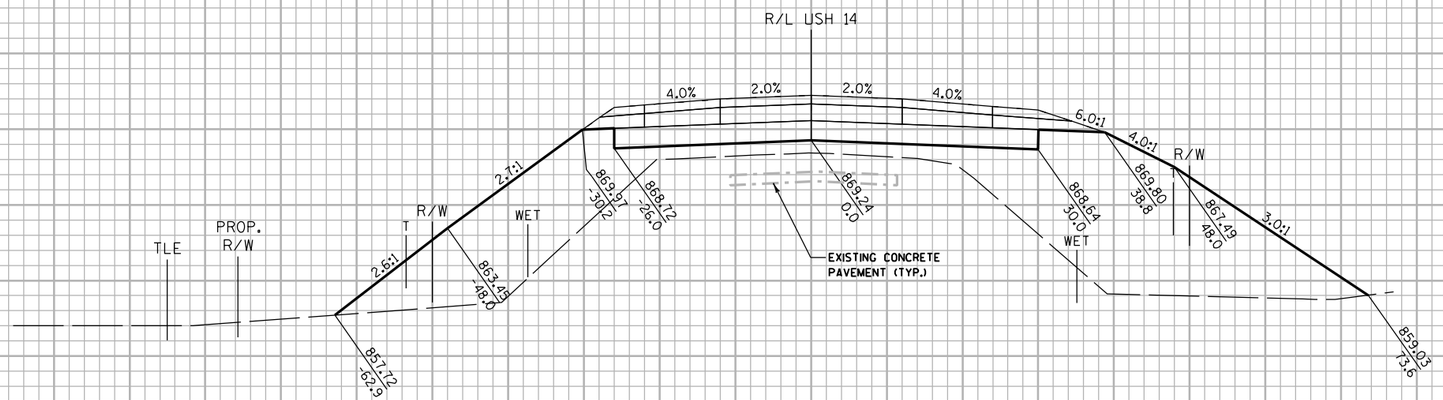

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 329 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090204_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21




1022+00



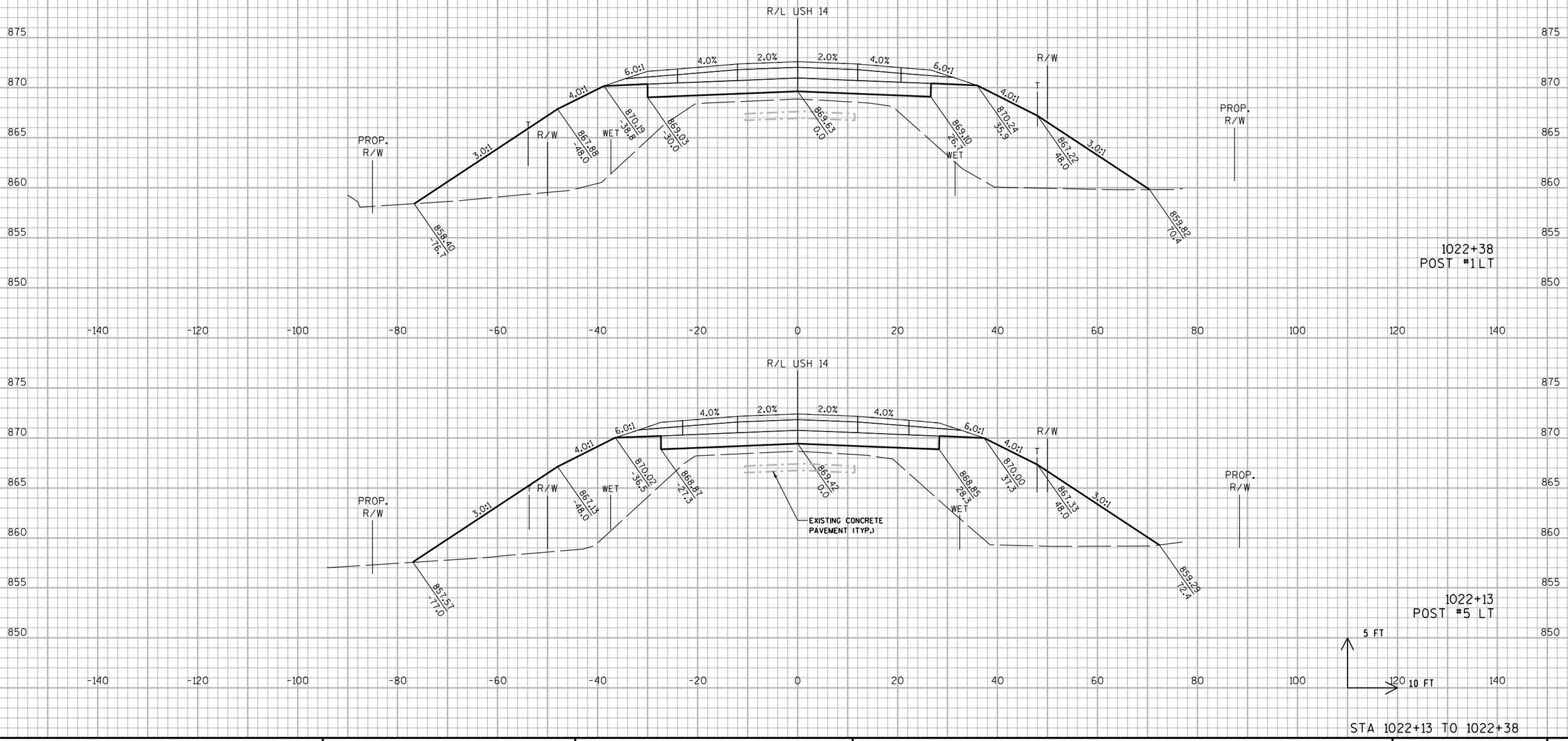

1021+88
POST #9 LT

5 FT
10 FT

STA 1021+88 TO 1022+00

9 9

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 330 | E |
|---|---|---|---|---|---|




1022+38
POST #1 LT




1022+13
POST #5 LT



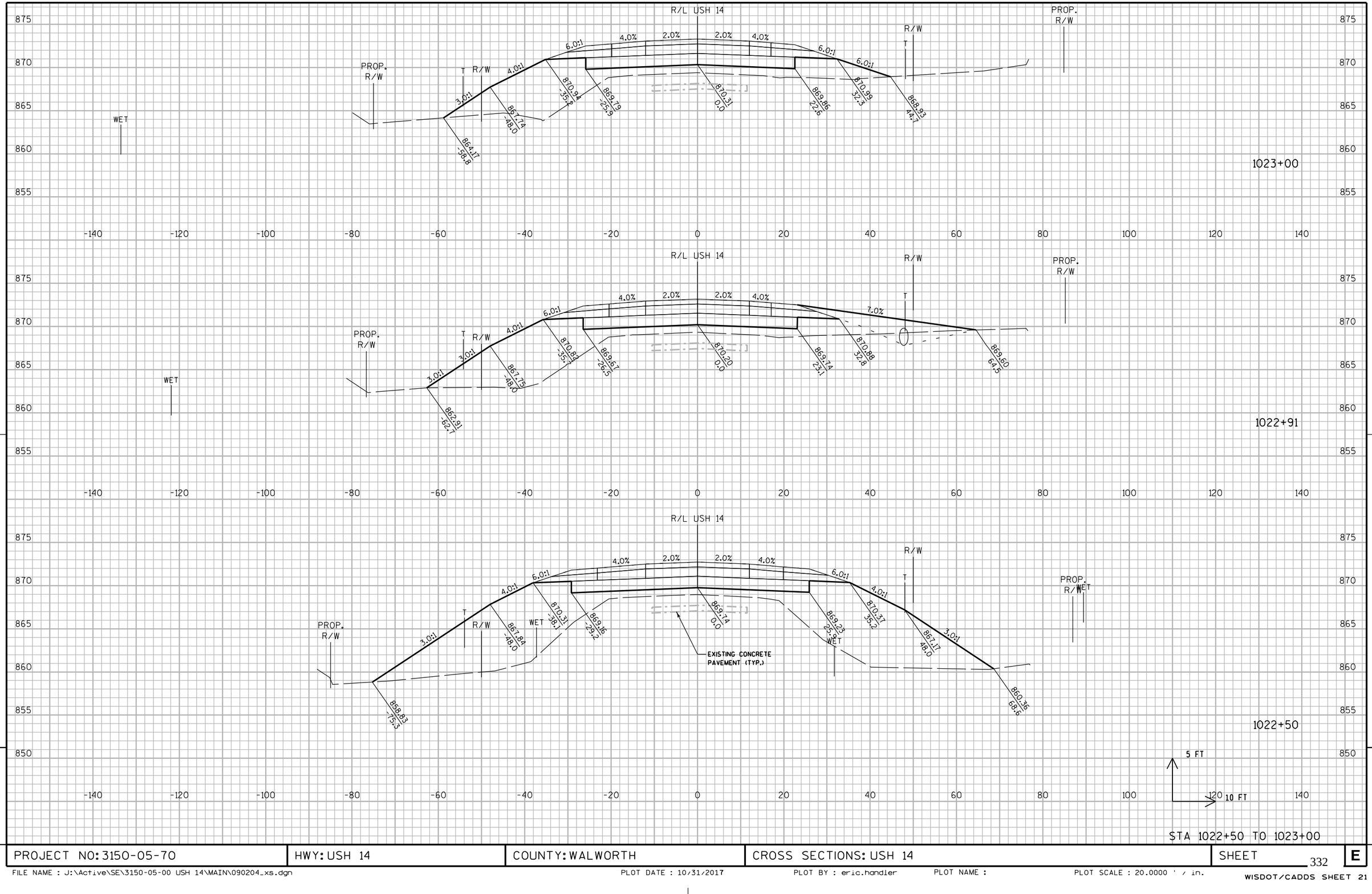

STA 1022+13 TO 1022+38

9 9

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 331 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090204_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

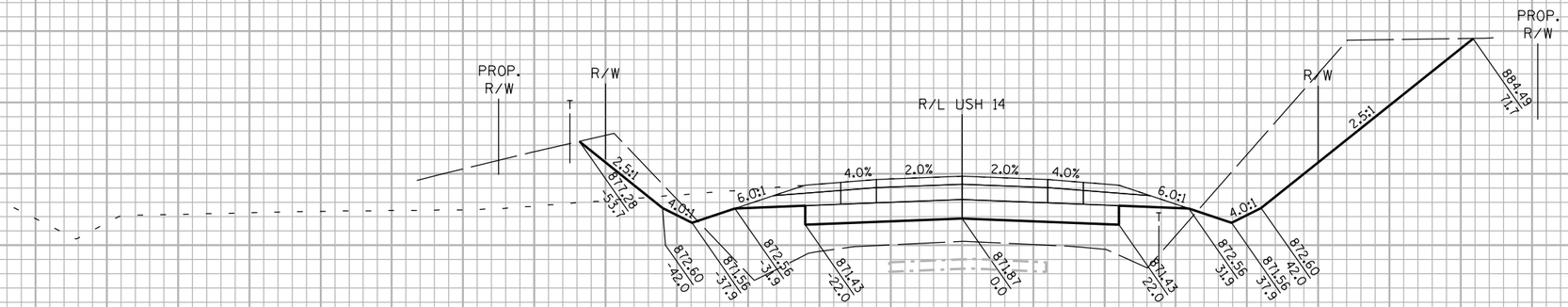


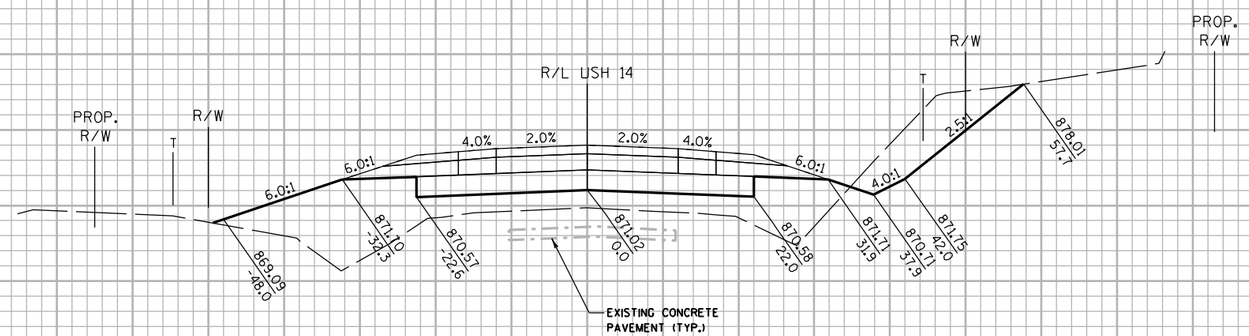

STA 1022+50 TO 1023+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 332 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090204_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

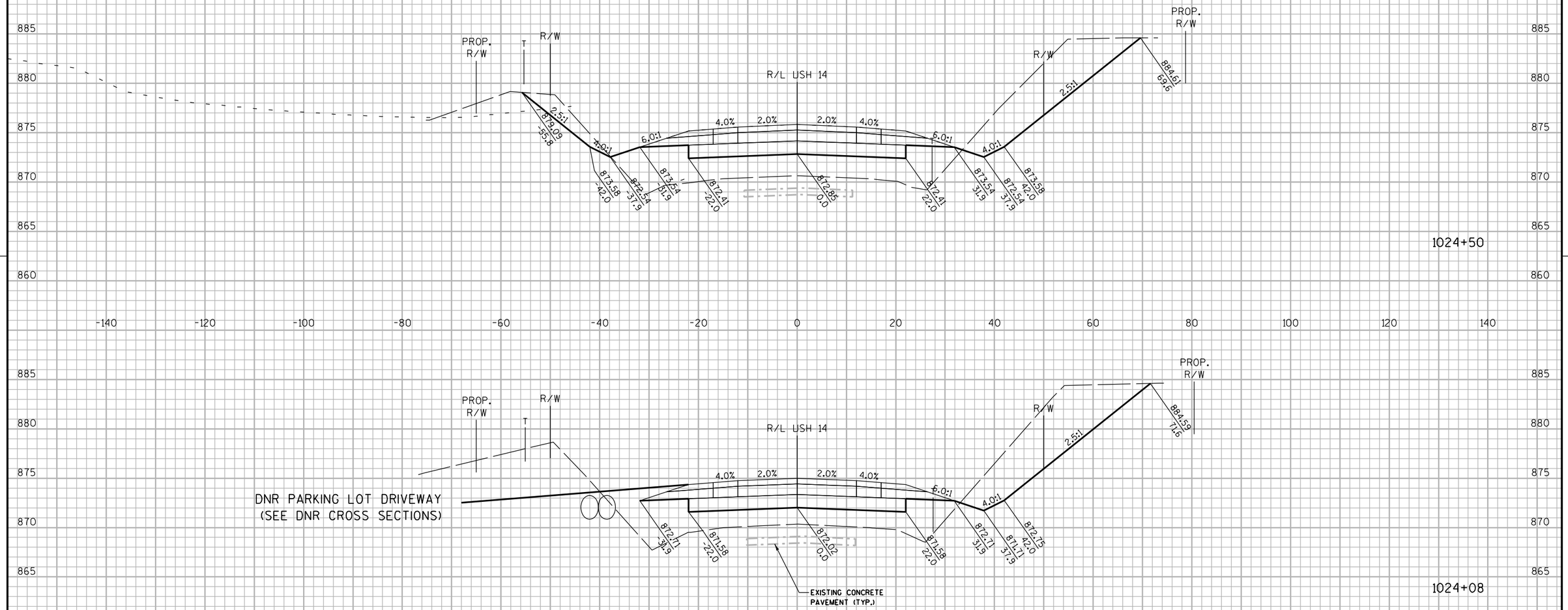



| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 333 | E |
|---|---|---|---|---|---|

