

ORDER OF SHEETS

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

TOTAL SHEETS = 176

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CHIPPEWA FALLS - CADOTT

197TH ST TO CTH XX

CTH X

CHIPPEWA COUNTY

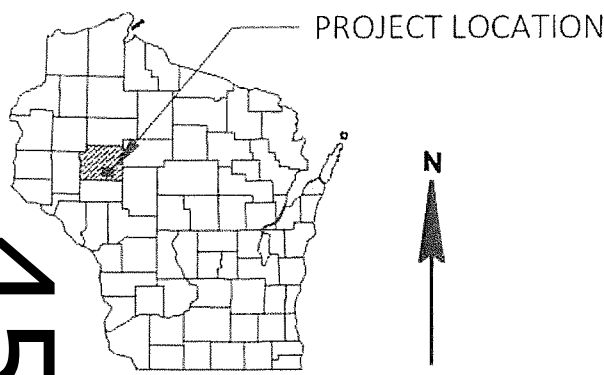
STATE PROJECT NUMBER

8919-03-75

| STATE PROJECT | FEDERAL PROJECT | |
|---------------|-----------------|----------|
| | PROJECT | CONTRACT |
| 8919-03-75 | WISC 2024007 | 1 |
| | | |
| | | |

PROJECT ID: 8919-03-75

COUNTY: CHIPPEWA

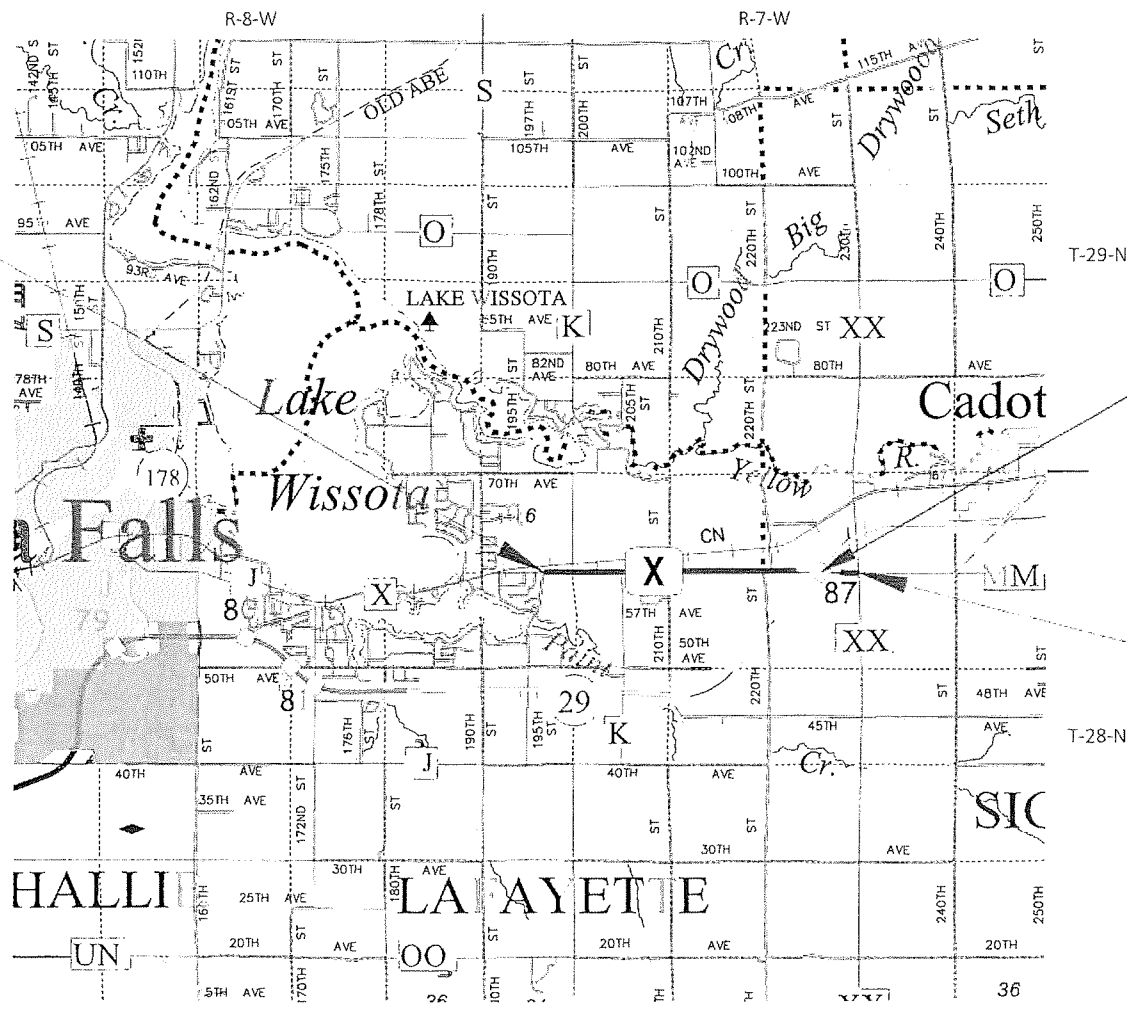


| | | | |
|--------------------|---------------|----------------------------|------------------------------|
| DESIGN DESIGNATION | 10+70 - 29+00 | 29+00 - 160+97 | 170+21 - 190+12 |
| A.A.D.T. (2023) | = 3,900 | 2,300 | |
| A.A.D.T. (2043) | = 4,760 | 2,810 | |
| D.H.V. | = - | - | |
| D.D. | = 50/50 | 50/50 | |
| T. | = 6% | 7% | |
| DESIGN SPEED | = 40 MPH | 40 MPH (STA 29+00 - 54+45) | 45 MPH (STA 54+45 - 113+00) |
| | | | 55 MPH (STA 113+00 - 190+12) |
| ESALS | = 430,000 | 380,000 | |

BEGIN PROJECT
STA 10+70.36
Y=127,061.543
X=202,132.791

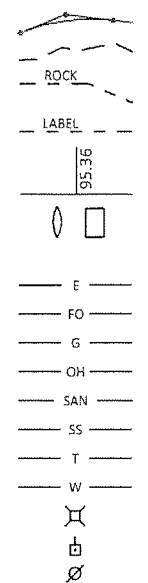
NET EXCEPTION TO CL LENGTH
STA 160+97 - STA 170+21
STRUCTURE B-09-019

END PROJECT
STA 190+12.33



CONVENTIONAL SYMBOLS

| PLAN | PROFILE |
|-----------------------------------|--|
| CORPORATE LIMITS | GRADE LINE |
| PROPERTY LINE | ORIGINAL GROUND |
| LOT LINE | MARSH OR ROCK PROFILE (To be noted as such) |
| LIMITED HIGHWAY EASEMENT | SPECIAL DITCH |
| EXISTING RIGHT OF WAY | GRADE ELEVATION |
| PROPOSED OR NEW R/W LINE | CULVERT (Profile View) |
| SLOPE INTERCEPT | UTILITIES |
| REFERENCE LINE | ELECTRIC |
| EXISTING CULVERT | FIBER OPTIC |
| PROPOSED CULVERT (Box or Pipe) | GAS |
| COMBUSTIBLE FLUIDS | OVERHEAD |
| | SANITARY SEWER |
| | STORM SEWER |
| | TELEPHONE |
| MARSH AREA | WATER |
| | UTILITY PEDESTAL |
| | POWER POLE |
| WOODED OR SHRUB AREA | TELEPHONE POLE |



LAYOUT
SCALE 0 2 MI
TOTAL NET LENGTH OF CENTERLINE = 3.223 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), CHIPPEWA 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.

ACCEPTED FOR CHIPPEWA COUNTY
DATE: 6-29-23
[Signature]
Highway Commissioner
(Title of Official)

ORIGINAL PLANS PREPARED BY
CORRE ENGINEERING
MADISON | EAU CLAIRE | WAUKESHA | APPLETON | TOMAH | WITTENBERG
KEVIN L. MEYER
E-38309-006
ELK MOUND WI
DATE: 6/29/23
[Signature]

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PREPARED BY
Surveyor CORRE INC.
Designer CORRE, INC.
Project Manager MATTHEW BERG
Regional Examiner TOU YANG
Regional Supervisor TYLER RONGSTAD

APPROVED FOR THE DEPARTMENT
DATE: 6/29/2023
[Signature]

GENERAL NOTES

WHEN THE QUANTITY OF BASE AGGREGATE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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

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

PERFORM MAINLINE REMOVING ASPHALTIC SURFACE MILLING TO EXISTING EDGE OF PAVEMENT.

3.5-INCH HMA PAVEMENT SHALL BE CONSTRUCTED WITH A 1.75-INCH 4 LT 58-34 S UPPER LAYER AND A 1.75-INCH 4 LT 58-28 S LOWER LAYER.

HMA QUANTITIES ARE CALCULATED FROM 110 LB/SY/INCH.

PAVING LIMITS TO BE DETERMINED BY THE ENGINEER.

TACK COAT SHALL BE APPLIED AT 0.05 GAL/SY.

THE PROPOSED SHOULDER WIDTHS SHOWN IN THE TYPICAL SECTIONS ARE MINIMUM WIDTHS, PERPETUATE EXISTING SHOULDERS WITH BASE AGGREGATE DENSE 3/4-INCH AS NECESSARY.

PRIOR TO THE INSTALLATION OF MGS GUARDRAIL 3, SHOULDERS SHALL BE IN PLACE AND COMPACTED.

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH SALVAGED TOPSOILED, FERTILIZED, SEEDED AND MULCHED OR EMAT.

ALL DRIVEWAY LIMITS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

SILT FENCE IS TO BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

BEARINGS SHOWN ON THE PLAN ARE GROUND BEARINGS TO THE NEAREST SECOND.

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 33.56 ACRES
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 6.5 ACRES

WISDOT CONTACT

NW REGION OFFICE - EAU CLAIRE
 MATTHEW BERG
 718 W CLAIREMONT AVE
 EAU CLAIRE, WI, 54701
 PHONE: (920) 492-4147
 EMAIL: MATTHEW.BERG@DOT.WI.GOV

COUNTY CONTACT

HIGHWAY DEPARTMENT
 FRED M. ANDERSON
 801 E GRAND AVE
 CHIPPEWA FALLS, WI, 54729
 PHONE: (715) 738-2610
 EMAIL: FANDERSON@CO.CHIPPEWA.WI.US

CONSULTANT CONTACT

CORRE, INC
 CHAD HALAMA
 1802 WARDEN ST
 EAU CLAIRE, WI 54703
 PHONE: (715) 619-8345
 EMAIL: CHALAMA@CORREINC.COM

DNR CONTACT

DNR WISCONSIN EAU CLAIRE
 LEAH NICOL
 1300 WEST CLAIREMONT AVENUE
 EAU CLAIRE, WI, 54701
 PHONE: (715) 934-9014
 EMAIL: LEAH.NICOL@WISCONSIN.GOV

UTILITY CONTACTS

AT&T WISCONSIN
 RICK PODOLAK
 304 S DEWEY ST
 EAU CLAIRE, WI 54703
 PHONE: (715) 839-5565
 EMAIL: RP4514@ATT.COM

DAIRYLAND POWER COOPERATIVE - ELECTRIC
 ROB MALY
 3200 EAST AVE S, PO BOX 817
 LA CROSSE, WI 54602-0817
 PHONE: (608) 787-1427
 EMAIL: ROB.MALY@DAIRYLANDPOWER.COM

WE ENERGIES - GAS/PETROLEUM
 TRAVIS KAHL
 A299, 333 W EVERET ST
 MILWAUKEE, WI 53203
 PHONE: (715) 498-6180
 EMAIL: TRAVIS.KAHL@WE-ENERGIES.COM

CHARTER COMMUNICATIONS
 SUNNY RICHARDSON
 1201 MCCANN DR
 ALTOONA, WI 54720
 PHONE: (715) 896-6503
 EMAIL: SUNNY.RICHARDSON@CHARTER.COM

EAU CLAIRE ENERGY COOPERATIVE
 ARIK ARNEVIK
 8214 HWY 12, PO BOX 368
 FALL CREEK, WI 54742-0368
 PHONE: (715) 836-6485
 EMAIL: AARNEVIK@ECEC.COM

BRIGHTSPEED - COMMUNICATION
 BRIAN HUHN
 20 S WILSON AVE
 RICE LAKE, WI 54868
 PHONE: (980) 376-1559
 EMAIL: BRIAN.HUHN@BRIGHTSPEED.COM

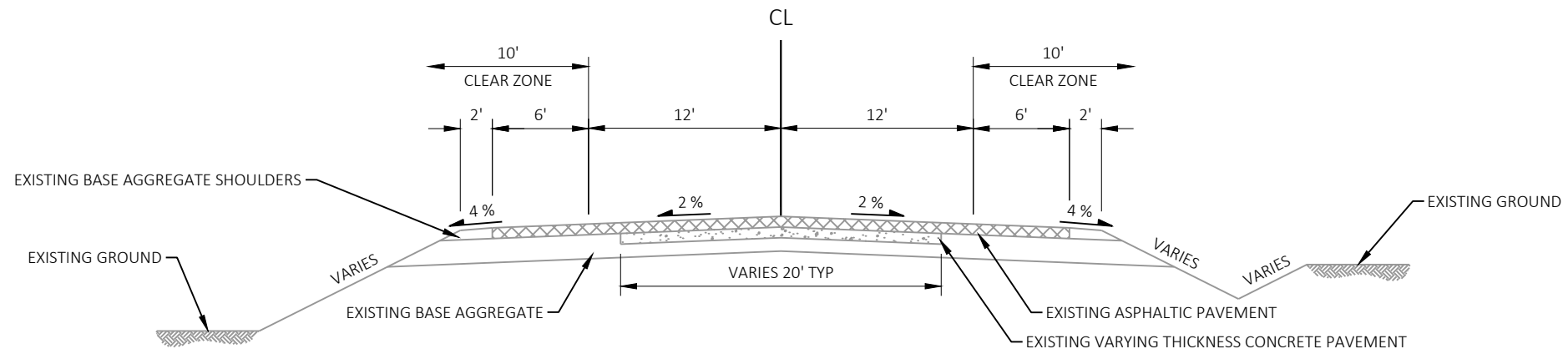
XCEL ENERGY - ELECTRIC
 JOHN KELSER
 1414 W HAMILTON AVE, PO BOX 8
 EAU CLAIRE, WI 54702
 PHONE: (715) 737-4097
 EMAIL: JOHN.KELSER@XCELENERGY.COM

XCEL ENERGY - GAS
 BENJAMEN CARLI
 1400 WESTERN AVENUE
 EAU CLAIRE, WI 54702
 PHONE: (715) 737-1450
 EMAIL: BENJAMEN.J.CARLI@XCELENERGY.COM

MAGELLAN PIPELINE - GAS
 BRYAN FERGUSON
 ONE WILLIAMS CENTER
 TULSA, OK 74172
 PHONE: (918) 574-7157
 EMAIL: BRYAN.FERGUSON@MAGELLANLP.COM



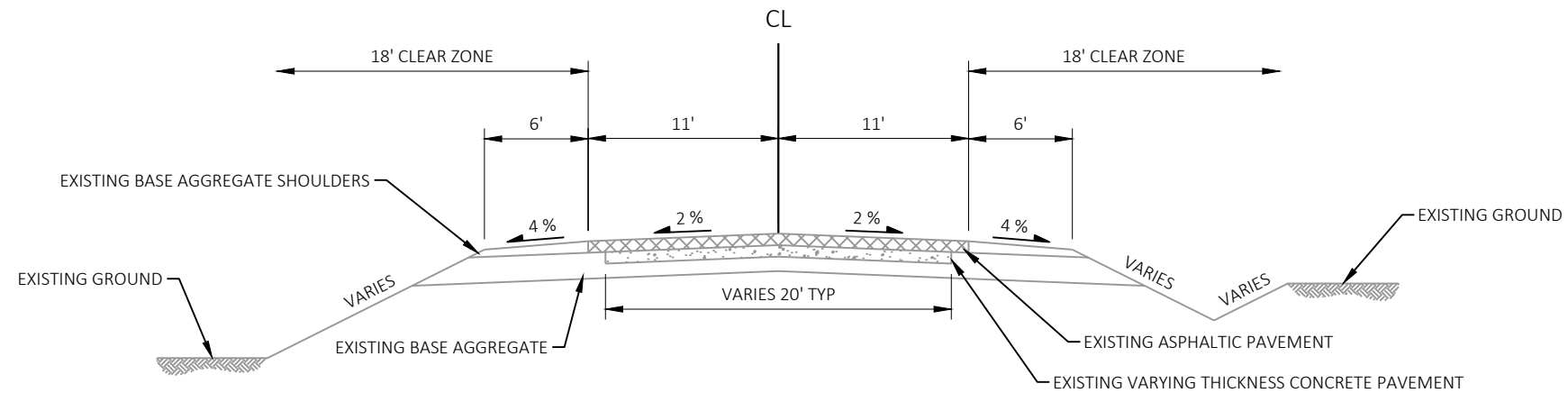
Dial **811** or (800)242-8511
 www.DiggersHotline.com



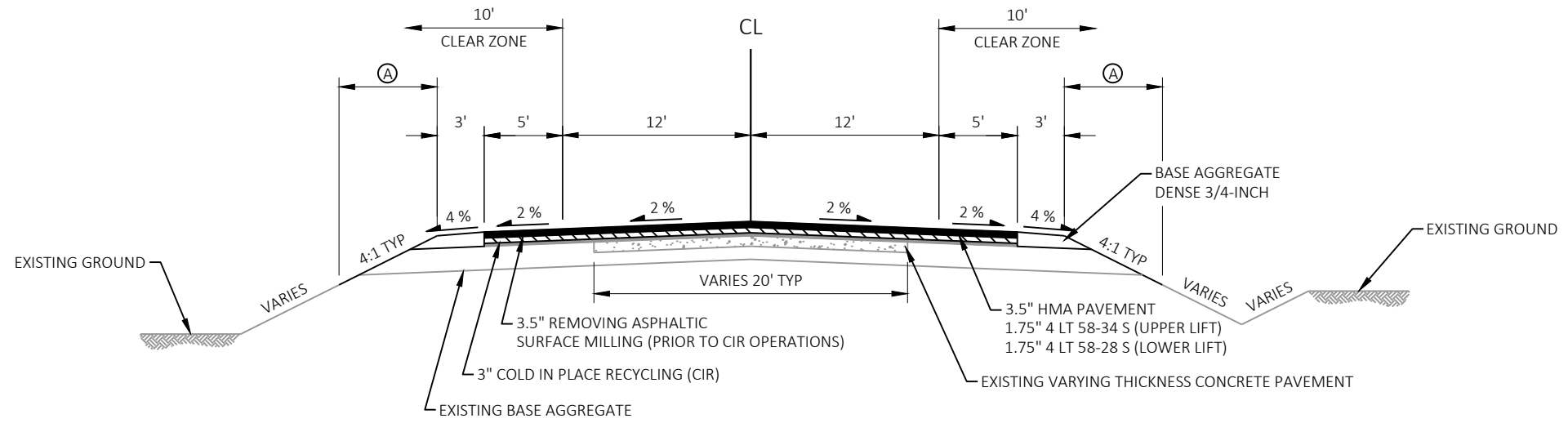
EXISTING TYPICAL SECTION - CTH X
STA 10+70 - 55+00

BORING LOG TABLE

| BORING NO. | STATION | OFFSET | HMA DEPTH (INCH) | CONCRETE DEPTH (INCH) | BASE AGGREGATE DEPTH (INCH) | UNDERLYING MATERIAL |
|------------|----------|-----------|------------------|-----------------------|-----------------------------|-----------------------------------|
| B-1 | 16+00.0 | 16.8', RT | 3.50 | --- | 20.4 | FILL, CLAYEY SAND, LITTLE GRAVEL |
| B-2 | 35+74.9 | 7.5', LT | 10.75 | 8.25 | VARIES | FILL, SAND W/ SILT |
| B-3 | 44+33.4 | 7.9', RT | 9.75 | 7.25 | VARIES | FILL, SAND W/ SILT, LITTLE GRAVEL |
| B-4 | 60+04.2 | 5.4', LT | 10.50 | 8.25 | VARIES | FILL, CLAYEY SAND |
| B-5 | 77+86.1 | 5.6', RT | 10.00 | 5.00 | VARIES | FILL, SILTY SAND |
| B-6 | 89+98.7 | 6.8', LT | 9.00 | 11.50 | VARIES | FILL, CLAYEY SAND |
| B-7 | 104+61.9 | 6.5', RT | 2.75 | 10.00 | VARIES | FILL, SILTY SAND |
| B-8 | 119+21.8 | 6.1', LT | 6.50 | 8.00 | 5.00 | FILL, SILTY SAND |
| B-9 | 142+08.6 | 5.8', RT | 13.00 | 6.25 | VARIES | FILL, CLAYEY SAND |
| B-10 | 155+78.8 | 7.5', LT | 7.50 | --- | 16.8 | FILL, SILTY SAND W/ LITTLE GRAVEL |
| B-11 | 176+02.8 | 7.5', RT | 9.00 | --- | 15.6 | FILL, SAND W/ SILT |
| B-12 | 184+28.4 | 6.5', LT | 11.00 | 7.5 | VARIES | FILL, SILTY SAND |

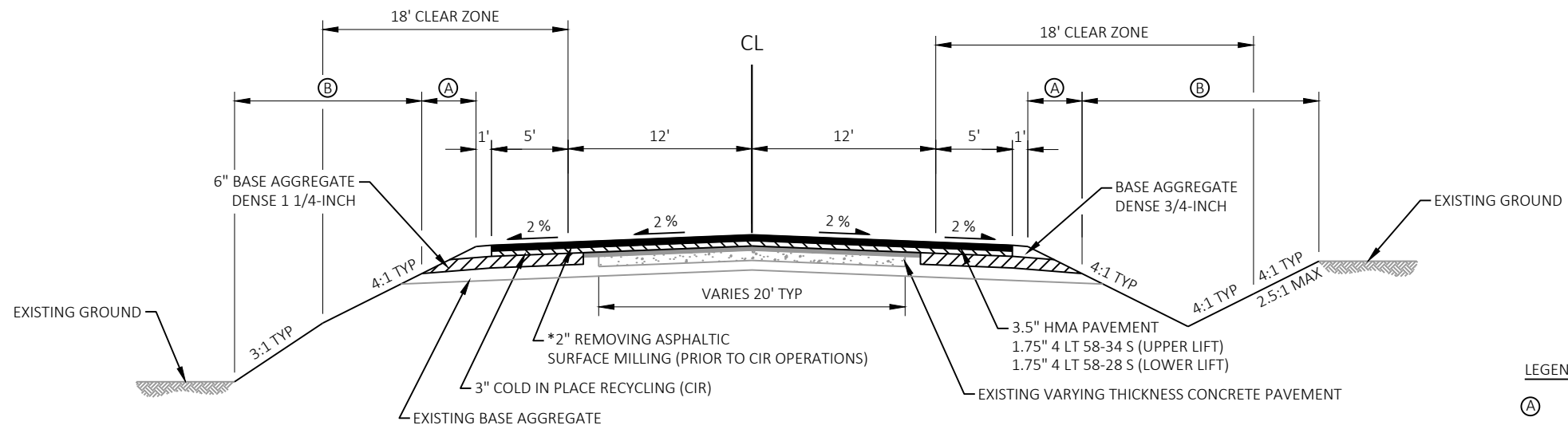


EXISTING TYPICAL SECTION - CTH X
STA 55+00 - 160+97
STA 170+21 - 190+12



FINISHED TYPICAL SECTION - CTH X
STA 10+70 - 55+00

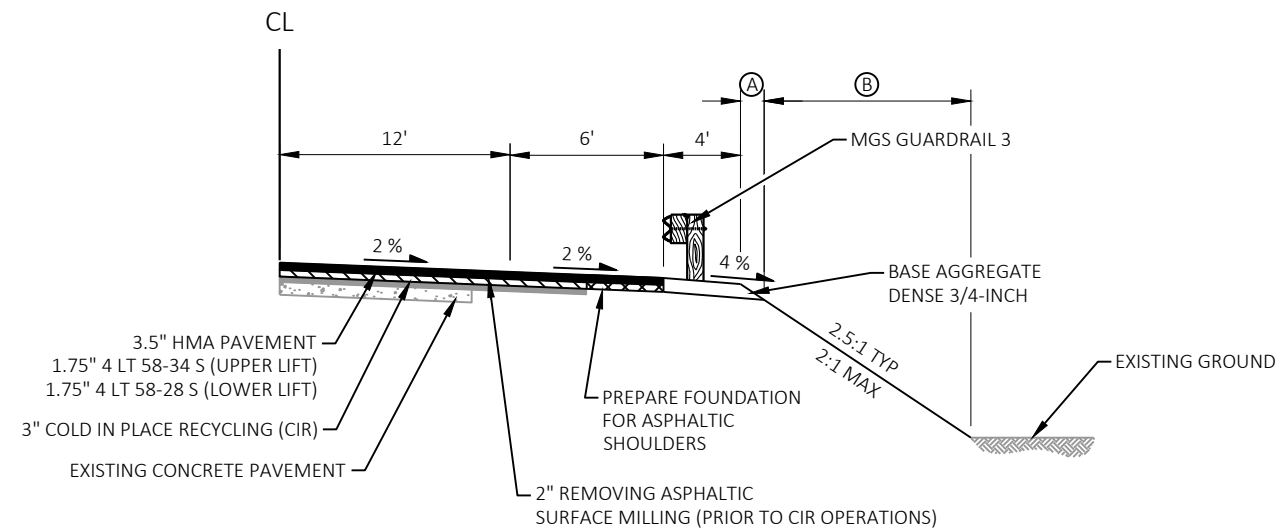
*ADJUST ASPHALTIC SURFACE MILLING DEPTH FROM 3.5" TO 2" FROM 55+00 TO 56+00



FINISHED TYPICAL SECTION - CTH X
STA 55+00 - 160+97
STA 170+21 - 186+70

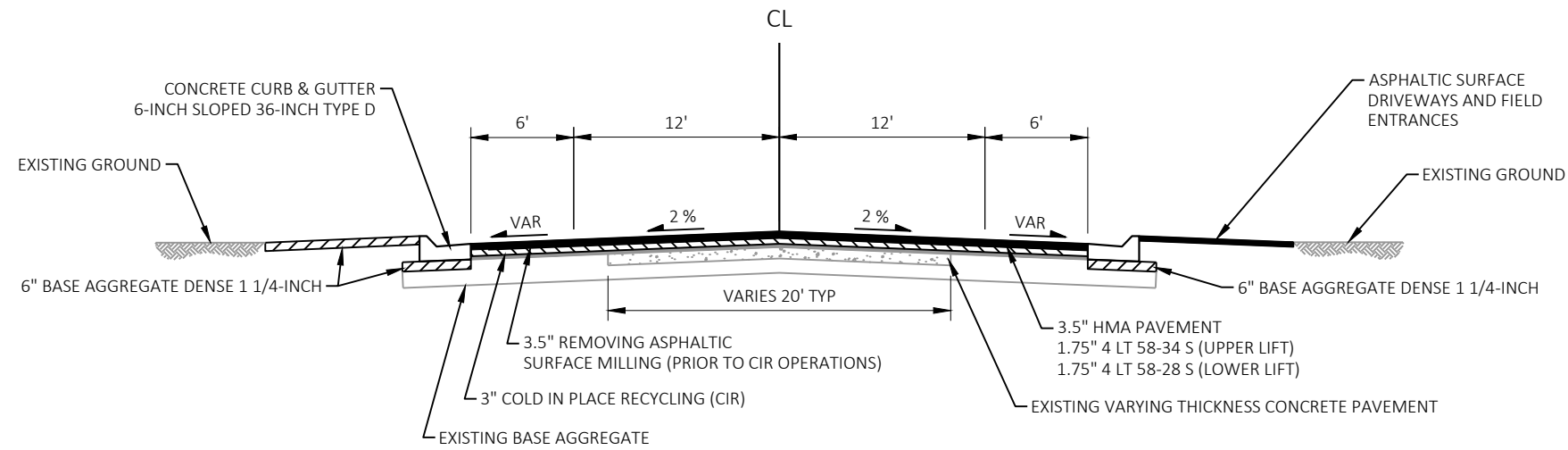
LEGEND

- (A) FERTILIZER TYPE B; SEEDING NO. 20
- (B) SALVAGED TOPSOIL; MULCHING; EROSION CONTROL MAT CLASS I TYPE B; FERTILIZER TYPE B; SEEDING MIXTURE NO. 20



FINISHED TYPICAL SECTION - GUARDRAIL

STA 156+07 - 161+26 LT
 STA 156+30 - 161+23 RT
 STA 169+38 - 174+57 RT
 STA 170+16 - 175+35 LT

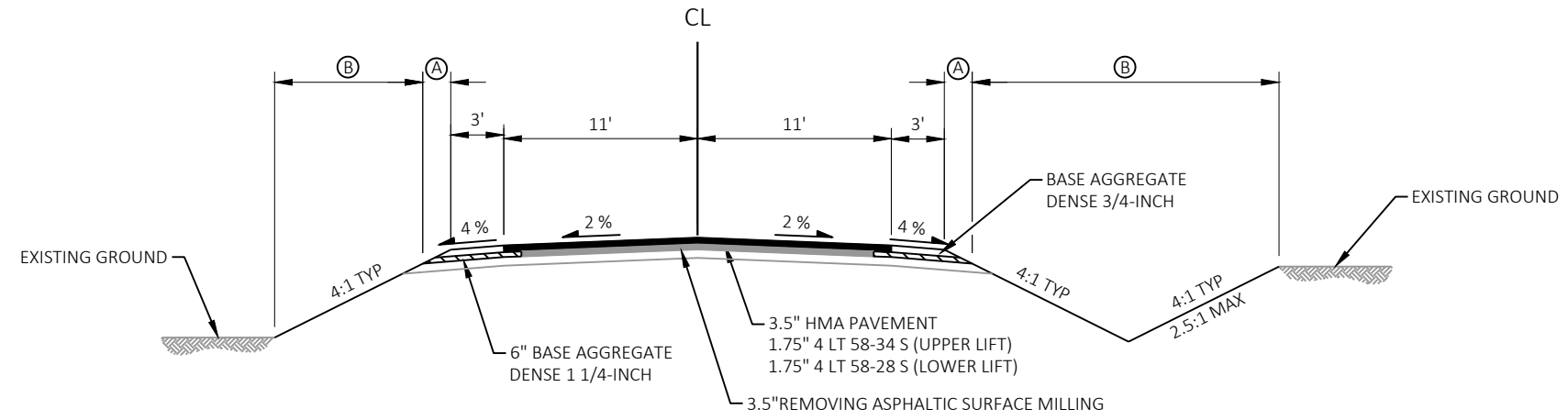


FINISHED TYPICAL SECTION - CTH X

STA 186+70 - 190+12

LEGEND

- (A) FERTILIZER TYPE B; SEEDING NO. 20
- (B) SALVAGED TOPSOIL; MULCHING; EROSION CONTROL MAT CLASS I TYPE B; FERTILIZER TYPE B; SEEDING MIXTURE NO. 20

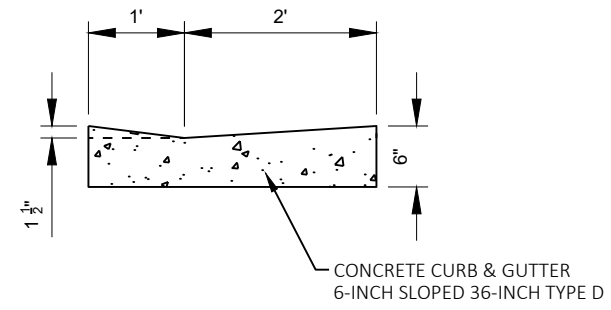


FINISHED TYPICAL SECTION - SIDEROADS

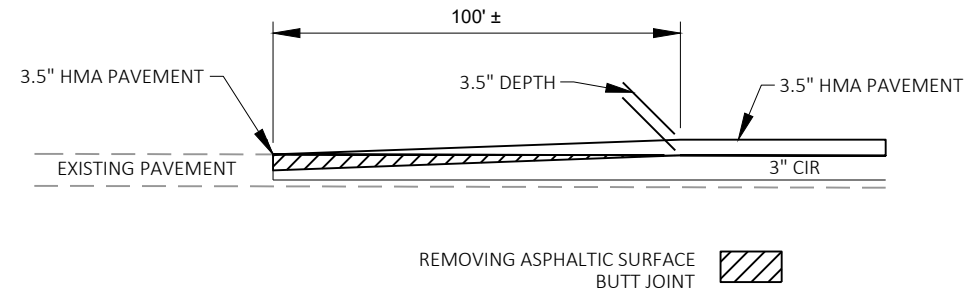
- 210TH ST (S)
- 210TH ST (N)
- 220TH ST (S)
- 220TH ST (N)
- CTH XX (S)
- CTH XX (N)

LEGEND

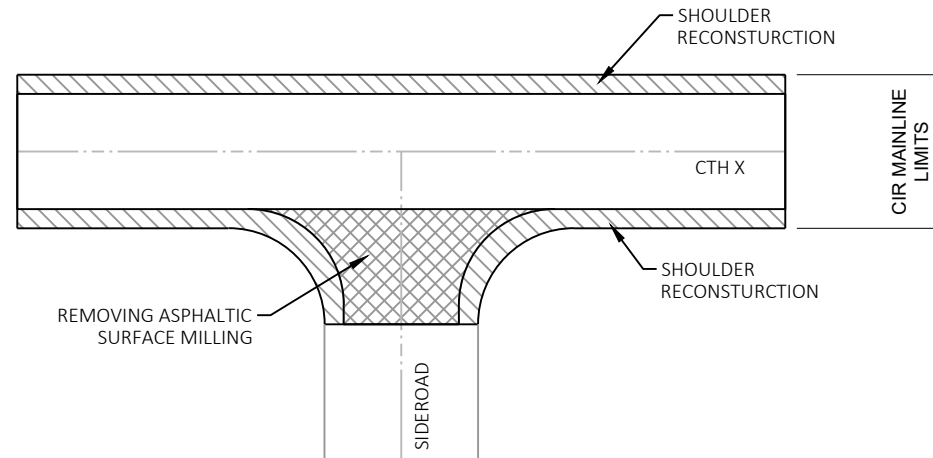
- (A) FERTILIZER TYPE B; SEEDING NO. 20
- (B) SALVAGED TOPSOIL; MULCHING; EROSION CONTROL MAT CLASS I TYPE B; FERTILIZER TYPE B; SEEDING MIXTURE NO. 20



DRIVEWAY CURB DETAIL



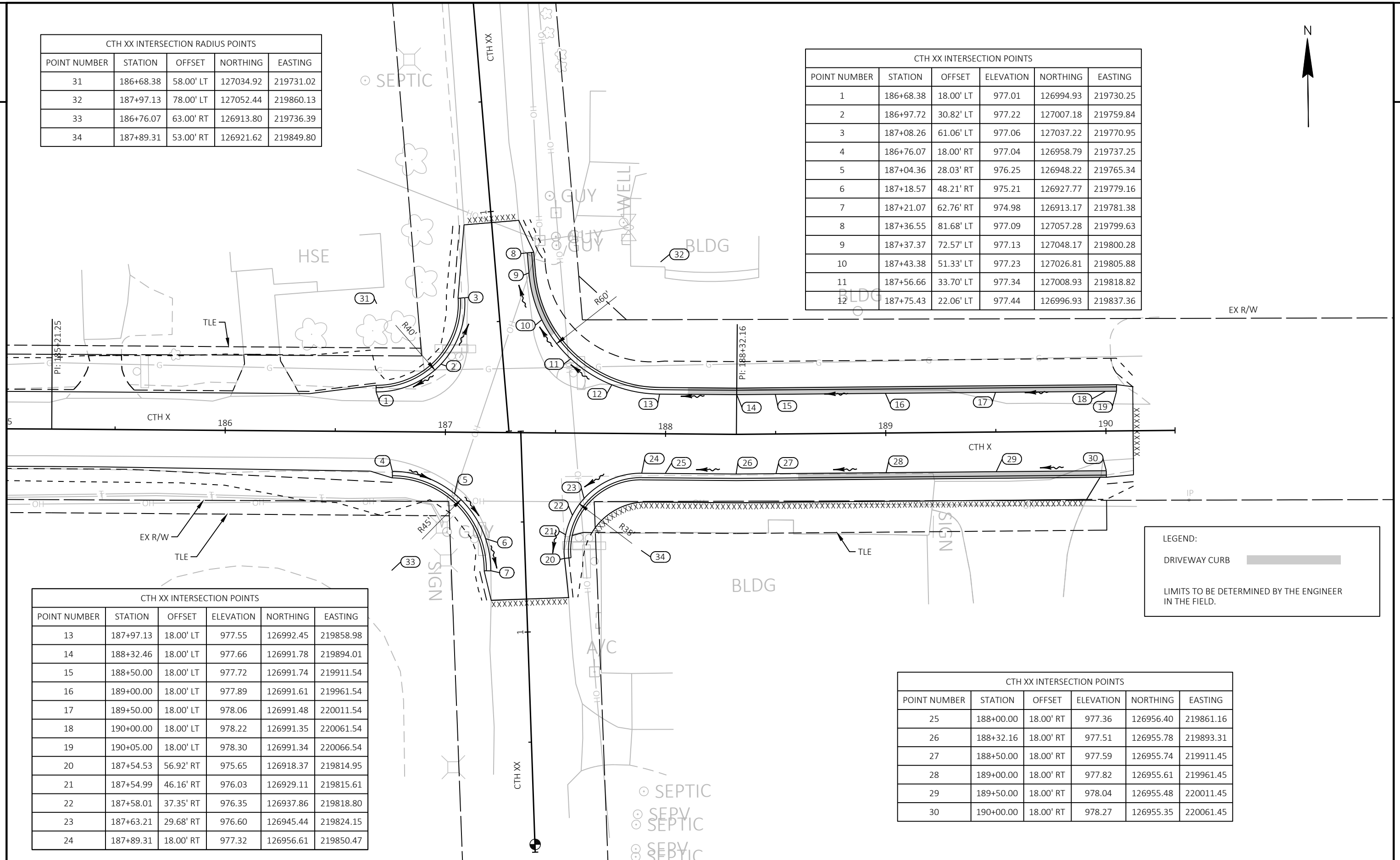
MAINLINE BUTT JOINT
PROJECT TERMINI
NET EXCEPTION TO CL LIMITS



INTERSECTION GRADING DETAIL
55+00 TO END PROJECT

| CTH XX INTERSECTION RADIUS POINTS | | | | |
|-----------------------------------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | NORTHING | EASTING |
| 31 | 186+68.38 | 58.00' LT | 127034.92 | 219731.02 |
| 32 | 187+97.13 | 78.00' LT | 127052.44 | 219860.13 |
| 33 | 186+76.07 | 63.00' RT | 126913.80 | 219736.39 |
| 34 | 187+89.31 | 53.00' RT | 126921.62 | 219849.80 |

| CTH XX INTERSECTION POINTS | | | | | |
|----------------------------|-----------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING |
| 1 | 186+68.38 | 18.00' LT | 977.01 | 126994.93 | 219730.25 |
| 2 | 186+97.72 | 30.82' LT | 977.22 | 127007.18 | 219759.84 |
| 3 | 187+08.26 | 61.06' LT | 977.06 | 127037.22 | 219770.95 |
| 4 | 186+76.07 | 18.00' RT | 977.04 | 126958.79 | 219737.25 |
| 5 | 187+04.36 | 28.03' RT | 976.25 | 126948.22 | 219765.34 |
| 6 | 187+18.57 | 48.21' RT | 975.21 | 126927.77 | 219779.16 |
| 7 | 187+21.07 | 62.76' RT | 974.98 | 126913.17 | 219781.38 |
| 8 | 187+36.55 | 81.68' LT | 977.09 | 127057.28 | 219799.63 |
| 9 | 187+37.37 | 72.57' LT | 977.13 | 127048.17 | 219800.28 |
| 10 | 187+43.38 | 51.33' LT | 977.23 | 127026.81 | 219805.88 |
| 11 | 187+56.66 | 33.70' LT | 977.34 | 127008.93 | 219818.82 |
| 12 | 187+75.43 | 22.06' LT | 977.44 | 126996.93 | 219837.36 |



| CTH XX INTERSECTION POINTS | | | | | |
|----------------------------|-----------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING |
| 13 | 187+97.13 | 18.00' LT | 977.55 | 126992.45 | 219858.98 |
| 14 | 188+32.46 | 18.00' LT | 977.66 | 126991.78 | 219894.01 |
| 15 | 188+50.00 | 18.00' LT | 977.72 | 126991.74 | 219911.54 |
| 16 | 189+00.00 | 18.00' LT | 977.89 | 126991.61 | 219961.54 |
| 17 | 189+50.00 | 18.00' LT | 978.06 | 126991.48 | 220011.54 |
| 18 | 190+00.00 | 18.00' LT | 978.22 | 126991.35 | 220061.54 |
| 19 | 190+05.00 | 18.00' LT | 978.30 | 126991.34 | 220066.54 |
| 20 | 187+54.53 | 56.92' RT | 975.65 | 126918.37 | 219814.95 |
| 21 | 187+54.99 | 46.16' RT | 976.03 | 126929.11 | 219815.61 |
| 22 | 187+58.01 | 37.35' RT | 976.35 | 126937.86 | 219818.80 |
| 23 | 187+63.21 | 29.68' RT | 976.60 | 126945.44 | 219824.15 |
| 24 | 187+89.31 | 18.00' RT | 977.32 | 126956.61 | 219850.47 |

| CTH XX INTERSECTION POINTS | | | | | |
|----------------------------|-----------|-----------|-----------|-----------|-----------|
| POINT NUMBER | STATION | OFFSET | ELEVATION | NORTHING | EASTING |
| 25 | 188+00.00 | 18.00' RT | 977.36 | 126956.40 | 219861.16 |
| 26 | 188+32.16 | 18.00' RT | 977.51 | 126955.78 | 219893.31 |
| 27 | 188+50.00 | 18.00' RT | 977.59 | 126955.74 | 219911.45 |
| 28 | 189+00.00 | 18.00' RT | 977.82 | 126955.61 | 219961.45 |
| 29 | 189+50.00 | 18.00' RT | 978.04 | 126955.48 | 220011.45 |
| 30 | 190+00.00 | 18.00' RT | 978.27 | 126955.35 | 220061.45 |

LEGEND:

DRIVEWAY CURB

LIMITS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.



MGS EAT POST 1 156+07, 20.00' LT
MGS EAT POST 5 156+32, 19.00' LT
MGS EAT POST 9 156+57, 18.00' LT

MGS EAT POST 9 160+76, 18.00' LT
MGS EAT POST 5 161+01, 19.00' LT
MGS EAT POST 1 161+26, 20.00' LT

EX R/W

STA 155+97, 17.00' LT
STA 156+07, 18.00' LT

END SHOULDER RECONSTRUCTION
BEGIN PREPARATION OF FOUNDATION
FOR ASPHALTIC SHOULDER
STA 156+07 TO 161+26 LT
STA 156+30 TO 161+23 RT

SLOPE INTERCEPT

STA 160+76, 18.00' LT

155+00

156+00

157+00

18'

158+00

18'

159+00

160+00

22'

161+00

162+00

CTH X

STA 156+20, 17.00' RT
STA 156+30, 18.00' RT

STA 158+86, 18.00' RT

STA 160+73, 22.00' RT

SLOPE INTERCEPT

EX R/W

GRADING LIMITS
TO MATCH INTO
EXISTING DRIVEWAY

MGS EAT POST 1 156+30, 20.00' RT
MGS EAT POST 5 156+55, 19.00' RT
MGS EAT POST 9 156+80, 18.00' RT

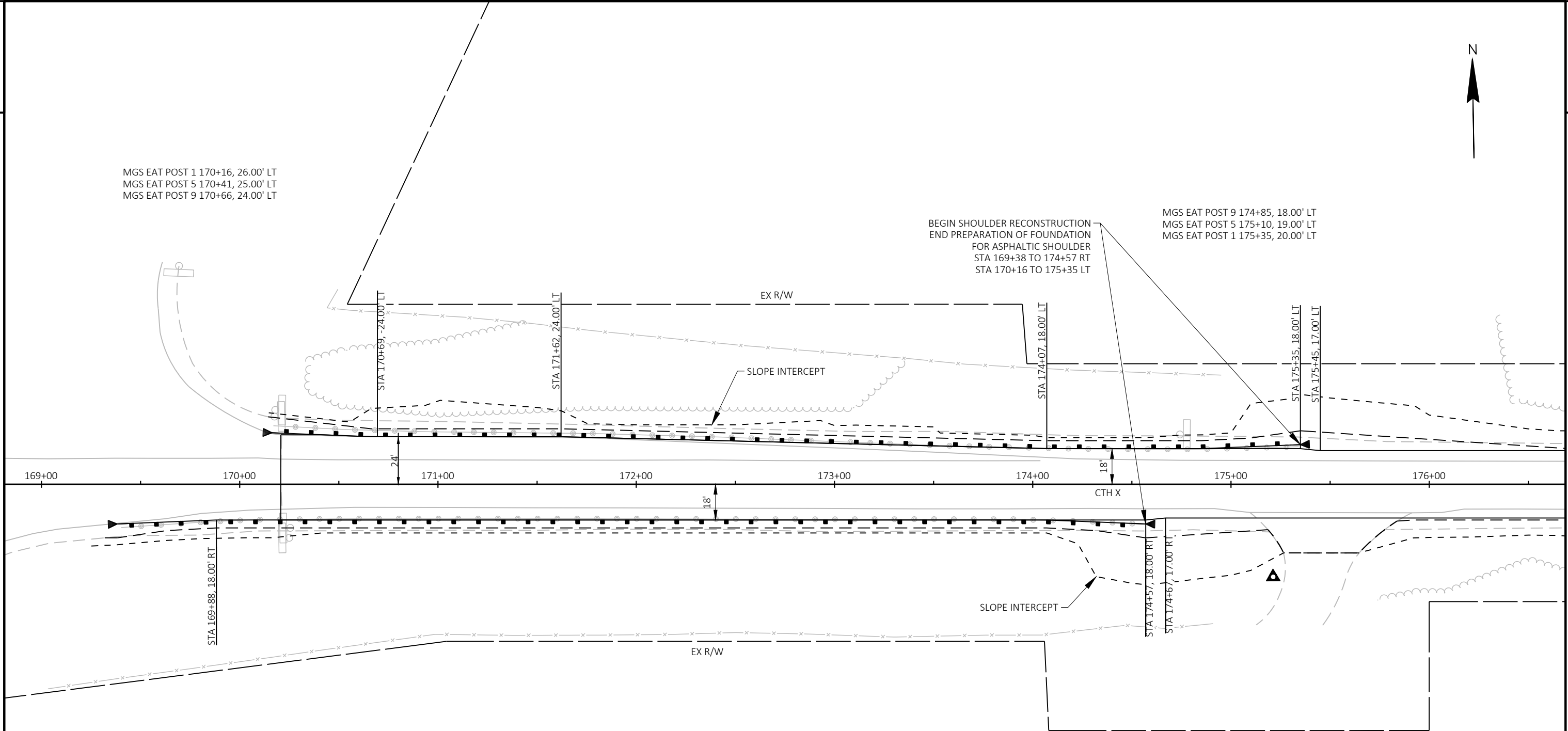
MGS EAT POST 9 160+73, 22.00' RT
MGS EAT POST 5 160+98, 23.00' RT
MGS EAT POST 1 161+23, 24.00' RT



MGS EAT POST 1 170+16, 26.00' LT
MGS EAT POST 5 170+41, 25.00' LT
MGS EAT POST 9 170+66, 24.00' LT

BEGIN SHOULDER RECONSTRUCTION
END PREPARATION OF FOUNDATION
FOR ASPHALTIC SHOULDER
STA 169+38 TO 174+57 RT
STA 170+16 TO 175+35 LT

MGS EAT POST 9 174+85, 18.00' LT
MGS EAT POST 5 175+10, 19.00' LT
MGS EAT POST 1 175+35, 20.00' LT



169+00 170+00 171+00 172+00 173+00 174+00 175+00 176+00

STA 169+88, 18.00' RT

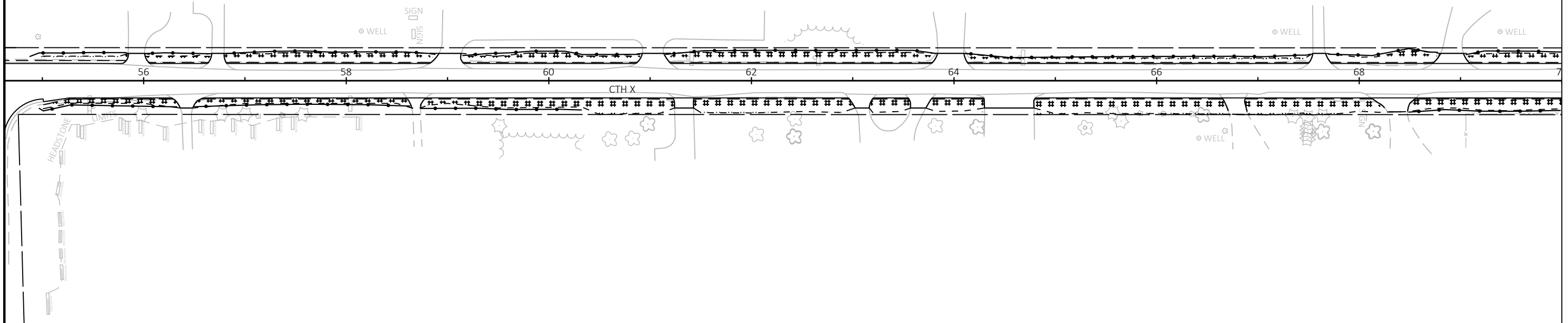
STA 174+57, 18.00' RT
STA 174+67, 17.00' RT

MGS EAT POST 1 169+38, 20.00' RT
MGS EAT POST 5 169+63, 19.00' RT
MGS EAT POST 9 169+88, 18.00' RT

MGS EAT POST 9 174+07, 18.00' RT
MGS EAT POST 5 174+32, 19.00' RT
MGS EAT POST 1 174+57, 20.00' RT

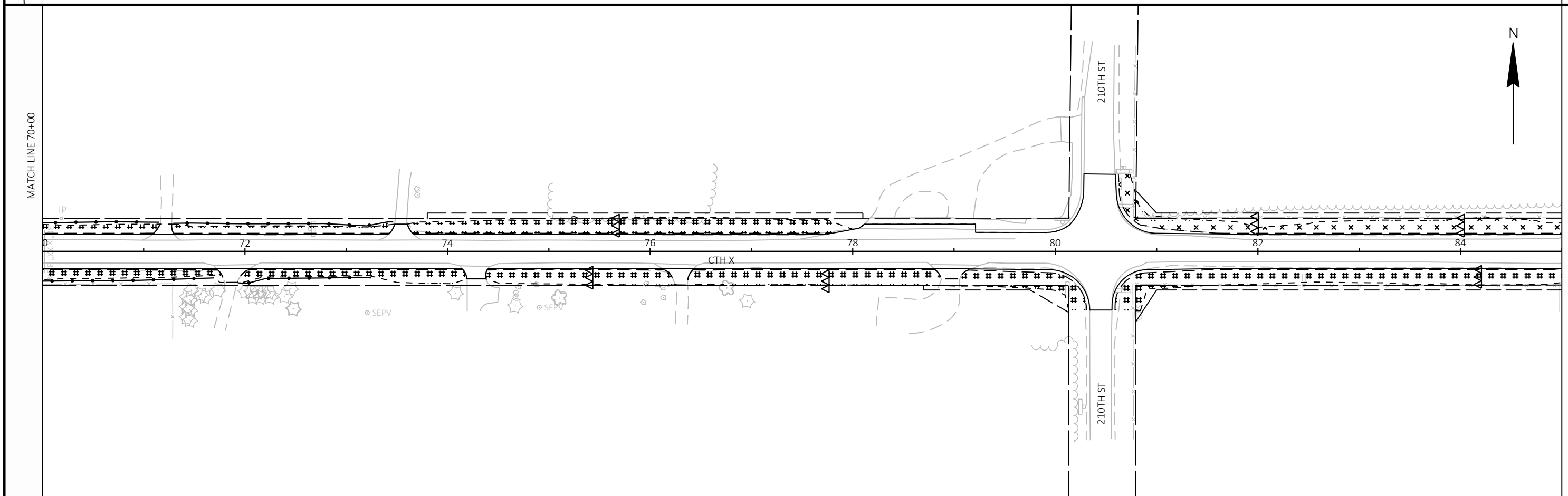
LEGEND

- ##### EROSION MAT CLASS I TYPE B
- x x x MULCHING
- SILT FENCE
- - - SLOPE INTERCEPT
- ∞∞∞ CULVERT PIPE CHECKS
- △△△ TEMPORARY DITCH CHECKS



MATCH LINE 70+00

MATCH LINE 70+00



MATCH LINE 85+00



| | | | | | |
|------------------------|------------|------------------|-----------------|-------|----------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | EROSION CONTROL | SHEET | E |
|------------------------|------------|------------------|-----------------|-------|----------|

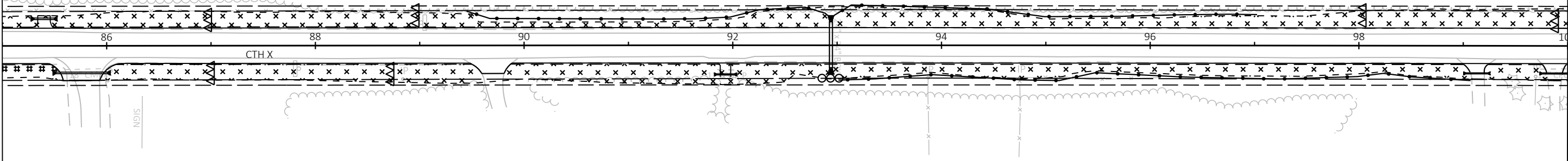
LEGEND

- ##### EROSION MAT CLASS I TYPE B
- x x x MULCHING
- SILT FENCE
- - - SLOPE INTERCEPT
- ∞∞ CULVERT PIPE CHECKS
- △△△ TEMPORARY DITCH CHECKS



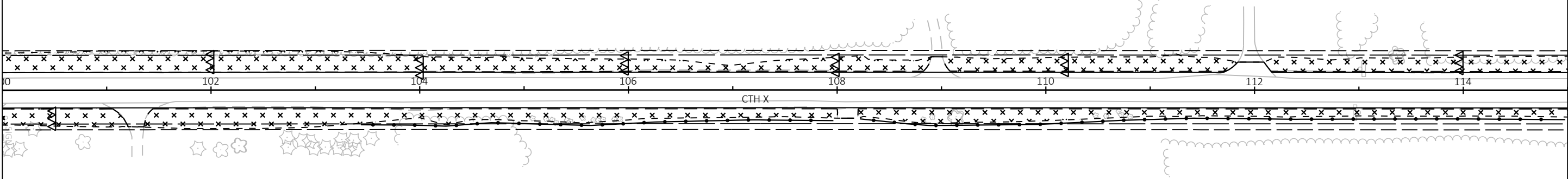
MATCH LINE 85+00

MATCH LINE 100+00



MATCH LINE 100+00

MATCH LINE 115+00



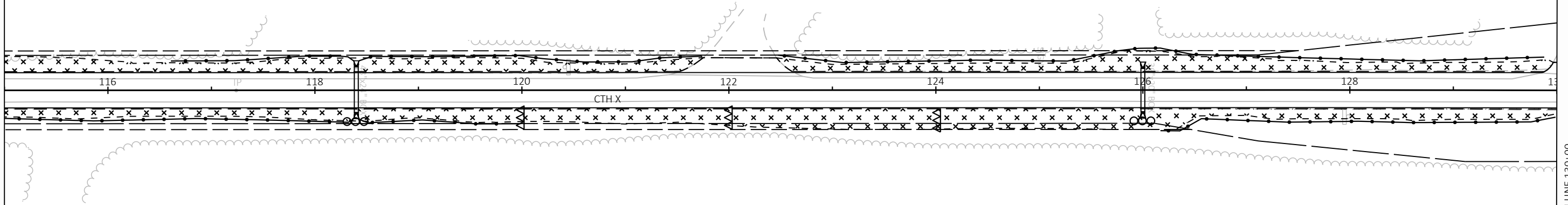
LEGEND

- ##### EROSION MAT CLASS I TYPE B
- x x x MULCHING
- SILT FENCE
- - - SLOPE INTERCEPT
- ∞∞ CULVERT PIPE CHECKS
- △△△ TEMPORARY DITCH CHECKS



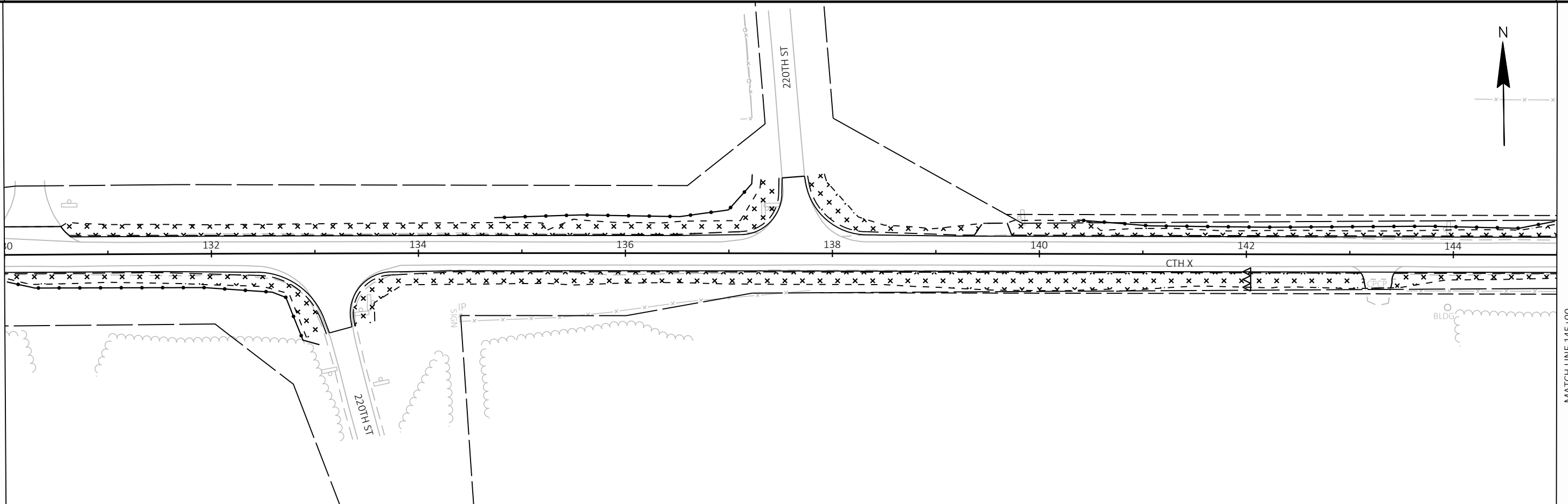
MATCH LINE 115+00

MATCH LINE 130+00



MATCH LINE 130+00

MATCH LINE 145+00



PROJECT NO: 8919-03-75

HWY: CTH X

COUNTY: CHIPPEWA

EROSION CONTROL

SHEET

E

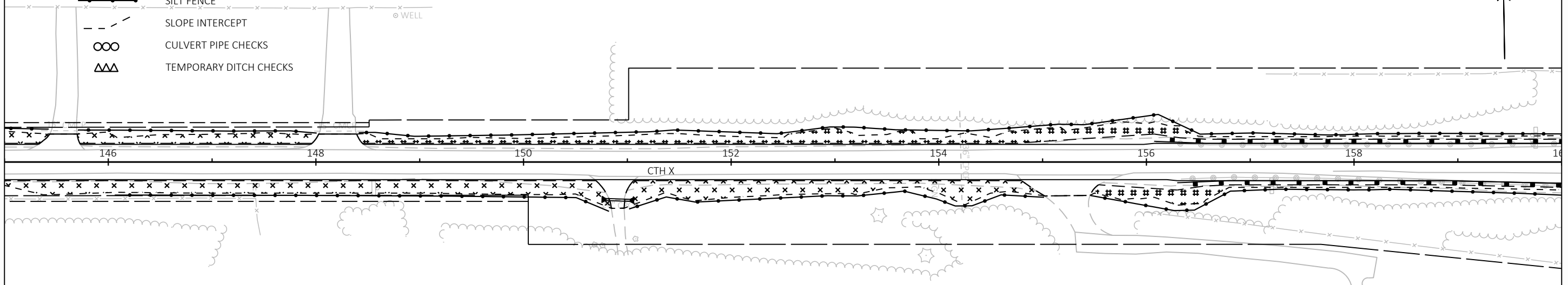
LEGEND

- ##### EROSION MAT CLASS I TYPE B
- x x x MULCHING
- SILT FENCE
- - - SLOPE INTERCEPT
- OOO CULVERT PIPE CHECKS
- AAA TEMPORARY DITCH CHECKS



MATCH LINE 145+00

MATCH LINE 160+00



MATCH LINE 160+00

MATCH LINE 175+00



PROJECT NO: 8919-03-75

HWY: CTH X

COUNTY: CHIPPEWA

EROSION CONTROL

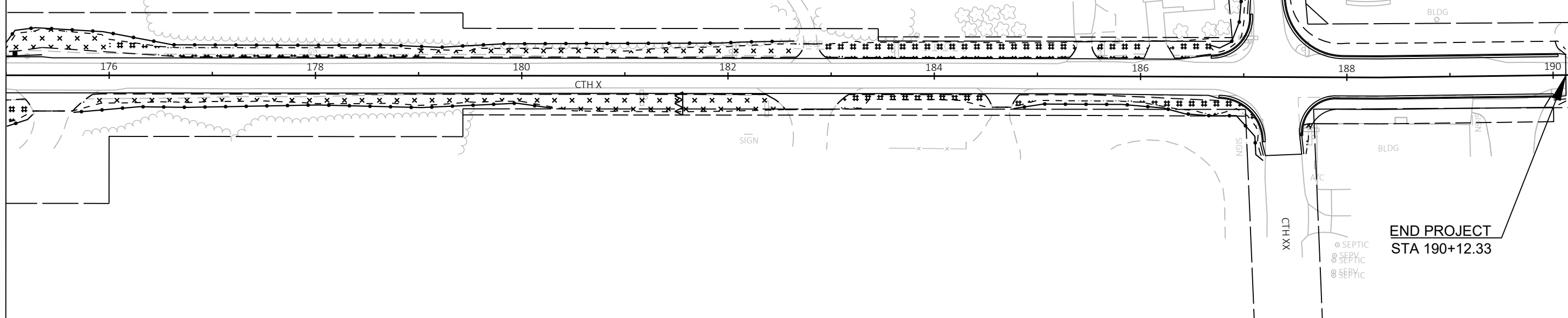
SHEET

E

LEGEND

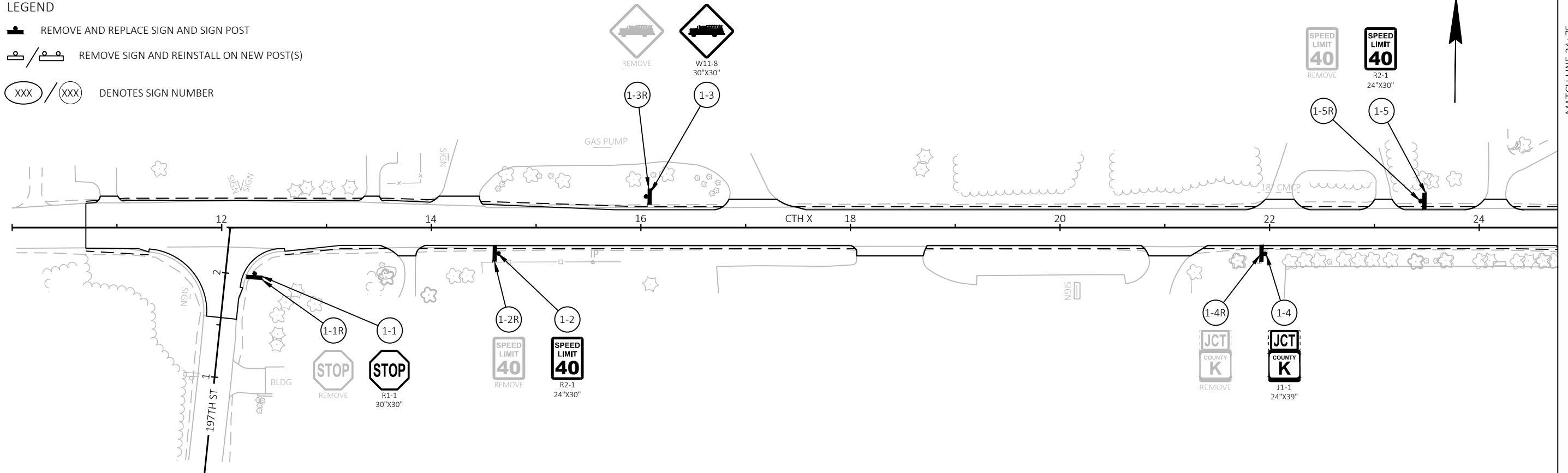
- ##### EROSION MAT CLASS I TYPE B
- x x x MULCHING
- SILT FENCE
- - - SLOPE INTERCEPT
- ∞∞∞ CULVERT PIPE CHECKS
- △△△ TEMPORARY DITCH CHECKS

MATCH LINE 175+00

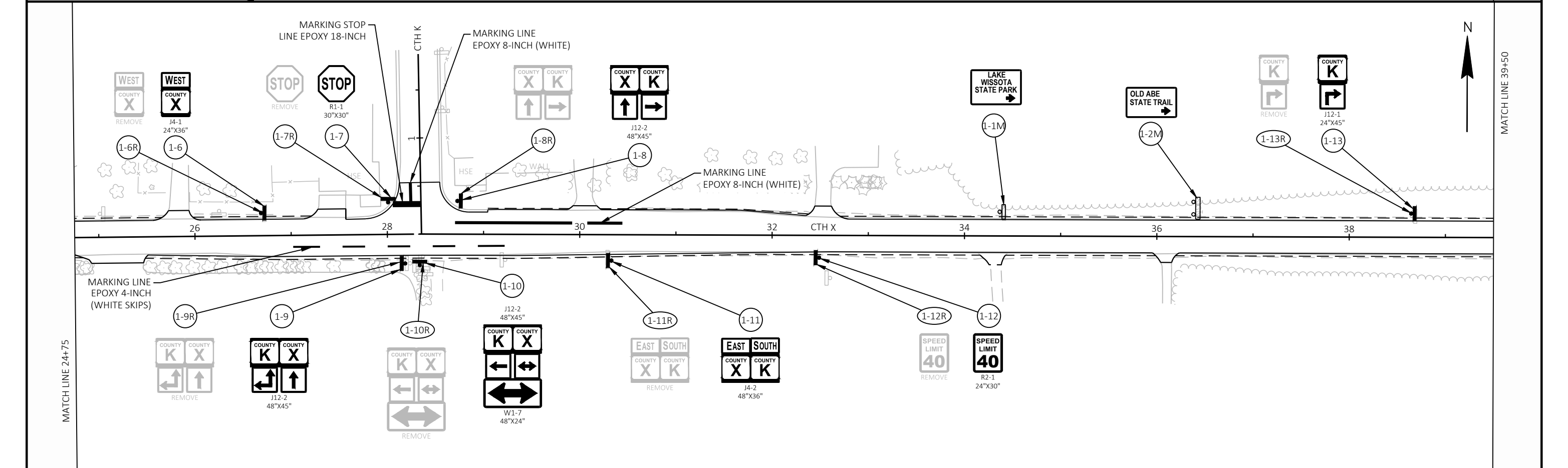


END PROJECT
STA 190+12.33

- LEGEND**
- REMOVE AND REPLACE SIGN AND SIGN POST
 - REMOVE SIGN AND REINSTALL ON NEW POST(S)
 - DENOTES SIGN NUMBER



MATCH LINE 24+75

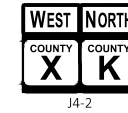


MATCH LINE 39+50

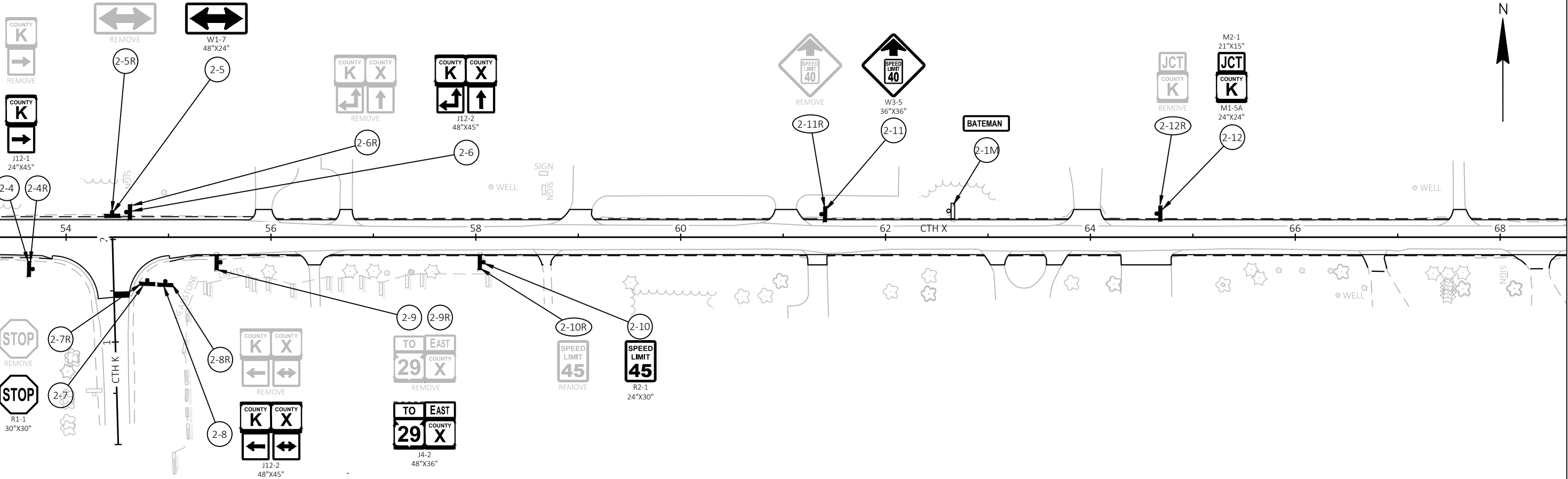
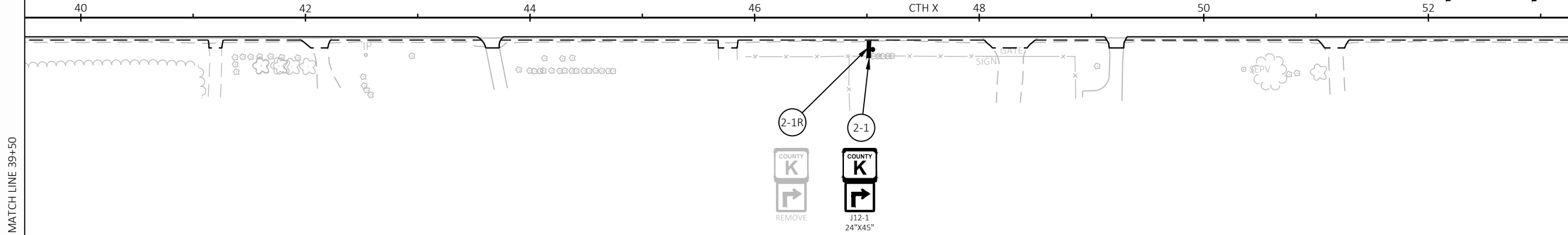


LEGEND

- REMOVE AND REPLACE SIGN AND SIGN POST
- REMOVE SIGN AND REINSTALL ON NEW POST(S)
- / DENOTES SIGN NUMBER



MATCH LINE 53+25



LEGEND

- REMOVE AND REPLACE SIGN AND SIGN POST
- REMOVE SIGN AND REINSTALL ON NEW POST(S)
- DENOTES SIGN NUMBER



3-2R



3-2



3-3R



3-3



3-4R



3-4

3-1R



REMOVE

3-1



W2-1
30"X30"

3-5R



REMOVE

3-5



R1-1
30"X30"

MATCH LINE 68+65

MATCH LINE 83+75



REMOVE

3-7R



W2-1
30"X30"

3-7

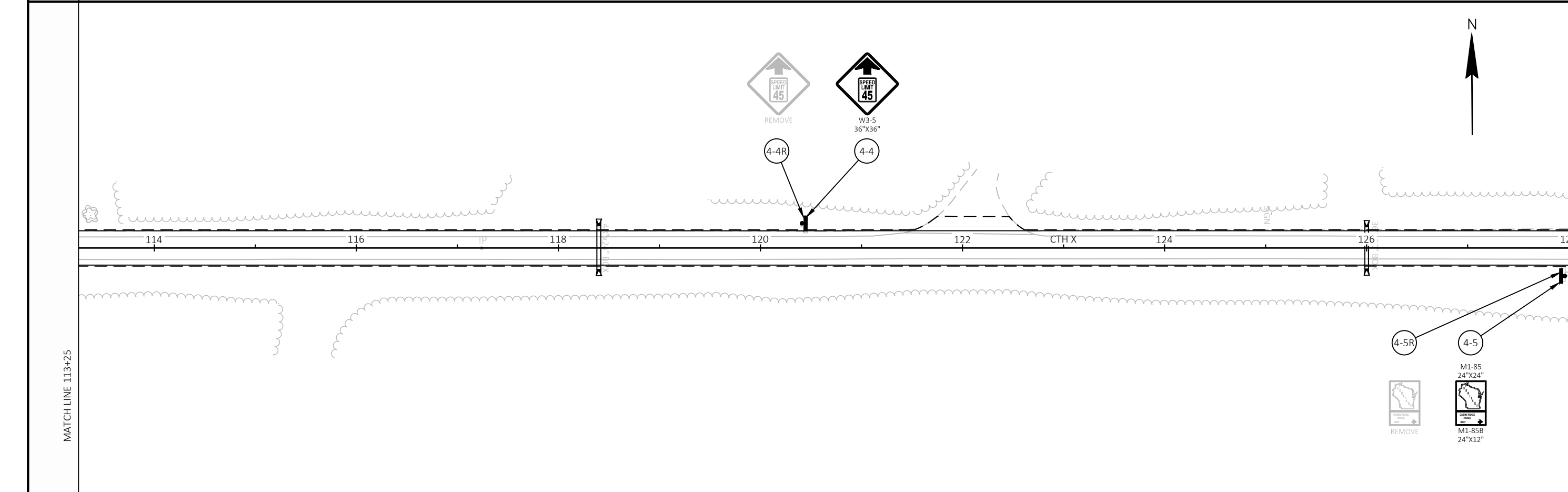
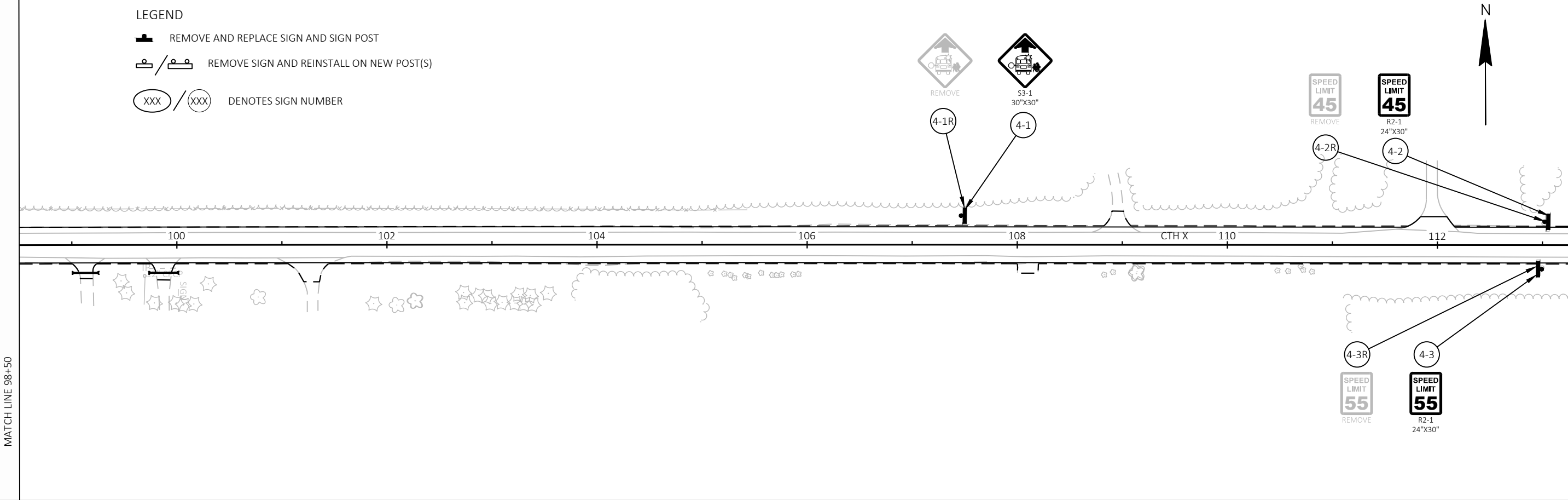


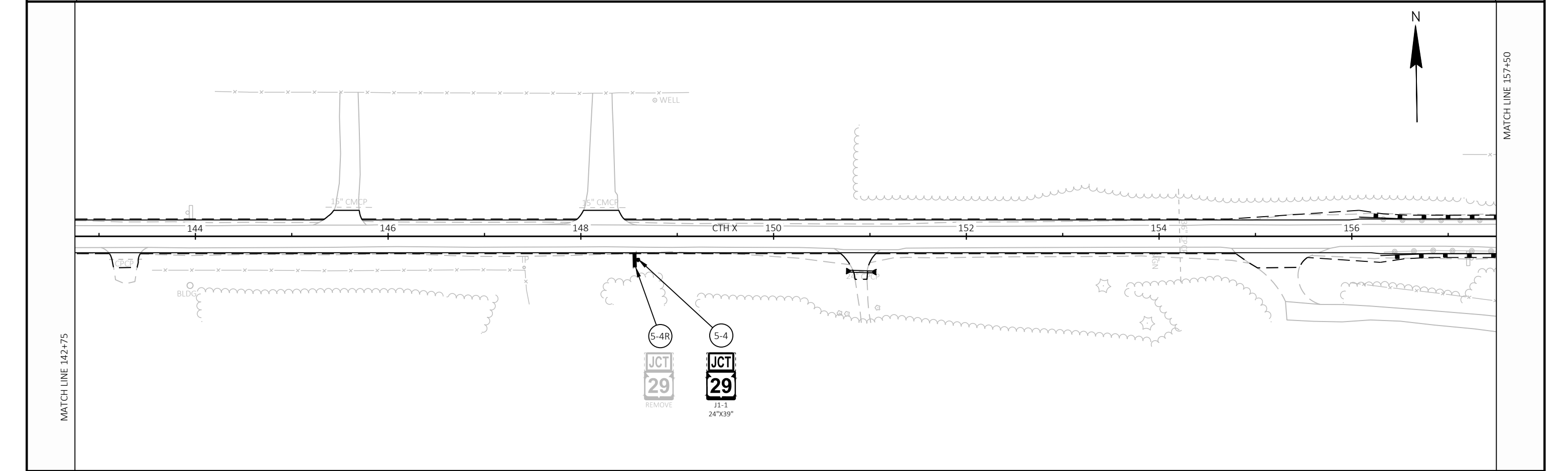
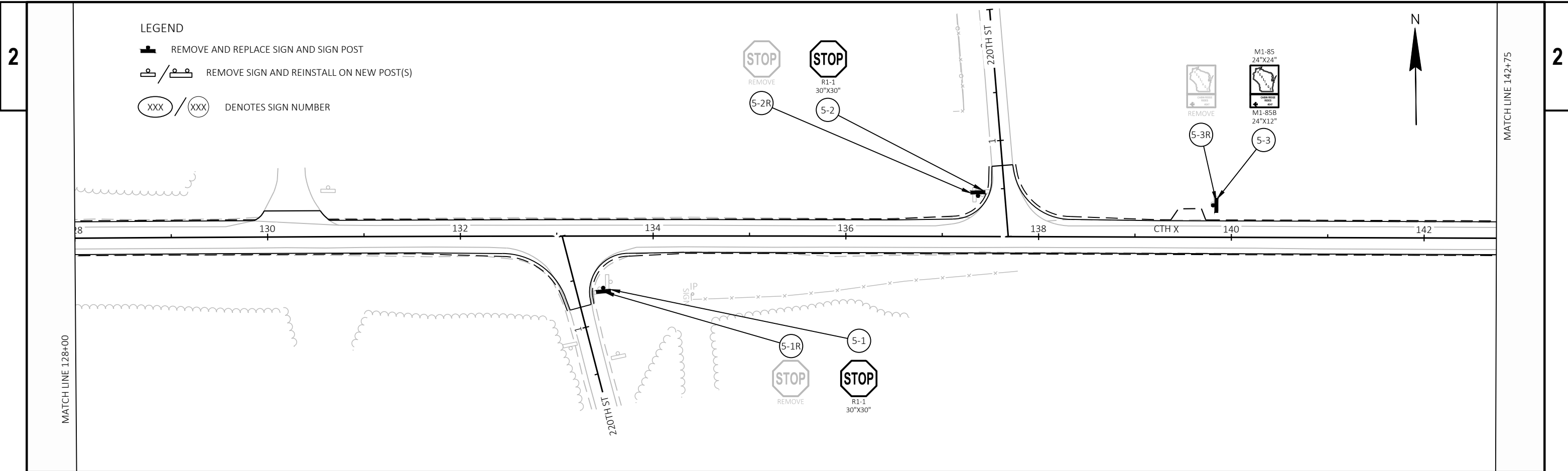
MATCH LINE 83+75

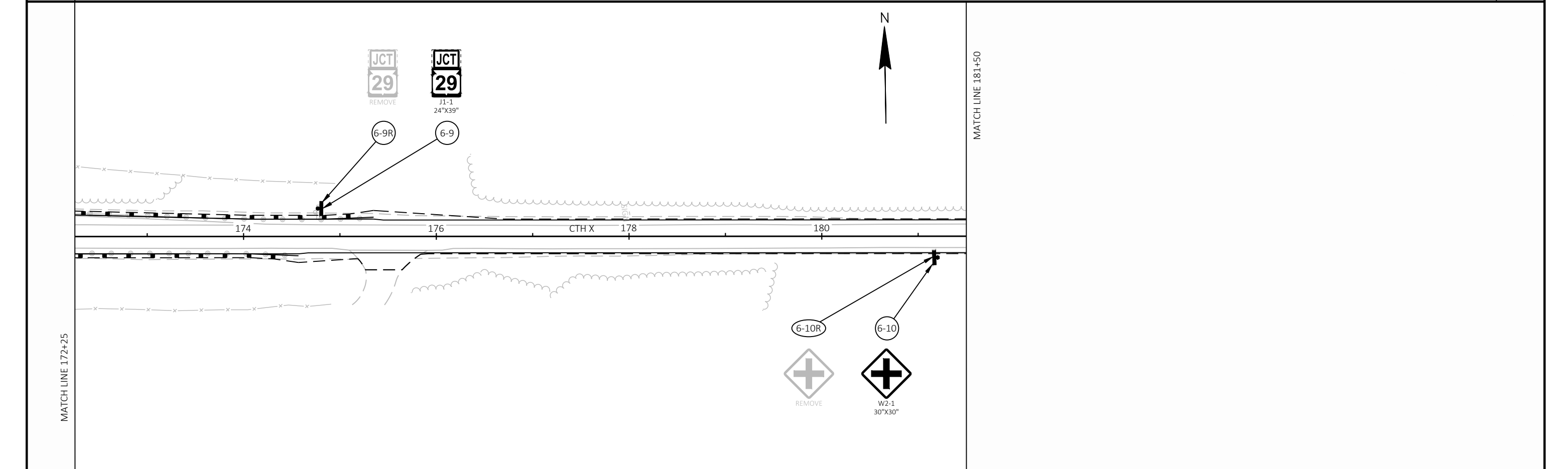
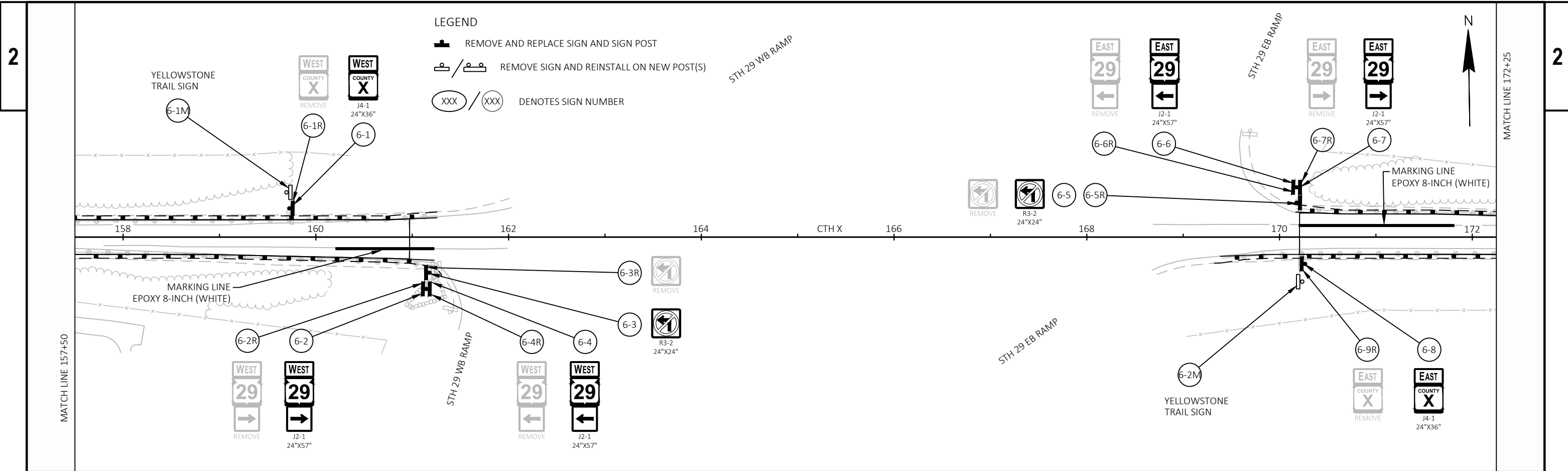
MATCH LINE 98+50

LEGEND

- REMOVE AND REPLACE SIGN AND SIGN POST
- REMOVE SIGN AND REINSTALL ON NEW POST(S)
- DENOTES SIGN NUMBER

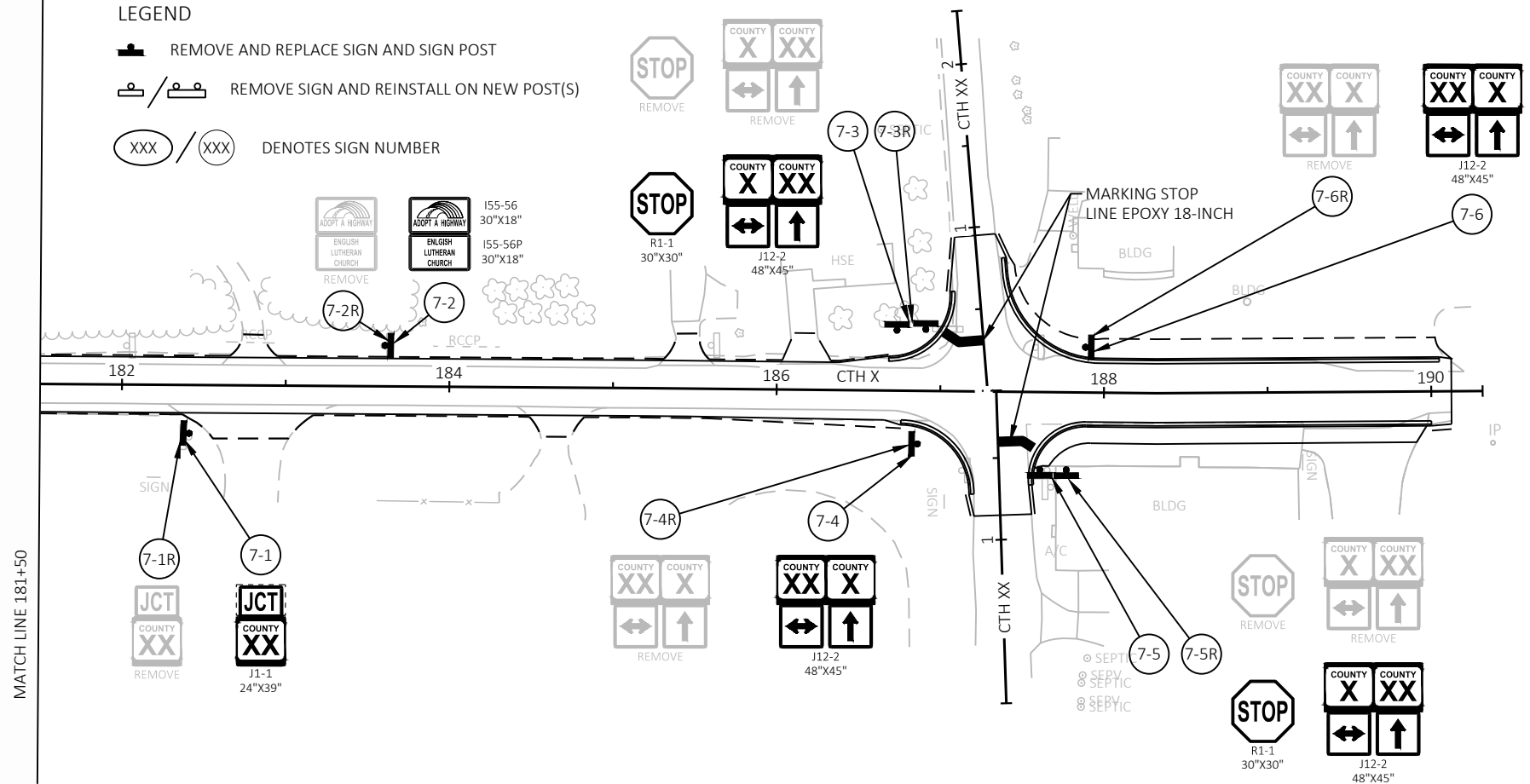





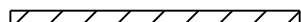



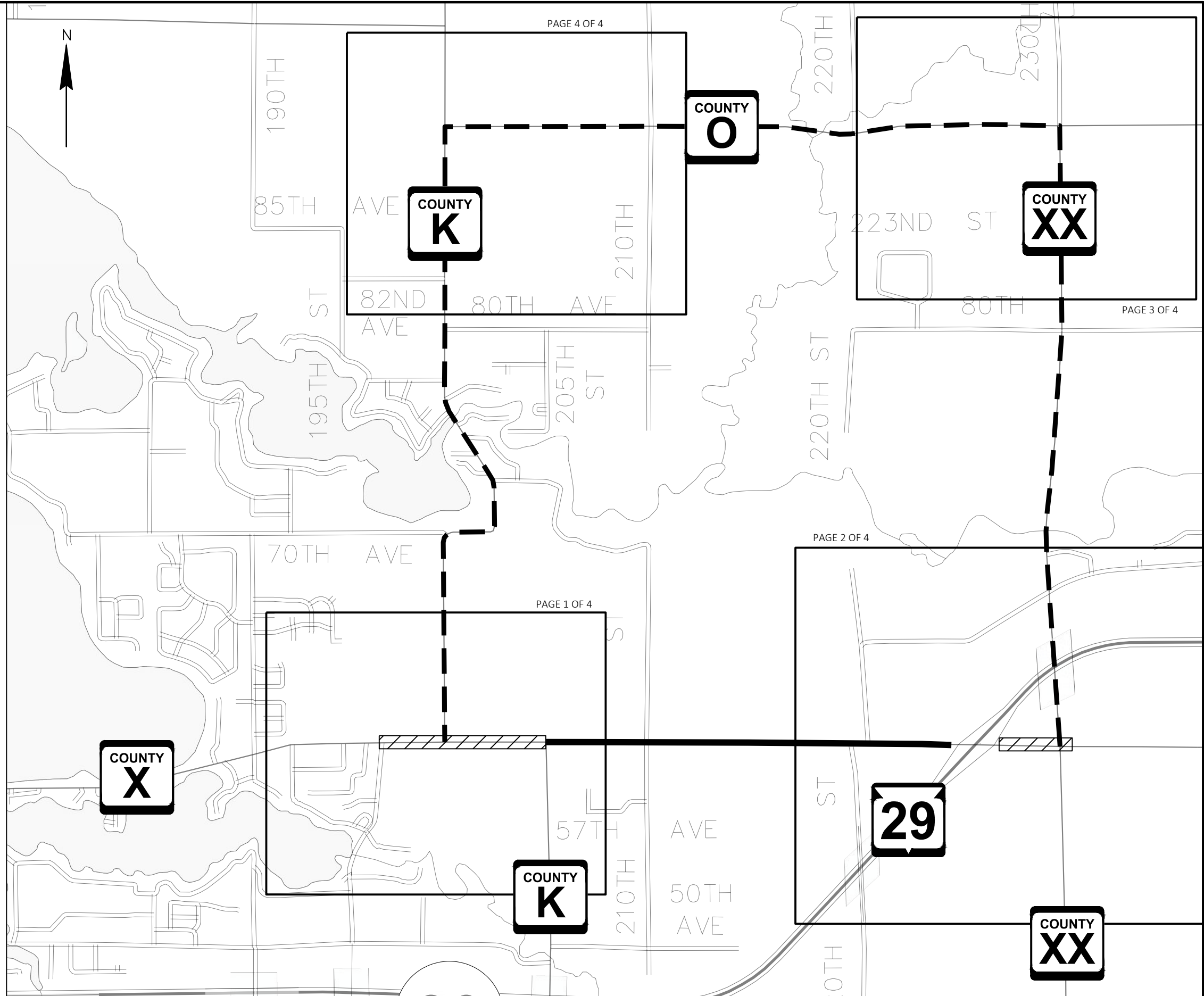
LEGEND

- REMOVE AND REPLACE SIGN AND SIGN POST
- REMOVE SIGN AND REINSTALL ON NEW POST(S)
- DENOTES SIGN NUMBER



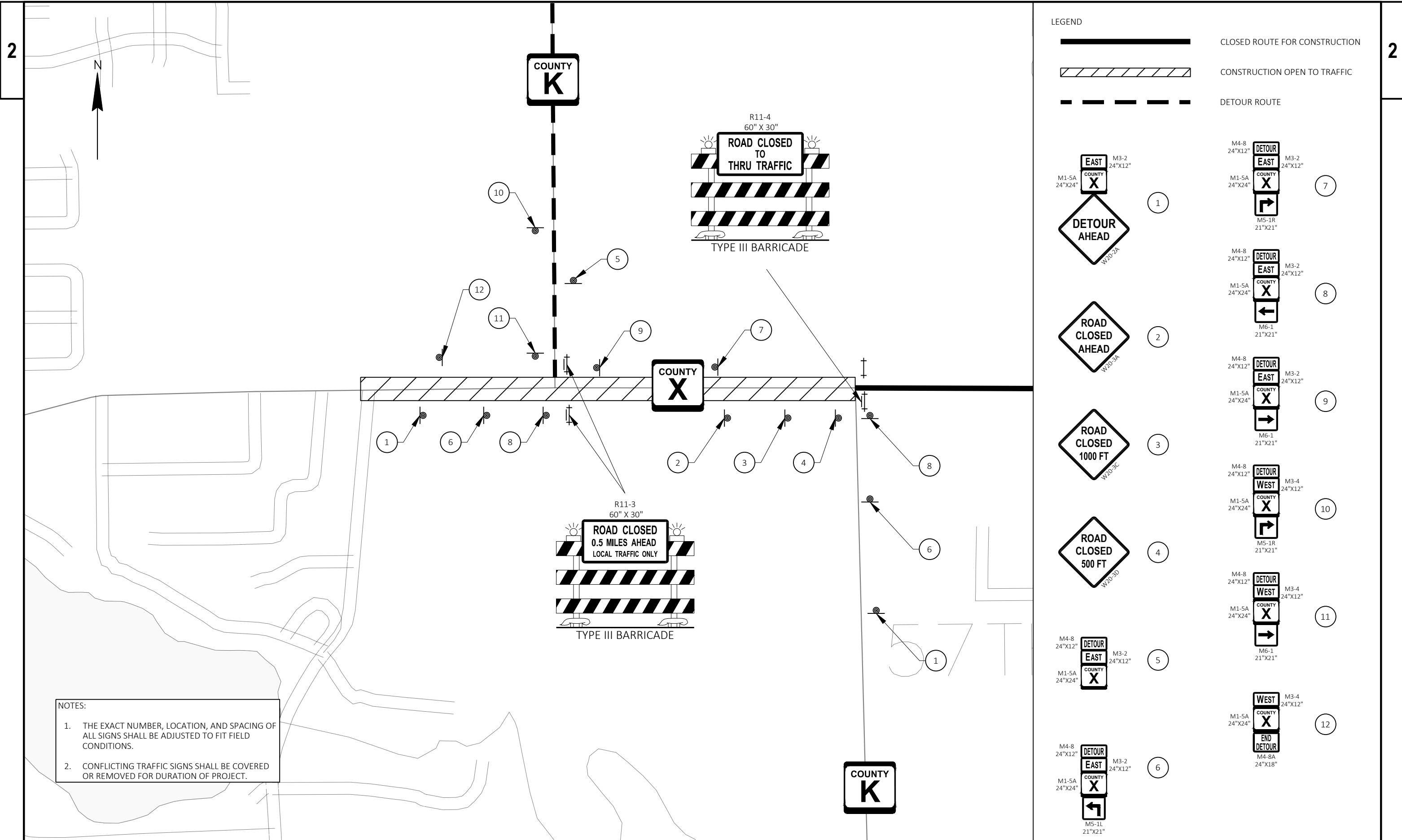
LEGEND

-  CLOSED ROUTE FOR CONSTRUCTION
-  CONSTRUCTION OPEN TO TRAFFIC
-  DETOUR ROUTE



NOTES:

1. CTH X WILL BE CLOSED TO THROUGH TRAFFIC FROM CTH K SOUTH TO STH 29 FOR THE DURATION OF THE PROJECT.
2. CTH X WILL REMAIN OPEN TO TRAFFIC FROM 197TH ST TO CTH K SOUTH AND BE CONSTRUCTED UNDER THE USE OF FLAGGING OPERATIONS.
3. CTH X WILL REMAIN OPEN TO TRAFFIC FROM STH 29 TO CTH XX AND BE CONSTRUCTED UNDER THE USE OF FLAGGING OPERATIONS.



