RHI

NOVEMBER 2023

PROJECT ID: 1170-19-72

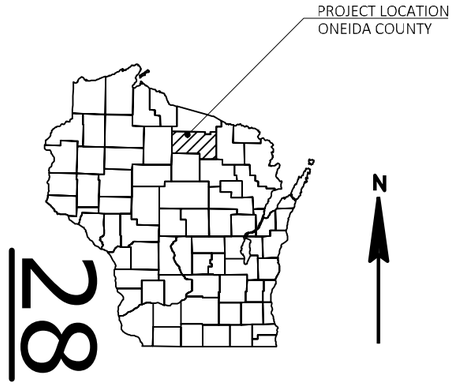
WITH: N/A

COUNTY: ONEIDA

ORDER OF SHEETS


| | | |
|---|---|---|
| Section No. | 1 | Title |
| Section No. | 2 | Typical Sections and Details (Includes Erosion Control 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 = 208




DESIGN DESIGNATION

| | | | |
|---|---|---|---|
| A.A.D.T. | 2023 | = | 15,700 |
| A.A.D.T. | 2043 | = | 17,700 |
| D.H.V. | | = | 7.9 |
| D.D. | | = | 61/39 |
| T. | | = | 8.4 |
| DESIGN SPEED | | = | 35 MPH |
| ESALS | | = | 2,920,000 |

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 (300'EB')
- 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**

# MINOCQUA - MANITOWISH

**MANITOU PARK TO MINOCQUA LK BRIDGE**

## USH 51

## ONEIDA COUNTY

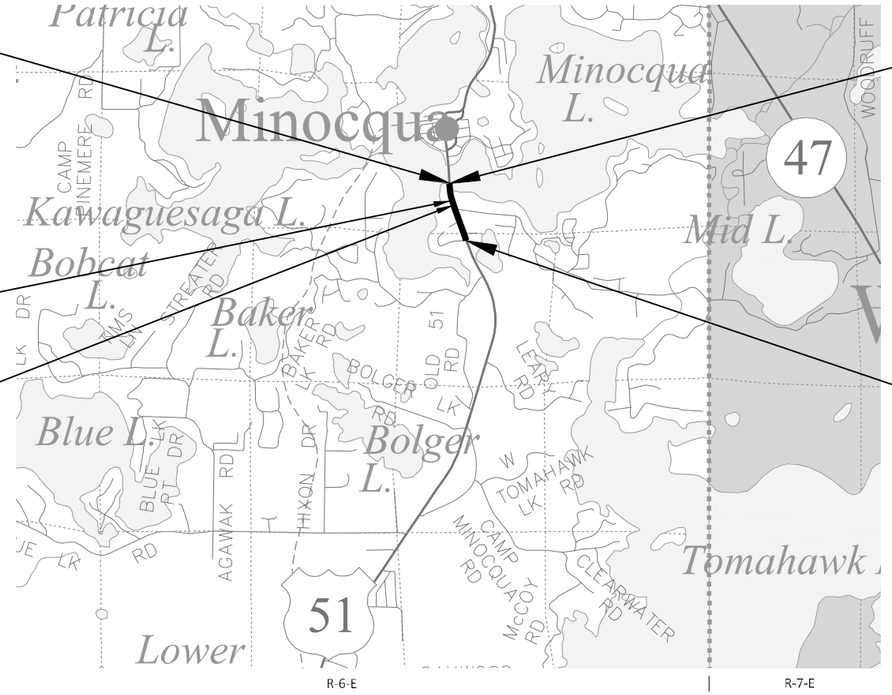
| STATE PROJECT NUMBER |
|---|
| 1170-19-72 |

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 1170-19-72 | WISC 2024036 | 1 |
| | | |
| | | |
| | | |

END CONSTRUCTION
STA 422+70
X = 188,026.642
Y = 247,768.047

STRUCTURE R-43-1-1

STRUCTURE R-43-1-2




END PROJECT
STA 422+54
X = 188,027.663
Y = 247,751.966

BEGIN PROJECT
STA 402+00
X = 188,624.140
Y = 245,795.322

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.389 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), ONEIDA COUNTY, NAD83 ( 2011 ), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 ( 2012 ). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ORIGINAL PLANS PREPARED BY


MSA

1835 NORTH STEVENS STREET, RHINELANDER, WI 54501
(715) 362-3244 (1-800) 844-7854 FAX: (715) 362-4116


WISCONSIN SEAN M. SPROMBERG E-37771-008 SCHOFIELD, WI PROFESSIONAL ENGINEER

7/25/2023

DATE: _____ (PROFESSIONAL ENGINEER)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | WISDOT |
| Designer | MSA PROFESSIONAL SERVICES, INC. |
| Project Manager | MICHELLE GUOIN |
| Regional Examiner | FRED SCHUNKE |
| Regional Supervisor | DAN ERVA |

APPROVED FOR THE DEPARTMENT

DATE: 7/26/2023 Michelle Guoin (Signature)

E

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\010101-TI.DWG PLOT DATE : 7/24/2023 6:10 AM PLOT BY : SHAWN DOLENS PLOT NAME :

## GENERAL NOTES

WHEN THE QUANTITY OF BASE AGGREGATE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON THE DEPTH OR THICKNESS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL DEPTH WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL BY THE ENGINEER IN THE FIELD.

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

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

ELEVATIONS REFERENCING CURB AND GUTTER ARE TO THE FLANGE UNLESS OTHERWISE NOTED. ELEVATIONS ALONG INTERSECTION RADII ARE SHOWN AT PC, PT, AND MIDPOINT ALONG THE CURVE.

ALL CURB AND GUTTER RADII ARE SHOWN TO THE FLANGE LINE OF CURB AND GUTTER.

## SECTION 2 ORDER

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER
SIGNING & PAVEMENT MARKING
TRAFFIC CONTROL AND STAGING
ALIGNMENT DIAGRAM

## RUNOFF COEFFIENT TABLE

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

TOTAL PROJECT AREA = 5.896 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 3.969 ACRES

## WISCONSIN DEPARTMENT OF NATURAL RESOURCES

NORTH CENTRAL DISTRICT HEADQUARTERS
WENDY HENNIGES
107 SUTCLIFF AVE
RHINELANDER, WI 54501
PHONE: (715) 365-8916
EMAIL: WENDY.HENNIGES@WISCONSIN.GOV

## UTILITIES

### COMMUNICATIONS

SPECTRUM
JOSEPH NESSMAN
821 LINCOLN STREET
RHINELANDER, WI 54501
PHONE: (715) 519-0039
EMAIL: JOSEPH.NESSMAN@CHARTER.COM

FRONTIER COMMUNICATIONS
JEREMY ZEHM
1851 N. 14TH AVENUE
WAUSAU, WI 54401
PHONE: (715) 243-9243
EMAIL: JEREMY.ZEHM@FTR.COM

### ELECTRICITY

WISCONSIN PUBLIC SERVICE CORPORATION
JESSE PATTEN
P.O. BOX 1166
WAUSAU, WI 54402
PHONE: (715) 573-0349
EMAIL: JESSE.PATTEN@WISCONSINPUBLICSERVICE.COM

### GAS/PRETROLEUM

WISCONSIN PUBLIC SERVICE CORPORATION
SHANE SARKKINEN
2027 NAVAJO STREET, PO BOX 160
RHINELANDER, WI 54501
PHONE: (715) 369-7133 (OFFICE)
PHONE: (715) 966-1040 (CELL)
EMAIL: SHANE.SARKKINEN@WISCONSINPUBLICSERVICE.COM

### SANITARY SEWER

LAKELAND SANITARY DISTRICT #1
WILBUR PETERS
8780 MORGAN ROAD
MINOCQUA, WI 54548
PHONE: (715) 346-4454 (OFFICE)
PHONE: (715) 360-5984 (CELL)
EMAIL: WILBURLAKELAND@YAHOO.COM

### WATER

LAKELAND SANITARY DISTRICT #1
WILBUR PETERS
8780 MORGAN ROAD
MINOCQUA, WI 54548
PHONE: (715) 346-4454 (OFFICE)
PHONE: (715) 360-5984 (CELL)
EMAIL: WILBURLAKELAND@YAHOO.COM

*NOT A MEMBER OF DIGGERS HOTLINE

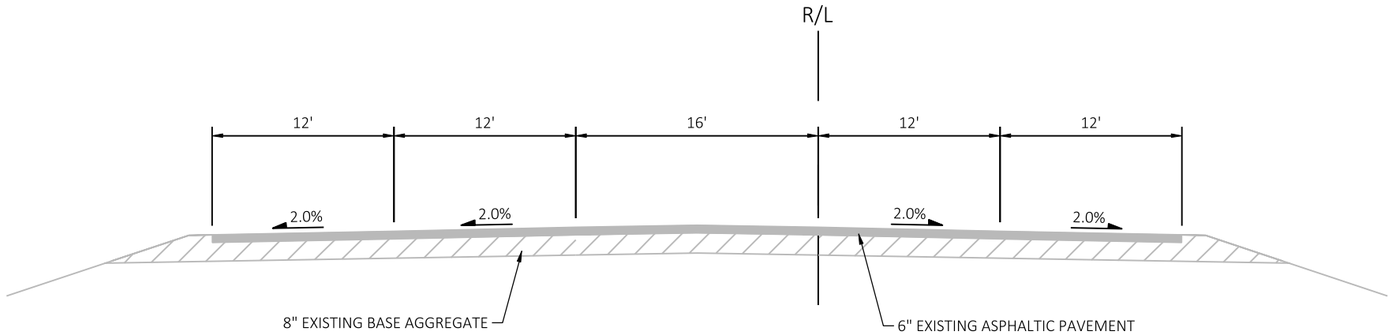
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

2

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | PROJECT OVERVIEW | SHEET 3 | E |
|---|---|---|---|---|---|

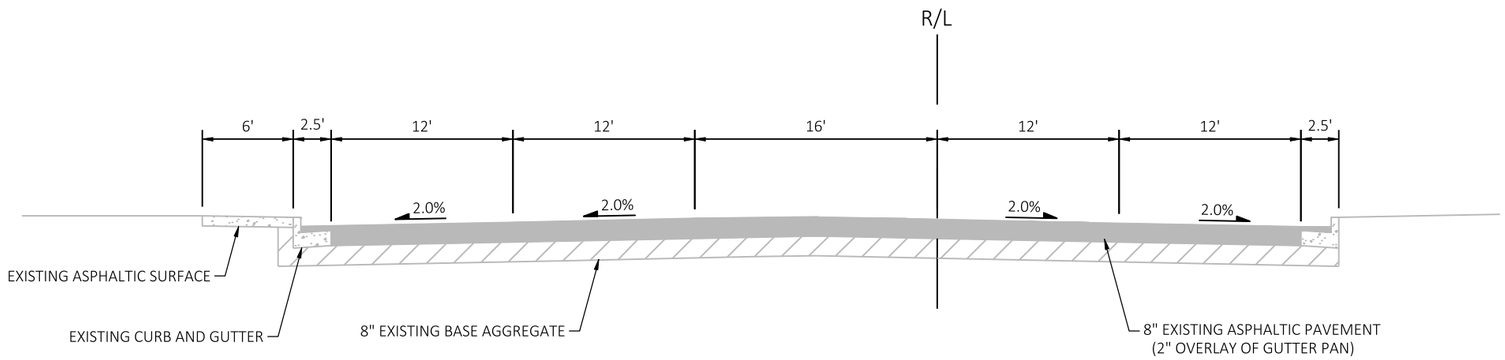
FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 4/24/2023 5:47 AM
PLOT BY : SHAWN DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2




EXISTING TYPICAL SECTION

STA 402+00 - STA 404+03



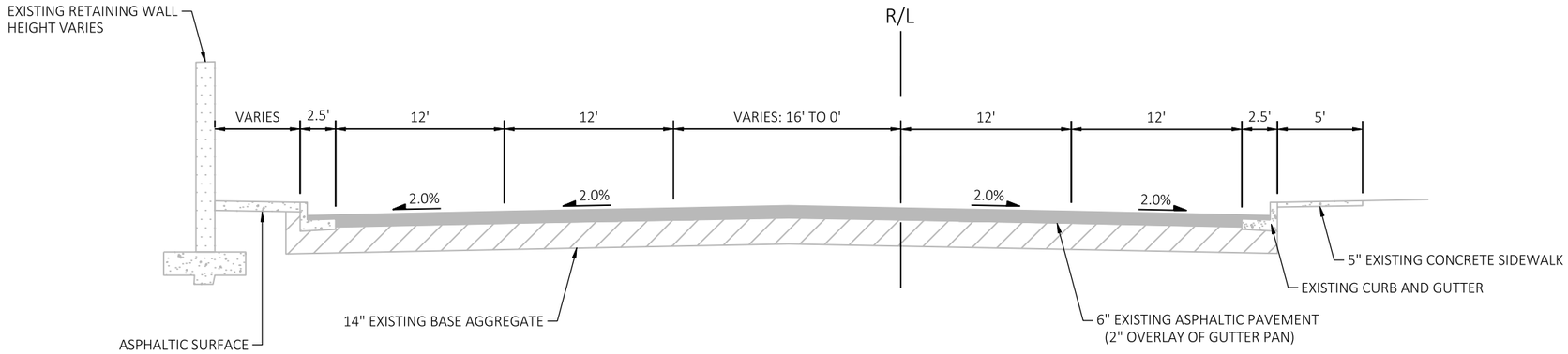

EXISTING TYPICAL SECTION

STA 404+03 - STA 416+09

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TYPICAL SECTIONS | SHEET 4 | E |
|---|---|---|---|---|---|

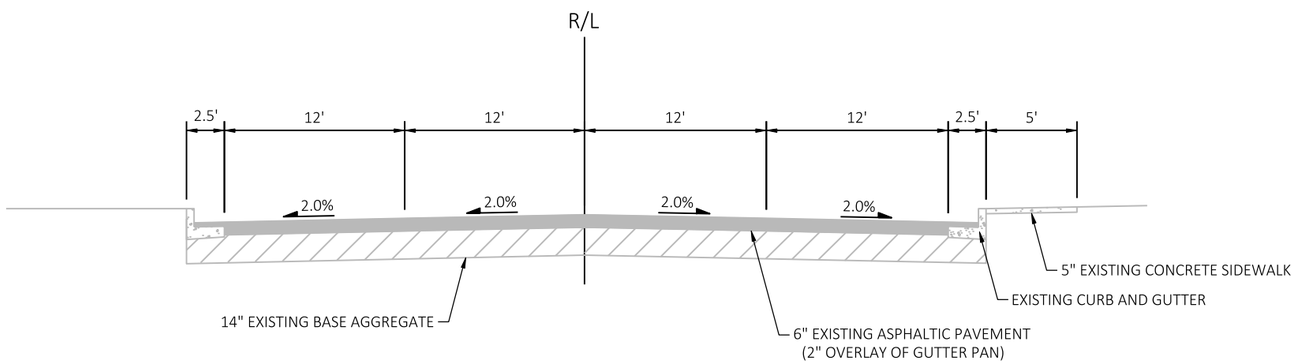
FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020301_ts
PLOT DATE : 5/31/2023 7:34 AM
PLOT BY : SHAWN DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2




EXISTING TYPICAL SECTION

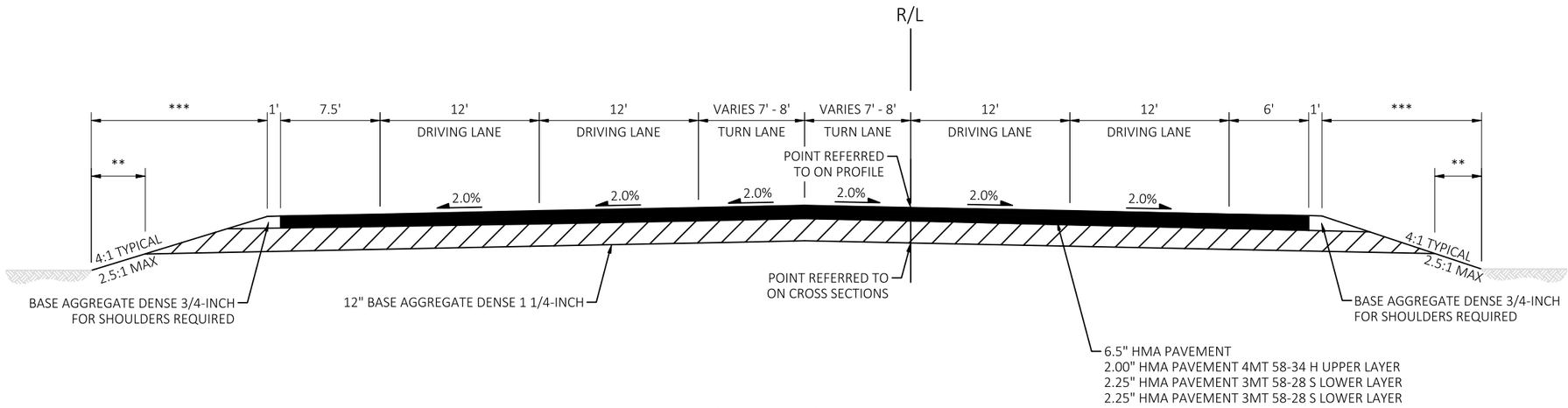
STA 416+00 - STA 419+53




EXISTING TYPICAL SECTION

STA 419+53 - STA 422+54

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TYPICAL SECTIONS | SHEET 5 | E |
|---|---|---|---|---|---|

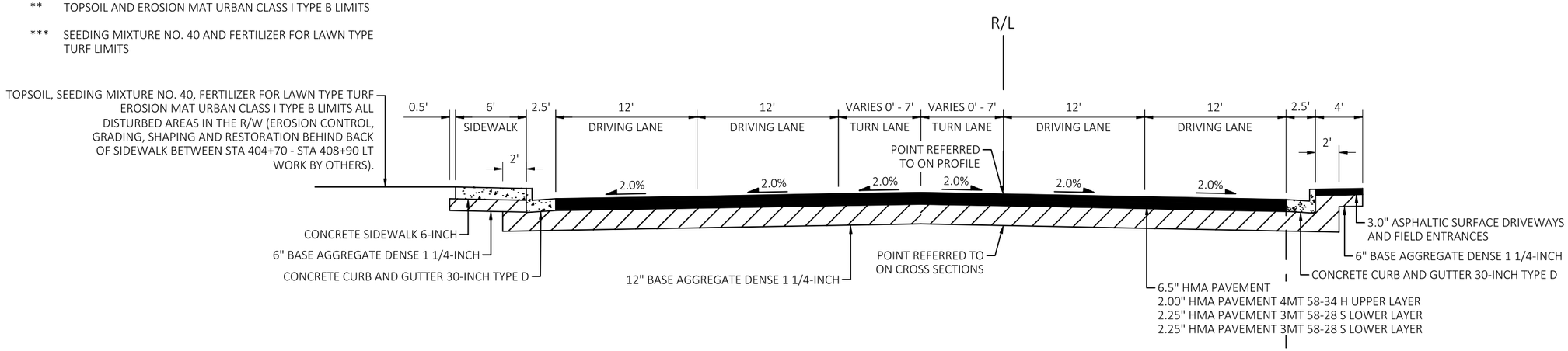



## FINISHED TYPICAL SECTION

STA 402+00 - STA 404+03

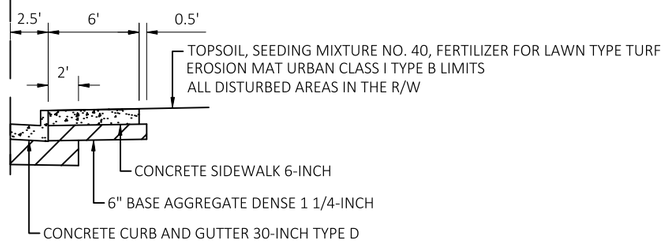
** TOPSOIL AND EROSION MAT URBAN CLASS I TYPE B LIMITS

*** SEEDING MIXTURE NO. 40 AND FERTILIZER FOR LAWN TYPE TURF LIMITS




## FINISHED TYPICAL SECTION

STA 404+03 - STA 414+08



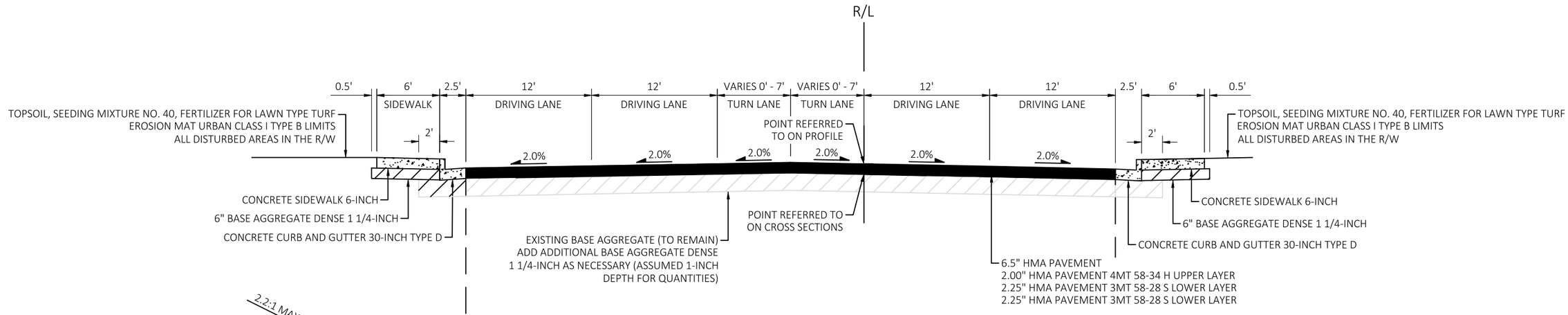

## PARTICAL FINISHED TYPICAL SECTION

STA 412+70 - STA 414+08

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TYPICAL SECTIONS | SHEET 6 | E |
|---|---|---|---|---|---|

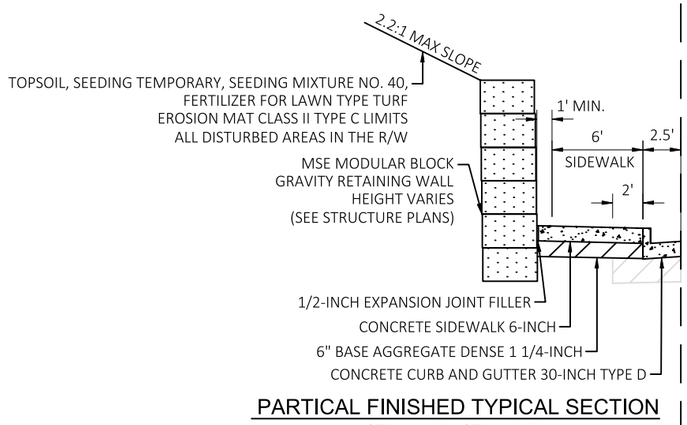
FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020303_ts
PLOT DATE : 7/28/2023 8:49 AM
PLOT BY : SHAWN DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



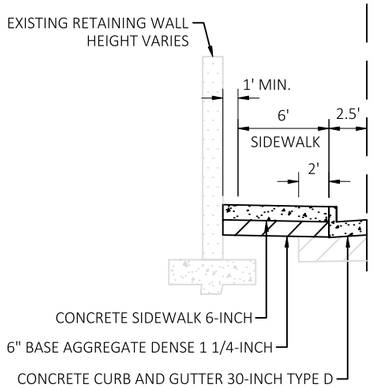

## FINISHED TYPICAL SECTION

STA 414+08 - STA 422+54



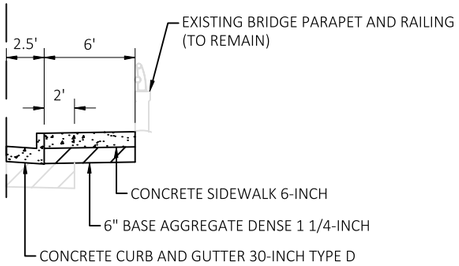

## PARTICAL FINISHED TYPICAL SECTION

STA 414+08 - STA 416+79




## PARTICAL FINISHED TYPICAL SECTION

STA 416+79 - STA 419+54

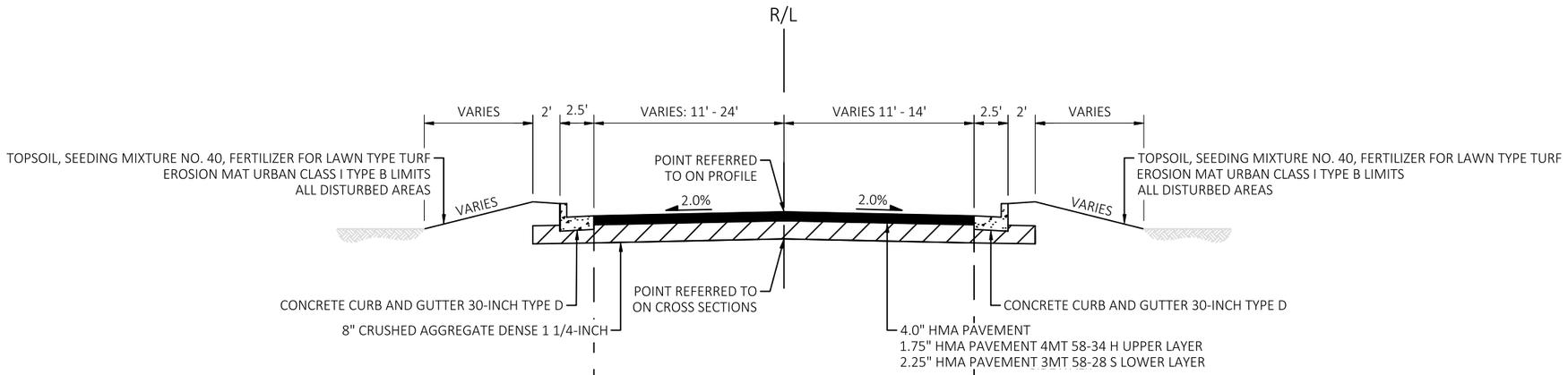



## PARTICAL FINISHED TYPICAL SECTION

STA 421+26 - STA 422+54

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TYPICAL SECTIONS | SHEET 7 | E |
|---|---|---|---|---|---|

2

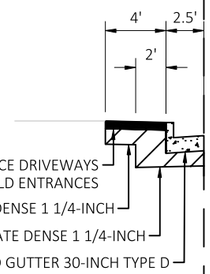



## FINISHED SIDEROAD TYPICAL SECTION

STA 8+98 'M' - STA 9+53 'M'
STA 10+30 'C' - STA 10+94 'C'
STA 11+63 'F' - STA 12+27 'F'
STA 10+24 'CC' - STA 12+00 'CC'

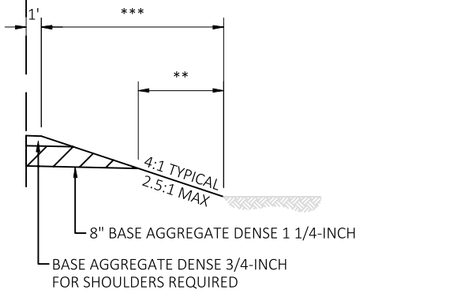
** TOPSOIL AND EROSION MAT URBAN CLASS I TYPE B LIMITS

*** SEEDING MIXTURE NO. 40 AND FERTILIZER FOR LAWN TYPE TURF LIMITS



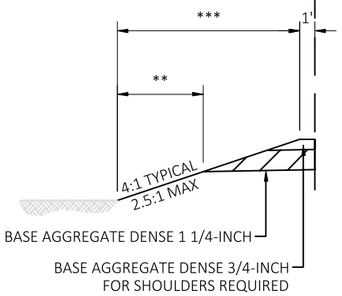

## PARTICAL FINISHED TYPICAL SECTION

STA 10+30 'C' - STA 10+94 'C'




## PARTIAL FINISHED TYPICAL SECTION

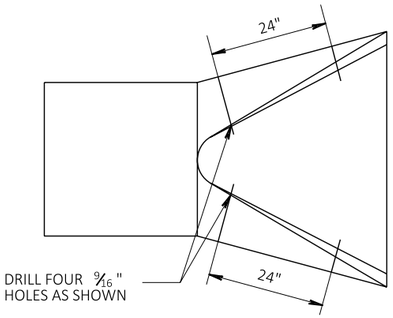
STA 8+98 'M' - STA 9+53 'M'
STA 10+70 'CC' - STA 12+00 'CC'

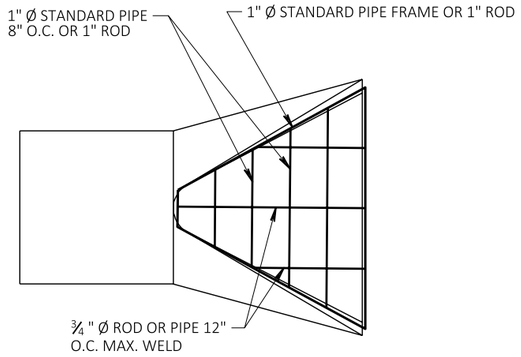



## PARTIAL FINISHED TYPICAL SECTION

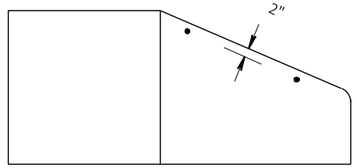
STA 8+98 'M' - STA 9+53 'M'
STA 11+21 'CC' - STA 12+00 'CC'

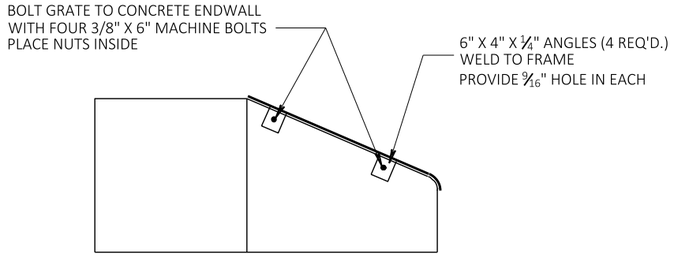
| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TYPICAL SECTIONS | SHEET 8 | E |
|---|---|---|---|---|---|

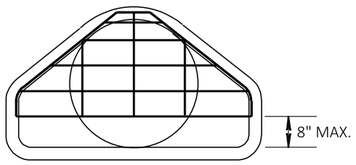


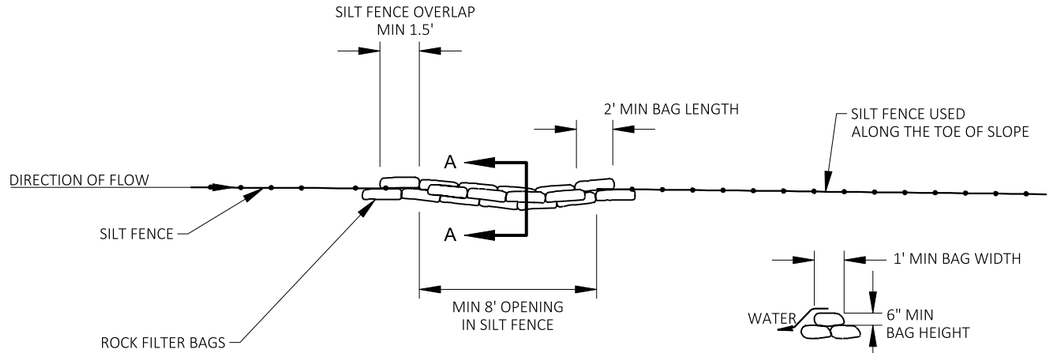

AT EACH PIPE



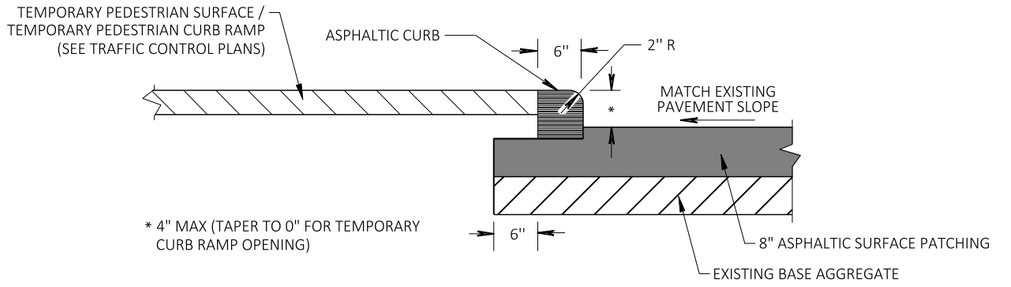




PIPE GRATE DETAIL

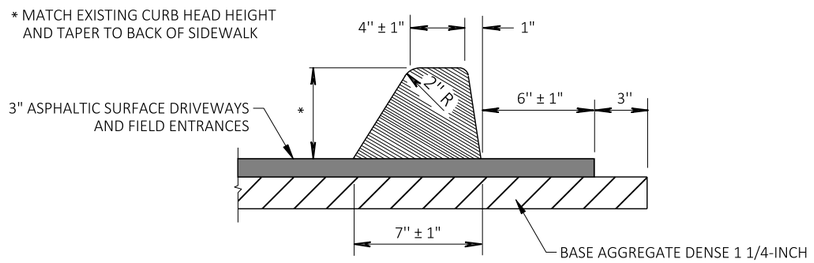



ROCK BAGS USED FOR SILT FENCE RELIEF




ASPHALTIC CURB DETAIL

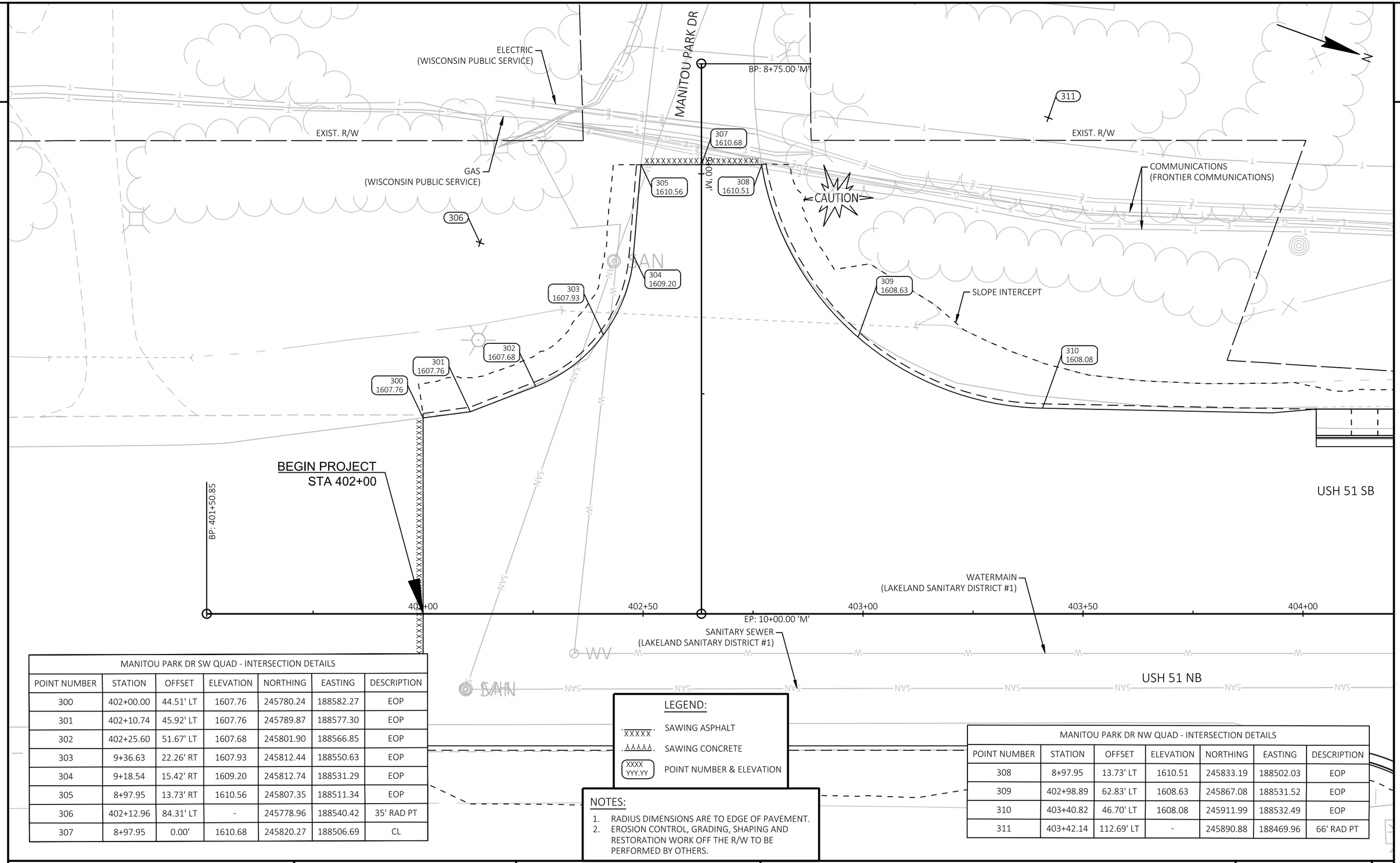
STAGE 1A
STA 408+85 - STA 409+05 RT
STA 412+75 - STA 412+95 RT




ASPHALTIC CURB DETAIL

STA 418+00 RT

2




MANITOU PARK DR SW QUAD - INTERSECTION DETAILS

| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
|---|---|---|---|---|---|---|
| 300 | 402+00.00 | 44.51' LT | 1607.76 | 245780.24 | 188582.27 | EOP |
| 301 | 402+10.74 | 45.92' LT | 1607.76 | 245789.87 | 188577.30 | EOP |
| 302 | 402+25.60 | 51.67' LT | 1607.68 | 245801.90 | 188566.85 | EOP |
| 303 | 9+36.63 | 22.26' RT | 1607.93 | 245812.44 | 188550.63 | EOP |
| 304 | 9+18.54 | 15.42' RT | 1609.20 | 245812.74 | 188531.29 | EOP |
| 305 | 8+97.95 | 13.73' RT | 1610.56 | 245807.35 | 188511.34 | EOP |
| 306 | 402+12.96 | 84.31' LT | - | 245778.96 | 188540.42 | 35' RAD PT |
| 307 | 8+97.95 | 0.00' | 1610.68 | 245820.27 | 188506.69 | CL |

LEGEND:

- XXXXX — SAWING ASPHALT
- AAAAA — SAWING CONCRETE
- XXXX / YYY.YY — POINT NUMBER & ELEVATION

NOTES:

1. RADIUS DIMENSIONS ARE TO EDGE OF PAVEMENT.
2. EROSION CONTROL, GRADING, SHAPING AND RESTORATION WORK OFF THE R/W TO BE PERFORMED BY OTHERS.

MANITOU PARK DR NW QUAD - INTERSECTION DETAILS

| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
|---|---|---|---|---|---|---|
| 308 | 8+97.95 | 13.73' LT | 1610.51 | 245833.19 | 188502.03 | EOP |
| 309 | 402+98.89 | 62.83' LT | 1608.63 | 245867.08 | 188531.52 | EOP |
| 310 | 403+40.82 | 46.70' LT | 1608.08 | 245911.99 | 188532.49 | EOP |
| 311 | 403+42.14 | 112.69' LT | - | 245890.88 | 188469.96 | 66' RAD PT |

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | INTERSECTION DETAILS | SHEET 10 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 021101-id
PLOT DATE : 7/26/2023 12:40 PM
PLOT BY : SHAWN DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

| W CLAWSON DR SE QUAD - INTERSECTION DETAILS | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 400 | 403+61.00 | 30.00' RT | 1608.17 | 245956.96 | 188597.82 | EOP TAPER |
| 401 | 404+03.13 | 30.00' RT | 1608.28 | 245996.60 | 188583.55 | EOP |
| 402 | 404+39.77 | 48.89' RT | 1608.46 | 246037.48 | 188588.90 | EOP |
| 403 | 404+03.14 | 75.06' RT | - | 246011.88 | 188625.94 | 45' RAD PT |
| 404 | 10+89.35 | 10.83' RT | 1608.77 | 246056.67 | 188621.95 | EOP |
| 405 | 10+93.81 | 0.00' | 1608.00 | 246067.87 | 188625.16 | CL |

LEGEND:

- XXXXX SAWING ASPHALT
- ΔΔΔΔΔ SAWING CONCRETE
- XXXX / YYY.YY POINT NUMBER & ELEVATION

NOTES:

1. RADIUS DIMENSIONS ARE TO EDGE OF PAVEMENT.
2. EROSION CONTROL, GRADING, SHAPING AND RESTORATION WORK OFF THE R/W TO BE PERFORMED BY OTHERS.

| W CLAWSON DR NE QUAD - INTERSECTION DETAILS | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 406 | 10+92.38 | 11.07' LT | 1608.79 | 246078.77 | 188622.71 | EOP |
| 407 | 10+65.42 | 14.54' LT | 1608.57 | 246076.85 | 188593.35 | EOP |
| 408 | 404+96.97 | 35.74' RT | 1608.28 | 246086.84 | 188557.15 | EOP |
| 409 | 405+32.64 | 24.00' RT | 1607.75 | 246116.43 | 188534.02 | EOP |
| 410 | 405+32.56 | 83.86' RT | - | 246136.63 | 188590.37 | 60' RAD PT |

2

USH 51 SB

USH 51 NB

W CLAWSON DR

COMMUNICATIONS (SPECTRUM)

ELECTRIC (WISCONSIN PUBLIC SERVICE)

COMMUNICATIONS (FRONTIER COMMUNICATIONS)

CAUTION

WATERMAIN (LAKELAND SANITARY DISTRICT #1)

SANITARY SEWER (LAKELAND SANITARY DISTRICT #1)

403+50 404+00 404+50 405+00 405+50 406+00

BP: 10+00.00 'C'

PC: 10+46.68 'C'

PT: 11+04.95 'C'

11+00 'C'

400 1608.17

401 1608.28

402 1608.46

403

404 1608.77

405 1608.00

406 1608.79

407 1608.57

408 1608.28

409 1607.75

410

ASPHALTIC FLUMES

SLOPE INTERCEPT

CONCRETE CURB & GUTTER 30-INCH TYPE D (TYP.)

ASPHALTIC SURFACE

APPROX. R/W

EXIST. R/W

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

GAS (WISCONSIN PUBLIC SERVICE)

SIGN

GUY

SAN

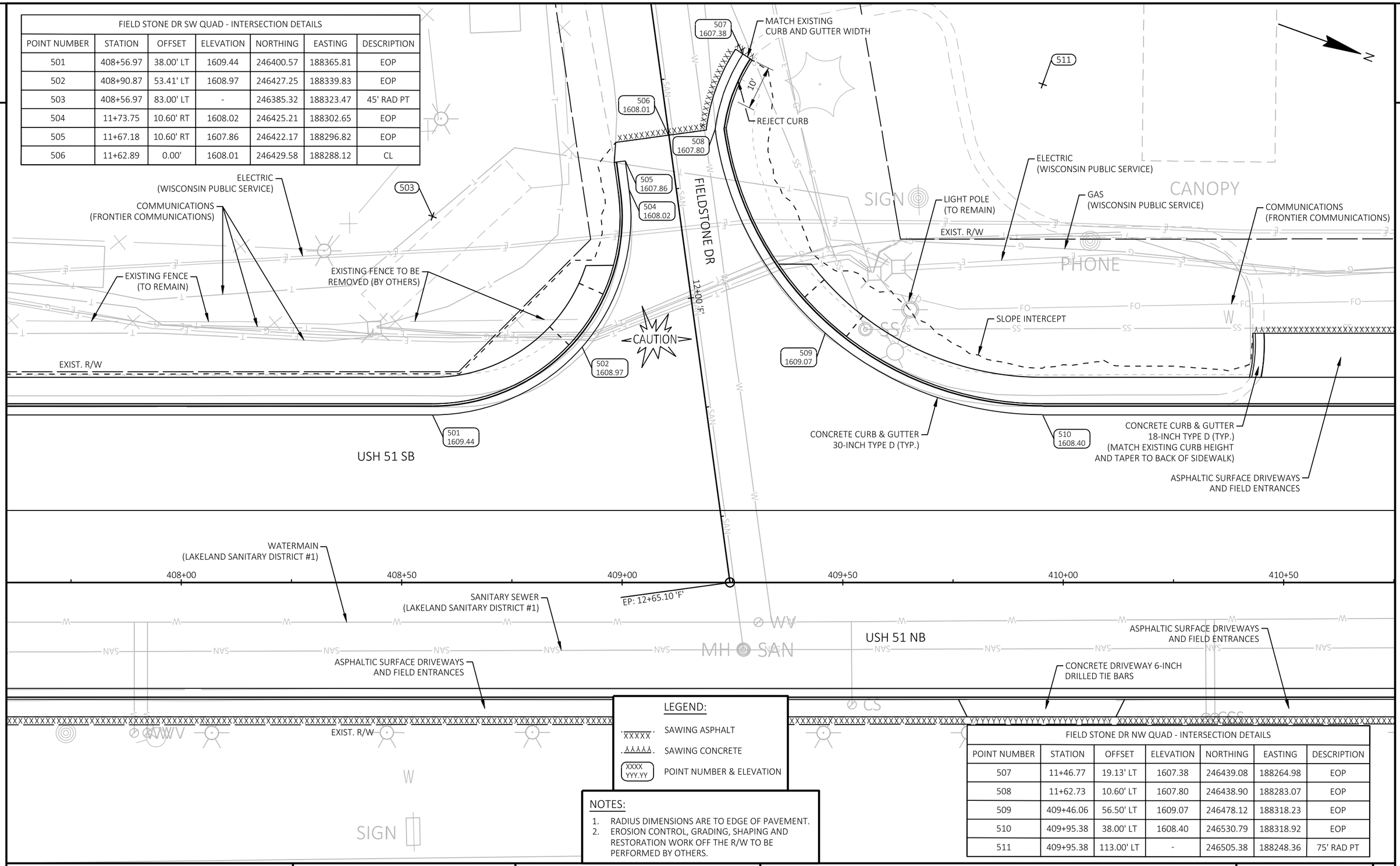
INL

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | INTERSECTION DETAILS | SHEET 11 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 021102-id

PLOT DATE : 7/26/2023 12:41 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:20 FT

| FIELD STONE DR SW QUAD - INTERSECTION DETAILS | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 501 | 408+56.97 | 38.00' LT | 1609.44 | 246400.57 | 188365.81 | EOP |
| 502 | 408+90.87 | 53.41' LT | 1608.97 | 246427.25 | 188339.83 | EOP |
| 503 | 408+56.97 | 83.00' LT | - | 246385.32 | 188323.47 | 45' RAD PT |
| 504 | 11+73.75 | 10.60' RT | 1608.02 | 246425.21 | 188302.65 | EOP |
| 505 | 11+67.18 | 10.60' RT | 1607.86 | 246422.17 | 188296.82 | EOP |
| 506 | 11+62.89 | 0.00' | 1608.01 | 246429.58 | 188288.12 | CL |




LEGEND:

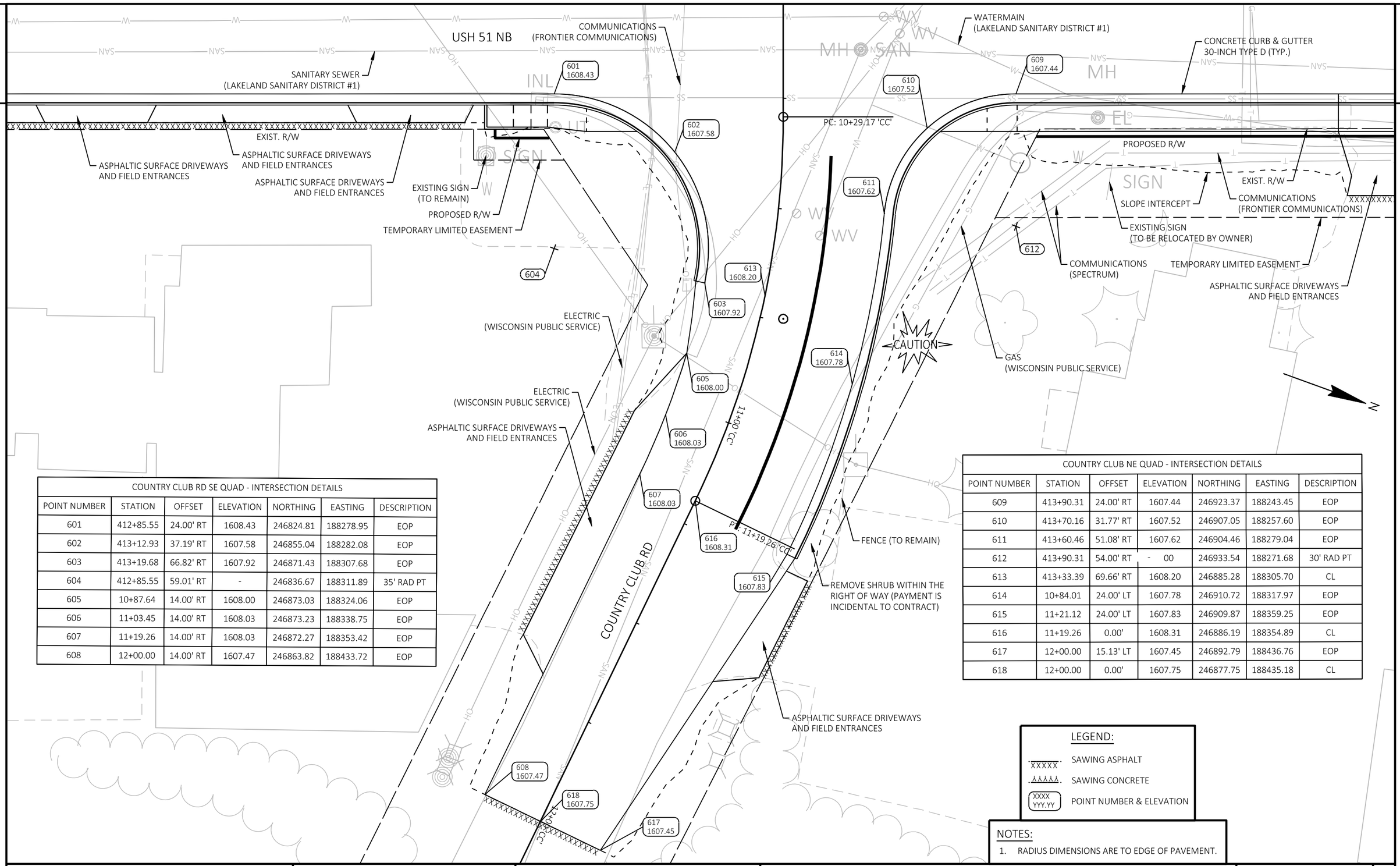
- SAWING ASPHALT
- SAWING CONCRETE
- POINT NUMBER & ELEVATION

NOTES:

1. RADIUS DIMENSIONS ARE TO EDGE OF PAVEMENT.
2. EROSION CONTROL, GRADING, SHAPING AND RESTORATION WORK OFF THE R/W TO BE PERFORMED BY OTHERS.

| FIELD STONE DR NW QUAD - INTERSECTION DETAILS | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 507 | 11+46.77 | 19.13' LT | 1607.38 | 246439.08 | 188264.98 | EOP |
| 508 | 11+62.73 | 10.60' LT | 1607.80 | 246438.90 | 188283.07 | EOP |
| 509 | 409+46.06 | 56.50' LT | 1609.07 | 246478.12 | 188318.23 | EOP |
| 510 | 409+95.38 | 38.00' LT | 1608.40 | 246530.79 | 188318.92 | EOP |
| 511 | 409+95.38 | 113.00' LT | - | 246505.38 | 188248.36 | 75' RAD PT |

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | INTERSECTION DETAILS | SHEET 12 | E |
|---|---|---|---|---|---|




| COUNTRY CLUB RD SE QUAD - INTERSECTION DETAILS | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 601 | 412+85.55 | 24.00' RT | 1608.43 | 246824.81 | 188278.95 | EOP |
| 602 | 413+12.93 | 37.19' RT | 1607.58 | 246855.04 | 188282.08 | EOP |
| 603 | 413+19.68 | 66.82' RT | 1607.92 | 246871.43 | 188307.68 | EOP |
| 604 | 412+85.55 | 59.01' RT | - | 246836.67 | 188311.89 | 35' RAD PT |
| 605 | 10+87.64 | 14.00' RT | 1608.00 | 246873.03 | 188324.06 | EOP |
| 606 | 11+03.45 | 14.00' RT | 1608.03 | 246873.23 | 188338.75 | EOP |
| 607 | 11+19.26 | 14.00' RT | 1608.03 | 246872.27 | 188353.42 | EOP |
| 608 | 12+00.00 | 14.00' RT | 1607.47 | 246863.82 | 188433.72 | EOP |

| COUNTRY CLUB NE QUAD - INTERSECTION DETAILS | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 609 | 413+90.31 | 24.00' RT | 1607.44 | 246923.37 | 188243.45 | EOP |
| 610 | 413+70.16 | 31.77' RT | 1607.52 | 246907.05 | 188257.60 | EOP |
| 611 | 413+60.46 | 51.08' RT | 1607.62 | 246904.46 | 188279.04 | EOP |
| 612 | 413+90.31 | 54.00' RT | - 00 | 246933.54 | 188271.68 | 30' RAD PT |
| 613 | 413+33.39 | 69.66' RT | 1608.20 | 246885.28 | 188305.70 | CL |
| 614 | 10+84.01 | 24.00' LT | 1607.78 | 246910.72 | 188317.97 | EOP |
| 615 | 11+21.12 | 24.00' LT | 1607.83 | 246909.87 | 188359.25 | EOP |
| 616 | 11+19.26 | 0.00' | 1608.31 | 246886.19 | 188354.89 | CL |
| 617 | 12+00.00 | 15.13' LT | 1607.45 | 246892.79 | 188436.76 | EOP |
| 618 | 12+00.00 | 0.00' | 1607.75 | 246877.75 | 188435.18 | CL |

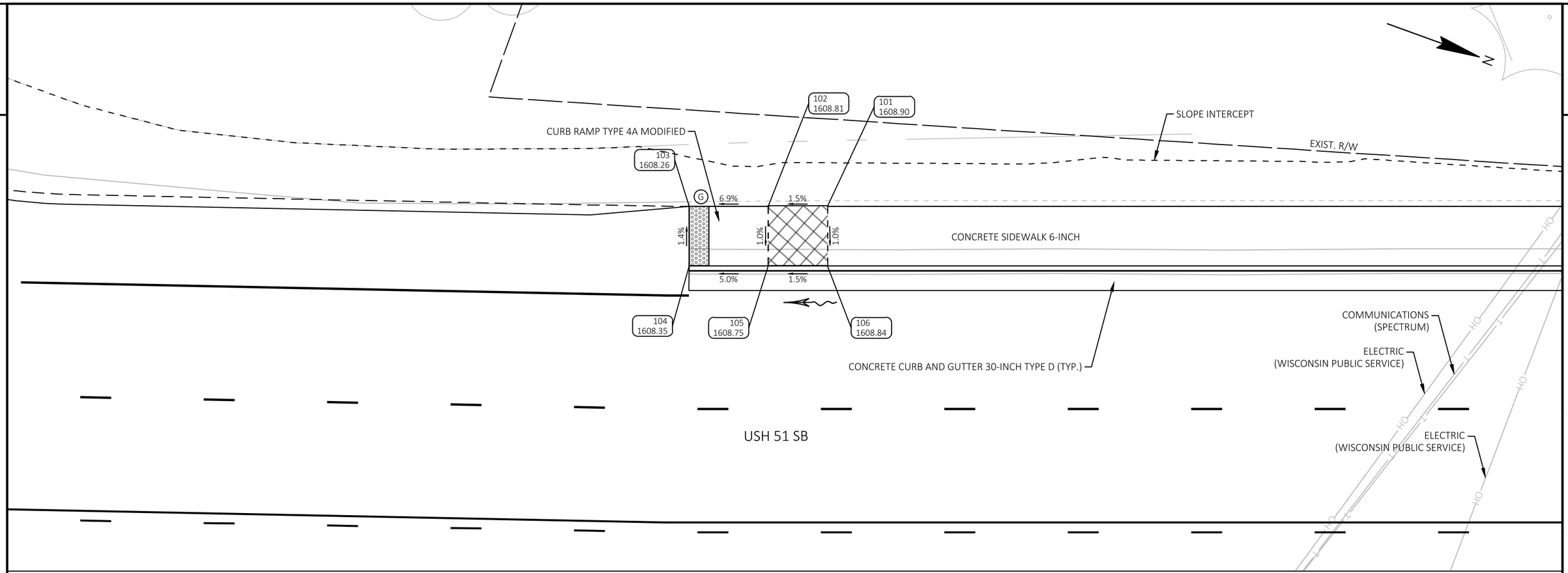
LEGEND:

- XXXXX — SAWING ASPHALT
- ΔΔΔΔΔ — SAWING CONCRETE
- XXXX / YYY.YY — POINT NUMBER & ELEVATION

NOTES:

1. RADIUS DIMENSIONS ARE TO EDGE OF PAVEMENT.

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | INTERSECTION DETAILS | SHEET 13 | E |
|---|---|---|---|---|---|




LEGEND:

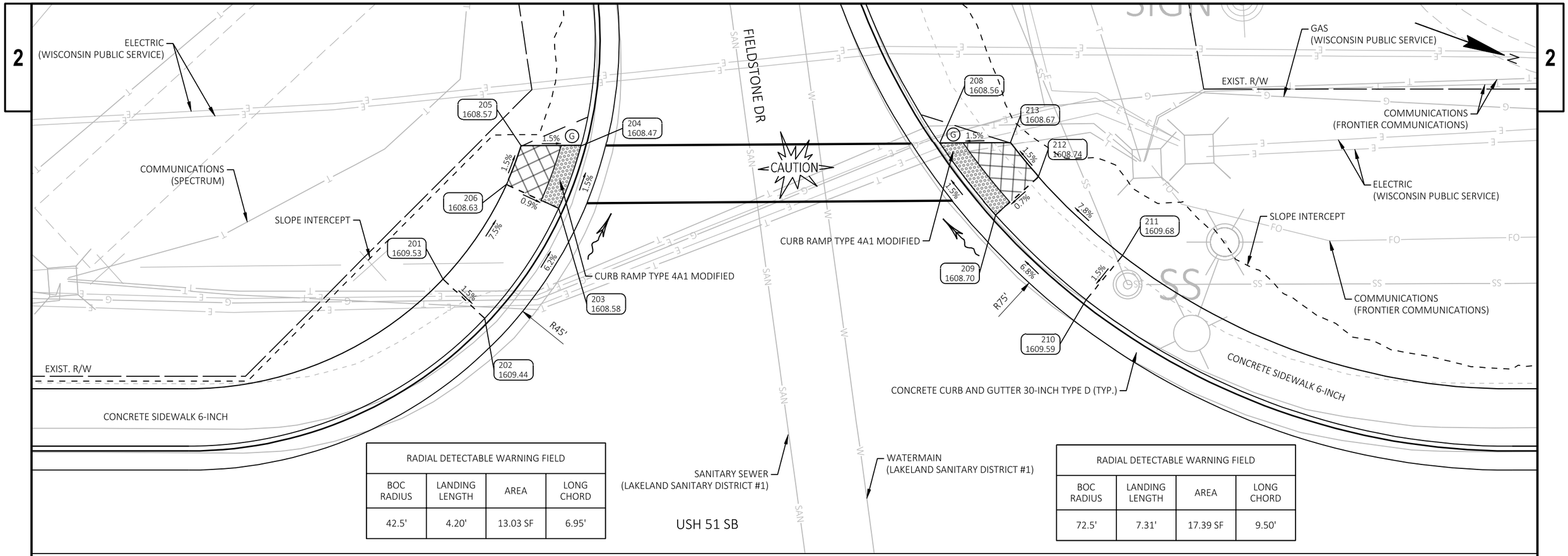
- DETECTABLE WARNING FIELD
- LANDING AREA
- (G) 6:1 GRADED FLARE
- (C) 10:1 CONCRETE FLARE
- (PED) CONCRETE CURB PEDESTRIAN
- (XXXX YYY.YY) POINT NUMBER & ELEVATION

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATION GRADES, SLOPES, LENGTHS AND MATCH POINTS, PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5. EROSION CONTROL, GRADING, SHAPING AND RESTORATION WORK OFF THE R/W TO BE PERFORMED BY OTHERS.

| CURB RAMP 404+07 LT | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 101 | 404+17.04 | 46.50' LT | 1608.90 | 245983.77 | 188506.86 | EOW |
| 102 | 404+11.04 | 46.50' LT | 1608.81 | 245978.12 | 188508.89 | EOW |
| 103 | 404+03.04 | 46.50' LT | 1608.26 | 245970.60 | 188511.60 | EOW |
| 104 | 404+03.04 | 40.50' LT | 1608.35 | 245972.63 | 188517.25 | BOC |
| 105 | 404+11.04 | 40.50' LT | 1608.75 | 245980.16 | 188514.54 | BOC |
| 106 | 404+17.06 | 40.50' LT | 1608.84 | 245985.82 | 188512.50 | BOC |

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CURB RAMP DETAILS | SHEET 14 | E |
|---|---|---|---|---|---|




| RADIAL DETECTABLE WARNING FIELD | | | |
|---|---|---|---|
| BOC RADIUS | LANDING LENGTH | AREA | LONG CHORD |
| 42.5' | 4.20' | 13.03 SF | 6.95' |

| RADIAL DETECTABLE WARNING FIELD | | | |
|---|---|---|---|
| BOC RADIUS | LANDING LENGTH | AREA | LONG CHORD |
| 72.5' | 7.31' | 17.39 SF | 9.50' |

| FIELD STONE DR SW | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 201 | 408+83.55 | 57.98' LT | 1609.53 | 246418.80 | 188338.01 | EOW |
| 202 | 408+87.91 | 53.87' LT | 1609.44 | 246424.31 | 188340.40 | BOC |
| 203 | 408+95.65 | 65.38' LT | 1608.58 | 246427.68 | 188326.95 | BOC |
| 204 | 408+98.00 | 71.91' LT | 1608.47 | 246427.68 | 188320.00 | BOC |
| 205 | 408+91.74 | 71.88' LT | 1608.57 | 246421.80 | 188322.16 | EOW |
| 206 | 408+90.19 | 67.87' LT | 1608.63 | 246421.70 | 188326.46 | EOW |

| FIELD STONE DR NW | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 208 | 409+35.48 | 72.15' LT | 1608.56 | 246462.86 | 188307.08 | BOC |
| 209 | 409+41.33 | 64.67' LT | 1608.70 | 246470.90 | 188312.13 | BOC |
| 210 | 409+50.83 | 55.80' LT | 1609.59 | 246482.84 | 188317.26 | BOC |
| 211 | 409+54.61 | 60.46' LT | 1609.68 | 246484.83 | 188311.60 | EOW |
| 212 | 409+45.81 | 68.67' LT | 1608.74 | 246473.76 | 188306.86 | EOW |
| 213 | 409+42.87 | 72.20' LT | 1608.67 | 246469.80 | 188304.54 | EOW |

LEGEND:

- DETECTABLE WARNING FIELD
- LANDING AREA
- (G) 6:1 GRADED FLARE
- (C) 10:1 CONCRETE FLARE
- (PED) CONCRETE CURB PEDESTRIAN
- XXXX / YYY.YY POINT NUMBER & ELEVATION

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATION GRADES, SLOPES, LENGTHS AND MATCH POINTS, PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5. EROSION CONTROL, GRADING, SHAPING AND RESTORATION WORK OFF THE R/W TO BE PERFORMED BY OTHERS.

2

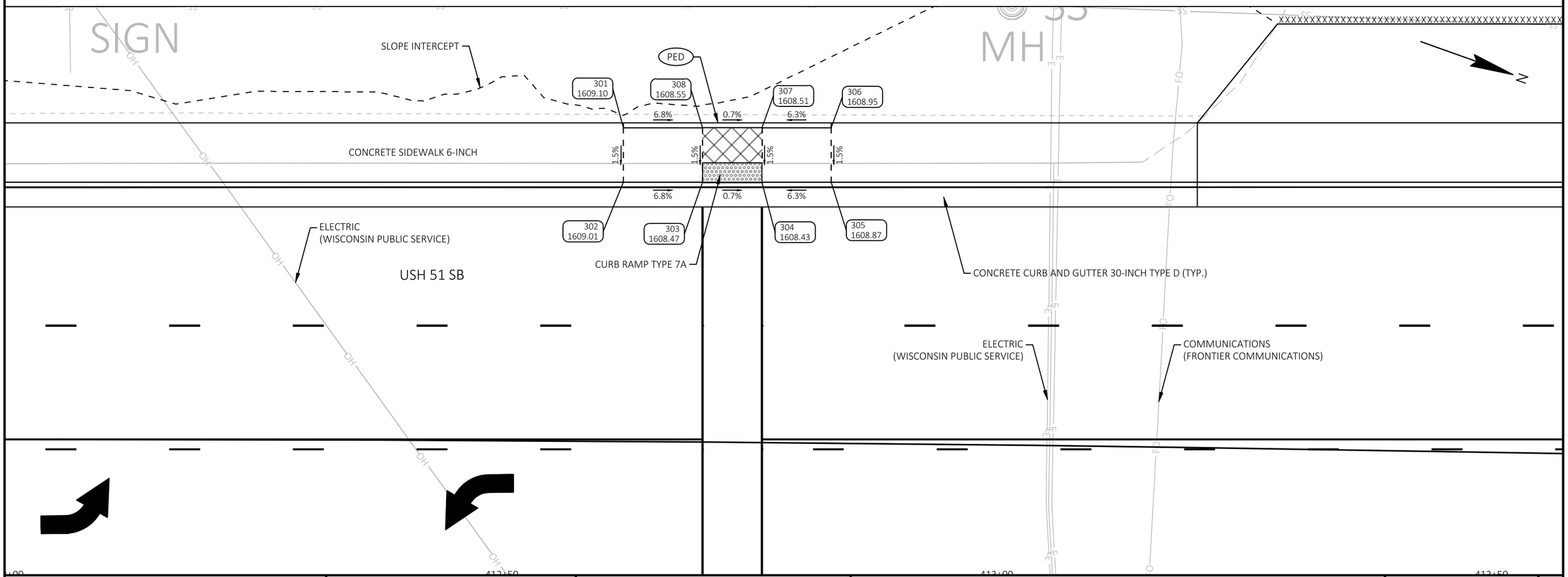
NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATION GRADES, SLOPES, LENGTHS AND MATCH POINTS, PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.

LEGEND:

- DETECTABLE WARNING FIELD
- LANDING AREA
- (G) 6:1 GRADED FLARE
- (C) 10:1 CONCRETE FLARE
- (PED) CONCRETE CURB PEDESTRIAN
- (XXXX / YYY.YY) POINT NUMBER & ELEVATION

| COUNTRY CLUB RD SW | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 301 | 412+62.29 | 46.00' LT | 1609.10 | 246779.21 | 188220.97 | EOW |
| 302 | 412+62.27 | 40.50' LT | 1609.01 | 246781.05 | 188226.15 | BOC |
| 303 | 412+70.29 | 40.50' LT | 1608.47 | 246788.60 | 188223.43 | BOC |
| 304 | 412+76.29 | 40.50' LT | 1608.43 | 246794.25 | 188221.40 | BOC |
| 305 | 412+83.29 | 40.50' LT | 1608.87 | 246800.83 | 188219.03 | BOC |
| 306 | 412+83.29 | 46.00' LT | 1608.95 | 246798.97 | 188213.85 | EOW |
| 307 | 412+76.29 | 46.00' LT | 1608.51 | 246792.38 | 188216.22 | EOW |
| 308 | 412+70.29 | 46.00' LT | 1608.55 | 246786.73 | 188218.26 | EOW |




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CURB RAMP DETAILS | SHEET 16 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021303-cr

PLOT DATE : 7/26/2023 1:49 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:10 FT

| COUNTRY CLUB RD SE | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 401 | 412+92.92 | 27.35' RT | 1608.18 | 246832.87 | 188279.60 | BOC |
| 402 | 412+84.03 | 26.50' RT | 1608.61 | 246824.23 | 188281.81 | BOC |
| 403 | 412+80.29 | 26.50' RT | 1608.63 | 246820.71 | 188283.08 | BOC |
| 404 | 412+76.29 | 26.50' RT | 1608.43 | 246816.94 | 188284.44 | BOC |
| 405 | 412+70.29 | 26.50' RT | 1608.47 | 246811.30 | 188286.47 | BOC |
| 406 | 412+70.29 | 31.48' RT | 1608.54 | 246812.99 | 188291.15 | EOW |
| 408 | 412+76.30 | 31.48' RT | 1608.50 | 246818.63 | 188289.12 | EOW |
| 409 | 412+80.31 | 31.47' RT | 1608.71 | 246822.41 | 188287.75 | EOW |
| 410 | 412+84.03 | 31.47' RT | 1608.69 | 246825.91 | 188286.49 | EOW |
| 411 | 412+92.92 | 32.50' RT | 1608.10 | 246834.62 | 188284.45 | EOW |
| 412 | 413+00.65 | 32.50' RT | 1607.99 | 246841.90 | 188281.83 | EOW |
| 413 | 413+04.33 | 32.50' RT | 1607.93 | 246845.36 | 188280.58 | BOC |
| 414 | 413+17.24 | 66.27' RT | 1608.34 | 246868.94 | 188307.98 | BOC |

NOTES:

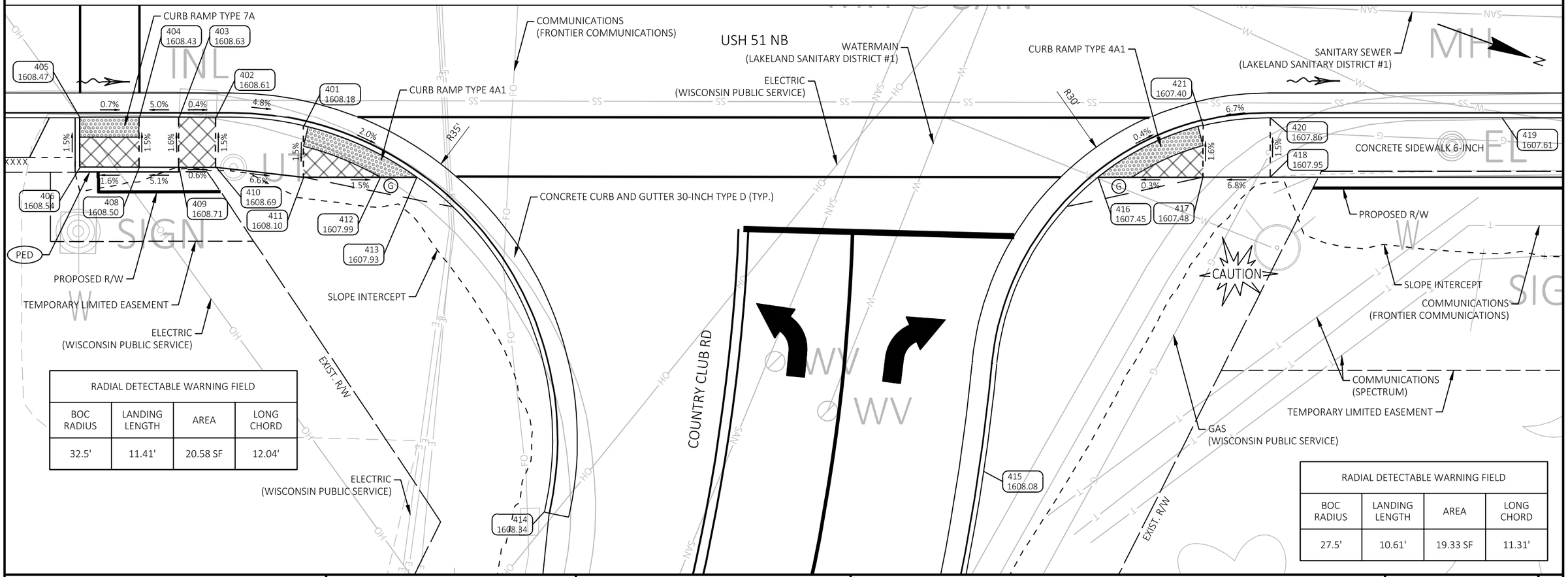
1. CONTRACTOR TO FIELD VERIFY ELEVATION GRADES, SLOPES, LENGTHS AND MATCH POINTS, PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.

LEGEND:

- DETECTABLE WARNING FIELD
- LANDING AREA
- (G) 6:1 GRADED FLARE
- (C) 10:1 CONCRETE FLARE
- PED — CONCRETE CURB PEDESTRIAN
- XXXX / YYY.YY — POINT NUMBER & ELEVATION

| COUNTRY CLUB RD NE | | | | | | |
|---|---|---|---|---|---|---|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING | DESCRIPTION |
| 415 | 413+61.59 | 62.19' RT | 1608.08 | 246909.29 | 188289.12 | BOC |
| 416 | 413+73.16 | 32.50' RT | 1607.45 | 246910.12 | 188257.27 | BOC |
| 417 | 413+83.77 | 32.50' RT | 1607.48 | 246920.10 | 188253.67 | EOW |
| 418 | 413+90.56 | 32.50' RT | 1607.95 | 246926.49 | 188251.37 | EOW |
| 419 | 414+14.00 | 26.50' RT | 1607.61 | 246946.51 | 188237.78 | EOW |
| 420 | 413+90.56 | 26.50' RT | 1607.86 | 246924.45 | 188245.72 | BOC |
| 421 | 413+83.78 | 27.29' RT | 1607.40 | 246918.34 | 188248.76 | BOC |

2

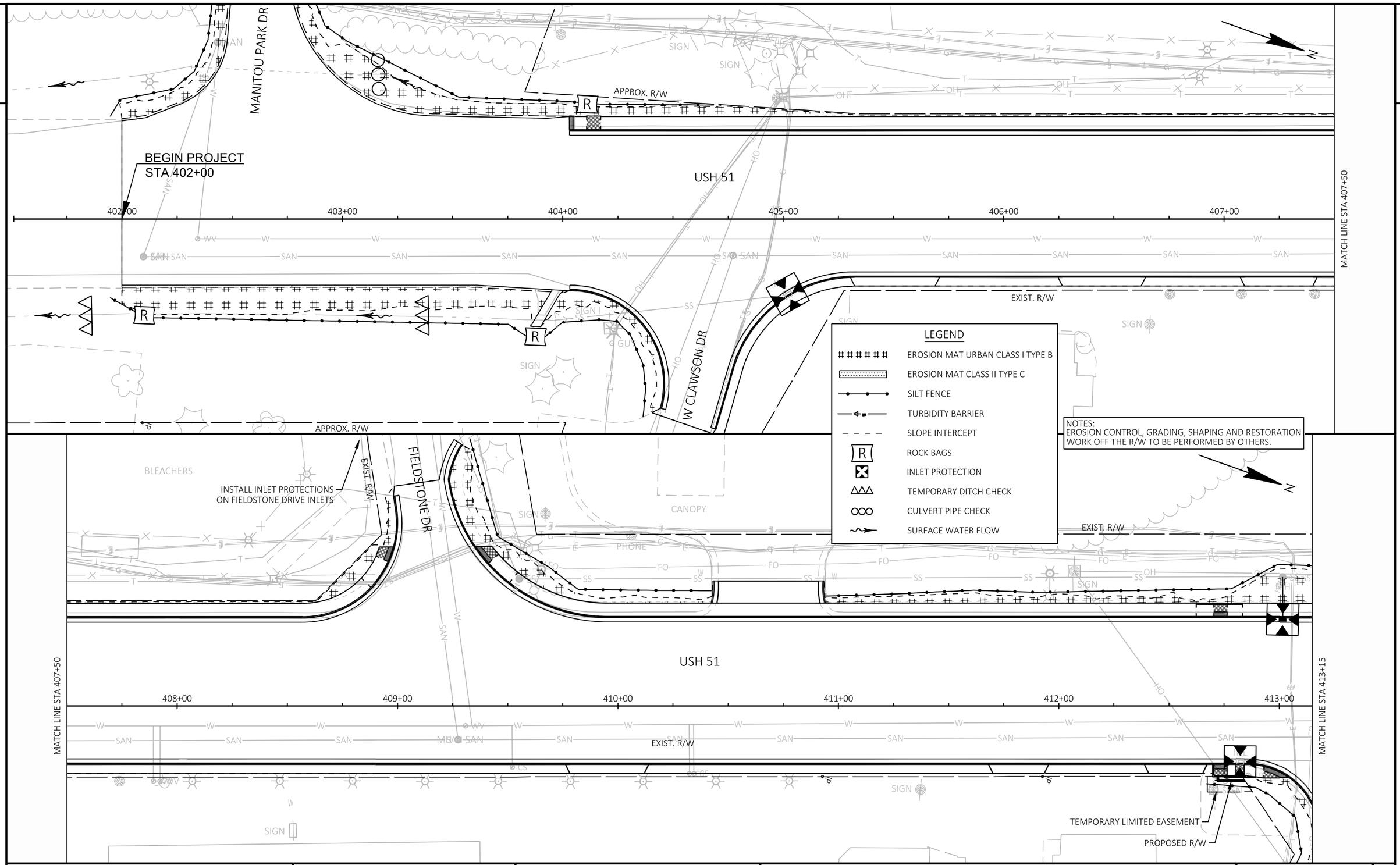



| RADIAL DETECTABLE WARNING FIELD | | | |
|---|---|---|---|
| BOC RADIUS | LANDING LENGTH | AREA | LONG CHORD |
| 32.5' | 11.41' | 20.58 SF | 12.04' |

| RADIAL DETECTABLE WARNING FIELD | | | |
|---|---|---|---|
| BOC RADIUS | LANDING LENGTH | AREA | LONG CHORD |
| 27.5' | 10.61' | 19.33 SF | 11.31' |

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CURB RAMP DETAILS | SHEET 17 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021304-cr
PLOT DATE : 7/26/2023 1:51 PM
PLOT BY : SHAWN DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | EROSION CONTROL | SHEET 18 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 8/29/2023 7:00 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

EXIST. R/W

STRUCTURE R-43-1-2
SEE STRUCTURE PLANS

EXISTING STRUCTURE R-43-1-1

N

USH 51

MATCH LINE STA 413+15

414+00 415+00 416+00 417+00 418+00 419

MATCH LINE STA 419+00

PROPOSED R/W

TEMPORARY LIMITED EASEMENT

EXIST. R/W

COUNTRY CLUB RD

## LEGEND

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

EXISTING STRUCTURE R-43-1-1

N

APPROX. R/W

MINOCQUA LAKE

USH 51

MATCH LINE STA 419+00

420+00 421+00 422+00 423+00 424+00

RIPRAP

END CONSTRUCTION
STA 422+70

B-43-41
(TO REMAIN)

END PROJECT
STA 422+54

MINOCQUA LAKE

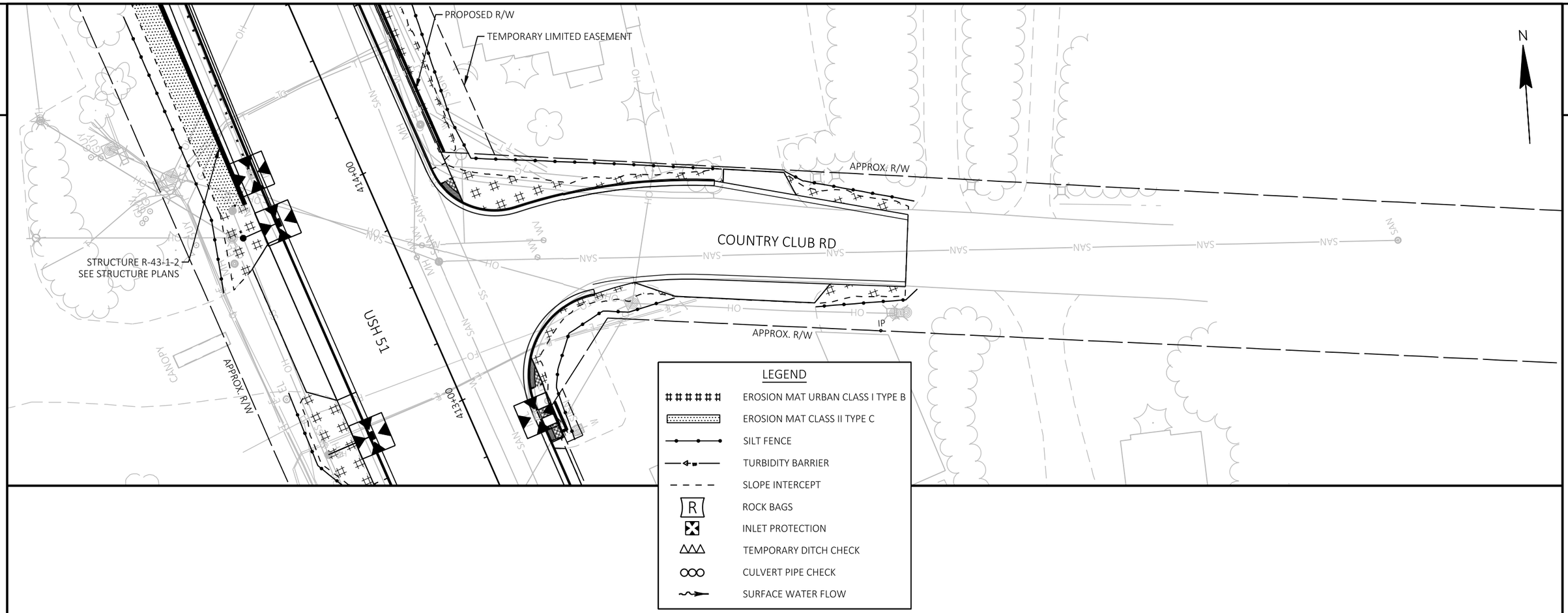
APPROX. R/W

2

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | EROSION CONTROL | SHEET 19 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 02

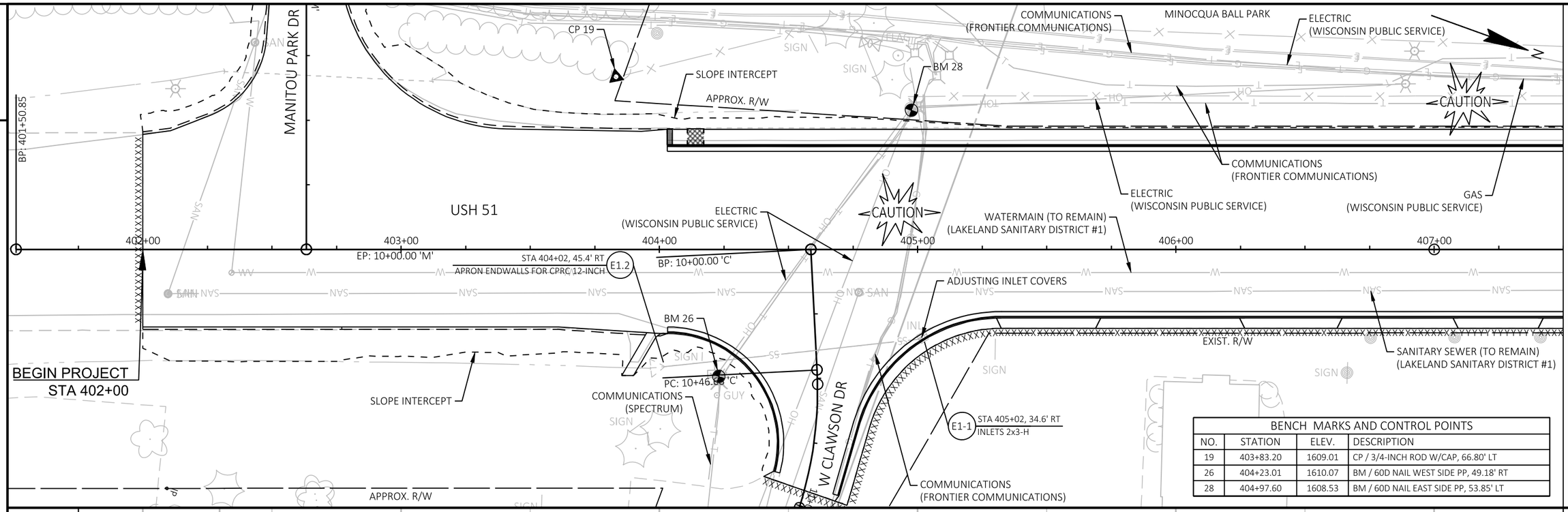
PLOT DATE : 8/29/2023 7:02 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:40 FT



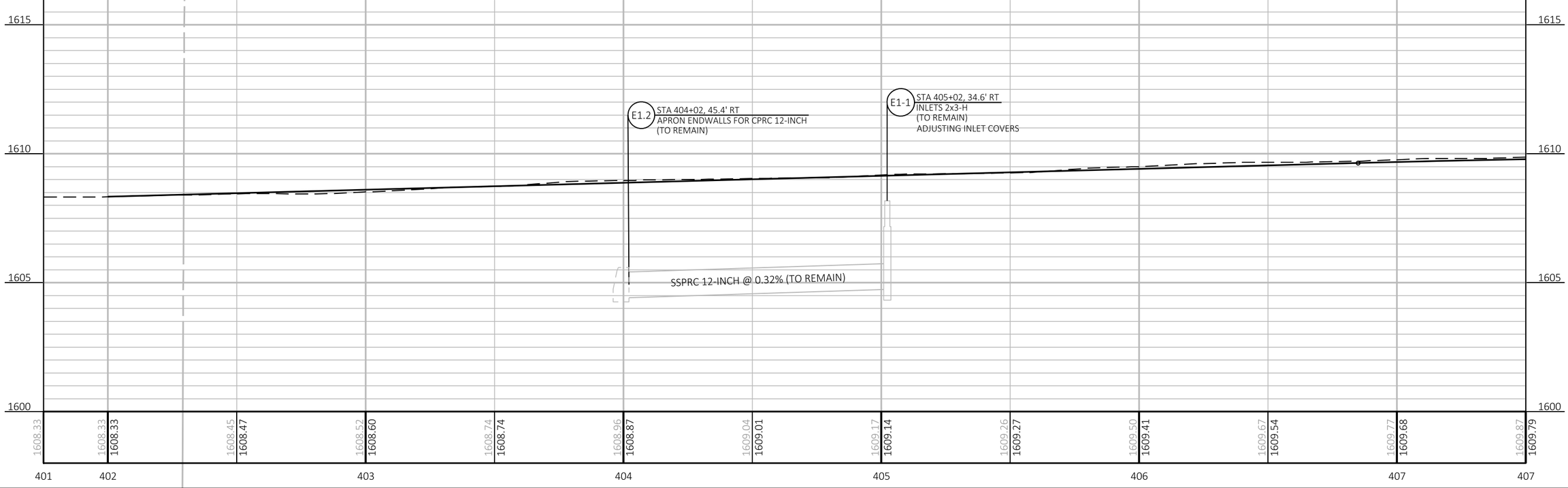

THIS SPACE INTENTIONALLY LEFT BLANK

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | EROSION CONTROL | SHEET 20 | E |
|---|---|---|---|---|---|

2




| BENCH MARKS AND CONTROL POINTS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| 19 | 403+83.20 | 1609.01 | CP / 3/4-INCH ROD W/CAP, 66.80' LT |
| 26 | 404+23.01 | 1610.07 | BM / 60D NAIL WEST SIDE PP, 49.18' RT |
| 28 | 404+97.60 | 1608.53 | BM / 60D NAIL EAST SIDE PP, 53.85' LT |




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | STORM SEWER | SHEET 21 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 01
PLOT DATE : 8/23/2023 12:37 PM
PLOT BY : SHAWN DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

MINOCQUA BALL PARK

FIELDSTONE DR

EXIST. R/W

12+00 'F'

CAUTION

E2.3 STA 409+55, 57.4' LT
MANHOLES 4-J

SLOPE INTERCEPT

ADJUSTING MANHOLE COVERS

ELECTRIC
(WISCONSIN PUBLIC SERVICE)

COMMUNICATIONS
(FRONTIER COMMUNICATIONS)

GAS
(WISCONSIN PUBLIC SERVICE)

CP 18

STA 413+02, 58.5' LT
MANHOLES 4-J
E2.4

CAUTION

E2-3

E2-1

RECONSTRUCTING MANHOLES

STA 413+02, 39.5' LT
CATCH BASINS 2x3-H
2.0

COMMUNICATIONS
(FRONTIER COMMUNICATIONS)

USH 51

WATERMAIN (TO REMAIN)
(LAKELAND SANITARY DISTRICT #1)

ELECTRIC
(WISCONSIN PUBLIC SERVICE)

MATCH LINE STA 407+50

MATCH LINE STA 413+25

408+00 409+00 410+00 411+00 412+00 413+00

EP: 12+65.10 'F'

BM 25

CP 21

SLOPE INTERCEPT

SANITARY SEWER (TO REMAIN)
(LAKELAND SANITARY DISTRICT #1)

EXIST. R/W

STA 412+82, 25.3' RT
CATCH BASINS 3-H
E2.5

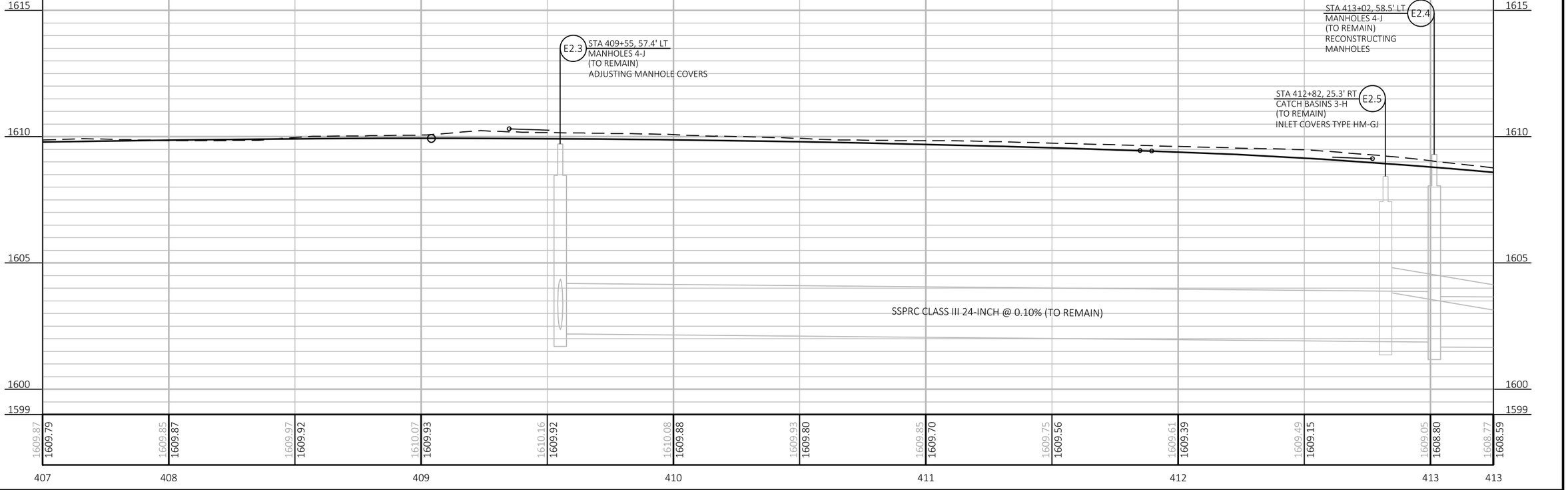
INLET COVERS TYPE HM-GJ

E3-5

TEMPORARY LIMITED EASEMENT

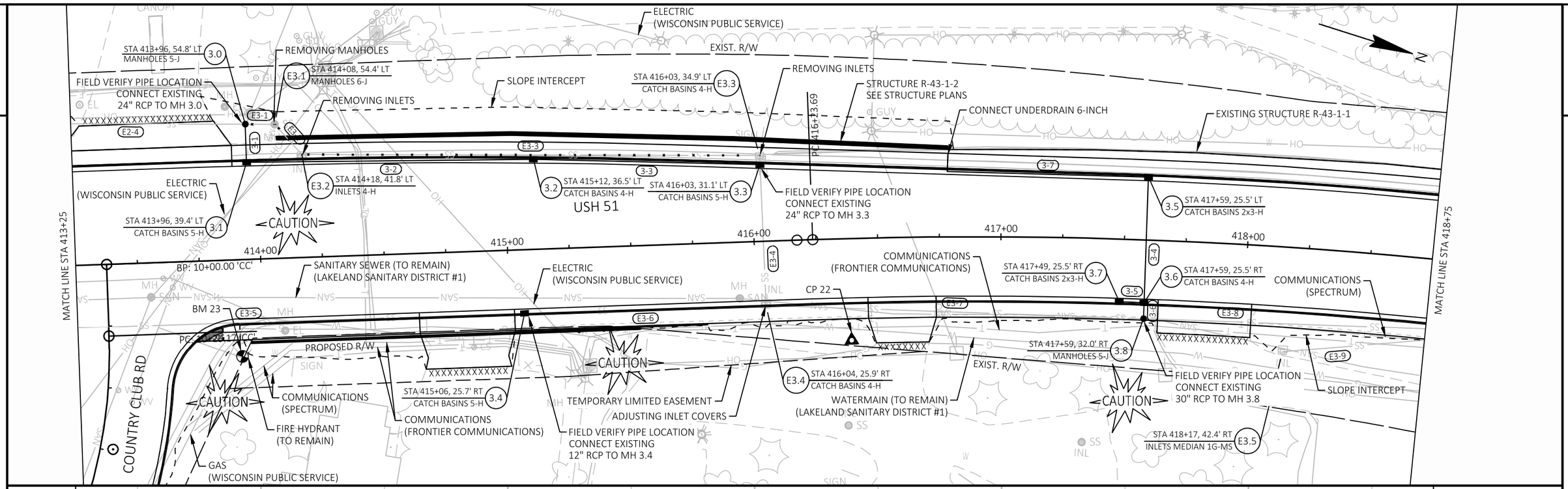
PROPOSED R/W

| BENCH MARKS AND CONTROL POINTS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| 25 | 407+94.03 | 1610.73 | BM / TAG BOLT ON HYDRANT, 36.58' RT |
| 21 | 408+22.35 | 1609.29 | CP / MAG NAIL, 42.71' RT |
| 18 | 413+93.58 | 1609.81 | CP / 3/4-INCH ROD W/CAP, 70.70' LT |

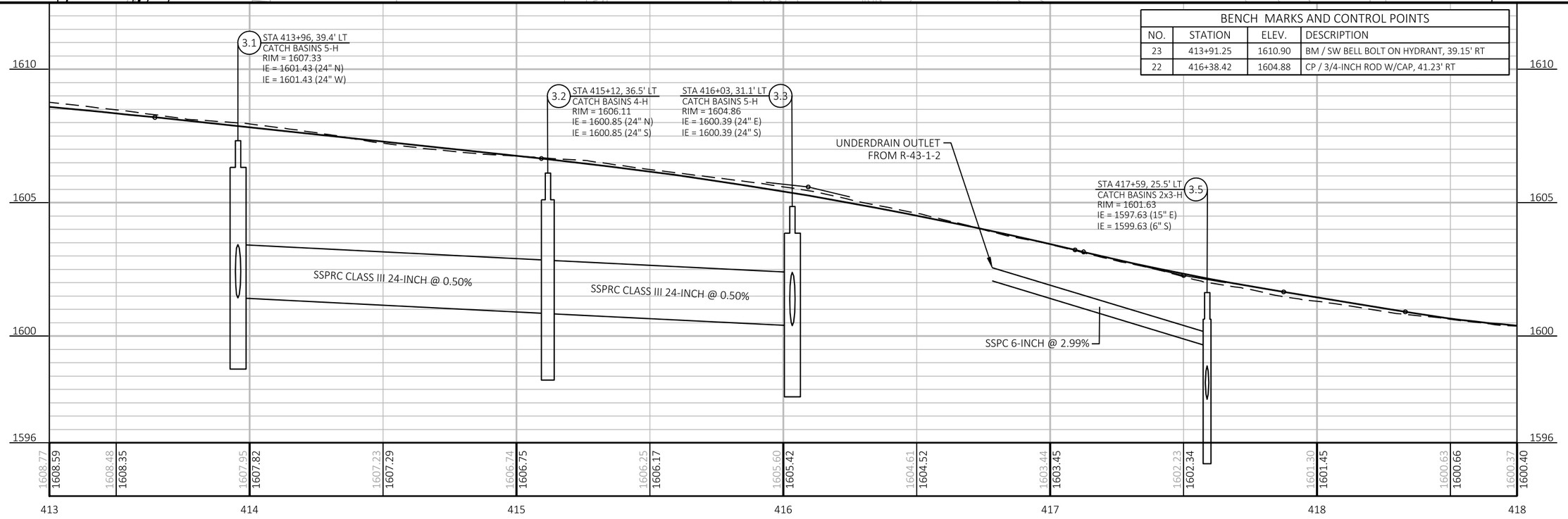



| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | STORM SEWER | SHEET 22 | E |
|---|---|---|---|---|---|

2




| BENCH MARKS AND CONTROL POINTS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| 23 | 413+91.25 | 1610.90 | BM / SW BELL BOLT ON HYDRANT, 39.15' RT |
| 22 | 416+38.42 | 1604.88 | CP / 3/4-INCH ROD W/CAP, 41.23' RT |




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | STORM SEWER | SHEET 23 | E |
|---|---|---|---|---|---|

2

EXISTING STRUCTURE R-43-1-1

4.0 STA 418+99, 25.5' LT
CATCH BASINS 2x3-H-S

E4.1 STA 419+14, 28.9' LT
CATCH BASINS 4-H

REMOVING INLETS (REMOVE EXISTING PIPE BETWEEN E4.1 AND 4.1 INCIDENTAL TO REMOVING INLETS ITEM)

4.2 STA 419+28, 25.5' LT
CATCH BASINS 2x3-H-S

SLOPE INTERCEPT

APPROX. R/W

PT: 421+57.37

STA 422+28, 46.7' LT 4.7
APRON ENDWALLS FOR CPRC 18-INCH

STA 422+25, 25.1' LT 4.6
CATCH BASINS 2x3-H-S

E4.6 STA 422+63, 49.8' LT
APRON ENDWALLS FOR CPRC 12-INCH

MINOCQUA LAKE

EP: 424+05.00

FIELD VERIFY PIPE LOCATION CONNECT EXISTING 18" RCP TO MH 4.1

4.1 STA 419+14, 25.5' LT
CATCH BASINS 4-H-S

USH 51

E4.5 STA 422+57, 25.9' LT
CATCH BASINS 4-H

MATCH LINE STA 418+75

419+00 420+00 421+00 422+00 423+00 424+00

E4.2 STA 419+14, 25.5' RT
CATCH BASINS 4-H

4.3 STA 419+29, 25.5' RT
CATCH BASINS 2x3-H-S

GAS
(WISCONSIN PUBLIC SERVICE)

ELECTRIC
(WISCONSIN PUBLIC SERVICE)

CP 17

BM 24

EXISTING BRIDGE PARAPET AND RAILING TO REMAIN

RECONSTRUCTING INLETS

SLOPE INTERCEPT

END CONSTRUCTION
STA 422+70

END PROJECT
STA 422+54

B-43-41
(TO REMAIN)

COMMUNICATIONS
(SPECTRUM)

SANITARY SEWER (TO REMAIN)
(LAKELAND SANITARY DISTRICT #1)

STA 422+25, 25.5' RT 4.5
CATCH BASINS 2x3-H-S

4.4 STA 421+08, 67.7' RT
APRON ENDWALLS FOR CPRC 30-INCH

STA 422+57, 25.8' RT E4.4
CATCH BASINS 4-H

MINOCQUA LAKE

COMMUNICATIONS
(FRONTIER COMMUNICATIONS)

APPROX. R/W

WATERMAIN (TO REMAIN)
(LAKELAND SANITARY DISTRICT #1)

4.3 STA 419+29, 25.5' RT
CATCH BASINS 2x3-H-S
RIM = 1599.70
IE = 1596.20 (18" S)

SSPRC CLASS III 18-INCH @ 1.01%

CONNECT PIPE TO EXISTING INLET

4.4 STA 421+08, 67.7' RT
APRON ENDWALLS FOR CPRC 30-INCH
IE = 1585.13 (30" S)
CONCRETE COLLARS FOR PIPE
PIPE GRATES 30-INCH

SSPRC CLASS III 30-INCH @ 3.18% (TO REMAIN)

E4.2 STA 419+14, 25.5' RT
CATCH BASINS 4-H
RECONSTRUCTING INLETS

1600 1595 1590 1586

1600.37 1600.40 1600.25 1600.25 1600.31 1600.30 1600.53 1600.45 1600.71 1600.60 1600.78 1600.75 1600.84 1600.84 1600.78 1600.74 1600.75 1600.74

418 419 420 421 422 423 424 424

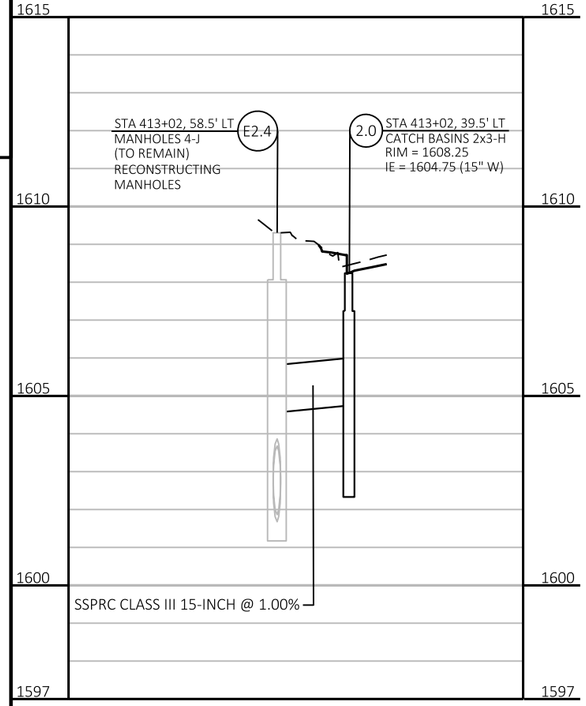
BENCH MARKS AND CONTROL POINTS

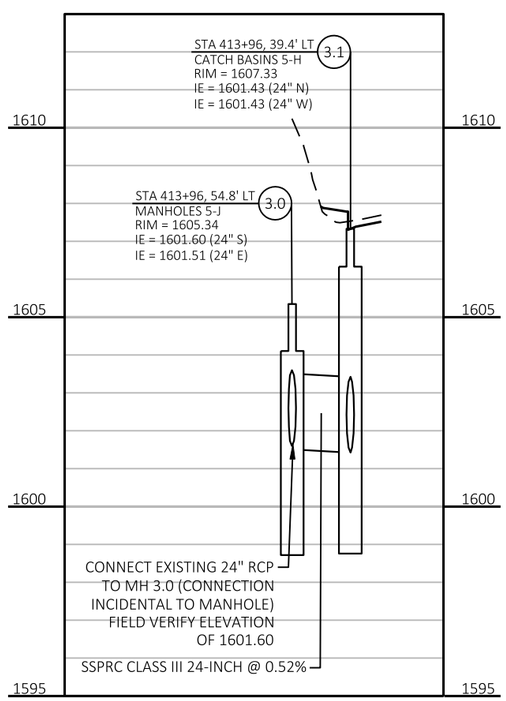
| NO. | STATION | ELEV. | DESCRIPTION |
|---|---|---|---|
| 17 | 420+79.67 | 1600.41 | CP / FENO MONUMENT, 34.30' RT |
| 24 | 421+26.59 | 1603.04 | BM / SW GUARDRAIL BOLT, 30.84' RT |

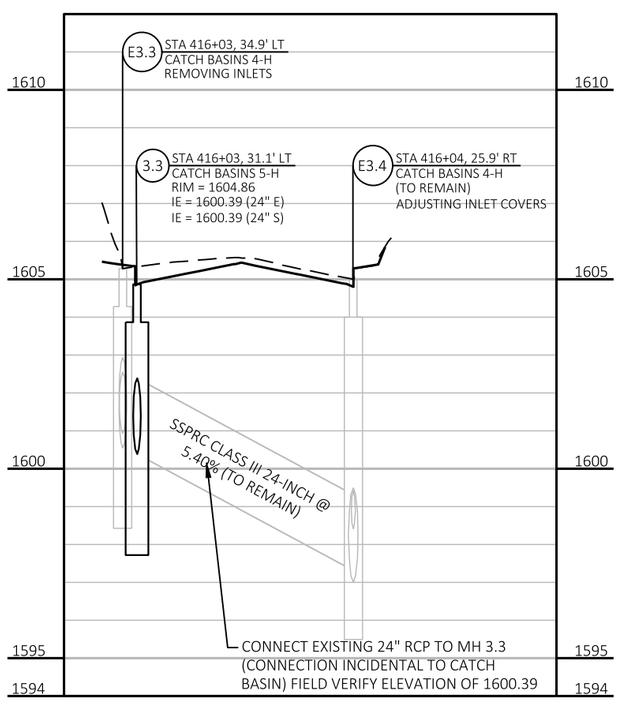
| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | STORM SEWER | SHEET 24 | E |
|---|---|---|---|---|---|

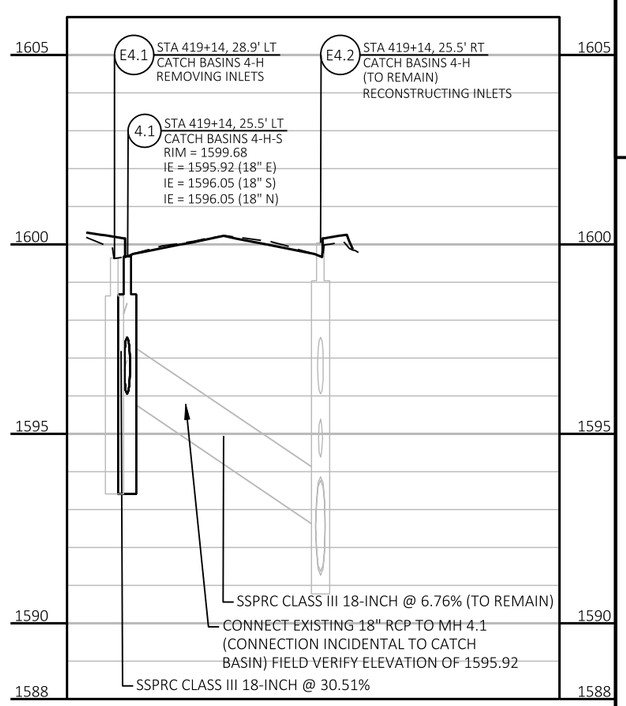
FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 04

PLOT DATE : 8/23/2023 12:42 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