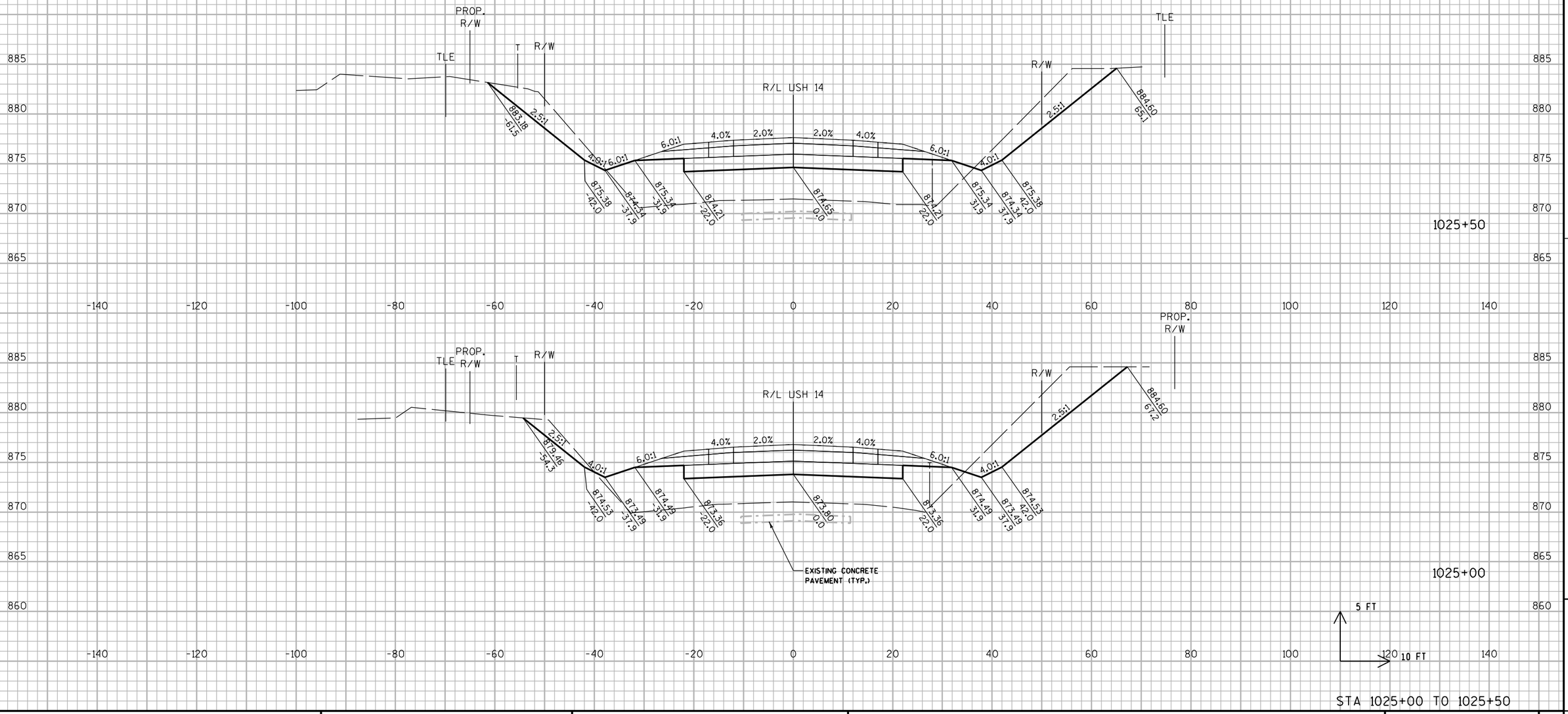
FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090204_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21




STA 1024+08 TO 1024+50

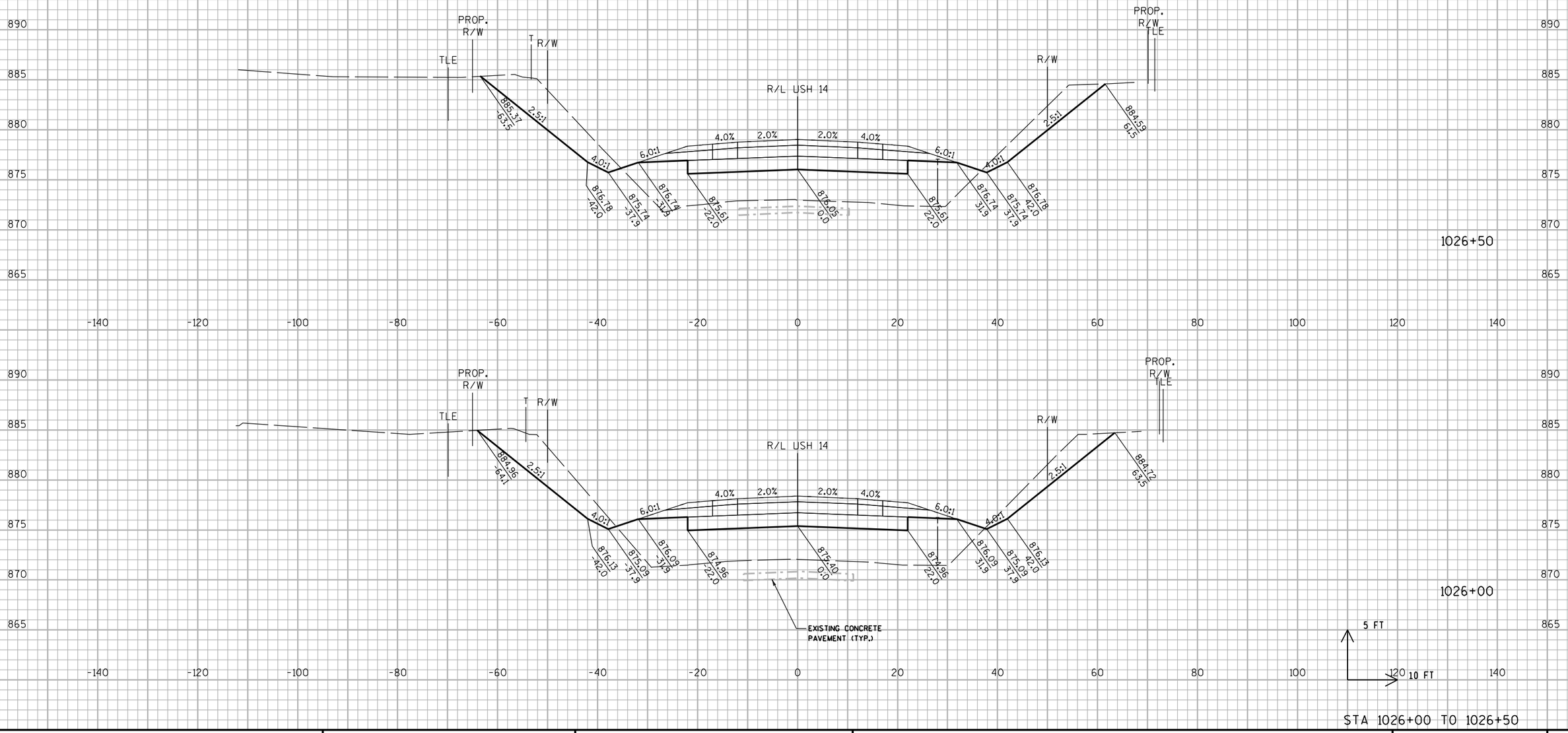
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 334 | E |
|---|---|---|---|---|---|



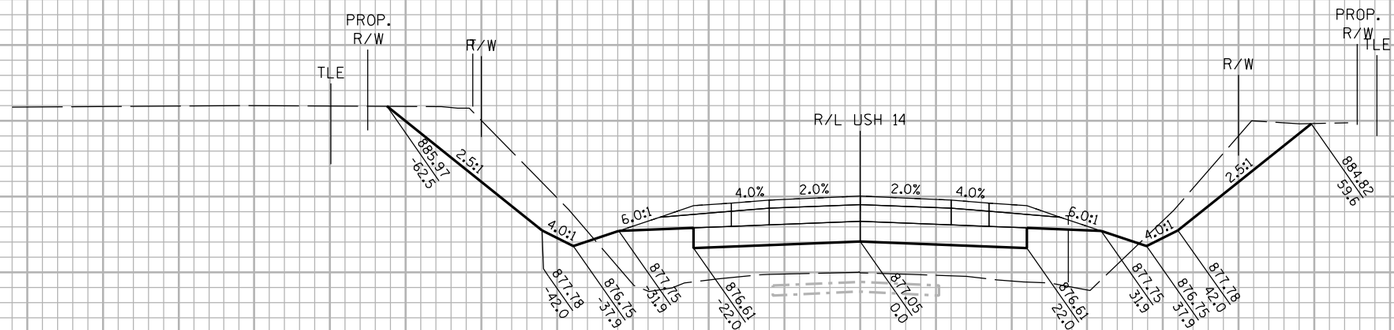

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 335 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090204_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

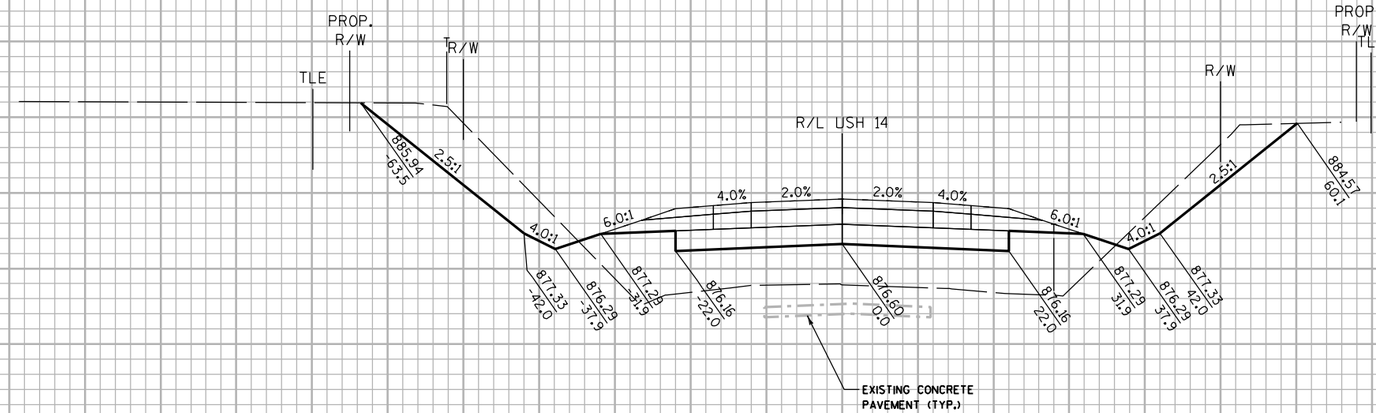
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 336 | E |
|---|---|---|---|---|---|