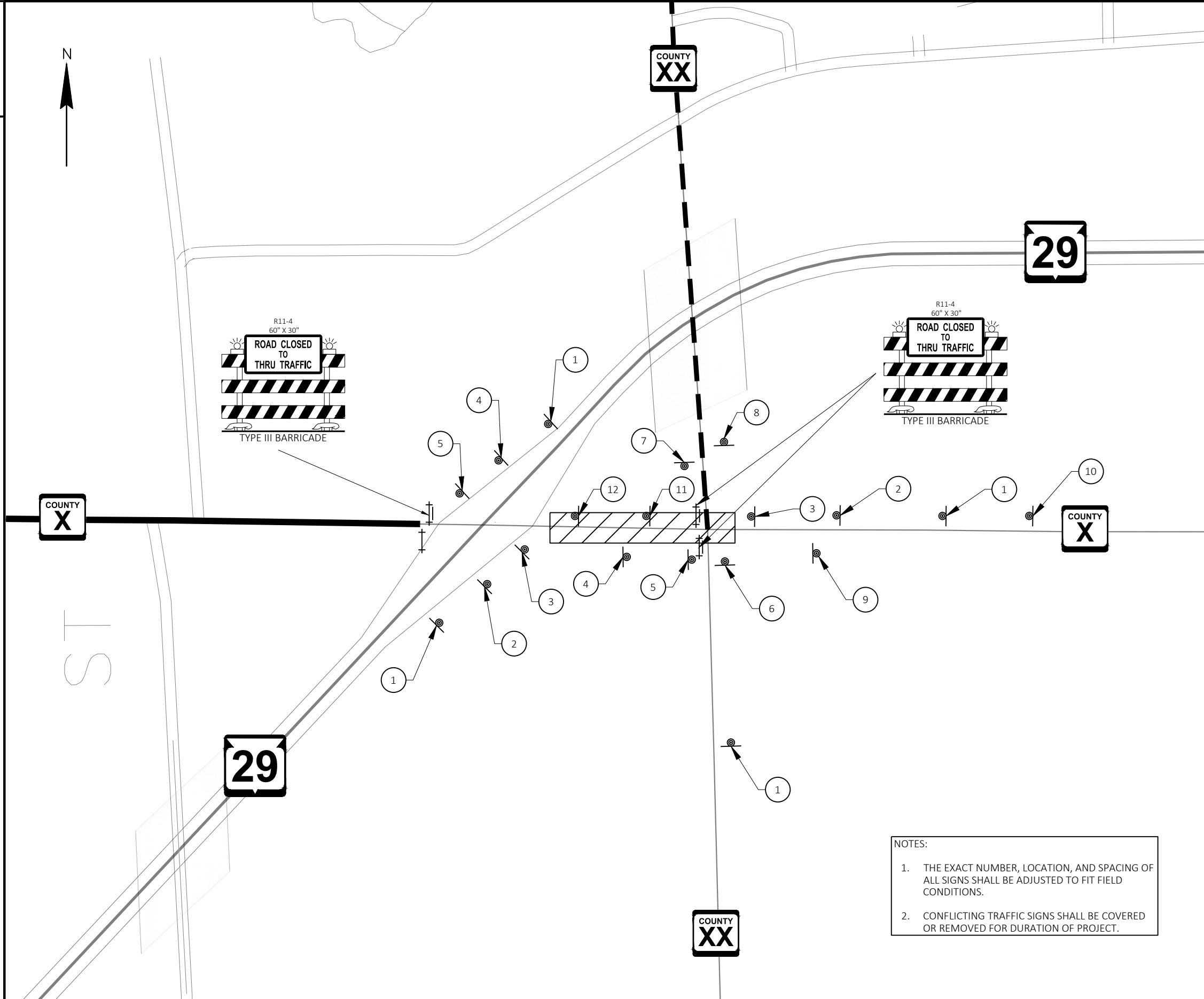
LEGEND

| | |
|--|-------------------------------|
| | CLOSED ROUTE FOR CONSTRUCTION |
| | CONSTRUCTION OPEN TO TRAFFIC |
| | DETOUR ROUTE |

| | | | |
|--|--|--|----|
| | | | 7 |
| | | | 8 |
| | | | 9 |
| | | | 10 |
| | | | 11 |
| | | | 12 |
| | | | |
| | | | |
| | | | |
| | | | |

NOTES:

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.
2. CONFLICTING TRAFFIC SIGNS SHALL BE COVERED OR REMOVED FOR DURATION OF PROJECT.



NOTES:


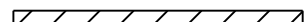

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.
2. CONFLICTING TRAFFIC SIGNS SHALL BE COVERED OR REMOVED FOR DURATION OF PROJECT.

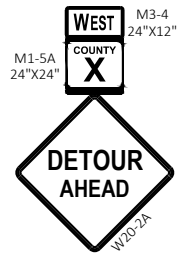
LEGEND

- CLOSED ROUTE FOR CONSTRUCTION
- CONSTRUCTION OPEN TO TRAFFIC
- DETOUR ROUTE

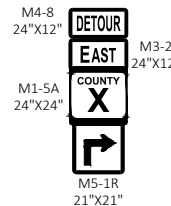
| | |
|----------------------|----------------------|
| | |
|----------------------|----------------------|

LEGEND

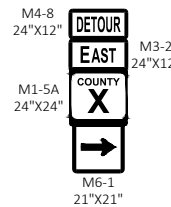
-  CLOSED ROUTE FOR CONSTRUCTION
-  CONSTRUCTION OPEN TO TRAFFIC
-  DETOUR ROUTE



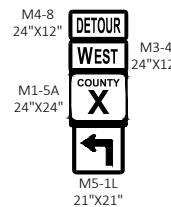
1



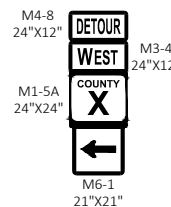
2



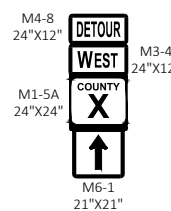
3



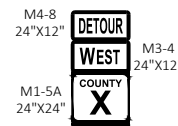
4



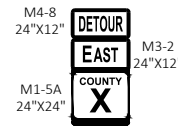
5



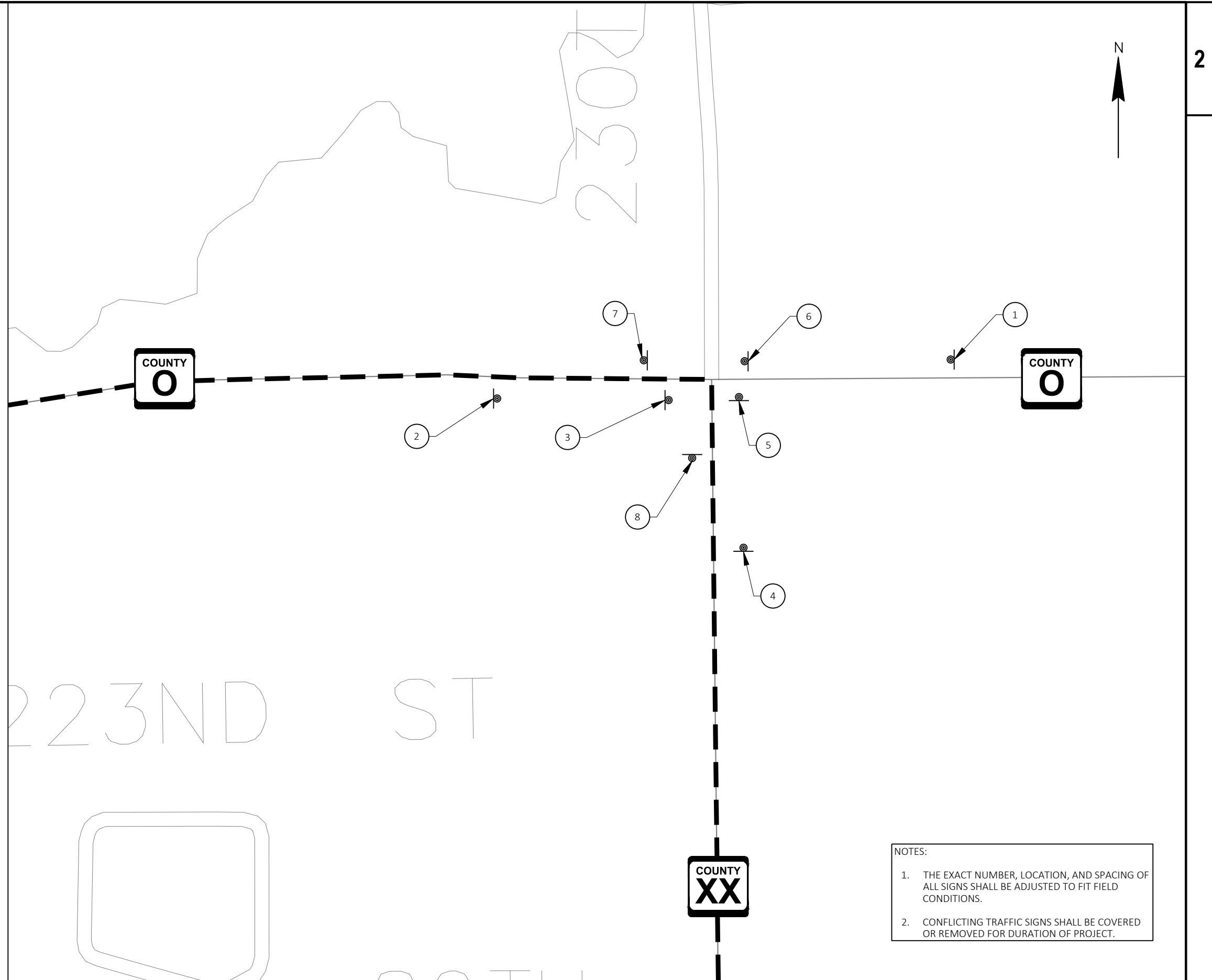
6



7



8

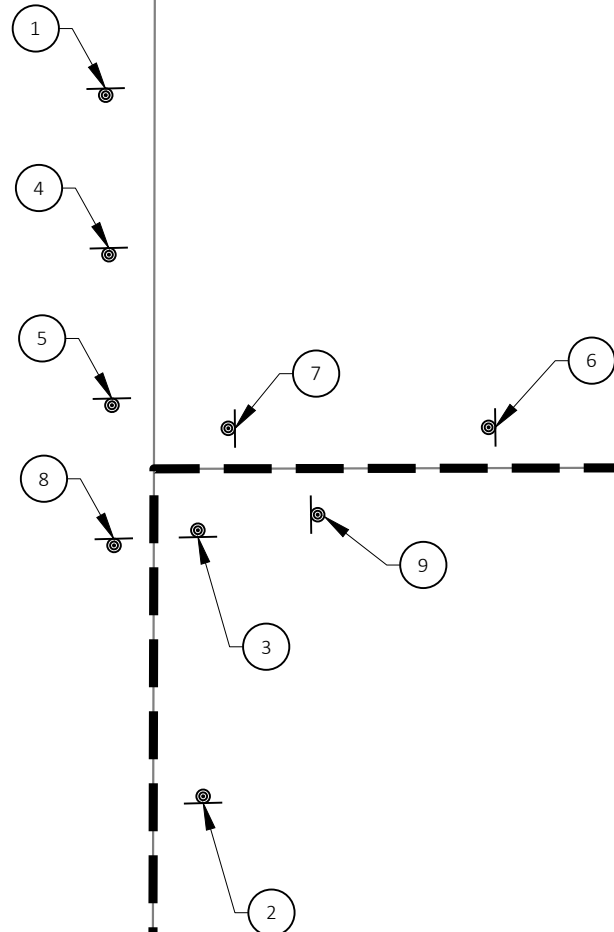


NOTES:

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.
2. CONFLICTING TRAFFIC SIGNS SHALL BE COVERED OR REMOVED FOR DURATION OF PROJECT.



COUNTY
K



COUNTY
O

AVE

COUNTY
K

210TH

82ND

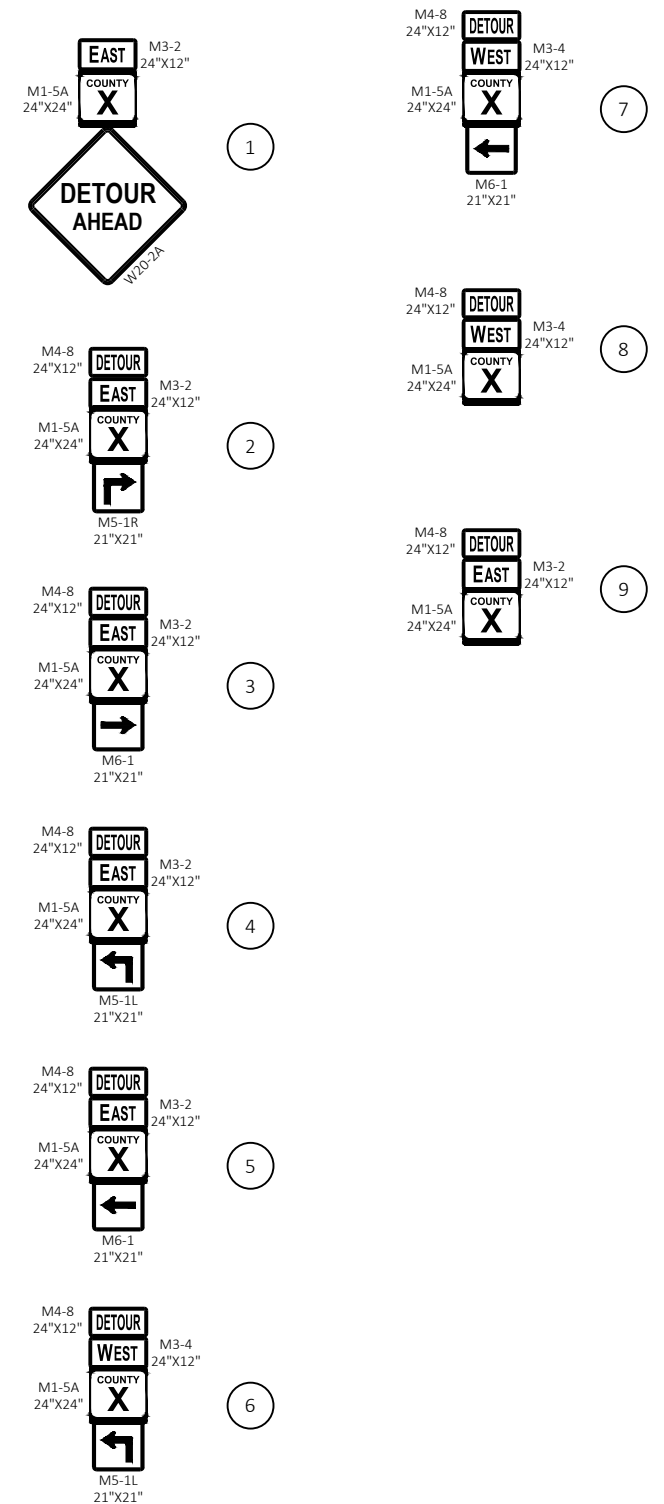
80TH AVE

NOTES:

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.
2. CONFLICTING TRAFFIC SIGNS SHALL BE COVERED OR REMOVED FOR DURATION OF PROJECT.

LEGEND

- CLOSED ROUTE FOR CONSTRUCTION
- CONSTRUCTION OPEN TO TRAFFIC
- DETOUR ROUTE



Estimate Of Quantities

8919-03-75

| Line | Item | Item Description | Unit | Total | Qty |
|------|------------|--|------|------------|------------|
| 0002 | 201.0105 | Clearing | STA | 19.000 | 19.000 |
| 0004 | 201.0205 | Grubbing | STA | 19.000 | 19.000 |
| 0006 | 203.0100 | Removing Small Pipe Culverts | EACH | 6.000 | 6.000 |
| 0008 | 203.0220 | Removing Structure (structure) 01. STA 92+94 | EACH | 1.000 | 1.000 |
| 0010 | 203.0220 | Removing Structure (structure) 02. STA 118+40 | EACH | 1.000 | 1.000 |
| 0012 | 203.0220 | Removing Structure (structure) 03. STA 126+00 | EACH | 1.000 | 1.000 |
| 0014 | 204.0110 | Removing Asphaltic Surface | SY | 310.000 | 310.000 |
| 0016 | 204.0115 | Removing Asphaltic Surface Butt Joints | SY | 3,600.000 | 3,600.000 |
| 0018 | 204.0120 | Removing Asphaltic Surface Milling | SY | 57,000.000 | 57,000.000 |
| 0020 | 204.0165 | Removing Guardrail | LF | 2,044.000 | 2,044.000 |
| 0022 | 205.0100 | Excavation Common | CY | 11,474.000 | 11,474.000 |
| 0024 | 211.0400 | Prepare Foundation for Asphaltic Shoulders | STA | 23.000 | 23.000 |
| 0026 | 211.0700.S | Prepare Foundation for CIR Base Layer (project) 01. 8919-03-75 | EACH | 1.000 | 1.000 |
| 0028 | 211.0800.S | Base Repair for CIR Layer | CY | 400.000 | 400.000 |
| 0030 | 213.0100 | Finishing Roadway (project) 01. 8919-03-75 | EACH | 1.000 | 1.000 |
| 0032 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 3,150.000 | 3,150.000 |
| 0034 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 10,210.000 | 10,210.000 |
| 0036 | 305.0500 | Shaping Shoulders | STA | 44.000 | 44.000 |
| 0038 | 327.1000.S | CIR Asphaltic Base Layer | SY | 57,000.000 | 57,000.000 |
| 0040 | 455.0605 | Tack Coat | GAL | 4,983.000 | 4,983.000 |
| 0042 | 455.0770.S | Asphalt Stabilizing Agent | TON | 190.000 | 190.000 |
| 0044 | 460.2000 | Incentive Density HMA Pavement | DOL | 8,570.000 | 8,570.000 |
| 0046 | 460.5224 | HMA Pavement 4 LT 58-28 S | TON | 6,691.000 | 6,691.000 |
| 0048 | 460.5244 | HMA Pavement 4 LT 58-34 S | TON | 6,691.000 | 6,691.000 |
| 0050 | 460.9000.S | Material Transfer Vehicle 01. 8919-03-75 | EACH | 1.000 | 1.000 |
| 0052 | 465.0120 | Asphaltic Surface Driveways and Field Entrances | TON | 346.000 | 346.000 |
| 0054 | 520.1012 | Apron Endwalls for Culvert Pipe 12-Inch | EACH | 6.000 | 6.000 |
| 0056 | 520.1018 | Apron Endwalls for Culvert Pipe 18-Inch | EACH | 4.000 | 4.000 |
| 0058 | 520.1024 | Apron Endwalls for Culvert Pipe 24-Inch | EACH | 2.000 | 2.000 |
| 0060 | 521.3112 | Culvert Pipe Corrugated Steel 12-Inch | LF | 65.000 | 65.000 |
| 0062 | 521.3118 | Culvert Pipe Corrugated Steel 18-Inch | LF | 70.000 | 70.000 |
| 0064 | 521.3124 | Culvert Pipe Corrugated Steel 24-Inch | LF | 24.000 | 24.000 |
| 0066 | 522.0130 | Culvert Pipe Reinforced Concrete Class III 30-Inch | LF | 44.000 | 44.000 |
| 0068 | 522.1030 | Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch | EACH | 2.000 | 2.000 |
| 0070 | 522.2324 | Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 24x38-Inch | LF | 86.000 | 86.000 |
| 0072 | 522.2624 | Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch | EACH | 4.000 | 4.000 |
| 0074 | 601.0557 | Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D | LF | 700.000 | 700.000 |
| 0076 | 614.2300 | MGS Guardrail 3 | LF | 1,625.000 | 1,625.000 |
| 0078 | 614.2610 | MGS Guardrail Terminal EAT | EACH | 8.000 | 8.000 |
| 0080 | 618.0100 | Maintenance And Repair of Haul Roads (project) 01. 8919-03-75 | EACH | 1.000 | 1.000 |
| 0082 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0084 | 621.0100 | Landmark Reference Monuments | EACH | 6.000 | 6.000 |
| 0086 | 624.0100 | Water | MGAL | 104.000 | 104.000 |
| 0088 | 625.0500 | Salvaged Topsoil | SY | 31,460.000 | 31,460.000 |
| 0090 | 627.0200 | Mulching | SY | 26,290.000 | 26,290.000 |
| 0092 | 628.1504 | Silt Fence | LF | 14,230.000 | 14,230.000 |
| 0094 | 628.1520 | Silt Fence Maintenance | LF | 14,230.000 | 14,230.000 |
| 0096 | 628.1905 | Mobilizations Erosion Control | EACH | 3.000 | 3.000 |
| 0098 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 3.000 | 3.000 |

Estimate Of Quantities

8919-03-75

| Line | Item | Item Description | Unit | Total | Qty |
|------|----------|--|------|------------|------------|
| 0100 | 628.2004 | Erosion Mat Class I Type B | SY | 5,170.000 | 5,170.000 |
| 0102 | 628.7504 | Temporary Ditch Checks | LF | 192.000 | 192.000 |
| 0104 | 628.7555 | Culvert Pipe Checks | EACH | 3.000 | 3.000 |
| 0106 | 629.0210 | Fertilizer Type B | CWT | 19.820 | 19.820 |
| 0108 | 630.0120 | Seeding Mixture No. 20 | LB | 870.000 | 870.000 |
| 0110 | 630.0500 | Seed Water | MGAL | 700.000 | 700.000 |
| 0112 | 634.0614 | Posts Wood 4x6-Inch X 14-FT | EACH | 29.000 | 29.000 |
| 0114 | 634.0616 | Posts Wood 4x6-Inch X 16-FT | EACH | 28.000 | 28.000 |
| 0116 | 634.0620 | Posts Wood 4x6-Inch X 20-FT | EACH | 1.000 | 1.000 |
| 0118 | 637.2210 | Signs Type II Reflective H | SF | 398.800 | 398.800 |
| 0120 | 637.2230 | Signs Type II Reflective F | SF | 65.250 | 65.250 |
| 0122 | 638.2102 | Moving Signs Type II | EACH | 5.000 | 5.000 |
| 0124 | 638.2602 | Removing Signs Type II | EACH | 71.000 | 71.000 |
| 0126 | 638.3000 | Removing Small Sign Supports | EACH | 58.000 | 58.000 |
| 0128 | 638.4000 | Moving Small Sign Supports | EACH | 6.000 | 6.000 |
| 0130 | 642.5001 | Field Office Type B | EACH | 1.000 | 1.000 |
| 0132 | 643.0300 | Traffic Control Drums | DAY | 4,000.000 | 4,000.000 |
| 0134 | 643.0420 | Traffic Control Barricades Type III | DAY | 1,440.000 | 1,440.000 |
| 0136 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 1,440.000 | 1,440.000 |
| 0138 | 643.0900 | Traffic Control Signs | DAY | 5,840.000 | 5,840.000 |
| 0140 | 643.0920 | Traffic Control Covering Signs Type II | EACH | 5.000 | 5.000 |
| 0142 | 643.3105 | Temporary Marking Line Paint 4-Inch | LF | 42,694.000 | 42,694.000 |
| 0144 | 643.5000 | Traffic Control | EACH | 1.000 | 1.000 |
| 0146 | 646.1020 | Marking Line Epoxy 4-Inch | LF | 55,383.000 | 55,383.000 |
| 0148 | 646.3020 | Marking Line Epoxy 8-Inch | LF | 440.000 | 440.000 |
| 0150 | 646.6120 | Marking Stop Line Epoxy 18-Inch | LF | 73.000 | 73.000 |
| 0152 | 648.0100 | Locating No-Passing Zones | MI | 3.570 | 3.570 |
| 0154 | 650.5500 | Construction Staking Curb Gutter and Curb & Gutter | LF | 700.000 | 700.000 |
| 0156 | 650.6000 | Construction Staking Pipe Culverts | EACH | 3.000 | 3.000 |
| 0158 | 650.8000 | Construction Staking Resurfacing Reference | LF | 17,018.000 | 17,018.000 |
| 0160 | 650.9911 | Construction Staking Supplemental Control (project) 01. 8919-03-75 | EACH | 1.000 | 1.000 |
| 0162 | 650.9920 | Construction Staking Slope Stakes | LF | 12,588.000 | 12,588.000 |
| 0164 | 690.0150 | Sawing Asphalt | LF | 1,868.000 | 1,868.000 |
| 0166 | 740.0440 | Incentive IRI Ride | DOL | 14,280.000 | 14,280.000 |
| 0168 | ASP.1T0A | On-the-Job Training Apprentice at \$5.00/HR | HRS | 800.000 | 800.000 |
| 0170 | ASP.1T0G | On-the-Job Training Graduate at \$5.00/HR | HRS | 600.000 | 600.000 |

CLEARING & GRUBBING

| STATION | TO | STATION | LOCATION | 201.0105 CLEARING STA | 201.0205 GRUBBING STA |
|------------|----|---------|----------|-----------------------------|-----------------------------|
| 75+00 | - | 77+00 | CTH X LT | 2 | 2 |
| 90+00 | - | 92+00 | CTH X RT | 2 | 2 |
| 92+00 | - | 94+00 | CTH X LT | 2 | 2 |
| 98+00 | - | 104+00 | CTH X LT | 6 | 6 |
| 104+00 | - | 106+00 | CTH X RT | 2 | 2 |
| 108+50 | - | 109+50 | CTH X RT | 1 | 1 |
| 114+00 | - | 116+00 | CTH X LT | 2 | 2 |
| 170+00 | - | 172+00 | CTH X LT | 2 | 2 |
| TOTAL 0010 | | | | 19 | 19 |

REMOVING CULVERT PIPE ITEMS

| STATION | LOCATION | 203.0100 REMOVING SMALL PIPE CULVERTS EACH | REMARKS |
|------------|-------------|--|------------------|
| 73+54 | ASPH PE LT | 1 | 18" CPCS - 28 LF |
| 85+40 | AGG FE LT | 1 | 18" CPCS - 20LF |
| 85+81 | ASPH CE RT | 1 | 18" CPCS - 45 LF |
| 91+93 | GRASS PE RT | 1 | 12" CPCS - 16 LF |
| 99+88 | AGG PE RT | 1 | 12" CPCS - 25 LF |
| 150+89 | AGG PE RT | 1 | 24" CPCS - 24 LF |
| TOTAL 0010 | | 6 | |

REMOVING STRUCTURE ITEMS

| STATION | LOCATION | 203.0220.01 REMOVING STRUCTURE (STRUCTURE) (01. STA 92+94) EACH | 203.0220.02 REMOVING STRUCTURE (STRUCTURE) (02. STA 118+40) EACH | 203.0220.03 REMOVING STRUCTURE (STRUCTURE) (03. STA 126+00) EACH | REMARKS |
|------------|----------|--|---|---|--------------------------|
| 92+94 | CTH X | 1 | -- | -- | 24"X24"X39' CONCRETE BOX |
| 118+40 | CTH X | -- | 1 | -- | 48"X24"X40' CONCRETE BOX |
| 126+00 | CTH X | -- | -- | 1 | 36"X20"X40' CONCRETE BOX |
| TOTAL 0010 | | 1 | 1 | 1 | |

REMOVING ASPHALT

| STATION | TO | STATION | LOCATION | 204.0110 REMOVING ASPHALTIC SURFACE SY | REMARKS |
|------------|----|---------|--------------------|--|----------------------------|
| 186+98 | | | CTH XX NW QUADRANT | 28 | PRIOR TO CURB INSTALLATION |
| 187+08 | | | CTH XX SW QUADRANT | 29 | PRIOR TO CURB INSTALLATION |
| 187+36 | - | 190+05 | CTH XX NE QUADRANT | 134 | PRIOR TO CURB INSTALLATION |
| 187+52 | - | 190+00 | CTH XX SE QUADRANT | 119 | PRIOR TO CURB INSTALLATION |
| TOTAL 0010 | | | | 310 | |

REMOVING ASPHALTIC SURFACE BUTT JOINTS

| STATION | TO | STATION | LOCATION | 204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY |
|---------------|----|---------|----------|---|
| 10+70 | - | 11+70 | CTH X | 350 |
| 159+97 | - | 160+97 | CTH X | 450 |
| 170+21 | - | 171+21 | CTH X | 450 |
| 189+12 | - | 190+12 | CTH X | 350 |
| INTERSECTIONS | | | | 2,000 |
| TOTAL 0010 | | | | 3,600 |

REMOVING ASPHALTIC SURFACE MILLING

| STATION | TO | STATION | LOCATION | 204.0120 REMOVING ASPHALTIC SURFACE MILLING SY |
|------------|----|---------|----------|---|
| 10+70 | - | 55+00 | CTH X | 19,940 |
| 55+00 | - | 160+97 | CTH X | 30,200 |
| 170+21 | - | 190+12 | CTH X | 6,860 |
| TOTAL 0010 | | | | 57,000 |

REMOVING GUARDRAIL

| STATION | TO | STATION | LOCATION | 204.0165 REMOVING GUARDRAIL LF |
|------------|----|---------|----------|---|
| 156+08 | - | 161+49 | CTH X LT | 518 |
| 156+37 | - | 161+09 | CTH X RT | 493 |
| 169+40 | - | 174+58 | CTH X RT | 516 |
| 170+17 | - | 161+09 | CTH X LT | 517 |
| TOTAL 0010 | | | | 2,044 |

| DIVISION | FROM/TO STATION | LOCATION | 205.0100 COMMON EXCAVATION (1) | | SALVAGED/UNUSABLE PAVEMENT MATERIAL (3) | AVAILABLE MATERIAL (4) | UNEXPANDED FILL | EXPANDED FILL (5) | MASS ORDINATE +/- (6) | WASTE |
|---------------------|--------------------|----------|--------------------------------------|----------------|---|------------------------------|--------------------|----------------------|--------------------------|--------|
| | | | CUT (2) | EBS EXCAVATION | | | | FACTOR 1.25 | | |
| DIVISION 1 - CTH X | 55+00 TO 156+00 | MAINLINE | 10,003 | | 0 | 10,003 | 1,018 | 1,273 | 8,731 | 8,731 |
| DIVISION 1 - CTH X | 175+50 TO 190+12 | MAINLINE | 1,471 | | 0 | 1,471 | 32 | 40 | 1,431 | 1,431 |
| DIVISION 1 SUBTOTAL | | | 11,474 | 0 | 0 | 11,474 | 1,050 | 1,313 | 10,162 | |
| GRAND TOTAL | | | 11,474 | 0 | 0 | 11,474 | 1,050 | 1,313 | 10,162 | 10,162 |
| TOTAL COMMON EXC | | | 11,474 | | | | | | | |

NOTES:

- (1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
- (2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
- (3) SALVAGED/UNUSABLE PAVEMENT MATERIAL
- (4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
- (5) EXPANDED FILL FACTOR = 1.25
- (6) 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.
- (7) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

3

3

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

| STATION TO | STATION | LOCATION | 211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA |
|------------|---------|----------|--|
| 156+07 - | 161+26 | CTH X LT | 6 |
| 156+30 - | 161+23 | CTH X RT | 5 |
| 169+38 - | 174+57 | CTH X RT | 6 |
| 170+16 - | 175+35 | CTH X LT | 6 |
| TOTAL 0010 | | | 23 |

BASE AGGREGATE 3/4-INCH

| STATION TO | STATION | LOCATION | 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON |
|------------|---------|----------|--|
| 10+70 - | 55+00 | CTH X | 1,180 |
| 55+00 - | 160+97 | CTH X | 1,690 |
| 170+21 - | 190+12 | CTH X | 280 |
| TOTAL 0010 | | | 3,150 |

BASE AGGREGATE 1 1/4-INCH

| STATION TO | STATION | LOCATION | 305.0120 BASE AGGREGATE DENSE 1 1/4- INCH TON | 624.0100 WATER MGAL |
|------------|---------|----------|--|---------------------------|
| 55+00 - | 160+97 | CTH X | 8,120 | 82 |
| 170+21 - | 190+12 | CTH X | 1,680 | 17 |
| DRIVEWAYS | | | 410 | 5 |
| TOTAL 0010 | | | 10,210 | 104 |

SHAPING SHOULDERS

| STATION TO | STATION | LOCATION | 305.0500 SHAPING SHOULDERS STA |
|------------|---------|----------|---|
| 10+70 - | 55+00 | CTH X | 44 |
| TOTAL 0010 | | | 44 |

COLD IN PLACE RECYCLING (CIR)

| STATION TO | STATION | LOCATION | 327.1000.S CIR ASPHALTIC BASE LAYER SY | 455.0770.S ASPHALT STABILIZING AGENT TON |
|------------|---------|----------|---|--|
| 10+70 - | 55+00 | CTH X | 19,940 | 70 |
| 55+00 - | 160+97 | CTH X | 30,200 | 100 |
| 170+21 - | 190+12 | CTH X | 6,860 | 20 |
| TOTAL 0010 | | | 57,000 | 190 |

HMA PAVEMENT ITEMS

| STATION TO | STATION | LOCATION | 455.0605 TACK COAT GAL | 460.5224 HMA PAVEMENT 4 LT 58-28 S TON | 460.5244 HMA PAVEMENT 4 LT 58-34 S TON |
|------------|---------|----------|------------------------------|---|---|
| 10+70 - | 55+00 | CTH X | 1,250 | 1,720 | 1,720 |
| 55+00 - | 160+97 | CTH X | 2,840 | 3,905 | 3,905 |
| 170+21 - | 190+12 | CTH X | 580 | 800 | 800 |
| DRIVEWAYS | | | 120 | -- | -- |
| TOTAL 0010 | | | 4,983 | 6,691 | 6,691 |

COLD IN PLACE RECYCLING (CIR) CONT'D

| LOCATION | 211.0700.S.01 PREPARE FOUNDATION FOR CIR BASE LAYER (PROJECT) (01. 8919-03- 75) EACH | 211.0800.S BASE REPAIR FOR CIR LAYER CY |
|---------------|---|--|
| UNDISTRIBUTED | 1 | 400 |
| TOTAL 0010 | 1 | 400 |

MATERIAL TRANSFER VEHICLE

| LOCATION | 460.9000.S MATERIAL TRANSFER VEHICLE EACH |
|------------|---|
| CTH X | 1 |
| TOTAL 0010 | 1 |

ASPHALTIC DRIVEWAYS

465.0120
 ASPHALTIC
 SURFACE
 DRIVEWAYS AND
 FIELD
 ENTRANCES
 TON

| STATION | LOCATION | TON |
|------------|-----------|-----|
| 10+92 | ASPH PELT | 3 |
| 13+45 | ASPH PELT | 2 |
| 13+77 | ASPH PERT | 6 |
| 14+28 | ASPH PELT | 7 |
| 17+07 | ASPH PELT | 14 |
| 18+38 | ASPH PERT | 15 |
| 21+04 | ASPH PERT | 11 |
| 22+10 | ASPH PELT | 9 |
| 23+08 | ASPH PELT | 6 |
| 24+15 | ASPH PELT | 7 |
| 25+19 | ASPH PERT | 12 |
| 25+83 | ASPH PELT | 7 |
| 27+43 | ASPH PELT | 8 |
| 30+05 | ASPH PELT | 3 |
| 32+53 | ASPH PELT | 7 |
| 36+10 | ASPH PERT | 4 |
| 43+20 | ASPH PELT | 5 |
| 43+67 | ASPH PERT | 4 |
| 44+86 | ASPH PELT | 4 |
| 45+46 | ASPH PELT | 4 |
| 47+50 | ASPH PELT | 4 |
| 49+22 | ASPH PERT | 4 |
| 55+93 | ASPH PELT | 5 |
| 56+42 | ASPH PERT | 5 |
| 56+73 | ASPH PELT | 4 |
| 59+03 | ASPH PELT | 6 |
| 61+03 | ASPH PELT | 6 |
| 61+34 | ASPH PERT | 5 |
| 63+09 | ASPH PERT | 4 |
| 63+65 | ASPH PERT | 4 |
| 63+97 | ASPH PELT | 7 |
| 64+56 | ASPH PELT | 11 |
| 67+60 | ASPH PELT | 4 |
| 68+92 | ASPH PELT | 7 |
| 73+54 | ASPH PELT | 4 |
| 74+28 | ASPH PERT | 5 |
| 78+66 | ASPH PELT | 19 |
| 85+81 | ASPH PERT | 8 |
| 89+70 | ASPH PERT | 7 |
| 111+96 | ASPH PELT | 8 |
| 130+26 | ASPH PELT | 15 |
| 145+57 | ASPH PELT | 7 |
| 148+21 | ASPH PELT | 10 |
| 186+17 | ASPH PELT | 6 |
| 189+57 | ASPH PERT | 43 |
| TOTAL 0010 | | 346 |

CULVERT PIPE ITEMS

| STATION | LOCATION | 520.1012 | 520.1018 | 520.1024 | 521.3112 | 521.3118 | 521.3124 | 522.0130 | 522.1030 | 522.2324 | 522.2624 |
|------------|------------|---|---|---|---|---|---|---|---|--|---|
| | | APRON ENDWALLS FOR CULVERT PIPE 12- INCH EACH | APRON ENDWALLS FOR CULVERT PIPE 18- INCH EACH | APRON ENDWALLS FOR CULVERT PIPE 24- INCH EACH | CULVERT PIPE CORRUGATED STEEL 12-INCH LF | CULVERT PIPE CORRUGATED STEEL 18-INCH LF | CULVERT PIPE CORRUGATED STEEL 24-INCH LF | CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH LF | APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30- INCH EACH | CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 24X38-INCH LF | APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH EACH |
| 85+40 | AGG FELT | -- | 2 | -- | -- | 20 | -- | -- | -- | -- | -- |
| 85+81 | ASPH CERT | -- | 2 | -- | -- | 50 | -- | -- | -- | -- | -- |
| 91+93 | GRASS PERT | 2 | -- | -- | 18 | -- | -- | -- | -- | -- | -- |
| 92+94 | CTH X | -- | -- | -- | -- | -- | -- | 44 | 2 | -- | -- |
| 99+14 | AGG PERT | 2 | -- | -- | 22 | -- | -- | -- | -- | -- | -- |
| 99+88 | AGG PERT | 2 | -- | -- | 25 | -- | -- | -- | -- | -- | -- |
| 118+40 | CTH X | -- | -- | -- | -- | -- | -- | -- | -- | 44 | 2 |
| 126+00 | CTH X | -- | -- | -- | -- | -- | -- | -- | -- | 42 | 2 |
| 150+89 | AGG PERT | -- | -- | 2 | -- | -- | 24 | -- | -- | -- | -- |
| TOTAL 0010 | | 6 | 4 | 2 | 65 | 70 | 24 | 44 | 2 | 86 | 4 |

CONCRETE CURB & GUTTER

| STATION TO | STATION | LOCATION | 601.0557 CONCRETE CURB & GUTTER 6- INCH SLOPED 36- INCH TYPE D LF |
|------------|----------|--------------------|--|
| 186+98 | | CTH XX NW QUADRANT | 63 |
| 187+08 | | CTH XX SW QUADRANT | 67 |
| 187+36 | - 190+05 | CTH XX NE QUADRANT | 303 |
| 187+52 | - 190+00 | CTH XX SE QUADRANT | 267 |
| TOTAL 0010 | | | 700 |

MGS GUARDRAIL ITEMS

| STATION TO | STATION | LOCATION | 614.2300 MGS GUARDRAIL 3 LF | 614.2610 MGS GUARDRAIL TERMINAL EAT EACH |
|------------|----------|----------|--------------------------------------|---|
| 156+07 | - 161+26 | CTH X LT | 412.5 | 2 |
| 156+30 | - 161+23 | CTH X RT | 387.5 | 2 |
| 169+38 | - 174+57 | CTH X RT | 412.5 | 2 |
| 170+16 | - 175+35 | CTH X LT | 412.5 | 2 |
| TOTAL 0010 | | | 1,625 | 8 |

| LOCATION | 621.0100 LANDMARK REFERENCE MONUMENTS EACH |
|------------|--|
| PROJECT | 6 |
| TOTAL 0010 | 6 |

3

LANDSCAPING ITEMS

| STATION | TO | STATION | LOCATION | 625.0500 SALVAGED TOPSOIL SY | 627.0200 MULCHING SY | 628.2004 EROSION MAT CLASS I TYPE B SY | 629.0210 FERTILIZER TYPE B CWT | 630.0120 SEEDING MIXTURE NO. 20 LB | 630.0500 SEED WATER MGAL |
|------------|----|---------|----------|---------------------------------------|----------------------------|---|---|---|--------------------------------|
| 10+70 | - | 160+97 | CTH X RT | 13,510 | 12,970 | 540 | 8.51 | 370 | 300 |
| 10+70 | - | 160+97 | CTH X LT | 13,130 | 10,490 | 2,640 | 8.27 | 360 | 290 |
| 170+12 | - | 190+12 | CTH X RT | 2,550 | 1,130 | 1,420 | 1.61 | 70 | 60 |
| 170+12 | - | 190+12 | CTH X LT | 2,270 | 1,700 | 570 | 1.43 | 70 | 50 |
| TOTAL 0010 | | | | 31,460 | 26,290 | 5,170 | 19.82 | 870 | 700 |

SILT FENCE ITEMS

| LOCATION | 628.1504 SILT FENCE LF | 628.1520 SILT FENCE MAINTENANCE LF |
|------------|------------------------------|---|
| CTH X | 11,460 | 11,460 |
| CTH X | 2,770 | 2,770 |
| TOTAL 0010 | 14,230 | 14,230 |

TEMPORARY PAVEMENT MARKING

| STATION | TO | STATION | LOCATION | 643.3105 TEMPORARY MARKING LINE PAINT 4-INCH LF | REMARKS |
|------------|----|---------|----------|---|---------------|
| 10+70 | - | 160+97 | CTH X CL | 18,481 | CIR SUFACE CL |
| 170+12 | - | 190+12 | CTH X CL | 2,866 | CIR SUFACE CL |
| - | - | - | - | - | - |
| 10+70 | - | 160+97 | CTH X CL | 18,481 | 1ST LIFT CL |
| 170+12 | - | 190+12 | CTH X CL | 2,866 | 1ST LIFT CL |
| TOTAL 0010 | | | | 42,694 | |

EROSION CONTROL ITEMS

| LOCATION | 628.1905 MOBILIZATIONS EROSION CONTROL EACH | 628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH |
|------------|---|--|
| PROJECT | 3 | 3 |
| TOTAL 0010 | 3 | 3 |

| STATION | LOCATION | 628.7555 CULVERT PIPE CHECKS EACH |
|------------|----------|--|
| 92+94 | CTH X | 1 |
| 118+40 | CTH X | 1 |
| 126+00 | CTH X | 1 |
| TOTAL 0010 | | 3 |

628.7504
TEMPORARY
DITCH CHECKS
LF

| STATION | LOCATION | LF |
|------------|----------|-----|
| 75+40 | CTH X RT | 8 |
| 75+75 | CTH X LT | 8 |
| 77+80 | CTH X RT | 8 |
| 82+00 | CTH X LT | 8 |
| 84+00 | CTH X LT | 8 |
| 84+10 | CTH X RT | 8 |
| 87+00 | CTH X LT | 8 |
| 87+00 | CTH X RT | 8 |
| 88+75 | CTH X RT | 8 |
| 89+00 | CTH X LT | 8 |
| 98+00 | CTH X LT | 8 |
| 100+00 | CTH X LT | 8 |
| 101+50 | CTH X RT | 8 |
| 102+00 | CTH X LT | 8 |
| 104+00 | CTH X LT | 8 |
| 106+00 | CTH X LT | 8 |
| 108+00 | CTH X LT | 8 |
| 110+10 | CTH X LT | 8 |
| 114+00 | CTH X LT | 8 |
| 120+00 | CTH X RT | 8 |
| 122+00 | CTH X RT | 8 |
| 124+00 | CTH X RT | 8 |
| 142+00 | CTH X RT | 8 |
| 181+50 | CTH X RT | 8 |
| TOTAL 0010 | | 192 |

MOVING SIGN ITEMS

| SIGN ID | STATION | SIGN MESSAGE | LOCATION | 638.2102 MOVING SIGNS TYPE II EACH | 638.4000 MOVING SMALL SIGN SUPPORTS EACH |
|------------|---------|-------------------------|----------|---|---|
| 1-1M | 34+38 | LAKE WISSOTA STATE PARK | CTH X LT | 1 | 1 |
| 1-2M | 36+40 | OLD ABE STATE TRAIL | CTH X LT | 1 | 2 |
| 2-1M | 62+64 | BATEMAN | CTH X LT | 1 | 1 |
| 6-1M | 159+72 | YELLOWSTONE TRAIL SIGN | CTH X LT | 1 | 1 |
| 6-2M | 170+21 | YELLOWSTONE TRAIL SIGN | CTH X RT | 1 | 1 |
| TOTAL 0010 | | | | 5 | 6 |

SIGNING ITEMS

REMOVING SIGN ITEMS

| SIGN ID | SIGN CODE | STATION | SIGN MESSAGE | SIGN SIZE | LOCATION | 634.0614 | 634.0616 | 634.0620 | 637.2210 | 637.2230 | 638.2602 | 638.3000 | | |
|------------|--------------|---------|-------------------------------------|-----------------|----------|--|--|--|-------------------------------------|-------------------------------------|------------|----------|-----------------------------------|--|
| | | | | | | POSTS WOOD 4X6-INCH X 14- FT EACH | POSTS WOOD 4X6-INCH X 16- FT EACH | POSTS WOOD 4X6-INCH X 20- FT EACH | SIGNS TYPE II REFLECTIVE H SF | SIGNS TYPE II REFLECTIVE F SF | | | REMOVING SIGNS TYPE II EACH | REMOVING SMALL SIGN SUPPORTS EACH |
| 1-1 | R1-1 | 12+31 | STOP | 30"X30" | 197TH ST | 1 | -- | -- | 5.18 | -- | | | | |
| 1-2 | R2-1 | 14+62 | SPEED LIMIT 40 | 24"X30" | CTH X RT | 1 | -- | -- | 5.00 | -- | | | | |
| 1-3 | W11-8 | 16+06 | FIRE TRUCK CROSSING | 30"X30" | CTH X LT | 1 | -- | -- | -- | 6.25 | | | | |
| 1-4 | J1-1 | 21+93 | JCT CTH K | 24"X39" | CTH X RT | -- | 1 | -- | 6.50 | -- | | | | |
| 1-5 | R2-1 | 23+45 | SPEED LIMIT 40 | 24"X30" | CTH X LT | 1 | -- | -- | 5.00 | -- | | | | |
| 1-6 | J4-1 | 26+70 | CTH X WEST | 24"X36" | CTH X LT | -- | 1 | -- | 6.00 | -- | | | | |
| 1-7 | R1-1 | 28+01 | STOP | 30"X30" | CTH K | 1 | -- | -- | 5.18 | -- | | | | |
| 1-8 | J12-2 | 28+75 | CTH X/CTH K ARROWS | 48"X45" | CTH X LT | -- | 1 | -- | 15.00 | -- | | | | |
| 1-9 | J12-2 | 28+15 | CTH X/CTH K ARROWS | 48"X45" | CTH X RT | -- | 1 | -- | 15.00 | -- | | | | |
| 1-10 | J12-2/W1-7 | 28+34 | CTH X/CTH K ARROWS WITH NIGHT ARROW | 48"X45"/48"X24" | CTH X RT | -- | -- | 1 | 15.00 | 8.00 | | | | |
| 1-11 | J4-2 | 30+31 | CTH X EAST/CTH X SOUTH | 48"X36" | CTH X RT | -- | 1 | -- | 12.00 | -- | | | | |
| 1-12 | R2-1 | 32+45 | SPEED LIMIT 40 | 24"X30" | CTH X RT | 1 | -- | -- | 5.00 | -- | | | | |
| 1-13 | J12-1 | 38+66 | CTH K ARROW | 24"X45" | CTH X LT | -- | 1 | -- | 7.50 | -- | | | | |
| 2-1 | J12-1 | 47+03 | CTH K ARROW | 24"X45" | CTH X RT | -- | 1 | -- | 7.50 | -- | | | | |
| 2-2 | J4-2 | 52+15 | CTH X WEST/CTH K NORTH | 48"X36" | CTH X LT | -- | 1 | -- | 12.00 | -- | | | | |
| 2-3 | R2-1 | 52+92 | SPEED LIMIT 40 | 24"X30" | CTH X LT | 1 | -- | -- | 5.00 | -- | | | | |
| 2-4 | J12-1 | 53+65 | CTH K ARROW | 24"X45" | CTH X RT | -- | 1 | -- | 7.50 | -- | | | | |
| 2-5 | W1-7 | 54+45 | NIGHT ARROW | 48"X24" | CTH X LT | 1 | -- | -- | -- | 8.00 | | | | |
| 2-6 | J12-2 | 54+60 | CTH K/CTH X ARROWS | 48"X45" | CTH X LT | -- | 1 | -- | 15.00 | -- | | | | |
| 2-7 | R1-1 | 54+79 | STOP | 30"X30" | CTH K | 1 | -- | -- | 5.18 | -- | | | | |
| 2-8 | J12-2 | 54+82 | CTH K/CTH X ARROWS | 48"X45" | CTH K | -- | 1 | -- | 15.00 | -- | | | | |
| 2-9 | J4-2 | 55+47 | TO STH 29/CTH X EAST | 48"X36" | CTH X RT | -- | 1 | -- | 12.00 | -- | | | | |
| 2-10 | R2-1 | 58+04 | SPEED LIMIT 45 | 24"X30" | CTH X RT | 1 | -- | -- | 5.00 | -- | | | | |
| 2-11 | W3-5 | 61+40 | SPEED LIMIT 40 AHEAD | 36"X36" | CTH X LT | 1 | -- | -- | -- | 9.00 | | | | |
| 2-12 | J1-1 | 64+66 | JCT CTH K | 24"X39" | CTH X LT | -- | 1 | -- | 6.50 | -- | | | | |
| 3-1 | W2-1 | 71+14 | INTERSECTION AHEAD | 30"X30" | CTH X RT | 1 | -- | -- | -- | 6.25 | | | | |
| 3-2 | R2-1 | 72+66 | SPEED LIMIT 45 | 24"X30" | CTH X LT | 1 | -- | -- | 5.00 | -- | | | | |
| 3-3 | R1-1 | 80+07 | STOP | 30"X30" | 210TH ST | 1 | -- | -- | 5.18 | -- | | | | |
| 3-4 | R1-1 | 80+76 | STOP | 30"X30" | 210TH ST | 1 | -- | -- | 5.18 | -- | | | | |
| 3-5 | R1-1 | 80+75 | STOP | 30"X30" | 210TH ST | 1 | -- | -- | 5.18 | -- | | | | |
| 3-6 | R2-1 | 87+86 | SPEED LIMIT 45 | 24"X30" | CTH X RT | 1 | -- | -- | 5.00 | -- | | | | |
| 3-7 | W2-1 | 89+05 | INTERSECTION AHEAD | 30"X30" | CTH X LT | 1 | -- | -- | -- | 6.25 | | | | |
| 4-1 | S3-1 | 107+48 | SCHOOL BUS STOP AHEAD | 30"X30" | CTH X LT | 1 | -- | -- | -- | 6.25 | | | | |
| 4-2 | R2-1 | 112+98 | SPEED LIMIT 45 | 24"X30" | CTH X LT | 1 | -- | -- | 5.00 | -- | | | | |
| 4-3 | R2-1 | 113+02 | SPEED LIMIT 55 | 24"X30" | CTH X RT | 1 | -- | -- | 5.00 | -- | | | | |
| 4-4 | W3-5 | 120+42 | SPEED LIMIT 45 AHEAD | 36"X36" | CTH X LT | 1 | -- | -- | -- | 9.00 | | | | |
| 4-5 | M1-85/M1-85B | 127+93 | HERITAGE RD | 24"X24"/24"X12" | CTH X RT | -- | 1 | -- | 6.00 | -- | | | | |
| 5-1 | R1-1 | 133+46 | STOP | 30"X30" | 220TH ST | 1 | -- | -- | 5.18 | -- | | | | |
| 5-2 | R1-1 | 137+36 | STOP | 30"X30" | 220TH ST | 1 | -- | -- | 5.18 | -- | | | | |
| 5-3 | M1-85/M1-85B | 139+82 | HERITAGE RD | 24"X24"/24"X12" | CTH X LT | -- | 1 | -- | 6.00 | -- | | | | |
| 5-4 | J1-1 | 148+58 | JCT STH 29 | 24"X39" | CTH X RT | -- | 1 | -- | 6.50 | -- | | | | |
| 6-1 | J4-1 | 159+75 | CTH X WEST | 24"X36" | CTH X LT | -- | 1 | -- | 6.00 | -- | | | | |
| 6-2 | J2-1 | 161+16 | STH 29 WEST ARROW | 24"X57" | CTH X RT | -- | 1 | -- | 9.50 | -- | | | | |
| 6-3 | R3-2 | 161+16 | NO LEFT TURN | 24"X24" | CTH X RT | 1 | -- | -- | 4.00 | -- | | | | |
| 6-4 | J2-1 | 161+16 | STH 29 WEST ARROW | 24"X57" | CTH X RT | -- | 1 | -- | 9.50 | -- | | | | |
| 6-5 | R3-2 | 170+18 | NO LEFT TURN | 24"X24" | CTH X LT | 1 | -- | -- | 4.00 | -- | | | | |
| 6-6 | J2-1 | 170+18 | STH 29 EAST ARROW | 24"X57" | CTH X LT | -- | 1 | -- | 9.50 | -- | | | | |
| 6-7 | J2-1 | 170+18 | STH 29 EAST ARROW | 24"X57" | CTH X LT | -- | 1 | -- | 9.50 | -- | | | | |
| 6-8 | J4-1 | 170+18 | CTH X EAST | 24"X36" | CTH X RT | -- | 1 | -- | 6.00 | -- | | | | |
| 6-9 | J1-1 | 174+80 | JCT STH 29 | 24"X39" | CTH X LT | -- | 1 | -- | 6.50 | -- | | | | |
| 6-10 | W2-1 | 181+18 | INTERSECTION AHEAD | 30"X30" | CTH X RT | 1 | -- | -- | -- | 6.25 | | | | |
| 7-1 | J1-1 | 182+40 | JCT CTH XX | 24"X29" | CTH X RT | -- | 1 | -- | 6.50 | -- | | | | |
| 7-2 | J12-2 | 186+82 | CTH XX/CTH X ARROWS | 48"X45" | CTH X RT | -- | 1 | -- | 15.00 | -- | | | | |
| 7-3 | R1-1 | 186+85 | STOP | 30"X30" | CTH XX | 1 | -- | -- | 5.18 | -- | | | | |
| | J12-2 | | CTH X/CTH XX ARROWS | 48"X45" | CTH XX | -- | 1 | -- | 15.00 | -- | | | | |
| 7-4 | R1-1 | 187+67 | STOP | 30"X30" | CTH XX | 1 | -- | -- | 5.18 | -- | | | | |
| | J12-2 | | CTH X/CTH XX ARROWS | 48"X45" | CTH XX | -- | 1 | -- | 15.00 | -- | | | | |
| 7-5 | J12-2 | 187+90 | CTH XX/CTH X ARROWS | 48"X45" | CTH X LT | -- | 1 | -- | 15.00 | -- | | | | |
| TOTAL 0010 | | | | | | 29 | 28 | 1 | 398.80 | 65.25 | TOTAL 0010 | | 71 | 58 |

PROJECT NO: 8919-03-75

HWY: CTH X

COUNTY: CHIPPEWA

MISCELLANEOUS QUANTITIES

SHEET

E

3

TRAFFIC CONTROL ITEMS

| LOCATION | 643.0300 TRAFFIC CONTROL DRUMS DAY | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY | 643.0900 TRAFFIC CONTROL SIGNS DAY | 643.5000 TRAFFIC CONTROL EACH |
|----------------------------|--|---|--|--|-------------------------------------|
| CTH X DETOUR PROJECT | 4,000 -- -- | 800 640 -- | 480 960 -- | 1,280 4,560 -- | -- -- 1 |
| TOTAL 0010 | 4,000 | 1,440 | 1,440 | 5,840 | 1 |

PAVEMENT MARKING ITEMS

| STATION | TO | STATION | LOCATION | 646.1020 MARKING LINE EPOXY 4-INCH LF | 646.3020 MARKING LINE EPOXY 8-INCH LF | 646.6120 MARKING STOP LINE EPOXY 18-INCH LF | REMARKS | 648.0100 LOCATING NO-PASSING ZONES MI |
|---------|----|---------|-------------------|---|---|---|------------|---|
| | | | CTH K NORTH | -- | -- | 28 | STOP BAR | |
| | | | CTH K NORTH | -- | 170 | -- | TURN LANE | |
| | | | CTH K SOUTH | -- | -- | 15 | STOP BAR | |
| 10+70 | - | 160+97 | | 18,481 | -- | -- | CENTERLINE | 10+70 - 190+12 CTH X 3.57 |
| | | | | 30,054 | -- | -- | EDGELINE | |
| | | | STH 29 OVERPASS | -- | 100 | -- | TURN LANE | TOTAL 0010 3.57 |
| | | | STH 29 OVERPASS | -- | 170 | -- | TURN LANE | |
| 170+21 | - | 190+12 | | 2,866 | -- | -- | CENTERLINE | |
| | | | | 3,982 | -- | -- | EDGELINE | |
| | | | CTH XX | -- | -- | 30 | STOP BAR | |
| | | | TOTAL 0010 | 55,383 | 440 | 73 | | |

COVERING SIGNS

| LOCATION | 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH | NUMBER OF CYCLES | NUMBER OF SIGNS |
|-------------------|---|------------------|-----------------|
| DETOUR | 5 | 1 | 5 |
| TOTAL 0010 | 5 | | |

CULVERT CONSTRUCTION STAKING

| STATION | LOCATION | 650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH |
|-------------------|----------|--|
| 92+94 | CTH X | 1 |
| 118+40 | CTH X | 1 |
| 126+00 | CTH X | 1 |
| TOTAL 0010 | | 3 |

SAWING ASPHALT

| STATION | LOCATION | 690.0150 SAWING ASPHALT LF | 690.0150 SAWING ASPHALT LF |
|---------|---------------------|----------------------------------|----------------------------------|
| 55+93 | ASPH PE LT | 16 | |
| 56+42 | ASPH PE RT | 12 | |
| 56+73 | ASPH PE LT | 12 | |
| 59+03 | ASPH PE LT | 22 | |
| 61+03 | ASPH PE LT | 21 | |
| 61+34 | ASPH PE RT | 19 | |
| 63+09 | ASPH PE RT | 14 | |
| 63+65 | ASPH PE RT | 15 | |
| 63+97 | ASPH PE LT | 26 | |
| 64+56 | ASPH PE LT | 49 | |
| 67+60 | ASPH PE LT | 13 | |
| 68+92 | ASPH PE LT | 23 | |
| 73+54 | ASPH PE LT | 12 | |
| 74+28 | ASPH PE RT | 19 | |
| 78+66 | ASPH PE LT | 109 | |
| | 210TH ST NORTH | 31 | |
| | 210TH ST SOUTH | 22 | |
| 85+81 | ASPH PE RT | 28 | |
| 89+70 | ASPH PE RT | 21 | |
| 111+96 | ASPH PE LT | 25 | |
| 130+26 | ASPH PE LT | 58 | |
| | 220TH ST SOUTH | 24 | |
| | 220TH ST NORTH | 22 | |
| 145+57 | ASPH PE LT | 27 | |
| 148+21 | ASPH PE LT | 37 | |
| 160+97 | NET EXCEPTION TO CL | 44 | |
| 170+21 | NET EXCEPTION TO CL | 118 | |
| 186+17 | ASPH PE LT | 20 | |
| | CTH XX NORTH | 24 | |
| | CTH XX SOUTH | 36 | |
| 189+57 | ASPH PE RT | 230 | |
| 190+12 | END PROJECT | 36 | |
| | TOTAL 0010 | 1,868 | |

CURB & GUTTER STAKING

| STATION | TO | STATION | LOCATION | 650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF |
|---------|----|---------|--------------------|--|
| 186+98 | | | CTH XX NW QUADRANT | 63 |
| 187+08 | | | CTH XX SW QUADRANT | 67 |
| 187+36 | - | 190+05 | CTH XX NE QUADRANT | 303 |
| 187+52 | - | 190+00 | CTH XX SE QUADRANT | 267 |
| | | | TOTAL 0010 | 700 |

CONSTRUCTION STAKING ITEMS

| STATION | TO | STATION | LOCATION | 650.8000 CONSTRUCTION STAKING LF | 650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. REFERENCE 8919-03-75) EACH | 650.9920 CONSTRUCTION STAKING SLOPE STAKES LF |
|---------|----|---------|-------------------|--|---|---|
| 10+70 | - | 55+00 | CTH X | 4,430 | -- | -- |
| 55+00 | - | 160+97 | CTH X | 10,597 | -- | 10,597 |
| 170+21 | - | 190+12 | CTH X | 1,991 | -- | 1,991 |
| | | | CTH X | -- | 1 | -- |
| | | | TOTAL 0010 | 17,018 | 1 | 12,588 |

| 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 | --- |
| CULVERT | --- |
| PARALLEL OFFSETS | --- |

| CONVENTIONAL UTILITY SYMBOLS | |
|------------------------------|-----|
| WATER | --- |
| GAS | --- |
| TELEPHONE | --- |
| OVERHEAD TRANSMISSION LINES | --- |
| ELECTRIC | --- |
| CABLE TELEVISION | --- |
| FIBER OPTIC | --- |
| SANITARY SEWER | --- |
| STORM SEWER | --- |
| ELECTRIC TOWER | --- |

| CONVENTIONAL ABBREVIATIONS | | | |
|----------------------------|-------|-----------------------------|--------|
| ACCESS RIGHTS | AR | POINT OF COMPOUND CURVE | PCC |
| ACRES | AC | POINT OF INTERSECTION | PI |
| AHEAD | AH | PROPERTY LINE | PL |
| ALUMINUM | ALUM | RECORDED AS | (100') |
| AND OTHERS | ET AL | REEL / IMAGE | R/I |
| BACK | BK | REFERENCE LINE | R/L |
| BLOCK | BLK | REMAINING | REM |
| CENTERLINE | C/L | RESTRICTIVE DEVELOPMENT | RDE |
| CERTIFIED SURVEY MAP | CSM | EASEMENT | |
| CONCRETE | CONC | RIGHT | RT |
| COUNTY | CO | RIGHT OF WAY | R/W |
| COUNTY TRUNK HIGHWAY | CTH | SECTION | SEC |
| DISTANCE | DIST | SEPTIC VENT | SEPV |
| CORNER | COR | SQUARE FEET | SF |
| DOCUMENT NUMBER | DOC | STATE TRUNK HIGHWAY | STH |
| EASEMENT | EASE | STATION | STA |
| EXISTING | EX | TELEPHONE PEDESTAL | TP |
| GAS VALVE | GV | TEMPORARY LIMITED EASEMENT | TLE |
| GRID NORTH | GN | EASEMENT | |
| HIGHWAY EASEMENT | HE | TRANSPORTATION PROJECT PLAT | TPP |
| IDENTIFICATION | ID | UNITED STATES HIGHWAY | USH |
| LAND CONTRACT | LC | VOLUME | V |
| 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 | | |

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

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

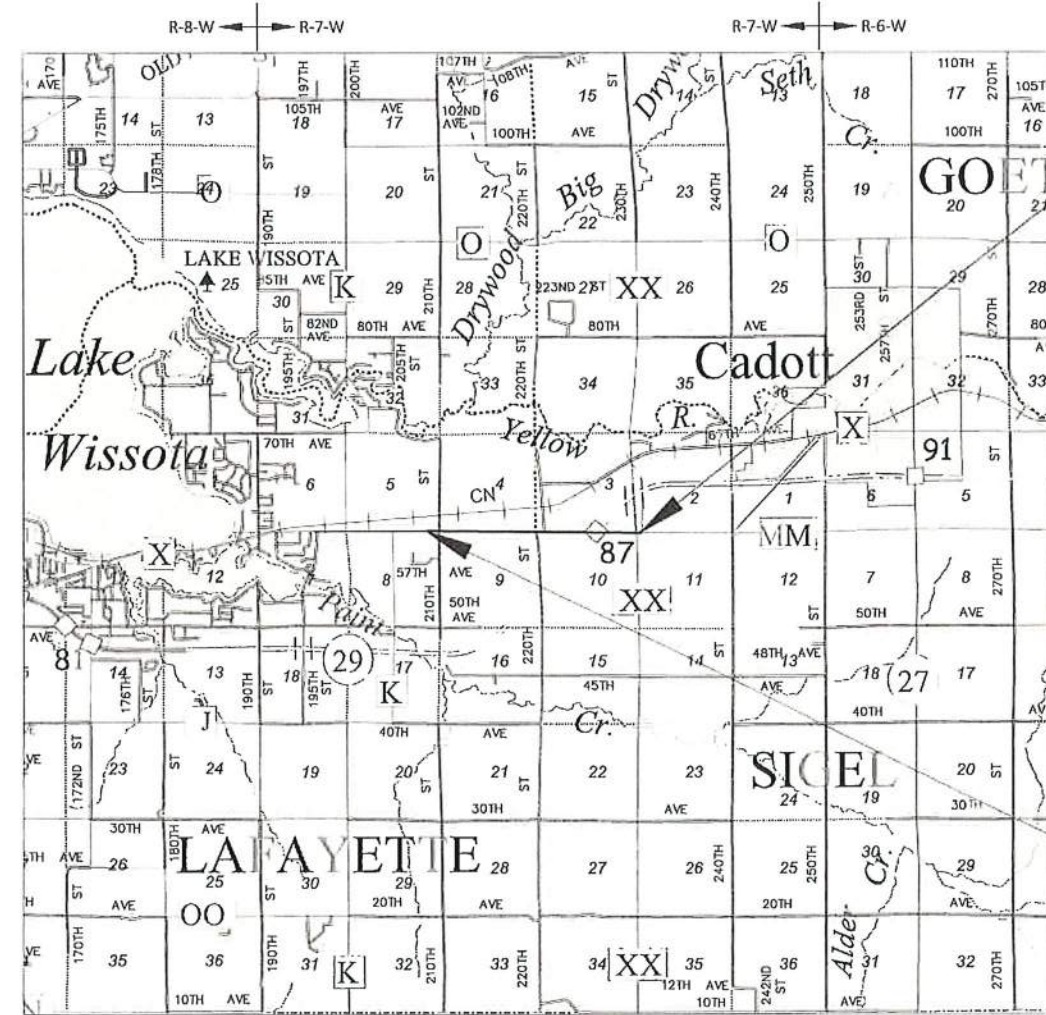
RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

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

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 AND / OR EXISTING OCCUPATIONAL LINES.

DIMENSIONS FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO 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.

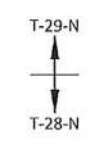


LAYOUT
 SCALE 0 2 MI
 TOTAL NET LENGTH OF CENTERLINE = 2.221 MI.

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

| | | |
|--|----------------------|-------------------|
| R/W PROJECT NUMBER 8919-03-05 | SHEET NUMBER 4.01 | TOTAL SHEETS 7 |
| FEDERAL PROJECT NUMBER N/A | | |
| PLAT OF RIGHT OF WAY REQUIRED FOR CHIPPEWA FALLS - CADOTT 197TH ST TO CTH XX | | |
| CTH X | CHIPPEWA COUNTY | |
| CONSTRUCTION PROJECT NUMBER 8919-03-75 | | |

END RELOCATION ORDER
 STA 190+25.00
 291.67' EAST AND 4.03' SOUTH OF
 THE SOUTHEAST SEC CORNER
 OF SEC 3, T-28-N, R-7-W



BEGIN RELOCATION ORDER
 STA 73+00.00
 745.94' WEST AND 0.96' NORTH OF
 THE SOUTHWEST CORNER OF SEC 5
 T-28-N, R-7-W

CORRE ENGINEERING
 MADISON | EAU CLAIRE | WAUKESHA | APPLETON | TOMAH | WAUSAU

WISCONSIN
 BRYON J. MOTSZKO
 S-2846
 MENOMONIE WI
 LAND SURVEYOR

I, BRYON J. MOTSZKO, PROFESSIONAL LAND SURVEYOR, S-2846, HEREBY CERTIFY THAT I HAVE SURVEYED THE LAND DESCRIBED HEREON AND THAT THE MAP HEREON IS A CORRECT REPRESENTATION OF THAT SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE: 3/7/23 *Bryon Motzko*
 (Signature)

| | |
|--|-----------------|
| REVISION DATE | CHIPPEWA COUNTY |
| APPROVED FOR THE COUNTY DATE: 3-7-23 <i>Bryon Motzko</i> (Signature) | |


SCHEDULE OF LAND & INTERESTS REQUIRED

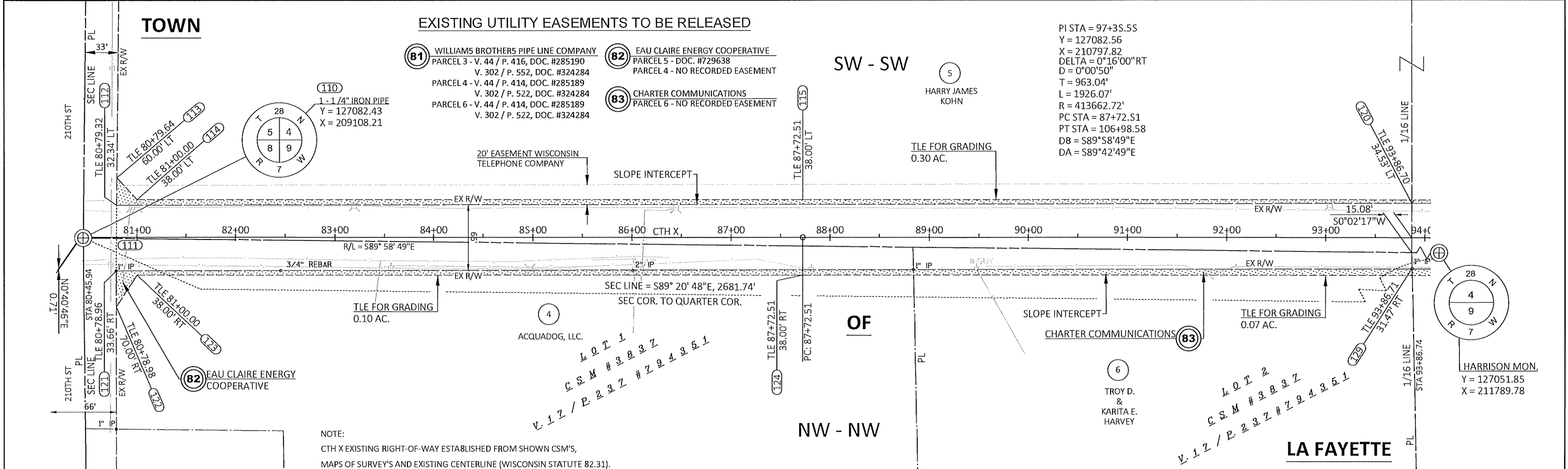
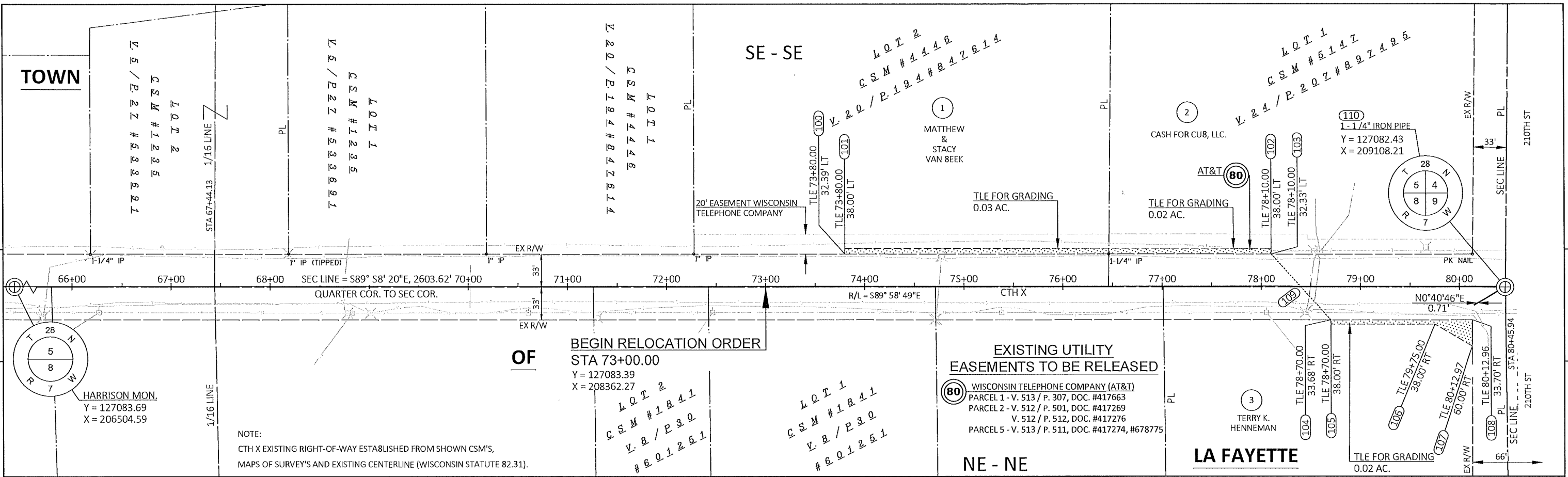
OWNERS NAMES ARE SHOWN FOR REFERENCE ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE COUNTY.

| PARCEL NUMBER | SHEET NUMBER | OWNER | INTEREST REQ'D | R/W REQUIRED | | | T.L.E. |
|---------------|--------------|--|----------------|--------------|------------------|---------------|---------|
| | | | | NEW (ACRES) | EXISTING (ACRES) | TOTAL (ACRES) | (ACRES) |
| 1 | 4.03 | MATTHEW & STACY VAN BEEK | TLE | --- | --- | --- | 0.03 |
| 2 | 4.03 | CASH FOR CUB, LLC. | TLE | --- | --- | --- | 0.02 |
| 3 | 4.03 | TERRY K. HENNEMAN | TLE | --- | --- | --- | 0.02 |
| 4 | 4.03 | ACQUADOG, LLC. | TLE | --- | --- | --- | 0.10 |
| 5 | 4.03, 4.04 | HARRY JAMES KOHN | TLE | --- | --- | --- | 0.30 |
| 6 | 4.03 | TROY D. & KARITA E. HARVEY | TLE | --- | --- | --- | 0.07 |
| 7 | 4.04 | RICHARD R. KORN | TLE | --- | --- | --- | 0.07 |
| 8 | 4.04, 4.05 | KIM R. BARQUIST | TLE | --- | --- | --- | 0.36 |
| 9 | 4.04 | TODD MICHAEL BURGESS & LINDA LEE CATT | TLE | --- | --- | --- | 0.08 |
| 10 | 4.04, 4.05 | BRUCE KASAL REVOCABLE TRUST DATED MAY 27, 2016 | TLE | --- | --- | --- | 0.10 |
| 11 | 4.05, 4.06 | WILLIAMS PIPE LINE COMPANY | TLE | --- | --- | --- | 0.11 |
| 12 | 4.05 | TERRENCE J. & KRISTEN A. WALTERS | TLE | --- | --- | --- | 0.08 |
| 13 | 4.06 | DUANE H. EICHELT | TLE | --- | --- | --- | 0.04 |
| 14 | 4.06 | KENDELL D. & SHIRLEY A. FROELICH | TLE | --- | --- | --- | 0.01 |
| 15 | 4.06 | ADAM R. BURYNSKI & JOHN A. DUGAL | TLE | --- | --- | --- | 0.02 |
| 16 | 4.06 | STEVEN J. WEBB & DRIN R. WEBB & KYLE P. ROTHBAUER & ALEX J. ROTHBAUER & DYLAN R. ROTHBAUER | TLE | --- | --- | --- | 0.01 |
| 17 | 4.06 | CADOTT GRAIN SERVICES, LLC. | TLE | --- | --- | --- | 0.05 |
| 18 | 4.06 | DAIRYLAND POWER COOPERATIVE | TLE | --- | --- | --- | 0.03 |
| 19 | 4.06 | TSORB, LLC. | TLE | --- | --- | --- | 0.03 |
| 20 | 4.06 | SHEY T. PETERSON | TLE | --- | --- | --- | 0.01 |
| 21 | 4.06 | FROG HOP, LLC. | TLE | --- | --- | --- | 0.08 |

UTILTY INTERESTS REQUIRED

| UTILITY NUMBER | SHEET NUMBER | OWNER | INTEREST REQUIRED |
|----------------|--------------|-------------------------------------|-------------------|
| 80 | 4.03 -4.05 | WISCONSIN TELEPHONE COMPANY | RELEASE OF RIGHTS |
| 81 | 4.03 - 4.06 | WILLIAMS BROTHERS PIPE LINE COMPANY | RELEASE OF RIGHTS |
| 82 | 4.03 - 4.06 | EAU CLAIRE ENERGY COOPERATIVE | RELEASE OF RIGHTS |
| 83 | 4.03 | CHARTER COMMUNICATIONS | RELEASE OF RIGHTS |
| 84 | 4.04 - 4.06 | NORTH-WEST TELEPHONE COMPANY | RELEASE OF RIGHTS |
| 85 | 4.06 | DAIRYLAND POWER COOPERATIVE | RELEASE OF RIGHTS |

| | | | | | |
|---------------|---------------|---|------------------|--|-----------------|
| REVISION DATE | DATE : 3/7/23 | SCALE, FEET | HWY: CTH X | R/W PROJECT NUMBER : 8919-03-05 | PLAT SHEET 4.02 |
| | GRID FACTOR |  | COUNTY: CHIPPEWA | CONSTRUCTION PROJECT NUMBER : 8919-03-75 | PS&E SHEET |



| | | | | | |
|---------------|---------------|-------------|------------------|---|-----------------|
| REVISION DATE | DATE : 3/7/23 | SCALE, FEET | HWY: CTH X | R/W PROJECT NUMBER: 8919-03-05 | PLAT SHEET 4.03 |
| | GRID FACTOR | 0 25 50 | COUNTY: CHIPPEWA | CONSTRUCTION PROJECT NUMBER: 8919-03-75 | PS&E SHEET |

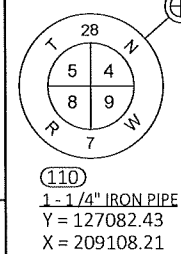
TOWN

EXISTING UTILITY EASEMENTS TO BE RELEASED

- (80) WISCONSIN TELEPHONE COMPANY (AT&T)
PARCEL 5 - V. 512 / P. 511, DOC. #417274, # 678775
PARCEL 10 - V. 319 / P. 10, DOC. #331029
- (81) WILLIAMS BROTHERS PIPE LINE COMPANY
PARCEL 7 - V. 44 / P. 408, DOC. #285186
V. 302 / P. 552, DOC. #324284
PARCEL 8 - V. 44 / P. 408, DOC. #285186
V. 302 / P. 552, DOC. #324284
PARCEL 10 - V. 46 / P. 38, DOC. #287493
V. 302 / P. 552, DOC. #324284
- (82) EAU CLAIRE ENERGY COOPERATIVE
PARCEL 8 - V. 732 / P. 377, DOC. #513347, # 729638
PARCEL 9 - V. 565 / P. 679, DOC. #444081
PARCEL 10 - V. 796 / P. 191, DOC. #535749
- (84) NORTH WEST TELEPHONE COMPANY
PARCEL 7 - V. 355 / P. 587, DOC. #346832
PARCEL 8 - V. 355 / P. 587, DOC. #346832

SE - SW

(5) HARRY JAMES KOHN



(110)
1 - 1/4" IRON PIPE
Y = 127082.43
X = 209108.21

NOTE:
CTH X EXISTING RIGHT-OF-WAY ESTABLISHED FROM SHOWN CSM'S,
MAPS OF SURVEY'S AND EXISTING CENTERLINE (WISCONSIN STATUTE 82.31).

MAP OF SURVEY
6149B
DATED SEPTEMBER
2016

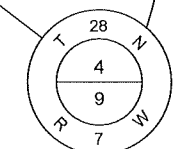
PI STA = 97+35.55
Y = 127082.56
X = 210797.82
DELTA = 0°16'00" RT
D = 0°00'50"
T = 963.04'
L = 1926.07'
R = 413662.72'
PC STA = 87+72.51
PT STA = 106+98.58
DB = S89°58'49"E
DA = S89°42'49"E

OF

(8) KIM R BARQUIST

EAU CLAIRE ENERGY (82) COOPERATIVE

HARRISON MON.
Y = 127051.85
X = 211789.78



NE - NW

LA FAYETTE

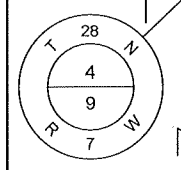
TOWN

SW - SE

LOT 1
CSM # 587
V. 2 / P. 63 # 435842

(9) TODD MICHAEL BURGESS & LINDA LEE CATT

(10) BRUCE KASAL REVOCABLE TRUST
DATED MAY 27, 2016



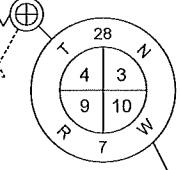
HARRISON MON.
Y = 127051.85
X = 211789.78

NOTE:
CTH X EXISTING RIGHT-OF-WAY ESTABLISHED FROM SHOWN CSM'S,
MAPS OF SURVEY'S AND EXISTING CENTERLINE (WISCONSIN STATUTE 82.31).