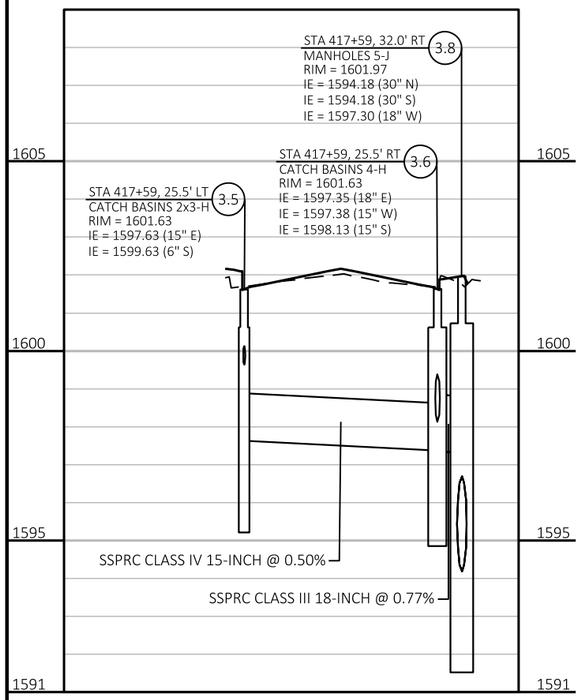


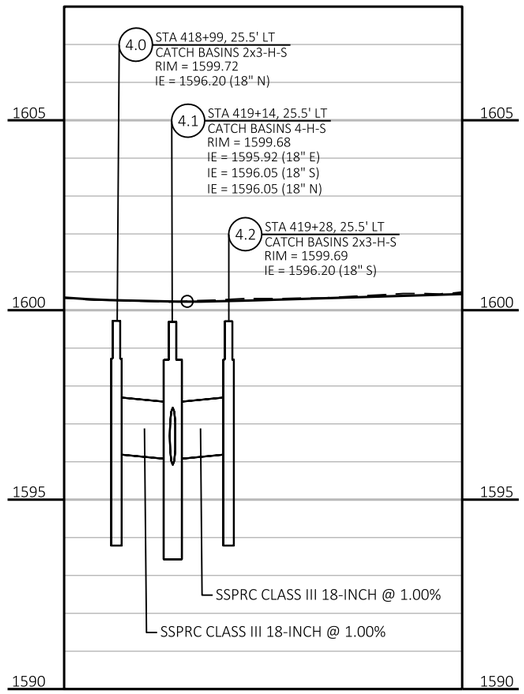



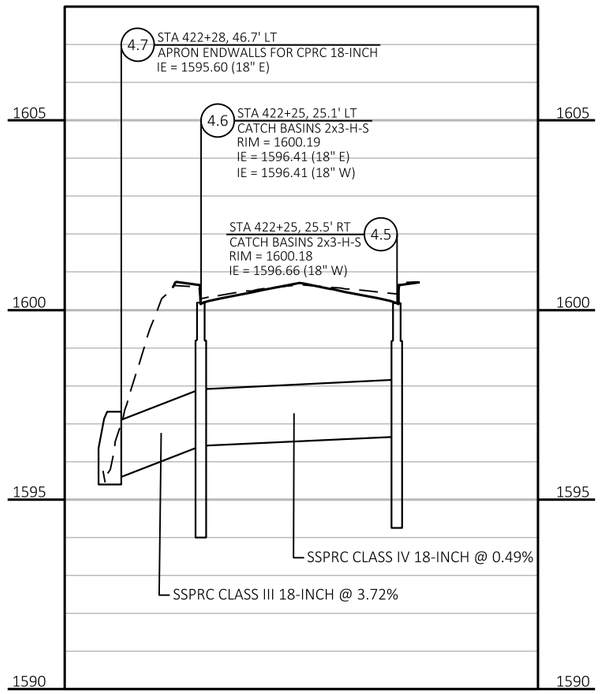



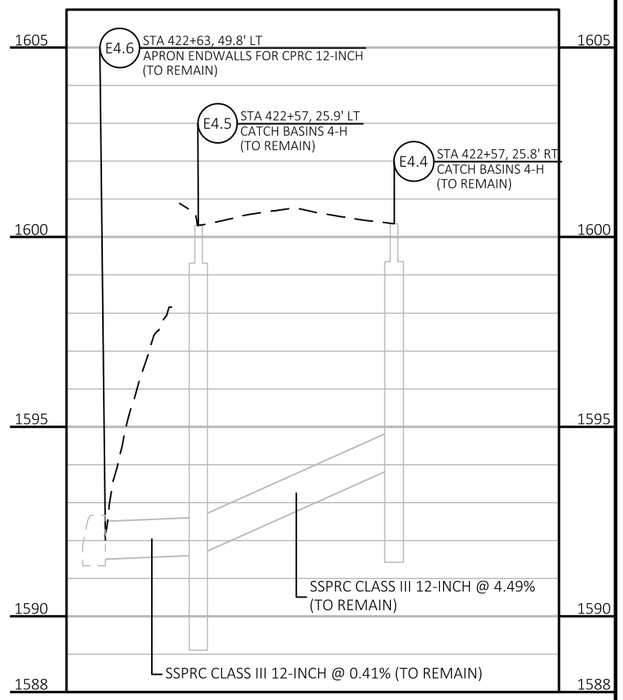




2

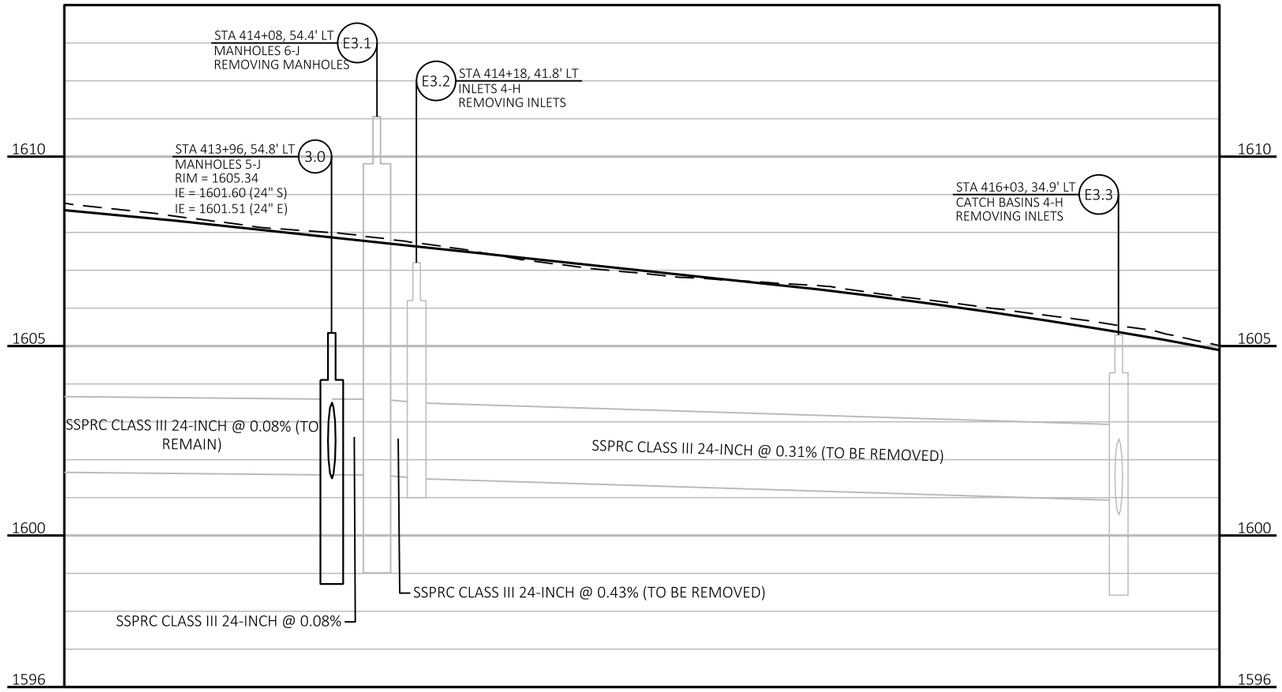


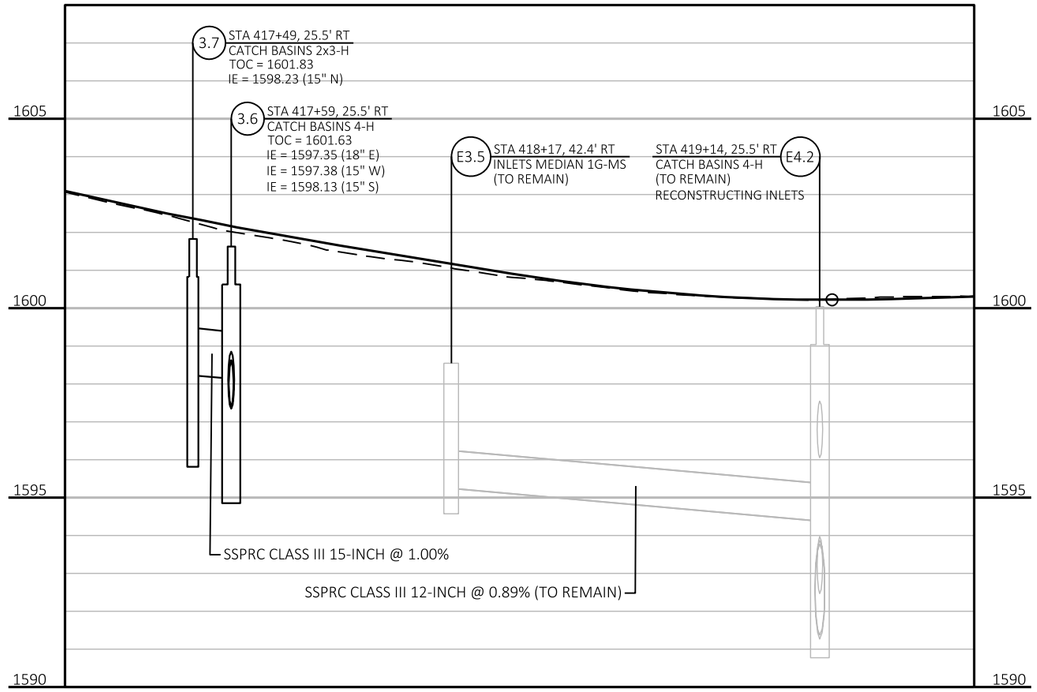



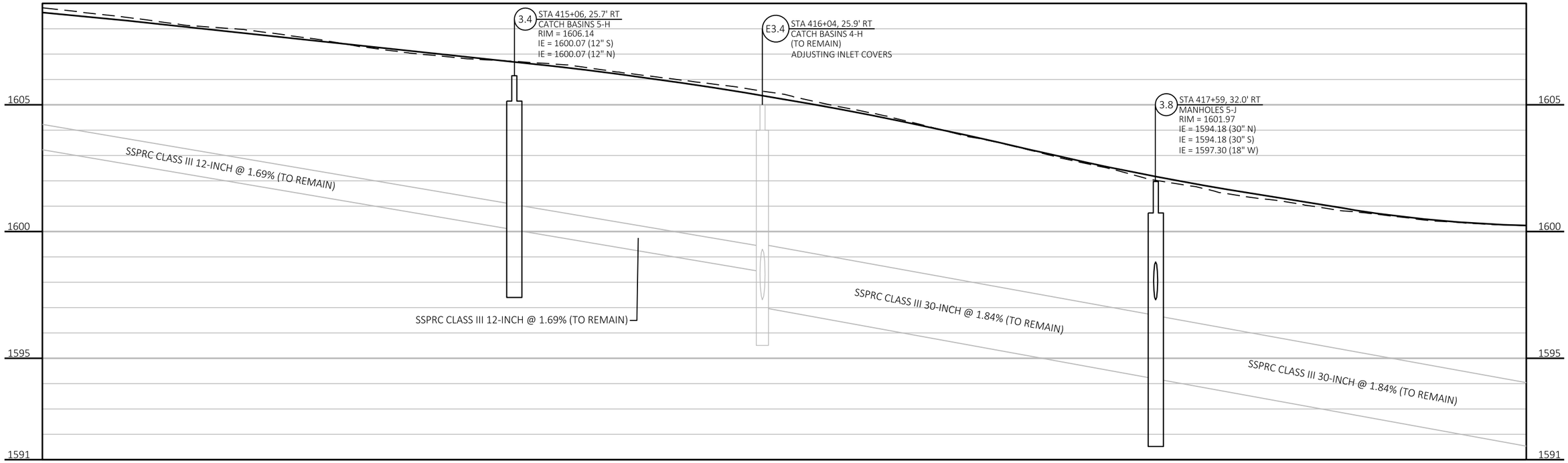



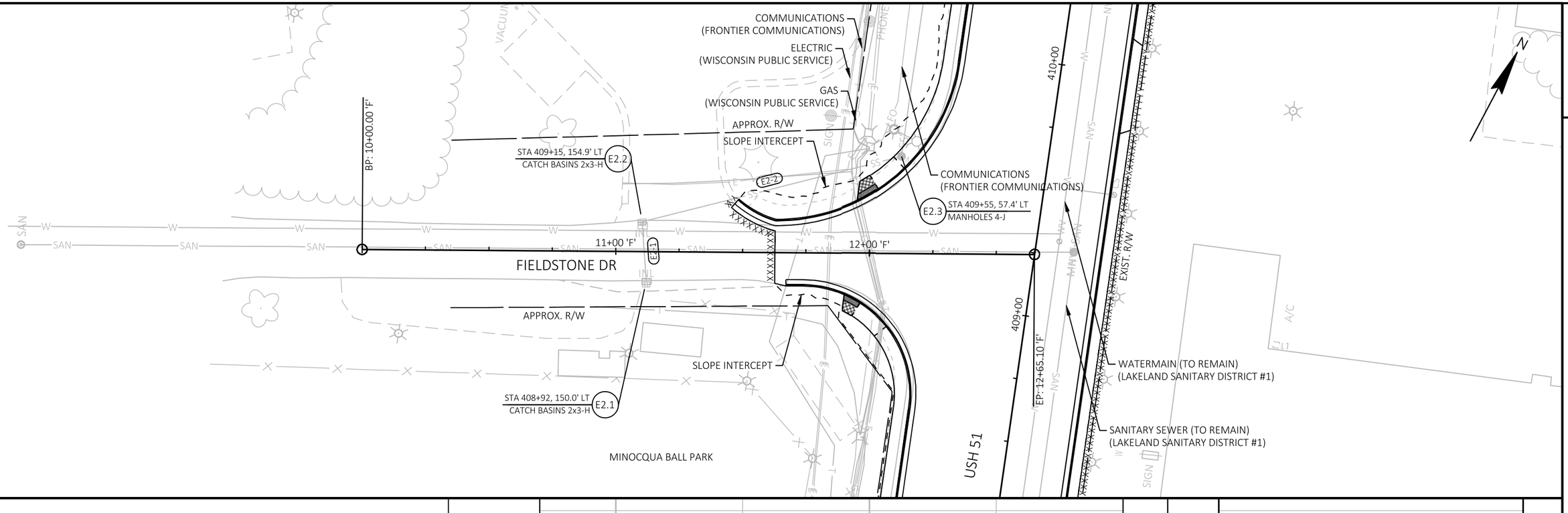

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | STORM SEWER | SHEET 25 | E |
|---|---|---|---|---|---|

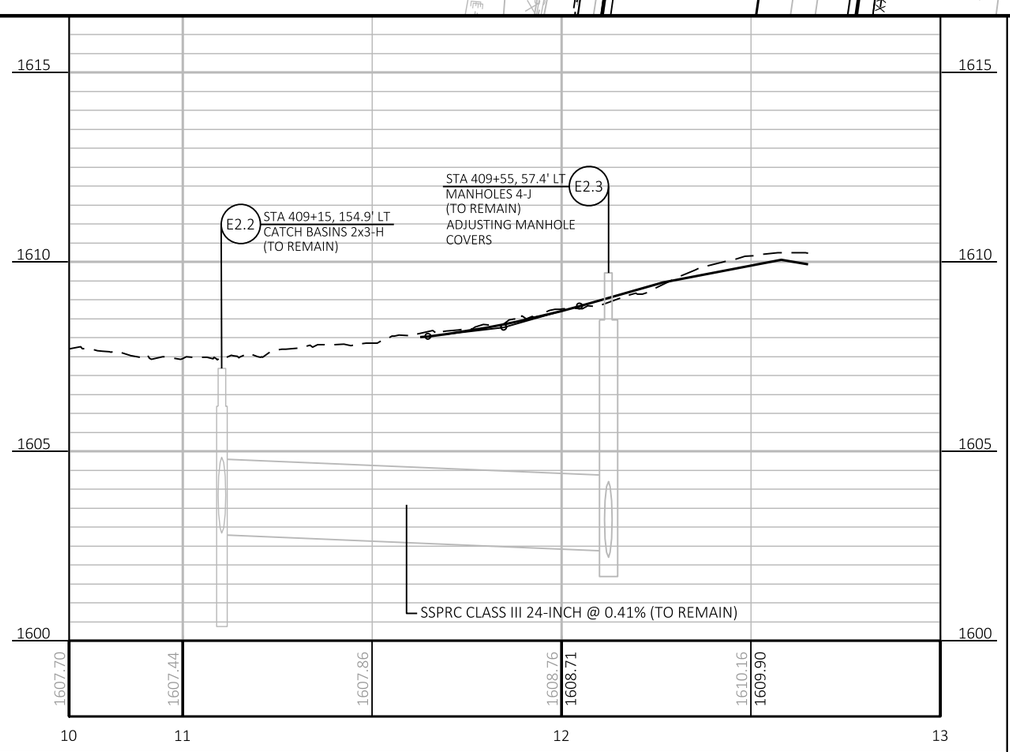


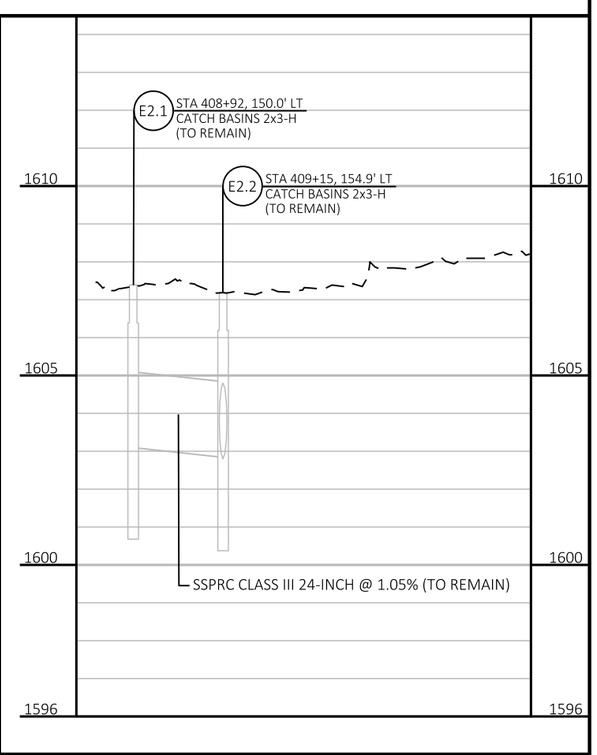




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | STORM SEWER | SHEET 26 | E |
|---|---|---|---|---|---|



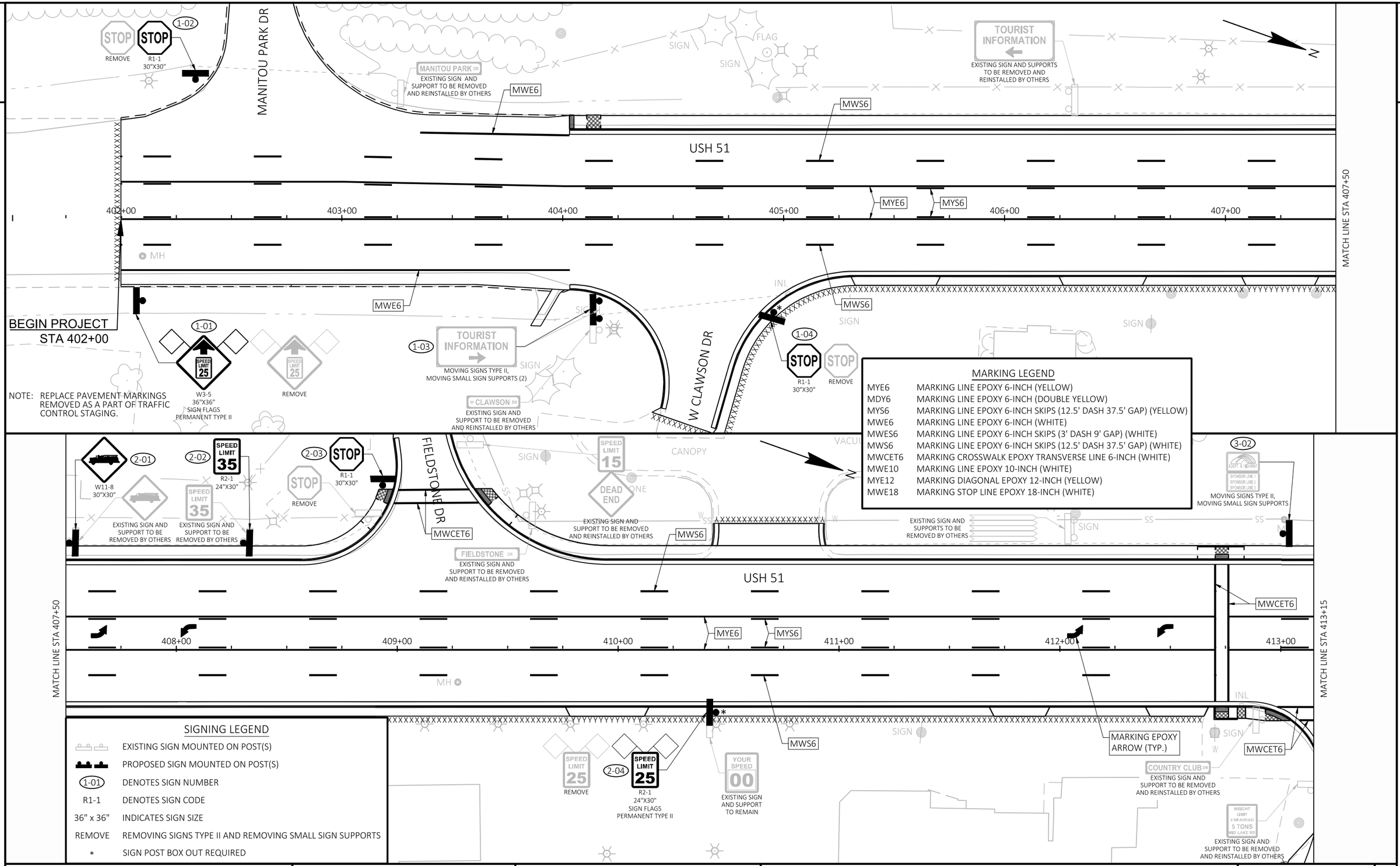




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | STORM SEWER | SHEET 27 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 07

PLOT DATE : 8/23/2023 12:48 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44


1-02
STOP
REMOVE
STOP
R1-1
30"X30"
MANITOU PARK DR
MANITOU PARK DR
EXISTING SIGN AND SUPPORT TO BE REMOVED AND REINSTALLED BY OTHERS
MWE6
SIGN
FLAG
SIGN
TOURIST INFORMATION
EXISTING SIGN AND SUPPORTS TO BE REMOVED AND REINSTALLED BY OTHERS
N
MWS6
USH 51
402+00
403+00
404+00
405+00
MYE6
MYS6
406+00
407+00
MATCH LINE STA 407+50
MH
MWE6
INL
MWS6
SIGN
SIGN
BEGIN PROJECT
STA 402+00
1-01
SPEED LIMIT 25
W3-5
36"X36"
SIGN FLAGS
PERMANENT TYPE II
SPEED LIMIT 25
REMOVE
1-03
TOURIST INFORMATION
MOVING SIGNS TYPE II,
MOVING SMALL SIGN SUPPORTS (2)
SIGN
W CLAWSON DR
EXISTING SIGN AND SUPPORT TO BE REMOVED AND REINSTALLED BY OTHERS
W CLAWSON DR
1-04
STOP
R1-1
30"X30"
STOP
REMOVE
NOTE: REPLACE PAVEMENT MARKINGS REMOVED AS A PART OF TRAFFIC CONTROL STAGING.
MARKING LEGEND
MYE6 MARKING LINE EPOXY 6-INCH (YELLOW)
MDY6 MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
MYS6 MARKING LINE EPOXY 6-INCH SKIPS (12.5' DASH 37.5' GAP) (YELLOW)
MWE6 MARKING LINE EPOXY 6-INCH (WHITE)
MWES6 MARKING LINE EPOXY 6-INCH SKIPS (3' DASH 9' GAP) (WHITE)
MWS6 MARKING LINE EPOXY 6-INCH SKIPS (12.5' DASH 37.5' GAP) (WHITE)
MWCET6 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
MWE10 MARKING LINE EPOXY 10-INCH (WHITE)
MYE12 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
MWE18 MARKING STOP LINE EPOXY 18-INCH (WHITE)
2-01
W11-8
30"X30"
EXISTING SIGN AND SUPPORT TO BE REMOVED BY OTHERS
2-02
SPEED LIMIT 35
R2-1
24"X30"
SPEED LIMIT 35
EXISTING SIGN AND SUPPORT TO BE REMOVED BY OTHERS
2-03
STOP
R1-1
30"X30"
STOP
REMOVE
FIELDSTONE DR
MWCET6
FIELDSTONE DR
EXISTING SIGN AND SUPPORT TO BE REMOVED AND REINSTALLED BY OTHERS
SIGN
SPEED LIMIT 15
CANOPY
DEAD END
EXISTING SIGN AND SUPPORT TO BE REMOVED AND REINSTALLED BY OTHERS
MWS6
W
SS
EXISTING SIGN AND SUPPORTS TO BE REMOVED BY OTHERS
SIGN
SS
SS
3-02
ADOPT A HIGHWAY
SPONSOR LINE 1
SPONSOR LINE 2
SPONSOR LINE 3
MOVING SIGNS TYPE II,
MOVING SMALL SIGN SUPPORTS
USH 51
MWCET6
408+00
409+00
410+00
MYE6
MYS6
411+00
412+00
413+00
MATCH LINE STA 407+50
MH
INL
MWS6
SIGN
SIGN
MARKING EPOXY ARROW (TYP.)
MWCET6
W
SPEED LIMIT 25
REMOVE
2-04
SPEED LIMIT 25
R2-1
24"X30"
SIGN FLAGS
PERMANENT TYPE II
YOUR SPEED 00
EXISTING SIGN AND SUPPORT TO REMAIN
COUNTRY CLUB DR
EXISTING SIGN AND SUPPORT TO BE REMOVED AND REINSTALLED BY OTHERS
WEIGHT LIMIT
2 MI AHEAD
5 TONS
MID LAKE RD
EXISTING SIGN AND SUPPORT TO BE REMOVED AND REINSTALLED BY OTHERS
MATCH LINE STA 413+15
SIGNING LEGEND
EXISTING SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON POST(S)
1-01 DENOTES SIGN NUMBER
R1-1 DENOTES SIGN CODE
36" x 36" INDICATES SIGN SIZE
REMOVE REMOVING SIGNS TYPE II AND REMOVING SMALL SIGN SUPPORTS
* SIGN POST BOX OUT REQUIRED

2

STRUCTURE R-43-1-2
SEE STRUCTURE PLANS

EXISTING SIGN AND SUPPORTS TO BE REMOVED BY OTHERS

EXISTING STRUCTURE R-43-1-1

N

USH 51

MATCH LINE STA 413+15

MATCH LINE STA 419+00

STA 413+77.35 -14.50' LT

STA 414+00 -14.41' LT

STA 414+50 -13.62' LT

STA 415+00 -11.99' LT

STA 415+50 -9.53' LT

STA 416+00 -6.31' LT

STA 416+50 -3.15' LT

STA 417+00 -1.16' LT

STA 417+49.98 -0.50' LT

414+00 415+00 416+00 417+00 418+00

MYS6 MYE6 MWS6 MWCET6 MWE18 MWE10 MDY4 MYE12 MDY6

COUNTRY CLUB RD

MARKING EPOXY ARROW (TYP.)

3-01 STOP R1-1 30"X30"

STOP SIGN REMOVE

3-02 MOVING SIGNS TYPE II, MOVING SMALL SIGN SUPPORTS

3-03 BEGIN CENTER LANE ONLY R3-9C 24"X6"

3-04 R3-9B 24"X36"

BEGIN CENTER LANE ONLY REMOVE

## MARKING LEGEND

| | |
|---|---|
| MYE6 | MARKING LINE EPOXY 6-INCH (YELLOW) |
| MDY6 | MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW) |
| MYS6 | MARKING LINE EPOXY 6-INCH SKIPS (12.5' DASH 37.5' GAP) (YELLOW) |
| MWE6 | MARKING LINE EPOXY 6-INCH (WHITE) |
| MWES6 | MARKING LINE EPOXY 6-INCH SKIPS (3' DASH 9' GAP) (WHITE) |
| MWS6 | MARKING LINE EPOXY 6-INCH SKIPS (12.5' DASH 37.5' GAP) (WHITE) |
| MWCET6 | MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) |
| MWE10 | MARKING LINE EPOXY 10-INCH (WHITE) |
| MYE12 | MARKING DIAGONAL EPOXY 12-INCH (YELLOW) |
| MWE18 | MARKING STOP LINE EPOXY 18-INCH (WHITE) |

## SIGNING LEGEND

| | |
|---|---|
| | EXISTING SIGN MOUNTED ON POST(S) |
| | PROPOSED SIGN MOUNTED ON POST(S) |
| 1-01 | DENOTES SIGN NUMBER |
| R1-1 | DENOTES SIGN CODE |
| 36" x 36" | INDICATES SIGN SIZE |
| REMOVE | REMOVING SIGNS TYPE II AND REMOVING SMALL SIGN SUPPORTS |
| * | SIGN POST BOX OUT REQUIRED |

EXISTING STRUCTURE R-43-1-1

4-01 TOURIST INFORMATION 1/2 MILE MOVING SIGNS TYPE II, MOVING SMALL SIGN SUPPORTS (2)

4-02 SPEED LIMIT 25 R2-1 24"X30" SPEED LIMIT 25 REMOVE

MWS6

USH 51

MATCH LINE STA 419+00

420+00 421+00 422+00 423+00 424+00

MWS6 MDY6

4-03 SPEED LIMIT 25 REMOVE SPEED LIMIT 25 R2-1 24"X30"

END CONSTRUCTION STA 422+70

END PROJECT STA 422+54

MINOCQUA LAKE

MINOCQUA LAKE

RIPRAP

NOTE: REPLACE PAVEMENT MARKINGS REMOVED AS A PART OF TRAFFIC CONTROL STAGING.

N

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | SIGNING & PAVEMENT MARKING | SHEET 29 | E |
|---|---|---|---|---|---|

2

2

MANITOU P

FIELDSTONE DR

TENNIS COURT

USH 51

403+00 404+00 405+00 406+00 407+00 408+00 409+00 410+00 411+00 412+00 413+00 414+00 415+00 416+00 417+00 418+00

W CLAWSON DR

COUNTRY CLUB RD

N

LEGEND

WORK AREA FOR SIDEWALK AND CURB RAMPS

EXISTING PEDESTRIAN ROUTE

PROPOSED PEDESTRIAN ROUTE

NOTE: ADDITIONAL DETAILS ON OTHER SHEETS

MINOCQUA LAKE

418+00 419+00 420+00 421+00 422+00 423+00 424+00 425+00 426+00 427+00 428+00 429+00 430+00 431+00 432+00 433+00

E PARK AVE

MINOCQUA LAKE

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 1A - PEDESTRIAN ACCOMMODATION OVERVIEW | SHEET 30 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025100 - TC_STAGE1.DWG
LAYOUT NAME - Overview

PLOT DATE : 6/29/2023 8:52 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MANITOU PARK

FIELDSTONE DR

TEMPORARY CURB RAMP
AND TEMPORARY PEDESTRIAN SURFACE

TEMPORARY CURB RAMP
AND TEMPORARY PEDESTRIAN SURFACE

TENNIS COURT

USH 51

403+00 404+00 405+00 406+00 407+00 408+00 409+00 410+00 411+00 412+00 413+00 414+00 415+00 416+00 417+00 418+00

W CLAWSON DR

COUNTRY CLUB RD

N

LEGEND

WORK AREA FOR SIDEWALK AND CURB RAMPS

EXISTING PEDESTRIAN ROUTE

PROPOSED PEDESTRIAN ROUTE

NOTE: ADDITIONAL DETAILS ON OTHER SHEETS

N

MINOCQUA LAKE

USH 51

418+00 419+00 420+00 421+00 422+00 423+00 424+00 425+00 426+00 427+00 428+00 429+00 430+00 431+00 432+00 433+00

E PARK AVE

MINOCQUA LAKE

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 1 - PEDESTRIAN ACCOMMODATION OVERVIEW | SHEET 31 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025100 - TC_STAGE2.DWG
LAYOUT NAME - Overview

PLOT DATE : 6/29/2023 9:21 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

MANITOU PARK

FIELDSTONE DR

TENNIS COURT

USH 51

USH 51

403+00 404+00 405+00 406+00 407+00 408+00 409+00 410+00 411+00 412+00 413+00 414+00 415+00 416+00 417+00 418+00

W CLAWSON DR

TEMPORARY CURB RAMP
AND TEMPORARY PEDESTRIAN SURFACE

COUNTRY CLUB RD

N

LEGEND

WORK AREA FOR SIDEWALK AND CURB RAMPS

EXISTING PEDESTRIAN ROUTE

PROPOSED PEDESTRIAN ROUTE

NOTE: ADDITIONAL DETAILS ON OTHER SHEETS

N

MINOCQUA LAKE

418+00 419+00 420+00 421+00 422+00 423+00 424+00 425+00 426+00 427+00 428+00 429+00 430+00 431+00 432+00 433+00

USH 51

USH 51

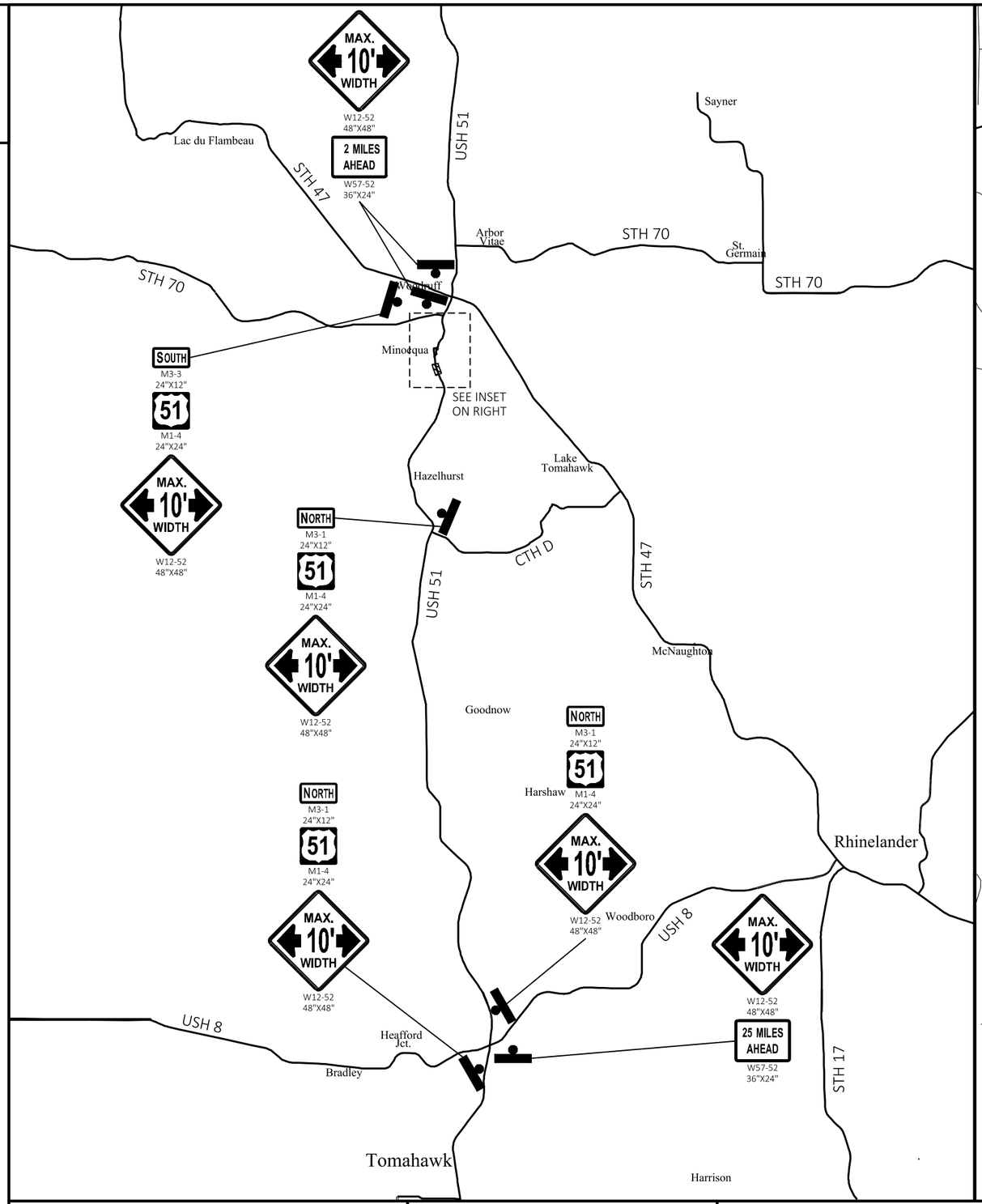
MINOCQUA LAKE

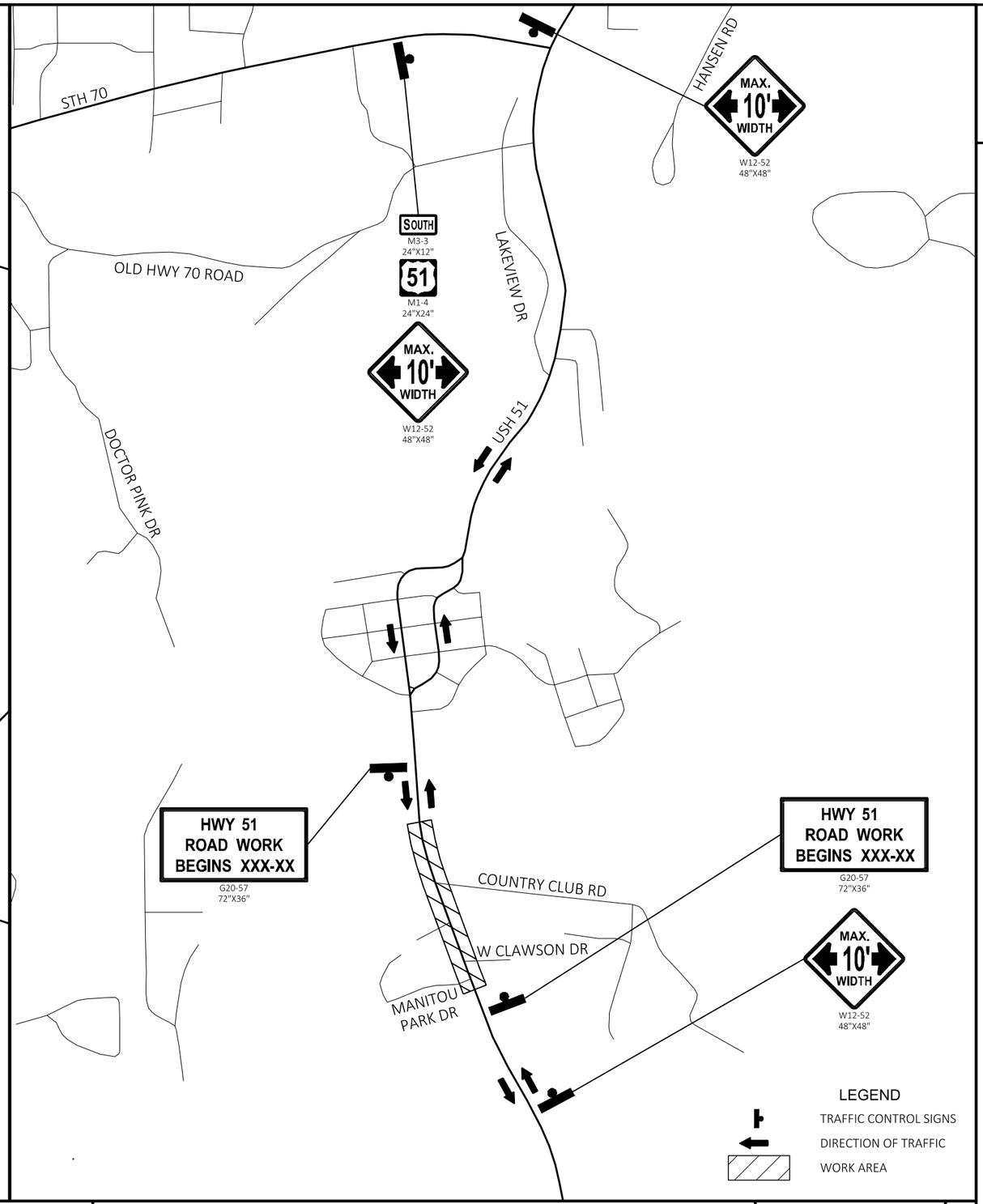
E PARK AVE

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 2 - PEDESTRIAN ACCOMMODATION OVERVIEW | SHEET 32 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025100 - TC_STAGE3.DWG
LAYOUT NAME - Overview

PLOT DATE : 6/29/2023 9:30 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:50 FT




2

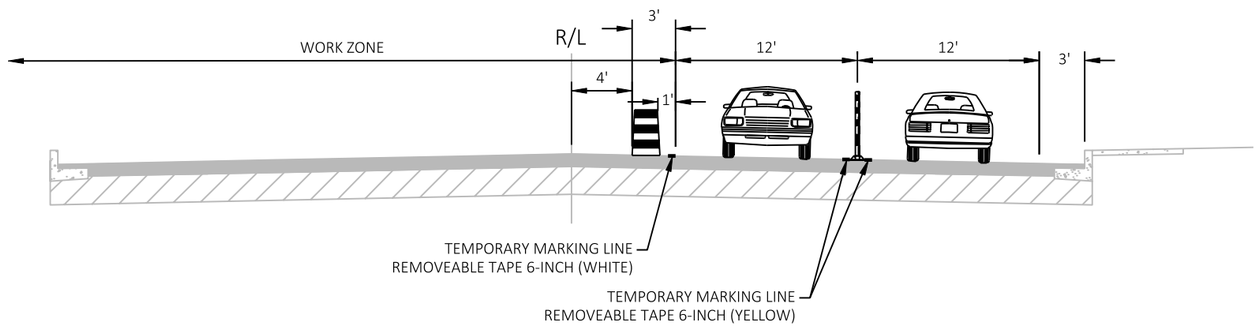
| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - ADVANCED WARNING | SHEET 33 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025001-AW.DWG
LAYOUT NAME - 025001-aw
PLOT DATE : 6/29/2023 11:32 AM
PLOT BY : SHAWN DOLENS
PLOT NAME :
PLOT SCALE : 1 IN: 0.25 MI
WISDOT/CADDS SHEET 42

2

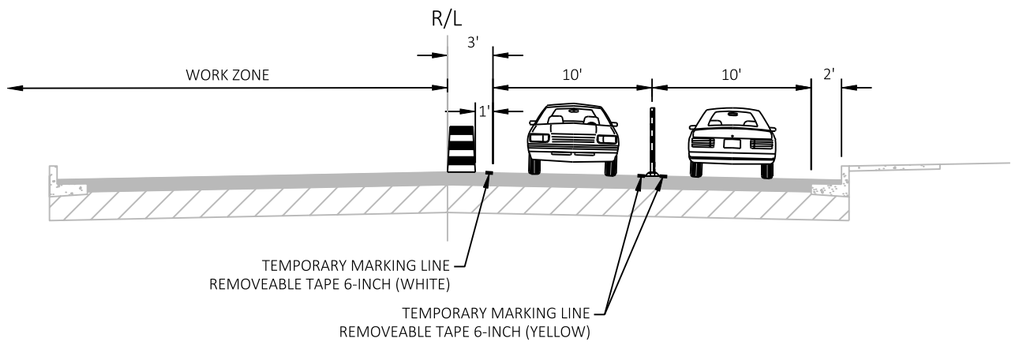
## STAGE 1B PAVEMENT REPLACEMENT

STA 402+00 - STA 414+00




## STAGE 1B PAVEMENT REPLACEMENT

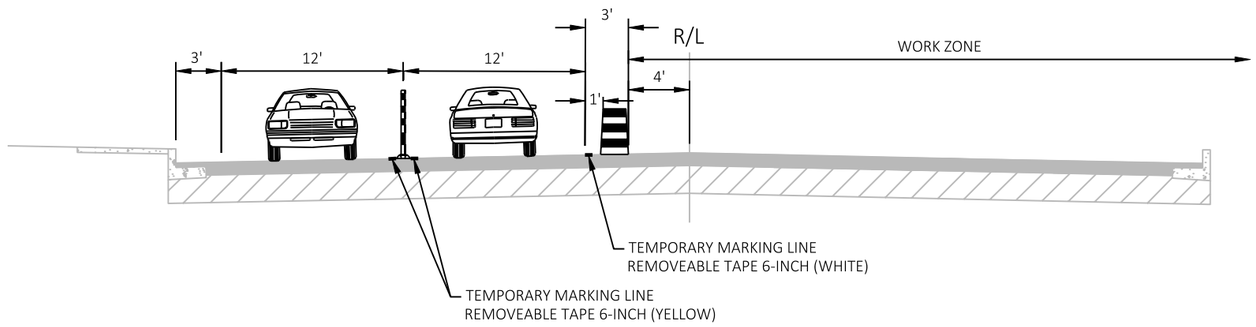
STA 414+00 - STA 422+54



2

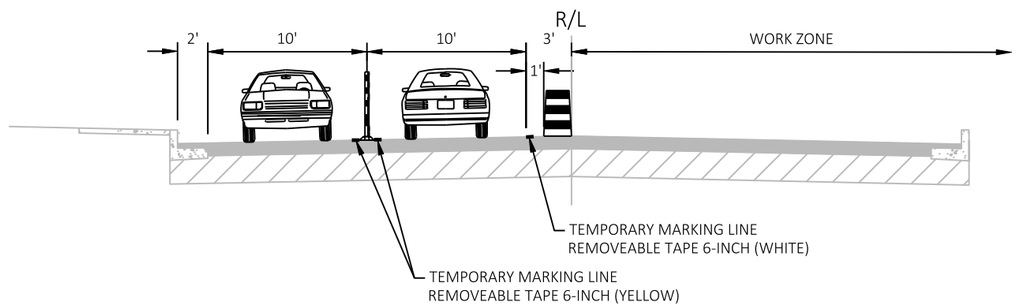
## STAGE 2 PAVEMENT REPLACEMENT

STA 402+00 - STA 414+00




## STAGE 2 PAVEMENT REPLACEMENT

STA 414+00 - STA 422+54



2

OLD HWY 51

RIPRAP

SS

SIGN

W

SIGN

RIPRAP

SIGN

SIGN

FLAG

END ROAD WORK
G20-2A
48"X24"

N

USH 51

392+00

393+00

MATCH LINE STA 393+50

ROAD WORK AHEAD
W20-1A

RIGHT LANE CLOSED AHEAD
W20-5A

W04-2R

350'

350'

LEGEND

| | |
|---|---|
| TYPE III BARRICADE WITH TYPE A LIGHTS | WORK AREA |
| TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS | TEMPORARY PEDESTRIAN SURFACE |
| TRAFFIC CONTROL DRUM | TEMPORARY CURB RAMP |
| TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT | TEMPORARY DETECTABLE WARNING FIELD |
| FLASHING ARROW BOARD | EXISTING PEDESTRIAN ROUTE |
| SIGN ON PERMANENT SUPPORT | PROPOSED PEDESTRIAN ROUTE |
| SIGN ON TEMPORARY SUPPORT | TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH |
| DELINEATOR FLEXIBLE/TUBULAR MARKER | TEMPORARY PEDESTRIAN BARRICADE |
| DIRECTION OF TRAFFIC | REMOVING PAVEMENT MARKING |

TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE" AND "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"

NOTES:

1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

N

SIGN

USH 51

394+00

395+00

396+00

397+00

398+00

399+00

400+00

401

MATCH LINE STA 393+50

MATCH LINE STA 401+00

W

SIGN

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 1A | SHEET 36 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025100 - TC_STAGE1.DWG
LAYOUT NAME - 025105

PLOT DATE : 8/29/2023 11:49 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

MANITOU PARK DR

USH 51

MATCH LINE STA 401+00

MATCH LINE STA 408+50

400+00 402+00 403+00 404+00 405+00 406+00 407+00 408+00

SIGN FLAG SIGN SIGN SIGN SIGN SIGN SIGN

W CLAWSON DR

25'

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE" AND "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"

NOTES:

1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

LEGEND

- TYPE III BARRICADE WITH TYPE A LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- EXISTING PEDESTRIAN ROUTE
- PROPOSED PEDESTRIAN ROUTE
- TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH
- TEMPORARY PEDESTRIAN BARRICADE
- REMOVING PAVEMENT MARKING

FIELDSTONE DR

CANOPY VACUUM PHONE A/C

USH 51

MATCH LINE STA 408+50

MATCH LINE STA 416+00

409+00 410+00 411+00 412+00 413+00 414+00 415+00 416

20' 4' 15' 50' 15' 4' 15'

MOVING SMALL SIGN SUPPORT
MOVING SIGNS TYPE II
(MOVE TO PROVIDE 4-FOOT MINIMUM TEMPORARY PEDESTRIAN WIDTH)

STA 408+95
REMOVING CURB & GUTTER
TEMPORARY CURB RAMP
TEMPORARY PEDESTRIAN SURFACE ASPHALT
TEMPORARY DETECTABLE WARNING FIELD
(MAINTAIN DRAINAGE AT FLOWLINE)

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

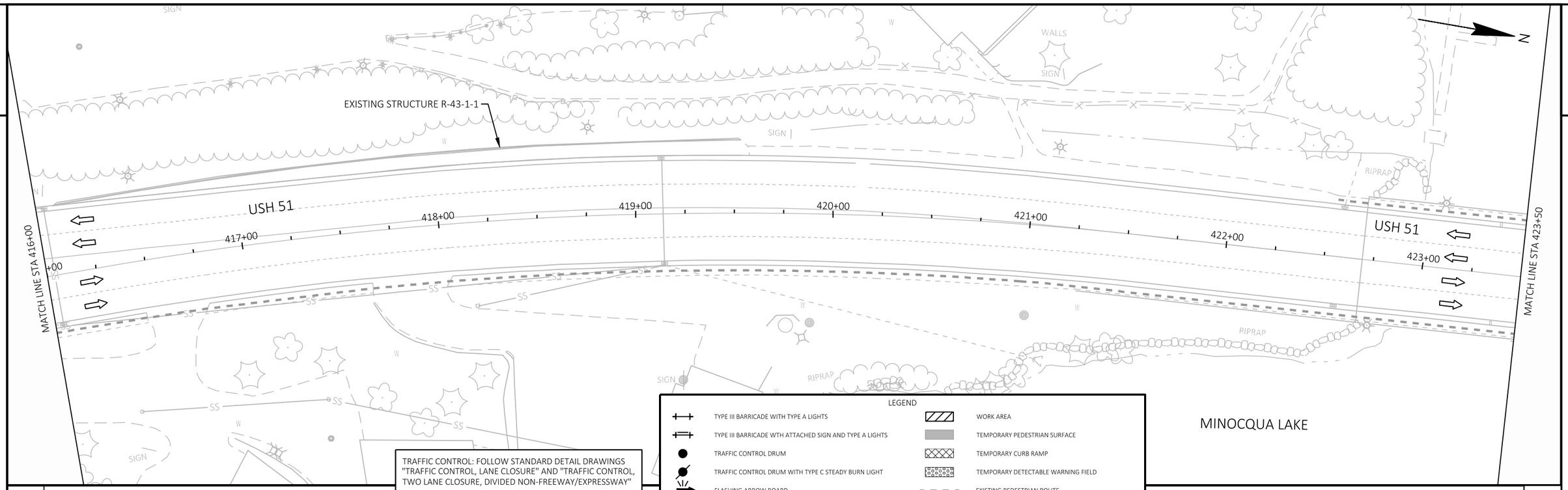
STA 412+85
REMOVE CURB & GUTTER
TEMPORARY CURB RAMP
TEMPORARY PEDESTRIAN SURFACE ASPHALT
TEMPORARY DETECTABLE WARNING FIELD
(MAINTAIN DRAINAGE AT FLOWLINE)

COUNTRY CLUB RD

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 1A | SHEET 37 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025100 - TC_STAGE1.DWG
LAYOUT NAME - 025106

PLOT DATE : 8/29/2023 11:50 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:50 FT



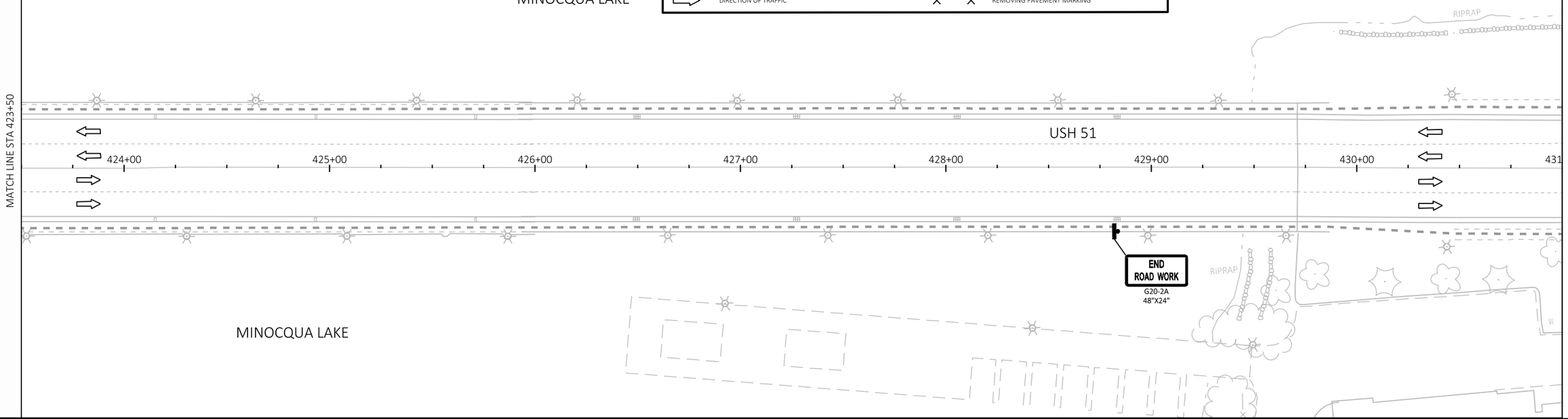

TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE" AND "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"

NOTES:

1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

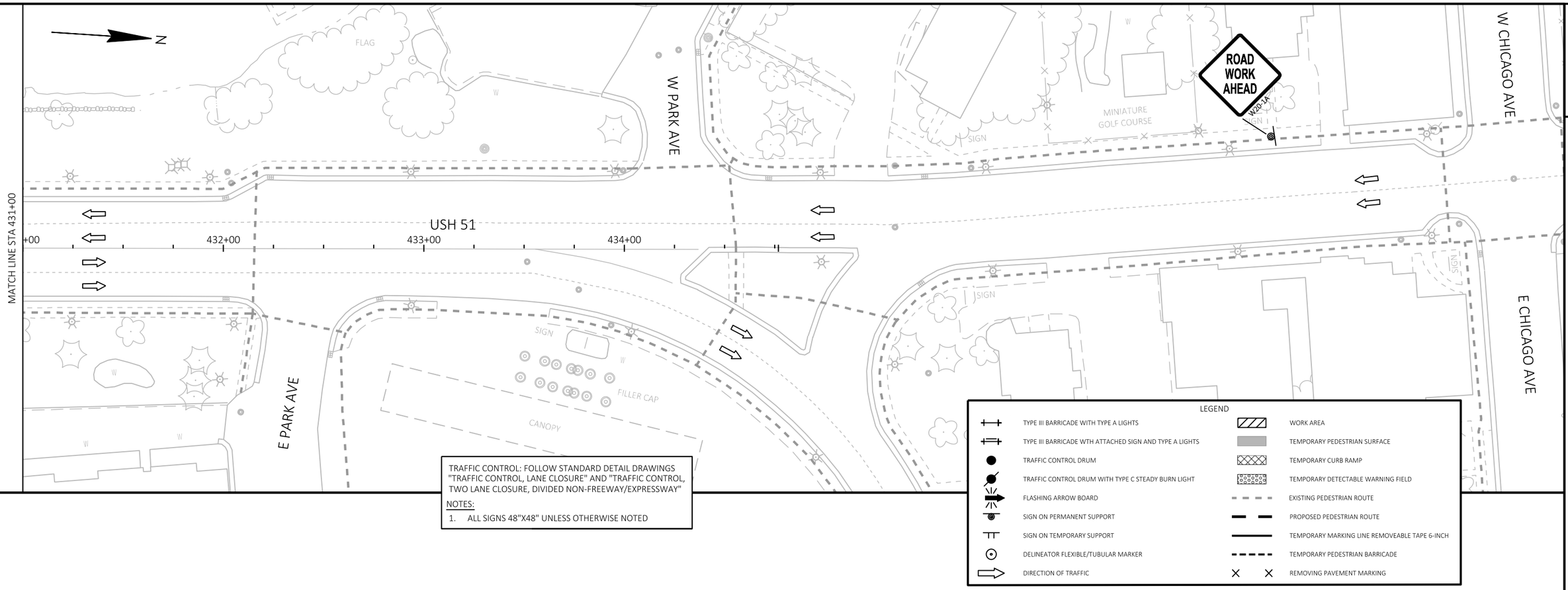
LEGEND

| | |
|---|---|
| TYPE III BARRICADE WITH TYPE A LIGHTS | WORK AREA |
| TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS | TEMPORARY PEDESTRIAN SURFACE |
| TRAFFIC CONTROL DRUM | TEMPORARY CURB RAMP |
| TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT | TEMPORARY DETECTABLE WARNING FIELD |
| FLASHING ARROW BOARD | EXISTING PEDESTRIAN ROUTE |
| SIGN ON PERMANENT SUPPORT | PROPOSED PEDESTRIAN ROUTE |
| SIGN ON TEMPORARY SUPPORT | TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH |
| DELINEATOR FLEXIBLE/TUBULAR MARKER | TEMPORARY PEDESTRIAN BARRICADE |
| DIRECTION OF TRAFFIC | REMOVING PAVEMENT MARKING |




2

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 1A | SHEET 38 | E |
|---|---|---|---|---|---|

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2

OLD HWY 51

USH 51

MATCH LINE STA 393+50

MATCH LINE STA 401+00

392+00

393+00

394+00

395+00

396+00

397+00

398+00

399+00

400+00

401

ROAD WORK AHEAD
W20-1A

LEFT LANE CLOSED AHEAD
W20-5A

W04-2L

END ROAD WORK
G20-2A
48"X24"

SPEED LIMIT 35
R2-1
24"X30"

R11-2L
48"x 30"
LANE CLOSED
TYPE III BARRICADE

WO1-6
48" X 24"
TYPE III BARRICADE

350'

50'

25'

TAPER LENGTH = 245'

MARKING REMOVAL SPECIAL MARKING (TYPE 2 ARROW)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH DOUBLE (YELLOW)

LEGEND

- TYPE III BARRICADE WITH TYPE A LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- EXISTING PEDESTRIAN ROUTE
- PROPOSED PEDESTRIAN ROUTE
- TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH
- TEMPORARY PEDESTRIAN BARRICADE
- REMOVING PAVEMENT MARKING

TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE" AND "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"

NOTES:

1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 1B | SHEET 40 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025100 - TC_STAGE2.DWG
LAYOUT NAME - 025110

PLOT DATE : 8/29/2023 11:55 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

MATCH LINE STA 401+00

MATCH LINE STA 408+50

LANE CLOSED
R11-2L
48"X30"

W01-4R

LANE CLOSED
R11-2L
48"X30"

MANITOU PARK DR

15'

STOP
R1-1
30"X30"

MARKING REMOVAL SPECIAL MARKING
(TYPE 2 ARROW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH DOUBLE (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

USH 51

50'

50'

W11-8
30"X30"

SPEED LIMIT
35
R2-1
24"X30"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH DOUBLE (YELLOW)

W CLAWSON DR

TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE" AND "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"

NOTES:

1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

LEGEND

| | |
|---|---|
| TYPE III BARRICADE WITH TYPE A LIGHTS | WORK AREA |
| TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS | TEMPORARY PEDESTRIAN SURFACE |
| TRAFFIC CONTROL DRUM | TEMPORARY CURB RAMP |
| TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT | TEMPORARY DETECTABLE WARNING FIELD |
| FLASHING ARROW BOARD | EXISTING PEDESTRIAN ROUTE |
| SIGN ON PERMANENT SUPPORT | PROPOSED PEDESTRIAN ROUTE |
| SIGN ON TEMPORARY SUPPORT | TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH |
| DELINEATOR FLEXIBLE/TUBULAR MARKER | TEMPORARY PEDESTRIAN BARRICADE |
| DIRECTION OF TRAFFIC | REMOVING PAVEMENT MARKING |

DETOUR
M4-9BL
30"X24"

SIDEWALK CLOSED
R9-9
24"X12"

FIELDSTONE DR

LANE CLOSED
R11-2L
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED
R9-9
24"X12"

DETOUR
M4-9BR
30"X24"

TEMPORARY CURB RAMP
AND TEMPORARY PEDESTRIAN SURFACE

STRUCTURE R-43-1-2
SEE STRUCTURE PLANS

USH 51

50'

STOP
R1-1
30"X30"

TEMPORARY CURB RAMP AND
TEMPORARY PEDESTRIAN SURFACE

LANE CLOSED
R11-2L
48"X30"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH DOUBLE (YELLOW)

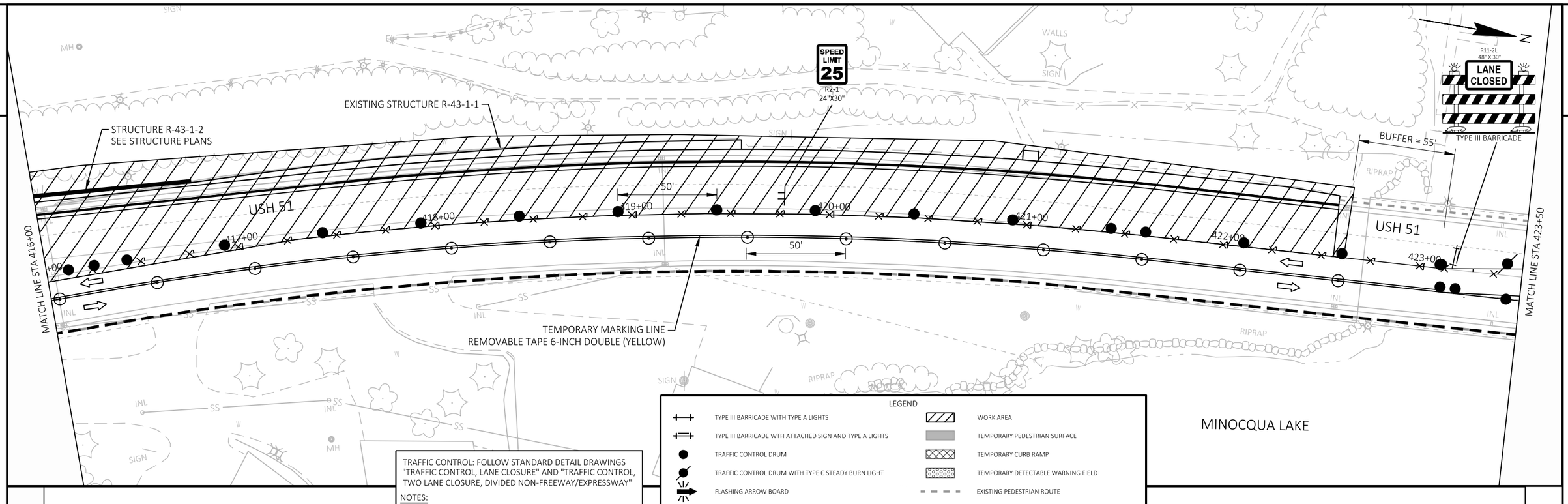
LANE CLOSED
R11-2L
48"X30"

COUNTRY CLUB RD

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 1B | SHEET 41 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025100 - TC_STAGE2.DWG
LAYOUT NAME - 025111

PLOT DATE : 8/29/2023 11:57 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:50 FT



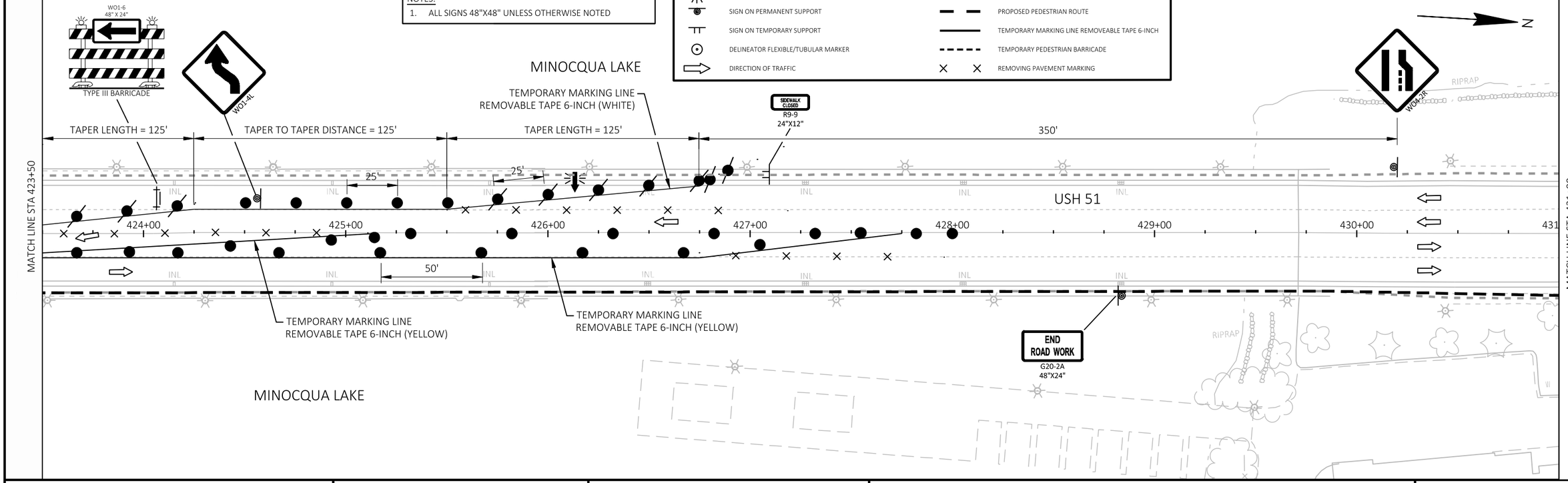

TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE" AND "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"

NOTES:

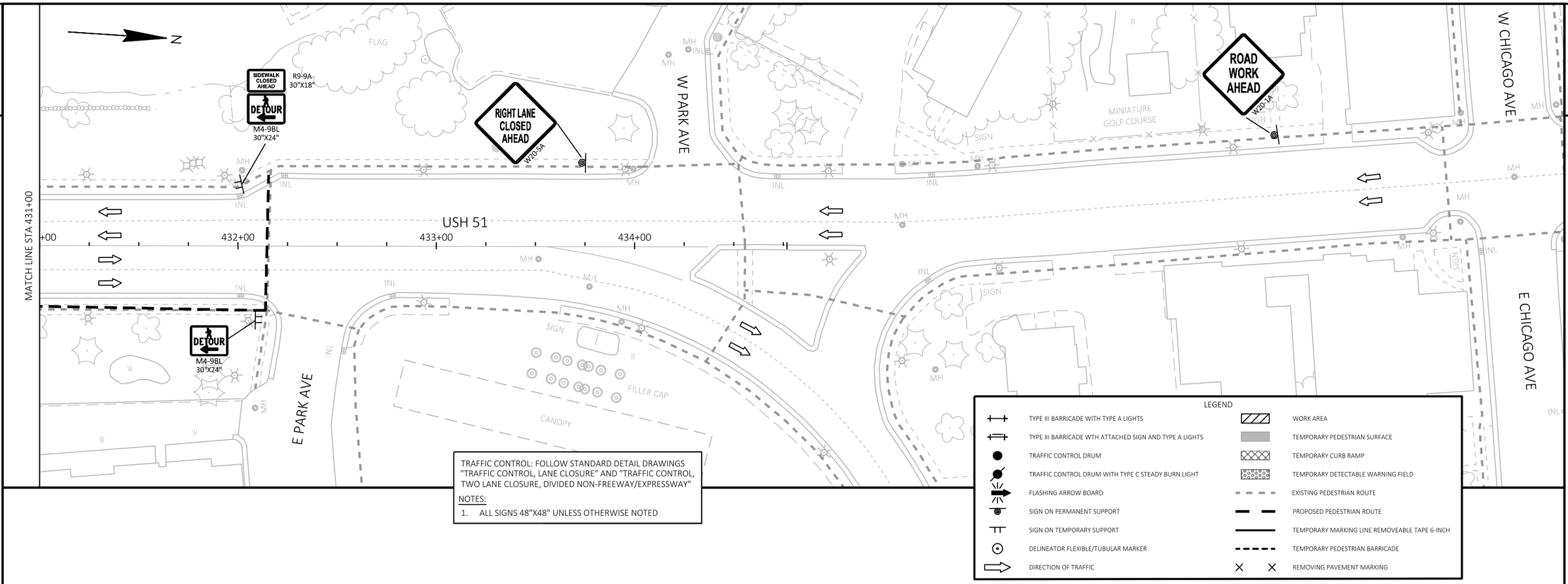
1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

LEGEND

| | |
|---|---|
| TYPE III BARRICADE WITH TYPE A LIGHTS | WORK AREA |
| TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS | TEMPORARY PEDESTRIAN SURFACE |
| TRAFFIC CONTROL DRUM | TEMPORARY CURB RAMP |
| TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT | TEMPORARY DETECTABLE WARNING FIELD |
| FLASHING ARROW BOARD | EXISTING PEDESTRIAN ROUTE |
| SIGN ON PERMANENT SUPPORT | PROPOSED PEDESTRIAN ROUTE |
| SIGN ON TEMPORARY SUPPORT | TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH |
| DELINEATOR FLEXIBLE/TUBULAR MARKER | TEMPORARY PEDESTRIAN BARRICADE |
| DIRECTION OF TRAFFIC | REMOVING PAVEMENT MARKING |




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 1B | SHEET 42 | E |
|---|---|---|---|---|---|




TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, LANE CLOSURE" AND "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"

NOTES:

1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

LEGEND

- TYPE III BARRICADE WITH TYPE A LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- EXISTING PEDESTRIAN ROUTE
- PROPOSED PEDESTRIAN ROUTE
- TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH
- TEMPORARY PEDESTRIAN BARRICADE
- REMOVING PAVEMENT MARKING

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2

OLD HWY 51

RIPRAP

SS

SS

RIPRAP

SIGN

N

USH 51

392

MATCH LINE STA 392+00

2

350'

350'

350'

ROAD WORK AHEAD
W20-1A

LEFT LANE CLOSED AHEAD
W20-5SA

W04-2R

TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

NOTES:

1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

LEGEND

| | |
|---|---|
| TYPE III BARRICADE WITH TYPE A LIGHTS | WORK AREA |
| TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS | TEMPORARY PEDESTRIAN SURFACE |
| TRAFFIC CONTROL DRUM | TEMPORARY CURB RAMP |
| TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT | TEMPORARY DETECTABLE WARNING FIELD |
| FLASHING ARROW BOARD | EXISTING PEDESTRIAN ROUTE |
| SIGN ON PERMANENT SUPPORT | PROPOSED PEDESTRIAN ROUTE |
| SIGN ON TEMPORARY SUPPORT | TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH |
| DELINEATOR FLEXIBLE/TUBULAR MARKER | TEMPORARY PEDESTRIAN BARRICADE |
| DIRECTION OF TRAFFIC | REMOVING PAVEMENT MARKING |

SIGN

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

END ROAD WORK
G20-2A
48"X24"

SIGN

FLAG

SIGN

USH 51

MATCH LINE STA 292+00

+00

393+00

394+00

395+00

396+00

397+00

398+00

399+00

MATCH LINE STA 399+50

25'

50'

25'

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

TAPER LENGTH = 243'

350'

W01-4L

W01-6
48" X 24"
TYPE III BARRICADE

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 2 | SHEET 44 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025100 - TC_STAGE3.DWG
LAYOUT NAME - 025115

PLOT DATE : 8/29/2023 12:02 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

MATCH LINE STA 399+50

MATCH LINE STA 407+00

MATCH LINE STA 407+00

MATCH LINE STA 414+50

TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS
"TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

NOTES:
1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

LEGEND

| | |
|---|---|
| TYPE III BARRICADE WITH TYPE A LIGHTS | WORK AREA |
| TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS | TEMPORARY PEDESTRIAN SURFACE |
| TRAFFIC CONTROL DRUM | TEMPORARY CURB RAMP |
| TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT | TEMPORARY DETECTABLE WARNING FIELD |
| FLASHING ARROW BOARD | EXISTING PEDESTRIAN ROUTE |
| SIGN ON PERMANENT SUPPORT | PROPOSED PEDESTRIAN ROUTE |
| SIGN ON TEMPORARY SUPPORT | TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH |
| DELINEATOR FLEXIBLE/TUBULAR MARKER | TEMPORARY PEDESTRIAN BARRICADE |
| DIRECTION OF TRAFFIC | REMOVING PAVEMENT MARKING |

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH DOUBLE (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

USH 51

MANITOU PARK DR

FIELDSTONE DR

W CLAWSON DR

COUNTRY CLUB RD

LANE CLOSED
R11-2L
48"X30"

SPEED LIMIT 25
W03-5

STOP
R1-1
30"X30"

SPEED LIMIT 25
R2-1
24"X30"

SIDEWALK CLOSED
R9-9
24"X12"

TEMPORARY MARKING STOP LINE
REMOVABLE TAPE 18-INCH (WHITE)

STRUCTURE R-43-1-2
SEE STRUCTURE PLANS

400+00 401+00 402+00 403+00 404+00 405+00 406+00 407+00 408+00 409+00 410+00 411+00 412+00 413+00 414+00

50' 15'

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 2 | SHEET 45 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025100 - TC_STAGE3.DWG
LAYOUT NAME - 025116

PLOT DATE : 8/29/2023 12:03 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

STRUCTURE R-43-1-2
SEE STRUCTURE PLANS

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH DOUBLE (YELLOW)

EXISTING STRUCTURE R-43-1-1

USH 51

MATCH LINE STA 414+50

MATCH LINE STA 422+00

415+00 416+00 417+00 418+00 419+00 420+00 421+00

50' 50' 50'

LANE CLOSED
R11-2L
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

SPEED LIMIT 25
R2-1
24"X30"

WO1-4R

TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

NOTES:

1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

LEGEND

| | |
|---|---|
| TYPE III BARRICADE WITH TYPE A LIGHTS | WORK AREA |
| TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS | TEMPORARY PEDESTRIAN SURFACE |
| TRAFFIC CONTROL DRUM | TEMPORARY CURB RAMP |
| TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT | TEMPORARY DETECTABLE WARNING FIELD |
| FLASHING ARROW BOARD | EXISTING PEDESTRIAN ROUTE |
| SIGN ON PERMANENT SUPPORT | PROPOSED PEDESTRIAN ROUTE |
| SIGN ON TEMPORARY SUPPORT | TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH |
| DELINEATOR FLEXIBLE/TUBULAR MARKER | TEMPORARY PEDESTRIAN BARRICADE |
| DIRECTION OF TRAFFIC | REMOVING PAVEMENT MARKING |

WO1-6
48" X 24"
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

MINOCQUA LAKE

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

MATCH LINE STA 422+00

MATCH LINE STA 429+50

USH 51

423+00 424+00 425+00 426+00 427+00 428+00 429+00

50' 50' 25'

SIDEWALK CLOSED
R9-9
24"X12"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

MINOCQUA LAKE

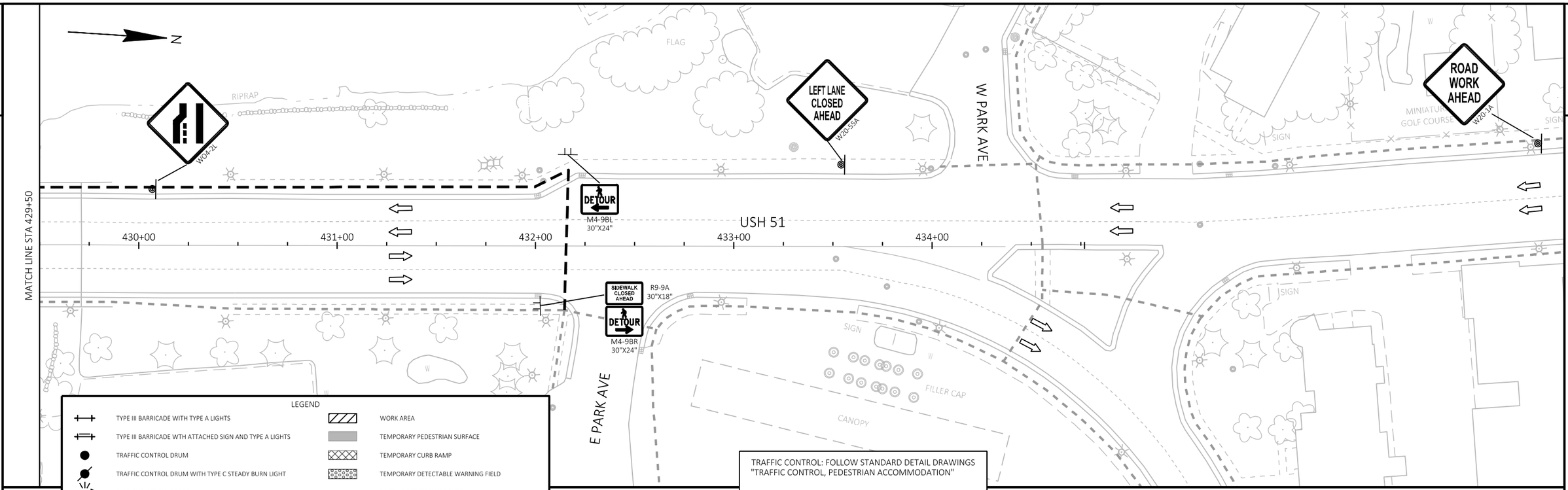
END ROAD WORK
G20-2A
48"X24"

RIPRAP

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | TRAFFIC CONTROL - STAGE 2 | SHEET 46 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\025100 - TC_STAGE3.DWG
LAYOUT NAME - 025117

PLOT DATE : 8/29/2023 12:04 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:50 FT




LEGEND

| | |
|---|---|
| TYPE III BARRICADE WITH TYPE A LIGHTS | WORK AREA |
| TYPE III BARRICADE WTH ATTACHED SIGN AND TYPE A LIGHTS | TEMPORARY PEDESTRIAN SURFACE |
| TRAFFIC CONTROL DRUM | TEMPORARY CURB RAMP |
| TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT | TEMPORARY DETECTABLE WARNING FIELD |
| FLASHING ARROW BOARD | EXISTING PEDESTRIAN ROUTE |
| SIGN ON PERMANENT SUPPORT | PROPOSED PEDESTRIAN ROUTE |
| SIGN ON TEMPORARY SUPPORT | TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH |
| DELINEATOR FLEXIBLE/TUBULAR MARKER | TEMPORARY PEDESTRIAN BARRICADE |
| DIRECTION OF TRAFFIC | REMOVING PAVEMENT MARKING |

TRAFFIC CONTROL: FOLLOW STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

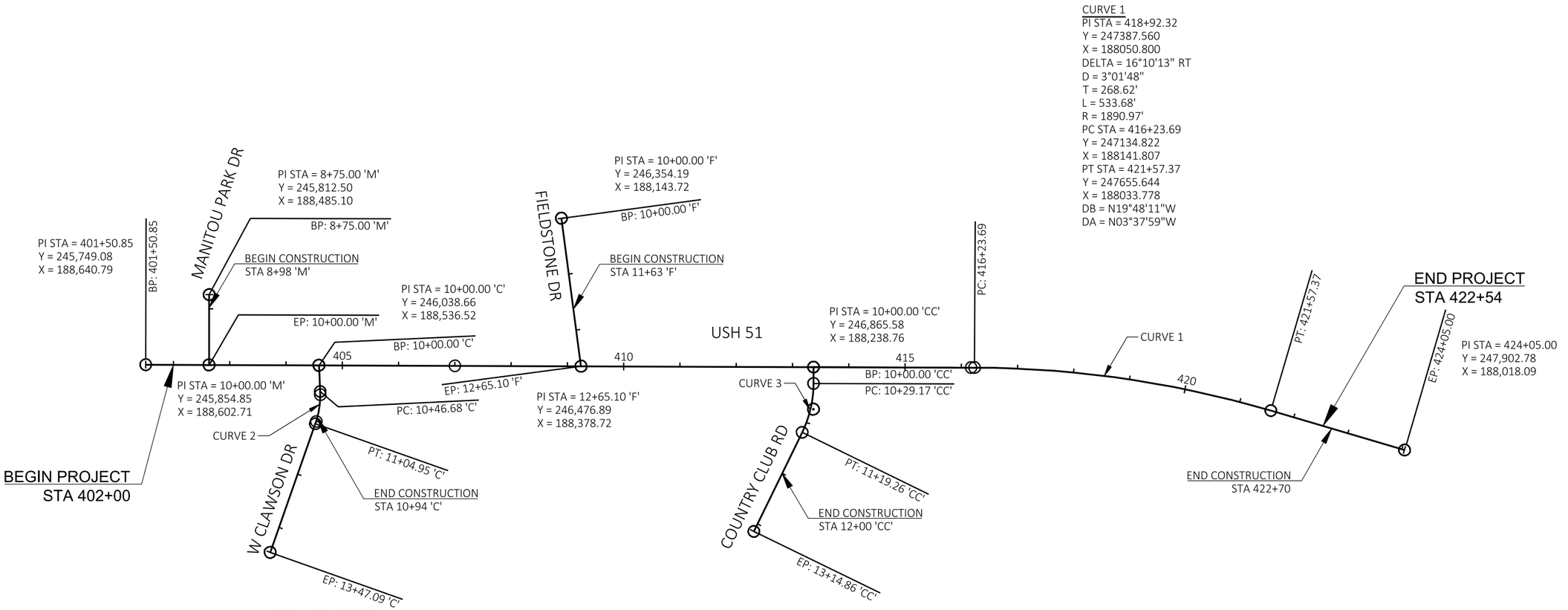
NOTES:

1. ALL SIGNS 48"X48" UNLESS OTHERWISE NOTED

THIS SPACE INTENTIONALLY LEFT BLANK

2

N




CURVE 2
PI STA = 10+76.18 'C'
Y = 246068.100
X = 188606.781
DELTA = 22°09'56" RT
D = 38°02'19"
T = 29.50'
L = 58.27'
R = 150.63'
PC STA = 10+46.68 'C'
Y = 246056.699
X = 188579.569
PT STA = 11+04.95 'C'
Y = 246068.392
X = 188636.285
DB = N67°16'06"E
DA = N89°26'03"E

CURVE 3
PI STA = 10+75.00 'CC'
Y = 246890.989
X = 188309.316
DELTA = 25°48'32" RT
D = 28°38'52"
T = 45.82'
L = 90.09'
R = 200.00'
PC STA = 10+29.17 'CC'
Y = 246875.464
X = 188266.204
PT STA = 11+19.26 'CC'
Y = 246886.194
X = 188354.887
DB = N70°11'49"E
DA = S83°59'39"E

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | ALIGNMENT DIAGRAM | SHEET 48 | E |
|---|---|---|---|---|---|

1170-19-72

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0002 | 201.0105 | Clearing | STA | 3.000 | 3.000 |
| 0004 | 201.0205 | Grubbing | STA | 3.000 | 3.000 |
| 0006 | 204.0100 | Removing Concrete Pavement | SY | 36.000 | 36.000 |
| 0008 | 204.0110 | Removing Asphaltic Surface | SY | 28.000 | 28.000 |
| 0010 | 204.0150 | Removing Curb & Gutter | LF | 3,943.000 | 3,943.000 |
| 0012 | 204.0155 | Removing Concrete Sidewalk | SY | 477.000 | 477.000 |
| 0014 | 204.0210 | Removing Manholes | EACH | 1.000 | 1.000 |
| 0016 | 204.0220 | Removing Inlets | EACH | 3.000 | 3.000 |
| 0018 | 204.0245 | Removing Storm Sewer (size) 01. 24-Inch | LF | 216.000 | 216.000 |
| 0020 | 204.9060.S | Removing (item description) 01. Apron Endwalls | EACH | 1.000 | 1.000 |
| 0022 | 204.9090.S | Removing (item description) 01. Modular Block Retaining Wall | LF | 75.000 | 75.000 |
| 0024 | 204.9090.S | Removing (item description) 02. Cast-In-Place Retaining Wall R-43-1-1 | LF | 70.000 | 70.000 |
| 0026 | 205.0100 | Excavation Common | CY | 7,878.000 | 7,878.000 |
| 0028 | 205.0300 | Excavation Stone Piles and Stone Fences | CY | 15.000 | 15.000 |
| 0030 | 213.0100 | Finishing Roadway (project) 01. 1170-19-72 | EACH | 1.000 | 1.000 |
| 0032 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 265.000 | 265.000 |
| 0034 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 9,800.000 | 9,800.000 |
| 0036 | 416.0610 | Drilled Tie Bars | EACH | 26.000 | 26.000 |
| 0038 | 455.0605 | Tack Coat | GAL | 1,740.000 | 1,740.000 |
| 0040 | 460.2000 | Incentive Density HMA Pavement | DOL | 3,510.000 | 3,510.000 |
| 0042 | 460.6223 | HMA Pavement 3 MT 58-28 S | TON | 3,720.000 | 3,720.000 |
| 0044 | 460.6444 | HMA Pavement 4 MT 58-34 H | TON | 1,750.000 | 1,750.000 |
| 0046 | 465.0110 | Asphaltic Surface Patching | TON | 6.000 | 6.000 |
| 0048 | 465.0120 | Asphaltic Surface Driveways and Field Entrances | TON | 119.000 | 119.000 |
| 0050 | 465.0310 | Asphaltic Curb | LF | 45.000 | 45.000 |
| 0052 | 465.0315 | Asphaltic Flumes | SY | 9.000 | 9.000 |
| 0054 | 509.0400.S | Cleaning Concrete Surfaces | SY | 230.000 | 230.000 |
| 0056 | 511.1200 | Temporary Shoring (structure) 01. R-43-1-2 | SF | 2,800.000 | 2,800.000 |
| 0058 | 517.1010.S | Concrete Staining (structure) 01. R-43-1-1 | SF | 2,075.000 | 2,075.000 |
| 0060 | 520.8000 | Concrete Collars for Pipe | EACH | 4.000 | 4.000 |
| 0062 | 522.1018 | Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch | EACH | 1.000 | 1.000 |
| 0064 | 522.1030 | Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch | EACH | 1.000 | 1.000 |
| 0066 | 601.0407 | Concrete Curb & Gutter 18-Inch Type D | LF | 20.000 | 20.000 |
| 0068 | 601.0411 | Concrete Curb & Gutter 30-Inch Type D | LF | 3,906.000 | 3,906.000 |
| 0070 | 601.0600 | Concrete Curb Pedestrian | LF | 114.000 | 114.000 |
| 0072 | 602.0415 | Concrete Sidewalk 6-Inch | SF | 17,850.000 | 17,850.000 |
| 0074 | 602.0505 | Curb Ramp Detectable Warning Field Yellow | SF | 36.000 | 36.000 |
| 0076 | 602.0605 | Curb Ramp Detectable Warning Field Radial Yellow | SF | 70.330 | 70.330 |
| 0078 | 602.0810 | Concrete Driveway 6-Inch | SY | 31.000 | 31.000 |
| 0080 | 608.0315 | Storm Sewer Pipe Reinforced Concrete Class III 15-Inch | LF | 29.000 | 29.000 |
| 0082 | 608.0318 | Storm Sewer Pipe Reinforced Concrete Class III 18-Inch | LF | 74.000 | 74.000 |
| 0084 | 608.0324 | Storm Sewer Pipe Reinforced Concrete Class III 24-Inch | LF | 223.000 | 223.000 |
| 0086 | 608.0415 | Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch | LF | 51.000 | 51.000 |
| 0088 | 608.0418 | Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch | LF | 51.000 | 51.000 |
| 0090 | 611.0420 | Reconstructing Manholes | EACH | 1.000 | 1.000 |
| 0092 | 611.0430 | Reconstructing Inlets | EACH | 1.000 | 1.000 |
| 0094 | 611.0530 | Manhole Covers Type J | EACH | 2.000 | 2.000 |
| 0096 | 611.0624 | Inlet Covers Type H | EACH | 8.000 | 8.000 |
| 0098 | 611.0630 | Inlet Covers Type HM-GJ | EACH | 1.000 | 1.000 |

1170-19-72

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0100 | 611.0639 | Inlet Covers Type H-S | EACH | 6.000 | 6.000 |
| 0102 | 611.1004 | Catch Basins 4-FT Diameter | EACH | 3.000 | 3.000 |
| 0104 | 611.1005 | Catch Basins 5-FT Diameter | EACH | 3.000 | 3.000 |
| 0106 | 611.1230 | Catch Basins 2x3-FT | EACH | 8.000 | 8.000 |
| 0108 | 611.2005 | Manholes 5-FT Diameter | EACH | 2.000 | 2.000 |
| 0110 | 611.8110 | Adjusting Manhole Covers | EACH | 1.000 | 1.000 |
| 0112 | 611.8115 | Adjusting Inlet Covers | EACH | 2.000 | 2.000 |
| 0114 | 611.8120.S | Cover Plates Temporary | EACH | 5.000 | 5.000 |
| 0116 | 611.9850.S | Pipe Grates (size) 01. 30-Inch | EACH | 1.000 | 1.000 |
| 0118 | 612.0206 | Pipe Underdrain Unperforated 6-Inch | LF | 90.000 | 90.000 |
| 0120 | 612.0406 | Pipe Underdrain Wrapped 6-Inch | LF | 290.000 | 290.000 |
| 0122 | 618.0100 | Maintenance And Repair of Haul Roads (project) 01. 1170-19-72 | EACH | 1.000 | 1.000 |
| 0124 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0126 | 624.0100 | Water | MGAL | 142.000 | 142.000 |
| 0128 | 625.0100 | Topsoil | SY | 2,190.000 | 2,190.000 |
| 0130 | 628.1504 | Silt Fence | LF | 2,530.000 | 2,530.000 |
| 0132 | 628.1520 | Silt Fence Maintenance | LF | 2,530.000 | 2,530.000 |
| 0134 | 628.1905 | Mobilizations Erosion Control | EACH | 4.000 | 4.000 |
| 0136 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 2.000 | 2.000 |
| 0138 | 628.2008 | Erosion Mat Urban Class I Type B | SY | 1,620.000 | 1,620.000 |
| 0140 | 628.2027 | Erosion Mat Class II Type C | SY | 570.000 | 570.000 |
| 0142 | 628.6005 | Turbidity Barriers | SY | 14.000 | 14.000 |
| 0144 | 628.7005 | Inlet Protection Type A | EACH | 14.000 | 14.000 |
| 0146 | 628.7010 | Inlet Protection Type B | EACH | 3.000 | 3.000 |
| 0148 | 628.7015 | Inlet Protection Type C | EACH | 23.000 | 23.000 |
| 0150 | 628.7504 | Temporary Ditch Checks | LF | 50.000 | 50.000 |
| 0152 | 628.7555 | Culvert Pipe Checks | EACH | 3.000 | 3.000 |
| 0154 | 628.7560 | Tracking Pads | EACH | 4.000 | 4.000 |
| 0156 | 628.7570 | Rock Bags | EACH | 144.000 | 144.000 |
| 0158 | 630.0140 | Seeding Mixture No. 40 | LB | 37.500 | 37.500 |
| 0160 | 630.0200 | Seeding Temporary | LB | 15.300 | 15.300 |
| 0162 | 630.0500 | Seed Water | MGAL | 122.000 | 122.000 |
| 0164 | 633.5200 | Markers Culvert End | EACH | 3.000 | 3.000 |
| 0166 | 634.0616 | Posts Wood 4x6-Inch X 16-FT | EACH | 13.000 | 13.000 |
| 0168 | 634.0618 | Posts Wood 4x6-Inch X 18-FT | EACH | 2.000 | 2.000 |
| 0170 | 637.0620 | Sign Flags Permanent Type II | EACH | 4.000 | 4.000 |
| 0172 | 637.2210 | Signs Type II Reflective H | SF | 47.720 | 47.720 |
| 0174 | 637.2230 | Signs Type II Reflective F | SF | 15.250 | 15.250 |
| 0176 | 638.2102 | Moving Signs Type II | EACH | 4.000 | 4.000 |
| 0178 | 638.2602 | Removing Signs Type II | EACH | 9.000 | 9.000 |
| 0180 | 638.3000 | Removing Small Sign Supports | EACH | 9.000 | 9.000 |
| 0182 | 638.4000 | Moving Small Sign Supports | EACH | 6.000 | 6.000 |
| 0184 | 642.5001 | Field Office Type B | EACH | 1.000 | 1.000 |
| 0186 | 643.0300 | Traffic Control Drums | DAY | 21,435.000 | 21,435.000 |
| 0188 | 643.0420 | Traffic Control Barricades Type III | DAY | 4,180.000 | 4,180.000 |
| 0190 | 643.0500 | Traffic Control Flexible Tubular Marker Posts | EACH | 95.000 | 95.000 |
| 0192 | 643.0600 | Traffic Control Flexible Tubular Marker Bases | EACH | 95.000 | 95.000 |
| 0194 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 4,870.000 | 4,870.000 |
| 0196 | 643.0715 | Traffic Control Warning Lights Type C | DAY | 3,586.000 | 3,586.000 |

1170-19-72

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0198 | 643.0800 | Traffic Control Arrow Boards | DAY | 209.000 | 209.000 |
| 0200 | 643.0900 | Traffic Control Signs | DAY | 10,425.000 | 10,425.000 |
| 0202 | 643.1000 | Traffic Control Signs Fixed Message | SF | 36.000 | 36.000 |
| 0204 | 643.3180 | Temporary Marking Line Removable Tape 6-Inch | LF | 17,560.000 | 17,560.000 |
| 0206 | 643.3850 | Temporary Marking Stop Line Removable Tape 18-Inch | LF | 45.000 | 45.000 |
| 0208 | 643.5000 | Traffic Control | EACH | 1.000 | 1.000 |
| 0210 | 644.1410 | Temporary Pedestrian Surface Asphalt | SF | 260.000 | 260.000 |
| 0212 | 644.1430 | Temporary Pedestrian Surface Plate | SF | 200.000 | 200.000 |
| 0214 | 644.1440 | Temporary Pedestrian Surface Matting | SF | 1,400.000 | 1,400.000 |
| 0216 | 644.1601 | Temporary Pedestrian Curb Ramp | DAY | 283.000 | 283.000 |
| 0218 | 644.1605 | Temporary Pedestrian Detectable Warning Field | SF | 80.000 | 80.000 |
| 0220 | 644.1810 | Temporary Pedestrian Barricade | LF | 716.000 | 716.000 |
| 0222 | 645.0113 | Geotextile Type DF Schedule C | SY | 8.000 | 8.000 |
| 0224 | 646.2020 | Marking Line Epoxy 6-Inch | LF | 8,955.000 | 8,955.000 |
| 0226 | 646.4020 | Marking Line Epoxy 10-Inch | LF | 90.000 | 90.000 |
| 0228 | 646.5020 | Marking Arrow Epoxy | EACH | 12.000 | 12.000 |
| 0230 | 646.6120 | Marking Stop Line Epoxy 18-Inch | LF | 30.000 | 30.000 |
| 0232 | 646.7120 | Marking Diagonal Epoxy 12-Inch | LF | 45.000 | 45.000 |
| 0234 | 646.7420 | Marking Crosswalk Epoxy Transverse Line 6-Inch | LF | 335.000 | 335.000 |
| 0236 | 646.9000 | Marking Removal Line 4-Inch | LF | 4,565.000 | 4,565.000 |
| 0238 | 646.9300 | Marking Removal Special Marking | EACH | 4.000 | 4.000 |
| 0240 | 650.4000 | Construction Staking Storm Sewer | EACH | 18.000 | 18.000 |
| 0242 | 650.4500 | Construction Staking Subgrade | LF | 1,567.000 | 1,567.000 |
| 0244 | 650.5000 | Construction Staking Base | LF | 2,413.000 | 2,413.000 |
| 0246 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 4,040.000 | 4,040.000 |
| 0248 | 650.6501 | Construction Staking Structure Layout (structure) 01. R-43-001-2 | EACH | 1.000 | 1.000 |
| 0250 | 650.9000 | Construction Staking Curb Ramps | EACH | 7.000 | 7.000 |
| 0252 | 650.9500 | Construction Staking Sidewalk (project) 01. 1170-19-72 | EACH | 1.000 | 1.000 |
| 0254 | 650.9911 | Construction Staking Supplemental Control (project) 01. 1170-19-72 | EACH | 1.000 | 1.000 |
| 0256 | 650.9920 | Construction Staking Slope Stakes | LF | 2,413.000 | 2,413.000 |
| 0258 | 653.0905 | Removing Pull Boxes | EACH | 4.000 | 4.000 |
| 0260 | 690.0150 | Sawing Asphalt | LF | 3,640.000 | 3,640.000 |
| 0262 | 690.0250 | Sawing Concrete | LF | 124.000 | 124.000 |
| 0264 | 740.0440 | Incentive IRI Ride | DOL | 3,120.000 | 3,120.000 |
| 0266 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 1,200.000 | 1,200.000 |
| 0268 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 600.000 | 600.000 |
| 0270 | SPV.0030 | Special 01. Fertilizer for Lawn Type Turf | CWT | 1.350 | 1.350 |
| 0272 | SPV.0060 | Special 01. Temporary Storm Sewer Connection | EACH | 1.000 | 1.000 |
| 0274 | SPV.0165 | Special 01. Wall Modular Block Mechanically Stabilized Earth R-43-001-2 | SF | 1,605.000 | 1,605.000 |
| 0276 | SPV.0165 | Special 02. Remove, Salvage and Reinstall Landscaping Rocks | SF | 50.000 | 50.000 |
| 0278 | SPV.0180 | Special 01. Preparing Topsoil for Lawn Type Turf | SY | 1,620.000 | 1,620.000 |

3

## CLEARING AND GRUBBING

| CATEGORY | STATION | TO | STATION | LOCATION | 201.0105 CLEARING STA | 201.0205 GRUBBING STA | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 414+50 | - | 416+80 | LT | 3 | 3 | LIMIT CLEARING AND GRUBBING TO 5' BEYOND THE TEMPORARY SHORING LIMITS |
| | | | | TOTAL 0010 | 3 | 3 | |

## REMOVING CONCRETE PAVEMENT

| CATEGORY | STAGE | STATION | TO | STATION | LOCATION | 204.0100 REMOVING CONCRETE PAVEMENT SY | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 2 | 402+08 | - | 402+12 | RT | 2 | SANITARY MANHOLE |
| 0010 | 2 | 407+08 | - | 407+40 | RT | 16 | DRIVEWAY |
| 0010 | 2 | 408+78 | - | 410+12 | RT | 17 | DRIVEWAY |
| | | | | | TOTAL 0010 | 36 | |

## REMOVING ASPHALTIC SURFACE

| CATEGORY | STAGE | STATION | TO | STATION | LOCATION | 204.0110 REMOVING ASPHALTIC SURFACE SY | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 1A | 408+85 | - | 409+05 | RT | 11 | TEMPORARY CURB RAMP |
| 0010 | 1A | 412+75 | - | 412+95 | RT | 11 | TEMPORARY CURB RAMP |
| 0010 | 1B | 409+23 | - | 409+31 | LT | 28 | PATH |
| | | | | | TOTAL 0010 | 28 | |

## REMOVING CURB & GUTTER

| CATEGORY | STAGE | STATION | TO | STATION | LOCATION | 204.0150 REMOVING CURB & GUTTER LF |
|---|---|---|---|---|---|---|
| 0010 | 1A | 408+85 | - | 409+05 | LT | 20 |
| 0010 | 1A | 412+75 | - | 412+93 | LT | 20 |
| 0010 | 1B | 404+03 | - | 408+98 | LT | 496 |
| 0010 | 1B | 409+24 | - | 422+54 | LT | 1,387 |
| 0010 | 1B | 410+35 | - | 410+43 | LT | 18 |
| 0010 | 1B | 410+93 | - | 411+00 | LT | 18 |
| 0010 | 2 | 404+03 | - | 404+44 | RT | 80 |
| 0010 | 2 | 404+69 | - | 413+16 | RT | 934 |
| 0010 | 2 | 413+36 | - | 422+54 | RT | 970 |
| | | | | | TOTAL 0010 | 3,943 |

## REMOVING CONCRETE SIDEWALK

| CATEGORY | STAGE | STATION | TO | STATION | LOCATION | 204.0155 REMOVING CONCRETE SIDEWALK SY |
|---|---|---|---|---|---|---|
| 0010 | 1B | 413+90 | - | 413+96 | LT | 5 |
| 0010 | 2 | 413+89 | - | 422+54 | RT | 472 |
| | | | | | TOTAL 0010 | 477 |

## REMOVING STORM SEWER STRUCTURES

| CATEGORY | STRUCTURE | STATION | OFFSET | LOCATION | 204.0210 REMOVING MANHOLES EACH | 204.0220 REMOVING INLETS EACH |
|---|---|---|---|---|---|---|
| 0010 | E3.1 | 414+08 | 54.4' LT | 51 | 1 | - |
| 0010 | E3.2 | 414+18 | 41.8' LT | 51 | - | 1 |
| 0010 | E3.3 | 416+03 | 34.9' LT | 51 | - | 1 |
| 0010 | E4.1 | 419+14 | 28.9' LT | 51 | - | 1 |
| | | | | TOTAL 0010 | 1 | 3 |

## REMOVING STORM SEWER PIPE

| CATEGORY | PIPE NO. | FROM STRUCTURE | TO | TO STRUCTURE | LOCATION | 204.0245.01 REMOVING STORM SEWER (SIZE) (01.24-INCH) LF |
|---|---|---|---|---|---|---|
| 0010 | E3-1 | E3.1 | - | 3.0 | 51 | 12 |
| 0010 | E3-2 | E3.1 | - | E3.2 | 51 | 16 |
| 0010 | E3-3 | E3.2 | - | E3.3 | 51 | 185 |
| 0010 | - | E3.3 | - | 3.3 | 51 | 3 |
| | | | | | TOTAL 0010 | 216 |

## REMOVING APRON ENDWALLS

| CATEGORY | STATION | LOCATION | 204.9060.S.01 REMOVING (ITEM DESCRIPTION) (01. APRON ENDWALLS) EA |
|---|---|---|---|
| 0010 | 421+10 | RT | 1 |
| | | TOTAL 0010 | 1 |

PROJECT 1170-19-72 EARTHWORK SUMMARY

| DIVISION | FROM/TO STATION | LOCATION | 205.0100 COMMON EXCAVATION (1) CUT (2) | 205.0100 COMMON EXCAVATION (1) EBS EXCAVATION | SALVAGED/UNUSABLE PAVEMENT MATERIAL (4) | AVAILABLE MATERIAL (5) | UNEXPANDED FILL | EXPANDED FILL (13) FACTOR 1.25 | MASS ORDINATE +/- (14) | WASTE | 208.0100 BORROW | COMMENT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USH 51 | 402+00 - 422+54 | USH 51 | 7,418 | 0 | | 7,418 | 115 | 144 | 7,274 | 7,274 | 0 | |
| MANITOU PARK DRIVE | 8+98 'M' - 9+25 'M' | MANITOU PARK DRIVE | 49 | 0 | | 49 | 0 | 0 | 49 | 49 | 0 | |
| CLAWSON DRIVE | 10+50 'C' - 10+92 'C' | CLAWSON DRIVE | 80 | 0 | | 80 | 0 | 0 | 80 | 80 | 0 | |
| FIELDSTONE DRIVE | 11+63 'F' - 12+00 'F' | FIELDSTONE DRIVE | 54 | 0 | | 54 | 19 | 24 | 30 | 30 | 0 | |
| COUNTRY CLUB DRIVE | 10+50 'CC' - 12+00 'CC' | COUNTRY CLUB DRIVE | 277 | 0 | | 277 | 4 | 5 | 272 | 272 | 0 | |
| GRAND TOTAL | | | 7,878 | 0 | 0 | 7,878 | 138 | 173 | 7,706 | 7,706 | 0 | |
| TOTAL COMMON EXC | | | 7,878 | | | | | | | | | |

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.25
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

REMOVING MODULAR BLOCK RETAINING WALL

| CATEGORY | STATION | TO | STATION | LOCATION | 204.9090.S REMOVING (ITEM DESCRIPTION) (01. MODULAR BLOCK RETAINING WALL) LF |
|---|---|---|---|---|---|
| 0010 | 413+90 | - | 414+64 | RT | 75 |
| | | | | TOTAL 0010 | 75 |

EXCAVATION STONE PILES AND STONE FENCES

| CATEGORY | STATION | TO | STATION | LOCATION | 205.0300 EXCAVATION STONE PILES AND STONE FENCES CY |
|---|---|---|---|---|---|
| 0010 | 413+90 | - | 414+25 | LT | 15 |
| | | | | TOTAL 0010 | 15 |

REMOVE, SALVAGE AND REINSTALL LANDSCAPING ROCKS

| CATEGORY | STATION | TO | STATION | LOCATION | SPV.0165.02 REMOVE, SALVAGE AND REINSTALL LANDSCAPING ROCKS SF |
|---|---|---|---|---|---|
| 0010 | 414+99 | - | 415+22 | RT | 50 |
| | | | | TOTAL 0010 | 50 |

BASE AGGREGATE DENSE

| CATEGORY | STATION | TO | STATION | LOCATION | 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON | 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON | 624.0100 WATER MGAL | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0010 | 402+00 | - | 404+03 | LT & RT | - | 1,340 | 19 | ROADWAY |
| 0010 | 404+03 | - | 414+08 | LT & RT | - | 5,430 | 76 | ROADWAY |
| 0010 | 404+03 | - | 408+98 | LT | - | 130 | 2 | SIDEWALK |
| 0010 | 404+69 | - | 413+04 | RT | - | 190 | 3 | SIDEWALK, DRIVEWAYS & PARKING LOTS |
| 0010 | 414+08 | - | 422+54 | LT & RT | - | 300 | 4 | 1-INCH UNDER HMA |
| 0010 | 414+08 | - | 422+54 | LT | - | 350 | 5 | CURB & GUTTER |
| 0010 | 414+08 | - | 422+54 | RT | - | 340 | 5 | CURB & GUTTER |
| 0010 | 409+35 | - | 422+54 | LT | - | 420 | 6 | SIDEWALK & DRIVEWAYS |
| 0010 | 413+73 | - | 422+54 | RT | - | 250 | 4 | SIDEWALK & DRIVEWAYS |
| 0010 | 402+00 | - | 402+21 | LT | 1 | - | 1 | AGGREGATE SHOULDER |
| 0010 | 402+00 | - | 404+03 | RT | 10 | - | 1 | AGGREGATE SHOULDER |
| 0010 | 403+18 | - | 404+03 | LT | 5 | - | 1 | AGGREGATE SHOULDER |
| 0010 | 8+98 'M' | - | 9+53 'M' | LT & RT | 5 | 160 | 2 | MANITOU PARK DRIVE |
| 0010 | 10+30 'C' | - | 10+94 'C' | LT & RT | - | 170 | 2 | WEST CLAWSON DRIVE |
| 0010 | 11+63 'F' | - | 12+27 'F' | LT & RT | - | 160 | 2 | FIELDSTONE DRIVE |
| 0010 | 10+24 'CC' | - | 12+00 'CC' | LT & RT | 5 | 460 | 6 | COUNTRY CLUB DRIVE |
| 0010 | CENTERLINE STAGING LIMITS | | | | 40 | - | 1 | STAGE 1B CENTERLINE TRIANGLE TAPER AFTER PAVING |
| 0010 | UNDISTRIBUTED FOR TEMPORARY ACCESS | | | | 200 | 100 | 3 | STAGES 1B & 2 |
| | | | | TOTAL 0010 | 265 | 9,800 | 142 | |

NOTE: WATER BID ITEM TO BE USED FOR BASE AGGREGATE DUST CONTROL AND COMPACTION

3

## CONCRETE DRIVEWAY 6-INCH

| CATEGORY | STATION | TO | STATION | LOCATION | 602.0810 CONCRETE DRIVEWAY 6-INCH SY | 416.0610 DRILLED TIE BARS EACH |
|---|---|---|---|---|---|---|
| 0010 | 407+07 | - | 407+42 | RT | 15 | 12 |
| 0010 | 409+76 | - | 410+14 | RT | 16 | 14 |
| | | | | TOTAL 0010 | 31 | 26 |

## ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

| CATEGORY | STATION | TO | STATION | LOCATION | 465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON |
|---|---|---|---|---|---|
| 0010 | 404+68 | - | 407+09 | RT | 22 |
| 0010 | 407+40 | - | 409+78 | RT | 19 |
| 0010 | 410+12 | - | 412+67 | RT | 20 |
| 0010 | 410+44 | - | 410+92 | LT | 10 |
| 0010 | 412+79 | - | 413+16 | RT | 11 |
| 0010 | 413+20 | - | 413+90 | LT | 13 |
| 0010 | 413+22 | - | 413+43 | RT | 5 |
| 0010 | 414+63 | - | 415+02 | RT | 11 |
| 0010 | 416+46 | - | 416+74 | RT | 6 |
| 0010 | 417+65 | - | 417+03 | RT | 5 |
| | | | | TOTAL 0010 | 119 |

## HMA PAVEMENT

| CATEGORY | STATION | TO | STATION | LOCATION | 455.0605 TACK COAT GAL | 465.0110 ASPHALTIC SURFACE PATCHING TON | 465.0310 ASPHALTIC CURB LF | 460.6223 HMA PAVEMENT 3 MT 58-28 S TON | 460.6444 HMA PAVEMENT 4 MT 58-34 H TON | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 408+85 | - | 409+05 | RT | - | 3 | 20 | - | - | |
| 0010 | 412+75 | - | 412+95 | RT | - | 3 | 20 | - | - | |
| 0010 | 402+00 | - | 414+08 | LT & RT | 1,050 | - | - | 2,250 | 1,010 | USH 51 MAINLINE |
| 0010 | 414+08 | - | 422+54 | LT & RT | 580 | - | 5 | 1,240 | 550 | USH 51 MAINLINE |
| 0010 | 8+98 'M' | - | 9+53 'M' | LT & RT | 20 | - | - | 50 | 40 | MANITOU PARK DRIVE |
| 0010 | 10+30 'C' | - | 10+94 'C' | LT & RT | 20 | - | - | 40 | 30 | WEST CLAWSON DRIVE |
| 0010 | 11+63 'F' | - | 12+27 'F' | LT & RT | 20 | - | - | 40 | 40 | FIELDSTONE DRIVE |
| 0010 | 10+24 'CC' | - | 12+00 'CC' | LT & RT | 50 | - | - | 100 | 80 | COUNTRY CLUB DRIVE |
| | | | | TOTAL 0010 | 1,740 | 6 | 45 | 3,720 | 1,750 | |

## ASPHALTIC FLUMES

| CATEGORY | STATION | TO | STATION | LOCATION | 465.0315 ASPHALTIC FLUMES SY |
|---|---|---|---|---|---|
| 0010 | 403+85 | - | 404+00 | RT | 9 |
| | | | | TOTAL 0010 | 9 |

3

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CONCRETE CURB & GUTTER

| CATEGORY | STAGE | STATION | TO | STATION | LOCATION | 601.0407 CONCRETE CURB & GUTTER 18-INCH TYPE D LF | 601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF | 601.0600 CONCRETE CURB PEDESTRIAN LF | 650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | 1B | 404+03 | - | 408+99 | LT | - | 536 | - | 536 |
| 0010 | 1B | 409+23 | - | 422+54 | LT | - | 1,385 | - | 1,385 |
| 0010 | 1B | 410+43 | - | 410+44 | LT | 10 | - | - | 10 |
| 0010 | 1B | 410+93 | - | 410+97 | LT | 10 | - | - | 10 |
| 0010 | 1B | 412+62 | - | 412+83 | LT | - | - | 21 | 21 |
| 0010 | 2 | 404+03 | - | 404+45 | RT | - | 79 | - | 79 |
| 0010 | 2 | 404+69 | - | 413+18 | RT | - | 926 | - | 926 |
| 0010 | 2 | 412+70 | - | 412+80 | RT | - | - | 15 | 15 |
| 0010 | 2 | 413+40 | - | 422+54 | RT | - | 980 | - | 980 |
| 0010 | 2 | 415+02 | - | 415+80 | RT | - | - | 78 | 78 |
| | | | | | TOTAL 0010 | 20 | 3,906 | 114 | 4,040 |

CONCRETE SIDEWALK

| CATEGORY | STATION | TO | STATION | LOCATION | 602.0415 CONCRETE SIDEWALK 6-INCH SF | 602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF | 602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF | 650.9000 CONSTRUCTION STAKING CURB RAMPS EACH | 650.9500 CONSTRUCTION STAKING SIDEWALK (PROJECT) (01. 1170-19-72) EACH |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | 404+03 | - | 408+98 | LT | 3,030 | 12 | 13.03 | 2 | - |
| 0010 | 409+35 | - | 422+54 | LT | 9,600 | 12 | 17.39 | 2 | - |
| 0010 | 412+70 | - | 413+04 | RT | 150 | 12 | 20.58 | 2 | - |
| 0010 | 413+73 | - | 422+54 | RT | 5,070 | - | 19.33 | 1 | - |
| 0010 | | | | PROJECT | - | - | - | - | 1 |
| | | | | TOTAL 0010 | 17,850 | 36 | 70.33 | 7 | 1 |

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## STORM SEWER PIPE

| CATEGORY | PIPE NO. | DOWNSTREAM STRUCTURE | | UPSTREAM STRUCTURE | LOCATION | 608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF | 608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF | 608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF | 608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF | 608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF | 612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF | SPV.0060.01 TEMPORARY STORM SEWER CONNECTION EACH | JOINT TIES* | DOWNSTREAM ELEVATION | UPSTREAM ELEVATION | SLOPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 2-1 | E2.4 | - | 2 | 51 | 19 | - | - | - | - | - | - | - | 1604.56 | 1604.75 | 1.00% |
| 0010 | 3-1 | 3.1 | - | 3.0 | 51 | - | - | 15 | - | - | - | - | - | 1601.43 | 1601.51 | 0.52% |
| 0010 | 3-2 | 3.2 | - | 3.1 | 51 | - | - | 116 | - | - | - | - | - | 1600.85 | 1601.43 | 0.50% |
| 0010 | 3-3 | 3.3 | - | 3.2 | 51 | - | - | 92 | - | - | - | - | - | 1600.39 | 1600.85 | 0.50% |
| 0010 | 3-4 | 3.6 | - | 3.5 | 51 | - | - | - | 51 | - | - | 1 | - | 1597.63 | 1597.38 | 0.50% |
| 0010 | 3-5 | 3.6 | - | 3.7 | 51 | 10 | - | - | - | - | - | - | - | 1598.13 | 1598.23 | 1.00% |
| 0010 | 3-6 | 3.8 | - | 3.6 | 51 | - | 7 | - | - | - | - | - | - | 1597.30 | 1597.35 | 0.77% |
| 0010 | 3-7 | 3.5 | - | R-43-1-2 | 51 | - | - | - | - | - | 90 | - | - | 1599.63 | 1602.41 | 2.99% |
| 0010 | 4-1 | 4.1 | - | 4.0 | 51 | - | 15 | - | - | - | - | - | - | 1596.05 | 1596.20 | 1.00% |
| 0010 | 4-2 | 4.1 | - | 4.2 | 51 | - | 15 | - | - | - | - | - | - | 1596.05 | 1596.20 | 1.00% |
| 0010 | 4-3 | E4.2 | - | 4.3 | 51 | - | 15 | - | - | - | - | - | - | 1596.05 | 1596.20 | 1.01% |
| 0010 | 4-4 | 4.6 | - | 4.5 | 51 | - | - | - | - | 51 | - | - | - | 1596.41 | 1596.66 | 0.49% |
| 0010 | 4-5 | 4.7 | - | 4.6 | 51 | - | 22 | - | - | - | - | - | 6 | 1595.60 | 1596.41 | 3.72% |
| | | | | | TOTAL 0010 | 29 | 74 | 223 | 51 | 51 | 90 | 1 | | | | |

*NON-BID ITEM: FOR INFORMATION ONLY

## COVER PLATES TEMPORARY

| CATEGORY | STATION | TO | STATION | LOCATION | 611.8120.S COVER PLATES TEMPORARY EACH |
|---|---|---|---|---|---|
| 0010 | | | UNDISTRIBUTED | | 5 |
| | | | | TOTAL 0010 | 5 |