1027+50

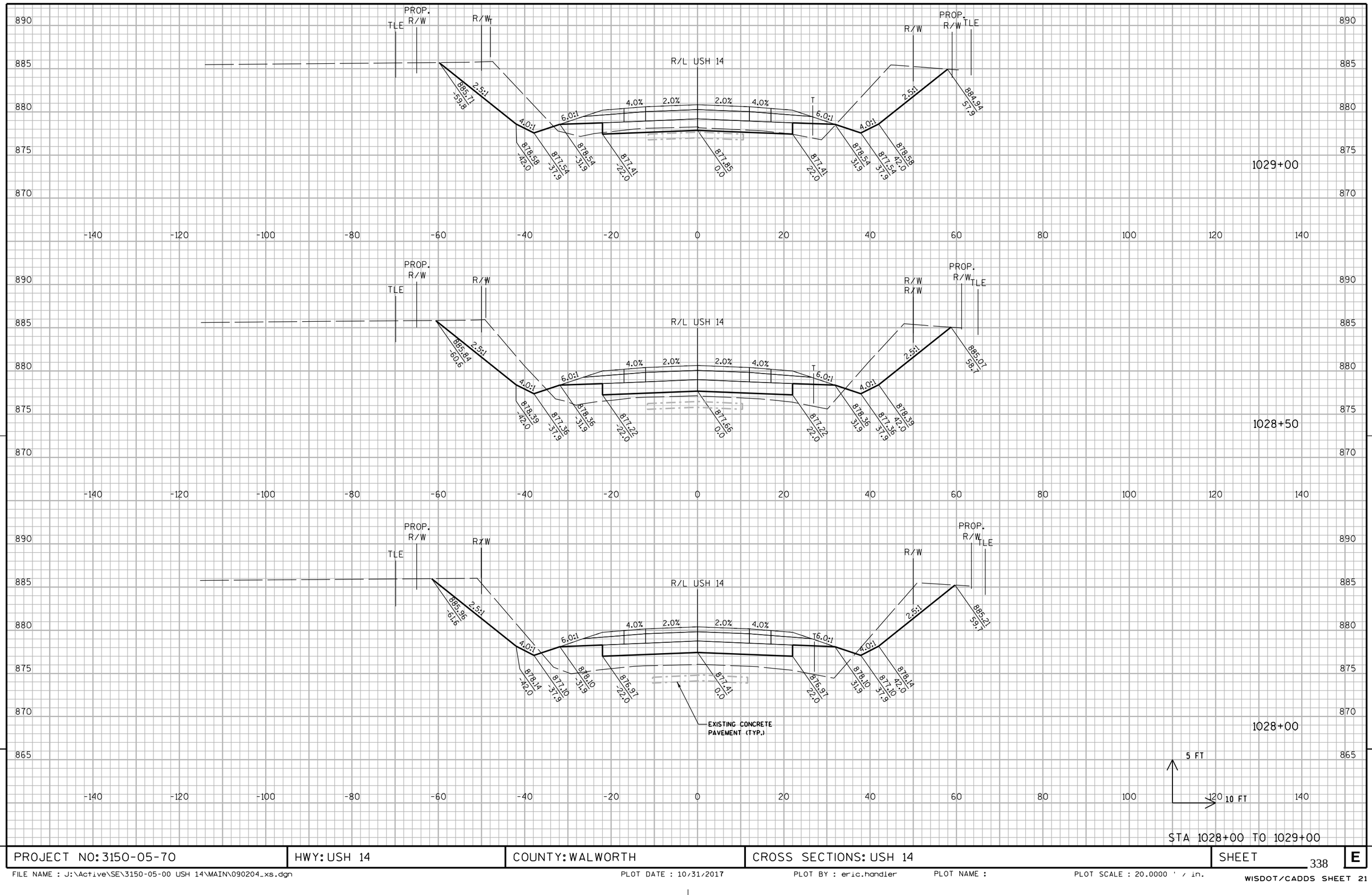



1027+00

5 FT
10 FT

STA 1027+00 TO 1027+50

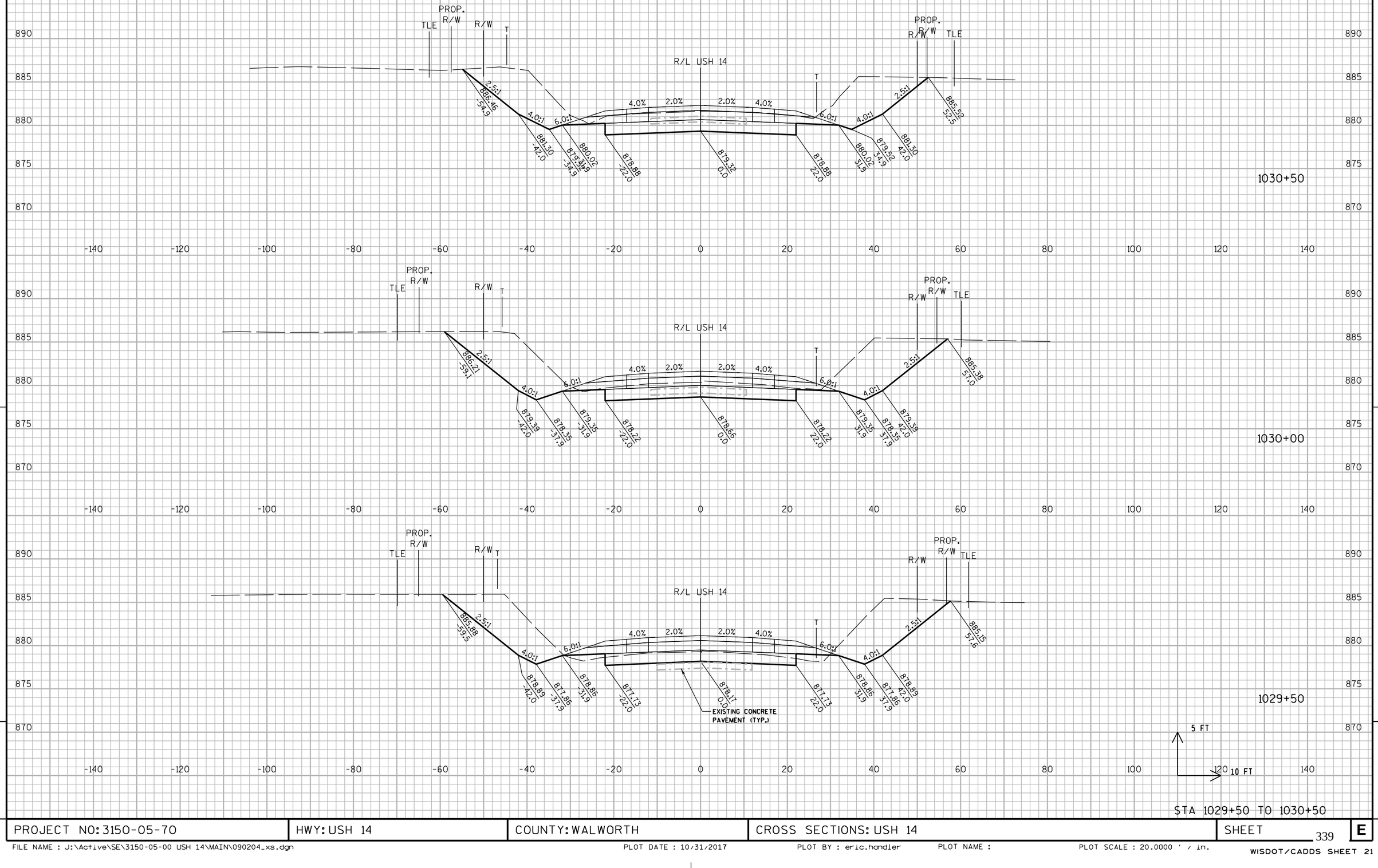
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 337 | E |
|---|---|---|---|---|---|




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 338 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090204_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

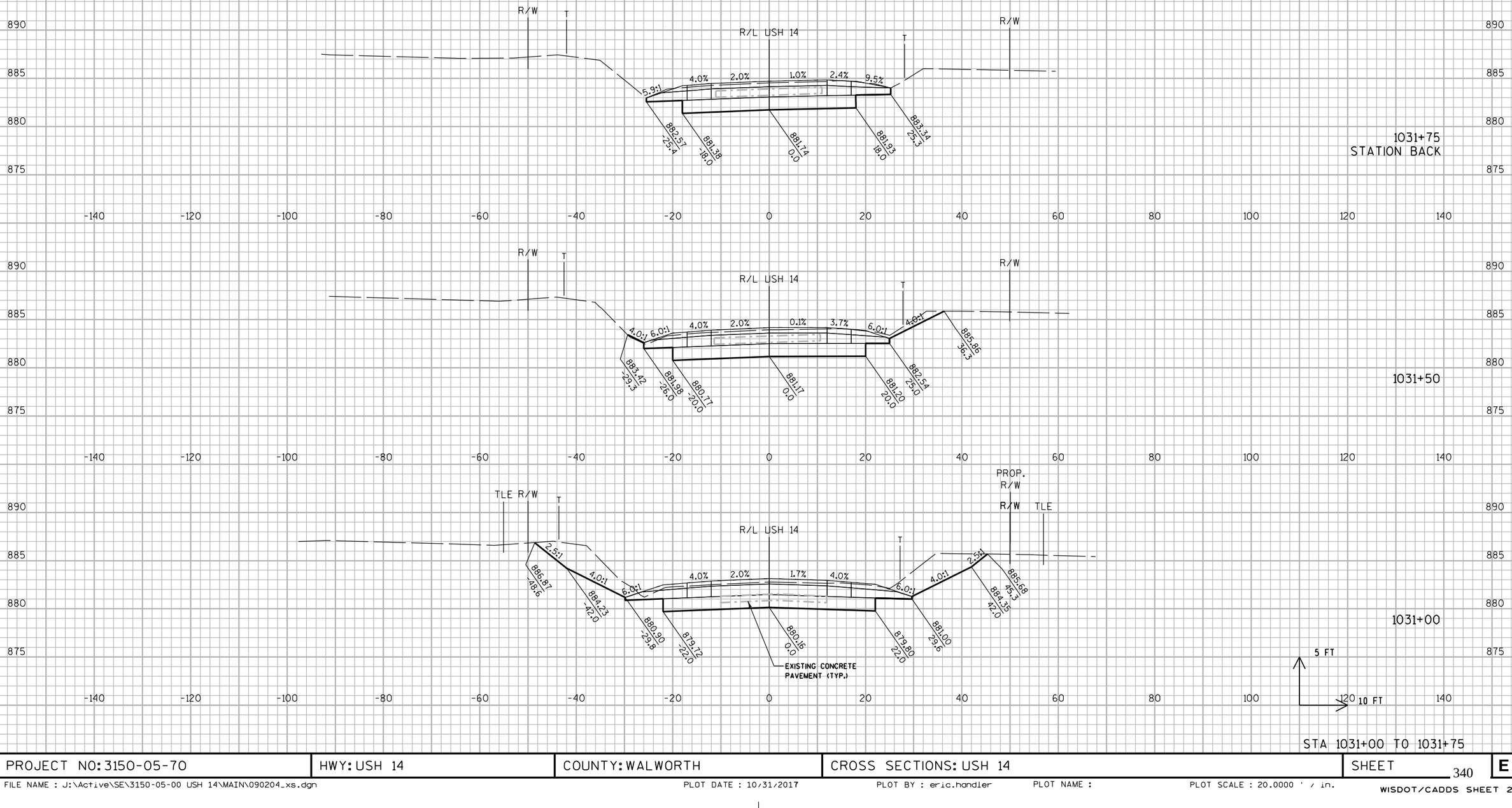
WISDOT/CADDS SHEET 21




STA 1029+50 TO 1030+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 339 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090204_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.
WISDOT/CADDS SHEET 21

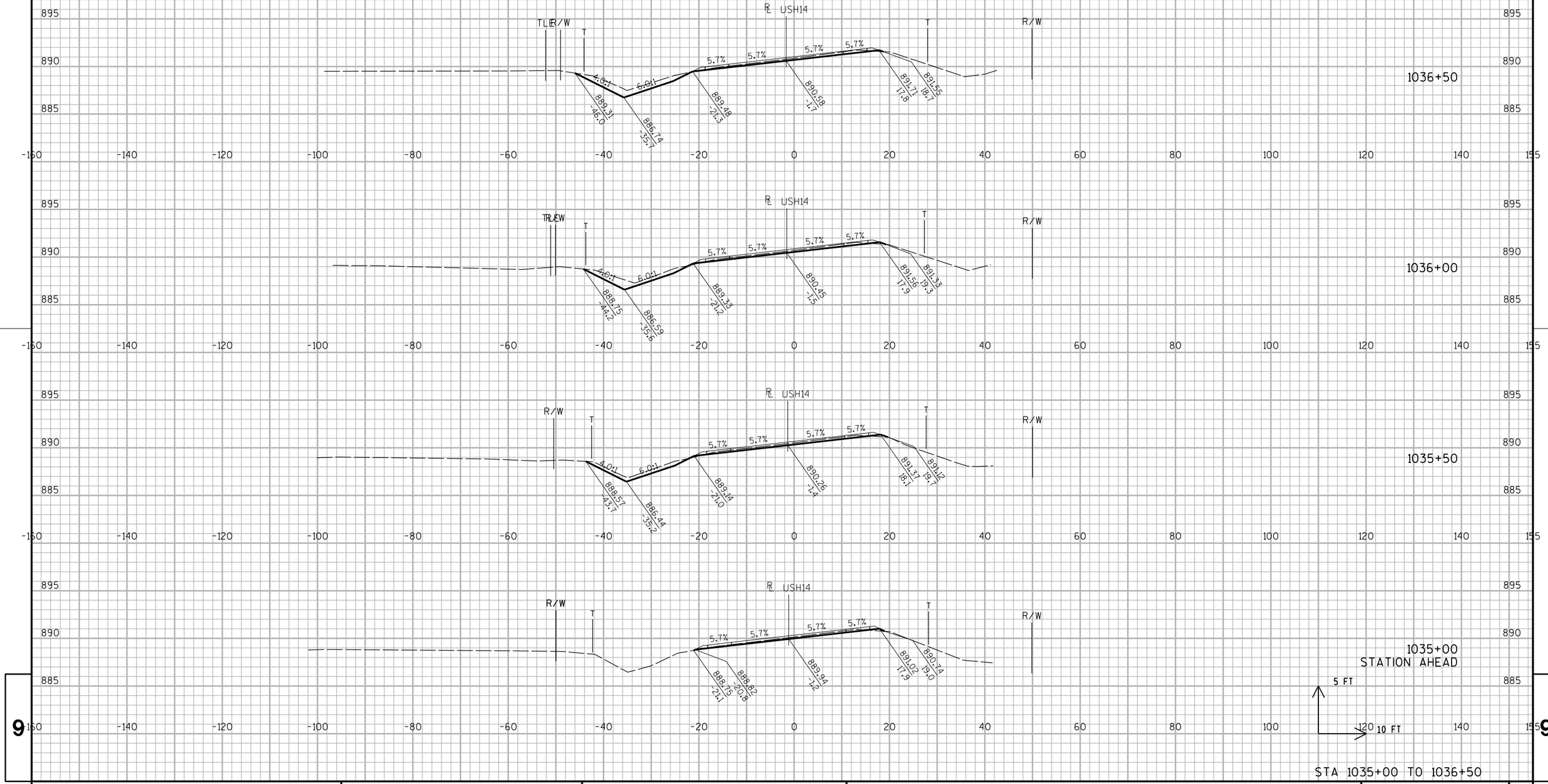



STA 1031+00 TO 1031+75

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 340 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090204_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

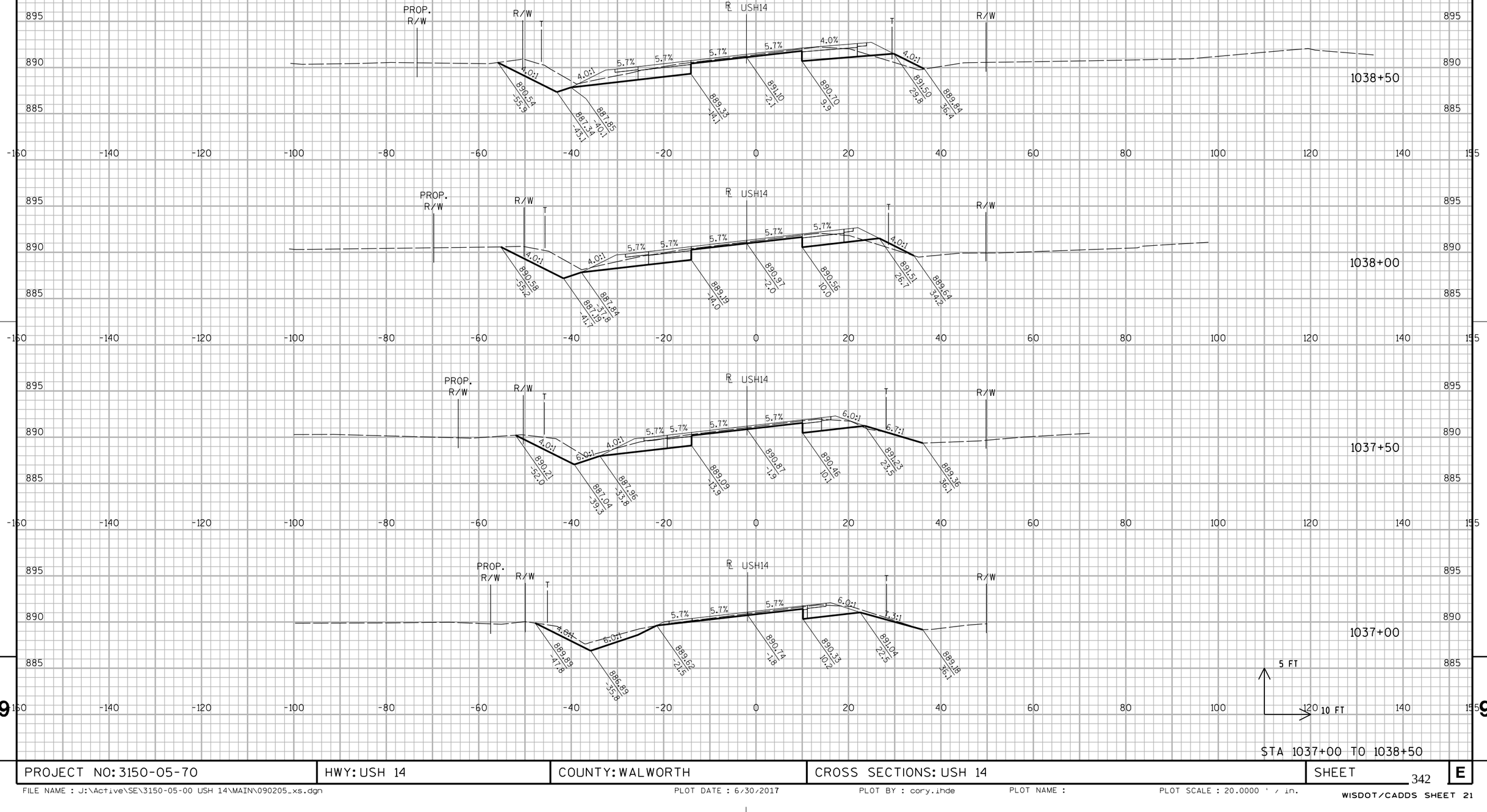
WISDOT/CADDS SHEET 21




9

9

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 341 | E |
|---|---|---|---|---|---|




STA 1037+00 TO 1038+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 342 | E |
|---|---|---|---|---|---|

STA 1039+00 TO 1040+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 343 | E |
|---|---|---|---|---|---|