(8) KIM R BARQUIST

NW - NE

LA FAYETTE

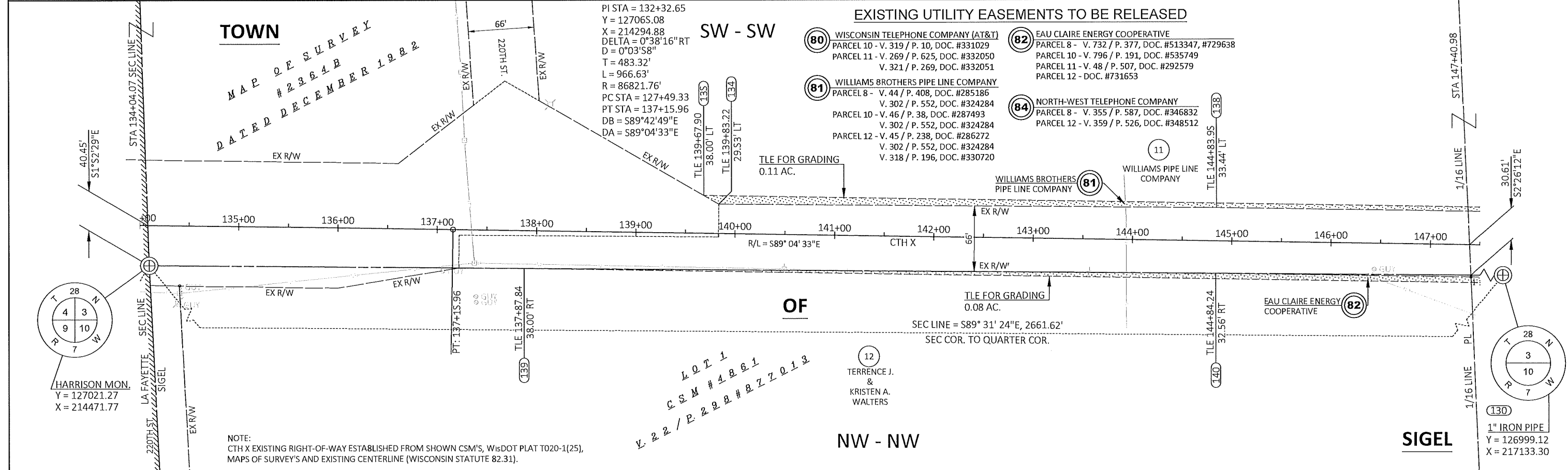
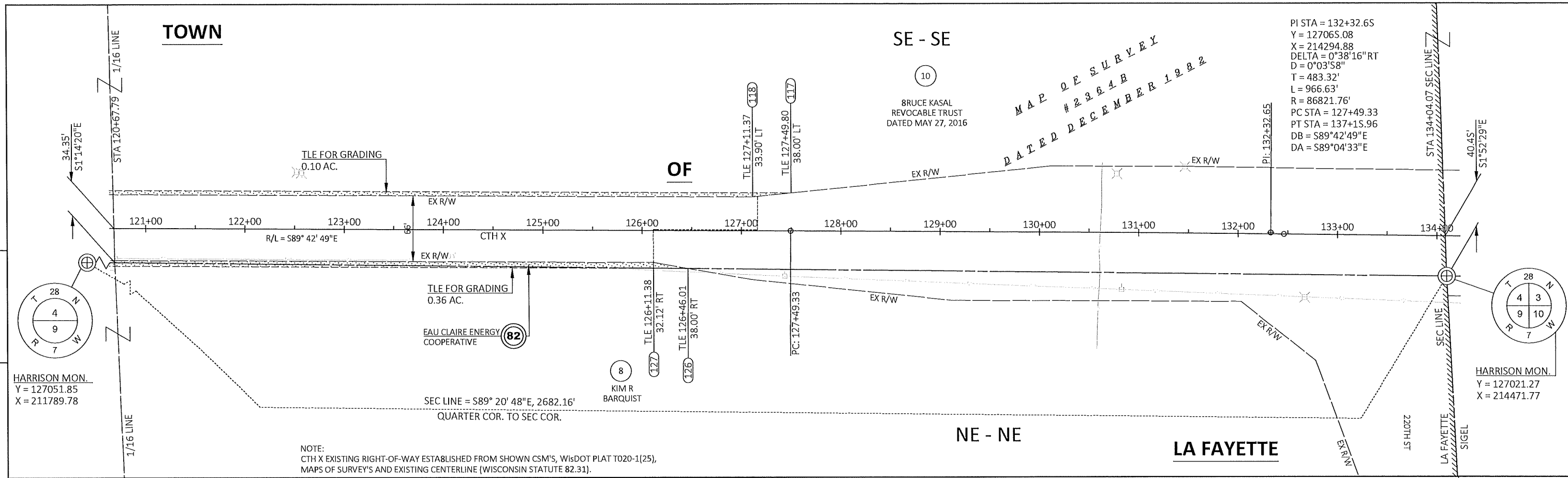


HARRISON MON.
Y = 127021.27
X = 214471.77

| | | | | | |
|---------------|---------------|-------------|------------------|---|-----------------|
| REVISION DATE | DATE : 3/7/23 | SCALE, FEET | HWY: CTH X | R/W PROJECT NUMBER: 8919-03-05 | PLAT SHEET 4.04 |
| | GRID FACTOR | 0 25 50 | COUNTY: CHIPPEWA | CONSTRUCTION PROJECT NUMBER: 8919-03-75 | PS&E SHEET |

FILE NAME : 040102-RP.DWG
LAYOUT NAME - 040104-rp

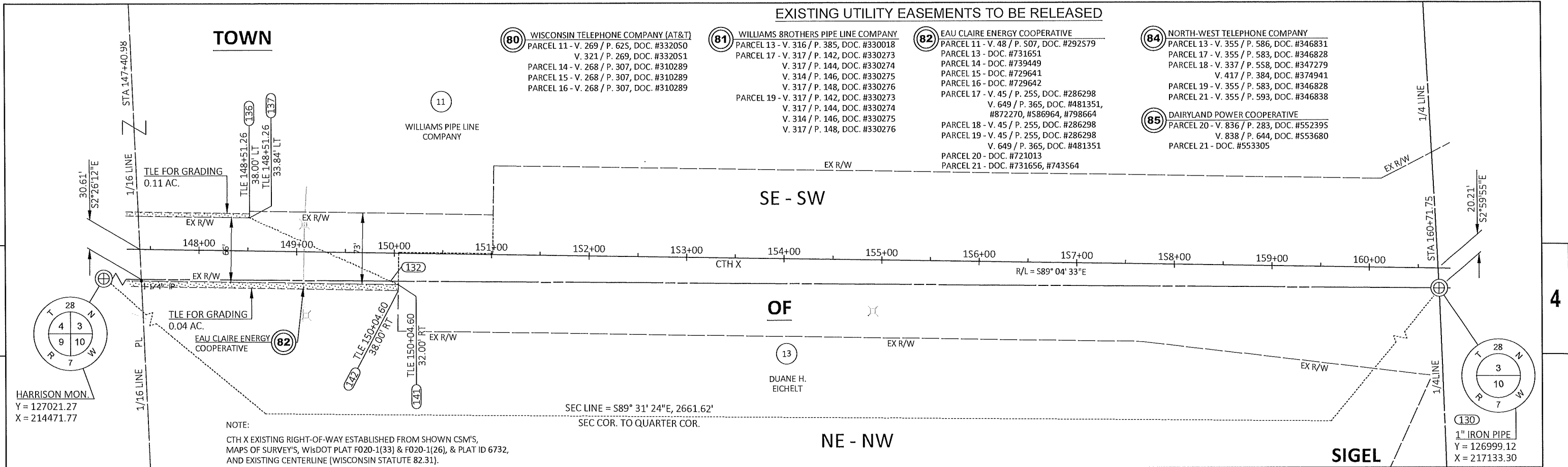
PLOT DATE : 3/7/2023 10:05 AM PLOT BY : BOBBY JONES PLOT NAME : PLOT SCALE :



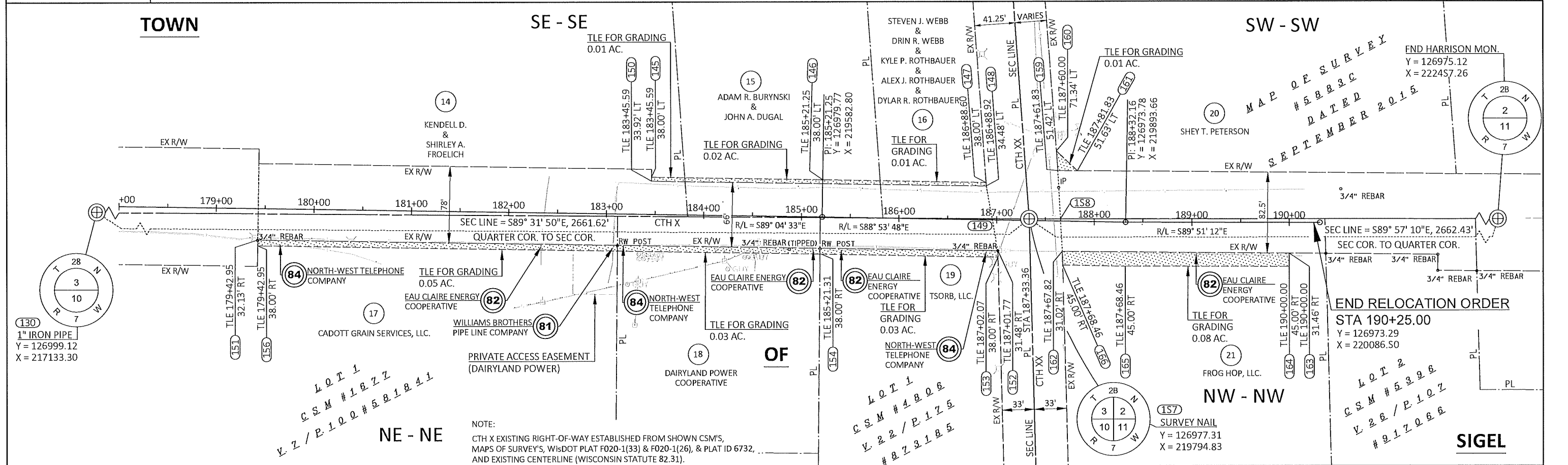
| | | | | | |
|---------------|---------------|-------------|------------------|---|-----------------|
| REVISION DATE | DATE : 3/7/23 | SCALE, FEET | HWY: CTH X | R/W PROJECT NUMBER: 8919-03-05 | PLAT SHEET 4.05 |
| | GRID FACTOR | | COUNTY: CHIPPEWA | CONSTRUCTION PROJECT NUMBER: 8919-03-75 | PS&E SHEET |

EXISTING UTILITY EASEMENTS TO BE RELEASED

- (80) WISCONSIN TELEPHONE COMPANY (AT&T)
 PARCEL 11 - V. 269 / P. 625, DOC. #332050
 V. 321 / P. 269, DOC. #332051
 PARCEL 14 - V. 268 / P. 307, DOC. #310289
 PARCEL 15 - V. 268 / P. 307, DOC. #310289
 PARCEL 16 - V. 268 / P. 307, DOC. #310289
- (81) WILLIAMS BROTHERS PIPE LINE COMPANY
 PARCEL 13 - V. 316 / P. 385, DOC. #330018
 PARCEL 17 - V. 317 / P. 142, DOC. #330273
 V. 317 / P. 144, DOC. #330274
 V. 314 / P. 146, DOC. #330275
 V. 317 / P. 148, DOC. #330276
 PARCEL 19 - V. 317 / P. 142, DOC. #330273
 V. 317 / P. 144, DOC. #330274
 V. 314 / P. 146, DOC. #330275
 V. 317 / P. 148, DOC. #330276
- (82) EAU CLAIRE ENERGY COOPERATIVE
 PARCEL 11 - V. 48 / P. 507, DOC. #292579
 PARCEL 13 - DOC. #731651
 PARCEL 14 - DOC. #739449
 PARCEL 15 - DOC. #729641
 PARCEL 16 - DOC. #729642
 PARCEL 17 - V. 45 / P. 255, DOC. #286298
 V. 649 / P. 365, DOC. #481351,
 #872270, #586964, #798664
 PARCEL 18 - V. 45 / P. 255, DOC. #286298
 PARCEL 19 - V. 45 / P. 255, DOC. #286298
 V. 649 / P. 365, DOC. #481351
 PARCEL 20 - DOC. #721013
 PARCEL 21 - DOC. #731656, #743564
- (84) NORTH-WEST TELEPHONE COMPANY
 PARCEL 13 - V. 355 / P. 586, DOC. #346831
 PARCEL 17 - V. 355 / P. 583, DOC. #346828
 PARCEL 18 - V. 337 / P. 558, DOC. #347279
 V. 417 / P. 384, DOC. #374941
 PARCEL 19 - V. 355 / P. 583, DOC. #346828
 PARCEL 21 - V. 355 / P. 593, DOC. #346838
- (85) DAIRYLAND POWER COOPERATIVE
 PARCEL 20 - V. 836 / P. 283, DOC. #552395
 V. 838 / P. 644, DOC. #553680
 PARCEL 21 - DOC. #553305



NOTE:
 CTH X EXISTING RIGHT-OF-WAY ESTABLISHED FROM SHOWN CSM'S,
 MAPS OF SURVEY'S, WISDOT PLAT F020-1(33) & F020-1(26), & PLAT ID 6732,
 AND EXISTING CENTERLINE (WISCONSIN STATUTE 82.31).



NOTE:
 CTH X EXISTING RIGHT-OF-WAY ESTABLISHED FROM SHOWN CSM'S,
 MAPS OF SURVEY'S, WISDOT PLAT F020-1(33) & F020-1(26), & PLAT ID 6732,
 AND EXISTING CENTERLINE (WISCONSIN STATUTE 82.31).

| | | | |
|---------------|---------------|-------------|---|
| REVISION DATE | DATE : 3/7/23 | SCALE, FEET | HWY: CTH X |
| | GRID FACTOR | | COUNTY: CHIPPEWA |
| | | | R/W PROJECT NUMBER: 8919-03-05 |
| | | | CONSTRUCTION PROJECT NUMBER: 8919-03-75 |
| | | | PLAT SHEET 4.06 |
| | | | PS&E SHEET |
| | | | E |

COURSE TABLE

| PNT - PNT | BEARING | DISTANCE |
|-----------|---------------|----------|
| 110 - 109 | N89° 58' 20"W | 205.94' |
| 109 - 103 | N42° 15' 01"W | 44.60' |
| 103 - 100 | N89° 58' 20"W | 430.00' |
| 100 - 101 | N00° 01' 11"E | 5.61' |
| 101 - 102 | S89° 58' 49"E | 430.00' |
| 102 - 103 | S00° 01' 11"W | 5.67' |
| 109 - 104 | S42° 15' 01"E | 44.60' |
| 104 - 105 | S00° 01' 11"W | 4.32' |
| 105 - 106 | S89° 58' 49"E | 105.00' |
| 106 - 107 | S59° 53' 43"E | 43.89' |
| 107 - 108 | N00° 01' 08"W | 26.30' |
| 108 - 104 | N89° 58' 20"W | 142.96' |
| 110 - 111 | S89° 20' 48"E | 33.20' |
| 111 - 112 | N00° 20' 18"E | 33.42' |
| 112 - 113 | N00° 40' 48"E | 27.66' |
| 113 - 114 | S42° 45' 32"E | 29.97' |
| 114 - 115 | S89° 58' 49"E | 672.51' |
| 115 - 116 | CURVE DATA | |
| 116 - 117 | S89° 42' 49"E | 2051.21' |
| 117 - 118 | S84° 11' 27"W | 38.65' |
| 118 - 119 | N89° 43' 13"W | 1984.64' |
| 119 - 120 | N89° 45' 56"W | 1340.14' |
| 120 - 112 | S89° 56' 37"W | 1307.42' |
| 111 - 121 | S00° 20' 18"W | 32.59' |
| 121 - 122 | S00° 01' 08"E | 36.34' |
| 122 - 123 | N33° 19' 04"E | 38.29' |
| 123 - 124 | S89° 58' 49"E | 672.51' |
| 124 - 125 | CURVE DATA | |
| 125 - 126 | S89° 42' 49"E | 1947.43' |
| 126 - 127 | N80° 04' 20"W | 35.13' |
| 127 - 128 | N89° 43' 13"W | 1884.62' |
| 128 - 129 | N89° 45' 56"W | 1339.94' |
| 129 - 121 | S89° 56' 37"W | 1307.71' |
| 134 - 135 | N60° 07' 23"W | 17.50' |
| 135 - 136 | S89° 04' 33"E | 883.36' |
| 136 - 137 | S00° 55' 05"W | 4.16' |
| 137 - 138 | N89° 08' 17"W | 367.32' |
| 138 - 134 | N89° 31' 24"W | 500.74' |
| 130 - 132 | N89° 31' 24"W | 1075.19' |
| 132 - 137 | N65° 50' 25"W | 158.16' |

PNT 115 TO PNT 116
L = 1926.25'
LCH = 1926.24'
CB = S89° 50' 49"E
R = 413700.72'
Δ = 0° 16' 00"

PNT 124 TO PNT 125
L = 1925.89'
LCH = 1925.89'
CB = S89° 50' 49"E
R = 413624.72'
Δ = 0° 16' 00"

COURSE TABLE

| PNT - PNT | BEARING | DISTANCE |
|-----------|---------------|----------|
| 139 - 140 | S89° 31' 23"E | 696.42' |
| 140 - 141 | S89° 08' 17"E | 520.36' |
| 141 - 142 | S00° 55' 05"W | 6.00' |
| 142 - 139 | N89° 04' 33"W | 1216.76' |
| 132 - 141 | S65° 50' 25"E | 8.71' |
| 157 - 158 | S89° 57' 10"E | 32.12' |
| 158 - 159 | N03° 03' 11"W | 49.34' |
| 159 - 160 | N04° 08' 54"W | 20.00' |
| 160 - 161 | S46° 48' 50"E | 29.41' |
| 161 - 159 | N89° 28' 46"W | 20.00' |
| 158 - 162 | S03° 03' 11"E | 33.32' |
| 162 - 166 | S01° 31' 36"E | 14.00' |
| 166 - 165 | S88° 53' 48"E | 64.08' |
| 165 - 164 | S89° 51' 12"E | 168.21' |
| 164 - 163 | N00° 08' 48"E | 13.54' |
| 163 - 162 | N89° 28' 46"W | 232.69' |
| 157 - 149 | N89° 31' 50"W | 37.89' |
| 149 - 148 | N09° 55' 27"W | 33.90' |
| 148 - 147 | N04° 01' 51"W | 3.53' |
| 147 - 146 | N88° 53' 48"W | 167.41' |
| 146 - 145 | N89° 04' 33"W | 175.72' |
| 145 - 150 | S00° 55' 05"W | 4.08' |
| 150 - 148 | S89° 04' 55"E | 343.43' |
| 149 - 152 | S09° 55' 27"E | 33.30' |
| 152 - 153 | S01° 31' 36"E | 6.53' |
| 153 - 154 | N88° 53' 48"W | 180.76' |
| 154 - 156 | N89° 04' 33"W | 578.24' |
| 155 - 156 | N89° 04' 33"W | 368.53' |
| 151 - 152 | S89° 04' 55"E | 758.72' |

| | | | | |
|---------------|-------|-------|-------|-------|
| REVISION DATE | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

| | |
|---------------|-------------|
| DATE : 3/7/23 | SCALE, FEET |
| GRID FACTOR | N/A |

| | |
|------------------|--|
| HWY: CTH X | R/W PROJECT NUMBER : 8919-03-05 |
| COUNTY: CHIPPEWA | CONSTRUCTION PROJECT NUMBER : 8919-03-75 |

| | |
|-----------------|------------|
| PLAT SHEET 4.07 | PS&E SHEET |
|-----------------|------------|

| |
|---|
| E |
|---|

| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|----------|-----------|------------|------------|-----------|-------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 1 | 11+87.57 | 21.98' LT | 127085.074 | 202249.699 | 935.70 | MAG NAIL |



MATCH LINE 24+75

5

5

BEGIN PROJECT
STA 10+70.36
 SAWCUT REQ'D
 Y = 127061.543
 X = 202132.791

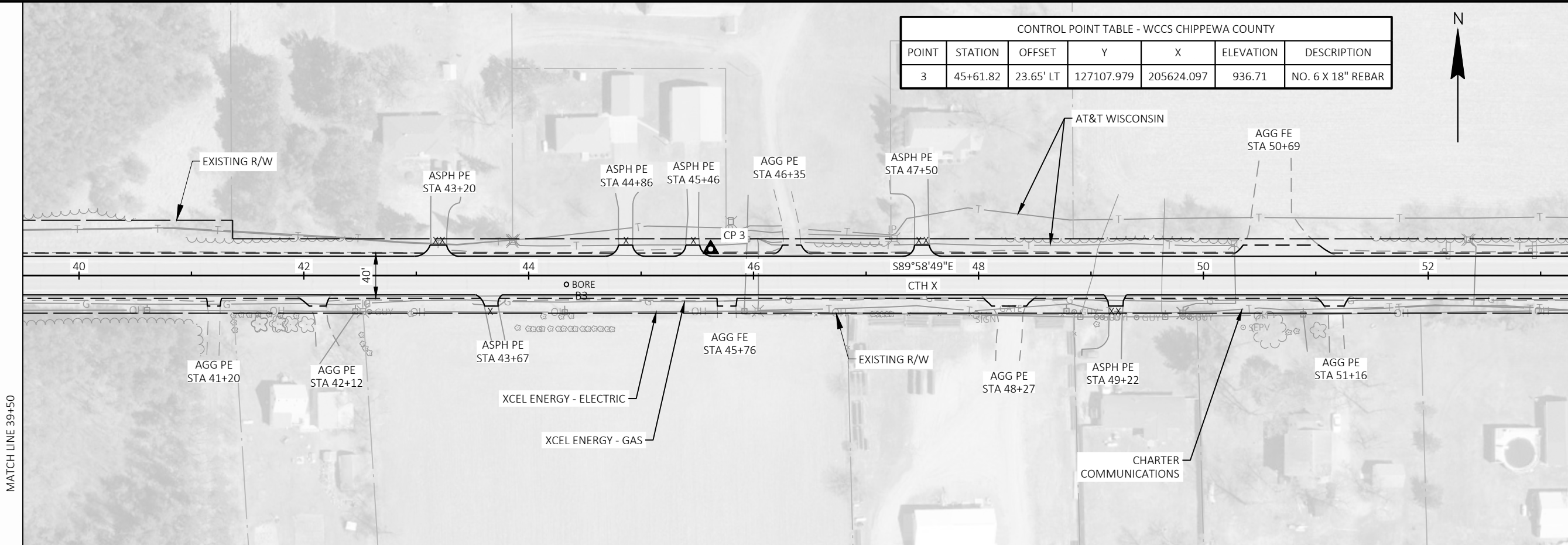
| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|----------|-----------|------------|------------|-----------|-------------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 2 | 28+43.35 | 28.57' RT | 127056.350 | 203905.614 | 936.08 | NO. 6 X 18" REBAR |



MATCH LINE 39+50

MATCH LINE 24+75

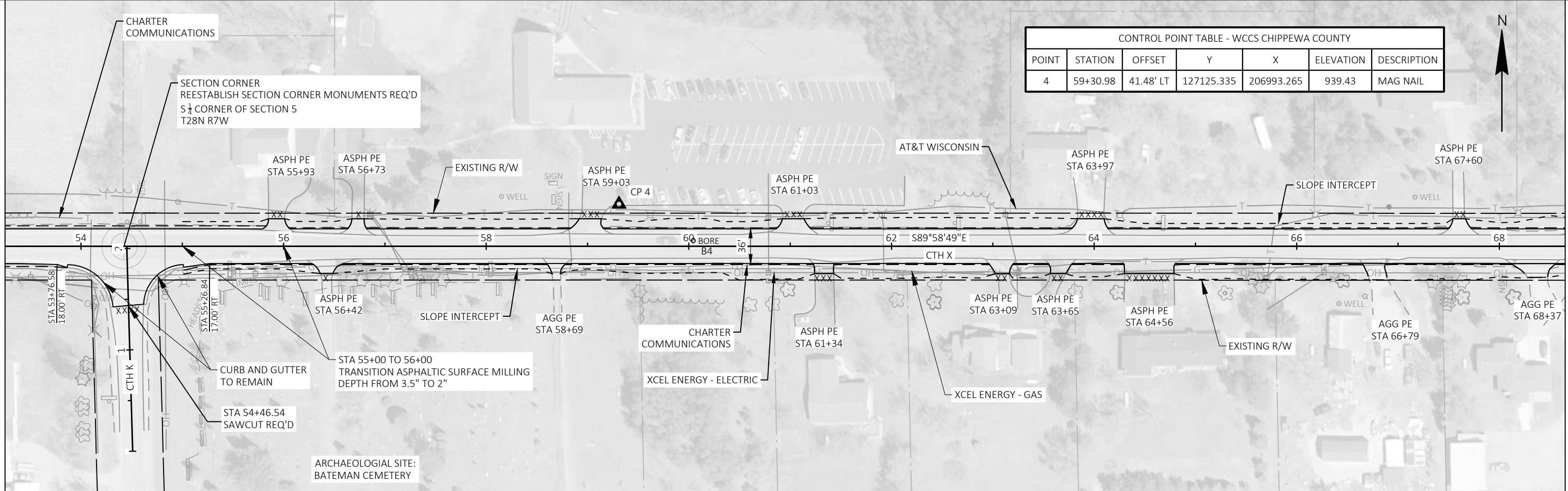
| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|----------|-----------|------------|------------|-----------|-------------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 3 | 45+61.82 | 23.65' LT | 127107.979 | 205624.097 | 936.71 | NO. 6 X 18" REBAR |



5

5

| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|----------|-----------|------------|------------|-----------|-------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 4 | 59+30.98 | 41.48' LT | 127125.335 | 206993.265 | 939.43 | MAG NAIL |

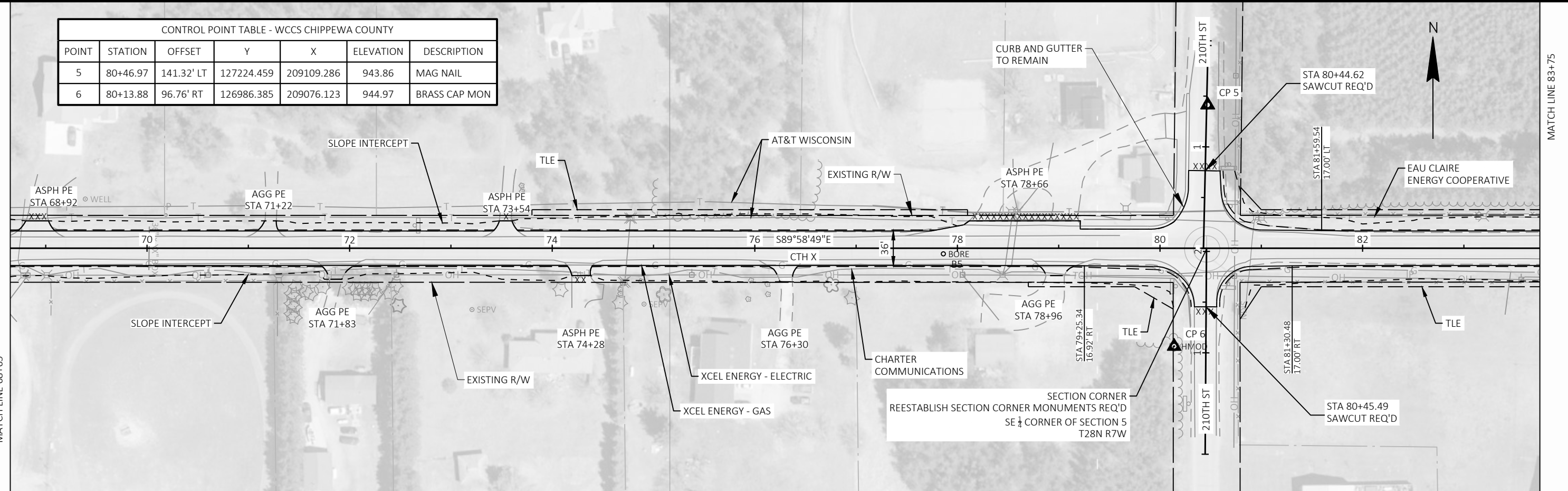


MATCH LINE 53+25

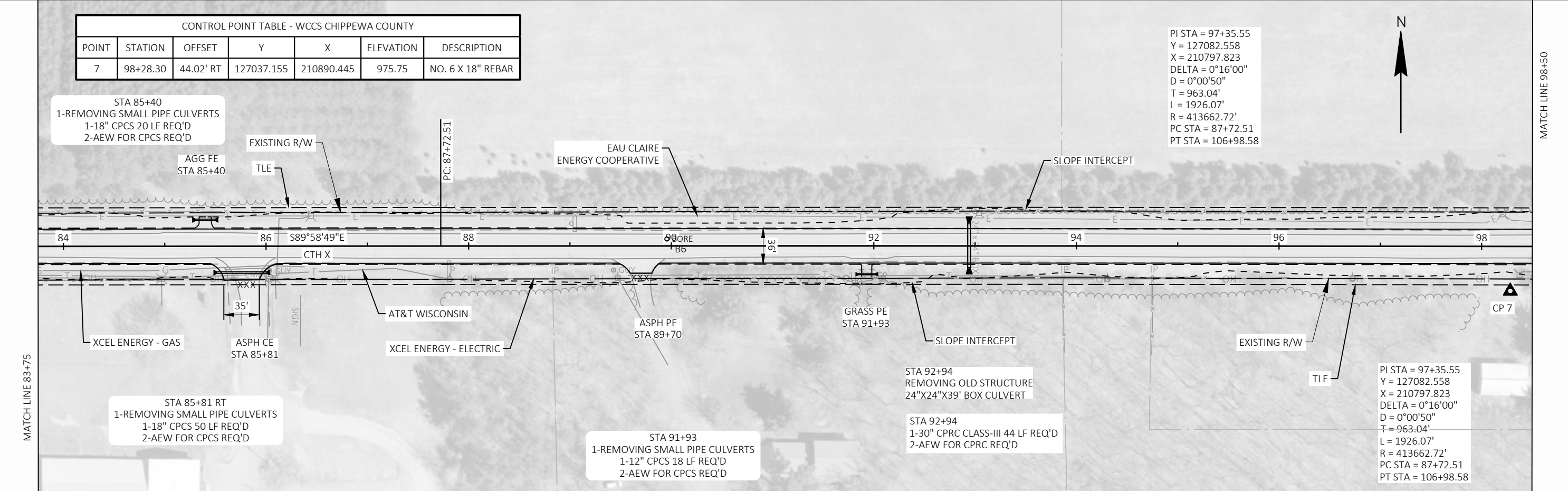
MATCH LINE 68+65

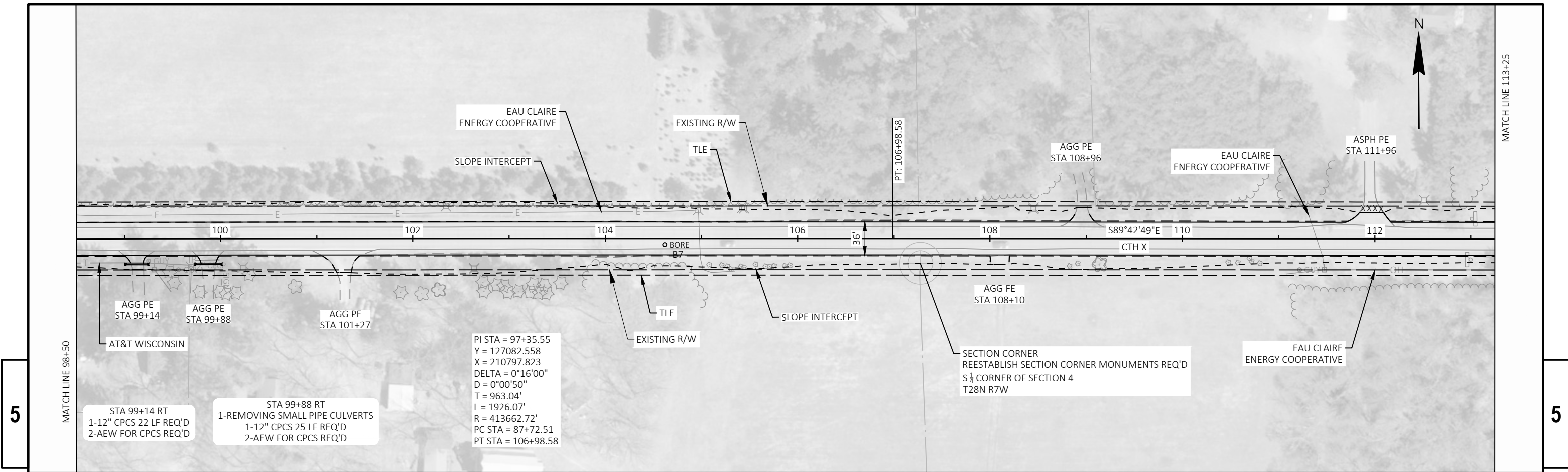
| | | | | | |
|------------------------|------------|------------------|-------------|-------|----------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | PLAN SHEETS | SHEET | E |
|------------------------|------------|------------------|-------------|-------|----------|

| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|----------|------------|------------|------------|-----------|---------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 5 | 80+46.97 | 141.32' LT | 127224.459 | 209109.286 | 943.86 | MAG NAIL |
| 6 | 80+13.88 | 96.76' RT | 126986.385 | 209076.123 | 944.97 | BRASS CAP MON |



| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|----------|-----------|------------|------------|-----------|-------------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 7 | 98+28.30 | 44.02' RT | 127037.155 | 210890.445 | 975.75 | NO. 6 X 18" REBAR |

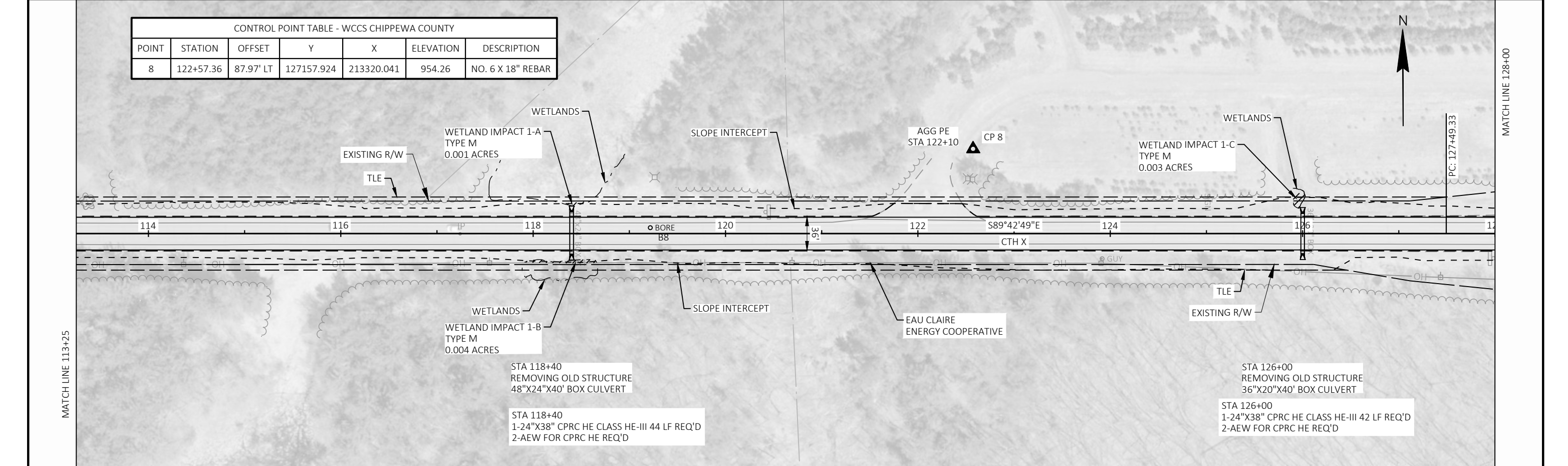




5

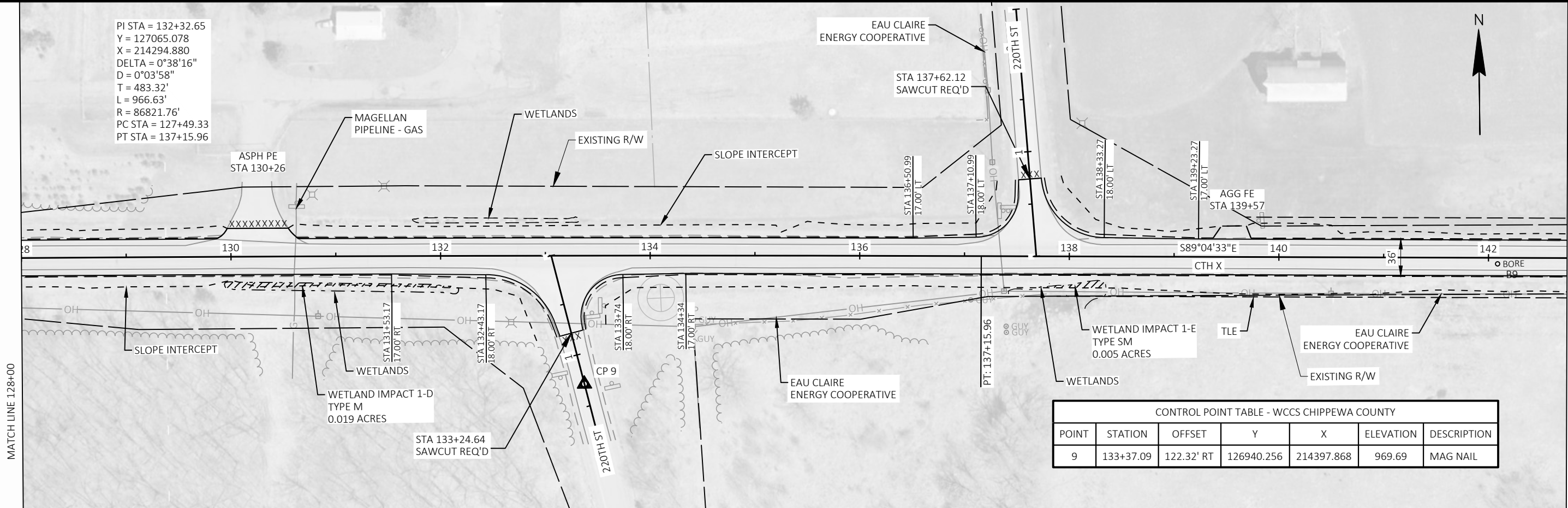
5

| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|-----------|-----------|------------|------------|-----------|-------------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 8 | 122+57.36 | 87.97' LT | 127157.924 | 213320.041 | 954.26 | NO. 6 X 18" REBAR |



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA PLAN SHEETS SHEET E

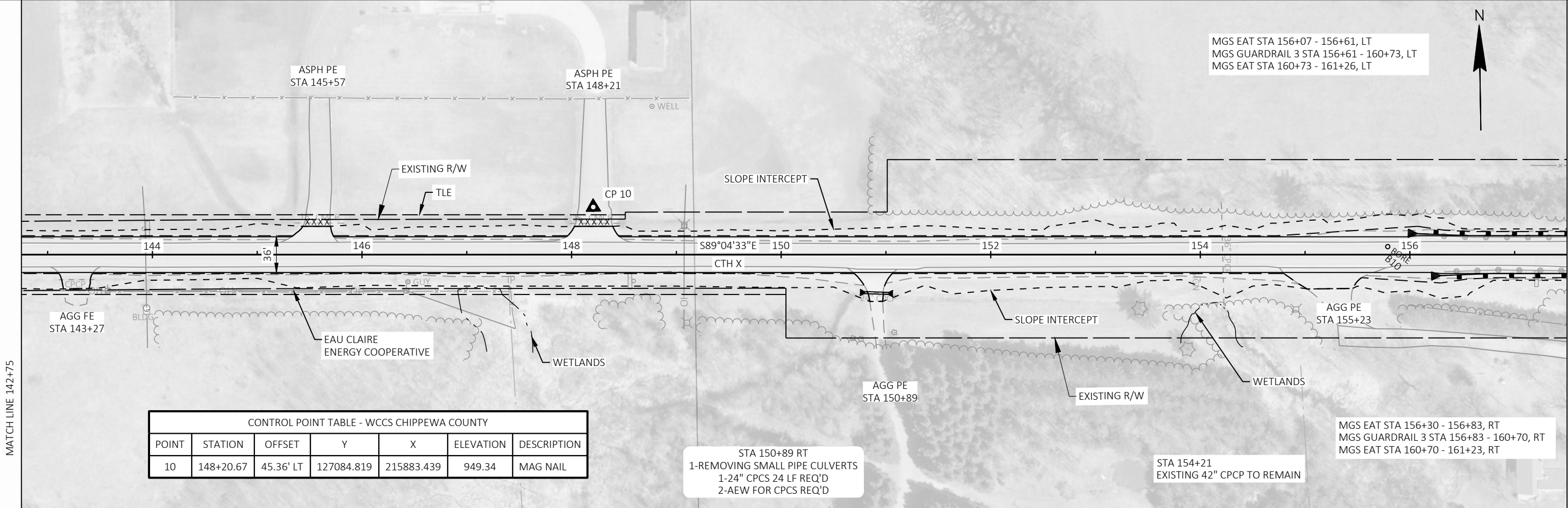
PI STA = 132+32.65
 Y = 127065.078
 X = 214294.880
 DELTA = 0°38'16"
 D = 0°03'58"
 T = 483.32'
 L = 966.63'
 R = 86821.76'
 PC STA = 127+49.33
 PT STA = 137+15.96



| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|-----------|------------|------------|------------|-----------|-------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 9 | 133+37.09 | 122.32' RT | 126940.256 | 214397.868 | 969.69 | MAG NAIL |

5

5

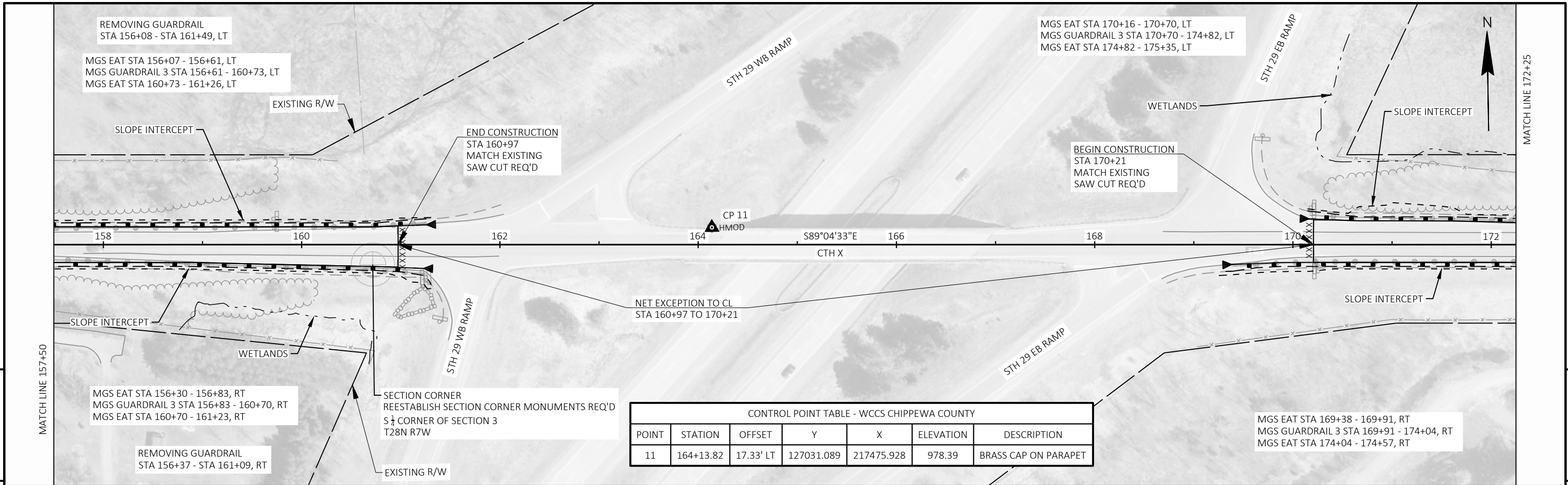


| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|-----------|-----------|------------|------------|-----------|-------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 10 | 148+20.67 | 45.36' LT | 127084.819 | 215883.439 | 949.34 | MAG NAIL |

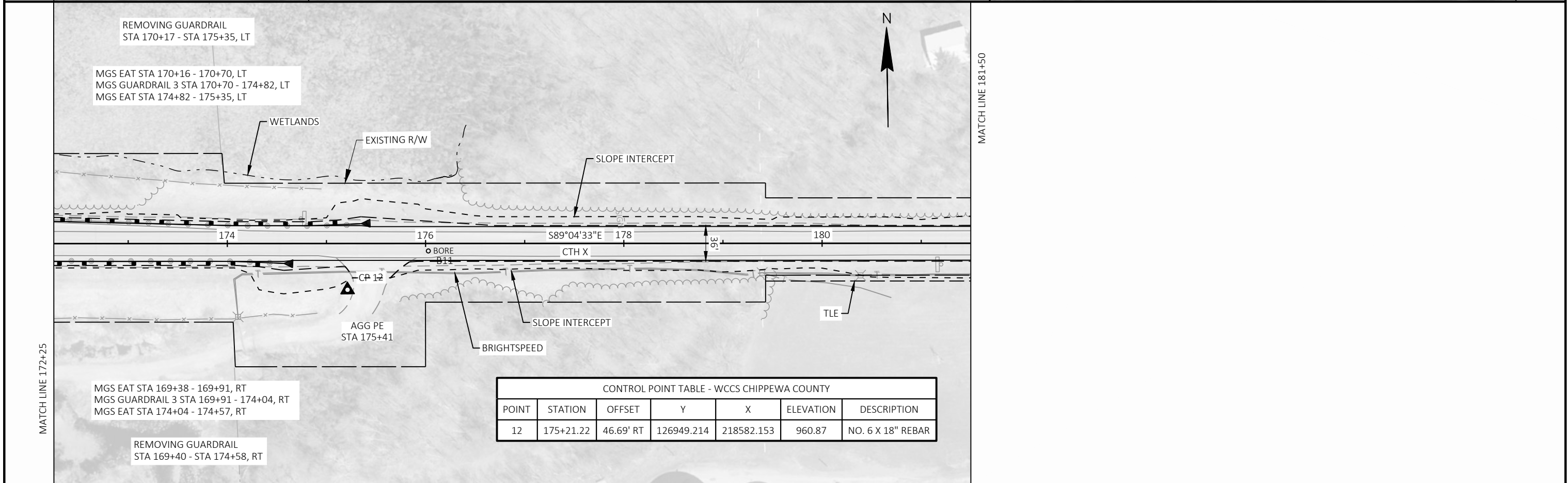
STA 150+89 RT
 1-REMOVING SMALL PIPE CULVERTS
 1-24" CPCS 24 LF REQ'D
 2-AEW FOR CPCS REQ'D

STA 154+21
 EXISTING 42" CPCP TO REMAIN

MGS EAT STA 156+30 - 156+83, RT
 MGS GUARDRAIL 3 STA 156+83 - 160+70, RT
 MGS EAT STA 160+70 - 161+23, RT

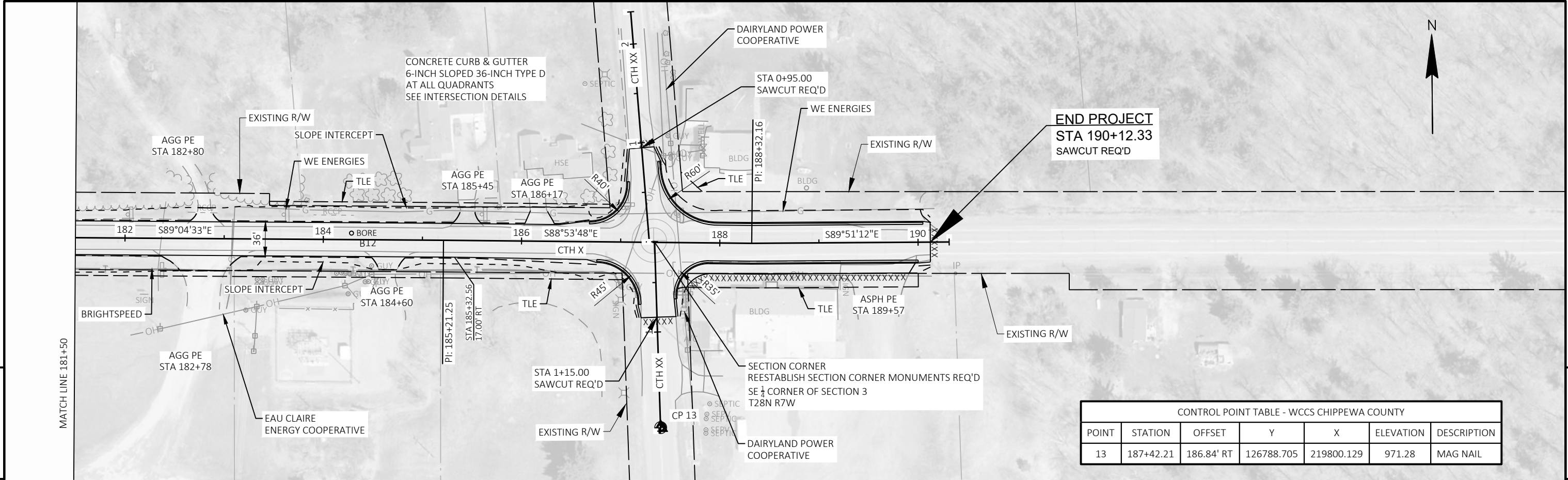


| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|-----------|-----------|------------|------------|-----------|----------------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 11 | 164+13.82 | 17.33' LT | 127031.089 | 217475.928 | 978.39 | BRASS CAP ON PARAPET |



| CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY | | | | | | |
|--|-----------|-----------|------------|------------|-----------|-------------------|
| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
| 12 | 175+21.22 | 46.69' RT | 126949.214 | 218582.153 | 960.87 | NO. 6 X 18" REBAR |

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA PLAN SHEETS SHEET E



CONTROL POINT TABLE - WCCS CHIPPEWA COUNTY

| POINT | STATION | OFFSET | Y | X | ELEVATION | DESCRIPTION |
|-------|-----------|------------|------------|------------|-----------|-------------|
| 13 | 187+42.21 | 186.84' RT | 126788.705 | 219800.129 | 971.28 | MAG NAIL |

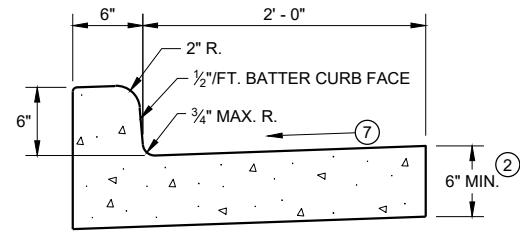
5

5

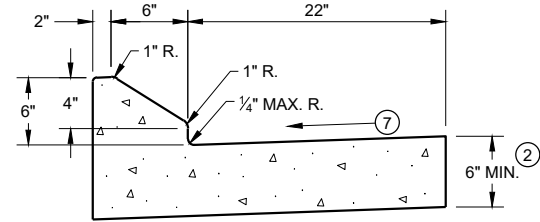
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA PLAN SHEETS SHEET E

Standard Detail Drawing List

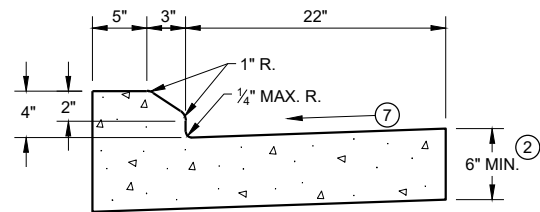
| | |
|-----------|--|
| 08D01-23A | CONCRETE CURB & GUTTER |
| 08D20-01 | DRIVEWAYS WITH CURB & GUTTER RETURNS |
| 08D21-01 | DRIVEWAYS WITHOUT CURB & GUTTER |
| 08E08-03 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E09-06 | SILT FENCE |
| 08E15-01 | CULVERT PIPE CHECK |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F02-01 | APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE |
| 08F06-04 | REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN |
| 09A01-14A | AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE |
| 14B42-07A | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-07B | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-07C | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B42-07D | MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL |
| 14B44-04A | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B44-04B | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 14B44-04C | MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS) |
| 15A03-02A | FLEXIBLE MARKER POST FOR CULVERT END |
| 15A03-02B | FLEXIBLE MARKER POST FOR CULVERT END |
| 15C02-09A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-09B | BARRICADES AND SIGNS FOR VARIOUS CLOSURES |
| 15C02-09C | DETOUR SIGNING FOR MAINLINE CLOSURES |
| 15C04-05 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC |
| 15C08-23A | PERMANENT LONGITUDINAL PAVEMENT MARKINGS |
| 15C08-23C | PAVEMENT MARKING (TURN LANES) |
| 15C08-23D | PAVEMENT MARKING (TURN LANES) |
| 15C12-09A | TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION |
| 15D44-02 | TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES |
| 15D45-03 | TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL |



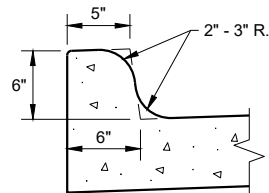
TYPES A¹ & D



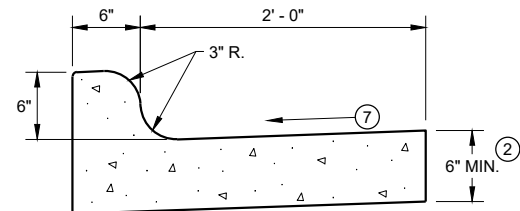
6" SLOPED CURB TYPES G¹ & J



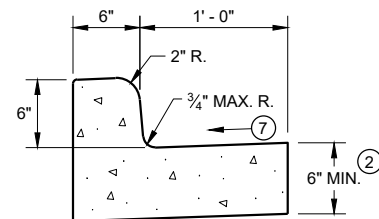
4" SLOPED CURB TYPES G¹ & J



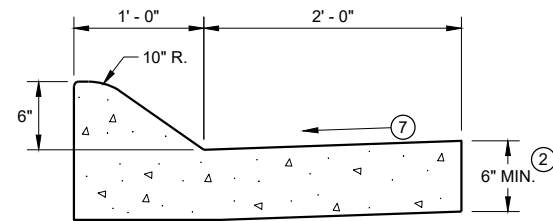
TYPES K¹ & L
(OPTIONAL CURB SHAPE)



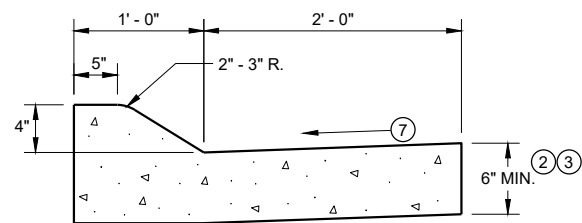
TYPES K¹ & L
CONCRETE CURB AND GUTTER 30"



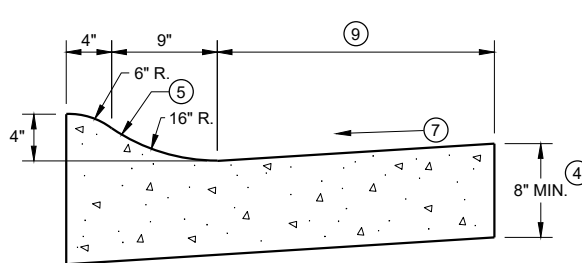
TYPES A¹ & D
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A¹ & D

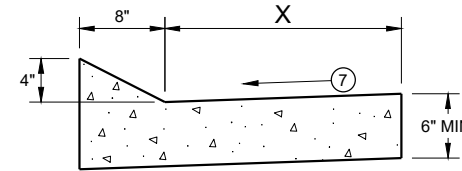


4" SLOPED CURB TYPES A¹ & D
CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R¹ & T

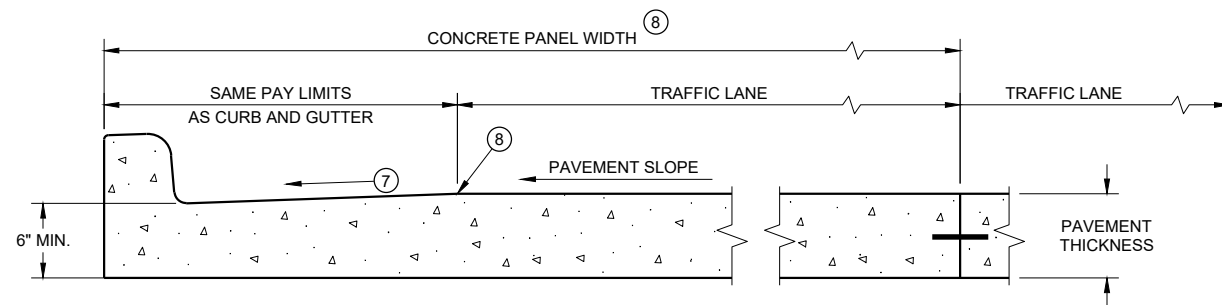
| | |
|------------|-----|
| TBT & TBTT | X |
| 30" | 22" |
| 36" | 28" |



TYPES TBT & TBTT¹
CONCRETE CURB AND GUTTER

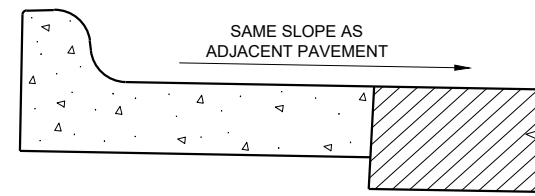
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

| 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 GUTTER⁶
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

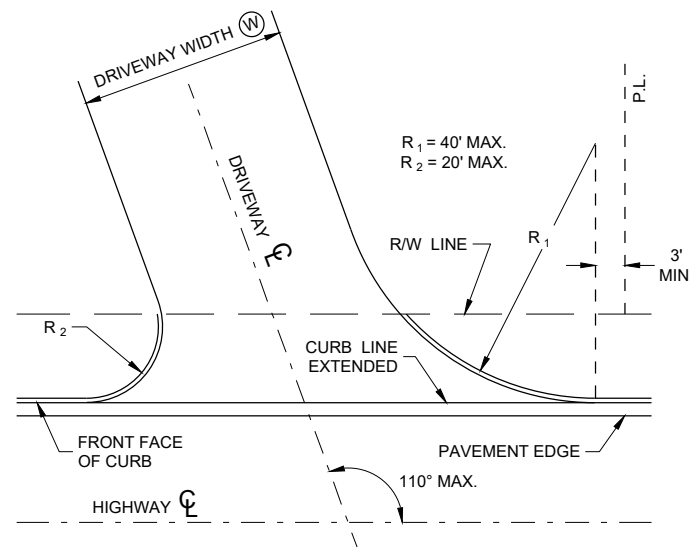
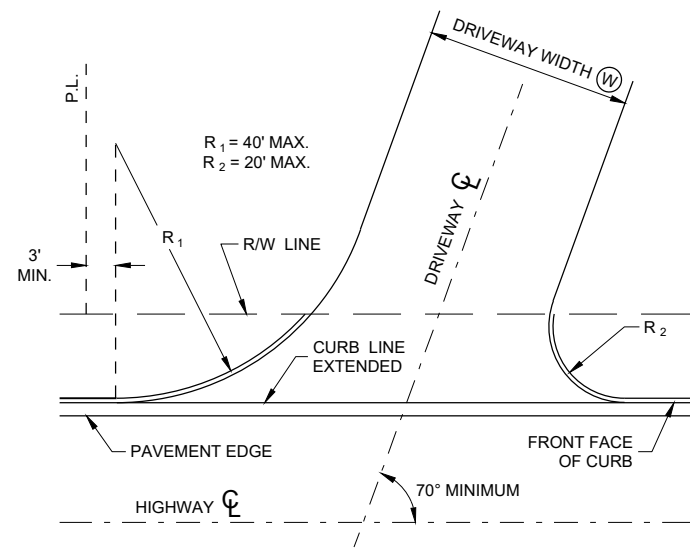
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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



**SKewed DRIVEWAY DETAILS
(COMMERCIAL AND NON-COMMERCIAL)
SIDEWALK NOT SHOWN**

GENERAL NOTES

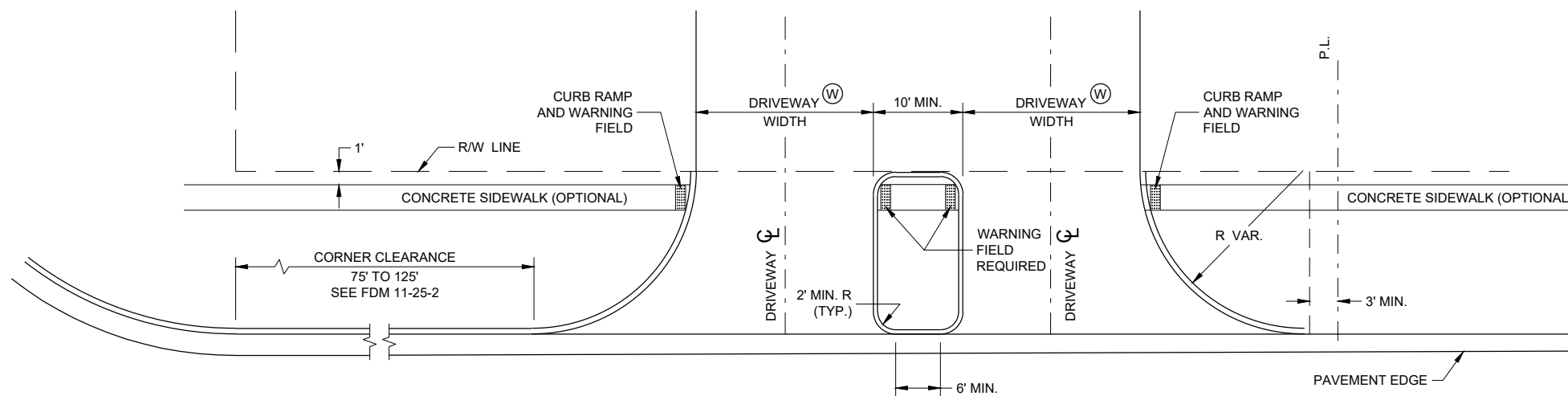
A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

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)



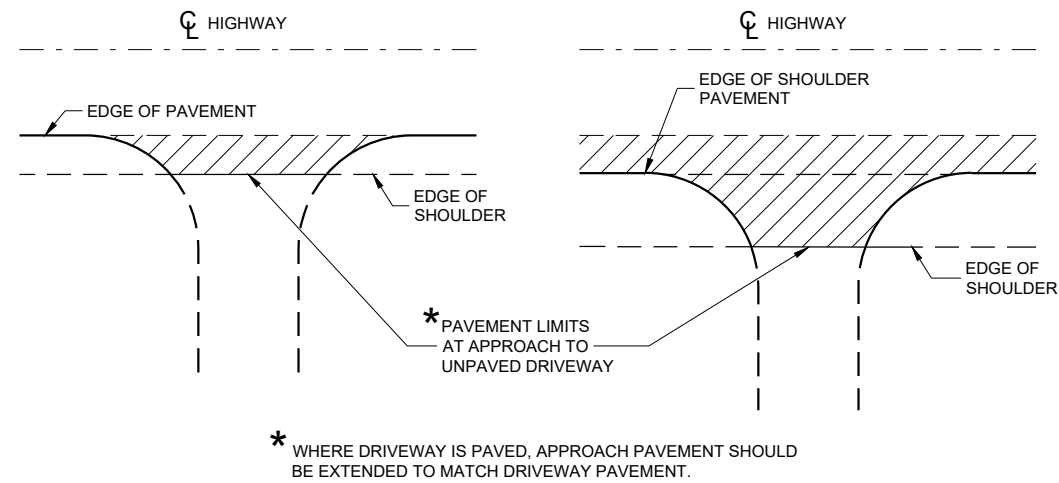
**DRIVEWAY LOCATION AND SPACING DETAILS
SIDEWALK SHOWN**

**DRIVEWAYS WITH
CURB AND GUTTER
RETURNS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

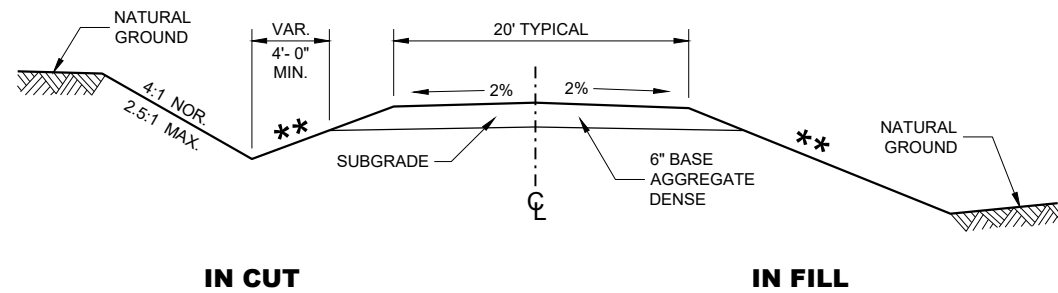
FHWA



PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

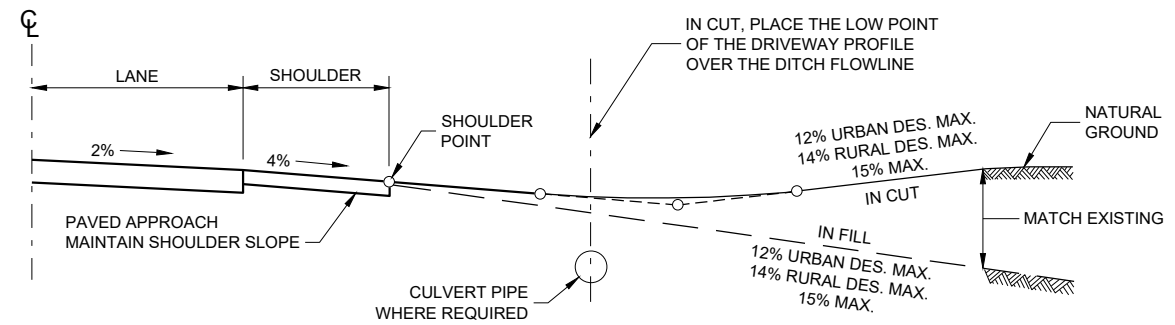
**RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)**



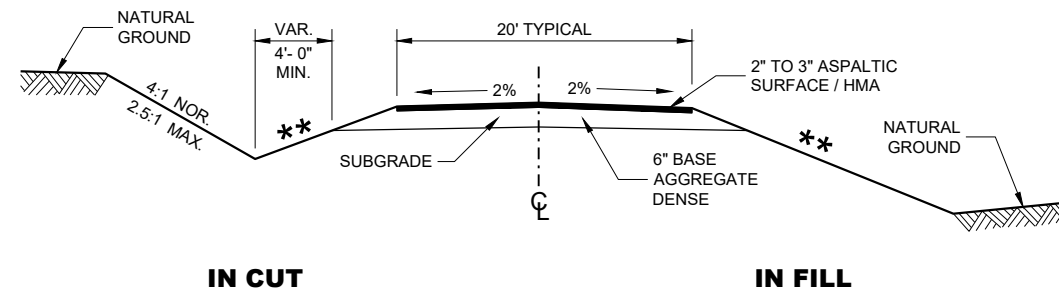
**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
AGGREGATE SURFACE**

** 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 |



TYPICAL DRIVEWAY PROFILES



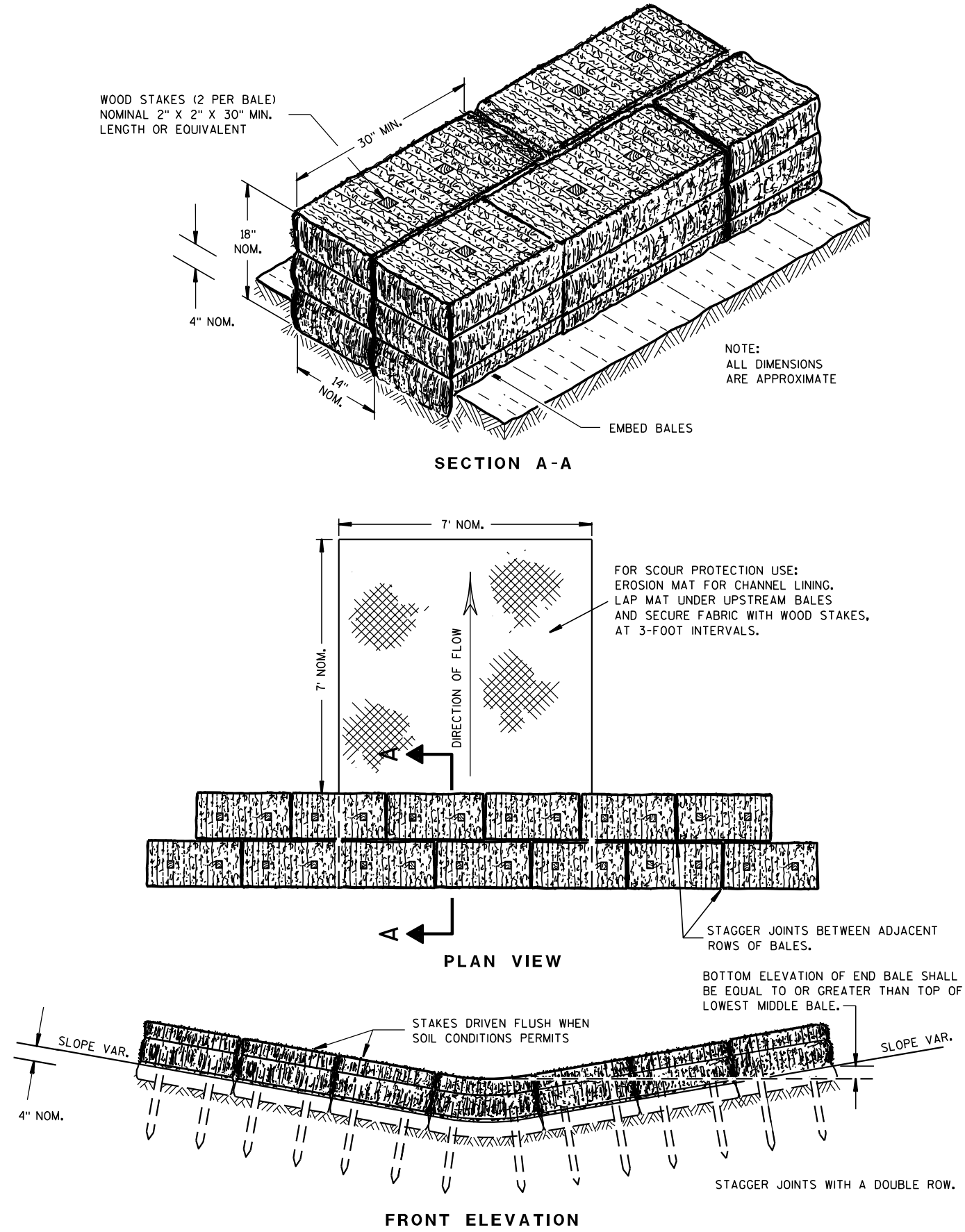
**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
ASPHALTIC SURFACE**

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

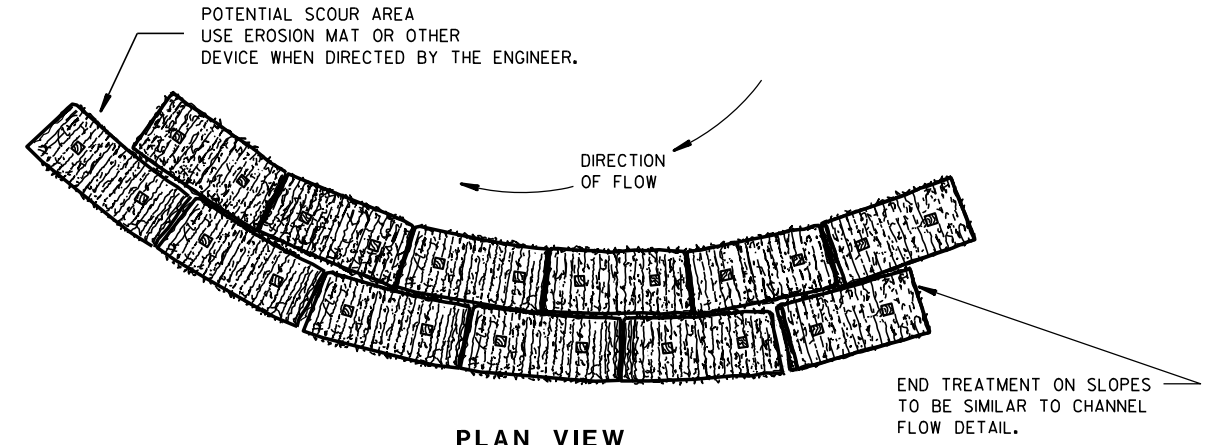


TEMPORARY DITCH CHECK USING EROSION BALES ①

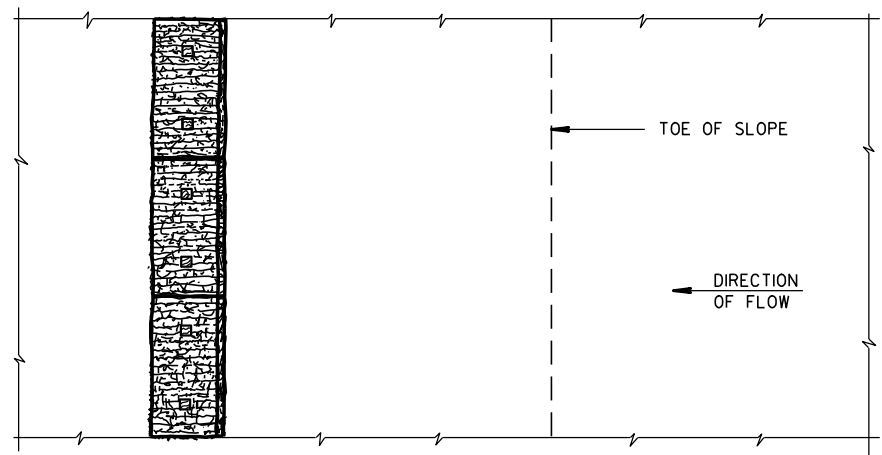
GENERAL NOTES

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.

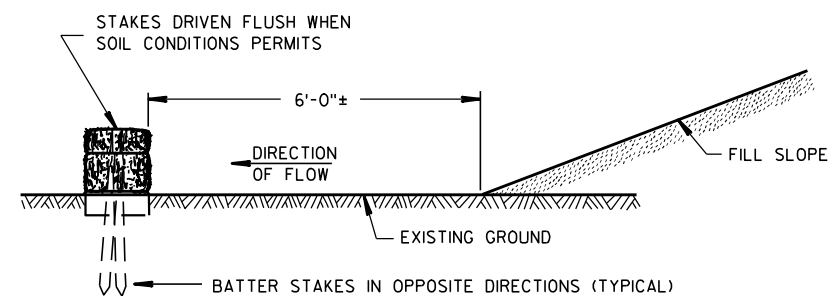
- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.



PLAN VIEW WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



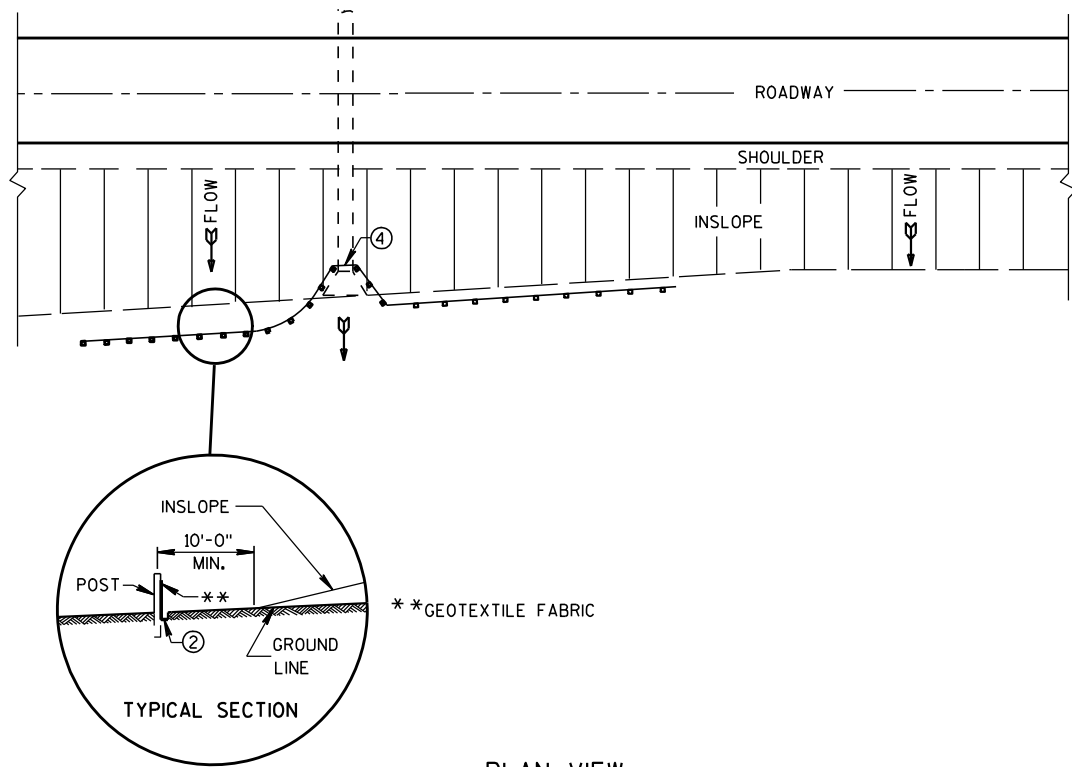
FRONT ELEVATION WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

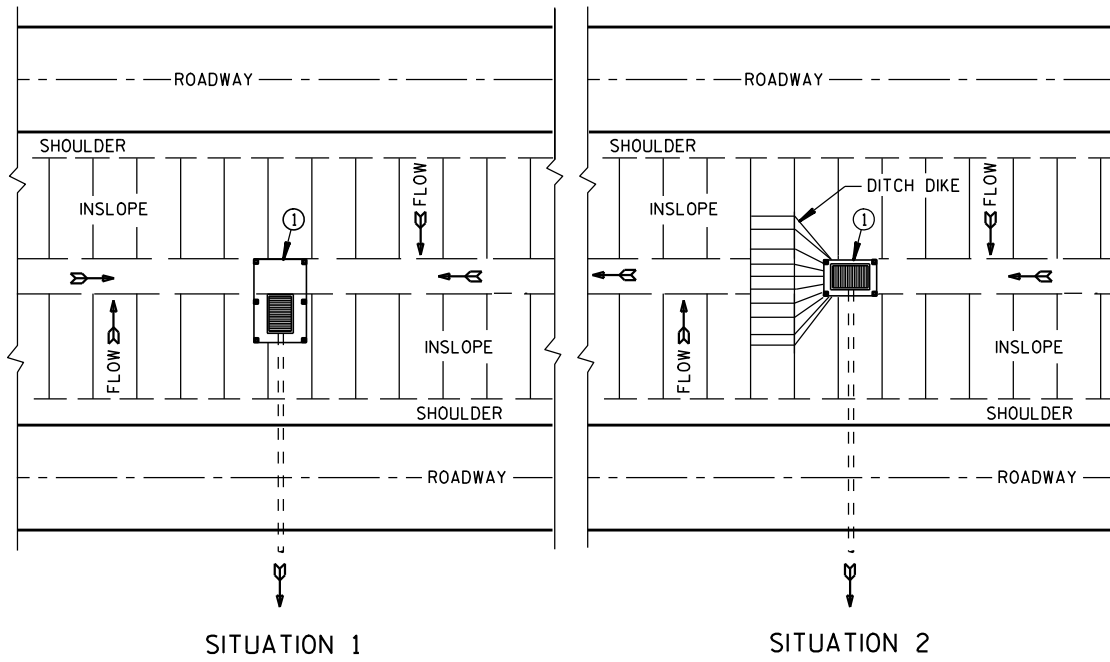
TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

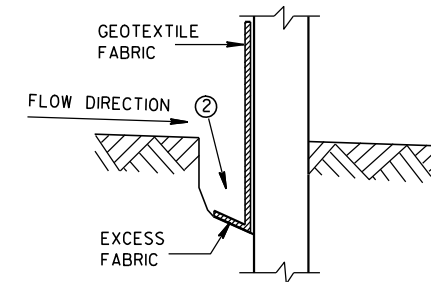


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

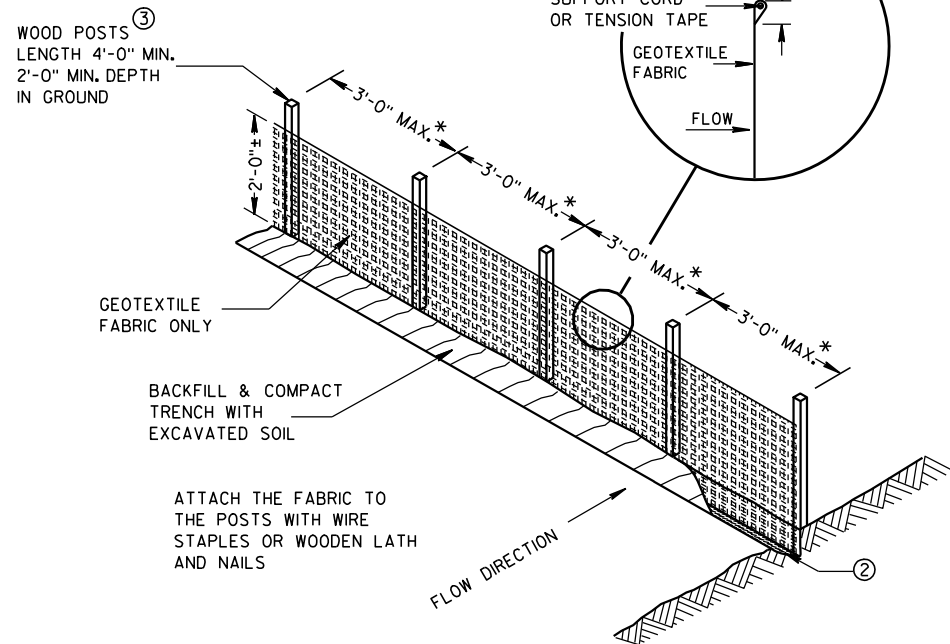
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- 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 1 1/8" X 1 1/8" 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.