3

STORM SEWER STRUCTURES

| | | | | | 520.8000 | 522.1018 | 522.1030 | 611.0420 | 611.0430 | 611.0530 | 611.0624 | 611.0630 | 611.0639 | 611.1004 | 611.1005 | 611.1230 | 611.2005 | 611.8110 | 611.8115 | 611.9850.S.01 | 633.5200 | 650.4000 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CATEGORY | STRUCTURE | STATION* | OFFSET* | LOCATION | CONCRETE COLLARS FOR PIPE | APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH | APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH | RECONSTRUCTING MANHOLES EACH | RECONSTRUCTING INLETS EACH | MANHOLE COVERS TYPE J EACH | INLET COVERS TYPE H EACH | INLET COVERS TYPE HM-GJ EACH | INLET COVERS TYPE H-S EACH | CATCH BASINS 4-FT DIAMETER EACH | CATCH BASINS 5-FT DIAMETER EACH | CATCH BASINS 2X3-FT EACH | MANHOLES 5-FT DIAMETER EACH | ADJUSTING MANHOLE COVERS EACH | ADJUSTING INLET COVERS EACH | PIPE GRATES (SIZE) 01. 30-INCH EACH | MARKERS CULVERT END EACH | CONSTRUCTION STAKING STORM SEWER EACH | RIM** ELEVATION | INVERT*** ELEVATION | DEPTH**** FT |
| 0010 | 2.0 | 413+02 | 39.5' LT | 51 | - | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | - | - | 1 | 1608.25 | 1602.75 | 4.50 |
| 0010 | 3.0 | 413+96 | 54.8' LT | 51 | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - | 1 | 1605.34 | 1599.38 | 4.72 |
| 0010 | 3.1 | 413+96 | 39.4' LT | 51 | - | - | - | - | - | - | 1 | - | - | - | 1 | - | - | - | - | - | - | 1 | 1607.33 | 1599.43 | 6.90 |
| 0010 | 3.2 | 415+12 | 36.5' LT | 51 | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | - | - | - | - | 1 | 1606.11 | 1598.85 | 6.26 |
| 0010 | 3.3 | 416+03 | 31.1' LT | 51 | - | - | - | - | - | - | 1 | - | - | - | 1 | - | - | - | - | - | - | 1 | 1604.86 | 1598.39 | 5.47 |
| 0010 | 3.4 | 415+06 | 25.7' RT | 51 | 2 | - | - | - | - | - | 1 | - | - | - | 1 | - | - | - | - | - | - | 1 | 1606.14 | 1598.07 | 7.07 |
| 0010 | 3.5 | 417+59 | 25.5' LT | 51 | - | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | - | - | 1 | 1601.63 | 1595.63 | 5.00 |
| 0010 | 3.6 | 417+59 | 25.5' RT | 51 | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | - | - | - | - | 1 | 1601.63 | 1595.30 | 5.33 |
| 0010 | 3.7 | 417+49 | 25.5' RT | 51 | - | - | - | - | - | - | 1 | - | - | - | - | 1 | - | - | - | - | - | 1 | 1601.83 | 1596.23 | 4.60 |
| 0010 | 3.8 | 417+59 | 32.0' RT | 51 | - | - | - | - | - | 1 | - | - | - | - | - | - | 1 | - | - | - | - | 1 | 1601.97 | 1592.18 | 8.55 |
| 0010 | 4.0 | 418+99 | 25.5' LT | 51 | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | - | - | 1 | 1599.72 | 1594.20 | 4.52 |
| 0010 | 4.1 | 419+14 | 25.5' LT | 51 | - | - | - | - | - | - | - | - | 1 | 1 | - | - | - | - | - | - | - | 1 | 1599.68 | 1593.92 | 4.76 |
| 0010 | 4.2 | 419+28 | 25.5' LT | 51 | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | - | - | 1 | 1599.69 | 1594.20 | 4.49 |
| 0010 | 4.3 | 419+29 | 25.5' RT | 51 | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | - | - | 1 | 1599.70 | 1594.20 | 4.50 |
| 0010 | 4.4 | 421+08 | 67.7' RT | 51 | 1 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | 1 | - | 1583.13 | - |
| 0010 | 4.5 | 422+25 | 25.5' RT | 51 | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | - | - | 1 | 1600.18 | 1594.66 | 4.52 |
| 0010 | 4.6 | 422+25 | 25.1' LT | 51 | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | - | - | - | 1 | 1600.19 | 1594.41 | 4.78 |
| 0010 | 4.7 | 422+28 | 46.7' LT | 51 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - | 1595.60 | - |
| 0010 | E1-2 | 404+02 | 45.4' RT | 51 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - |
| 0010 | E1-1 | 405+02 | 34.6' RT | 51 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - |
| 0010 | E2.3 | 409+55 | 57.4' LT | 51 | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - |
| 0010 | E2.4 | 413+02 | 58.5' LT | 51 | 1 | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 0010 | E2.5 | 412+82 | 25.3' RT | 51 | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 0010 | E3.4 | 416+04 | 25.9' RT | 51 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - |
| 0010 | E4.2 | 419+14 | 25.5' RT | 51 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | TOTAL 0010 | 4 | 1 | 1 | 1 | 1 | 2 | 8 | 1 | 6 | 3 | 3 | 8 | 2 | 1 | 2 | 1 | 3 | 18 | | | |

REMARKS:

*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

**RIM ELEV IS AT THE INLET COVER FLOW LINE LOCATION

***FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

****DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT

3

## SILT FENCE

| CATEGORY | STATION | TO | STATION | LOCATION | 628.1504 SILT FENCE LF | 628.1520 SILT FENCE MAINTENANCE LF |
|---|---|---|---|---|---|---|
| 0010 | 401+95 | - | 402+50 | LT | 95 | 95 |
| 0010 | 401+95 | - | 404+35 | RT | 280 | 280 |
| 0010 | 402+75 | - | 404+70 | LT | 215 | 215 |
| 0010 | 409+25 | - | 410+40 | LT | 145 | 145 |
| 0010 | 410+95 | - | 413+30 | LT | 240 | 240 |
| 0010 | 412+65 | - | 413+03 | RT | 95 | 95 |
| 0010 | 11+64 'CC' | - | 12+05 'CC' | RT | 45 | 45 |
| 0010 | 11+50 'CC' | - | 12+05 'CC' | LT | 55 | 55 |
| 0010 | 413+44 | - | 414+65 | RT | 175 | 175 |
| 0010 | 413+83 | - | 415+00 | LT | 115 | 115 |
| 0010 | 415+80 | - | 416+49 | RT | 70 | 70 |
| 0010 | 416+70 | - | 417+65 | RT | 95 | 95 |
| 0010 | 418+10 | - | 421+30 | RT | 350 | 350 |
| 0010 | 419+53 | - | 420+93 | LT | 145 | 145 |
| 0010 | 421+00 | - | 422+60 | LT | 160 | 160 |
| 0010 | | | UNDISTRIBUTED | | 250 | 250 |
| | | | | TOTAL 0010 | 2,530 | 2,530 |

## MOBILIZATIONS EROSION CONTROL

| CATEGORY | DESCRIPTION | 628.1905 MOBILIZATIONS EROSION CONTROL EACH | 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH |
|---|---|---|---|
| 0010 | PROJECT 1170-19-72 | 4 | 2 |
| | TOTAL 0010 | 4 | 2 |

## INLET PROTECTION

| CATEGORY | STATION | LOCATION | 628.7005 INLET PROTECTION TYPE A EACH | 628.7010 INLET PROTECTION TYPE B EACH | 628.7015 INLET PROTECTION TYPE C EACH | REMARKS |
|---|---|---|---|---|---|---|
| 0010 | 405+02 | RT | - | - | 1 | EXISTING INLET |
| 0010 | 408+91 | LT | - | 1 | - | EXISTING INLET - FIELDSTONE DRIVE |
| 0010 | 409+15 | LT | - | 1 | - | EXISTING INLET - FIELDSTONE DRIVE |
| 0010 | 412+82 | RT | - | - | 1 | EXISTING INLET |
| 0010 | 413+02 | LT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 413+96 | LT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 414+18 | LT | - | - | 1 | EXISTING INLET |
| 0010 | 415+06 | RT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 415+12 | LT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 416+03 | LT | - | - | 1 | EXISTING INLET |
| 0010 | 416+03 | LT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 416+04 | RT | - | - | 1 | EXISTING INLET |
| 0010 | 417+49 | RT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 417+59 | RT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 417+59 | LT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 418+17 | RT | - | 1 | - | EXISTING INLET |
| 0010 | 418+99 | LT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 419+14 | LT | - | - | 1 | EXISTING INLET |
| 0010 | 419+14 | LT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 419+14 | RT | - | - | 1 | EXISTING INLET |
| 0010 | 419+28 | LT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 419+29 | RT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 422+25 | LT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 422+25 | RT | 1 | - | 1 | PROPOSED INLET |
| 0010 | 422+57 | LT | - | - | 1 | EXISTING INLET |
| 0010 | 422+57 | RT | - | - | 1 | EXISTING INLET |
| 0010 | 422+57 | LT | - | - | 1 | EXISTING INLET |
| 0010 | 422+57 | RT | - | - | 1 | EXISTING INLET |
| | | TOTAL 0010 | 14 | 3 | 23 | |

## TURBIDITY BARRIERS

| CATEGORY | STATION | LOCATION | 628.6005 TURBIDITY BARRIERS SY |
|---|---|---|---|
| 0010 | 422+57 | RT | 14 |
| | | TOTAL 0010 | 14 |

## TEMPORARY DITCH CHECKS

| CATEGORY | STATION | LOCATION | 628.7504 TEMPORARY DITCH CHECKS LF |
|---|---|---|---|
| 0010 | 401+85 | RT | 10 |
| 0010 | 403+40 | RT | 10 |
| 0010 | 420+10 | LT | 10 |
| 0010 | UNDISTRIBUTED | | 20 |
| | | TOTAL 0010 | 50 |

## CULVERT PIPE CHECKS

| CATEGORY | STATION | LOCATION | 628.7555 CULVERT PIPE CHECKS EACH |
|---|---|---|---|
| 0010 | 403+12 | LT | 3 |
| | | TOTAL 0010 | 3 |

## TRACKING PADS

| CATEGORY | STAGE | 628.7560 TRACKING PADS EACH |
|---|---|---|
| 0010 | 1B | 2 |
| 0010 | 2 | 2 |
| | TOTAL 0010 | 4 |

## ROCK BAGS

| CATEGORY | STATION | LOCATION | 628.7570 ROCK BAGS EACH |
|---|---|---|---|
| 0010 | 402+10 | RT | 18 |
| 0010 | 403+80 | RT | 18 |
| 0010 | 404+10 | LT | 18 |
| 0010 | 420+25 | LT | 18 |
| 0010 | 420+75 | RT | 18 |
| 0010 | 422+46 | RT | 18 |
| | UNDISTRIBUTED | | 36 |
| | | TOTAL 0010 | 144 |

## FINISHING ITEMS

| CATEGORY | STATION | TO | STATION | LOCATION | 625.0100 TOPSOIL SY | 628.2008 EROSION MAT URBAN CLASS I TYPE B SY | 628.2027 EROSION MAT CLASS II TYPE C SY | 630.0140 SEEDING MIXTURE NO. 40 LB | 630.0200 SEEDING TEMPORARY LB | 630.0500 SEED WATER MGAL | SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT | SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 402+00 | - | 402+49 | LT | 70 | 70 | - | 1.1 | - | 3 | 0.04 | 70 |
| 0010 | 402+00 | - | 404+30 | RT | 310 | 310 | - | 5.5 | - | 17 | 0.19 | 310 |
| 0010 | 402+78 | - | 408+99 | LT | 240 | 240 | - | 4.3 | - | 13 | 0.15 | 240 |
| 0010 | 409+24 | - | 410+43 | LT | 70 | 70 | - | 1.2 | - | 4 | 0.04 | 70 |
| 0010 | 410+93 | - | 413+28 | LT | 170 | 170 | - | 3.0 | - | 9 | 0.10 | 170 |
| 0010 | 412+70 | - | 413+16 | RT | 50 | 50 | - | 0.8 | - | 3 | 0.03 | 50 |
| 0010 | 11+64 'CC' | - | 12+00 'CC' | RT | 30 | 30 | - | 0.5 | - | 1 | 0.02 | 30 |
| 0010 | 11+50 'CC' | - | 12+00 'CC' | LT | 60 | 60 | - | 1.0 | - | 3 | 0.04 | 60 |
| 0010 | 413+38 | - | 414+65 | RT | 170 | 170 | - | 3.0 | - | 9 | 0.11 | 170 |
| 0010 | 413+83 | - | 416+81 | LT | 420 | 70 | 350 | 7.4 | 6.3 | 23 | 0.26 | 70 |
| 0010 | 415+00 | - | 416+49 | RT | 20 | 20 | - | 0.4 | - | 1 | 0.01 | 20 |
| 0010 | 416+71 | - | 417+65 | RT | 20 | 20 | - | 0.3 | - | 1 | 0.01 | 20 |
| 0010 | 418+03 | - | 421+35 | RT | 230 | 60 | 170 | 4.0 | 3.0 | 13 | 0.14 | 60 |
| 0010 | 419+53 | - | 422+54 | LT | 180 | 180 | - | 3.2 | - | 10 | 0.11 | 180 |
| 0010 | | | UNDISTRIBUTED | | 150 | 100 | 50 | 2.0 | 6.0 | 10 | 0.11 | 100 |
| | | | | TOTAL 0010 | 2,190 | 1,620 | 570 | 37.5 | 15.3 | 122 | 1.35 | 1,620 |

## SIGNING

| CATEGORY | SIGN NO. | STATION | LOCATION | SIGN CODE | SIZE IN X IN | 634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH | 634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH | 637.0620 SIGN FLAGS PERMANENT TYPE II EACH | 637.2210 SIGNS TYPE II REFLECTIVE H SF | 637.2230 SIGNS TYPE II REFLECTIVE F SF | 638.2102 MOVING SIGNS TYPE II EACH | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | 638.4000 MOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | EXISTING | 402+10 | RT | - | - | - | - | - | - | - | - | 1 | 1 | - | |
| 0010 | 1-01 | 402+10 | RT | W1-5 | 36 X 36 | 1 | - | 2 | - | 9.00 | - | - | - | - | 25 MPH AHEAD |
| 0010 | EXISTING | 402+34 | LT | - | - | - | - | - | - | - | - | 1 | 1 | - | |
| 0010 | 1-02 | 402+34 | LT | R1-1 | 30 X 30 | 1 | - | - | 5.18 | - | - | - | - | - | |
| 0010 | 1-03 | 404+17 | RT | - | - | - | - | - | - | - | 1 | - | - | 2 | STOP |
| 0010 | EXISTING | 404+95 | RT | - | - | - | - | - | - | - | - | 1 | 1 | - | |
| 0010 | 1-04 | 404+94 | RT | R1-1 | 30 X 30 | 1 | - | - | 5.18 | - | - | - | - | - | STOP, SIGN POST BOX OUT |
| 0010 | 2-01 | 407+50 | LT | W11-8 | 30 X 30 | 1 | - | - | - | 6.25 | - | - | - | - | FIRE TRUCK CROSSING |
| 0010 | 2-02 | 408+30 | LT | R2-1 | 24 X 30 | 1 | - | - | 5.00 | - | - | - | - | - | 35 MPH |
| 0010 | EXISTING | 408+87 | LT | - | - | - | - | - | - | - | - | 1 | 1 | - | |
| 0010 | 2-03 | 408+93 | LT | R1-1 | 30 X 30 | 1 | - | - | 5.18 | - | - | - | - | - | |
| 0010 | EXISTING | 410+44 | RT | - | - | - | - | - | - | - | 1 | 1 | 1 | 1 | |
| 0010 | 2-04 | 410+44 | RT | R2-1 | 24 X 30 | 1 | - | 2 | 5.00 | - | - | - | - | - | 25 MPH, SIGN POST BOX OUT |
| 0010 | 3-01 | 413+71 | RT | R1-1 | 30 X 30 | 1 | - | - | 5.18 | - | - | - | - | - | STOP |
| 0010 | EXISTING | 413+82 | RT | - | - | - | - | - | - | - | - | 1 | 1 | - | |
| 0010 | 3-02 | 413+10 | LT | - | - | - | - | - | - | - | 1 | - | - | 1 | |
| 0010 | EXISTING | 415+00 | LT | - | - | - | - | - | - | - | - | 1 | 1 | - | |
| 0010 | 3-03 | 414+00 | LT | R3-9C | 24 X 6 | 1 | - | - | 1.00 | - | - | - | - | - | |
| 0010 | 3-04 | 415+00 | LT | R3-9B | 24 X 36 | - | - | - | 6.00 | - | - | - | - | - | ON POST WITH SIGN 3-03 |
| 0010 | 4-01 | 419+78 | LT | - | - | - | - | - | - | - | 1 | - | - | 2 | |
| 0010 | EXISTING | 420+68 | LT | - | - | - | - | - | - | - | - | 1 | 1 | - | |
| 0010 | 4-02 | 420+68 | LT | R2-1 | 24 X 30 | 1 | - | - | 5.00 | - | - | - | - | - | 25 MPH |
| 0010 | EXISTING | 421+00 | RT | - | - | - | - | - | - | - | - | 1 | 1 | - | |
| 0010 | 4-03 | 421+00 | RT | R2-1 | 24 X 30 | 1 | - | - | 5.00 | - | - | - | - | - | 25 MPH |
| 0010 | | | | UNDISTRIBUTED | | 2 | 2 | - | - | - | - | - | - | - | SIGN MOVES |
| | | | TOTAL 0010 | | | 13 | 2 | 4 | 47.72 | 15.25 | 4 | 9 | 9 | 6 | |

3

TRAFFIC CONTROL

| CATEGORY | DESCRIPTION | DURATION DAYS | 643.0300 DRUMS NO. DEVICES | 643.0300 TRAFFIC CONTROL DRUMS DAY | 643.0300 BARRICADES TYPE III NO. DEVICES | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY | 643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH | 643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH | 643.0705 WARNING LIGHTS TYPE A NO. DEVICES | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY | 643.0715 WARNING LIGHTS TYPE C NO. DEVICES | 643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY | 643.0800 ARROW BOARDS NO. DEVICES | 643.0800 TRAFFIC CONTROL ARROW BOARDS DAY | 643.0900 SIGNS NO. DEVICES | 643.0900 TRAFFIC CONTROL SIGNS DAY | * 643.1000 SIGNS FIXED MESSAGE NO. DEVICES | * 643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | ADVANCED WARNING | 7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 36 |
| 0010 | ADVANCED WIDTH RESTRICTION | 97 | - | - | - | - | - | - | - | - | - | - | - | - | 23 | 2,231 | - | - |
| 0010 | SIDEROAD ROAD WORK AHEAD SIGNS | 110 | - | - | - | - | - | - | - | - | - | - | - | - | 7 | 770 | - | - |
| 0010 | BUMP AND LOOSE GRAVEL SIGNS | 97 | - | - | - | - | - | - | - | - | - | - | - | - | 30 | 2,910 | - | - |
| 0010 | STAGE 1A | 5 | 30 | 150 | 2 | 10 | - | - | 6 | 30 | 4 | 20 | 1 | 5 | 8 | 40 | - | - |
| 0010 | STAGE 1B | 52 | 205 | 10,660 | 40 | 2,080 | 43 | 43 | 45 | 2,340 | 38 | 1,976 | 2 | 104 | 42 | 2,184 | - | - |
| 0010 | STAGE 2 | 45 | 225 | 10,125 | 42 | 1,890 | 42 | 42 | 50 | 2,250 | 32 | 1,440 | 2 | 90 | 42 | 1,890 | - | - |
| 0010 | UNDISTRIBUTED | - | - | 500 | - | 200 | 10 | 10 | - | 250 | - | 150 | - | 10 | - | 400 | - | - |
| | | TOTAL 0010 | | 21,435 | | 4,180 | 95 | 95 | | 4,870 | | 3,586 | | 209 | | 10,425 | | 36 |

* PLACE G20-57 SIGNS 7 DAYS PRIOR TO CONSTRUCTION, REMOVE WHEN CONSTRUCTION BEGINS

TEMPORARY PAVEMENT MARKINGS

| CATEGORY | STAGE | LOCATION | 643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW LF | 643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE LF | 643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF |
|---|---|---|---|---|---|
| 0010 | 1B | LT & RT | 5,880 | 3,040 | - |
| 0010 | 2 | LT & RT | 4,750 | 3,140 | 25 |
| 0010 | | UNDISTRIBUTED | 400 | 350 | 20 |
| | | SUBTOTALS | 11,030 | 6,530 | - |
| | | TOTAL 0010 | 17,560 | | 45 |

3

3

PEDESTRIAN ACCESS

| CATEGORY | STAGE | STATION | LOCATION | 644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY | 644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF | 644.1410 TEMPORARY PEDESTRIAN SURFACE ASPHALT SF | 644.1430 TEMPORARY PEDESTRIAN SURFACE PLATE SF | 644.1440 TEMPORARY PEDESTRIAN SURFACE MATTING SF | 644.1810 TEMPORARY PEDESTRIAN BARRICADE LF |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | 1B | 408+95 | RT | 52 | 10 | 80 | - | - | - |
| 0010 | 1B | 408+95 | LT | 52 | 10 | - | - | 530 | 220 |
| 0010 | 1B | 410+35 | RT | 52 | 10 | 80 | - | - | - |
| 0010 | 1B | 413+90 | LT | 52 | 10 | - | 50 | 330 | 100 |
| 0010 | 2 | 412+70 | RT | 45 | 10 | - | 50 | 440 | 220 |
| 0010 | 2 | 414+60 | RT | - | - | - | - | - | 18 |
| 0010 | 2 | 415+05 | RT | - | - | - | - | - | 18 |
| 0010 | 2 | 416+40 | RT | - | - | - | - | - | 18 |
| 0010 | 2 | 416+80 | RT | - | - | - | - | - | 18 |
| 0010 | 2 | 417+60 | RT | - | - | - | - | - | 18 |
| 0010 | 2 | 418+10 | RT | - | - | - | - | - | 18 |
| 0010 | 2 | 423+15 | RT | - | - | - | - | - | 18 |
| 0010 | | UNDISTRIBUTED | | 30 | 30 | 100 | 100 | 100 | 50 |
| | | | TOTAL 0010 | 283 | 80 | 260 | 200 | 1,400 | 716 |

MARKING REMOVAL

| CATEGORY | STAGE | STATION | TO | STATION | LOCATION | 646.9000 MARKING REMOVAL LINE 4-INCH LF | 646.9300 MARKING REMOVAL SPECIAL MARKING EACH | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0010 | 1B | 394+75 | - | 397+25 | RT | 63 | - | WHITE SKIP DASH |
| 0010 | 1B | 396+40 | - | 397+50 | LT | 28 | - | WHITE SKIP DASH |
| 0010 | 1B | 397+00 | - | 399+50 | LT | 313 | - | SOLID YELLOW AND YELLOW SKIP DASH |
| 0010 | 1B | 397+50 | - | 425+25 | ONLINE | 3,469 | - | SOLID YELLOW AND YELLOW SKIP DASH |
| 0010 | 1B | 397+50 | - | - | LT | - | 1 | TYPE 2 ARROW |
| 0010 | 1B | 398+25 | - | - | LT | - | 1 | TYPE 2 ARROW |
| 0010 | 1B | 401+00 | - | - | LT | - | 1 | TYPE 2 ARROW |
| 0010 | 1B | 401+75 | - | - | LT | - | 1 | TYPE 2 ARROW |
| 0010 | 1B | 425+50 | - | 426+75 | LT | 31 | - | WHITE SKIP DASH |
| 0010 | 1B | 426+75 | - | 427+75 | RT | 25 | - | WHITE SKIP DASH |
| 0010 | 2 | 392+50 | - | 394+75 | RT | 56 | - | WHITE SKIP DASH |
| 0010 | 2 | 399+50 | - | 402+00 | LT | 313 | - | SOLID YELLOW AND YELLOW SKIP DASH |
| 0010 | 2 | 424+00 | - | 426+75 | RT | 69 | - | WHITE SKIP DASH |
| 0010 | | UNDISTRIBUTED | | | | 200 | - | |
| | | | | | TOTAL 0010 | 4,565 | 4 | |

## PAVEMENT MARKINGS

| CATEGORY | STATION | TO | STATION | LOCATION | 646.5020 MARKING ARROW EPOXY (TYPE 2, WHITE) EACH | 646.6120 MARKING STOP LINE EPOXY 18-INCH (WHITE) LF | 646.7120 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) LF | 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF | 646.4020 MARKING LINE EPOXY 10-INCH (WHITE) LF | 646.2020 MARKING LINE EPOXY 6-INCH (YELLOW) LF | 646.2020 MARKING LINE EPOXY 6-INCH (WHITE) LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 392+50 | - | 402+00 | LT & RT | 4 | - | - | - | - | 1,250 | 375 | STAGING LIMITS |
| 0010 | 402+00 | - | 422+70 | LT & RT | 8 | 30 | 45 | 335 | 90 | 5,285 | 1,305 | |
| 0010 | 422+70 | - | 427+75 | LT & RT | - | - | - | - | - | 510 | 230 | STAGING LIMITS |
| | | | | SUBTOTALS | - | - | - | - | - | 7,045 | 1,910 | |
| | | | | TOTAL 0010 | 12 | 30 | 45 | 335 | 90 | 8,955 | | |

## CONSTRUCTION STAKING

| CATEGORY | STATION | TO | STATION | LOCATION | 650.4500 CONSTRUCTION STAKING SUBGRADE LF | 650.5000 CONSTRUCTION STAKING BASE LF | 650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 1170-19-72) EACH | 650.9920 CONSTRUCTION STAKING SLOPE INTERCEPTS LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 0010 | 402+00 | - | 414+08 | LT & RT | 1,208 | 1,208 | - | 1,208 | USH 51 |
| 0010 | 414+08 | - | 422+54 | LT & RT | - | 846 | - | 846 | USH 51 |
| 0010 | 8+98 'M' | - | 9+53 'M' | LT & RT | 55 | 55 | - | 55 | MANITOU PARK DRIVE |
| 0010 | 10+30 'C' | - | 10+94 'C' | LT & RT | 64 | 64 | - | 64 | WEST CLAWSON DRIVE |
| 0010 | 11+63 'F' | - | 12+27 'F' | LT & RT | 64 | 64 | - | 64 | FIELDSTONE DRIVE |
| 0010 | 10+24 'CC' | - | 12+00 'CC' | LT & RT | 176 | 176 | - | 176 | COUNTRY CLUB DRIVE |
| 0010 | | | | PROJECT | - | - | 1 | - | |
| | | | | TOTAL 0010 | 1,567 | 2,413 | 1 | 2,413 | |

## REMOVING PULL BOXES

| CATEGORY | STATION | LOCATION | 653.0905 REMOVING PULL BOXES EACH | REMARKS |
|---|---|---|---|---|
| 0010 | 412+86 | 31' RT | 1 | REMOVE CONDUIT BETWEEN PULL BOXES WITHIN WORK LIMITS |
| 0010 | 413+28 | 65' LT | 1 | REMOVE CONDUIT BETWEEN PULL BOXES WITHIN WORK LIMITS |
| 0010 | 413+87 | 62' LT | 1 | REMOVE CONDUIT BETWEEN PULL BOXES WITHIN WORK LIMITS |
| 0010 | 414+08 | 29' RT | 1 | REMOVE CONDUIT BETWEEN PULL BOXES WITHIN WORK LIMITS |
| | | TOTAL 0010 | 4 | |

## SAWING

| CATEGORY | STATION | TO | STATION | LOCATION | 690.0150 SAWING ASPHALT LF | 690.0250 SAWING CONCRETE LF | REMARKS |
|---|---|---|---|---|---|---|---|
| 0010 | 402+00 | - | 402+00 | LT & RT | 75 | - | USH 51 BEGIN PROJECT |
| 0010 | 8+98 'M' | - | 8+98 'M' | LT & RT | 27 | - | MANITOU PARK DRIVE BEGIN CONSTRUCTION |
| 0010 | 10+94 'C' | - | 10+94 'C' | LT & RT | 29 | - | WEST CLAWSON DRIVE END CONSTRUCTION |
| 0010 | 404+68 | - | 412+65 | RT | 775 | 70 | PARKING LOT/DRIVEWAYS |
| 0010 | 11+63 'F' | - | 11+63 'F' | LT & RT | 23 | 3 | FIELDSTONE DRIVE BEGIN CONSTRUCTION |
| 0010 | 410+43 | - | 410+93 | LT | 45 | 5 | DRIVEWAY |
| 0010 | 413+28 | - | 413+83 | LT | 55 | - | DRIVEWAY |
| 0010 | 11+05 'CC' | - | 11+64' CC' | RT | 57 | - | DRIVEWAY |
| 0010 | 11+25 'CC' | - | 11+49 'CC' | LT | 25 | - | DRIVEWAY |
| 0010 | 12+00 'CC' | - | 12+00 'CC' | LT & RT | 29 | - | COUNTRY CLUB DRIVE END CONSTRUCTION |
| 0010 | 414+65 | - | 415+00 | RT | 35 | - | DRIVEWAY |
| 0010 | 416+49 | - | 416+70 | RT | 21 | - | DRIVEWAY |
| 0010 | 417+65 | - | 418+03 | RT | 38 | - | DRIVEWAY |
| 0010 | 422+54 | - | 422+54 | LT & RT | - | 16 | USH 51 END PROJECT CURB & GUTTER AND SIDEWALK |
| 0010 | 408+85 | - | 409+05 | RT | 50 | 5 | STAGE 1A TEMPORARY RAMP |
| 0010 | 412+75 | - | 412+95 | RT | 50 | 5 | STAGE 1A TEMPORARY RAMP |
| 0010 | 402+00 | - | 422+54 | RL | 2,056 | - | STAGE 1B WORKZONE LIMITS |
| 0010 | | | UNDISTRIBUTED | | 250 | 20 | |
| | | | | TOTAL 0010 | 3,640 | 124 | |

# TRANSPORTATION PROJECT PLAT NO: 1170-19-22 - 4.01 AMENDMENT NO. 1

AMENDS UTILITY NO. 103 AND ADDS UTILITY NUMBERS 104 AND 105 TO TRANSPORTATION PROJECT PLAT NO: 1170-19-22 - 4.01 RECORDED AS DOCUMENT NUMBER 830677, LOCATED IN THAT PART OF LOT 8 OF PINE GROVE CLAWSON'S THIRD ADDITION TO TOWN OF MINOCQUA, AND PART OF LOT 12 AND PART OF VACATED ROADWAY AS PART OF THE PLAT OF LAKE VIEW PARK INCLUDING PART OF MINOCQUA LAKE CONDOMINIUM, A CONDOMINIUM PLAT FIRST ADDENDUM; ALL LOCATED IN GOVERNMENT LOT 8, SECTION 14, TOWNSHIP 39 NORTH, RANGE 6 EAST, TOWN OF MINOCQUA, ONEIDA COUNTY, WISCONSIN

RELOCATION ORDER U.S.H. "51", MINOCQUA - MANITOWISH (MANITOU PARK TO MINOCQUA LK BRIDGE) ONEIDA COUNTY

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

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

Doc No: 844342
Recorded on
7/6/2023 12:41 PM
KYLE J FRANSON
REGISTER OF DEEDS
ONEIDA COUNTY, WI
Fee Amount:

This document has been electronically recorded

63

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-19-22 - 4.01
SHEET 1 OF 1
AMENDMENT NO. 1

**U.S.H. "51" R/L CURVE DATA**
**CURVE 1**
**PI STA = 418+92.31**
**Y = 247387.560**
**X = 188050.800**
**Δ = 16°10'13" LT**
**D = 3°01'48"**
**T = 268.62'**
**L = 533.68'**
**R = 1890.97'**
**LC = 531.91'**
**LCB = N11°43'05"W**
**PC STA = 416+23.69**
**Y = 247134.822**
**X = 188141.807**
**PT STA = 421+57.37**
**Y = 247655.644**
**X = 188033.778**
**DB = N19°48'11"W**
**DA= N03°37'59"W**

**CURVE TIE107 - 108**
**L = 76.31'**
**LC = 76.30'**
**LCB = S18° 38' 50"E**
**R = 1890.97'**

NOTE:
BASIS OF EXISTING RIGHT-OF-WAY:
- RIGHT-OF-WAY PLAT DIVISION JOB NO. 7964, DATED 7-6-1938
- R/W PROJECT NUMBER 1174-08-21, DATED 7-21-1986
- PINE GROVE CLAWSON'S THIRD ADDITION TO TOWN OF MINOCQUA, DATED 6-20-1923
- PLAT OF LAKE VIEW PARK, DATED 9-4-1905
- C.S.M. NUMBER 3319, DATED 5-25-2006
- ONEIDA COUNTY SURVEYOR'S MAP NO. A1558, B7887, C728, B3047 & A1218

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ONEIDA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY CAPPED 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT NUMBER 830677 IN THE OFFICE OF THE ONEIDA COUNTY REGISTER OF DEEDS.

T.L.E.'S ARE REQUIRED FOR SLOPE BLENDING.

| UTILITY EASEMENT TABLE | | | |
|---|---|---|---|
| UTILITY # | PARCEL # | INTEREST DESCRIPTION | RECORDING DATA |
| 101 | 1 | UTILITY EASEMENT | DOC. #430966 |
| 102 | 3 | GRANT OF EASEMENT | DOC. #821017 |
| 103 | 2 | NO EASEMENT OF RECORD | - |
| | 3 | NO EASEMENT OF RECORD | - |
| 104 | 2 | NO EASEMENT OF RECORD | - |
| | 3 | NO EASEMENT OF RECORD | - |
| 105 | 2 | NO EASEMENT OF RECORD | - |
| | 3 | NO EASEMENT OF RECORD | - |

| UTILITY INTERESTS REQUIRED | | |
|---|---|---|
| UTILITY # | OWNER(S) | INTEREST REQUIRED |
| 101 | WISCONSIN PUBLIC SERVICE CORPORATION | RELEASE OF RIGHTS |
| 102 | SPECTRUM MID-AMERICA, LLC | RELEASE OF RIGHTS |
| 103 | LAKELAND SANITARY DISTRICT (WATER) | RELEASE OF RIGHTS |
| 104 | WISCONSIN PUBLIC SERVICE (GAS) | RELEASE OF RIGHTS |
| 105 | FRONTIER COMMUNICATIONS | RELEASE OF RIGHTS |

| SCHEDULE OF LANDS AND 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(S) REQUIRED | R/W S.F. REQUIRED | | | TLE S.F. REQUIRED | PLE S.F. REQUIRED |
| | | | NEW | EXISTING | TOTAL | | |
| 1 | DONALD M. SEDLAK, TRUSTEE OF THE DONALD SEDLAK TRUST | FEE, TLE | 23 | - | 23 | 104 | - |
| 2 | MULLEADY FAMILY LIMITED PARTNERSHIP | FEE, TLE | 223 | - | 223 | 2533 | - |
| 3 | MINOCQUA LAKES CONDOMINIUM ASSOCIATION | FEE, TLE | 30 | - | 30 | 1132 | - |

| STATION & OFFSET TABLE TO U.S.H. 51 ALIGNMENT | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | Y COORDS | X COORDS |
| 101 | 412+72.17 | 31.98' RT | 246814.921 | 188290.986 |
| 102 | 412+72.17 | 33.98' RT | 246815.600 | 188292.868 |
| 103 | 412+84.51 | 33.97' RT | 246827.213 | 188288.678 |
| 104 | 413+94.89 | 33.60' RT | 246930.933 | 188250.939 |
| 105 | 415+52.68 | 33.51' RT | 247079.364 | 188197.389 |
| 106 | 417+00.00 | 48.92' RT | 247221.824 | 188164.069 |
| PROP911 | 411+92.64 | 32.03' RT | 246740.115 | 188317.975 |
| PROP913 | 413+06.75 | 67.28' RT | 246859.416 | 188312.483 |
| PROP920 | 413+22.26 | 177.86' RT | 246911.469 | 188411.268 |
| TLE150 | 412+67.29 | 31.98' RT | 246810.334 | 188292.641 |
| TLE151 | 412+67.30 | 38.98' RT | 246812.709 | 188299.226 |
| TLE152 | 412+87.85 | 38.97' RT | 246832.045 | 188292.250 |
| TLE153 | 413+26.90 | 179.74' RT | 246916.481 | 188411.469 |
| TLE154 | 413+93.74 | 47.00' RT | 246934.392 | 188263.937 |
| TLE155 | 416+68.30 | 46.32' RT | 247191.630 | 188171.131 |

| EXISTING MONUMENTS | | | |
|---|---|---|---|
| Point # | Y COORDS | X COORDS | DESCRIPTION |
| PROP907 | 246114.530 | 188543.671 | 1" IRON PIPE |
| PROP908 | 246241.791 | 188497.758 | 1" IRON PIPE |
| PROP909 | 246635.348 | 188355.787 | SURVEY SPIKE |
| PROP910 | 246646.072 | 188351.880 | 1" IRON PIPE |
| PROP911 | 246740.115 | 188317.975 | 1" IRON PIPE |
| PROP912 | 246825.280 | 188287.249 | 1" IRON PIPE |
| PROP913 | 246859.416 | 188312.483 | 1" IRON PIPE |
| PROP914 | 246787.058 | 188444.705 | 1" IRON PIPE |
| PROP915 | 246817.453 | 188674.092 | 1 1/2" IRON PIPE |
| PROP917 | 246782.903 | 188971.818 | 1 1/2" IRON PIPE |
| PROP918 | 246867.664 | 188772.097 | 3/4" IRON ROD |
| PROP919 | 246887.443 | 188609.177 | 1" IRON PIPE |
| PROP920 | 246911.469 | 188411.268 | 1 1/2" IRON PIPE |
| PROP921 | 247054.179 | 188205.158 | 1" IRON PIPE FND BENT |
| PROP922 | 247065.672 | 188201.046 | 1" IRON PIPE FND BENT |
| PROP931 | 246881.792 | 188149.921 | 5/8" IRON ROD |
| PROP932 | 246804.096 | 188177.952 | 1" IRON PIPE |
| PROP933 | 246690.778 | 188218.834 | 3/4" IRON ROD |
| PROP934 | 246485.310 | 188292.962 | 1" IRON PIPE |

| R/W COURSE TABLE | | |
|---|---|---|
| COURSE | BEARING | DISTANCE |
| TIE100-PROP911 | N70°11'49"E | 32.03' |
| PROP911-101 | N19°50'18"W | 79.53' |
| 101-102 | N70°09'42"E | 2.00' |
| 102-103 | N19°50'18"W | 12.35' |
| 103-PROP913 | N36°28'19"E | 40.05' |
| PROP913-104 | N40°42'48"W | 94.35' |
| 104-105 | N19°50'18"W | 157.80' |
| 105-106 | N13°09'51"W | 146.30' |
| 106-TIE107 | S72°30'32"W | 48.92' |
| 108-TIE100 | S19°48'11"E | 431.05' |





**QUEST**
Civil Engineers, LLC
320 West Grand Avenue, Suite 302
Wisconsin Rapids, WI 54495
Office: 715-423-3525
Fax: 715-423-3597

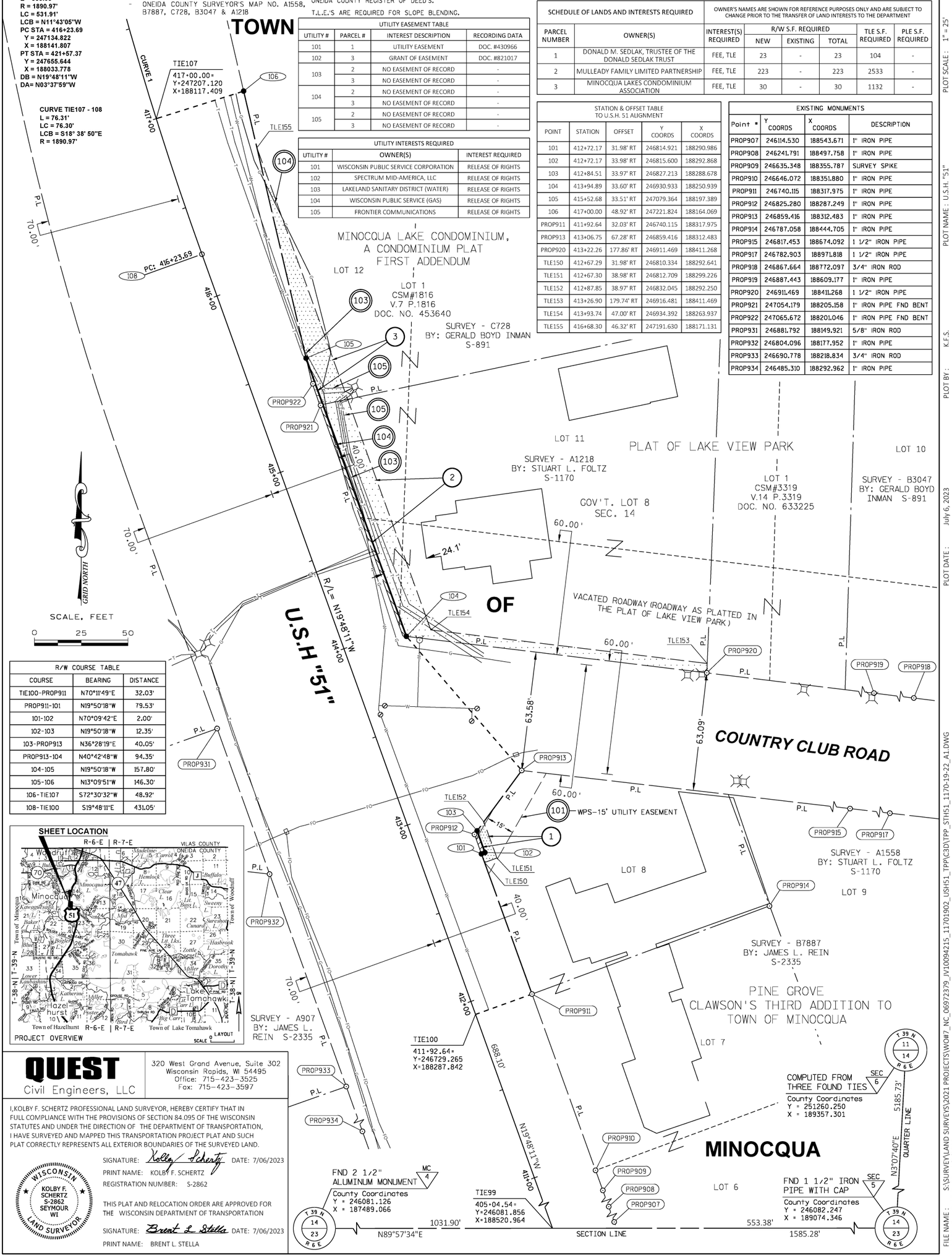

I,KOLBY F. SCHERTZ PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Kolby F. Schertz DATE: 7/06/2023
PRINT NAME: KOLBY F. SCHERTZ
REGISTRATION NUMBER: S-2862

WISCONSIN KOLBY F. SCHERTZ S-2862 SEYMOUR WI LAND SURVEYOR

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

SIGNATURE: Brent L Stella DATE: 7/06/2023
PRINT NAME: BRENT L. STELLA




1170-19-22 - 4.01 AMENDMENT NO. 1
PLOT SCALE : 1" = 25'
PLOT NAME : U.S.H."51"
PLOT BY : K.F.S.
PLOT DATE : July 6, 2023
FILE NAME : S:\SURVEY\LAND SURVEYS\2021 PROJECTS\WO#7_NC_06972379_JV10094215_11701902_USH51_TPP\C3D\TPP_STH51_1170-19-22_A1.DWG
APPRAISAL PLAT DATE : 2/9/2022

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION
# TRANSPORTATION PROJECT PLAT TITLE SHEET
# PROJECT NO. 1170-19-22
## MINOCQUA - MANITOWISH
### MANITOU PARK TO MINOCQUA LK BRIDGE
## U.S.H. "51"
## ONEIDA COUNTY

CONVENTIONAL SYMBOLS

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

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (AS NOTED)

| | COMPENSABLE | NON-COMPENSABLE |
|---|---|---|
| ELECTRIC POLE | | |
| TELEPHONE POLE | | |
| PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.) | | |
| LIGHT POLE | | |
| FIRE HYDRANT | | |
| WATER VALVE | | |

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25 — UTILITY NUMBER 40
EXISTING MONUMENT NUMBER
R/W BOUNDARY POINT NUMBER

## CONVENTIONAL ABBREVIATIONS

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

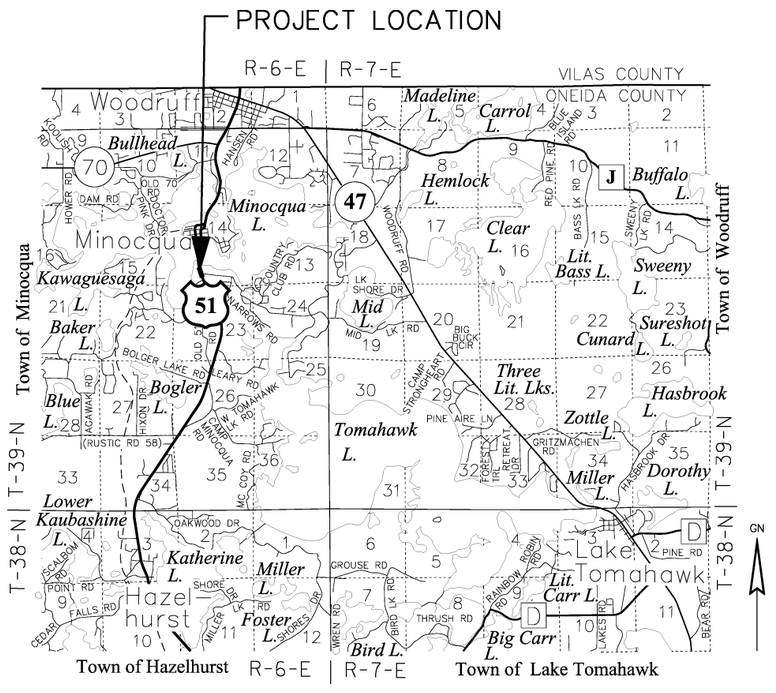
## CURVE DATA

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

## CONVENTIONAL UTILITY SYMBOLS

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

PROJECT LOCATION




LAYOUT
SCALE 0 1 MI.

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1170-19-22.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ONEIDA COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY CAPPED 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

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

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 DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

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

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, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

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

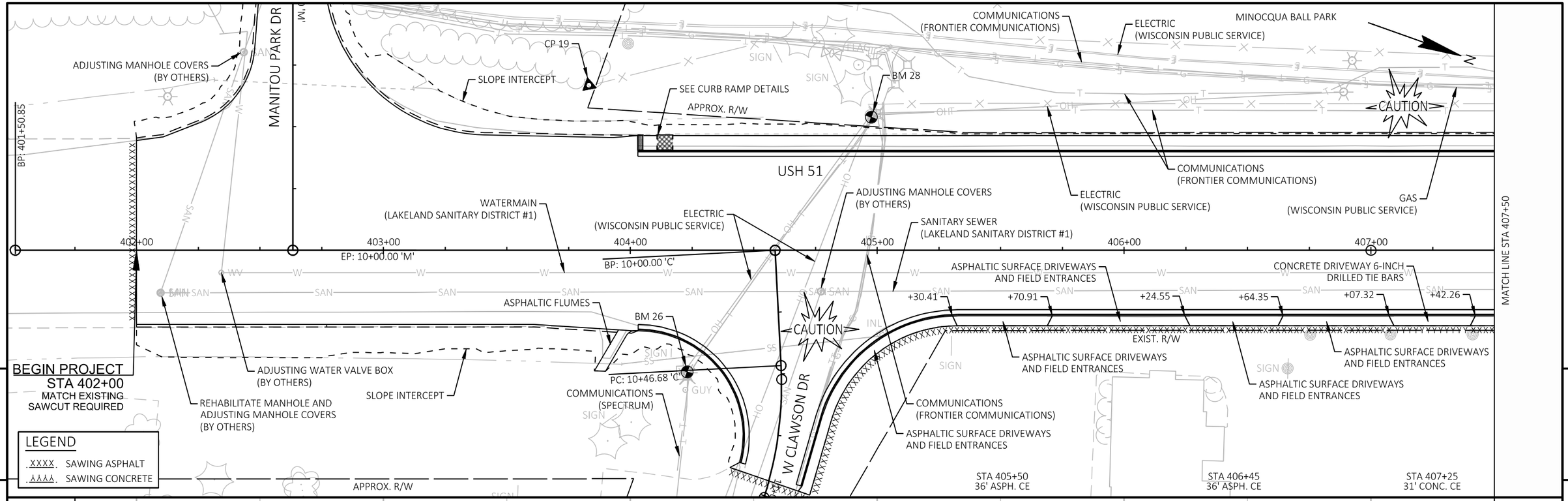
PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TRANSPORTATION PROJECT PLAT DETAIL SHEETS.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TRANSPORTATION PROJECT PLAT DETAIL SHEETS.

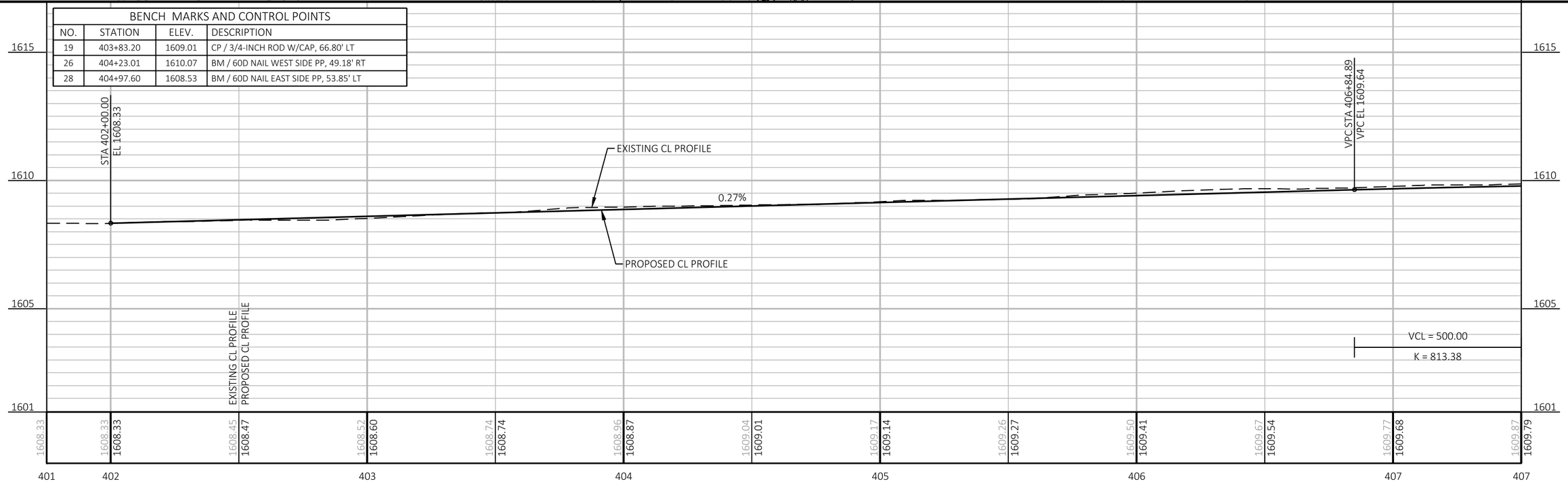
PROJECT NUMBER 1170-19-22 -4. 01
SHEET 2 OF 2
AMENDMENT NO:



FILE NAME : S:\SURVEY\LAND SURVEYS\2021 PROJECTS\WO#7_NC_06972379_JV10094215_11701902_USH51_TPP\C3D\TPP_STH51_1170-19-22.DWG
LAYOUT NAME: TPP Title Sheet
PLOT DATE : February 9, 2022 PLOT BY : K.F.S. PLOT NAME : U.S.H. 51
APPRAISAL PLAT DATE : 2/9/2022
1170-19-22 - 4.01




| BENCH MARKS AND CONTROL POINTS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| 19 | 403+83.20 | 1609.01 | CP / 3/4-INCH ROD W/CAP, 66.80' LT |
| 26 | 404+23.01 | 1610.07 | BM / 60D NAIL WEST SIDE PP, 49.18' RT |
| 28 | 404+97.60 | 1608.53 | BM / 60D NAIL EAST SIDE PP, 53.85' LT |




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | PLAN AND PROFILE: USH 51 | SHEET 65 | E |
|---|---|---|---|---|---|

MINOCQUA BALL PARK

FIELDSTONE DR

EXIST. R/W

12+00 'F'

CAUTION

STA 410+68
46' ASPH. CE

ELECTRIC
(WISCONSIN PUBLIC SERVICE)

GAS
(WISCONSIN PUBLIC SERVICE)

EXIST. R/W

SLOPE INTERCEPT

CAUTION

CP 18

GAS
(WISCONSIN PUBLIC SERVICE)

EXISTING BLOCK WALL (TO REMAIN)

EXISTING BLOCK WALL (TO REMAIN)

CONCRETE CURB & GUTTER 18-INCH TYPE D (TYP.)
(MATCH EXISTING CURB HEAD HEIGHT AND
TAPER TO BACK OF SIDEWALK)

ELECTRIC
(WISCONSIN PUBLIC SERVICE)

WATERMAIN
(LAKELAND SANITARY DISTRICT #1)

ADJUSTING WATER VALVE BOX
(BY OTHERS)

EP: 12+65.10 'F'

USH 51

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

408+00 409+00 410+00 411+00 412+00 413+00

MATCH LINE STA 407+50

MATCH LINE STA 413+25

BM 25

CP 21

+76.23 +13.94 +68.08 +95.34 +38.78 +67.21

WATER VALVE
(TO REMAIN)

FIRE HYDRANT
(TO REMAIN)

SANITARY SEWER
(LAKELAND SANITARY DISTRICT #1)

CURBSTOP
(TO REMAIN)

CURBSTOP
(TO REMAIN)

EXIST. R/W

SLOPE INTERCEPT

REHABILITATE MANHOLE AND
ADJUSTING MANHOLE COVERS
(BY OTHERS)

CONCRETE DRIVEWAY 6-INCH
DRILLED TIE BARS

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

TEMPORARY LIMITED EASEMENT

PROPOSED R/W

SEE CURB RAMP DETAILS (TYP.)

REMOVING PULL BOX

LEGEND

.XXXX. SAWING ASPHALT

.XXXX. SAWING CONCRETE

STA 409+95
34' CONC. CE

STA 411+82
23' ASPH. CE

STA 412+53
24' ASPH. CE

5

5

| BENCH MARKS AND CONTROL POINTS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| 25 | 407+94.03 | 1610.73 | BM / TAG BOLT ON HYDRANT, 36.58' RT |
| 21 | 408+22.35 | 1609.29 | CP / MAG NAIL, 42.71' RT |
| 18 | 413+93.58 | 1609.81 | CP / 3/4-INCH ROD W/CAP, 70.70' LT |

1615
1610
1605
1601

VPI STA 409+34.89
VPI EL 1610.31

EXISTING CL PROFILE

VPT STA 411+84.89
VPT EL 1609.45'

VPI STA 412+77.03
VPI EL 1609.13

-0.35%

HP STA 409+04.07
HP EL 1609.93

PROPOSED CL PROFILE

VPC STA 411+89.53
VPC EL 1609.43

EXISTING CL PROFILE
PROPOSED CL PROFILE

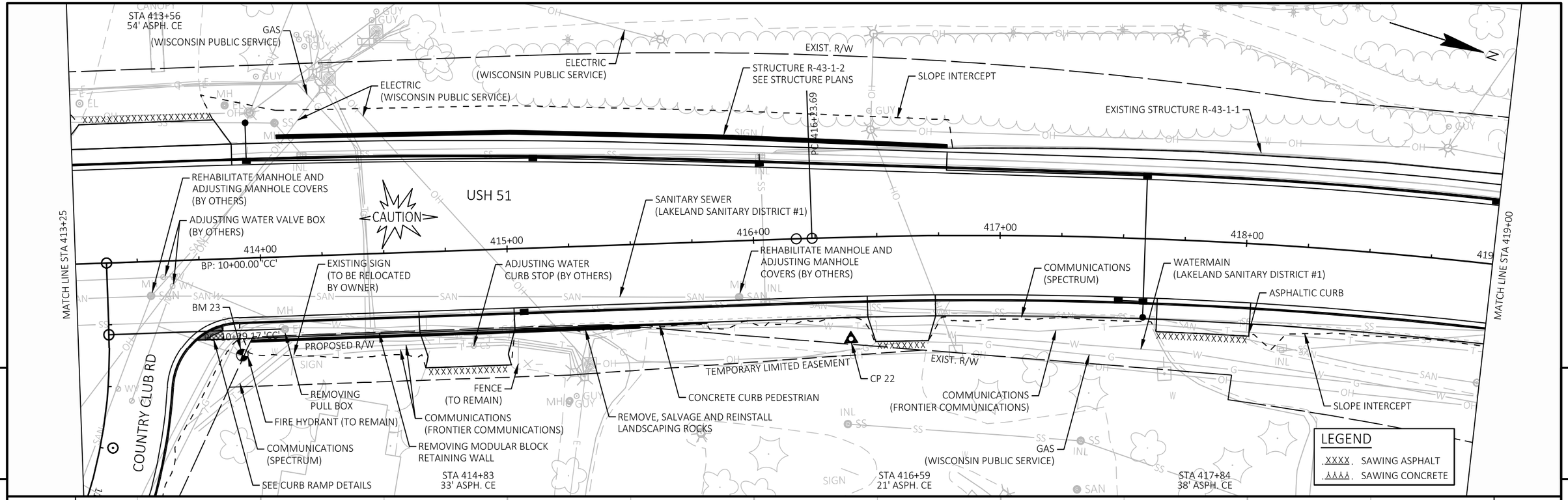
VCL = 500.00
K = 813.38

VCL = 175.00
K = 242.86

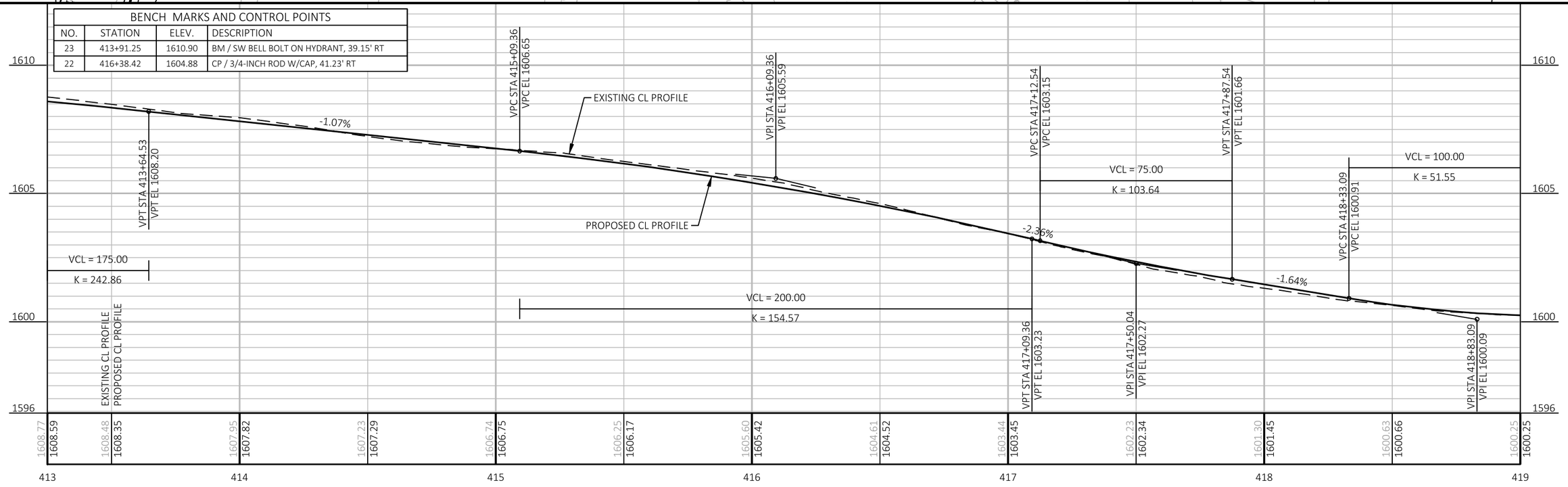
| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1609.87 | 1609.79 | 1609.85 | 1609.87 | 1609.97 | 1609.92 | 1610.07 | 1609.93 | 1610.16 | 1609.92 | 1610.08 | 1609.88 | 1609.93 | 1609.80 | 1609.85 | 1609.70 | 1609.75 | 1609.56 | 1609.61 | 1609.39 | 1609.49 | 1609.15 | 1609.05 | 1608.80 | 1608.77 | 1608.59 |

407 408 409 410 411 412 413 413

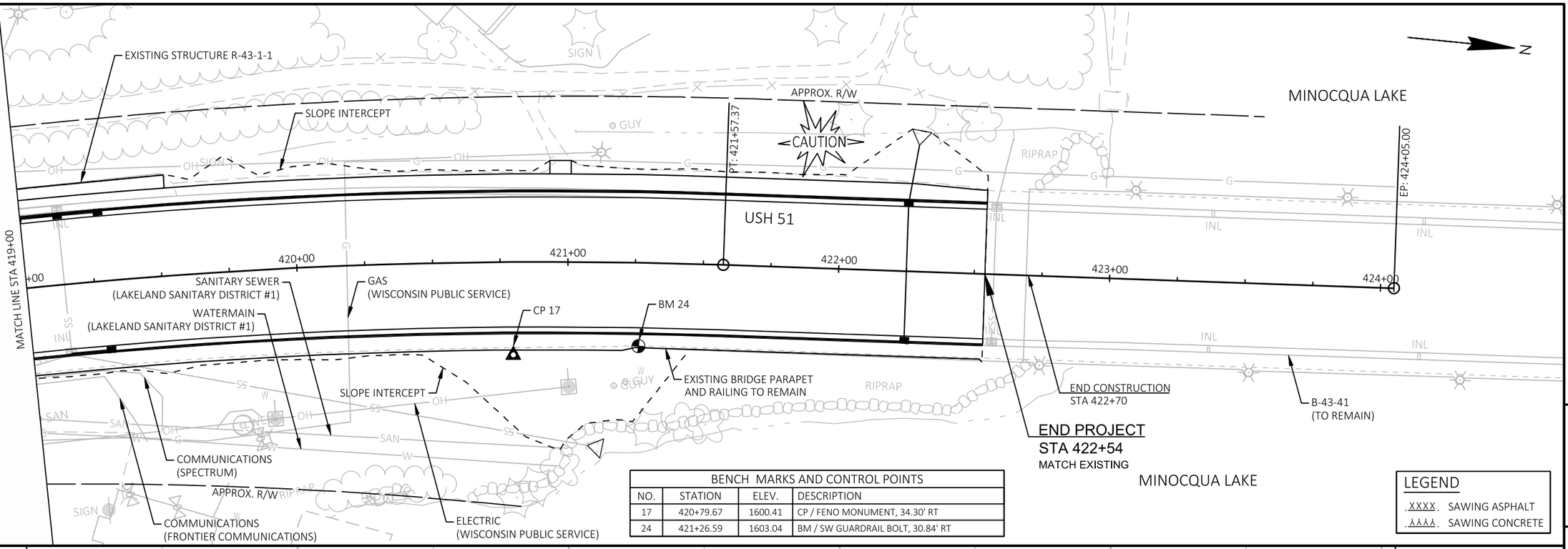
| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | PLAN AND PROFILE: USH 51 | SHEET 66 | E |
|---|---|---|---|---|---|




| BENCH MARKS AND CONTROL POINTS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| 23 | 413+91.25 | 1610.90 | BM / SW BELL BOLT ON HYDRANT, 39.15' RT |
| 22 | 416+38.42 | 1604.88 | CP / 3/4-INCH ROD W/CAP, 41.23' RT |




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | PLAN AND PROFILE: USH 51 | SHEET 67 | E |
|---|---|---|---|---|---|

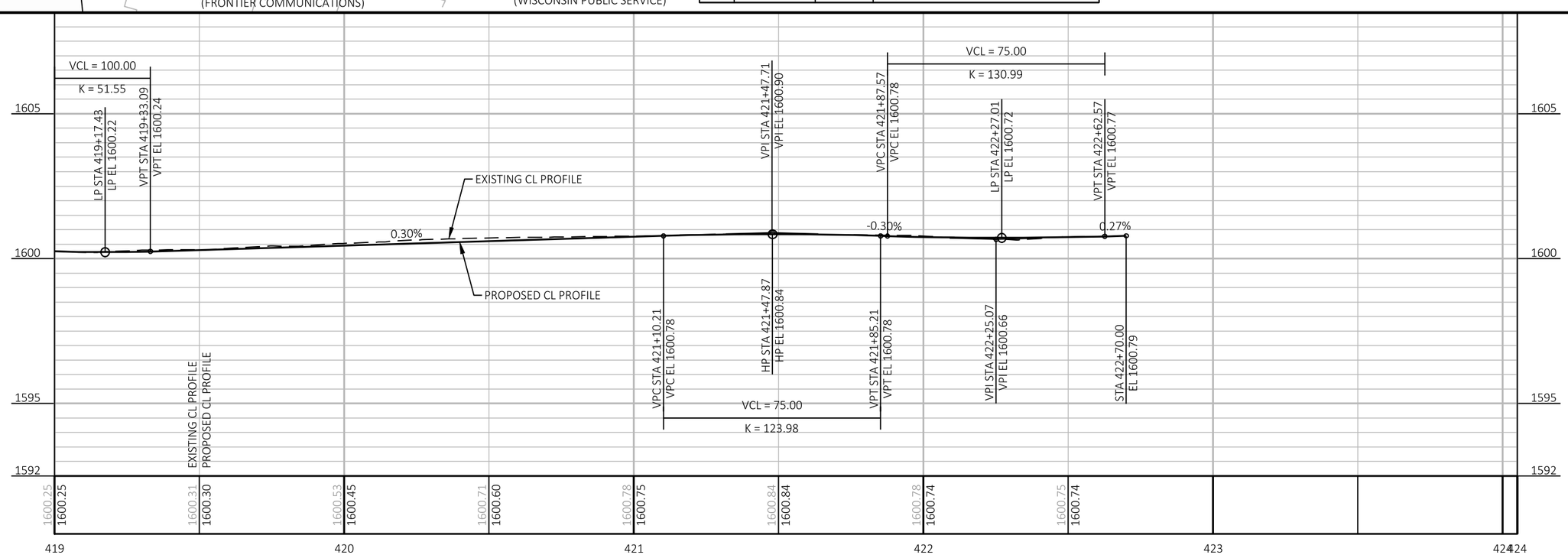



| BENCH MARKS AND CONTROL POINTS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| 17 | 420+79.67 | 1600.41 | CP / FENO MONUMENT, 34.30' RT |
| 24 | 421+26.59 | 1603.04 | BM / SW GUARDRAIL BOLT, 30.84' RT |

LEGEND

XXXX SAWING ASPHALT

XXXX SAWING CONCRETE




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | PLAN AND PROFILE: USH 51 | SHEET 68 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 04

PLOT DATE : 8/23/2023 11:41 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

LEGEND

XXXX. SAWING ASPHALT

XXXX. SAWING CONCRETE

ELECTRIC (WISCONSIN PUBLIC SERVICE)

COMMUNICATIONS (FRONTIER COMMUNICATIONS)

SLOPE INTERCEPT

USH 51

SLOPE INTERCEPT

APPROX. R/W

SIGN

N

CAUTION

BP: 8+75.00 'M'

403+00

EP: 10+00.00 'M'

APPROX. R/W

MANITOU PARK DR

SANITARY SEWER (LAKELAND SANITARY DISTRICT #1)

9+00 'M'

WATERMAIN (LAKELAND SANITARY DISTRICT #1)

APPROX. R/W

COMMUNICATIONS (FRONTIER COMMUNICATIONS)

ELECTRIC (WISCONSIN PUBLIC SERVICE)

SLOPE INTERCEPT

BEGIN CONSTRUCTION STA 8+98 'M'

GAS (WISCONSIN PUBLIC SERVICE)

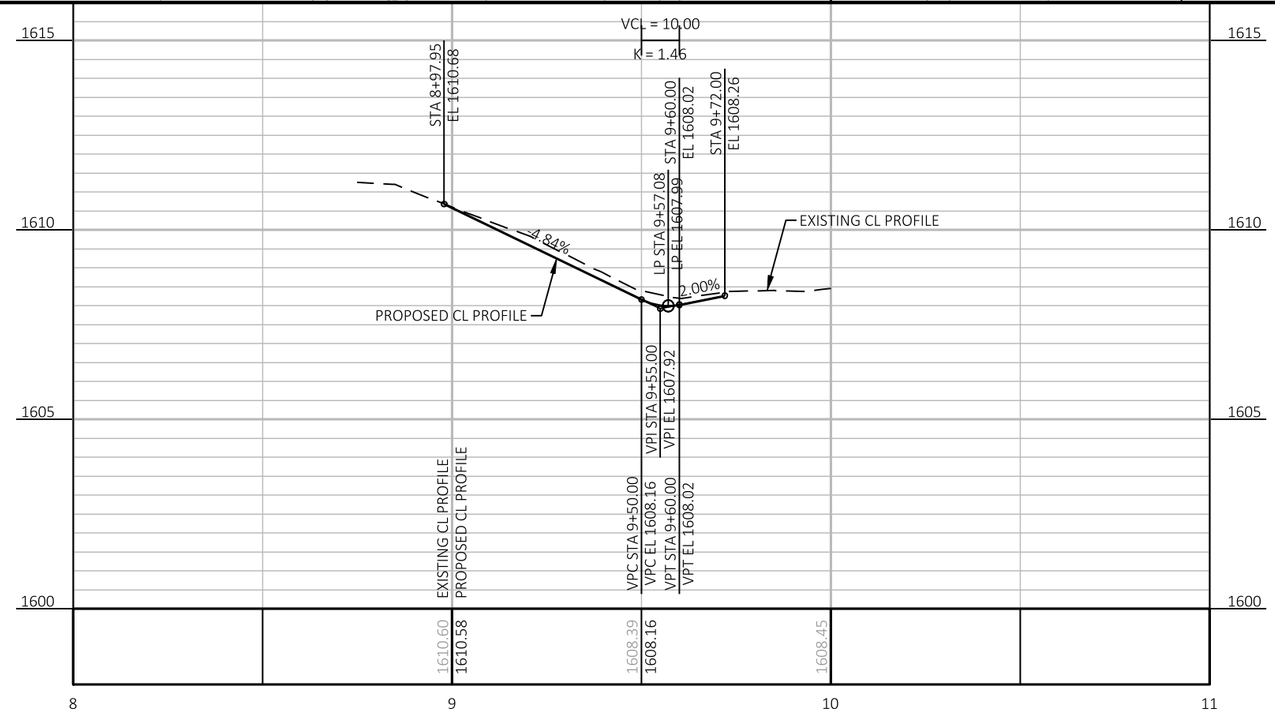
402+00

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

A/C

5

5




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | PLAN AND PROFILE: MANITOU PARK DRIVE | SHEET 69 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 05

PLOT DATE : 8/23/2023 11:43 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

| BENCH MARKS AND CONTROL POINTS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| 19 | 403+83.20 | 1609.01 | CP / 3/4-INCH ROD W/CAP, 66.80' LT |
| 26 | 404+23.01 | 1610.07 | BM / 60D NAIL WEST SIDE PP, 49.18' RT |
| 28 | 404+97.60 | 1608.53 | BM / 60D NAIL EAST SIDE PP, 53.85' LT |

N

COMMUNICATIONS (FRONTIER COMMUNICATIONS)
SLOPE INTERCEPT
PT: 11+04.95 'C'
GAS (WISCONSIN PUBLIC SERVICE)
EP: 13+47.09 'C'
405+00
CAUTION
11+00 'C'
W CLAWSON DR
12+00 'C'
13+00 'C'
APPROX. R/W
BM 28
USH 51
APPROX. R/W
SLOPE INTERCEPT
PC: 10+49.88 'C'
ELECTRIC (WISCONSIN PUBLIC SERVICE)
SANITARY SEWER (LAKELAND SANITARY DISTRICT #1)
COMMUNICATIONS (SPECTRUM)
APPROX. R/W
BM 26
END CONSTRUCTION STA 10+94 'C'
404+00
PT: 10+00.00 'C'
CP 19
SEE CURB RAMP DETAILS

LEGEND
XXXX SAWING ASPHALT
XXXX SAWING CONCRETE

5

5

1615
1610
1605
1601

VCL = 14.00
K = 3.57

STA 10+00.00 'C'
EL 1609.03
LP STA 10+30.11 'C'
LP EL 1608.50
VPC STA 10+46.00 'C'
VPC EL 1608.74
VPI STA 10+56.00 'C'
VPI EL 1608.94
VPT STA 10+66.00 'C'
VPT EL 1608.96
STA 10+93.81 'C'
EL 1609.02

EXISTING CL PROFILE

-1.98%
1.94%
0.21%

PROPOSED CL PROFILE

VPI STA 10+30.04 'C'
VPI EL 1608.43
VPC STA 10+23.04 'C'
VPC EL 1608.57
VPT STA 10+37.04 'C'
VPT EL 1608.57

VCL = 20.00
K = 11.57

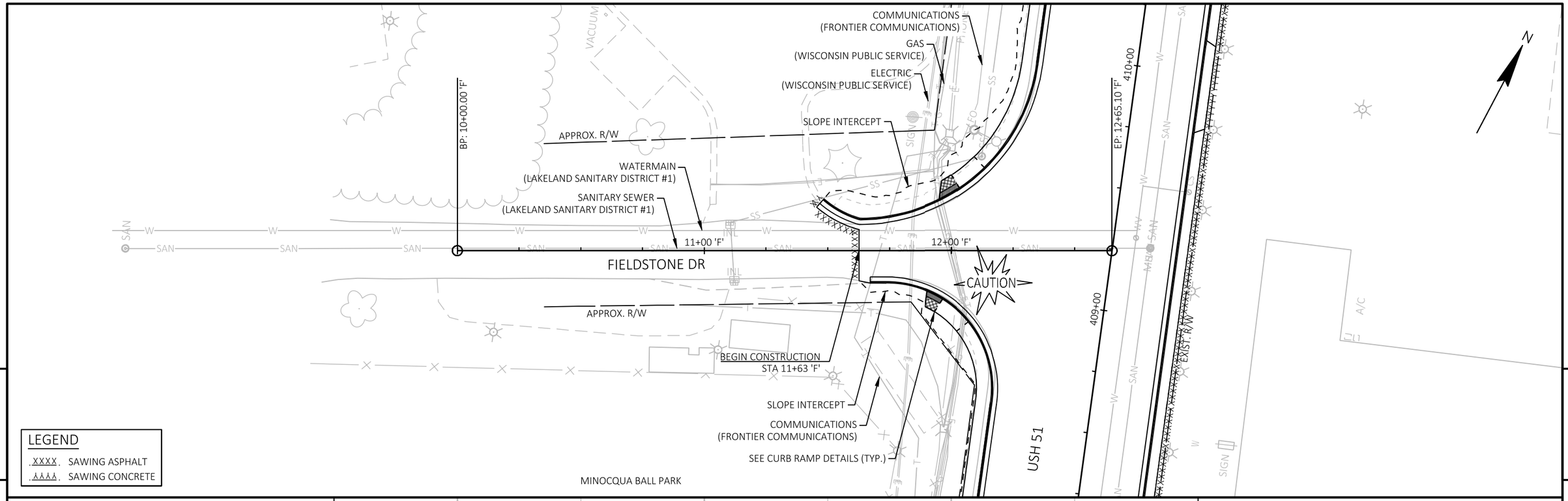
EXISTING CL PROFILE
PROPOSED CL PROFILE

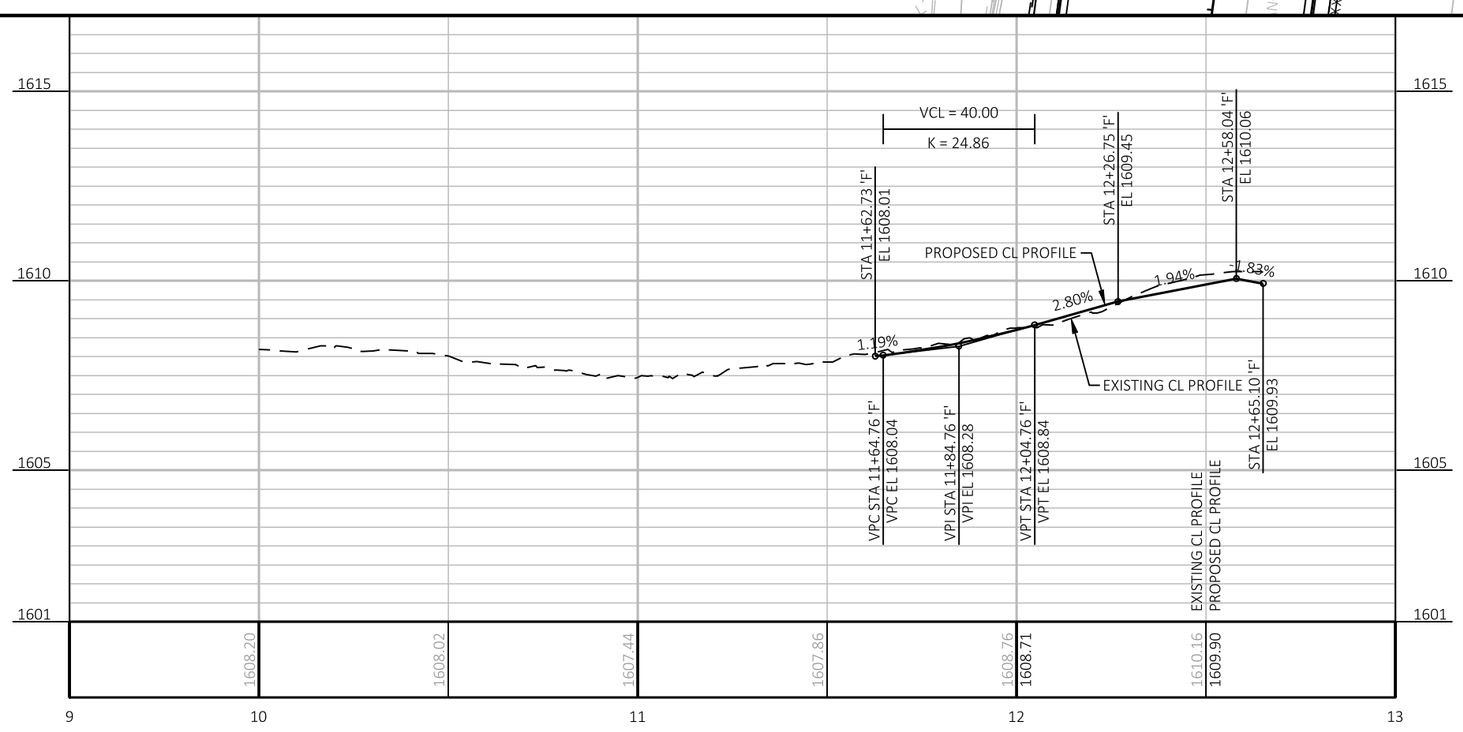
1609.06
1609.03
1608.87
1608.81
1609.03
1609.38
1609.75
1609.93
1610.01
1610.37

9 10 11 12 13 13

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | PLAN AND PROFILE: W CLAWSON DRIVE | SHEET 70 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 06
PLOT DATE : 8/23/2023 11:44 AM
PLOT BY : SHAWN DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | PLAN AND PROFILE: FIELDSTONE DRIVE | SHEET 71 | E |
|---|---|---|---|---|---|


FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 07
PLOT DATE : 8/23/2023 11:46 AM
PLOT BY : SHAWN DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

| BENCH MARKS AND CONTROL POINTS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| 18 | 412+93.58 | 1609.81 | CP, 3/4-INCH ROD W/CAP, 70.70' LT |
| 23 | 413+91.25 | 1610.90 | BM / SW BELL BOLT ON HYDRANT, 39.15' RT |

N

SEE CURB RAMP DETAILS (TYP.)

COMMUNICATIONS
(FRONTIER COMMUNICATIONS)

WATERMAIN
(LAKELAND SANITARY DISTRICT #1)

COMMUNICATIONS
(SPECTRUM)

GAS
(WISCONSIN PUBLIC SERVICE)

SLOPE INTERCEPT

STA 11+37
24' ASPH. CE

REMOVE SHRUB WITHIN THE
RIGHT OF WAY (PAYMENT IS
INCIDENTAL TO CONTRACT)

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

PT: 11+19.26 'CC'

EP: 13+14.86 'CC'

APPROX. R/W

SANITARY SEWER
(LAKELAND SANITARY DISTRICT #1)

CAUTION

BP: 10+00.00 'CC'
414+00

BM 23

FENCE (TO REMAIN)

ADJUSTING WATER VALVE BOX
(BY OTHERS)

11+00 'CC'

12+00 'CC'

13+00 'CC'

COUNTRY CLUB RD

STRUCTURE R-43-1-2
SEE STRUCTURE PLANS

USH 51

413+00

APPROX. R/W

CP 18

SLOPE INTERCEPT

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

ELECTRIC
(WISCONSIN PUBLIC SERVICE)

COMMUNICATIONS
(FRONTIER COMMUNICATIONS)

APPROX. R/W

END CONSTRUCTION
STA 12+00 'CC'

STA 11+35
57' ASPH. CE

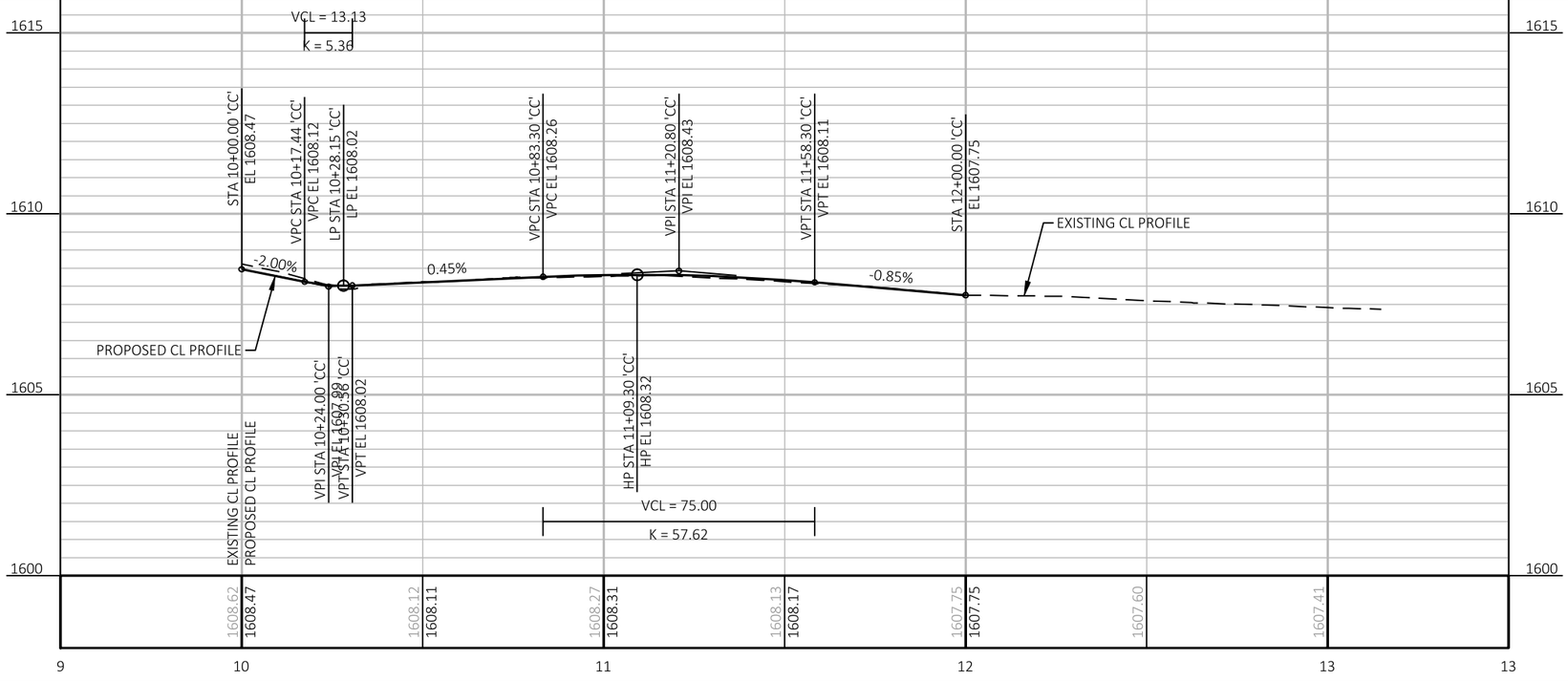
LEGEND

XXXX SAWING ASPHALT

XXXX SAWING CONCRETE

5

5




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | PLAN AND PROFILE: COUNTRY CLUB ROAD | SHEET 72 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 08

PLOT DATE : 8/23/2023 11:47 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

# Standard Detail Drawing List

| | |
|---|---|
| 08A05-19A | INLET COVERS TYPE A, H, A-S, H-S & Z |
| 08A05-19C | INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S |
| 08A05-19D | INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M |
| 08A08-02 | CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER |
| 08A09-02 | CATCH BASINS 2X3-FT AND 2.5X3-FT |
| 08B09-03 | MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER |
| 08D01-23A | CONCRETE CURB & GUTTER |
| 08D01-23B | CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS |
| 08D04-07 | CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES |
| 08D05-20A | CURB RAMPS TYPES 1 AND 1-A |
| 08D05-20B | CURB RAMPS TYPES 2 AND 3 |
| 08D05-20C | CURB RAMPS TYPES 4A AND 4A1 |
| 08D05-20D | CURB RAMPS TYPE 4B AND 4B1 |
| 08D05-20E | CURB RAMPS TYPES 5, 6, 7A, 7B & 8 |
| 08D05-20F | CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS |
| 08D05-20G | CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES |
| 08D18-03 | DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y |
| 08D20-01 | DRIVEWAYS WITH CURB & GUTTER RETURNS |
| 08D21-01 | DRIVEWAYS WITHOUT CURB & GUTTER |
| 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 |
| 08E14-01 | TRACKING PAD |
| 08E15-01 | CULVERT PIPE CHECK |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F04-08 | JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL |
| 09A01-14A | AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE |
| 09A01-14B | AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2" |
| 12A03-10 | NAME PLATE (STRUCTURES) |
| 13C19-03 | HMA LONGITUDINAL JOINTS |
| 14B29-01 | SAFETY EDGE |
| 15A03-02A | FLEXIBLE MARKER POST FOR CULVERT END |
| 15A03-02B | FLEXIBLE MARKER POST FOR CULVERT END |
| 15C02-09F | ADVANCED WIDTH RESTRICTION SIGNING |
| 15C03-05 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C05-05 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS |
| 15C07-15C | PAVEMENT MARKING ARROWS |
| 15C08-23A | PERMANENT LONGITUDINAL PAVEMENT MARKINGS |
| 15C08-23B | TEMPORARY LONGITUDINAL PAVEMENT MARKING |
| 15C08-23C | PAVEMENT MARKING (TURN LANES) |
| 15C08-23D | PAVEMENT MARKING (TURN LANES) |
| 15C11-10A | CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST |
| 15C11-10B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |
| 15C12-09A | TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION |
| 15C12-09B | TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE |
| 15C18-08A | MEDIAN ISLAND MARKING PAVEMENT MARKINGS |
| 15C19-08A | MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY |
| 15C19-08B | MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY |
| 15C33-04 | STOP LINE AND CROSSWALK PAVEMENT MARKING |
| 15C35-06A | PAVEMENT MARKING (INTERSECTIONS) |
| 15D06-06 | TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION |
| 15D12-11A | TRAFFIC CONTROL, LANE CLOSURE |
| 15D22-06 | TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY |
| 15D23-07A | TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE |
| 15D23-07B | TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE |
| 15D30-09A | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-09B | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-09C | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-09D | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-09E | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-09F | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-09G | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-09H | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-09I | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-09J | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |

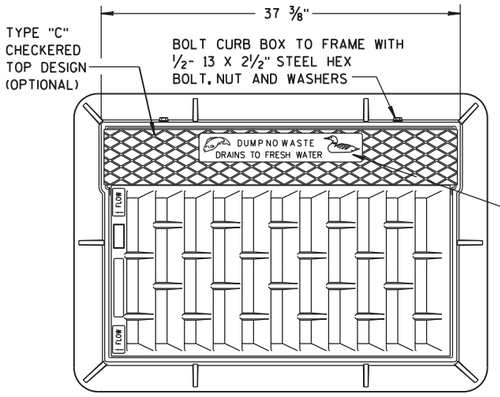

6

# Standard Detail Drawing List

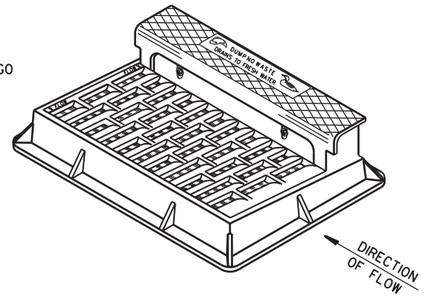
| | |
|---|---|
| 15D30-09K | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D30-09L | TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION |
| 15D39-02 | TRAFFIC CONTROL, DROP-OFF SIGNING |
| 15D45-03 | TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL |



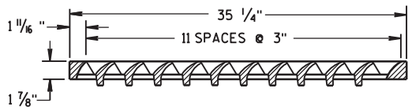
6

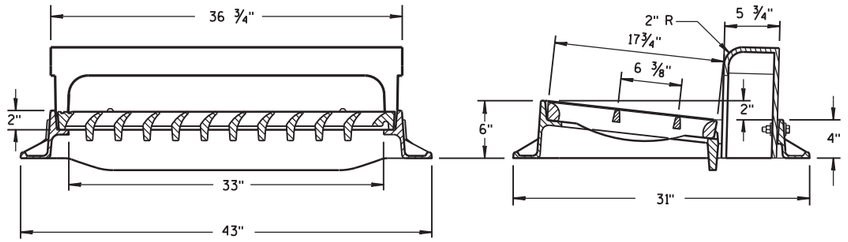


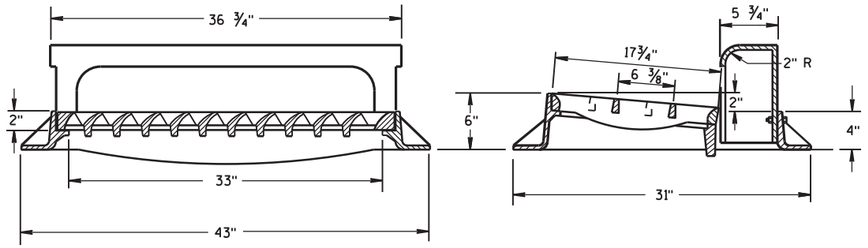

**NOTE:**
**GRATE IS REVERSIBLE.**




NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

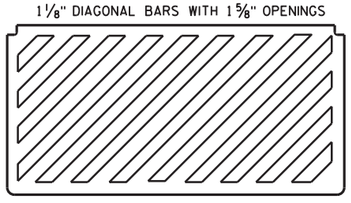



## TYPE "H"

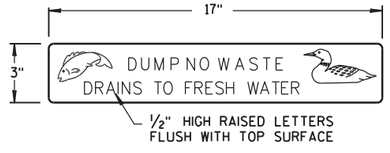
**NOTE: EITHER CASTING IS ACCEPTABLE**



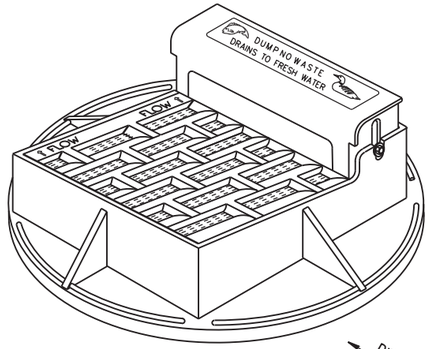

## SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

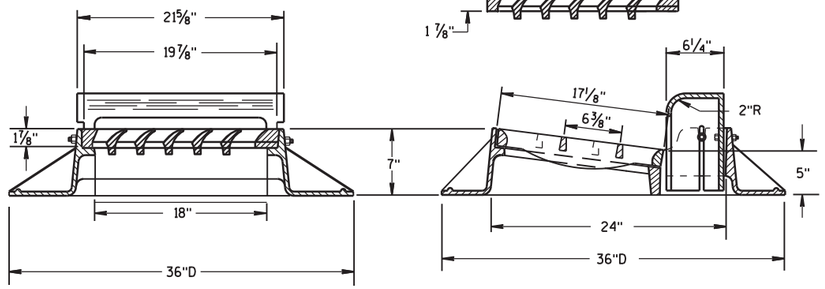



## LOGO DETAIL




NOTE: CURB BOX ADJUSTABLE 4" TO 9"

**NOTE:**
**GRATE IS REVERSIBLE.**



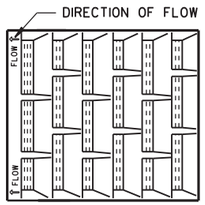

## TYPE "A"

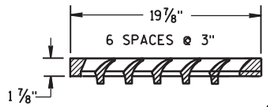
## GENERAL NOTES

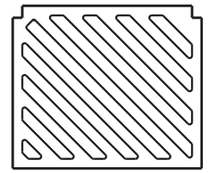
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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



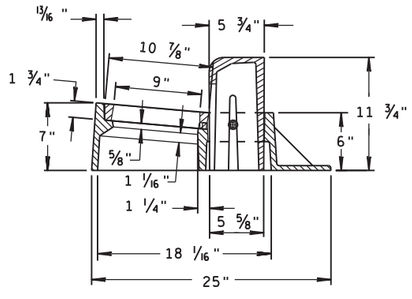



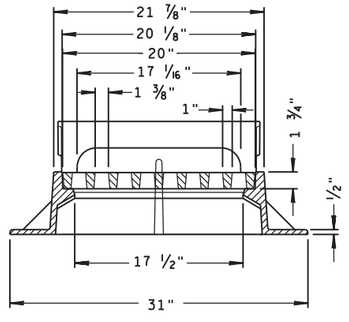




## SPECIAL GRATE FOR TYPE "A" COVER

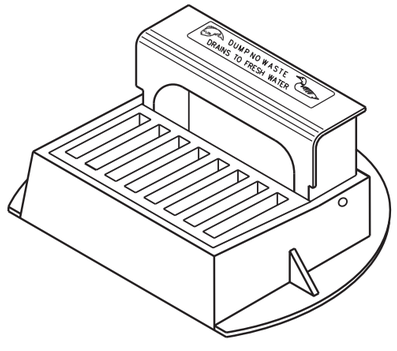
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)




## TYPE "Z"




## INLET COVERS TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

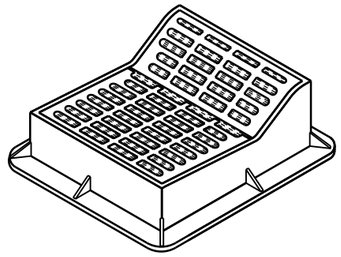
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

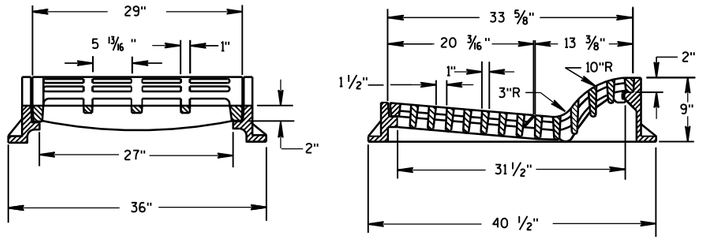




6

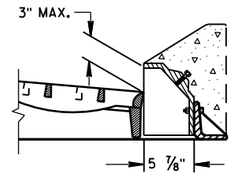
S.D.D. 8 A 5-19a






## TYPE "F"

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




## ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

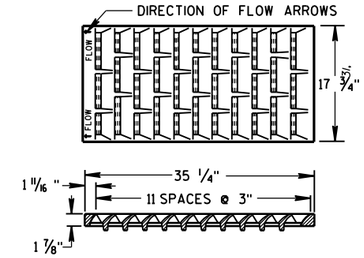
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

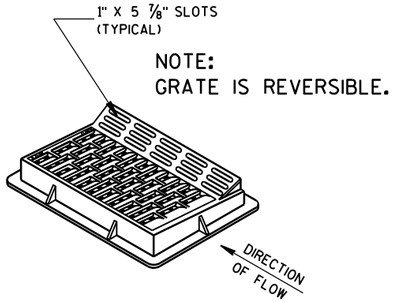
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

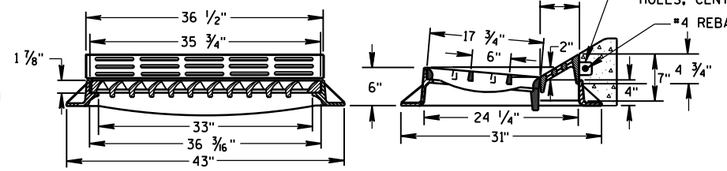
## GENERAL NOTES

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

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



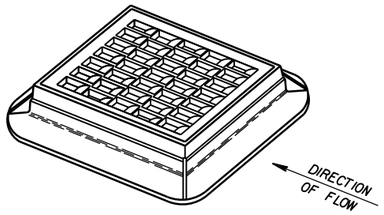



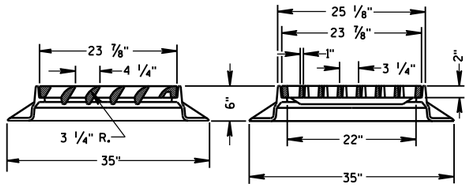




## TYPE "HM"

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

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

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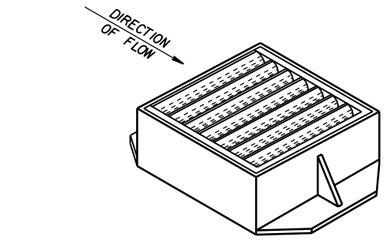


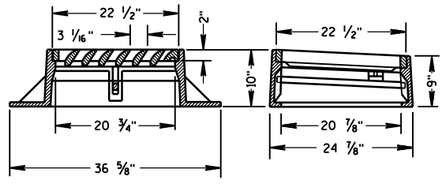


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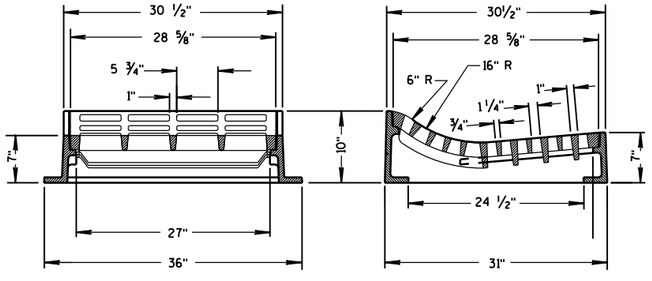
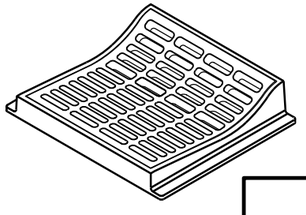


## TYPE "T"

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

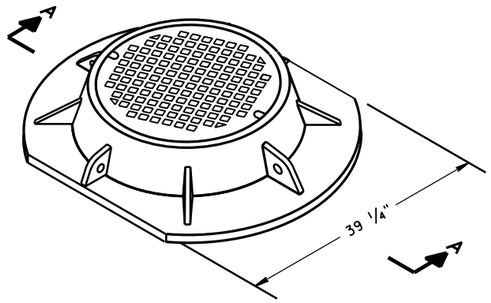


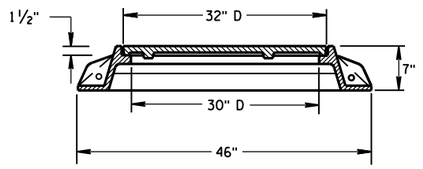
6

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

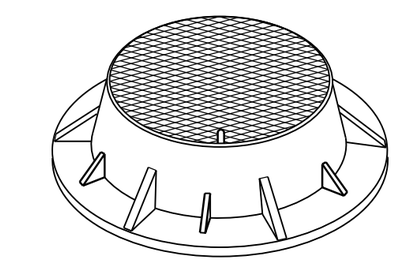
6

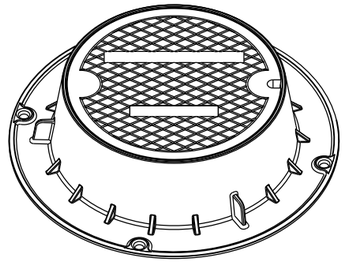
S.D.D. 8 A 5-19c

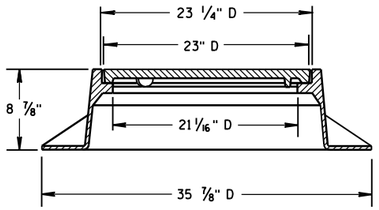


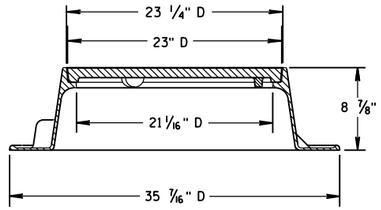




SECTION A-A
TYPE "K"







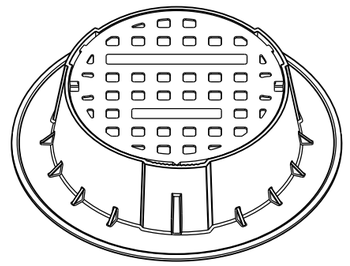

TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

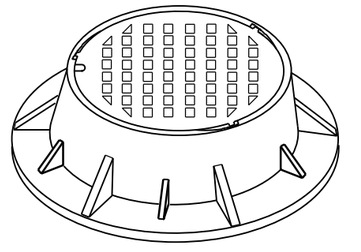
## GENERAL NOTES

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

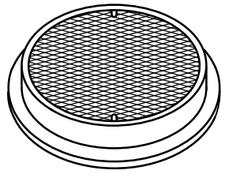
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

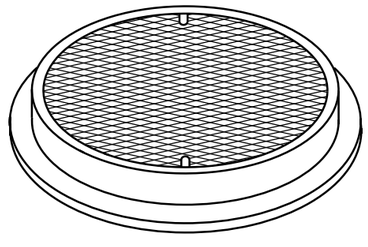
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

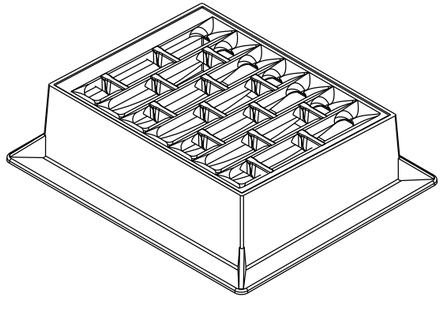


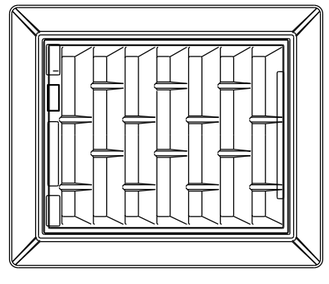



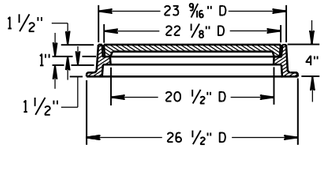

TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



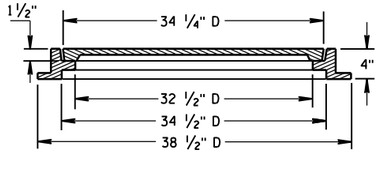




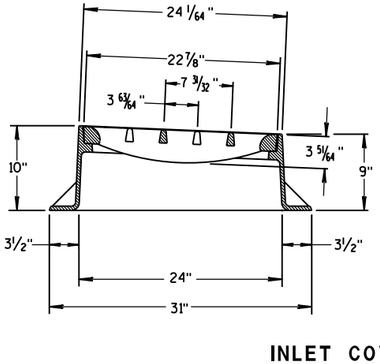


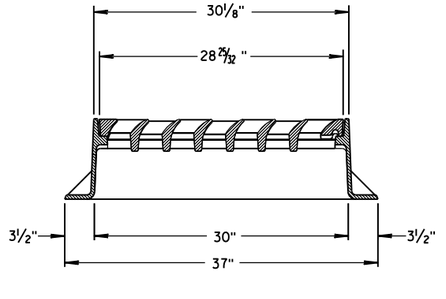



TYPE "L"




TYPE "M"




INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

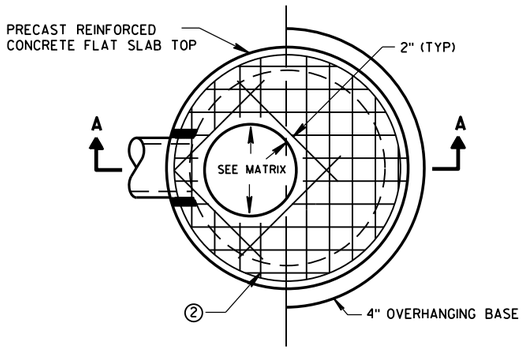
/S/ Jerry H. Zogg
ROADWAY STANDARDS D 77
ENGINEER

6

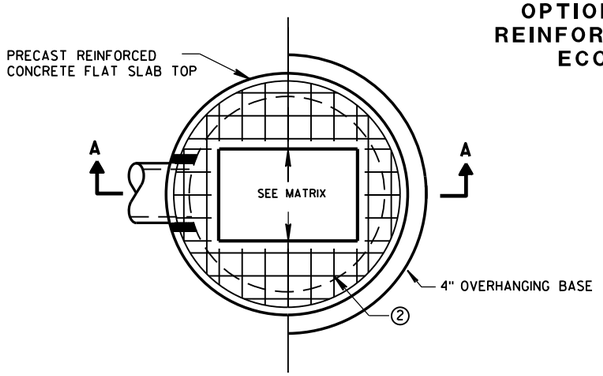
S.D.D. 8 A 5-19d

6

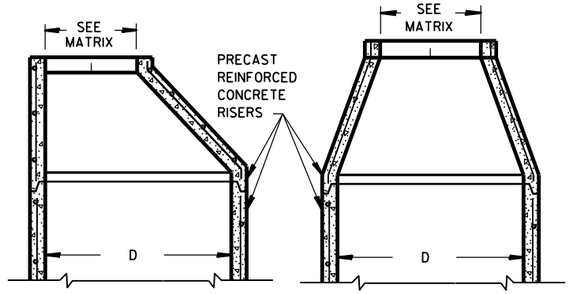
S.D.D. 8 A 5-19d




PLAN VIEW CIRCULAR OPENING

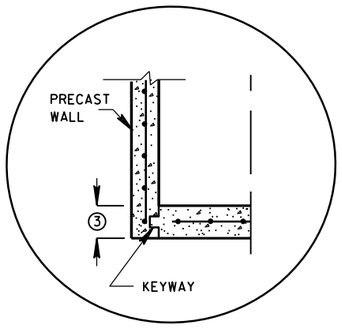



PLAN VIEW RECTANGULAR OPENING




OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

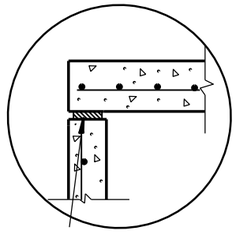



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



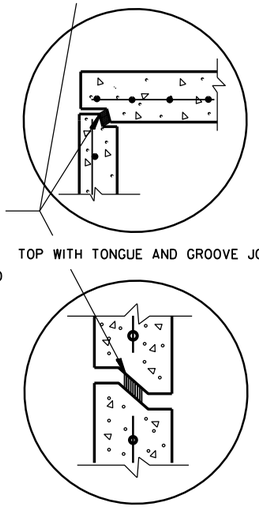

SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



TOP WITH PLAIN END JOINT

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

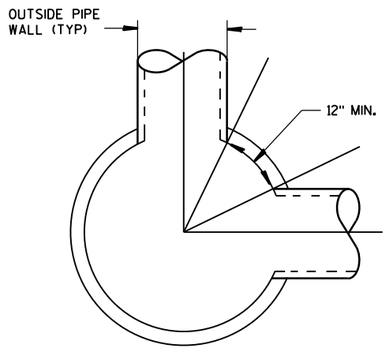


TOP WITH TONGUE AND GROOVE JOINT

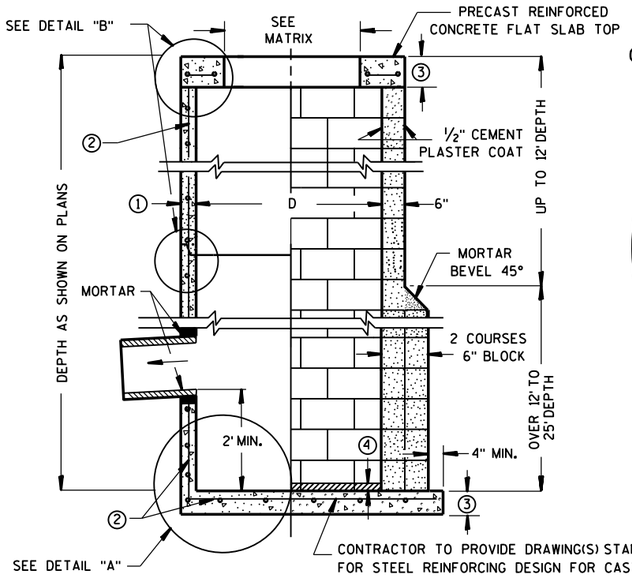


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"




DETAIL "C"




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

SECTION A-A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

## GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL 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.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

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

## CATCH BASIN COVER OPENING MATRIX

| CATCH BASIN SIZE | INLET COVER TYPE | ALL A'S | ALL B'S | BW | C | F | ALL H'S | S | T | V | WM | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OPENING SIZE (FT) | | | | | | | | | | | |
| 3-FT | 2X2 | X | X | | | | | X | | X | | |
| | 2 DIA. | | | | X | | | | | | | X |
| 4-FT-6-FT | 2X2 | X | X | | | | | X | | X | | |
| | 2X2.5 | | | X | | | | X | X | X | X | |
| | 2 DIA. | | | | X | | | | | | | X |
| | 2X3 | | | | | | X | | | | | |
| | 2.5X3 | | | | | X | | | | | | |

## PIPE MATRIX

| CATCH BASIN SIZE | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | |
|---|---|---|
| | 180° SEPARATION (IN) | 90° SEPARATION (IN) |
| 3-FT | 15 | 12 |
| 4-FT | 24 | 18 |
| 5-FT | 36 | 24 |
| 6-FT | 42 | 30 |

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

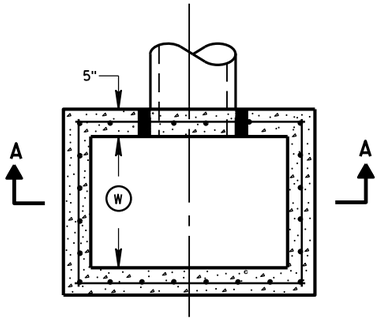
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

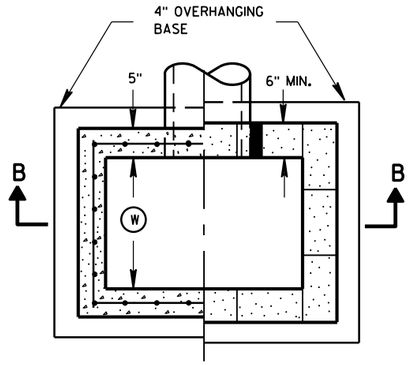




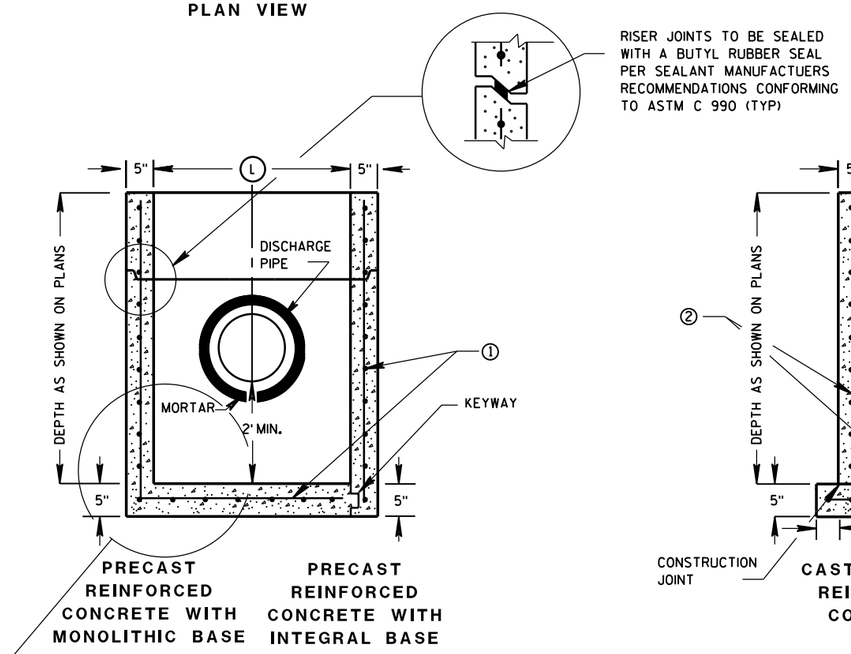
6
S.D.D. 8 A 8-2



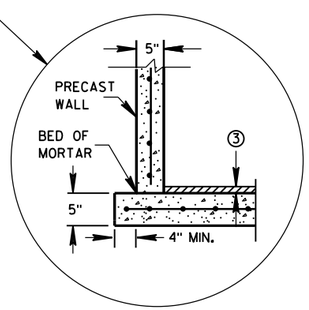

PLAN VIEW



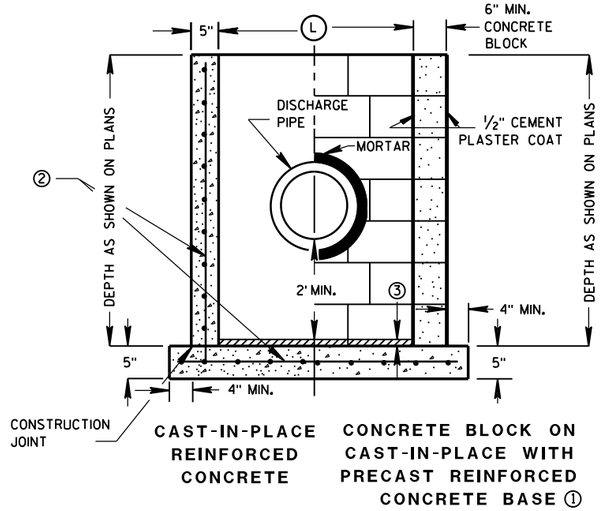

PLAN VIEW




SECTION A-A




SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION




SECTION B-B

## GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

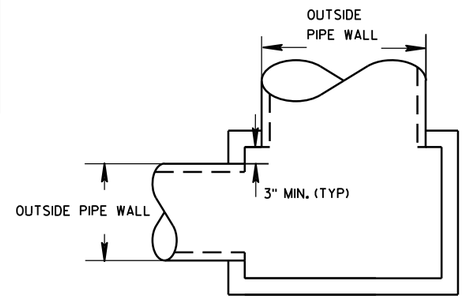
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

### CATCH BASIN COVER MATRIX

| CATCH BASIN SIZE | | INLET COVER TYPE | F | ALL H'S |
|---|---|---|---|---|
| | WIDTH (W) (FT) | LENGTH (L) (FT) | | |
| 2X3-FT | 2 | 3 | | X |
| 2.5X3-FT | 2.5 | 3 | X | |

### PIPE MATRIX

| CATCH BASIN SIZE | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | |
|---|---|---|
| | WIDTH (IN) | LENGTH (IN) |
| 2X3-FT | 12 | 24 |
| 2.5X3-FT | 18 | 24 |



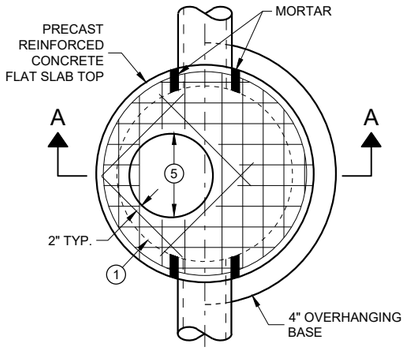

DETAIL "A"

# CATCH BASINS 2X3-FT AND 2.5X3-FT

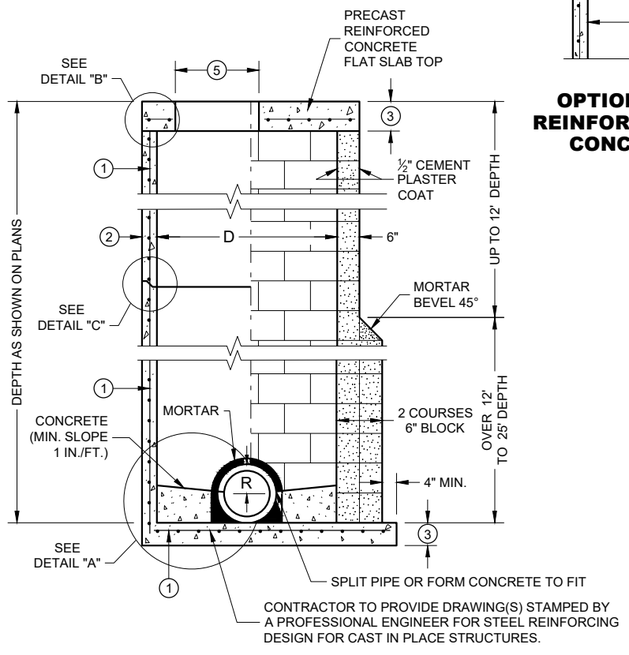
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



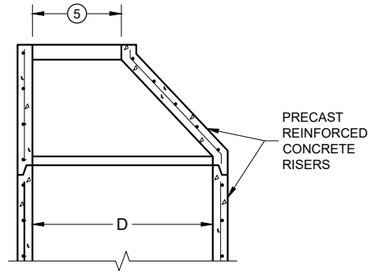

**PLAN VIEW**
**CIRCULAR OPENING**



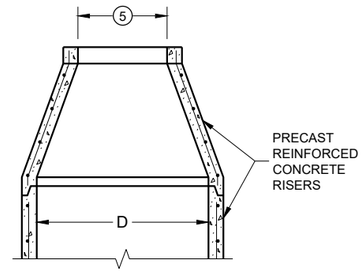

**SECTION A - A**

**PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE**

**CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)**




**OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP**




**OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP**

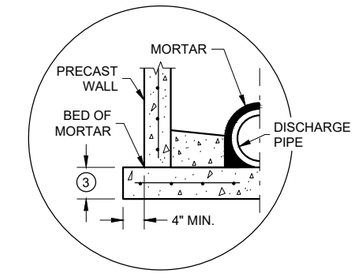
## MANHOLE COVER OPENING MATRIX

| OPENING SIZE (FT.) \ MANHOLE COVER TYPE | C | ALL J'S | K | L | M |
|---|---|---|---|---|---|
| 2 DIA. | X | X | | X | |
| 3 DIA. | | | X | | X |

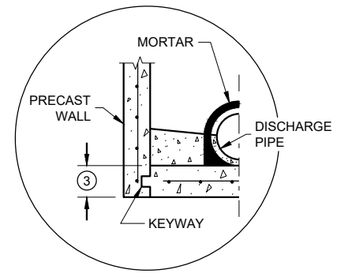
## PIPE MATRIX

| MANHOLE SIZE (DIA.) | MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES | | MINIMUM WALL THICKNESS (IN) | MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS |
|---|---|---|---|---|
| | 180° SEPARATION (IN) | 90° SEPARATION (IN) | | |
| 3-FT | 15 | 12 | 4 | 6 |
| 4-FT | 24 | 18 | 4 | 6 |
| 5-FT | 36 | 24 | 5 | 8 |
| 6-FT | 42 | 36 | 6 | 8 |
| 7-FT | 48 | 36/42* | 7 | 8 |
| 8-FT | 60 | 42 | 8 | 8 |
| 9-FT | 66 | 54 | 9 | 10 |
| 10-FT | 72 | 60 | 10 | 10 |

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES.
SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

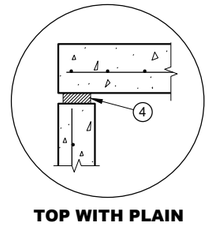



**SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION**

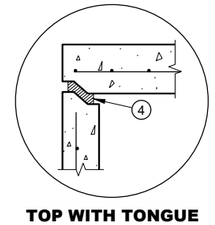



**PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION**

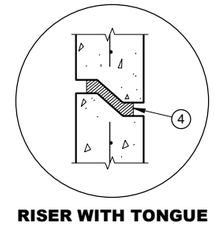
**DETAIL "A"**




**TOP WITH PLAIN END JOINT**




**TOP WITH TONGUE AND GROOVE JOINT**




**RISER WITH TONGUE AND GROOVE JOINT**

**DETAIL "B"** **DETAIL "C"**

## GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL 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.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

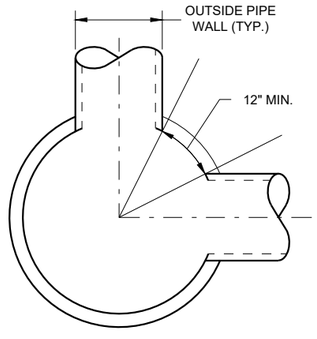
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP.).