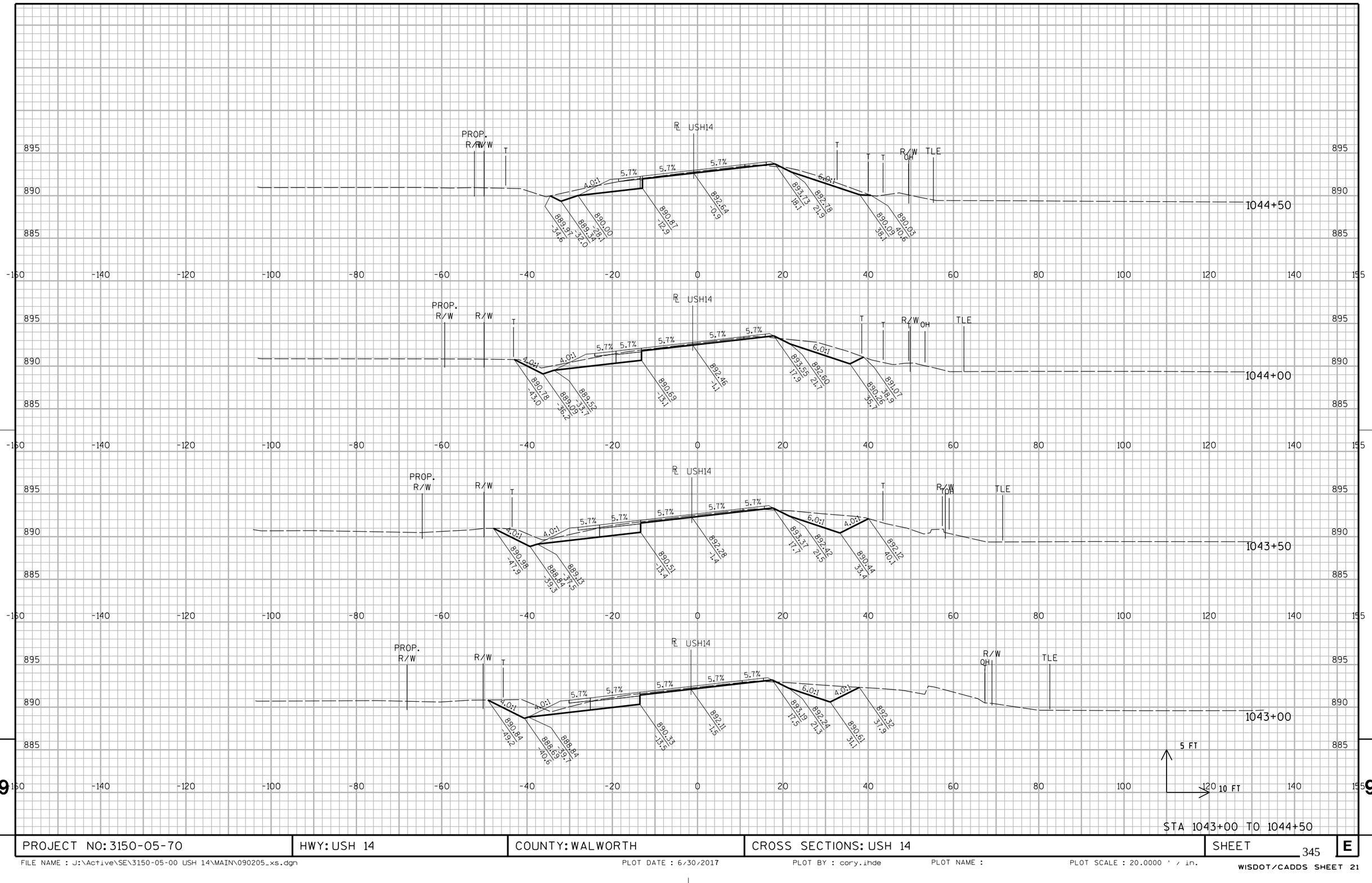
FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090205_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 344 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090205_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

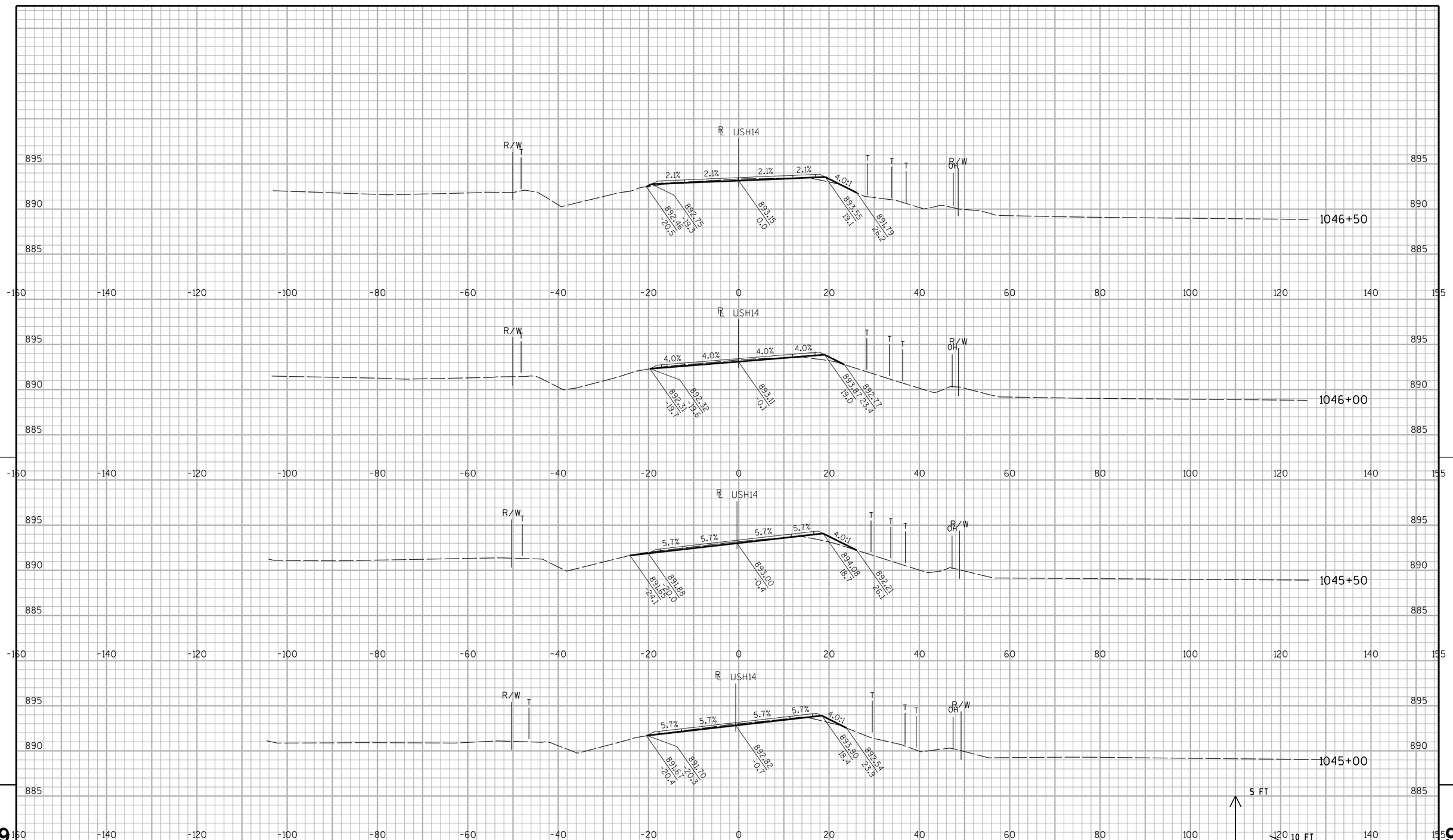
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 345 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090205_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

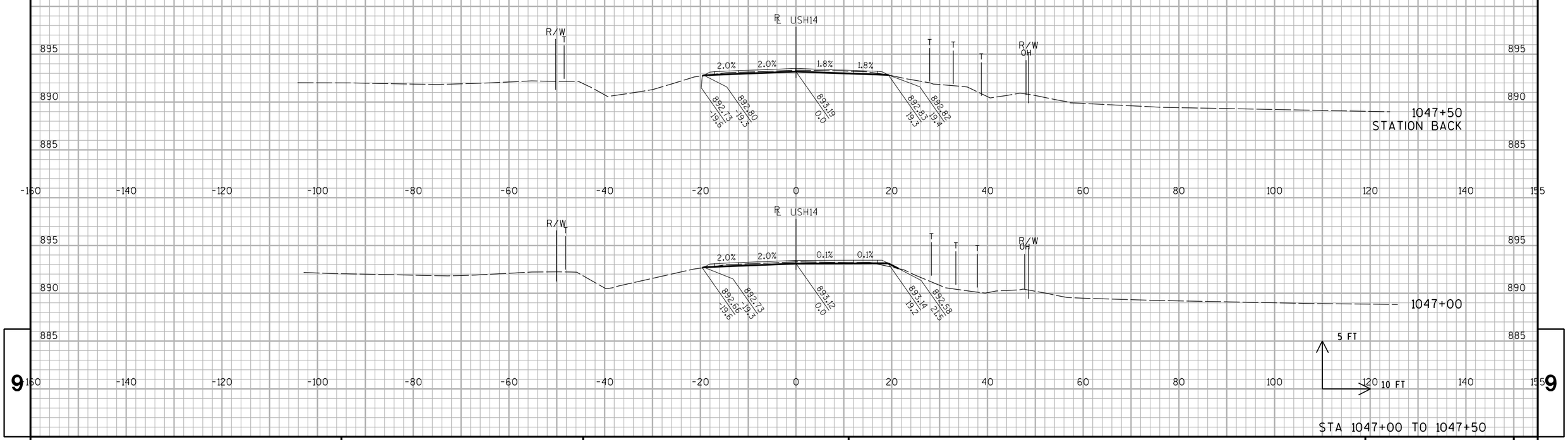



STA 1045+00 TO 1046+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 346 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090205_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

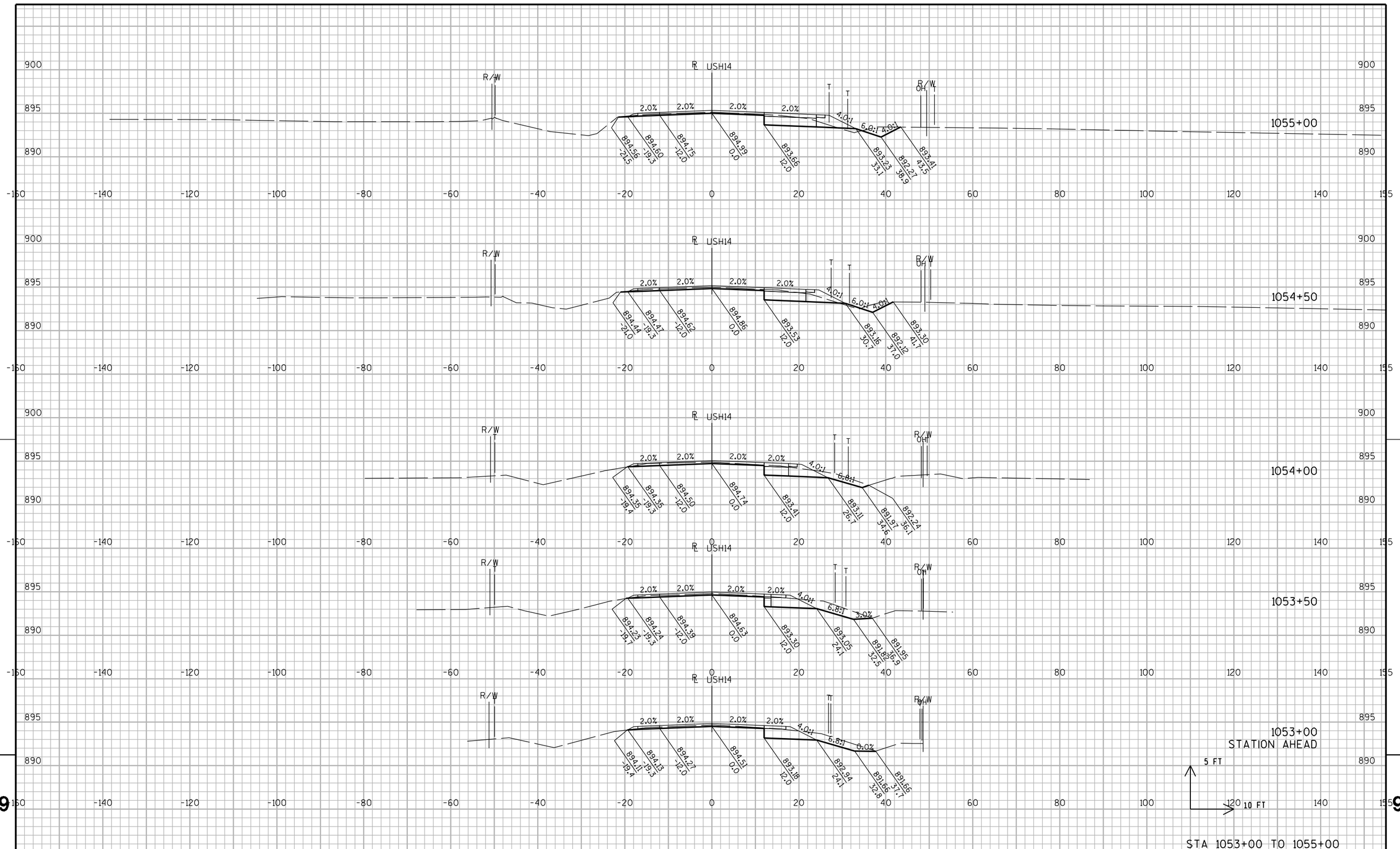
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 347 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090205_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

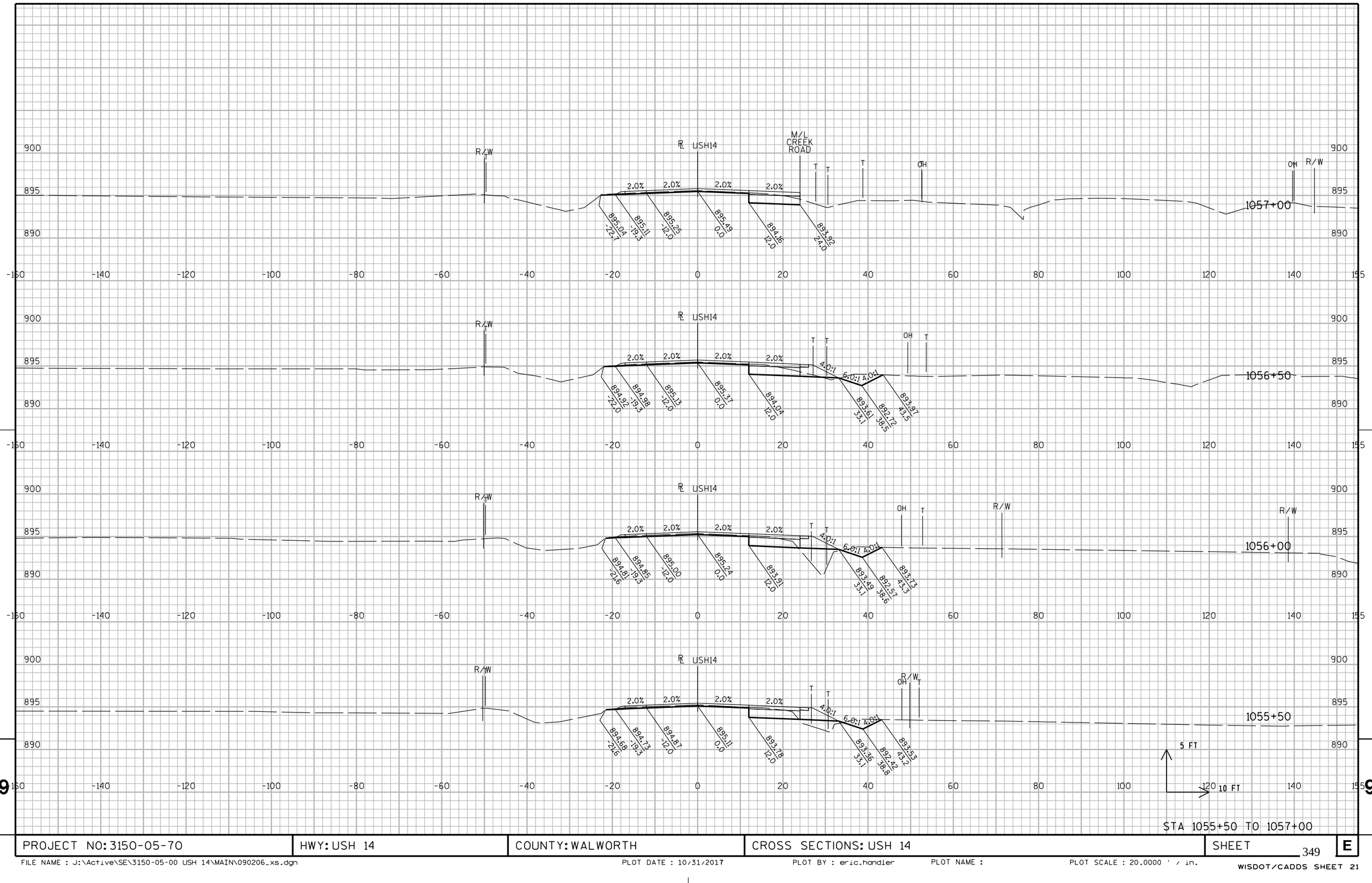



STA 1053+00 TO 1055+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 348 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090206_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