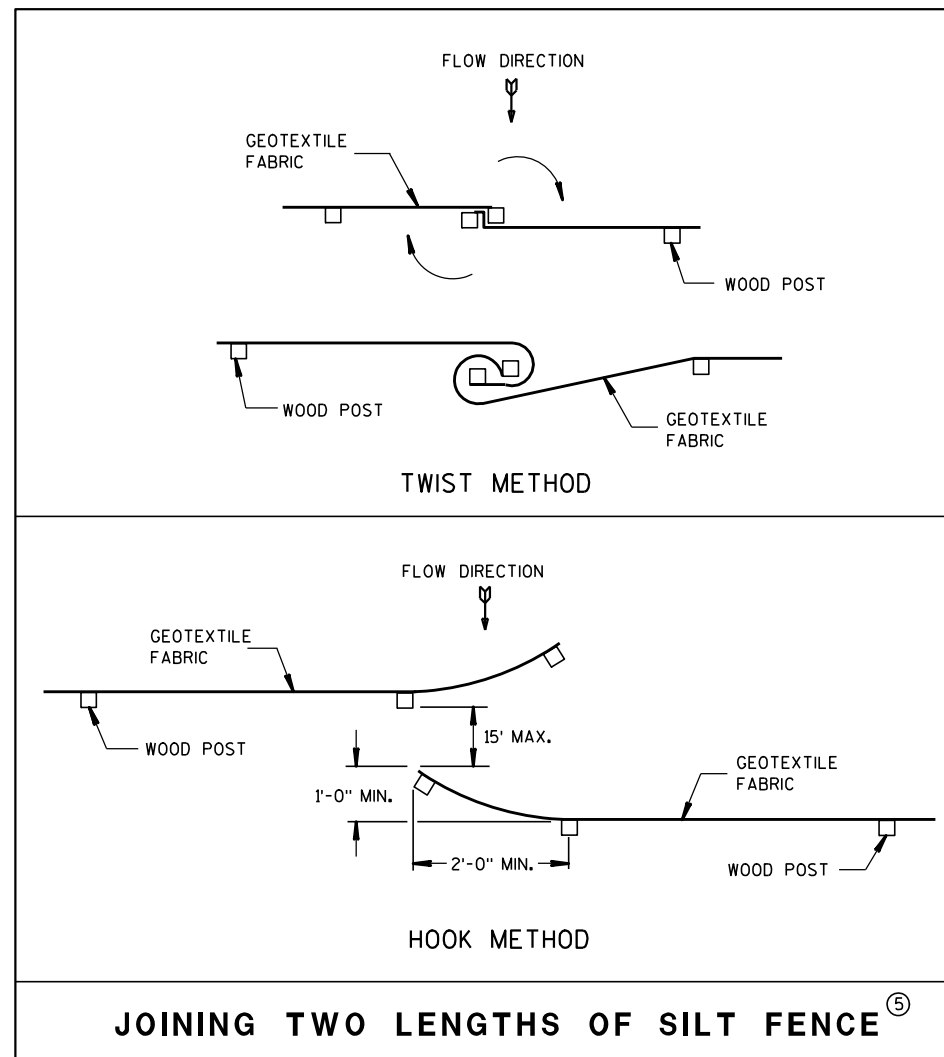
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

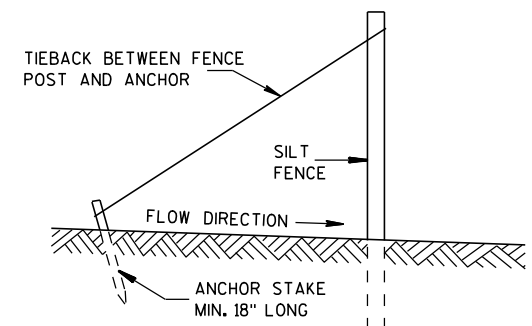


SILT FENCE

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



JOINING TWO LENGTHS OF SILT FENCE ⑤

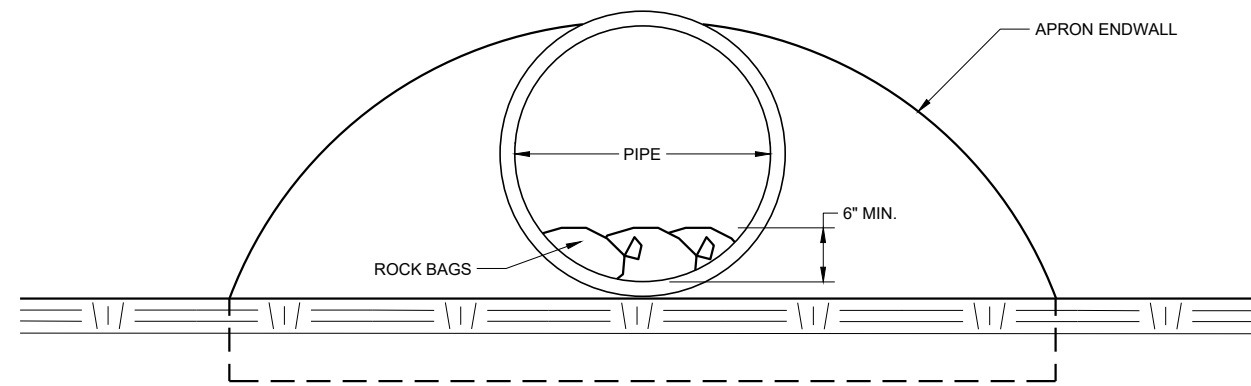


SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

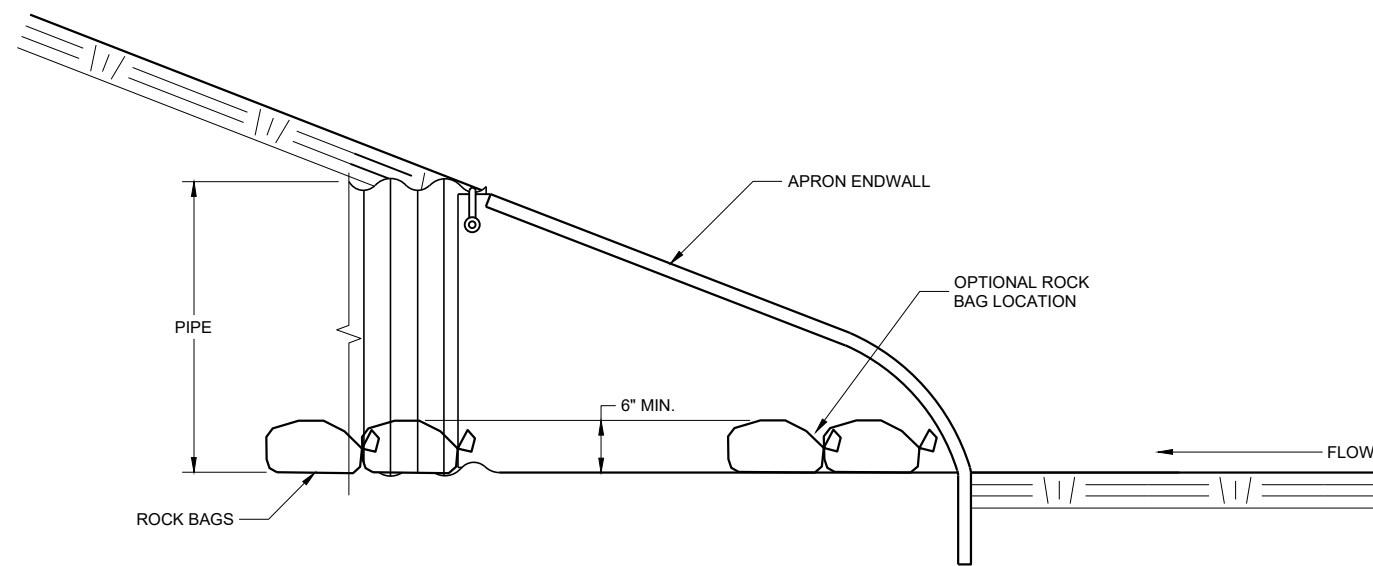
SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



END VIEW



SIDE VIEW

CULVERT PIPE CHECK
(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Daniel Schave
DATE EROSION CONTROL ENGINEER

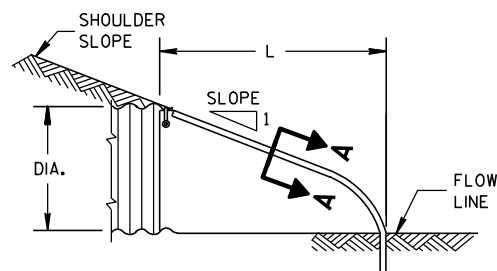
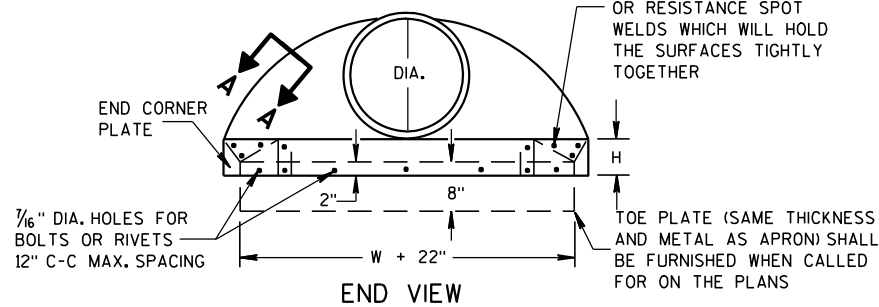
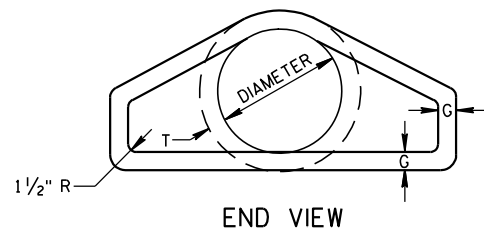
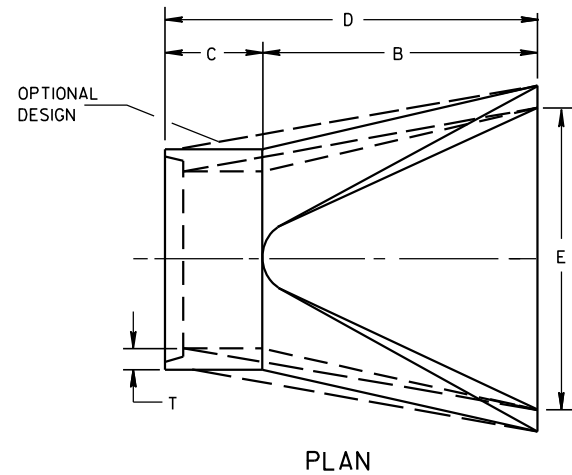
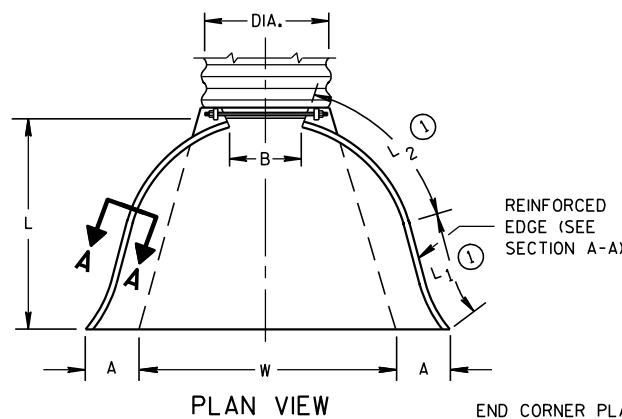
FHWA

| METAL APRON ENDWALLS | | | | | | | | | | | |
|----------------------|----------------------|-------|---------------------|----------|---------|-------------|--------|--------|---------|---------------|-------|
| PIPE DIA. (IN.) | MIN. THICK. (Inches) | | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE | BODY |
| | STEEL | ALUM. | A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 (1) | L2 (1) | W (±2") | | |
| 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 | .109x | .105x | 18 | 33 | 12 | 87 | — | — | 114 | 2 to 1 | 3 Pc. |
| 66 | .109x | .105x | 18 | 36 | 12 | 87 | — | — | 120 | 2 to 1 | 3 Pc. |
| 72 | .109x | .105x | 18 | 39 | 12 | 87 | — | — | 126 | 2 to 1 | 3 Pc. |
| 78 | .109x | .105x | 18 | 42 | 12 | 87 | — | — | 132 | 1 1/2 to 1 | 3 Pc. |
| 84 | .109x | .105x | 18 | 45 | 12 | 87 | — | — | 138 | 1 1/2 to 1 | 3 Pc. |
| 90 | .109x | .105x | 18 | 37 | 12 | 87 | — | — | 144 | 1 1/2 to 1 | 3 Pc. |
| 96 | .109x | .105x | 18 | 35 | 12 | 87 | — | — | 150 | 1 1/2 to 1 | 3 Pc. |

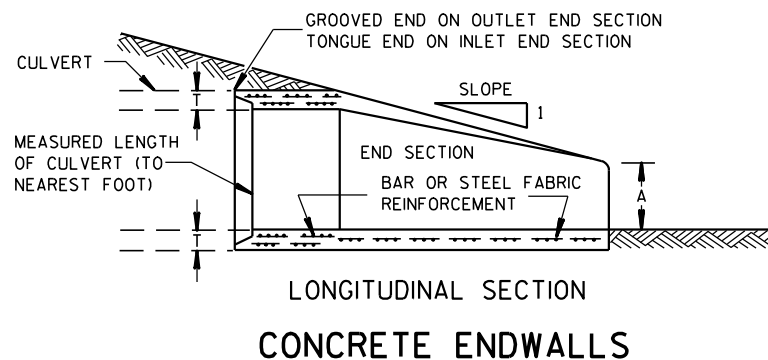
* EXCEPT CENTER PANEL SEE GENERAL NOTES

| REINFORCED CONCRETE APRON ENDWALLS | | | | | | | | |
|------------------------------------|---------------------|--------|--------|-----------|------------|-----|-------|---------------|
| PIPE DIA. (IN.) | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE |
| | T | A | B | C | D | E | G | |
| 12 | 2 | 4 | 24 | 48 1/8 | 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 1/2 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

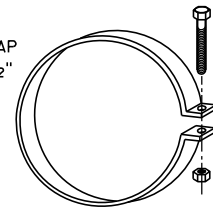


SIDE ELEVATION
METAL ENDWALLS

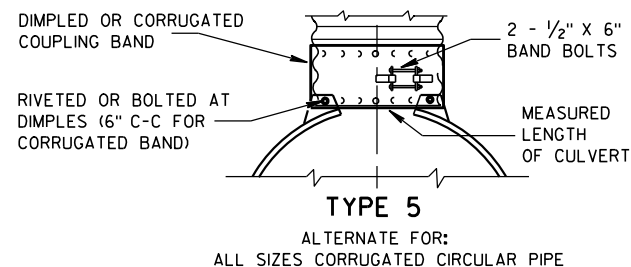
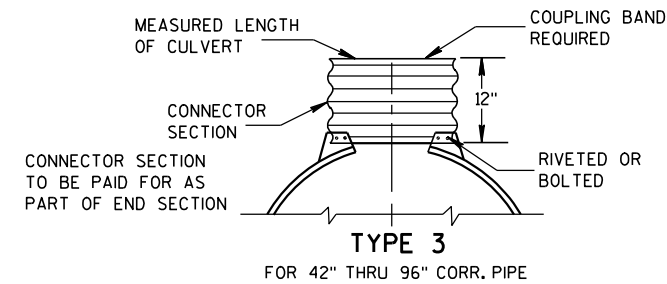
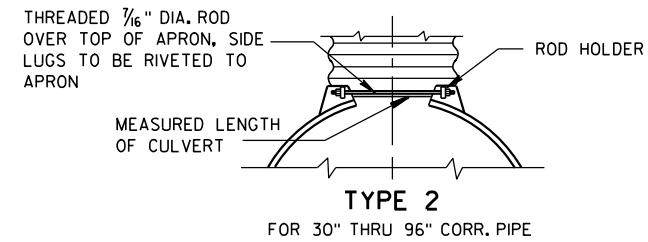
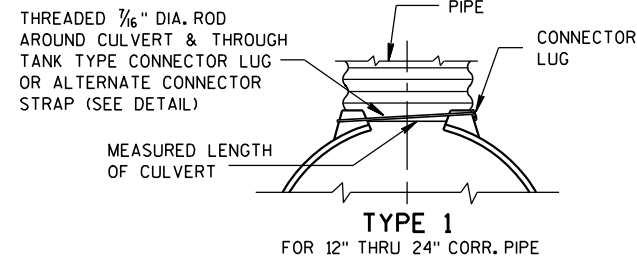


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



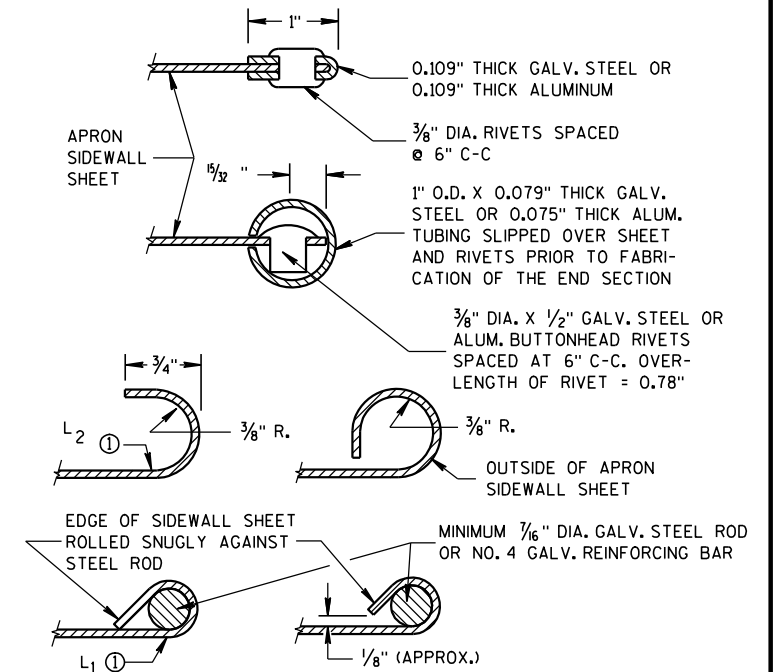
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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 VICE 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.

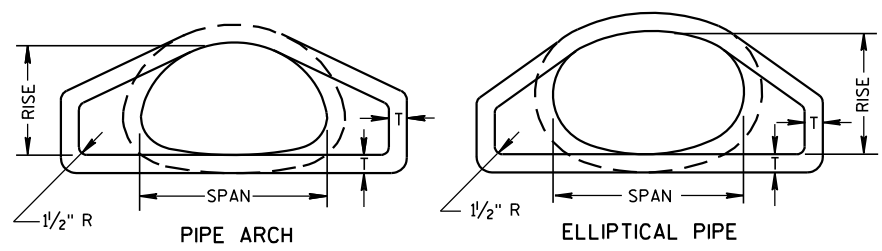
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

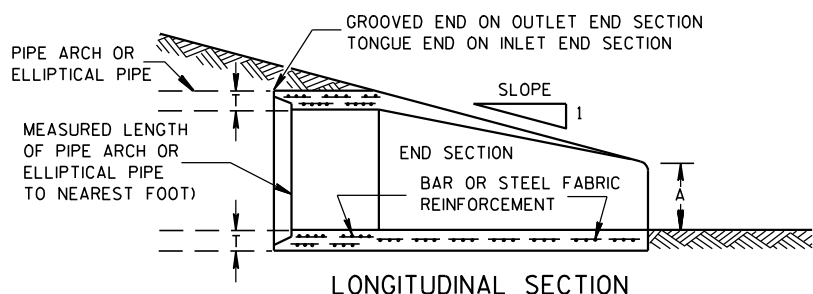
APRON ENDWALLS FOR
CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

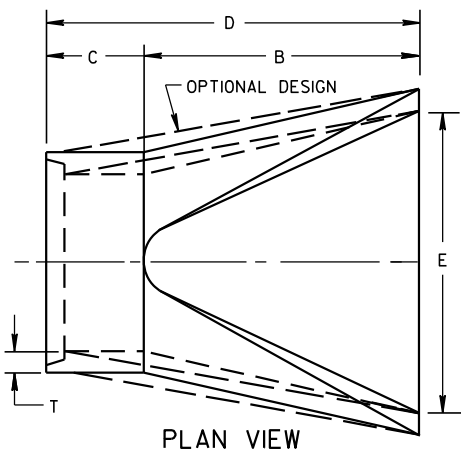


END VIEW



LONGITUDINAL SECTION

CONCRETE ENDWALLS



PLAN VIEW

| 2- 2/3" X 1/2" CORRUGATIONS | | | | | | | | | | | | | |
|-----------------------------|----------|------|----------------------|-------|---------------------|----------|---------|-------------|----------|----------|---------|---------------|-------|
| EQUIV. DIA. (Inches) | (Inches) | | MIN. THICK. (Inches) | | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE | BODY |
| | SPAN | RISE | STEEL | ALUM. | A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 (±1") | L2 (±1") | W (±2") | | |
| 15 | 17 | 13 | .064 | .060 | 7 | 9 | 6 | 19 | 14 | 16 | 30 | 2 1/2 to 1 | 1 Pc. |
| 18 | 21 | 15 | .064 | .060 | 7 | 10 | 6 | 23 | 14 | 19 3/8 | 36 | 2 1/2 to 1 | 1 Pc. |
| 21 | 24 | 18 | .064 | .060 | 8 | 12 | 6 | 28 | 18 | 21 3/4 | 42 | 2 1/2 to 1 | 1 Pc. |
| 24 | 28 | 20 | .064 | .060 | 9 | 14 | 6 | 32 | 18 | 27 1/2 | 48 | 2 1/2 to 1 | 1 Pc. |
| 30 | 35 | 24 | .079 | .075 | 10 | 16 | 6 | 39 | 18 | 37 5/8 | 60 | 2 1/2 to 1 | 1 Pc. |
| 36 | 42 | 29 | .079 | .075 | 12 | 18 | 8 | 46 | 24 | 45 3/8 | 75 | 2 1/2 to 1 | 1 Pc. |
| 42 | 49 | 33 | .109 | .105 | 13 | 21 | 9 | 53 | 24 | 54 3/4 | 85 | 2 1/2 to 1 | 2 Pc. |
| 48 | 57 | 38 | .109 | .105 | 18 | 26 | 12 | 63 | 24 | 68 | 90 | 2 1/2 to 1 | 3 Pc. |
| 54 | 64 | 43 | .109 | .105 | 18 | 30 | 12 | 70 | 24 | 72 3/4 | 102 | 2 1/4 to 1 | 3 Pc. |
| 60 | 71 | 47 | .109* | .105* | 18 | 33 | 12 | 77 | 30 | 82 1/4 | 114 | 2 1/4 to 1 | 3 Pc. |
| 66 | 77 | 52 | .109* | .105* | 18 | 36 | 12 | 77 | — | — | 126 | 2 to 1 | 3 Pc. |
| 72 | 83 | 57 | .109* | .105* | 18 | 39 | 12 | 77 | — | — | 138 | 2 to 1 | 3 Pc. |

| 3" X 1" CORRUGATIONS | | | | | | | | | | | | | |
|----------------------|----------|------|----------------------|-------|---------------------|----------|---------|-------------|----------|----------|---------|---------------|-------|
| EQUIV. DIA. (Inches) | (Inches) | | MIN. THICK. (Inches) | | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE | BODY |
| | SPAN | RISE | STEEL | ALUM. | A (±1") | B (MAX.) | H (±1") | L (±1 1/2") | L1 (±1") | L2 (±1") | W (±2") | | |
| 48 | 53 | 41 | .109 | .105 | 18 | 26 | 12 | 63 | 24 | 72 3/4 | 90 | 2 1/2 to 1 | 2 Pc. |
| 54 | 60 | 46 | .109 | .105 | 18 | 30 | 12 | 70 | 30 | 82 1/4 | 102 | 2 to 1 | 2 Pc. |
| 60 | 66 | 51 | .109* | .105* | 18 | 33 | 12 | 77 | — | — | 114 | 1 1/2 to 1 | 3 Pc. |
| 66 | 73 | 55 | .109* | .105* | 18 | 36 | 12 | 77 | — | — | 126 | 1 1/2 to 1 | 3 Pc. |
| 72 | 81 | 59 | .109* | .105* | 18 | 39 | 12 | 77 | — | — | 138 | 2 to 1 | 3 Pc. |
| 78 | 87 | 63 | .109* | .105* | 22 | 38 | 12 | 77 | — | — | 148 | 1 1/2 to 1 | 3 Pc. |
| 84 | 95 | 67 | .109* | .105* | 22 | 34 | 12 | 77 | — | — | 162 | 1 1/2 to 1 | 3 Pc. |
| 90 | 103 | 71 | .109* | .105* | 22 | 38 | 12 | 77 | — | — | 174 | 1 1/2 to 1 | 3 Pc. |
| 96 | 112 | 75 | .109* | .105* | 24 | 40 | 12 | 77 | — | — | 174 | 1 1/2 to 1 | 3 Pc. |

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED. * EXCEPT CENTER PANEL SEE GENERAL NOTES

| REINFORCED CONCRETE PIPE ARCH | | | | | | | | | | |
|-------------------------------|---------------------|--------|-------|---------|----|----|-----|-----|---------------|--|
| EQUIV. DIA. (Inches) | DIMENSIONS (Inches) | | | | | | | | APPROX. SLOPE | |
| | **SPAN | **RISE | T | A | B | C | D | E | | |
| 24 | 29 | 18 | 3 | 8 1/2 | 39 | 33 | 72 | 48 | 3 to 1 | |
| 30 | 36 | 22 | 3 1/2 | 9 1/2 | 50 | 46 | 96 | 60 | 3 to 1 | |
| 36 | 44 | 27 | 4 | 11 1/8 | 60 | 36 | 96 | 72 | 3 to 1 | |
| 42 | 51 | 31 | 4 1/2 | 15 5/16 | 60 | 36 | 96 | 78 | 3 to 1 | |
| 48 | 58 | 36 | 5 | 21 | 60 | 36 | 96 | 84 | 3 to 1 | |
| 54 | 65 | 40 | 5 1/2 | 25 1/2 | 60 | 36 | 96 | 90 | 3 to 1 | |
| 60 | 73 | 45 | 6 | 31 | 60 | 36 | 96 | 96 | 3 to 1 | |
| 72 | 88 | 54 | 7 | 31 | 60 | 39 | 99 | 120 | 2 to 1 | |
| 84 | 102 | 62 | 8 | 28 1/2 | 83 | 19 | 102 | 144 | 2 to 1 | |

| REINFORCED CONCRETE ELLIPTICAL PIPE | | | | | | | | | | |
|-------------------------------------|---------------------|--------|-------|--------|----|----|----|----|---------------|--|
| EQUIV. DIA. (Inches) | DIMENSIONS (Inches) | | | | | | | | APPROX. SLOPE | |
| | **SPAN | **RISE | T | A | B | C | D | E | | |
| 24 | 30 | 19 | 3 1/4 | 8 1/2 | 39 | 33 | 72 | 48 | 3 to 1 | |
| 30 | 38 | 24 | 3 3/4 | 9 1/2 | 54 | 18 | 72 | 60 | 3 to 1 | |
| 36 | 45 | 29 | 4 1/2 | 11 1/8 | 60 | 24 | 84 | 72 | 2 1/2 to 1 | |
| 42 | 53 | 34 | 5 | 15 3/4 | 60 | 36 | 96 | 78 | 2 1/2 to 1 | |
| 48 | 60 | 38 | 5 1/2 | 21 | 60 | 36 | 96 | 84 | 2 1/2 to 1 | |
| 54 | 68 | 43 | 6 | 25 1/2 | 60 | 36 | 96 | 90 | 2 1/2 to 1 | |
| 60 | 76 | 48 | 6 1/2 | 30 | 60 | 36 | 96 | 96 | 2 1/2 to 1 | |

**NOMINAL SIZE

GENERAL NOTES

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

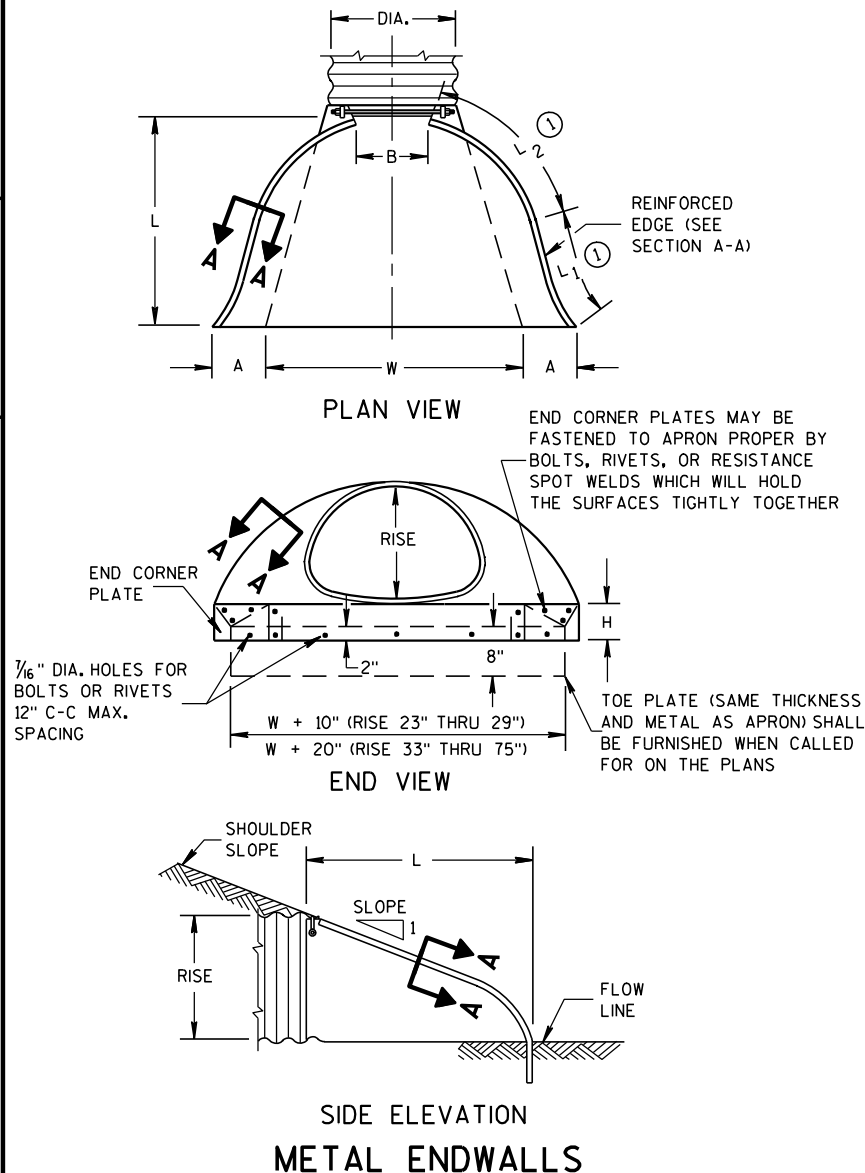
CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

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

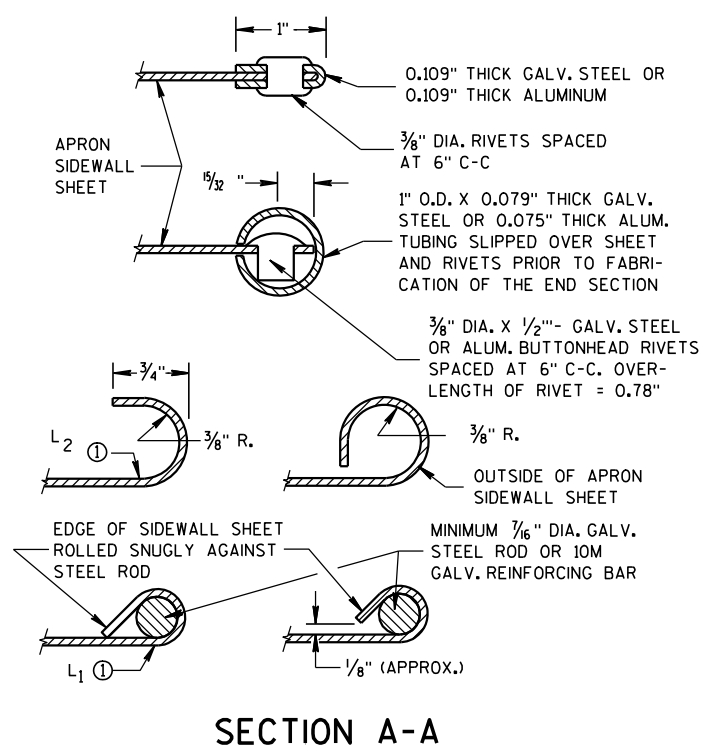
LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER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

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

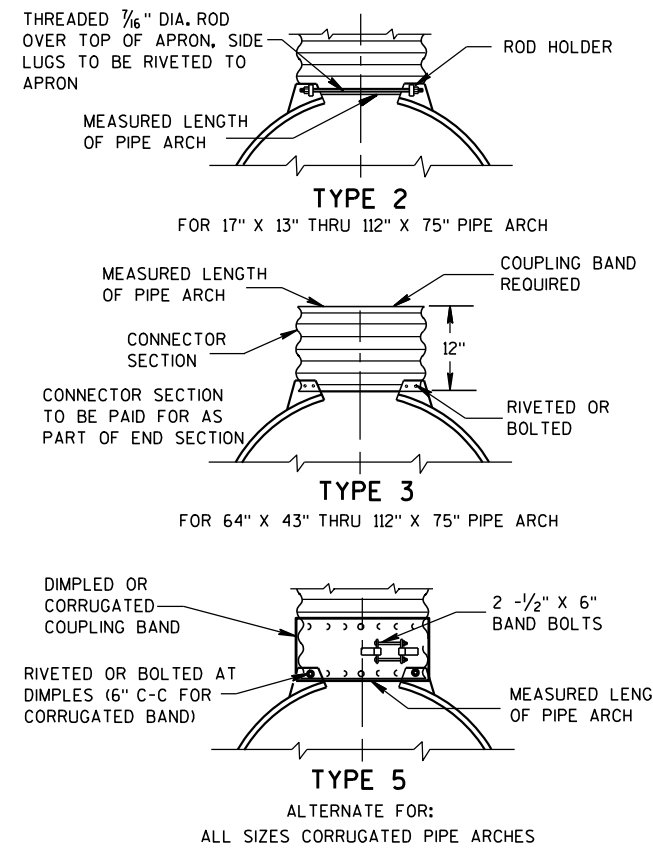
① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.



METAL ENDWALLS



SECTION A-A



CONNECTION DETAILS

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

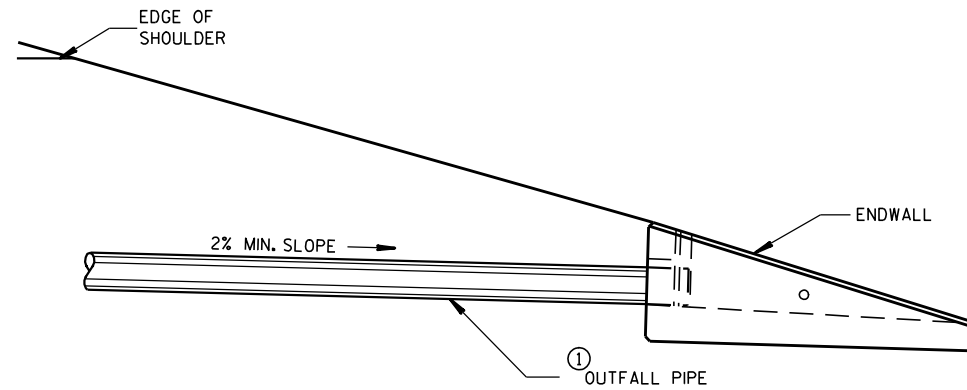
**APRON ENDWALLS FOR
PIPE ARCH AND
ELLIPTICAL PIPE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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



INSTALLATION DETAIL

GENERAL NOTES

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

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

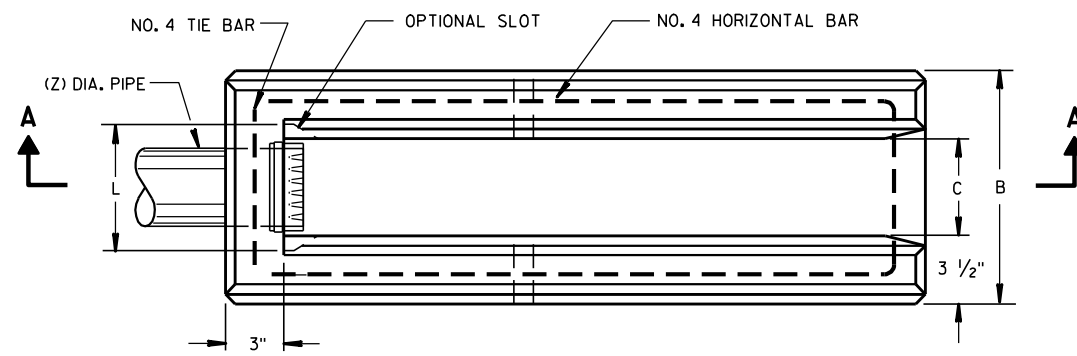
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

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

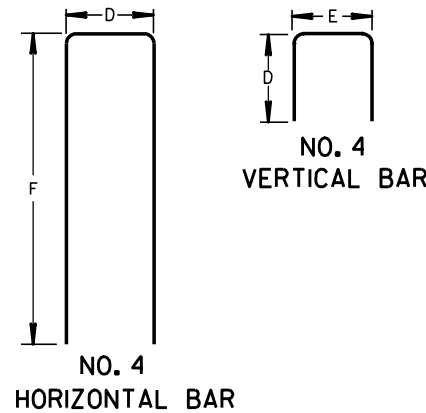
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE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

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

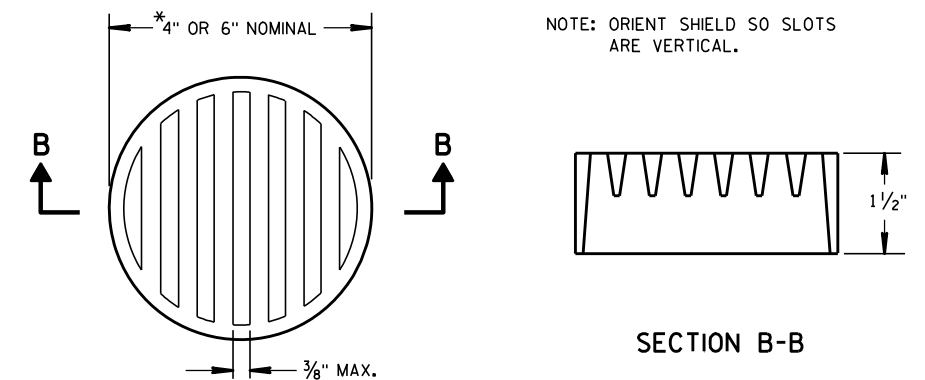
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL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



PLAN VIEW

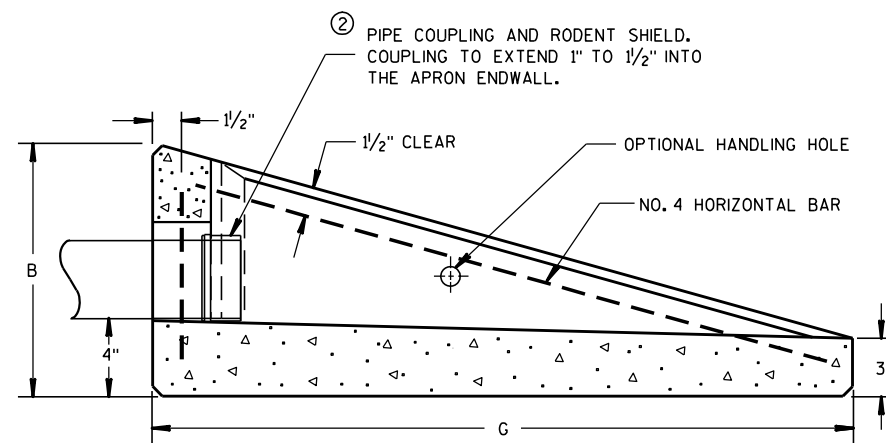


BAR STEEL REINFORCEMENT DETAILS



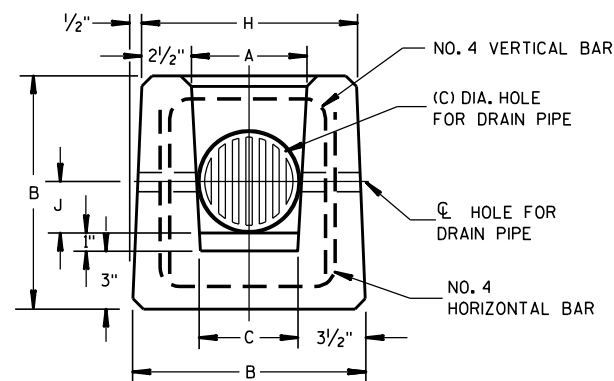
② RODENT SHIELD

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



SECTION A-A

CONCRETE APRON ENDWALL FOR UNDERDRAIN

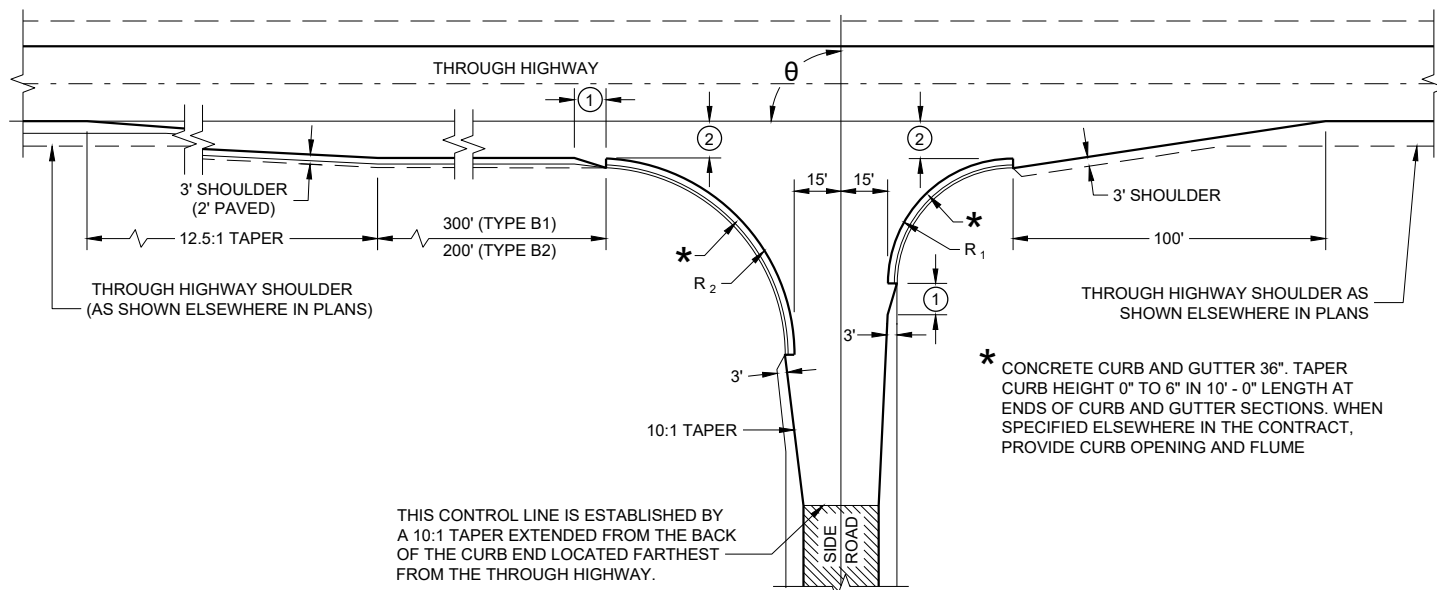


END VIEW

**REINFORCED
CONCRETE APRON ENDWALL
FOR PIPE UNDERDRAIN**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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.

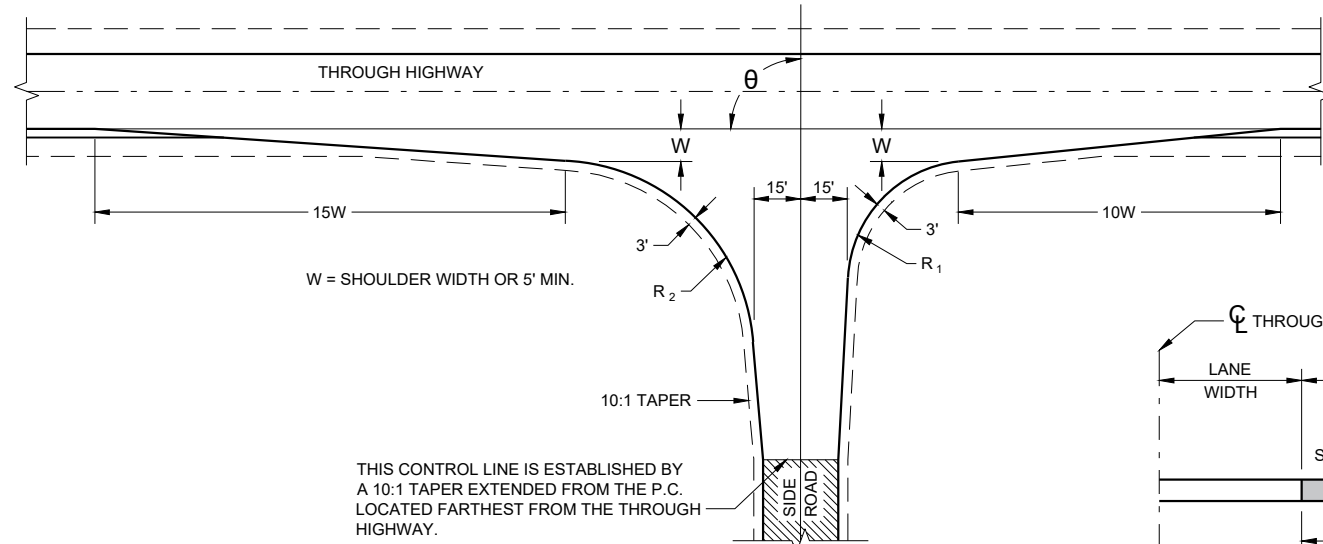
SIDE ROAD SURFACING NOTE

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.

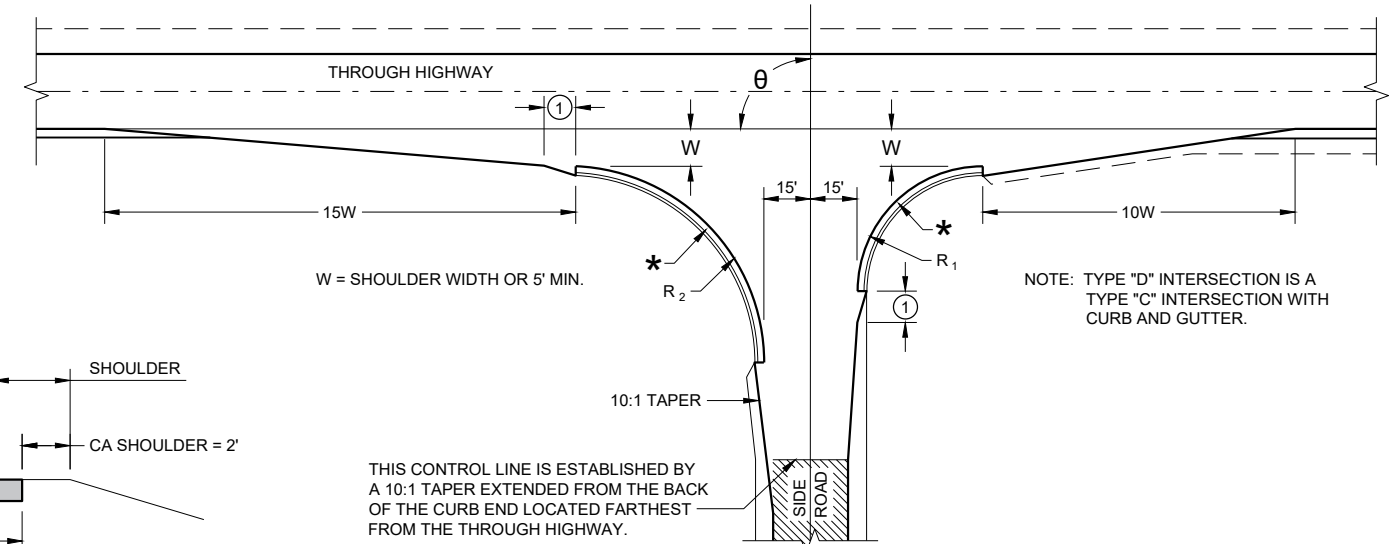
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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.

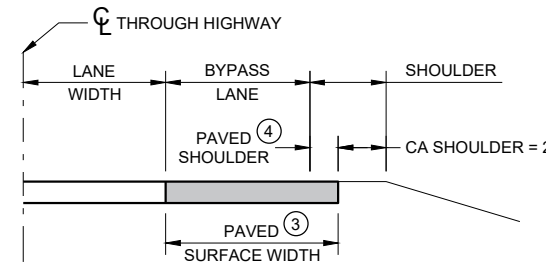


TYPE "C"

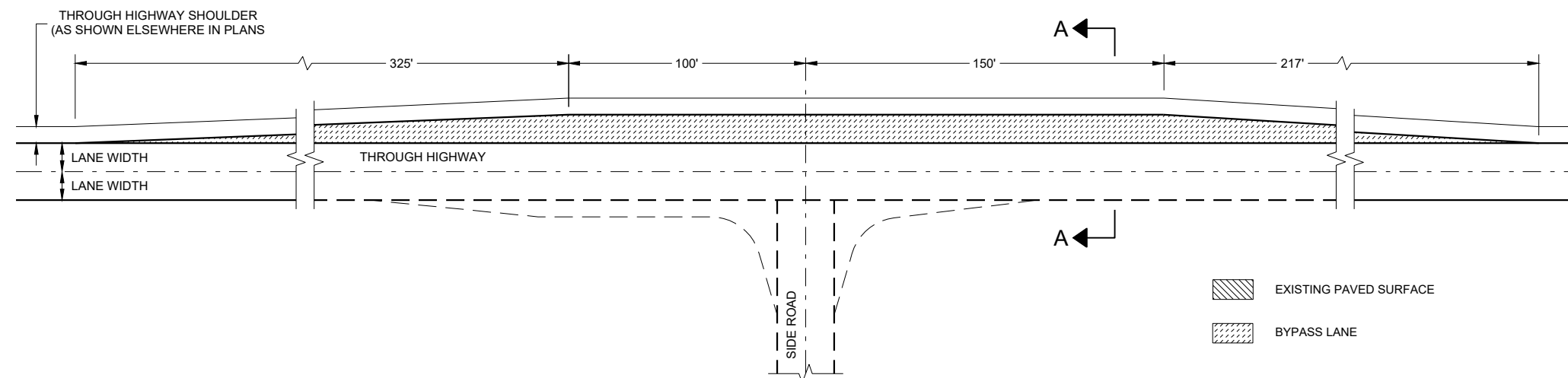


TYPE "D"

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



SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)

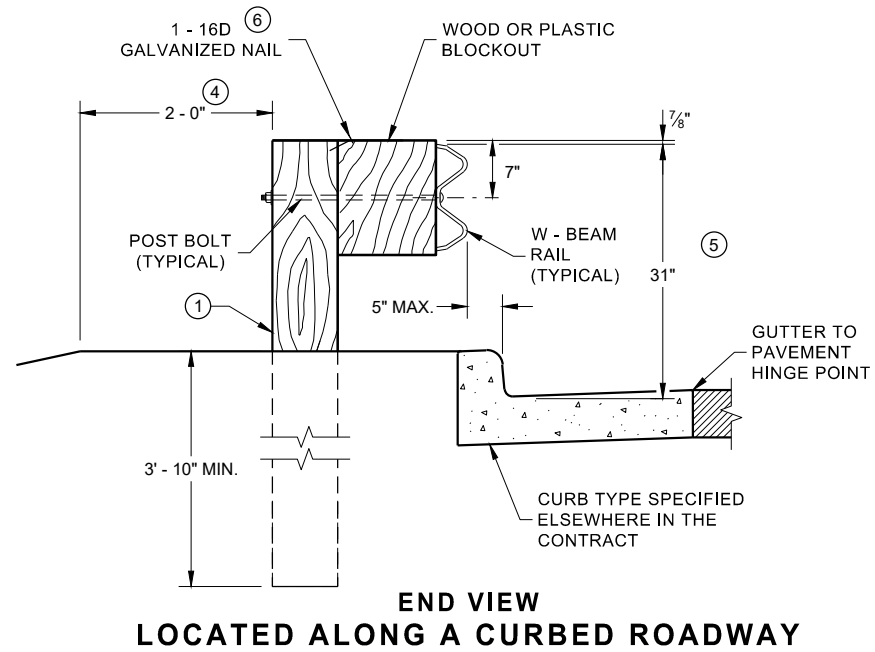
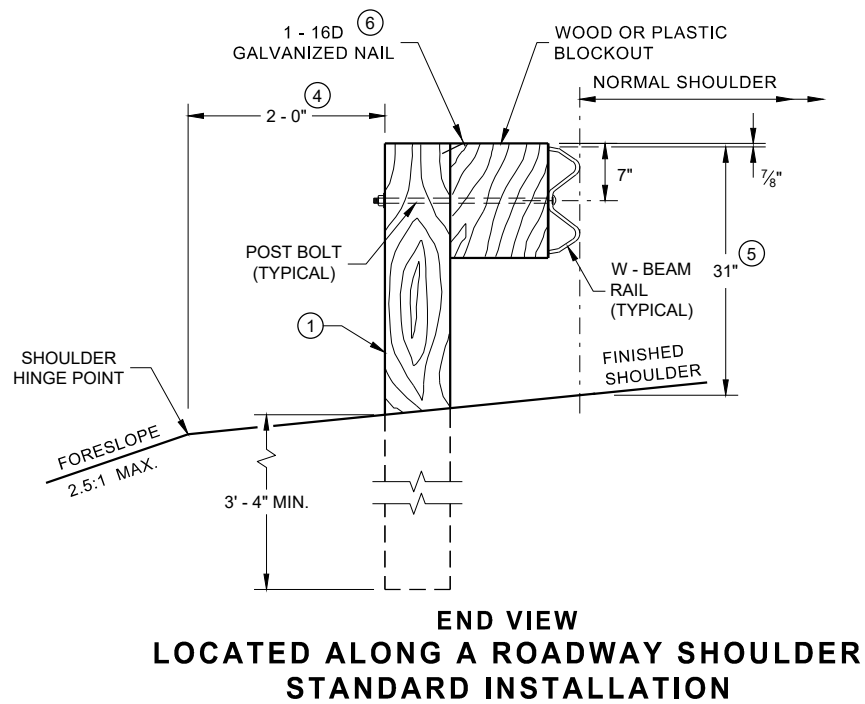
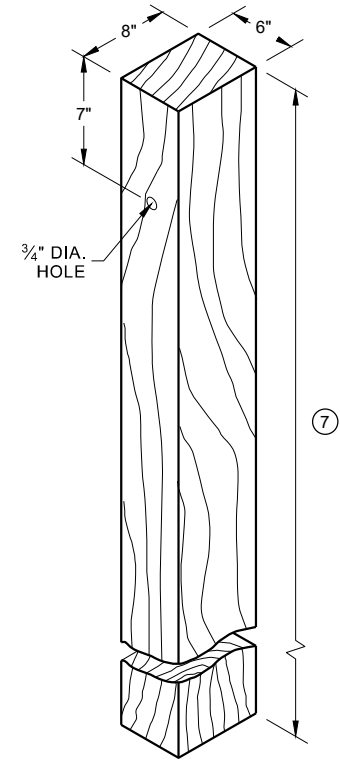
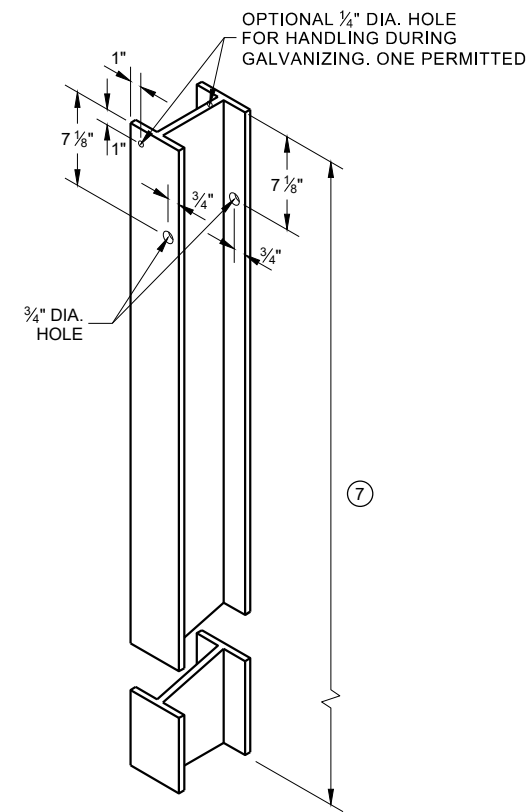
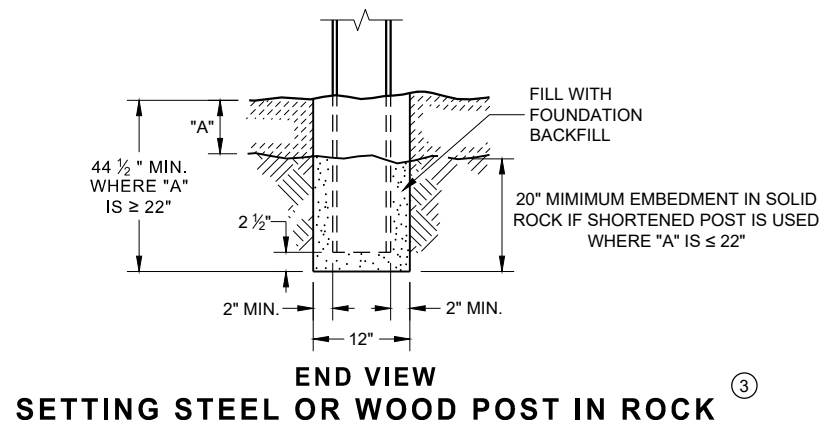


TEE INTERSECTION BYPASS LANE DETAIL

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

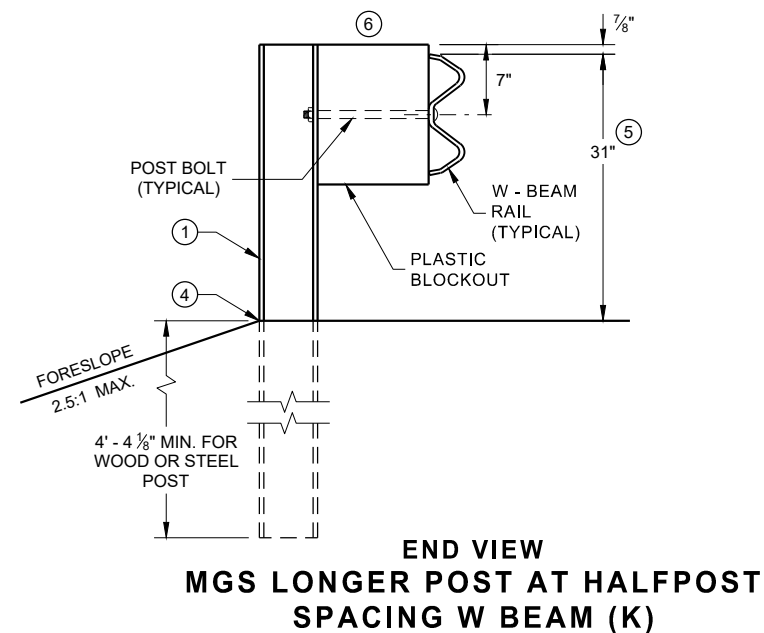
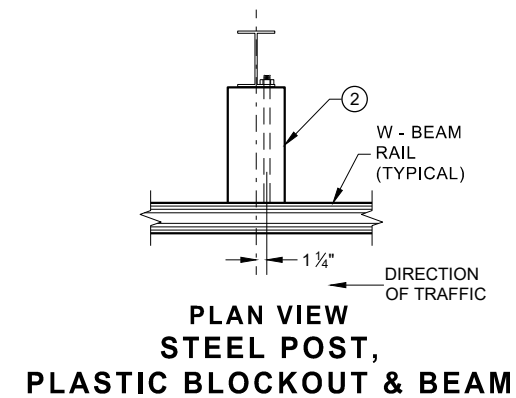
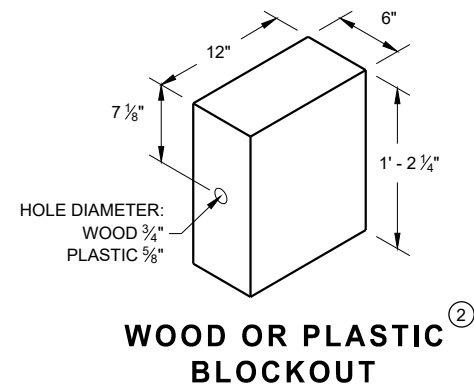
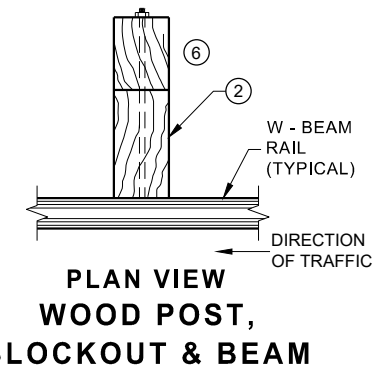
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AND INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- ④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- ⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 3/4" TO 32".
- ⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
- ⑦ TOTAL POST LENGTH FOR TYPE K IS 7' - 0". TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) ①

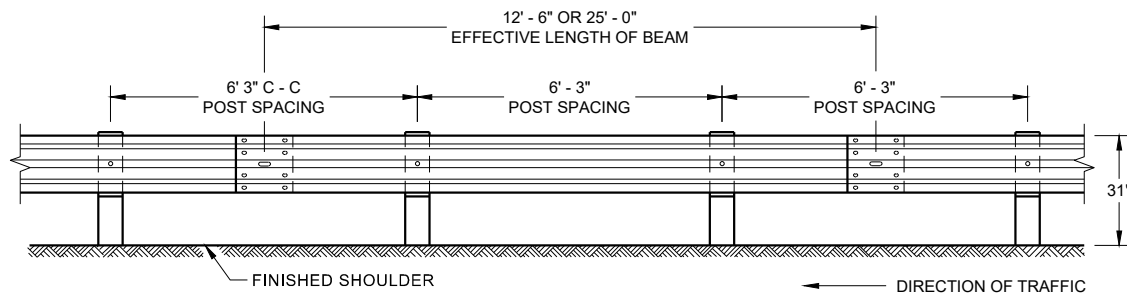
WOOD POST (6" X 8") NOMINAL ①



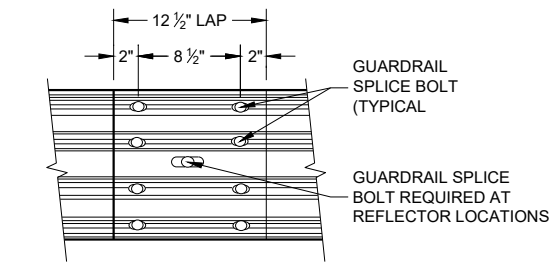
PLAN VIEW STEEL POST, PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



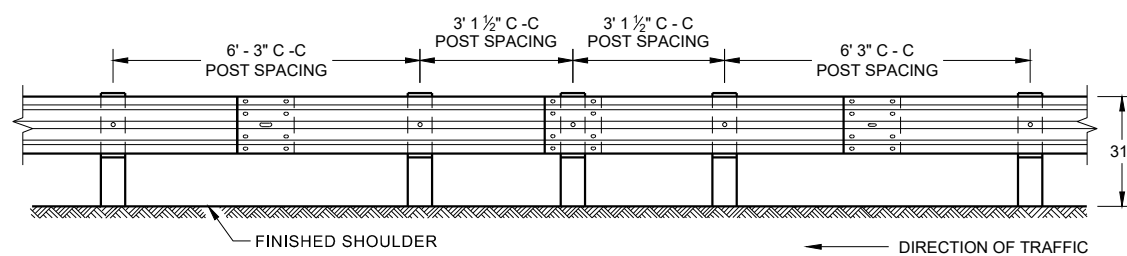
**FRONT VIEW
POST SPACING STANDARD INSTALLATION**



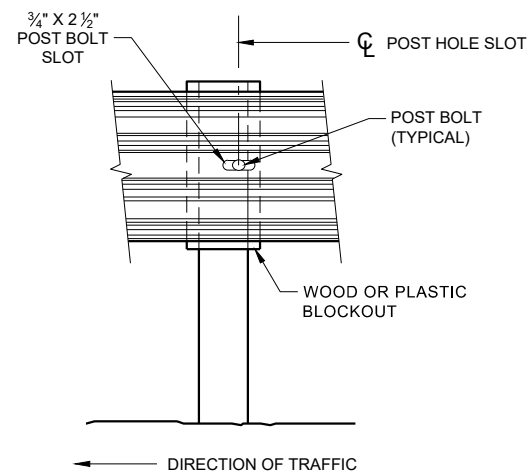
**FRONT VIEW
MID-SPAN BEAM SPLICE**

GENERAL NOTES

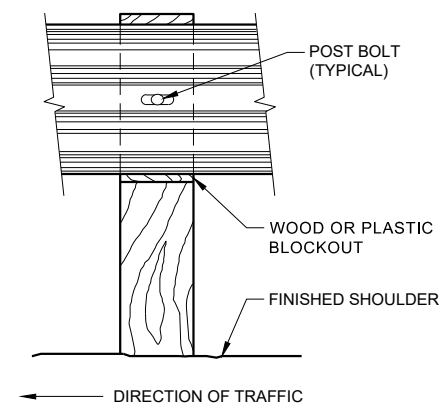
- ⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
 - ⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.
- POST BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 3/4" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 3/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.
- GUARD RAIL SPLICE BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 3/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



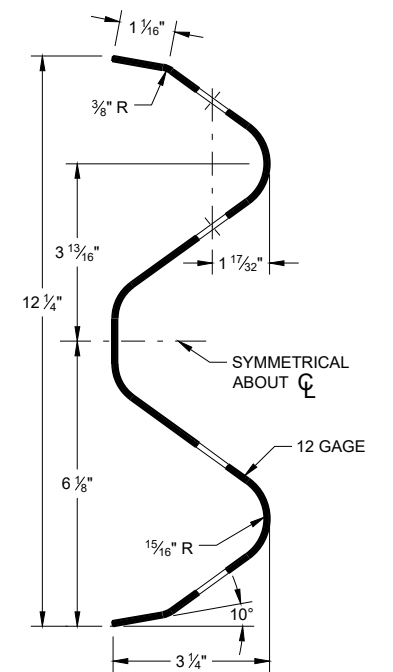
**FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)**



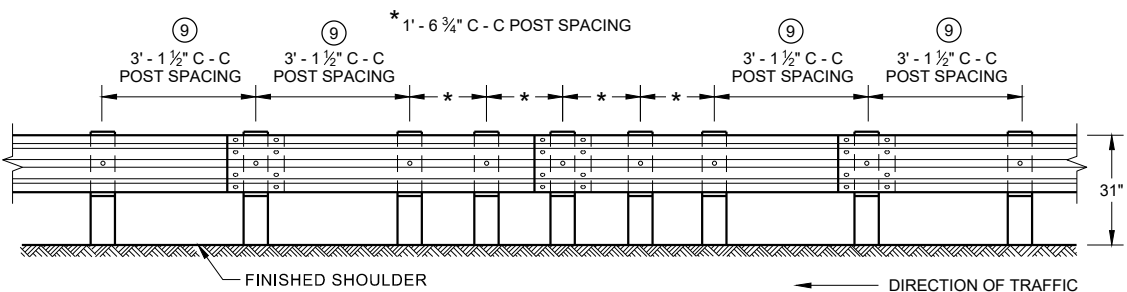
FRONT VIEW AT STEEL POST



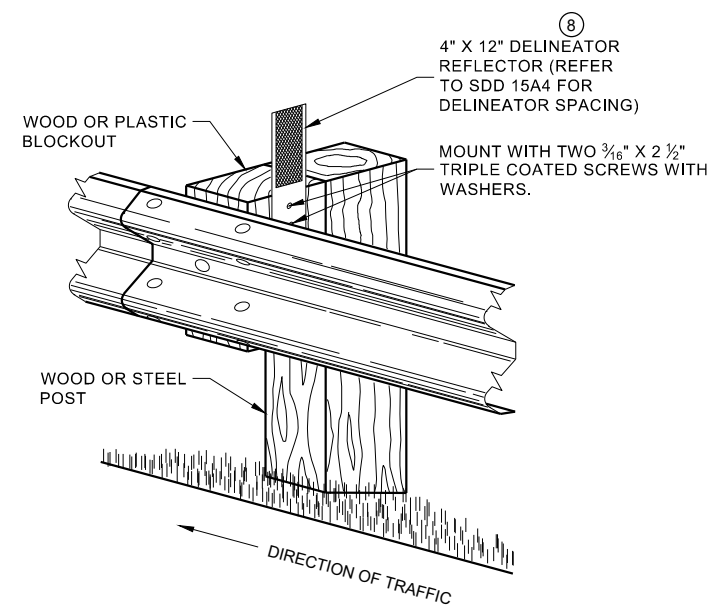
FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



**FRONT VIEW
QUARTER POST SPACING (QS)**



**ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION**

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

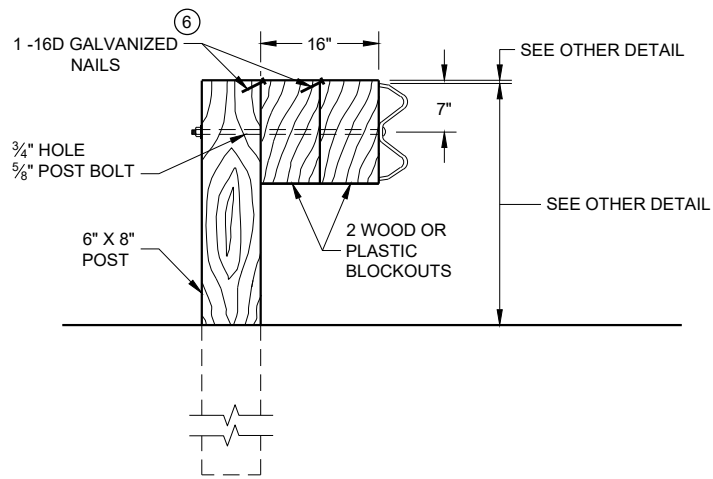
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

6

SDD 14B42 - 07b

SDD 14B42 - 07b

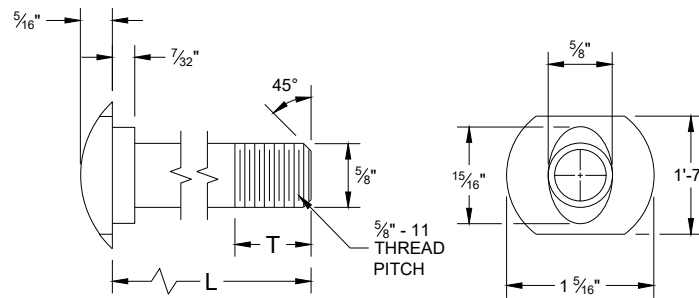


DETAIL FOR 16" BLOCKOUT DEPTH

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

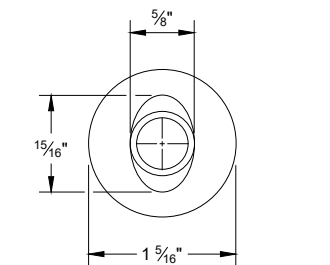
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

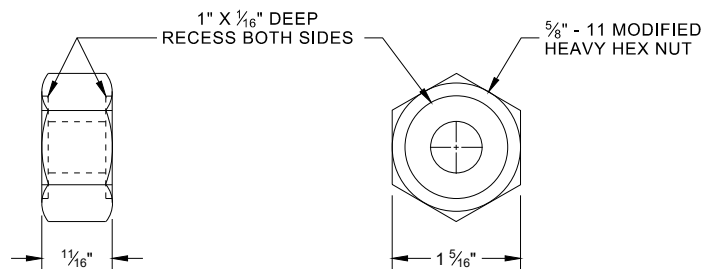


POST BOLT TABLE

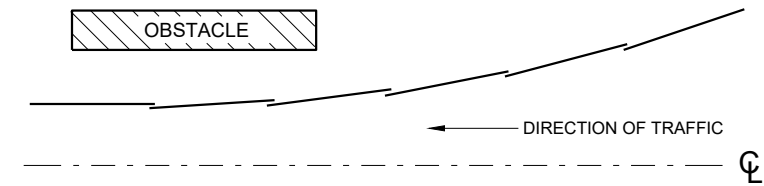
| L | T (MIN.) |
|--------|----------|
| 1 1/4" | 1 1/8" |
| 2" | 1 3/4" |
| 10" | 4" |
| 14" | 4 1/16" |
| 18" | 4" |
| 21" | 4 1/16" |
| 25" | 4" |



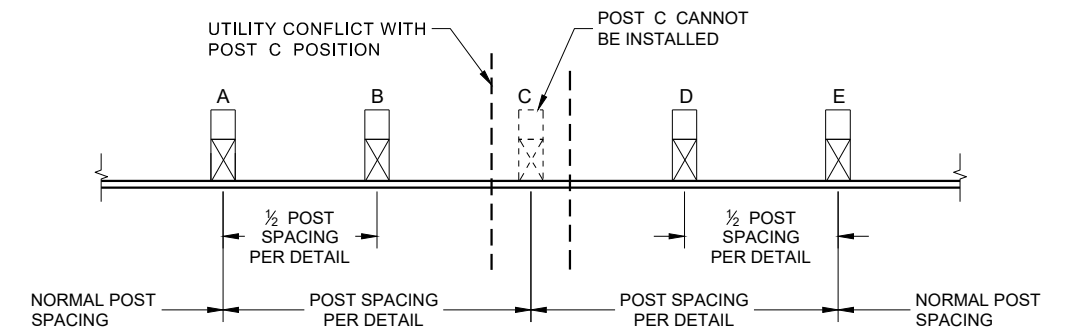
ALTERNATE BOLT HEAD



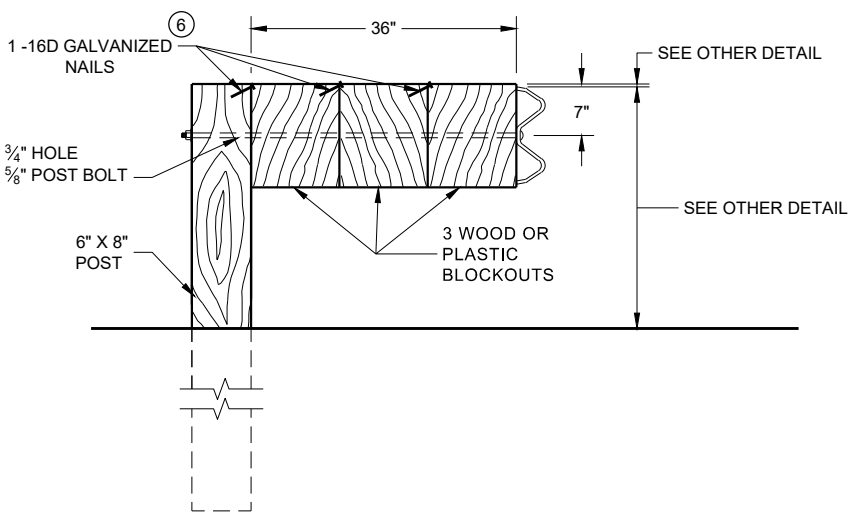
POST BOLT, SPLICE BOLT AND RECESS NUT



PLAN VIEW BEAM LAPPING DETAIL

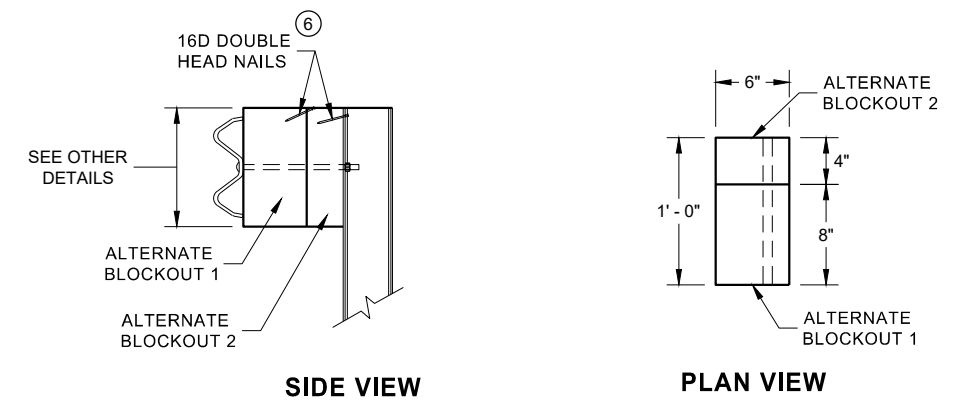


POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

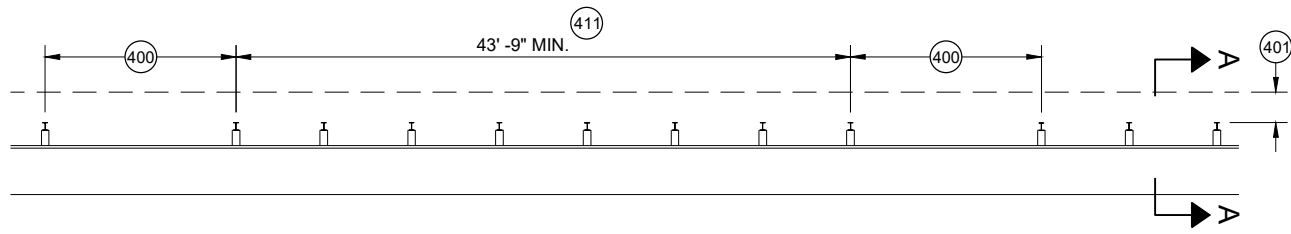


ALTERNATE WOOD BLOCKOUT DETAIL

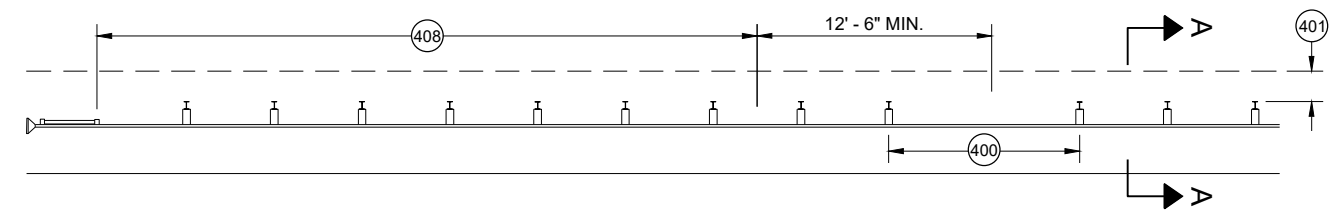
6 WHEN USING STEEL POST AND WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

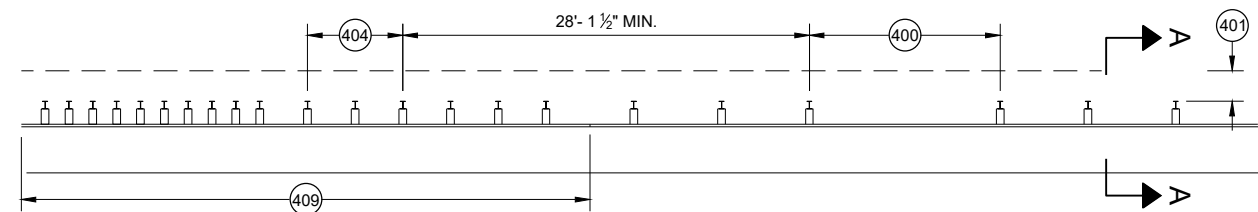
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



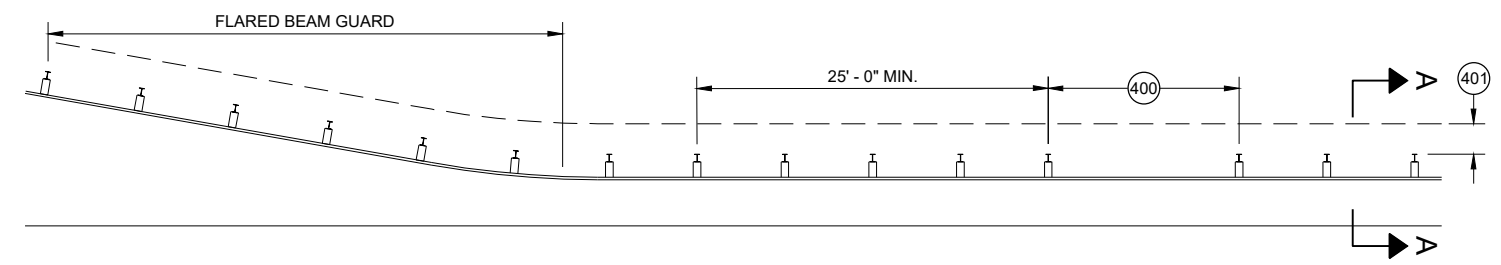
MISSING POST IN MGS GUARDRAIL



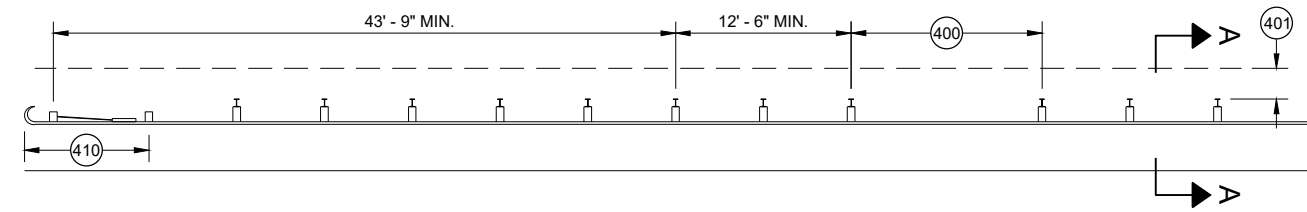
MISSING POST IN MGS GUARDRAIL NEAR EAT



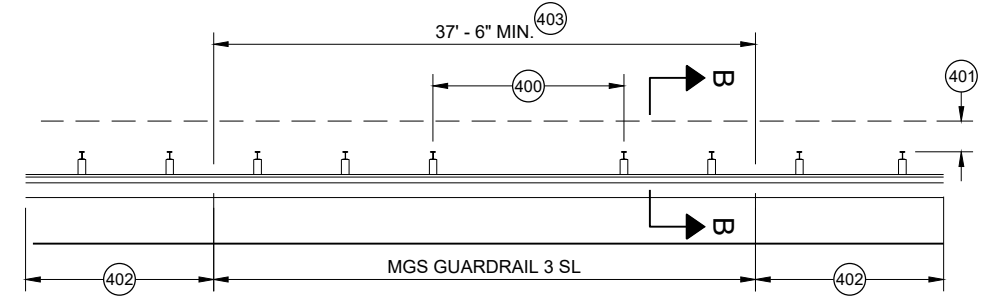
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

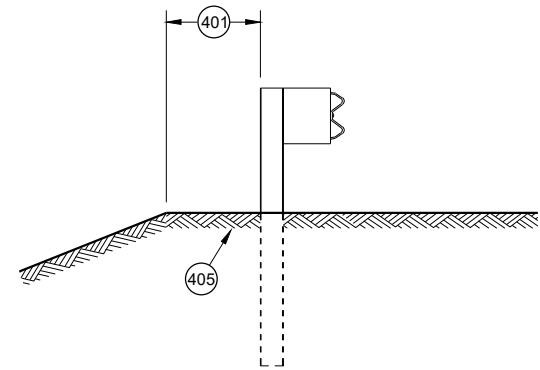


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

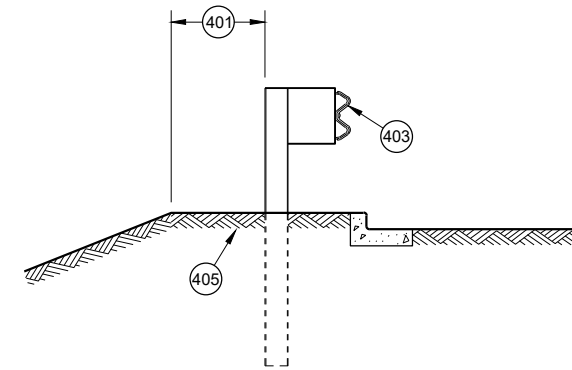


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL)

- 400 MAX SPAN 12' - 6"
- 401 2' MIN.
- 402 MGS GUARDRAIL 3
- 403 NESTING BEAM GUARD
- 404 ASYMMETRIC TRANSITION
- 405 SOIL WELL DRAINED AND COMPACTED
- 406 SEE OTHER DRAWINGS IN THIS SDD
- 407 SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
- 408 SEE SDD 14B44
- 409 SEE SDD 14B45
- 410 SEE SDD 14B47
- 411 MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A



SECTION B - B

| | |
|---|---|
| MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED May 2021 DATE | /S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR |
| <small>FHWA</small> | |

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
 - (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED
 - (C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.
 - (D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.
 - (E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.
- DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

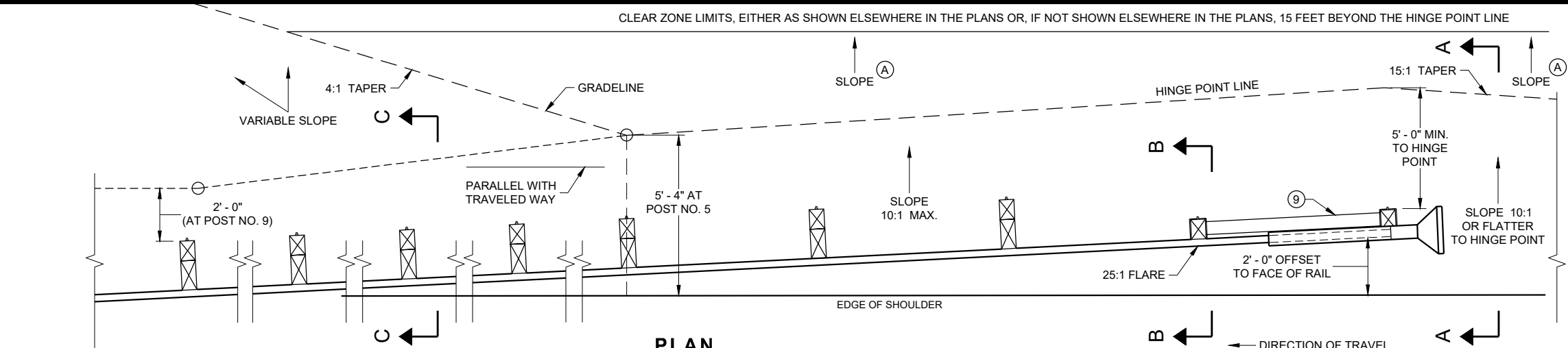
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

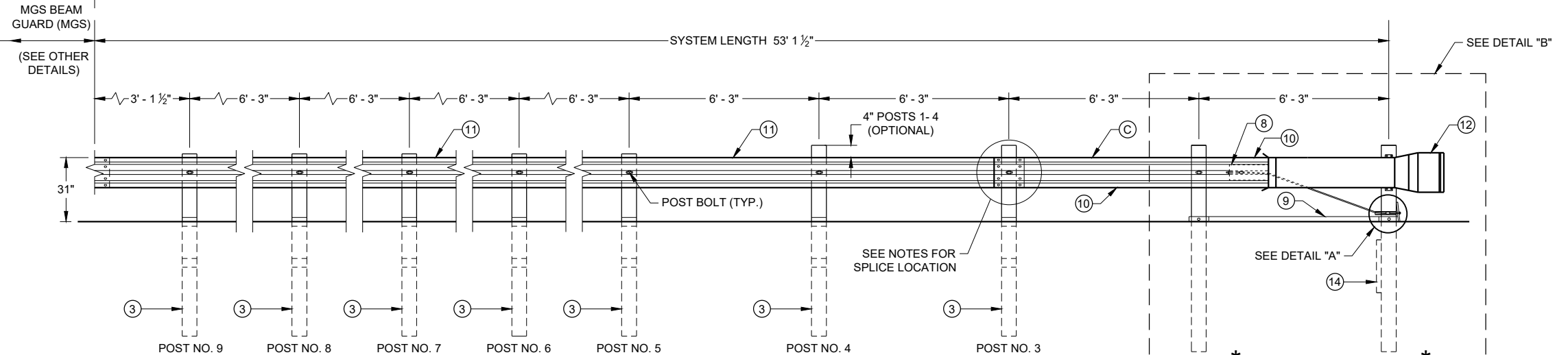
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

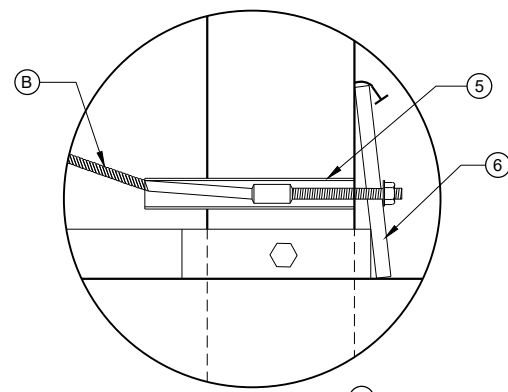
THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



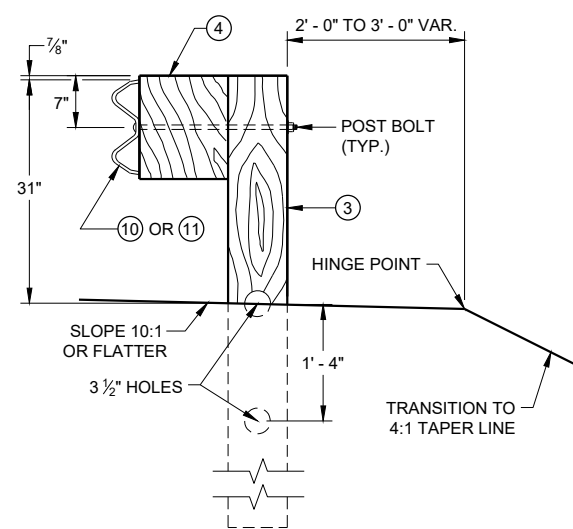
PLAN



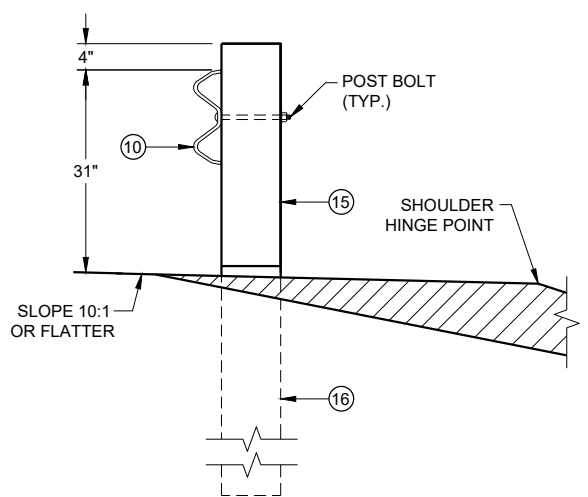
ELEVATION



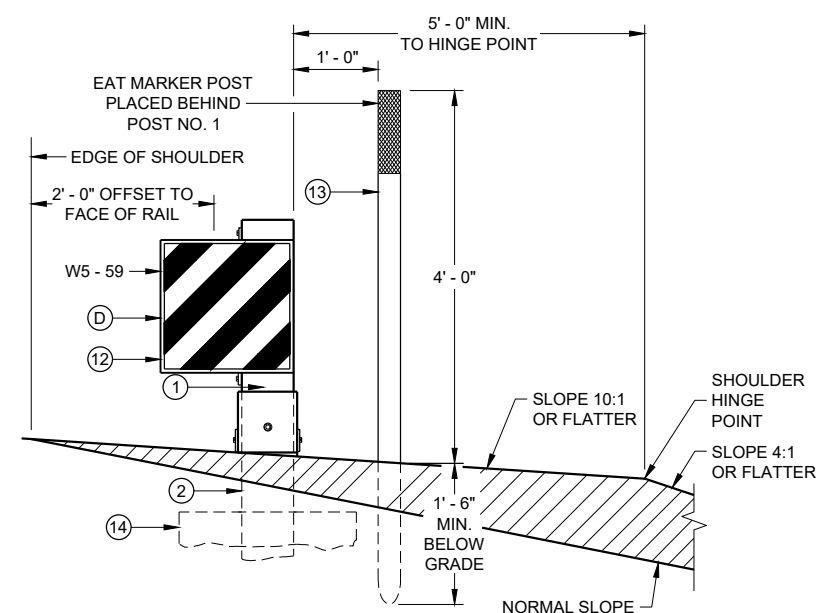
DETAIL "A"



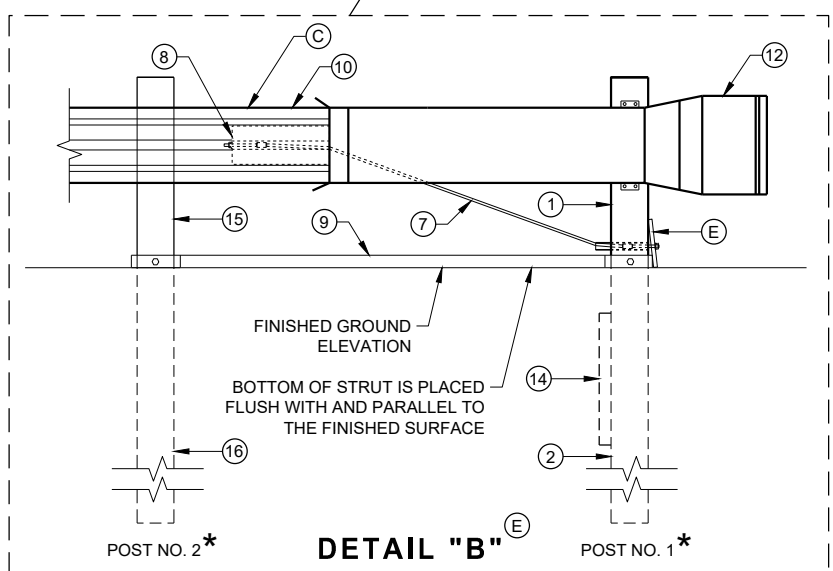
**SECTION C - C
TYPICAL AT POST NOS. 3 - 9**



**SECTION B - B
TYPICAL AT POST NO. 2***



**SECTION A - A
TYPICAL AT POST NO. 1***



DETAIL "B"