(5) SEE MANHOLE COVER OPENING MATRIX.




**MINIMUM HORIZONTAL PIPE SEPARATION**

**MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

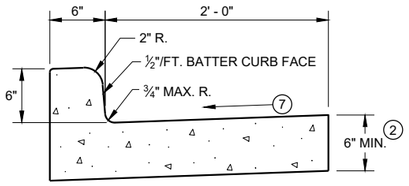


**MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER**

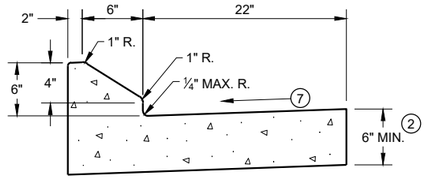


6

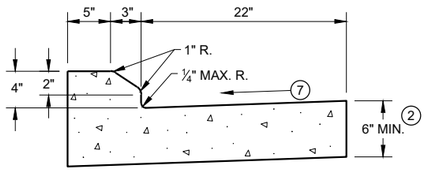
SDD 08B09 - 03



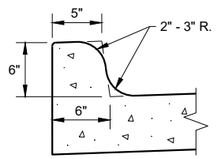

**TYPES A (1) & D**



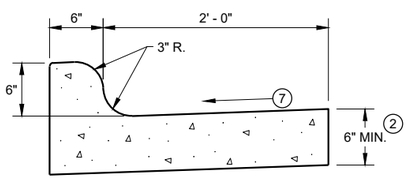

**6" SLOPED CURB TYPES G (1) & J**




**4" SLOPED CURB TYPES G (1) & J**

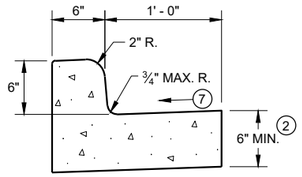



**TYPES K (1) & L**
(OPTIONAL CURB SHAPE)



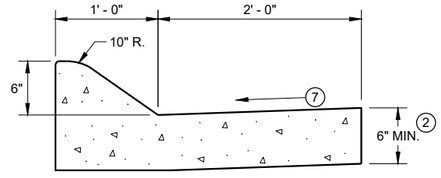

**TYPES K (1) & L**

**CONCRETE CURB AND GUTTER 30"**

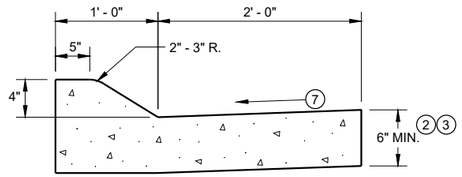



**TYPES A (1) & D**

**CONCRETE CURB AND GUTTER 18"**

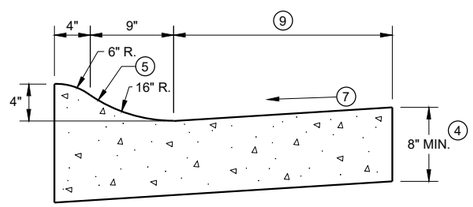



**6" SLOPED CURB TYPES A (1) & D**



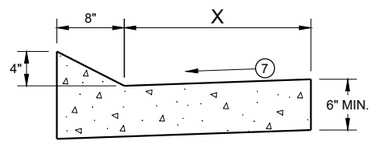

**4" SLOPED CURB TYPES A (1) & D**

**CONCRETE CURB AND GUTTER 36"**




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

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

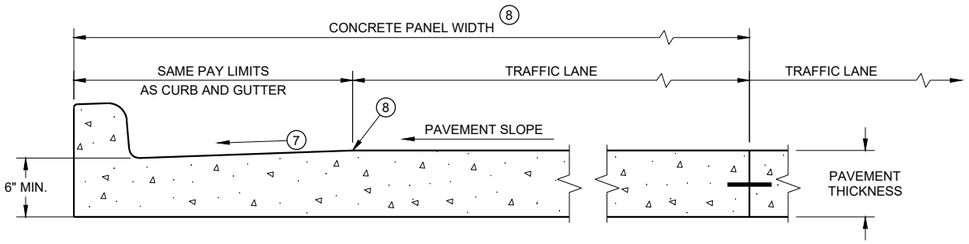



**TYPES TBT & TBTT (1)**

**CONCRETE CURB AND GUTTER**

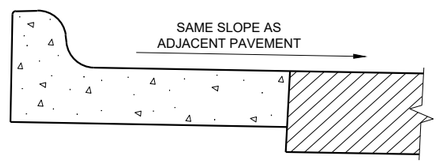
**PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE**

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




**PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER**

* BIKE LANE IS NOT SHOWN




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

## GENERAL NOTES

DETAILS OF CONSTRUCTION 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 AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 GUTTERS 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) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES 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.

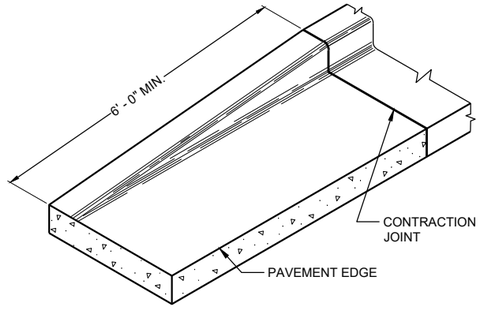
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

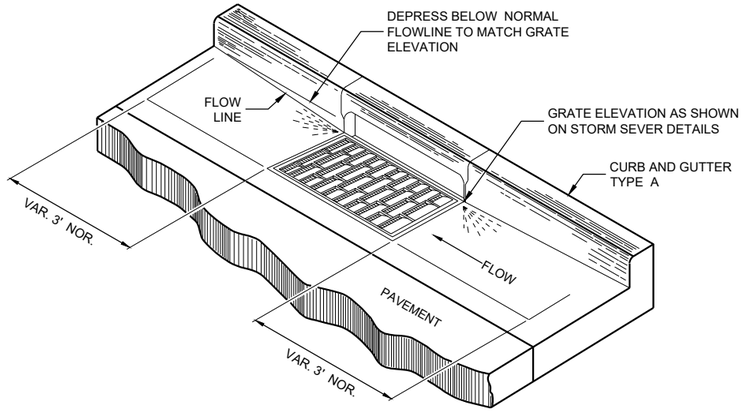
**CONCRETE CURB AND GUTTER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION


6
SDD 08D01 - 23a




**END SECTIONCURB AND GUTTER**




**DETAIL OF CURB AND GUTTER AT INLETS**

(TYPICAL H INLET COVER SHOWN)

## GENERAL NOTES

DETAILS OF CONSTRUCTION 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.

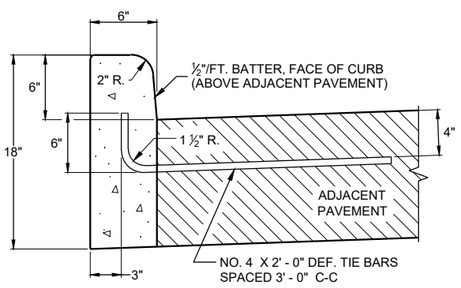
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

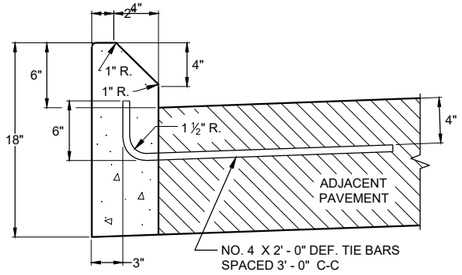
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

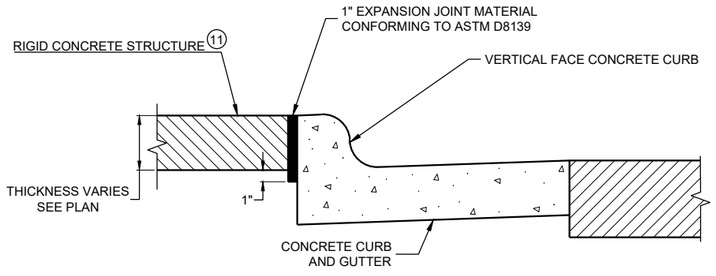



**TYPES A (1) & D**

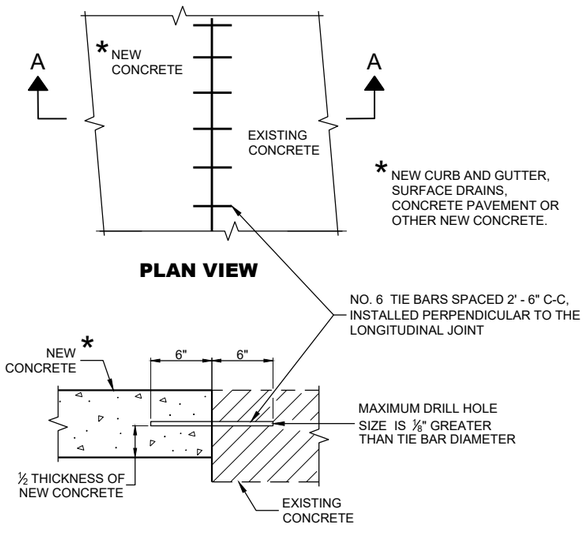



**TYPES G (1) & J**

**CONCRETE CURB**



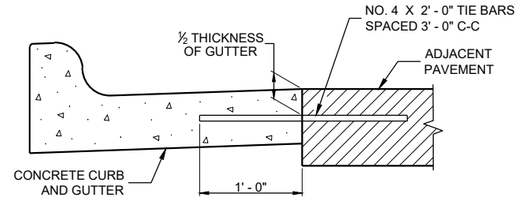

**EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)**



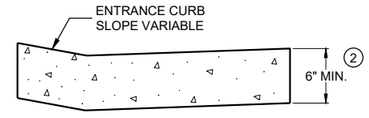

**PLAN VIEW**

**SECTION A - A**

**TIE BARS DRILLED INTO EXISTING PAVEMENT**




**TYPICAL TIE BAR LOCATION (1)**




**DRIVEWAY ENTRANCE CURB (10)**

(WHEN DIRECTED BY THE ENGINEER)

**CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA





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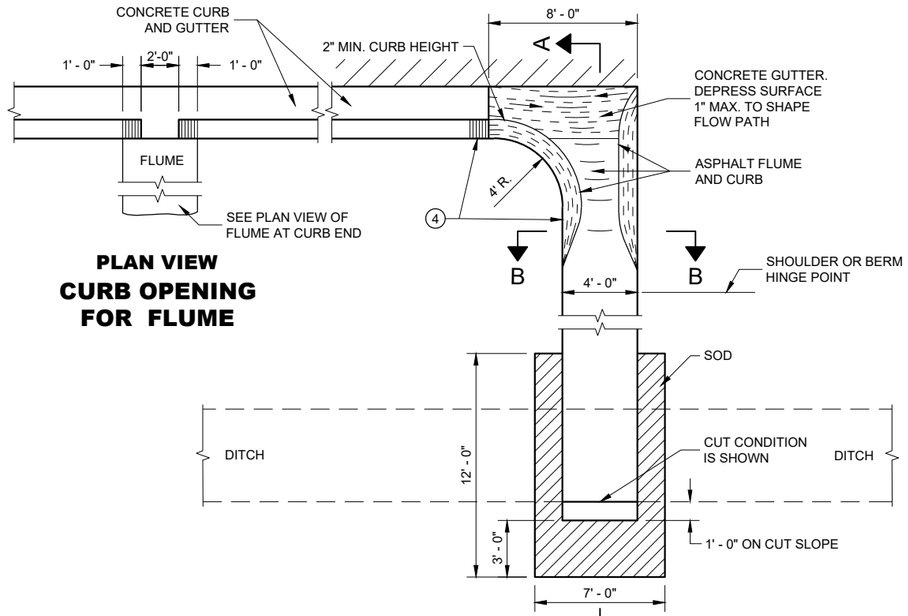
SDD08D01 - 23b

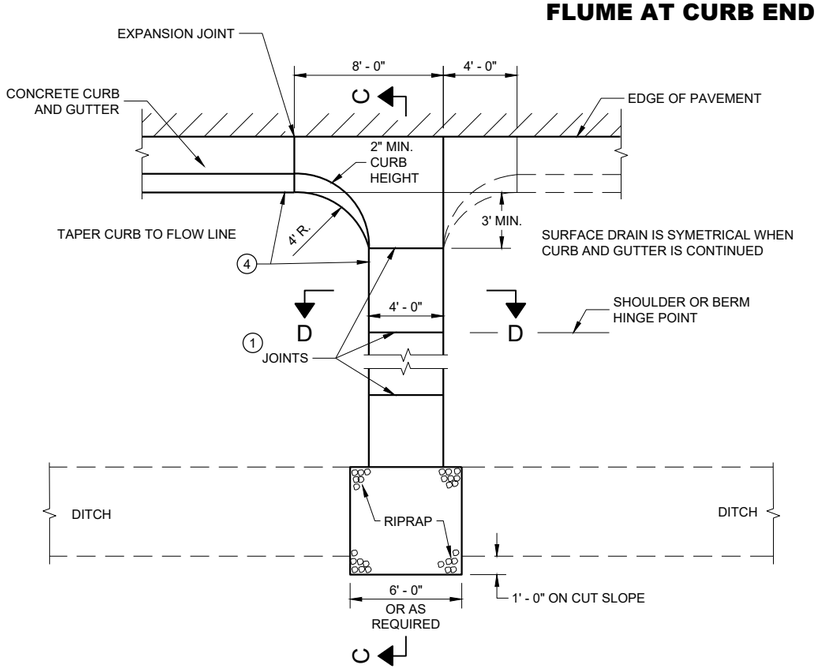
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

## ASPHALTIC FLUME




**PLAN VIEW**
**CURB OPENING FOR FLUME**

**PLAN VIEW**
**FLUME AT CURB END**



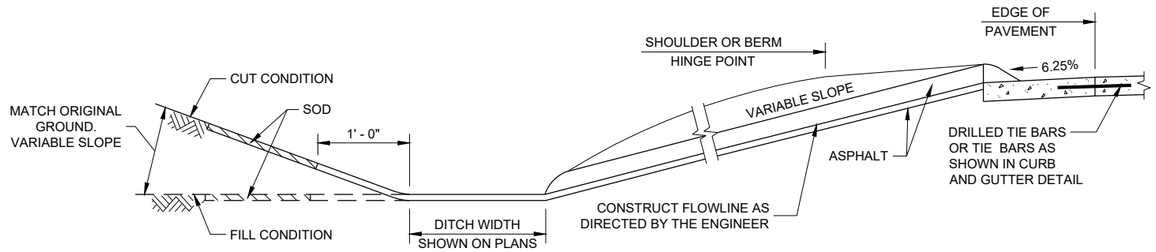

**PLAN VIEW**
**CONCRETE SURFACE DRAIN**

## 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.

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

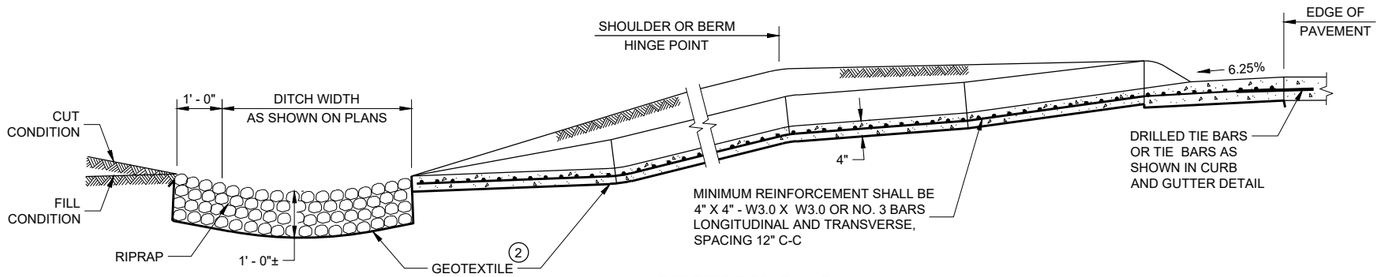
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



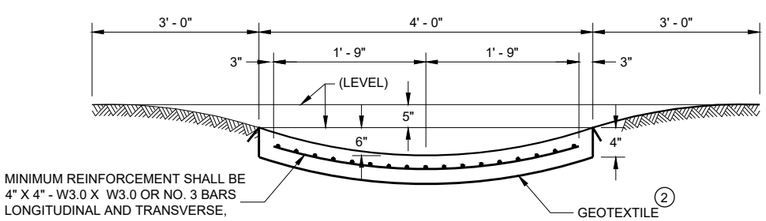

**SECTION A - A**




**SECTION B - B**




**SECTION C - C**




**SECTION D - D**

**CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

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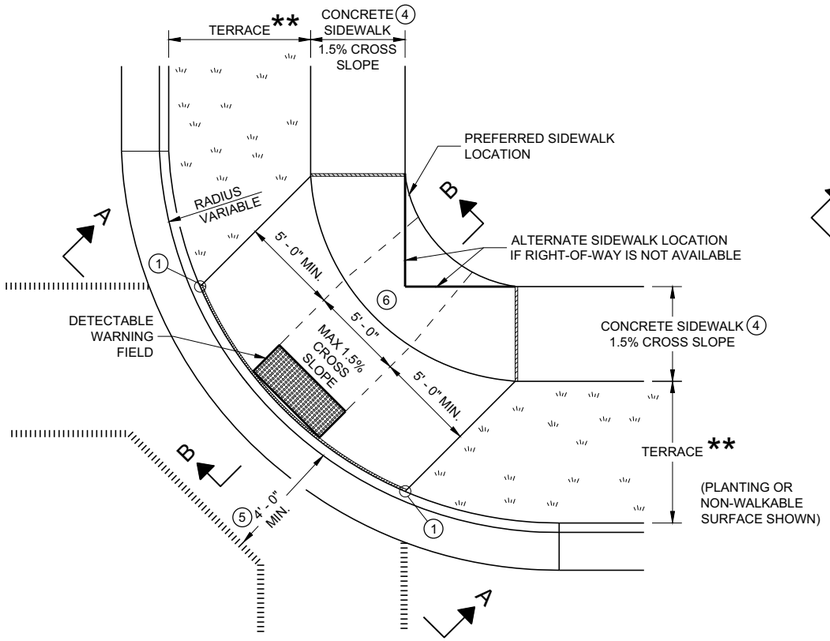
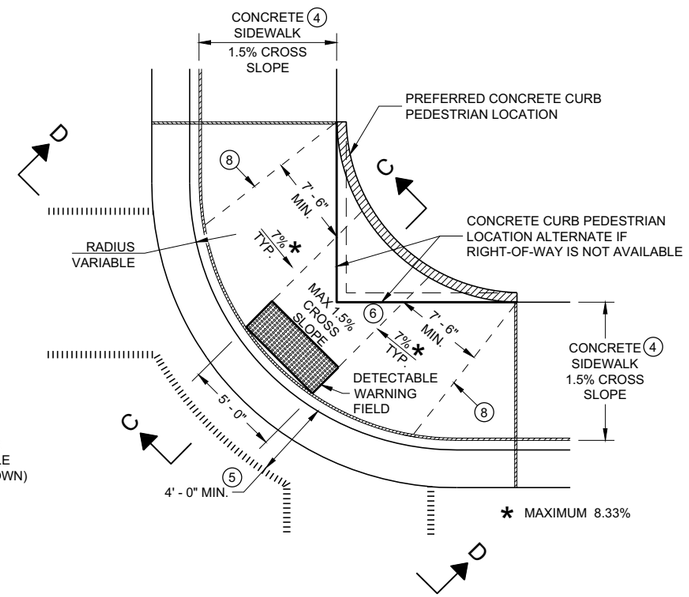
SDD 08D04 - 07




**PLAN VIEW**

## CURB RAMP TYPE 1

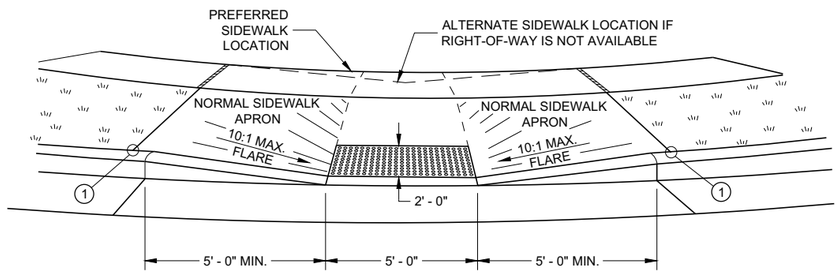
**(CENTER OF CORNER RADIUS)**



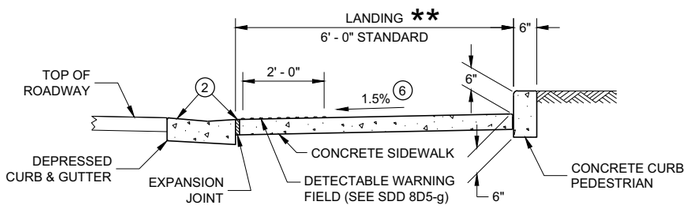

**PLAN VIEW**

## CURB RAMP TYPE 1 - A

**(NO TERRACE)**

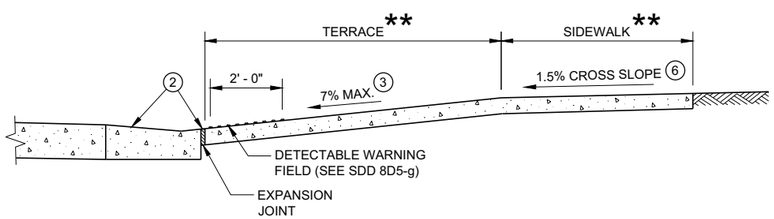



**VIEW A - A FOR TYPE 1**

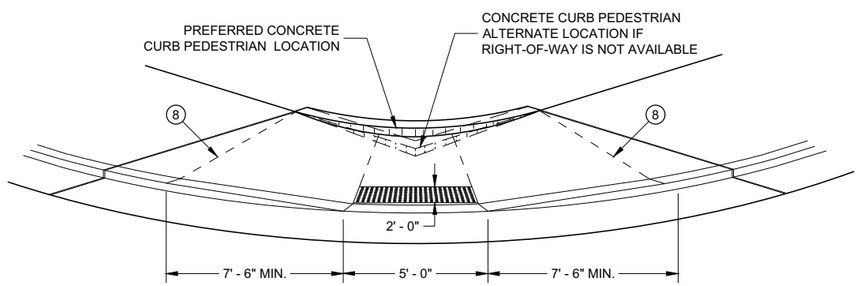



**SECTION C - C FOR TYPE 1 - A**

** WIDTH SHOWN ELSEWHERE IN THE PLANS




**SECTION B - B FOR TYPE 1**




**VIEW D - D FOR TYPE 1 - A**

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS**
**TYPE 1 AND 1-A**

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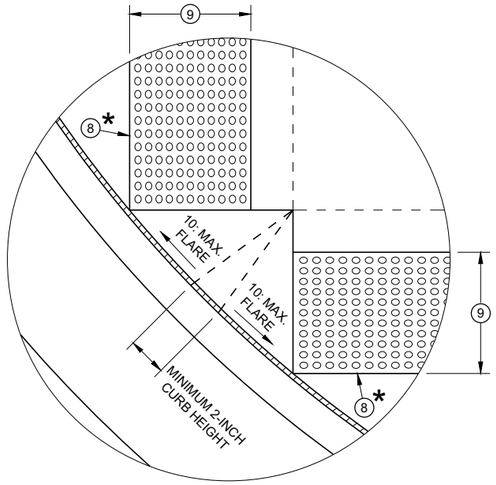
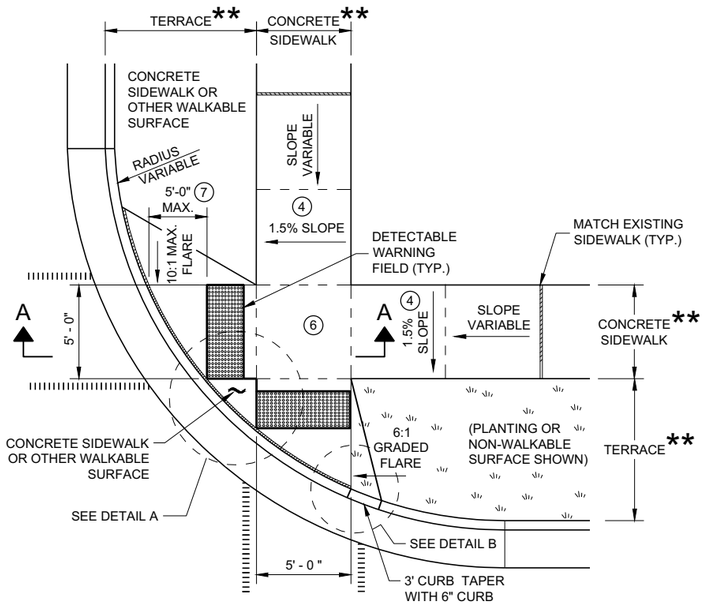



**DETAIL A**




**PLAN VIEW**
**CURB RAMP TYPE 2**
**(CENTER OF CORNER RADIUS)**

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

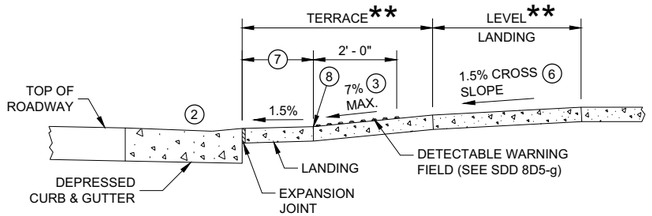
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

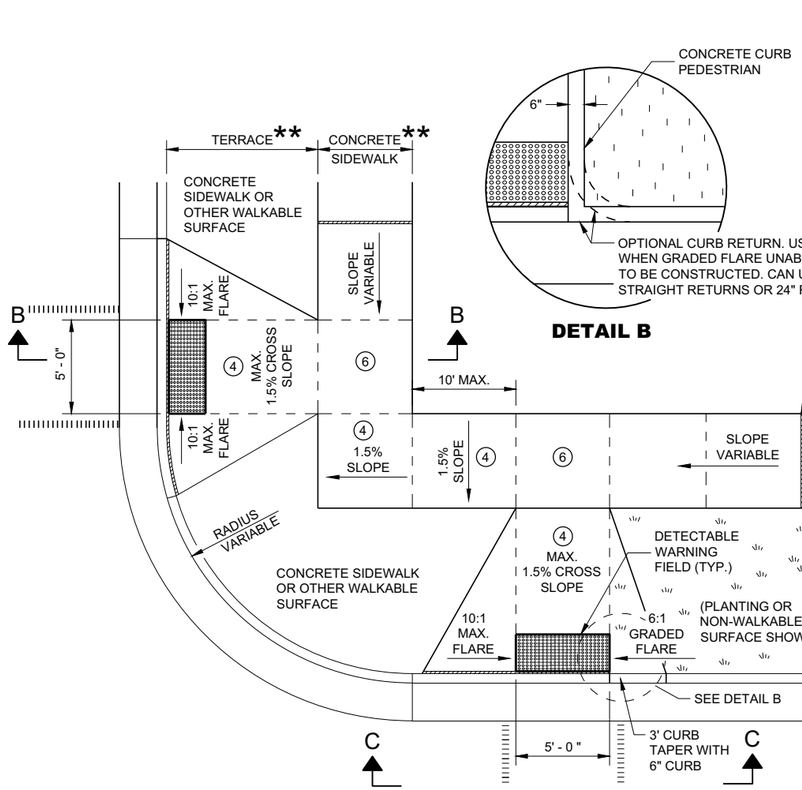
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.




**SECTION A - A FOR TYPE 2**

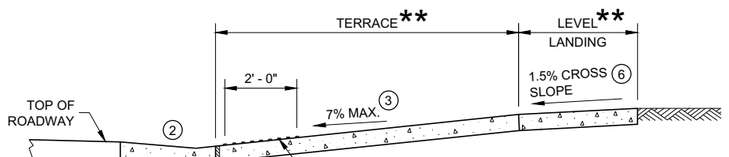
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS




**DETAIL B**

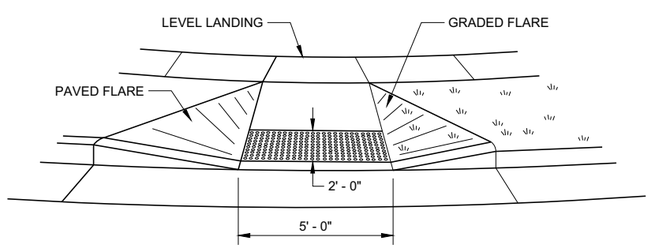
**PLAN VIEW**
**CURB RAMP TYPE 3**
**(OUTSIDE OF CROSSWALK AREA)**




**SECTION B - B FOR TYPE 3**

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)




**VIEW C - C FOR TYPE 3**

**CURB RAMPS TYPE 2 AND 3**

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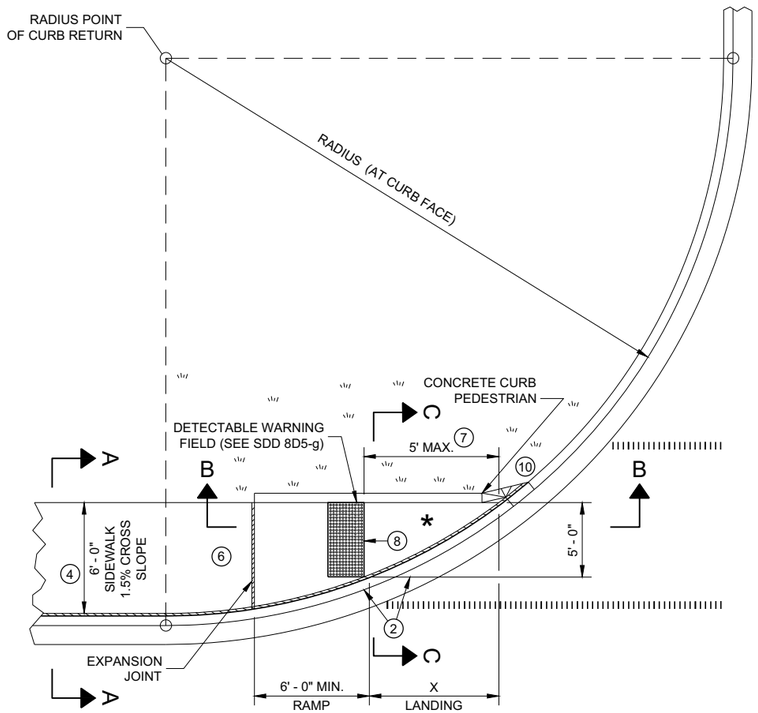
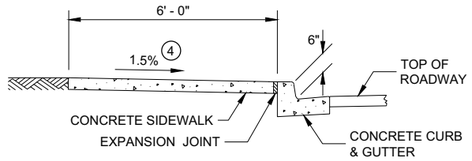



**PLAN VIEW**

**CURB RAMP TYPE 4A**

| RADIUS (AT CURB FACE) | X |
|---|---|
| 10 FEET | 4' - 7" |
| 15 FEET | 6' - 5½" |

INTERMEDIATE RADII CAN BE INTERPOLATED




**SECTION A - A FOR TYPE 4A**

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

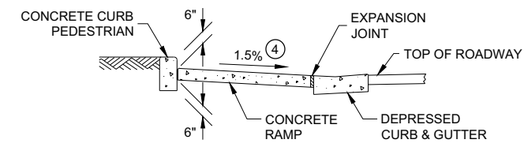
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

## LEGEND

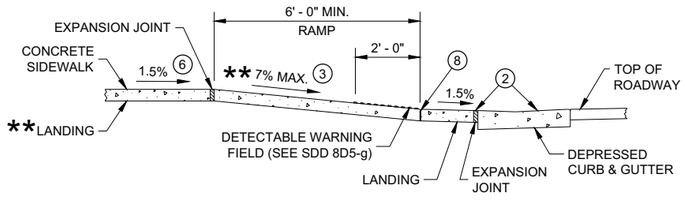
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



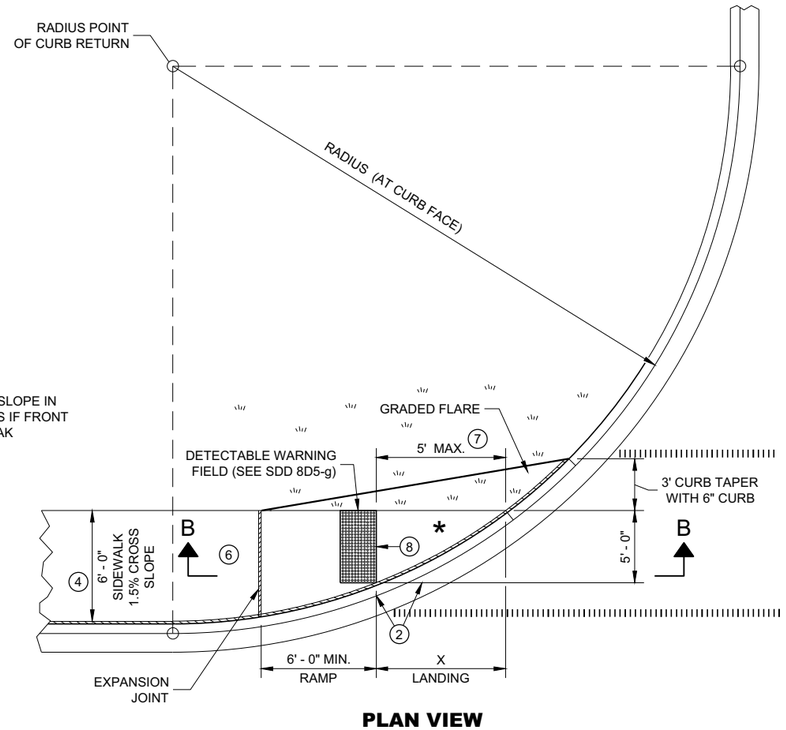

**SECTION C - C FOR TYPE 4A**




**SECTION B - B FOR TYPE 4A AND TYPE 4A1**

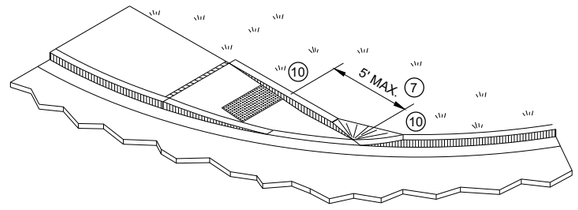
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

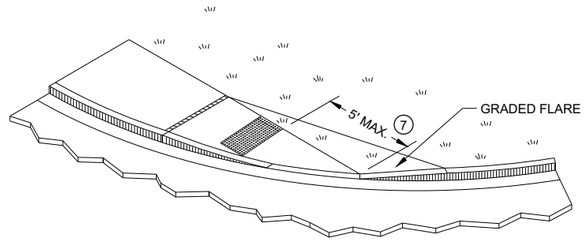



**PLAN VIEW**

**CURB RAMP TYPE 4A1**




**ISOMETRIC VIEW FOR TYPE 4A**




**ISOMETRIC VIEW FOR TYPE 4A1**

**CURB RAMPS**
**TYPE 4A AND 4A1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION





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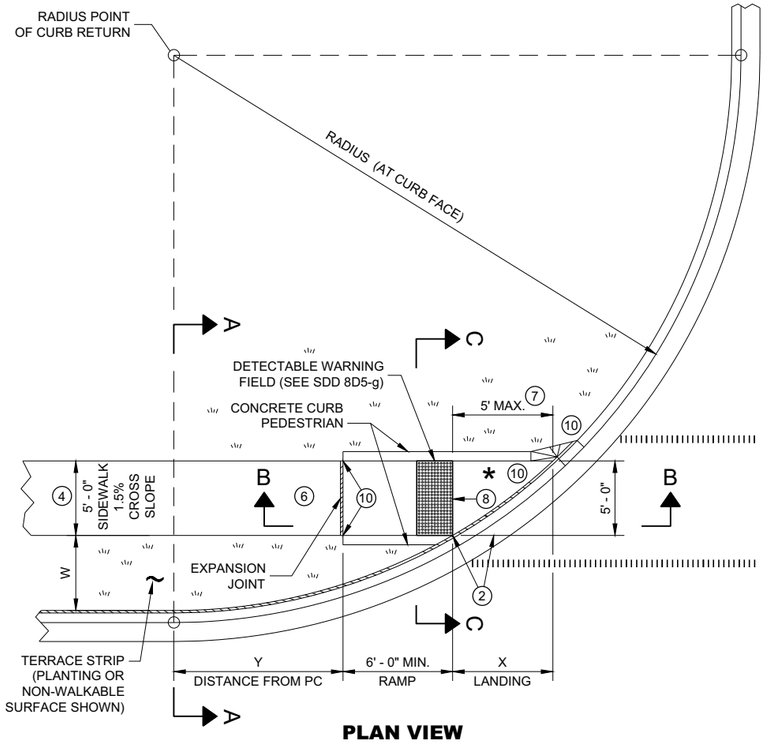
SDD 08D05 - 20c




**PLAN VIEW**

**CURB RAMP TYPE 4B**

| RADIUS (AT CURB FACE) | W = 3' - 0" | | W = 4' - 0" | | W = 5' - 0" | | W = 6' - 0" | | W = 7' - 0" | | W = 8' - 0" | | W = 9' - 0" | | W = 10' - 0" | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y | X | Y |
| 10 FEET | 2' - 10 ¼" | 0' - 5" | 2' - 1" | 1' - 4 ½" | 1' - 5" | 2' - 1" | 0' - 10" | 2' - 7 ½" | 0' - 3 ¼" | 3' - 0 ¼" | | | | | | |
| 15 FEET | 4' - 6 ¾" | 2' - 1 ¾" | 3' - 9" | 3' - 5 ¾" | 3' - 1 ¼" | 4' - 6" | 2' - 6 ¾" | 5' - 4 ½" | 2' - 1" | 6' - 1" | 1' - 8" | 6' - 8 ½" | 1' - 3 ¼" | 7' - 2 ½" | 0' - 10 ¾" | 7' - 7 ¼" |
| 20 FEET | 5' - 9 ¾" | 3' - 6 ½" | 4' - 11 ½" | 5' - 1 ¾" | 4' - 3 ¼" | 6' - 5 ½" | 3' - 8 ¾" | 7' - 7" | 3' - 3" | 8' - 6 ½" | 2' - 10" | 9' - 4 ½" | 2' - 5 ½" | 10' - 1 ¼" | 2' - 1 ¼" | 10' - 9" |
| 30 FEET | | | 6' - 9 ¼" | 7' - 11 ¼" | 6' - 0 ¼" | 9' - 8" | 5' - 5" | 11' - 1 ¾" | 4' - 10 ¾" | 12' - 5 ¾" | 4' - 5 ½" | 13' - 7 ¾" | 4' - 0 ¾" | 14' - 8 ½" | 3' - 8 ½" | 15' - 8 ¼" |
| 40 FEET | | | | | | | | | 6' - 1 ¾" | 15' - 8 ½" | 5' - 8" | 17' - 2" | 5' - 3" | 18' - 5 ¾" | 4' - 10 ¾" | 19' - 8 ¼" |
| 50 FEET | | | | | | | | | | | | | | | 5' - 10 ¼" | 23' - 2" |

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH




**SECTION C - C FOR TYPE 4B**

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

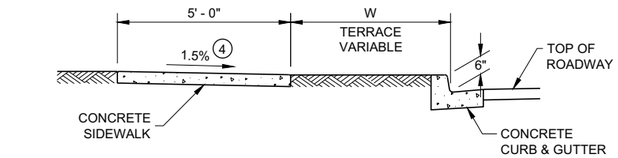
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

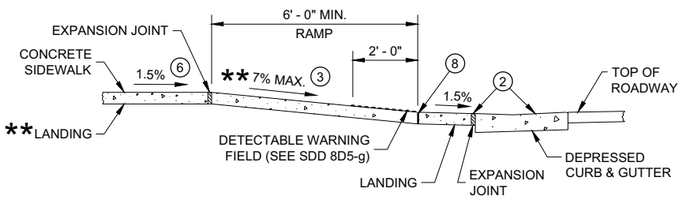
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



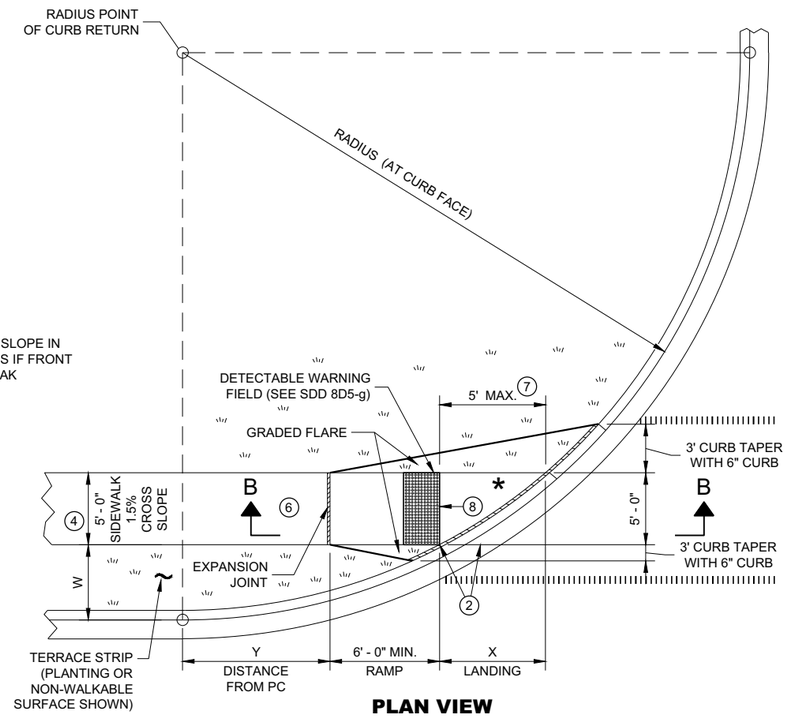

**SECTION A - A FOR TYPE 4B**




**SECTION B - B FOR TYPE 4B AND TYPE 4B1**

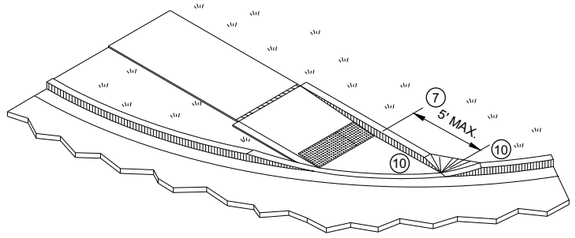
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

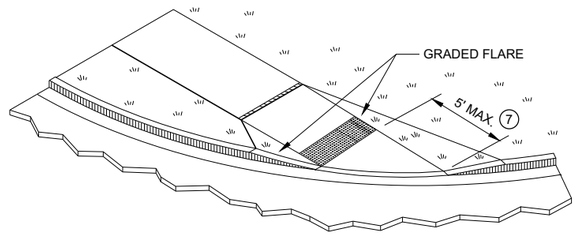



**PLAN VIEW**

**CURB RAMP TYPE 4B1**




**ISOMETRIC VIEW FOR TYPE 4B**




**ISOMETRIC VIEW FOR TYPE 4B1**

**CURB RAMPS TYPE 4B AND 4B1**

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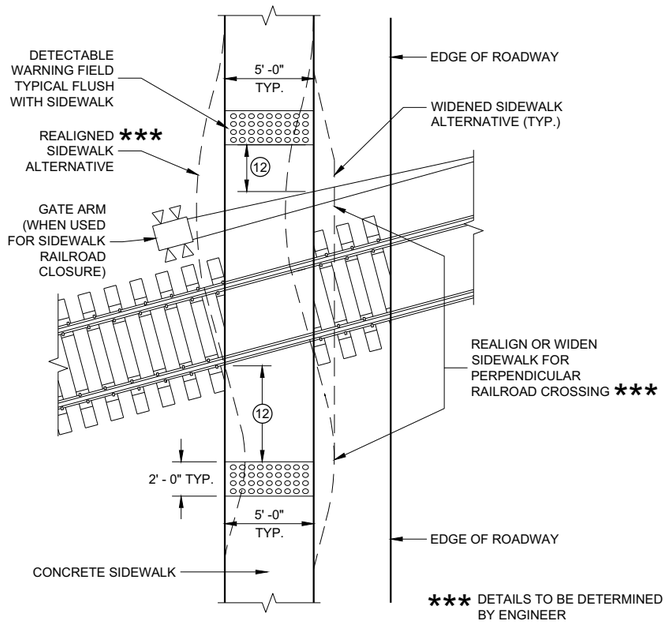
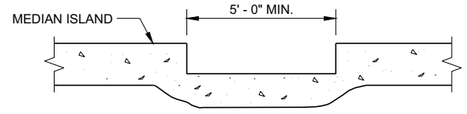
SDD 08D05 - 20d

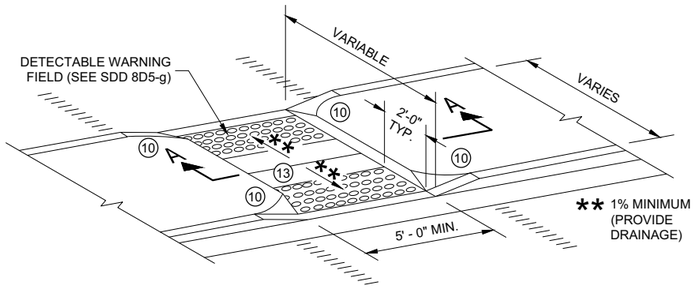



## CURB RAMP TYPE 8

### DETECTABLE WARNINGS AT RAILROAD CROSSING




### SECTION A - A FOR TYPE 5




## CURB RAMP TYPE 5

### MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

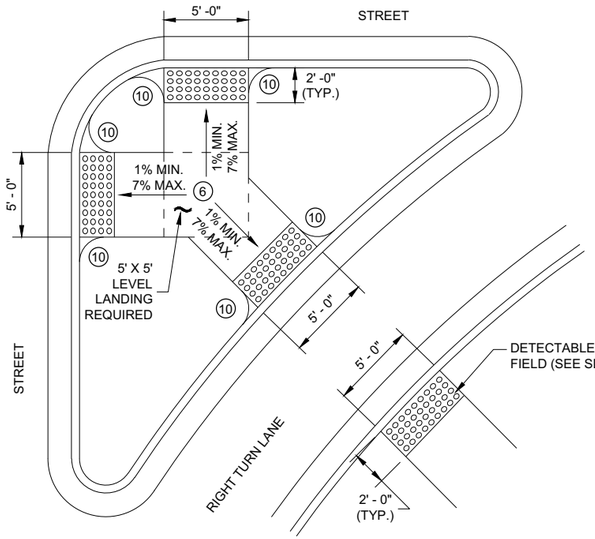
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

## LEGEND

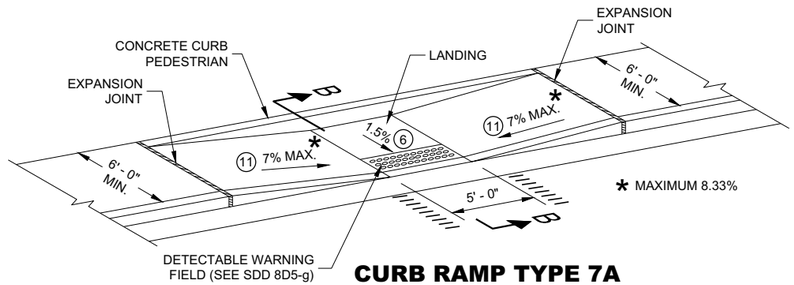
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)




## CURB RAMP TYPE 6

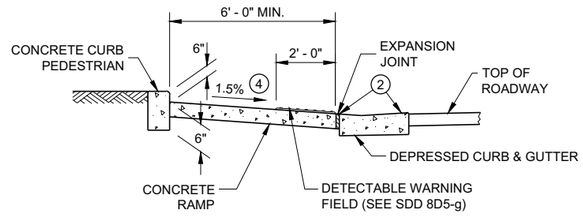
### DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS

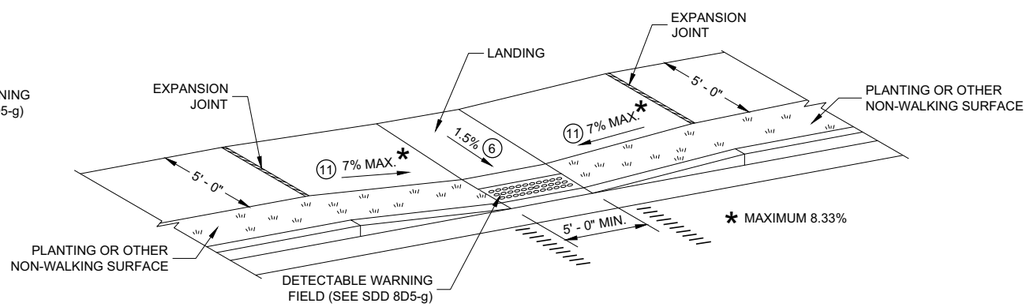



## CURB RAMP TYPE 7A

### MID BLOCK CROSSING




### SECTION B - B FOR TYPE 7A




## CURB RAMP TYPE 7B

### MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

**CURB RAMPS TYPE 5, 6, 7A, 7B & 8**

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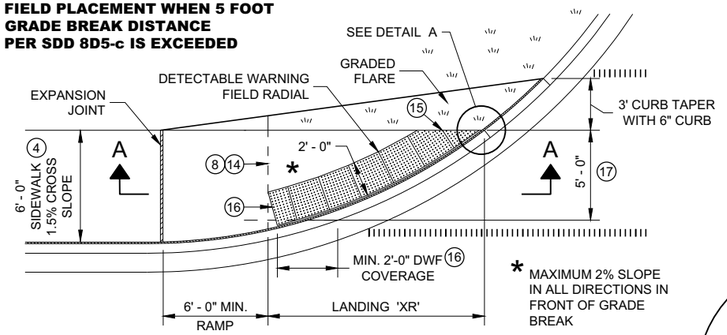
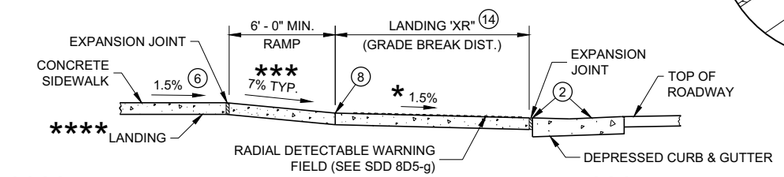
**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED**




**PLAN VIEW**

## CURB RAMP TYPE 4A1

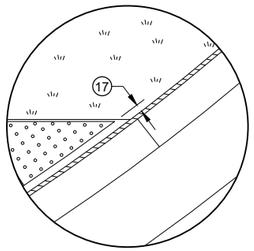
**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**




**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

**SECTION A - A FOR TYPE 4A1**




**DETAIL A**

## LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

## GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

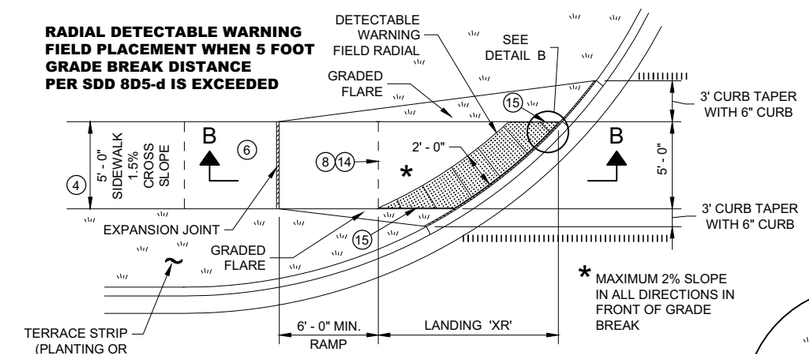
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

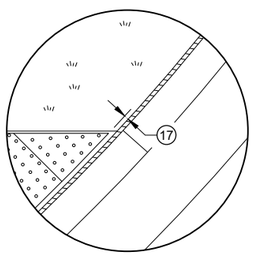
**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED**



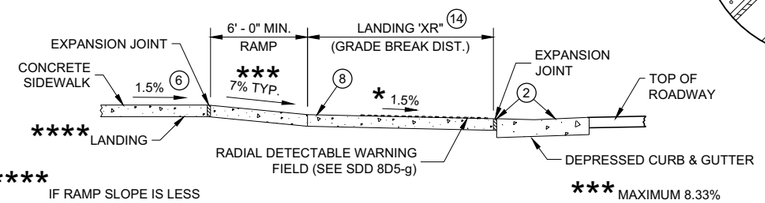

**PLAN VIEW**

## CURB RAMP TYPE 4B1

**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**




**DETAIL B**

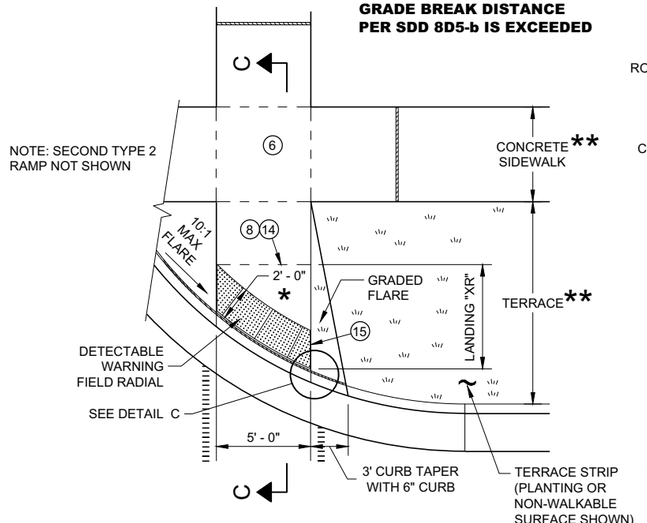



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

**SECTION B - B FOR TYPE 4B1**

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED**

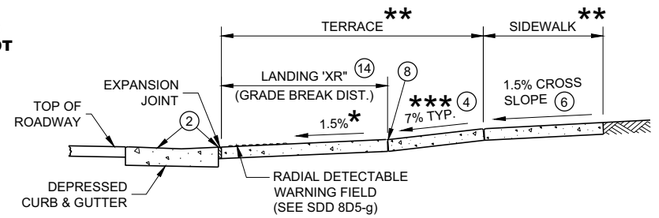



**PLAN VIEW**

## CURB RAMP TYPE 2

**(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

**(ON LINE WITH SIDEWALK)**

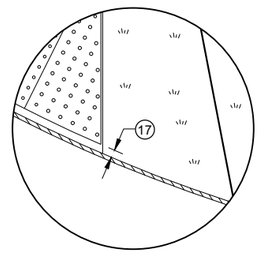



**SECTION C - C FOR TYPE 2**

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%




**DETAIL C**

## CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

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SDD 08D05 - 20f

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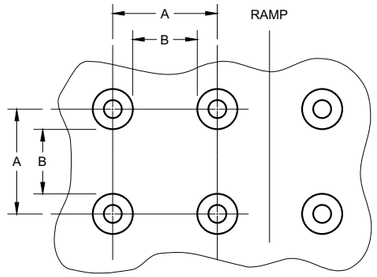
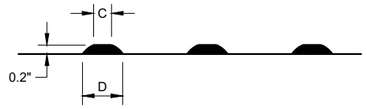
| | MIN. | MAX. |
|---|---|---|
| A | 1.6" | 2.4" |
| B | 0.65" | 1.5" |
| C | * | * |
| D | 0.9" | 1.4" |

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

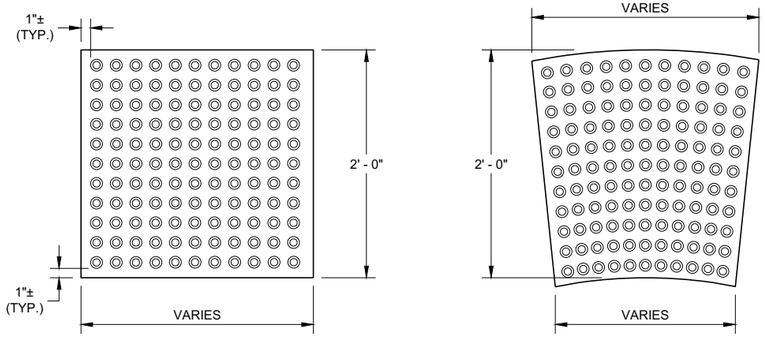



**PLAN VIEW**




**ELEVATION VIEW**

## TRUNCATED DOMES
### DETECTABLE WARNING PATTERN DETAIL




**RECTANGULAR PLATES**

**RADIAL PLATES**

**PLAN VIEW**
**DETECTABLE WARNING FIELDS (TYPICAL)**

## GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

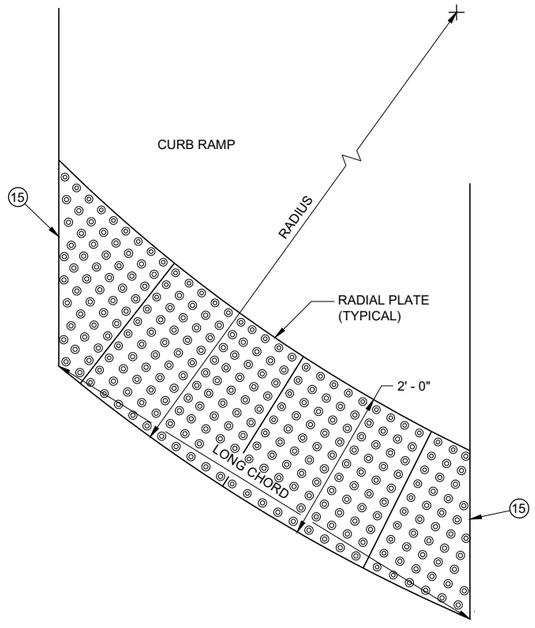
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

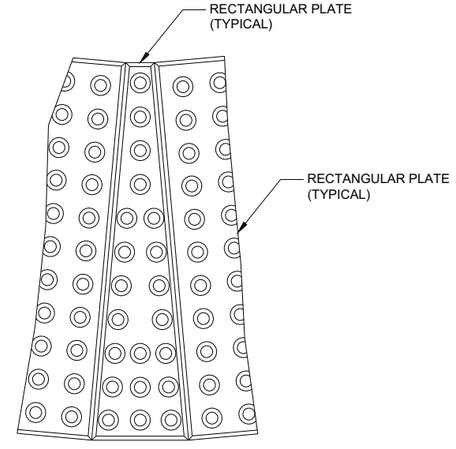
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.




**PLAN VIEW**
**RADIAL DETECTABLE WARNING FIELD ATTRIBUTES**



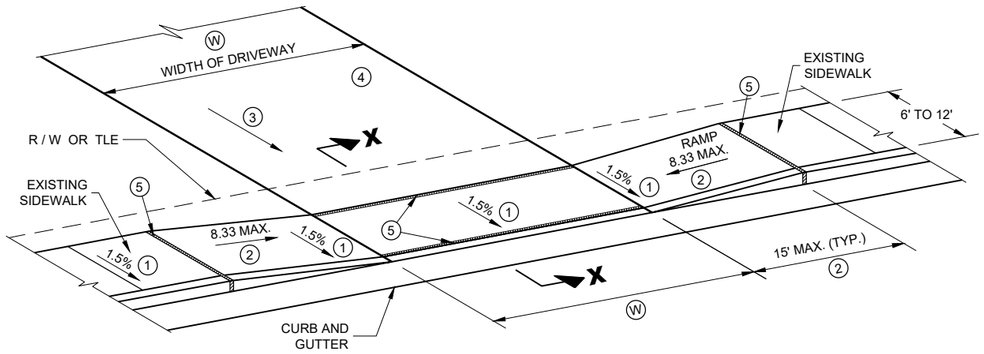

**PLAN VIEW**
**RADIAL WEDGE PLATE CONNECTION DETAIL**

| CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES | |
|---|---|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED | |
| May 2019 DATE | /S/ Rodney Taylor ROADWAY STANDARDS DEVE UNIT SUPERVISOR |

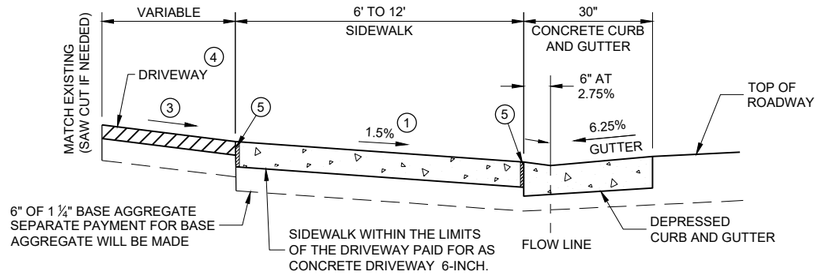
FHWA



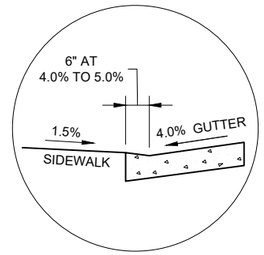
6
SDD 08D05 - 20g



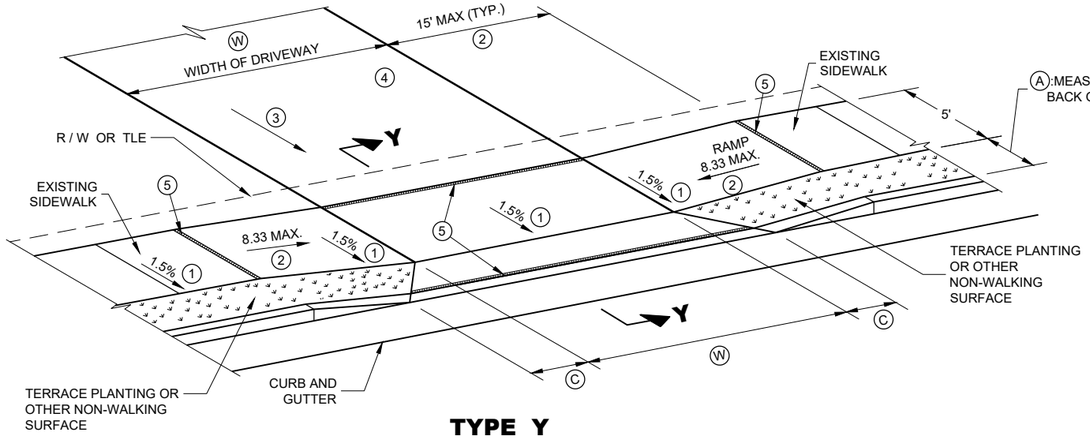

**TYPE X**
**SIDEWALK ABUTS CURB AND GUTTER**
**TERRACE VARIES 0 TO 3 FEET**




**SECTION X - X**




**SECTION X - X**
**4% GUTTER SLOPE**



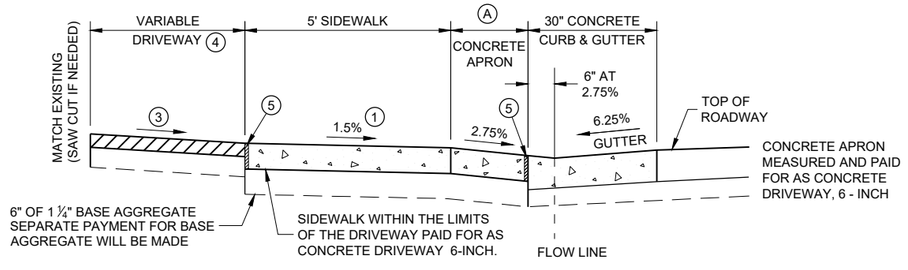

**TYPE Y**
**SIDEWALK WITH NARROWER TERRACE**
**TERRACE VARIES 4 TO 6 FEET**

W: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

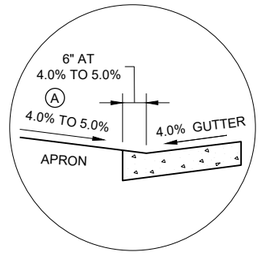
16' MIN. - 35' MAX. COMMERCIAL (CE)

**TABLE Y**

| Ⓐ FEET | Ⓒ FEET |
|---|---|
| 3.5' | 2.0' |
| 4.5' | 3.0' |
| 5.5' | 3.5' |




NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS




**SECTION Y - Y**
**4% GUTTER SLOPE**

**SECTION Y - Y**
**DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER**
**(URBAN AND SUBURBAN)**

## GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

Ⓦ IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

④ DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

⑤ ½" EXPANSION JOINT FILLER

**DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



SDD 08D18 - 03

SDD 08D18 - 03

## GENERAL NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

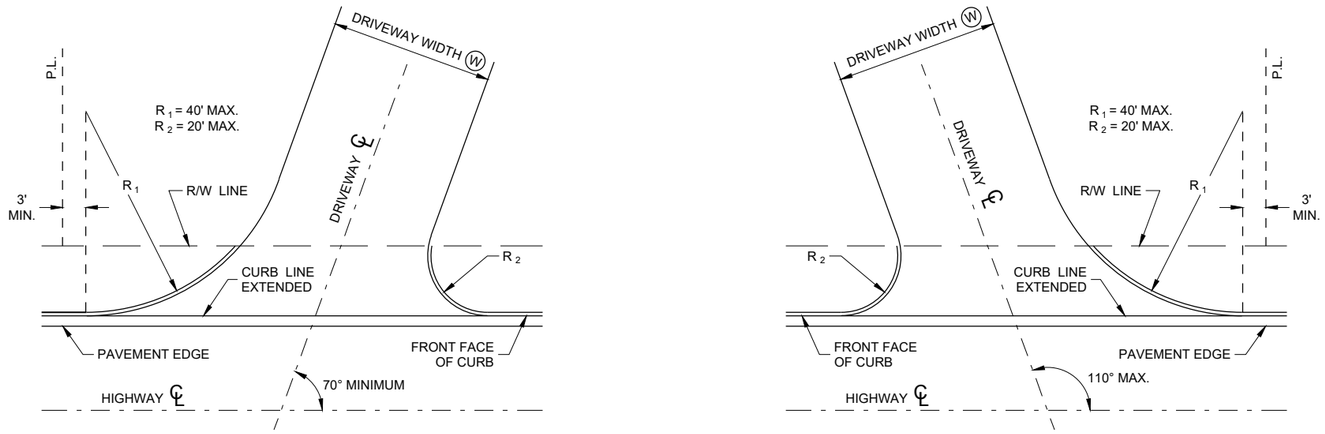
THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

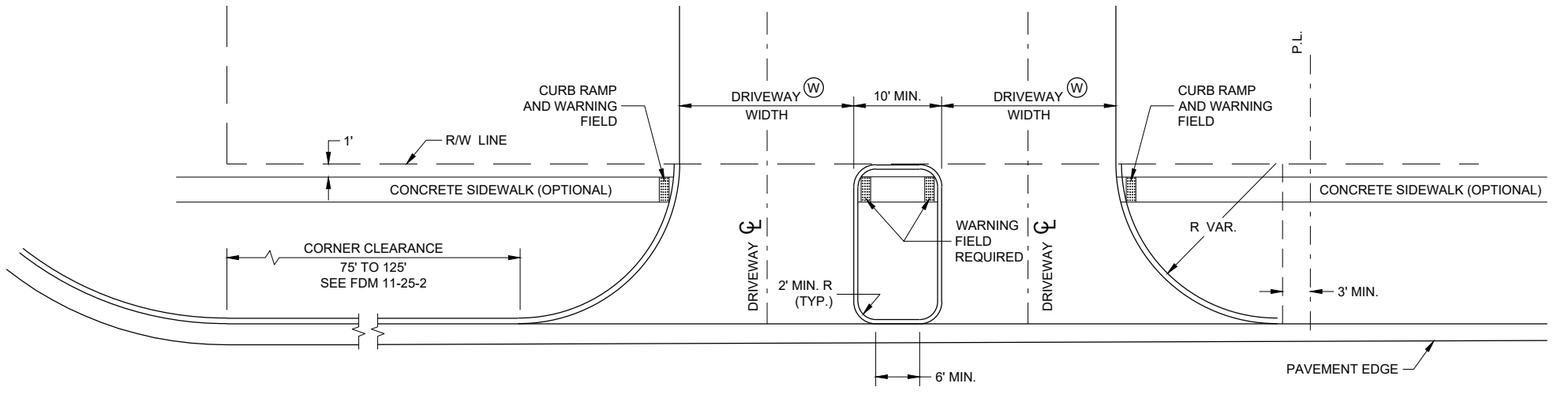
Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)




## SKEWED DRIVEWAY DETAILS (COMMERCIAL AND NON-COMMERCIAL)

### SIDEWALK NOT SHOWN




## DRIVEWAY LOCATION AND SPACING DETAILS

### SIDEWALK SHOWN

**DRIVEWAYS WITH CURB AND GUTTER RETURNS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

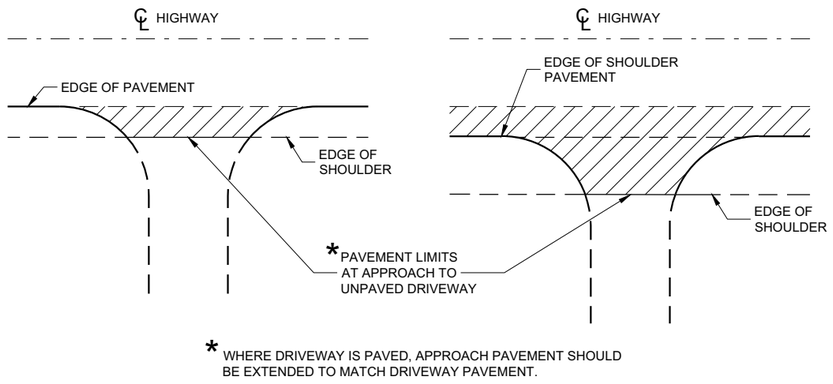
APPROVED
00-00-00 — DATE
/S/ <AUTHOR> — ROADWAY STANDARDS DEVE ENGINEER

FHWA



SDD 08D20 - 01

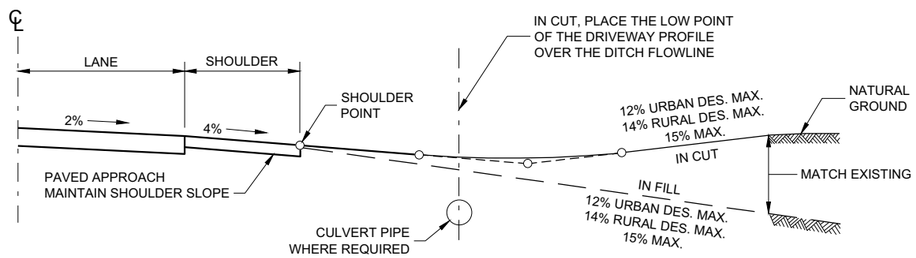
SDD 08D20 - 01



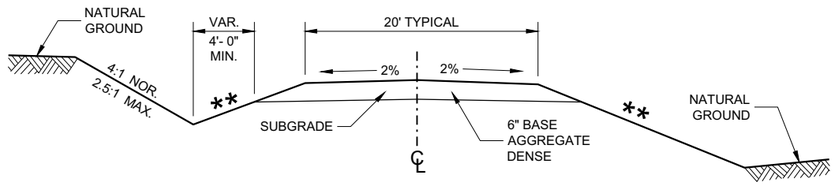

**PLAN VIEW**
(UNPAVED SHOULDER ON HIGHWAY)

**PLAN VIEW**
(PAVED SHOULDER ON HIGHWAY)

## RURAL DRIVEWAY INTERSECTION DETAIL
## (NO CURB AND GUTTER OR SIDEWALK)




## TYPICAL DRIVEWAY PROFILES

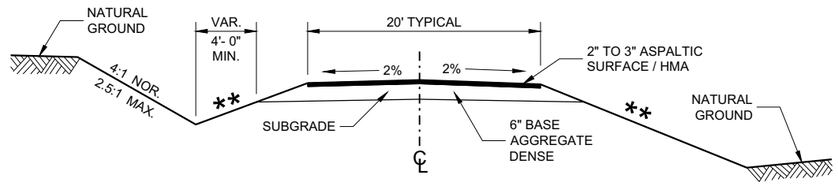



**IN CUT** **IN FILL**

## TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

| POSTED SPEED MPH | MAX. SLOPE |
|---|---|
| <35 | 4:1 |
| ≥ 35 TO < 60 | 6:1 |
| ≥60 | 10:1 |




**IN CUT** **IN FILL**

## TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 08D21 - 01

SDD 08D21 - 01

## DRIVEWAYS WITHOUT CURB AND GUTTER

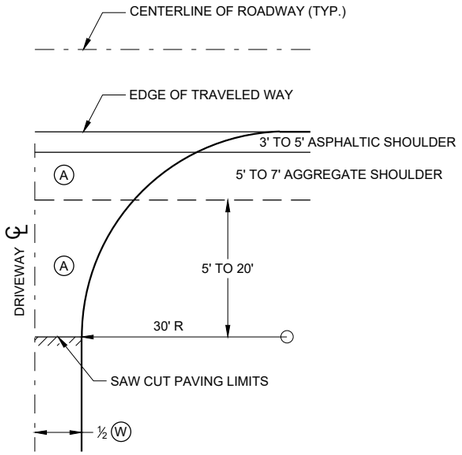
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

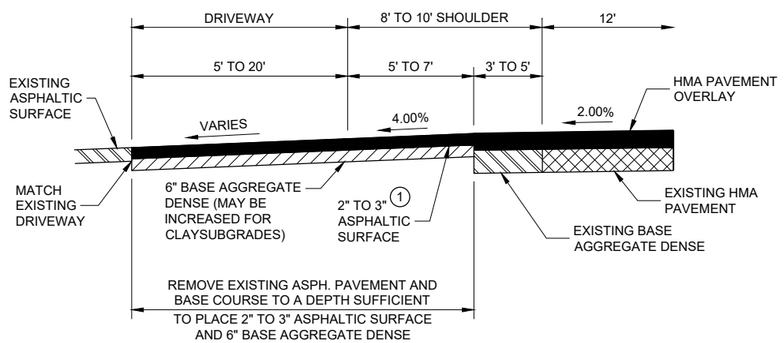
## GENERAL NOTES

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




**PLAN VIEW**

**HALF SECTION**



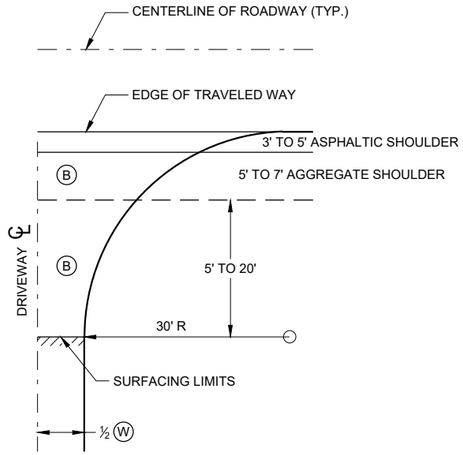

**PROFILE VIEW**

**RURAL ENTRANCE**
**WITH ASPHALTIC SURFACE**
**RESURFACING PROJECTS**

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

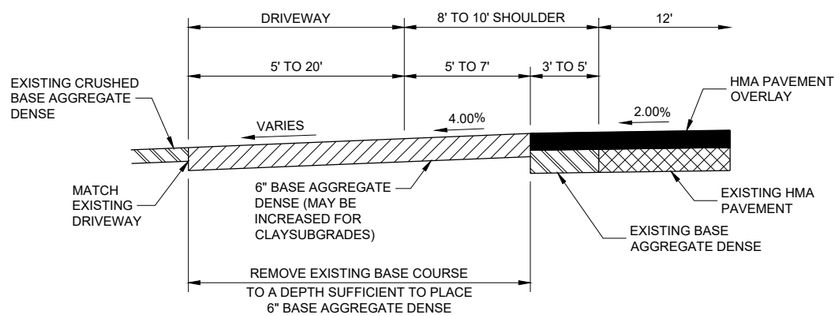
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.




**PLAN VIEW**

**HALF SECTION**




**PROFILE VIEW**

**RURAL ENTRANCE**
**WITH AGGREGATE SURFACE**
**6" BASE AGGREGATE DENSE**
**RESURFACING PROJECTS**

**DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL**

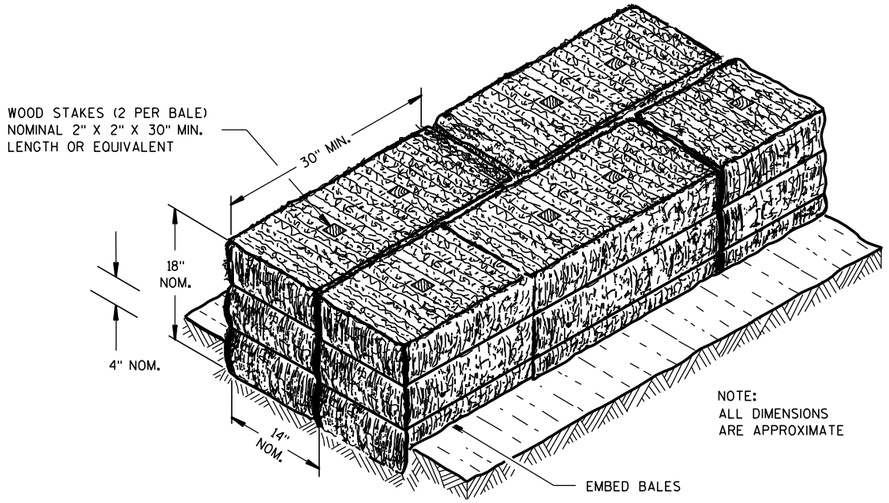
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

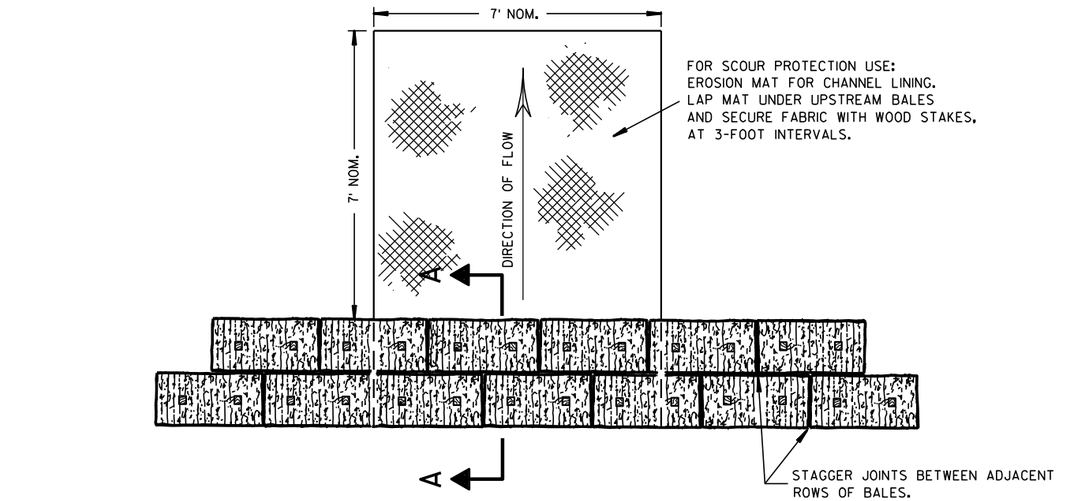



6

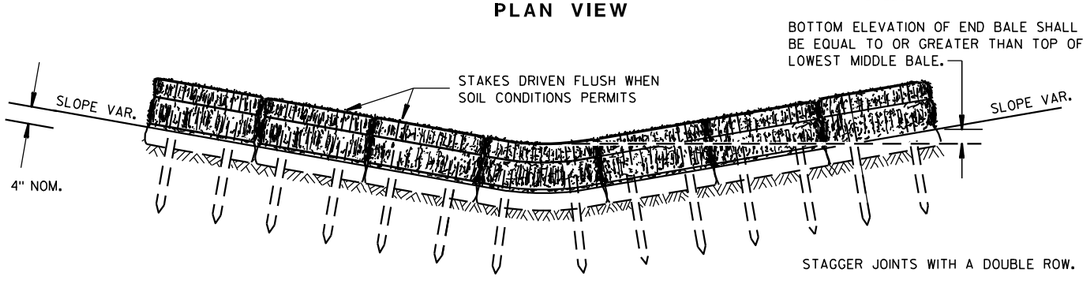

SDD 08D22 - 01




**SECTION A-A**




**PLAN VIEW**



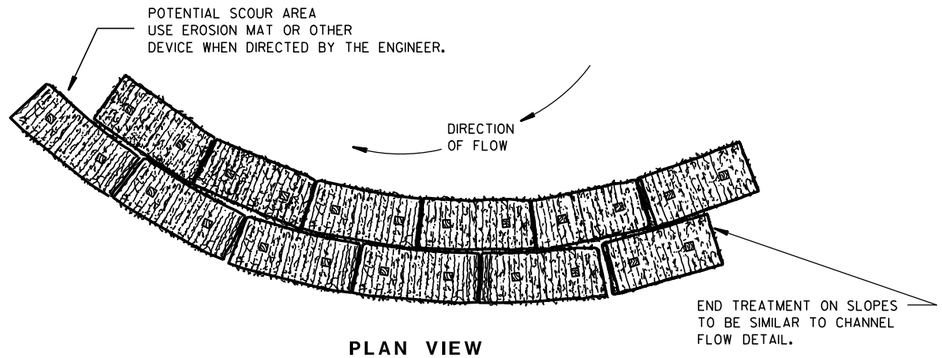

**FRONT ELEVATION**

## TEMPORARY DITCH CHECK USING EROSION BALES (1)

## GENERAL NOTES

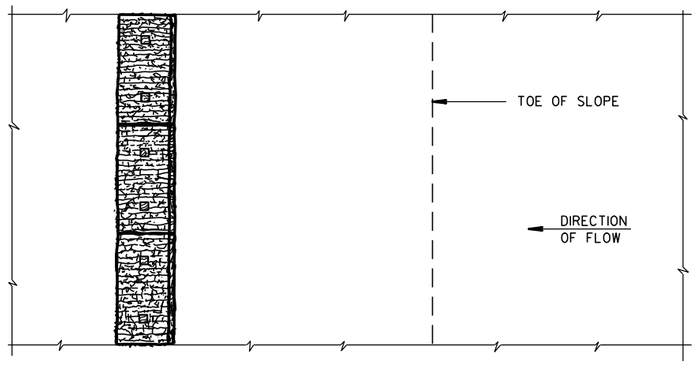
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

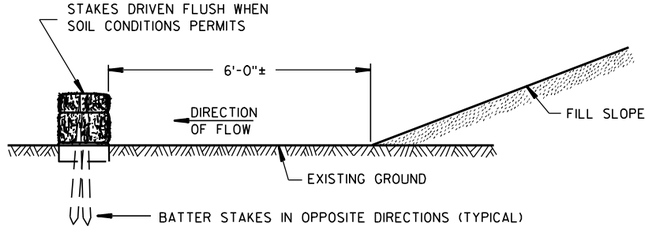



**PLAN VIEW**

WHEN ALTERING THE DIRECTION OF FLOW




**PLAN VIEW**




**FRONT ELEVATION**

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

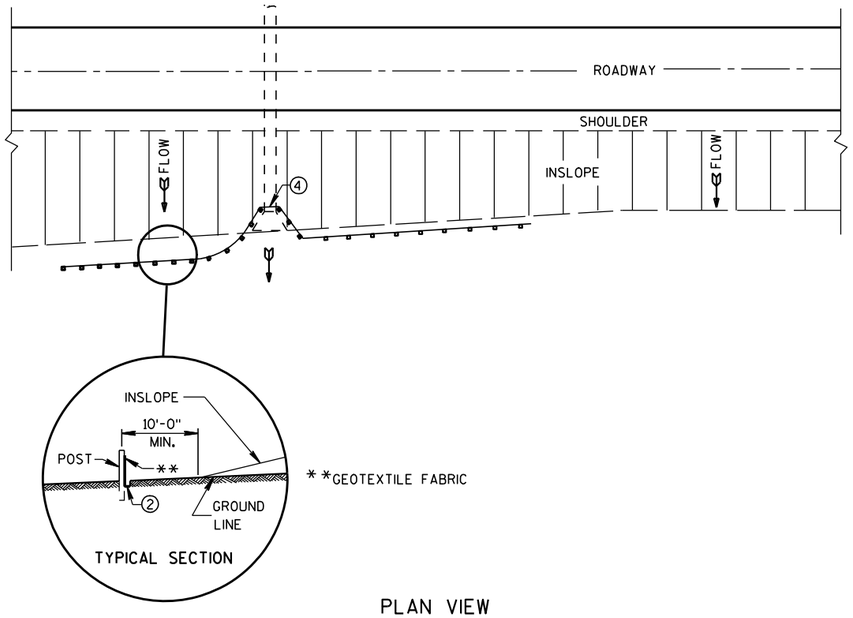
## EROSION BALES FOR SHEET FLOW

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

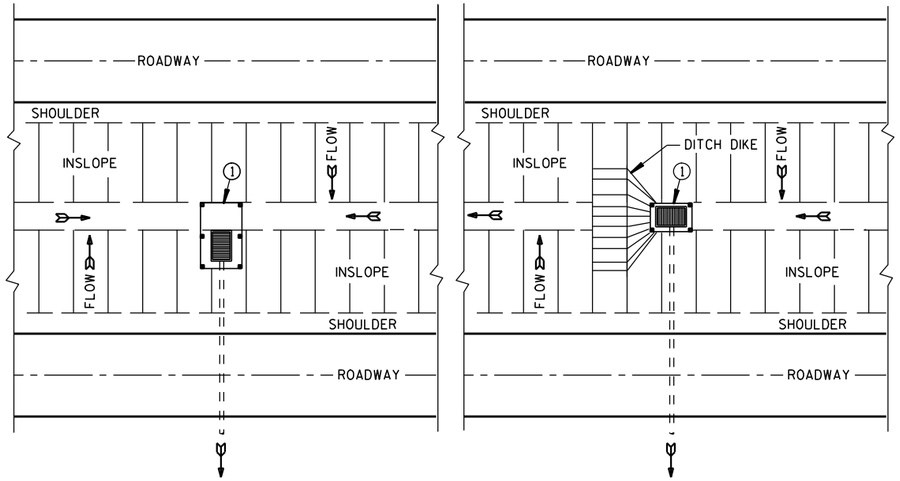
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA


6
S.D.D. 8 E 8-3




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE



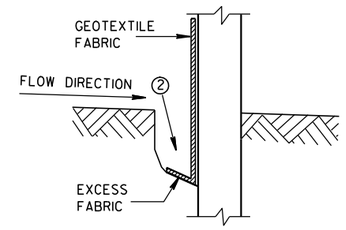

PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

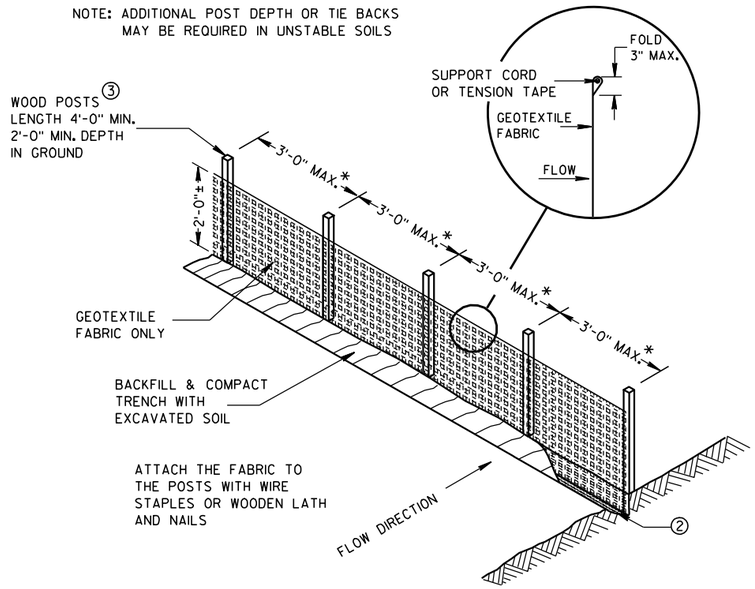
## GENERAL NOTES

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.

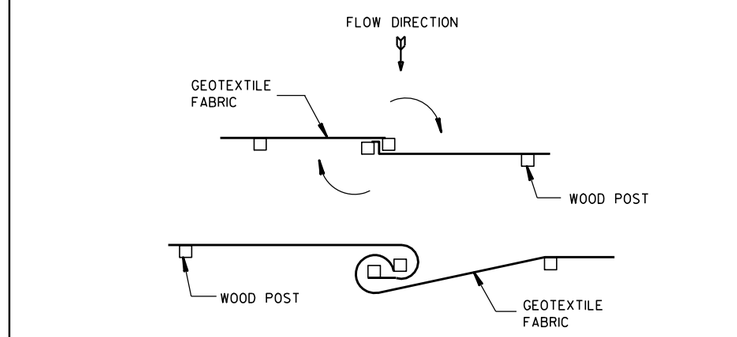



## TRENCH DETAIL

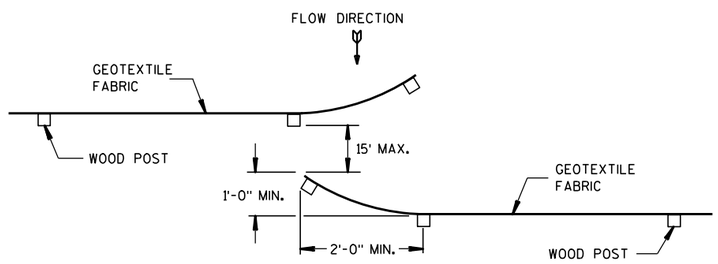



*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

## SILT FENCE

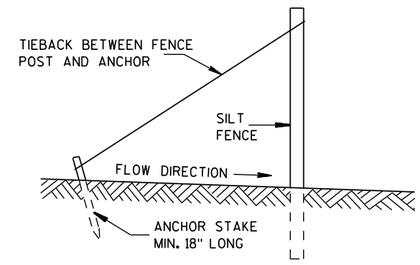



TWIST METHOD




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

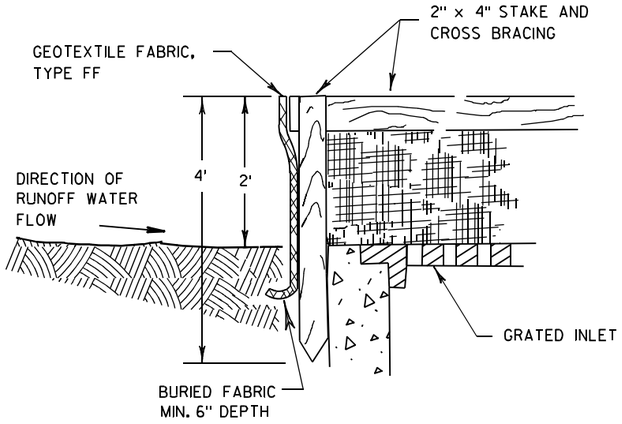


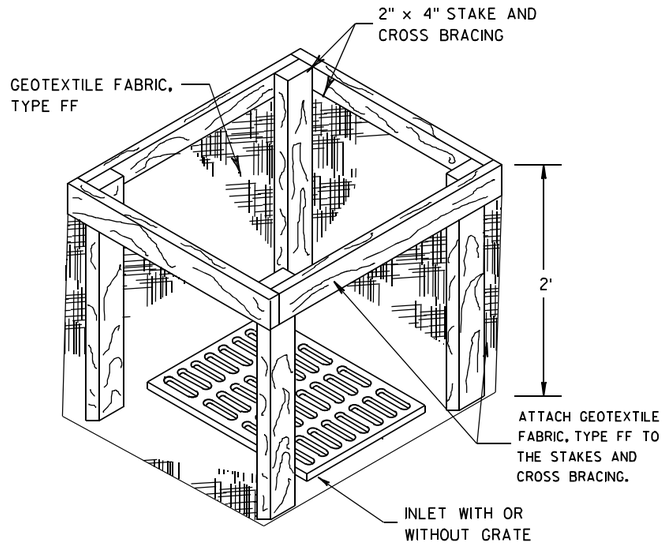
6

S.D.D. 8 E 9-6

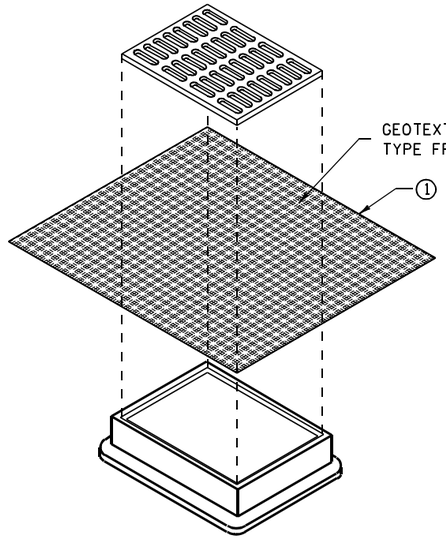
6

S.D.D. 8 E 9-6



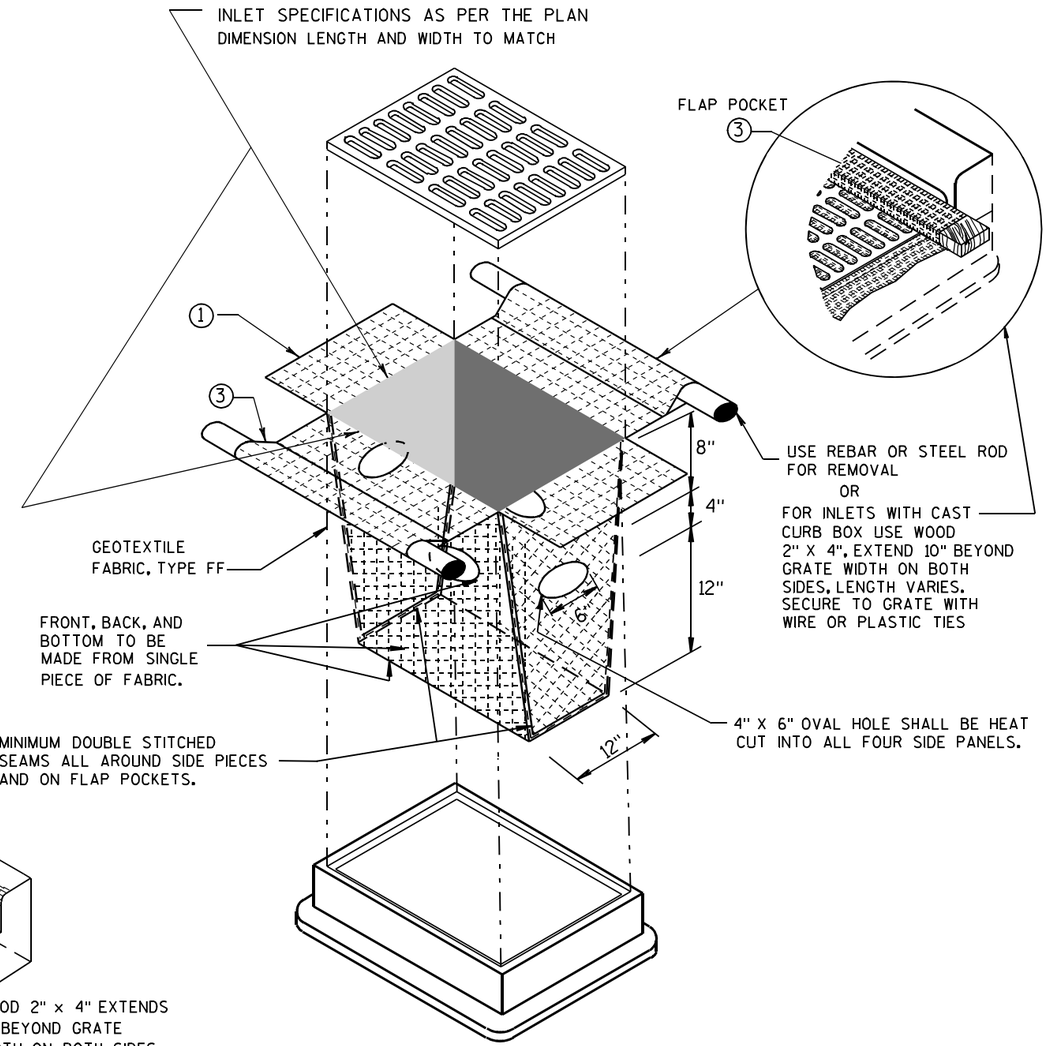




## INLET PROTECTION, TYPE A



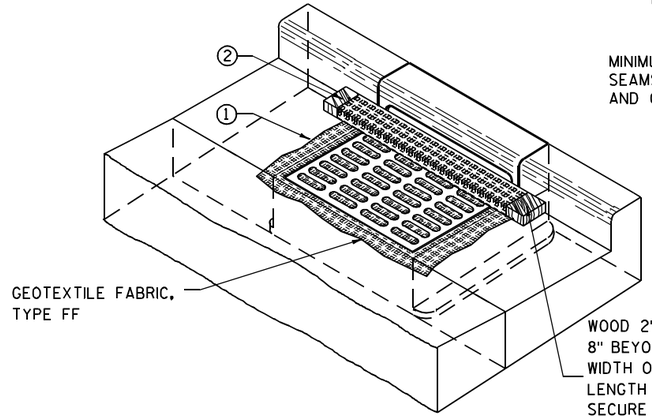

## INLET PROTECTION, TYPE B
## (WITHOUT CURB BOX)

(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.

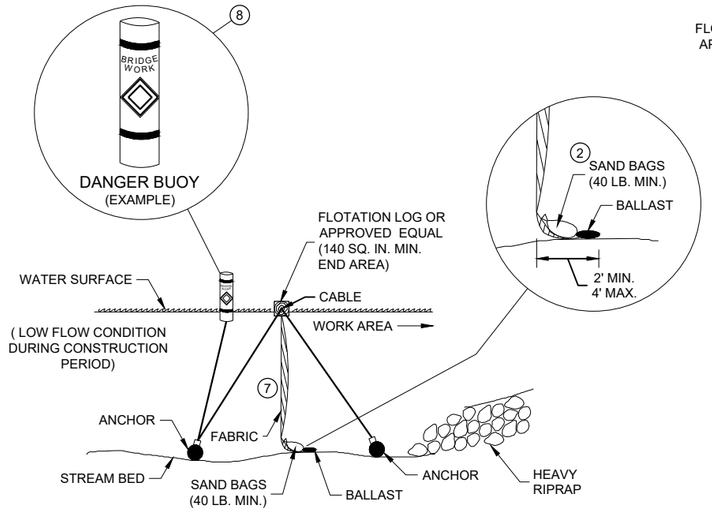
**INLET PROTECTION**
**TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

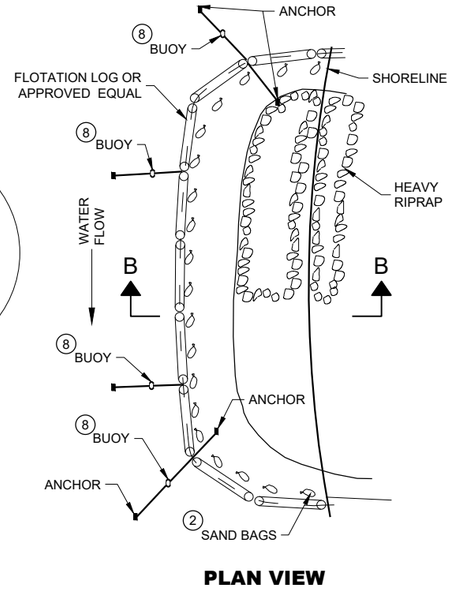
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA




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

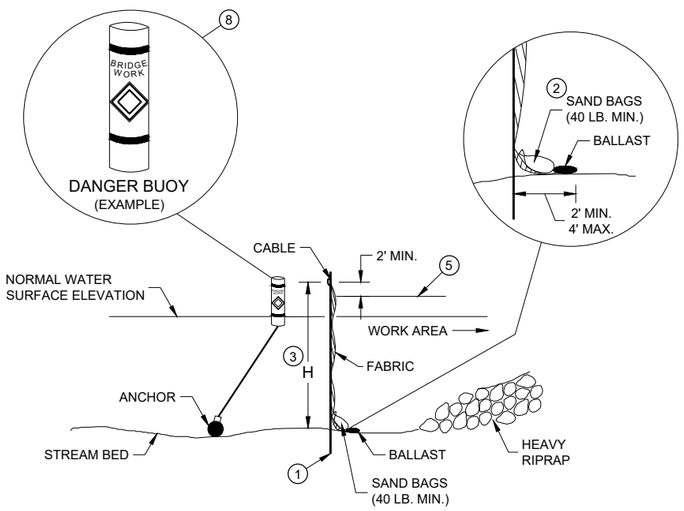



**SECTION B - B**

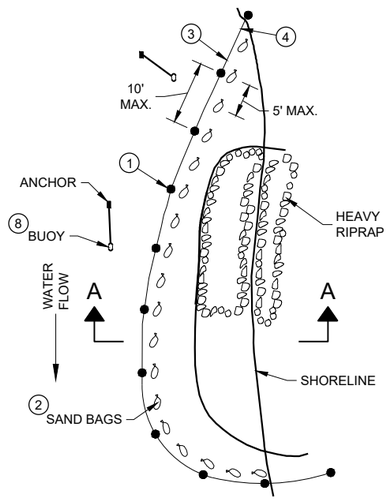



**PLAN VIEW**

**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) SAND BAGS 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 FEET, POST SPACING MAY NEED TO BE DECREASED.

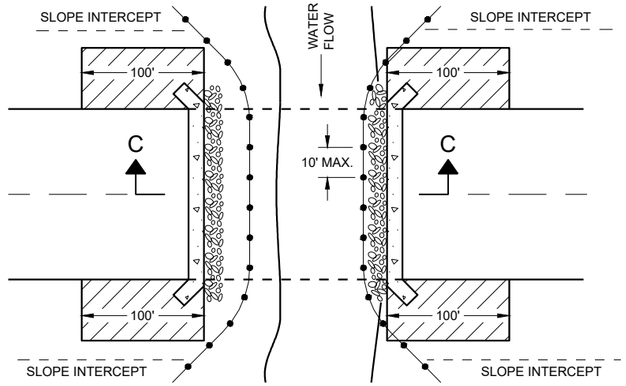
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(5) ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.