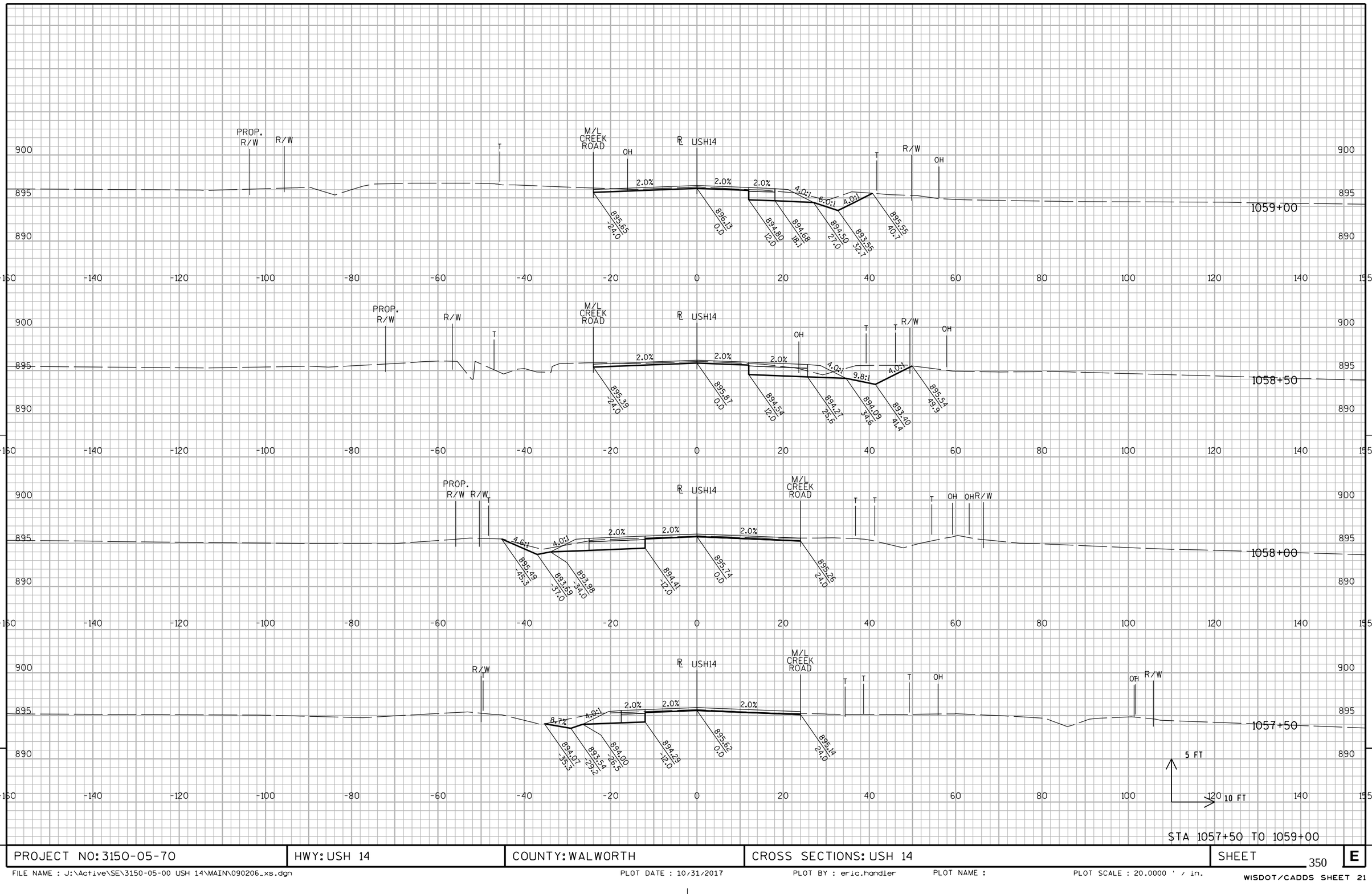



STA 1055+50 TO 1057+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 349 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090206_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21




STA 1057+50 TO 1059+00

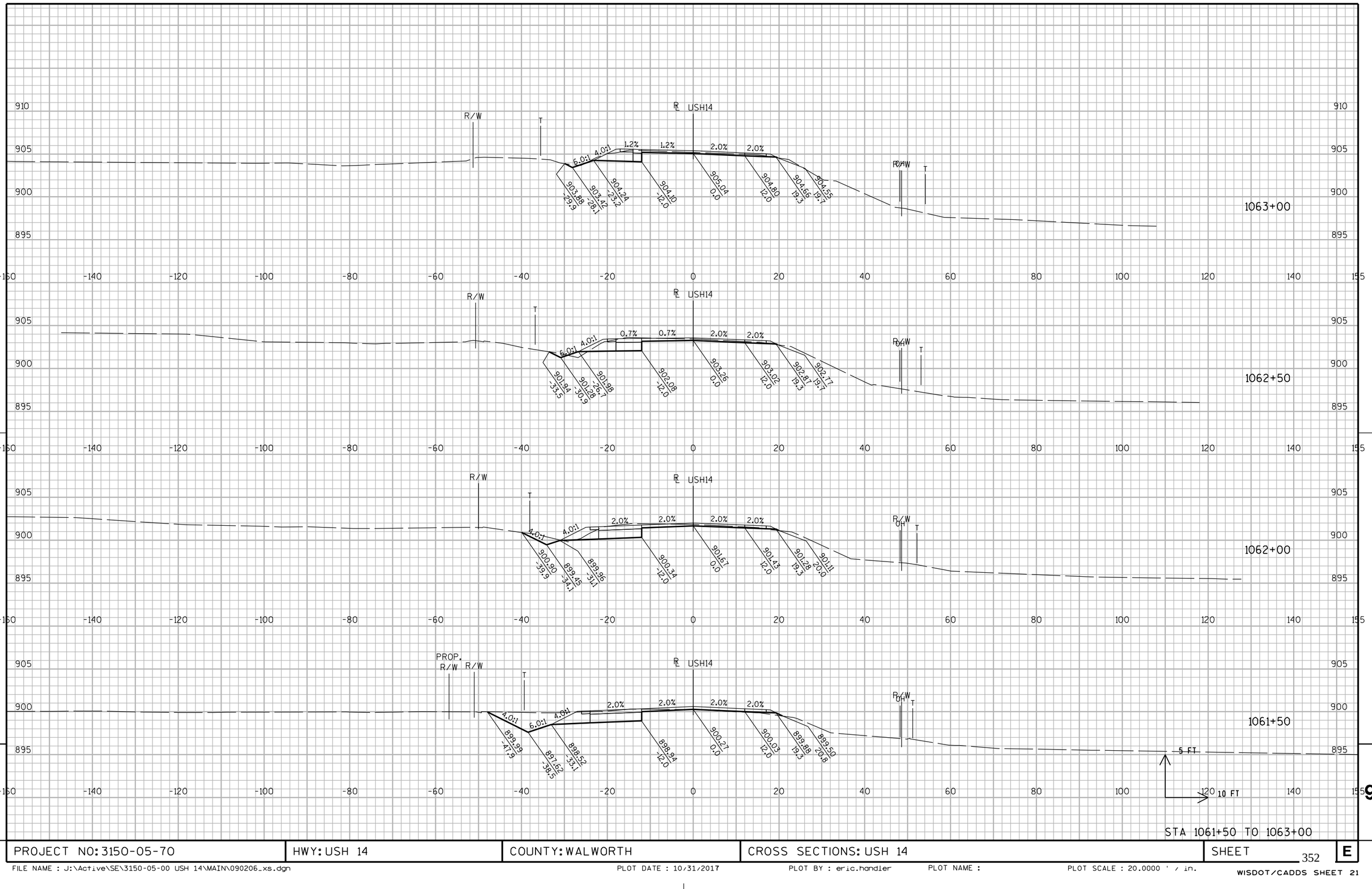
| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 350 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090206_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

STA 1059+50 TO 1061+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 351 | E |
|---|---|---|---|---|---|

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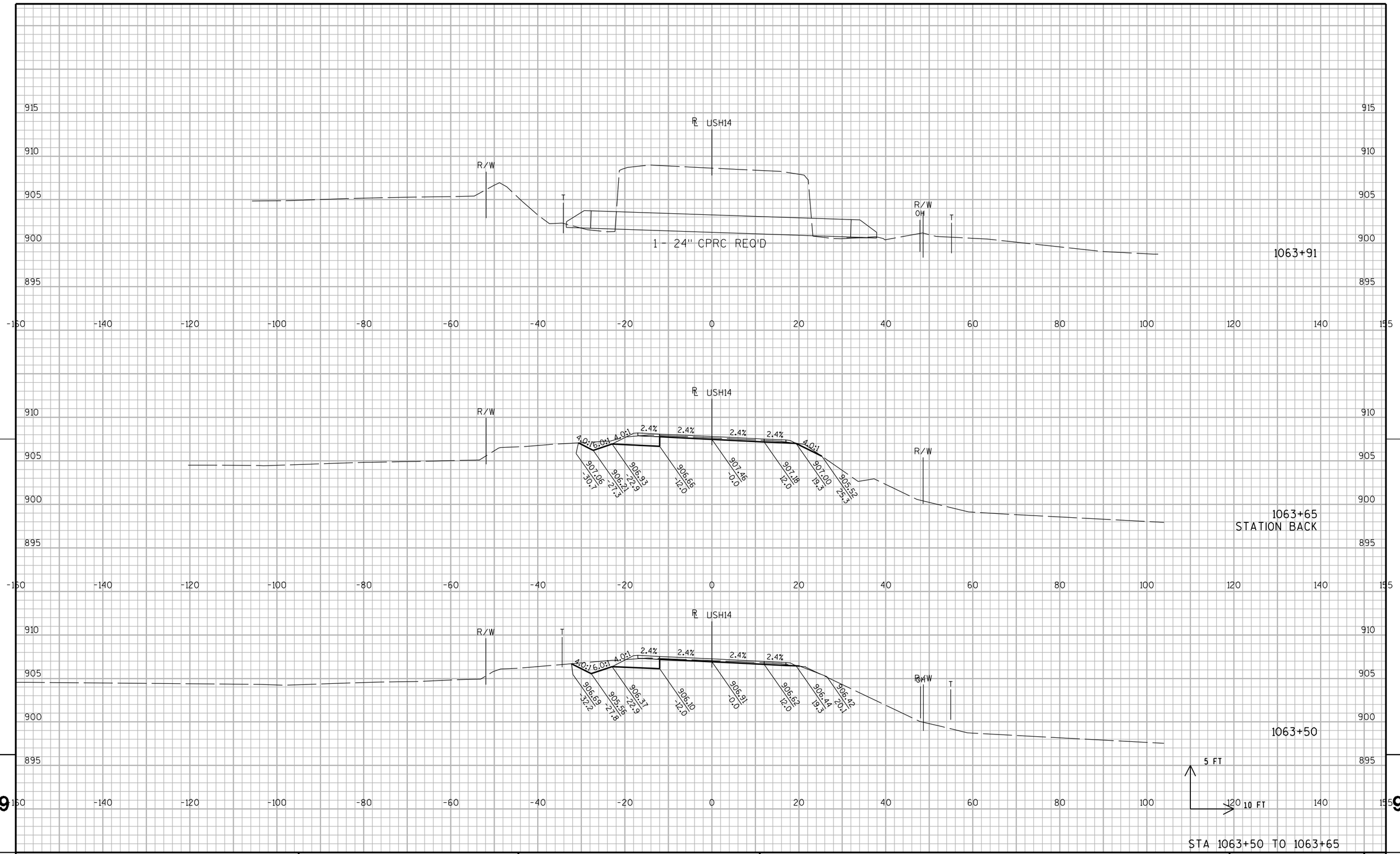
9

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 352 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090206_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

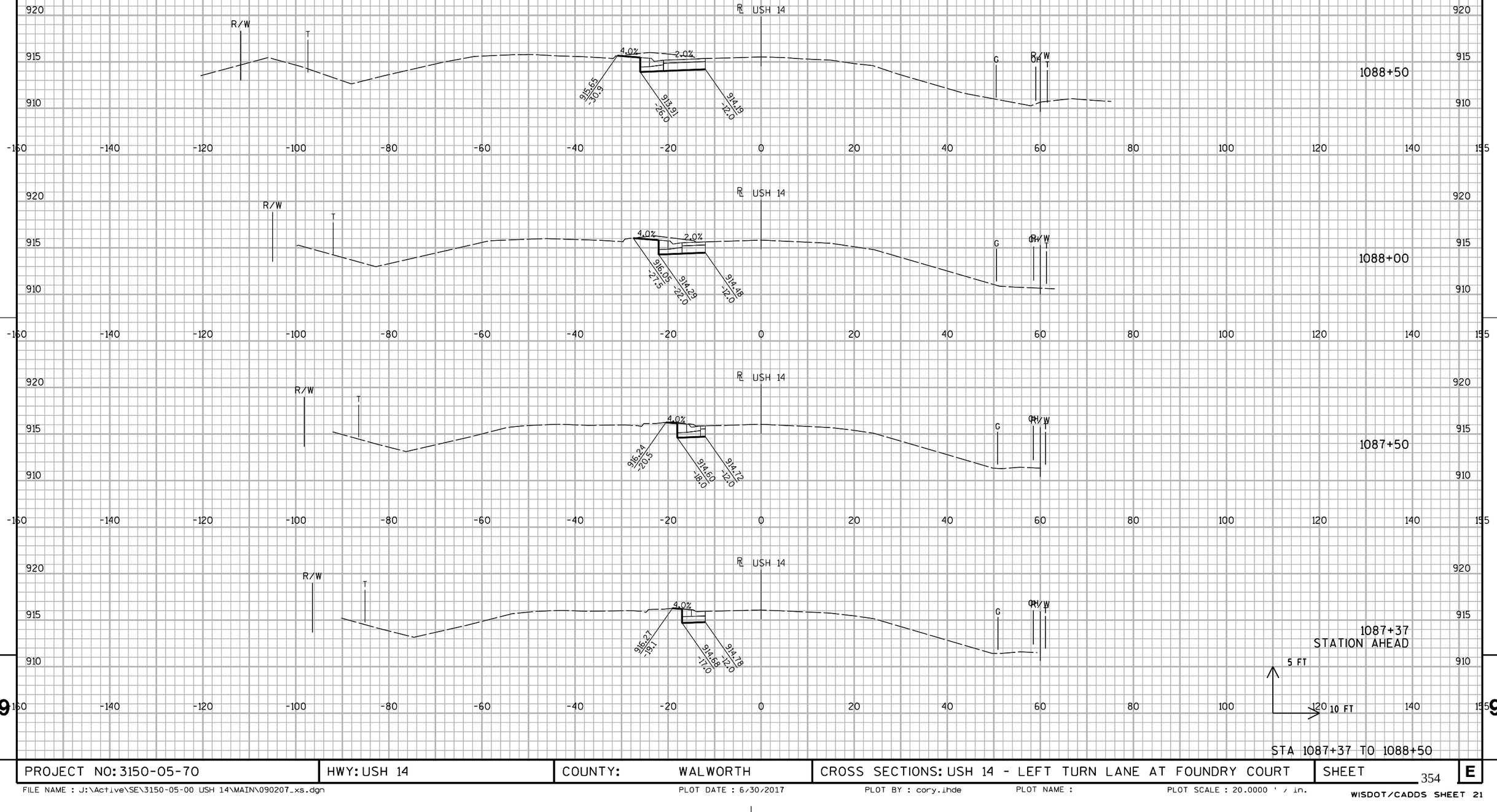
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 | SHEET 353 | E |
|---|---|---|---|---|---|