**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

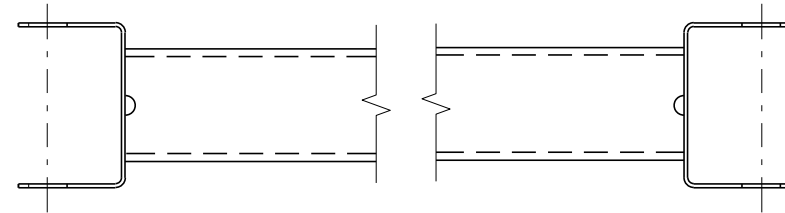
6

SDD 14B44 - 04a

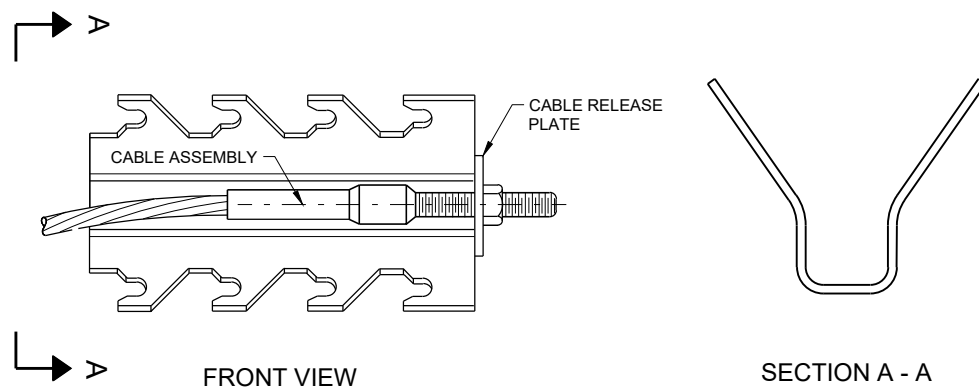
SDD 14B44 - 04a

BILL OF MATERIALS

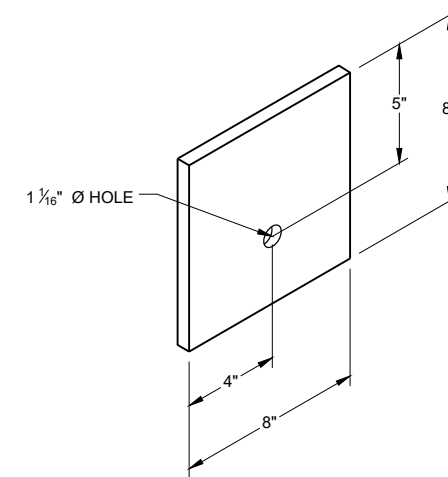
| PART NO. | DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION. |
|----------|--|
| ① | UPPER POST NO. 1 6" X 6" TUBE |
| ② | LOWER POST NO. 1 |
| ③ | WOOD CRT |
| ④ | WOOD BLOCKOUT |
| ⑤ | PIPE SLEEVE |
| ⑥ | BEARING PLATE |
| ⑦ | BCT CABLE ASSEMBLY |
| ⑧ | ANCHOR CABLE BOX |
| ⑨ | GROUND STRUT |
| ⑩ | PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG. |
| ⑪ | STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH. |
| ⑫ | IMPACT HEAD |
| ⑬ | EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST) |
| ⑭ | SOIL PLATE |
| ⑮ | UPPER POST NO. 2 |
| ⑯ | LOWER POST NO. 2 |



GENERIC GROUND STRUT ⑨ ⑤



GENERIC ANCHOR CABLE BOX ⑨ ⑤



BEARING PLATE ⑥ ⑤

6

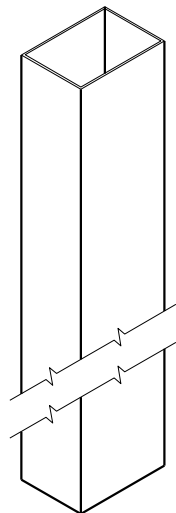
6

SDD 14B44 - 04b

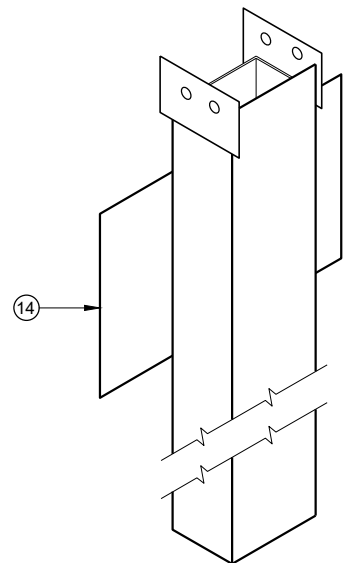
SDD 14B44 - 04b

**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

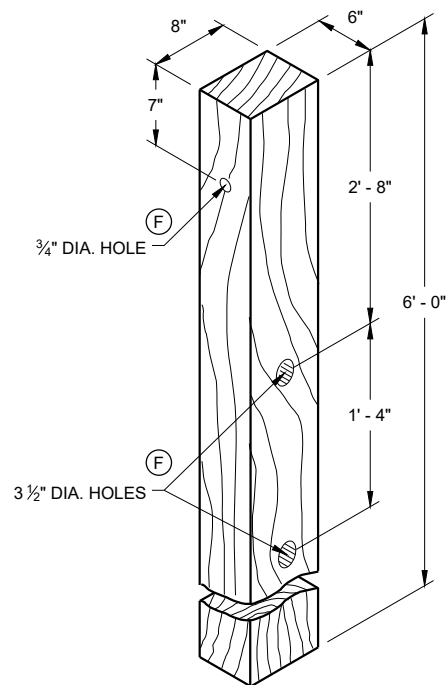
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



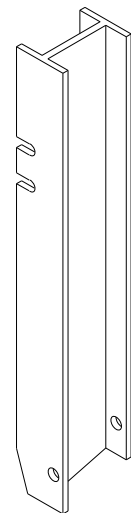
UPPER POST NO. 1 ⁽¹⁾ (E)



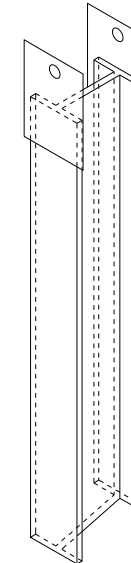
LOWER POST NO. 1 ⁽²⁾ (E)



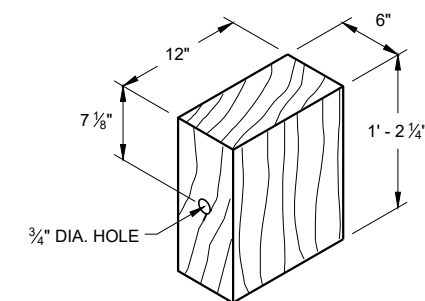
WOOD CRT POST ⁽³⁾ (E)
POSTS NUMBER 3-9



UPPER POST NO. 2 ⁽¹⁵⁾ (E)

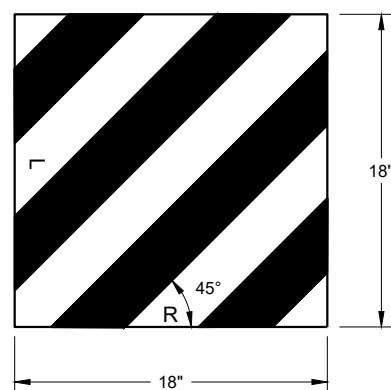


LOWER POST NO. 2 ⁽¹⁶⁾ (E)

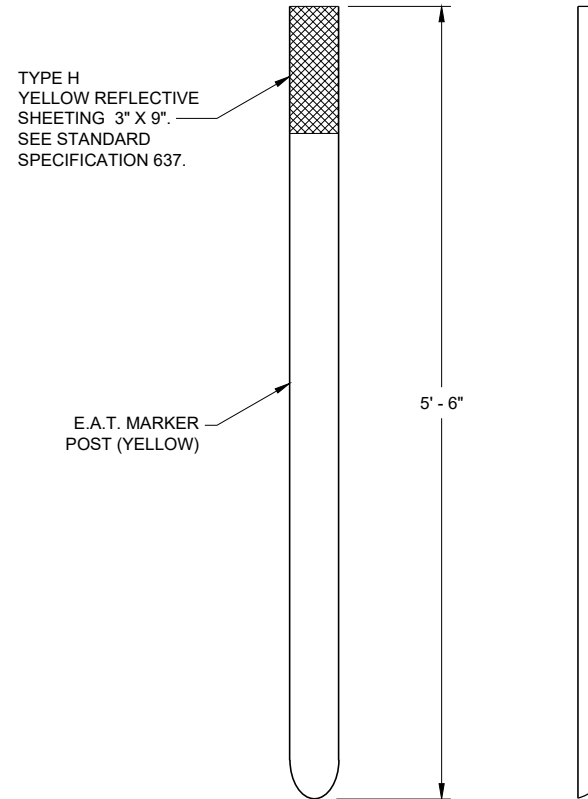


WOOD BLOCKOUT ⁽⁴⁾
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

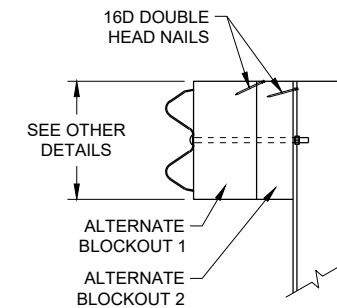
6



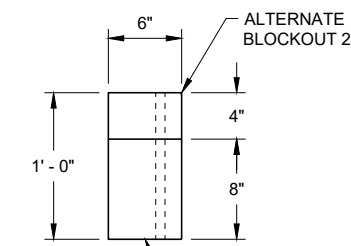
W5 - 59
REFLECTIVE SHEETING DETAIL ^(E)



FRONT VIEW SIDE VIEW
E.A.T. MARKER POST ⁽¹³⁾



SIDE VIEW



TOP VIEW

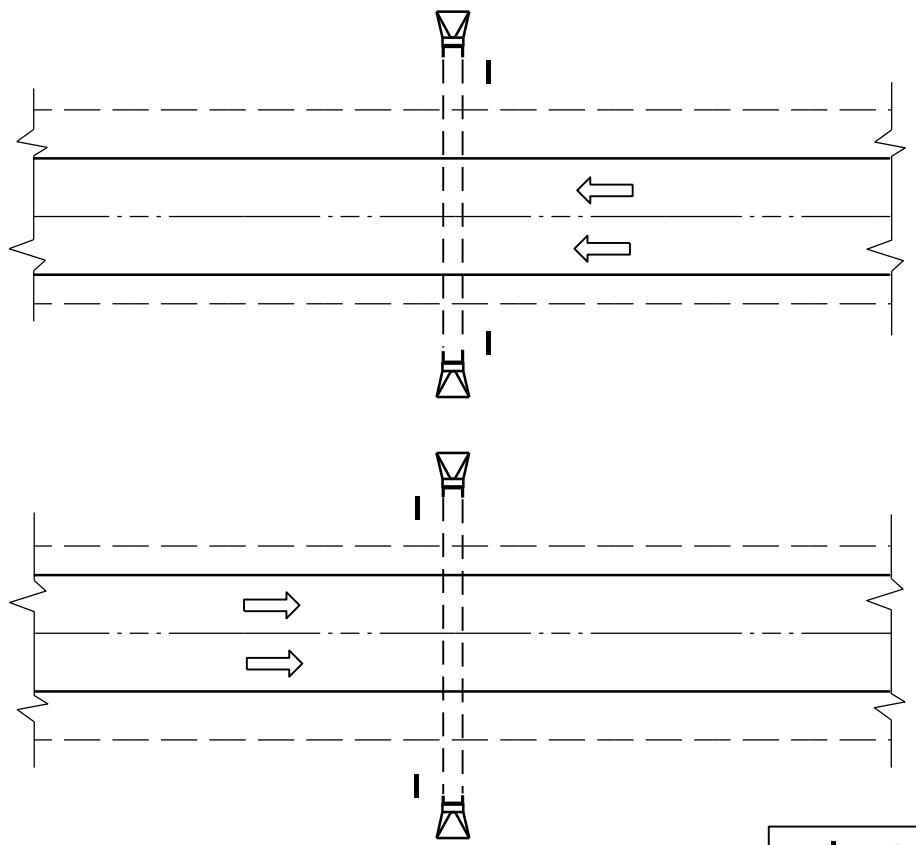
ALTERNATE WOOD BLOCKOUT DETAIL

6

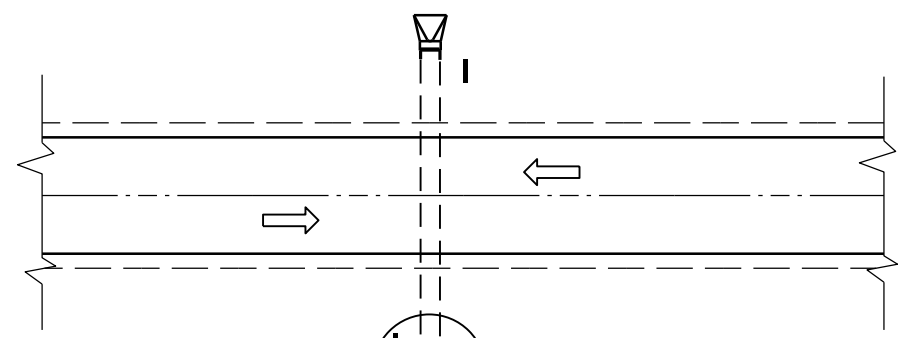
**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

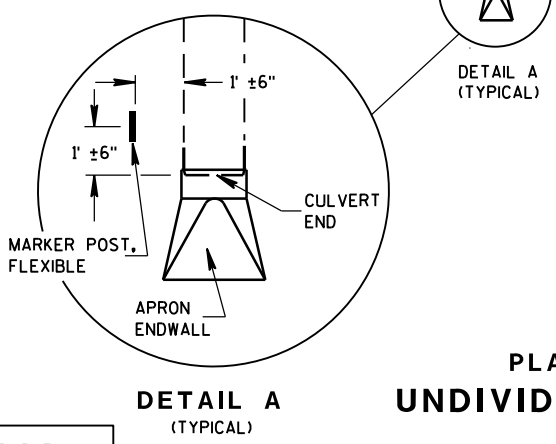
APPROVED
7/2018 DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR



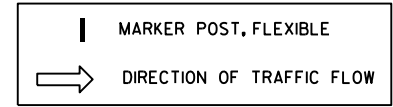
PLAN VIEW
DIVIDED HIGHWAY



PLAN VIEW
UNDIVIDED HIGHWAY

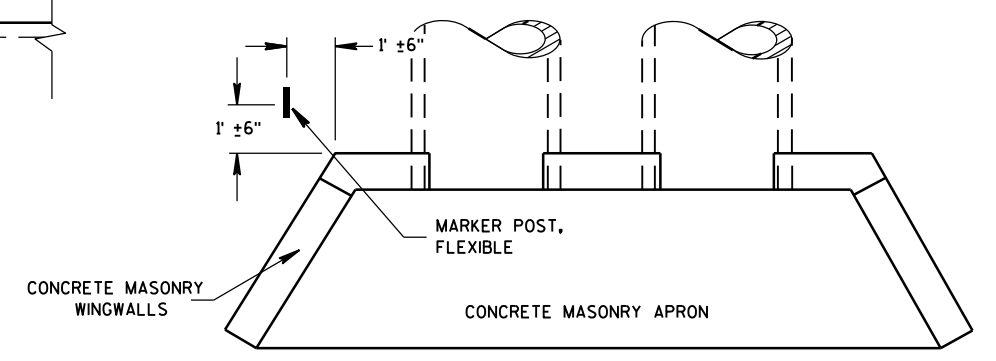


DETAIL A
(TYPICAL)



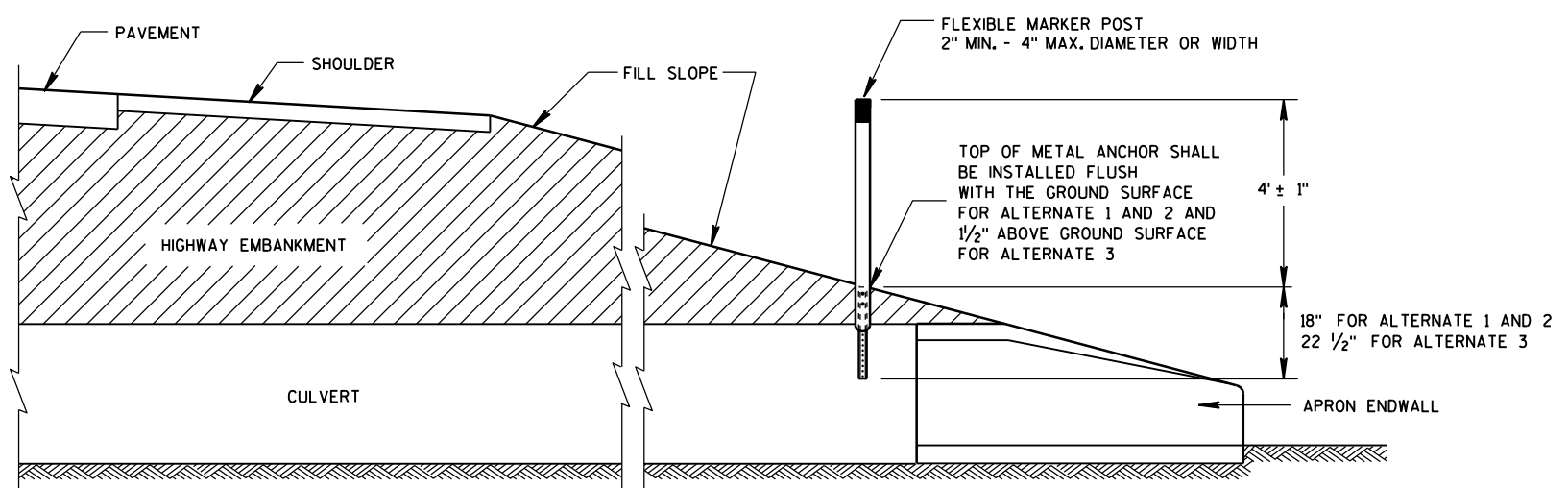
GENERAL NOTES

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**

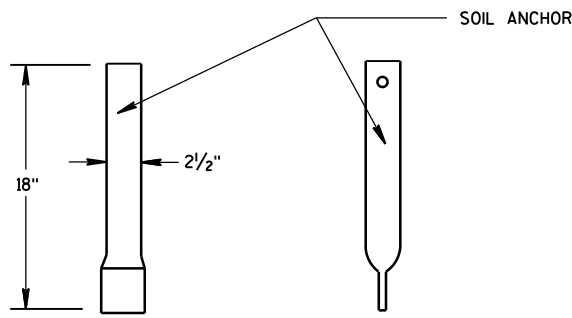
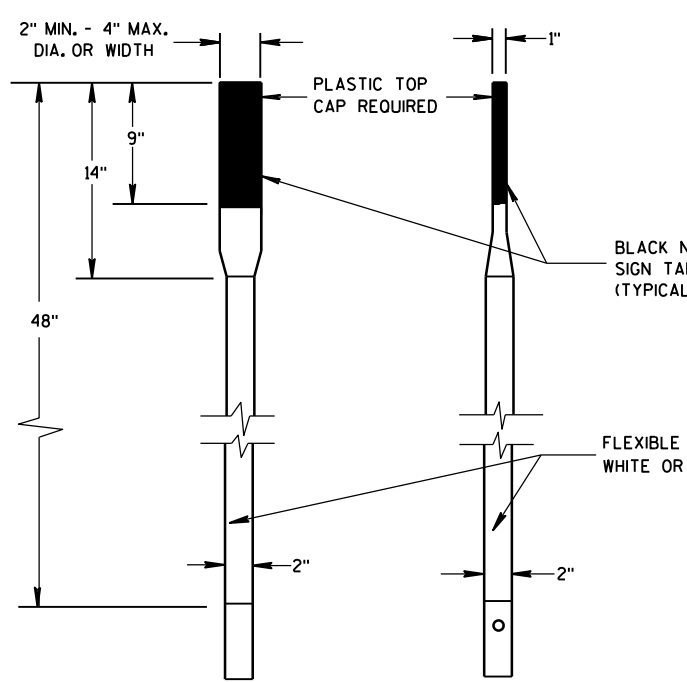
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

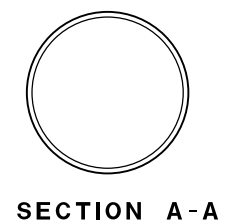
6

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

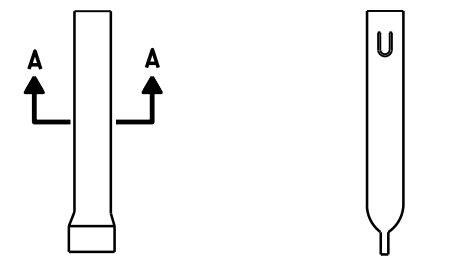
S.D.D. 15 A 3-2a



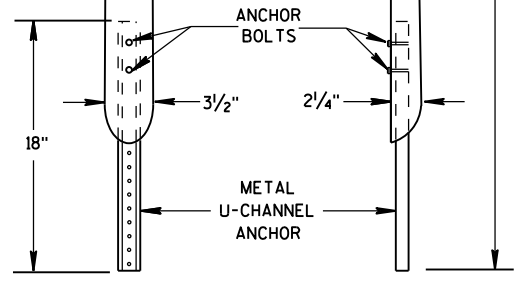
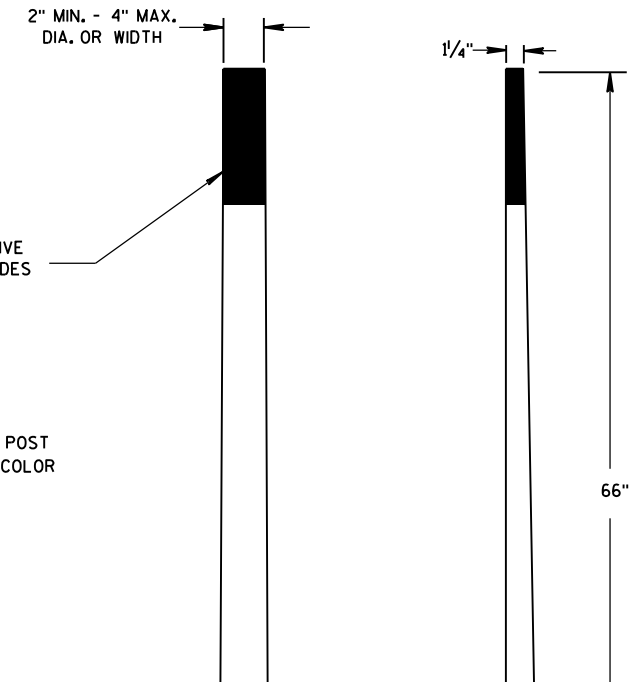
FRONT VIEW SIDE VIEW
ALTERNATE 1



SECTION A-A

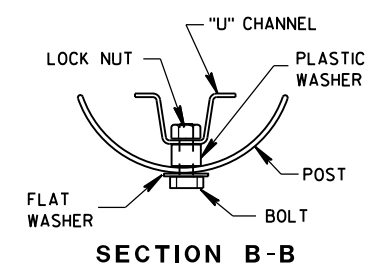


FRONT VIEW SIDE VIEW
ALTERNATE 1

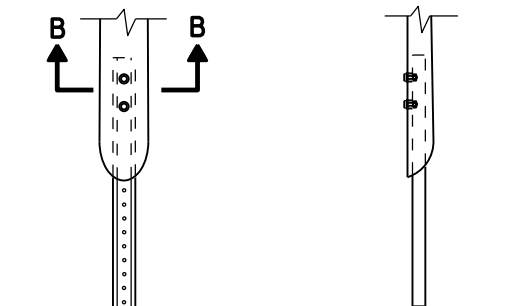


FRONT VIEW SIDE VIEW
ALTERNATE 2

FLEXIBLE MARKER POSTS

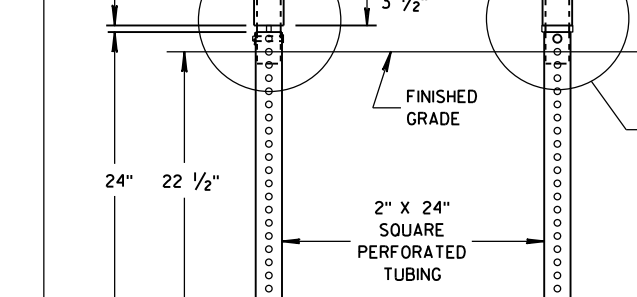
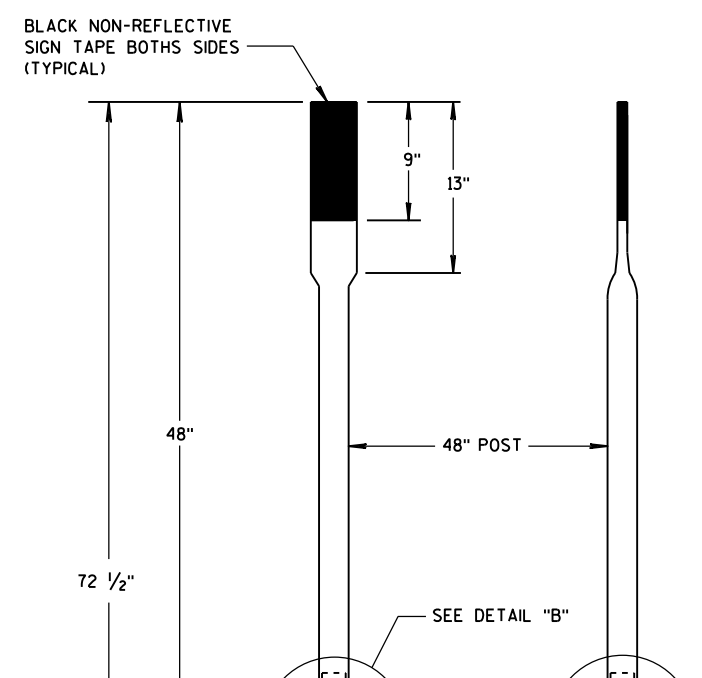


SECTION B-B

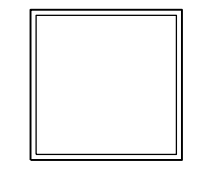


FRONT VIEW SIDE VIEW
ALTERNATE 2

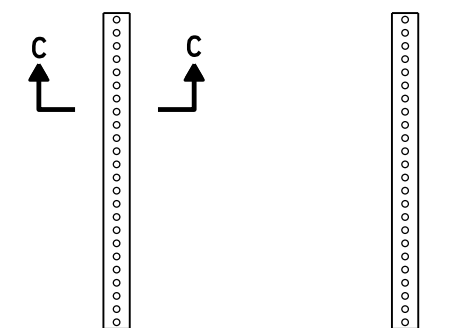
FLEXIBLE MARKER POST ANCHORS



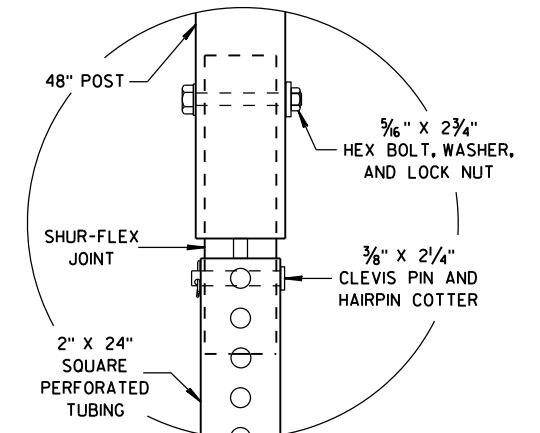
FRONT VIEW SIDE VIEW
ALTERNATE 3



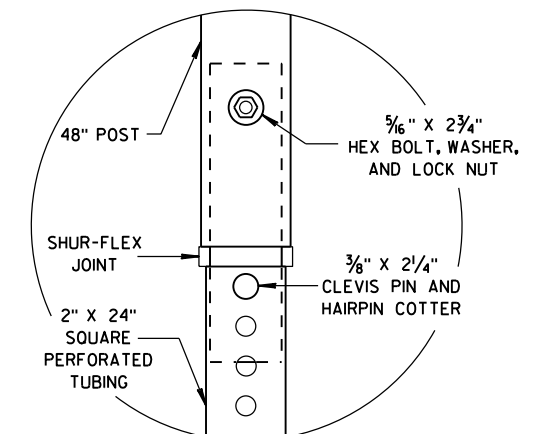
SECTION C-C



FRONT VIEW SIDE VIEW
ALTERNATE 3



DETAIL B

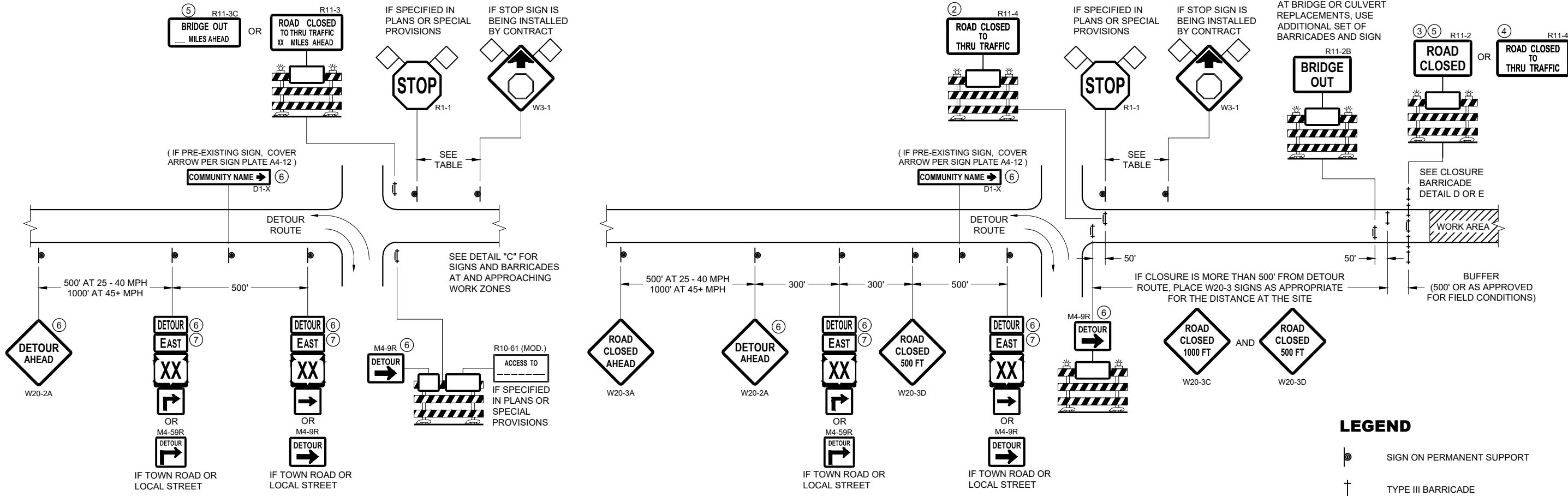


DETAIL C

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



**DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

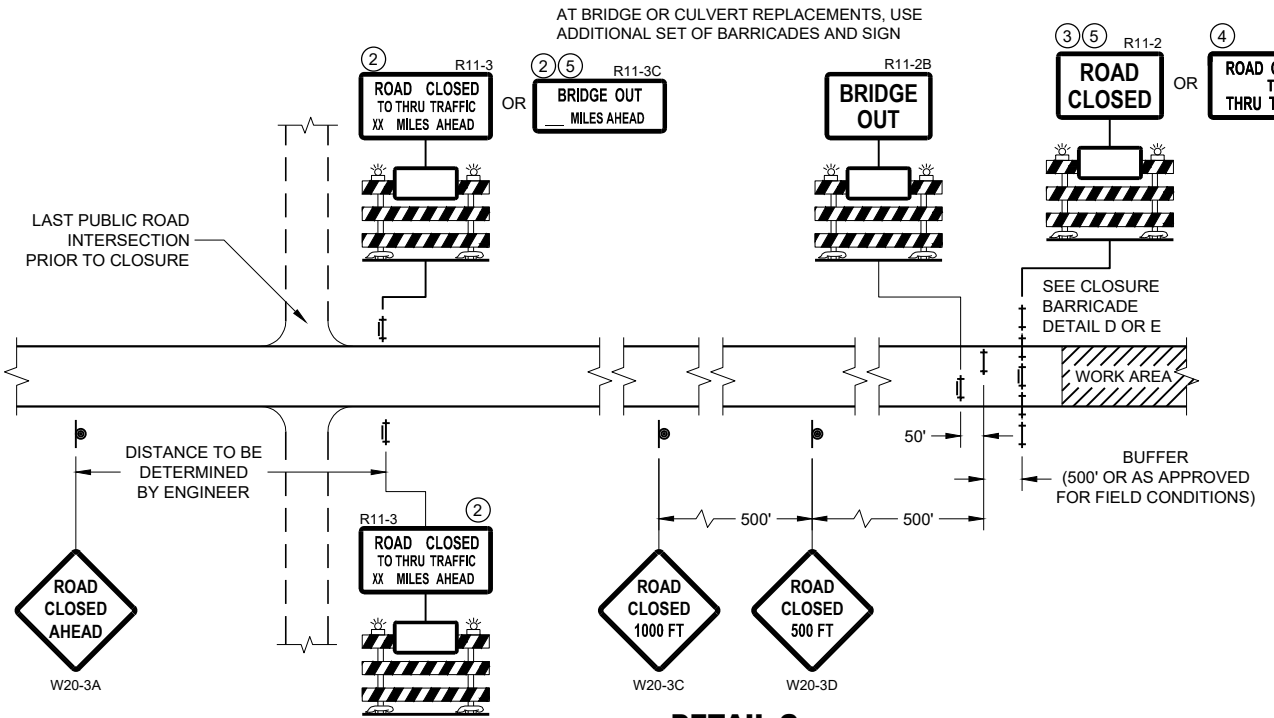
**DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE LESS THAN 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

- LEGEND**
- SIGN ON PERMANENT SUPPORT
 - TYPE III BARRICADE
 - TYPE III BARRICADE WITH ATTACHED SIGN
 - TYPE "A" WARNING LIGHT (FLASHING)
 - WORK AREA
 - FLAGS, 16" X 16" MIN. (ORANGE)

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

- M4 - 8
- M3 - X
- M1 - 4 OR M1 - 6 OR M1 - 5A
- M05 - 1 OR M06 - 1



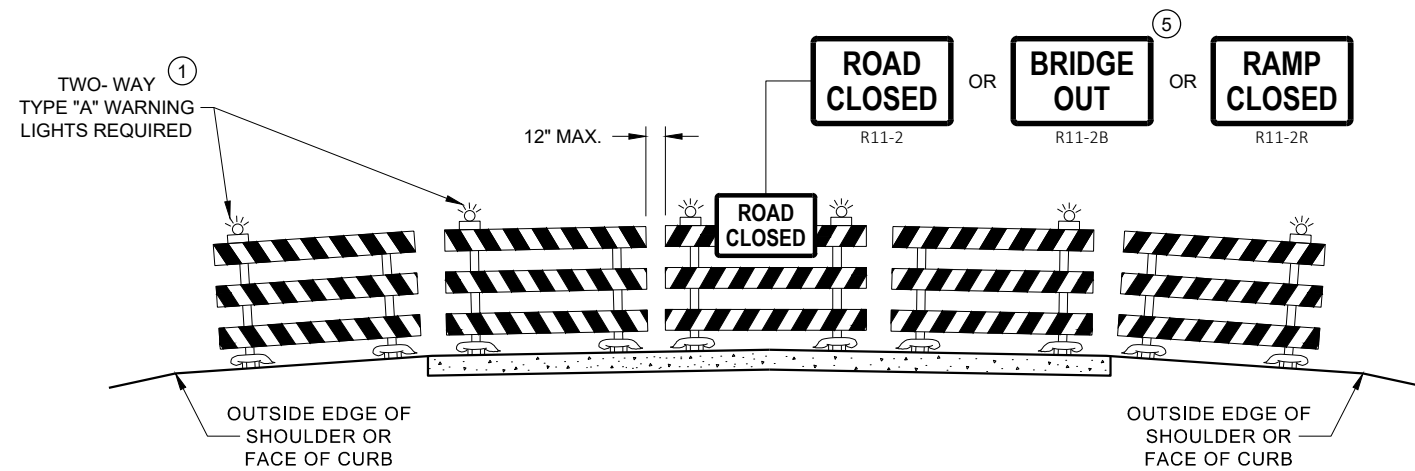
**DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR**

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

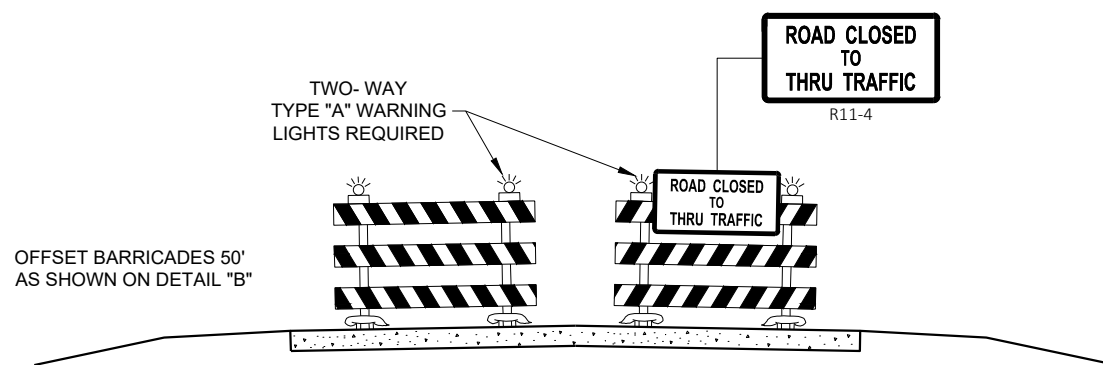
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE DATE WORK ZONE ENGINEER
FHWA



**DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW**



**DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

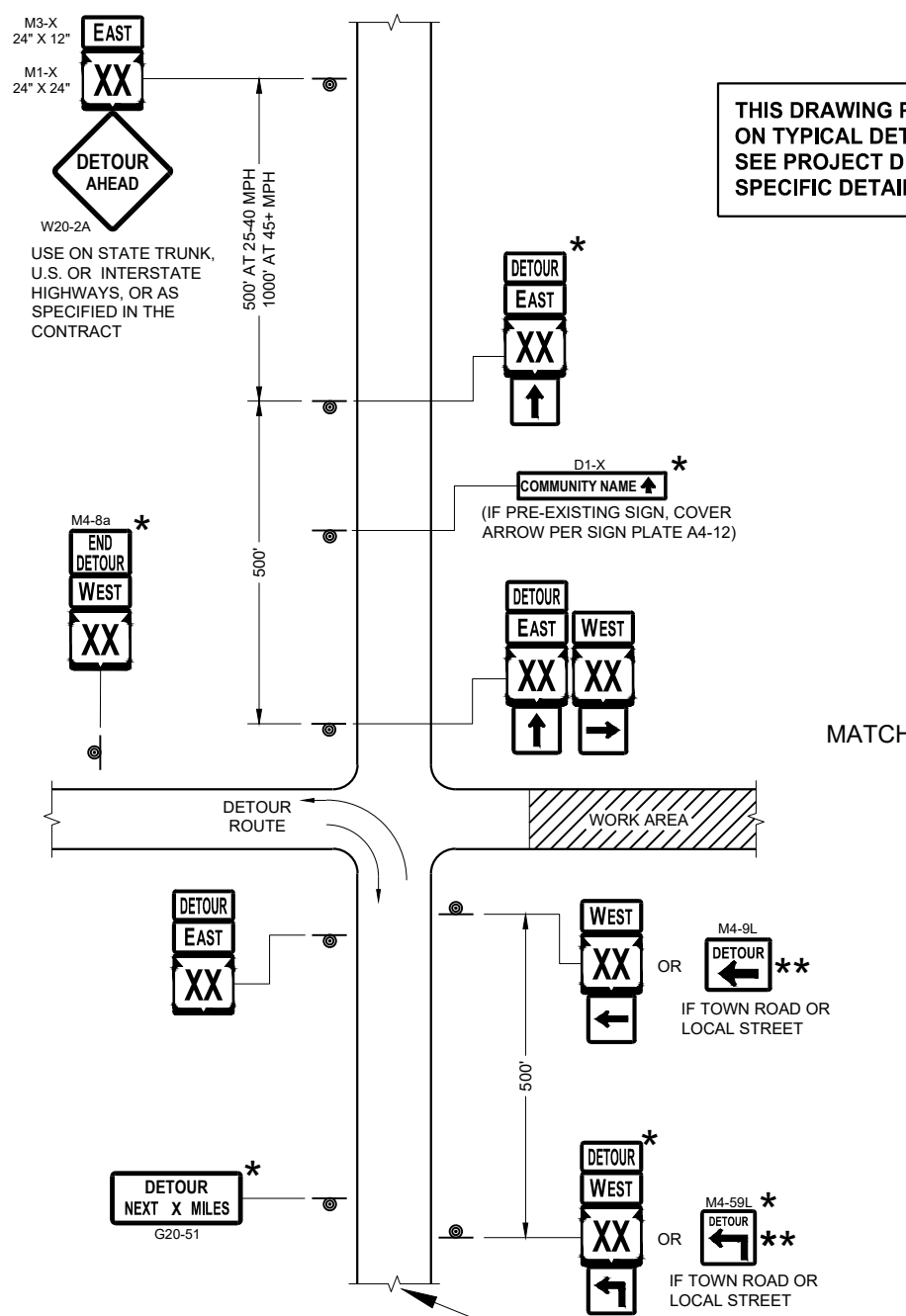
- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- M4 - 8
- M3 - X
- M1 - 4
- M1 - 6
- M1 - 5A
- M05 - 1
- M06 - 1
- M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

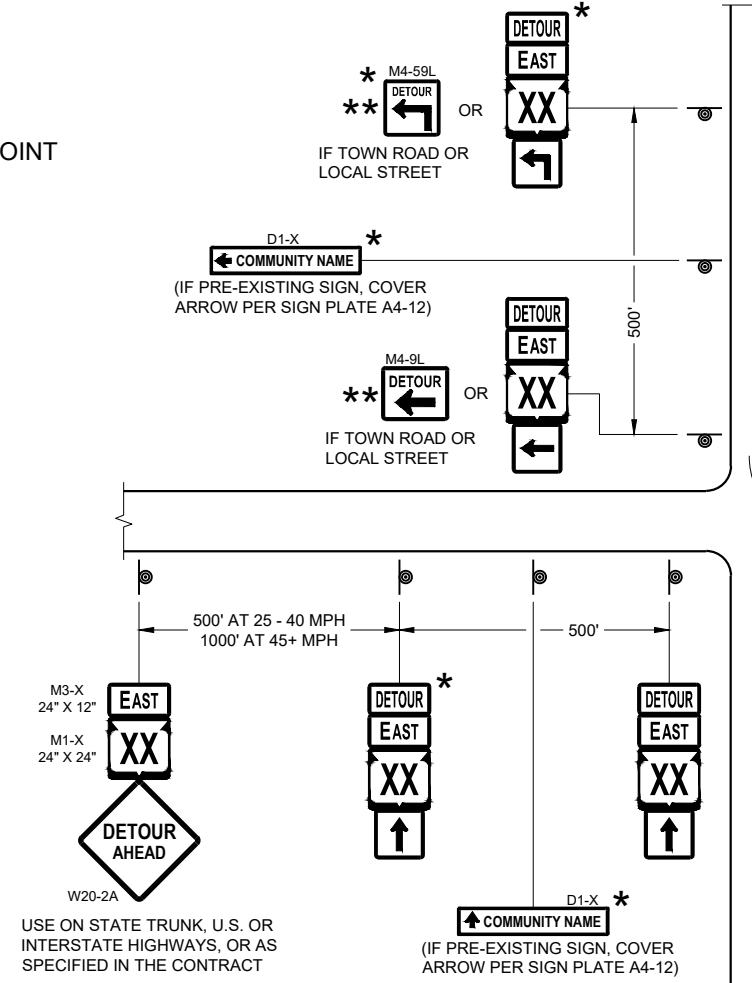
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

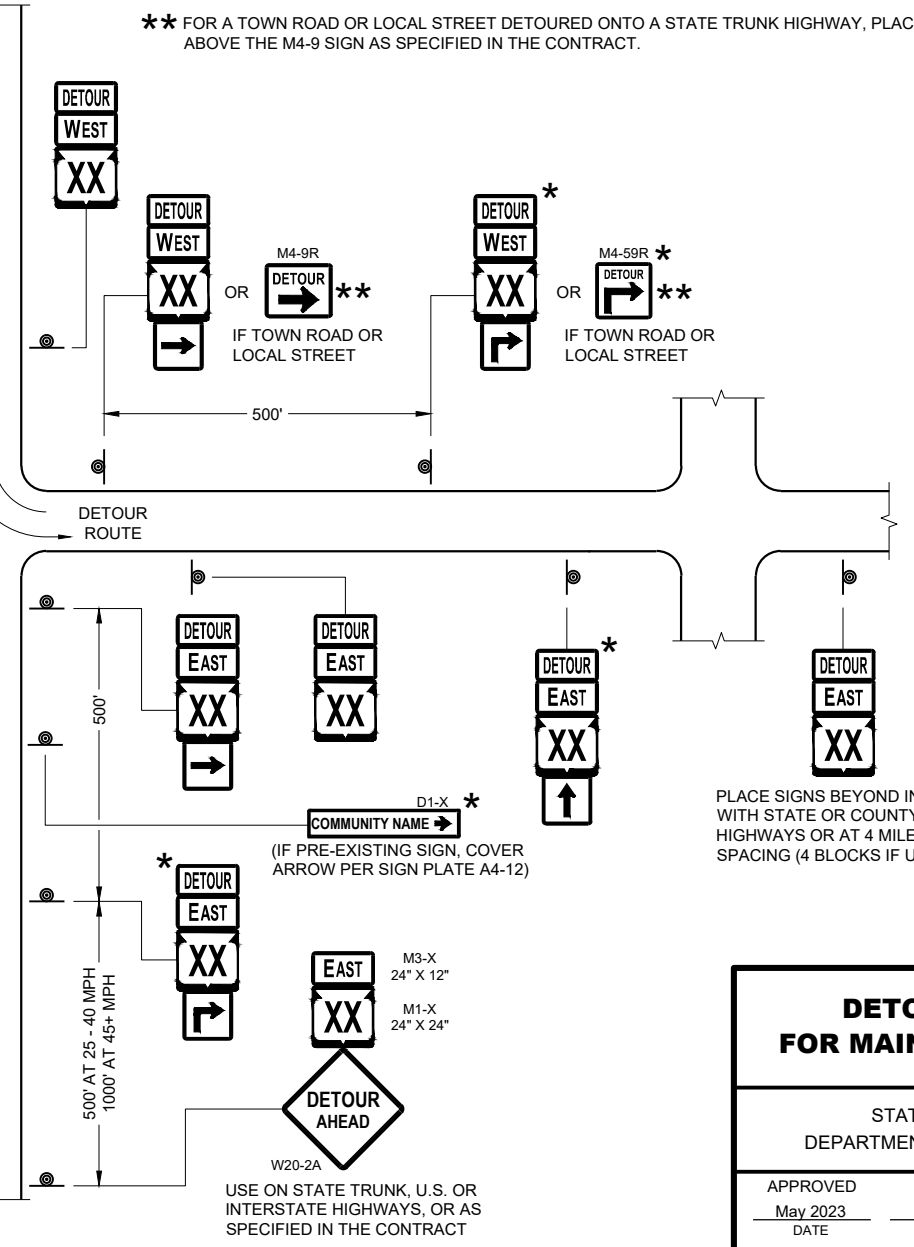
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-9R SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

MATCH POINT



**DETAIL F
DETOUR SIGNING**



PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

| DETOUR SIGNING FOR MAINLINE CLOSURES | |
|--|--|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED May 2023 DATE | /S/ Andrew Heidtke WORK ZONE ENGINEER |
| FHWA | |

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.

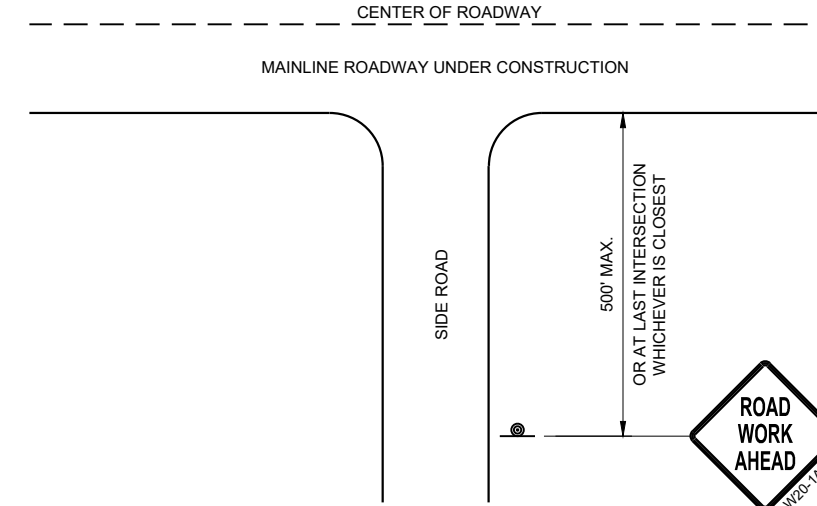
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

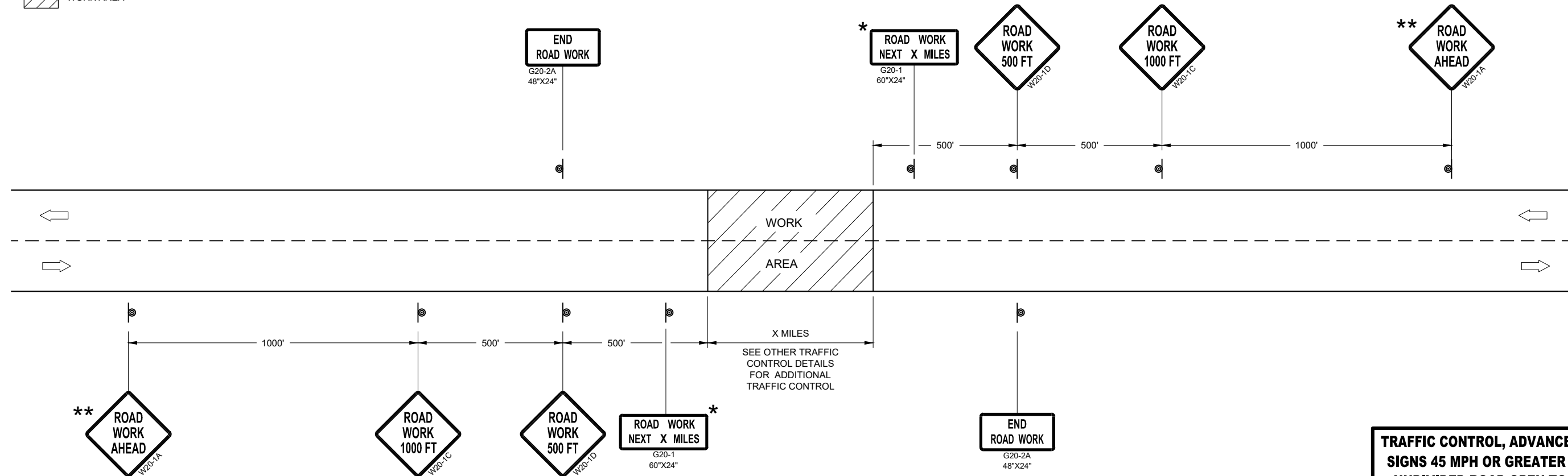
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

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



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE July 2018 /S/ Andrew Heidtke
WORK ZONE ENGINEER




FHWA

GENERAL NOTES

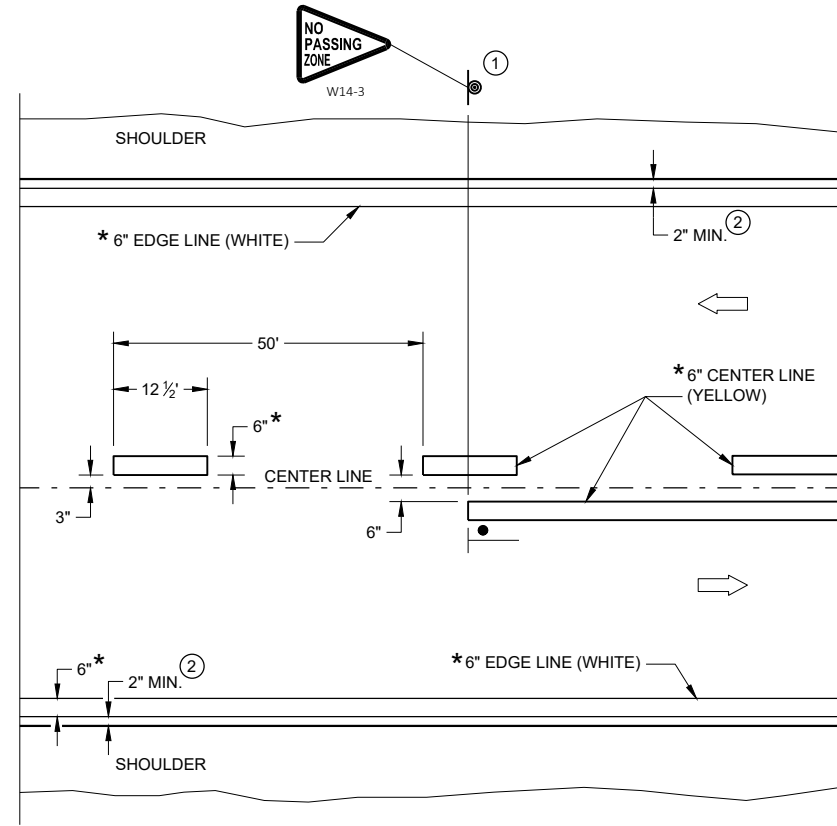
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- 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.

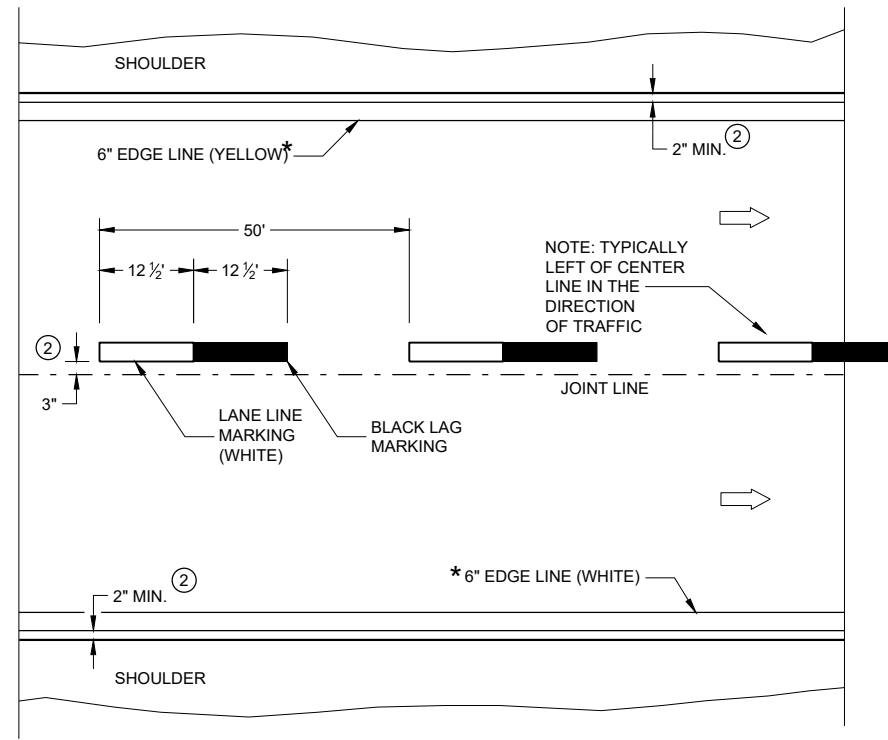
LEGEND

-  "T" MARKING
-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

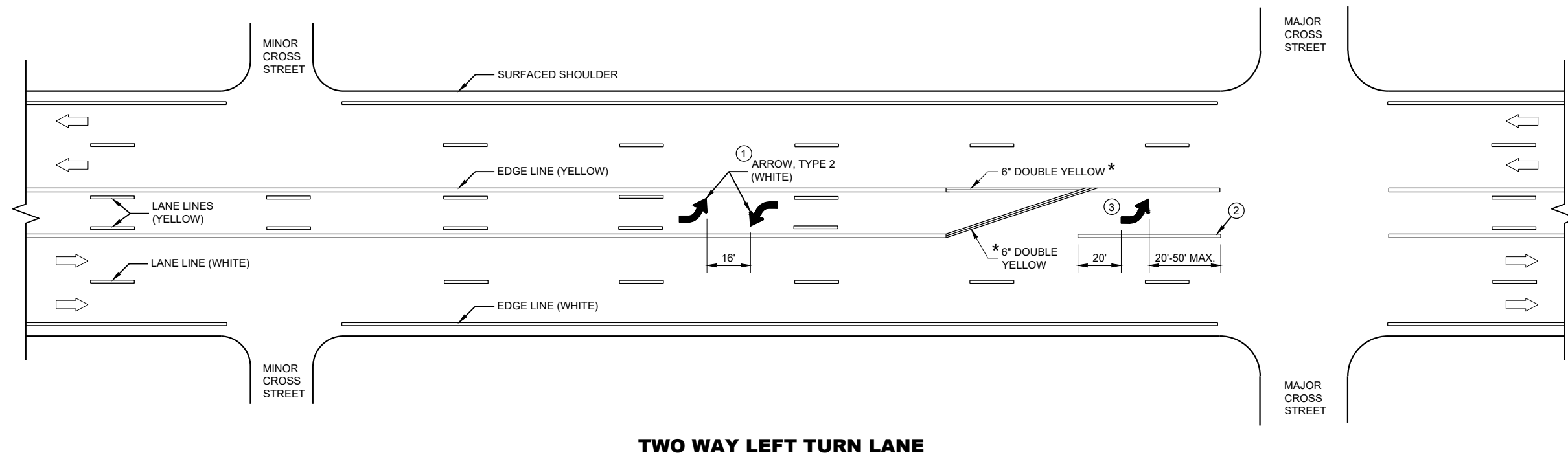
APPROVED
DATE: May 2023 /S/ Jeannie Silver
STATEWIDE SIGNING AND MARKING ENGINEER

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



6

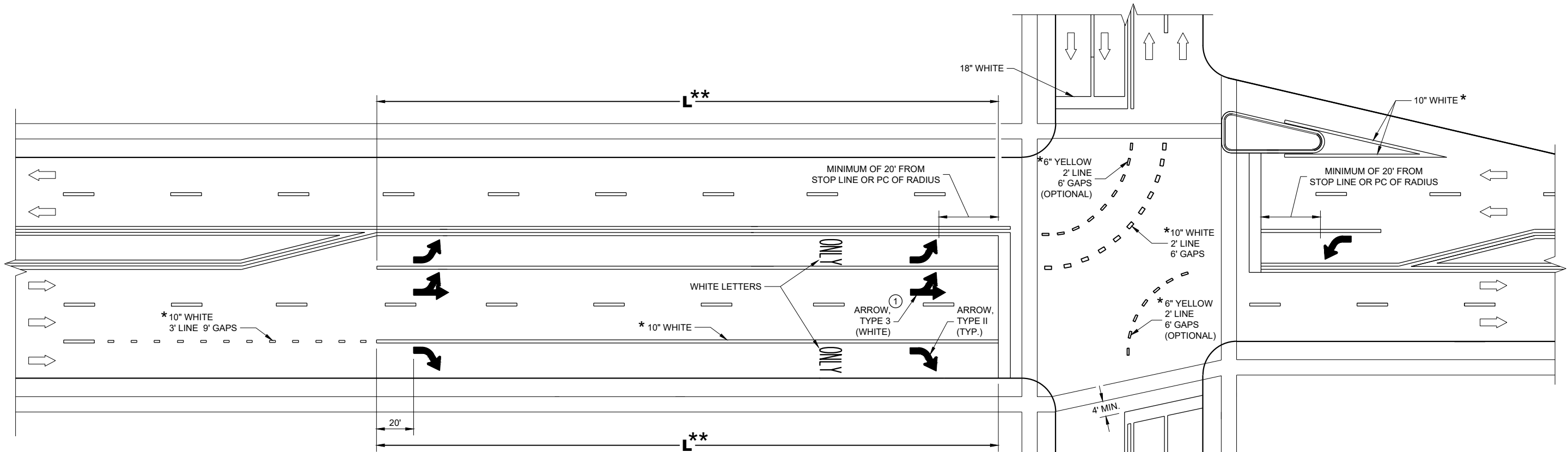
6

SDD 15C08-23c

SDD 15C08-23c

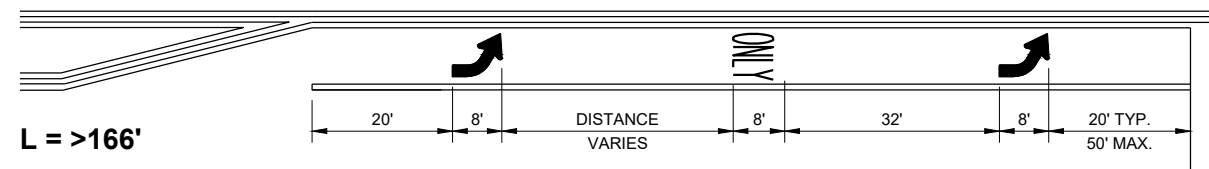
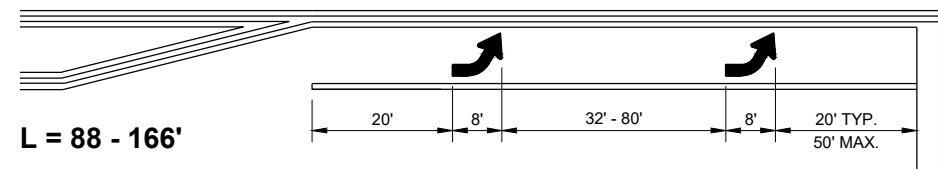
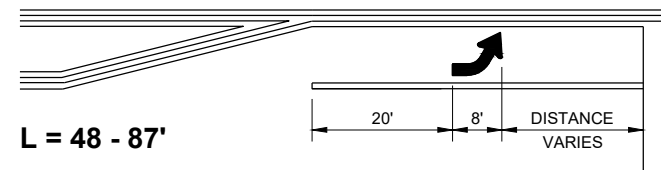
**PAVEMENT MARKING
(TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TURN LANE OPTIONS

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



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

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

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.

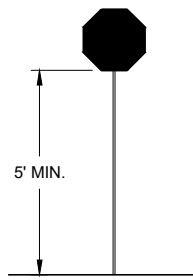
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

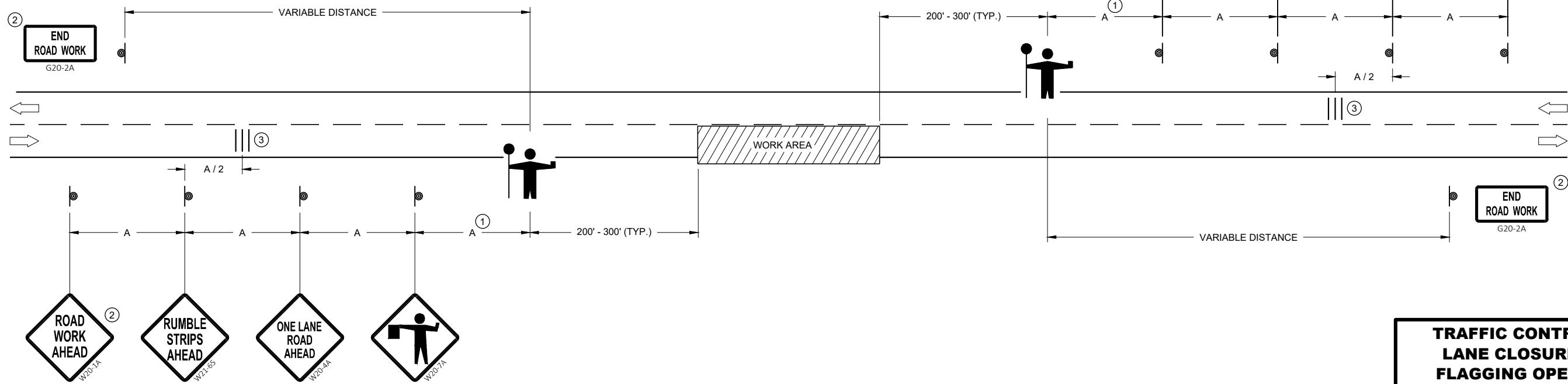
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



W03-4

USE OF W03-4 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
DATE: May 2022 /S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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.

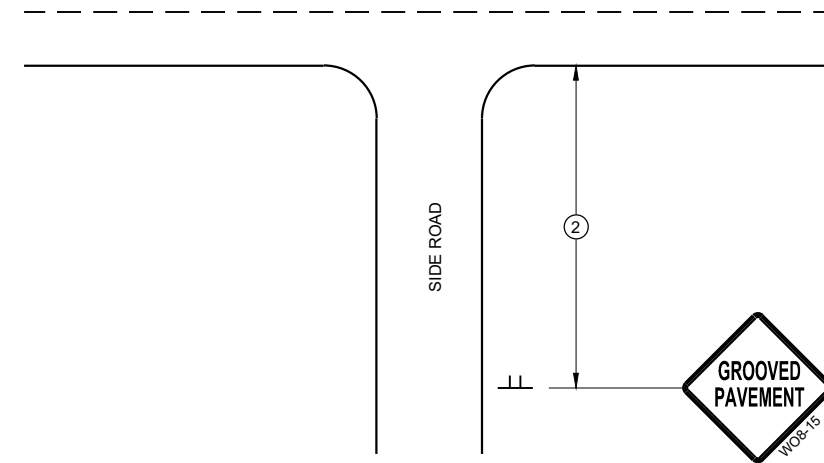
SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

- ① PLACE SIGNS 350' IN ADVANCE OF MILLED 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.

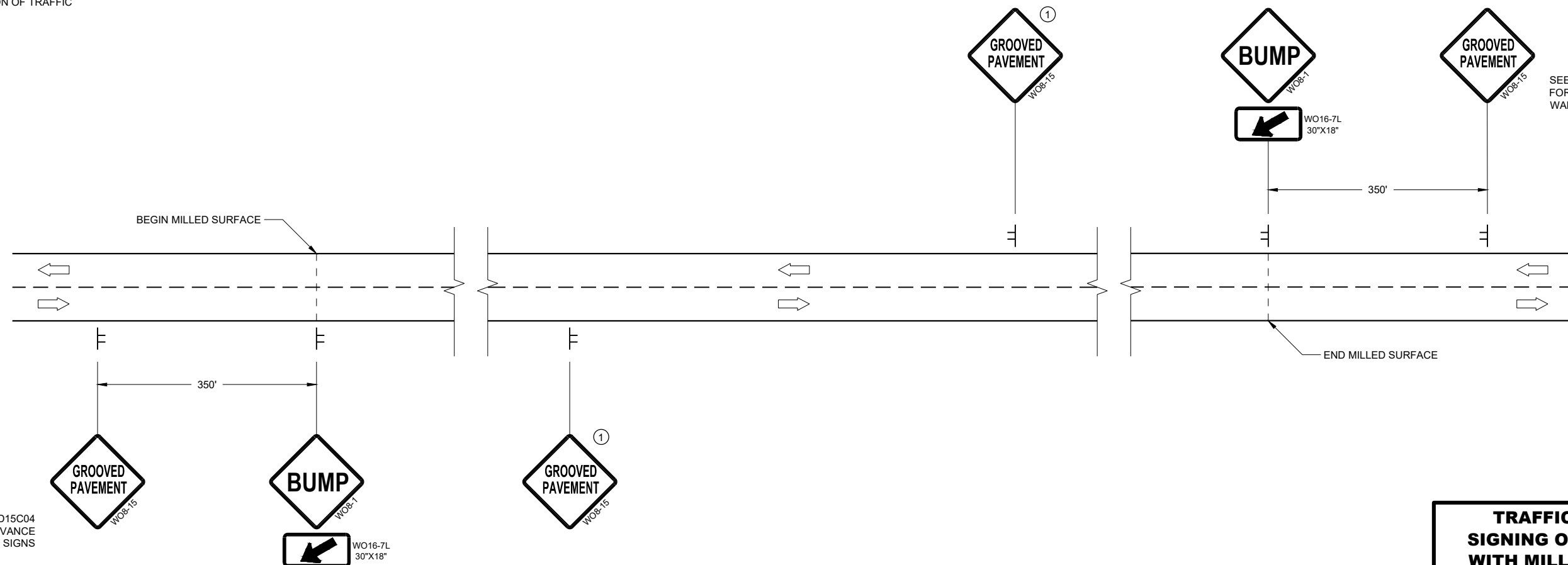
LEGEND

⊥ SIGN ON TEMPORARY SUPPORT

⇨ DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



SEE SDD15C04 FOR ADVANCE WARNING SIGNS

SEE SDD15C04 FOR ADVANCE WARNING SIGNS

DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

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.

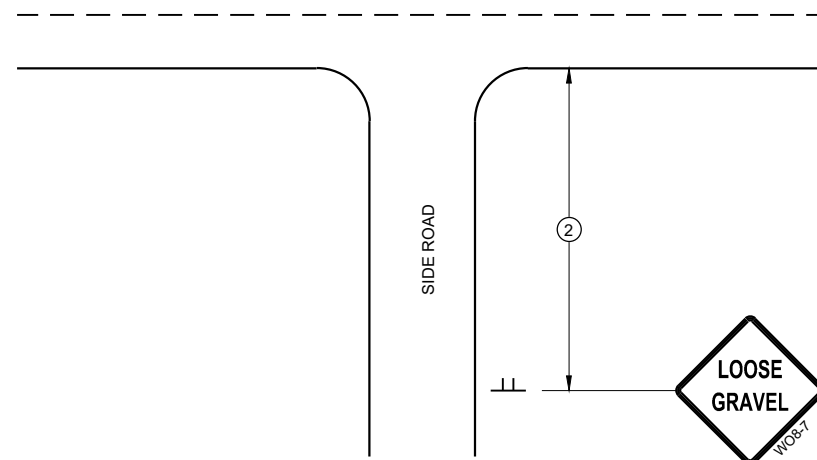
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

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.

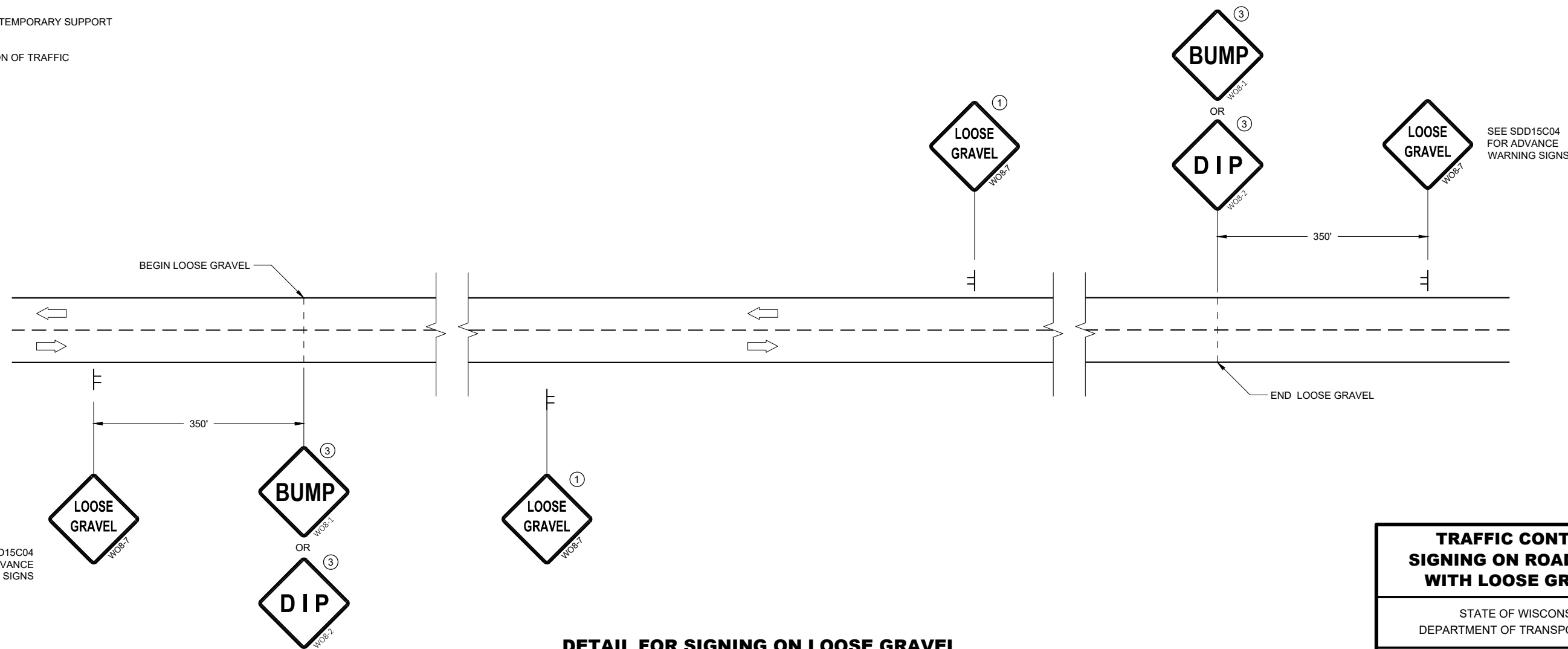
- ① PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.
- ③ ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

LEGEND

- ⊥ SIGN ON TEMPORARY SUPPORT
- ➡ DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



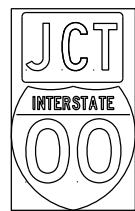
SEE SDD15C04 FOR ADVANCE WARNING SIGNS

SEE SDD15C04 FOR ADVANCE WARNING SIGNS

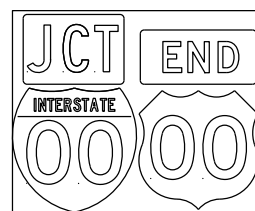
DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

| | |
|--|--|
| TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED February 2021 DATE | /S/ Andrew Heidtke WORK ZONE ENGINEER |
| FHWA | |

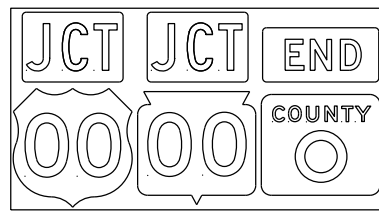
TYPICAL ASSEMBLIES



J1-1



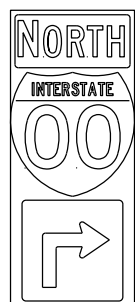
J1-2



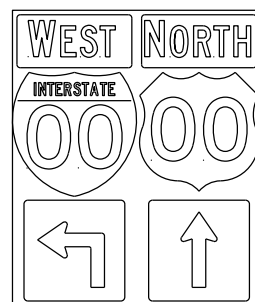
J1-3



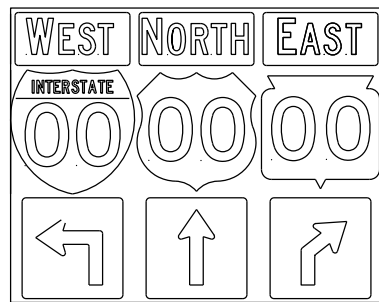
JR1-1



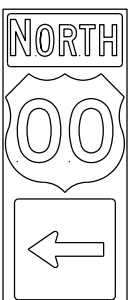
J2-1



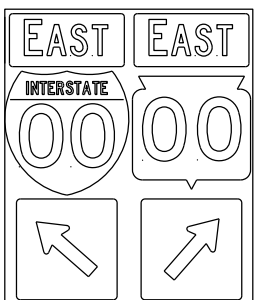
J2-2



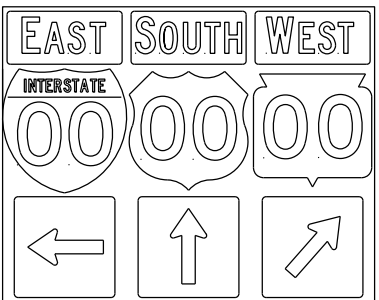
J2-3



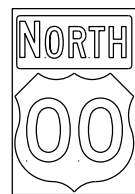
J3-1



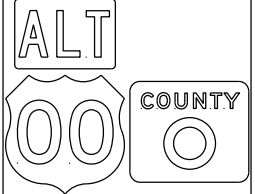
J3-2



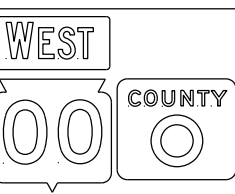
J3-3



J4-1



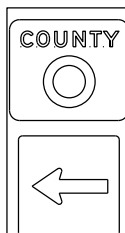
J4-2



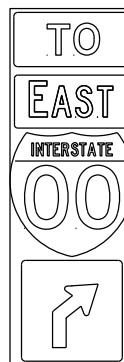
J4-2



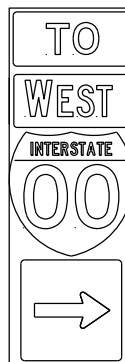
J12-1



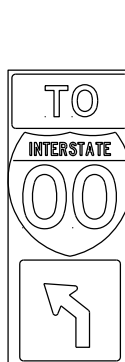
J13-1



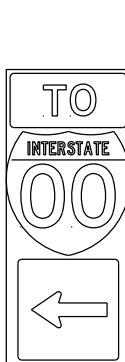
J32-1



J33-1



J22-1



J23-1



JR13-1



JR23-1

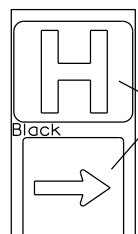


JR99-1



JV

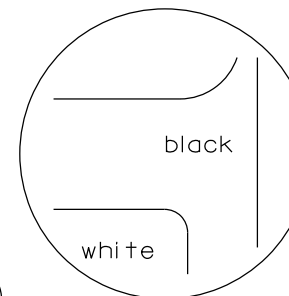
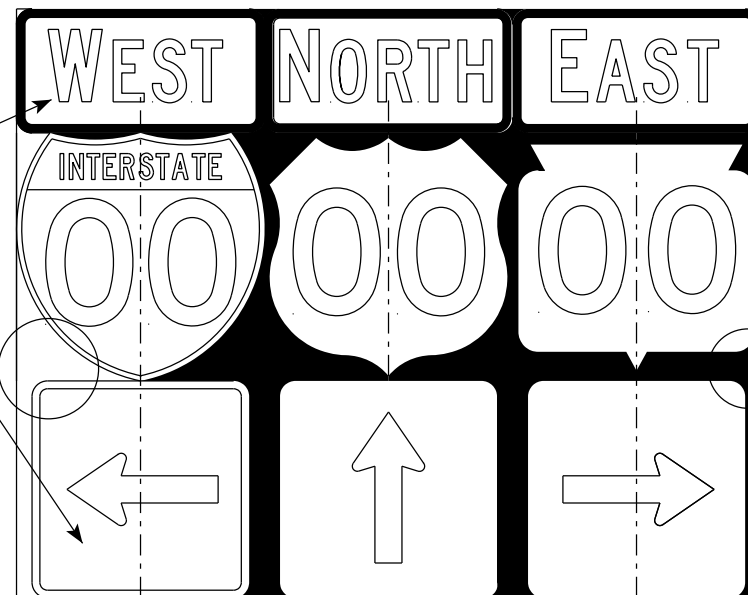
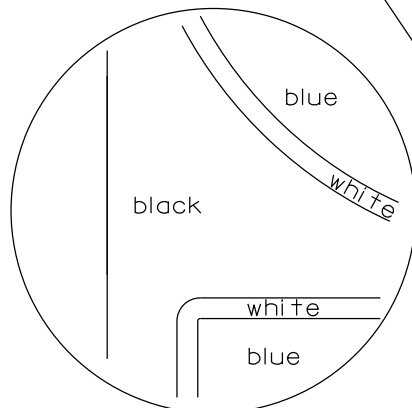
(Typical Vertical J-Assembly See Note 10 and 11)



JH-1

Blue Background

blue background with interstate



black background

NOTES

- Signs are Type II - Type H Reflective
- Color:
 - Background - Black Non-reflective
 - Message - see Note 5
- Message Series - See Note 5
- Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- Certain marker heads require the component pieces to be the same color. As an example, all the components used with an MI-1 Interstate marker shall be blue.
- Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
- Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- All Vertical J Assemblies are given a Sign Code of JV
- For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 3/18/21

PLATE NO. A2-1S.9

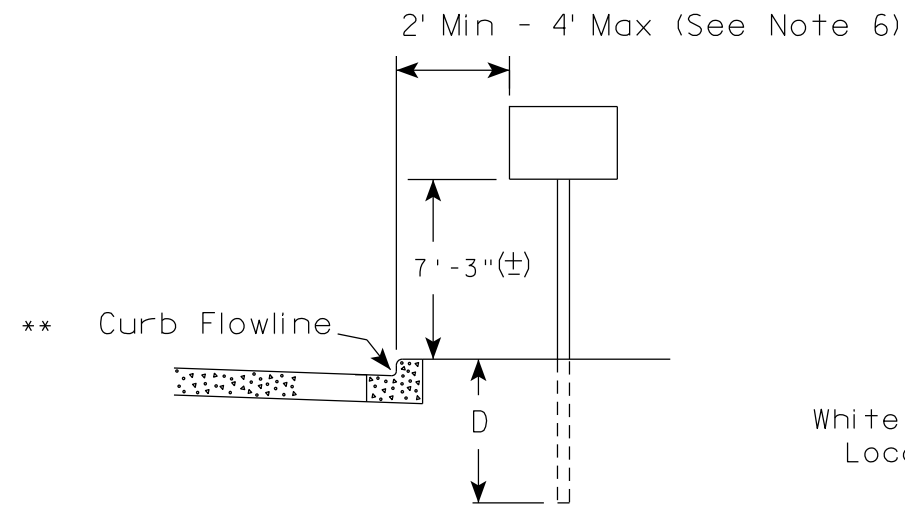
PROJECT NO:

SHEET NO:

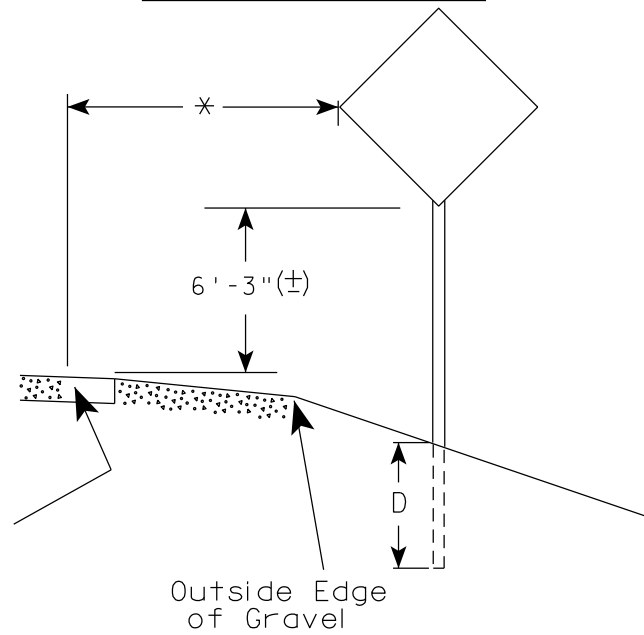
E

URBAN AREA

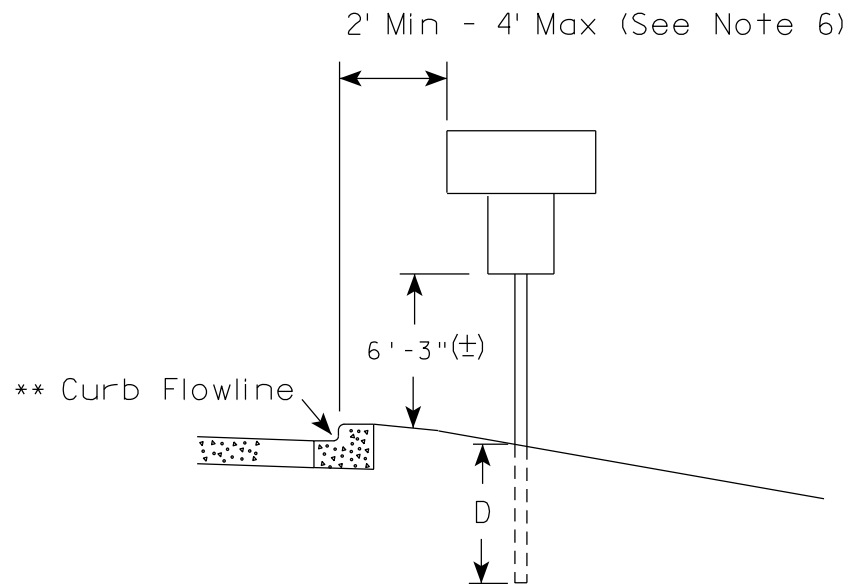
RURAL AREA (See Note 2)



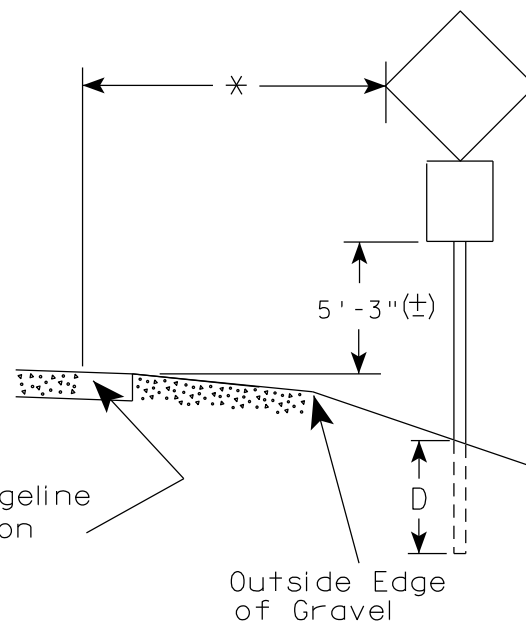
White Edgeline Location



Outside Edge of Gravel



White Edgeline Location



Outside Edge of Gravel

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 directed by the 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.

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22



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

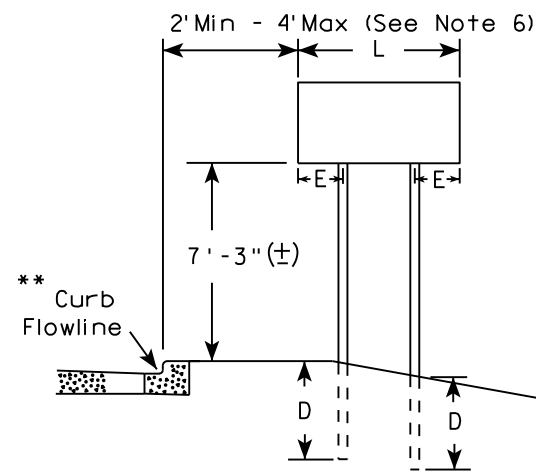
7

7

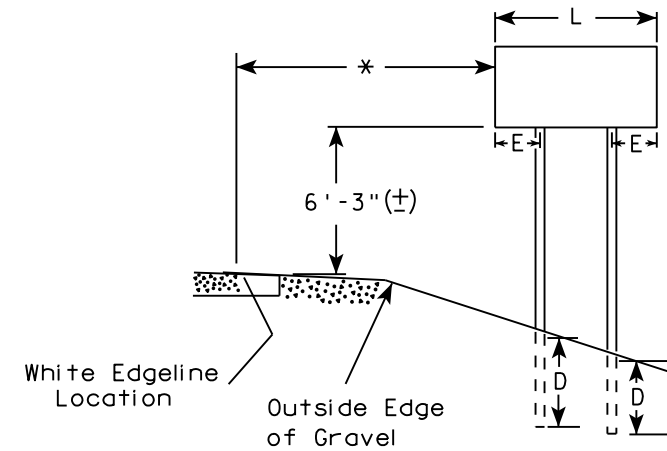
GENERAL NOTES

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" (±).