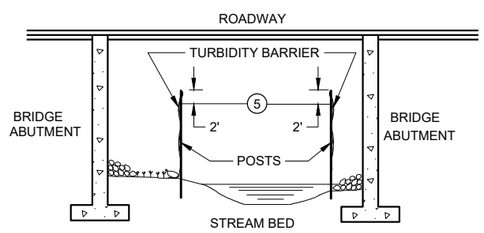
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(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
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA





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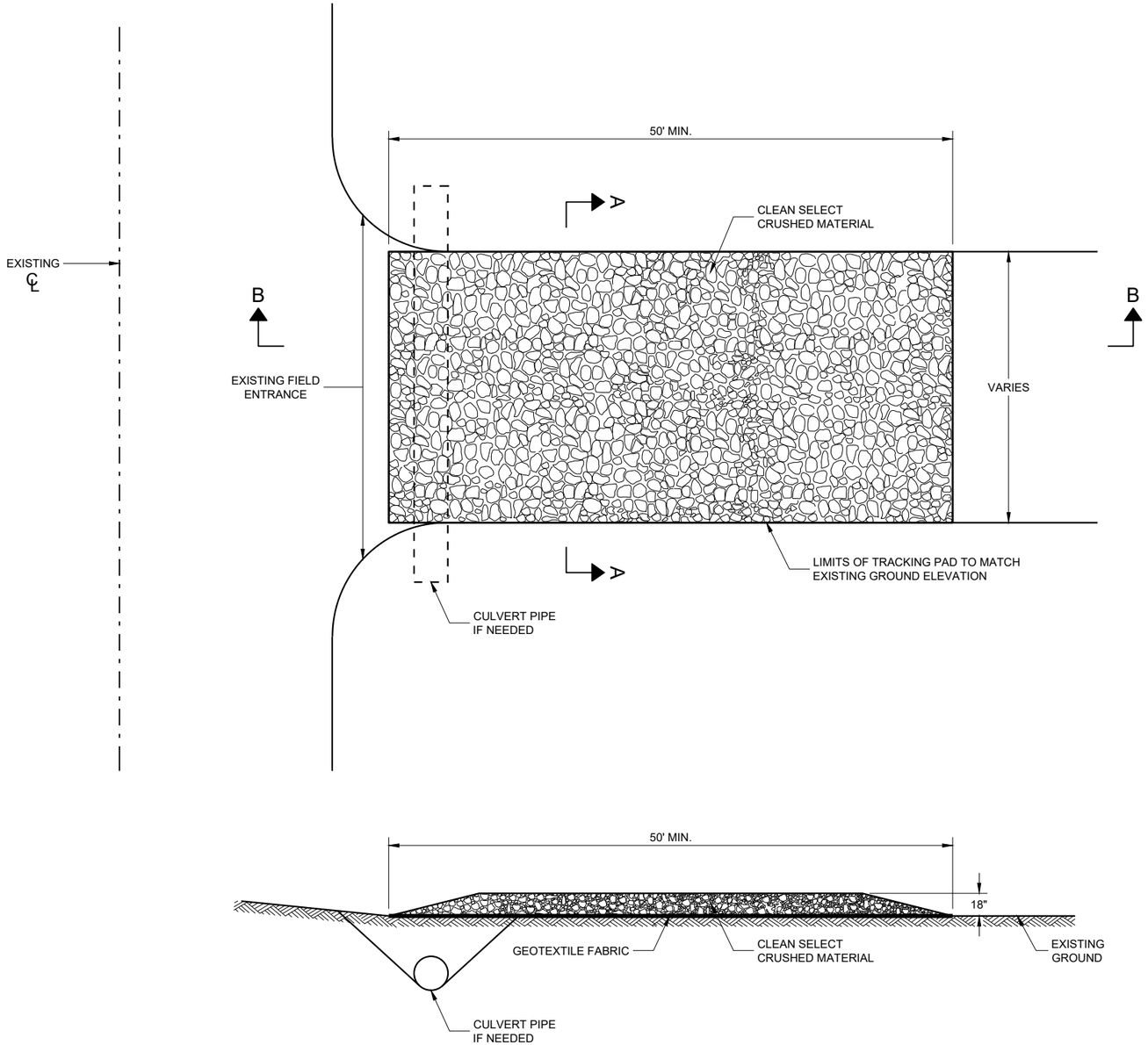
SDD 08E11 - 02







**SECTION B - B**

## GENERAL NOTES

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

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

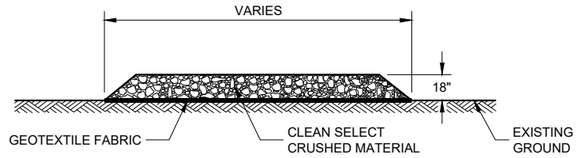
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

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

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

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




**SECTION A - A**

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SDD 08E14 - 01

# TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011
DATE

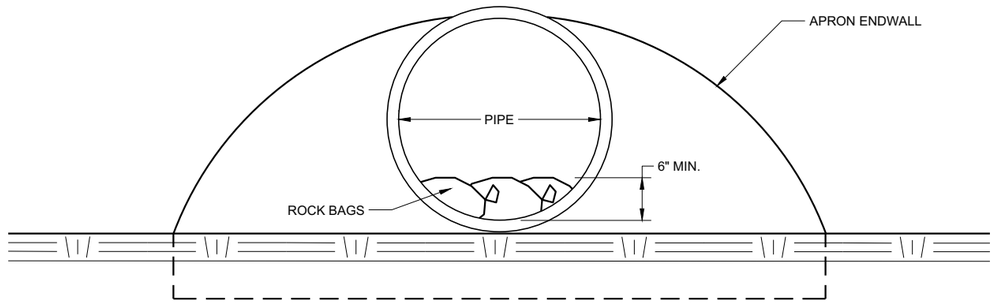
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

FHWA

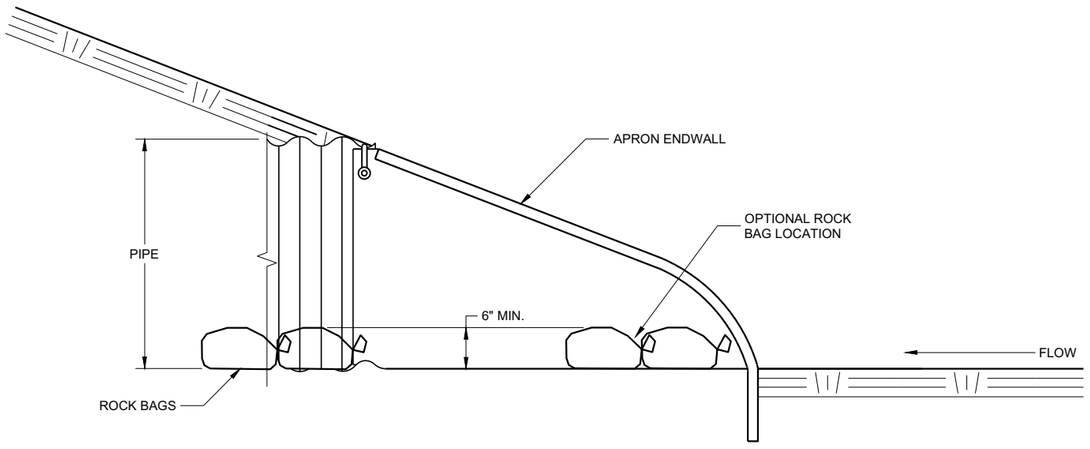


6

SDD 08E14 - 01




**END VIEW**




**SIDE VIEW**

## CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

| CULVERT PIPE CHECK | |
|---|---|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION | |
| APPROVED<br>May 2019<br>DATE | /S/ Daniel Schave<br>EROSION CONTROL ENGI |
| FHWA | 100 |

6

SDD 08E15 - 01

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SDD 08E15 - 01

## METAL APRON ENDWALLS

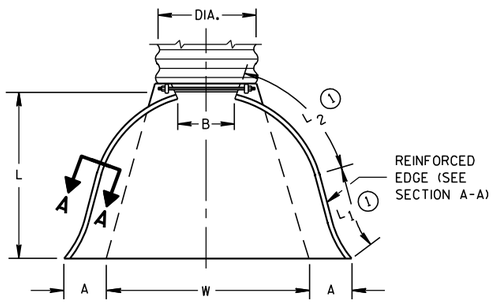
| PIPE DIA. (IN.) | MIN. THICK. (Inches) STEEL | MIN. THICK. (Inches) ALUM. | DIMENSIONS (Inches) A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 ① | L2 ① | W (±2") | APPROX. SLOPE | BODY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | .064 | .060 | 6 | 6 | 6 | 21 | 12 | 17 1/2 | 24 | 2 1/2 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

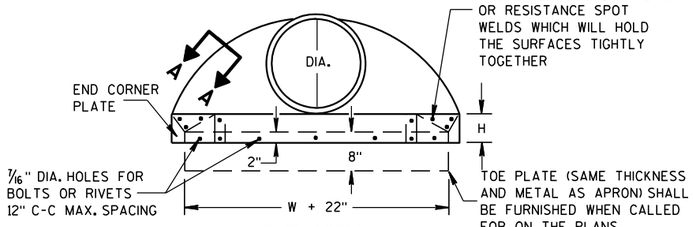
## REINFORCED CONCRETE APRON ENDWALLS

| 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 |

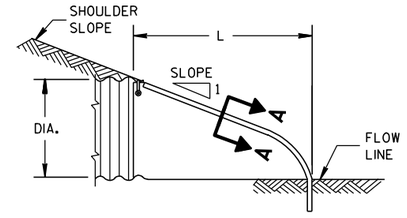
*MINIMUM
**MAXIMUM




PLAN VIEW

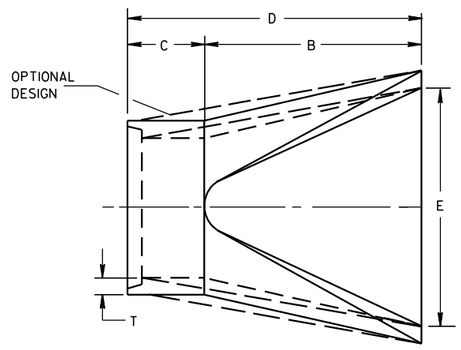



END VIEW

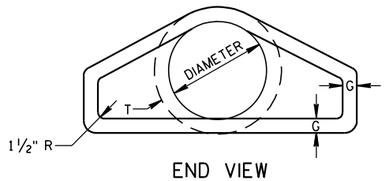



SIDE ELEVATION

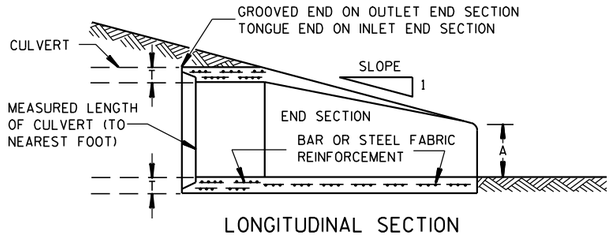
## METAL ENDWALLS




PLAN

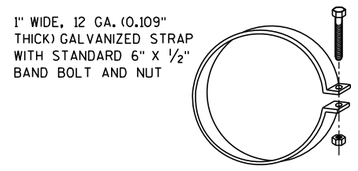



END VIEW



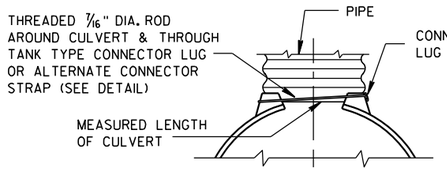

LONGITUDINAL SECTION

## CONCRETE ENDWALLS

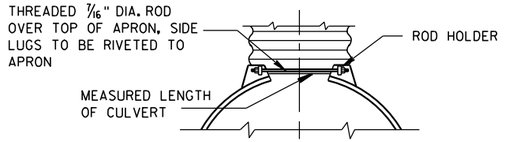



ALTERNATE FOR TYPE 1 CONNECTION

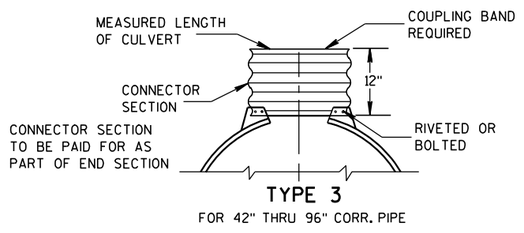
## END SECTION CONNECTOR STRAP



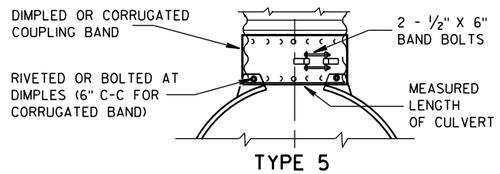

TYPE 1
FOR 12" THRU 24" CORR. PIPE




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

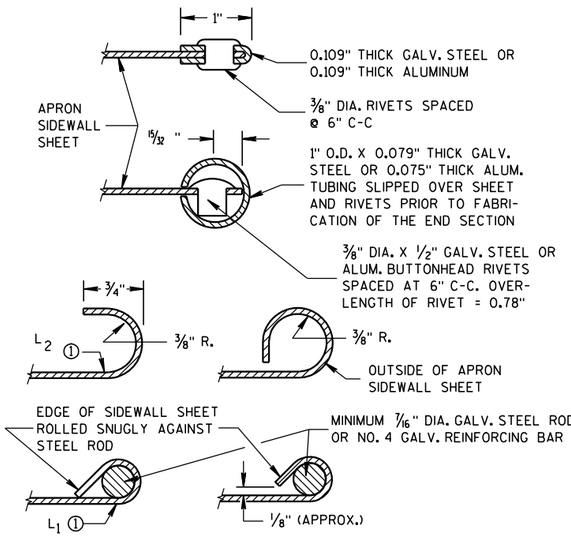
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

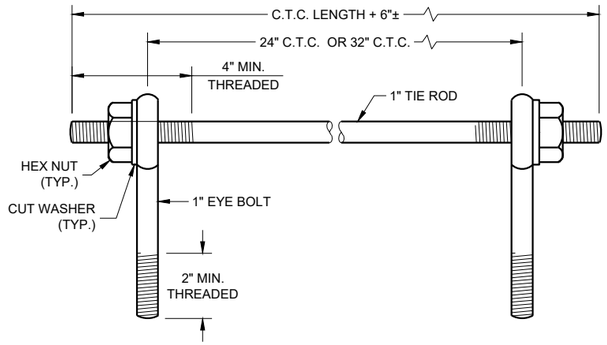
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

# APRON ENDWALLS FOR CULVERT PIPE

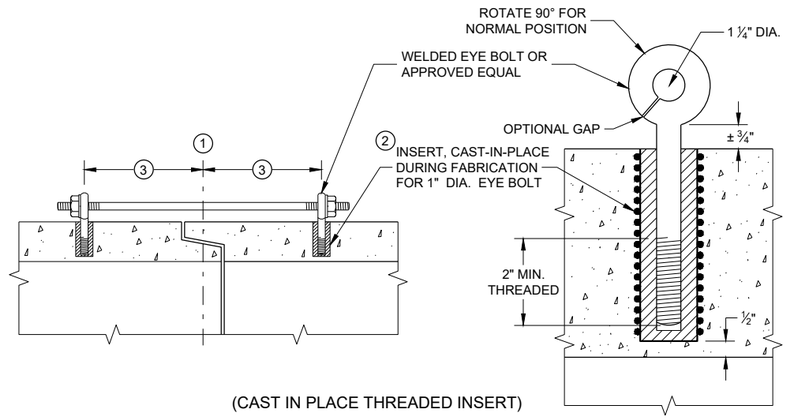
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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


6
S.D.D. 8 F 1-11




**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) CENTER LINE 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.

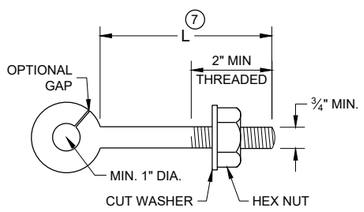
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

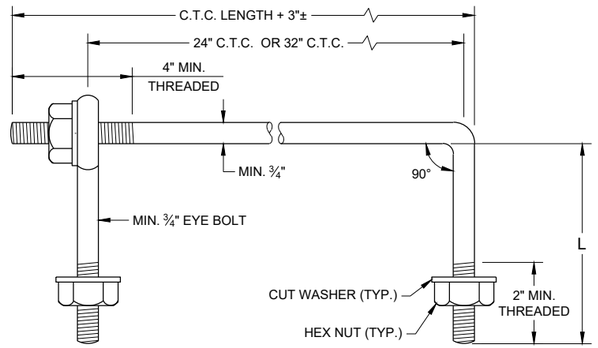
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

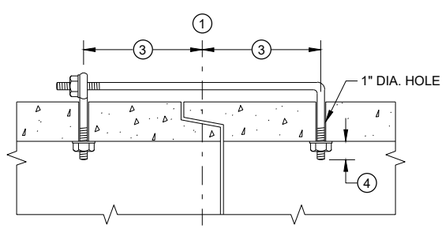



**EYE BOLT** (7)

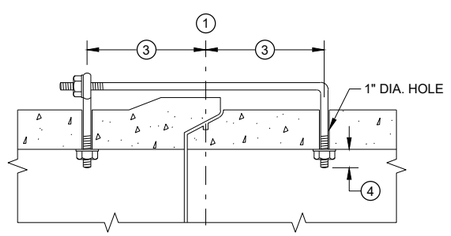
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.




**EYE BOLT AND TIE ROD**




(TONGUE AND GROOVE PIPE)




(MODIFIED BELL PIPE)

**LONGITUDINAL SECTION**

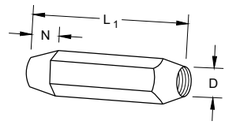
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

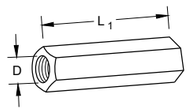
ADJUSTABLE TIE ROD TABLE

| PIPE DIAMETER | TIE ROD DIAMETER | D | $L_1$ | N |
|---|---|---|---|---|
| 12 - 60 | ⅝ | ⅝ | 5 | ½ |
| 66 - 84 | ¾ | ¾ | 5 | ½ |
| 90 - 144 | 1 | 1 | 7 | 1 7/16 |

DIMENSIONS SHOWN ARE IN INCHES



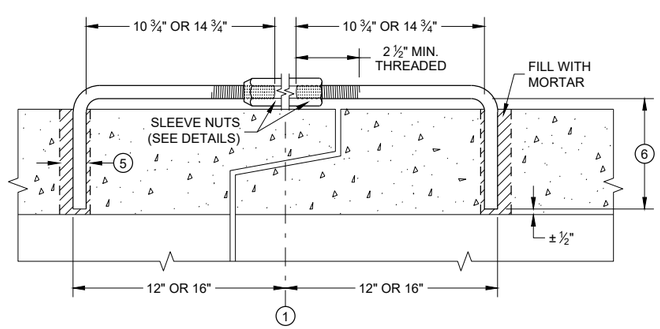

TAPERED




PLAIN

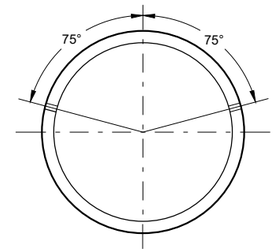
RIGHT AND LEFT THREADS

**SLEEVE NUTS**



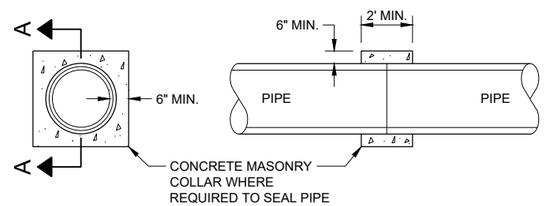

**LONGITUDINAL SECTION**

## 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

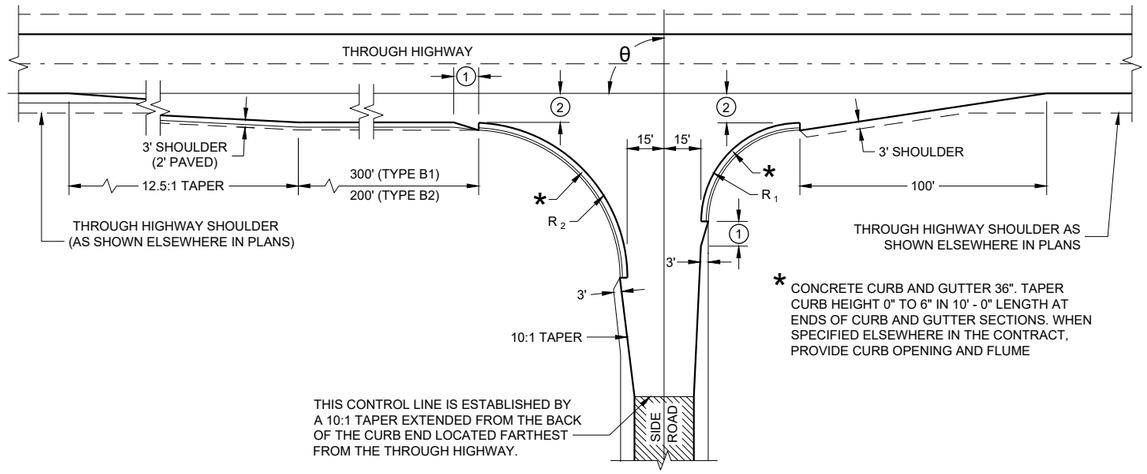
APPROVED
November 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



SDD 08F04 - 08

SDD 08F04 - 08




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

## TYPE "B1" AND "B2"

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 |

## 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.

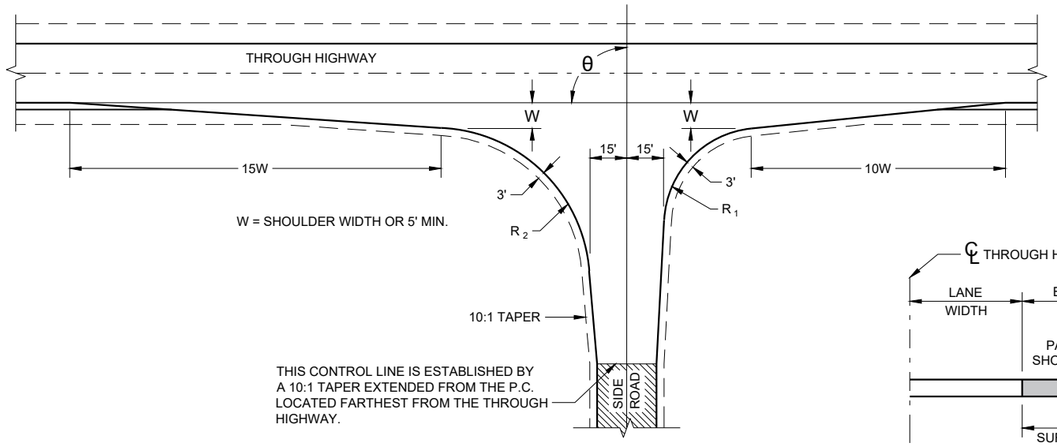
(1) 10-FT TYPICAL.

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

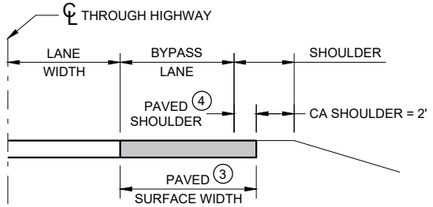
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

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

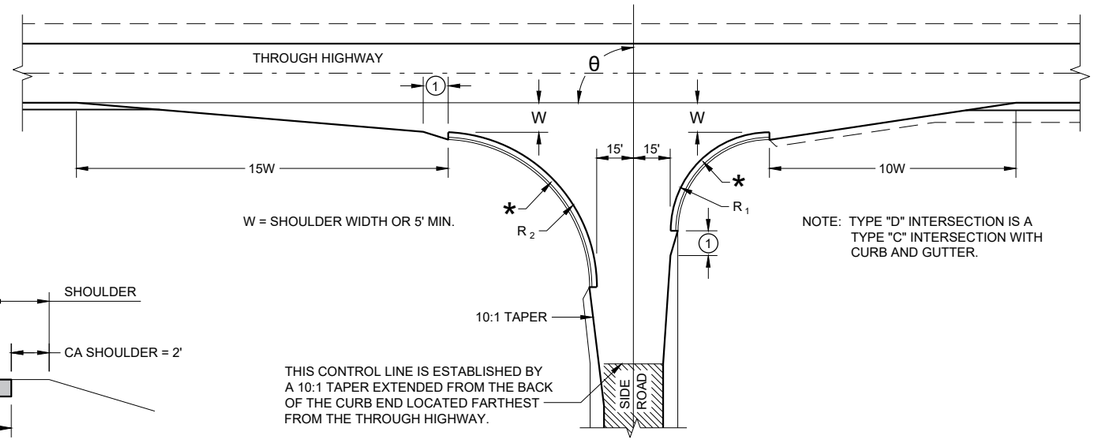
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.




## TYPE "C"

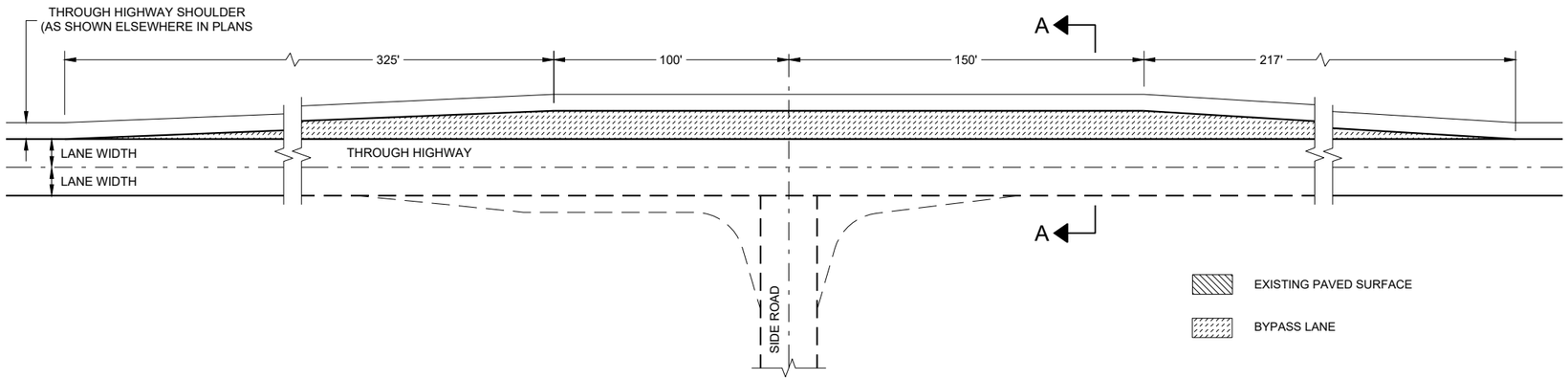



## SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)




NOTE: TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB AND GUTTER.

## TYPE "D"




## TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION





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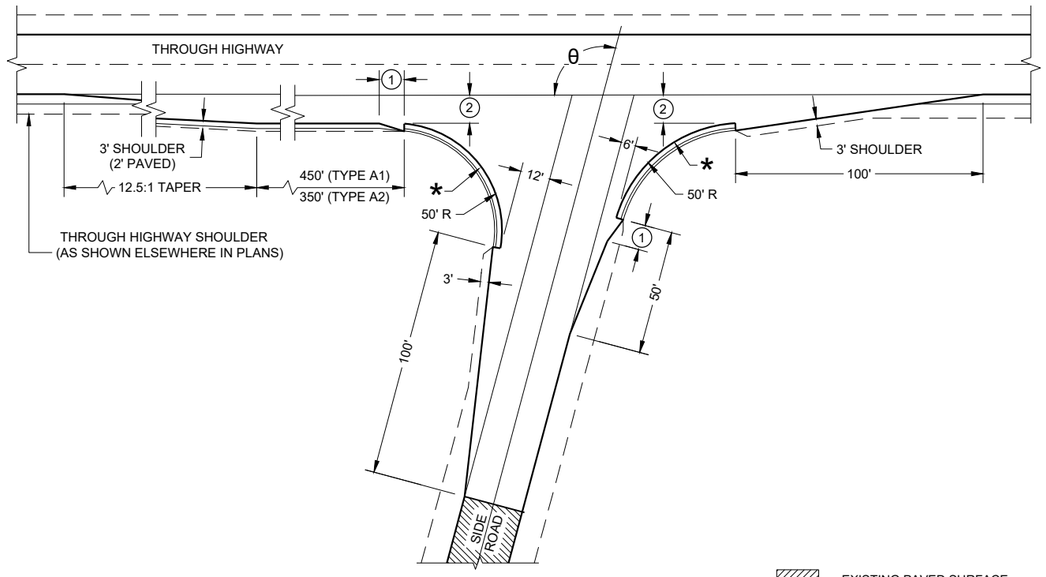
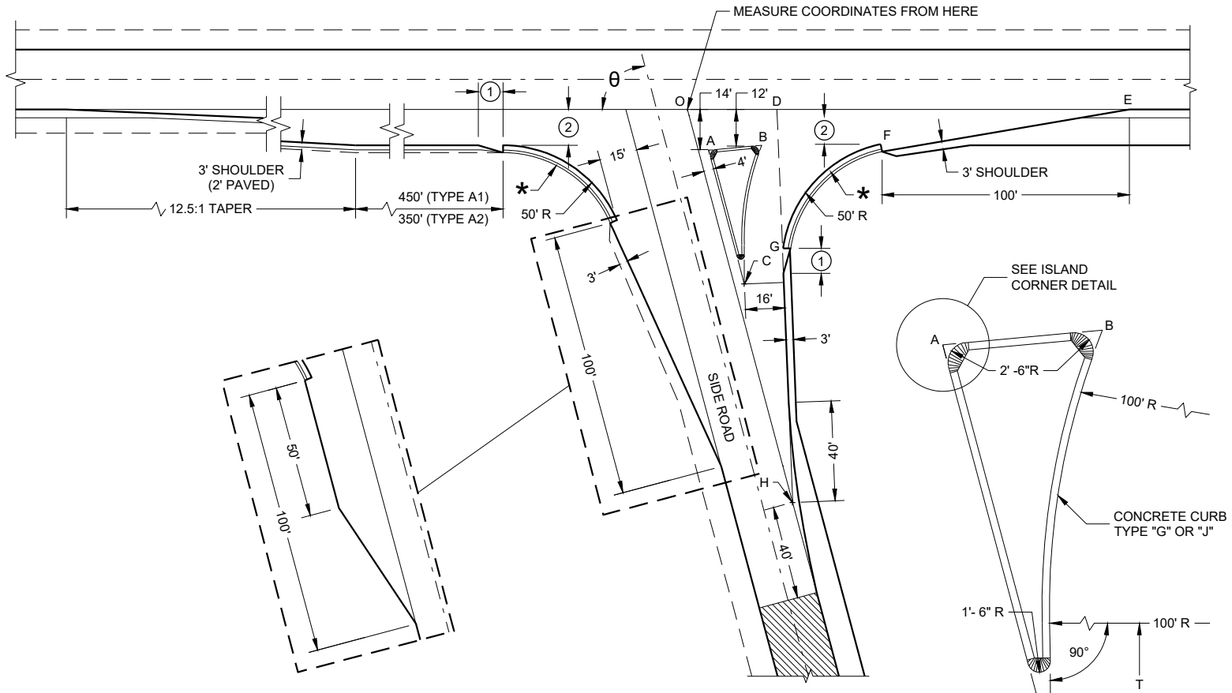
SDD 09A01 - 14a

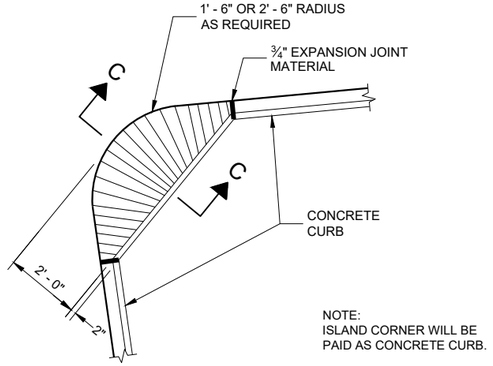



θ = MORE THAN 80°

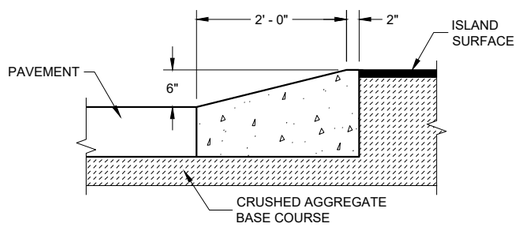



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS

θ = ACUTE ANGLES 80° OR LESS




**PLAN VIEW**




**SECTION C - C**

## ISLAND CORNER DETAIL

(TO BE CONSTUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

| ANGLE θ DEGREES | COORDINATES IN FEET (MEASURED FROM POINT 'O') X / Y | | | | | | | | LENGTH IN FEET | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | AB | AC | T | OJ | OH |
| 60 | 12.7 / -14.0 | 44.9 / -12.0 | 46.4 / -72.4 | 41.9 / 0.0 | 205.0 / 0.0 | 104.6 / -12.0 | 64.0 / -75.5 | 85.0 / -147.1 | 32.3 | 67.4 | 4.9 | 85.9 | 169.9 |
| 65 | 10.9 / -14.0 | 39.0 / -12.0 | 37.8 / -71.6 | 39.4 / 0.0 | 196.1 / 0.0 | 95.7 / -12.0 | 54.1 / -71.5 | 70.5 / -151.3 | 28.2 | 63.6 | 8.5 | 80.9 | 166.9 |
| 70 | 9.4 / -14.0 | 33.9 / -12.0 | 29.8 / -70.1 | 37.4 / 0.0 | 188.3 / 0.0 | 87.8 / -12.0 | 45.6 / -67.5 | 56.1 / -154.2 | 24.6 | 59.7 | 11.5 | 76.1 | 164.1 |
| 75 | 7.9 / -14.0 | 29.3 / -12.0 | 22.3 / -67.9 | 35.7 / 0.0 | 181.2 / 0.0 | 80.7 / -12.0 | 38.2 / -63.4 | 41.8 / -155.9 | 21.5 | 55.8 | 13.8 | 71.4 | 161.4 |
| 80 | 6.5 / -14.0 | 25.4 / -12.0 | 15.6 / -65.2 | 34.4 / 0.0 | 174.8 / 0.0 | 74.4 / -12.0 | 31.8 / -59.3 | 27.6 / -156.5 | 18.9 | 52.0 | 15.6 | 66.9 | 158.9 |

## TYPE 'A1" AND "A2" SIDE ROAD INTERSECTION DETAILS

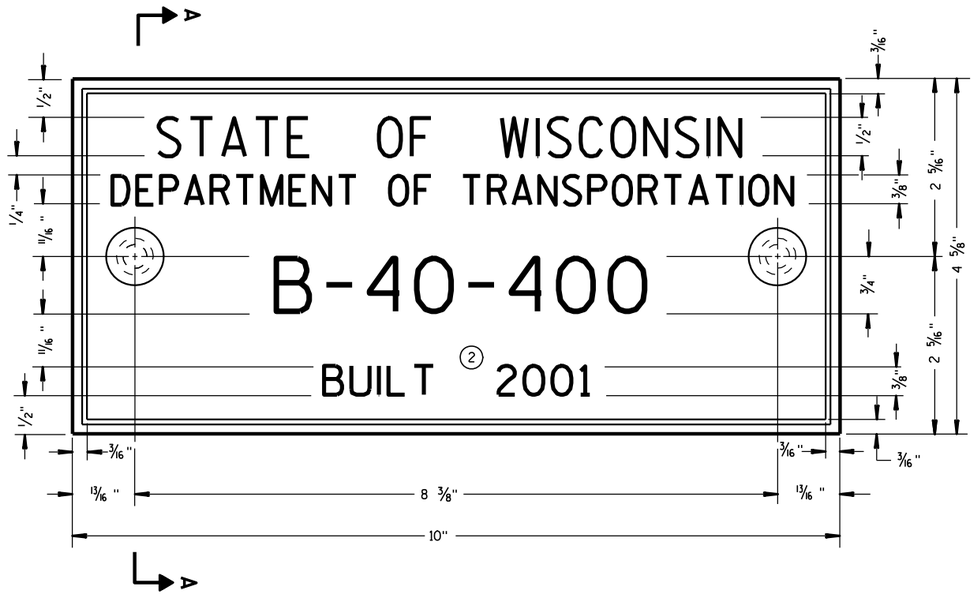
**AT GRADE SIDE ROAD INTERSECTIONS**
**TYPES "A1" AND "A2"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

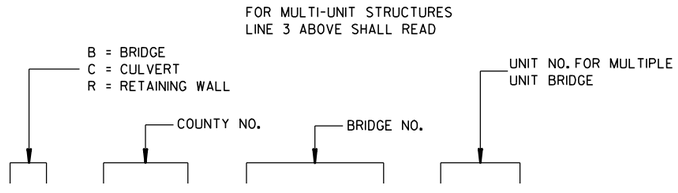
APPROVED
November 2022 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER
FHWA



SDD 09A01 - 14b




**TYPICAL NAME PLATE**
(BRIDGES, CULVERTS, AND RETAINING WALLS)




**NUMBERING DESIGNATION**
**MULTI-UNIT STRUCTURES**

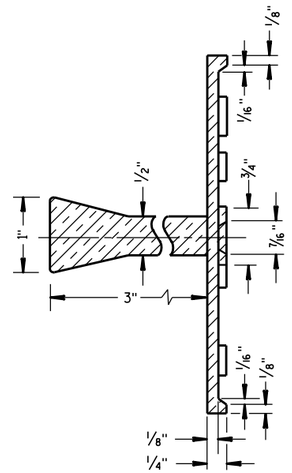
## GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

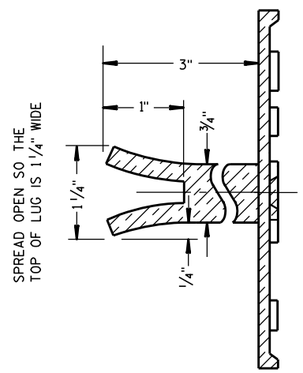
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

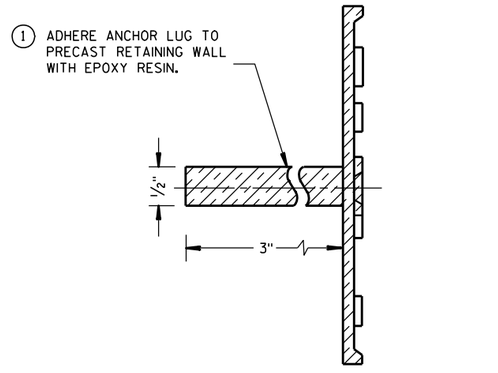
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.




**SECTION A-A**




**ALTERNATE LUG**




**ALTERNATE LUG**
(FOR ATTACHMENT TO PRECAST STRUCTURES)

**NAME PLATE (STRUCTURES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck-- CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA

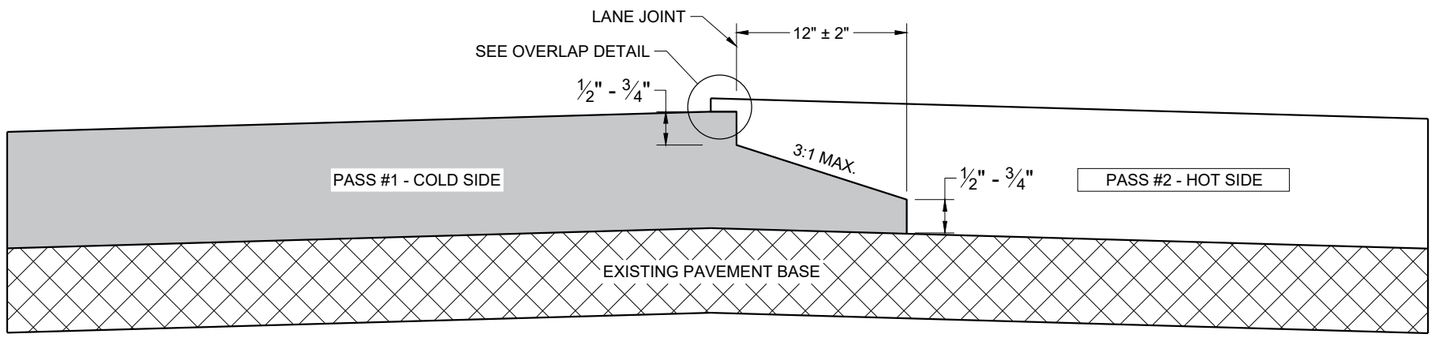


6

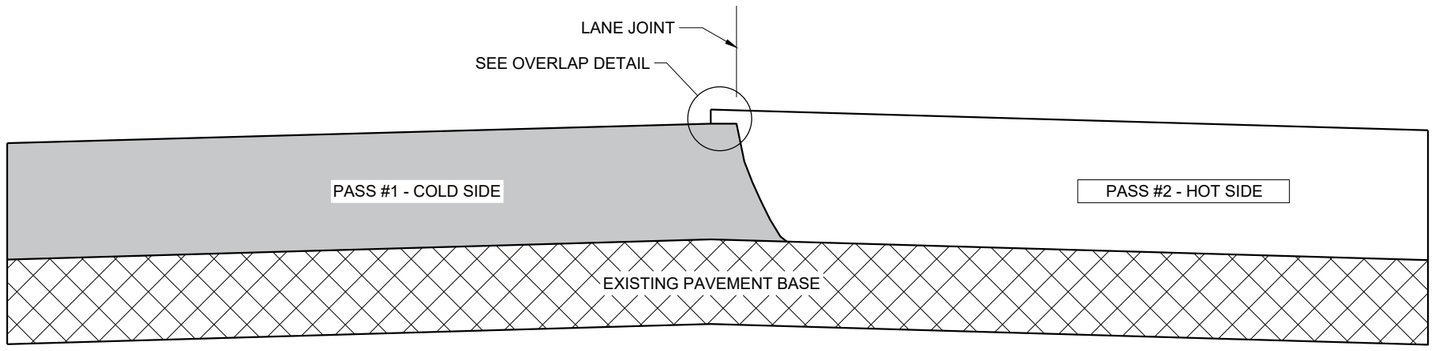
S.D.D. 12 A 3-10

6

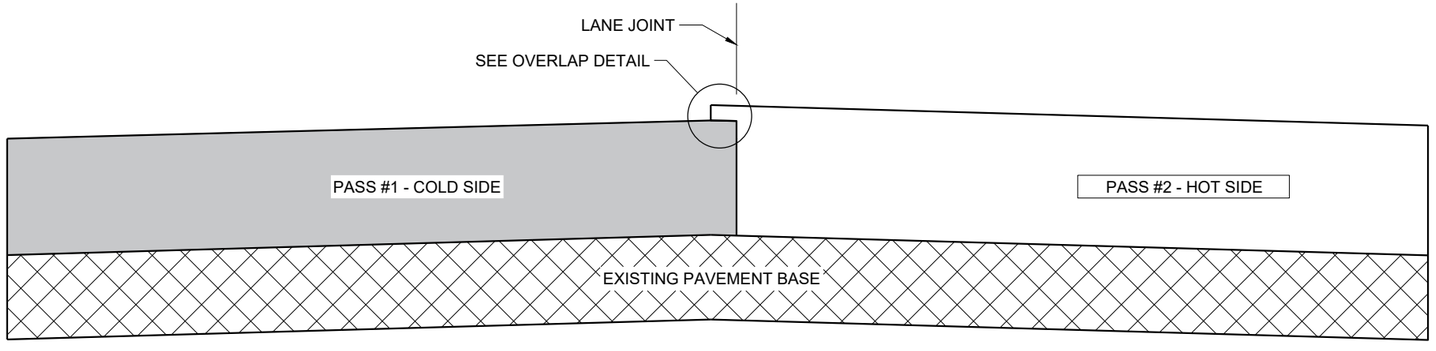
S.D.D. 12 A 3-10




**TYPICAL PAVEMENT CROSS SECTION**
**NOTCHED WEDGE JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT (MILLED)**

## GENERAL NOTES

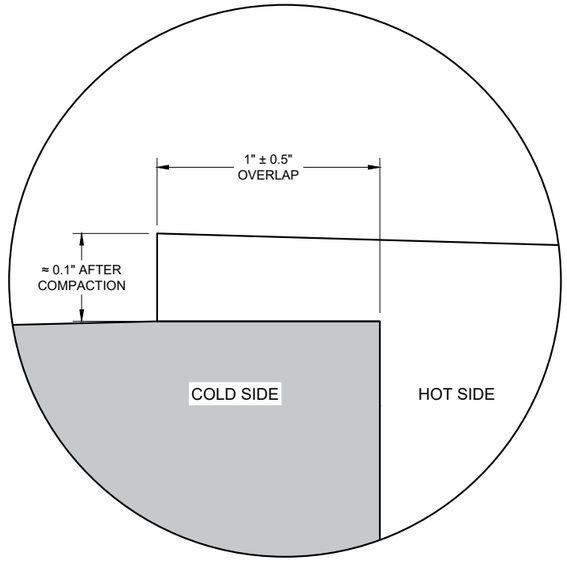
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.




**OVERLAP DETAIL (TYPICAL)**

6

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SDD 13C19 - 03

SDD 13C19 - 03

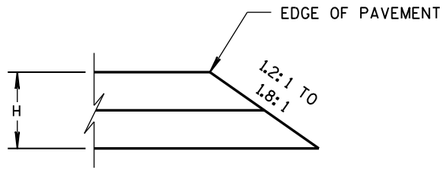
**HMA LONGITUDINAL JOINTS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

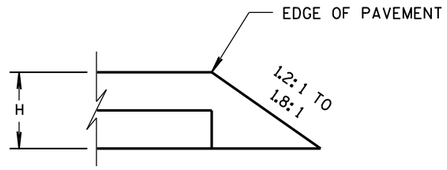
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



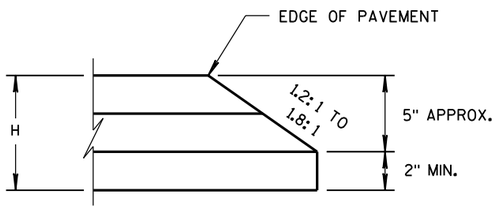

CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



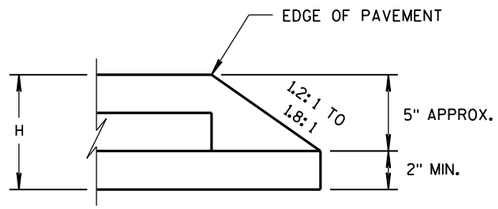

CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS




CONSTRUCTED WITH FINAL TWO LAYERS

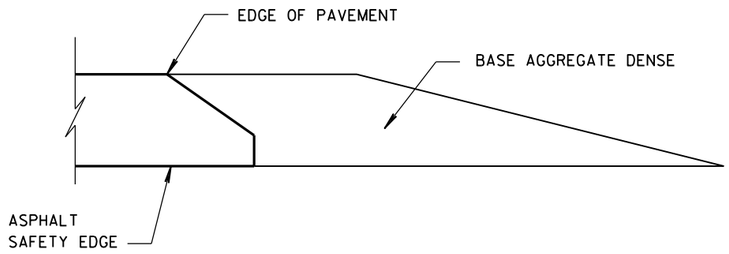
FOR H GREATER THAN 5"




CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

## HMA PAVEMENT AND HMA OVERLAYS




## FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

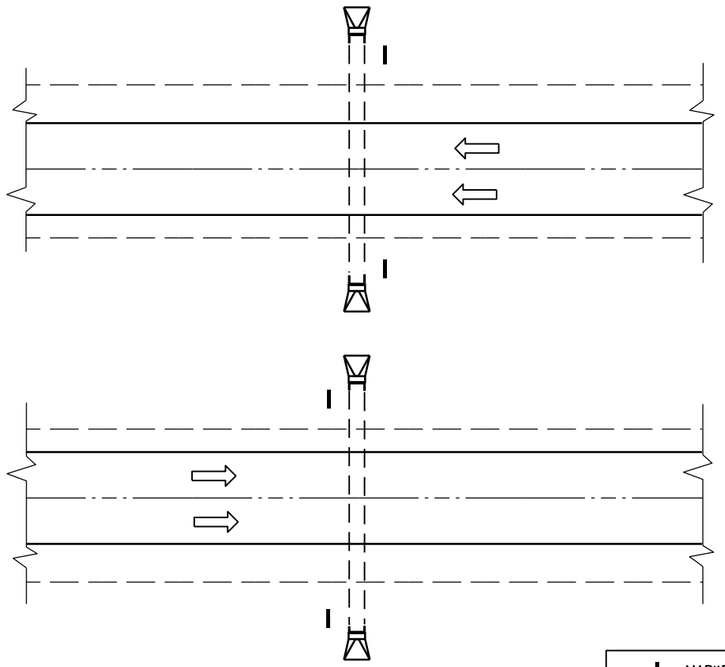
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

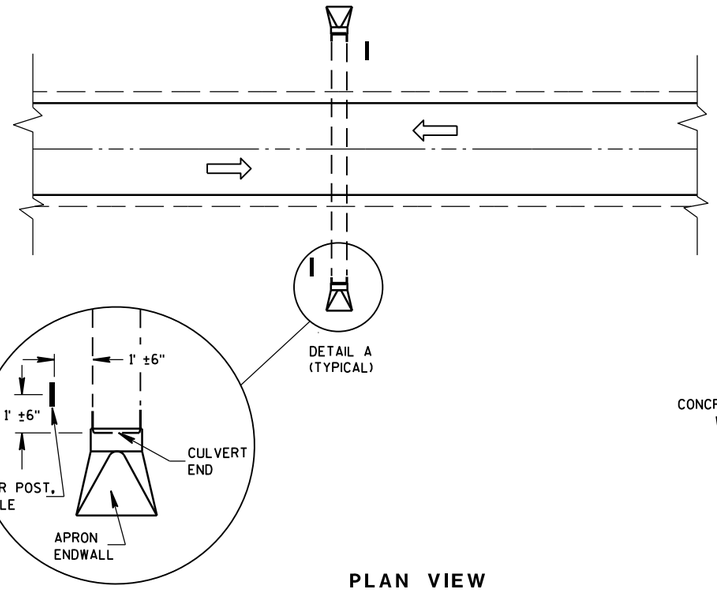
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



PLAN VIEW

## DIVIDED HIGHWAY




DETAIL A
(TYPICAL)

PLAN VIEW

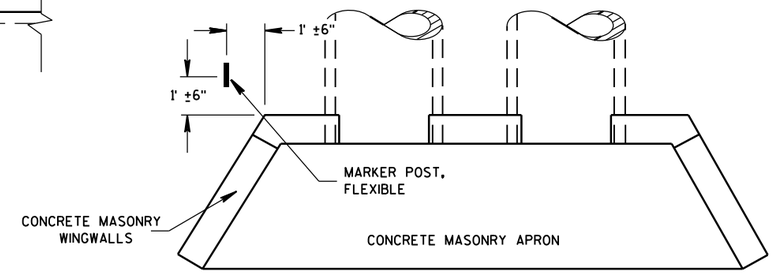
## UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

## GENERAL NOTES

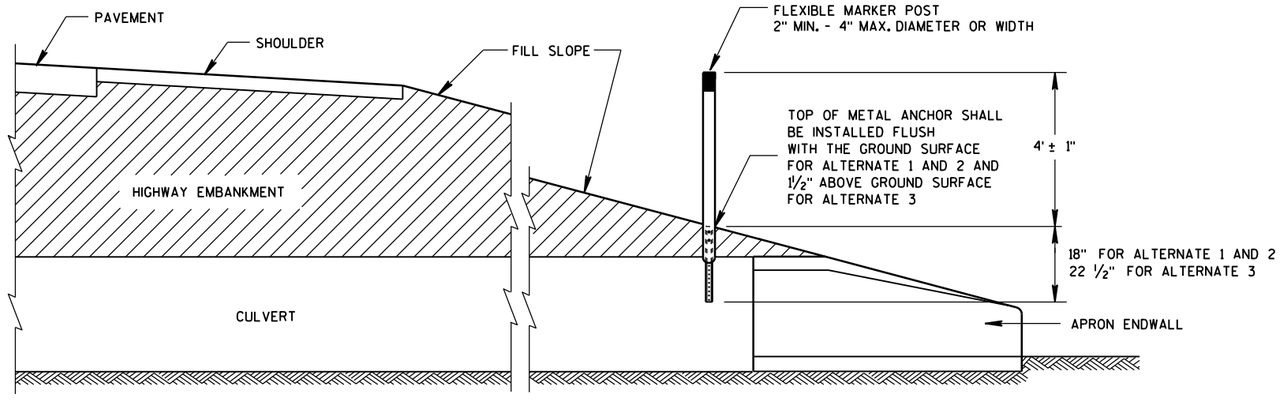
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.




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

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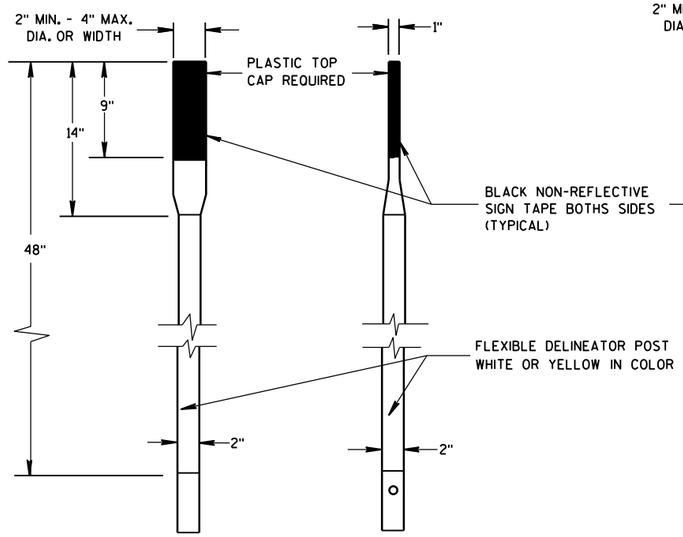
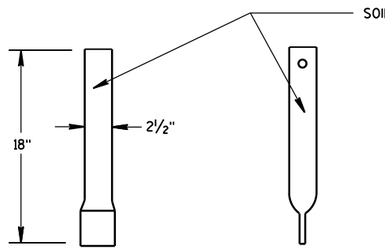
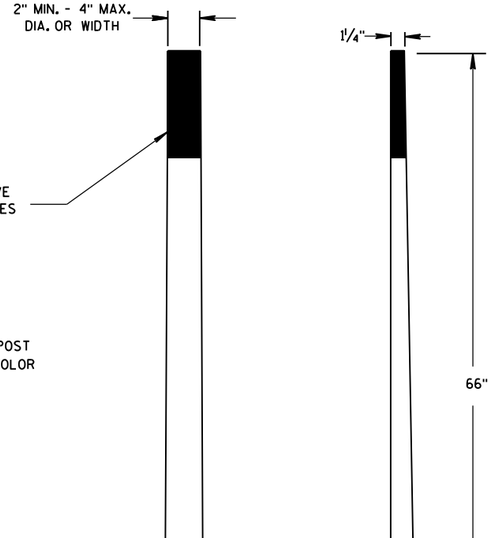
S.D.D. 15 A 3-2a



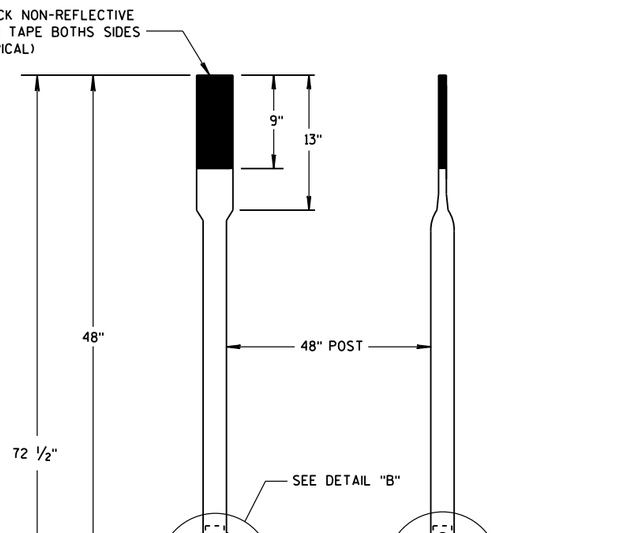

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

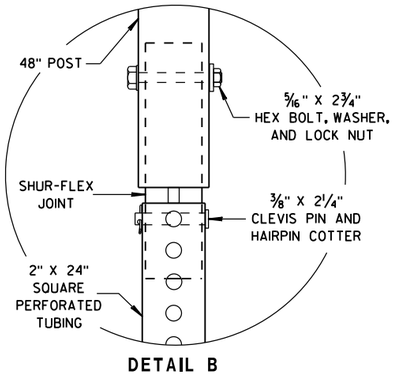
ALTERNATE 2



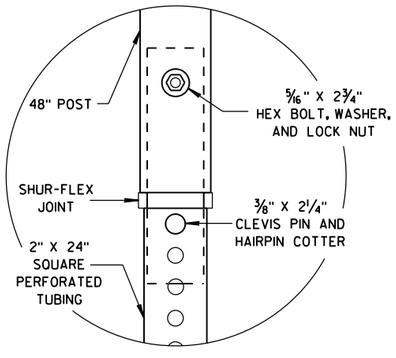

FRONT VIEW SIDE VIEW

ALTERNATE 3

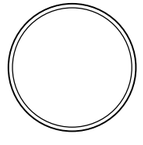
## FLEXIBLE MARKER POSTS



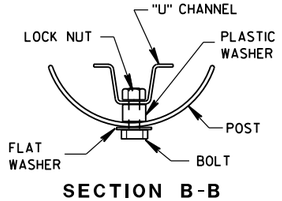

DETAIL B




DETAIL C



SECTION A-A

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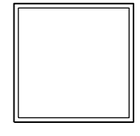
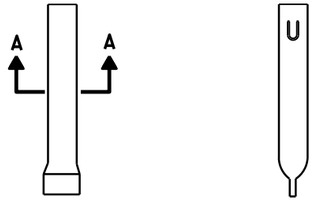
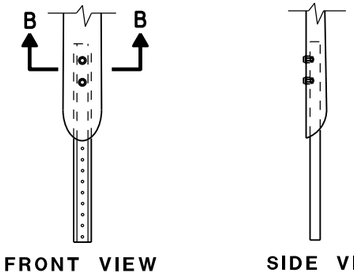


SECTION C-C



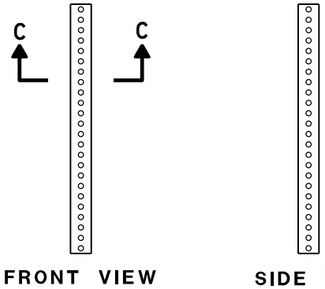

FRONT VIEW SIDE VIEW

ALTERNATE 1




FRONT VIEW SIDE VIEW

ALTERNATE 2




FRONT VIEW SIDE VIEW

ALTERNATE 3

## FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA



6

S.D.D. 15 A 3-2b

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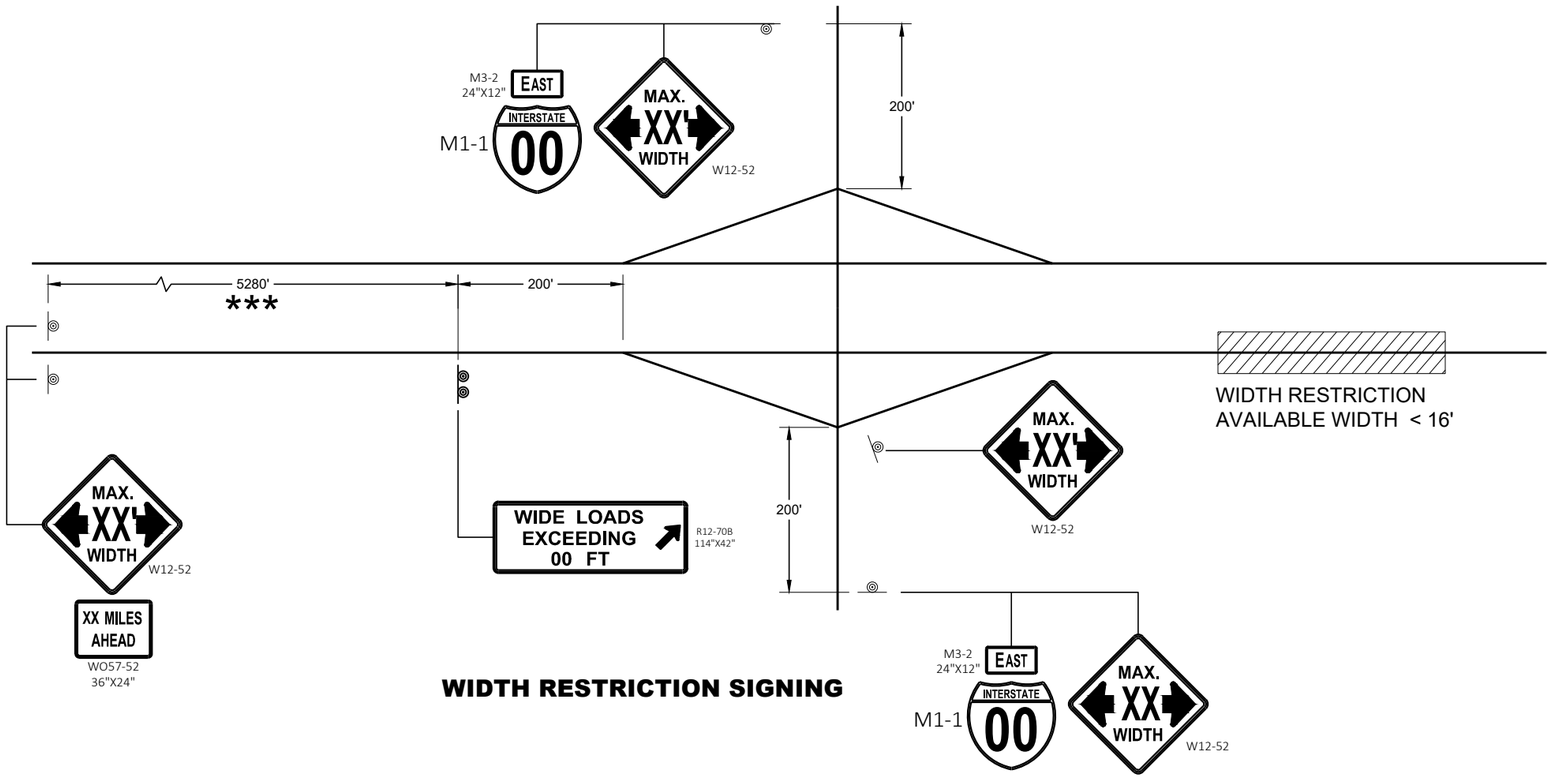
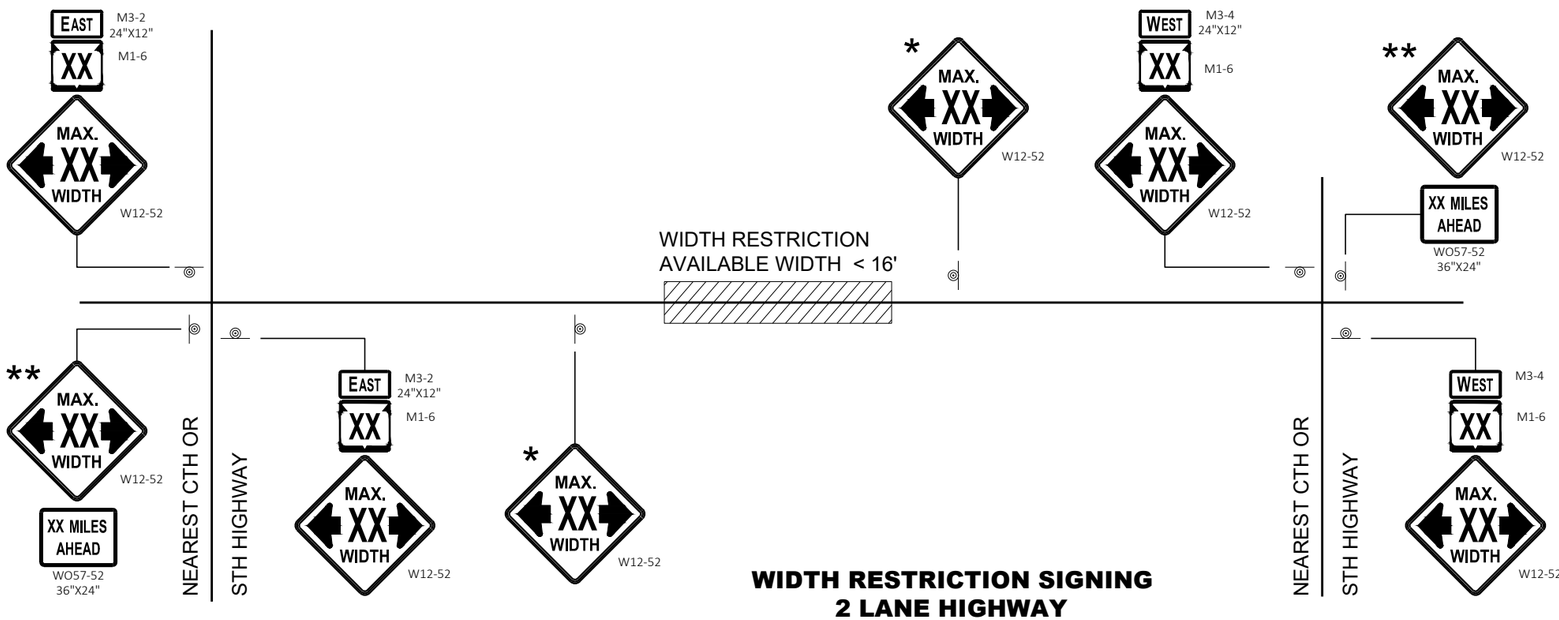
S.D.D. 15 A 3-2b




## WIDTH RESTRICTION SIGNING




## WIDTH RESTRICTION SIGNING
## 2 LANE HIGHWAY

## LEGEND

SIGN ON PERMANENT SUPPORT

## GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A 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.

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

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

6

6

SDD 15C02 - 09f

SDD 15C02 - 09f

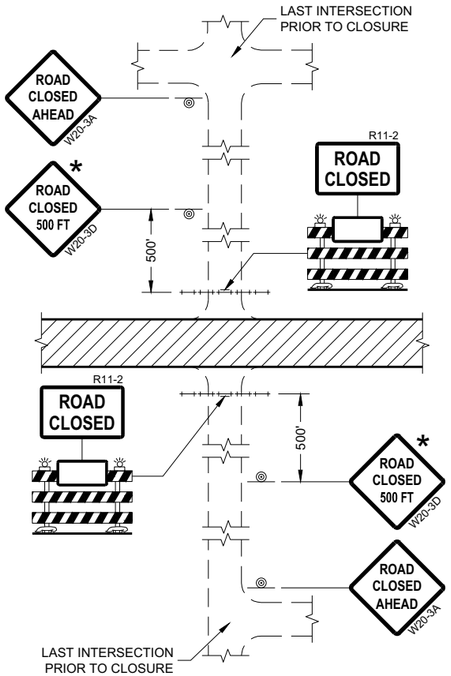
**ADVANCED WIDTH RESTRICTION SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

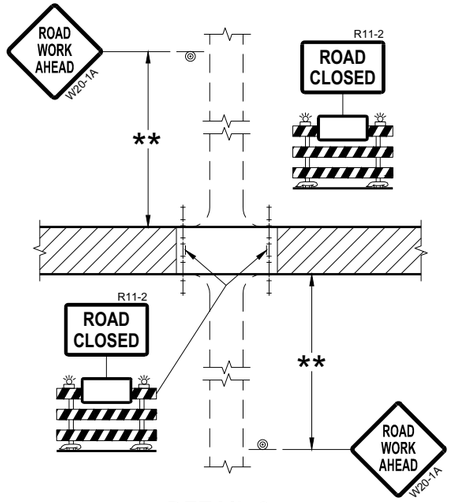
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

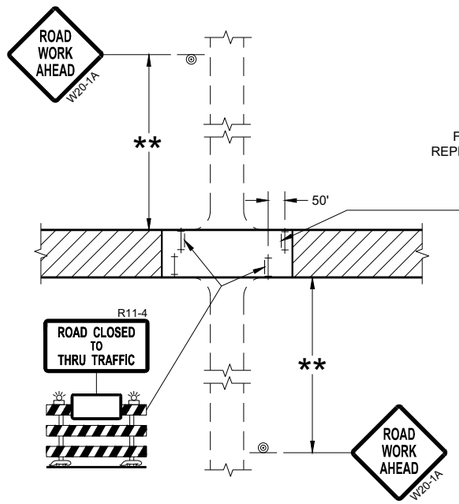
FHWA



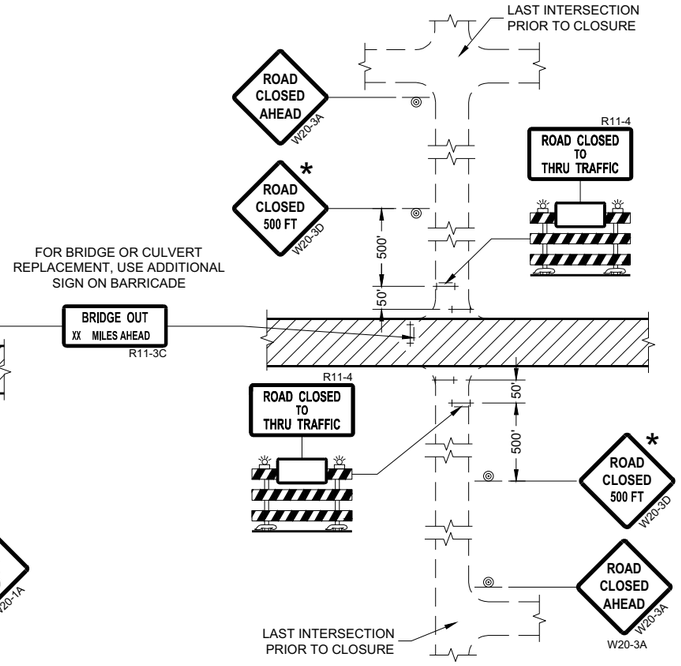

**DETAIL 1**
(NO ACCESS TO PROJECT)




**DETAIL 2**
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)




**DETAIL 3**
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)




**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 (500 FEET DESIRABLE) 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 REESTABLISHED.

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

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

## LEGEND

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

**BARRICADES AND SIGNS FOR SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



6

SDD 15C03 - 05

6

SDD 15C03 - 05

## GENERAL NOTES

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

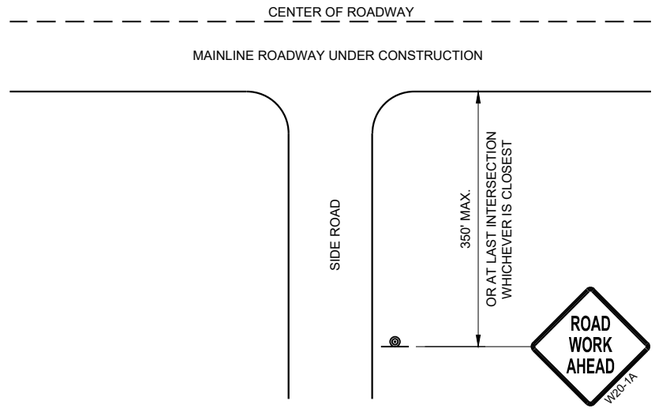
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

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



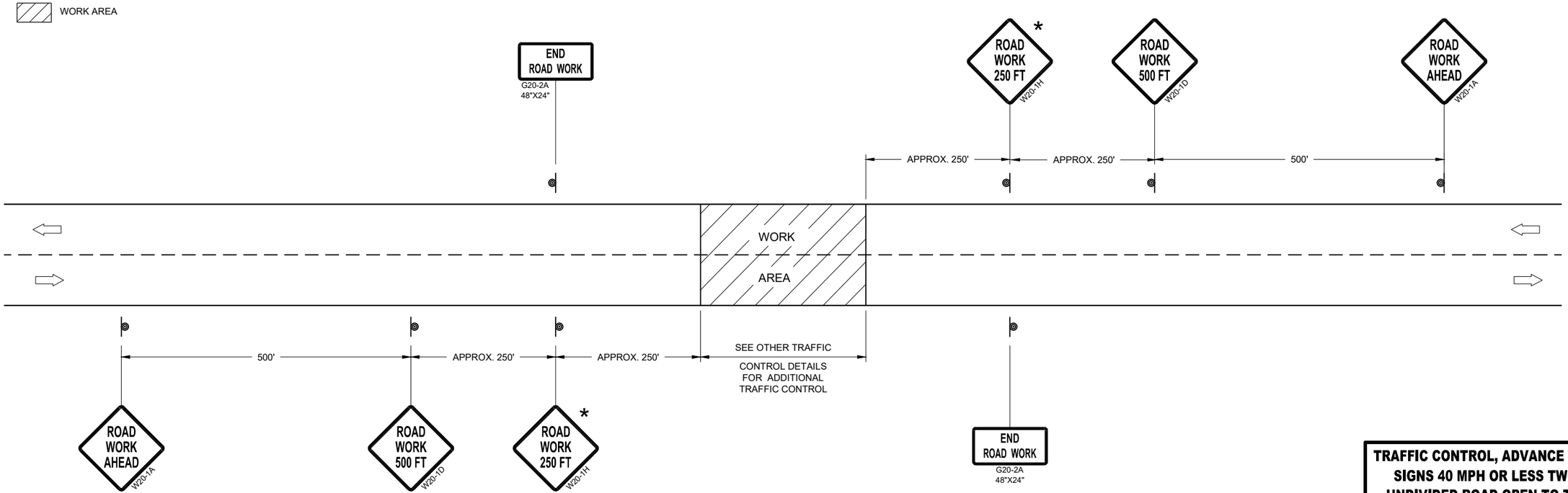

**TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL**

## LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA




**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS**

**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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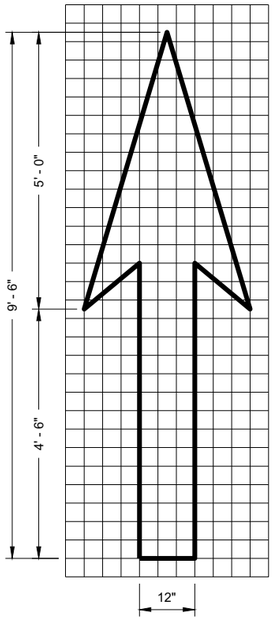
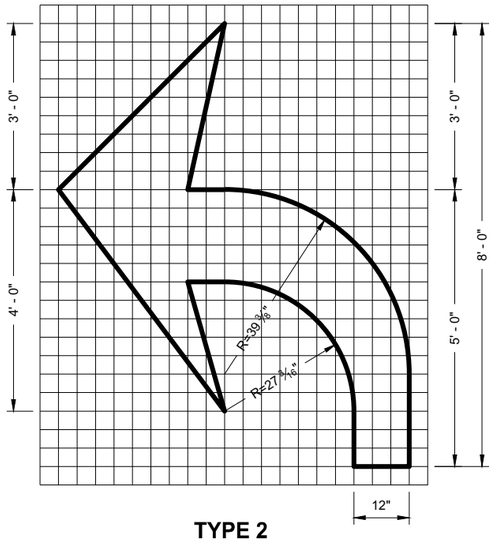
SDD 15C05 - 05




TYPE 1

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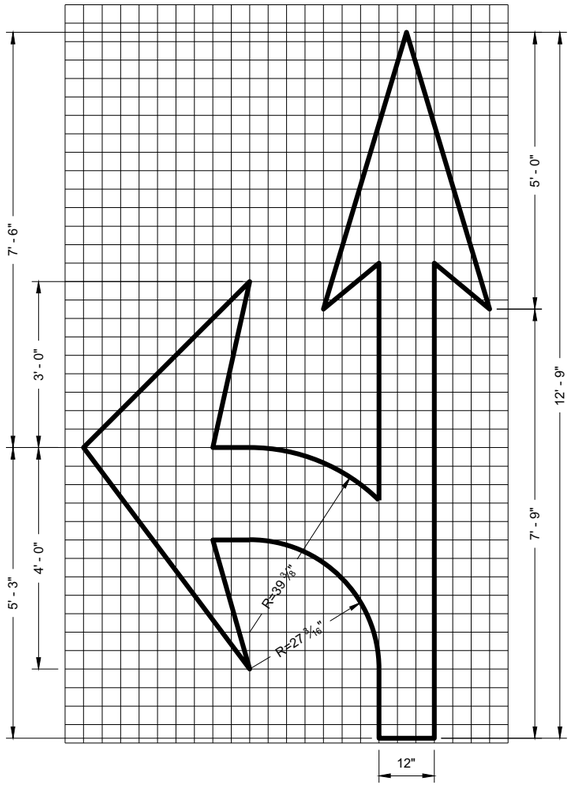


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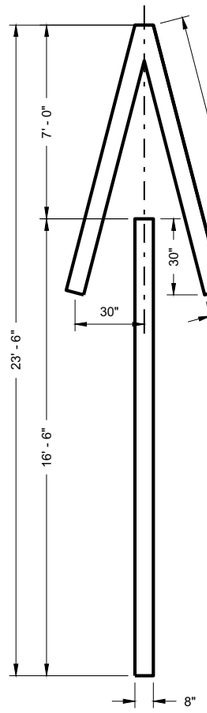
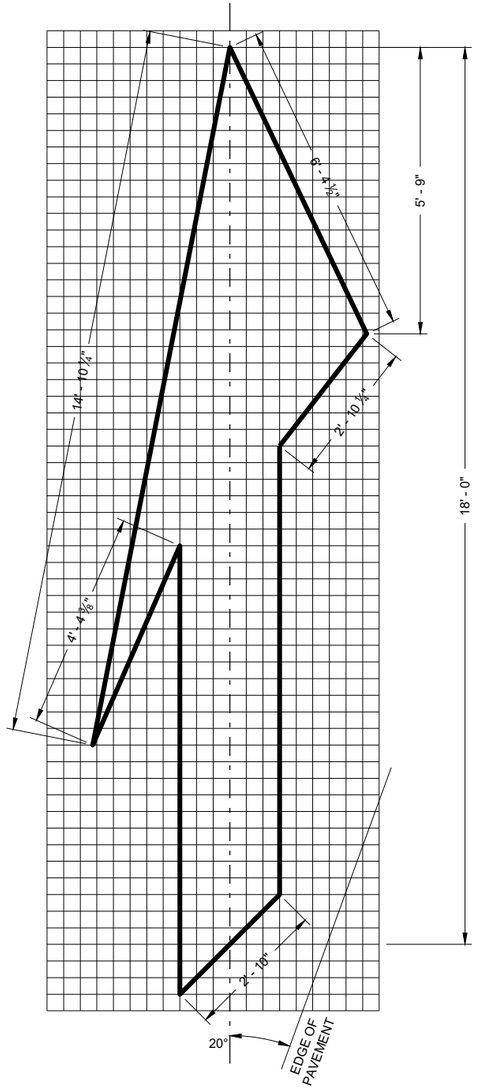


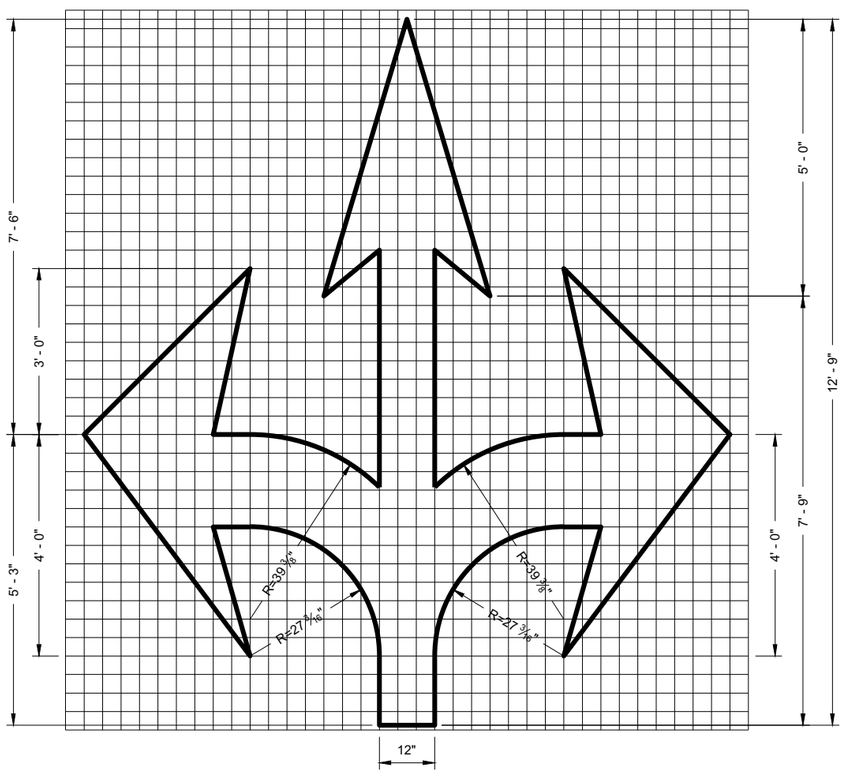

TYPE 4

## GENERAL NOTES

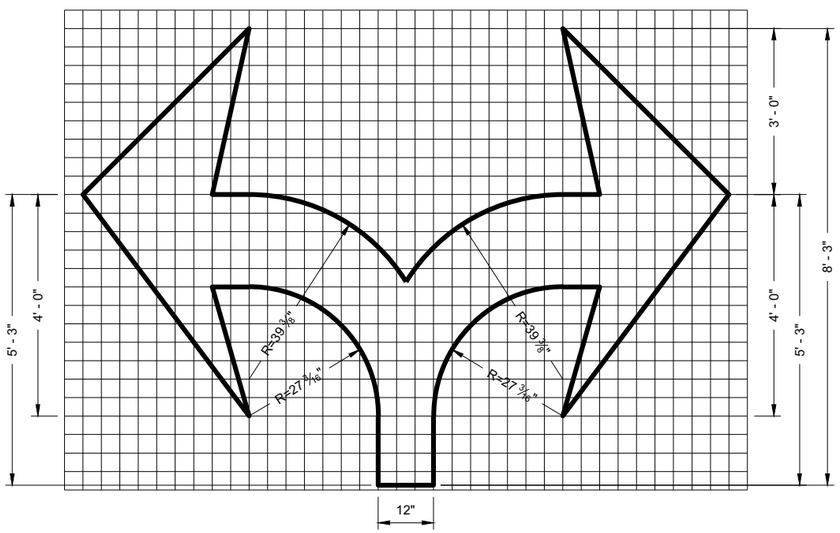
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.




TYPE 5 LANE DROP ARROW




TYPE 6




TYPE 7

**PAVEMENT MARKING ARROWS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA



6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

## 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

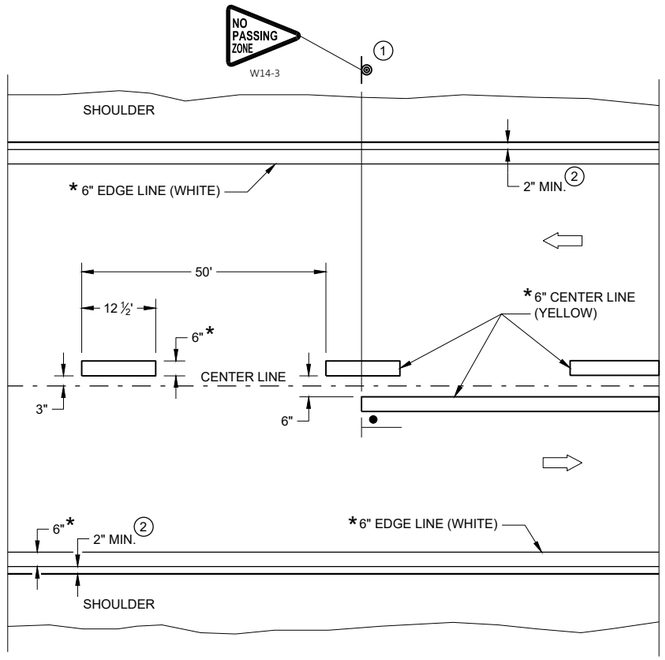
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

## LEGEND

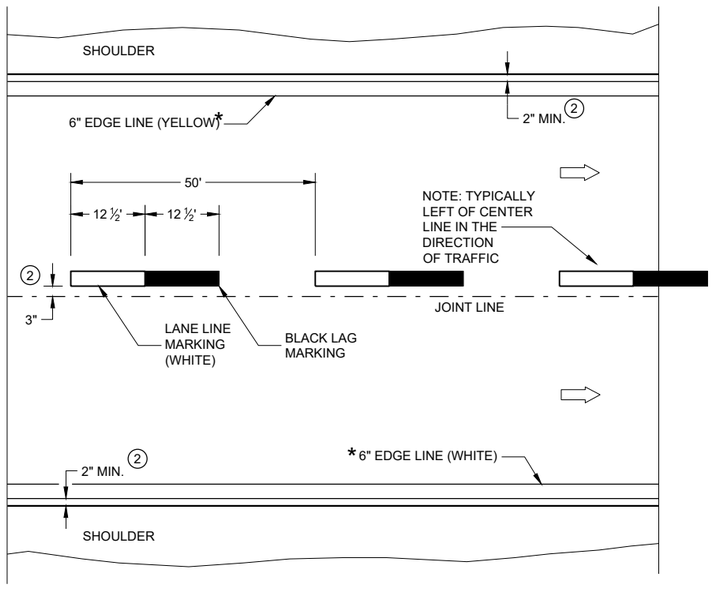
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC




TWO WAY TRAFFIC




ONE WAY TRAFFIC

**PERMANENT PAVEMENT MARKING**

**PERMANENT LONGITUDINAL PAVEMENT MARKINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

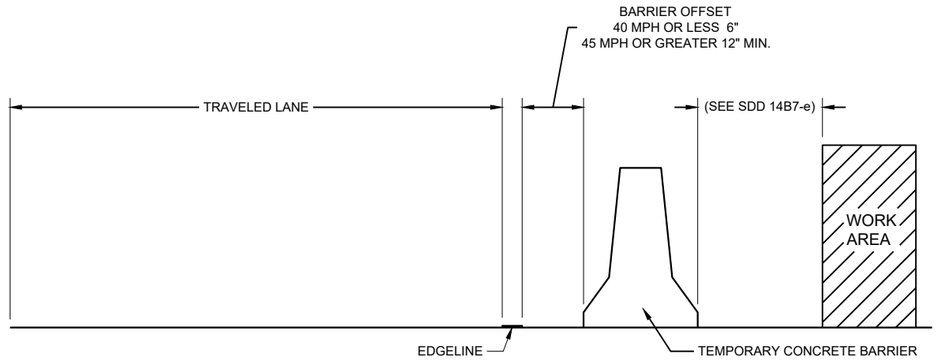
FHWA



6

SDD 15C08-23a

SDD 15C08-23a




**TEMPORARY BARRIER OFFSET FROM EDGELINE**

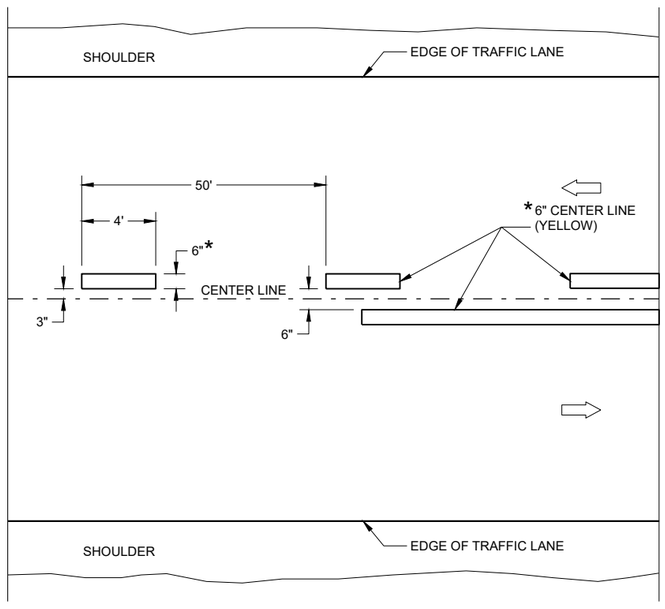
## GENERAL NOTES

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

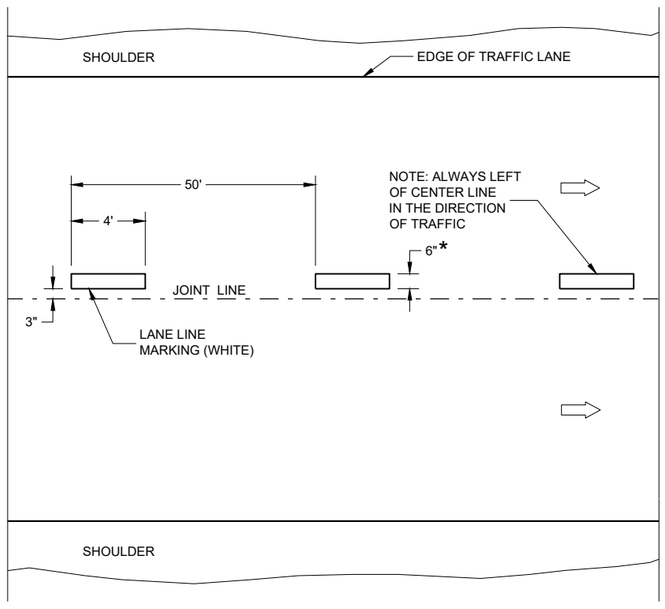
## LEGEND

⇨ DIRECTION OF TRAFFIC

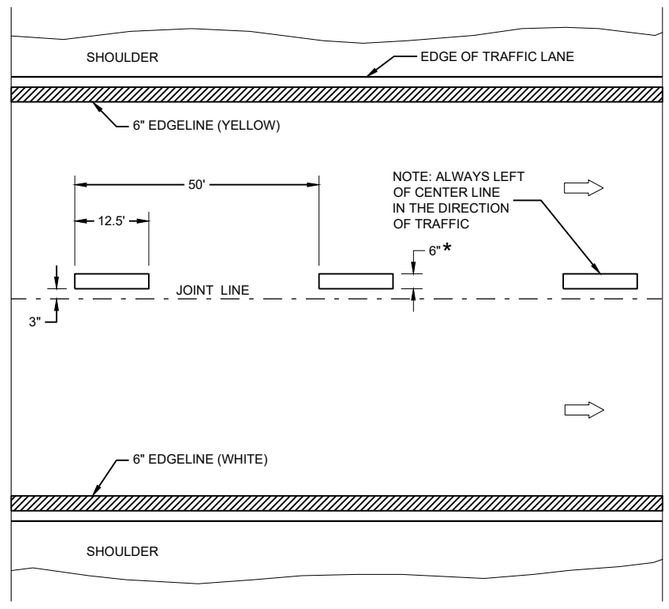
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES




**TWO WAY TRAFFIC**




**ONE WAY TRAFFIC**




**FREEWAYS AND EXPRESSWAYS**

**TEMPORARY PAVEMENT MARKING**

**TEMPORARY LONGITUDINAL PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA



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SDD 15C08-23b

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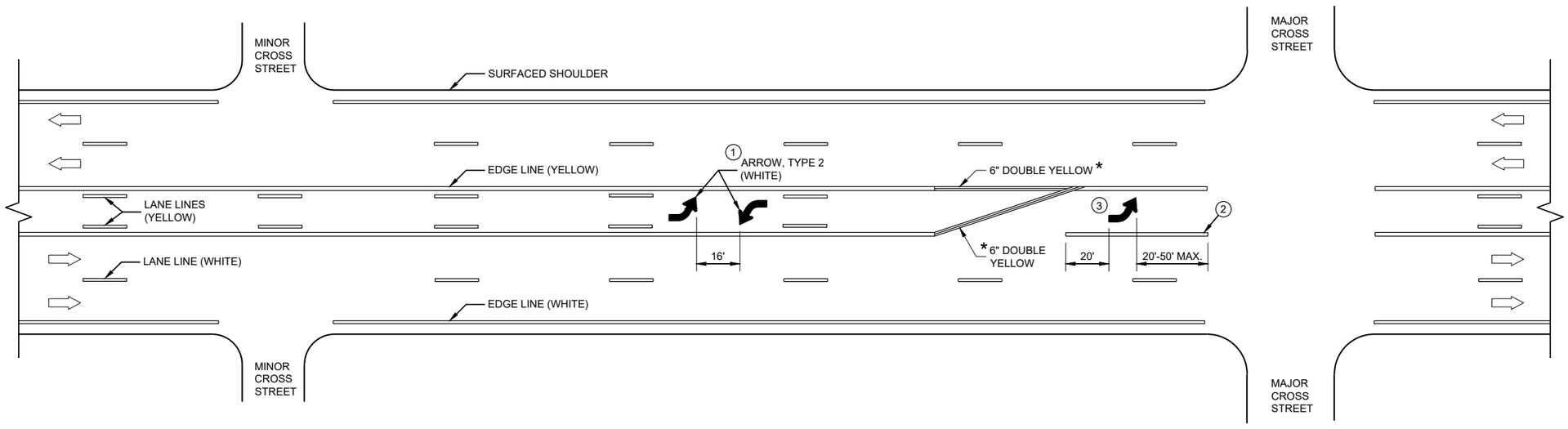
## GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES




**TWO WAY LEFT TURN LANE**

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**PAVEMENT MARKING (TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 116

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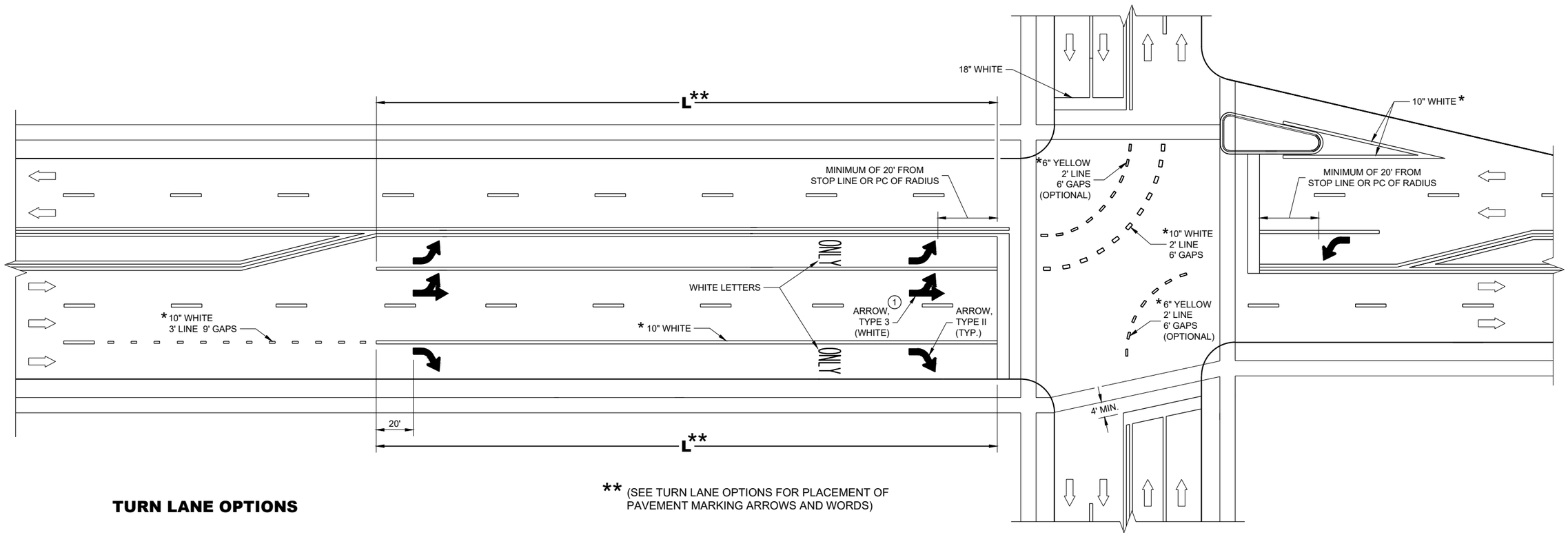
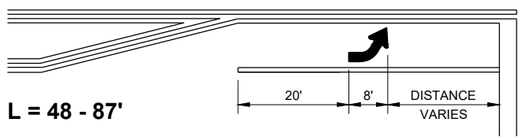
SDD 15C08-23c



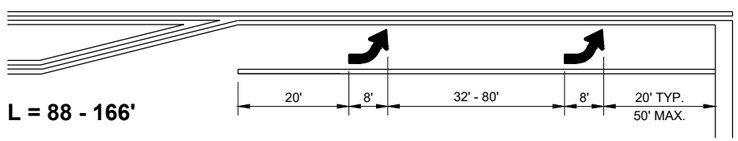

** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

## TURN LANE OPTIONS

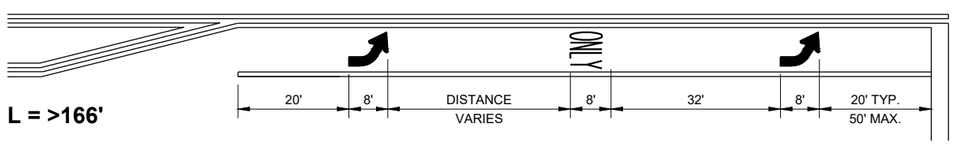
LENGTH OF TURN BAY ( **L** ) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS




**L = 48 - 87'**




**L = 88 - 166'**




**L = >166'**

## GENERAL NOTES

1. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

**L** = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

**PAVEMENT MARKING (TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION





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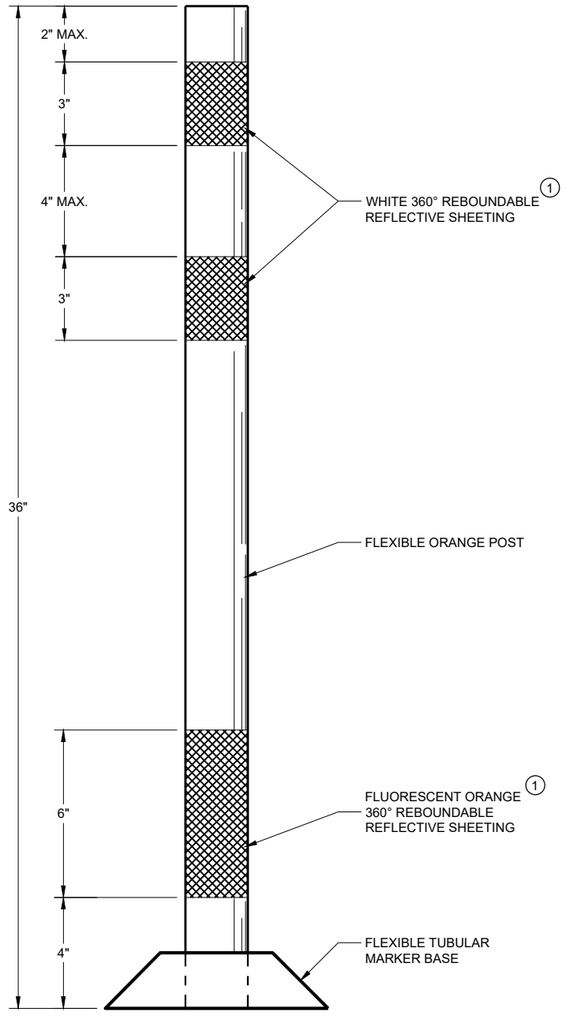
SDD 15C08-23d




**FLEXIBLE TUBULAR MARKER POST WORK ZONE**

## GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

**CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



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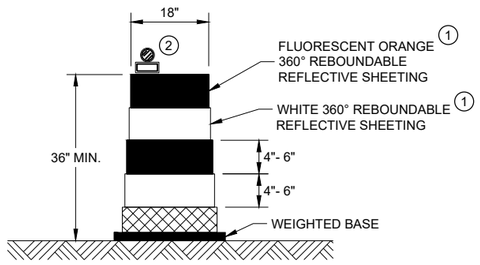
SDD 15C11 - 10a

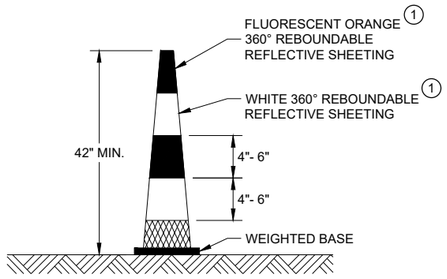
## GENERAL NOTES

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.




### DRUM

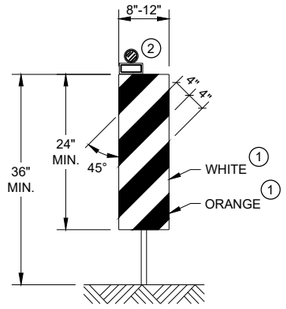
BALLAST WIDTHS
RANGE FROM 24"-36"




### 42" CONE

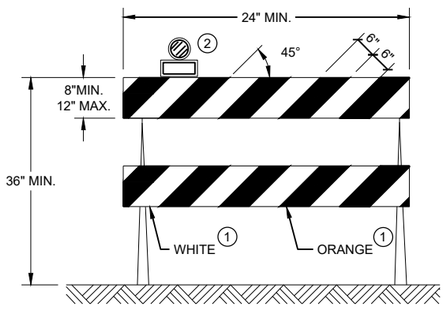
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



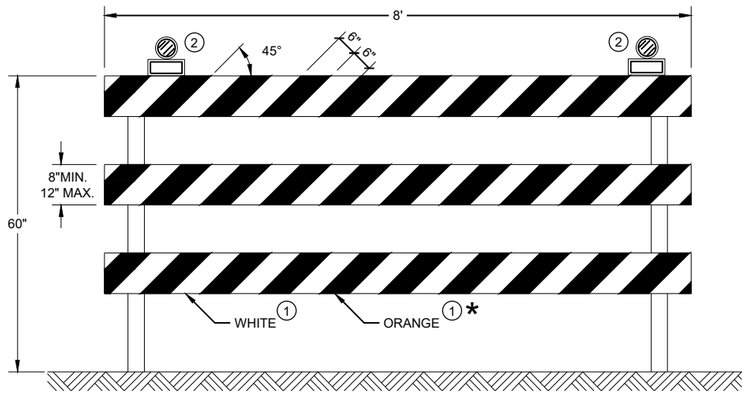

### VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.




### TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.




### TYPE III 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
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



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## LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

## GENERAL NOTES

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

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

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

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

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

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

## FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

## TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

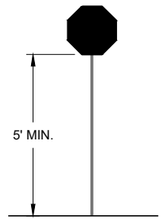
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



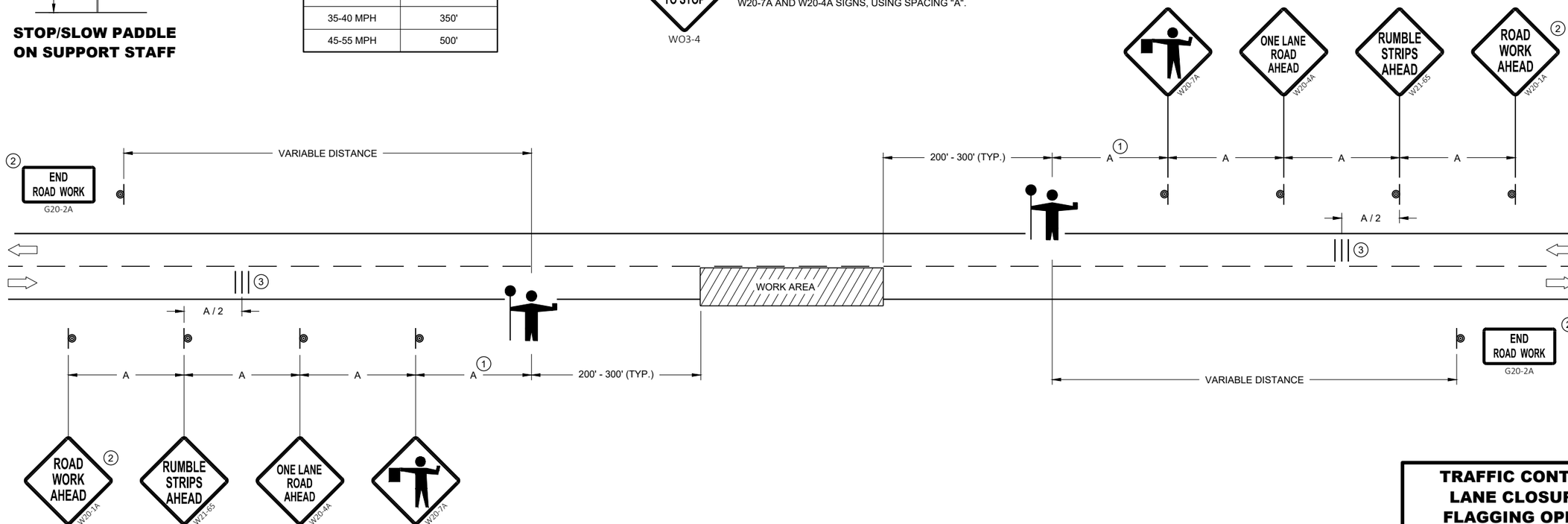

**STOP/SLOW PADDLE ON SUPPORT STAFF**

## SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

| SPEED LIMIT | SPACING "A" |
|---|---|
| 25-30 MPH | 200' |
| 35-40 MPH | 350' |
| 45-55 MPH | 500' |

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".




**TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



SDD 15C12 - 09a

SDD 15C12 - 09a

## GENERAL NOTES

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL CONE 42-INCH

TRAFFIC CONTROL DRUM

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

## GENERAL NOTES

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

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

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

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

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

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

## FLAGGING

IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

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

(2) IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

## TEMPORARY PORTABLE RUMBLE STRIPS

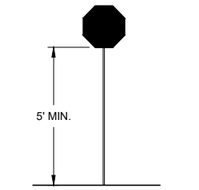
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

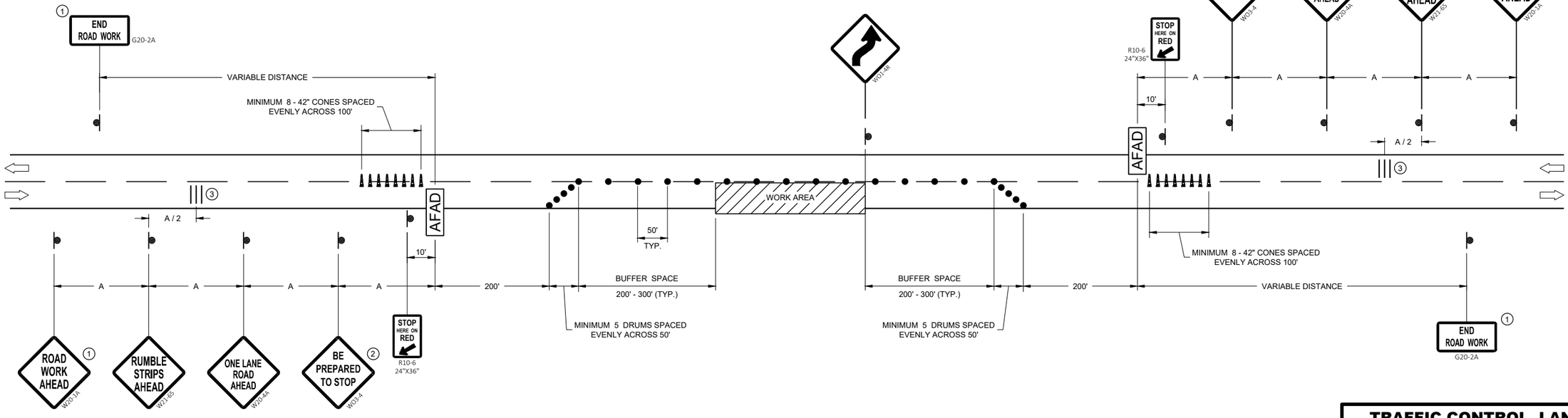
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.




**STOP/SLOW PADDLE ON SUPPORT STAFF**

**SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE**

| SPEED LIMIT | SPACING "A" |
|---|---|
| 25-30 MPH | 200' |
| 35-40 MPH | 350' |
| 45-55 MPH | 500' |




# TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



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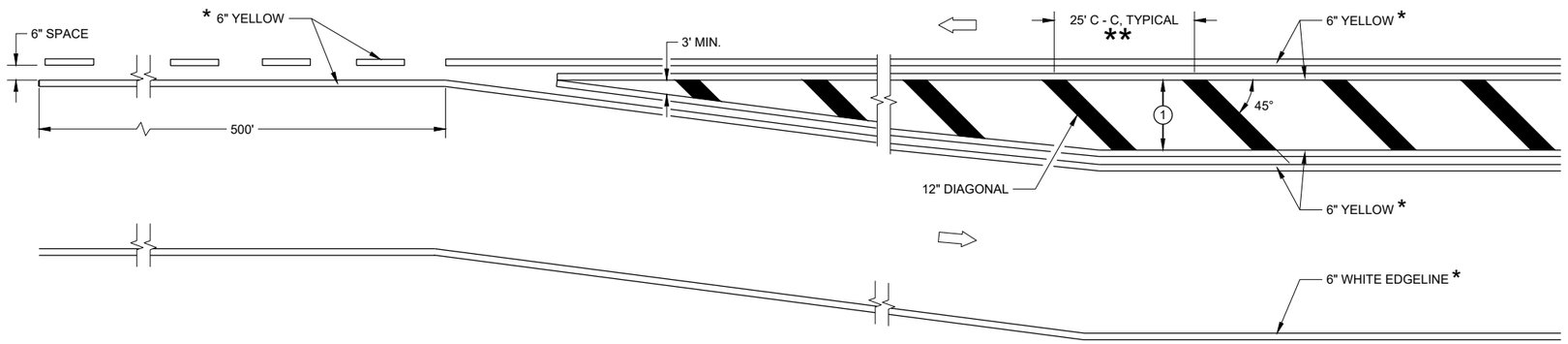


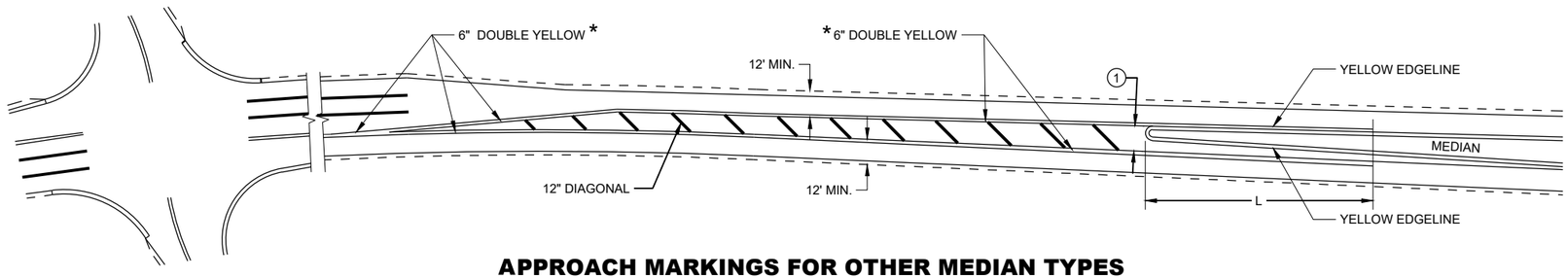

## MEDIAN ISLAND DETAIL

## GENERAL NOTES

1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

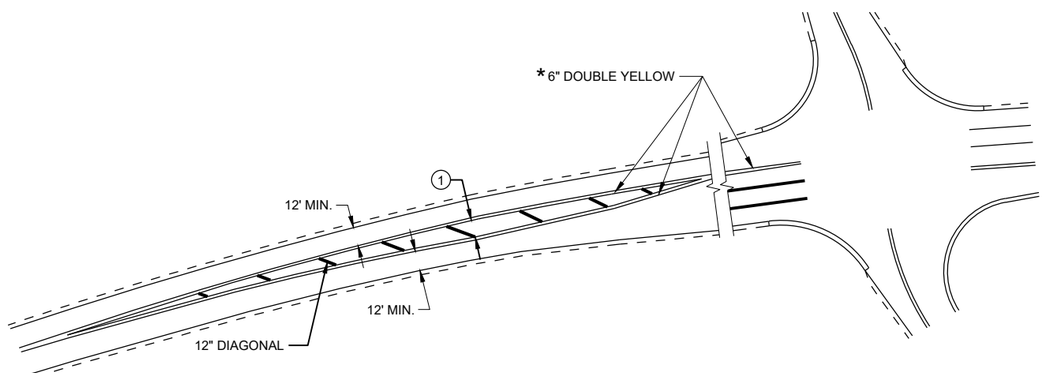
⇨ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES




## APPROACH MARKINGS FOR OTHER MEDIAN TYPES

| SPEED LIMIT | L |
|---|---|
| <35 MPH | 5' |
| 35> MPH | 50' |




## NON-APPROACH MARKINGS

**MEDIAN ISLAND PAVEMENT MARKINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER

FHWA



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SDD 15C18-08a

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SDD 15C18-08a

## LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

## GENERAL NOTES

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

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

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

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

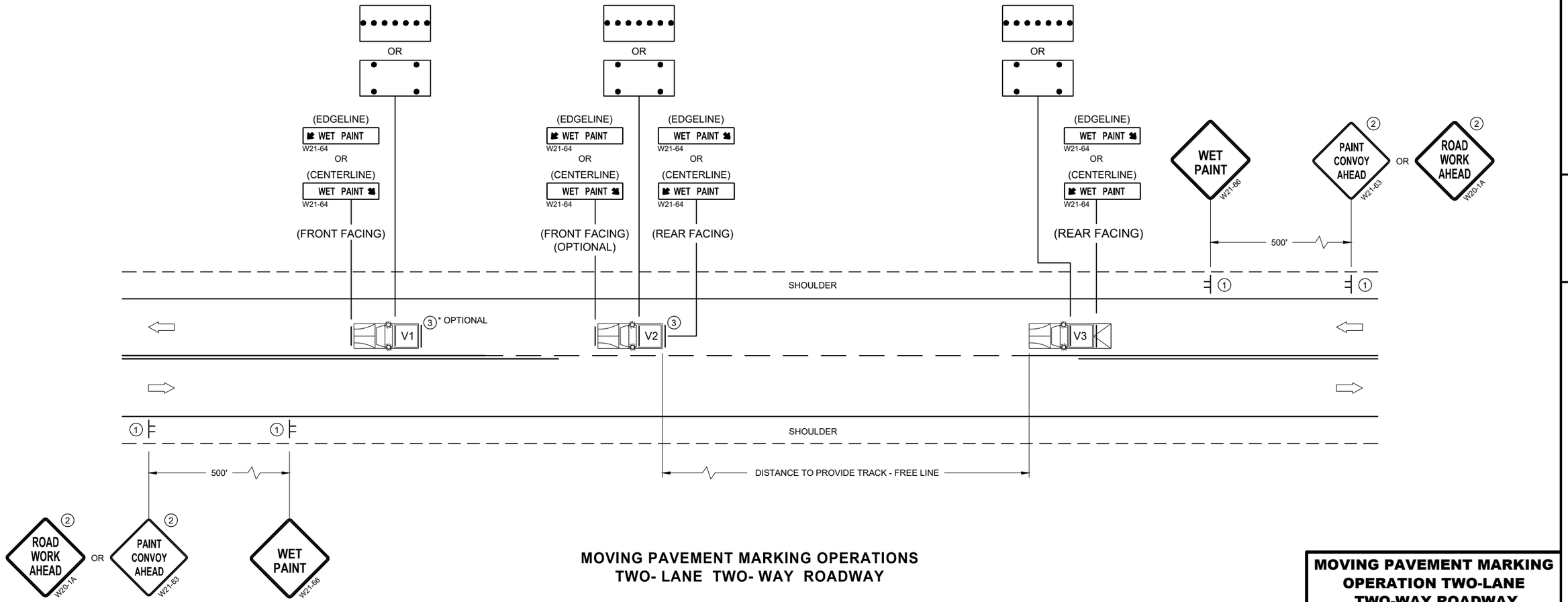
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

1. SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
2. IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.
3. V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.