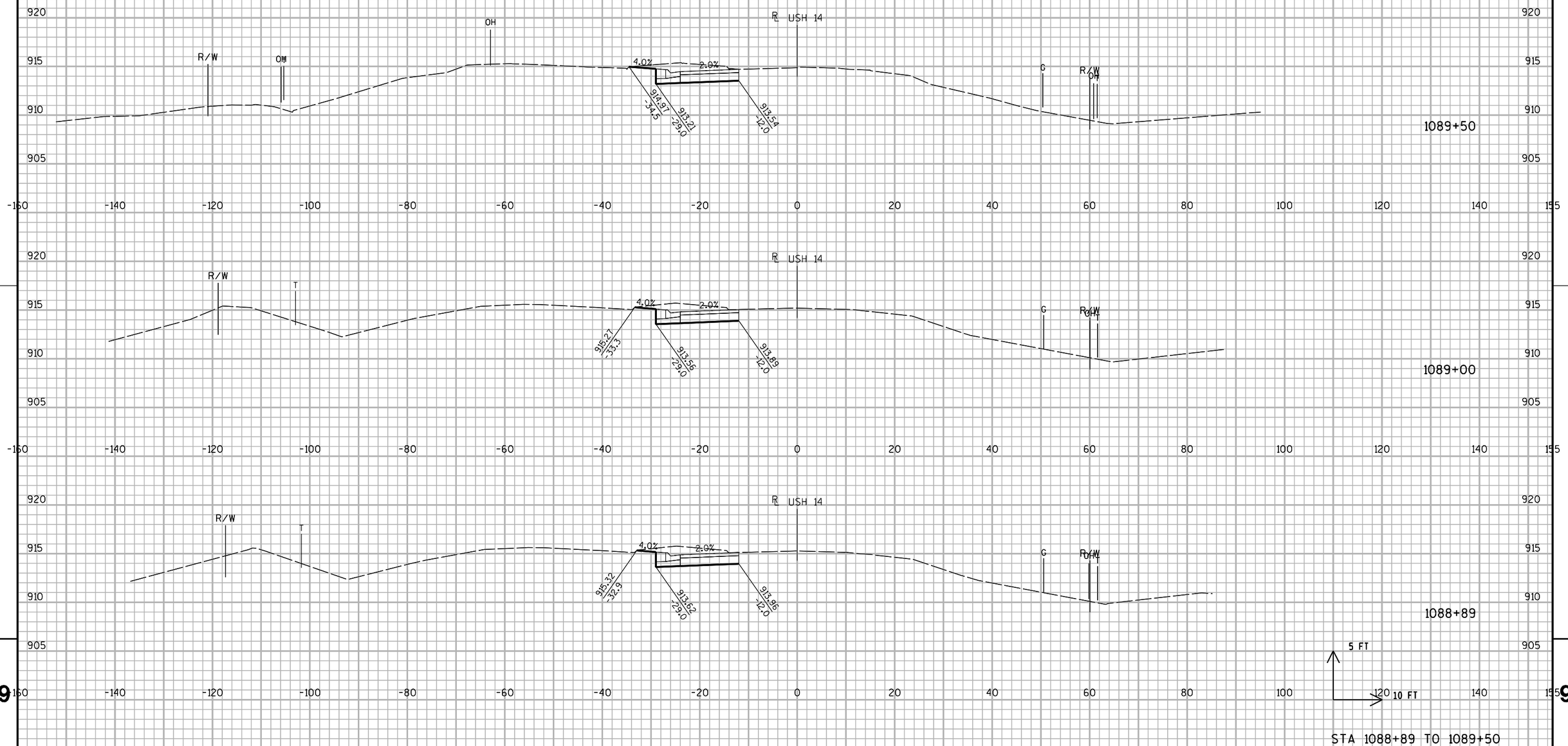
FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090206_xs.dgn PLOT DATE : 10/31/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



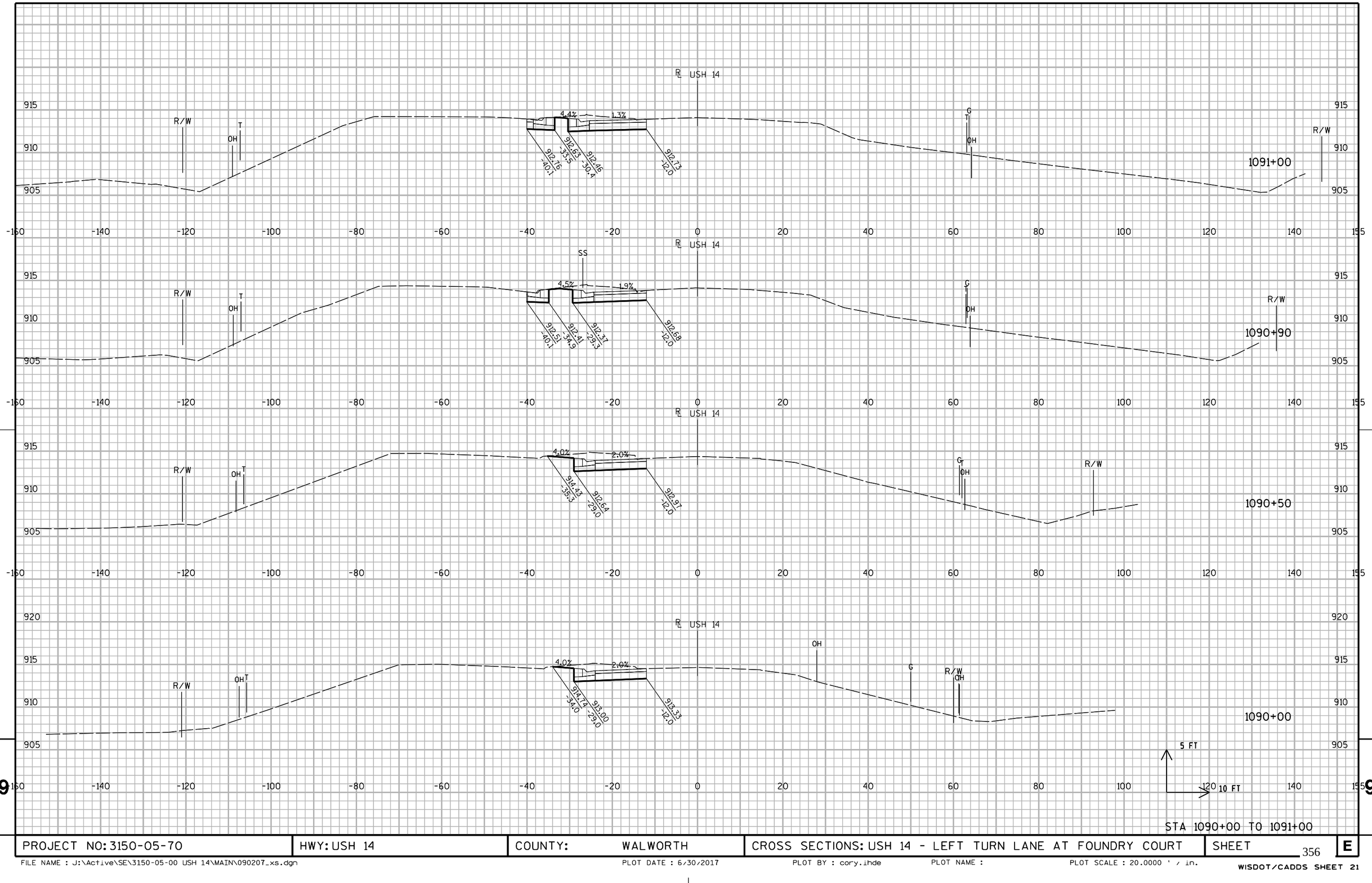

STA 1087+37 TO 1088+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 - LEFT TURN LANE AT FOUNDRY COURT | SHEET 354 | E |
|---|---|---|---|---|---|



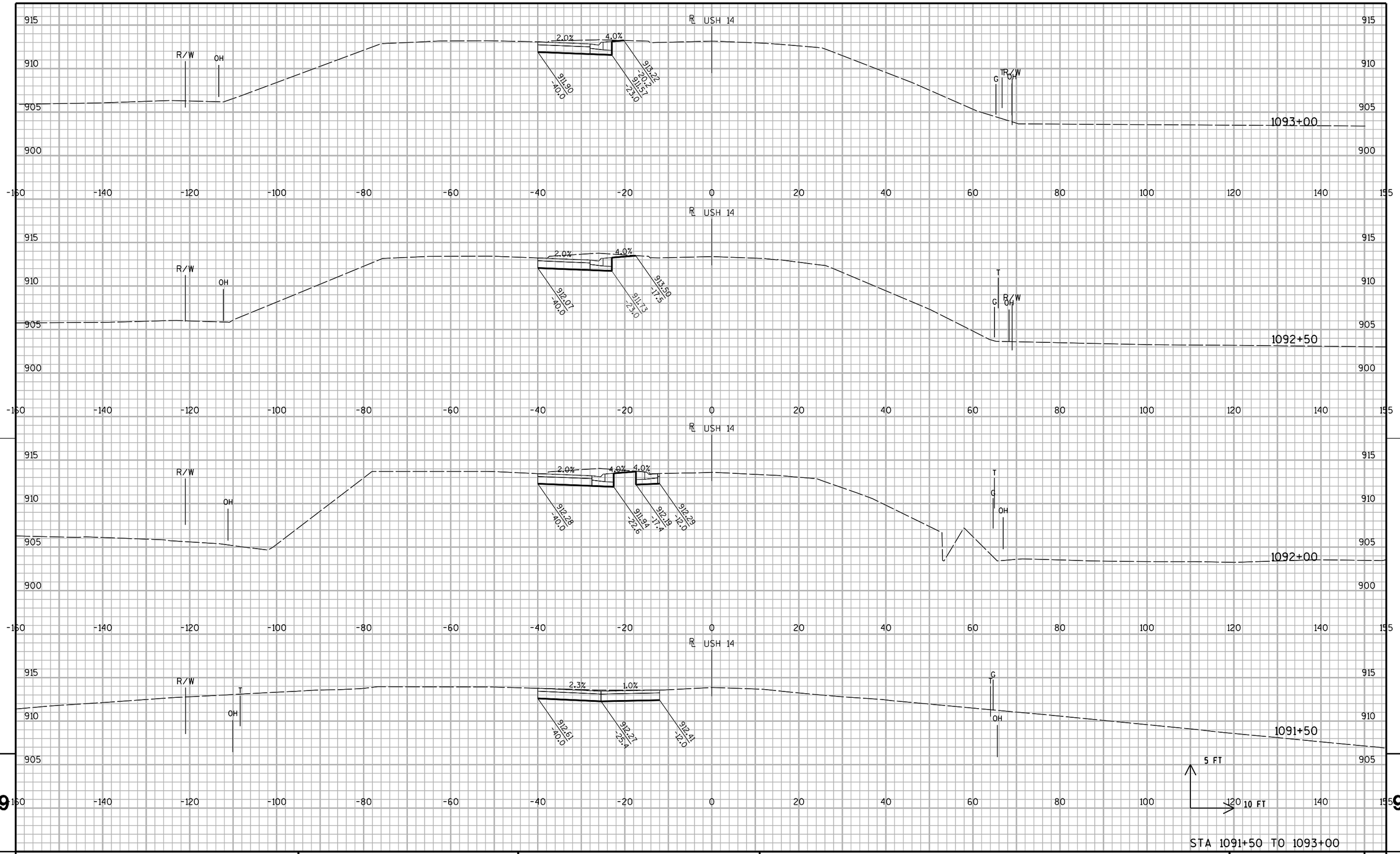

STA 1088+89 TO 1089+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 - LEFT TURN LANE AT FOUNDRY COURT | SHEET 355 | E |
|---|---|---|---|---|---|



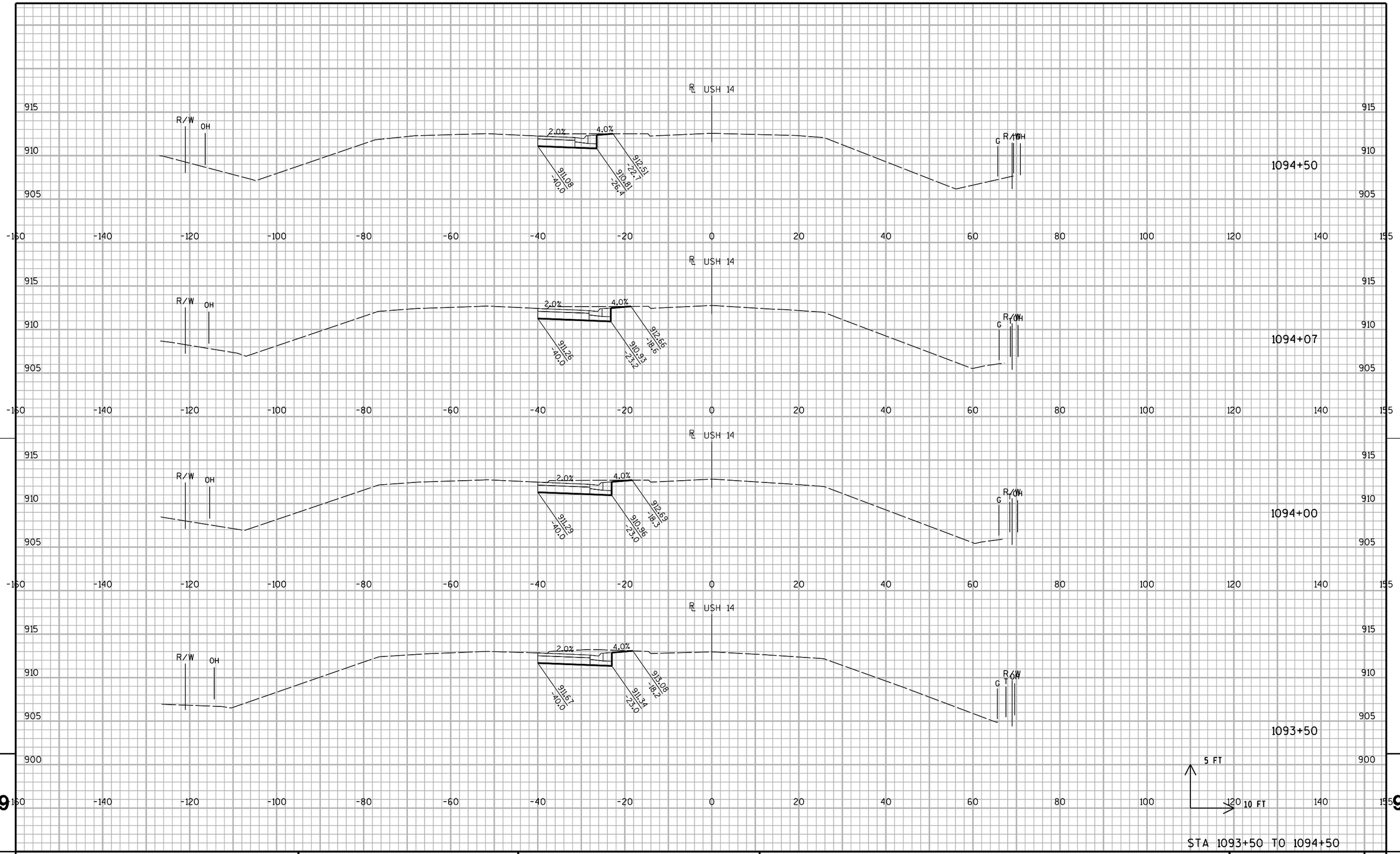

STA 1090+00 TO 1091+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 - LEFT TURN LANE AT FOUNDRY COURT | SHEET 356 | E |
|---|---|---|---|---|---|




STA 1091+50 TO 1093+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 - LEFT TURN LANE AT FOUNDRY COURT | SHEET 357 | E |
|---|---|---|---|---|---|