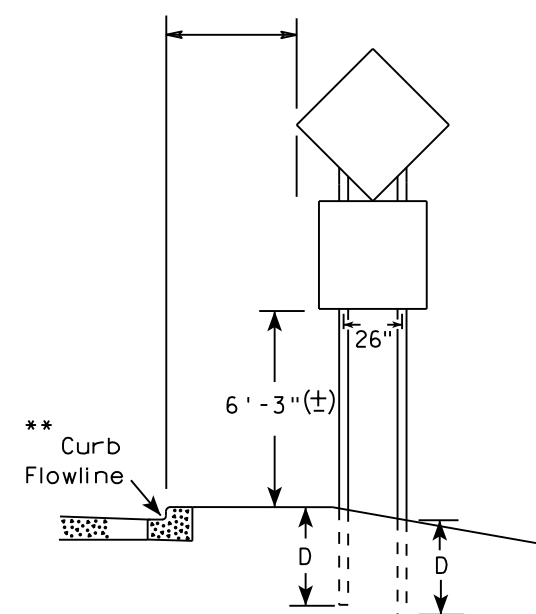
URBAN AREA



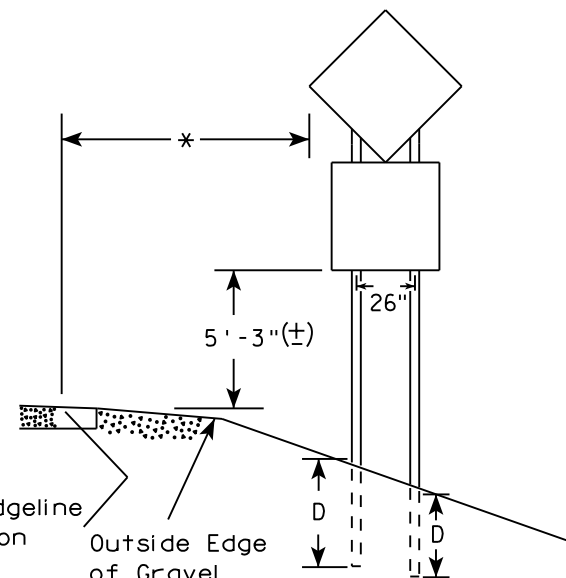
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

| SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED) | |
|--|-----|
| L | E |
| Greater than 48" Less than 60" | 12" |
| 60" to 108" | L/5 |

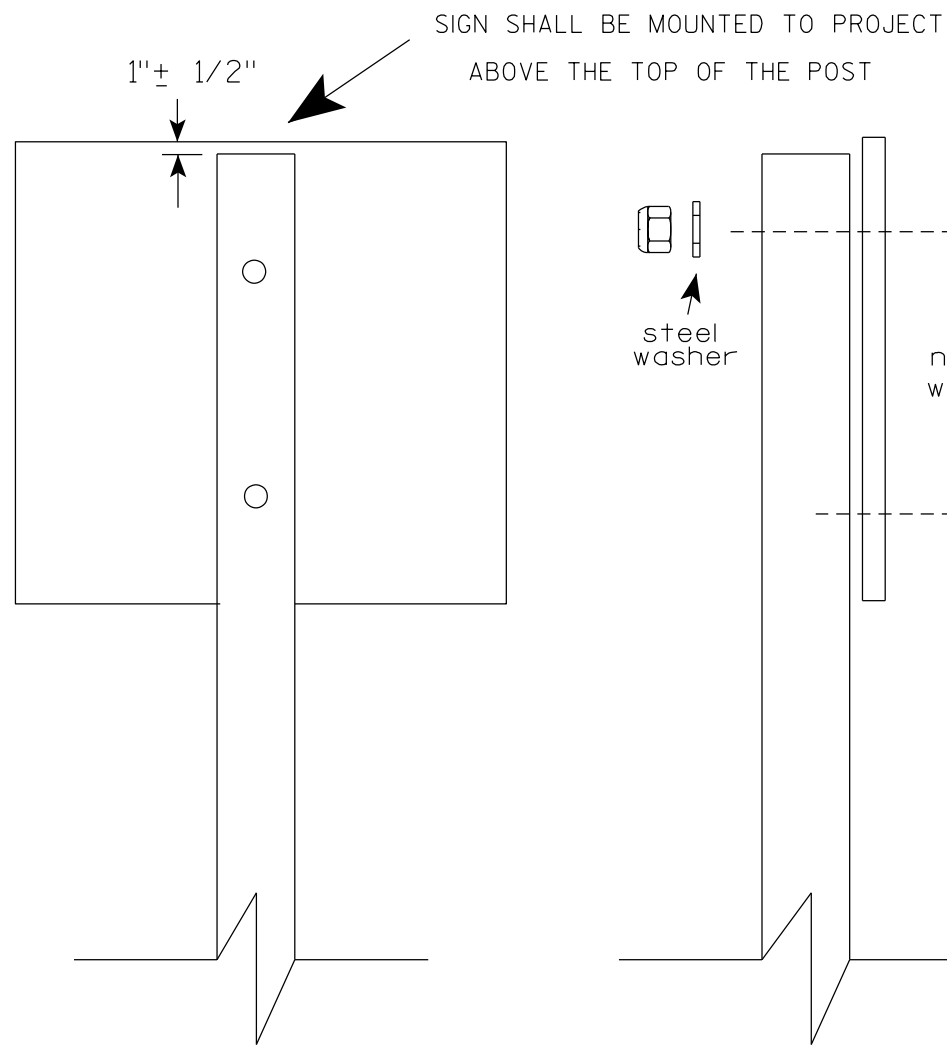
| SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED) | |
|--|-----|
| L | E |
| Greater than 108" to 144" | 12" |

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *Matthew R. Rauch*
 For State Traffic Engineer
 DATE 8/21/17 PLATE NO. A4-4.15



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

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

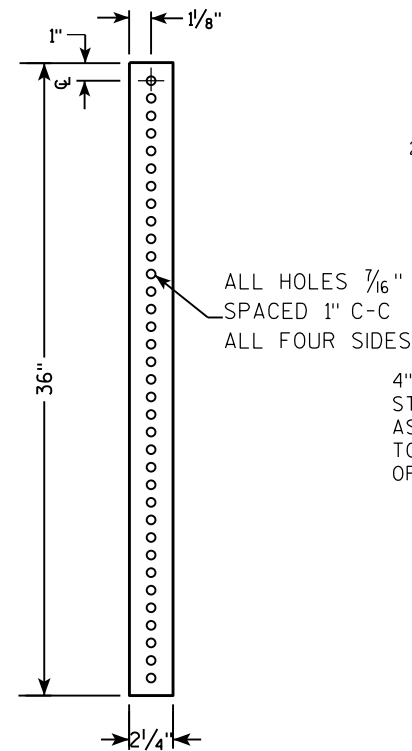
- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 - $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 - $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " 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 | <i>Matthew R Rauch</i> For State Traffic Engineer |
| DATE 4/1/2020 | PLATE NO. A4-8.9 |

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

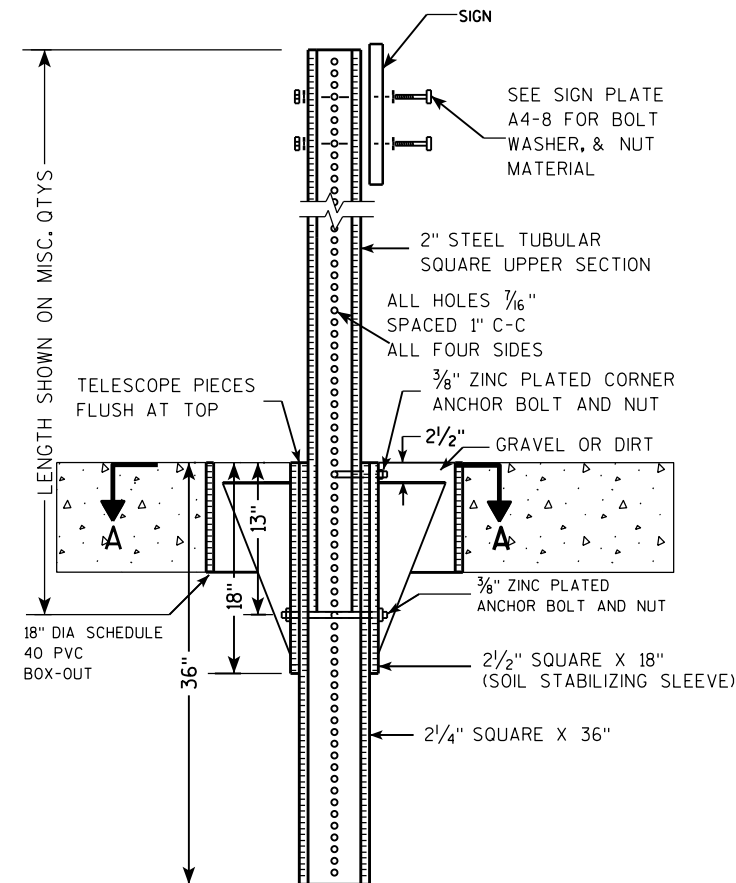
2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



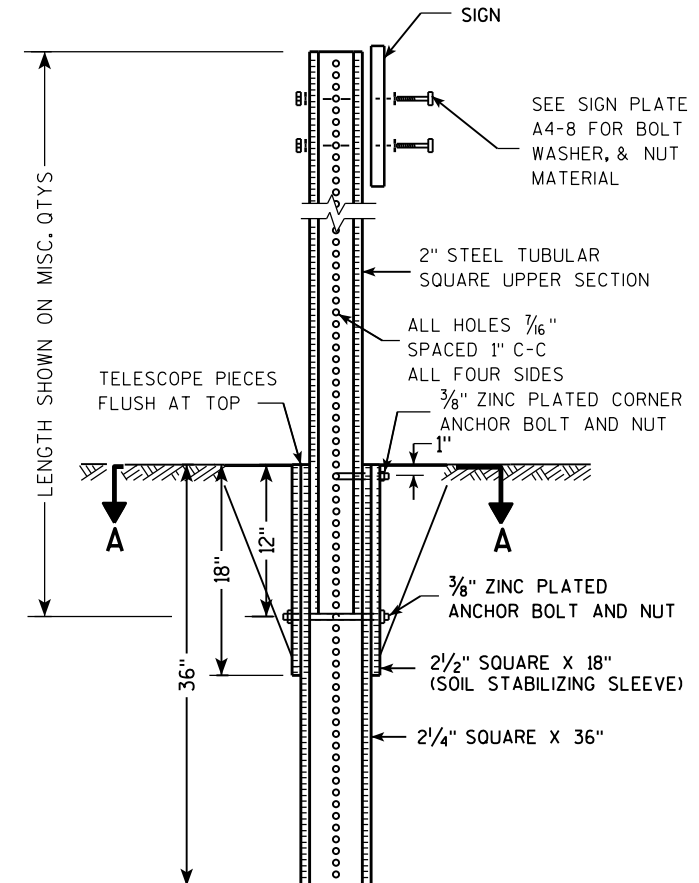
2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



**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)**



| 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 |

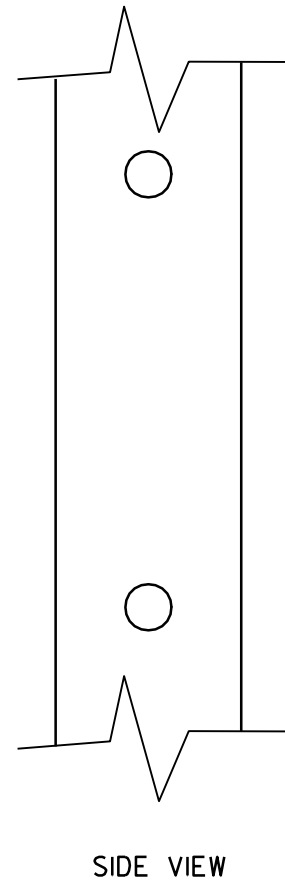
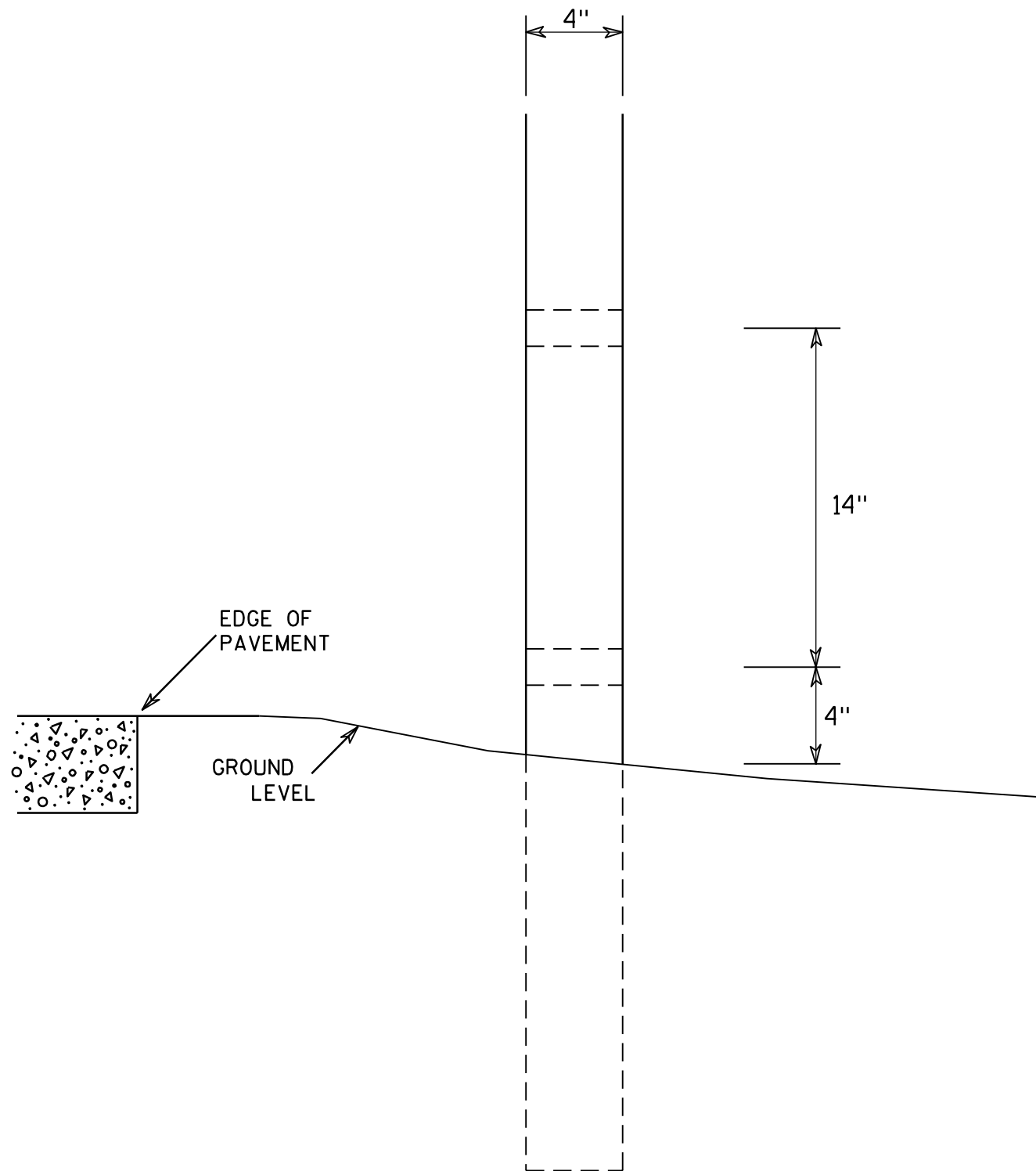
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

**TUBULAR STEEL
SIGN POST
A4-9**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9




GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

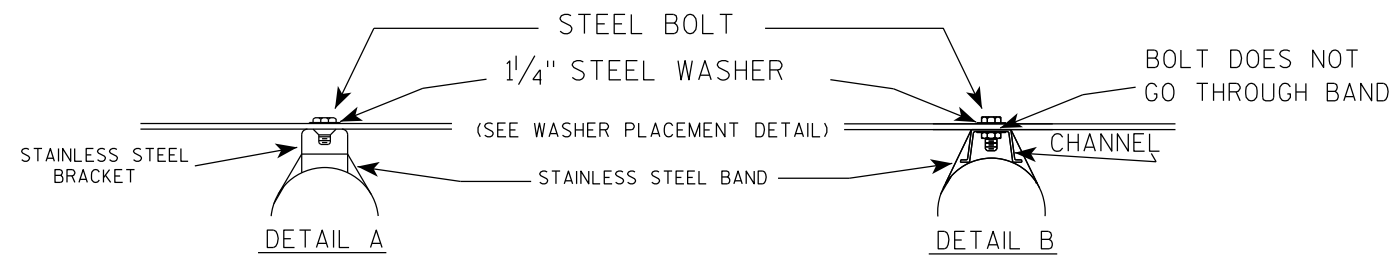
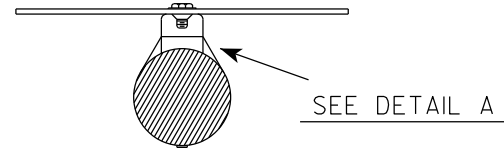
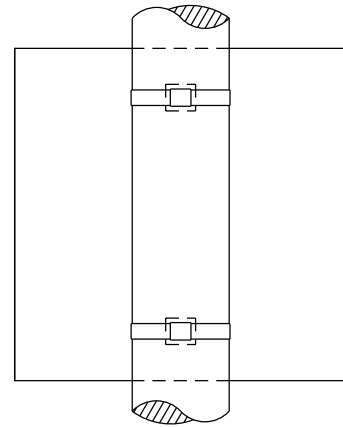
7

7

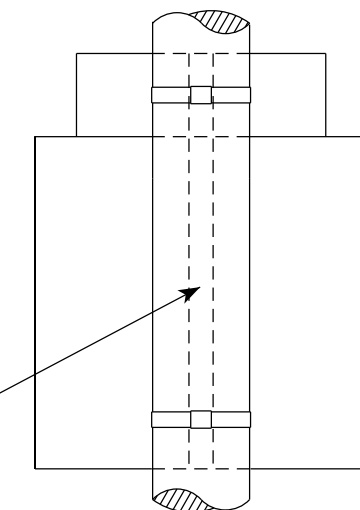
| | |
|--|--|
| 4 X 6 WOOD POST MODIFICATIONS | |
| <i>WISCONSIN DEPT OF TRANSPORTATION</i> | |
| APPROVED |  <small>for State Traffic Engineer</small> |
| DATE <u>3/27/97</u> | PLATE NO. <u>A4-11.2</u> |

BANDING

SINGLE SIGN



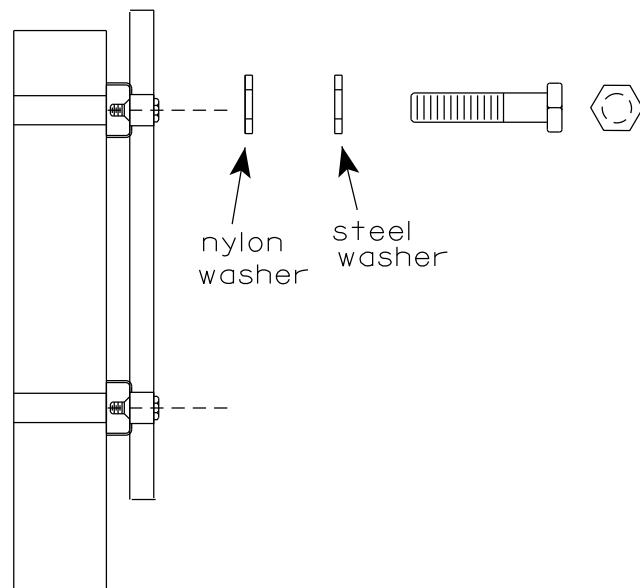
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



WASHER PLACEMENT



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

GENERAL NOTES

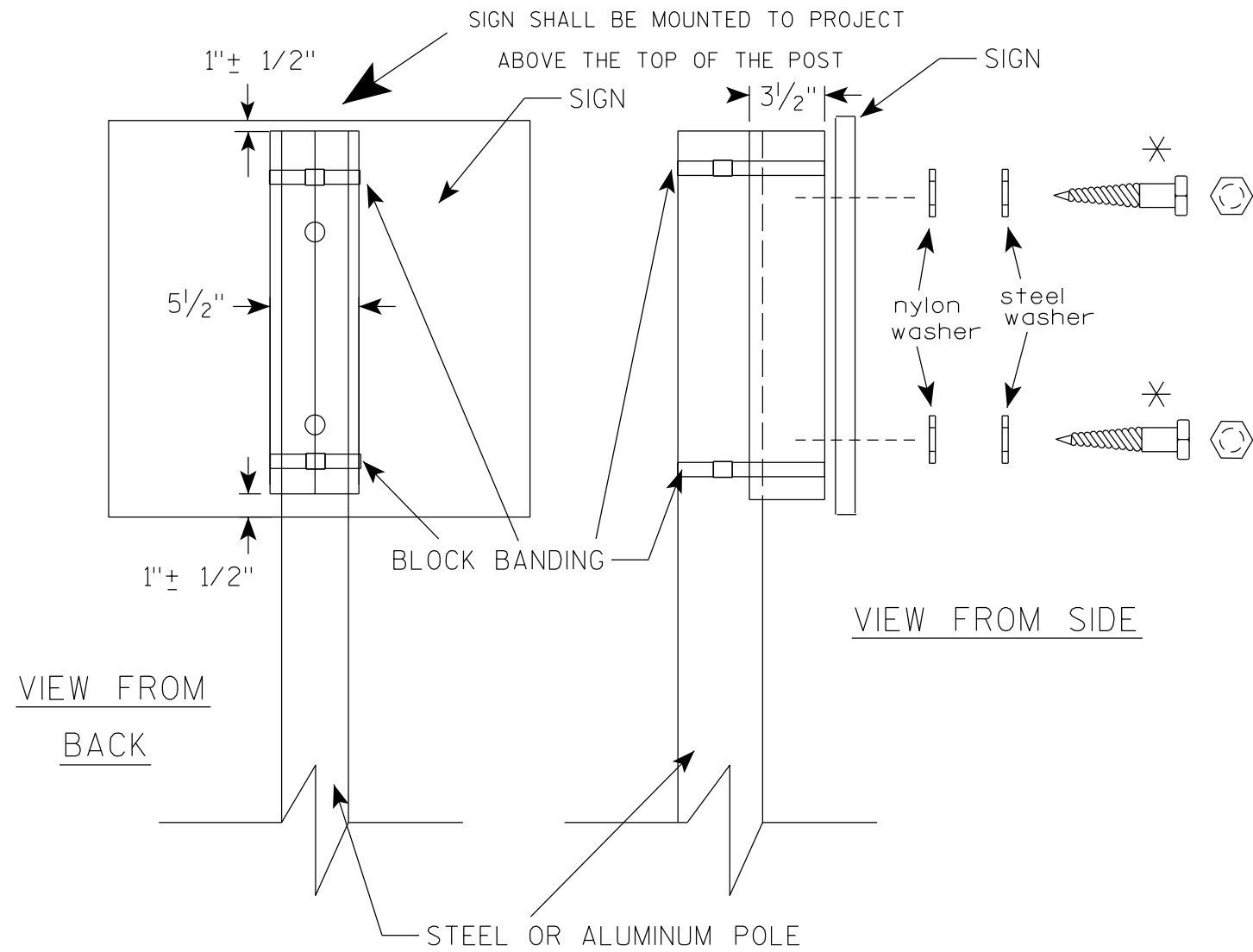
1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel.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

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

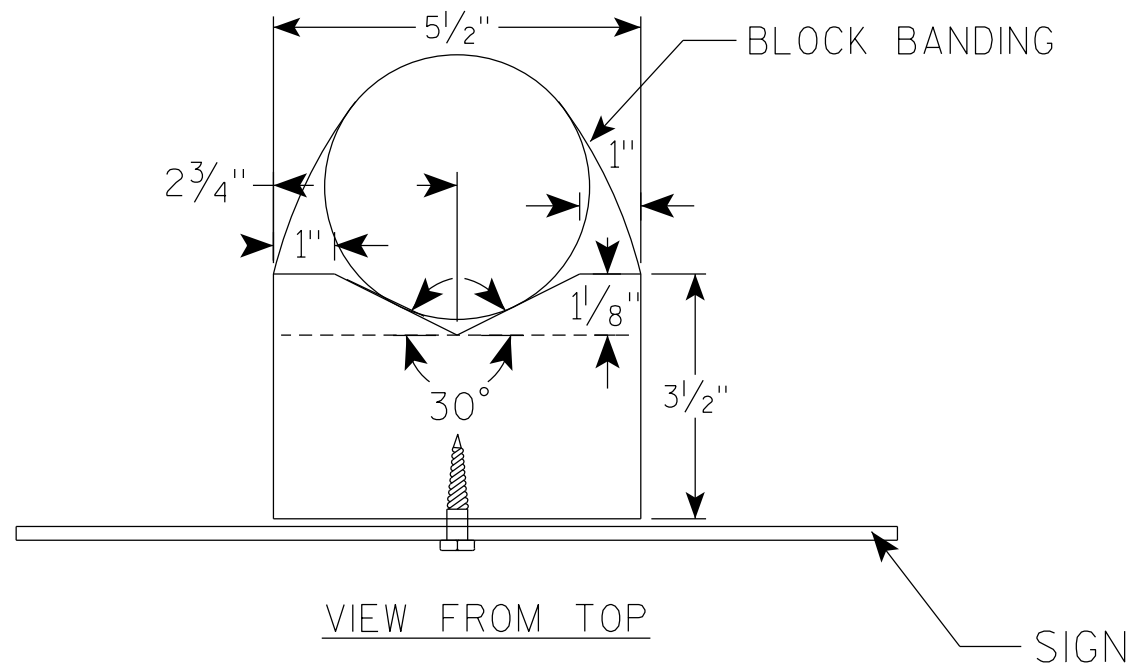
DATE 6/10/19 PLATE NO. A5-9.4



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, 3/4" 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 NORMALLY 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 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

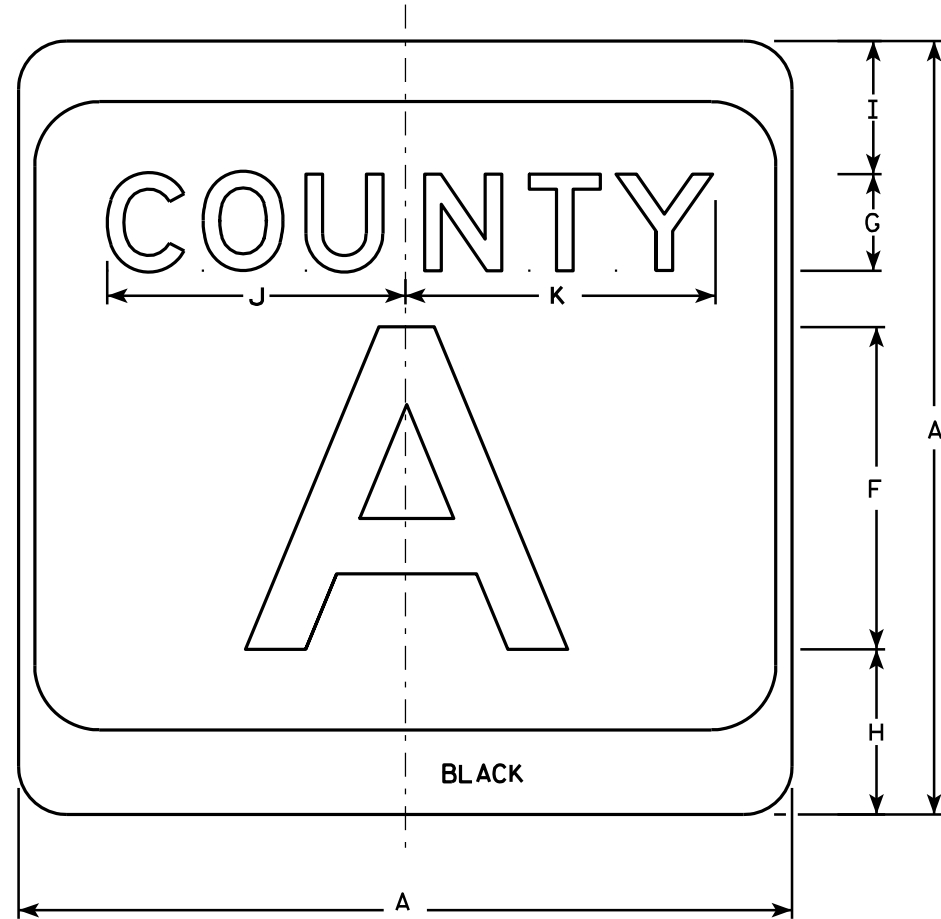
✱ LAG BOLTS SHALL BE 3/8" X 2 1/2"



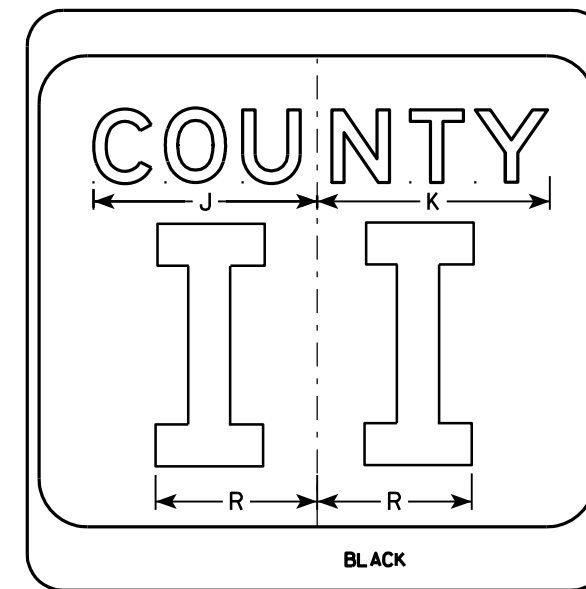
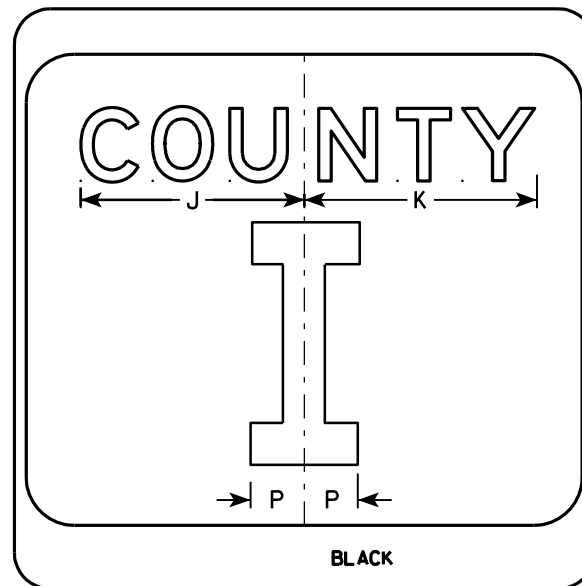
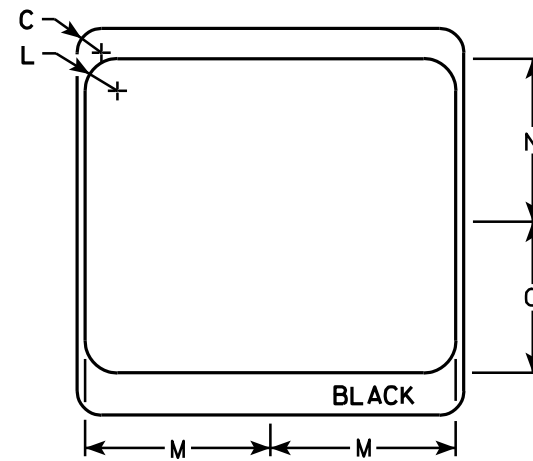
| | |
|--|--|
| BLOCK BANDING DETAIL (V-BLOCK OPTION) | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R Rauch</i> for State Traffic Engineer |
| DATE 4/19/2022 | PLATE NO. A5-10.3 |

NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



M1-5A



7

7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|---|---|----|---|-------|-------|--------|--------|---|--------|--------|-------|-------|---|-------|---|---|---|---|---|---|---|---|--------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | 1 1/2 | | | 10 | 3 | 5 1/8 | 4 1/8 | 9 1/4 | 9 5/8 | 2 | 11 1/2 | 10 1/8 | 9 3/8 | 2 1/4 | | 6 5/8 | | | | | | | | | 4.0 |
| 3 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |
| 5 | 36 | | 2 1/4 | | | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14 | 3 3/8 | | 10 | | | | | | | | | 9.0 |

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

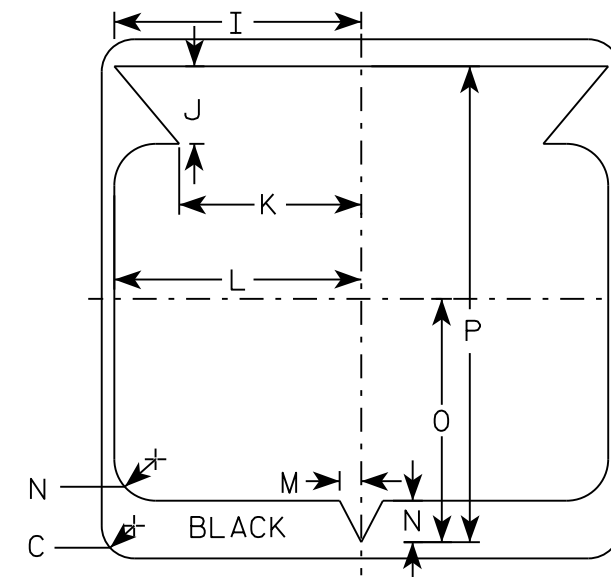
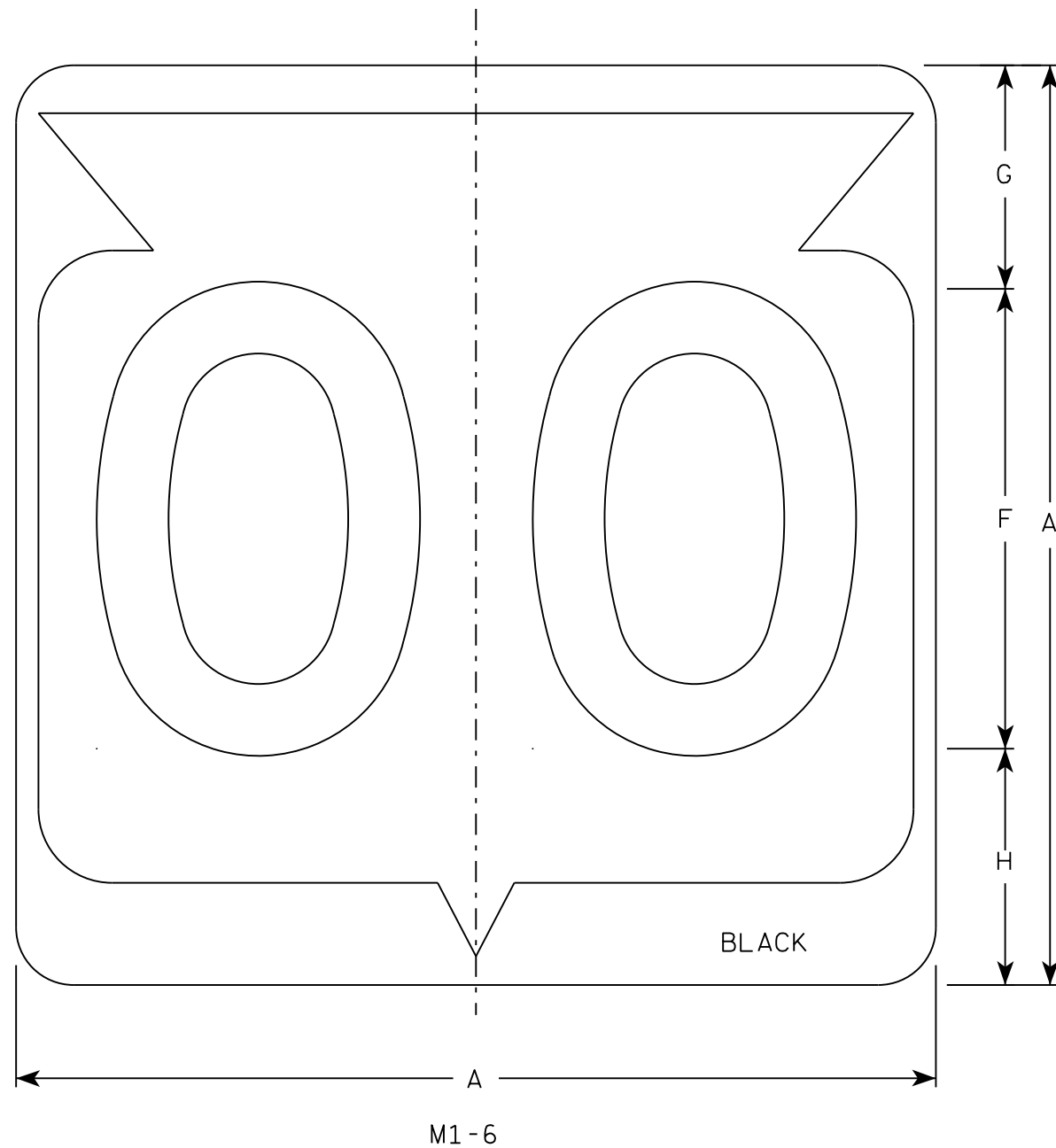
APPROVED *Matthew R. Raub*
For State Traffic Engineer

DATE 9/27/11 PLATE NO. MI-5A.8

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **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.



| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|---|---|----|-------|-------|--------|-------|--------|--------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|--------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | 1 1/2 | | | 12 | 5 1/2 | 6 1/2 | 10 1/4 | 2 1/2 | 8 7/8 | 11 1/2 | 1 | 1 7/8 | 11 1/4 | 21 7/8 | | | | | | | | | | | 4.0 |
| 3 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 |
| 4 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 |
| 5 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 |

STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

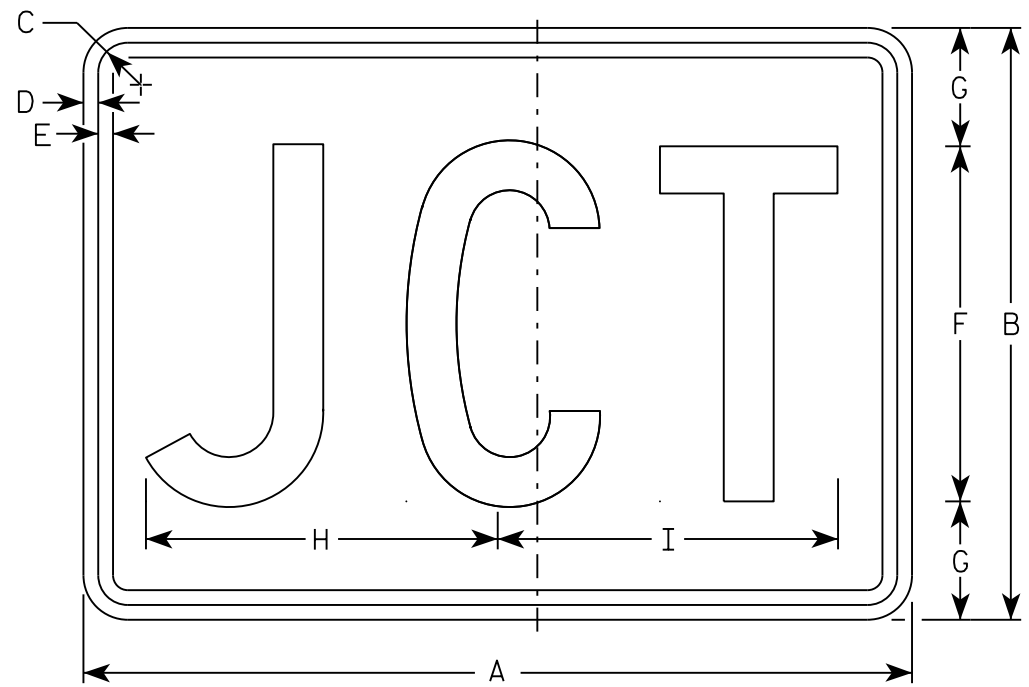
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ **E**

7

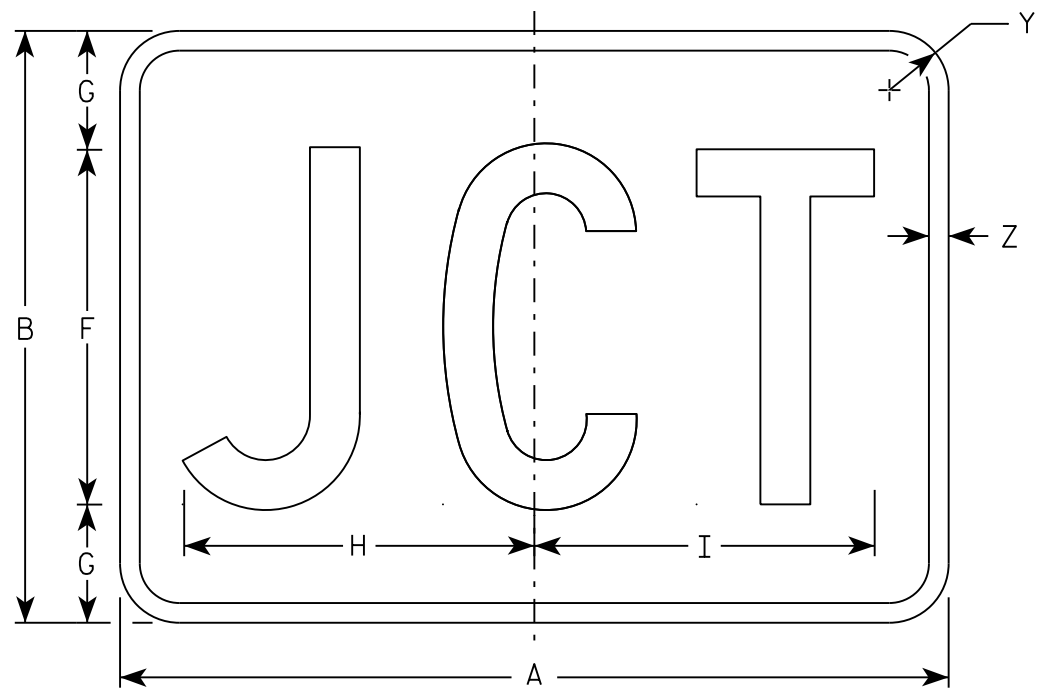
7

NOTES

1. Sign is Type II - Type H
2. Color:
 - Background - See note 5
 - Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
 Message - Black
 MB2-1 Background - Blue
 Message - White
 MK2-1 Background - Green
 Message - White
 MM2-1 Background - White
 Message - Green
 MN2-1 Background - Brown
 Message - White
 MP2-1 Background - White
 Message - Blue
 MR2-1 Background - Brown
 Message - Yellow



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|----|---|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|-----|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | 15 | 1 1/8 | 3/8 | 3/8 | 9 | 3 | 8 7/8 | 8 5/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 2.20 |
| 3 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |
| 4 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |
| 5 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 |

STANDARD SIGN
M2-1

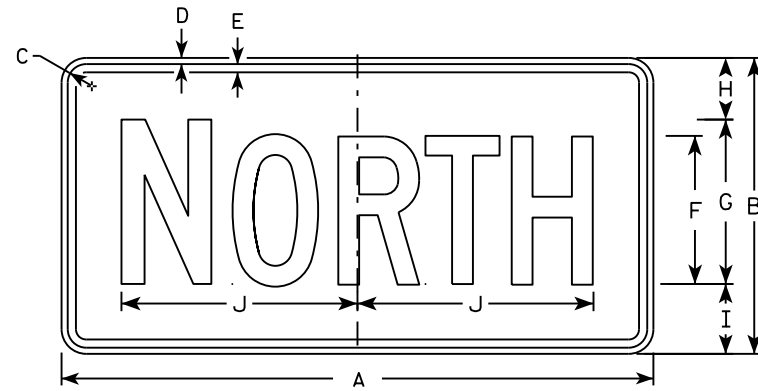
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

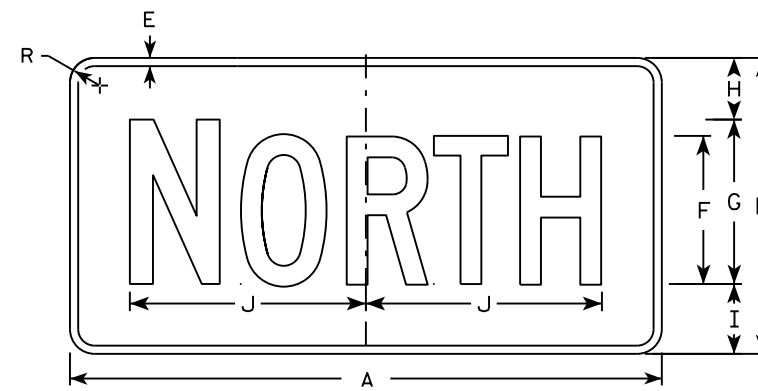
DATE 10/15/15 PLATE NO. M2-1.12

NOTES

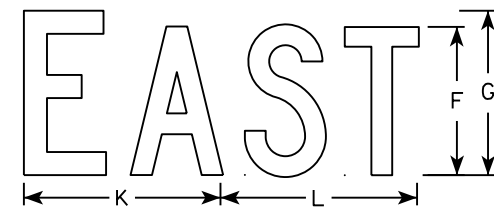
- All Signs Type II - Type H
- Color:
 - Background - See note 5
 - Message - See note 5
- Message Series - C
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M3-1 thru M3-4 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
- Note the first letter of each direction is larger than the remainder of the message.



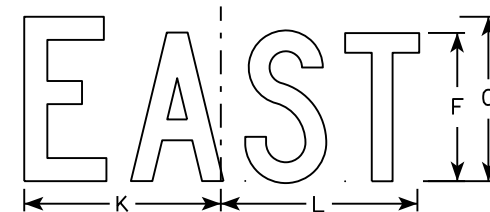
M3-1
MM3-1
MP3-1



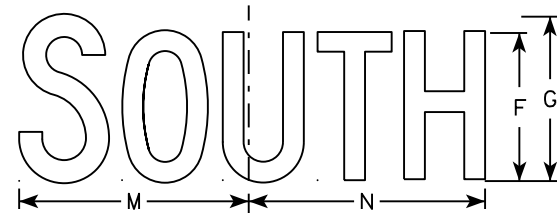
MB3-1
MK3-1
MN3-1



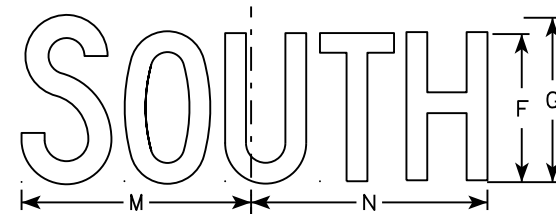
M3-2
MM3-2
MP3-2



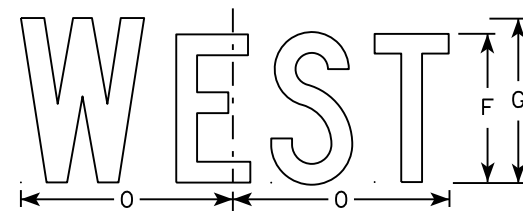
MB3-2
MK3-2
MN3-2



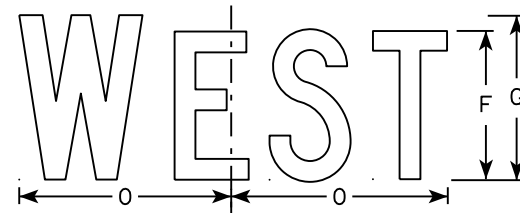
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

7

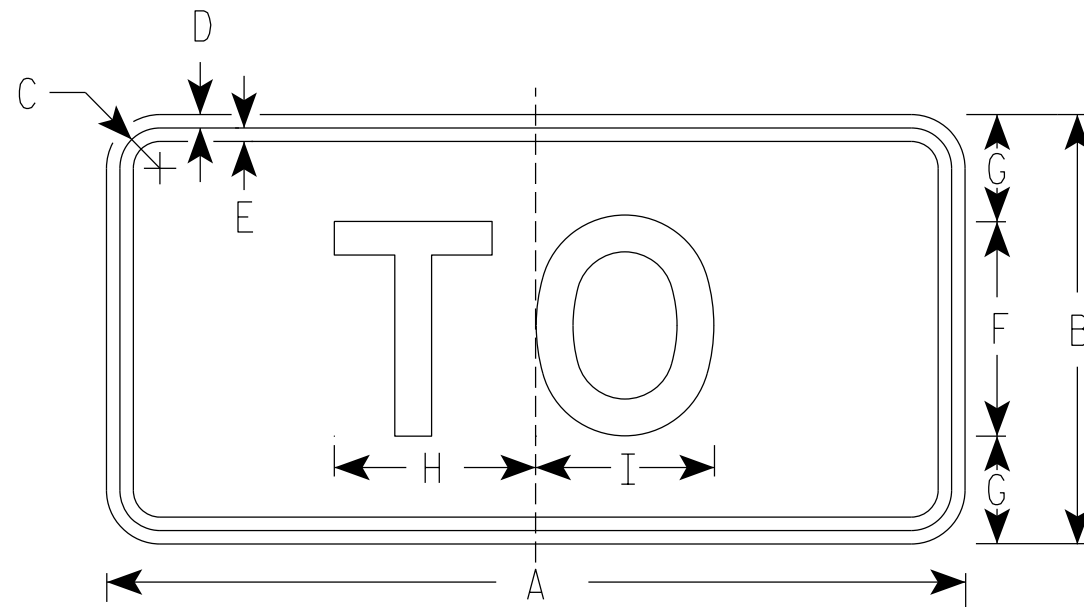
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|----|-------|-------|--------|-------|--------|--------|--------|-------|---|---|-------|---|---|---|---|---|---|---|---|--------------|
| 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 thru M3-4
SERIES

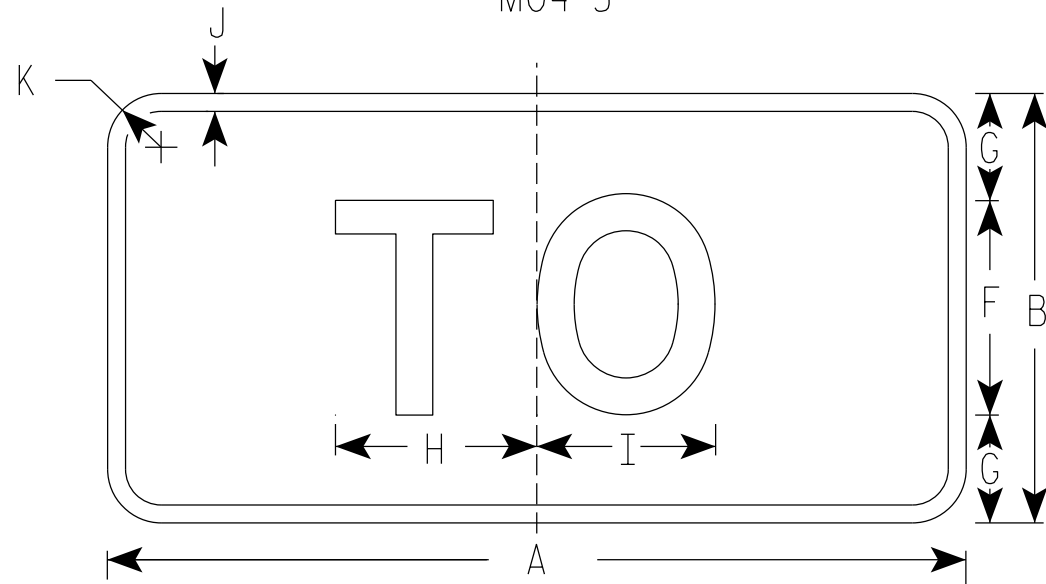
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M3-1.14



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
Message - Black
MB4-5 Background - Blue
Message - White
MK4-5 Background - Green
Message - White
MM4-5 Background - White
Message - Green
MN4-5 Background - Brown
Message - White
MP4-5 Background - White
Message - Blue
M04-5 Background - Orange Type F Reflective
Message - Black

7

7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|-------|-------|-------|-----|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 3 | 5 3/8 | 5 1/4 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 3/8 | 3/8 | 1/2 | 9 | 4 1/2 | 8 1/4 | 8 3/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 3/8 | 3/8 | 1/2 | 9 | 4 1/2 | 8 1/4 | 8 3/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 3/8 | 3/8 | 1/2 | 9 | 4 1/2 | 8 1/4 | 8 3/8 | 1/2 | 1 1/2 | | | | | | | | | | | | | | | | 4.5 |

STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

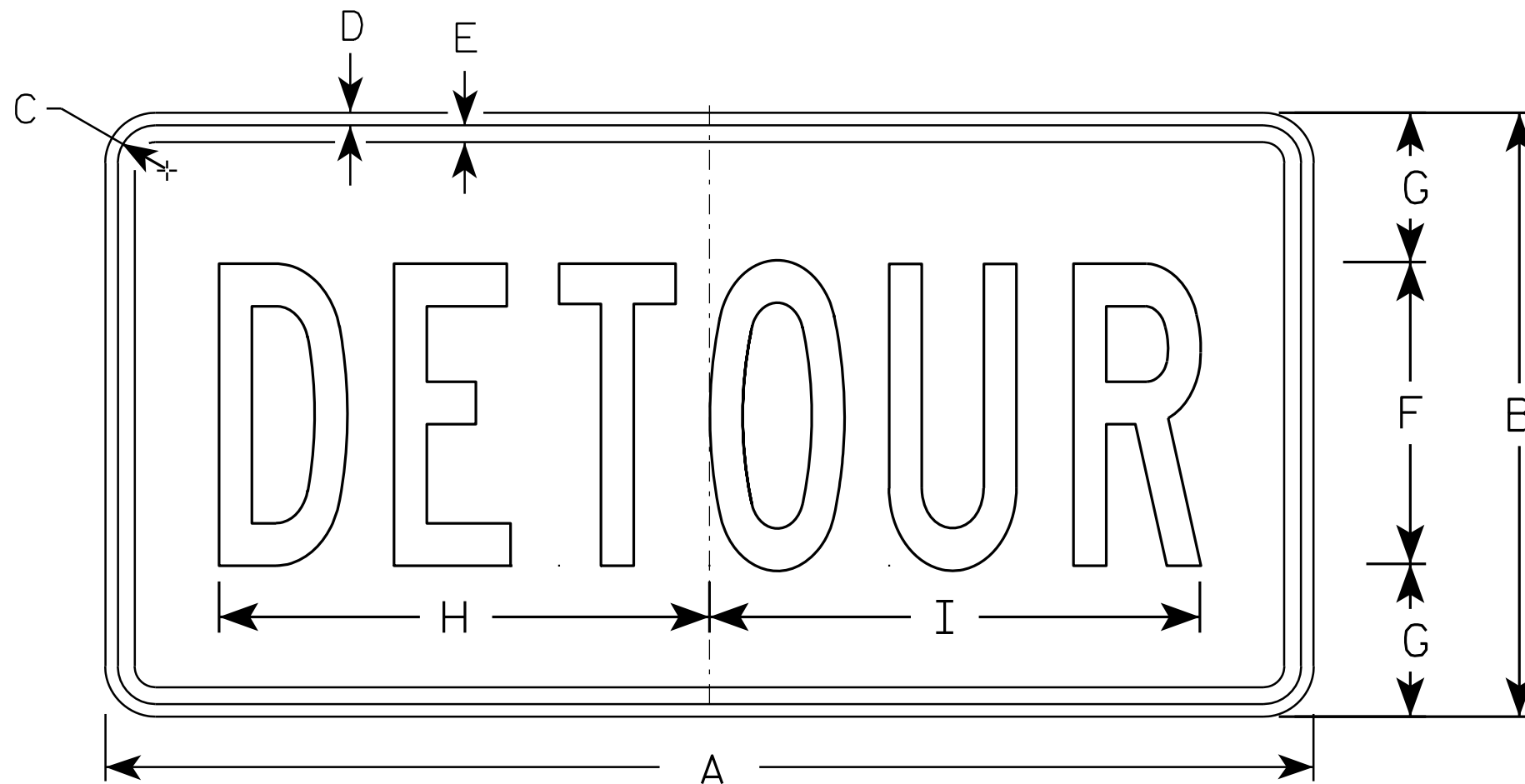
APPROVED *Matthew R. Rauch*
State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M4-8

7

7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 3 | 10 | 10 1/4 | | | | | | | | | | | | | | | | | | 2.0 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 4 1/2 | 14 5/8 | 14 1/2 | | | | | | | | | | | | | | | | | | 4.5 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

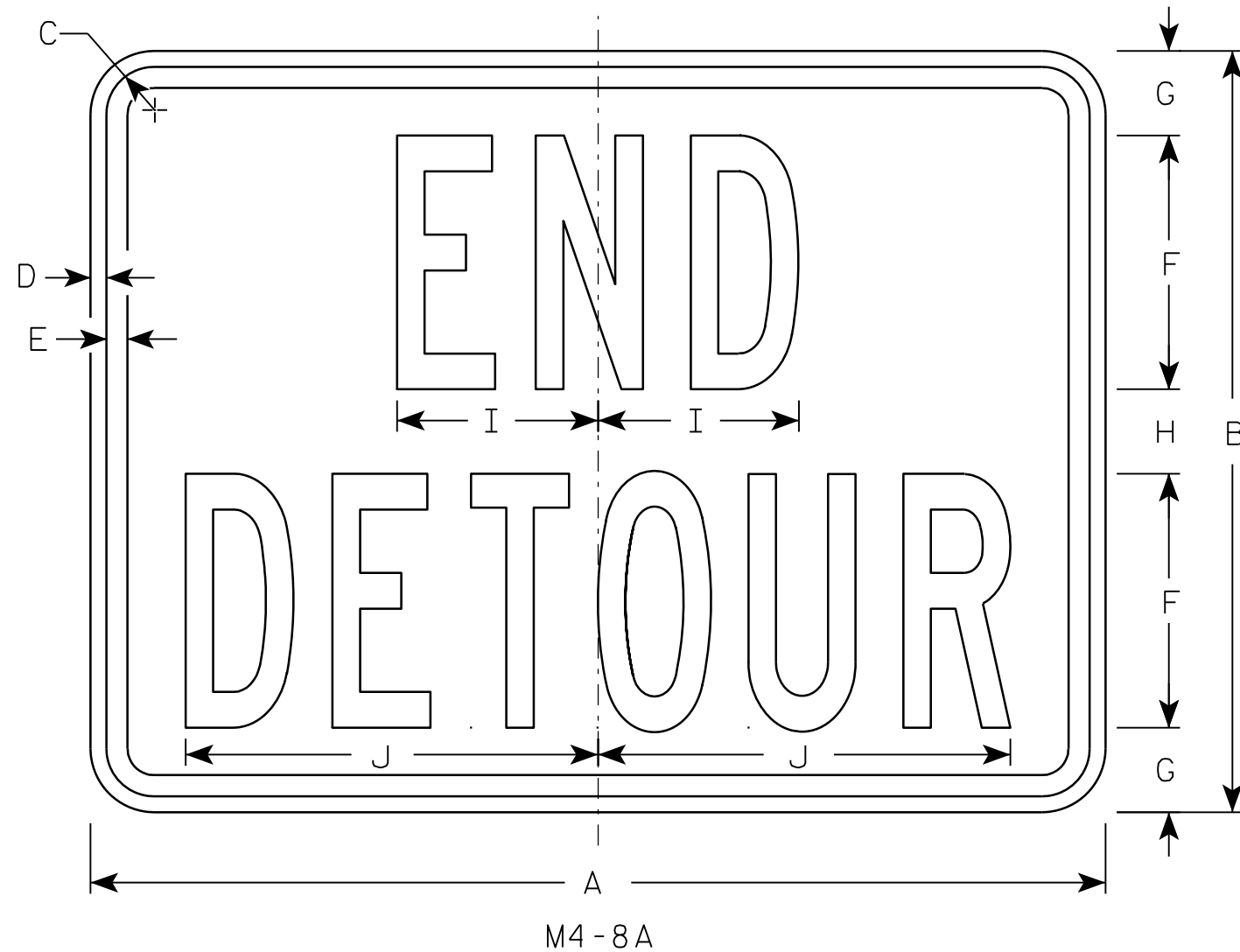
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



7

7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|-------|---|-------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 18 | 1 1/8 | 3/8 | 1/2 | 6 | 2 | 2 | 4 3/4 | 9 3/4 | | | | | | | | | | | | | | | | | 3.0 |
| 3 | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 8 | 2 1/2 | 3 | 6 3/4 | 13 | | | | | | | | | | | | | | | | | 5.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

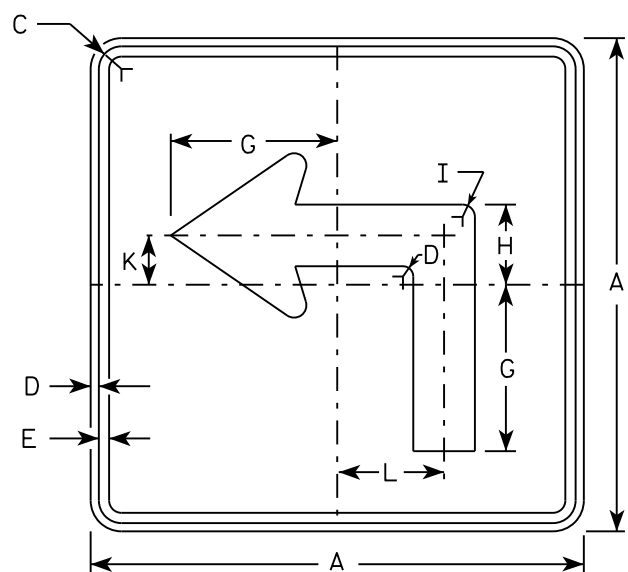
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

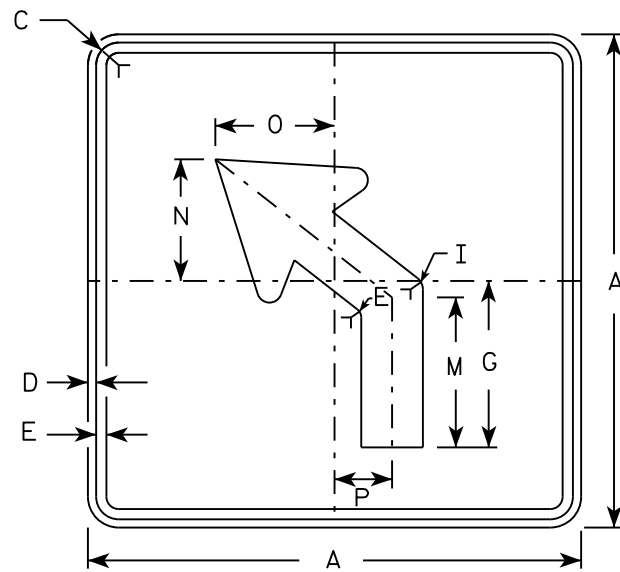
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

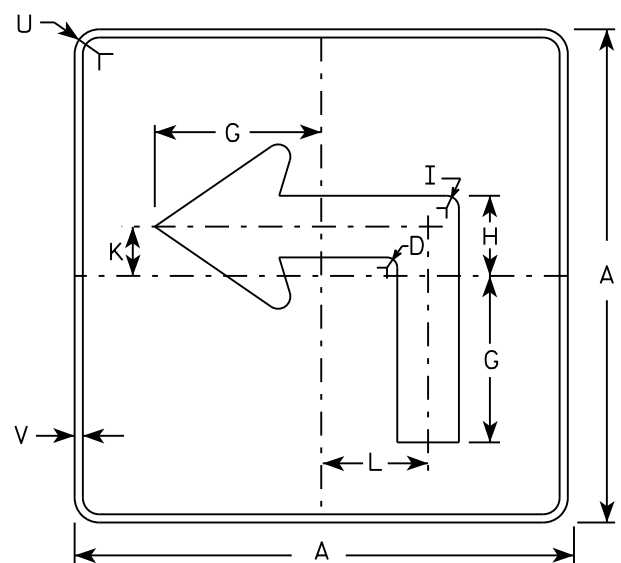
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**



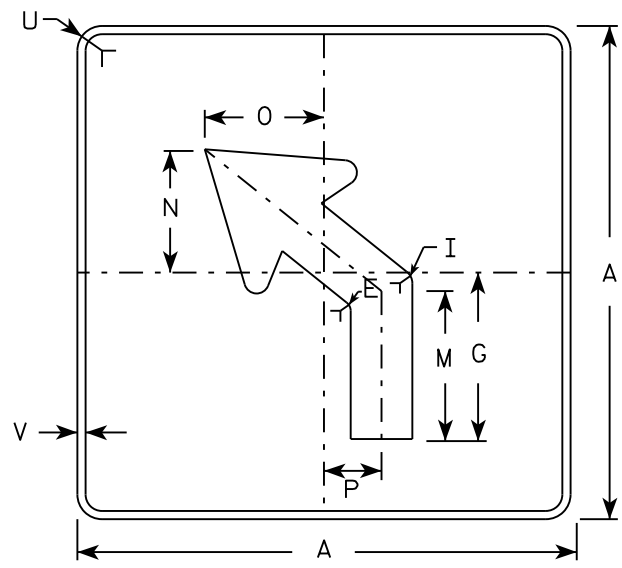
M5-1L
MM5-1L
M05-1L
MP5-1L



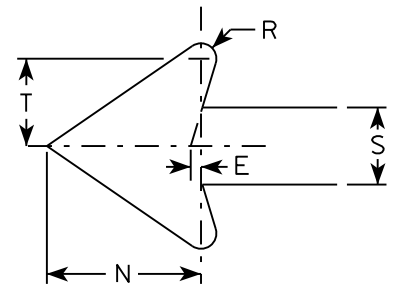
M5-2L
MM5-2L
M05-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 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.
- | | |
|-----------------|---|
| M5-1 and M5-2 | Background - White |
| | Message - Black |
| MB5-1 and MB5-2 | Background - Blue |
| | Message - White |
| MK5-1 and MK5-2 | Background - Green |
| | Message - White |
| MM5-1 and MM5-2 | Background - White |
| | Message - Green |
| MN5-1 and MN5-2 | Background - Brown |
| | Message - White |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
| | Message - Black |
| MP5-1 and MP5-2 | Background - White - Type H Reflective |
| | Message - Blue |
| MR5-1 and MR5-2 | Background - Brown |
| | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

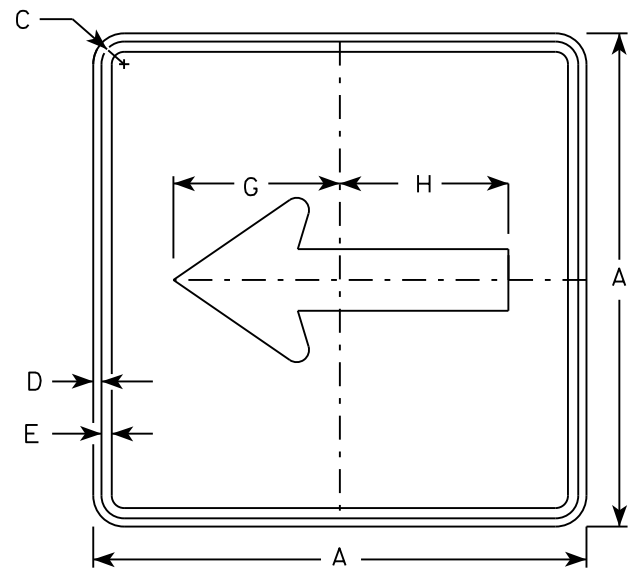
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|--------|-------|-----|---|-------|-------|-------|-------|-------|-------|---|-----|-------|-------|-------|-----|---|---|---|---|--------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 | 3 3/8 | 5/8 | | 2 1/8 | 4 1/2 | 6 3/8 | 5 1/4 | 5 | 2 1/2 | | 1/2 | 2 5/8 | 3 | 1 1/2 | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/8 | 4 7/8 | 7/8 | | 3 | 6 1/2 | 9 1/8 | 7 1/2 | 7 1/4 | 3 1/2 | | 3/4 | 3 3/4 | 4 1/4 | 1 7/8 | 1/2 | | | | | 6.25 |

STANDARD SIGN
M5-1 & M5-2

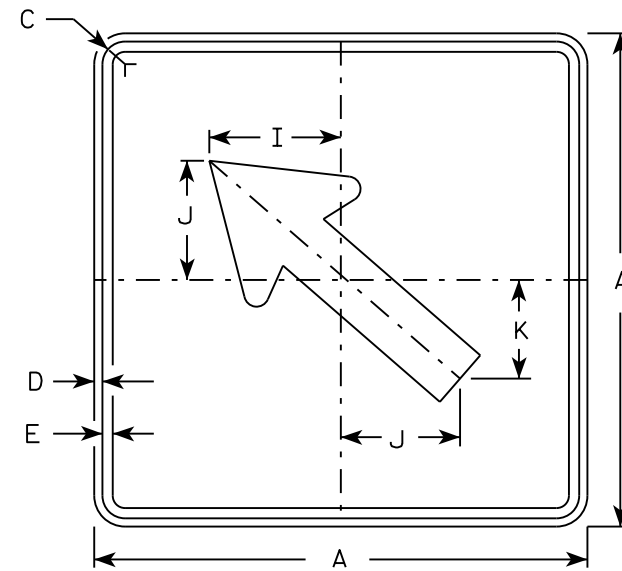
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

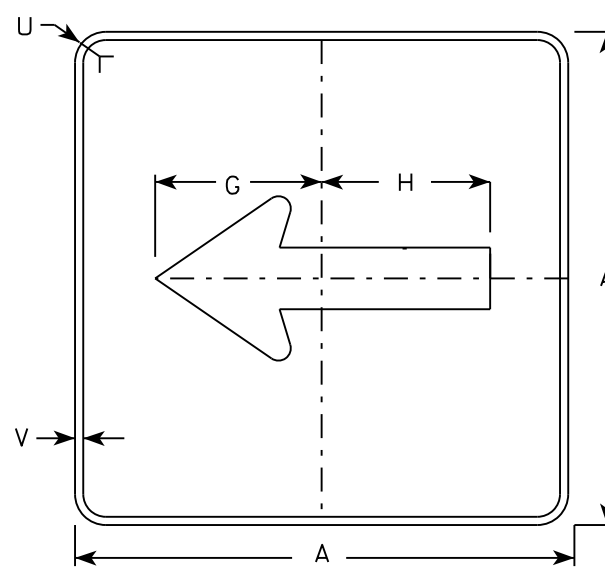
DATE 10/15/15 PLATE NO. M5-1.13



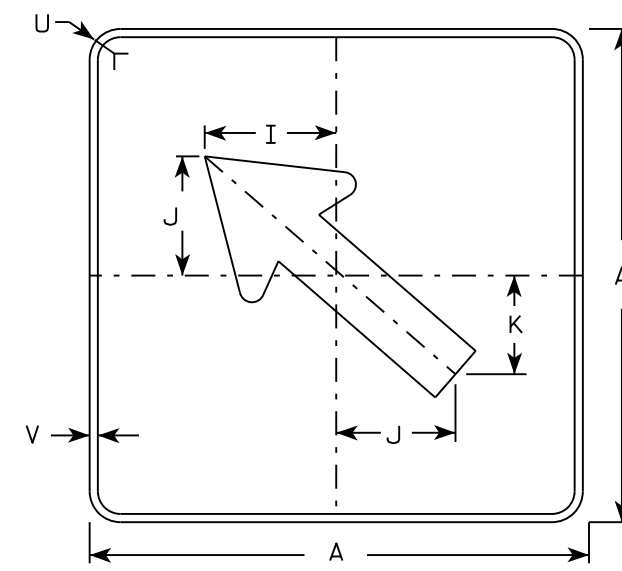
M6-1
MM6-1
M06-1
MP6-1



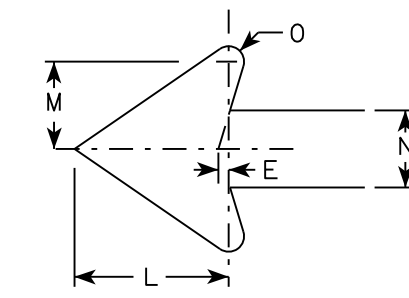
M6-2
MM6-2
M06-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See note 4
Message - See note 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.
- M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

7

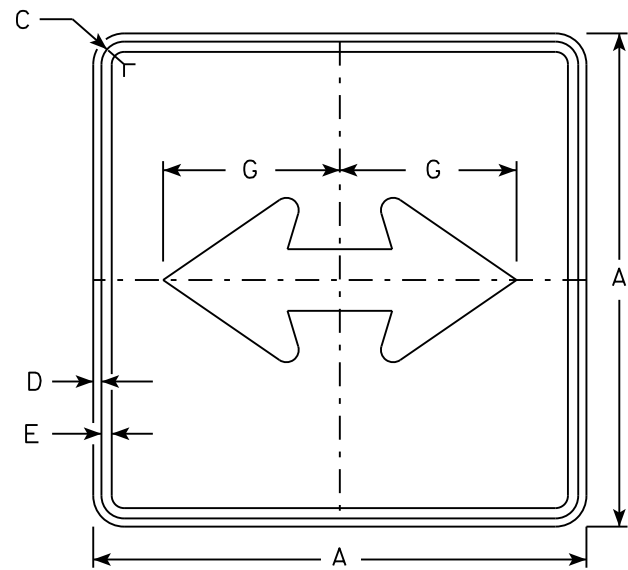
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|--------|--------|-------|-------|-------|-------|-------|-------|-----|---|---|---|---|---|---|-------|-----|---|---|---|--------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 1/2 | 7 1/8 | 5 5/8 | 5 | 4 1/4 | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | | 1 1/2 | 1/2 | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | | 1 7/8 | 1/2 | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | | 1 7/8 | 1/2 | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | | 1 7/8 | 1/2 | | | | 6.25 |

STANDARD SIGN
M6-1 & M6-2
SERIES

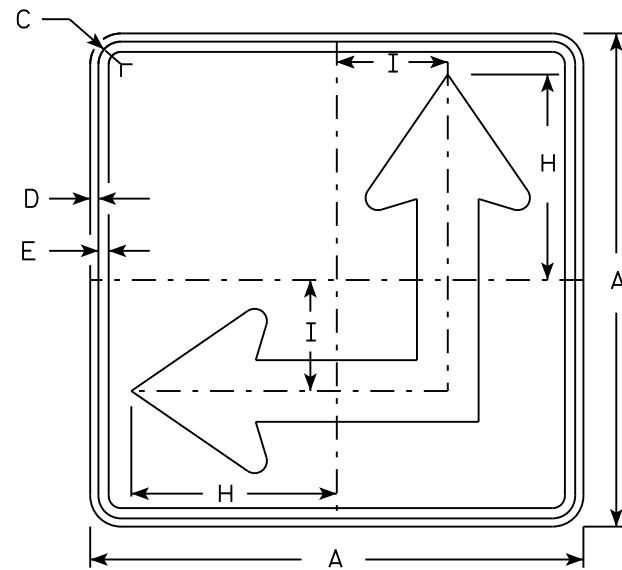
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

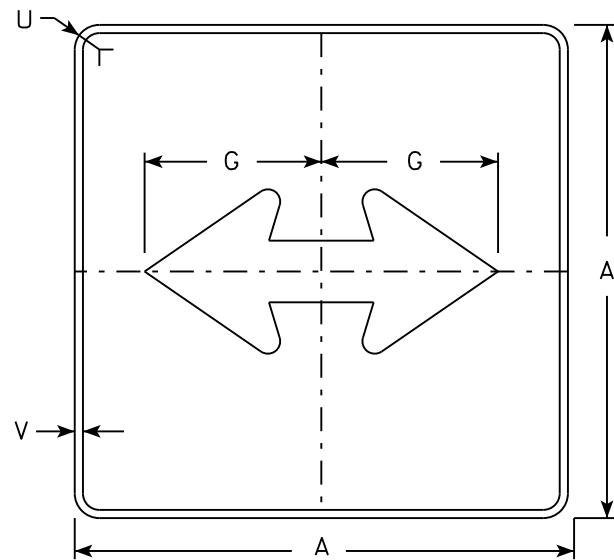
DATE 10/15/15 PLATE NO. M6-1.15



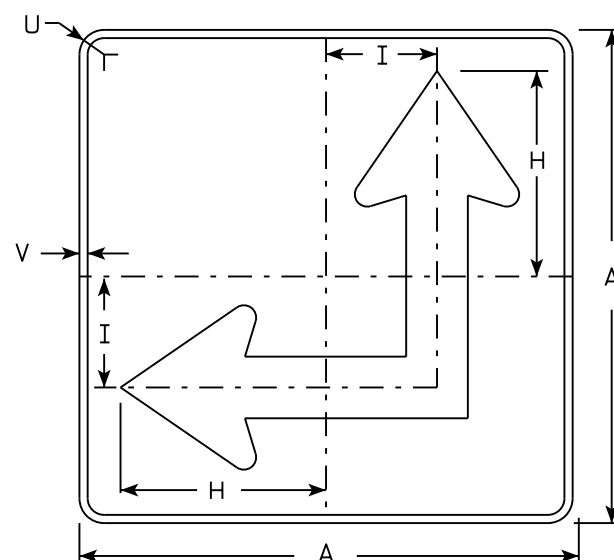
M6-4
MM6-4
M06-4
MP6-4



M6-6
MM6-6
M06-6
MP6-6



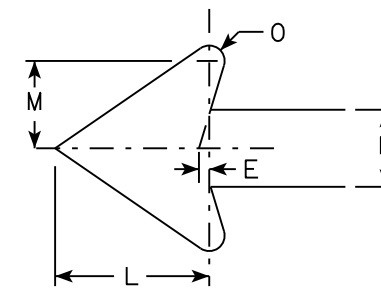
MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6

NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See Note 4
Message - See Note 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.
- M6-4 and M6-6 Background - White
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White
MK6-4 and MK6-6 Background - Green
Message - White
MM6-4 and MM6-6 Background - White
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White
M06-4 and M06-6 Background - Orange - Type F Reflective
Message - Black
MP6-4 and MP6-6 Background - White
Message - Blue
MR6-4 and MR6-6 Background - Brown
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and right.



7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|--------|--------|-------|---|---|-------|-------|-------|-----|---|---|---|---|---|-------|-----|---|---|---|---|--------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 1/2 | 8 3/4 | 4 1/4 | | | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | 1 1/2 | 1/2 | | | | | 3.06 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 |

STANDARD SIGN
M6-4 & M6-6
SERIES

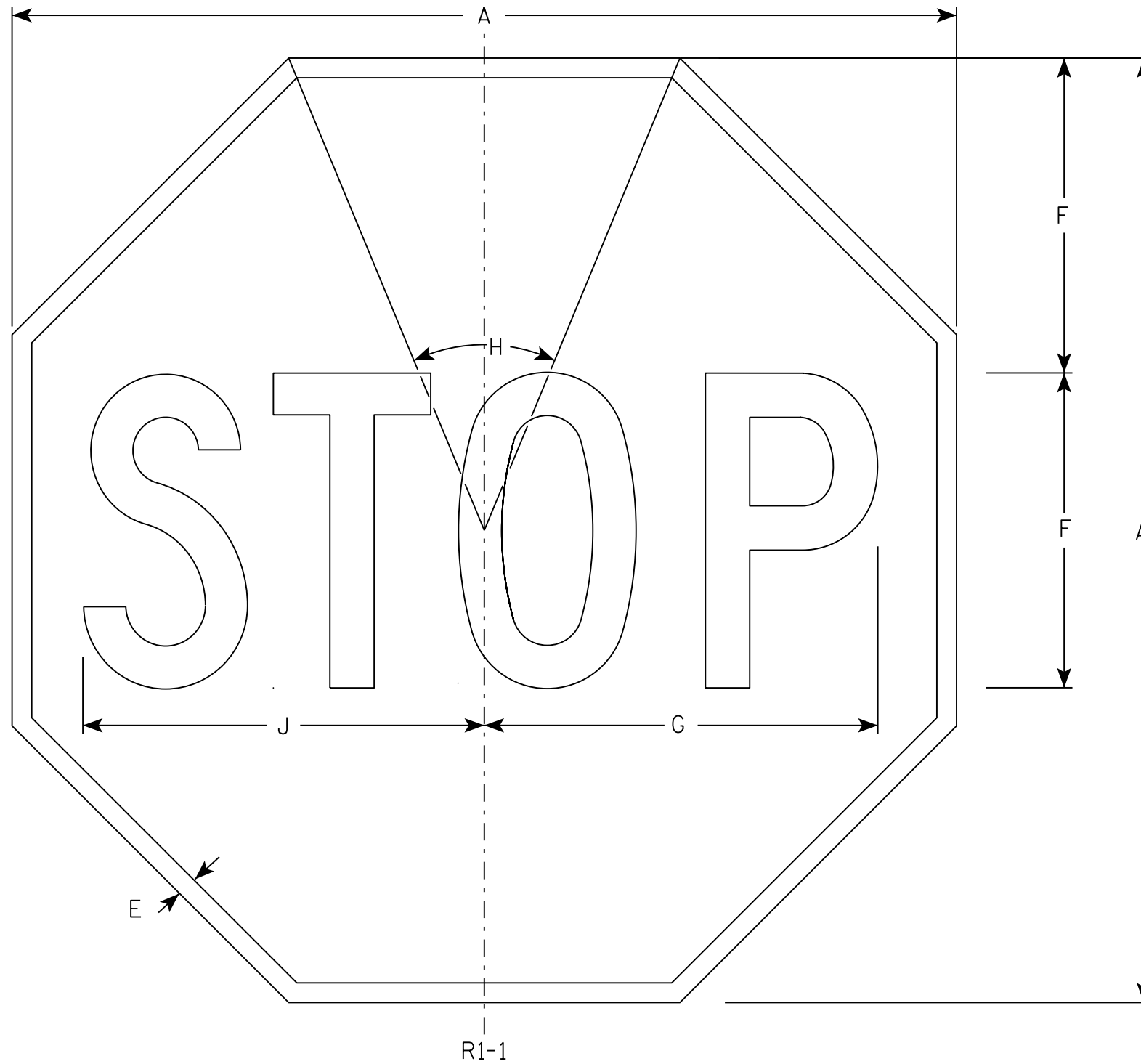
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-4.10

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



7

7

| 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 |

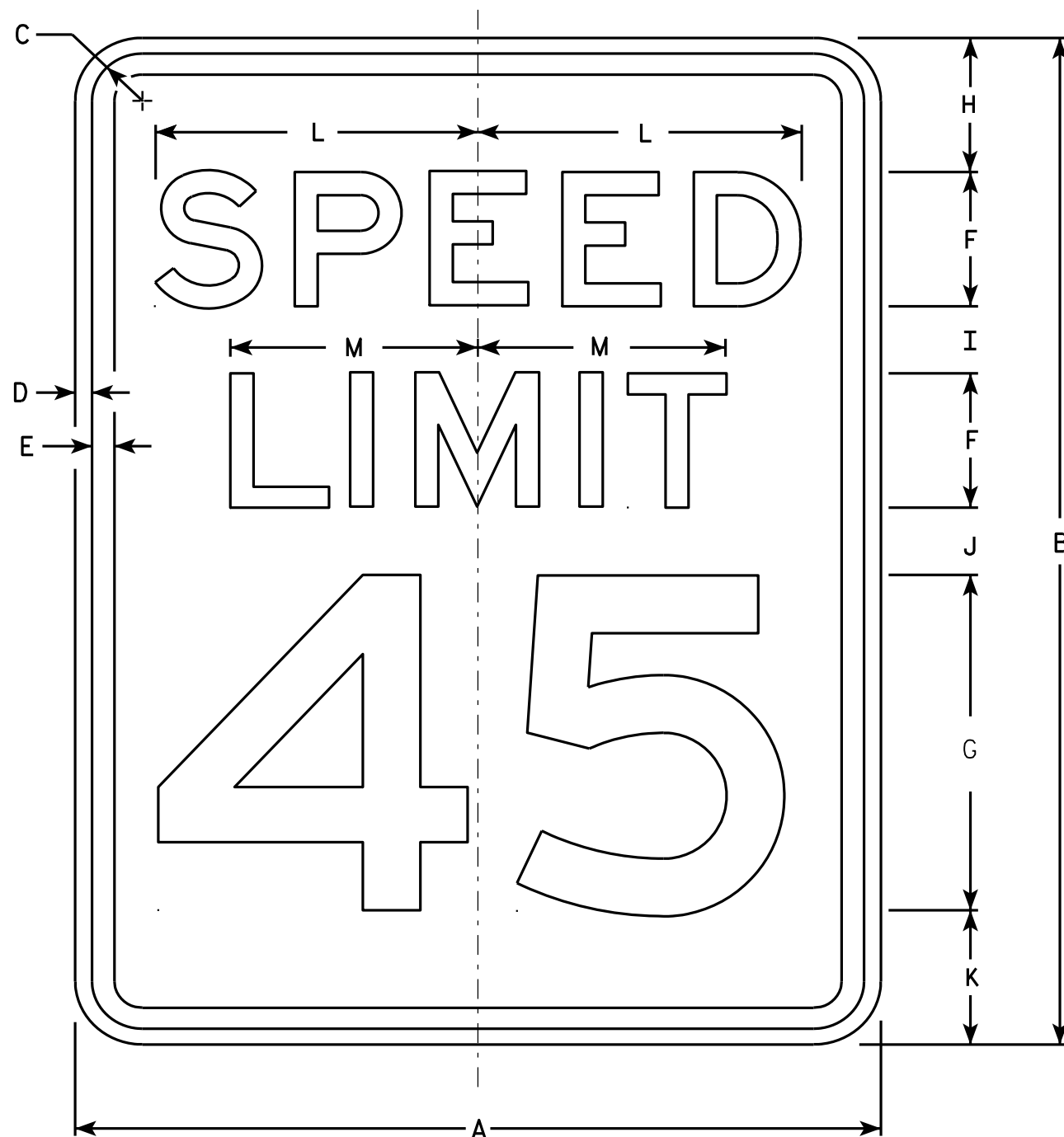
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

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



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.