## MOVING PAVEMENT MARKING OPERATIONS
## TWO- LANE TWO- WAY ROADWAY

**MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN

FHWA



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SDD 15C19-08a

6

SDD 15C19-08a

## LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)

## GENERAL NOTES

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

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

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

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

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

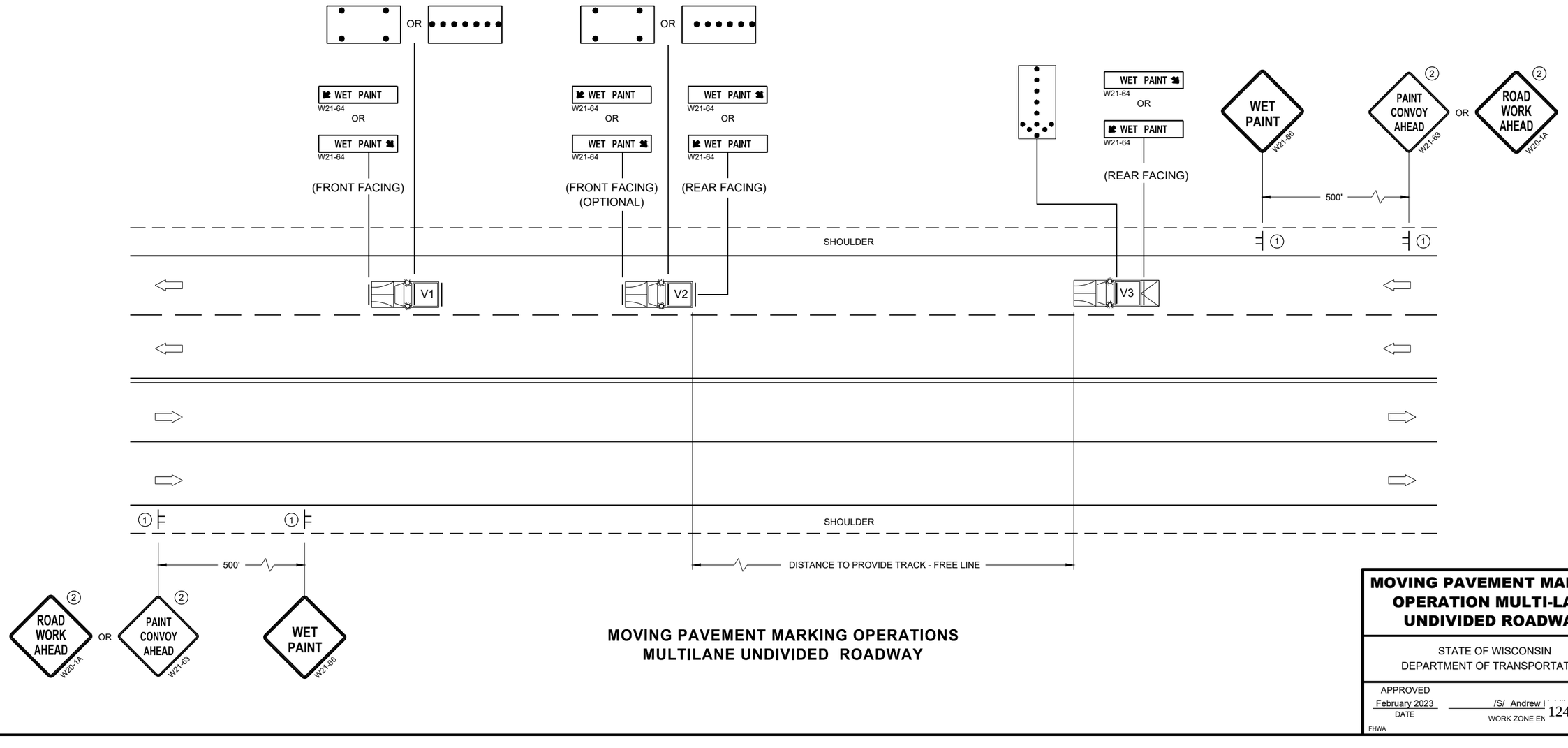
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

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

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




### MOVING PAVEMENT MARKING OPERATIONS MULTILANE UNDIVIDED ROADWAY

**MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN...

FHWA



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SDD 15C19-08b

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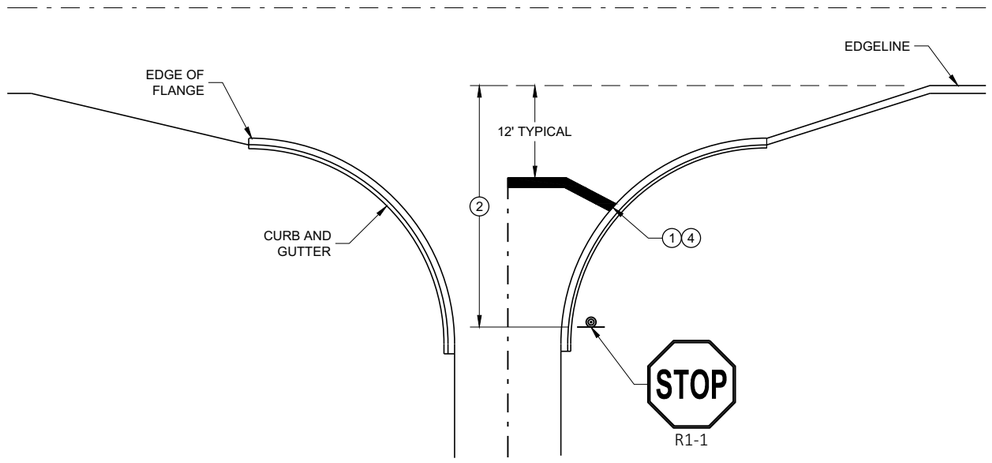
SDD 15C19-08b

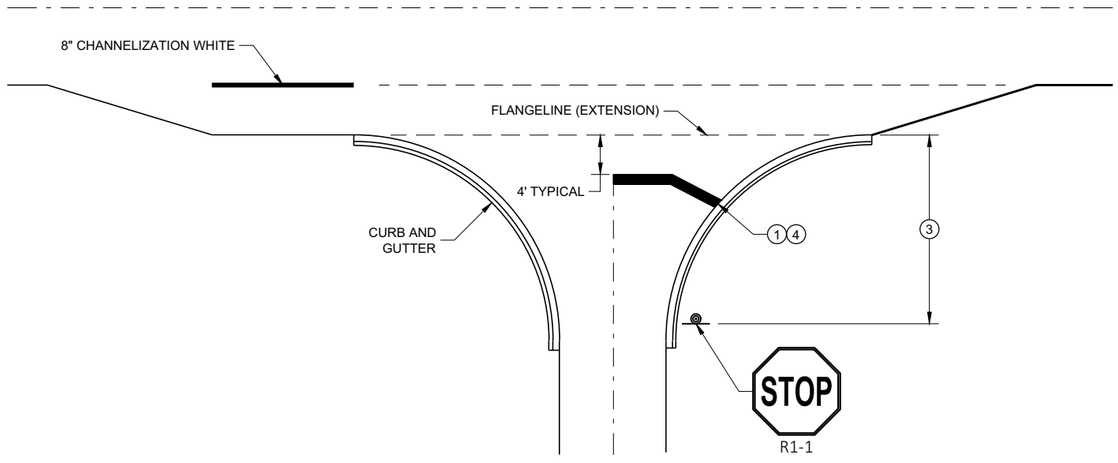
## GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

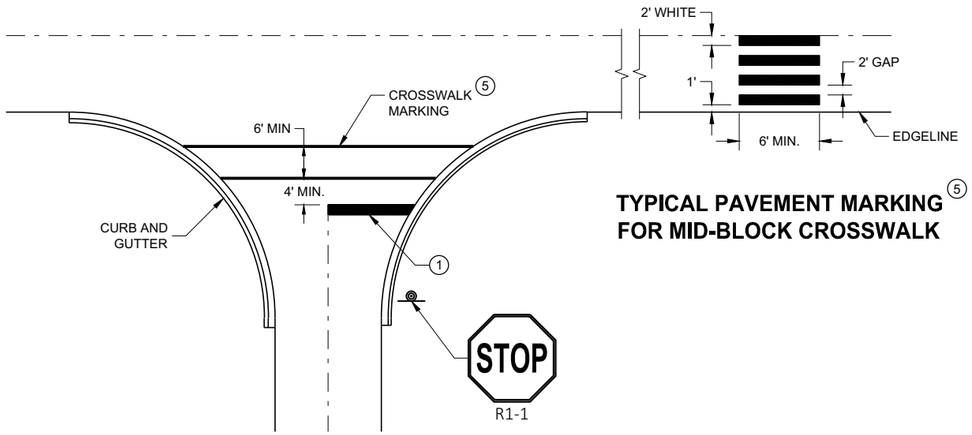
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.




**TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER**

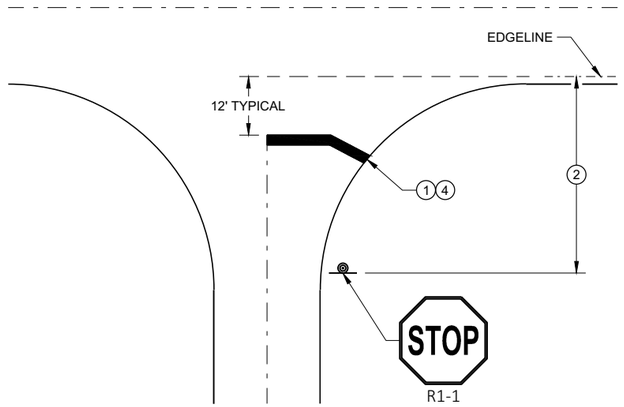



**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE**




**TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5**

**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING**




**TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER**

**STOP LINE AND CROSSWALK PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA



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SDD 15C33 - 04

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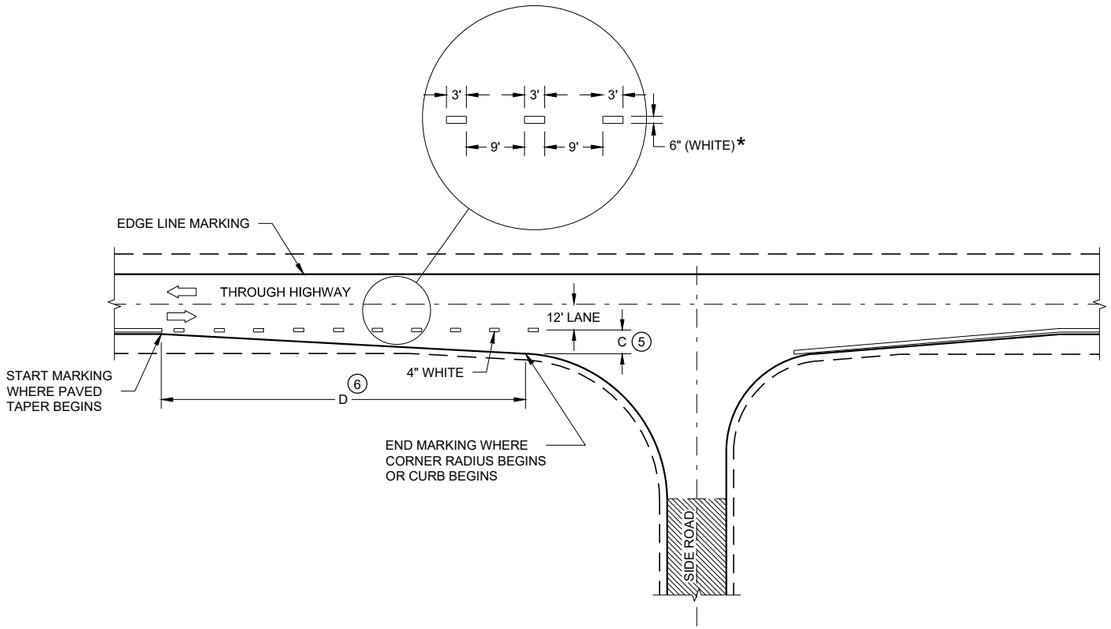
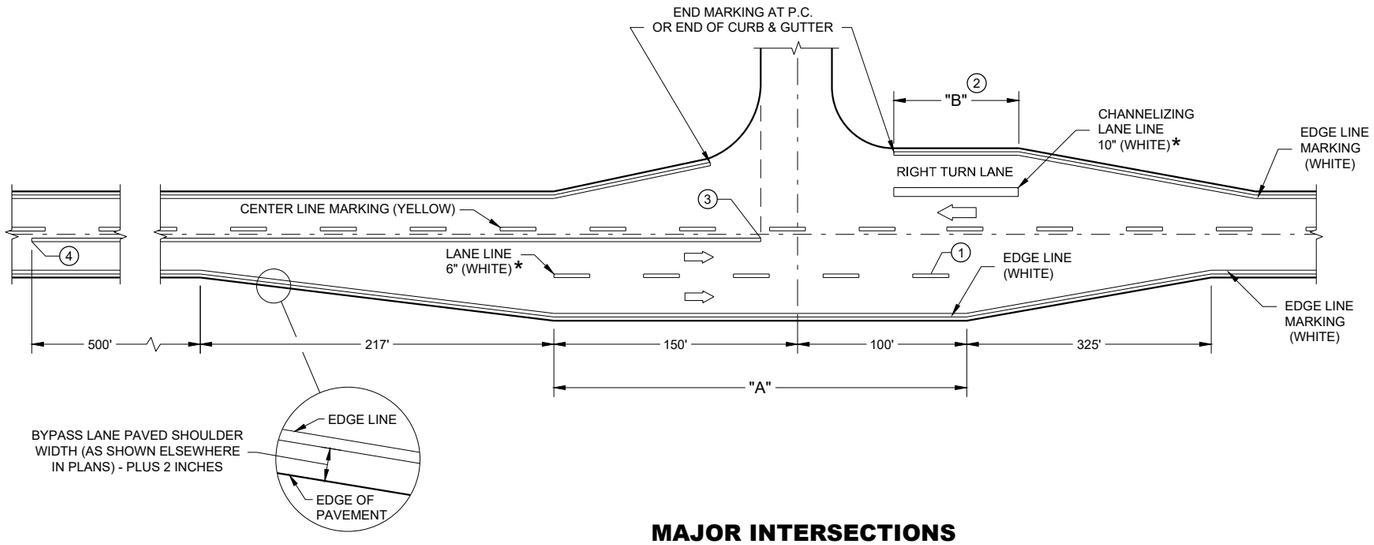
SDD 15C33 - 04




## MINOR INTERSECTION




## MAJOR INTERSECTIONS

### (INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

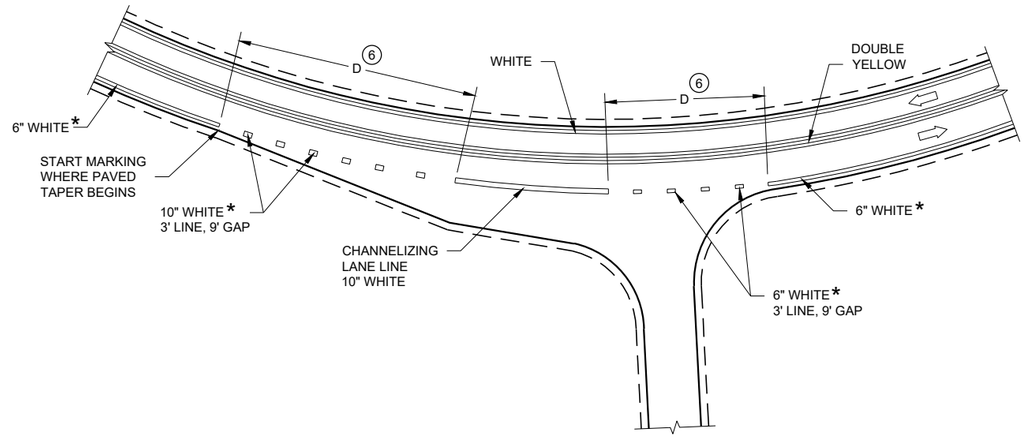
## GENERAL NOTES

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.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

## LEGEND

DIRECTION OF TRAVEL




## INTERSECTION ON OUTSIDE OF CURVE

**PAVEMENT MARKING (INTERSECTIONS)**

## LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR, FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

## GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50 FOOT SPACING.

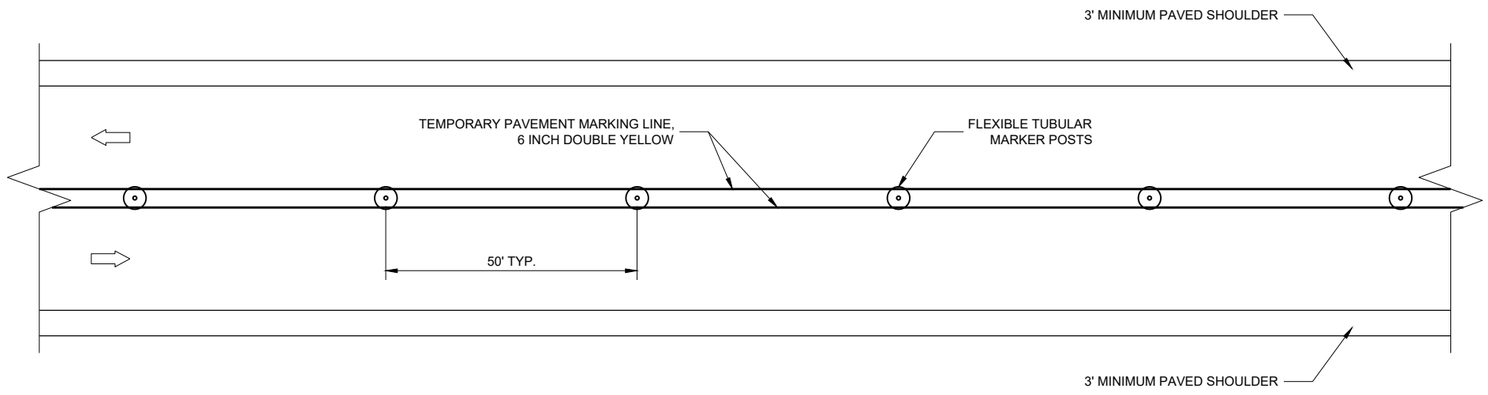
COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING LINE, 6 INCH DOUBLE YELLOW.

(1)

(2)

(1) THE WO6-3 AND WO57-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND / OR 500 FEET BEYOND ANY SIDE ROAD. THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE WO6-3 AND THE WO57-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN THE SIGNS.

(2) CONVENTIONAL: 24" X 30"
FREEWAY AND EXPRESSWAY: 36" X 48"




**TWO LANE, TWO WAY OPERATION**

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SDD 15D06-06

**TRAFFIC CONTROL**
**TWO LANE TWO WAY OPERATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



6

SDD 15D06-06

## GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

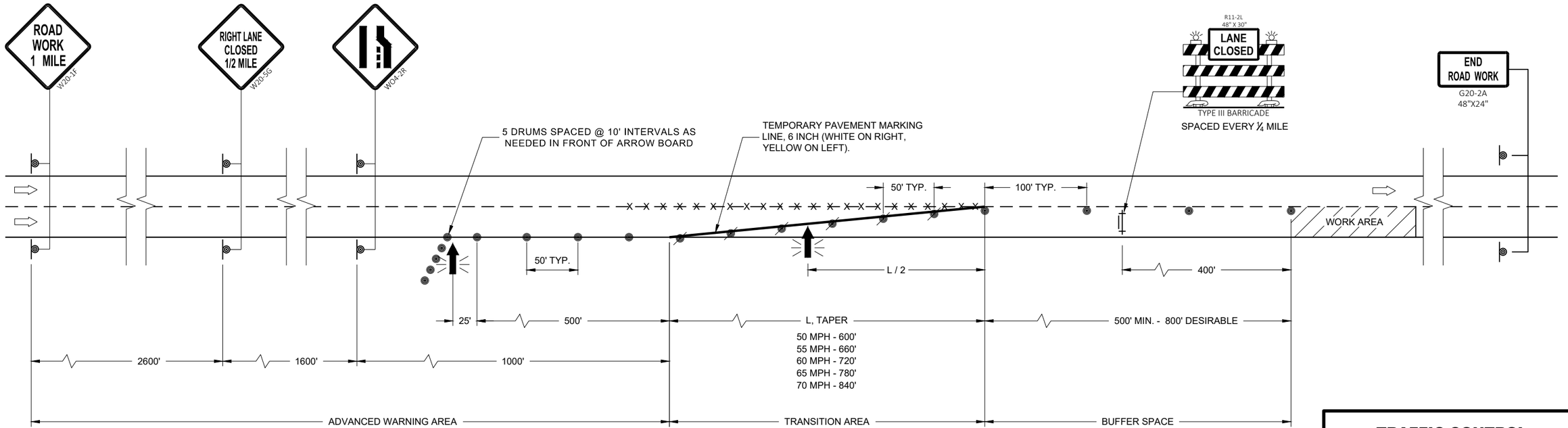
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD




# TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



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SDD 15D12 - 11a

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SDD 15D12 - 11a

## LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

## GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45 MPH, USE SDD 15D14.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES.
FOR CLOSING LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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 REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TEMPORARY SUPPORTS.

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 TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

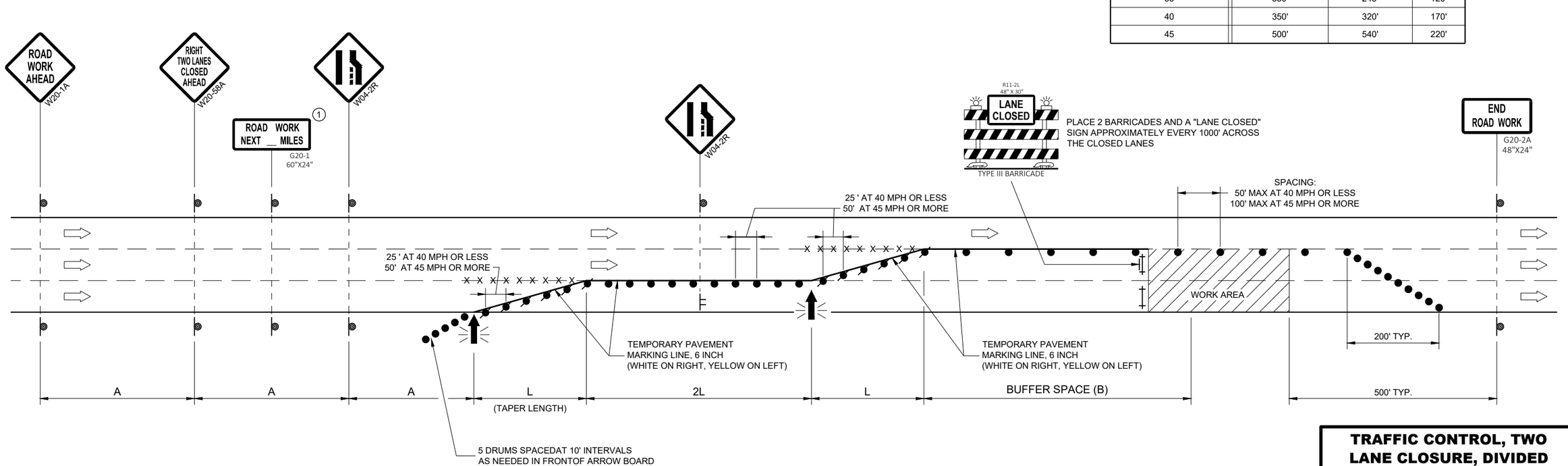
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

| POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH) | ADVANCE WARNING SIGN SPACING (A) FEET | TAPER LENGTH (12 FT. LANE) (L) FEET | BUFFER SPACE (B) FEET |
|---|---|---|---|
| 25 | 200' | 125' | 55' |
| 30 | 200' | 180' | 85' |
| 35 | 350' | 245' | 120' |
| 40 | 350' | 320' | 170' |
| 45 | 500' | 540' | 220' |




# TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



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SDD 15D22-06

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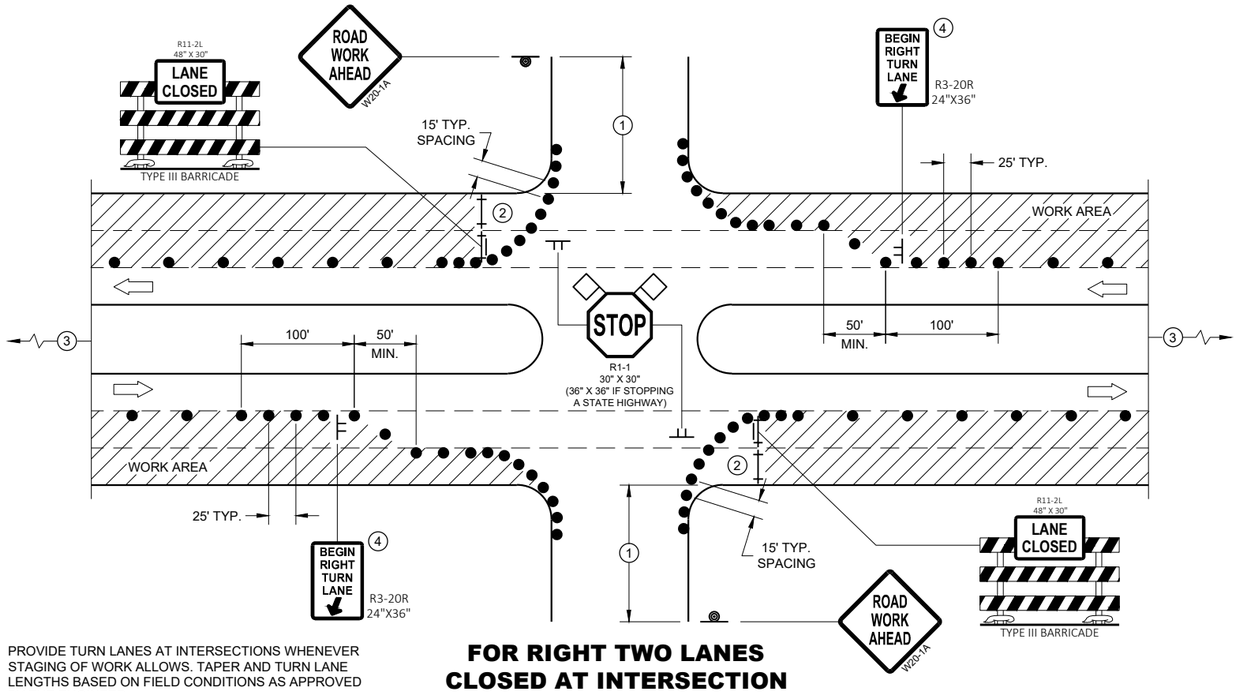
SDD 15D22-06




PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

**FOR RIGHT TWO LANES CLOSED AT INTERSECTION**

## GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

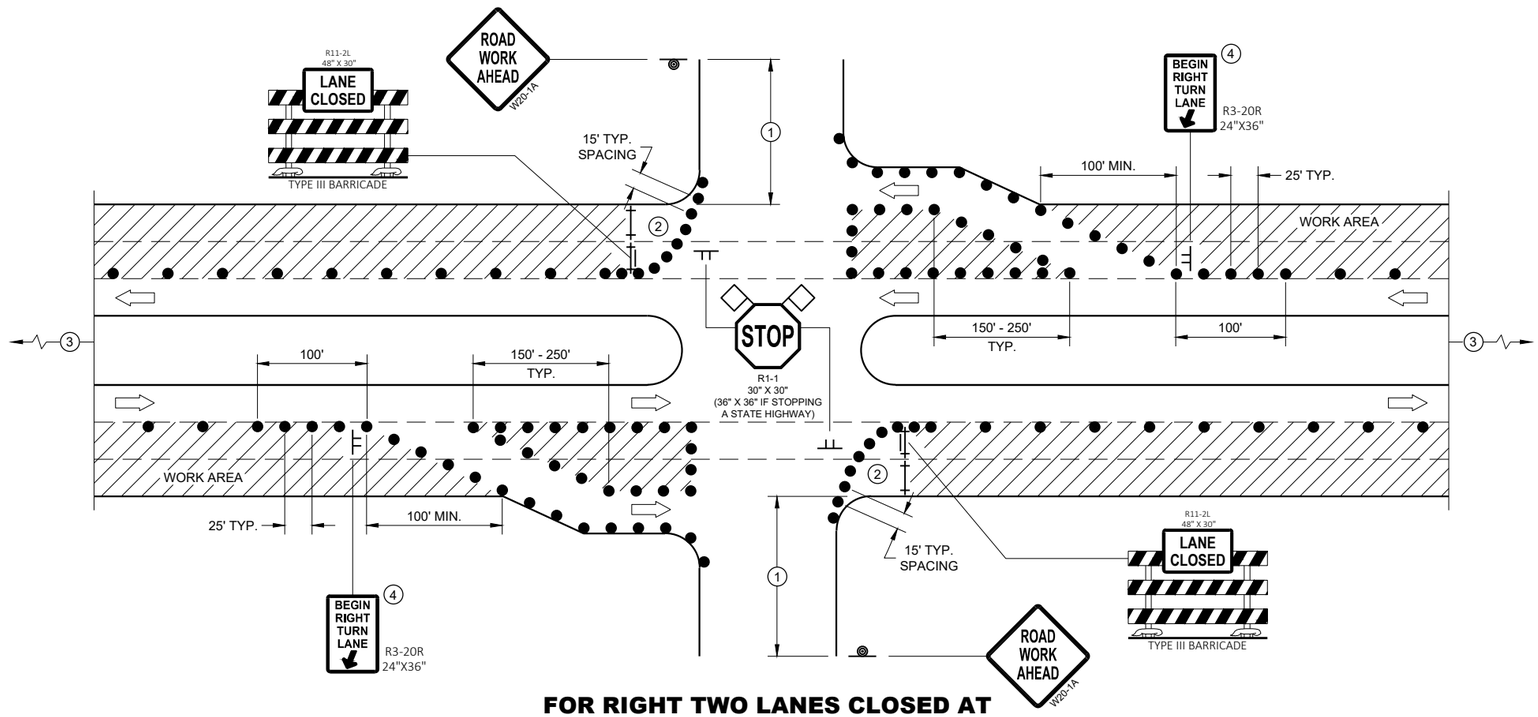
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.




**FOR RIGHT TWO LANES CLOSED AT INTERSECTION (WITH RIGHT TURN BAY OPEN)**

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

**TRAFFIC CONTROL, INTERSECTION WITHIN TWO RIGHT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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SDD 15D23 - 07a

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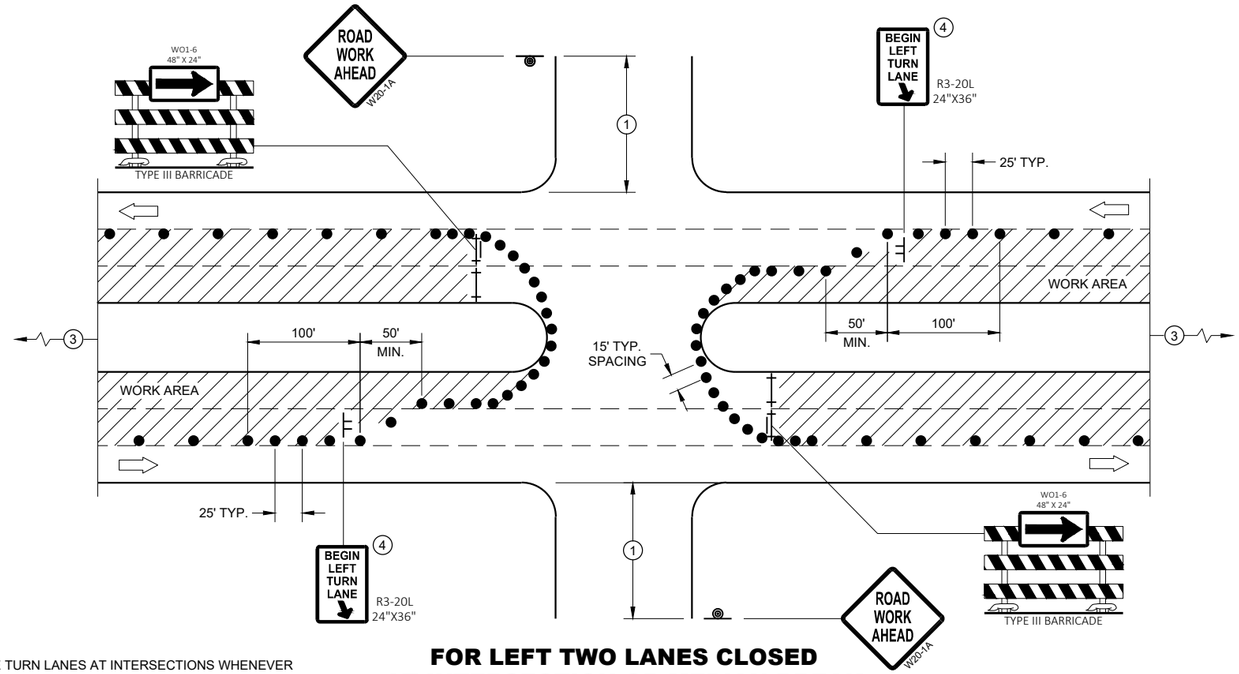
SDD 15D23 - 07a




## FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

## GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

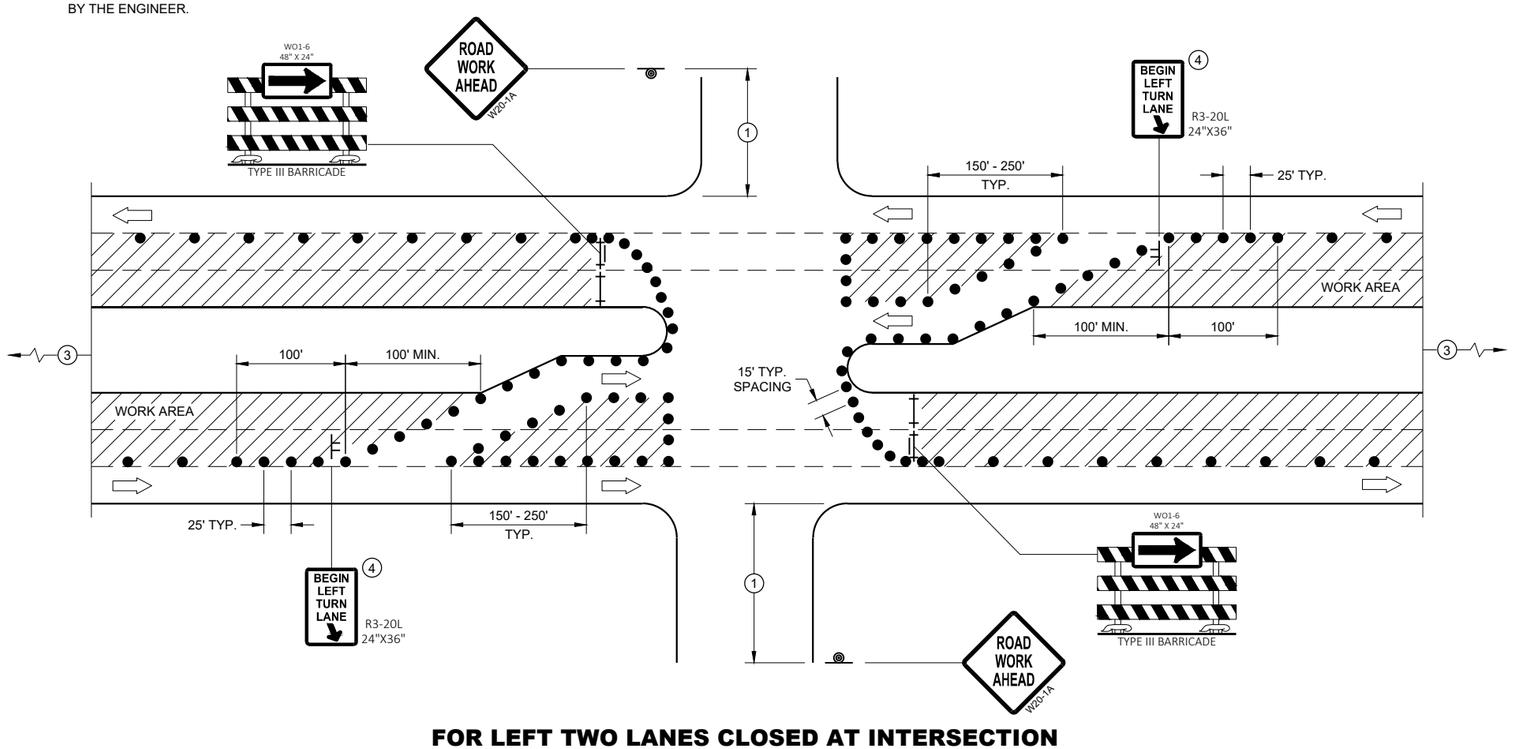
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.




## FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

**TRAFFIC CONTROL, INTERSECTION WITHIN TWO LEFT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

## GENERAL NOTES

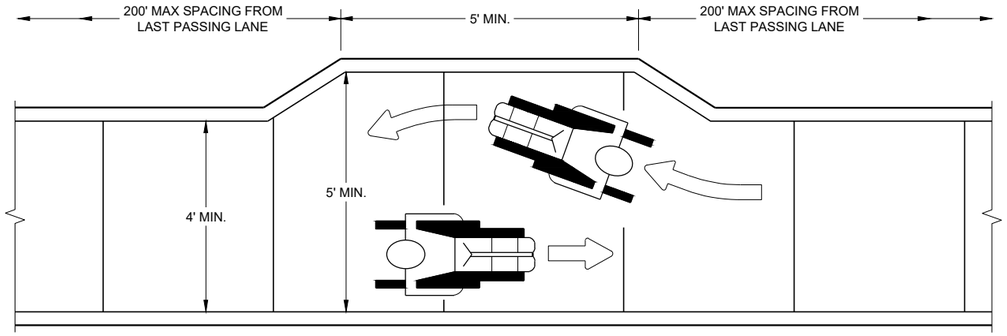
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

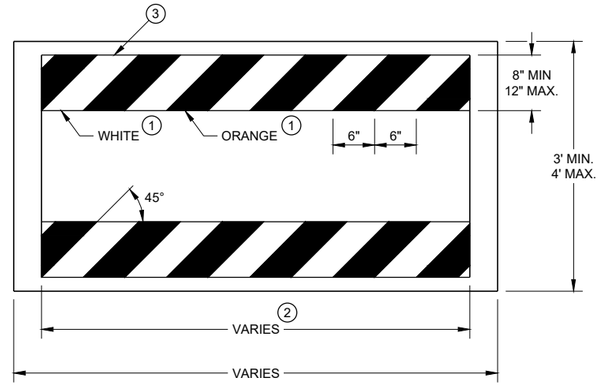
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

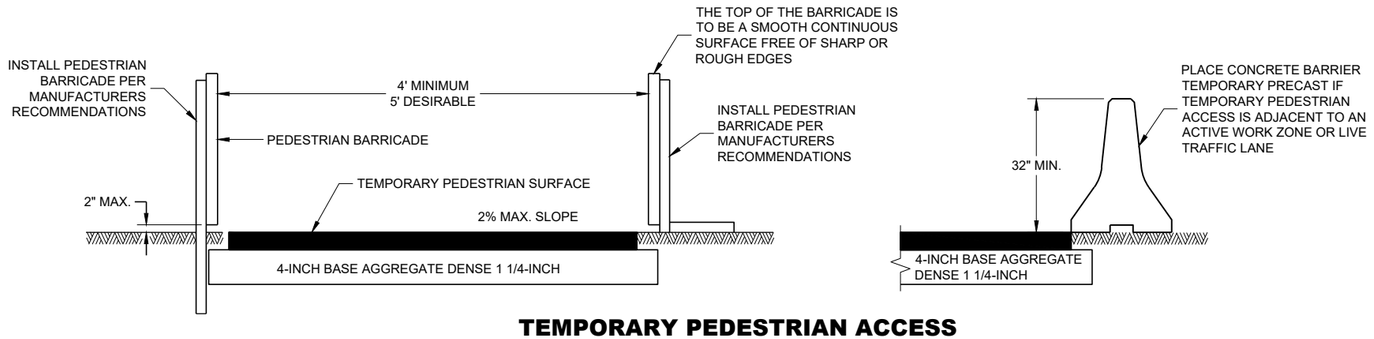
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.




**NARROW SIDEWALK PASSING DETAIL**




**TEMPORARY PEDESTRIAN BARRICADE***




**TEMPORARY PEDESTRIAN ACCESS**





**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**



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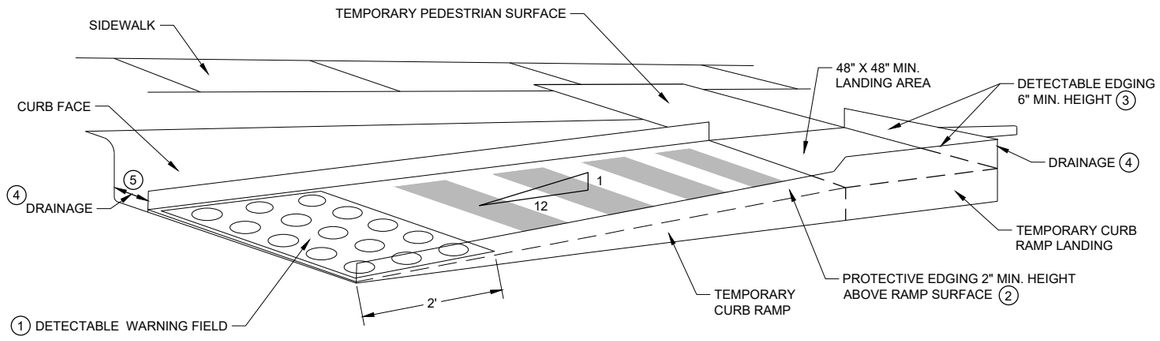
SDD 15D30 - 09a




**PERSPECTIVE VIEW**

## GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

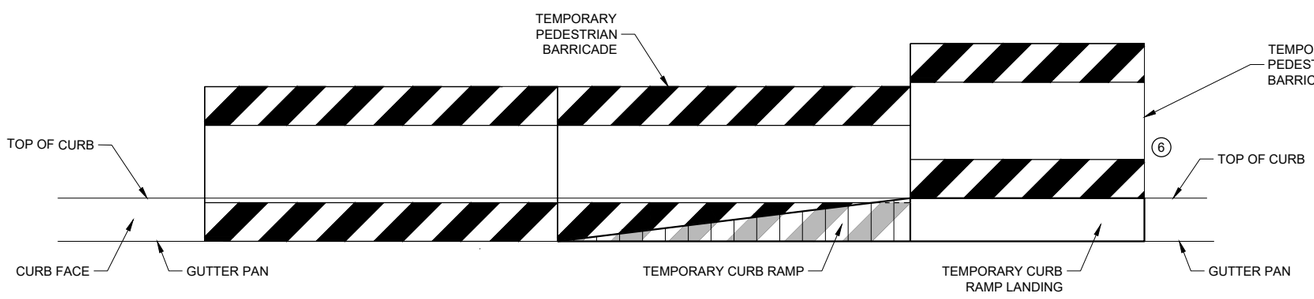
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

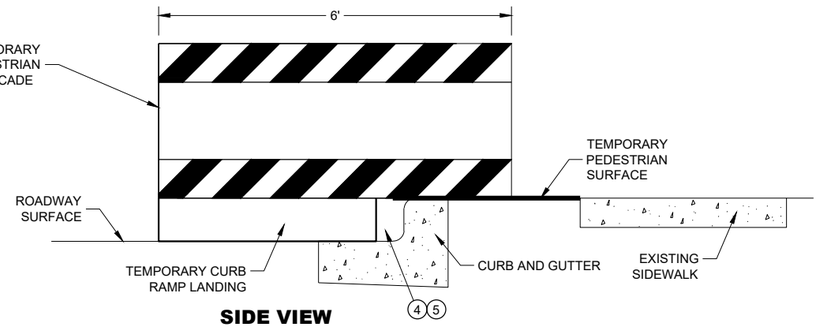
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.




**FRONT VIEW**




**SIDE VIEW**

## TEMPORARY CURB RAMP PARALLEL TO CURB

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




6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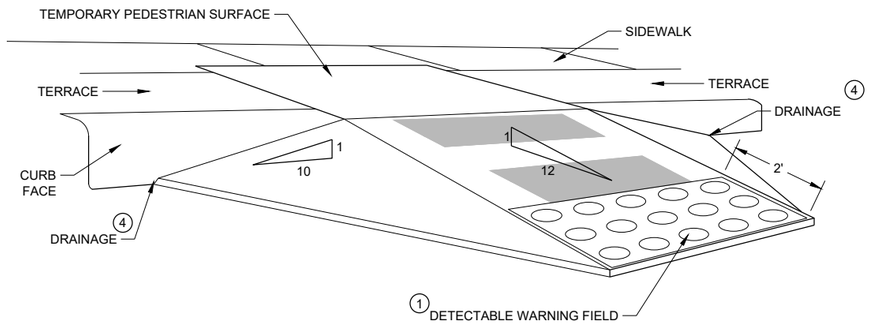
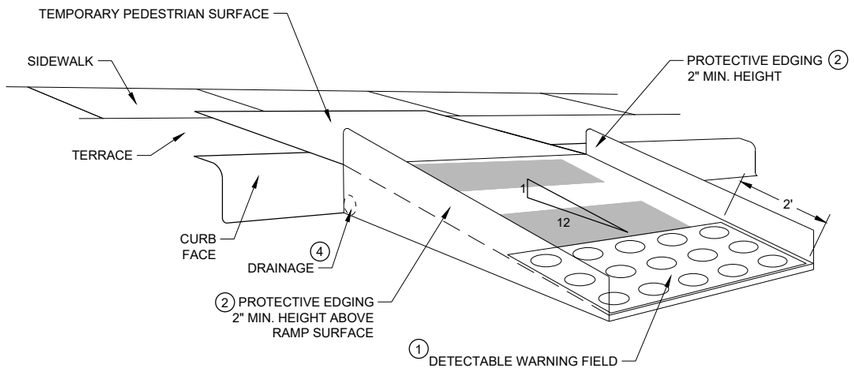



**WITH SIDE APRON** (5)




**WITH PROTECTIVE EDGE**

## TEMPORARY CURB RAMP PERPENDICULAR TO CURB

## GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.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**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

## GENERAL NOTES

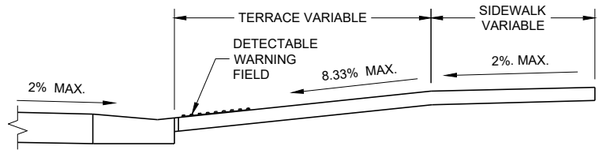
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

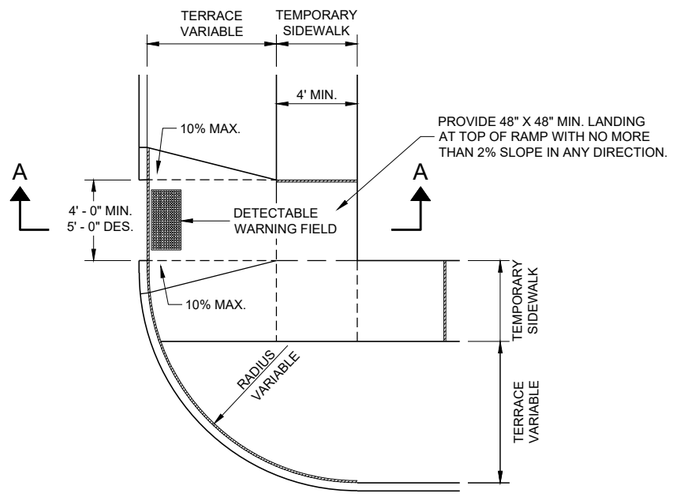
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.




**SECTION A - A**




**PLAN VIEW**

**TEMPORARY TYPE 3 RAMP**

(OUTSIDE OF CROSSWALK AREA)

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA



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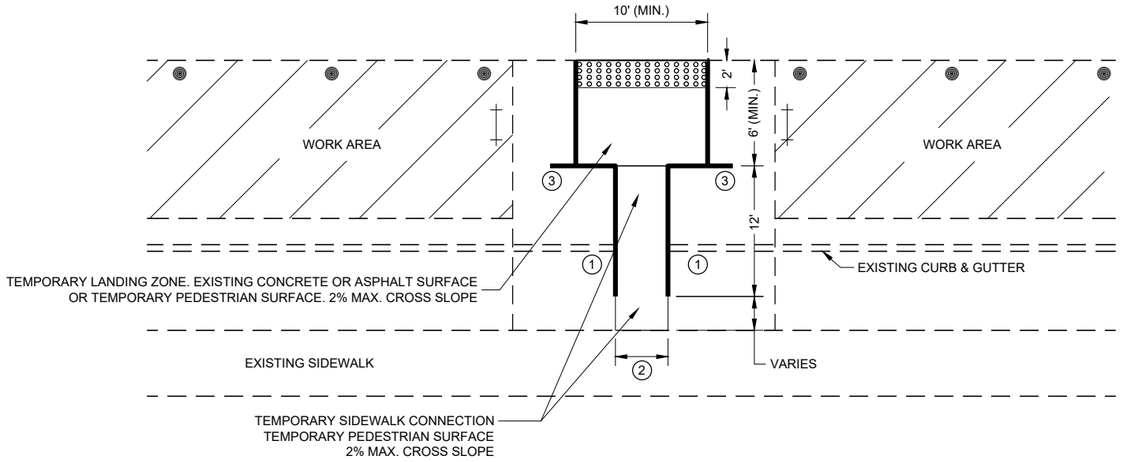
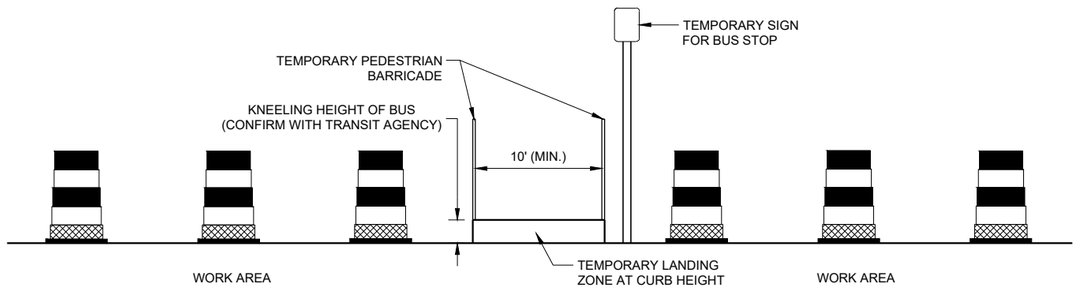



**PLAN VIEW**




**PROFILE VIEW**

**TEMPORARY BUS STOP PAD**

## GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

## LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA



6



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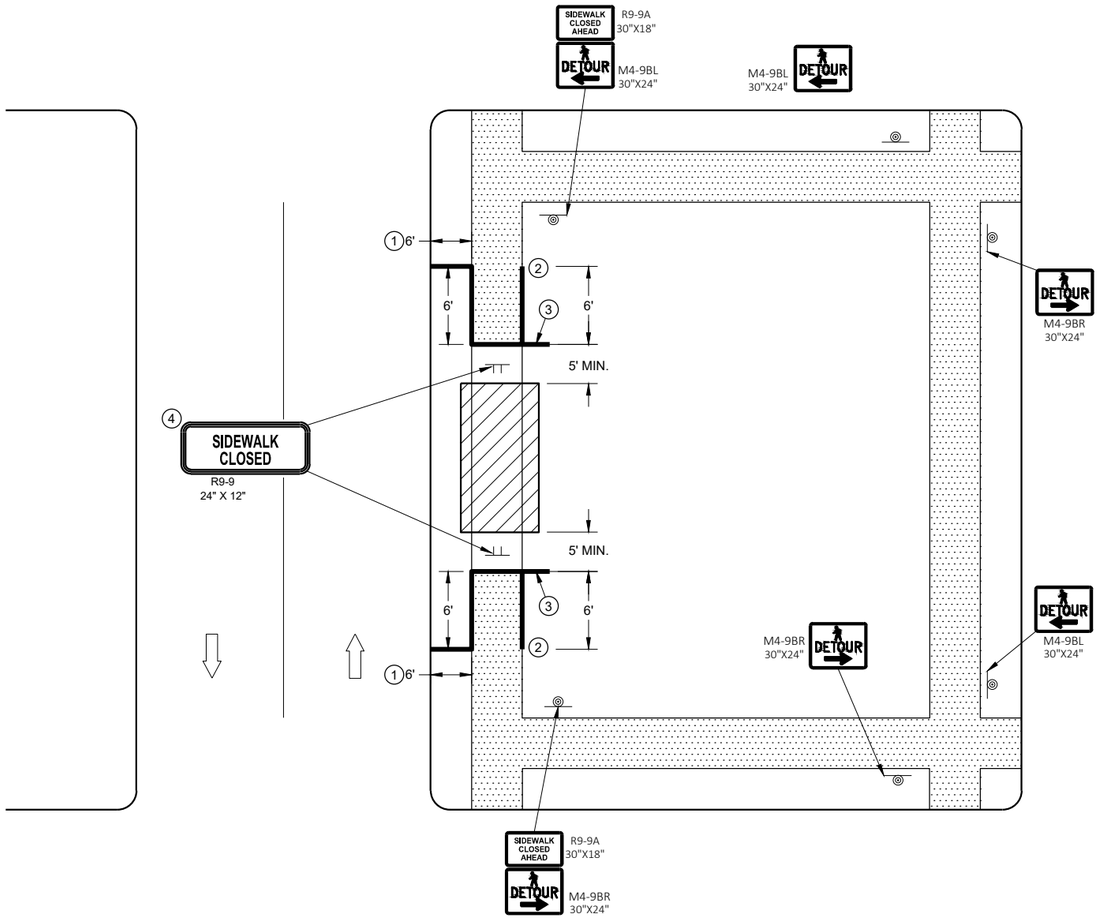
**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

## LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC




**SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE**

## GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.





**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**



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## LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

## GENERAL NOTES

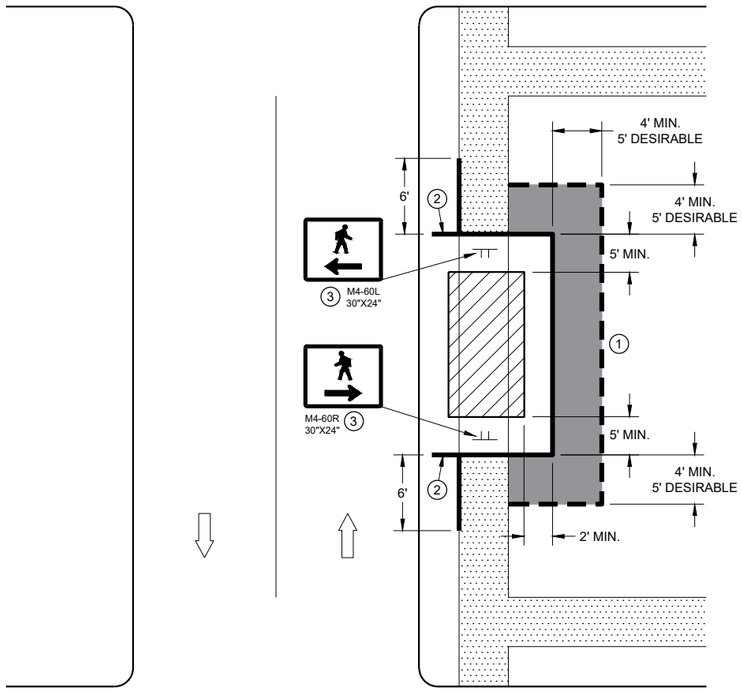
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.




**SIDEWALK DIVERSION**
**SINGLE SIDE**

6

SDD 15D30 - 09g

**TRAFFIC CONTROL,**
**PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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## LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

## GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

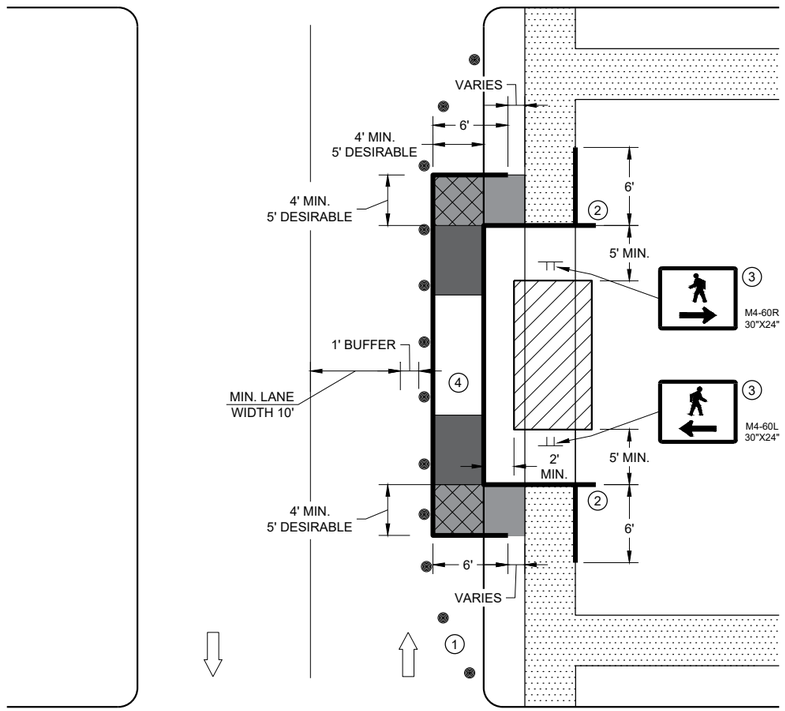
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.

(2) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.

(3) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

(4) USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.




**SIDEWALK DIVERSION, SINGLE SIDE**

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 139

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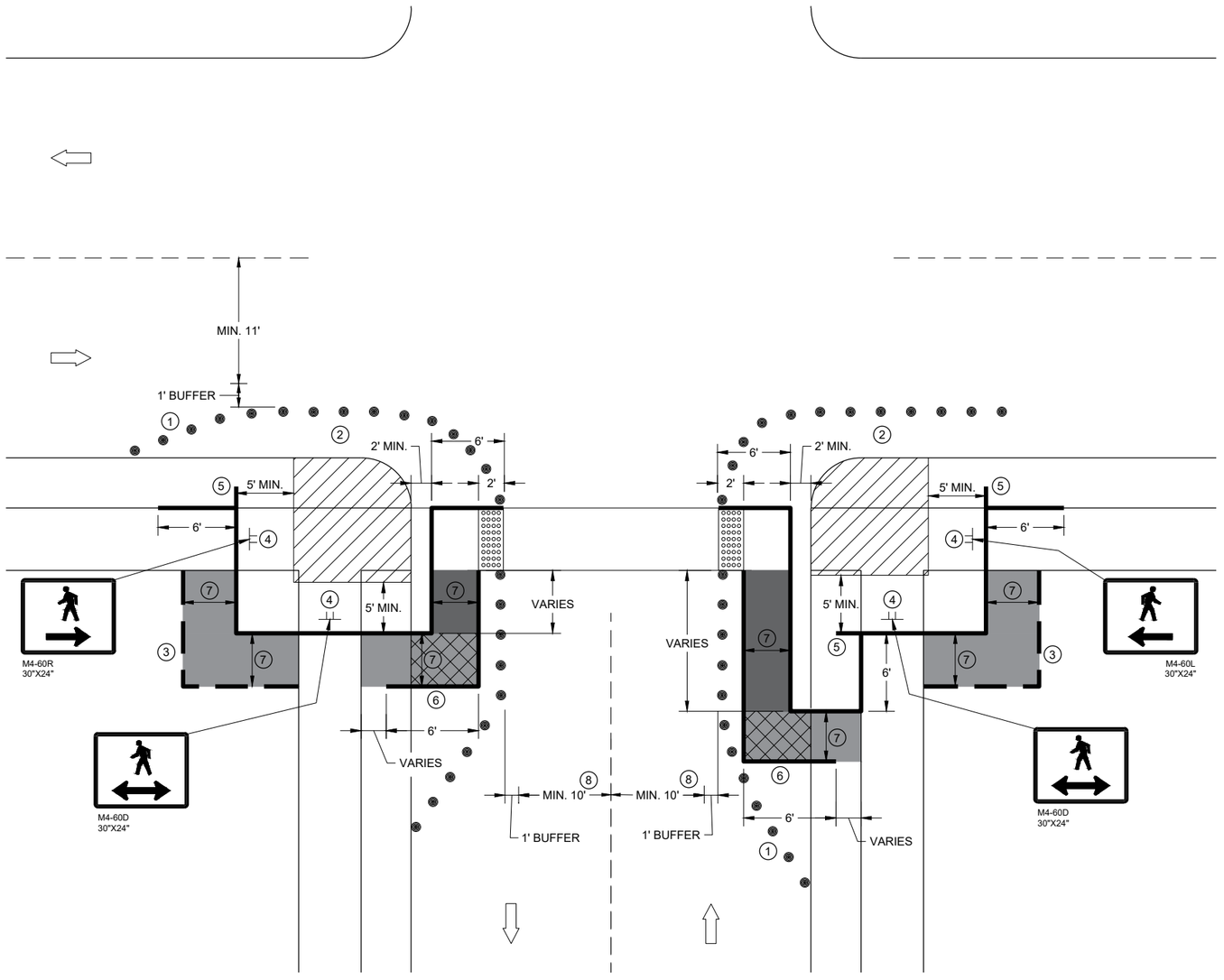



**CURB RAMP PEDESTRIAN TRAFFIC CONTROL**
**SIDEWALK ON SINGLE SIDE**

## GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

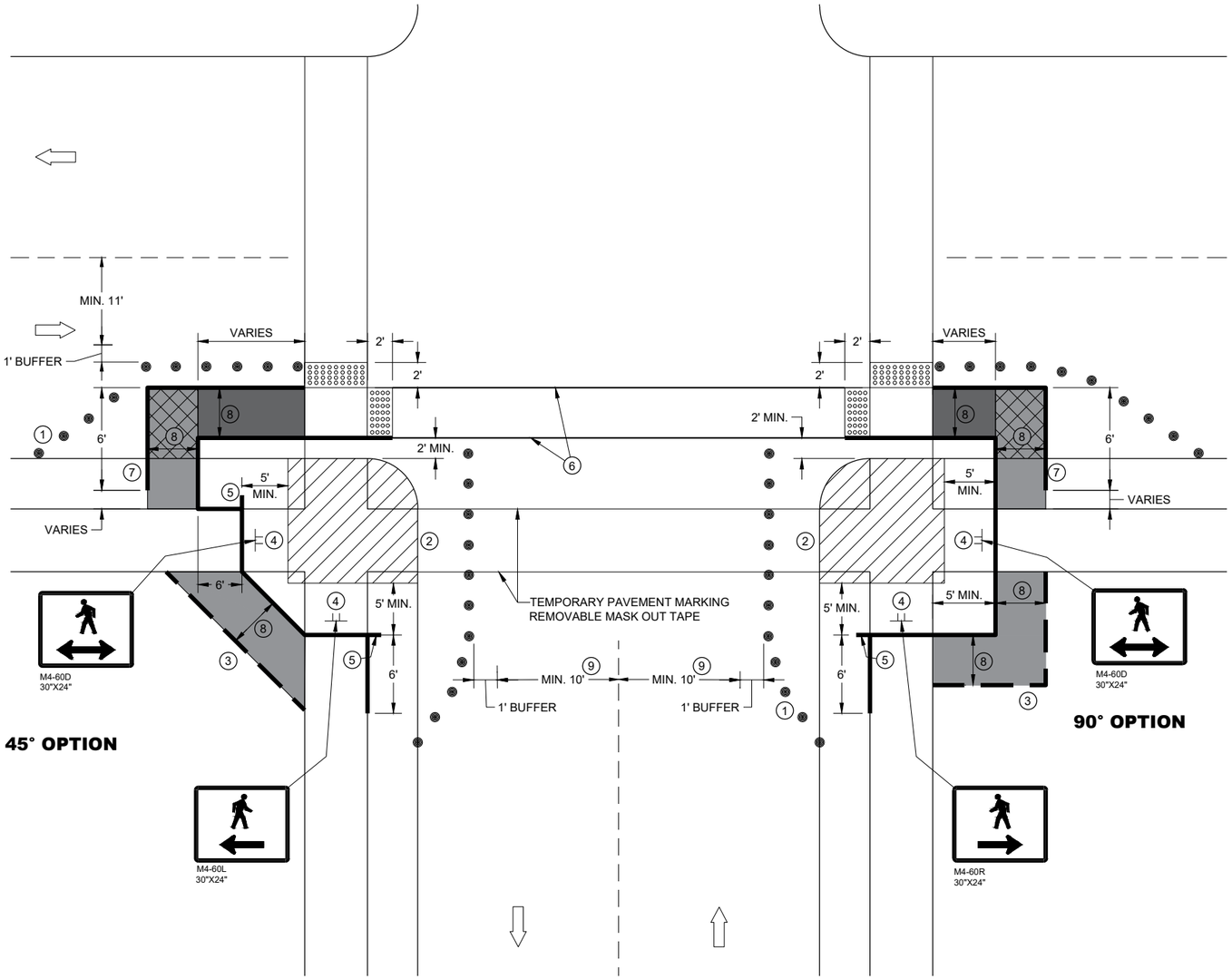
WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

**TRAFFIC CONTROL,**
**PEDESTRIAN ACCOMMODATION**




## CURB RAMP PEDESTRIAN TRAFFIC CONTROL

## GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

## LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**



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## LEGEND

SIGN ON PERMANENT SUPPORT

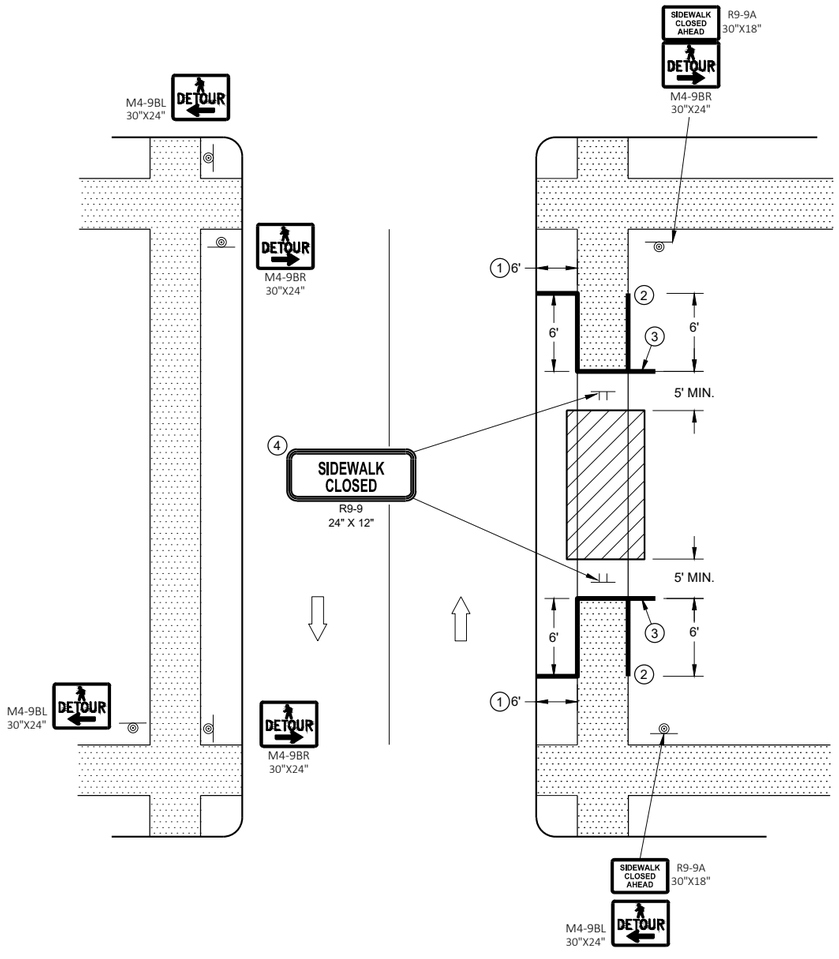
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC




**SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES**

## GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.





**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**



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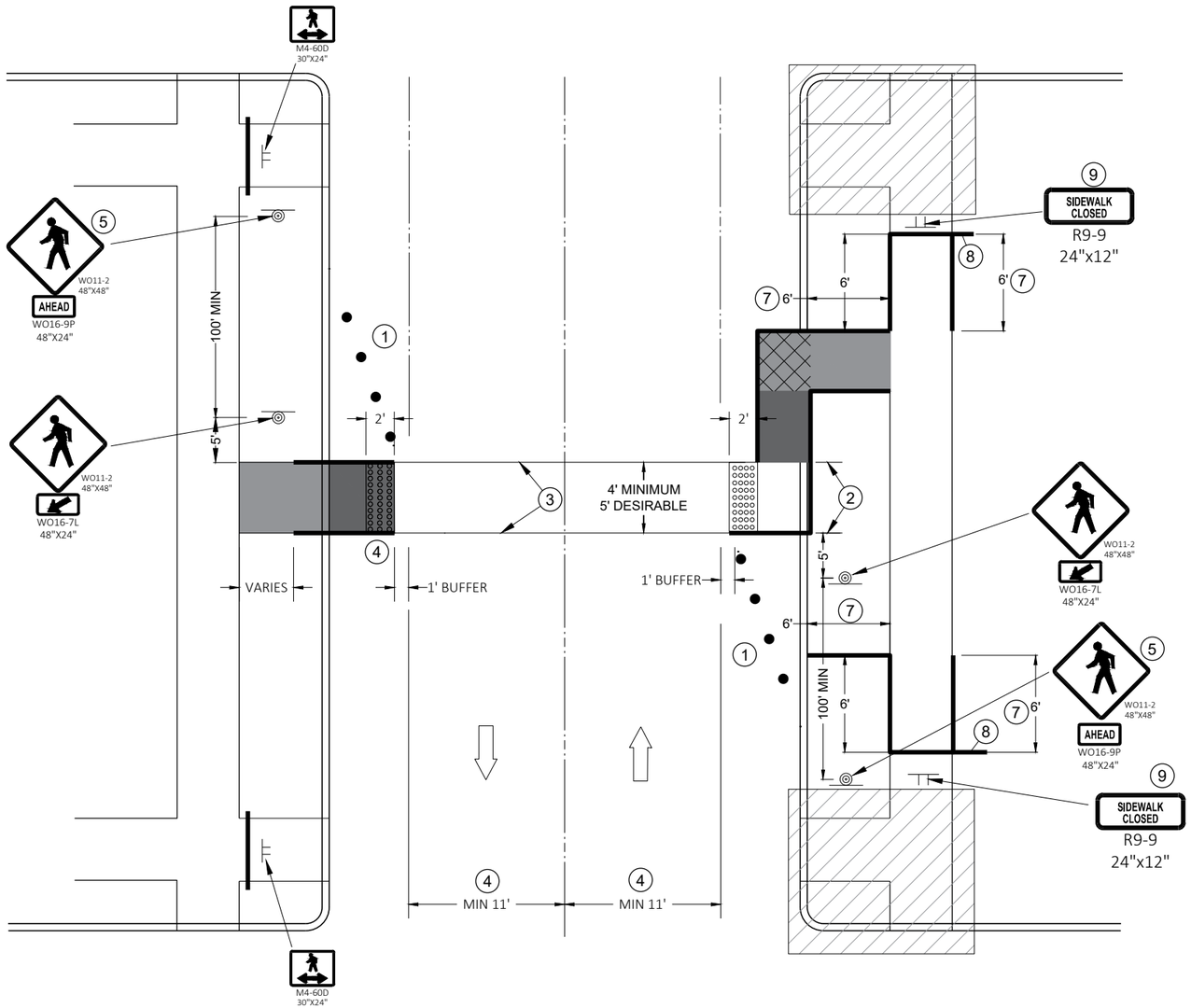


## TEMPORARY PEDESTRIAN CROSSING

## GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

1. SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
2. 4 FEET MINIMUM, 5 FEET DESIRABLE.
3. WHITE 6" TEMPORARY PAVEMENT MARKING.
4. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
5. IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
6. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
7. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
8. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
9. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

## LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

6



**TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION**



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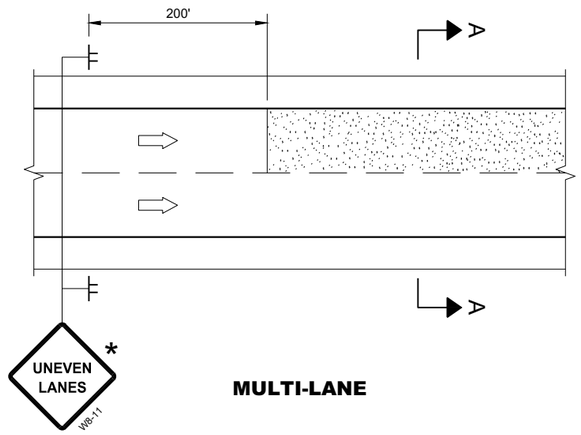
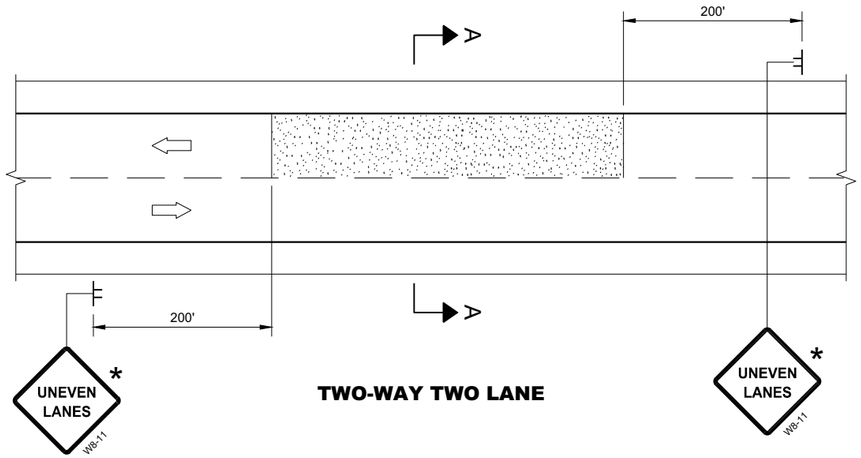



**MULTI-LANE**




**TWO-WAY TWO LANE**

## GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

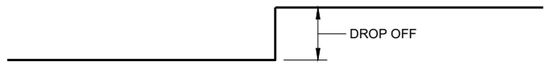
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

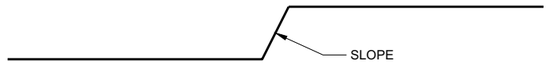
## LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

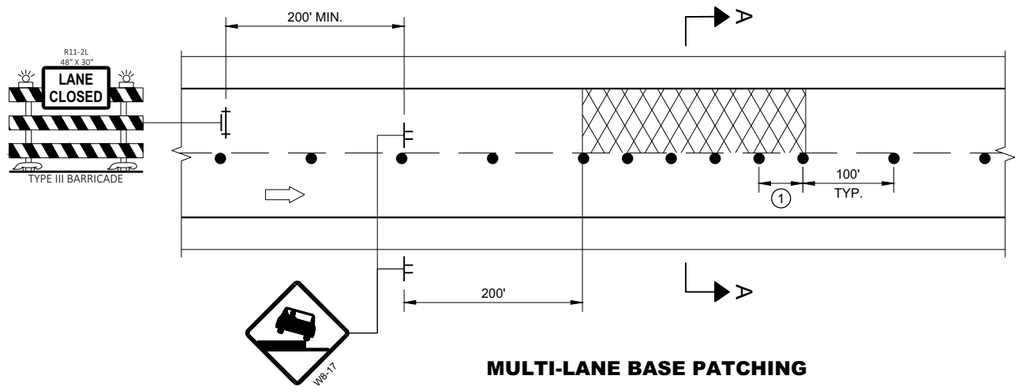



**SECTION A - A**

**OR**

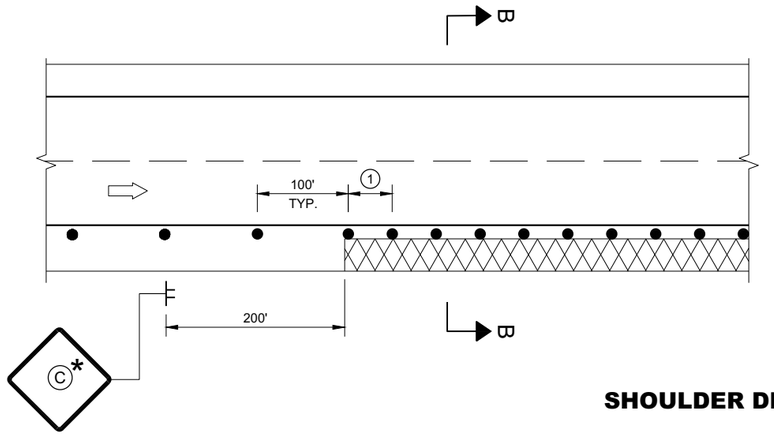



**SECTION A - A**

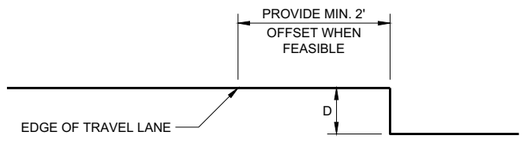



**MULTI-LANE BASE PATCHING**

**ADJACENT LANE DROP-OFFS**




**SHOULDER DROP-OFFS**




**SECTION B - B**

| D | SIGN (C) |
|---|---|
| < 2" WITH A SLOPE STEEPER THAN 3:1 | LOW SHOULDER<br>WO8-9 |
| 2" < 6" WITH A SLOPE STEEPER THAN 3:1 | SHOULDER DROP - OFF<br>W8-9A<br>PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT |

**TRAFFIC CONTROL, DROP-OFF SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



6

SDD 15D39 - 02

6

SDD 15D39 - 02

## GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

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

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

(1) PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

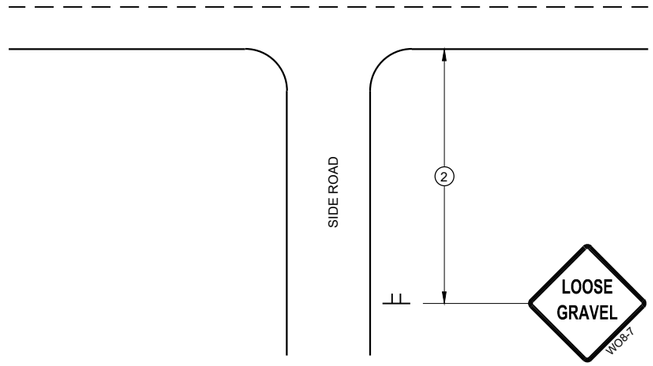
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

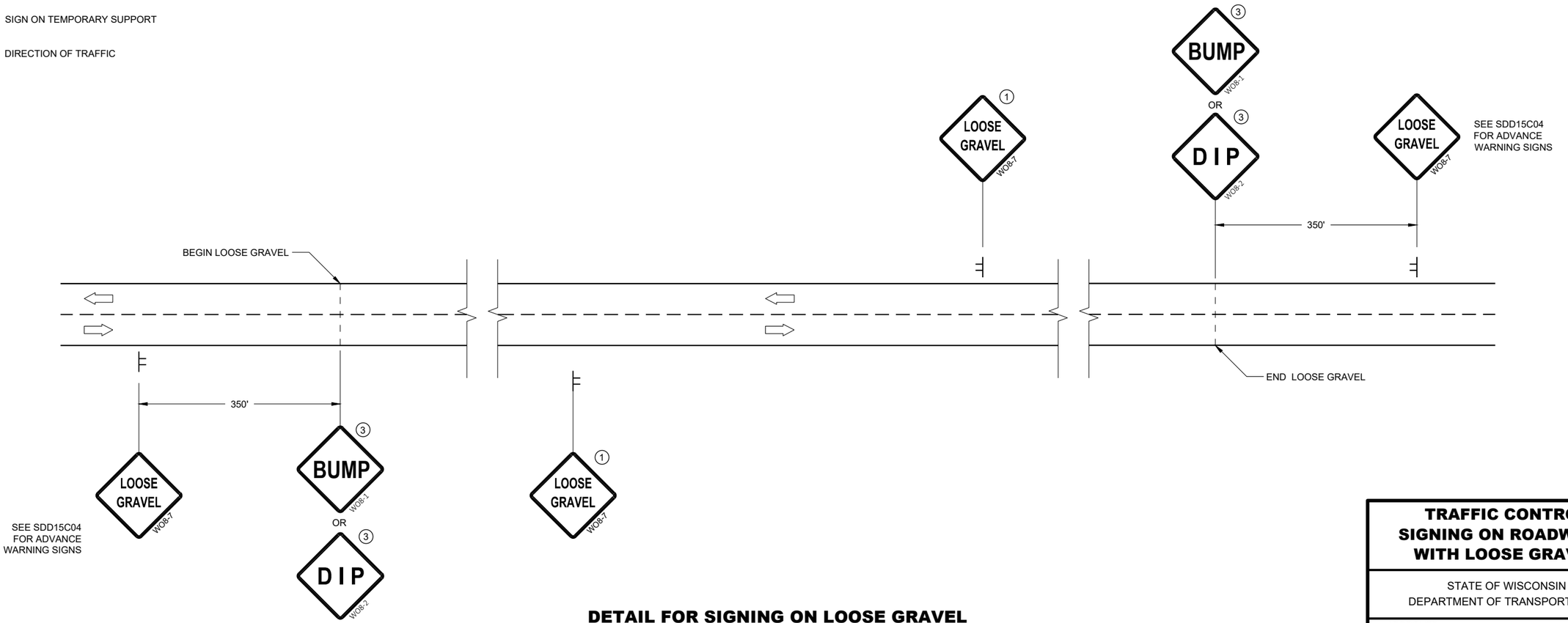
## LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC




**TYPICAL SIDE ROAD APPROACH SIGN DETAIL**




**DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES**

**TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



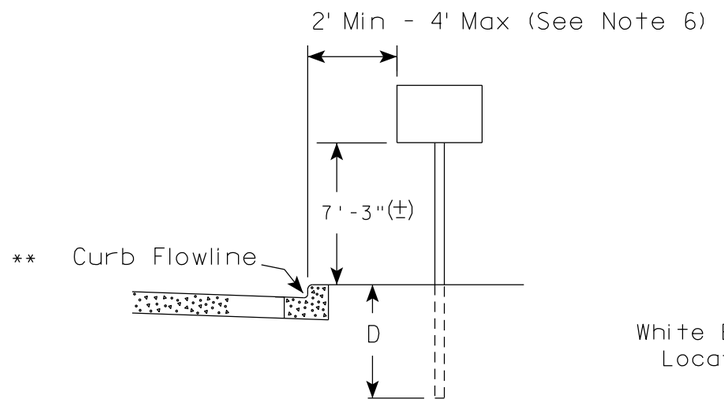
6

SDD 15D45 - 03

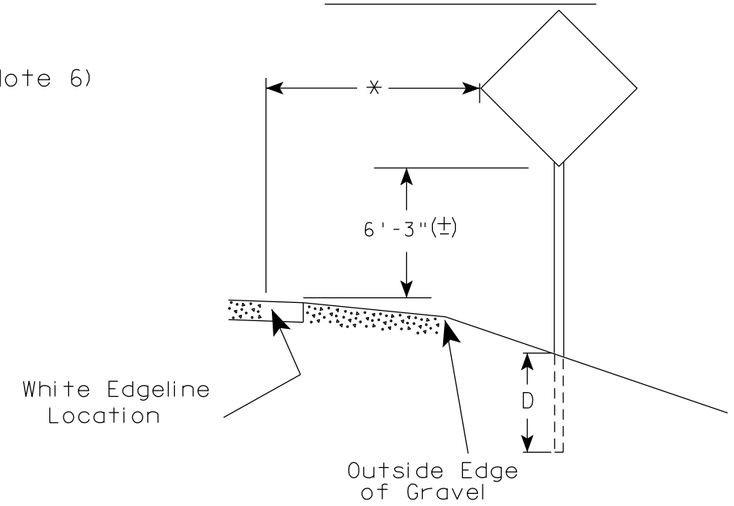
6

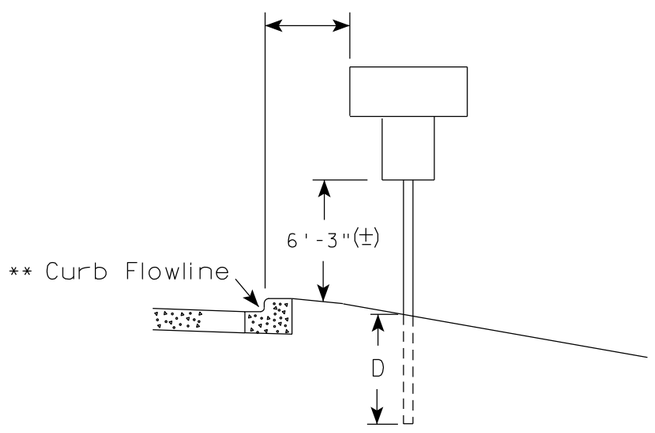
SDD 15D45 - 03

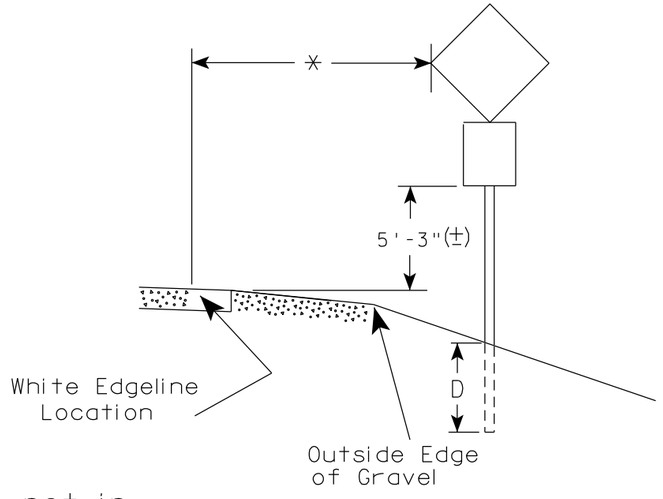
## URBAN AREA




## RURAL AREA (See Note 2)




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

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

### POST EMBEDMENT DEPTH

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

### GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) 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" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

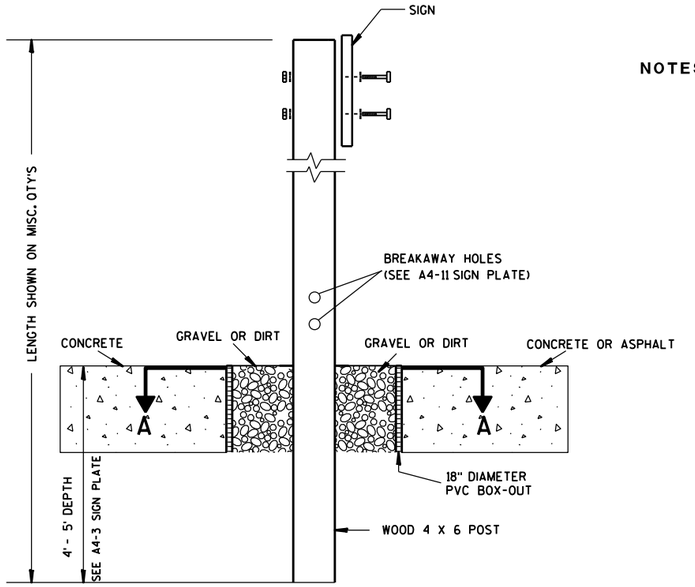
# TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

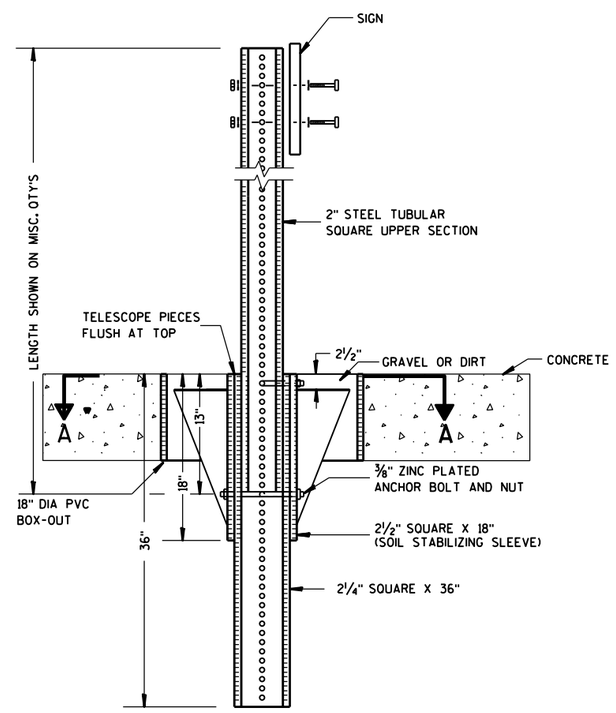
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 146 | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

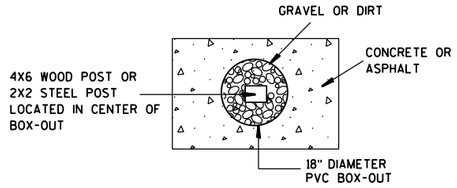
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

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*

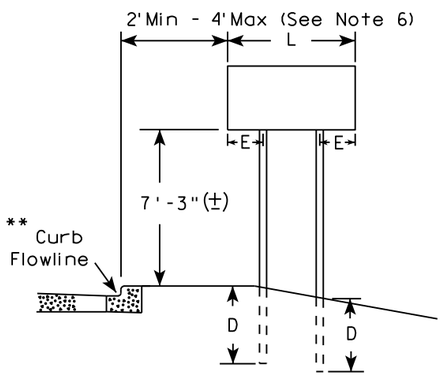
APPROVED Matthew R Rauch
for State Traffic Engineer

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

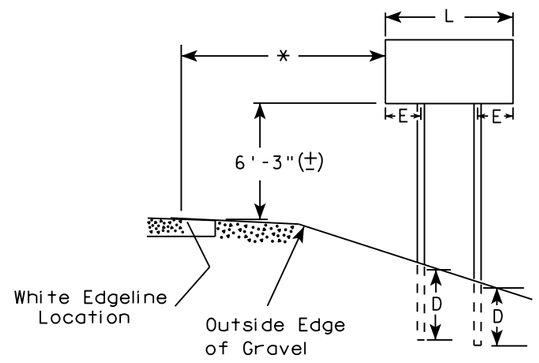


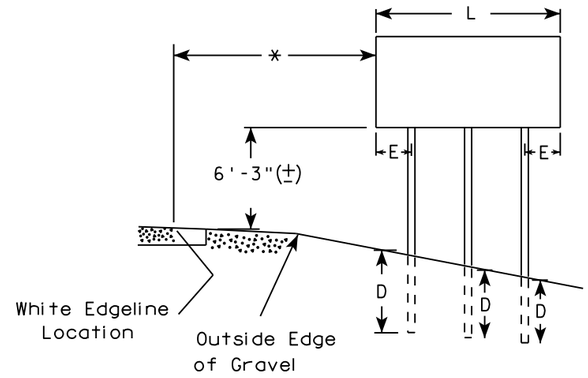
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

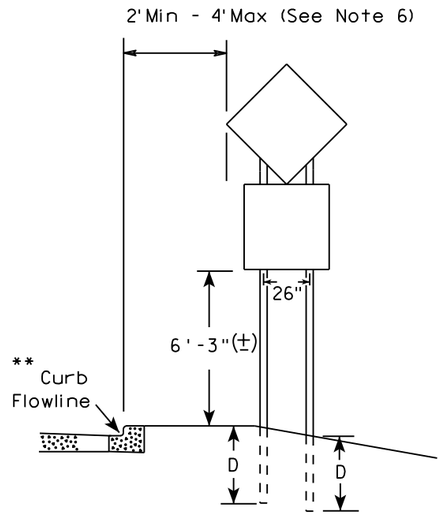
## URBAN AREA



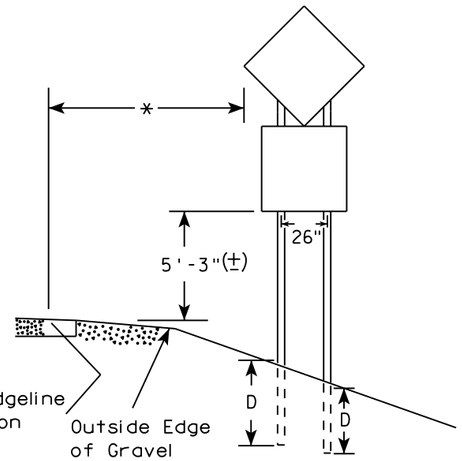

## RURAL AREA (See Note 3)




48" DIAMOND WARNING SIGN




48" DIAMOND WARNING SIGN

| *** | SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED) | |
|---|---|---|
| | L | E |
| | Greater than 48" Less than 60" | 12" |
| | 60" to 108" | L/5 |

| SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED) | |
|---|---|
| L | E |
| Greater than 108" to 144" | 12" |

### GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

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

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

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

### POST EMBEDMENT DEPTH

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

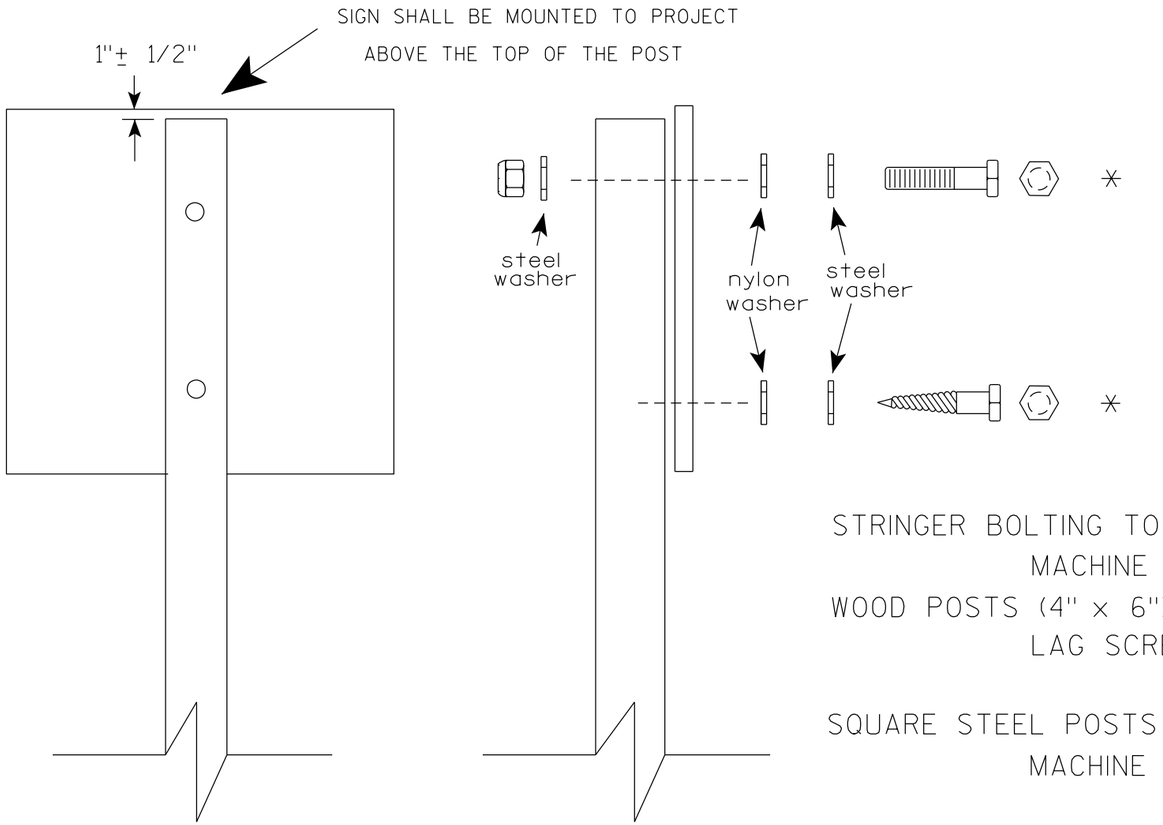
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 148 | 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 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

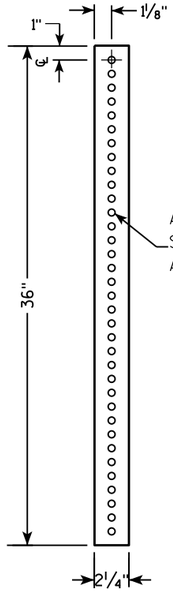
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

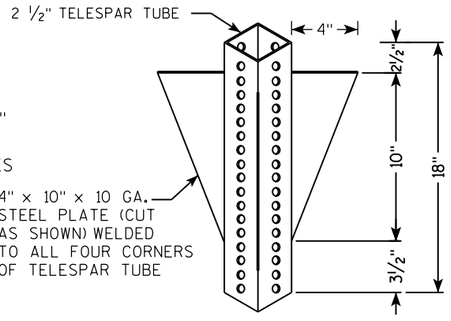
DATE 4/1/2020 PLATE NO. A4-8.9

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

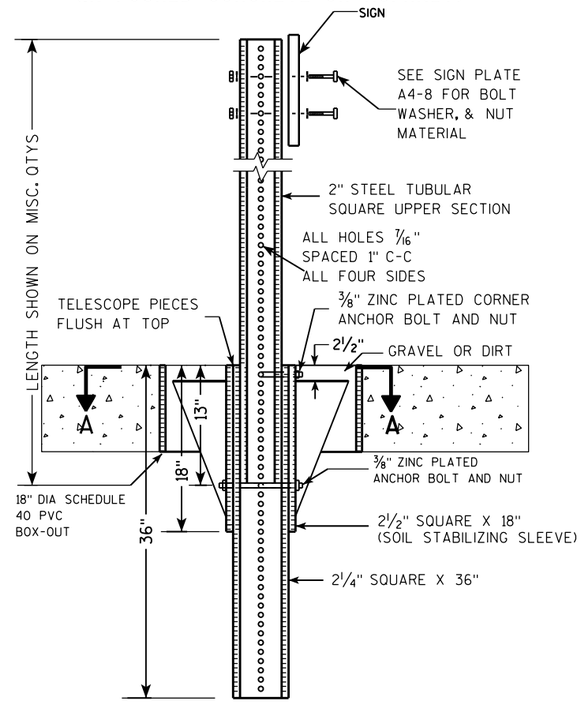
**2 1/4 " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



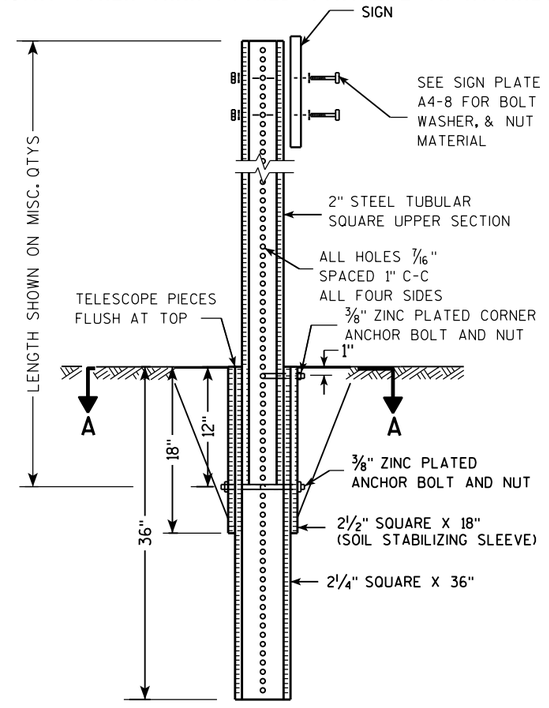

**2 1/2 " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

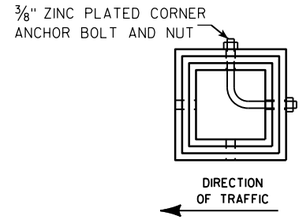



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




## 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).**

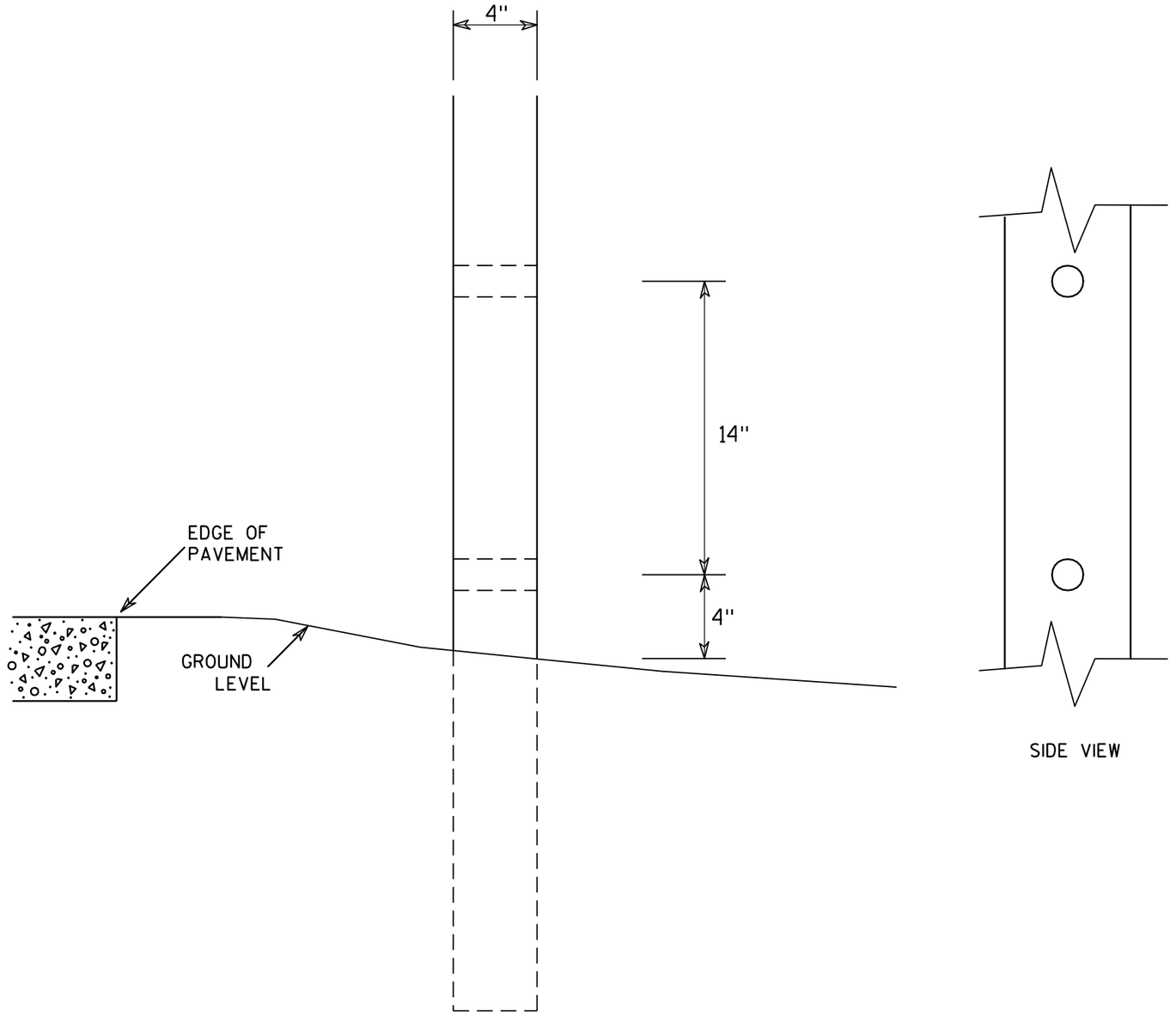
TUBULAR STEEL
SIGN POST
A4-9

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE 150 A4-9.9

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






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

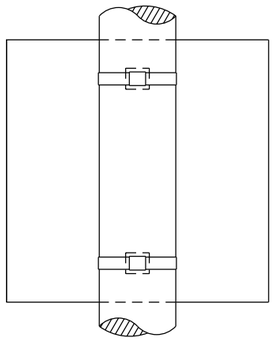
APPROVED Chester J Spang for State Traffic Engineer

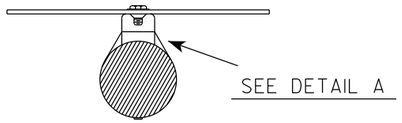
DATE 3/27/97 PLATE NO. A4-11.2

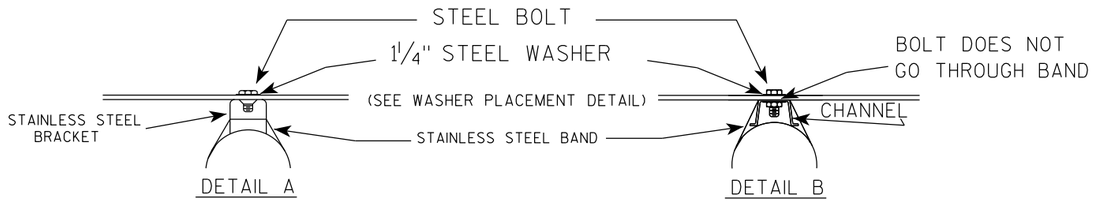
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 151 | E |
|---|---|---|---|---|---|

# BANDING

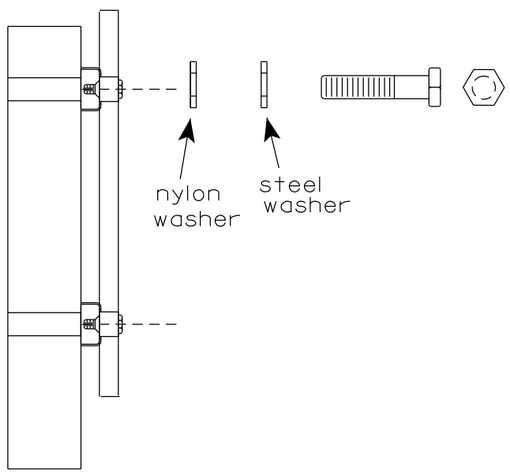
SINGLE SIGN






WASHER PLACEMENT

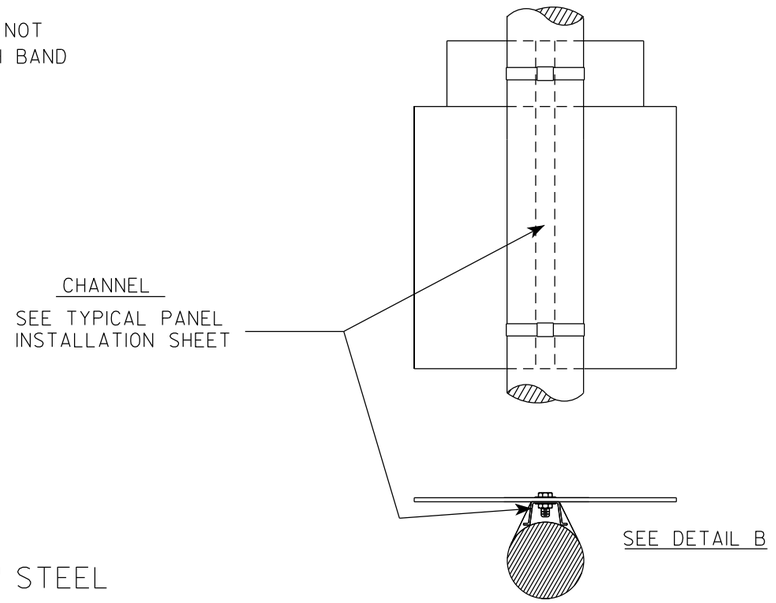



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY




STANDARD SIGN
SIGN BANDING DETAILS

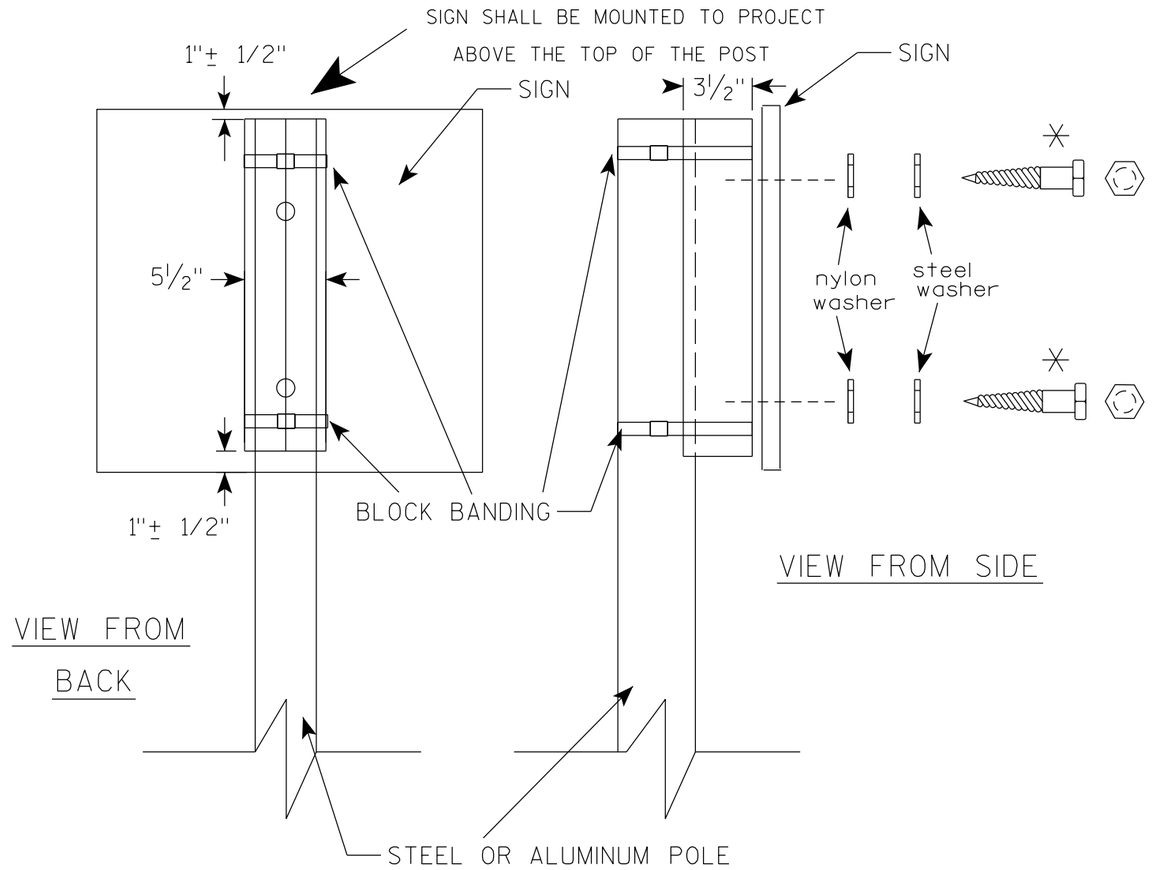
*WISCONSIN DEPT OF TRANSPORTATION*

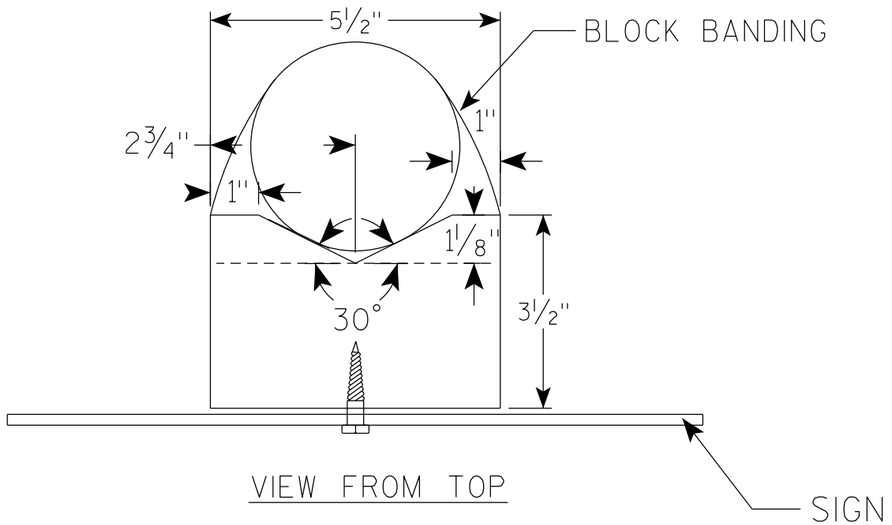
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 152 | E |
|---|---|---|---|---|---|

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$




## 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
   b. 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 )

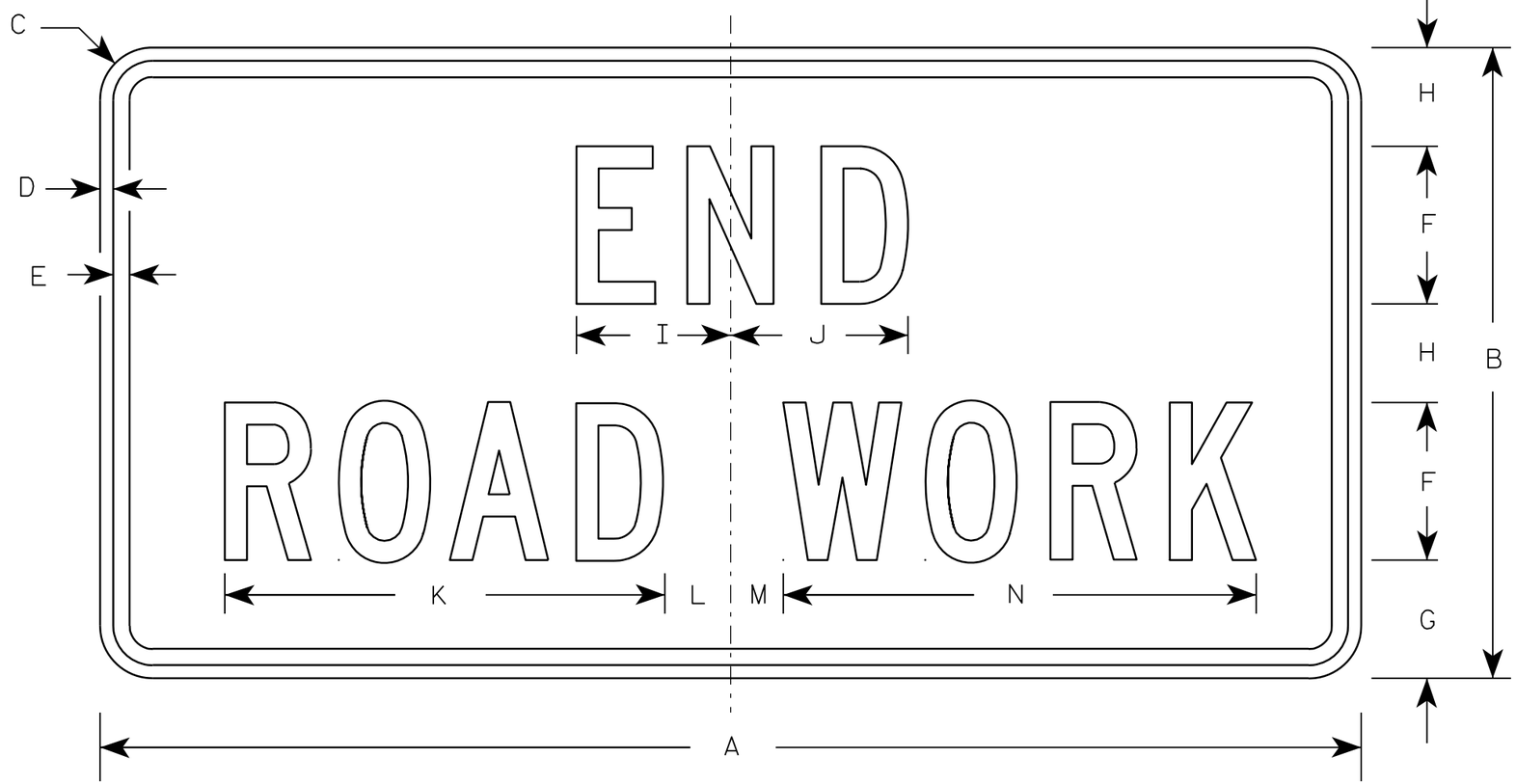
*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 153 E




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

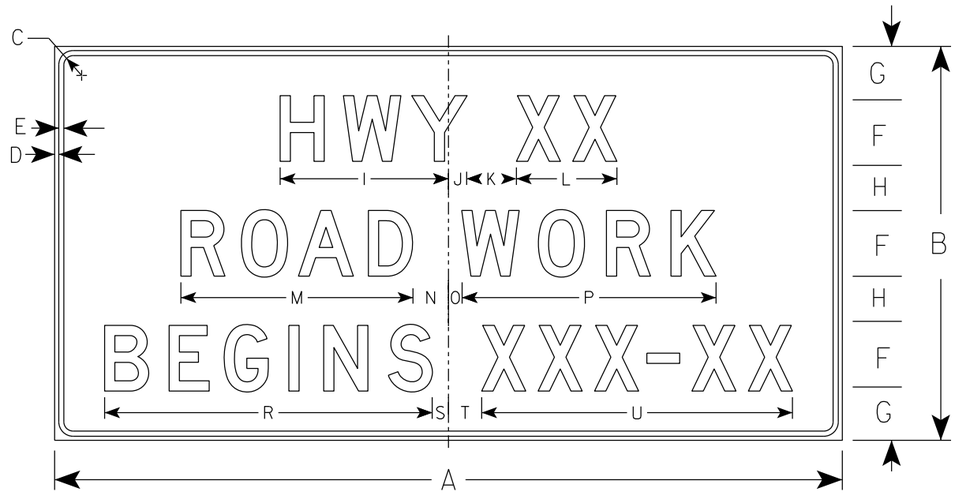
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 154 | E |
|---|---|---|---|---|---|

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and adjust spacing to achieve proper balance.