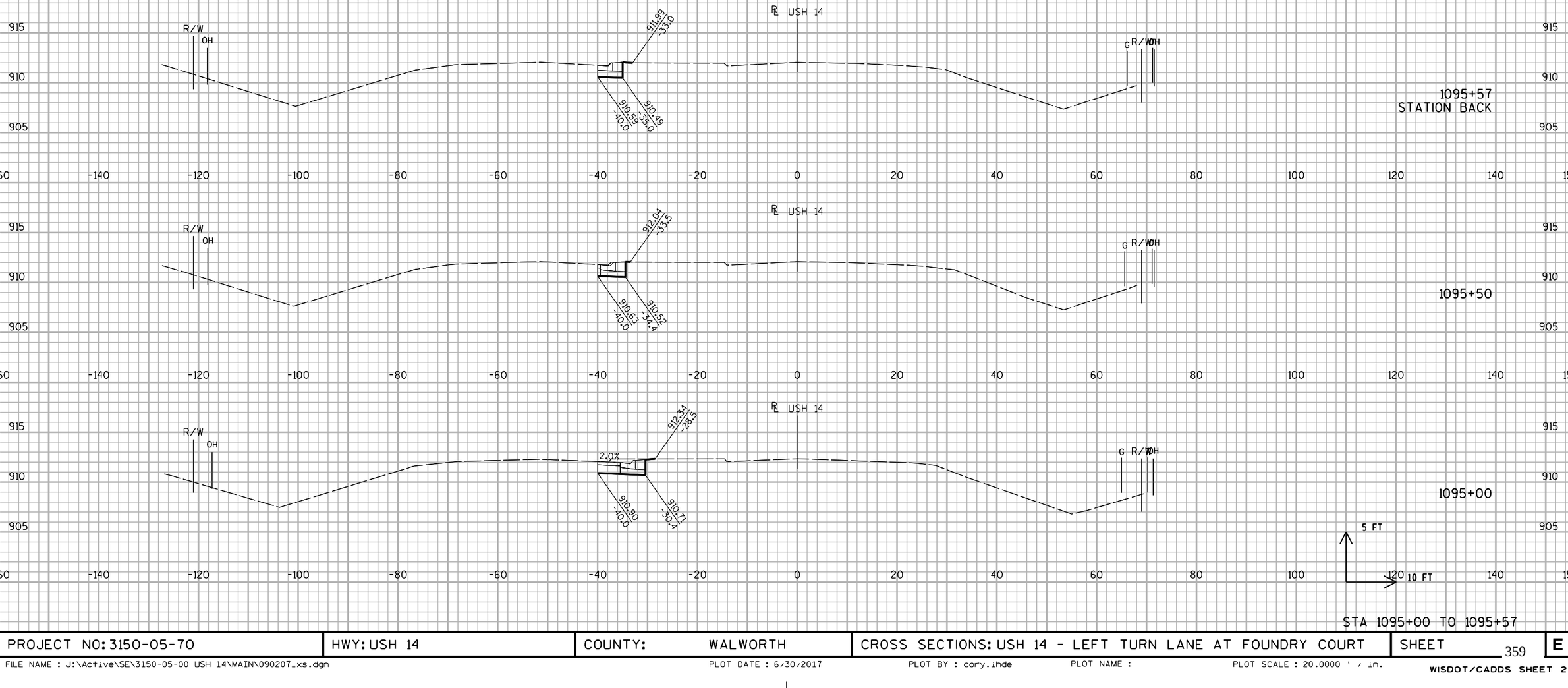



STA 1093+50 TO 1094+50

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 - LEFT TURN LANE AT FOUNDRY COURT | SHEET 358 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090207_xs.dgn | PLOT DATE : 6/30/2017 | PLOT BY : cory.ihde | PLOT NAME : | PLOT SCALE : 20.0000 ' / in.

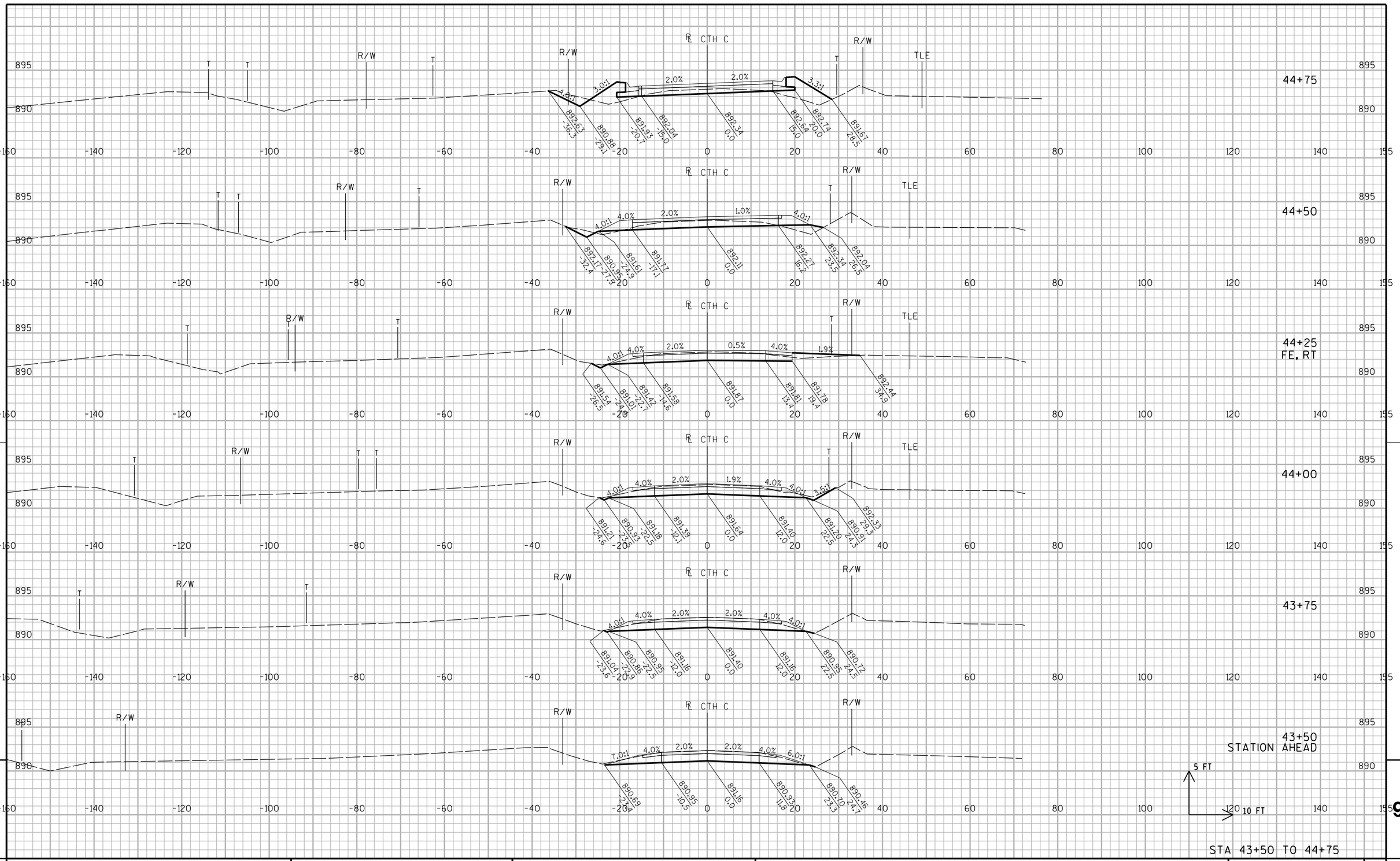
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: USH 14 - LEFT TURN LANE AT FOUNDRY COURT | SHEET 359 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090207_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

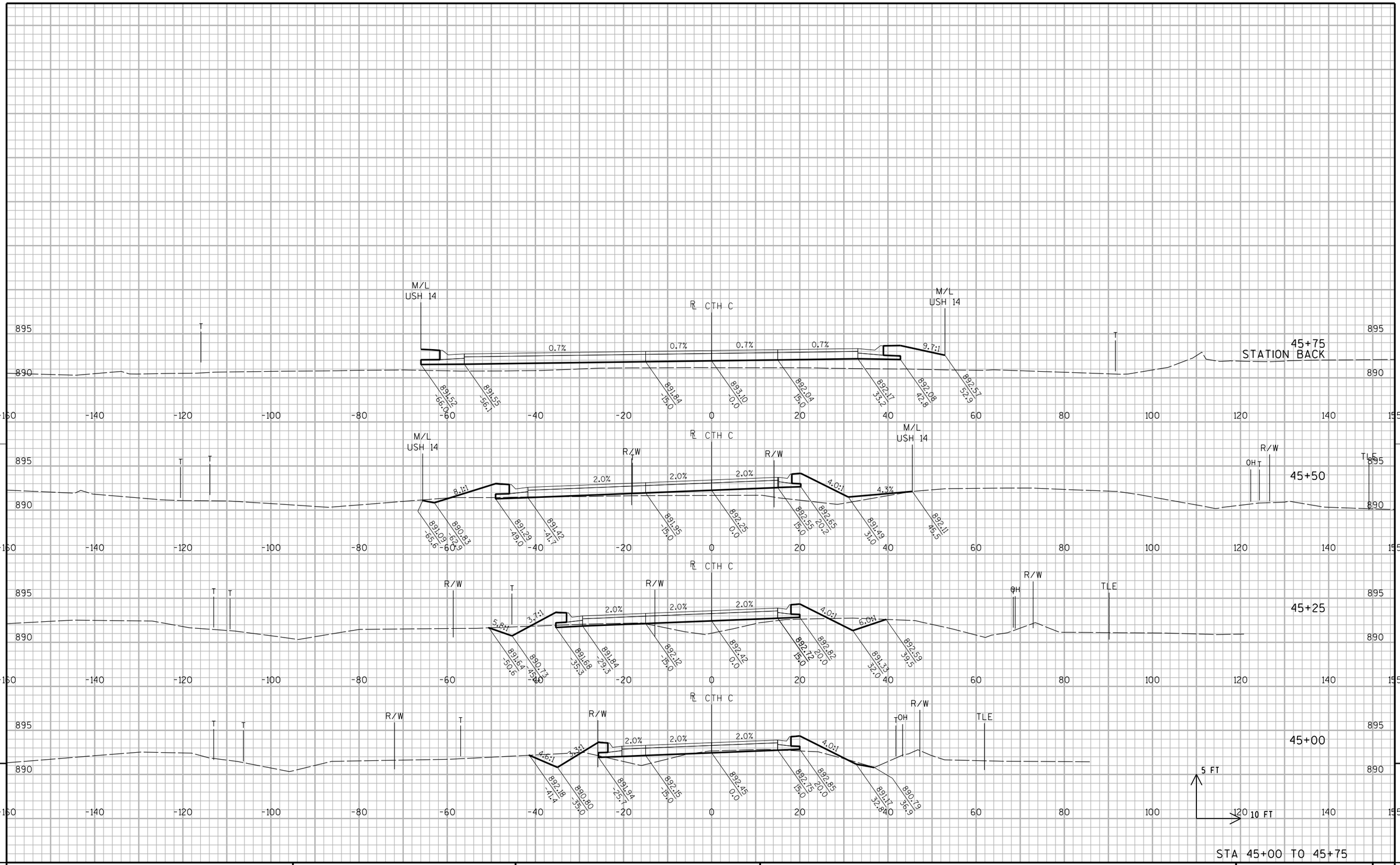
WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: CTH C | SHEET 360 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090208_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