7

7

| 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 |

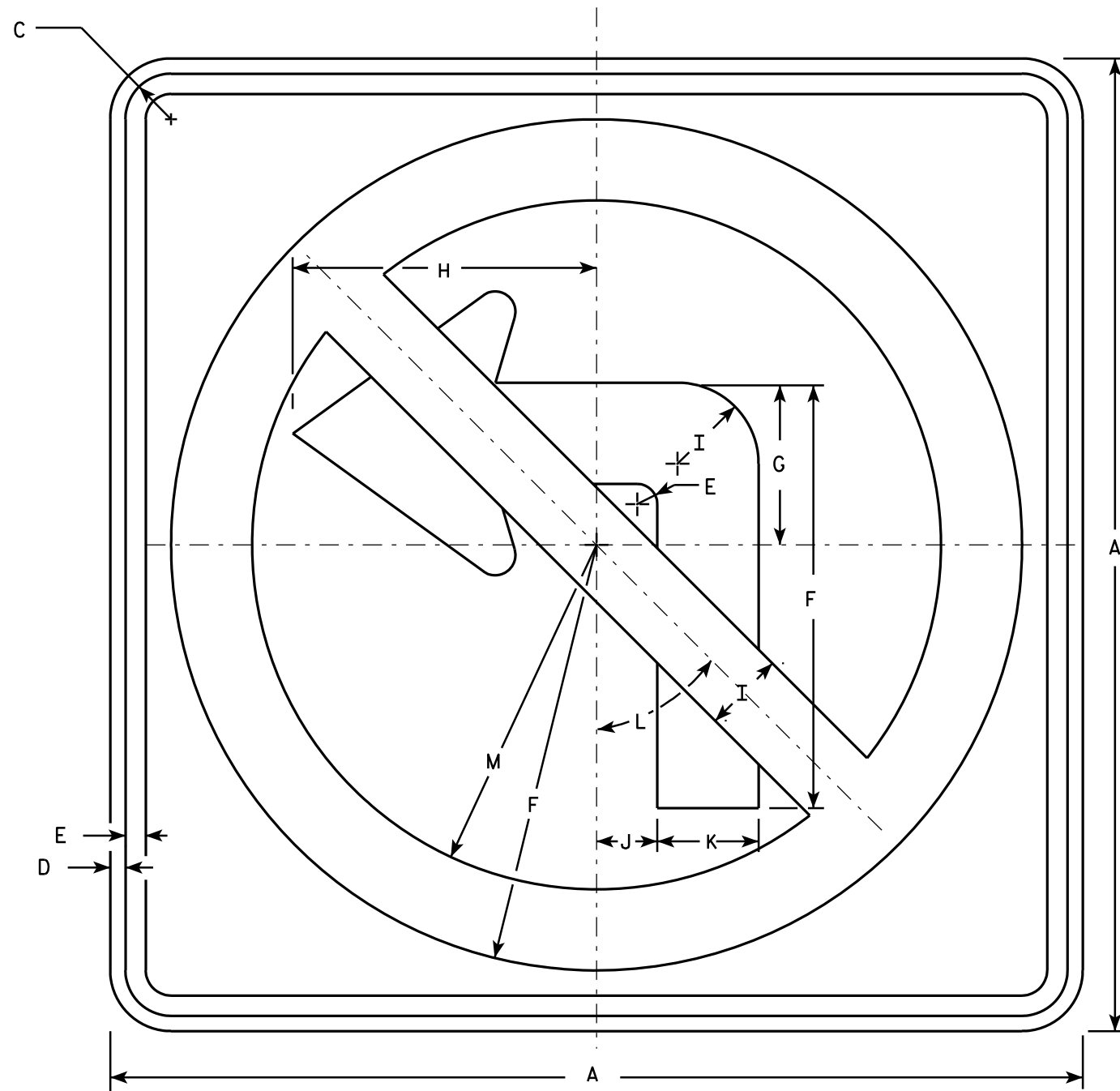
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

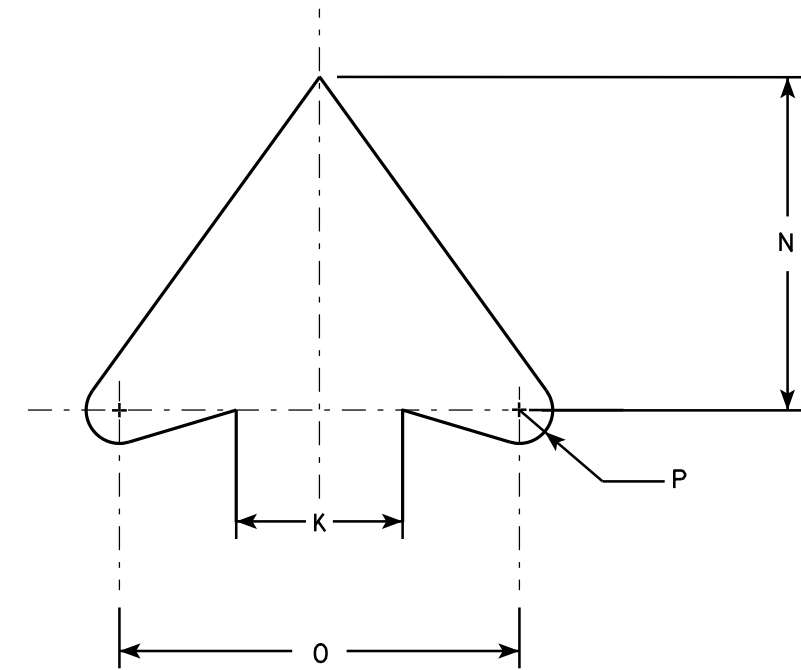
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. Ft. |
|------|----|---|-------|-----|-----|--------|---|--------|---|-------|-------|-----|--------|-------|----|-----|---|---|---|---|---|---|---|---|---|---|--------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45° | 8 1/2 | 5 | 6 | 1/2 | | | | | | | | | | | 4.0 |
| 2S | 24 | | 1 1/8 | 3/8 | 1/2 | 10 1/2 | 4 | 7 1/2 | 2 | 1 1/2 | 2 1/2 | 45° | 8 1/2 | 5 | 6 | 1/2 | | | | | | | | | | | 4.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 15 3/4 | 6 | 11 1/4 | 3 | 2 1/4 | 3 3/4 | 45° | 12 3/4 | 7 1/2 | 9 | 3/4 | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 21 | 8 | 15 | 4 | 3 | 5 | 45° | 17 | 10 | 12 | 1 | | | | | | | | | | | 16.0 |

STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

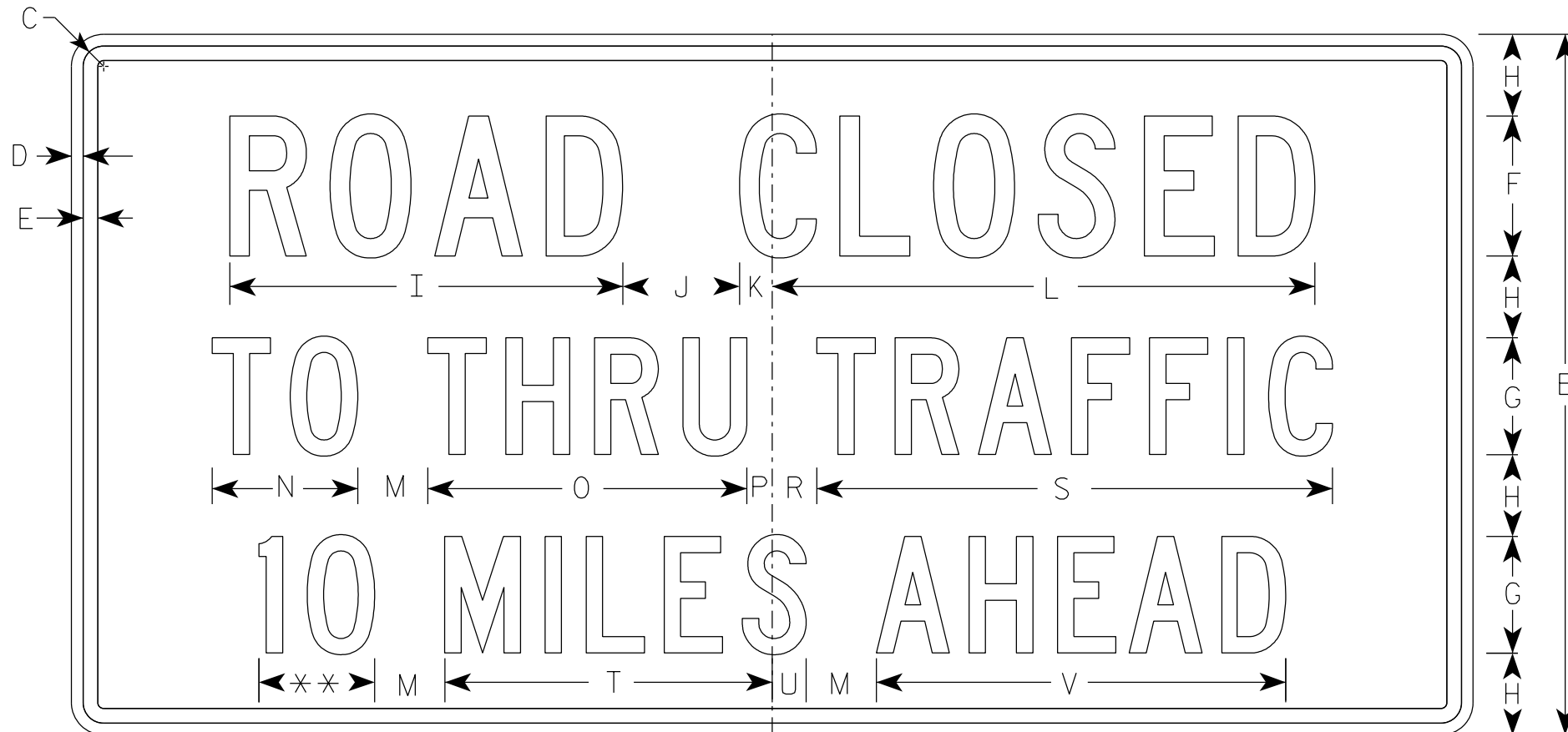
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

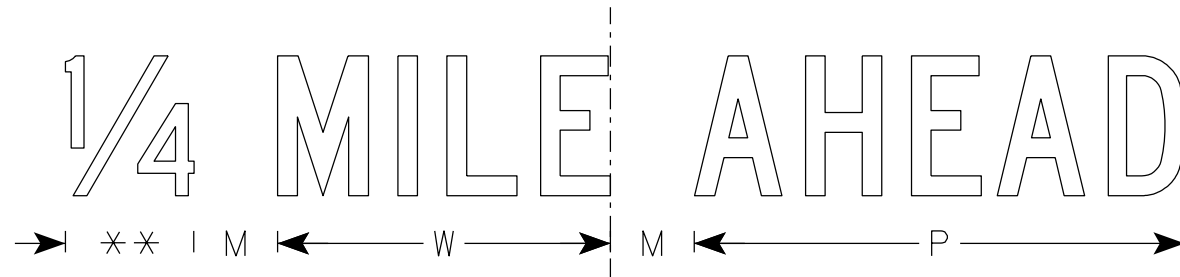
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | v | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|---|-------|--------|---|-------|--------|---|-------|--------|-------|---|-------|--------|-------|-------|--------|--------|---|---|------|--------------|
| 1 | 36 | 18 | 1 1/4 | 3/8 | 3/8 | 4 | 3 | 2 | 11 1/4 | 3 | 1 1/8 | 15 3/8 | 2 | 3 3/4 | 8 1/4 | 5/8 | | 1 3/8 | 13 1/4 | 8 3/8 | 7/8 | 10 1/2 | 7 1/8 | | | 4.5 | |
| 2S | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 3 1/2 | 16 7/8 | 5 | 1 3/8 | 23 1/4 | 3 | 6 1/4 | 13 5/8 | 1 1/8 | | 1 7/8 | 22 1/8 | 14 | 1 1/2 | 17 1/2 | 11 7/8 | | | 12.5 | |
| 2M | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 3 1/2 | 16 7/8 | 5 | 1 3/8 | 23 1/4 | 3 | 6 1/4 | 13 5/8 | 1 1/8 | | 1 7/8 | 22 1/8 | 14 | 1 1/2 | 17 1/2 | 11 7/8 | | | 12.5 | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

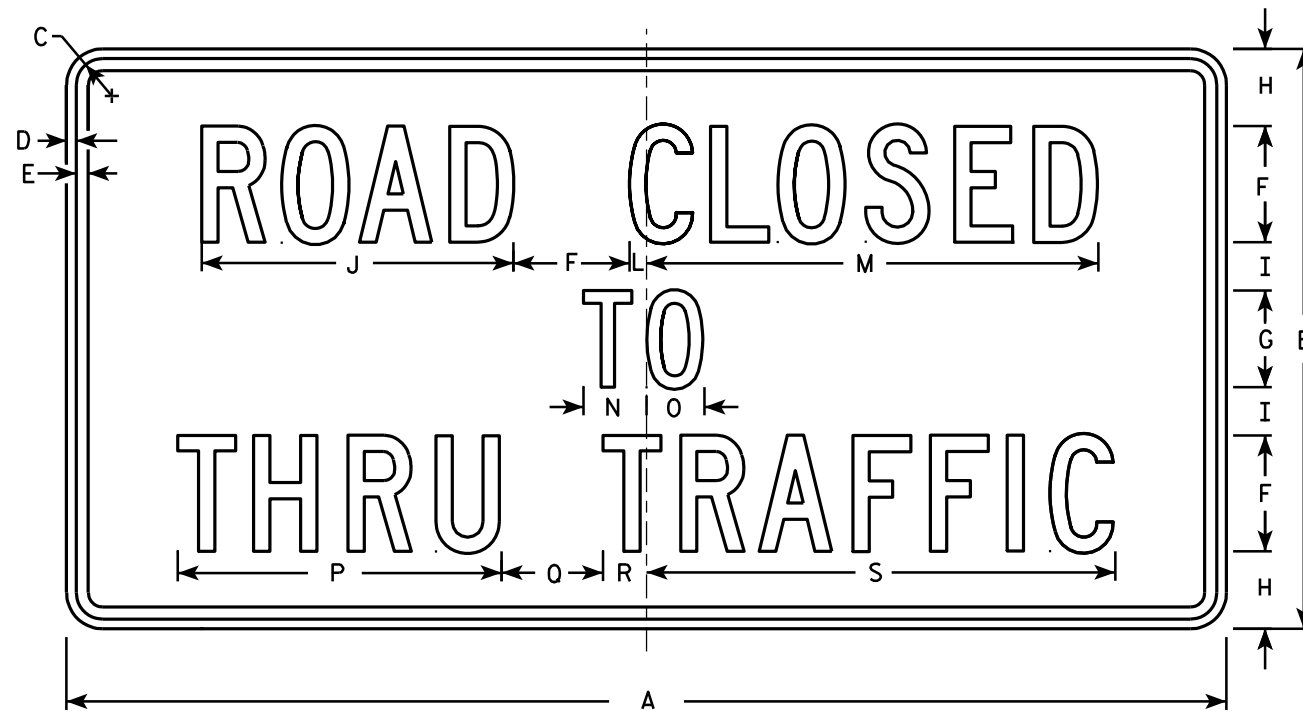
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ **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 - 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.



R11-4

7

7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|---|---|-------|--------|---|-----|--------|-------|---|--------|-------|-------|--------|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 2 1/2 | 16 1/8 | | 7/8 | 23 3/8 | 3 1/4 | 3 | 16 3/4 | 5 1/4 | 2 1/4 | 24 1/4 | | | | | | | | 12.5 |
| 2M | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 6 | 5 | 4 | 2 1/2 | 16 1/8 | | 7/8 | 23 3/8 | 3 1/4 | 3 | 16 3/4 | 5 1/4 | 2 1/4 | 24 1/4 | | | | | | | | 12.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

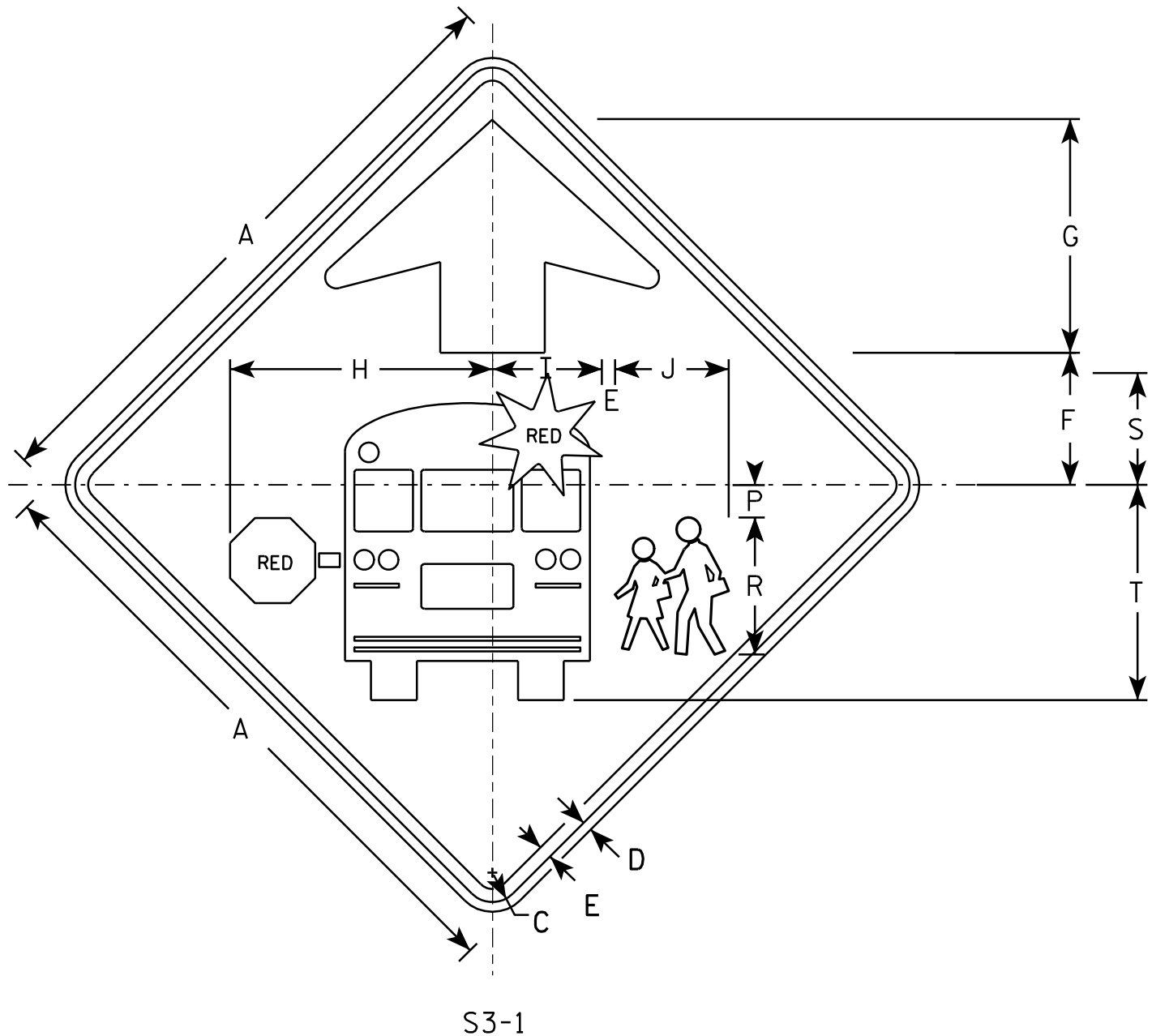
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Raush*
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

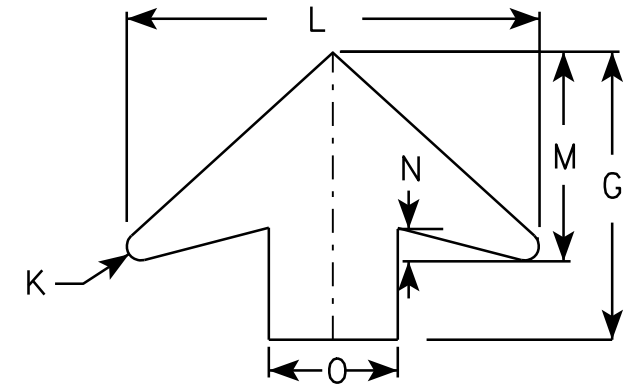
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



S3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 Background - YELLOW-GREEN
 Message - BLACK except as noted
 Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

7

7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|-------|--------|--------|-------|-------|-----|--------|-------|-------|---|-------|---|--------|-------|--------|---|---|---|---|---|---|--------------|
| 1 | 30 | | 1 3/8 | 1/2 | 5/8 | 6 1/4 | 11 1/4 | 12 1/2 | 5 1/4 | 5 1/2 | 1/2 | 16 | 8 | 1 1/4 | 5 | 1 1/2 | | 6 5/8 | 5 3/8 | 10 3/8 | | | | | | | 6.25 |
| 2 | 36 | | 1 5/8 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 15 1/8 | 6 1/4 | 6 1/2 | 5/8 | 19 1/4 | 9 3/4 | 1 5/8 | 6 | 1 7/8 | | 7 1/8 | 6 3/8 | 12 3/8 | | | | | | | 9.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 10 | 17 7/8 | 20 1/8 | 8 3/8 | 8 3/4 | 7/8 | 25 5/8 | 13 | 2 | 8 | 2 1/2 | | 10 1/2 | 8 1/2 | 16 1/2 | | | | | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 10 | 17 7/8 | 20 1/8 | 8 3/8 | 8 3/4 | 7/8 | 25 5/8 | 13 | 2 | 8 | 2 1/2 | | 10 1/2 | 8 1/2 | 16 1/2 | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
S3-1

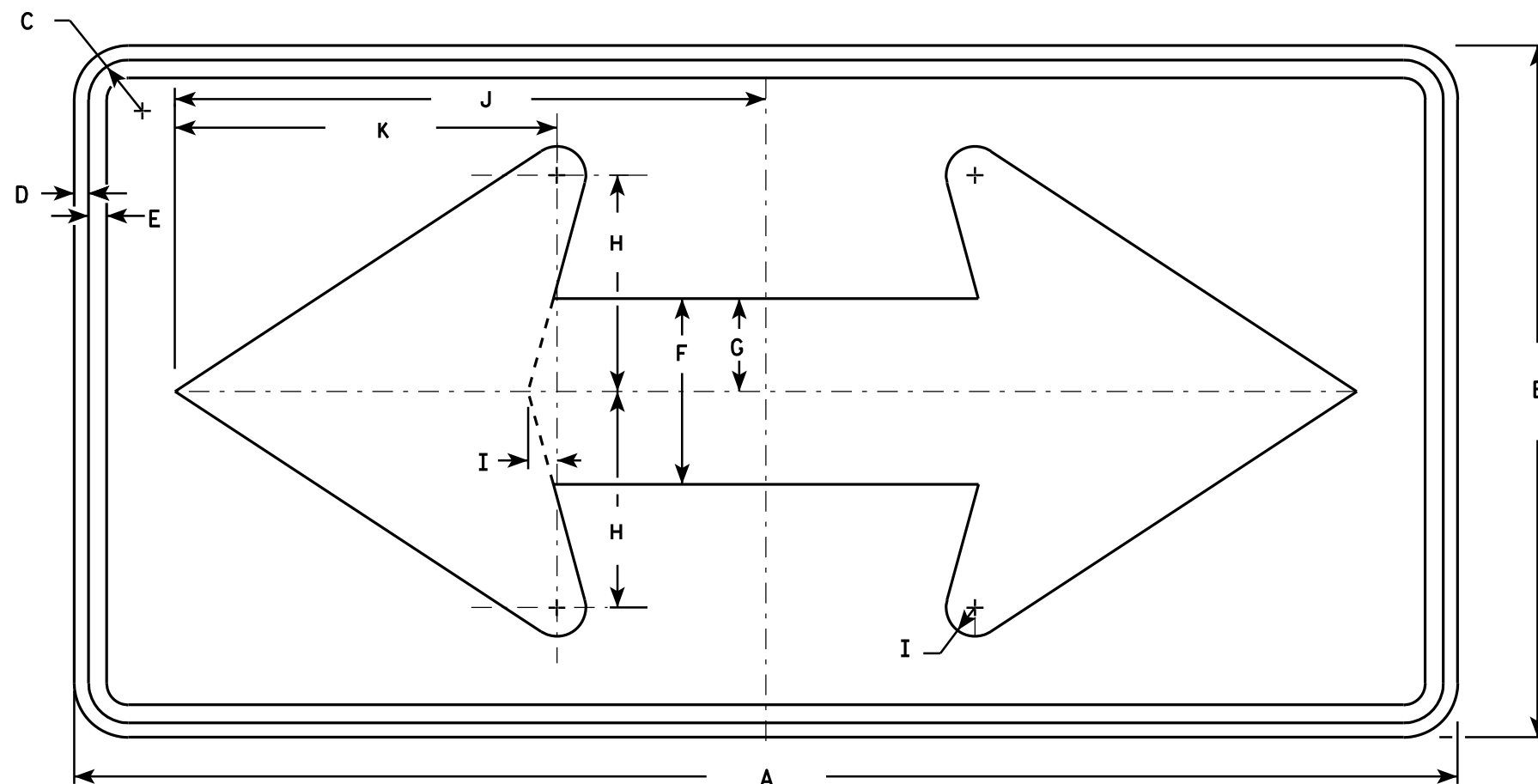
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

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.



W1-7

7

7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|-------|-------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 5 | 2 1/2 | 5 3/4 | 3/4 | 15 5/8 | 10 1/8 | | | | | | | | | | | | | | | | 4.5 |
| 2S | 48 | 24 | 1 3/8 | 1/2 | 5/8 | 6 1/2 | 3 1/4 | 7 1/2 | 1 | 20 1/2 | 13 1/4 | | | | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | 6 1/2 | 3 1/4 | 7 1/2 | 1 | 20 1/2 | 13 1/4 | | | | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 4 | 9 1/4 | 1 1/4 | 25 3/8 | 16 1/4 | | | | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | 8 | 4 | 9 1/4 | 1 1/4 | 25 3/8 | 16 1/4 | | | | | | | | | | | | | | | | 12.5 |
| 5 | 96 | 48 | 2 1/4 | 3/4 | 1 | 13 | 6 1/2 | 15 | 2 | 41 | 26 1/2 | | | | | | | | | | | | | | | | 32.0 |

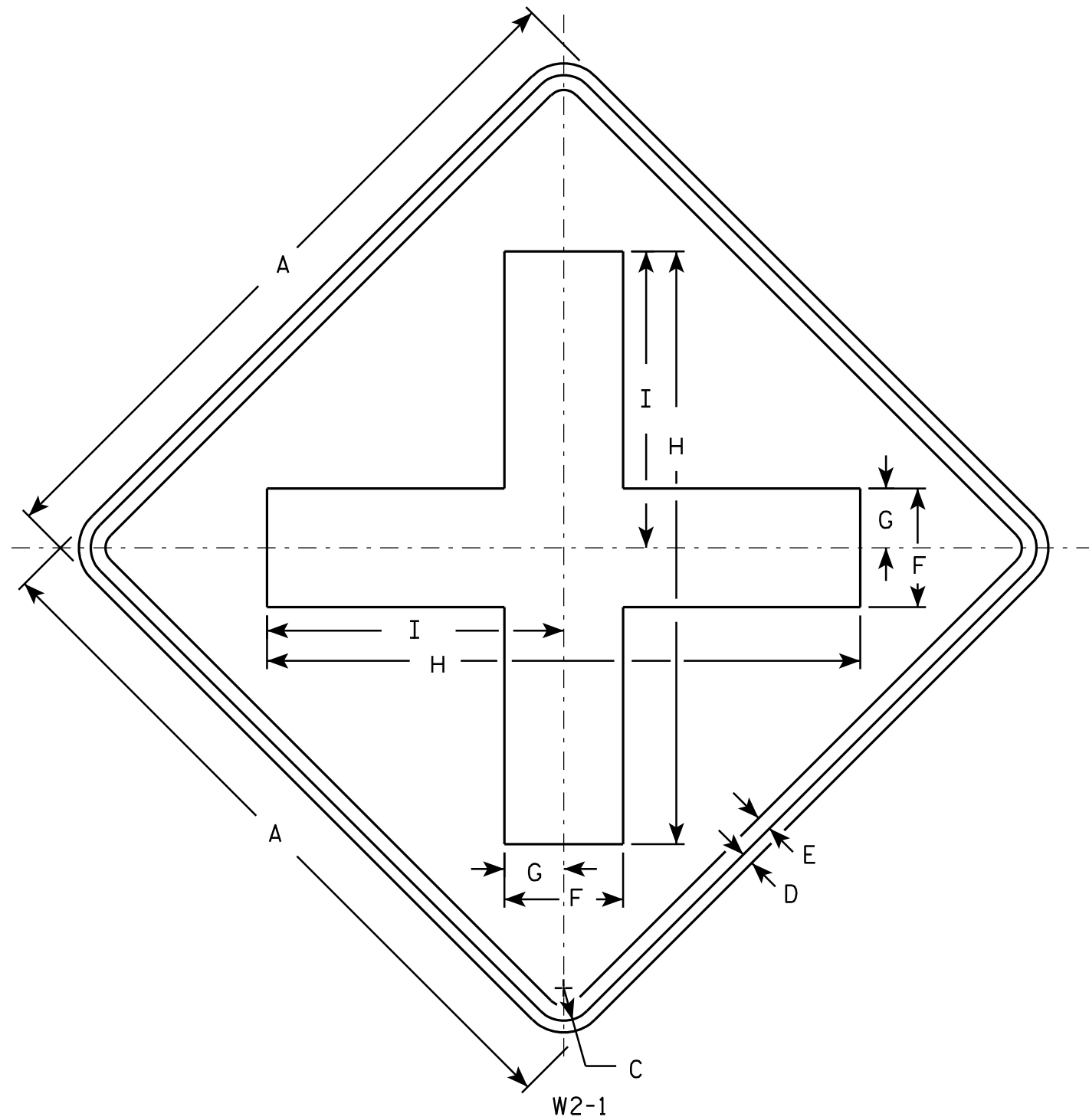
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



NOTES

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

7

7

| 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 | 2 | 20 | 10 | | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 1/2 | 25 | 12 1/2 | | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 1/2 | 25 | 12 1/2 | | | | | | | | | | | | | | | | | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 3 | 30 | 15 | | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 4 | 40 | 20 | | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

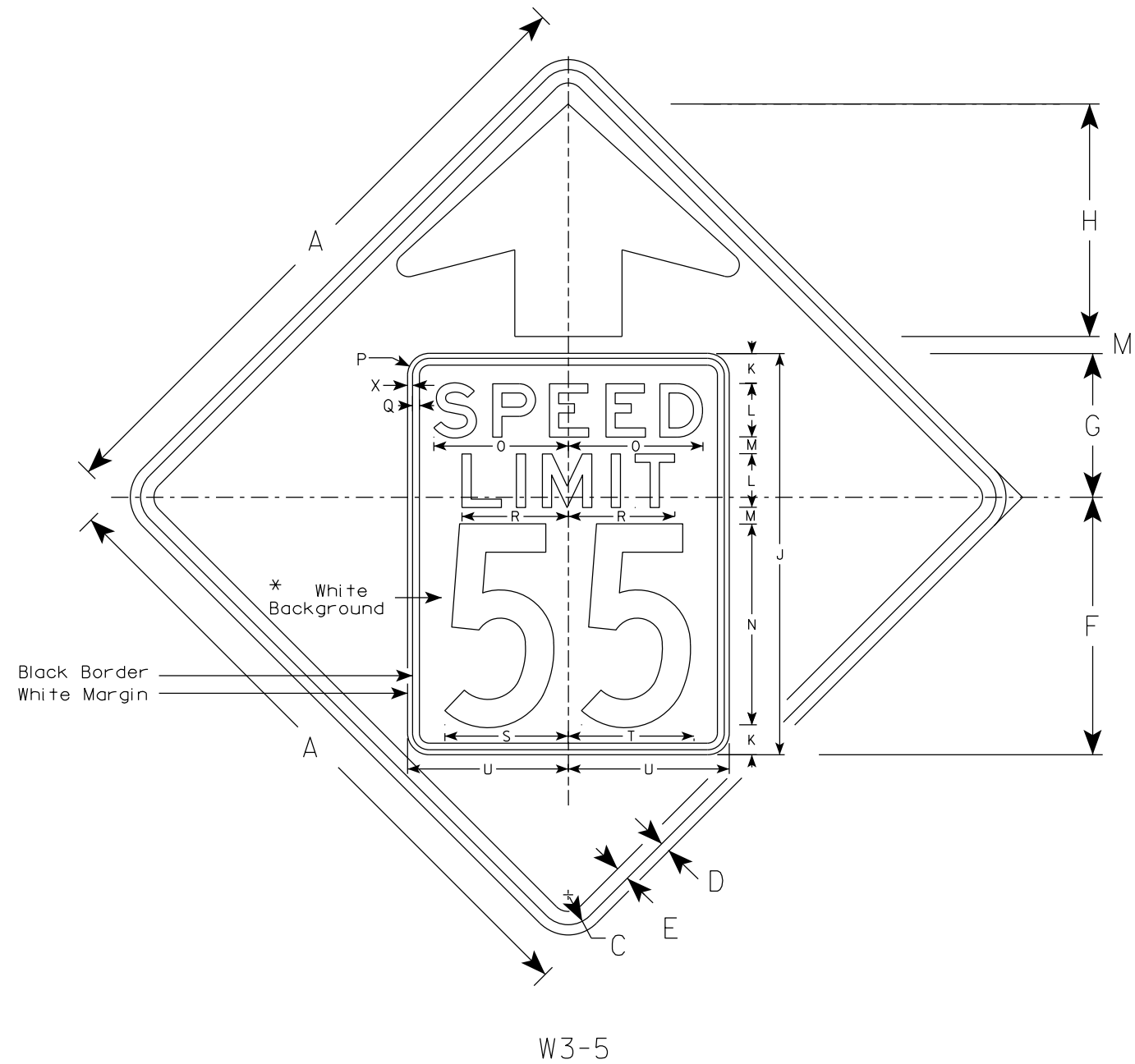
STANDARD SIGN
W2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-1.9

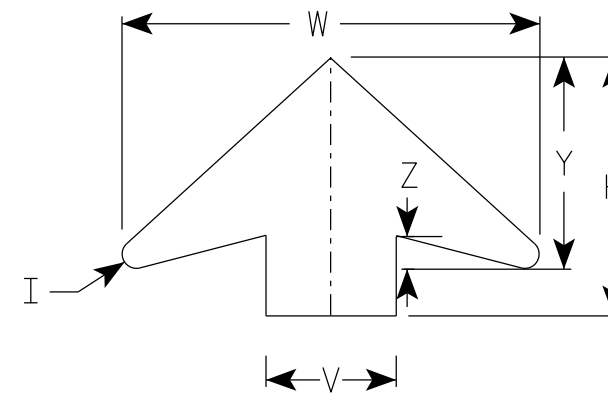
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ **E**



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

W3-5

| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 36 | | 1 5/8 | 5/8 | 3/4 | 14 1/2 | 9 1/2 | 11 1/2 | 5/8 | 24 | 2 | 3 | 1 | 12 | 7 1/8 | 1 1/2 | 3/8 | 5 3/4 | 7 1/4 | 7 1/8 | 9 | 6 | 19 1/4 | 3/8 | 9 3/4 | 1 5/8 | 9.0 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 14 1/2 | 9 1/2 | 11 1/2 | 5/8 | 24 | 2 | 3 | 1 | 12 | 7 1/8 | 1 1/2 | 3/8 | 5 3/4 | 7 1/4 | 7 1/8 | 9 | 6 | 19 1/4 | 3/8 | 9 3/4 | 1 5/8 | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 14 1/2 | 9 1/2 | 11 1/2 | 5/8 | 24 | 2 | 3 | 1 | 12 | 7 1/8 | 1 1/2 | 3/8 | 5 3/4 | 7 1/4 | 7 1/8 | 9 | 6 | 19 1/4 | 3/8 | 9 3/4 | 1 5/8 | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 19 1/4 | 10 3/4 | 17 3/8 | 7/8 | 30 | 2 1/4 | 4 | 1 1/4 | 15 | 10 | 1 5/8 | 1/2 | 8 | 9 1/4 | 9 3/8 | 12 | 8 | 25 5/8 | 3/8 | 13 | 2 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 19 1/4 | 10 3/4 | 17 3/8 | 7/8 | 30 | 2 1/4 | 4 | 1 1/4 | 15 | 10 | 1 5/8 | 1/2 | 8 | 9 1/4 | 9 3/8 | 12 | 8 | 25 5/8 | 3/8 | 13 | 2 | 16.0 |

STANDARD SIGN
W3-5

WISCONSIN DEPT OF TRANSPORTATION

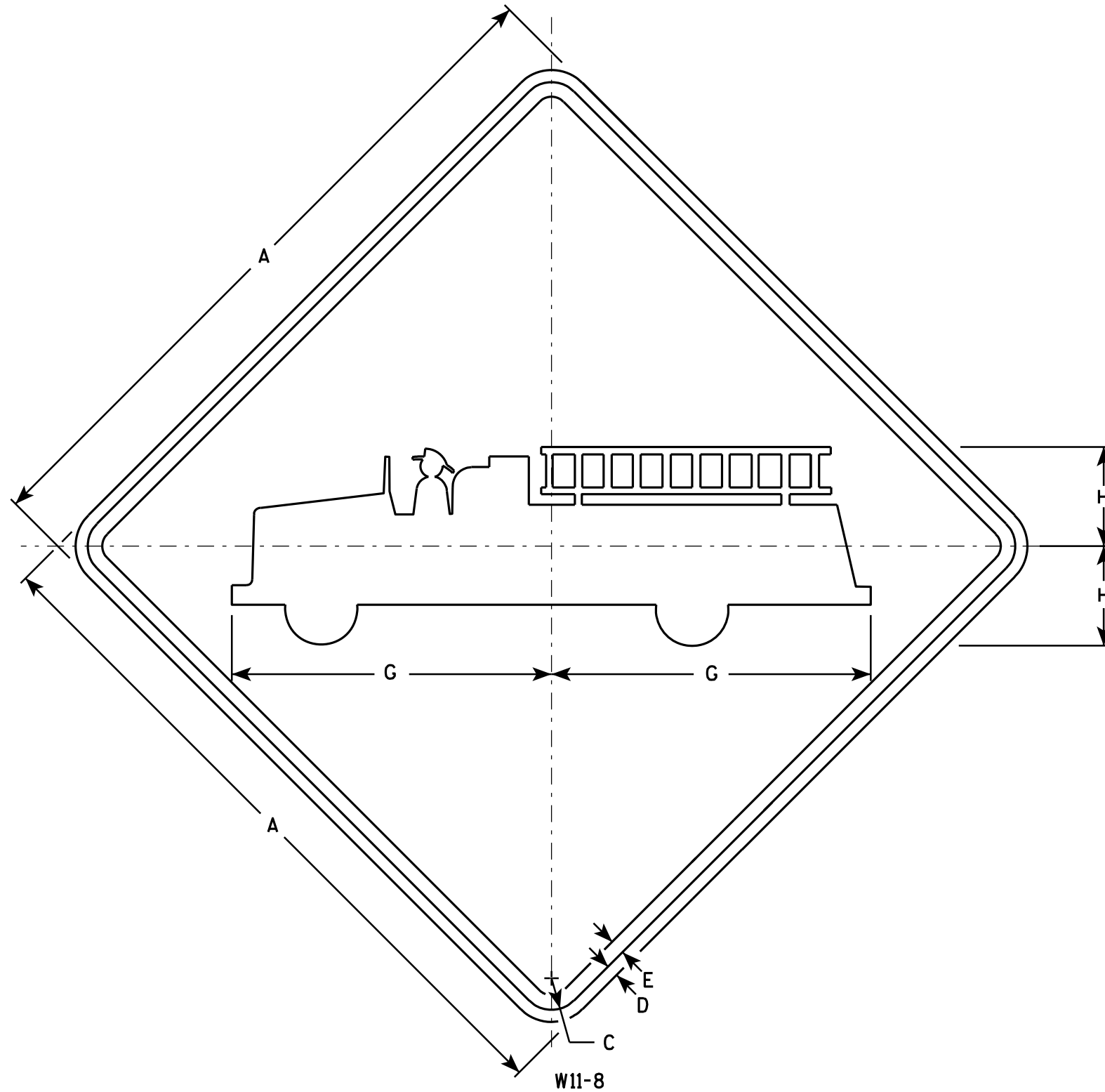
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/27/2020 PLATE NO. W3-5.6

PROJECT NO:

SHEET NO:

E



NOTES

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

7

7

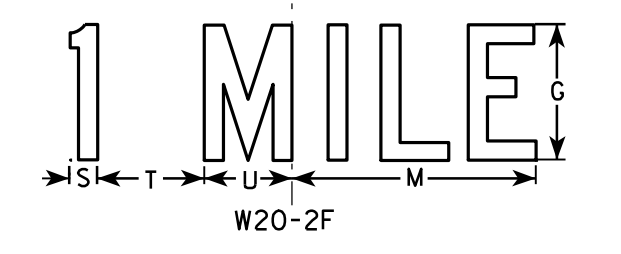
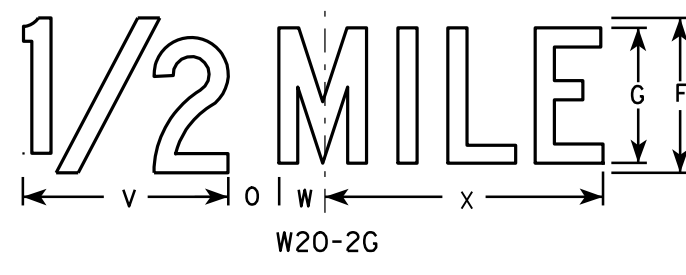
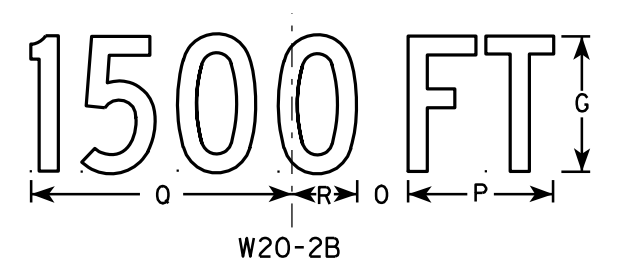
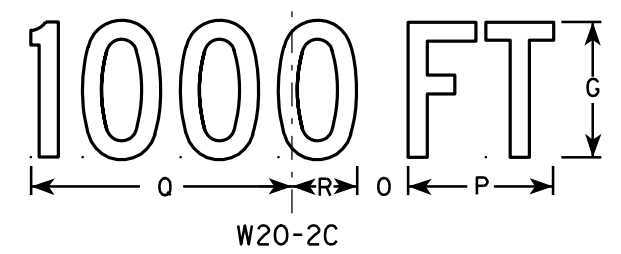
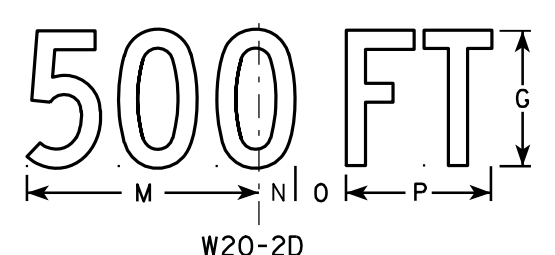
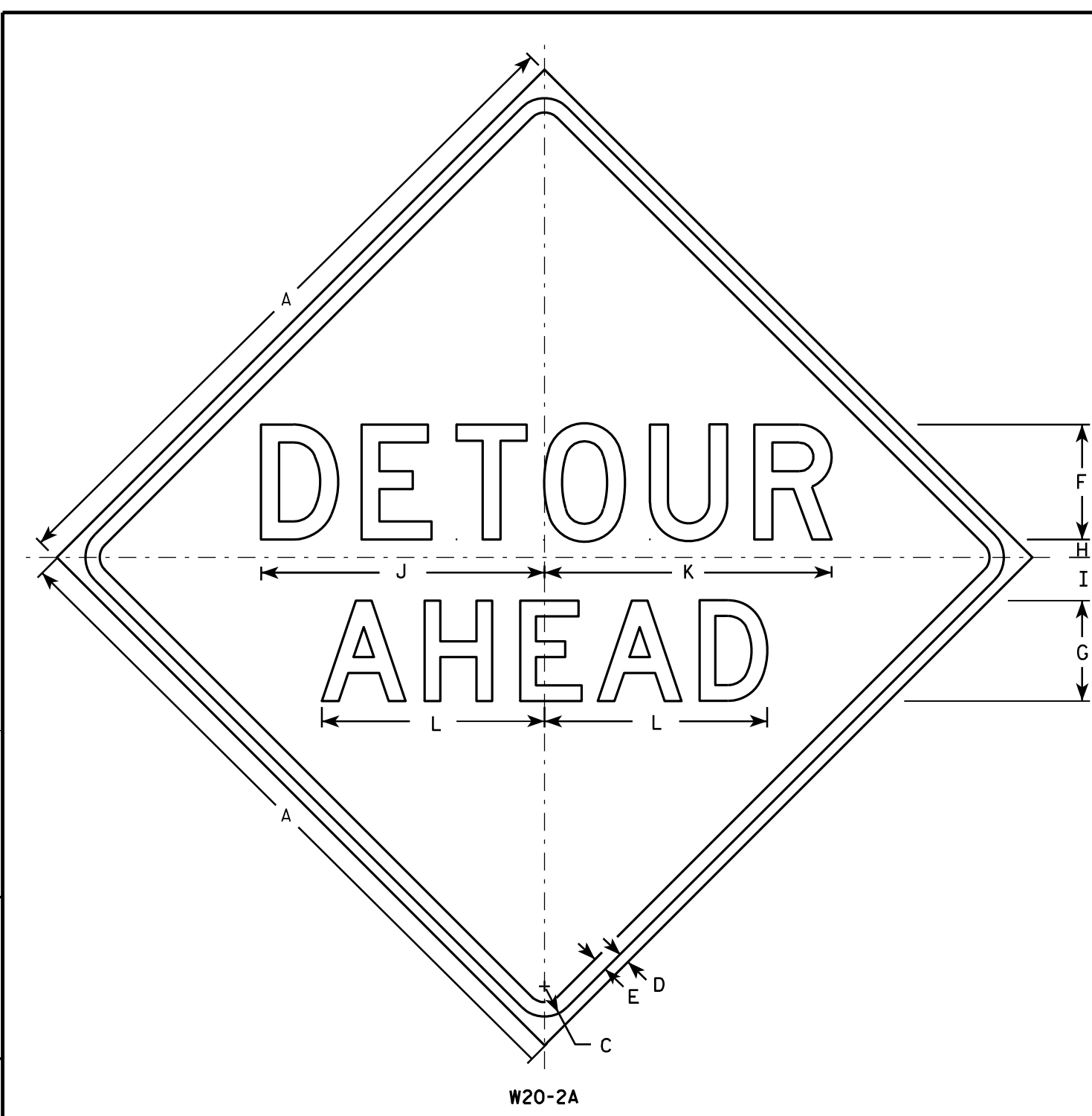
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|--------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 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



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

7

7

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|---|-------|-------|--------|----|--------|----|-------|-------|-------|--------|-------|-------|-------|-------|--------|-------|--------|---|---|--------------|
| 1 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 | 5 | 1 | 2 1/4 | 14 3/4 | 15 | 11 5/8 | 9 | 1 3/8 | 1 7/8 | 5 5/8 | 10 1/8 | 2 1/2 | 1 1/8 | 4 1/2 | 3 1/2 | 8 | 1 3/4 | 10 3/4 | | | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 7 | 1 1/4 | 3 | 19 3/4 | 20 | 15 1/2 | 12 | 1 7/8 | 2 5/8 | 7 1/2 | 13 1/2 | 3 3/8 | 1 1/2 | 6 | 4 5/8 | 10 5/8 | 2 3/8 | 14 3/8 | | | 16.0 |

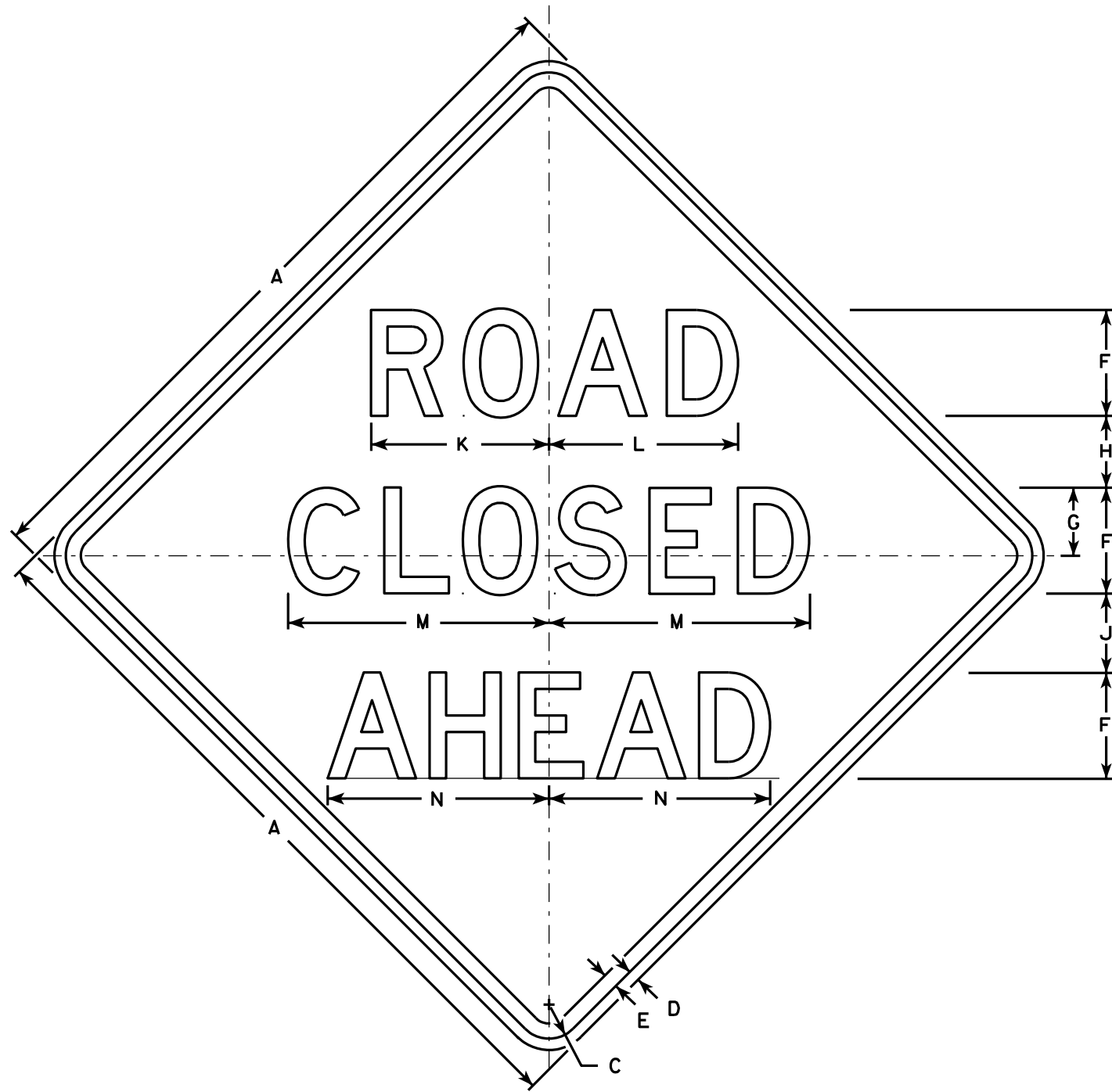
STANDARD SIGN
W20-2A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

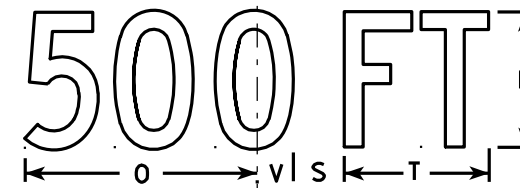
APPROVED *Matthew R. Raub*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

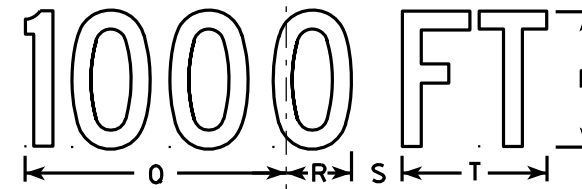
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



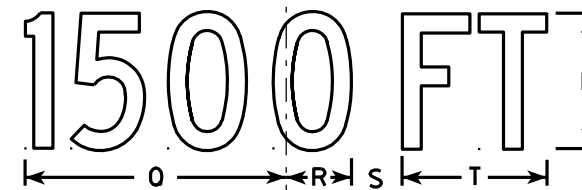
W20-3A



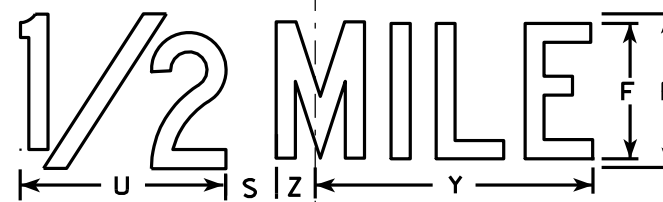
W20-3D



W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

7

7

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

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

DIVISION 1 -- CTH X

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---------|----------|-----------|-------------------------------------|------|-----------------------------------|---|----------------|-----------------------|-----------------------|-------------------------|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT NOTE 1 | SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2 | FILL NOTE 3 | CUT 1.00 NOTE 1 | EXPANDED FILL 1.25 | MASS ORDINATE NOTE 4 |
| | | | | | | | | | | |
| 55+00 | 0.00 | 28.63 | 0.00 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 55+50 | 50.00 | 23.95 | 0.00 | 0.00 | 49 | 0 | 0 | 49 | 0 | 49 |
| 56+00 | 50.00 | 23.55 | 0.00 | 0.00 | 44 | 0 | 0 | 93 | 0 | 93 |
| 56+50 | 50.00 | 26.21 | 0.00 | 0.00 | 46 | 0 | 0 | 139 | 0 | 139 |
| 57+00 | 50.00 | 19.38 | 0.00 | 1.26 | 42 | 0 | 1 | 181 | 1 | 180 |
| 57+50 | 50.00 | 17.25 | 0.00 | 2.20 | 34 | 0 | 3 | 215 | 5 | 210 |
| 58+00 | 50.00 | 18.88 | 0.00 | 1.40 | 33 | 0 | 3 | 248 | 9 | 239 |
| 58+50 | 50.00 | 16.30 | 0.00 | 0.92 | 33 | 0 | 2 | 281 | 11 | 270 |
| 59+00 | 50.00 | 16.82 | 0.00 | 0.00 | 31 | 0 | 1 | 312 | 13 | 300 |
| 59+50 | 50.00 | 16.55 | 0.00 | 3.12 | 31 | 0 | 3 | 343 | 16 | 327 |
| 60+00 | 50.00 | 14.53 | 0.00 | 4.65 | 29 | 0 | 7 | 372 | 25 | 347 |
| 60+50 | 50.00 | 18.57 | 0.00 | 1.07 | 31 | 0 | 5 | 403 | 31 | 372 |
| 61+00 | 50.00 | 26.28 | 0.00 | 0.00 | 42 | 0 | 1 | 445 | 33 | 413 |
| 61+50 | 50.00 | 21.79 | 0.00 | 3.84 | 45 | 0 | 4 | 490 | 38 | 453 |
| 62+00 | 50.00 | 21.59 | 0.00 | 6.07 | 40 | 0 | 9 | 530 | 49 | 481 |
| 62+50 | 50.00 | 16.15 | 0.00 | 6.84 | 35 | 0 | 12 | 565 | 64 | 501 |
| 63+00 | 50.00 | 32.77 | 0.00 | 4.68 | 45 | 0 | 11 | 610 | 78 | 533 |
| 63+50 | 50.00 | 22.13 | 0.00 | 4.88 | 51 | 0 | 9 | 661 | 89 | 572 |
| 64+00 | 50.00 | 20.58 | 0.00 | 0.00 | 40 | 0 | 5 | 701 | 95 | 606 |
| 64+50 | 50.00 | 32.74 | 0.00 | 0.01 | 49 | 0 | 0 | 750 | 95 | 655 |
| 65+00 | 50.00 | 23.33 | 0.00 | 0.01 | 52 | 0 | 0 | 802 | 95 | 707 |
| 65+50 | 50.00 | 22.60 | 0.00 | 0.12 | 43 | 0 | 0 | 845 | 95 | 750 |
| 66+00 | 50.00 | 27.65 | 0.00 | 0.19 | 47 | 0 | 0 | 892 | 95 | 797 |
| 66+50 | 50.00 | 23.83 | 0.00 | 0.12 | 48 | 0 | 0 | 940 | 95 | 845 |
| 67+00 | 50.00 | 32.97 | 0.00 | 0.00 | 53 | 0 | 0 | 993 | 95 | 898 |
| 67+50 | 50.00 | 30.77 | 0.00 | 0.00 | 59 | 0 | 0 | 1,052 | 95 | 957 |
| 68+00 | 50.00 | 21.56 | 0.00 | 0.02 | 48 | 0 | 0 | 1,100 | 95 | 1,005 |
| 68+50 | 50.00 | 25.97 | 0.00 | 0.00 | 44 | 0 | 0 | 1,144 | 95 | 1,049 |
| 69+00 | 50.00 | 17.77 | 0.00 | 2.52 | 40 | 0 | 2 | 1,184 | 98 | 1,087 |
| 69+50 | 50.00 | 14.59 | 0.00 | 6.77 | 30 | 0 | 9 | 1,214 | 109 | 1,105 |
| 70+00 | 50.00 | 13.41 | 0.00 | 4.84 | 26 | 0 | 11 | 1,240 | 123 | 1,118 |
| 70+50 | 50.00 | 13.81 | 0.00 | 3.60 | 25 | 0 | 8 | 1,265 | 133 | 1,133 |
| 71+00 | 50.00 | 16.36 | 0.00 | 1.25 | 28 | 0 | 4 | 1,293 | 138 | 1,156 |
| 71+50 | 50.00 | 16.25 | 0.00 | 0.82 | 30 | 0 | 2 | 1,323 | 140 | 1,183 |
| 72+00 | 50.00 | 22.52 | 0.00 | 1.42 | 36 | 0 | 2 | 1,359 | 143 | 1,217 |
| 72+50 | 50.00 | 13.30 | 0.00 | 2.66 | 33 | 0 | 4 | 1,392 | 148 | 1,245 |
| 73+00 | 50.00 | 14.30 | 0.00 | 1.17 | 26 | 0 | 4 | 1,418 | 153 | 1,266 |
| 73+50 | 50.00 | 39.74 | 0.00 | 0.03 | 50 | 0 | 1 | 1,468 | 154 | 1,314 |
| 74+00 | 50.00 | 26.25 | 0.00 | 0.02 | 61 | 0 | 0 | 1,529 | 154 | 1,375 |
| 74+50 | 50.00 | 31.34 | 0.00 | 0.00 | 53 | 0 | 0 | 1,582 | 154 | 1,428 |
| 75+00 | 50.00 | 28.34 | 0.00 | 0.00 | 55 | 0 | 0 | 1,637 | 154 | 1,483 |

| | |
|---|--|
| 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 - MASS ORDINATE | CUT - SALVAGED PAVT - (FILL * FILL FACTOR) |

9

9

DIVISION 1 -- CTH X

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---------|----------|-----------|-------------------------------------|-------|-----------------------------------|---|----------------|-----------------------|-----------------------|-------------------------|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT NOTE 1 | SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2 | FILL NOTE 3 | CUT 1.00 NOTE 1 | EXPANDED FILL 1.25 | MASS ORDINATE NOTE 4 |
| | | | | | | | | | | |
| 75+50 | 50.00 | 39.50 | 0.00 | 0.00 | 63 | 0 | 0 | 1,700 | 154 | 1,546 |
| 76+00 | 50.00 | 51.60 | 0.00 | 0.00 | 84 | 0 | 0 | 1,784 | 154 | 1,630 |
| 76+50 | 50.00 | 50.69 | 0.00 | 0.00 | 95 | 0 | 0 | 1,879 | 154 | 1,725 |
| 77+00 | 50.00 | 44.46 | 0.00 | 0.00 | 88 | 0 | 0 | 1,967 | 154 | 1,813 |
| 77+50 | 50.00 | 32.79 | 0.00 | 0.34 | 72 | 0 | 0 | 2,039 | 154 | 1,885 |
| 78+00 | 50.00 | 49.34 | 0.00 | 0.61 | 76 | 0 | 1 | 2,115 | 155 | 1,960 |
| 78+50 | 50.00 | 51.96 | 0.00 | 0.00 | 94 | 0 | 1 | 2,209 | 156 | 2,053 |
| 79+00 | 50.00 | 50.08 | 0.00 | 0.00 | 94 | 0 | 0 | 2,303 | 156 | 2,147 |
| 79+50 | 50.00 | 40.66 | 0.00 | 0.00 | 84 | 0 | 0 | 2,387 | 156 | 2,231 |
| 80+00 | 50.00 | 60.77 | 0.00 | 0.00 | 94 | 0 | 0 | 2,481 | 156 | 2,325 |
| 80+50 | 50.00 | 51.52 | 0.00 | 0.00 | 104 | 0 | 0 | 2,585 | 156 | 2,429 |
| 81+00 | 50.00 | 40.07 | 0.00 | 0.00 | 85 | 0 | 0 | 2,670 | 156 | 2,514 |
| 81+50 | 50.00 | 33.13 | 0.00 | 0.00 | 68 | 0 | 0 | 2,738 | 156 | 2,582 |
| 82+00 | 50.00 | 20.77 | 0.00 | 0.05 | 50 | 0 | 0 | 2,788 | 156 | 2,632 |
| 82+50 | 50.00 | 19.66 | 0.00 | 0.80 | 37 | 0 | 1 | 2,825 | 158 | 2,668 |
| 83+00 | 50.00 | 25.21 | 0.00 | 0.01 | 42 | 0 | 1 | 2,867 | 159 | 2,708 |
| 83+50 | 50.00 | 29.66 | 0.00 | 0.00 | 51 | 0 | 0 | 2,918 | 159 | 2,759 |
| 84+00 | 50.00 | 34.96 | 0.00 | 0.00 | 60 | 0 | 0 | 2,978 | 159 | 2,819 |
| 84+50 | 50.00 | 37.26 | 0.00 | 0.00 | 67 | 0 | 0 | 3,045 | 159 | 2,886 |
| 85+00 | 50.00 | 24.01 | 0.00 | 0.47 | 57 | 0 | 0 | 3,102 | 159 | 2,943 |
| 85+50 | 50.00 | 21.74 | 0.00 | 0.39 | 42 | 0 | 1 | 3,144 | 160 | 2,984 |
| 86+00 | 50.00 | 39.37 | 0.00 | 0.00 | 57 | 0 | 0 | 3,201 | 160 | 3,041 |
| 86+50 | 50.00 | 38.32 | 0.00 | 0.02 | 72 | 0 | 0 | 3,273 | 160 | 3,113 |
| 87+00 | 50.00 | 44.19 | 0.00 | 0.00 | 76 | 0 | 0 | 3,349 | 160 | 3,189 |
| 87+50 | 50.00 | 41.78 | 0.00 | 0.00 | 80 | 0 | 0 | 3,429 | 160 | 3,269 |
| 88+00 | 50.00 | 37.49 | 0.00 | 0.00 | 73 | 0 | 0 | 3,502 | 160 | 3,342 |
| 88+50 | 50.00 | 36.46 | 0.00 | 0.17 | 68 | 0 | 0 | 3,570 | 160 | 3,410 |
| 89+00 | 50.00 | 39.01 | 0.00 | 0.18 | 70 | 0 | 0 | 3,640 | 160 | 3,480 |
| 89+50 | 50.00 | 38.55 | 0.00 | 0.88 | 72 | 0 | 1 | 3,712 | 161 | 3,551 |
| 90+00 | 50.00 | 35.72 | 0.00 | 0.26 | 69 | 0 | 1 | 3,781 | 163 | 3,619 |
| 90+50 | 50.00 | 37.48 | 0.00 | 0.16 | 68 | 0 | 0 | 3,849 | 163 | 3,687 |
| 91+00 | 50.00 | 40.73 | 0.00 | 0.01 | 72 | 0 | 0 | 3,921 | 163 | 3,759 |
| 91+50 | 50.00 | 43.35 | 0.00 | 0.33 | 78 | 0 | 0 | 3,999 | 163 | 3,837 |
| 92+00 | 50.00 | 43.04 | 0.00 | 1.72 | 80 | 0 | 2 | 4,079 | 165 | 3,914 |
| 92+50 | 50.00 | 20.11 | 0.00 | 14.41 | 58 | 0 | 15 | 4,137 | 184 | 3,953 |
| 93+00 | 50.00 | 10.57 | 0.00 | 33.89 | 28 | 0 | 45 | 4,165 | 240 | 3,925 |
| 93+50 | 50.00 | 12.46 | 0.00 | 23.13 | 21 | 0 | 53 | 4,186 | 306 | 3,880 |
| 94+00 | 50.00 | 15.93 | 0.00 | 19.15 | 26 | 0 | 39 | 4,212 | 355 | 3,857 |
| 94+50 | 50.00 | 12.15 | 0.00 | 23.10 | 26 | 0 | 39 | 4,238 | 404 | 3,834 |
| 95+00 | 50.00 | 15.07 | 0.00 | 11.41 | 25 | 0 | 32 | 4,263 | 444 | 3,819 |
| 95+50 | 50.00 | 16.29 | 0.00 | 3.17 | 29 | 0 | 14 | 4,292 | 461 | 3,831 |

| | |
|---|--|
| 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 - MASS ORDINATE | CUT - SALVAGED PAVT - (FILL * FILL FACTOR) |

9

9

DIVISION 1 -- CTH X

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---------|----------|-----------|-------------------------------------|-------|-----------------------------------|---|----------------|-----------------------|-----------------------|-------------------------|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT NOTE 1 | SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2 | FILL NOTE 3 | CUT 1.00 NOTE 1 | EXPANDED FILL 1.25 | MASS ORDINATE NOTE 4 |
| | | | | | | | | | | |
| 96+00 | 50.00 | 13.57 | 0.00 | 7.70 | 28 | 0 | 10 | 4,320 | 474 | 3,846 |
| 96+50 | 50.00 | 15.33 | 0.00 | 8.86 | 27 | 0 | 15 | 4,347 | 493 | 3,855 |
| 97+00 | 50.00 | 13.63 | 0.00 | 9.82 | 27 | 0 | 17 | 4,374 | 514 | 3,860 |
| 97+50 | 50.00 | 13.79 | 0.00 | 8.46 | 25 | 0 | 17 | 4,399 | 535 | 3,864 |
| 98+00 | 50.00 | 22.04 | 0.00 | 2.77 | 33 | 0 | 10 | 4,432 | 548 | 3,885 |
| 98+50 | 50.00 | 32.50 | 0.00 | 0.01 | 50 | 0 | 3 | 4,482 | 551 | 3,931 |
| 99+00 | 50.00 | 42.35 | 0.00 | 0.02 | 69 | 0 | 0 | 4,551 | 551 | 4,000 |
| 99+50 | 50.00 | 42.84 | 0.00 | 0.00 | 79 | 0 | 0 | 4,630 | 551 | 4,079 |
| 100+00 | 50.00 | 42.58 | 0.00 | 2.15 | 79 | 0 | 2 | 4,709 | 554 | 4,155 |
| 100+50 | 50.00 | 50.05 | 0.00 | 0.73 | 86 | 0 | 3 | 4,795 | 558 | 4,238 |
| 101+00 | 50.00 | 67.85 | 0.00 | 0.00 | 109 | 0 | 1 | 4,904 | 559 | 4,345 |
| 101+50 | 50.00 | 72.18 | 0.00 | 0.00 | 130 | 0 | 0 | 5,034 | 559 | 4,475 |
| 102+00 | 50.00 | 67.61 | 0.00 | 0.00 | 129 | 0 | 0 | 5,163 | 559 | 4,604 |
| 102+50 | 50.00 | 71.76 | 0.00 | 0.00 | 129 | 0 | 0 | 5,292 | 559 | 4,733 |
| 103+00 | 50.00 | 56.78 | 0.00 | 0.04 | 119 | 0 | 0 | 5,411 | 559 | 4,852 |
| 103+50 | 50.00 | 38.09 | 0.00 | 0.38 | 88 | 0 | 0 | 5,499 | 559 | 4,940 |
| 104+00 | 50.00 | 33.22 | 0.00 | 0.00 | 66 | 0 | 0 | 5,565 | 559 | 5,006 |
| 104+50 | 50.00 | 19.92 | 0.00 | 5.08 | 49 | 0 | 5 | 5,614 | 565 | 5,049 |
| 105+00 | 50.00 | 16.20 | 0.00 | 5.03 | 33 | 0 | 9 | 5,647 | 576 | 5,071 |
| 105+50 | 50.00 | 14.39 | 0.00 | 7.79 | 28 | 0 | 12 | 5,675 | 591 | 5,084 |
| 106+00 | 50.00 | 14.06 | 0.00 | 4.45 | 26 | 0 | 11 | 5,701 | 605 | 5,096 |
| 106+50 | 50.00 | 13.67 | 0.00 | 3.16 | 26 | 0 | 7 | 5,727 | 614 | 5,113 |
| 107+00 | 50.00 | 13.05 | 0.00 | 4.02 | 25 | 0 | 7 | 5,752 | 623 | 5,130 |
| 107+50 | 50.00 | 13.00 | 0.00 | 6.05 | 24 | 0 | 9 | 5,776 | 634 | 5,142 |
| 108+00 | 50.00 | 18.94 | 0.00 | 0.83 | 30 | 0 | 6 | 5,806 | 641 | 5,165 |
| 108+50 | 50.00 | 15.81 | 0.00 | 6.59 | 32 | 0 | 7 | 5,838 | 650 | 5,188 |
| 109+00 | 50.00 | 28.92 | 0.00 | 10.55 | 41 | 0 | 16 | 5,879 | 670 | 5,209 |
| 109+50 | 50.00 | 18.88 | 0.00 | 9.28 | 44 | 0 | 18 | 5,923 | 693 | 5,231 |
| 110+00 | 50.00 | 21.41 | 0.00 | 7.67 | 37 | 0 | 16 | 5,960 | 713 | 5,248 |
| 110+50 | 50.00 | 21.14 | 0.00 | 4.68 | 39 | 0 | 11 | 5,999 | 726 | 5,273 |
| 111+00 | 50.00 | 25.13 | 0.00 | 2.86 | 43 | 0 | 7 | 6,042 | 735 | 5,307 |
| 111+50 | 50.00 | 25.99 | 0.00 | 2.33 | 47 | 0 | 5 | 6,089 | 741 | 5,348 |
| 112+00 | 50.00 | 29.22 | 0.00 | 3.04 | 51 | 0 | 5 | 6,140 | 748 | 5,393 |
| 112+50 | 50.00 | 22.80 | 0.00 | 3.00 | 48 | 0 | 6 | 6,188 | 755 | 5,433 |
| 113+00 | 50.00 | 23.20 | 0.00 | 1.86 | 43 | 0 | 5 | 6,231 | 761 | 5,470 |
| 113+50 | 50.00 | 20.03 | 0.00 | 2.06 | 40 | 0 | 4 | 6,271 | 766 | 5,505 |
| 114+00 | 50.00 | 19.26 | 0.00 | 3.49 | 36 | 0 | 5 | 6,307 | 773 | 5,535 |
| 114+50 | 50.00 | 19.18 | 0.00 | 4.26 | 36 | 0 | 7 | 6,343 | 781 | 5,562 |
| 115+00 | 50.00 | 18.47 | 0.00 | 4.84 | 35 | 0 | 8 | 6,378 | 791 | 5,587 |
| 115+50 | 50.00 | 15.69 | 0.00 | 6.57 | 32 | 0 | 11 | 6,410 | 805 | 5,605 |
| 116+00 | 50.00 | 11.36 | 0.00 | 5.33 | 25 | 0 | 11 | 6,435 | 819 | 5,616 |

| | |
|---|--|
| 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 - MASS ORDINATE | CUT - SALVAGED PAVT - (FILL * FILL FACTOR) |

9

9

DIVISION 1 -- CTH X

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---------|----------|-----------|-------------------------------------|-------|-----------------------------------|---|----------------|-----------------------|-----------------------|-------------------------|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT NOTE 1 | SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2 | FILL NOTE 3 | CUT 1.00 NOTE 1 | EXPANDED FILL 1.25 | MASS ORDINATE NOTE 4 |
| | | | | | | | | | | |
| 116+50 | 50.00 | 11.02 | 0.00 | 6.51 | 21 | 0 | 11 | 6,456 | 833 | 5,624 |
| 117+00 | 50.00 | 12.37 | 0.00 | 7.25 | 22 | 0 | 13 | 6,478 | 849 | 5,629 |
| 117+50 | 50.00 | 13.60 | 0.00 | 7.79 | 24 | 0 | 14 | 6,502 | 866 | 5,636 |
| 118+00 | 50.00 | 13.25 | 0.00 | 12.89 | 25 | 0 | 19 | 6,527 | 890 | 5,637 |
| 118+50 | 50.00 | 13.60 | 0.00 | 11.56 | 25 | 0 | 23 | 6,552 | 919 | 5,633 |
| 119+00 | 50.00 | 14.27 | 0.00 | 10.82 | 26 | 0 | 21 | 6,578 | 945 | 5,633 |
| 119+50 | 50.00 | 15.99 | 0.00 | 12.27 | 28 | 0 | 21 | 6,606 | 971 | 5,635 |
| 120+00 | 50.00 | 18.17 | 0.00 | 8.51 | 32 | 0 | 19 | 6,638 | 995 | 5,643 |
| 120+50 | 50.00 | 21.41 | 0.00 | 4.67 | 37 | 0 | 12 | 6,675 | 1,010 | 5,665 |
| 121+00 | 50.00 | 22.33 | 0.00 | 4.75 | 40 | 0 | 9 | 6,715 | 1,021 | 5,694 |
| 121+50 | 50.00 | 19.03 | 0.00 | 4.06 | 38 | 0 | 8 | 6,753 | 1,031 | 5,722 |
| 122+00 | 50.00 | 31.74 | 0.00 | 1.28 | 47 | 0 | 5 | 6,800 | 1,038 | 5,763 |
| 122+50 | 50.00 | 41.90 | 0.00 | 1.31 | 68 | 0 | 2 | 6,868 | 1,040 | 5,828 |
| 123+00 | 50.00 | 37.83 | 0.00 | 1.41 | 74 | 0 | 3 | 6,942 | 1,044 | 5,898 |
| 123+50 | 50.00 | 47.68 | 0.00 | 1.37 | 79 | 0 | 3 | 7,021 | 1,048 | 5,974 |
| 124+00 | 50.00 | 48.60 | 0.00 | 1.74 | 89 | 0 | 3 | 7,110 | 1,051 | 6,059 |
| 124+50 | 50.00 | 37.56 | 0.00 | 3.41 | 80 | 0 | 5 | 7,190 | 1,058 | 6,133 |
| 125+00 | 50.00 | 24.05 | 0.00 | 6.22 | 57 | 0 | 9 | 7,247 | 1,069 | 6,178 |
| 125+50 | 50.00 | 17.71 | 0.00 | 6.22 | 39 | 0 | 12 | 7,286 | 1,084 | 6,202 |
| 126+00 | 50.00 | 11.45 | 0.00 | 10.97 | 27 | 0 | 16 | 7,313 | 1,104 | 6,209 |
| 126+50 | 50.00 | 13.57 | 0.00 | 9.92 | 23 | 0 | 19 | 7,336 | 1,128 | 6,209 |
| 127+00 | 50.00 | 14.11 | 0.00 | 5.44 | 26 | 0 | 14 | 7,362 | 1,145 | 6,217 |
| 127+50 | 50.00 | 18.80 | 0.00 | 1.14 | 30 | 0 | 6 | 7,392 | 1,153 | 6,240 |
| 128+00 | 50.00 | 21.06 | 0.00 | 0.00 | 37 | 0 | 1 | 7,429 | 1,154 | 6,275 |
| 128+50 | 50.00 | 18.65 | 0.00 | 0.00 | 37 | 0 | 0 | 7,466 | 1,154 | 6,312 |
| 129+00 | 50.00 | 17.65 | 0.00 | 0.00 | 34 | 0 | 0 | 7,500 | 1,154 | 6,346 |
| 129+50 | 50.00 | 19.02 | 0.00 | 0.00 | 34 | 0 | 0 | 7,534 | 1,154 | 6,380 |
| 130+00 | 50.00 | 20.81 | 0.00 | 0.00 | 37 | 0 | 0 | 7,571 | 1,154 | 6,417 |
| 130+50 | 50.00 | 33.39 | 0.00 | 0.00 | 50 | 0 | 0 | 7,621 | 1,154 | 6,467 |
| 131+00 | 50.00 | 22.11 | 0.00 | 0.00 | 51 | 0 | 0 | 7,672 | 1,154 | 6,518 |
| 131+50 | 50.00 | 24.43 | 0.00 | 0.00 | 43 | 0 | 0 | 7,715 | 1,154 | 6,561 |
| 132+00 | 50.00 | 27.10 | 0.00 | 0.00 | 48 | 0 | 0 | 7,763 | 1,154 | 6,609 |
| 132+50 | 50.00 | 30.42 | 0.00 | 0.00 | 53 | 0 | 0 | 7,816 | 1,154 | 6,662 |
| 133+00 | 50.00 | 49.83 | 0.00 | 0.00 | 74 | 0 | 0 | 7,890 | 1,154 | 6,736 |
| 133+50 | 50.00 | 34.42 | 0.00 | 0.00 | 78 | 0 | 0 | 7,968 | 1,154 | 6,814 |
| 134+00 | 50.00 | 28.67 | 0.00 | 0.00 | 58 | 0 | 0 | 8,026 | 1,154 | 6,872 |
| 134+50 | 50.00 | 31.98 | 0.00 | 0.00 | 56 | 0 | 0 | 8,082 | 1,154 | 6,928 |
| 135+00 | 50.00 | 30.70 | 0.00 | 0.00 | 58 | 0 | 0 | 8,140 | 1,154 | 6,986 |
| 135+50 | 50.00 | 27.02 | 0.00 | 0.00 | 53 | 0 | 0 | 8,193 | 1,154 | 7,039 |
| 136+00 | 50.00 | 23.64 | 0.00 | 0.00 | 47 | 0 | 0 | 8,240 | 1,154 | 7,086 |
| 136+50 | 50.00 | 23.44 | 0.00 | 0.00 | 44 | 0 | 0 | 8,284 | 1,154 | 7,130 |
| 137+00 | 50.00 | 26.63 | 0.00 | 0.00 | 46 | 0 | 0 | 8,330 | 1,154 | 7,176 |

| | |
|---|--|
| 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 - MASS ORDINATE | CUT - SALVAGED PAVT - (FILL * FILL FACTOR) |

9

9

DIVISION 1 -- CTH X

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---------|----------|-----------|-------------------------------------|-------|-----------------------------------|---|----------------|-----------------------|-----------------------|-------------------------|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT NOTE 1 | SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2 | FILL NOTE 3 | CUT 1.00 NOTE 1 | EXPANDED FILL 1.25 | MASS ORDINATE NOTE 4 |
| | | | | | | | | | | |
| 137+50 | 50.00 | 35.40 | 0.00 | 0.00 | 57 | 0 | 0 | 8,387 | 1,154 | 7,233 |
| 138+00 | 50.00 | 24.31 | 0.00 | 0.00 | 55 | 0 | 0 | 8,442 | 1,154 | 7,288 |
| 138+50 | 50.00 | 26.46 | 0.00 | 0.00 | 47 | 0 | 0 | 8,489 | 1,154 | 7,335 |
| 139+00 | 50.00 | 28.20 | 0.00 | 0.01 | 51 | 0 | 0 | 8,540 | 1,154 | 7,386 |
| 139+50 | 50.00 | 35.98 | 0.00 | 0.00 | 59 | 0 | 0 | 8,599 | 1,154 | 7,445 |
| 140+00 | 50.00 | 36.62 | 0.00 | 0.86 | 67 | 0 | 1 | 8,666 | 1,155 | 7,511 |
| 140+50 | 50.00 | 32.27 | 0.00 | 0.30 | 64 | 0 | 1 | 8,730 | 1,156 | 7,574 |
| 141+00 | 50.00 | 24.52 | 0.00 | 0.57 | 53 | 0 | 1 | 8,783 | 1,158 | 7,626 |
| 141+50 | 50.00 | 17.87 | 0.00 | 0.98 | 39 | 0 | 1 | 8,822 | 1,159 | 7,663 |
| 142+00 | 50.00 | 19.73 | 0.00 | 0.24 | 35 | 0 | 1 | 8,857 | 1,160 | 7,697 |
| 142+50 | 50.00 | 19.33 | 0.00 | 0.99 | 36 | 0 | 1 | 8,893 | 1,161 | 7,732 |
| 143+00 | 50.00 | 17.08 | 0.00 | 2.75 | 34 | 0 | 3 | 8,927 | 1,165 | 7,762 |
| 143+50 | 50.00 | 22.49 | 0.00 | 0.61 | 37 | 0 | 3 | 8,964 | 1,169 | 7,795 |
| 144+00 | 50.00 | 14.28 | 0.00 | 0.83 | 34 | 0 | 1 | 8,998 | 1,170 | 7,828 |
| 144+50 | 50.00 | 12.97 | 0.00 | 1.42 | 25 | 0 | 2 | 9,023 | 1,173 | 7,851 |
| 145+00 | 50.00 | 12.96 | 0.00 | 3.94 | 24 | 0 | 5 | 9,047 | 1,179 | 7,868 |
| 145+50 | 50.00 | 39.00 | 0.00 | 0.00 | 48 | 0 | 4 | 9,095 | 1,184 | 7,911 |
| 146+00 | 50.00 | 21.93 | 0.00 | 0.04 | 56 | 0 | 0 | 9,151 | 1,184 | 7,967 |
| 146+50 | 50.00 | 20.40 | 0.00 | 0.64 | 39 | 0 | 1 | 9,190 | 1,185 | 8,005 |
| 147+00 | 50.00 | 14.97 | 0.00 | 1.16 | 33 | 0 | 2 | 9,223 | 1,188 | 8,036 |
| 147+50 | 50.00 | 15.15 | 0.00 | 3.02 | 28 | 0 | 4 | 9,251 | 1,193 | 8,059 |
| 148+00 | 50.00 | 27.20 | 0.00 | 0.00 | 39 | 0 | 3 | 9,290 | 1,196 | 8,094 |
| 148+50 | 50.00 | 23.50 | 0.00 | 0.00 | 47 | 0 | 0 | 9,337 | 1,196 | 8,141 |
| 149+00 | 50.00 | 22.23 | 0.00 | 0.00 | 42 | 0 | 0 | 9,379 | 1,196 | 8,183 |
| 149+50 | 50.00 | 29.03 | 0.00 | 0.00 | 47 | 0 | 0 | 9,426 | 1,196 | 8,230 |
| 150+00 | 50.00 | 29.72 | 0.00 | 0.00 | 54 | 0 | 0 | 9,480 | 1,196 | 8,284 |
| 150+50 | 50.00 | 29.30 | 0.00 | 0.00 | 55 | 0 | 0 | 9,535 | 1,196 | 8,339 |
| 151+00 | 50.00 | 30.56 | 0.00 | 0.00 | 55 | 0 | 0 | 9,590 | 1,196 | 8,394 |
| 151+50 | 50.00 | 25.32 | 0.00 | 0.00 | 52 | 0 | 0 | 9,642 | 1,196 | 8,446 |
| 152+00 | 50.00 | 23.12 | 0.00 | 0.00 | 45 | 0 | 0 | 9,687 | 1,196 | 8,491 |
| 152+50 | 50.00 | 21.27 | 0.00 | 0.00 | 41 | 0 | 0 | 9,728 | 1,196 | 8,532 |
| 153+00 | 50.00 | 19.97 | 0.00 | 4.99 | 38 | 0 | 5 | 9,766 | 1,203 | 8,564 |
| 153+50 | 50.00 | 20.44 | 0.00 | 0.00 | 37 | 0 | 5 | 9,803 | 1,209 | 8,594 |
| 154+00 | 50.00 | 20.77 | 0.00 | 0.00 | 38 | 0 | 0 | 9,841 | 1,209 | 8,632 |
| 154+50 | 50.00 | 20.33 | 0.00 | 0.25 | 38 | 0 | 0 | 9,879 | 1,209 | 8,670 |
| 155+00 | 50.00 | 22.12 | 0.00 | 2.80 | 39 | 0 | 3 | 9,918 | 1,213 | 8,706 |
| 155+50 | 50.00 | 24.28 | 0.00 | 7.49 | 43 | 0 | 10 | 9,961 | 1,225 | 8,736 |
| 156+00 | 50.00 | 21.49 | 0.00 | 33.30 | 42 | 0 | 38 | 10,003 | 1,273 | 8,731 |

| | |
|---|--|
| 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 - MASS ORDINATE | CUT - SALVAGED PAVT - (FILL * FILL FACTOR) |

9

9

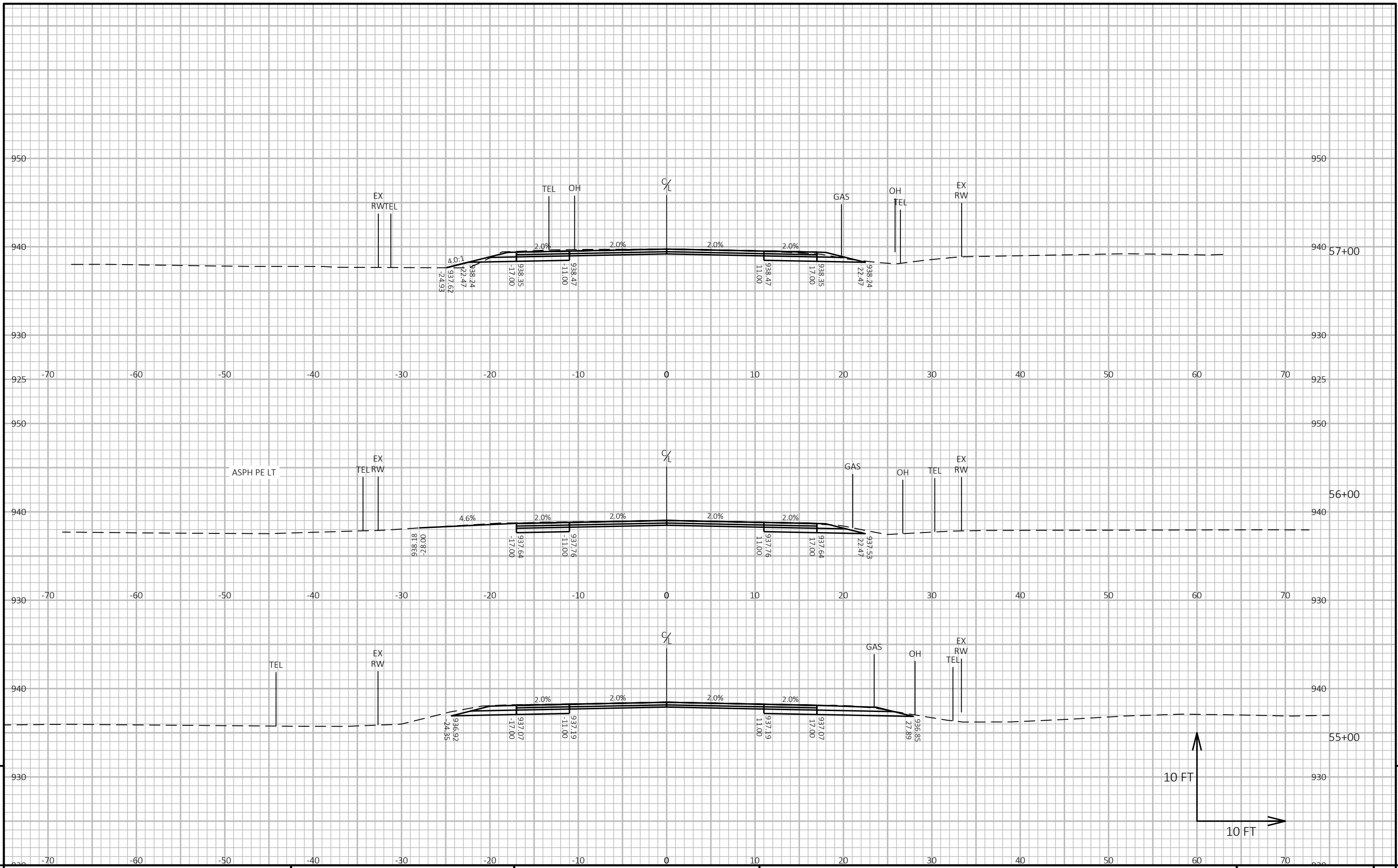
DIVISION 1 -- CTH X

| STATION | DISTANCE | AREA (SF) | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | CUMULATIVE VOL (CY) | | |
|---------|----------|-----------|-------------------------------------|------|-----------------------------------|---|----------------|-----------------------|-----------------------|-------------------------|
| | | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | CUT NOTE 1 | SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2 | FILL NOTE 3 | CUT 1.00 NOTE 1 | EXPANDED FILL 1.25 | MASS ORDINATE NOTE 4 |
| | | | | | | | | | | |
| 176+00 | 0.00 | 23.89 | 0.00 | 5.18 | 0 | 0 | 0 | 10,003 | 1,273 | 8,731 |
| 176+50 | 50.00 | 24.91 | 0.00 | 0.86 | 45 | 0 | 6 | 10,048 | 1,280 | 8,768 |
| 177+00 | 50.00 | 16.48 | 0.00 | 0.00 | 38 | 0 | 1 | 10,086 | 1,281 | 8,805 |
| 177+50 | 50.00 | 16.52 | 0.00 | 0.00 | 31 | 0 | 0 | 10,117 | 1,281 | 8,836 |
| 178+00 | 50.00 | 18.77 | 0.00 | 0.00 | 33 | 0 | 0 | 10,150 | 1,281 | 8,869 |
| 178+50 | 50.00 | 11.04 | 0.00 | 2.22 | 28 | 0 | 2 | 10,178 | 1,284 | 8,894 |
| 179+00 | 50.00 | 17.07 | 0.00 | 0.64 | 26 | 0 | 3 | 10,204 | 1,288 | 8,917 |
| 179+50 | 50.00 | 13.89 | 0.00 | 3.81 | 29 | 0 | 4 | 10,233 | 1,293 | 8,941 |
| 180+00 | 50.00 | 13.75 | 0.00 | 3.60 | 26 | 0 | 7 | 10,259 | 1,301 | 8,958 |
| 180+50 | 50.00 | 22.48 | 0.00 | 1.48 | 34 | 0 | 5 | 10,293 | 1,308 | 8,986 |
| 181+00 | 50.00 | 29.38 | 0.00 | 0.21 | 48 | 0 | 2 | 10,341 | 1,310 | 9,031 |
| 181+50 | 50.00 | 34.07 | 0.00 | 0.00 | 59 | 0 | 0 | 10,400 | 1,310 | 9,090 |
| 182+00 | 50.00 | 33.96 | 0.00 | 0.11 | 63 | 0 | 0 | 10,463 | 1,310 | 9,153 |
| 182+50 | 50.00 | 39.08 | 0.00 | 0.00 | 68 | 0 | 0 | 10,531 | 1,310 | 9,221 |
| 183+00 | 50.00 | 36.08 | 0.00 | 0.00 | 70 | 0 | 0 | 10,601 | 1,310 | 9,291 |
| 183+50 | 50.00 | 27.91 | 0.00 | 0.10 | 59 | 0 | 0 | 10,660 | 1,310 | 9,350 |
| 184+00 | 50.00 | 35.28 | 0.00 | 0.04 | 59 | 0 | 0 | 10,719 | 1,310 | 9,409 |
| 184+50 | 50.00 | 37.24 | 0.00 | 0.00 | 67 | 0 | 0 | 10,786 | 1,310 | 9,476 |
| 185+00 | 50.00 | 28.06 | 0.00 | 0.17 | 60 | 0 | 0 | 10,846 | 1,310 | 9,536 |
| 185+50 | 50.00 | 35.83 | 0.00 | 0.00 | 59 | 0 | 0 | 10,905 | 1,310 | 9,595 |
| 186+00 | 50.00 | 47.16 | 0.00 | 0.27 | 77 | 0 | 0 | 10,982 | 1,310 | 9,672 |
| 186+50 | 50.00 | 59.34 | 0.00 | 0.00 | 99 | 0 | 0 | 11,081 | 1,310 | 9,771 |
| 187+00 | 50.00 | 28.78 | 0.00 | 0.89 | 82 | 0 | 1 | 11,163 | 1,311 | 9,852 |
| 187+50 | 50.00 | 73.30 | 0.00 | 0.00 | 95 | 0 | 1 | 11,258 | 1,313 | 9,946 |
| 188+00 | 50.00 | 21.68 | 0.00 | 0.00 | 88 | 0 | 0 | 11,346 | 1,313 | 10,034 |
| 188+50 | 50.00 | 23.91 | 0.00 | 0.00 | 42 | 0 | 0 | 11,388 | 1,313 | 10,076 |
| 189+00 | 50.00 | 20.36 | 0.00 | 0.00 | 41 | 0 | 0 | 11,429 | 1,313 | 10,117 |
| 189+50 | 50.00 | 14.22 | 0.00 | 0.00 | 32 | 0 | 0 | 11,461 | 1,313 | 10,149 |
| 190+00 | 50.00 | 0.00 | 0.00 | 0.00 | 13 | 0 | 0 | 11,474 | 1,313 | 10,162 |
| 190+12 | 12.00 | 0.00 | 0.00 | 0.60 | 0 | 0 | 0 | 11,474 | 1,313 | 10,162 |

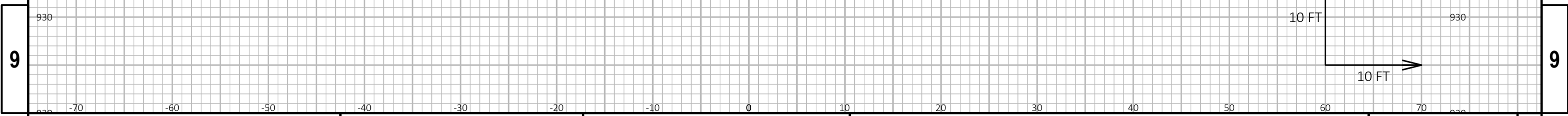
| | |
|---|--|
| Notes: | |
| 1 - CUT | CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL |
| 2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL | THIS DOES NOT SHOW UP IN CROSS SECTIONS |
| 3 - FILL | DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME |
| 4 - MASS ORDINATE | CUT - SALVAGED PAVT - (FILL * FILL FACTOR) |