G20-57

| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 72 | 36 | 1 1/8 | 1/2 | 5/8 | 6 | 5 | 4 | 15 5/8 | 1 5/8 | 5 | 9 1/4 | 21 1/4 | 3 1/2 | 1 1/2 | 23 1/4 | | 29 7/8 | 1 3/4 | 3 1/4 | 28 1/2 | | | | | | 18.0 |
| 4 | 96 | 48 | 2 1/4 | 3/4 | 1 | 8 | 6 1/2 | 5 1/2 | 20 5/8 | 2 1/4 | 6 | 12 1/4 | 28 1/4 | 4 3/8 | 1 5/8 | 31 | | 39 1/4 | 2 | 4 | 37 7/8 | | | | | | 32.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

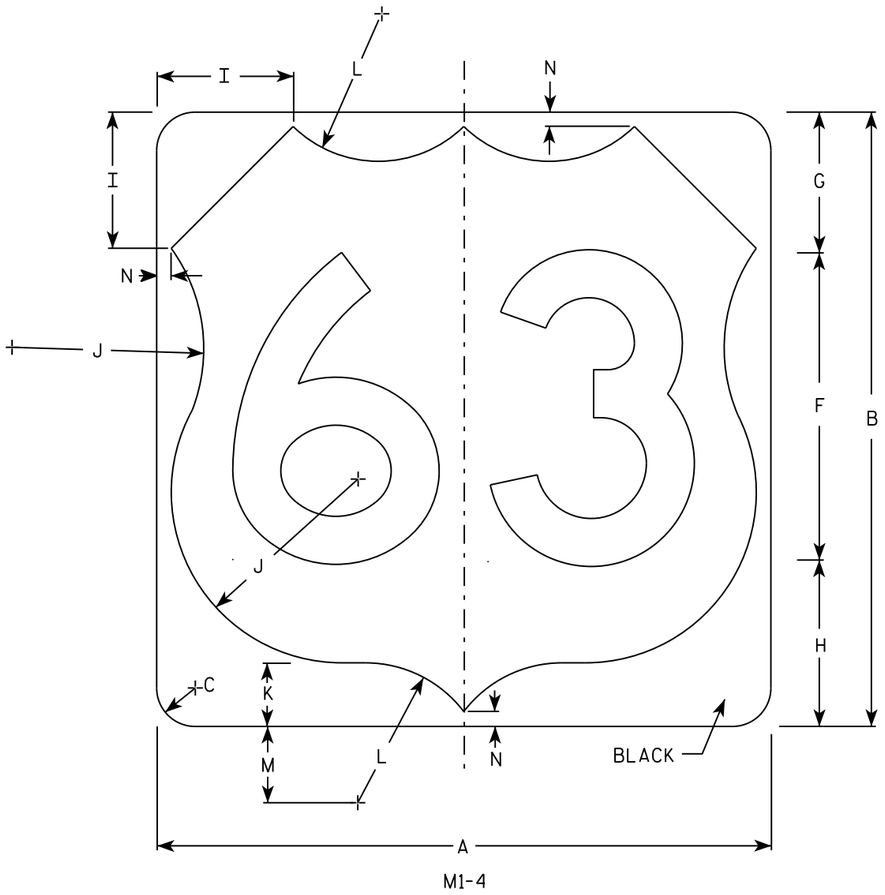
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/22/19 PLATE NO. G20-57.3

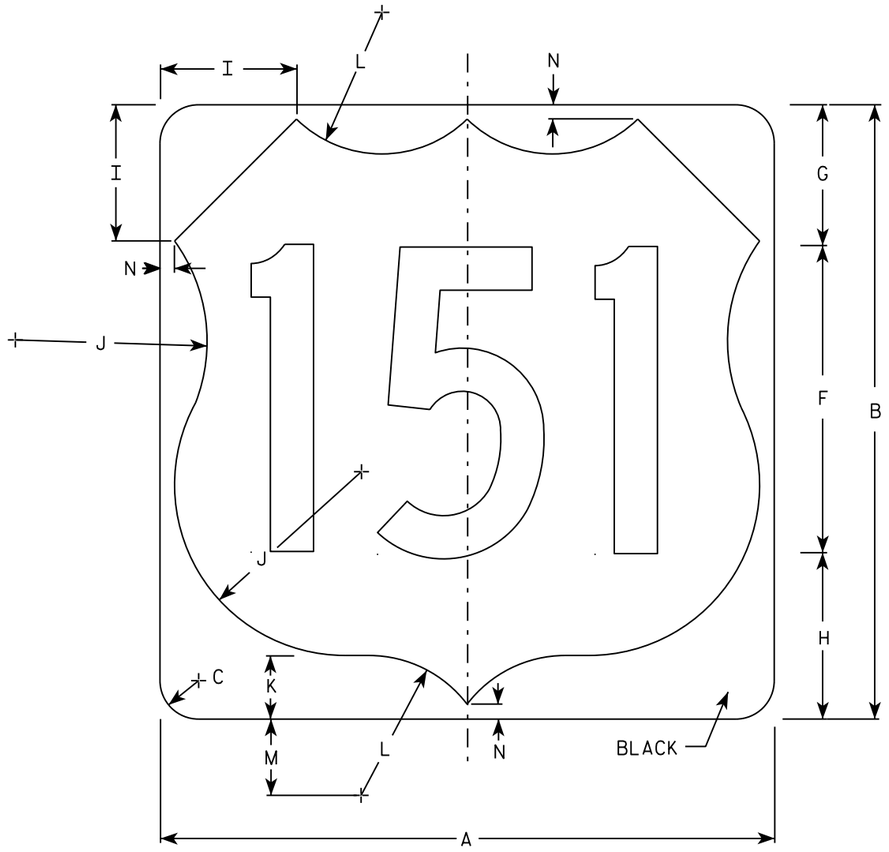
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 155 | E

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 |

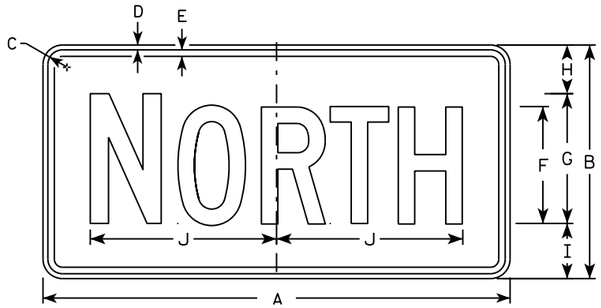
# USH MARKER
# M1-4 FOR ASSEMBLIES

*WISCONSIN DEPT OF TRANSPORTATION*

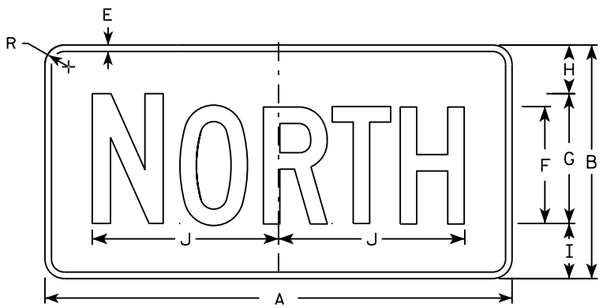
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 156 E



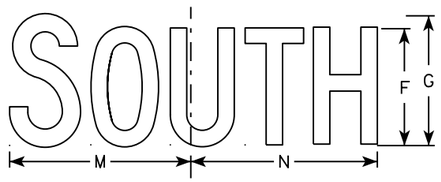

M3-1
MM3-1
MP3-1



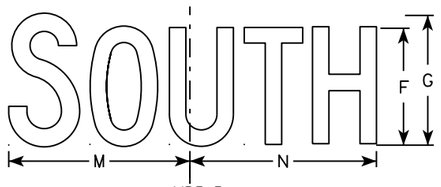

MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

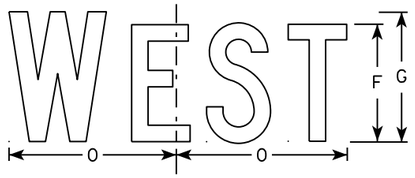
MB3-2
MK3-2
MN3-2



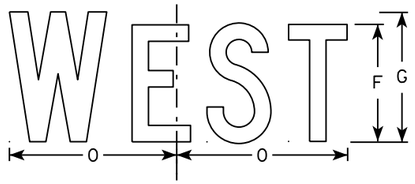

M3-3
MM3-3
MP3-3




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

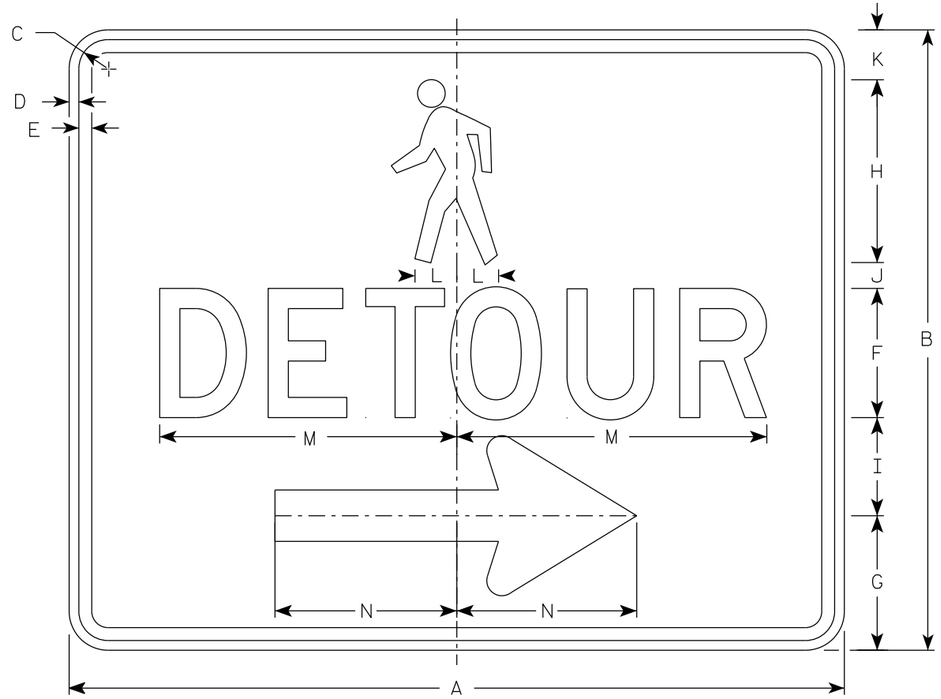
APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14



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

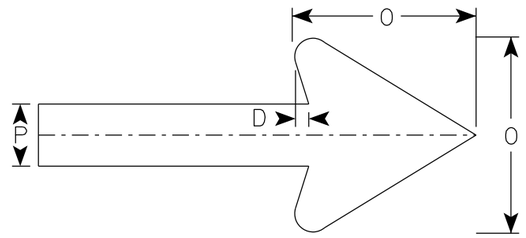
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000




M4-9BR

NOTES

1. Sign is Type II-Type F Reflective
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. M4-9BL is the same as M4-9BR 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 | 5 1/4 | 7 1/8 | 3 3/4 | 1 | 1 1/8 | 1 5/8 | 11 3/4 | 7 | 6 | 2 | | | | | | | | | | | 5.00 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

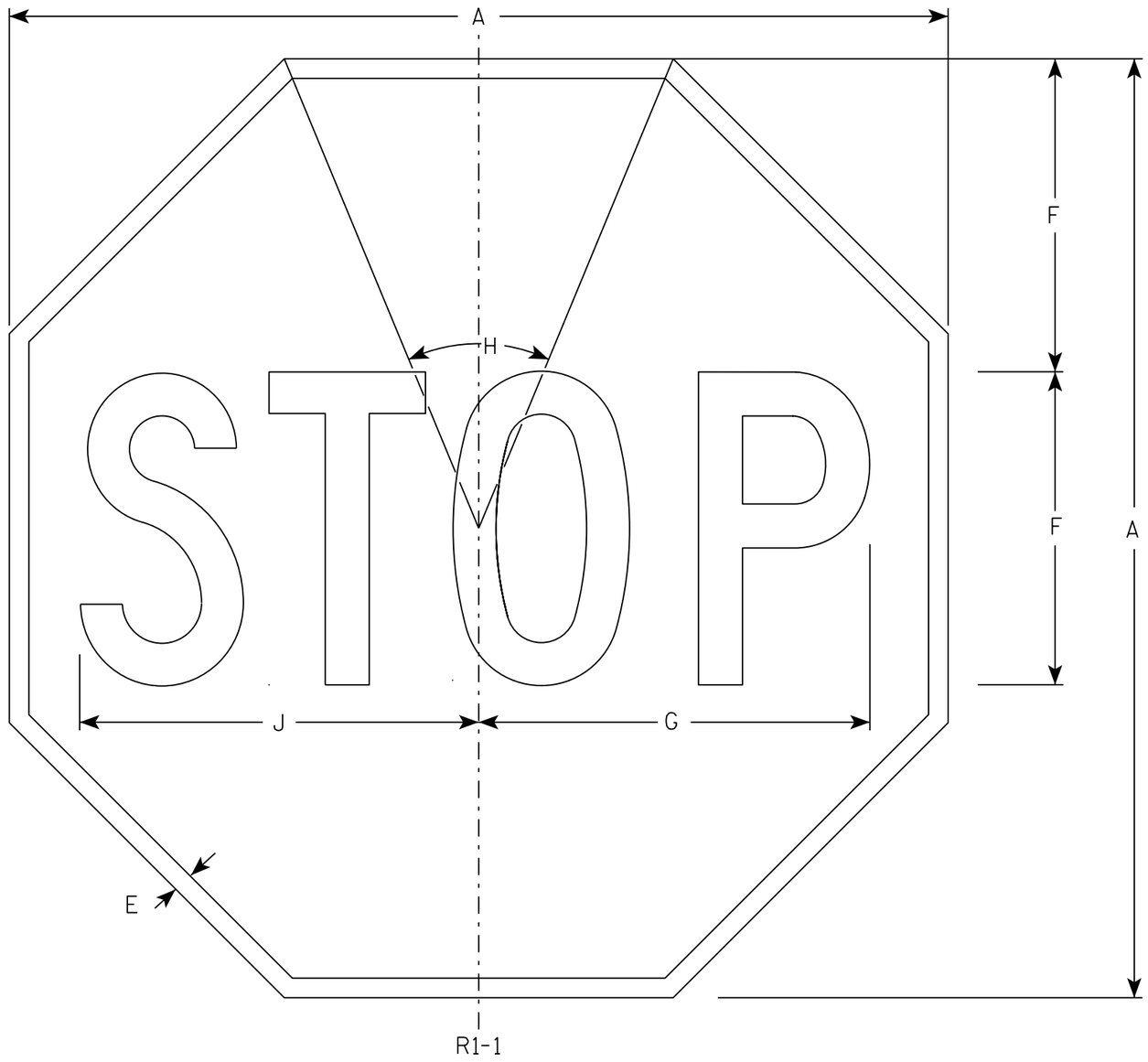
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 7/1/19 PLATE NO. M4-9B.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 158 | E




NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 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 |

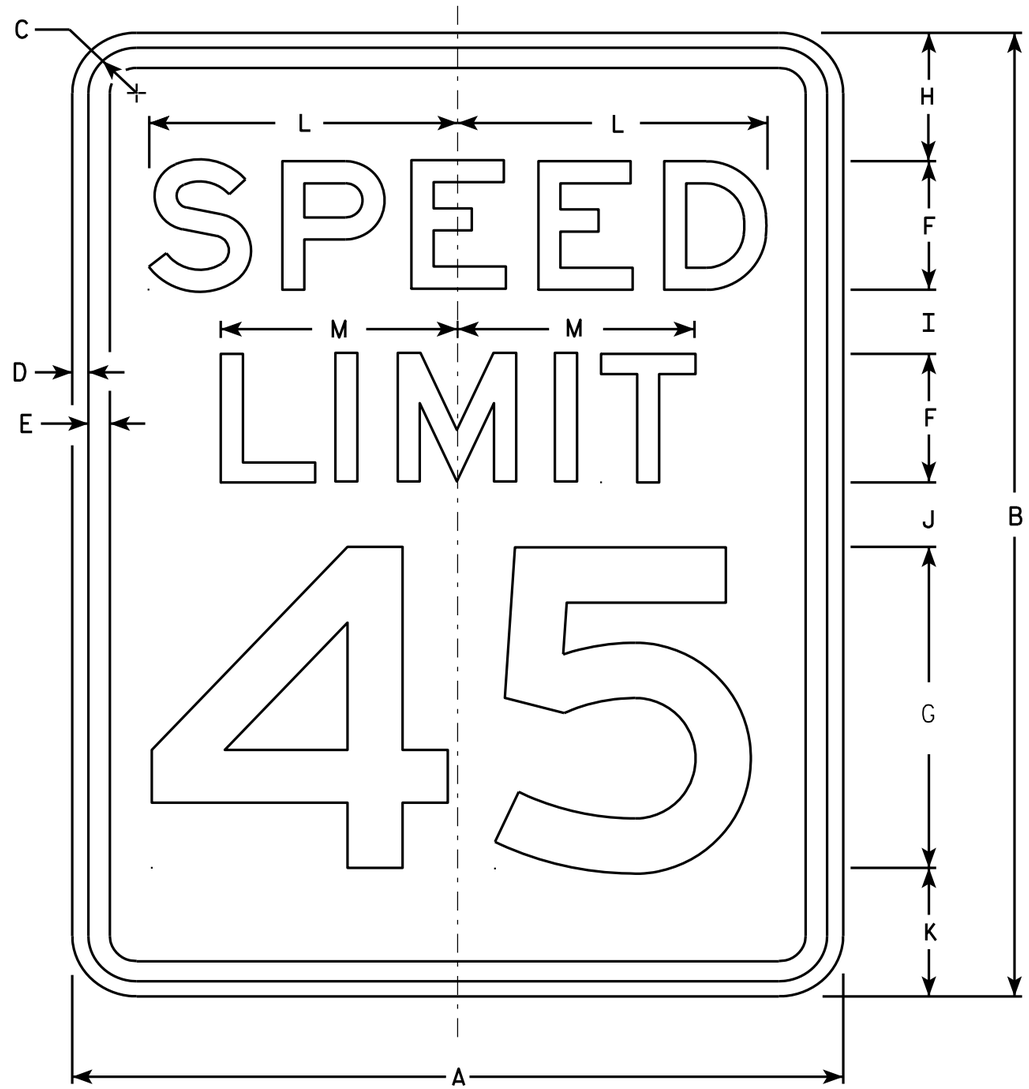
# STANDARD SIGN
# R1-1

*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: 159 | 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

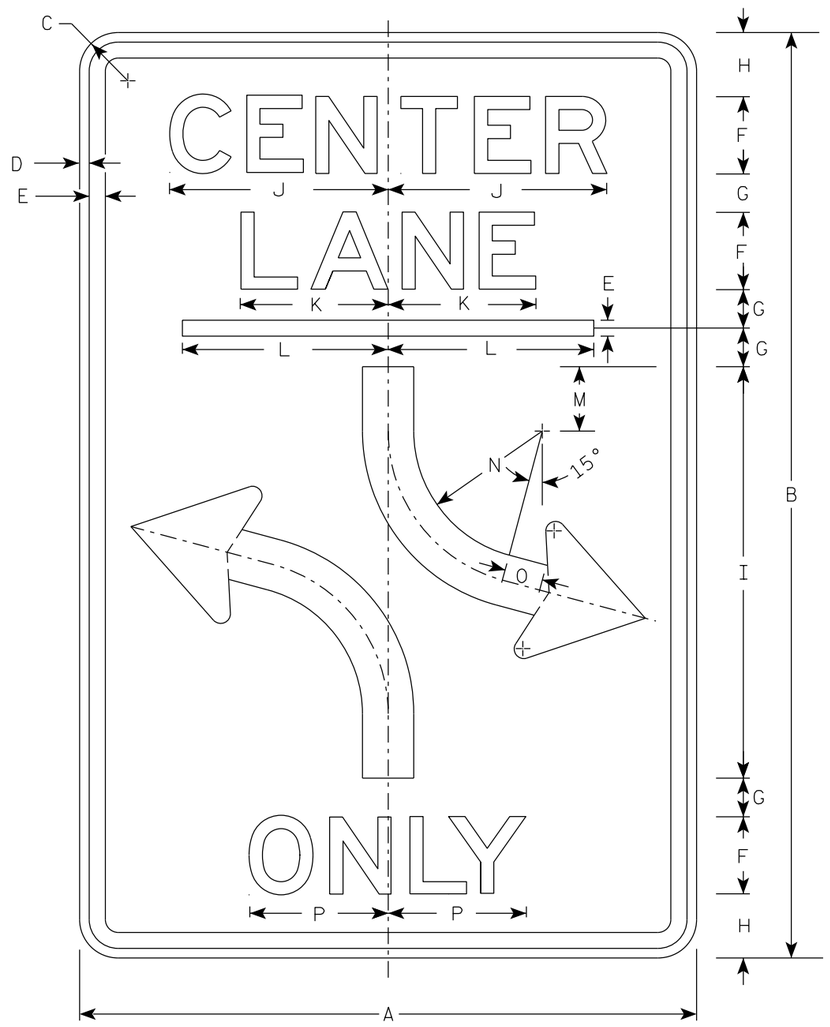
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 160 | E




FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

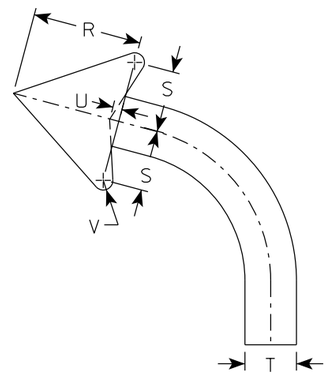
WISDOT/CADDS SHEET 42




R3-9B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E




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 ½ | ⅜ | ½ | 3 | 1 ½ | 2 ½ | 16 | 8 ½ | 5 ¾ | 8 | 2 ½ | 5 | 1 ½ | 5 ⅛ | | 4 ⅜ | 2 ⅜ | 2 | ⅜ | ⅜ | | | | | 6.0 |
| 2M | 24 | 36 | 1 ½ | ⅜ | ½ | 3 | 1 ½ | 2 ½ | 16 | 8 ½ | 5 ¾ | 8 | 2 ½ | 5 | 1 ½ | 5 ⅛ | | 4 ⅜ | 2 ⅜ | 2 | ⅜ | ⅜ | | | | | 6.0 |
| 3 | 36 | 48 | 2 ¼ | ⅝ | ⅞ | 5 | 1 ½ | 3 ½ | 20 | 14 ⅛ | 9 ½ | 12 | 3 | 7 ⅜ | 2 | 9 ⅞ | | 6 ⅛ | 3 ½ | 3 | ½ | ⅝ | | | | | 12.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R3-9B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2022 PLATE NO. R3-9B.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 161 | E

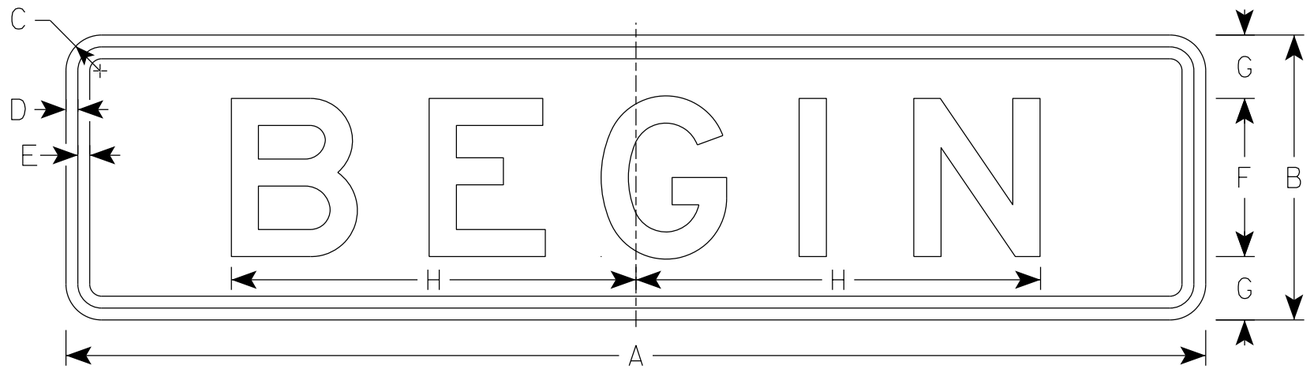


7

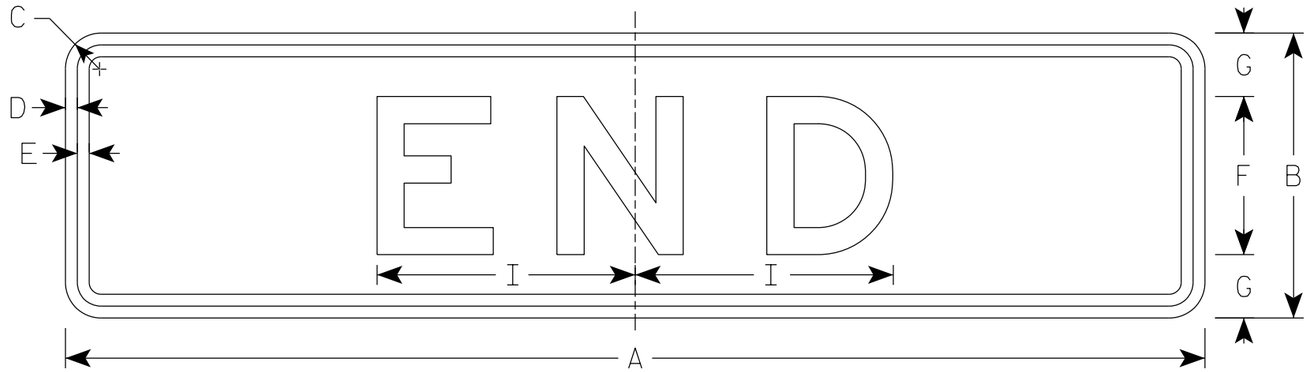
7

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E




R3-9C




R3-9D

| 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 | 6 | 1 1/8 | 3/8 | 3/8 | 3 | 1 1/2 | 7 3/4 | 4 7/8 | | | | | | | | | | | | | | | | | | 1.0 |
| 2M | 24 | 6 | 1 1/8 | 3/8 | 3/8 | 3 | 1 1/2 | 7 3/4 | 4 7/8 | | | | | | | | | | | | | | | | | | 1.0 |
| 3 | 36 | 9 | 1 1/8 | 3/8 | 3/8 | 5 | 2 | 12 3/4 | 8 1/8 | | | | | | | | | | | | | | | | | | 2.25 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

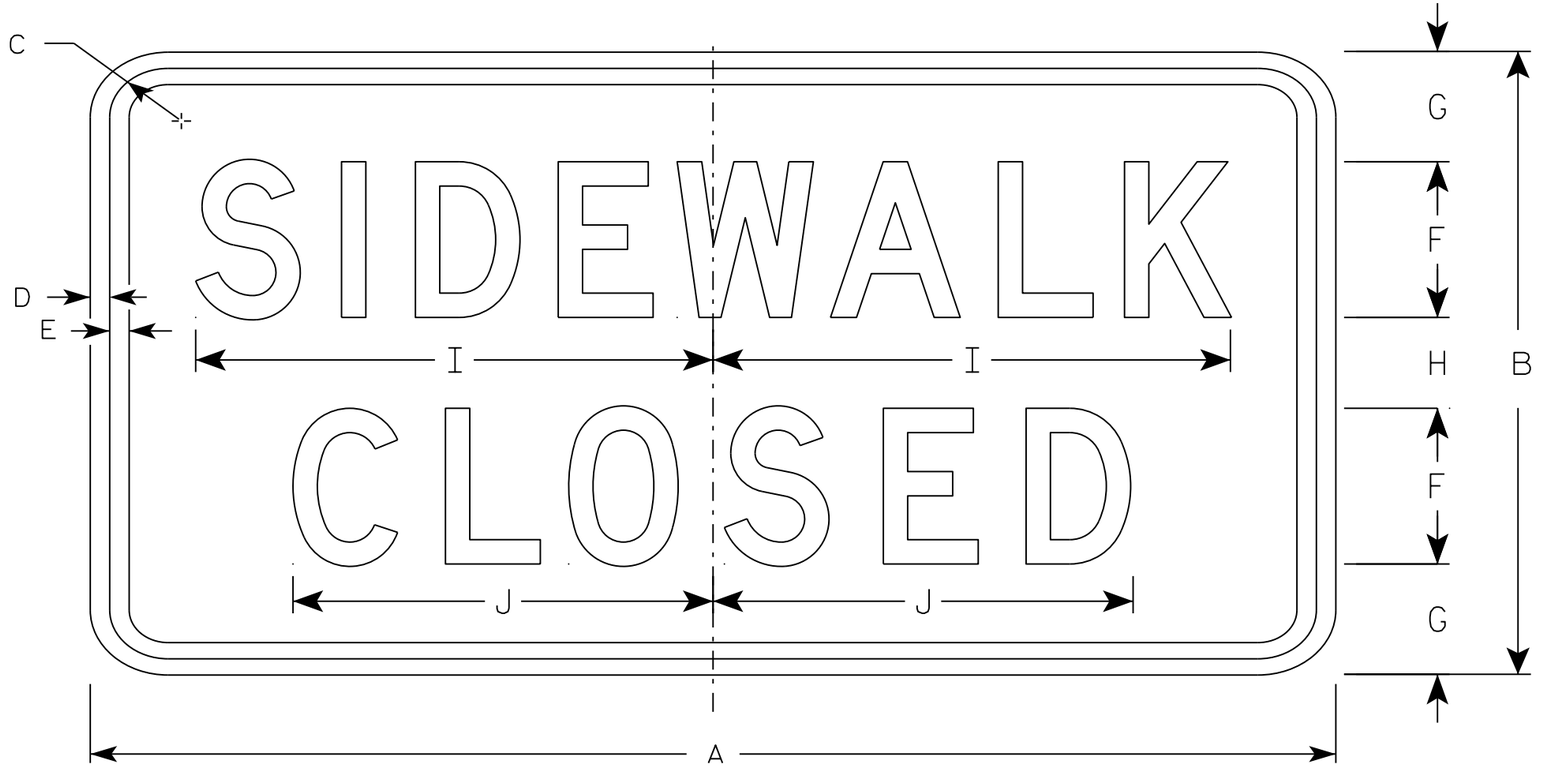
STANDARD SIGN
R3-9C & R3-9D

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R3-9C.3

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




R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 24 | 12 | 1 3/4 | 1/2 | 1/2 | 3 | 2 1/8 | 1 3/4 | 10 | 8 1/8 | | | | | | | | | | | | | | | | | 2.0 |
| 2M | 24 | 12 | 1 3/4 | 1/2 | 1/2 | 3 | 2 1/8 | 1 3/4 | 10 | 8 1/8 | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 30 | 18 | 1 3/4 | 1/2 | 1/2 | 4 | 3 1/2 | 3 | 12 1/2 | 10 1/4 | | | | | | | | | | | | | | | | | 3.75 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

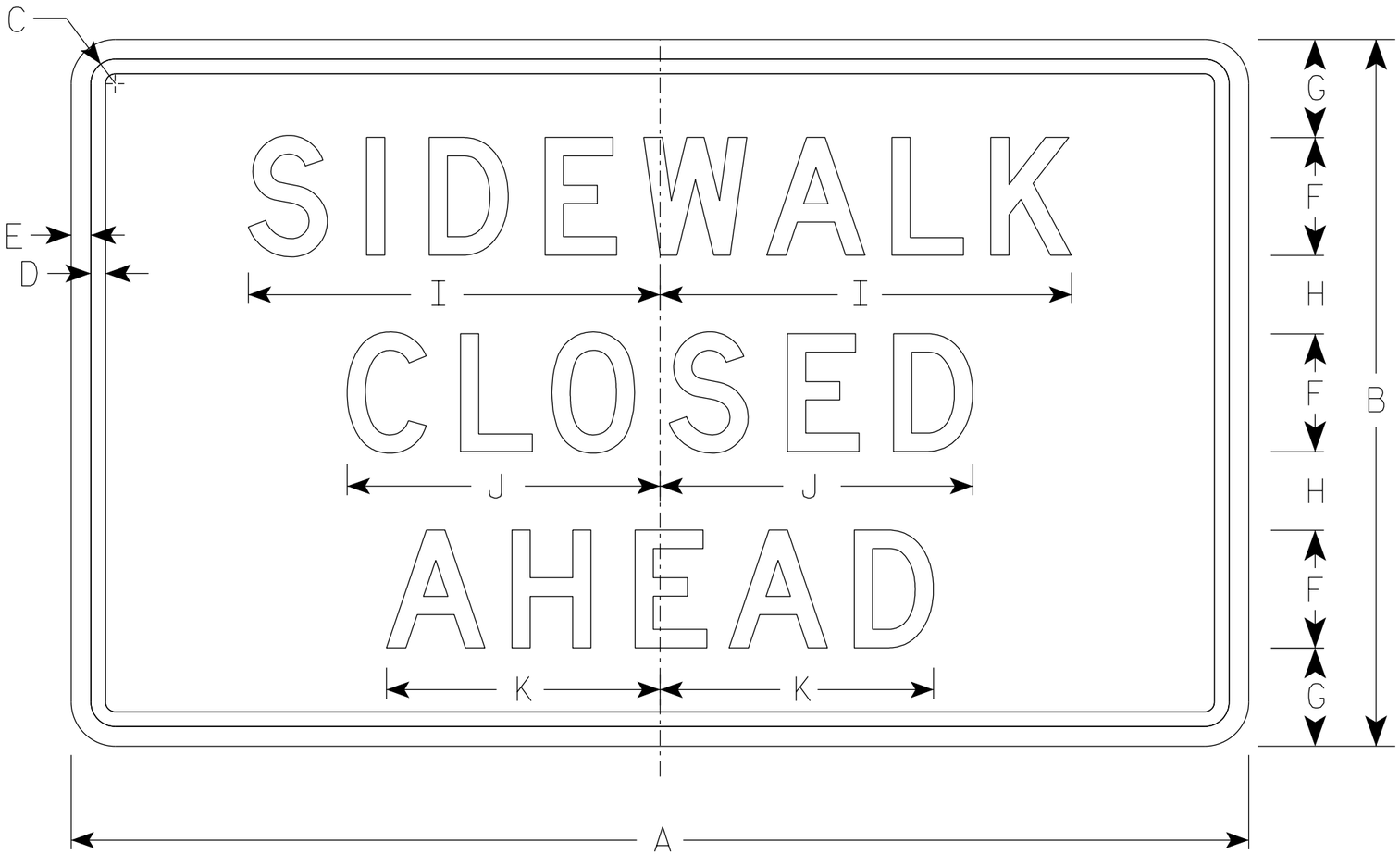
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 163 R9-9.6

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



FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000




R9-9A

NOTES

1. Sign is Type II - Type H Reflective
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 | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 3 | 2 1/2 | 2 | 10 1/2 | 8 | 7 | | | | | | | | | | | | | | | | 3.75 |
| 2M | 30 | 18 | 1 1/8 | 3/8 | 1/2 | 3 | 2 1/2 | 2 | 10 1/2 | 8 | 7 | | | | | | | | | | | | | | | | 3.75 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

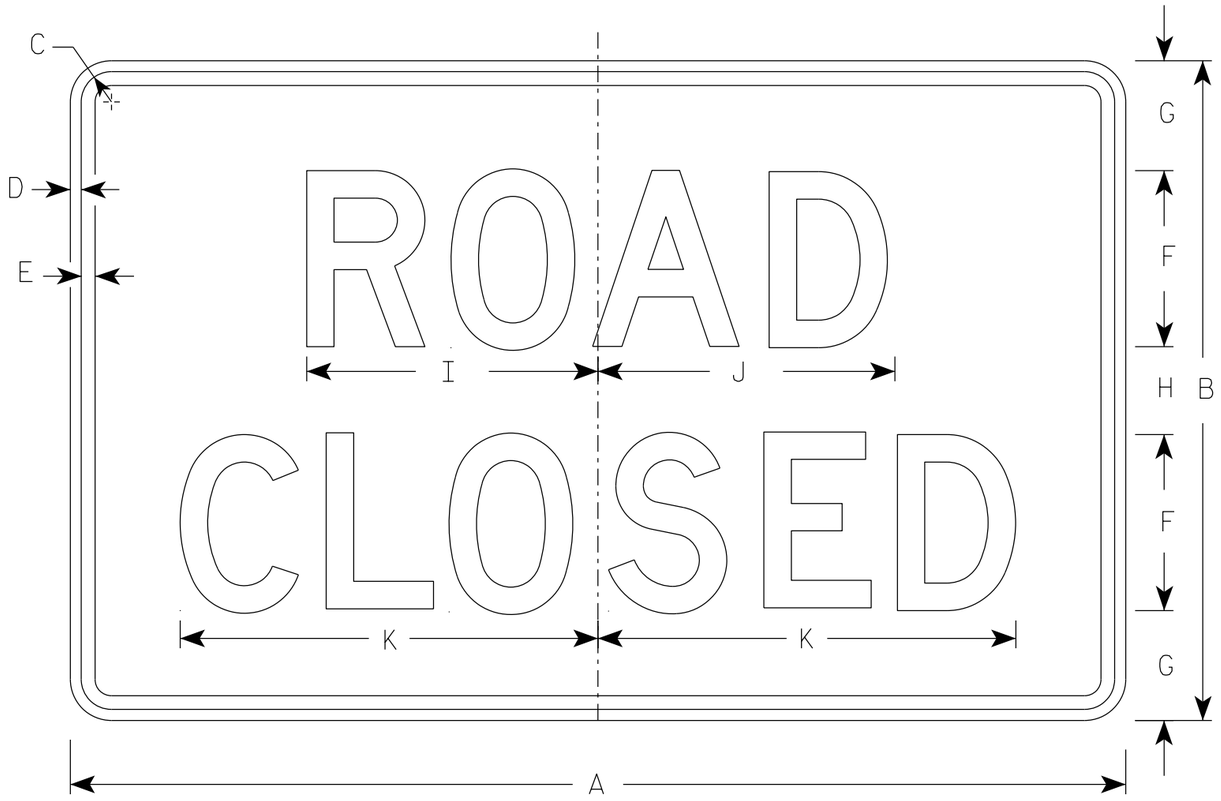
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/31/2020 PLATE NO. R9-9A.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 164 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R99A.DGN PLOT DATE : 31-AUG-2020 3:26 PLOT BY : dotc4c PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

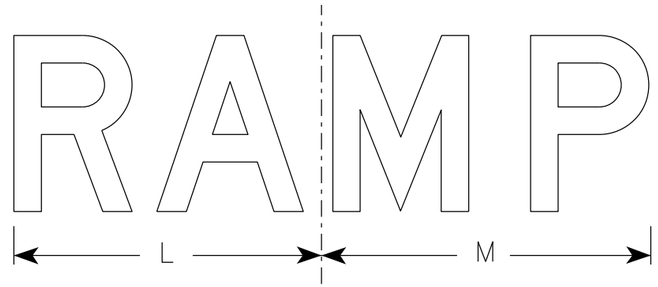
7 7



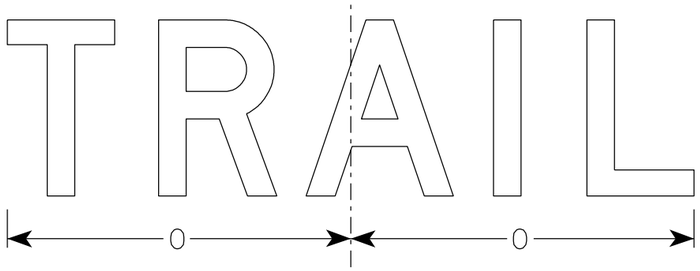

R11-2

NOTES

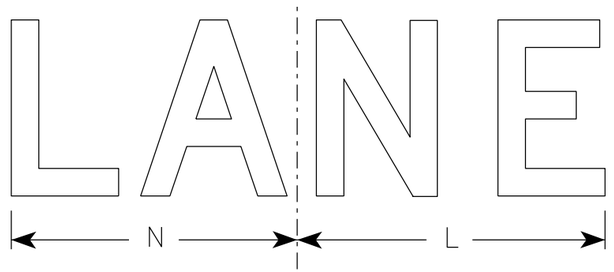
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.




R11-2R




R11-2T




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 | 15 5/8 | | | | | | | | | | | | 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 | 15 5/8 | | | | | | | | | | | | 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 | 15 5/8 | | | | | | | | | | | | 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 | 15 5/8 | | | | | | | | | | | | 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 | 15 5/8 | | | | | | | | | | | | 10.0 |

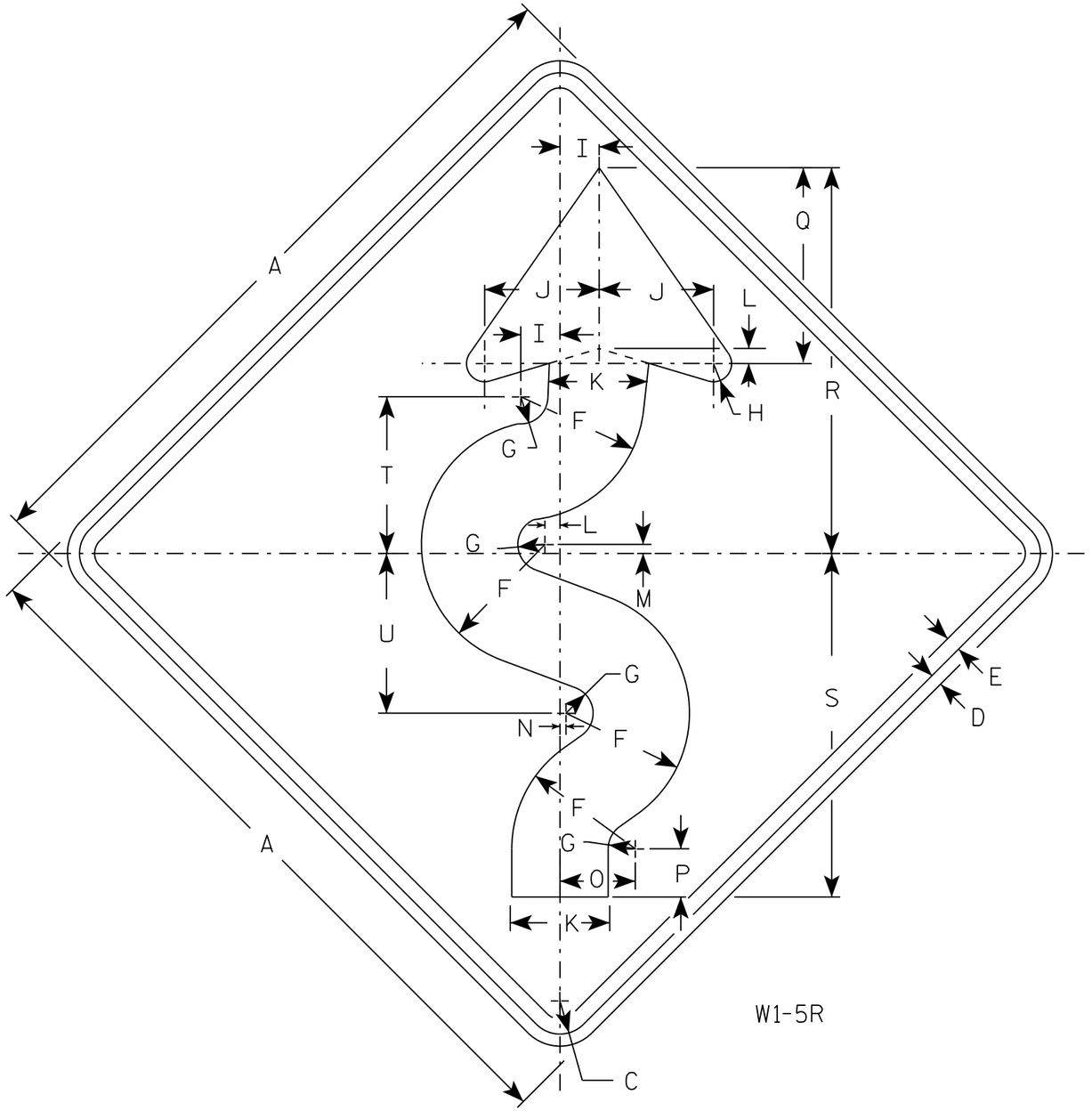
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

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




W1-5R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-5L is the same as W1-5R except the arrow is reversed along the vertical centerline.
4. If used with W13-1 of 30 MPH or less, use 36" sign for Size 2S.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 4 1/8 | 7/8 | 5/8 | 1 1/4 | 3 3/4 | 3 1/4 | 1/2 | 1/4 | 1/8 | 2 1/2 | 1 5/8 | 6 1/2 | 12 3/4 | 11 3/8 | 5 1/4 | 5 1/4 | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 5 1/8 | 1 1/8 | 3/4 | 1 5/8 | 4 3/4 | 4 1/8 | 5/8 | 3/8 | 1/4 | 3 1/8 | 2 | 8 1/8 | 16 | 14 1/4 | 6 1/2 | 6 5/8 | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 6 1/4 | 1 3/8 | 1 | 1 7/8 | 5 5/8 | 4 7/8 | 3/4 | 3/8 | 1/4 | 3 3/4 | 2 7/8 | 9 3/4 | 19 1/8 | 17 1/8 | 7 3/4 | 7 7/8 | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 1/4 | 1 3/8 | 1 | 1 7/8 | 5 5/8 | 4 7/8 | 3/4 | 3/8 | 1/4 | 3 3/4 | 2 7/8 | 9 3/4 | 19 1/8 | 17 1/8 | 7 3/4 | 7 7/8 | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 1/4 | 1 3/8 | 1 | 1 7/8 | 5 5/8 | 4 7/8 | 3/4 | 3/8 | 1/4 | 3 3/4 | 2 7/8 | 9 3/4 | 19 1/8 | 17 1/8 | 7 3/4 | 7 7/8 | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 1/4 | 1 3/4 | 1 1/4 | 2 1/2 | 7 1/2 | 6 1/2 | 1 | 1/2 | 3/8 | 5 | 3 1/4 | 13 | 25 1/2 | 22 3/4 | 10 3/8 | 10 1/2 | | | | | | 16.0 |

STANDARD SIGN

W1-5

WISCONSIN DEPT OF TRANSPORTATION

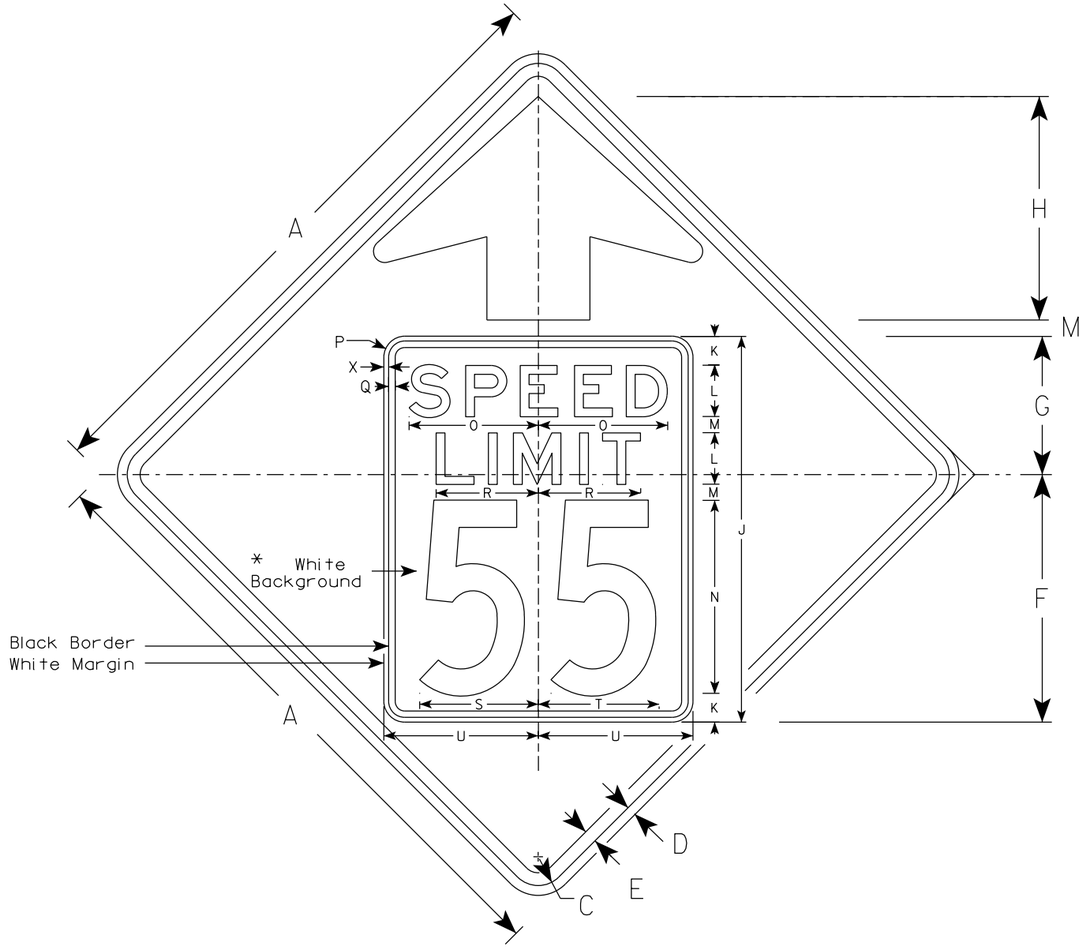
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/1/16 PLATE NO. W1-5.9



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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W15.DGN PLOT DATE : 01-AUG-2016 09:34 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.594294:1.000000

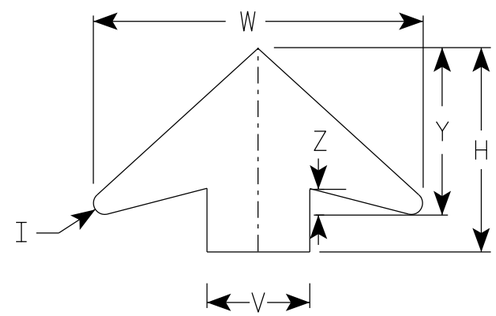



W3-5

NOTES

1. Sign is Type II - See Note 2 for Sheeting Type
2. Color: *
   Background - Yellow* (Type F Reflective)
   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 with black message (Type SH Reflective)




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

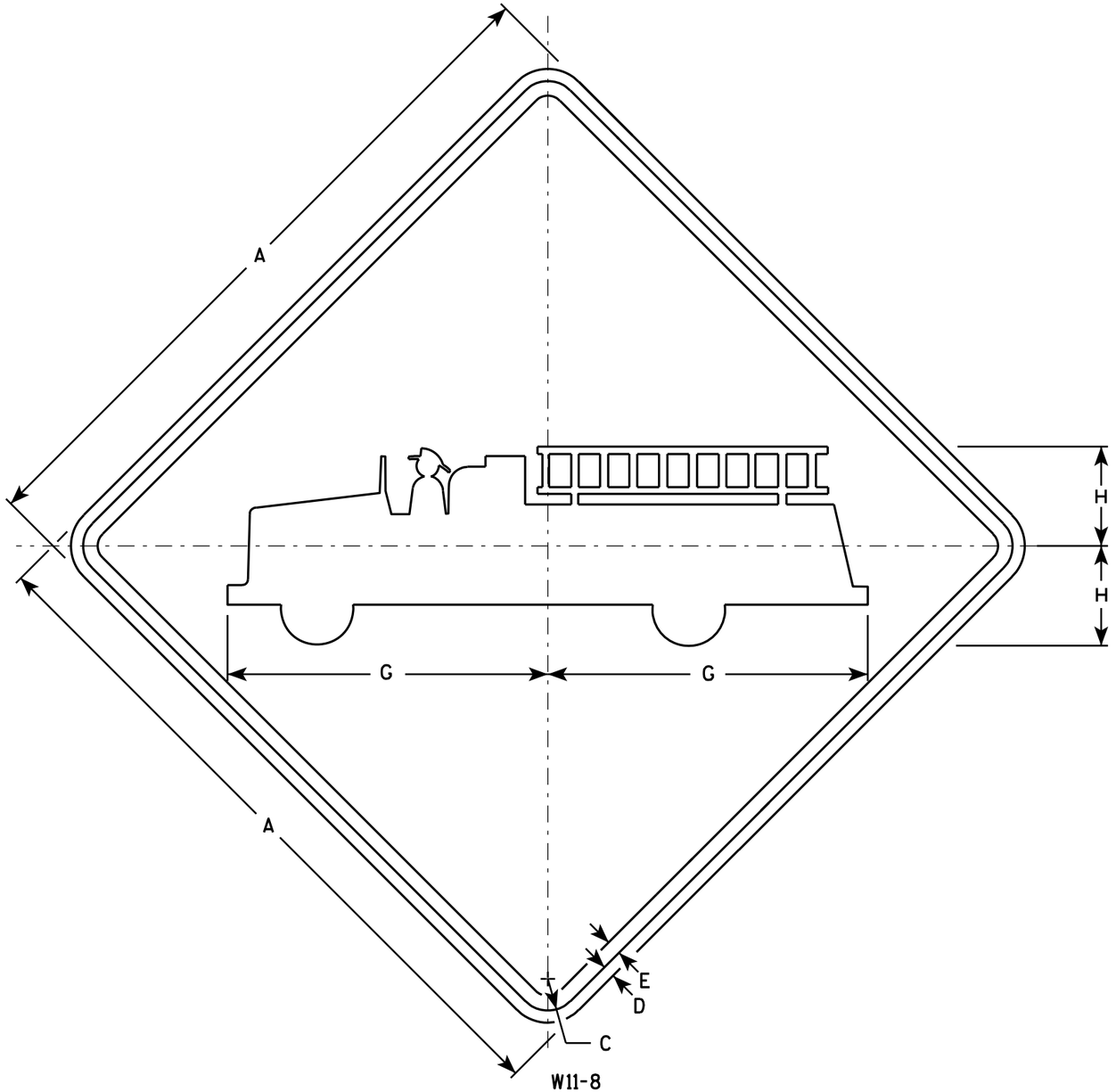
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew L Rauch
for State Traffic Engineer

DATE 7/27/2020 PLATE NO. W3-5.6

PROJECT NO:

SHEET NO: 167 E




W11-8

NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | | 11 | 3 3/8 | | | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | | 13 3/4 | 4 3/8 | | | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | | 13 3/4 | 4 3/8 | | | | | | | | | | | | | | | | | | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 16 1/2 | 5 1/4 | | | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 22 | 7 | | | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W11-8

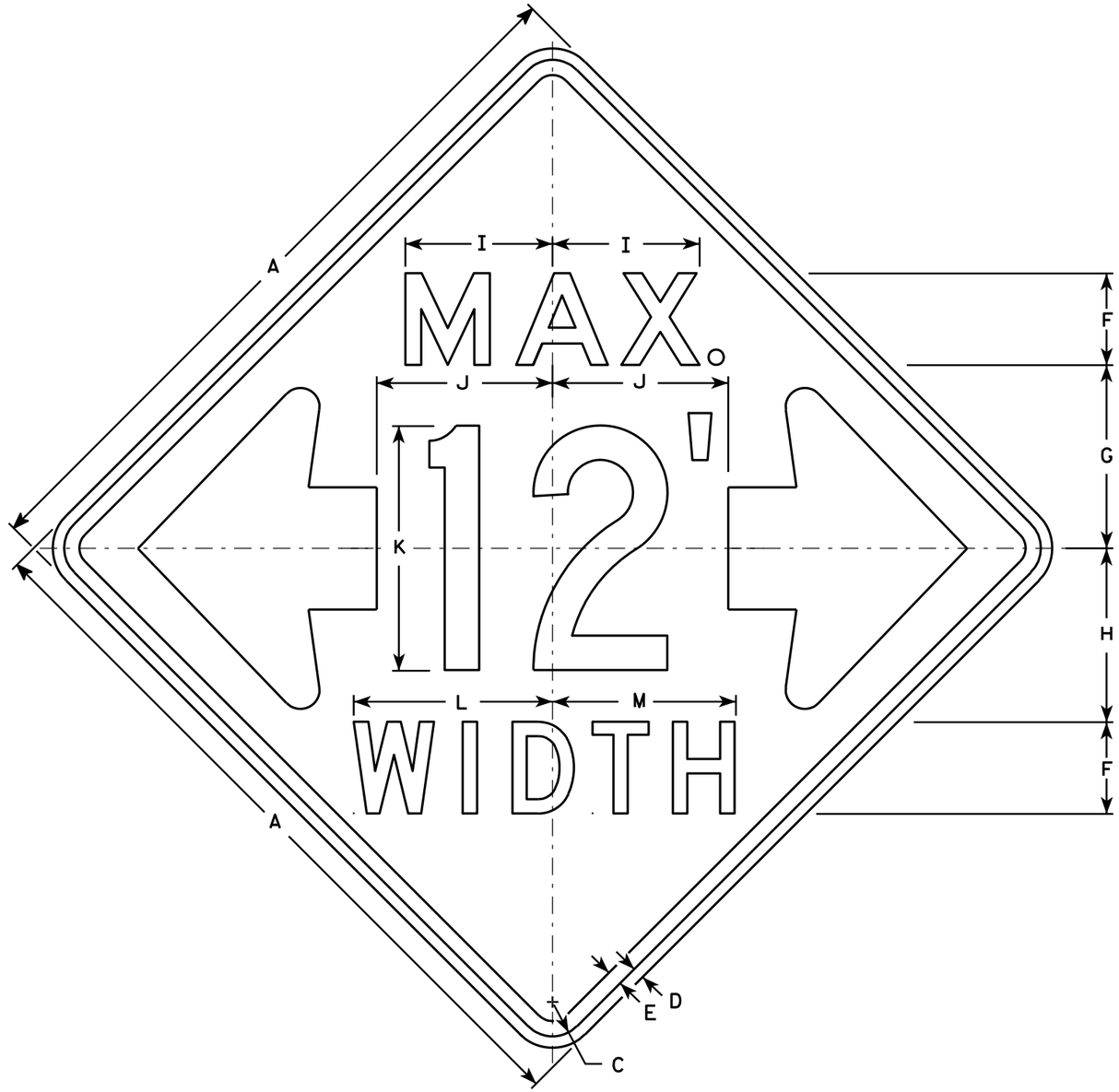
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-8.7

PROJECT NO:

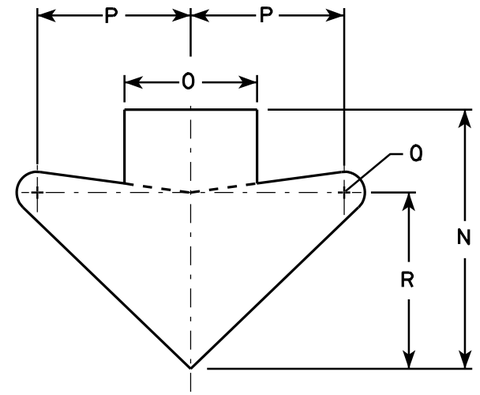
SHEET NO: 168 E




W12-52

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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.




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 | 48 | | 2 1/4 | 3/4 | 1 | 6 | 12 | 11 3/8 | 9 5/8 | 11 1/2 | 16 | 13 | 12 | 15 5/8 | 8 | 9 1/4 | 1 1/4 | 10 5/8 | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 6 | 12 | 11 3/8 | 9 5/8 | 11 1/2 | 16 | 13 | 12 | 15 5/8 | 8 | 9 1/4 | 1 1/4 | 10 5/8 | | | | | | | | | 16.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

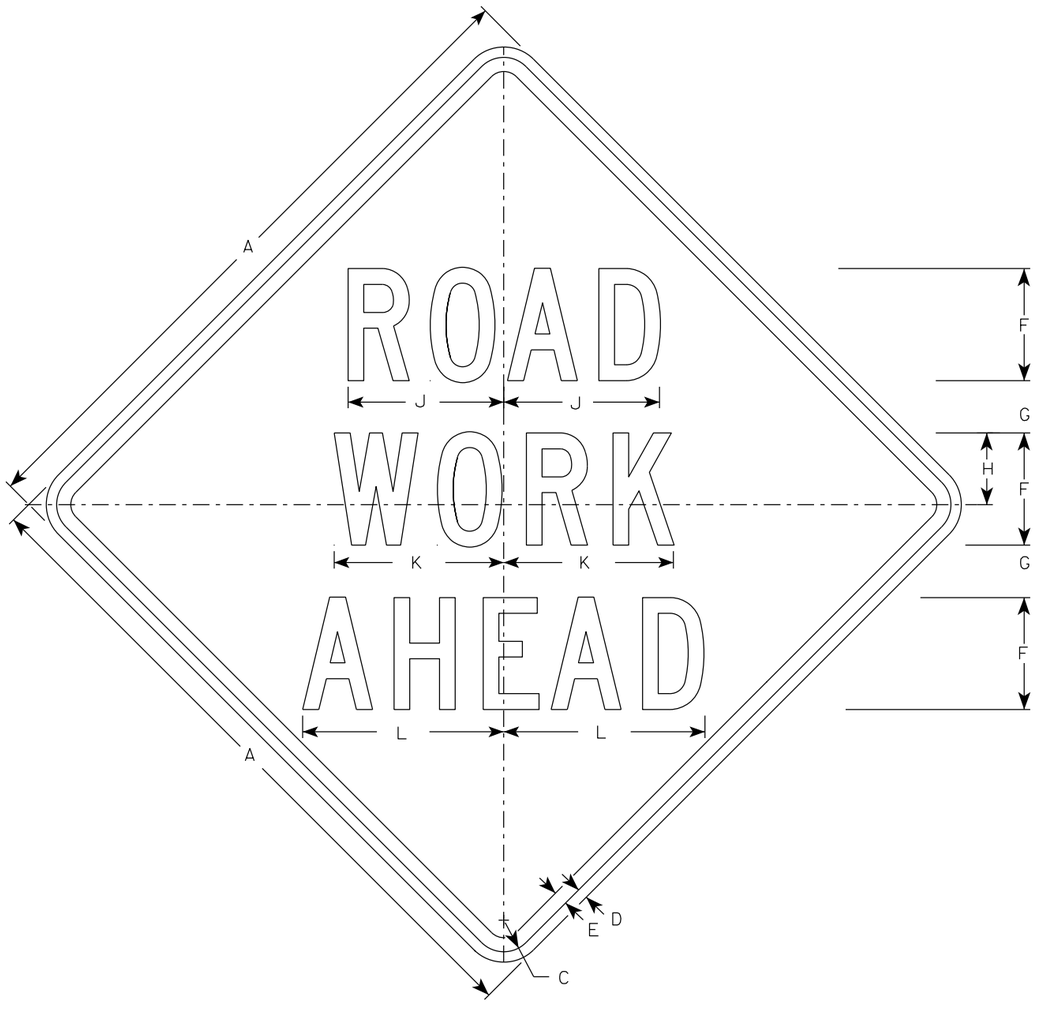
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

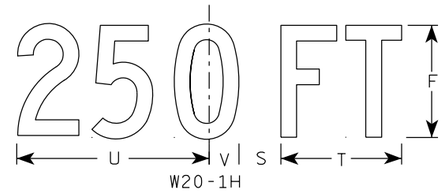
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 169 | E |
|---|---|---|---|---|---|

NOTES

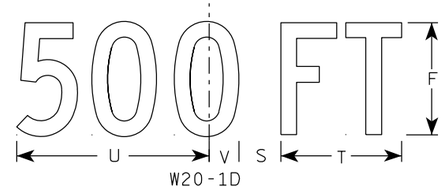
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



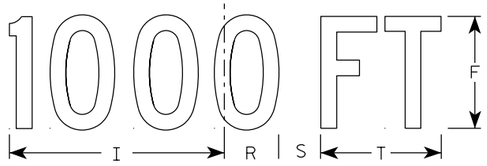

W20-1A



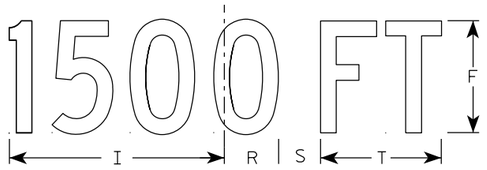

W20-1H



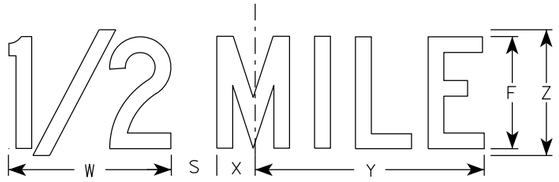

W20-1D



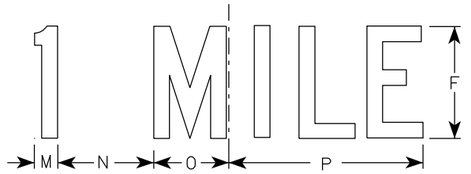

W20-1C



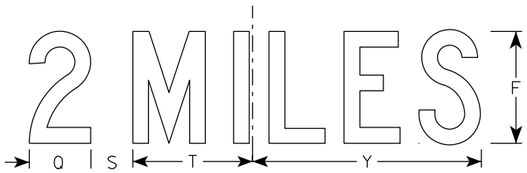

W20-1B




W20-1G




W20-1F




W20-1E

| 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 | 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 | 3 1/4 | 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, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

SHEET NO: E



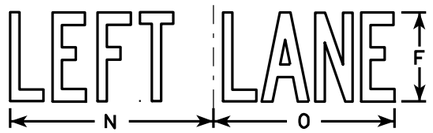
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

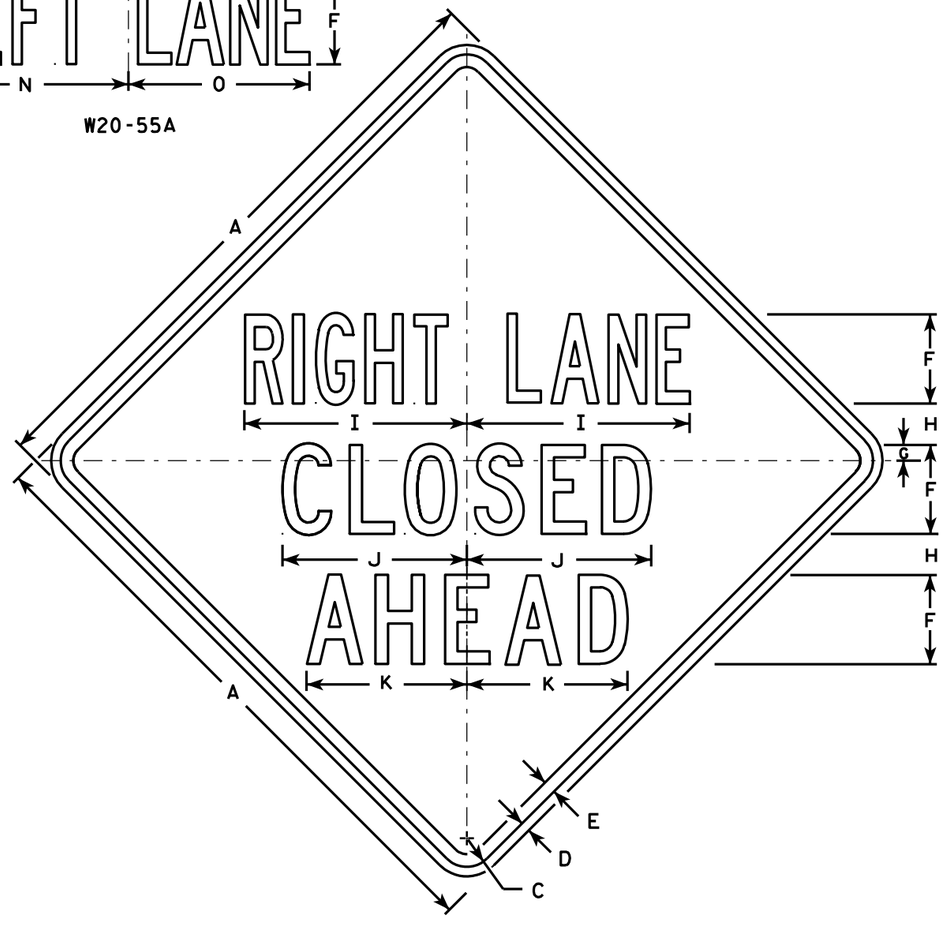
7

7

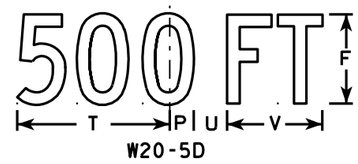
W20-56A



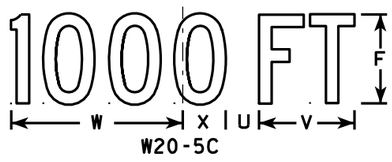

W20-55A



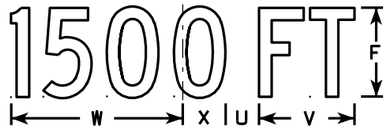

W20-5A




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

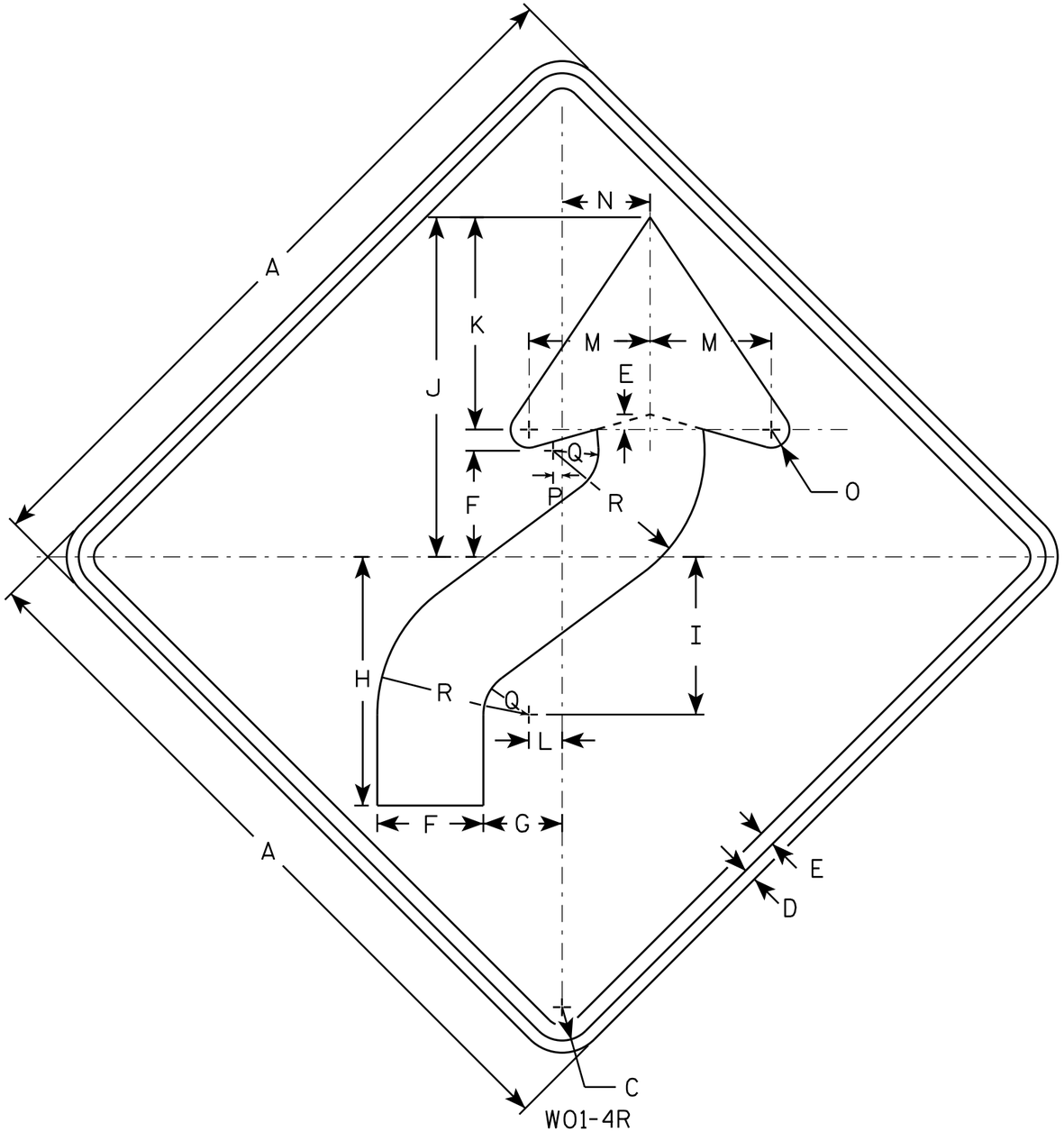
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 171 | E


7

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




W01-4R

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. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 5 1/4 | 4 | 12 3/8 | 7 7/8 | 16 7/8 | 10 1/2 | 1 5/8 | 6 | 4 1/2 | 1 | 1/2 | 2 1/4 | 7 1/2 | | | | | | | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 7 | 5 1/4 | 16 1/2 | 10 1/2 | 22 1/2 | 14 | 2 1/4 | 8 | 6 | 1 1/4 | 5/8 | 3 | 10 | | | | | | | | | 16.0 |

# STANDARD SIGN
# W01-4

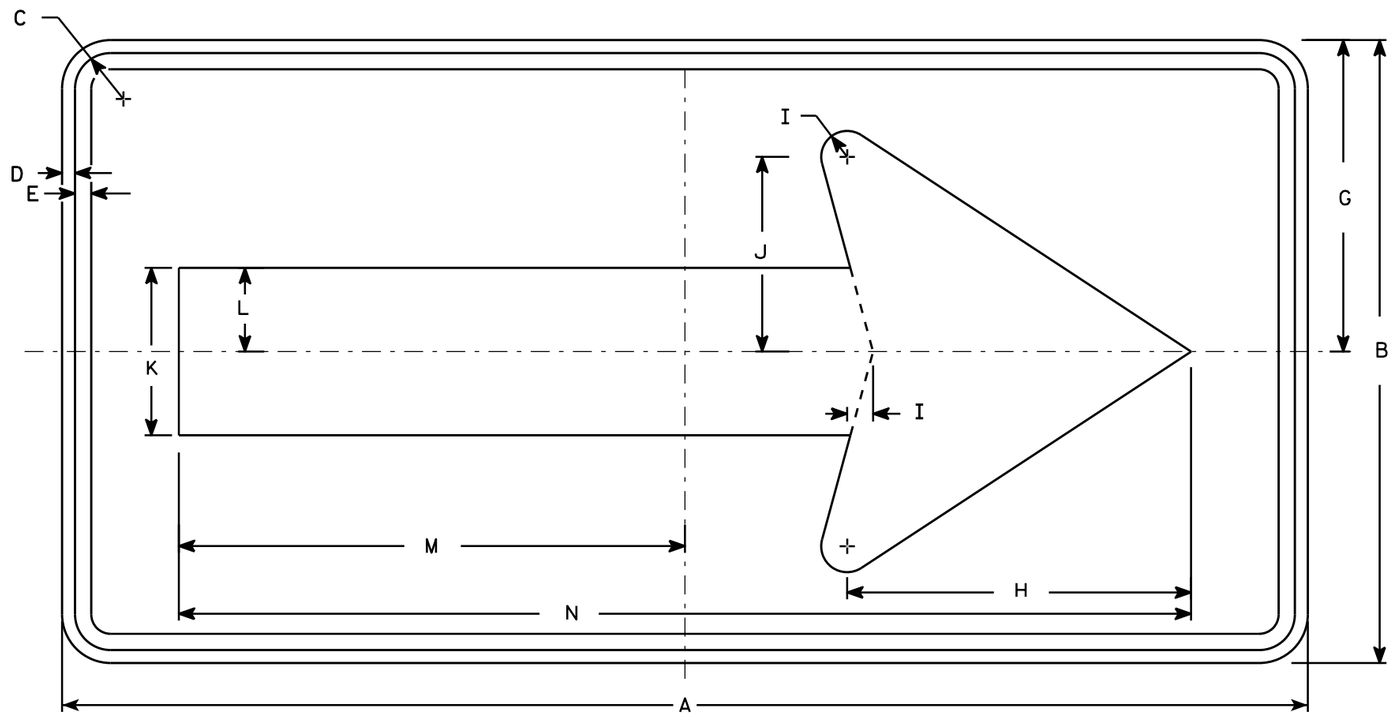
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1



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




W01-6

## NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 5 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |

# STANDARD SIGN
# W01-6

WISCONSIN DEPT OF TRANSPORTATION

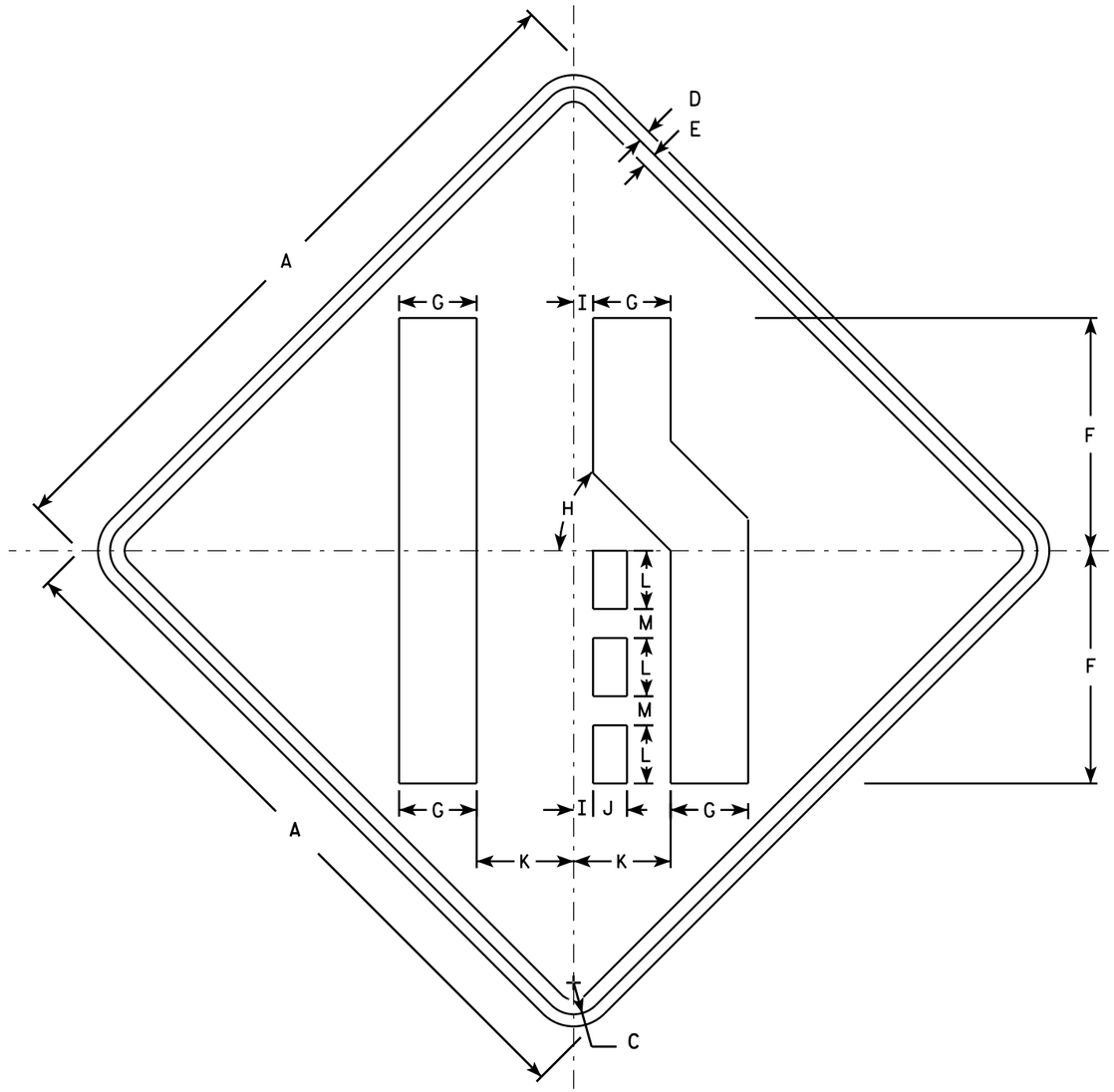
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-6.1



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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42




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

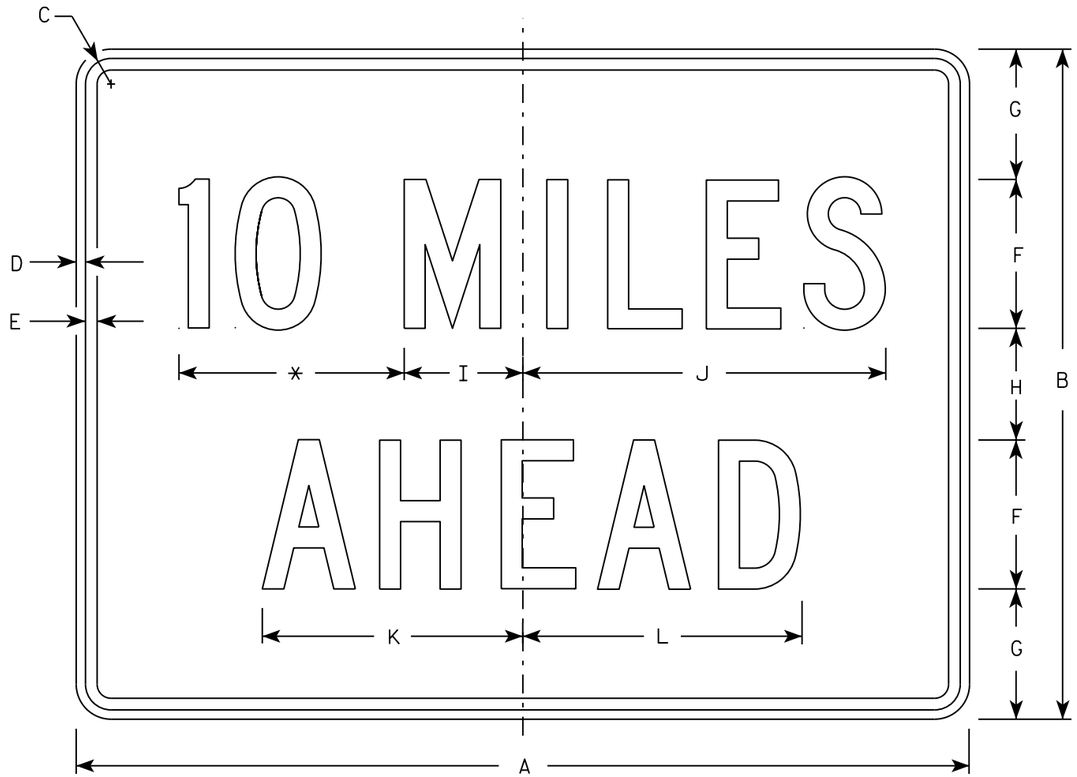
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

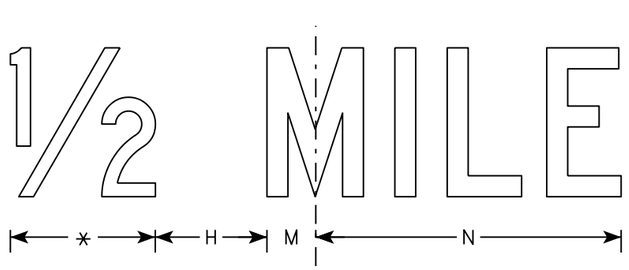
DATE 11/20/13 PLATE 174 W04-2.1

PROJECT NO:

SHEET NO: E




W057-52




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.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* 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 | 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 |
| 2S | 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 |
| 2M | 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 |
| 3 | 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 |
| 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
W057-52

WISCONSIN DEPT OF TRANSPORTATION

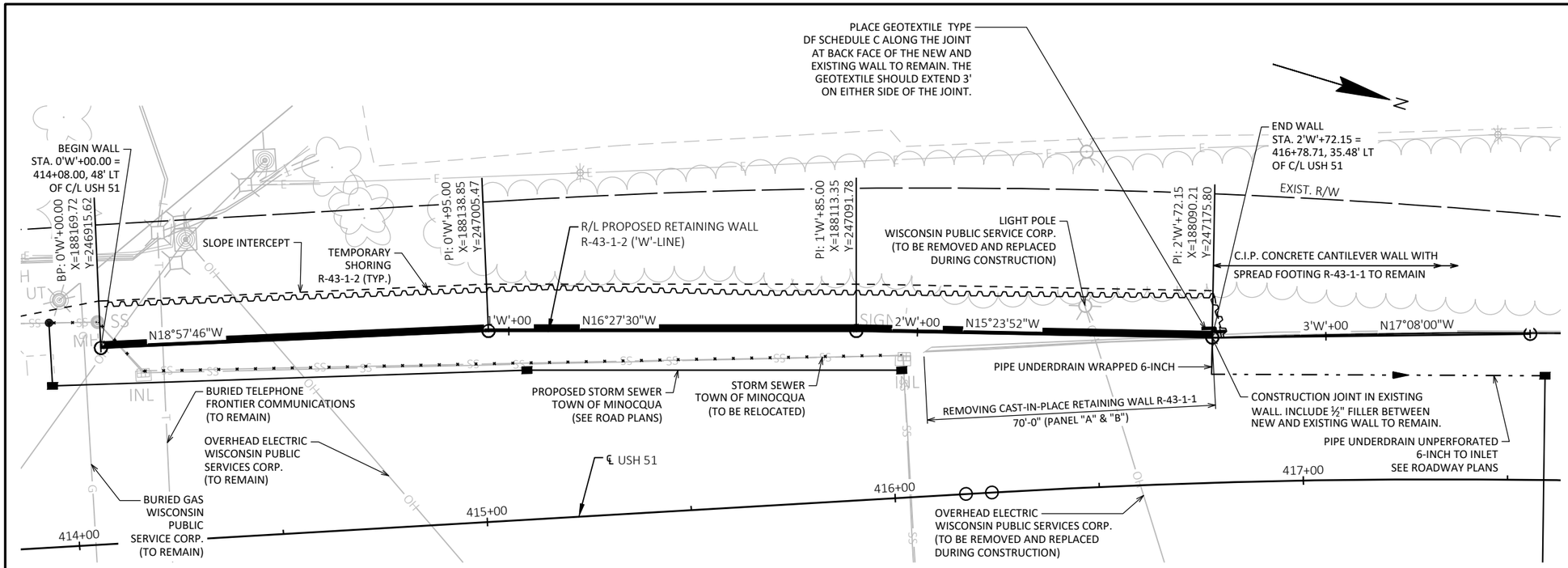
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 175 | E |
|---|---|---|---|---|---|

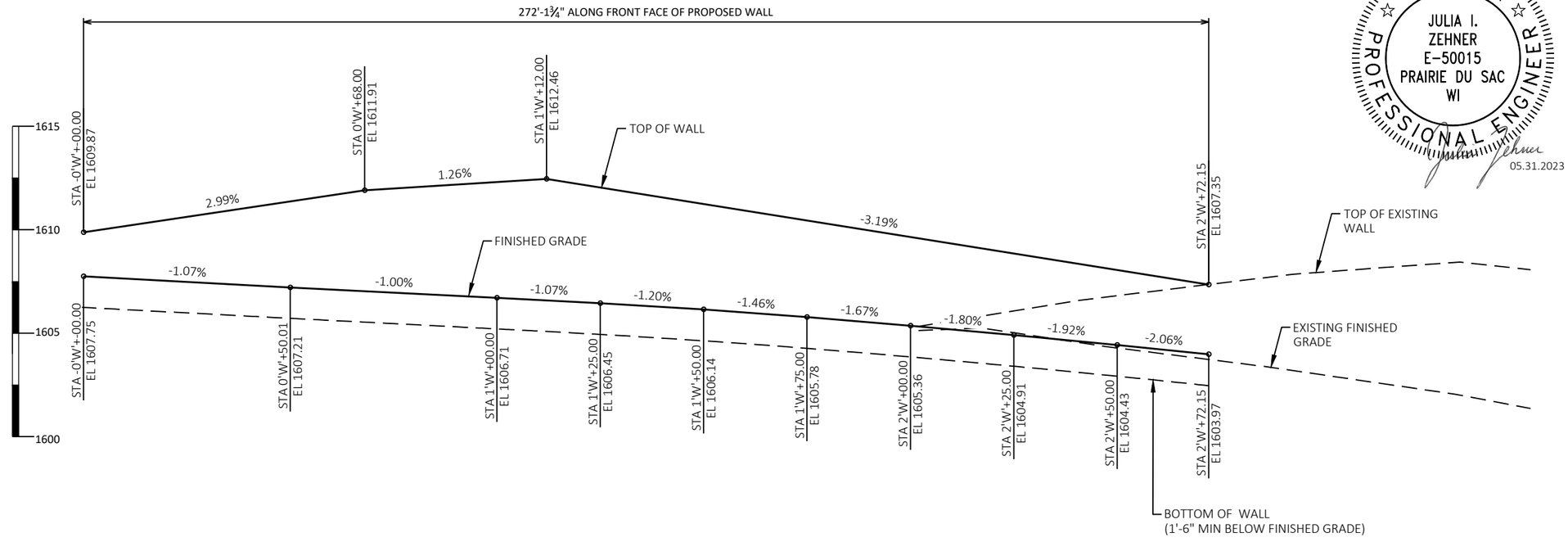
STATE PROJECT NUMBER

**1170-19-72**




## PLAN

(WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH)




## ELEVATION

(LOOKING WEST AT FRONT FACE OF WALL)

## TRAFFIC DATA USH 51

A.A.D.T. (2023) = 15, 700
A.A.D.T. (2043) = 17, 700
R.D.S. = 35 MPH

## DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-43-1-2".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

DESIGN RETAINING WALL FOR A LIVE LOAD SURCHARGE OF 100 PSF.

WISCONSIN PROFESSIONAL ENGINEER
JULIA I. ZEHNER
E-50015
PRAIRIE DU SAC
WI
05.31.2023

## LIST OF DRAWINGS:


1 GENERAL PLAN
2 TYPICAL SECTION, QUANTITIES & NOTES
3 SUBSURFACE EXPLORATION


NOTE
EXISTING AND PROPOSED ROADWAY FEATURES ARE NOT SHOWN. SEE ROAD PLANS FOR DETAILS. THERE MAY BE UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.


**STRUCTURE DESIGN CONTACTS**

CONSULTANT DESIGN CONTACT:
JULIA ZEHNER
(608) 355-8878

BRIDGE OFFICE CONTACT:
AARON BONK
(608) 261-0261


| NO. | DATE | REVISION | BY |
|---|---|---|---|


MSA
ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1230 South Blvd, Baraboo, WI 53913
(608) 356-2771 www.msa-ps.com

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 08/28/23
CHIEF STRUCTURES DESIGN ENGINEER — DATE

**STRUCTURE R-43-1-2**

RETAINING WALL ALONG USH 51

| COUNTY | TOWN/~~CITY/VILLAGE~~ |
|---|---|
| ONEIDA | MINOCQUA |

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

| DESIGNED BY | DESIGNED CK'D | DRAWN BY | PLANS CK'D |
|---|---|---|---|
| JZ | LJR | EKK | JZ |

**GENERAL PLAN**

SHEET 1 OF 3
176

SCALE = 1 IN:40 FT

I.D.

DATE:

8

8

STATE PROJECT NUMBER

**1170-19-72**

# GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE PLAN QUANTITY FOR THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-43-1-2" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF WALL TO A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE.

PLACE "WALL BACKFILL, TYPE A" AT FRONT FACE OF WALL TO THE SUBGRADE LEVEL OF THE SIDEWALK PRIOR TO BACKFILLING AT THE BACK FACE.

SEE SPECIAL PROVISIONS FOR DESCRIPTIONS OF MATERIALS REQUIRED FOR "WALL BACKFILL, TYPE A" AND "WALL BACKFILL, TYPE B".

AT THE BACK FACE OF THE WALL, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE OR THE REINFORCED SOIL ZONE SHALL BE BACKFILLED WITH SUITABLE NATIVE MATERIAL. BACKFILLING THE RETAINED SOIL ZONE IS INCLUDED IN THE BID ITEM FOR "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-43-1-2"

TEMPORARY SHORING IS REQUIRED IN LOCATIONS WHERE EXCAVATION WOULD OTHERWISE DISTURB THE EXISTING GROUND SURFACE IN EXCESS OF 15 FEET BEHIND THE FRONT FACE OF THE RETAINING WALL. AREAS BEYOND THIS DISTANCE SHALL NOT BE DISTURBED. LANDSCAPING BID ITEMS REQUIRED TO RESTORE THE DISTURBED SLOPE ARE INCLUDED IN THE ROAD PLAN QUANTITIES.

REMOVAL OF EARTHEN MATERIALS DOWN TO THE PROPOSED SUBGRADE LEVEL BETWEEN THE EXISTING CURB AND THE PROPOSED WALL ARE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-43-1-2"

SEE THE ROAD PLANS FOR BENCH MARK REFERENCE.

LIMITS FOR CLEARING & GRUBBING BEHIND THE WALL SHALL BE THE SLOPE INTERCEPT LINE SHOWN ON THE PLANS. CLEARING AND GRUBBING AT THE WALL STRUCTURE IS INCLUDED WITH THE ROAD PLAN QUANTITIES.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 88 (2012 ADJUSTED), AND WERE SET AT THE SITE USING GPS TECHNOLOGY.

BID ITEMS "CLEANING CONCRETE SURFACES" AND "CONCRETE STAINING R-43-1-1" (FEDERAL COLOR NO. 36424) SHALL BE APPLIED TO THE FRONT AND TOP FACES OF THE EXISTING WALL TO REMAIN. THE FRONT AND TOP FACES OF THE EXISTING AND PROPOSED WALL SHALL CLOSELY MATCH EACH OTHER IN COLOR. THE NEW WALL COLOR IS INCLUDED IN BID ITEM "WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-43-1-2".

⬟ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MINIMUM. RUN UNDER THE NEW CONCRETE LEVELING PAD AS SHOWN ON THE GENERAL PLAN AND CONNECT TO PVC PIPE. SEE ROAD PLANS FOR PVC PIPE DETAILS.

◑ THE LENGTHS PROVIDED IN THE TABLE ARE THE MINIMUM REQUIRED REINFORCEMENT LENGTHS BASED UPON THE MINIMUM DESCRIBED IN THE WALL SYSTEM SPECIAL PROVISIONS OR BASED UPON EXTERNAL AND OVERALL STABILITY AT THE DESIGNATED LOCATIONS. THESE DESIGNATED LOCATIONS REPRESENT TYPICAL AND CRITICAL WALL LOCATIONS, BUT SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR DESIGN LENGTHS SHALL MEET OR EXCEED THE MINIMUM VALUES REPRESENTED IN THE TABLE AT THESE DESIGNATED LOCATIONS. THE LENGTHS ARE MEASURED FROM THE BACK FACE OF THE BLOCKS.

★ OVERALL STABILITY CDR'S ARE BASED UPON THE MINIMUM REQUIRED REINFORCEMENT LENGTHS BASED ON OVERALL STABILITY PERFORMED BY THE WALL DESIGNER. COMPOUND STABILITY IS THE CONTRACTOR'S RESPONSIBILITY.

FIELD EMBEDMENTS SHALL MEET OR EXCEED THE MINIMUM 1'-6" EMBEDMENT. FIELD EMBEDMENTS EXCEEDING THE MINIMUM EMBEDMENT SHALL NOT BE INCLUDED IN THE PAY LIMITS.

PLACE GEOTEXTILE FABRIC TYPE DF SCHEDULE C ALONG THE JOINT AT BACK FACE OF THE NEW AND EXISTING WALL TO REMAIN. THE FABRIC SHOULD EXTEND 3' ON EITHER SIDE OF THE JOINT.

IF AN EXISTING UNDERDRAIN IS DISCOVERED BEHIND THE EXISTING CAST-IN-PLACE CONCRETE WALL, CUT AND CAP THE EXISTING UNDERDRAIN AT THE JOINT. CAPPING THE EXISTING UNDERDRAIN IS INCLUDED IN THE BID ITEM "REMOVING CAST-IN-PLACE RETAINING WALL R-43-1-1".

THE ORIGINAL 1966 PLANS FOR WALL R-43-1-1 ARE AVAILABLE ON THE WISCONSIN DOT HIGHWAY STRUCTURES INFORMATION (HSI) SYSTEM.

## SOIL PARAMETERS

| | STRATUM LOCATIONS & SOIL DESCRIPTIONS | TOTAL UNIT WEIGHT (PCF) | FRICTION ANGLE (DEGREES) | COHESION (PSF) |
|---|---|---|---|---|
| ▲ ✳ | GRANULAR BACKFILL WITHIN REINFORCED SOIL ZONE | 125 | 30 | 0 |
| ✳ | RETAINED SOIL ZONE (BACKFILL BEYOND REINFORCED SOIL ZONE) | 125 | 30 | 0 |
| | FOUNDATION SOILS (STA. 0W+00 TO STA. 2W+72.15) | 125 | 30 | 0 |

✳ DESIGN WALL FOR THESE VALUES.