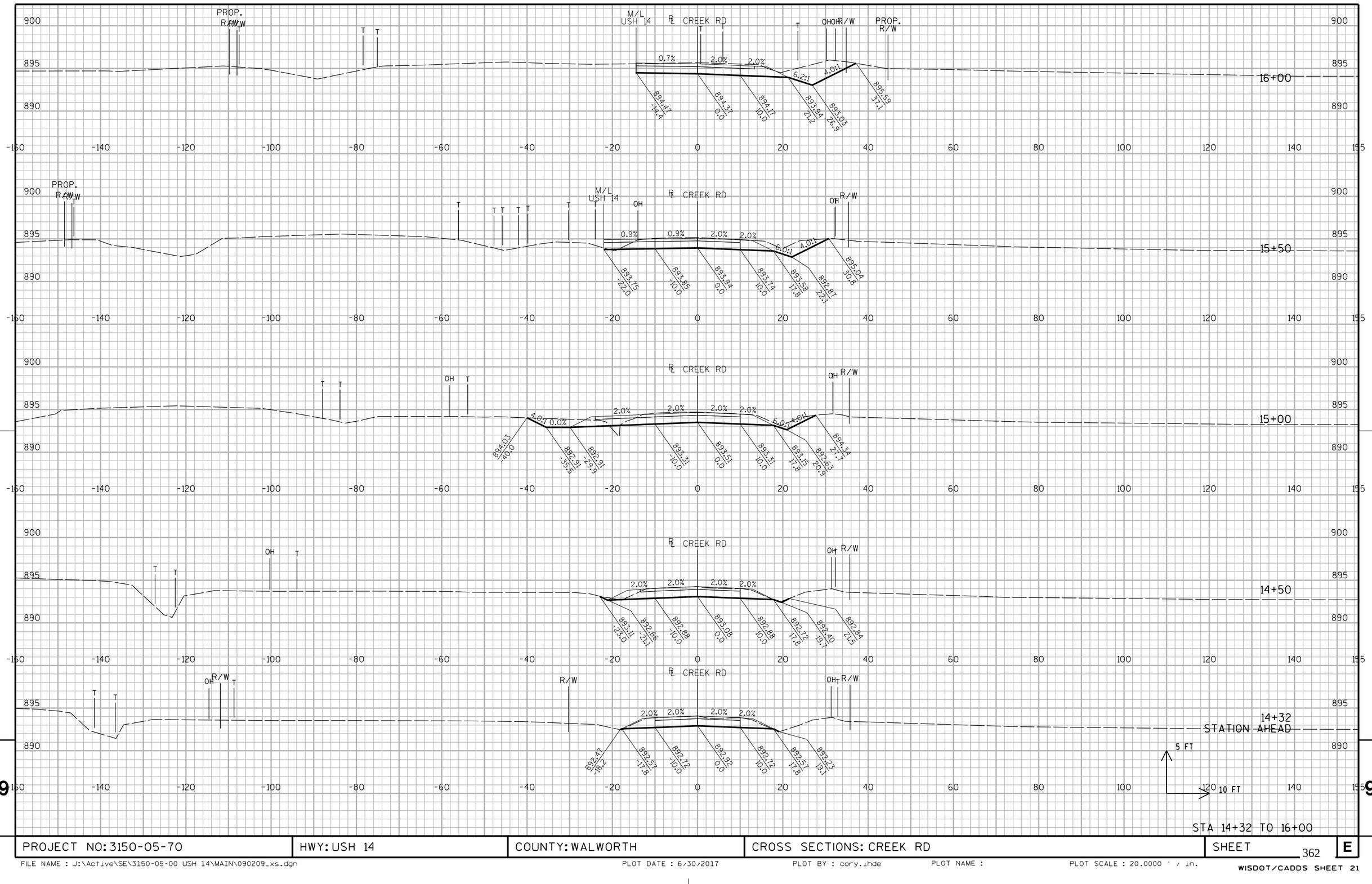
WISDOT/CADDS SHEET 21



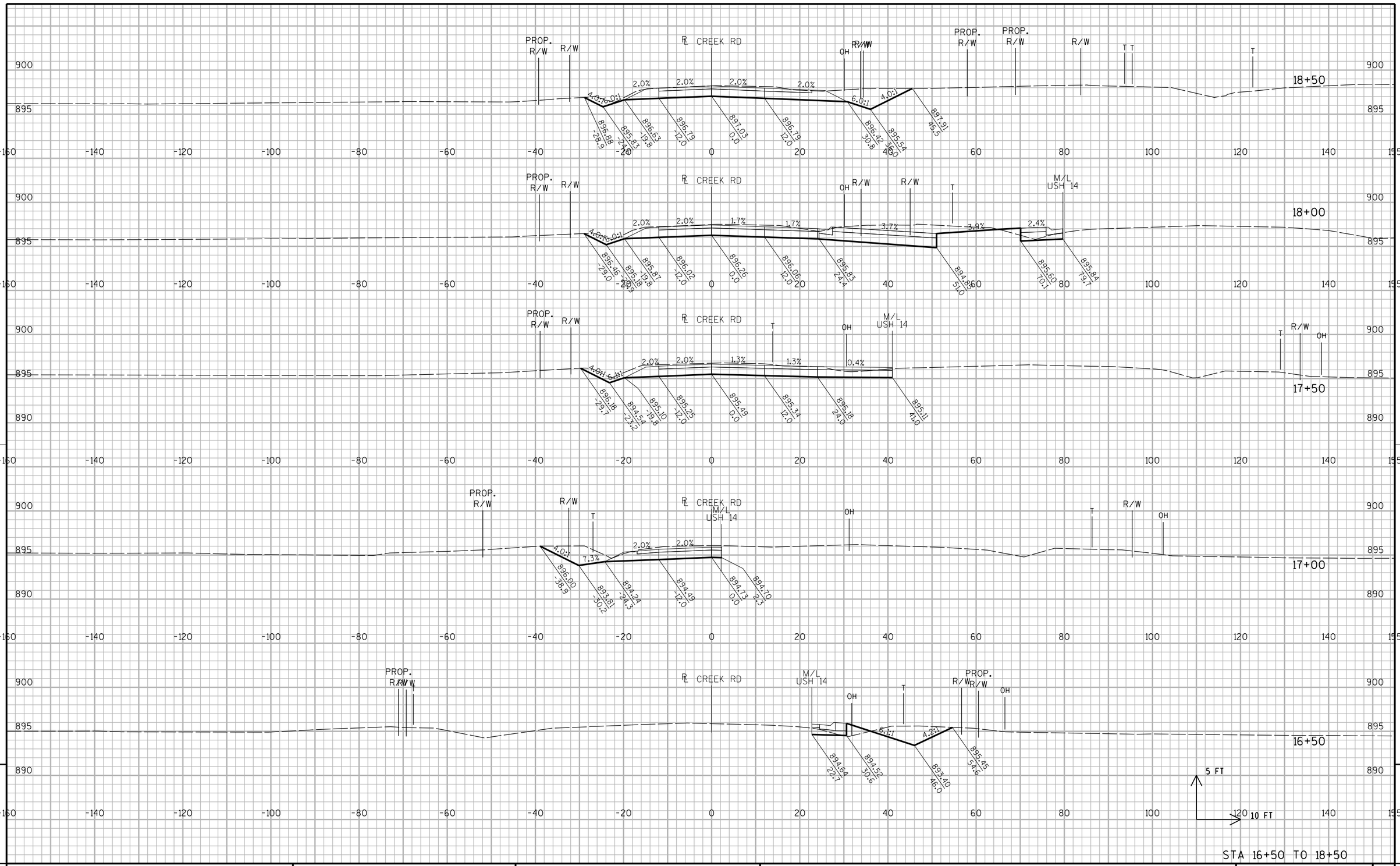

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: CTH C | SHEET 361 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090208_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21



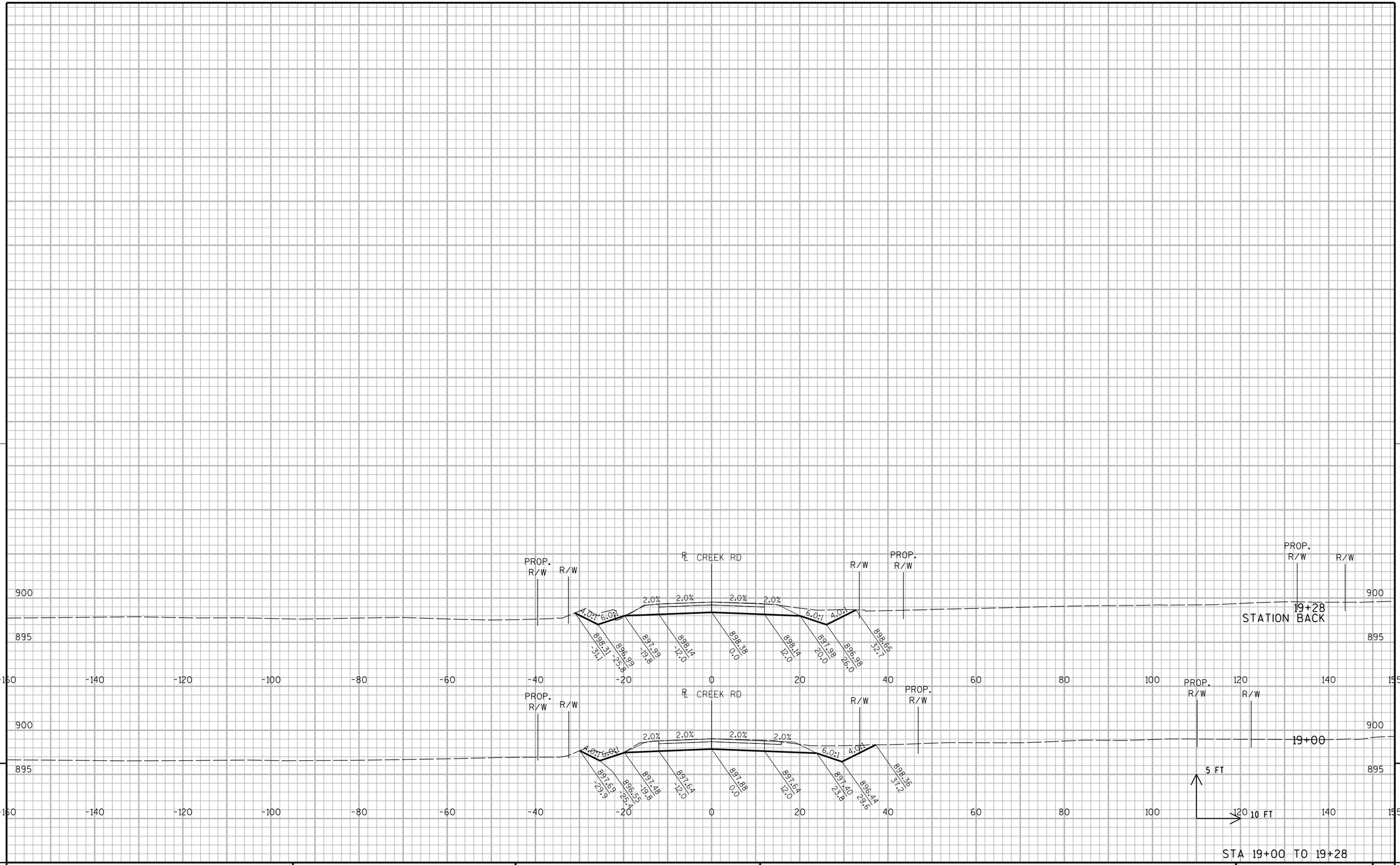

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: CREEK RD | SHEET 362 | E |
|---|---|---|---|---|---|




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: CREEK RD | SHEET 363 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090209_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: CREEK RD | SHEET 364 | E |
|---|---|---|---|---|---|

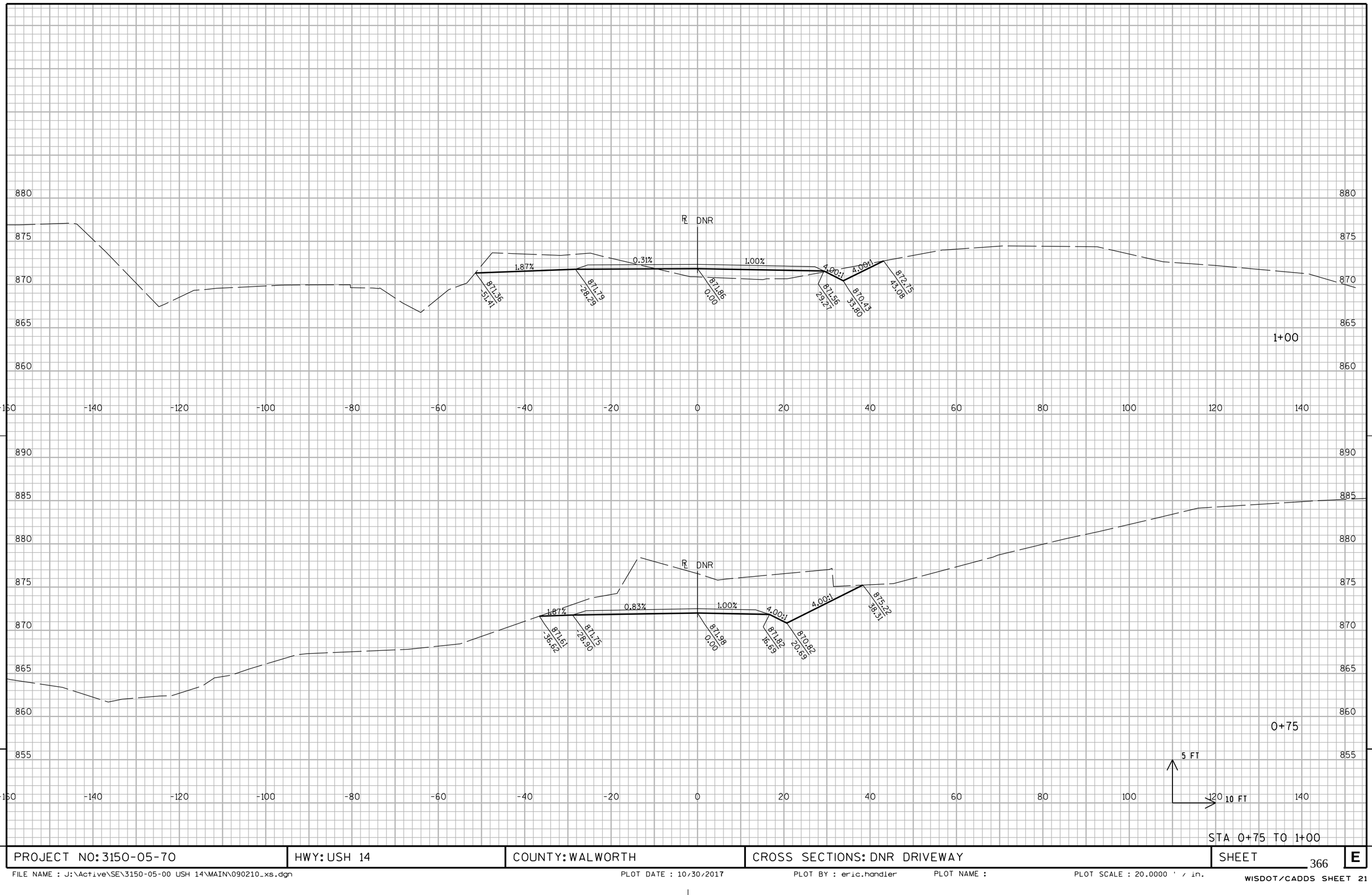
FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090209_xs.dgn PLOT DATE : 6/30/2017 PLOT BY : cory.ihde PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DNR DRIVEWAY | SHEET 365 | E |
|---|---|---|---|---|---|

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090210_xs.dgn PLOT DATE : 10/30/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

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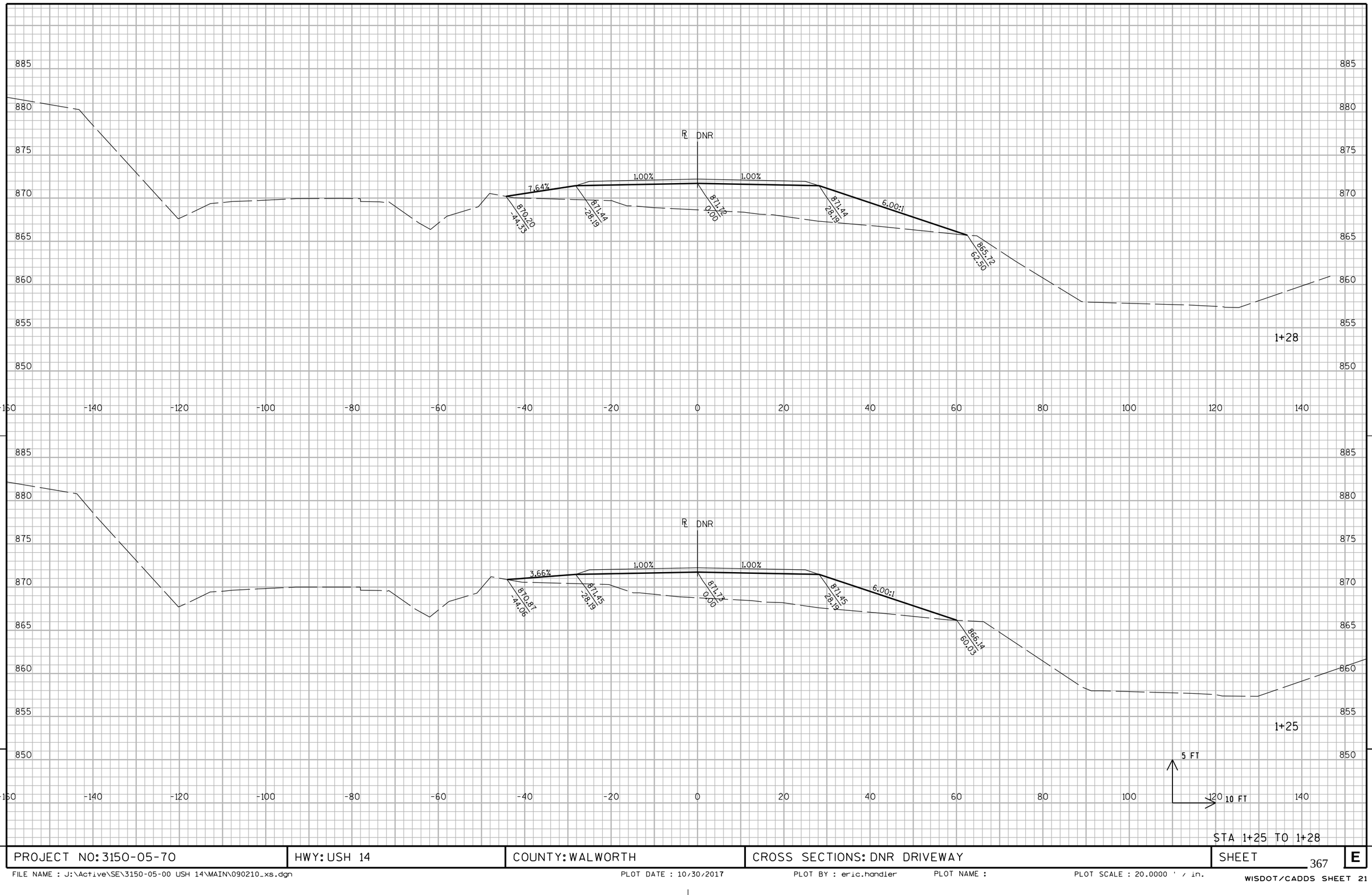
STA 0+75 TO 1+00

| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DNR DRIVEWAY | SHEET | E |
|---|---|---|---|---|---|



FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090210_xs.dgn PLOT DATE : 10/30/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21




| PROJECT NO: 3150-05-70 | HWY: USH 14 | COUNTY: WALWORTH | CROSS SECTIONS: DNR DRIVEWAY | SHEET 367 | E |
|---|---|---|---|---|---|

STA 1+25 TO 1+28

FILE NAME : J:\Active\SE\3150-05-00 USH 14\MAIN\090210_xs.dgn PLOT DATE : 10/30/2017 PLOT BY : eric.handler PLOT NAME : PLOT SCALE : 20.0000 ' / in.

WISDOT/CADDS SHEET 21

**Wisconsin Department of Transportation**

Dedicated people creating transportation solutions
through innovation and exceptional service.

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