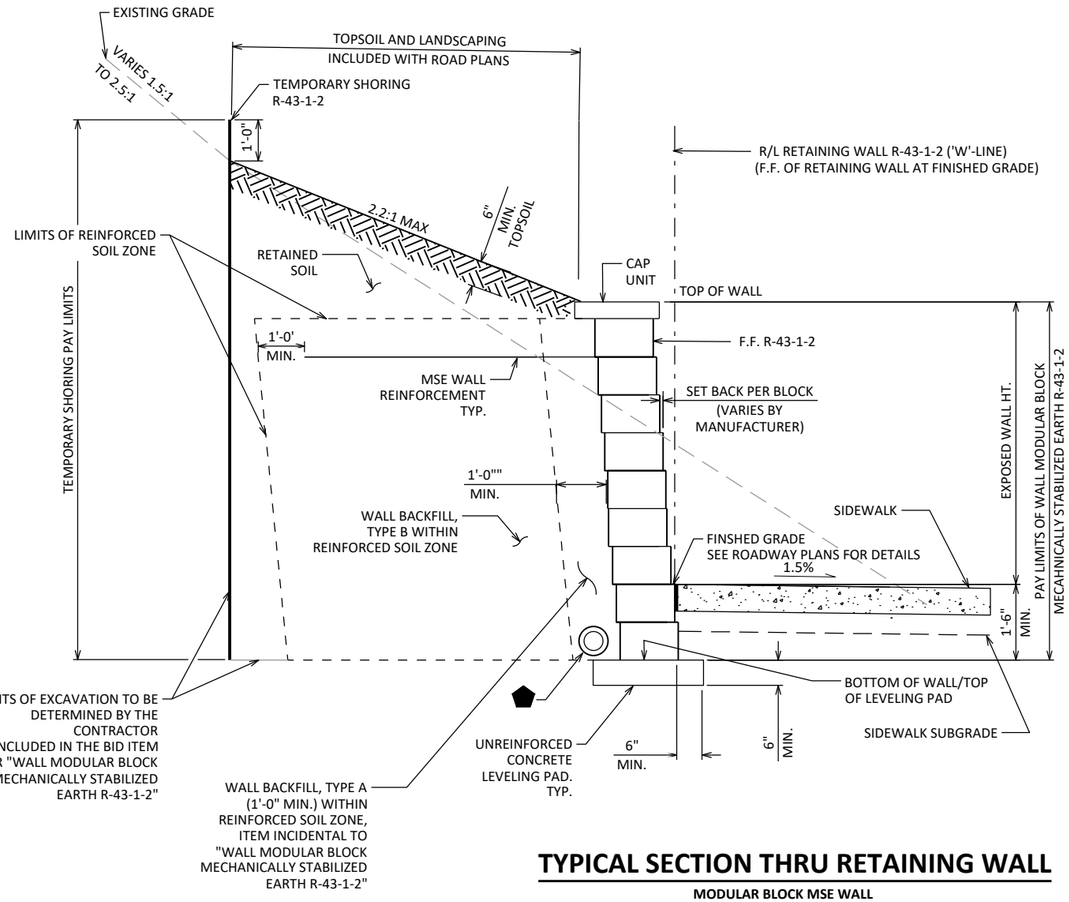
▲ THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

## WALL EXTERNAL & OVERALL STABILITY EVALUATION

| | WALL SECTION | 1 | 2 |
|---|---|---|---|
| | WALL HEIGHT (FEET) | 6.50 | 7.50 |
| | EXPOSED WALL HEIGHT (FEET) | 5.00 | 6.00 |
| | MINIMUM LENGTH OF REINFORCEMENT (FEET) | 8.0 | 8.0 |
| ◑ | BACKSLOPE BEHIND WALL | 2H:1V | 2.5H:1V |
| | CAPACITY TO DEMAND RATIO (CDR) | | |
| | SLIDING (CDR > 1.0) | 1.08 | 1.23 |
| | ECCENTRICITY (CDR > 1.0) | 3.11 | 2.76 |
| ★ | OVERALL STABILITY (CDR > 1.0) | 1.05 | 1.09 |
| | BEARING RESISTANCE (CDR > 1.0) | 2.43 | 2.36 |
| | FACTORED BEARING RESISTANCE (PSF) | 5000 | 5000 |

## LEGEND:

F.F. - FRONT FACE




## TYPICAL SECTION THRU RETAINING WALL

**MODULAR BLOCK MSE WALL**

## TOTAL STRUCTURE ESTIMATED QUANTITIES

| ITEM NUMBER | BID ITEM | UNIT | TOTAL |
|---|---|---|---|
| 204.9090.S.02 | REMOVING CAST-IN-PLACE RETAINING WALL R-43-1-1 | LF | 70 |
| 509.0400.S | CLEANING CONCRETE SURFACES | SY | 230 |
| 511.1200.01 | TEMPORARY SHORING R-43-1-2 | SF | 2,800 |
| 517.1010.S.01 | CONCRETE STAINING R-43-1-1 | SF | 2,075 |
| 612.0406 | PIPE UNDERDRAIN WRAPPED 6-INCH | LF | 290 |
| 645.0113 | GEOTEXTILE TYPE DF SCHEDULE C | SY | 8 |
| SPV.0165.01 | WALL MODULAR BLOCK MECHANICALLY STABILIZED EARTH R-43-1-2 | SF | 1,605 |
| | **NON-BID ITEMS** | | |
| | WALL BACKFILL, TYPE A | TON | - |
| | WALL BACKFILL, TYPE B | TON | - |
| | UNREINFORCED CONCRETE LEVELING PAD | CY | - |
| | PREFORMED FILLER | SIZE | ½' |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

**STRUCTURE R-43-1-2**

DRAWN BY EKK | PLANS CK'D JZ

**TYPICAL SECTION, QUANTITIES & NOTES**

SHEET 2 OF 3

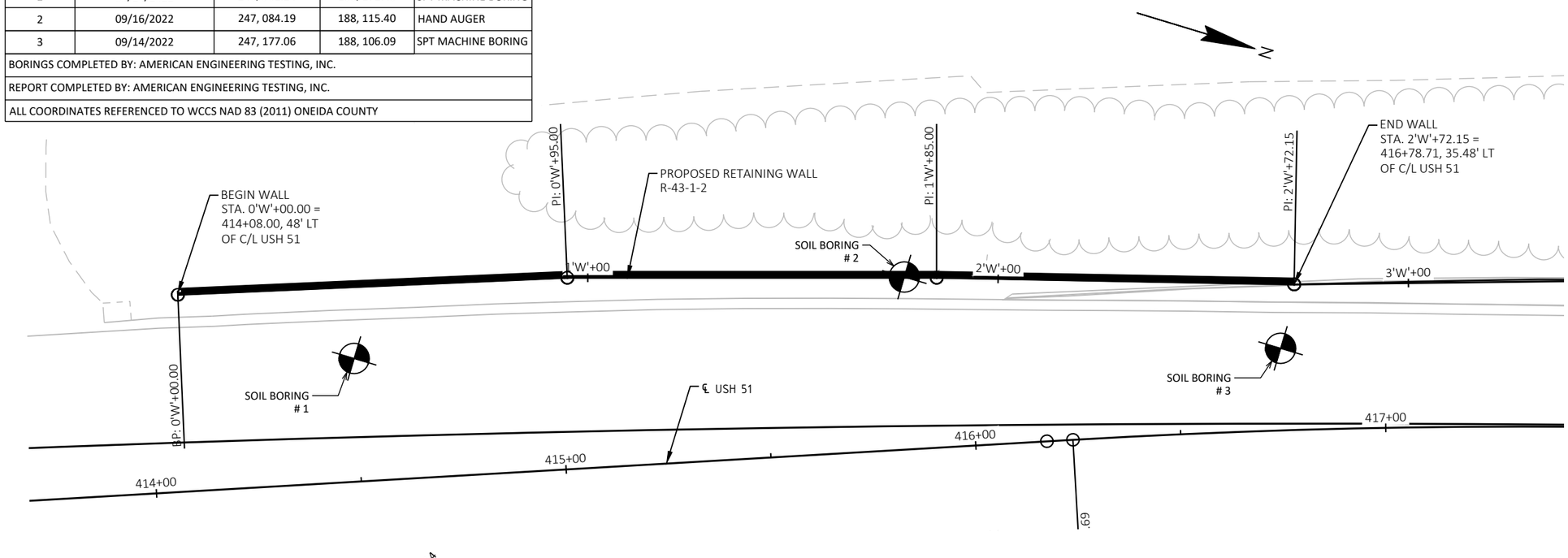
177

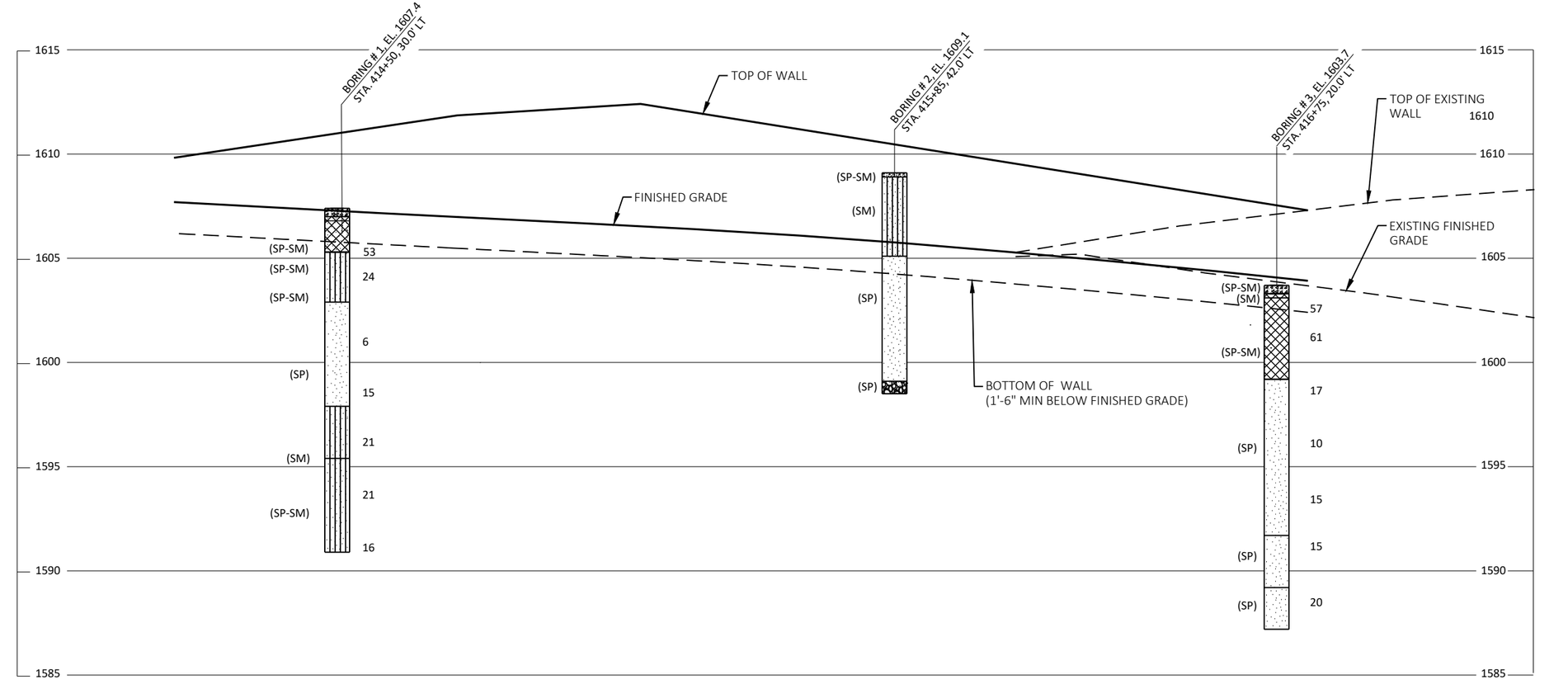
SCALE =

8

8

| BORING # | DATE COMPLETED | NORTHING (Y) | EASTING (X) | NOTES |
|---|---|---|---|---|
| 1 | 09/14/2022 | 246, 961.24 | 188, 172.43 | SPT MACHINE BORING |
| 2 | 09/16/2022 | 247, 084.19 | 188, 115.40 | HAND AUGER |
| 3 | 09/14/2022 | 247, 177.06 | 188, 106.09 | SPT MACHINE BORING |
| BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING, INC. | | | | |
| REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING, INC. | | | | |
| ALL COORDINATES REFERENCED TO WCCS NAD 83 (2011) ONEIDA COUNTY | | | | |



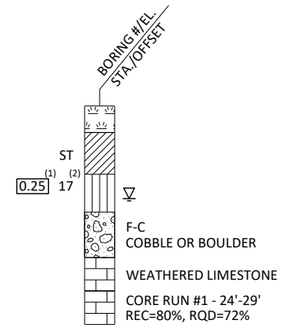

STATE PROJECT NUMBER

**1170-19-72**

**MATERIAL SYMBOLS**

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

**LEGEND OF BORING**




[1] UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

[2] UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

**GROUND WATER ELEVATION**

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

**ABBREVIATIONS**

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

**STRUCTURE R-43-1-2**

DRAWN BY EKK | PLANS CK'D JZ

**SUBSURFACE EXPLORATION**

SHEET 3 OF 3

178

SCALE =

8

8

USH 51

| STATION | REAL STATION | DISTANCE | AREA (SF) | | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | | CUMULATIVE VOL (CY) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | EXPANDED FILL | EXPANDED MARSH BACKFILL | REDUCED MARSH IN FILL | MASS ORDINATE |
| | | | | | | | | | | | 1.00 | 1.25 | 1.00 | 1.00 | |
| | | | | | | | NOTE 1 | NOTE 2 | NOTE 3 | | NOTE 1 | | NOTE 4 | NOTE 6 | NOTE 8 |
| 402+00.01 | 40200.01 | 0.00 | 127.23 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 402+50.00 | 40250.00 | 49.99 | 182.53 | 0.00 | 2.18 | 0.00 | 287 | 0 | 2 | 0 | 287 | 3 | 0 | 0 | 285 |
| 403+00.00 | 40300.00 | 50.00 | 140.16 | 0.00 | 0.42 | 0.00 | 299 | 0 | 2 | 0 | 586 | 5 | 0 | 0 | 581 |
| 403+50.00 | 40350.00 | 50.00 | 116.50 | 0.00 | 1.25 | 0.00 | 238 | 0 | 2 | 0 | 824 | 8 | 0 | 0 | 817 |
| 404+00.00 | 40400.00 | 50.00 | 121.26 | 0.00 | 0.00 | 0.00 | 220 | 0 | 1 | 0 | 1,044 | 9 | 0 | 0 | 1,035 |
| 404+50.00 | 40450.00 | 50.00 | 130.42 | 0.00 | 1.24 | 0.00 | 233 | 0 | 1 | 0 | 1,277 | 10 | 0 | 0 | 1,267 |
| 405+00.00 | 40500.00 | 50.00 | 122.12 | 0.00 | 1.75 | 0.00 | 234 | 0 | 3 | 0 | 1,511 | 14 | 0 | 0 | 1,497 |
| 405+50.00 | 40550.00 | 50.00 | 112.04 | 0.00 | 0.67 | 0.00 | 217 | 0 | 2 | 0 | 1,728 | 16 | 0 | 0 | 1,712 |
| 406+00.00 | 40600.00 | 50.00 | 112.56 | 0.00 | 1.20 | 0.00 | 208 | 0 | 2 | 0 | 1,936 | 19 | 0 | 0 | 1,917 |
| 406+50.00 | 40650.00 | 50.00 | 113.47 | 0.00 | 2.79 | 0.00 | 209 | 0 | 4 | 0 | 2,145 | 24 | 0 | 0 | 2,121 |
| 407+00.00 | 40700.00 | 50.00 | 113.10 | 0.00 | 1.47 | 0.00 | 210 | 0 | 4 | 0 | 2,355 | 29 | 0 | 0 | 2,326 |
| 407+25.00 | 40725.00 | 25.00 | 113.01 | 0.00 | 3.60 | 0.00 | 105 | 0 | 2 | 0 | 2,460 | 31 | 0 | 0 | 2,429 |
| 407+50.00 | 40750.00 | 25.00 | 114.86 | 0.00 | 4.00 | 0.00 | 105 | 0 | 4 | 0 | 2,565 | 36 | 0 | 0 | 2,529 |
| 408+00.00 | 40800.00 | 50.00 | 111.28 | 0.00 | 1.17 | 0.00 | 209 | 0 | 5 | 0 | 2,774 | 43 | 0 | 0 | 2,732 |
| 408+50.00 | 40850.00 | 50.00 | 115.33 | 0.00 | 0.56 | 0.00 | 210 | 0 | 2 | 0 | 2,984 | 45 | 0 | 0 | 2,939 |
| 409+00.00 | 40900.00 | 50.00 | 140.49 | 0.00 | 0.11 | 0.00 | 237 | 0 | 1 | 0 | 3,221 | 46 | 0 | 0 | 3,175 |
| 409+50.00 | 40950.00 | 50.00 | 129.16 | 0.00 | 2.70 | 0.00 | 250 | 0 | 3 | 0 | 3,471 | 50 | 0 | 0 | 3,421 |
| 410+00.00 | 41000.00 | 50.00 | 122.36 | 0.00 | 0.54 | 0.00 | 233 | 0 | 3 | 0 | 3,704 | 54 | 0 | 0 | 3,650 |
| 410+50.00 | 41050.00 | 50.00 | 126.67 | 0.00 | 0.29 | 0.00 | 231 | 0 | 1 | 0 | 3,935 | 55 | 0 | 0 | 3,880 |
| 411+00.00 | 41100.00 | 50.00 | 113.98 | 0.00 | 0.99 | 0.00 | 223 | 0 | 1 | 0 | 4,158 | 56 | 0 | 0 | 4,102 |
| 411+50.00 | 41150.00 | 50.00 | 118.98 | 0.00 | 1.01 | 0.00 | 216 | 0 | 2 | 0 | 4,374 | 59 | 0 | 0 | 4,315 |
| 411+75.00 | 41175.00 | 25.00 | 120.22 | 0.00 | 0.39 | 0.00 | 111 | 0 | 1 | 0 | 4,485 | 60 | 0 | 0 | 4,425 |
| 412+00.00 | 41200.00 | 25.00 | 123.61 | 0.00 | 0.79 | 0.00 | 113 | 0 | 1 | 0 | 4,598 | 61 | 0 | 0 | 4,537 |
| 412+50.00 | 41250.00 | 50.00 | 129.52 | 0.00 | 0.22 | 0.00 | 234 | 0 | 1 | 0 | 4,832 | 63 | 0 | 0 | 4,770 |
| 413+00.00 | 41300.00 | 50.00 | 135.46 | 0.00 | 0.00 | 0.00 | 245 | 0 | 0 | 0 | 5,077 | 63 | 0 | 0 | 5,015 |
| 413+01.54 | 41301.54 | 1.54 | 130.68 | 0.00 | 0.00 | 0.00 | 8 | 0 | 0 | 0 | 5,085 | 63 | 0 | 0 | 5,023 |
| 413+50.00 | 41350.00 | 48.46 | 154.33 | 0.00 | 0.00 | 0.00 | 256 | 0 | 0 | 0 | 5,341 | 63 | 0 | 0 | 5,279 |
| 414+00.00 | 41400.00 | 50.00 | 129.79 | 0.00 | 0.00 | 0.00 | 263 | 0 | 0 | 0 | 5,604 | 63 | 0 | 0 | 5,542 |
| 414+08.00 | 41408.00 | 8.00 | 73.74 | 0.00 | 1.36 | 0.00 | 30 | 0 | 0 | 0 | 5,634 | 63 | 0 | 0 | 5,572 |
| 414+50.00 | 41450.00 | 42.00 | 79.52 | 0.00 | 6.69 | 0.00 | 119 | 0 | 6 | 0 | 5,753 | 70 | 0 | 0 | 5,683 |
| 414+75.00 | 41475.00 | 25.00 | 87.57 | 0.00 | 5.94 | 0.00 | 77 | 0 | 6 | 0 | 5,830 | 78 | 0 | 0 | 5,753 |
| 415+00.00 | 41500.00 | 25.00 | 74.77 | 0.00 | 10.72 | 0.00 | 75 | 0 | 8 | 0 | 5,905 | 88 | 0 | 0 | 5,818 |
| 415+25.00 | 41525.00 | 25.00 | 76.00 | 0.00 | 8.27 | 0.00 | 70 | 0 | 9 | 0 | 5,975 | 99 | 0 | 0 | 5,876 |
| 415+50.00 | 41550.00 | 25.00 | 74.70 | 0.00 | 9.04 | 0.00 | 70 | 0 | 8 | 0 | 6,045 | 109 | 0 | 0 | 5,936 |
| 415+75.00 | 41575.00 | 25.00 | 76.48 | 0.00 | 6.84 | 0.00 | 70 | 0 | 7 | 0 | 6,115 | 118 | 0 | 0 | 5,998 |
| 416+00.00 | 41600.00 | 25.00 | 74.68 | 0.00 | 7.89 | 0.00 | 70 | 0 | 7 | 0 | 6,185 | 126 | 0 | 0 | 6,059 |
| 416+03.87 | 41603.87 | 3.87 | 74.06 | 0.00 | 8.43 | 0.00 | 11 | 0 | 1 | 0 | 6,196 | 128 | 0 | 0 | 6,069 |
| 416+23.69 | 41623.69 | 19.82 | 74.14 | 0.00 | 5.86 | 0.00 | 54 | 0 | 5 | 0 | 6,250 | 134 | 0 | 0 | 6,116 |
| 416+50.00 | 41650.00 | 26.31 | 77.50 | 0.00 | 1.45 | 0.00 | 74 | 0 | 4 | 0 | 6,324 | 139 | 0 | 0 | 6,185 |
| 417+00.00 | 41700.00 | 50.00 | 47.35 | 0.00 | 0.01 | 0.00 | 116 | 0 | 1 | 0 | 6,440 | 140 | 0 | 0 | 6,300 |

| 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 |
| 4 - EXPANDED MARSH BACKFILL | WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW) |
| 6 - REDUCED MARSH IN FILL | REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL |
| 8 - MASS ORDINATE | IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)] |

USH 51

| STATION | REAL STATION | DISTANCE | AREA (SF) | | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | | CUMULATIVE VOL (CY) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | EXPANDED FILL | EXPANDED MARSH BACKFILL | REDUCED MARSH IN FILL | MASS ORDINATE |
| | | | | | | | NOTE 1 | NOTE 2 | NOTE 3 | | 1.00 NOTE 1 | 1.25 | 1.00 NOTE 4 | 1.00 NOTE 6 | NOTE 8 |
| 417+50.00 | 41750.00 | 50.00 | 44.49 | 0.00 | 0.11 | 0.00 | 85 | 0 | 0 | 0 | 6,525 | 140 | 0 | 0 | 6,385 |
| 418+00.00 | 41800.00 | 50.00 | 42.20 | 0.00 | 0.00 | 0.00 | 80 | 0 | 0 | 0 | 6,605 | 140 | 0 | 0 | 6,465 |
| 418+50.00 | 41850.00 | 50.00 | 49.30 | 0.00 | 0.04 | 0.00 | 85 | 0 | 0 | 0 | 6,690 | 140 | 0 | 0 | 6,550 |
| 418+90.53 | 41890.53 | 40.53 | 49.62 | 0.00 | 0.03 | 0.00 | 74 | 0 | 0 | 0 | 6,764 | 140 | 0 | 0 | 6,624 |
| 419+00.00 | 41900.00 | 9.47 | 48.87 | 0.00 | 0.09 | 0.00 | 17 | 0 | 0 | 0 | 6,781 | 140 | 0 | 0 | 6,641 |
| 419+13.55 | 41913.55 | 13.55 | 47.55 | 0.00 | 0.24 | 0.00 | 24 | 0 | 0 | 0 | 6,805 | 140 | 0 | 0 | 6,665 |
| 419+50.00 | 41950.00 | 36.45 | 50.53 | 0.00 | 0.29 | 0.00 | 66 | 0 | 0 | 0 | 6,871 | 140 | 0 | 0 | 6,731 |
| 420+00.00 | 42000.00 | 50.00 | 50.17 | 0.00 | 0.55 | 0.00 | 93 | 0 | 1 | 0 | 6,964 | 141 | 0 | 0 | 6,823 |
| 420+50.00 | 42050.00 | 50.00 | 52.55 | 0.00 | 0.25 | 0.00 | 95 | 0 | 1 | 0 | 7,059 | 143 | 0 | 0 | 6,917 |
| 421+00.00 | 42100.00 | 50.00 | 48.90 | 0.00 | 0.31 | 0.00 | 94 | 0 | 1 | 0 | 7,153 | 144 | 0 | 0 | 7,009 |
| 421+50.00 | 42150.00 | 50.00 | 44.85 | 0.00 | 0.15 | 0.00 | 87 | 0 | 0 | 0 | 7,240 | 144 | 0 | 0 | 7,096 |
| 421+57.37 | 42157.37 | 7.37 | 46.23 | 0.00 | 0.12 | 0.00 | 12 | 0 | 0 | 0 | 7,252 | 144 | 0 | 0 | 7,108 |
| 422+00.00 | 42200.00 | 42.63 | 47.94 | 0.00 | 0.21 | 0.00 | 74 | 0 | 0 | 0 | 7,326 | 144 | 0 | 0 | 7,182 |
| 422+50.00 | 42250.00 | 50.00 | 45.18 | 0.00 | 0.02 | 0.00 | 86 | 0 | 0 | 0 | 7,412 | 144 | 0 | 0 | 7,268 |
| 422+53.89 | 42253.89 | 3.89 | 44.94 | 0.00 | 0.60 | 0.00 | 6 | 0 | 0 | 0 | 7,418 | 144 | 0 | 0 | 7,274 |

MANITOU PARK DRIVE

| STATION | REAL STATION | DISTANCE | AREA (SF) | | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | | CUMULATIVE VOL (CY) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | EXPANDED FILL | EXPANDED MARSH BACKFILL | REDUCED MARSH IN FILL | MASS ORDINATE |
| | | | | | | | NOTE 1 | NOTE 2 | NOTE 3 | | 1.00 NOTE 1 | 1.25 | 1.00 NOTE 4 | 1.00 NOTE 6 | NOTE 8 |
| 8+97.95 | 897.95 | 0.00 | 36.29 | 0.00 | 0.04 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9+25.00 | 925.00 | 27.05 | 61.41 | 0.00 | 0.50 | 0.00 | 49 | 0 | 0 | 0 | 49 | 0 | 0 | 0 | 49 |

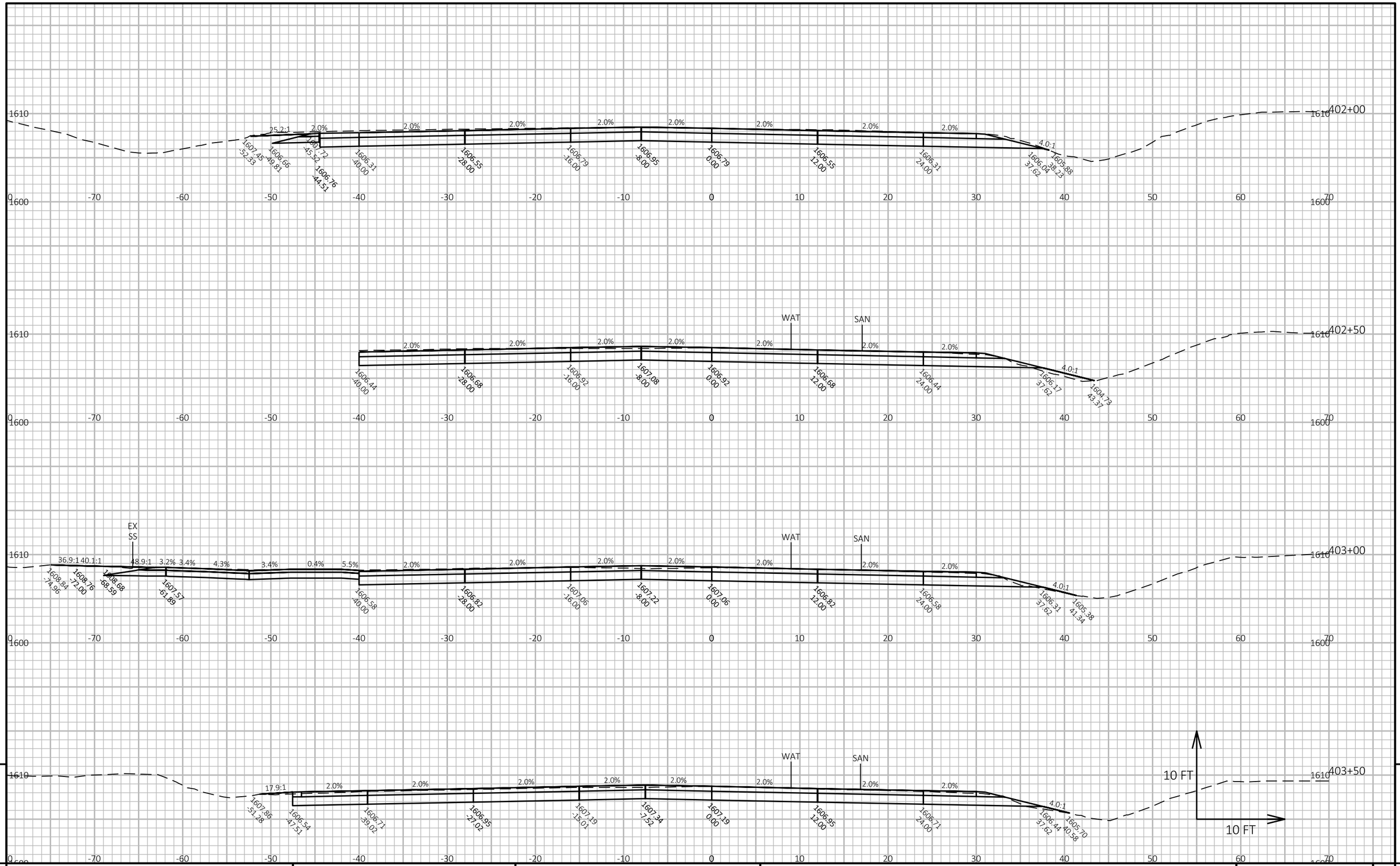
W CLAWSON DRIVE

| STATION | REAL STATION | DISTANCE | AREA (SF) | | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | | CUMULATIVE VOL (CY) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | EXPANDED FILL | EXPANDED MARSH BACKFILL | REDUCED MARSH IN FILL | MASS ORDINATE |
| | | | | | | | NOTE 1 | NOTE 2 | NOTE 3 | | 1.00 NOTE 1 | 1.25 | 1.00 NOTE 4 | 1.00 NOTE 6 | NOTE 8 |
| 10+50.00 | 1050.00 | 0.00 | 71.58 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10+92.38 | 1092.38 | 42.38 | 30.42 | 0.00 | 0.24 | 0.00 | 80 | 0 | 0 | 0 | 80 | 0 | 0 | 0 | 80 |

FIELD STONE DRIVE

| STATION | REAL STATION | DISTANCE | AREA (SF) | | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | | CUMULATIVE VOL (CY) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | EXPANDED FILL | EXPANDED MARSH BACKFILL | REDUCED MARSH IN FILL | MASS ORDINATE |
| | | | | | | | NOTE 1 | NOTE 2 | NOTE 3 | | 1.00 NOTE 1 | 1.25 | 1.00 NOTE 4 | 1.00 NOTE 6 | NOTE 8 |
| 11+62.86 | 1162.86 | 0.00 | 17.26 | 0.00 | 0.08 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11+67.18 | 1167.18 | 4.32 | 32.10 | 0.00 | 0.40 | 0.00 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| 12+00.00 | 1200.00 | 32.82 | 49.83 | 0.00 | 30.21 | 0.00 | 50 | 0 | 19 | 0 | 54 | 24 | 0 | 0 | 30 |

| 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 |
| 4 - EXPANDED MARSH BACKFILL | WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW) |
| 6 - REDUCED MARSH IN FILL | REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL |
| 8 - MASS ORDINATE | IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)] |




9

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 181 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 01

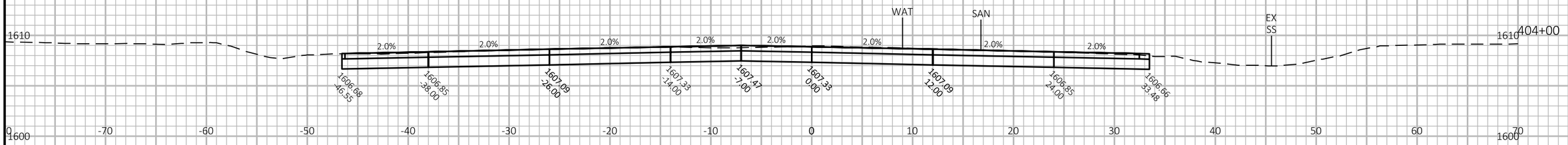
PLOT DATE : 6/26/2023 12:25 PM

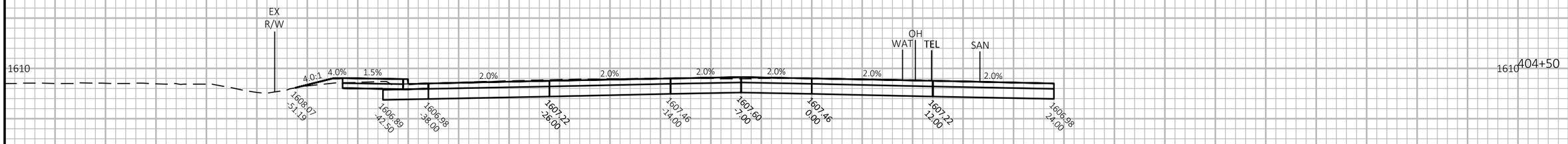
PLOT BY : SHAWN DOLENS

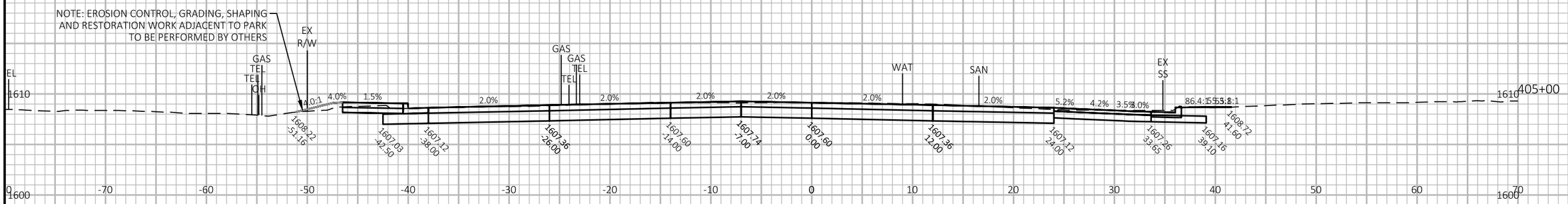
PLOT NAME :

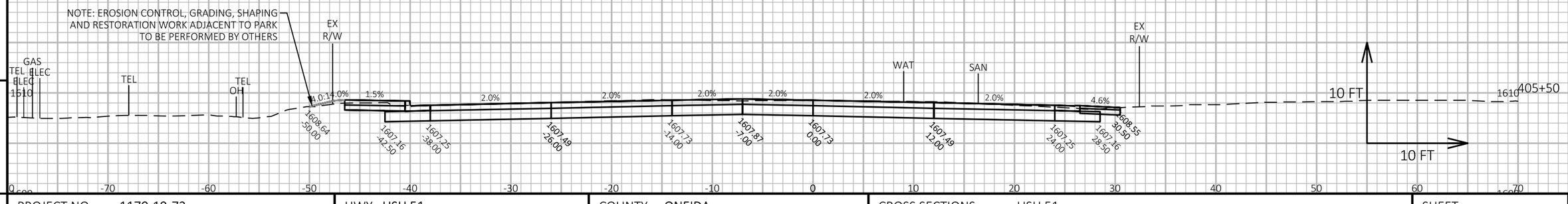
**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 182 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02

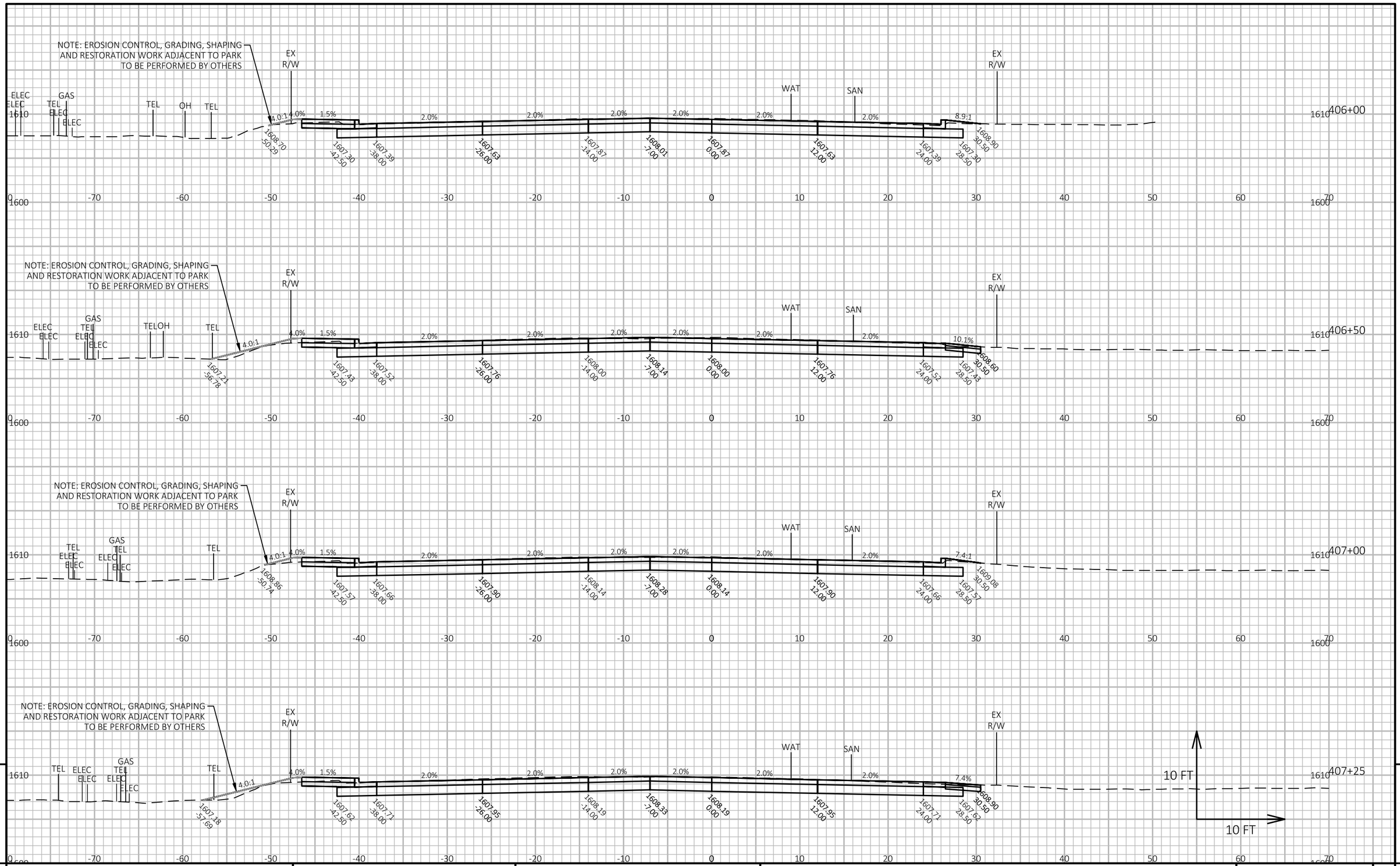
PLOT DATE : 6/26/2023 12:26 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 183 | E |
|---|---|---|---|---|---|

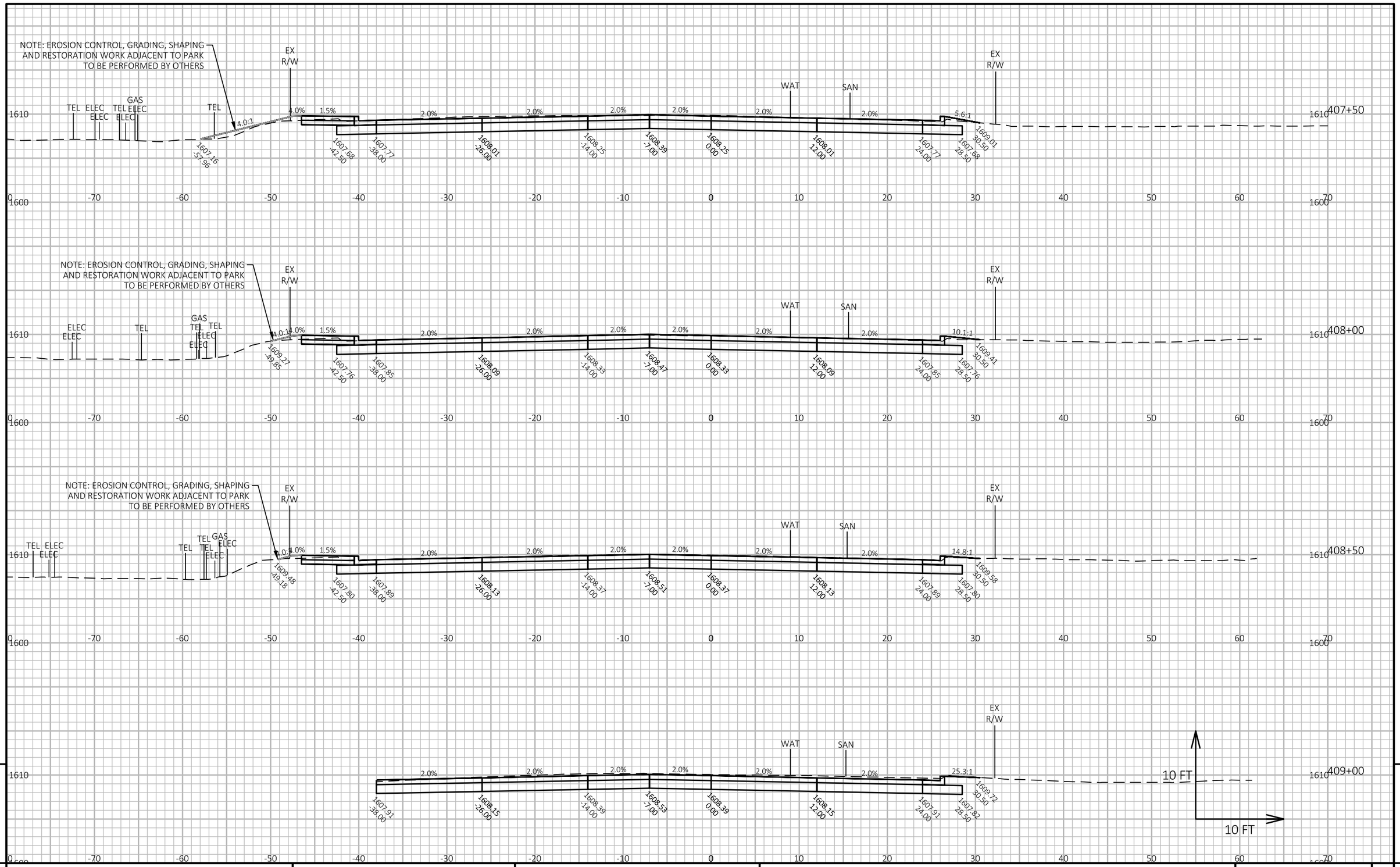
FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 6/26/2023 12:27 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

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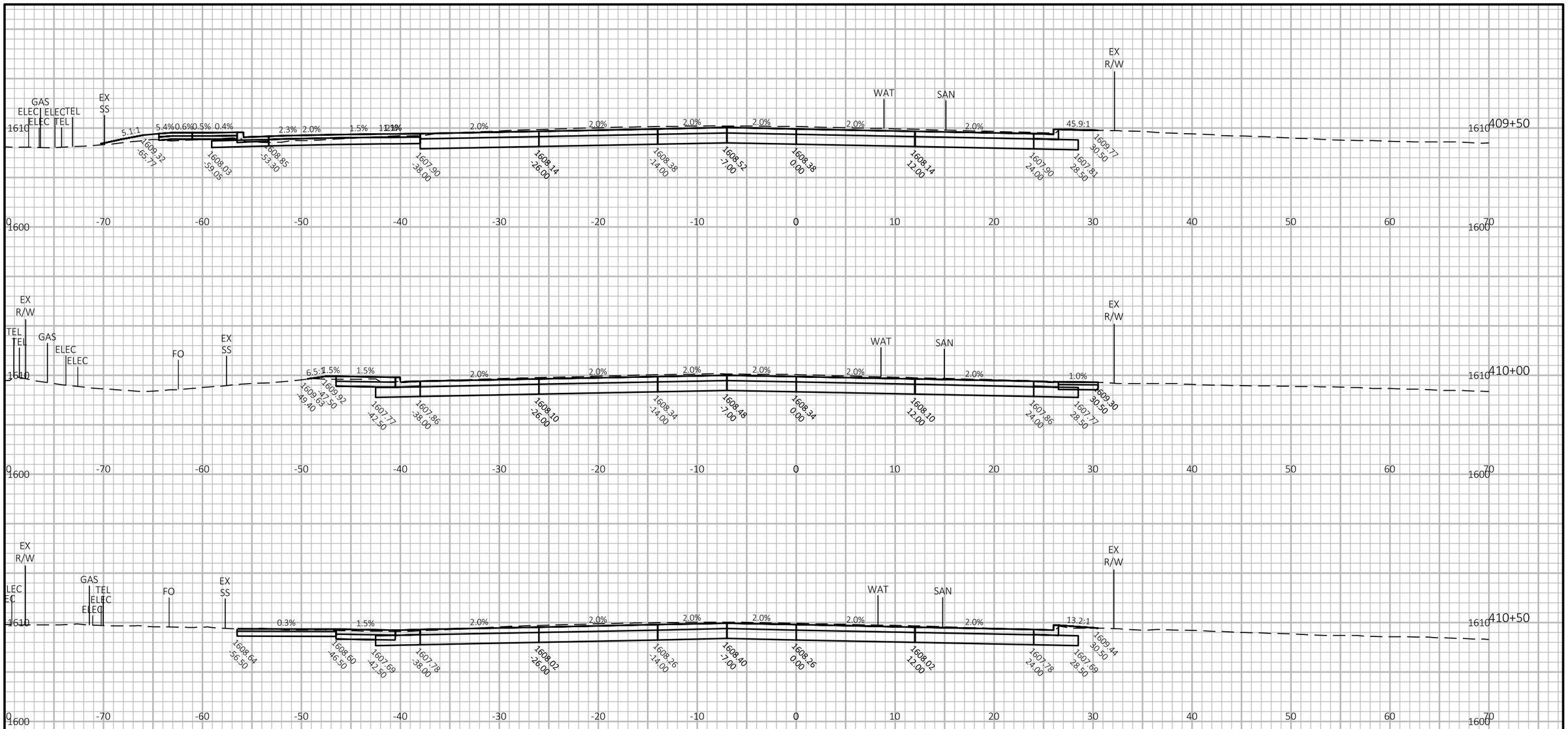
| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 184 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 6/26/2023 12:28 PM PLOT BY : SHAWN DOLENS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.




9

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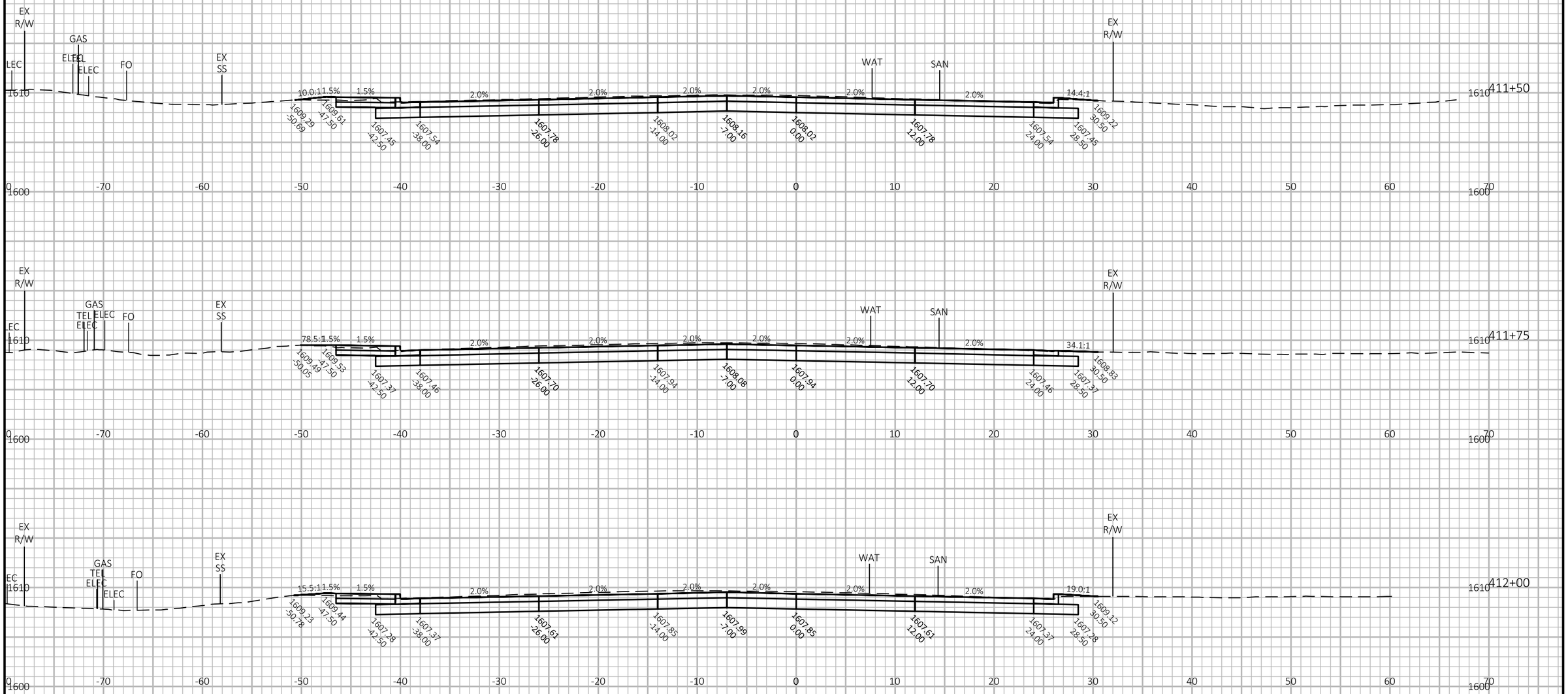
| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 185 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 6/26/2023 12:28 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 186 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 06

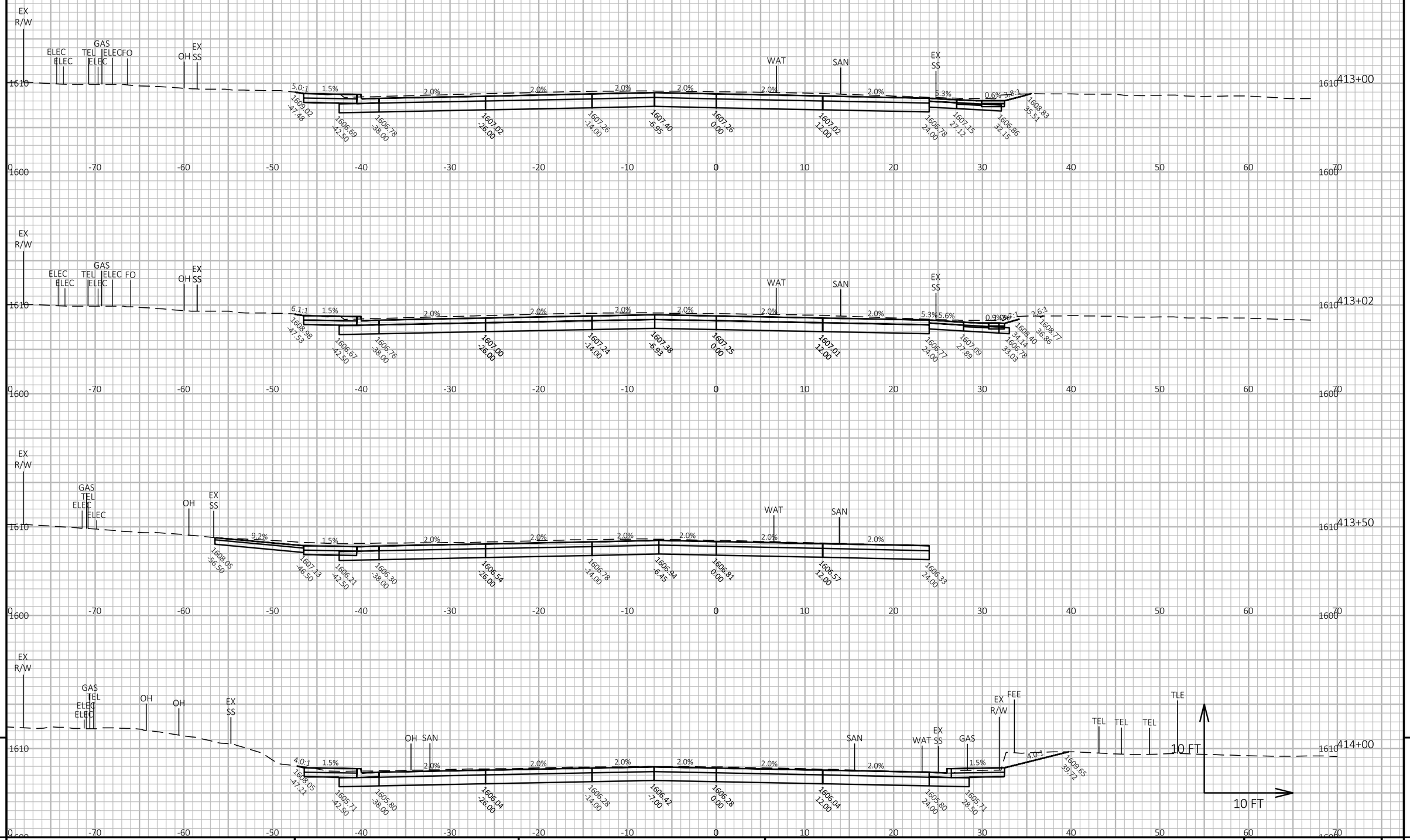
PLOT DATE : 6/26/2023 12:29 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 187 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 07

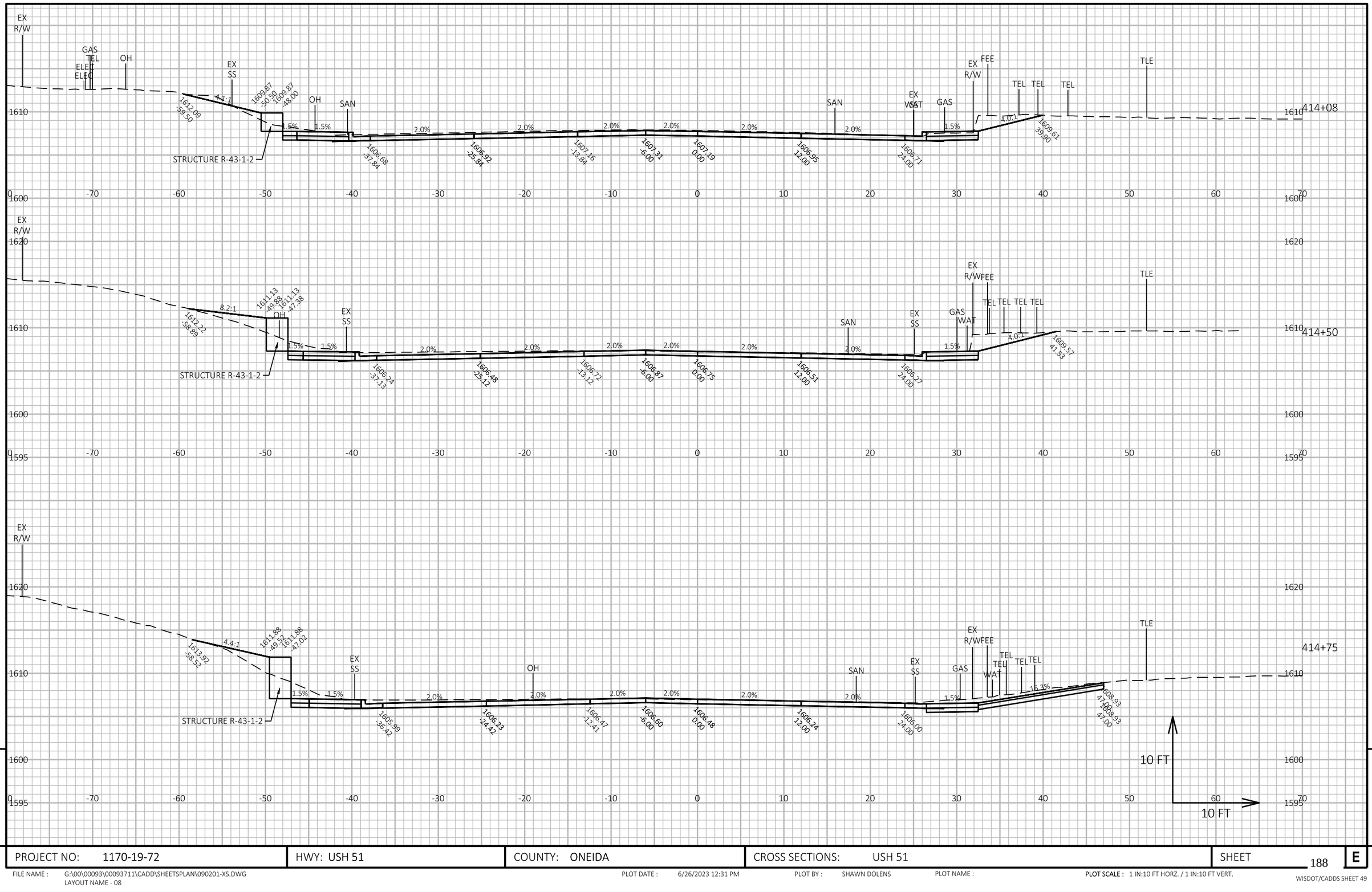
PLOT DATE : 6/26/2023 12:30 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

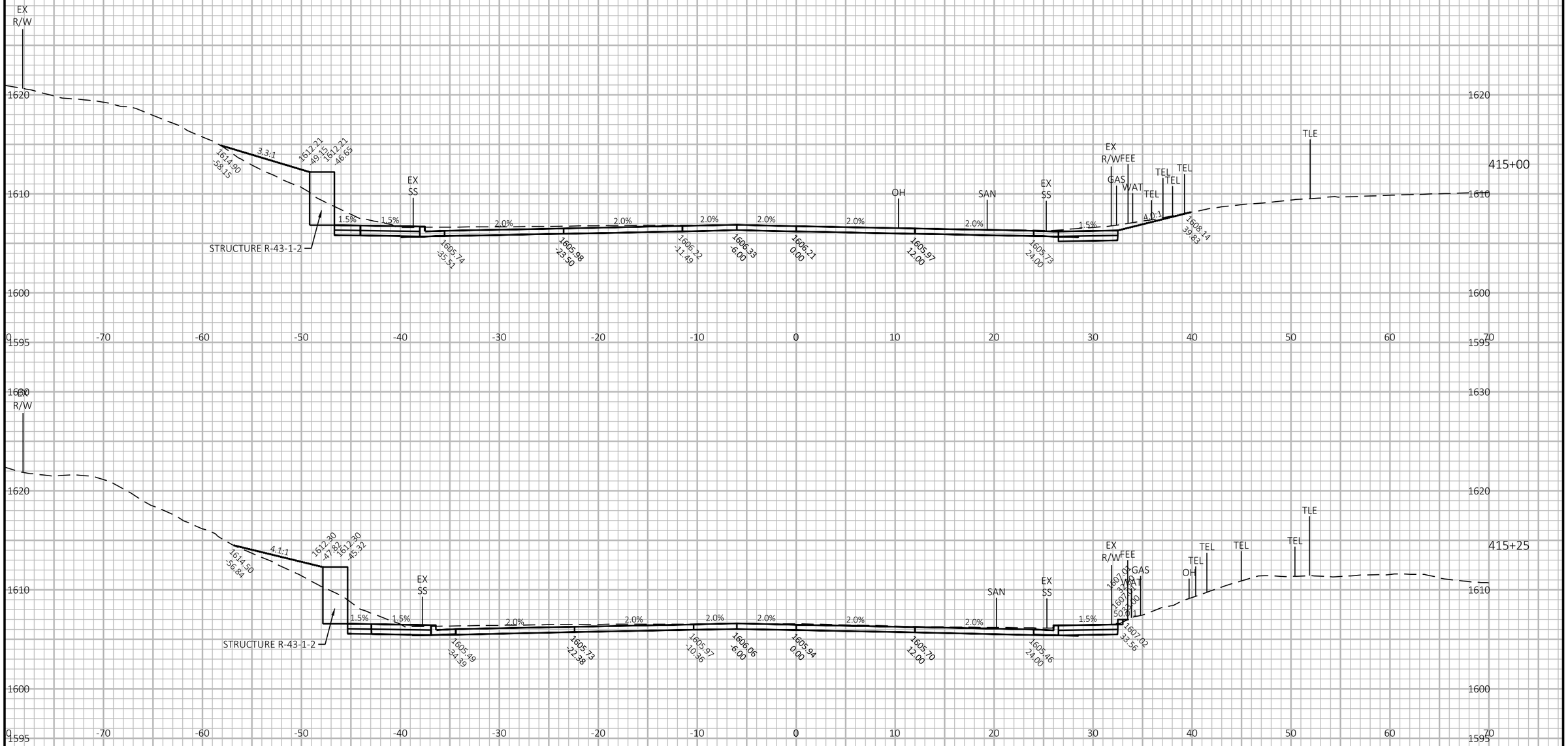



| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 188 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 6/26/2023 12:31 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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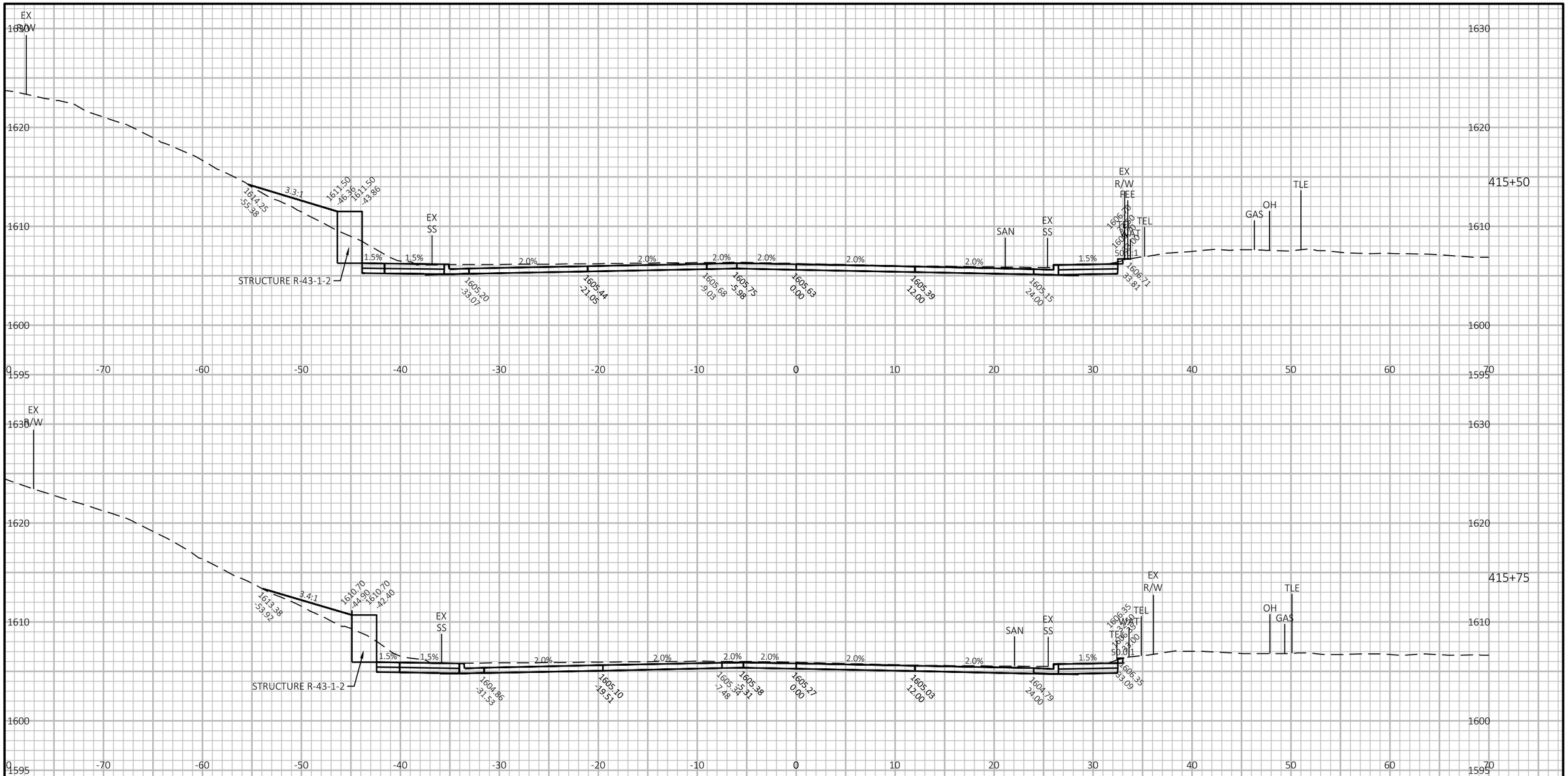
| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 189 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 6/26/2023 12:32 PM PLOT BY : SHAWN DOLENS PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 190 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 10

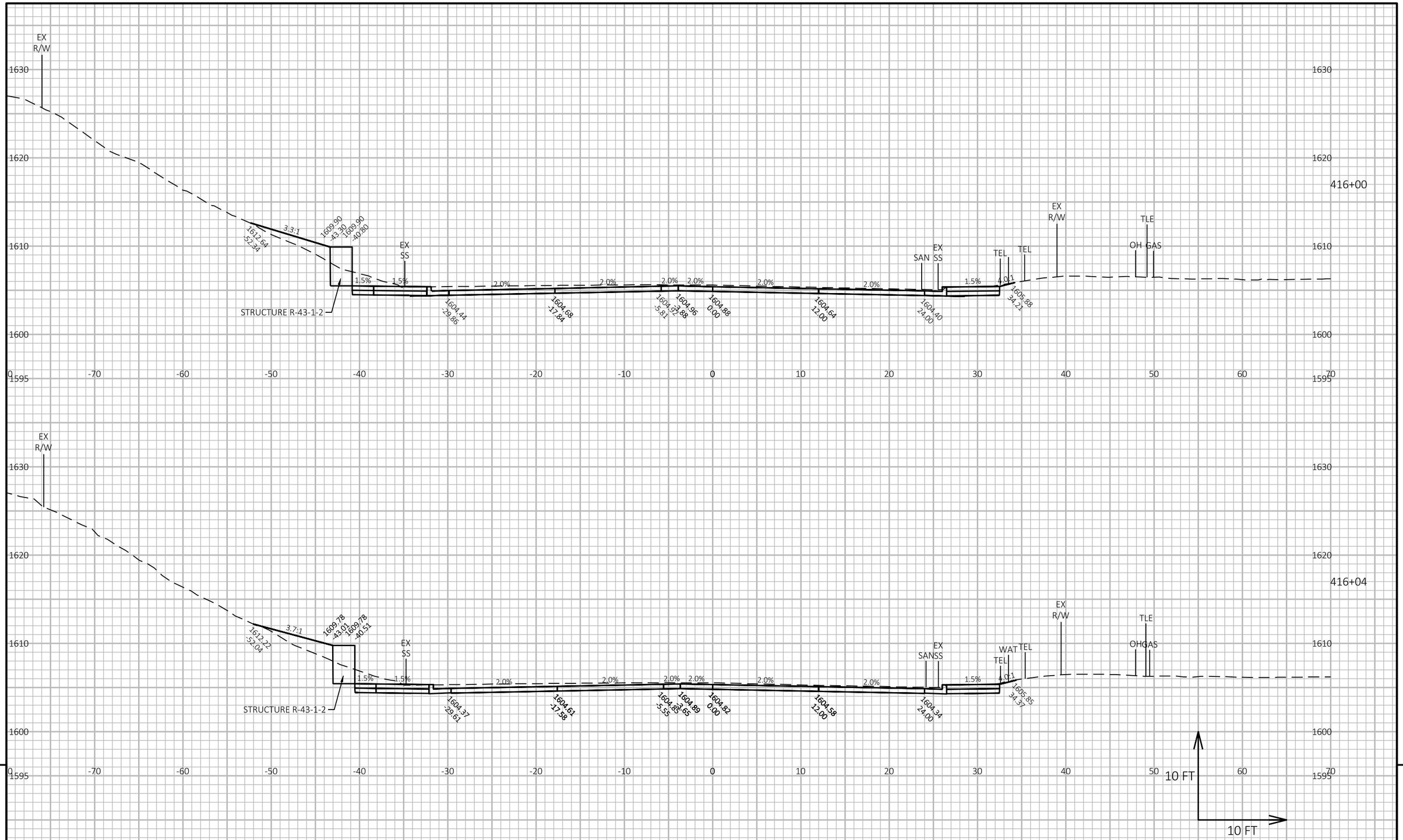
PLOT DATE : 6/26/2023 12:32 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 191 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 11

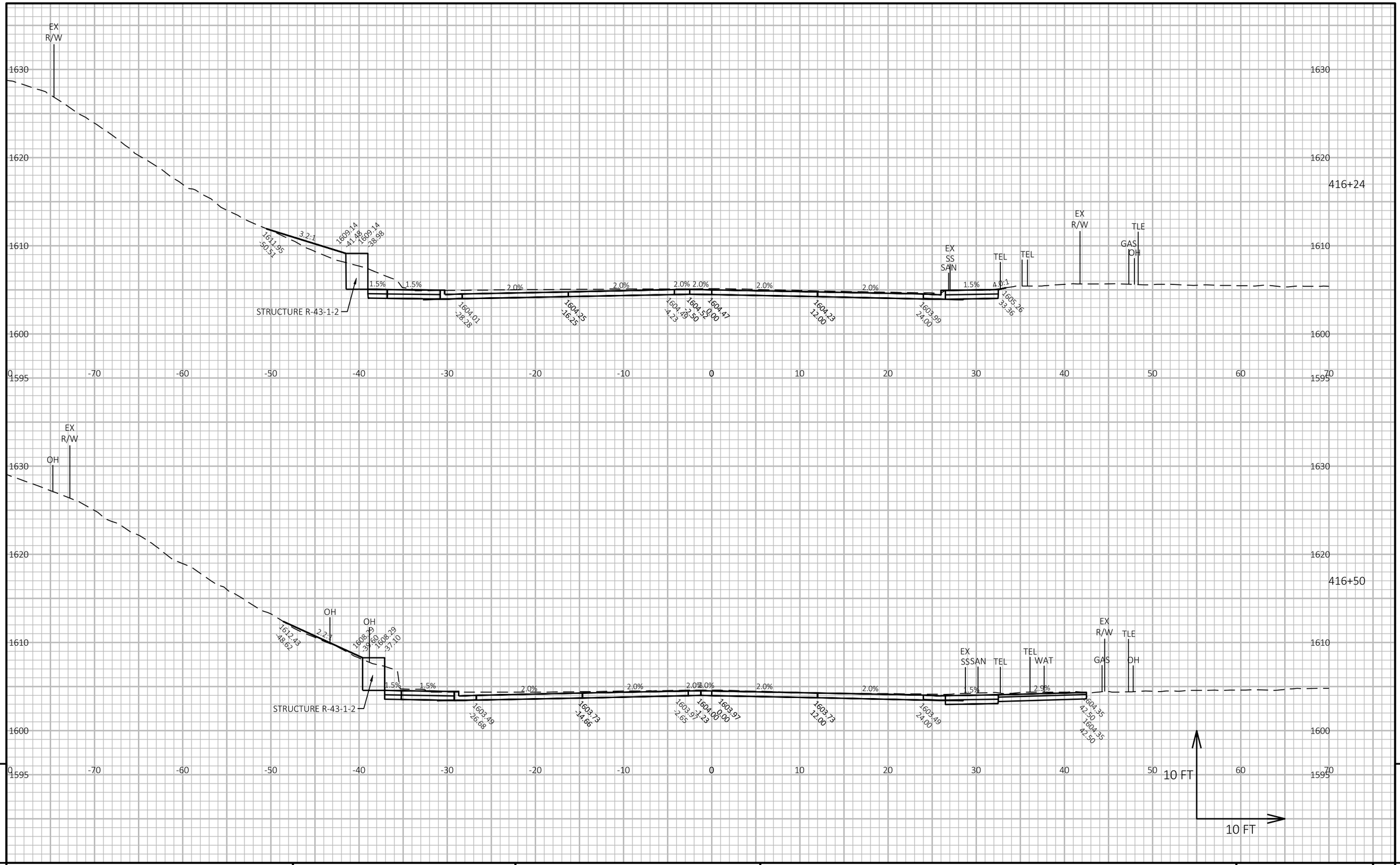
PLOT DATE : 6/26/2023 12:33 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 192 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 12

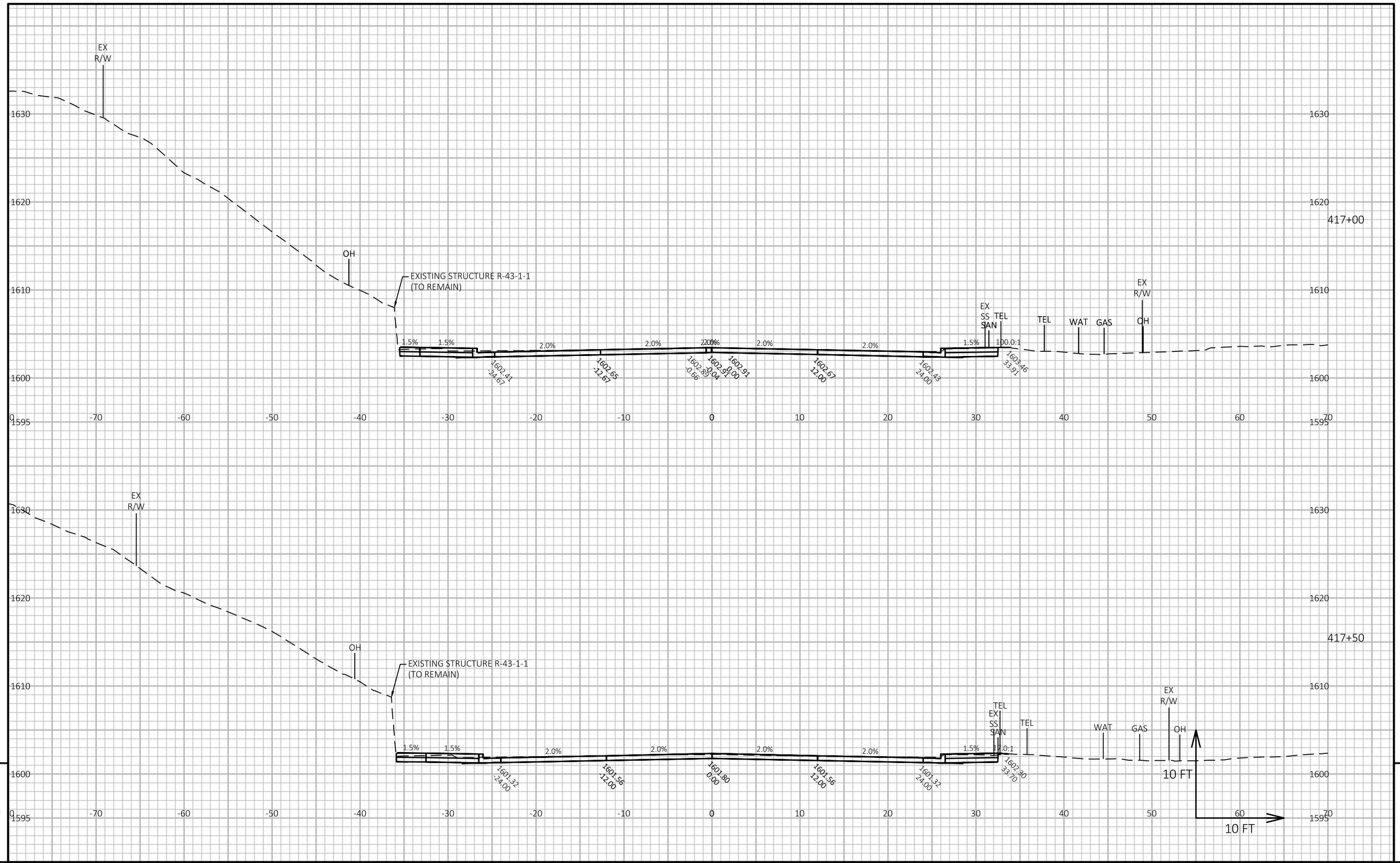
PLOT DATE : 6/26/2023 12:34 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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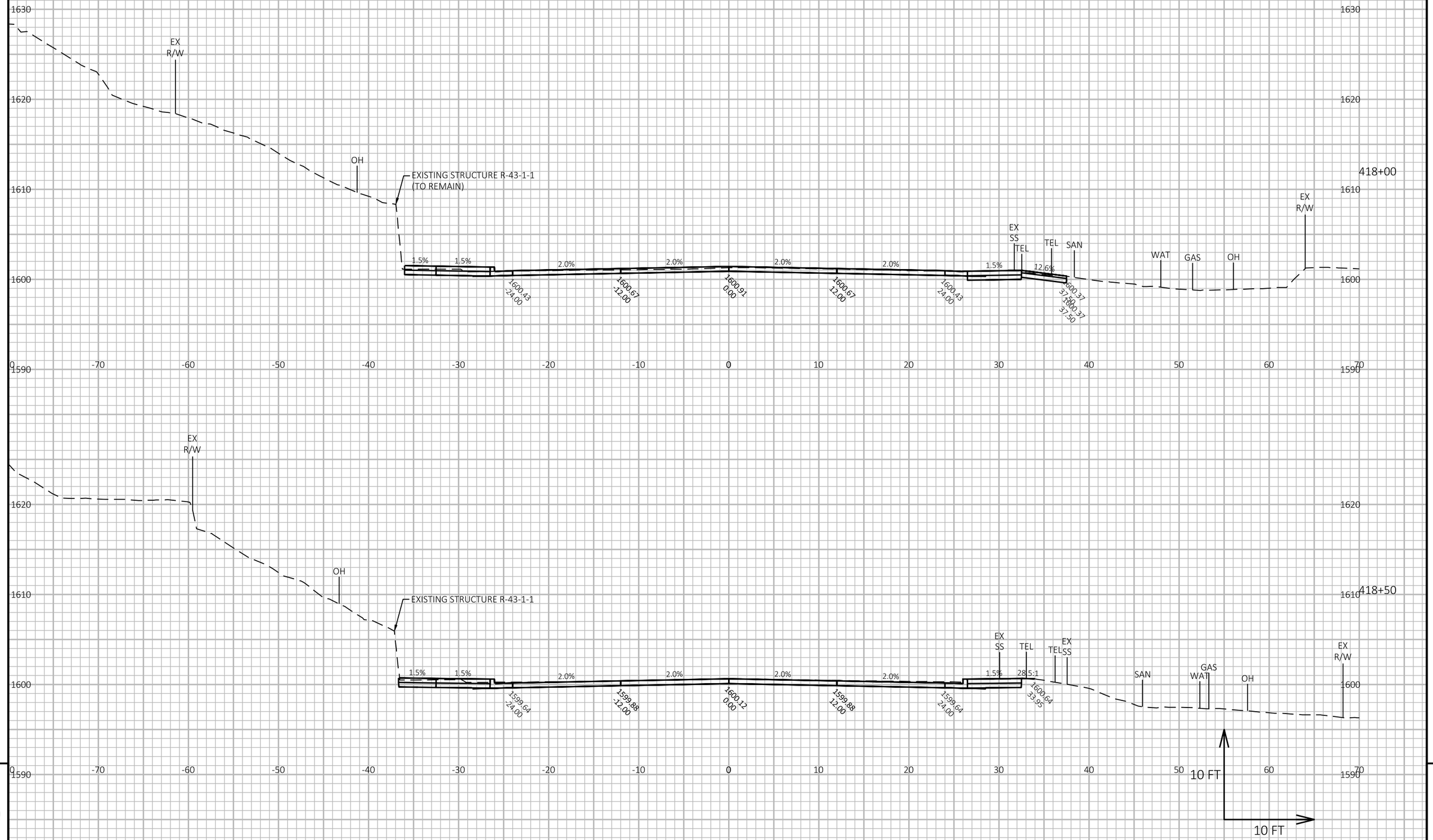
| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 193 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 6/26/2023 12:35 PM PLOT BY : SHAWN DOLENS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 194 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 14

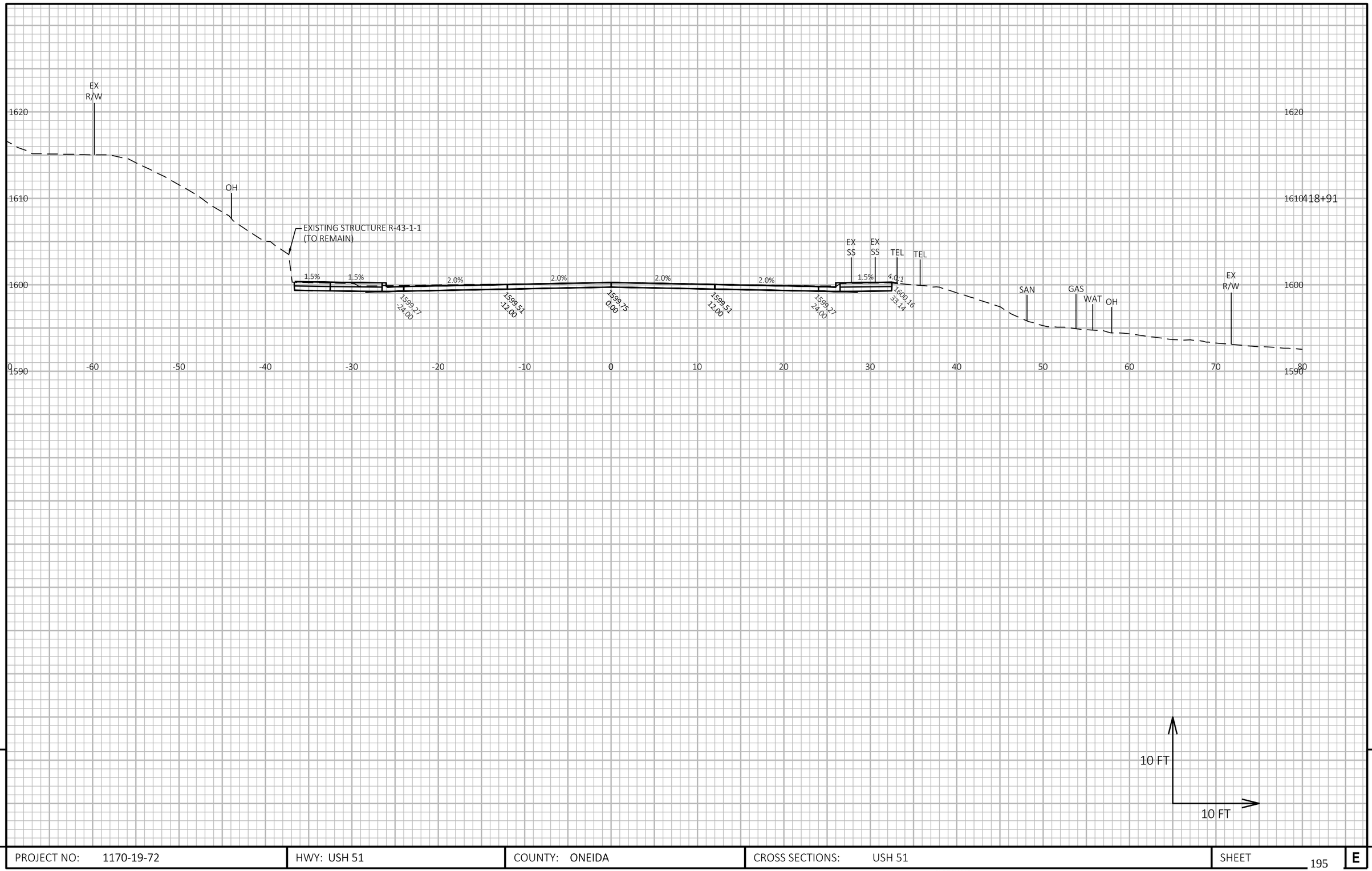
PLOT DATE : 6/26/2023 12:36 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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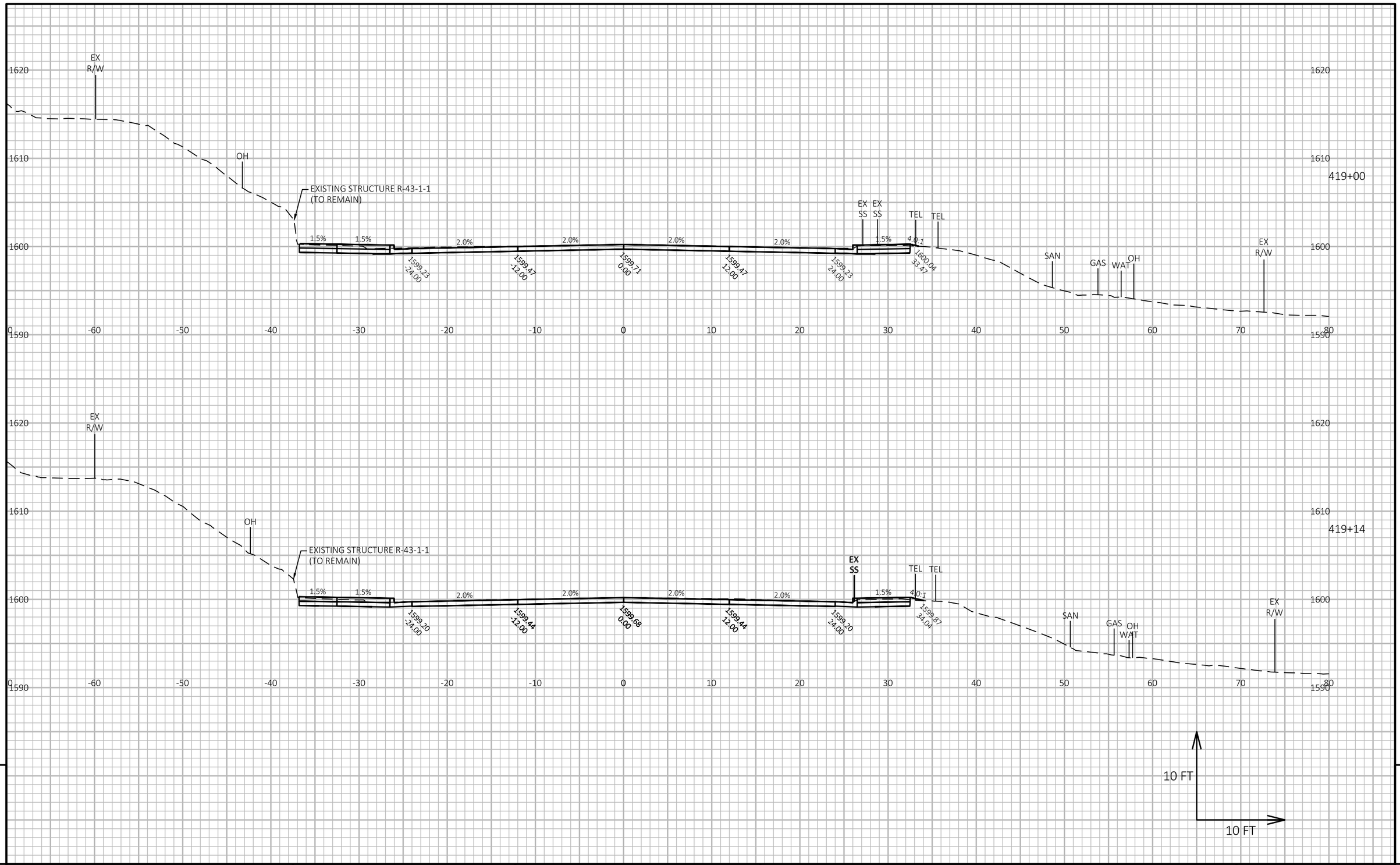
| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 195 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 6/26/2023 12:36 PM PLOT BY : SHAWN DOLENS PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

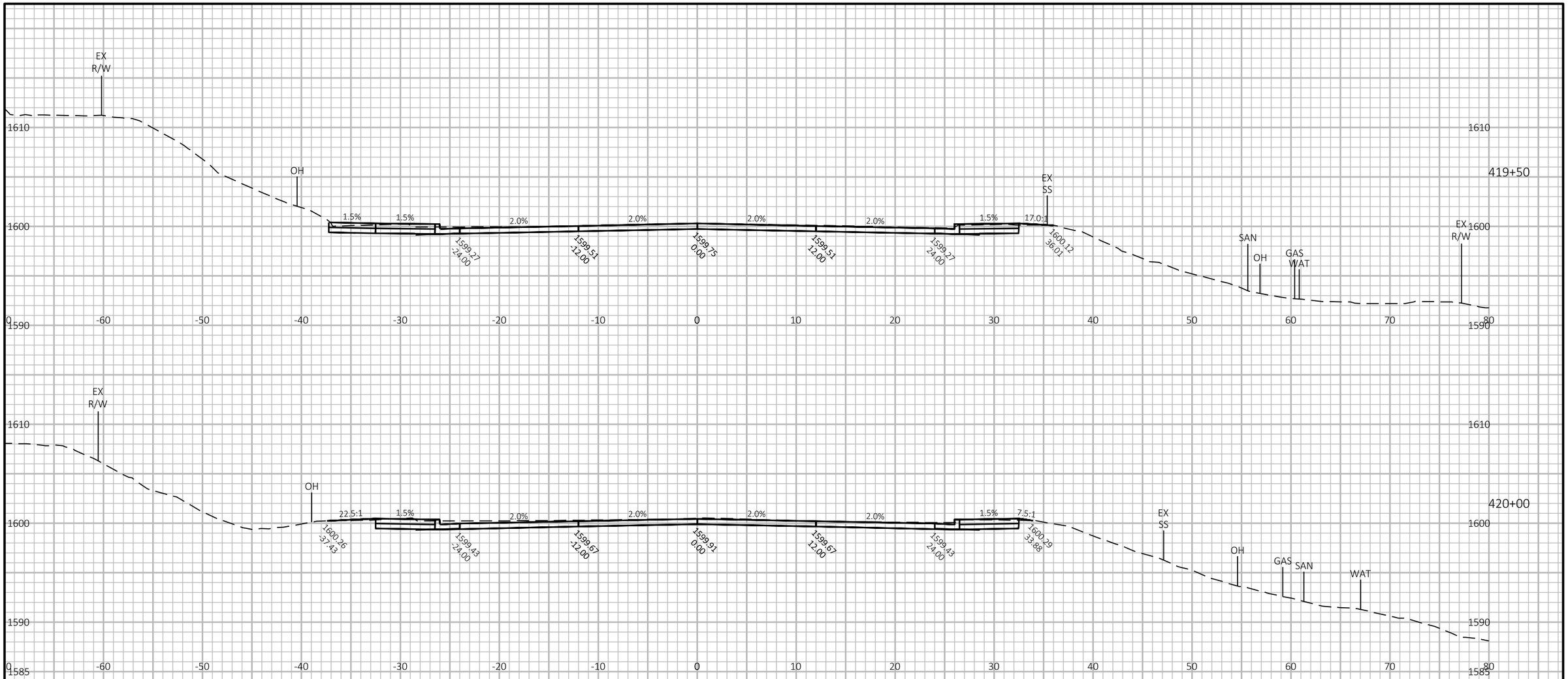



| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 196 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 6/26/2023 12:36 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 197 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 17

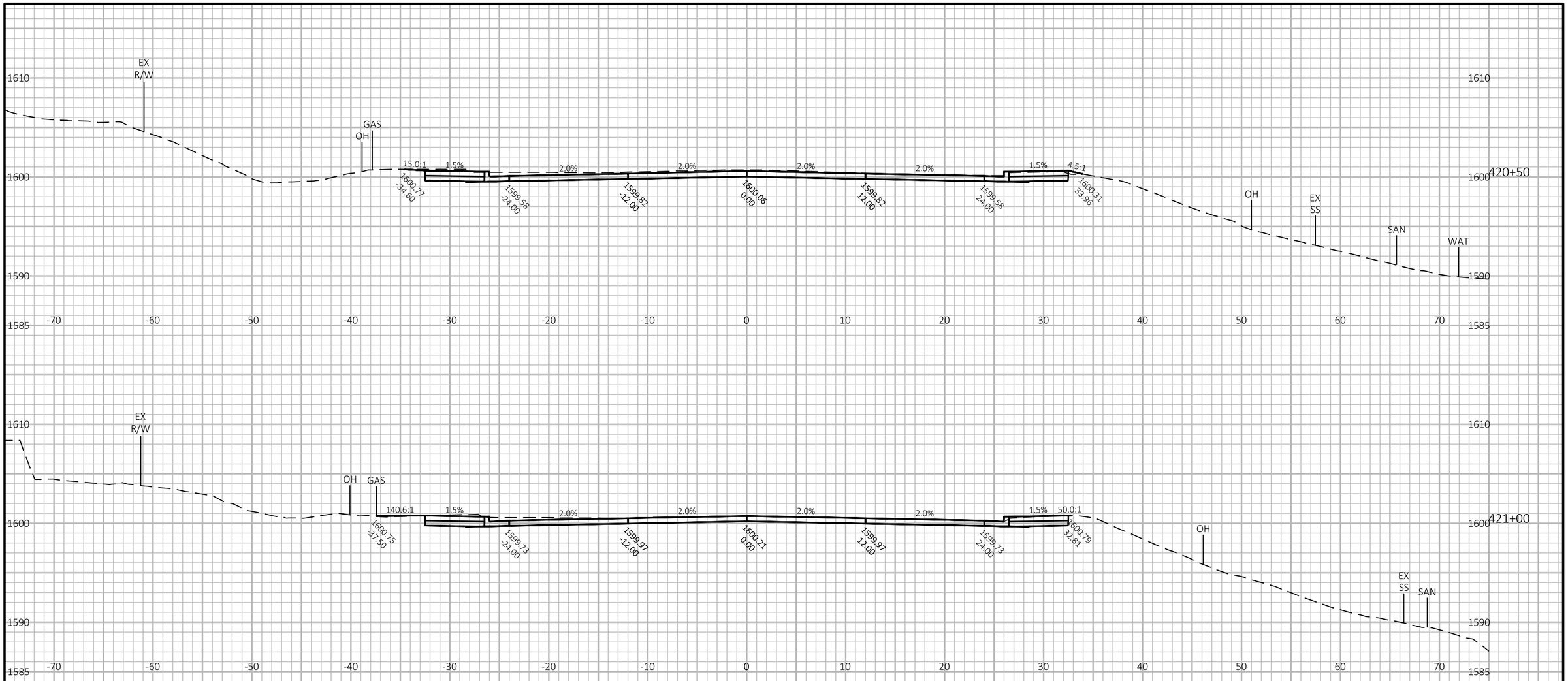
PLOT DATE : 6/26/2023 12:36 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 198 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 18

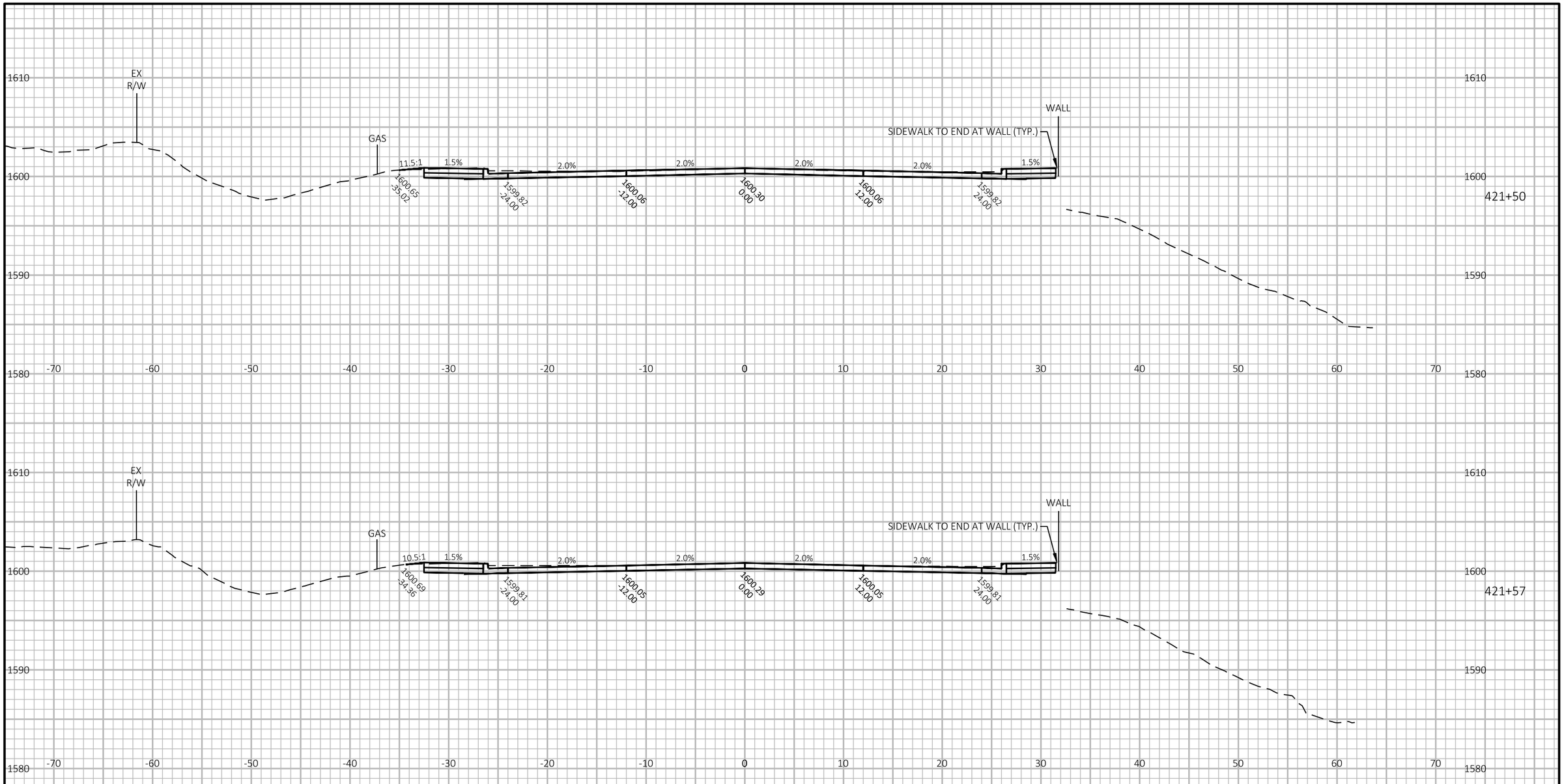
PLOT DATE : 6/26/2023 12:36 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 199 | E |
|---|---|---|---|---|---|

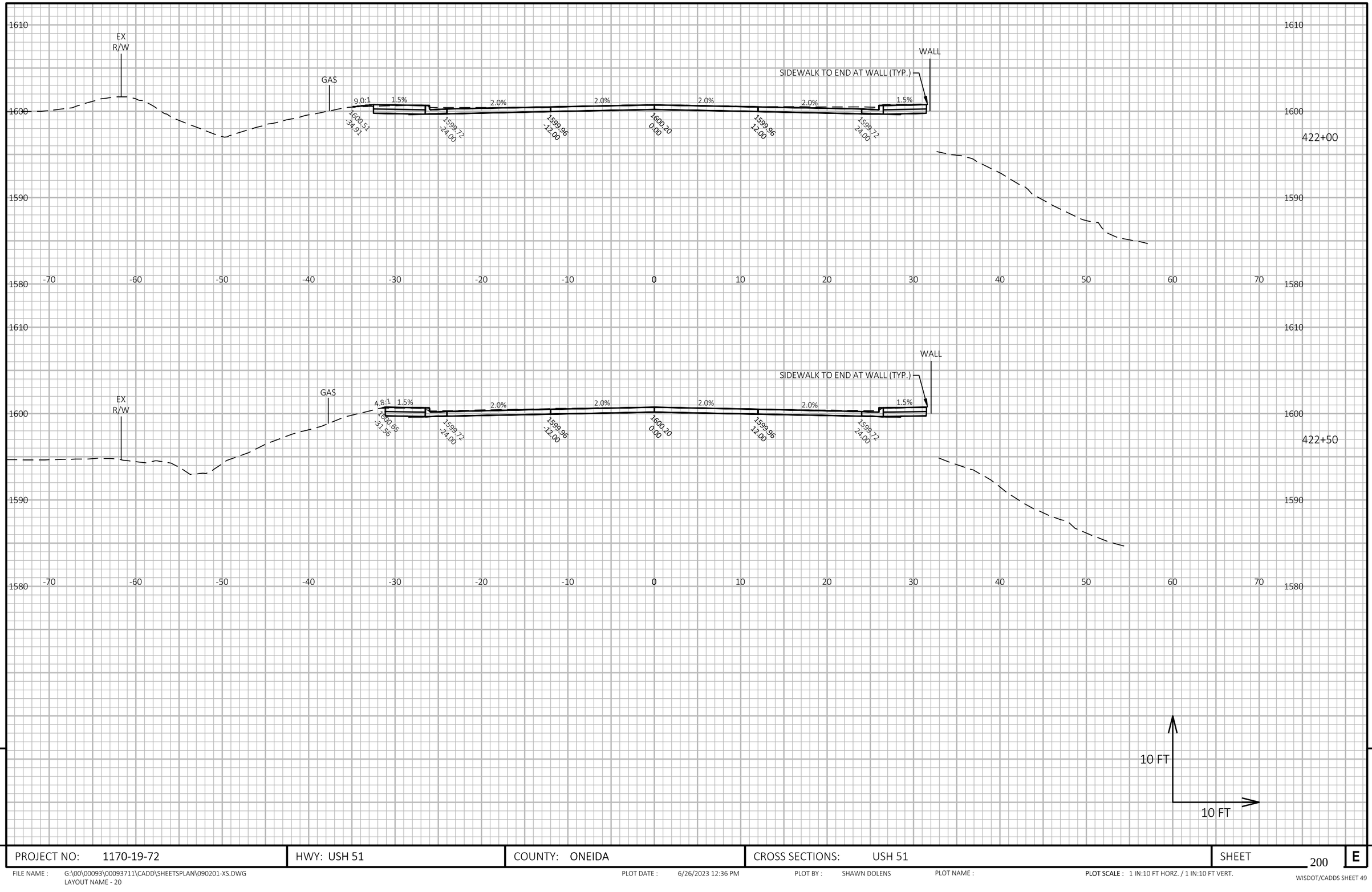
FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 6/26/2023 12:36 PM

PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.




9

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 200 | E |
|---|---|---|---|---|---|

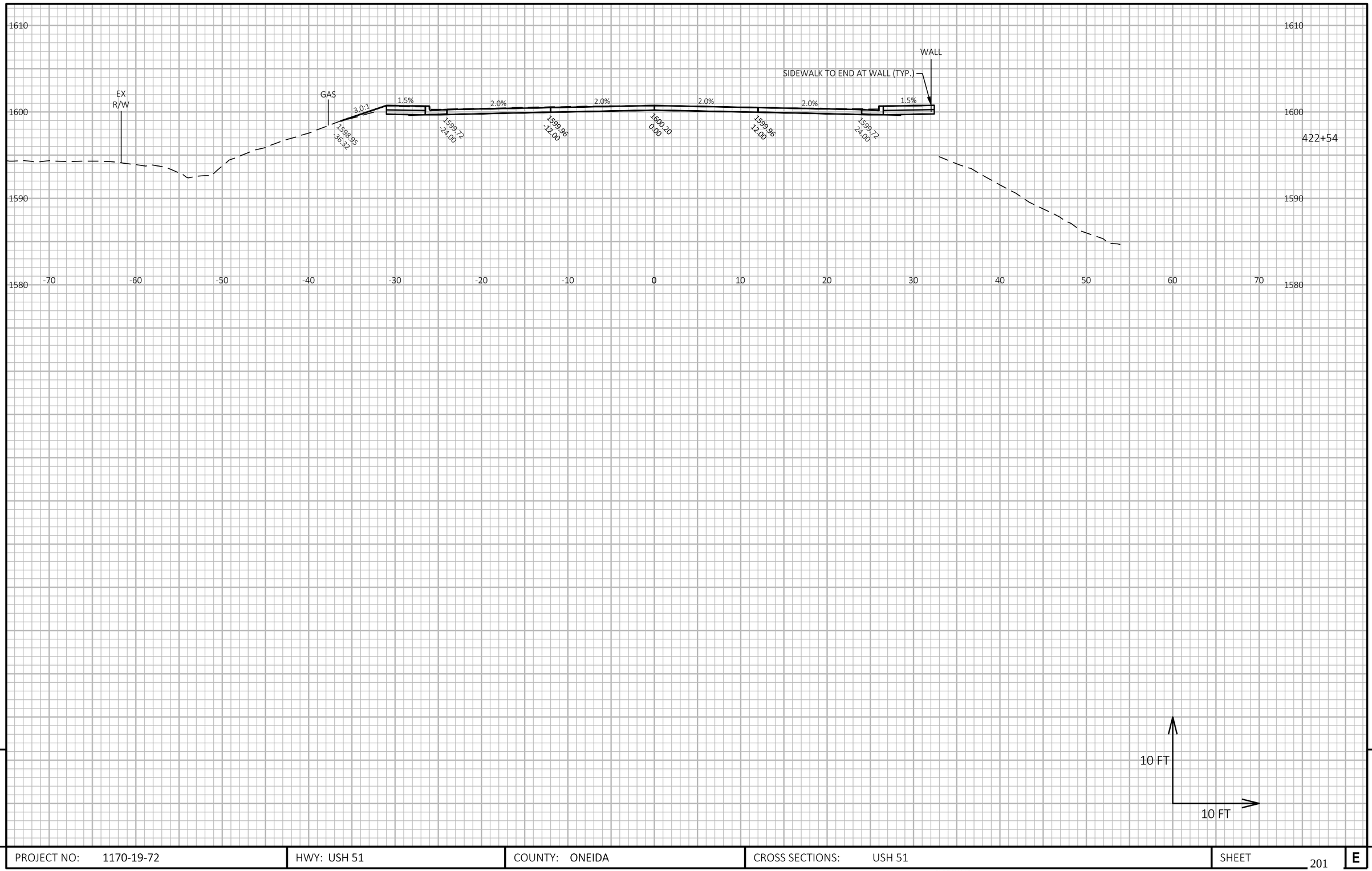
FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 20

PLOT DATE : 6/26/2023 12:36 PM PLOT BY : SHAWN DOLENS PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

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9

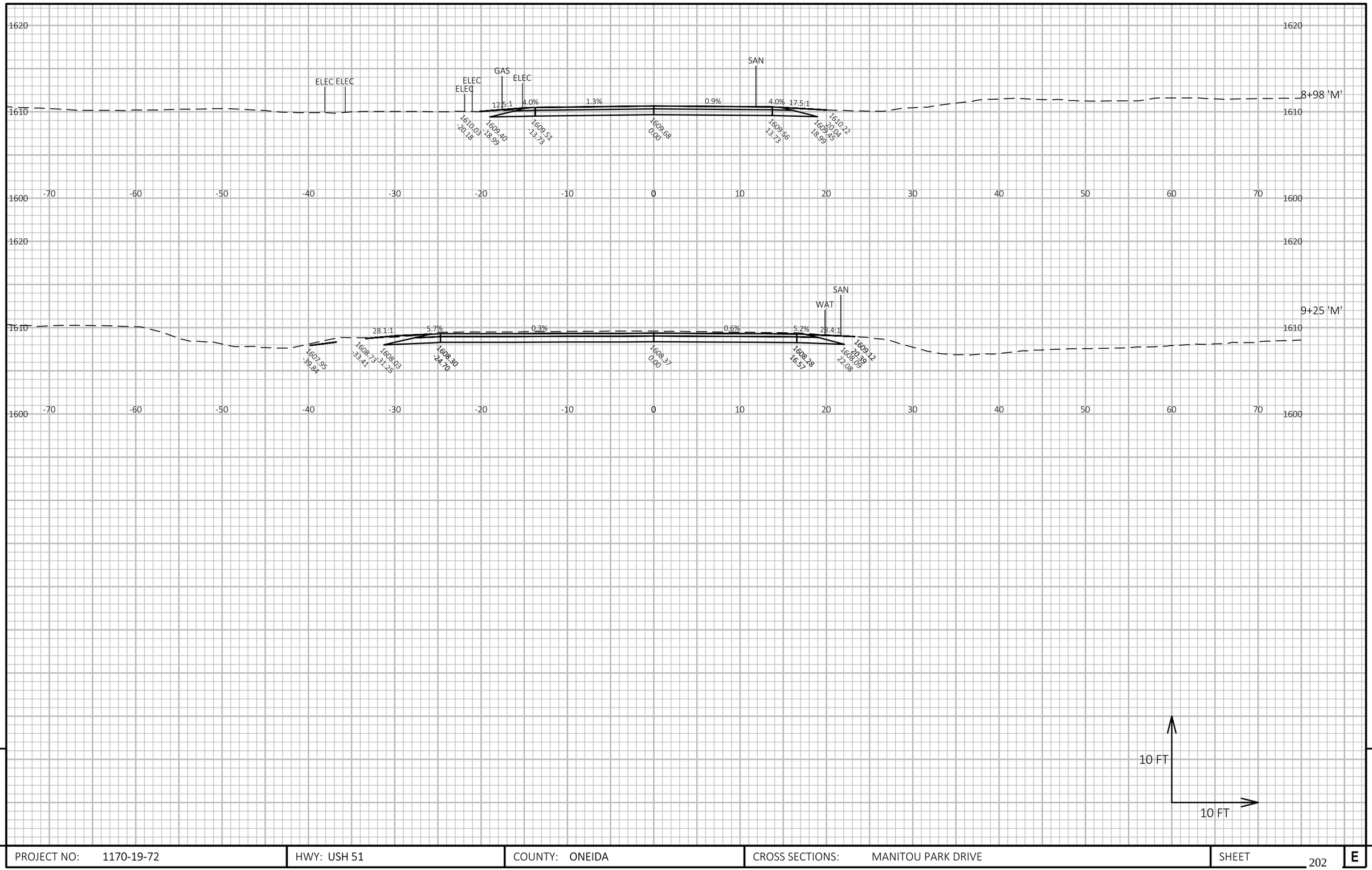
| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: USH 51 | SHEET 201 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 21

PLOT DATE : 6/26/2023 12:36 PM PLOT BY : SHAWN DOLENS PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49




9

| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: MANITOU PARK DRIVE | SHEET 202 | E |
|---|---|---|---|---|---|

9

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 60

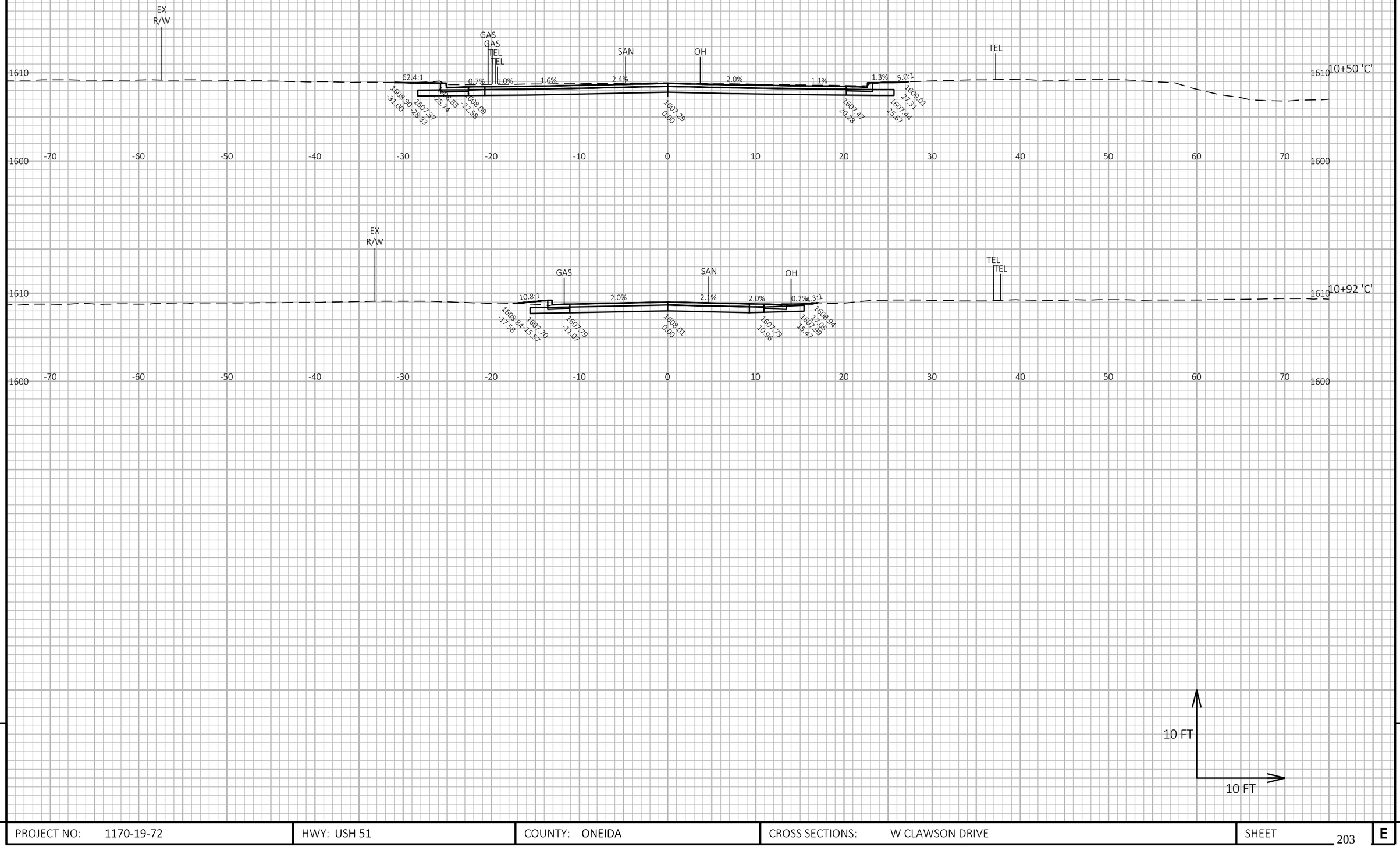
PLOT DATE : 7/27/2023 7:40 AM

PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: W CLAWSON DRIVE | SHEET 203 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 30

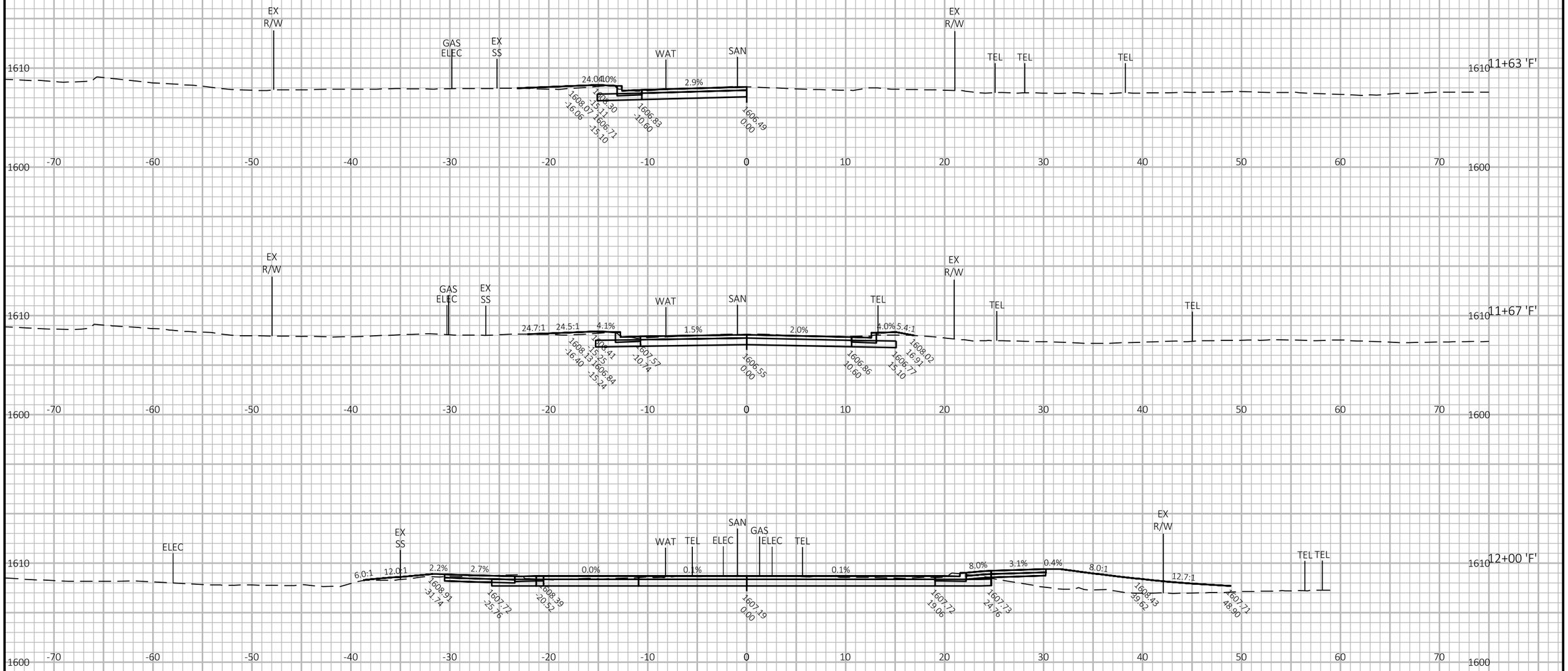
PLOT DATE : 6/1/2023 8:51 AM

PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: FIELDSTONE DRIVE | SHEET 204 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 40

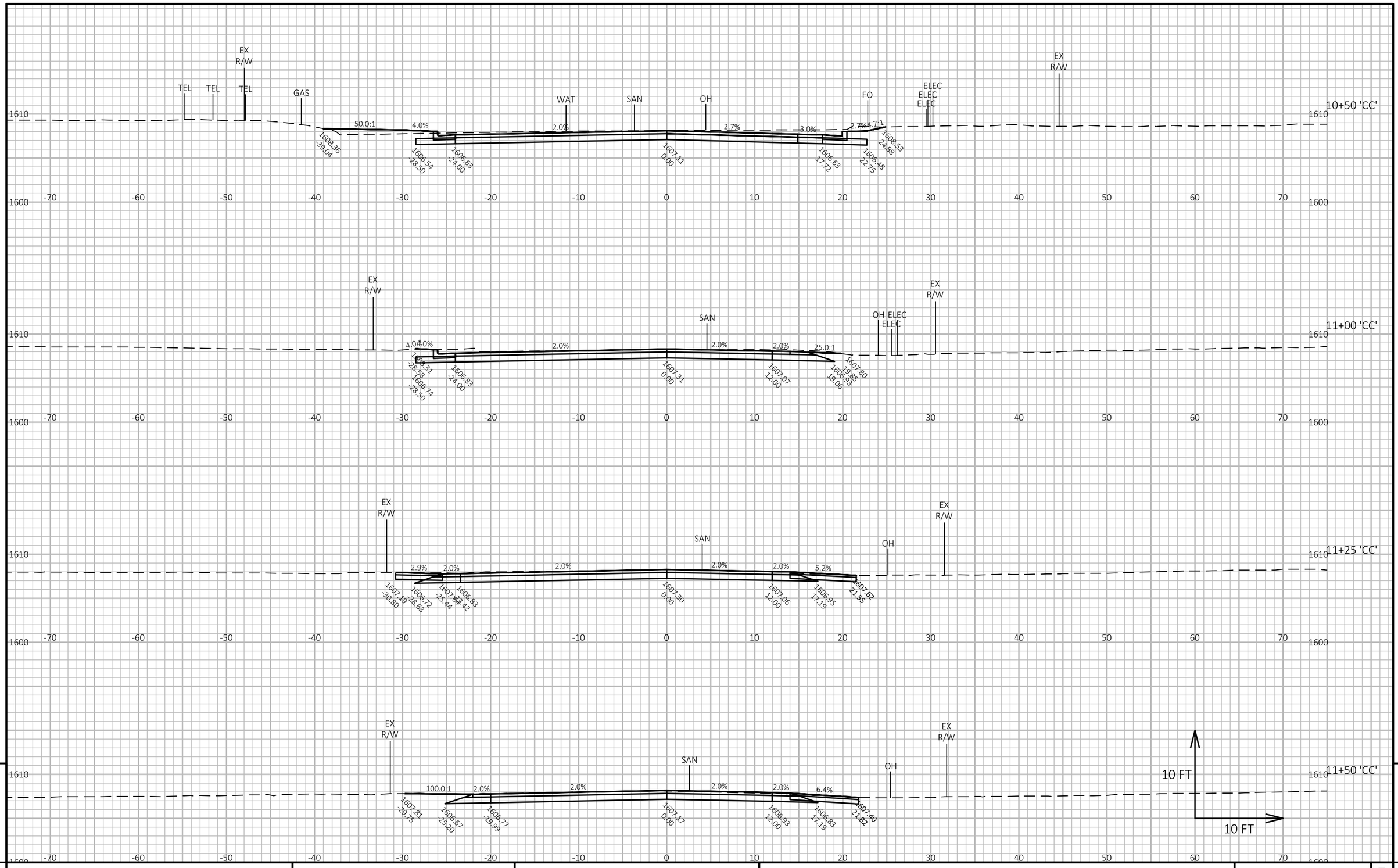
PLOT DATE : 7/27/2023 7:25 AM

PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: COUNTRY CLUB ROAD | SHEET 205 | E |
|---|---|---|---|---|---|

FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 50

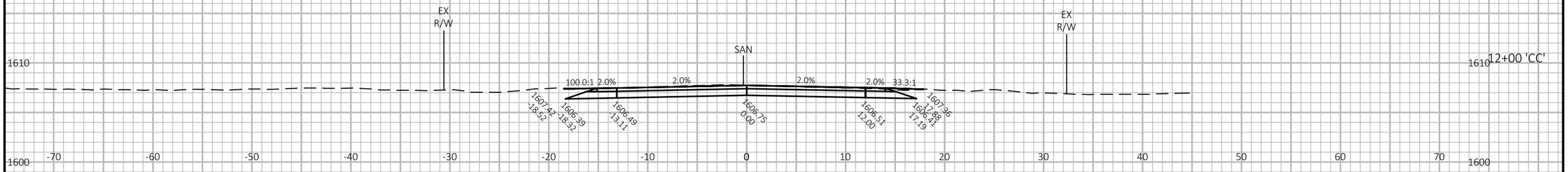
PLOT DATE : 6/26/2023 11:47 AM

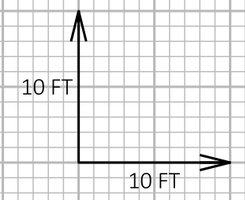
PLOT BY : SHAWN DOLENS

PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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| PROJECT NO: 1170-19-72 | HWY: USH 51 | COUNTY: ONEIDA | CROSS SECTIONS: COUNTRY CLUB ROAD | SHEET 206 | E |
|---|---|---|---|---|---|

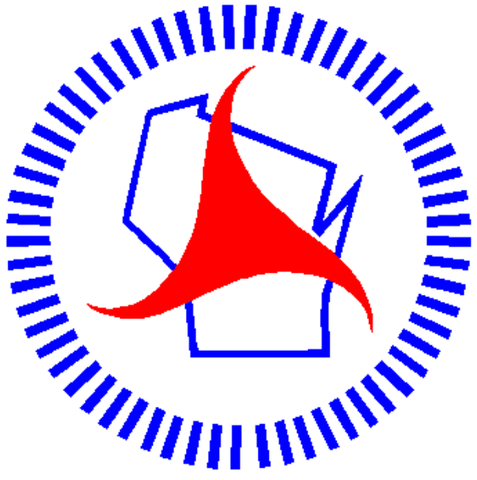
FILE NAME : G:\00\00093\00093711\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 51

PLOT DATE : 6/26/2023 11:47 AM PLOT BY : SHAWN DOLENS PLOT NAME :

**PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes



**Wisconsin Department of Transportation**

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through innovation and exceptional service.

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