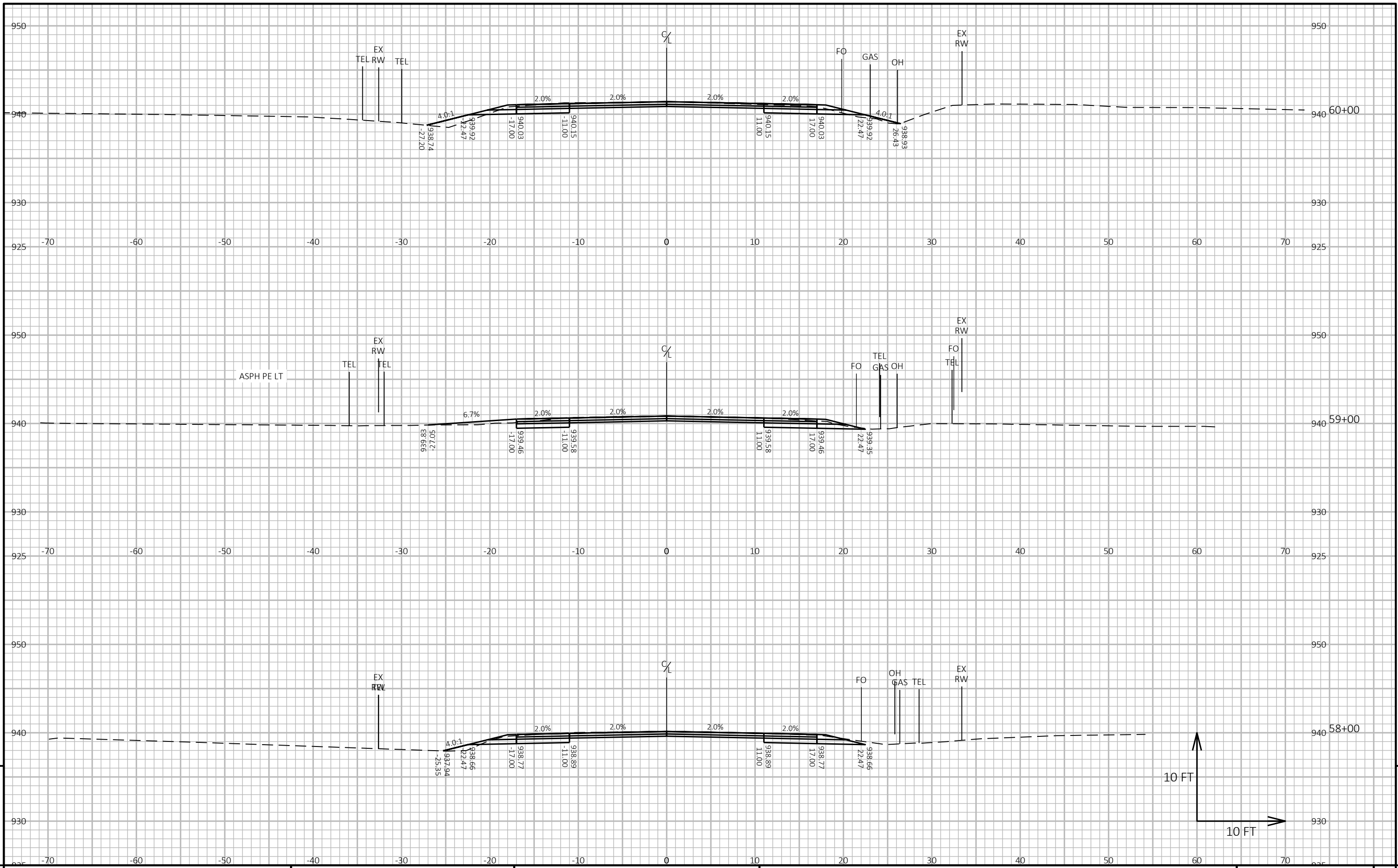
9

9



| | | | | |
|------------------------|------------|------------------|--------------------------|---------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET E |
|------------------------|------------|------------------|--------------------------|---------|





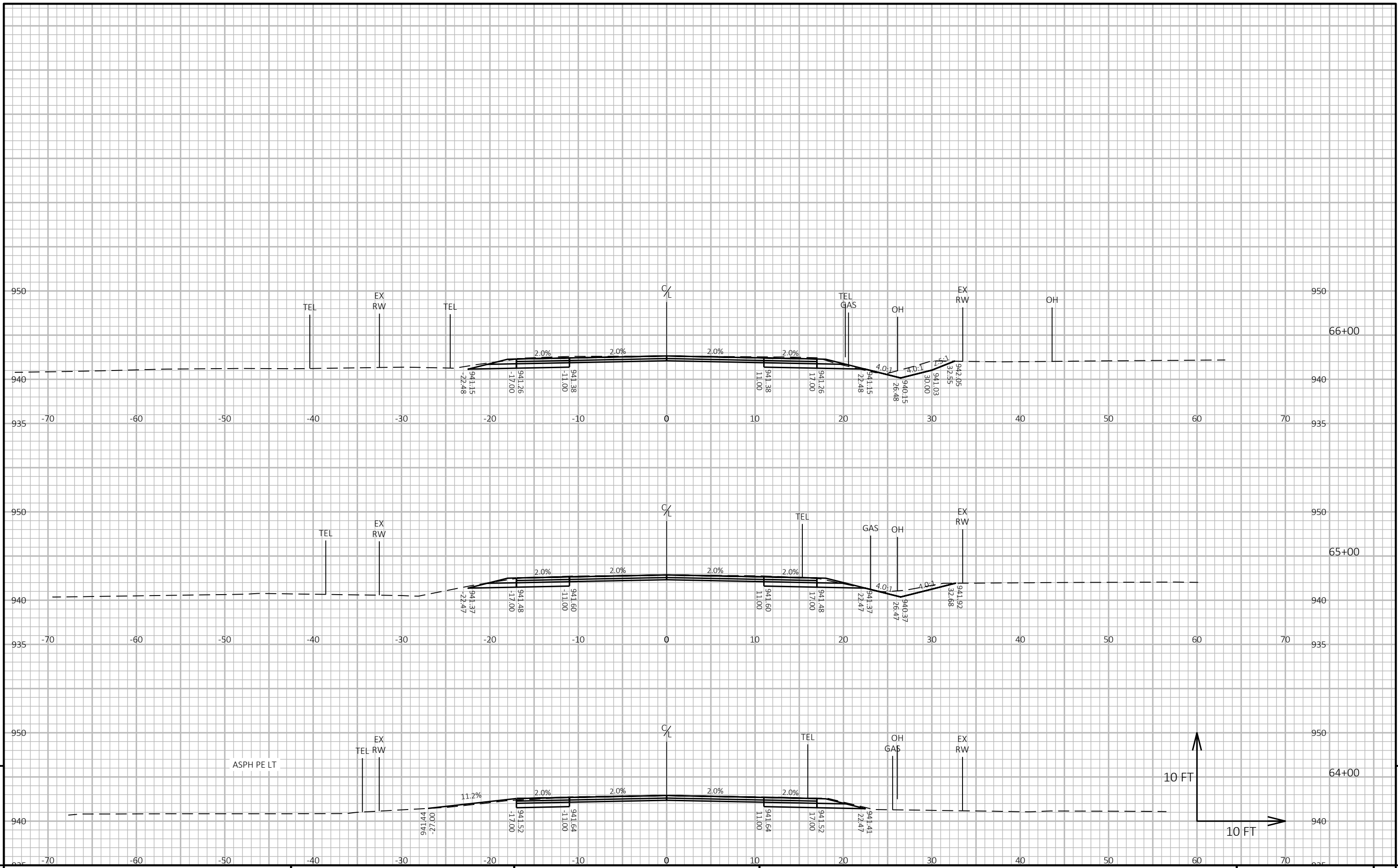
9

9

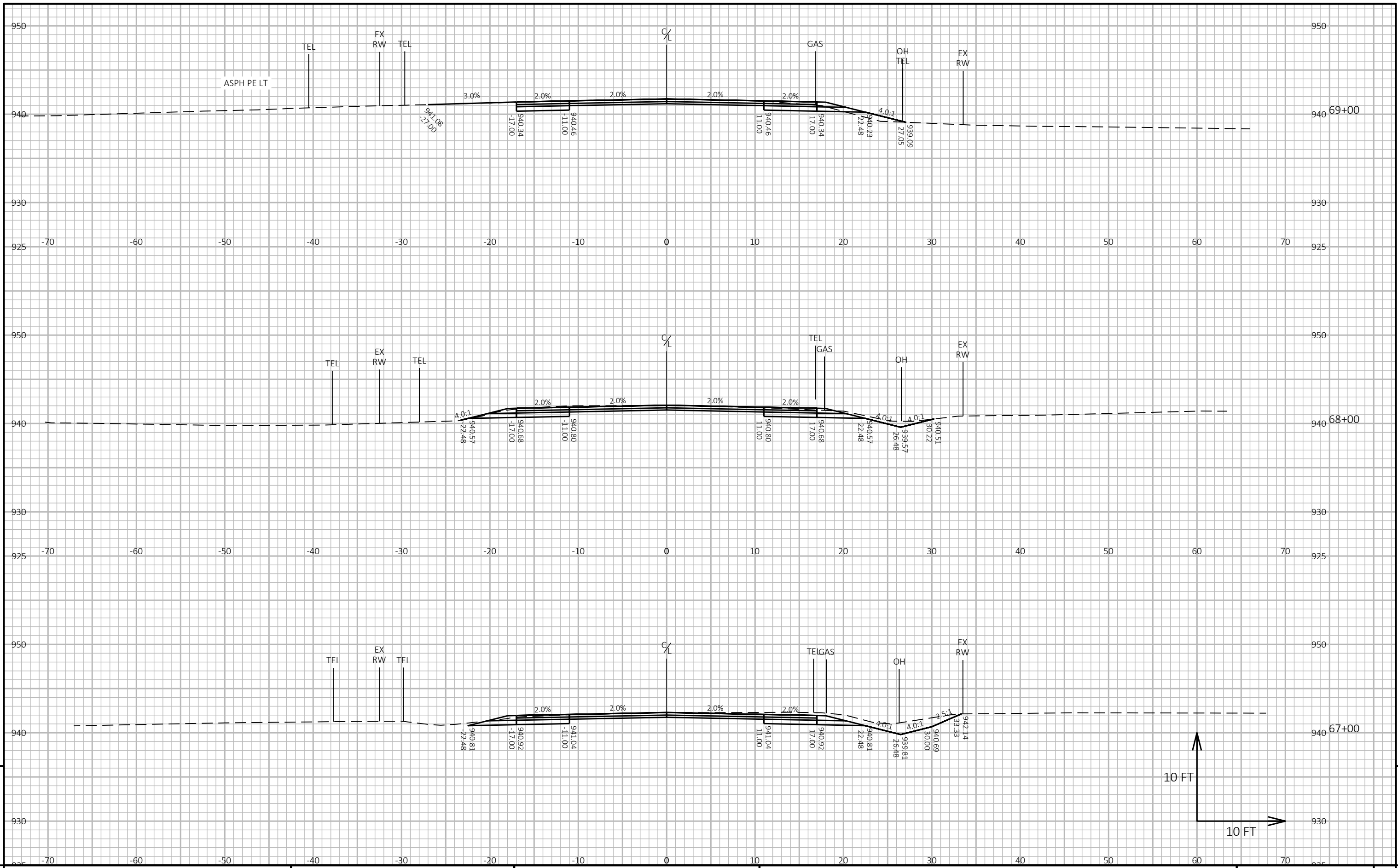
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 6/30/2023 8:57 AM PLOT BY: NICHOLAS WATHKE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

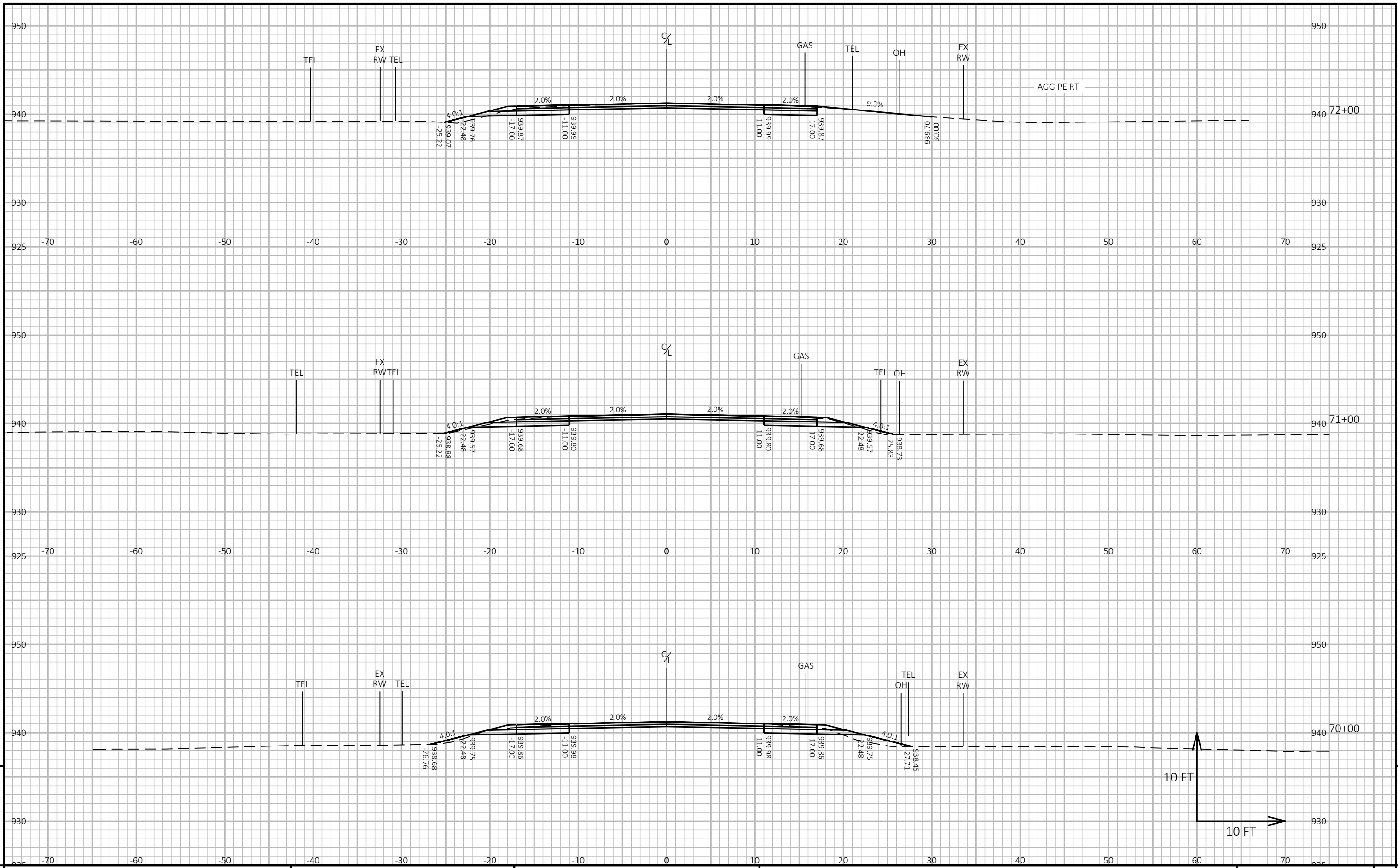
LAYOUT NAME - 02



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

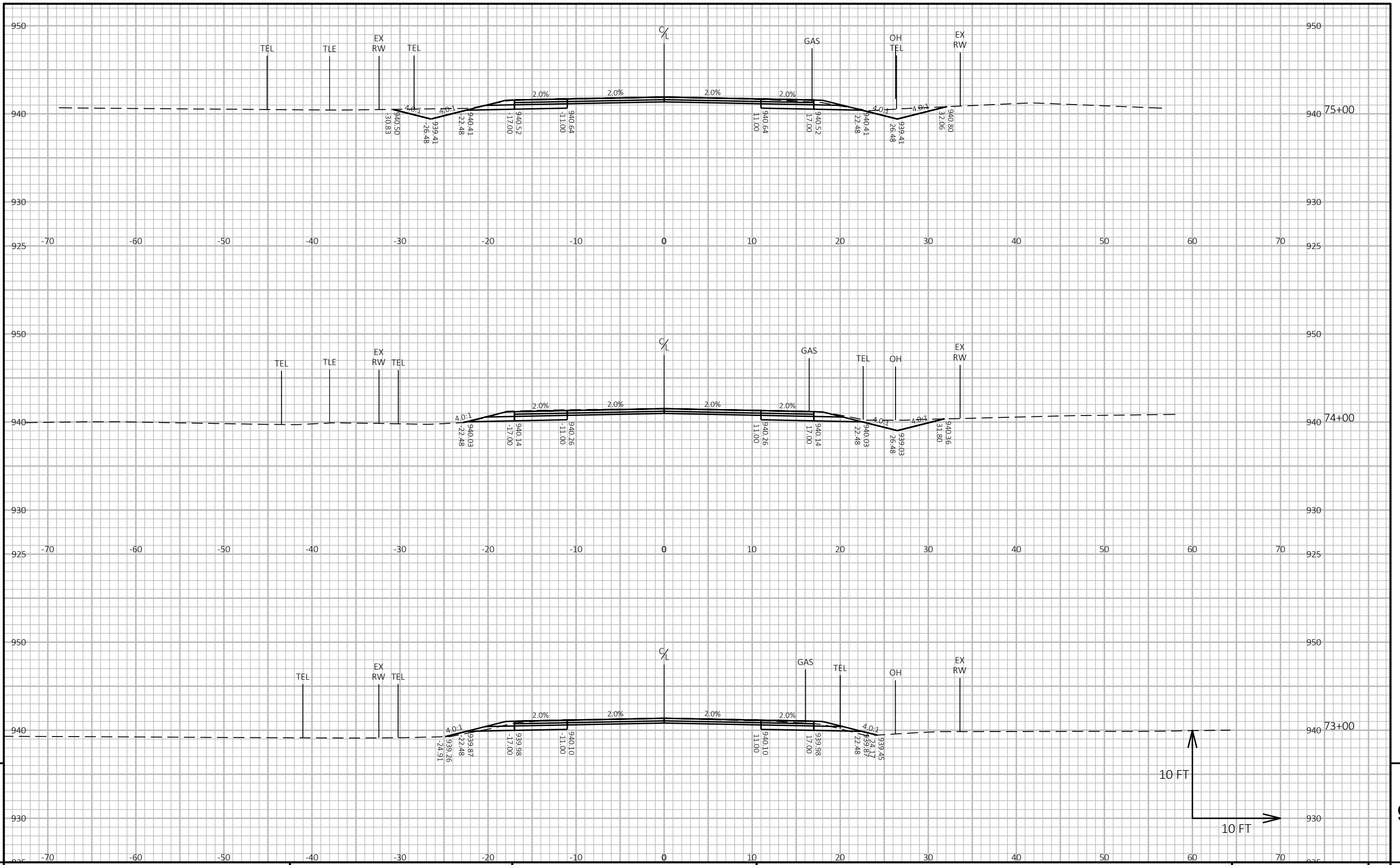


PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

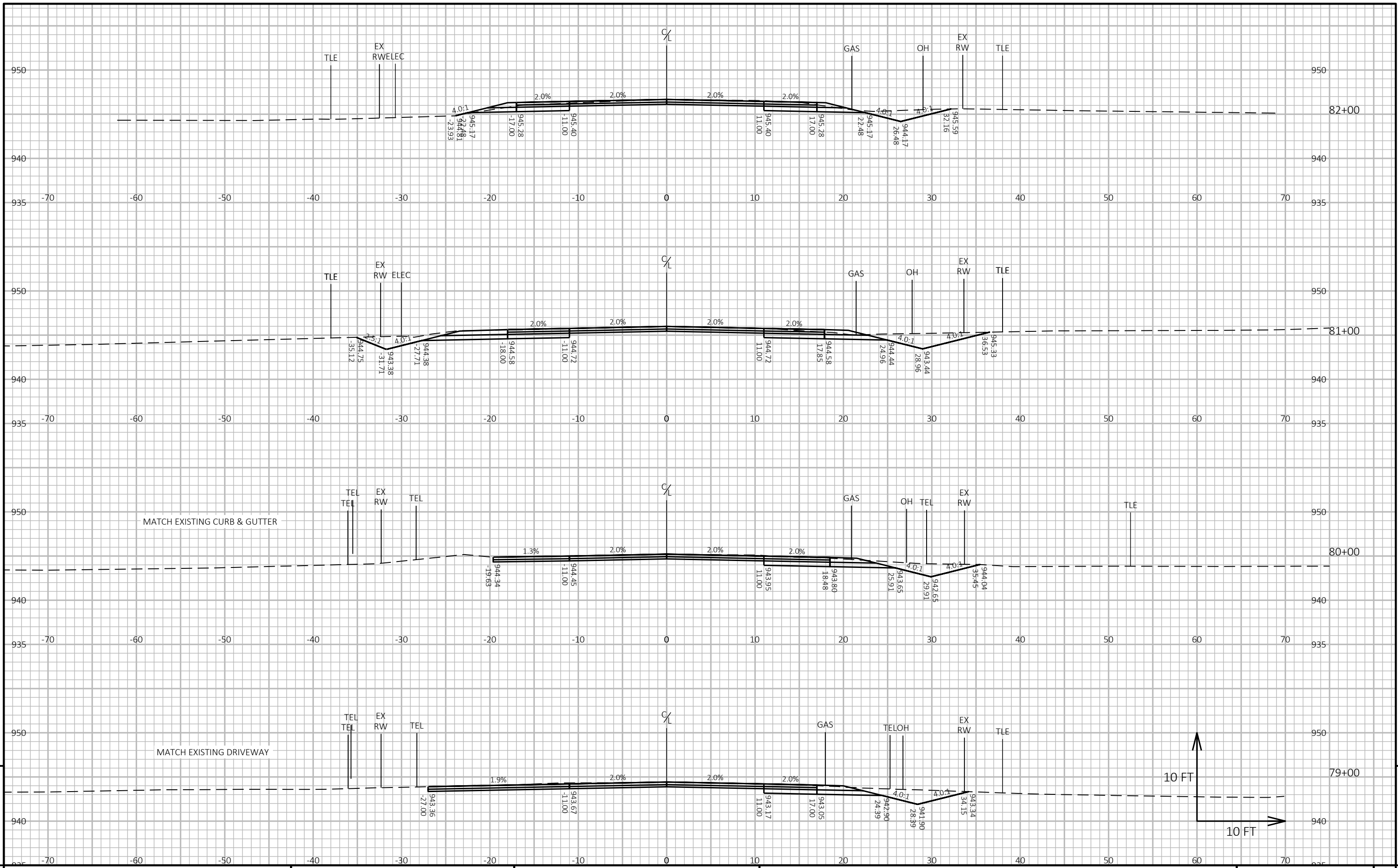


PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET 9

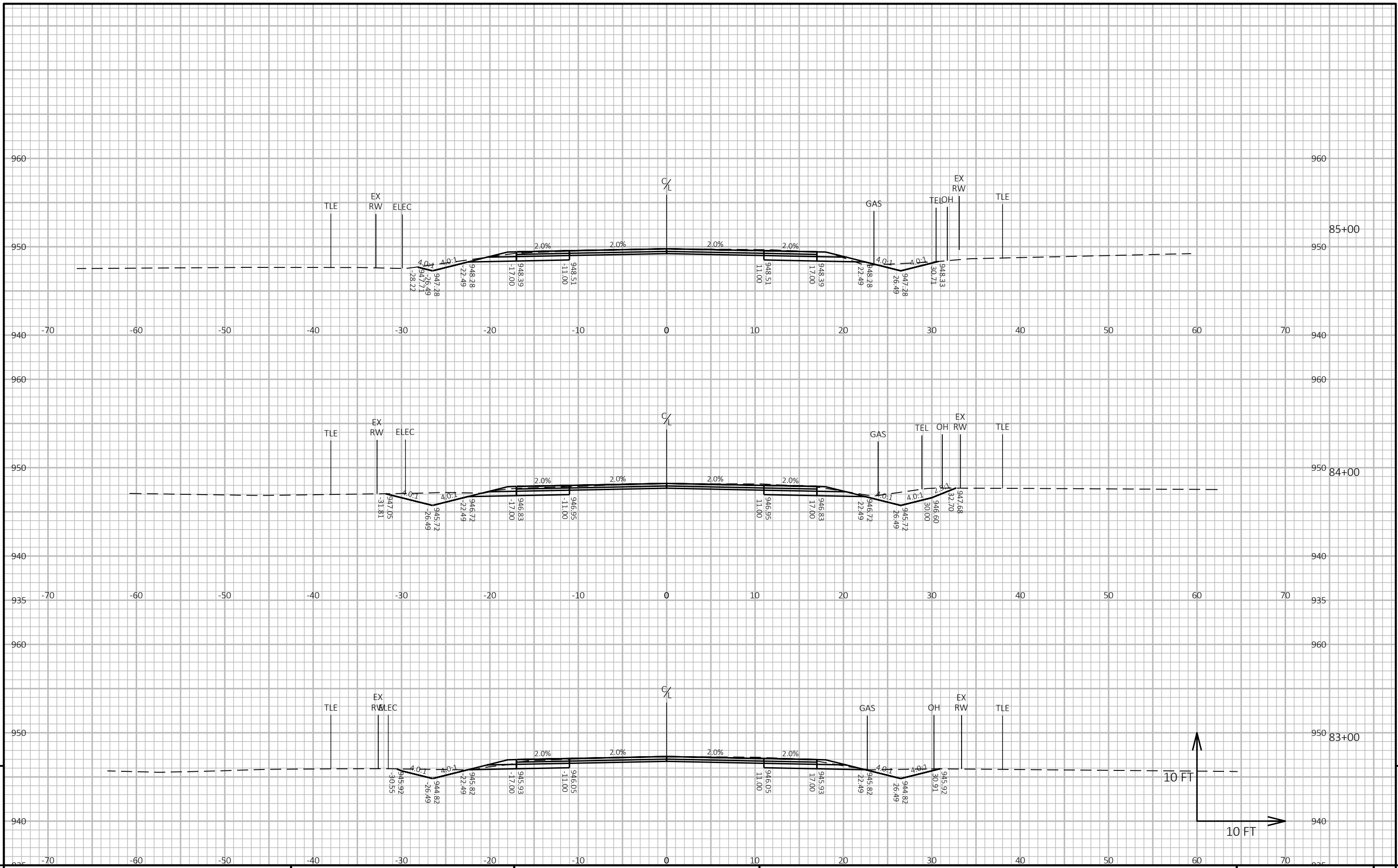
FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 6/30/2023 8:58 AM PLOT BY: NICHOLAS WATHKE PLOT NAME: SHEET 9 PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET 9



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET 9



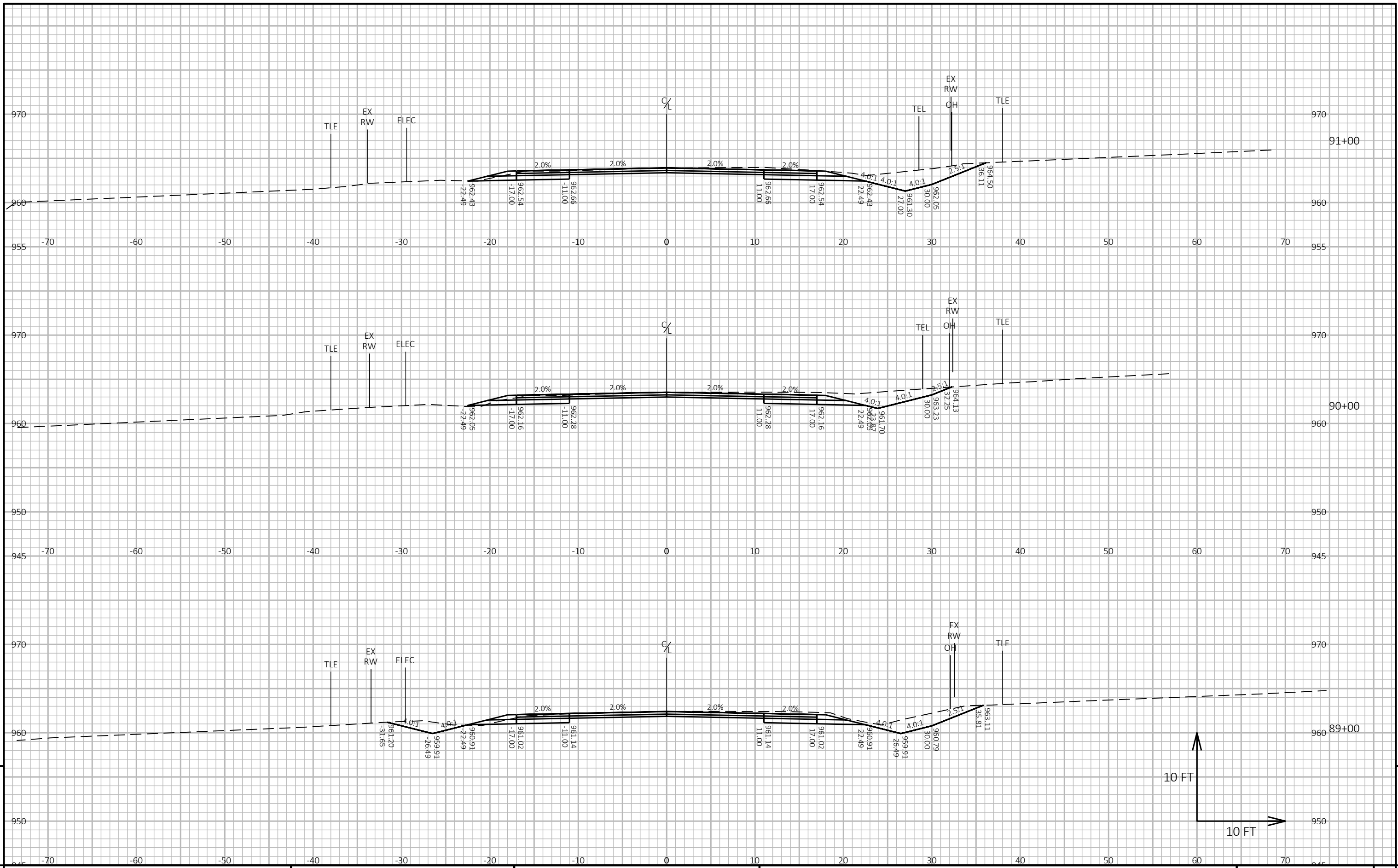
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



| | | | | |
|------------------------|------------|------------------|--------------------------|---------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET E |
|------------------------|------------|------------------|--------------------------|---------|

9

9



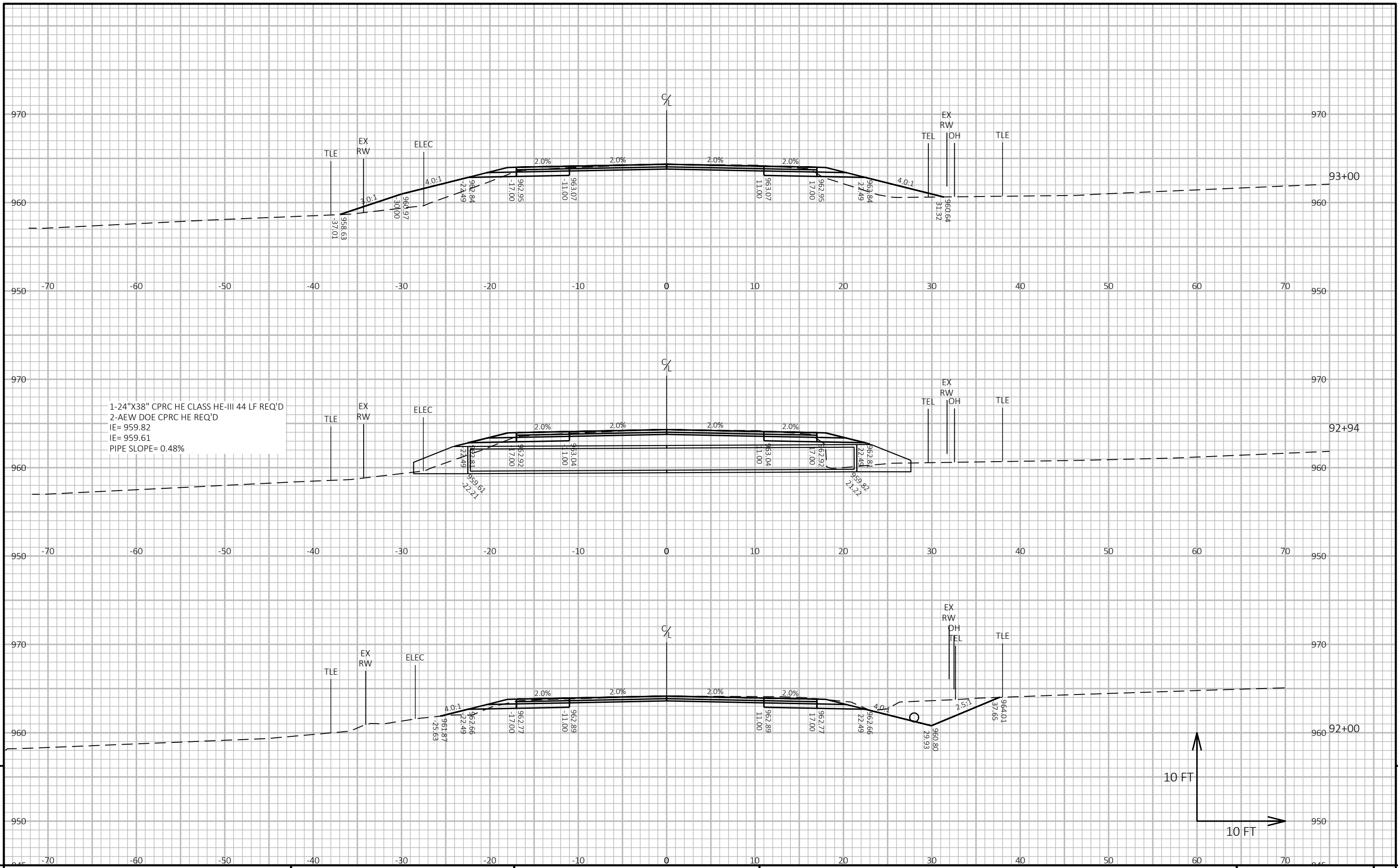
9

9

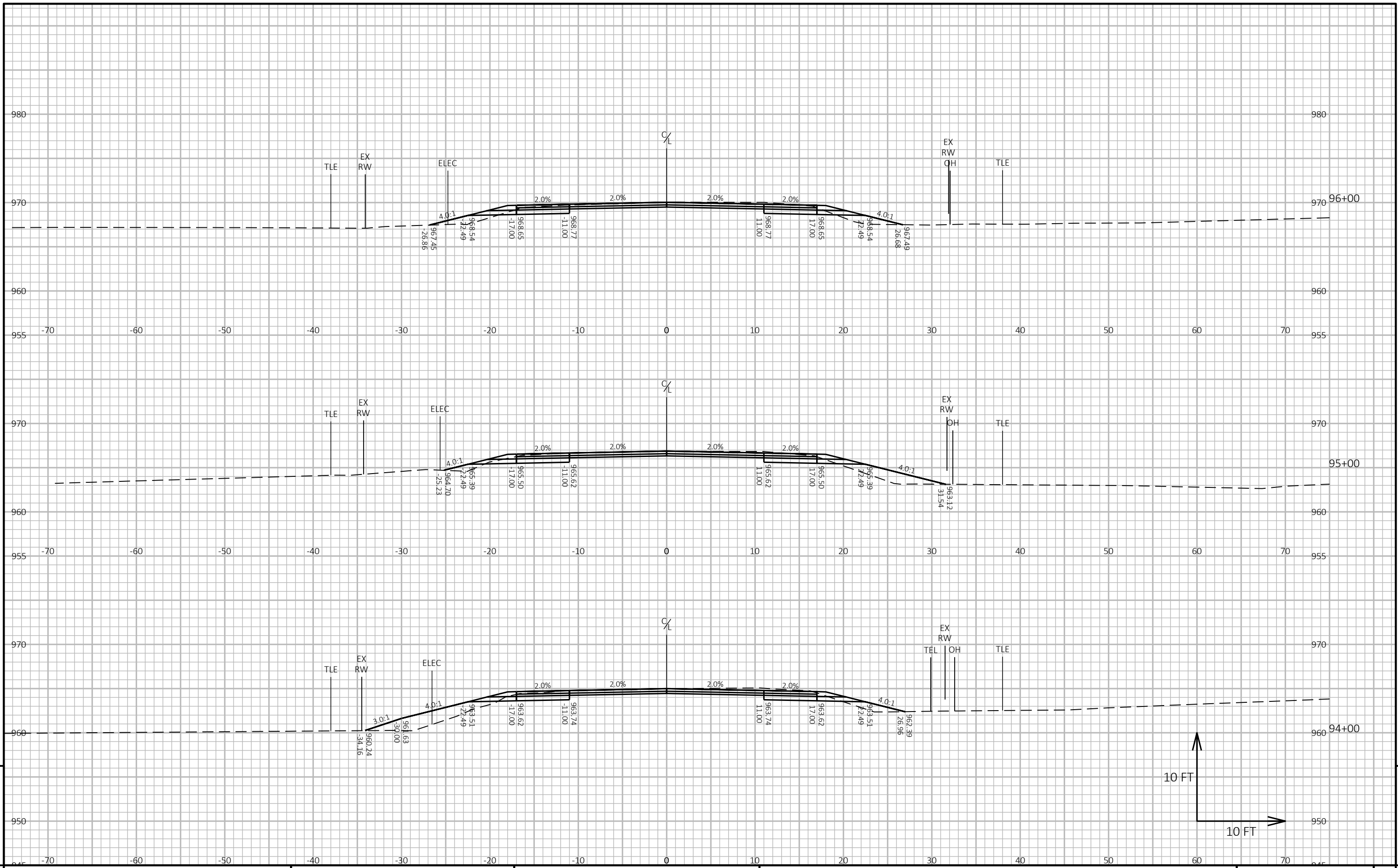
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 6/30/2023 8:58 AM PLOT BY: NICHOLAS WATHKE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 12



| | | | | | |
|------------------------|------------|------------------|--------------------------|-------|---|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET | E |
|------------------------|------------|------------------|--------------------------|-------|---|



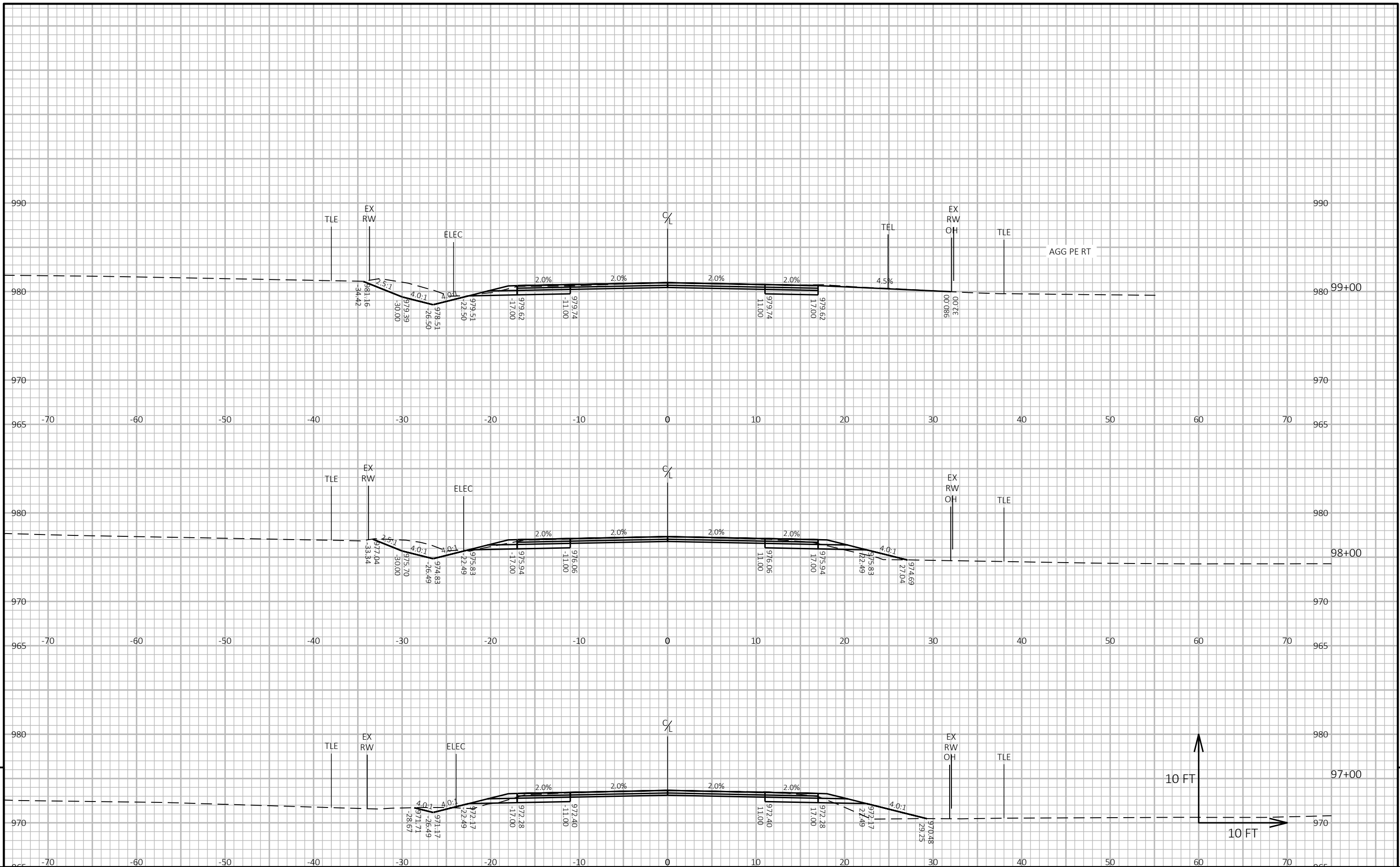
9

9

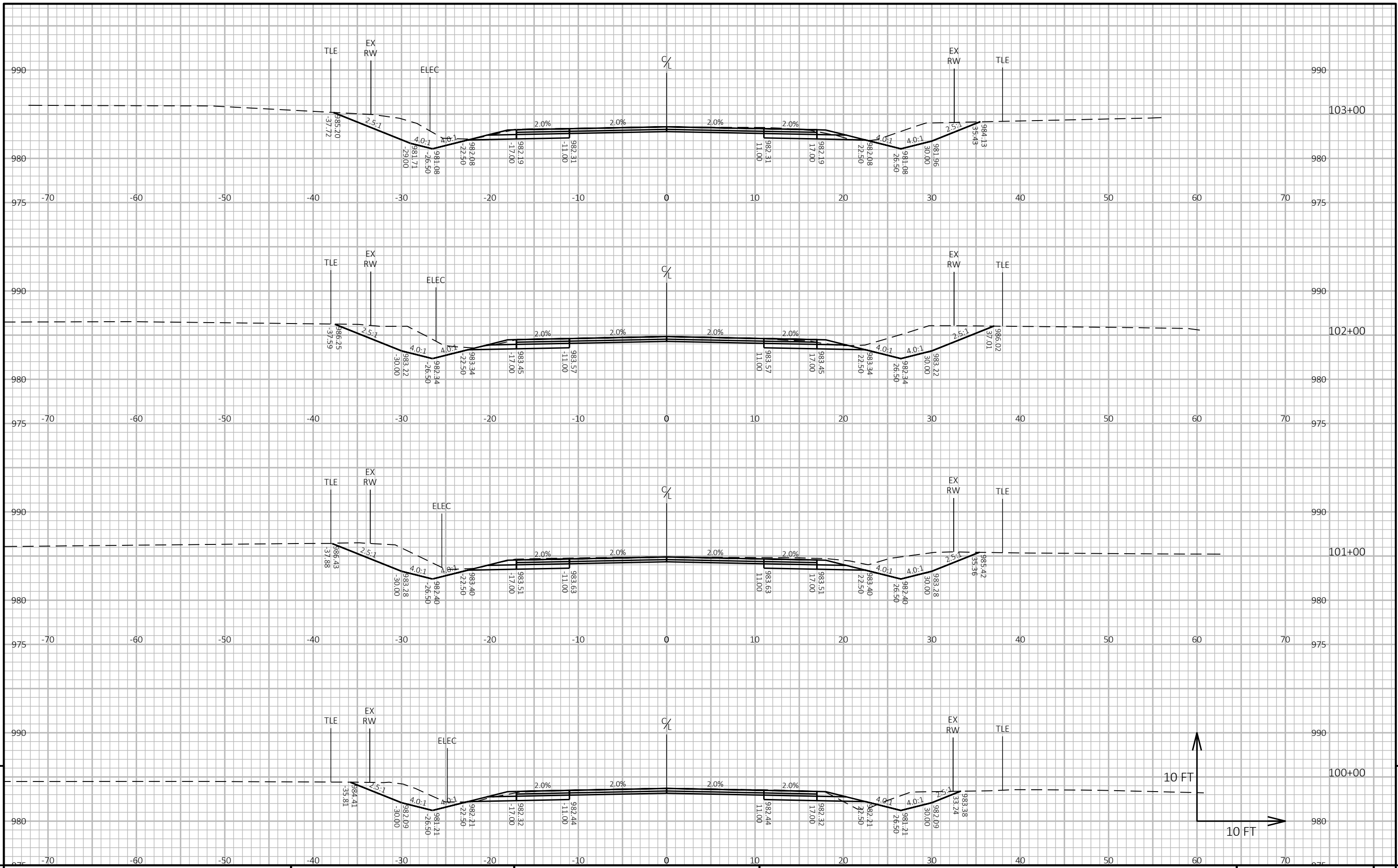
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 6/30/2023 8:59 AM PLOT BY: NICHOLAS WATHKE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 14



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



PROJECT NO: 8919-03-75

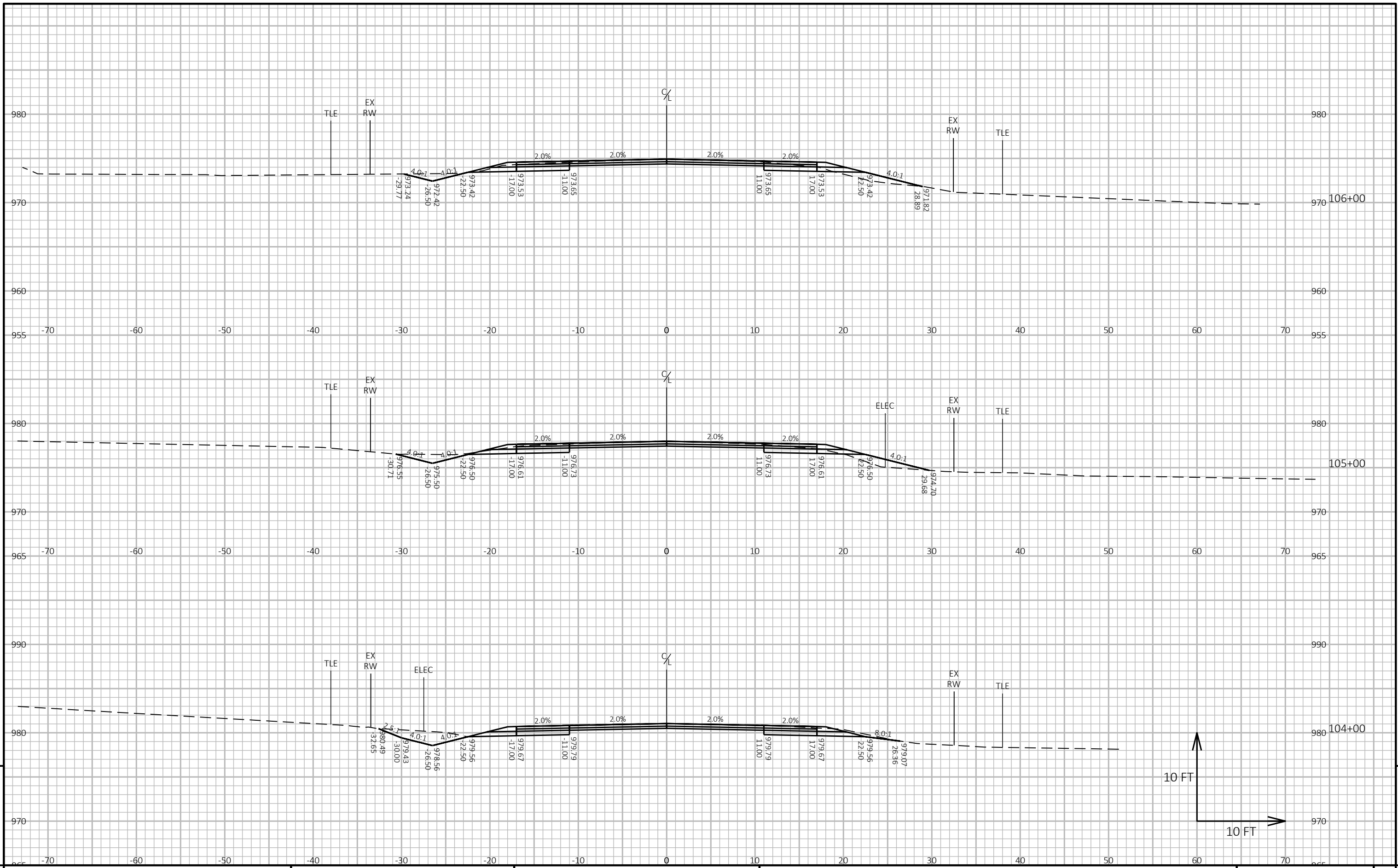
HWY: CTH X

COUNTY: CHIPPEWA

CROSS SECTIONS: MAINLINE

SHEET

E



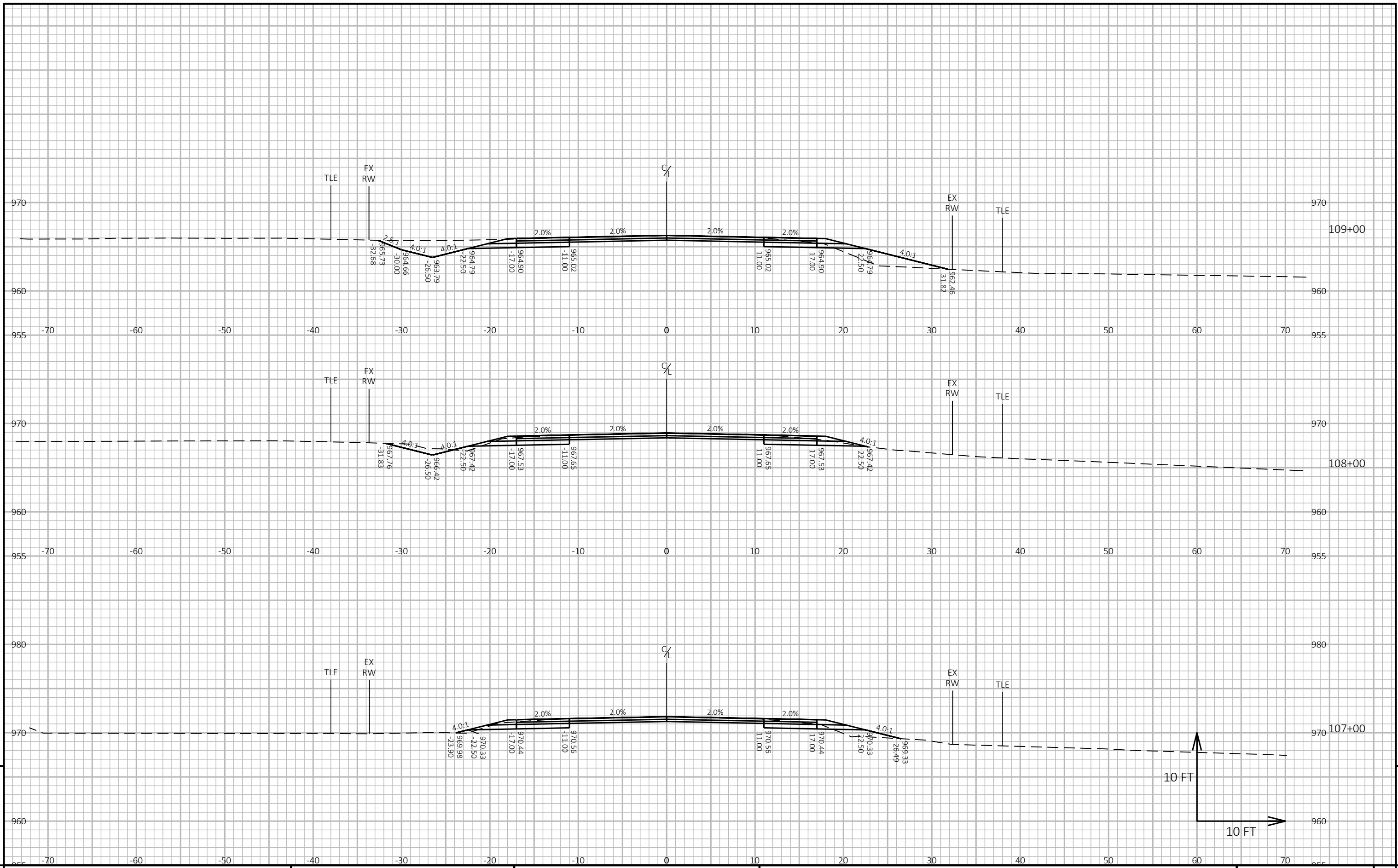
9

9

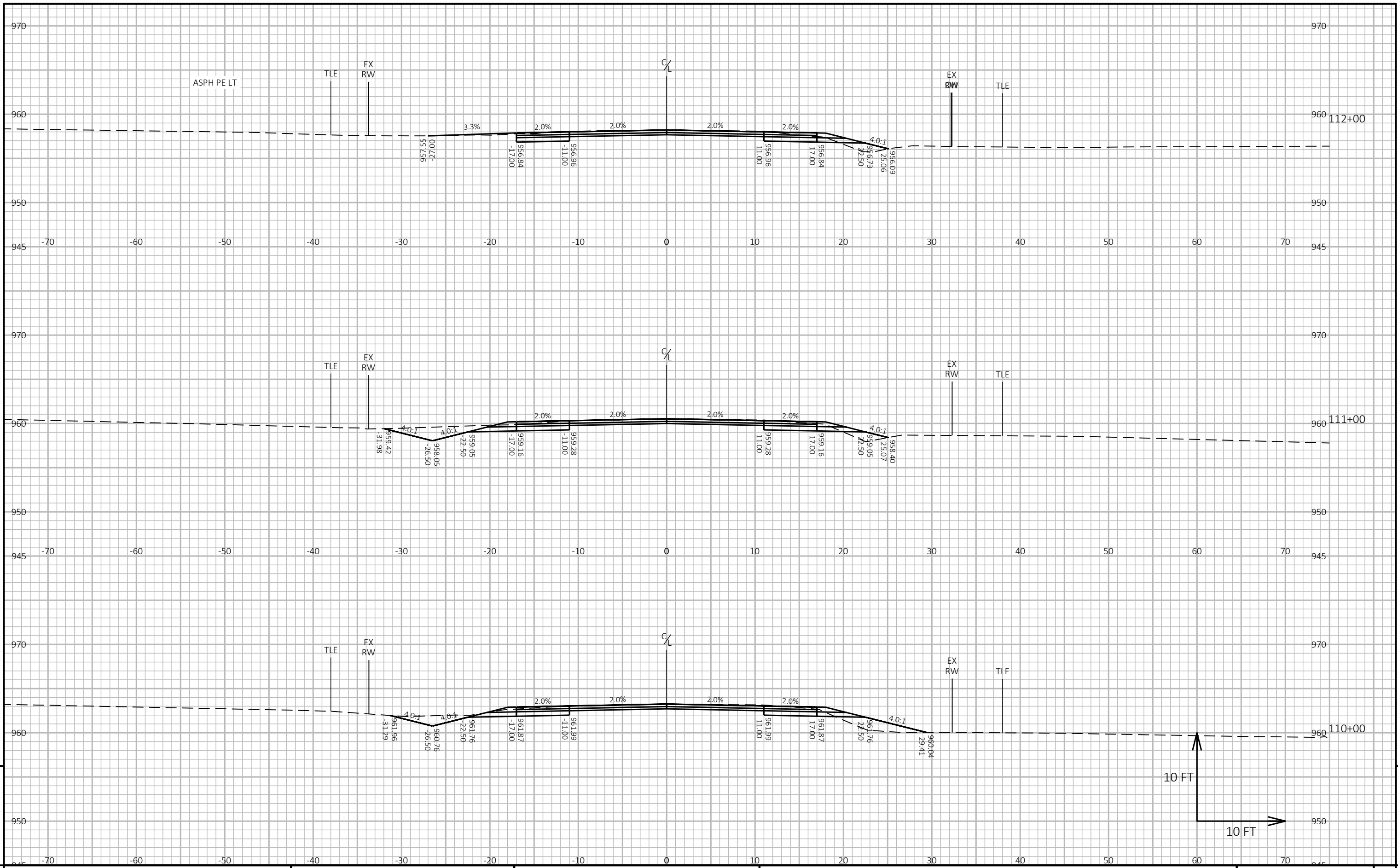
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 6/30/2023 8:59 AM PLOT BY: NICHOLAS WATHKE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 17



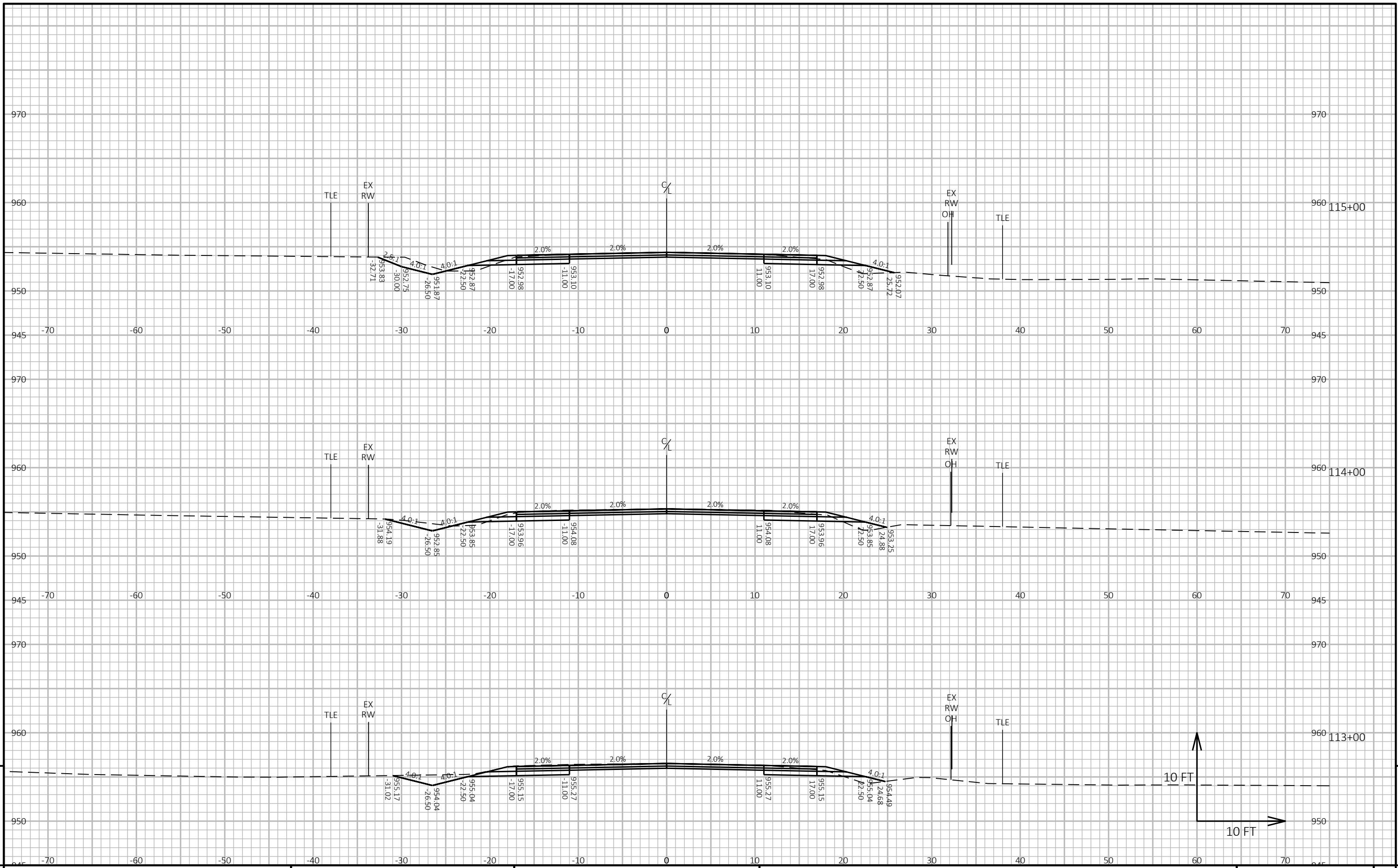
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



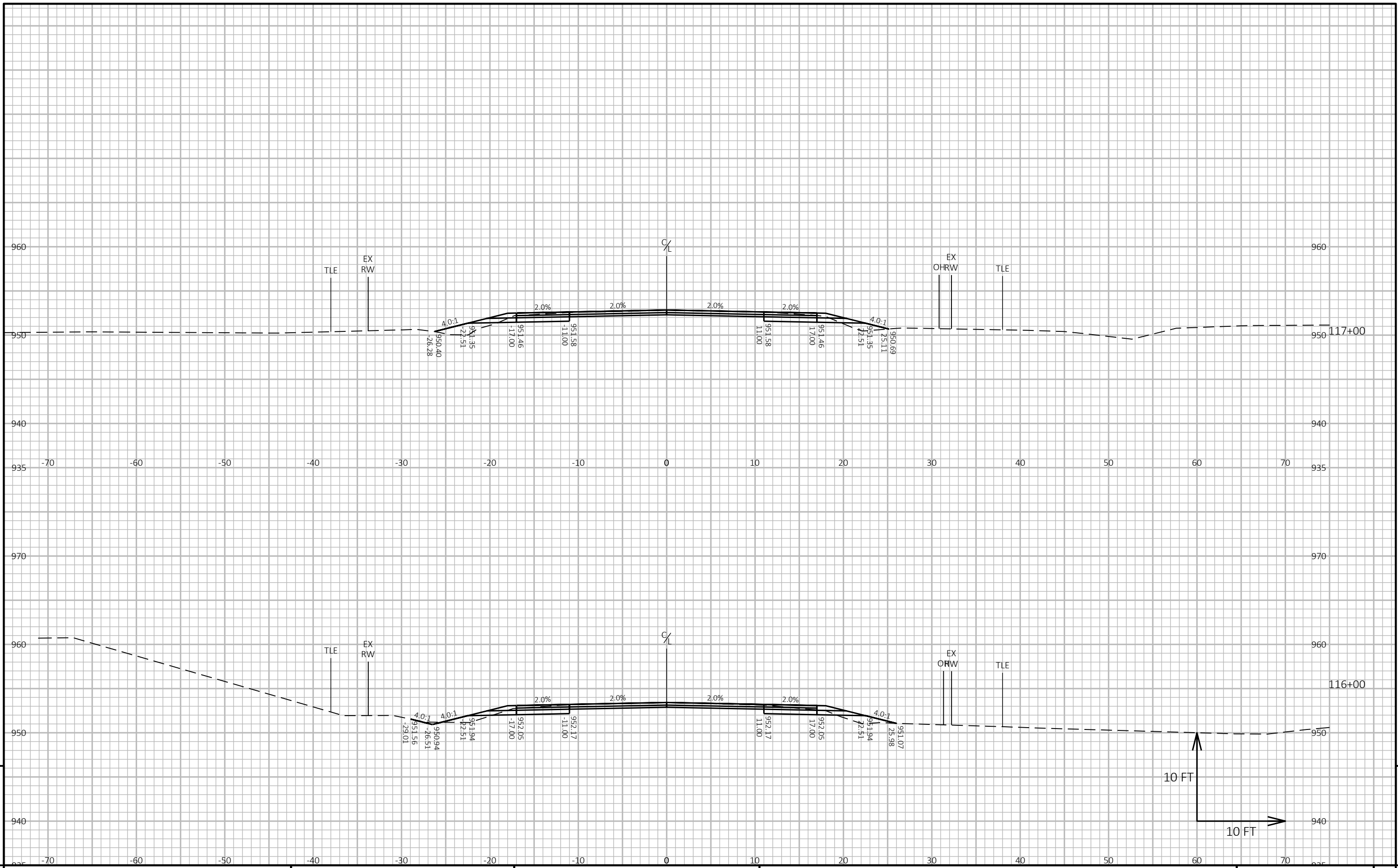
| | | | | | |
|------------------------|------------|------------------|--------------------------|-------|---|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET | E |
|------------------------|------------|------------------|--------------------------|-------|---|

9

9



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



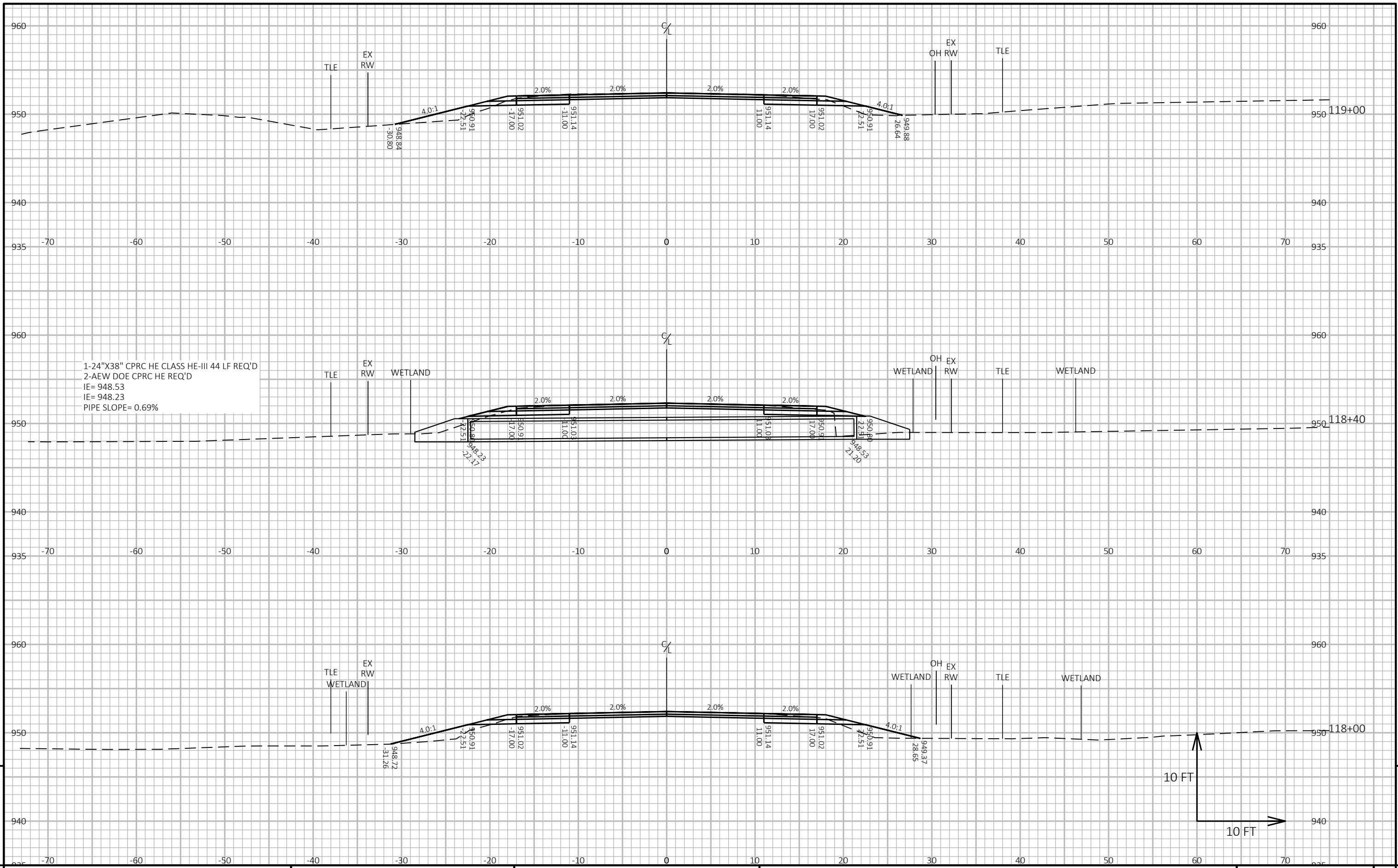
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 6/30/2023 9:00 AM PLOT BY: NICHOLAS WATKHE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 21



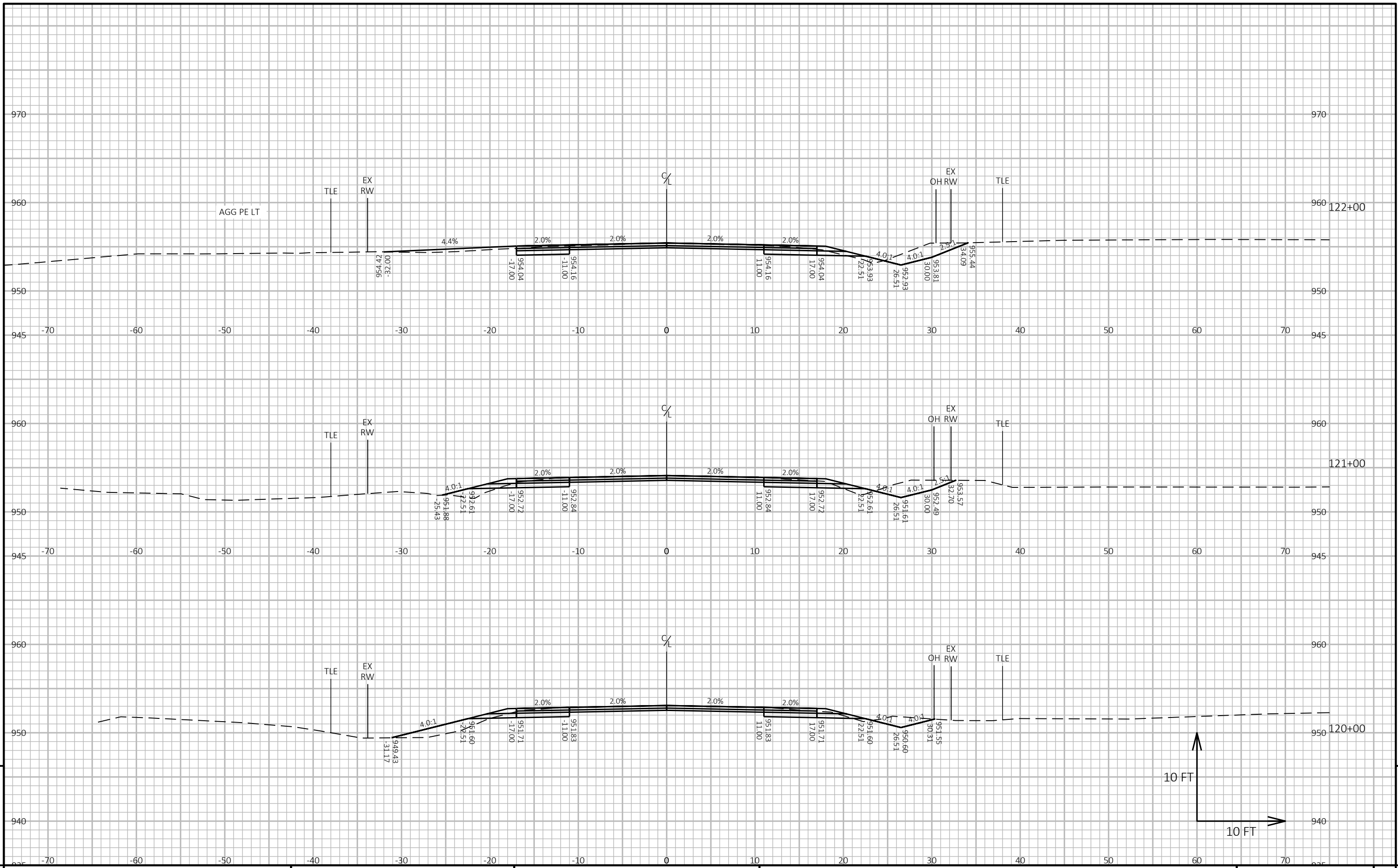
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE : 6/30/2023 9:00 AM PLOT BY : NICHOLAS WATHKE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 22



PROJECT NO: 8919-03-75

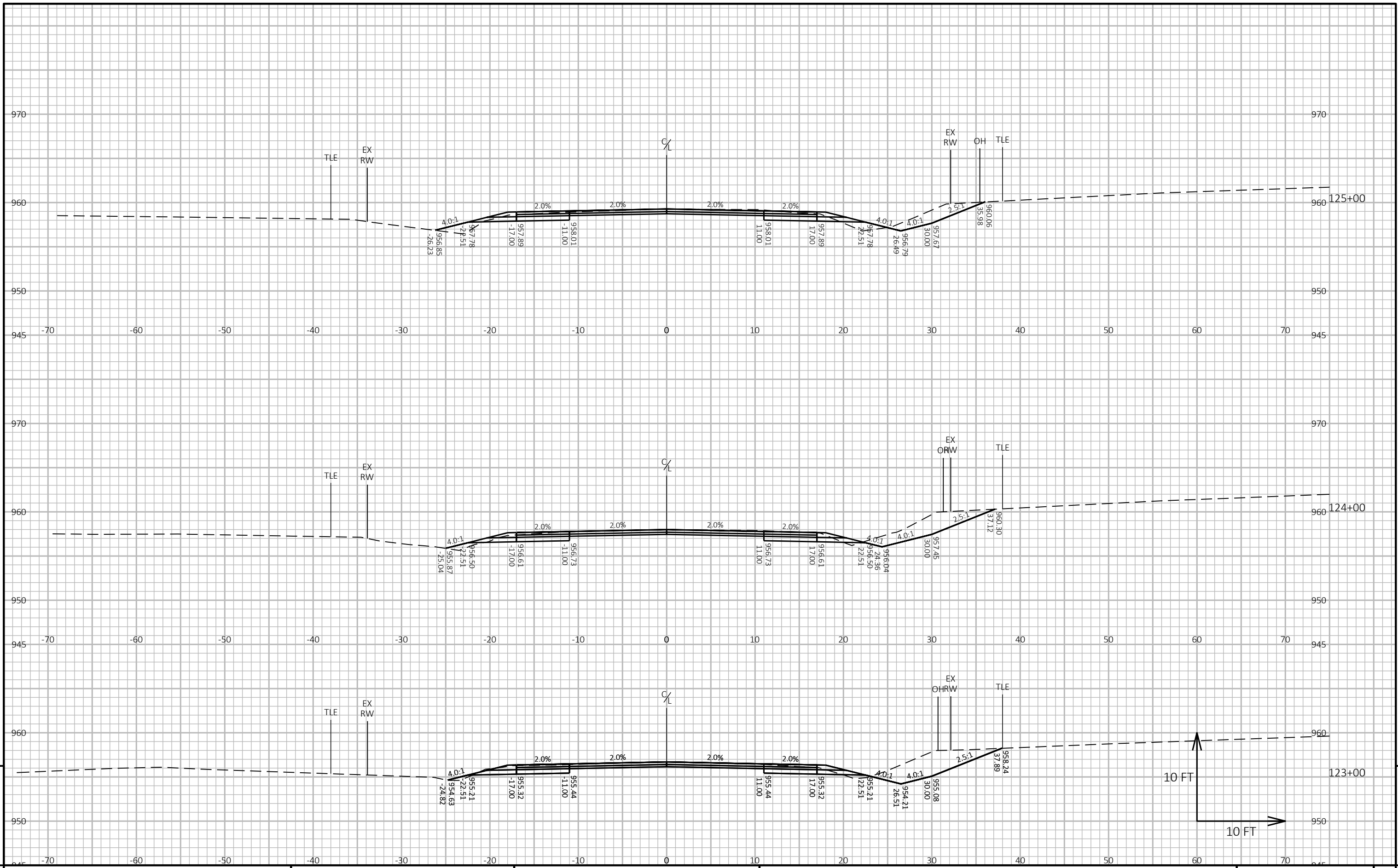
HWY: CTH X

COUNTY: CHIPPEWA

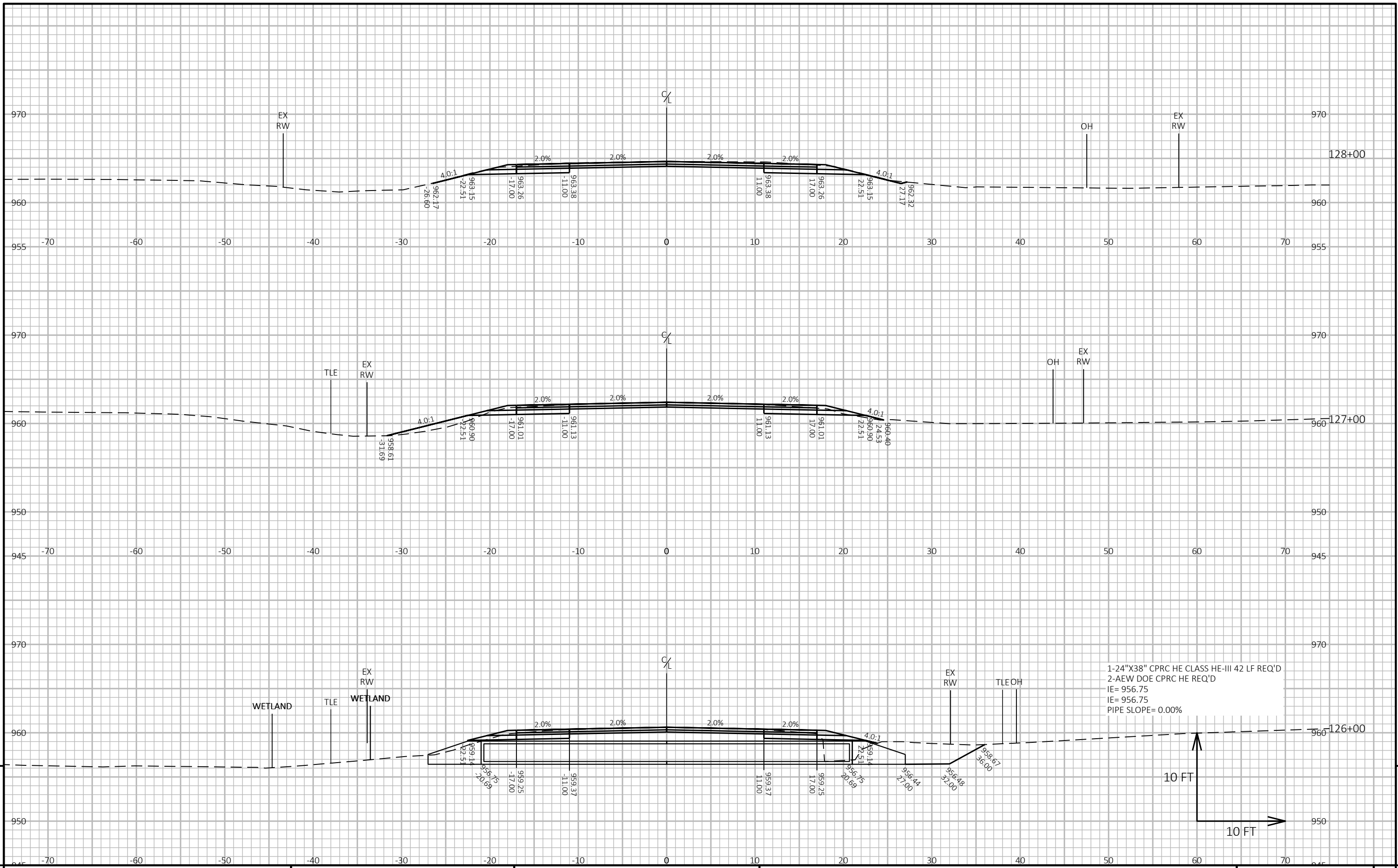
CROSS SECTIONS: MAINLINE

SHEET

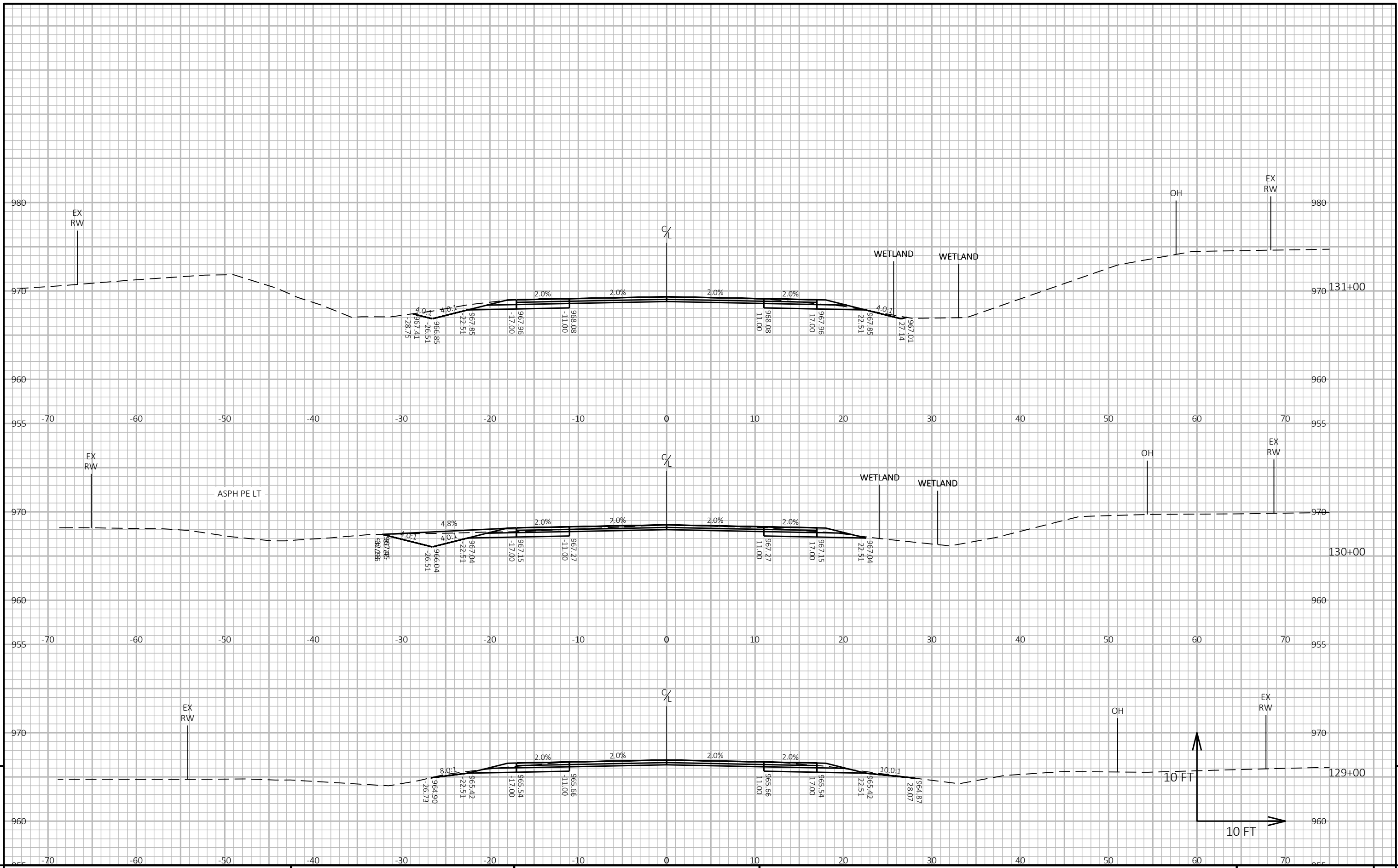
E



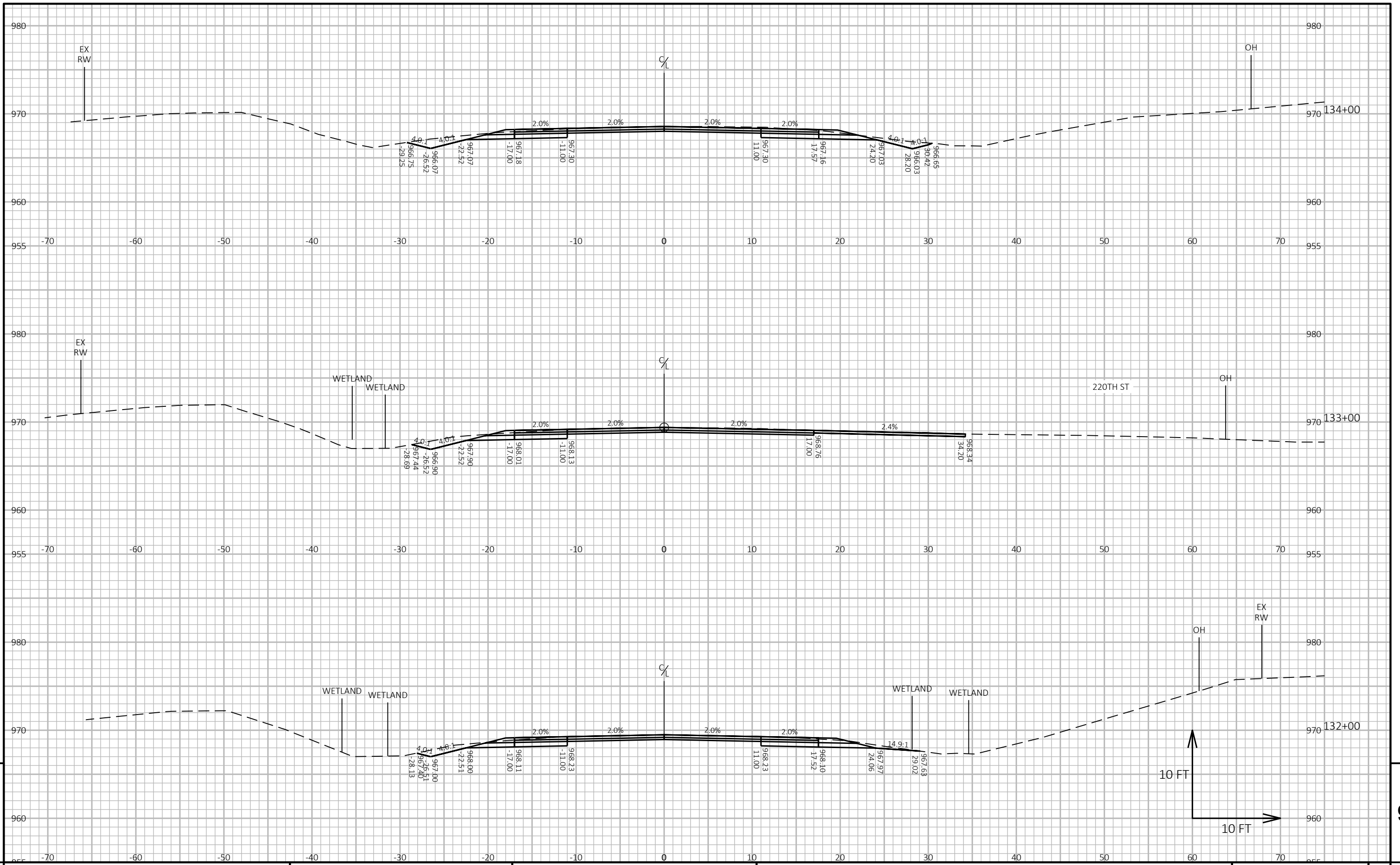
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



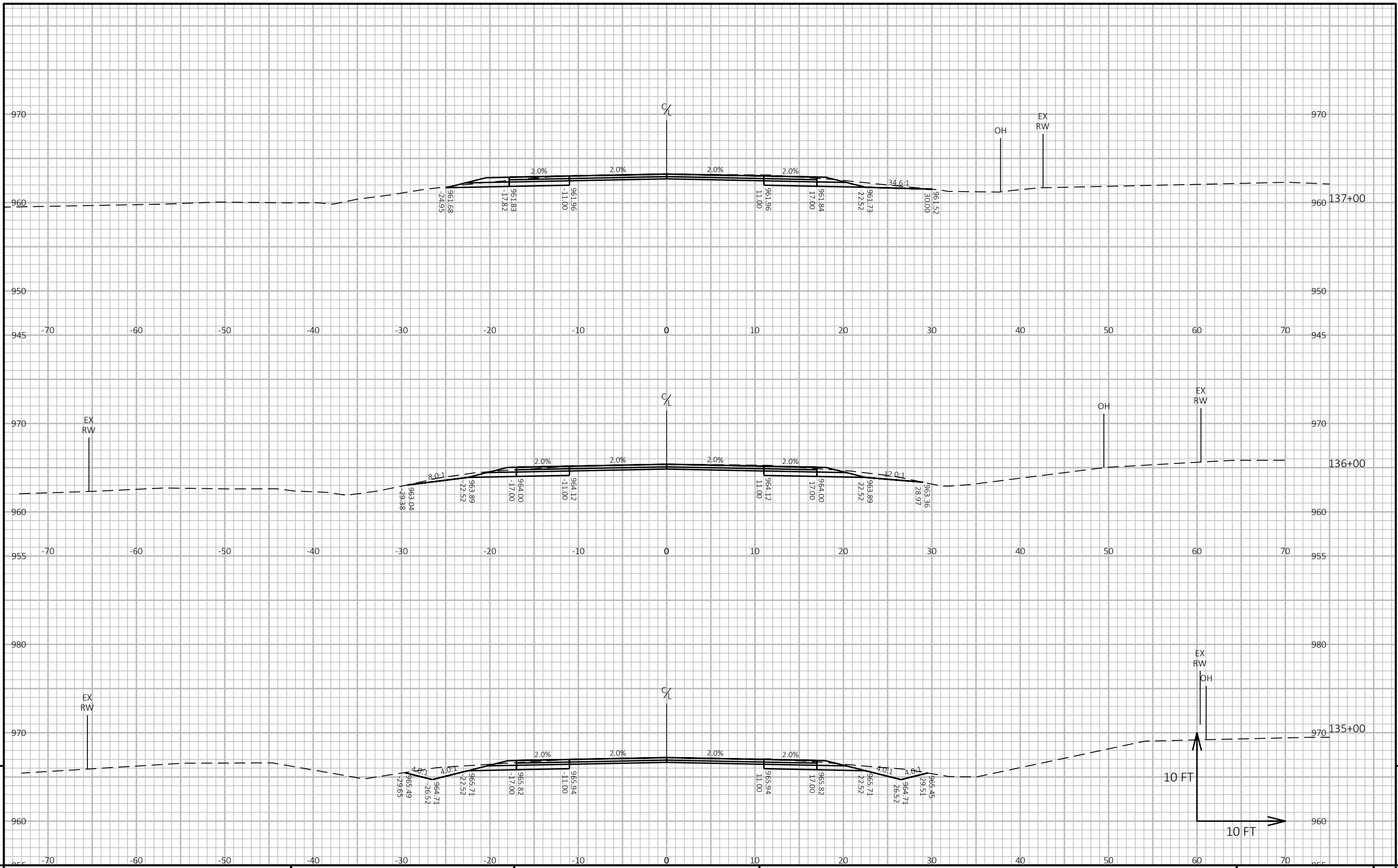
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



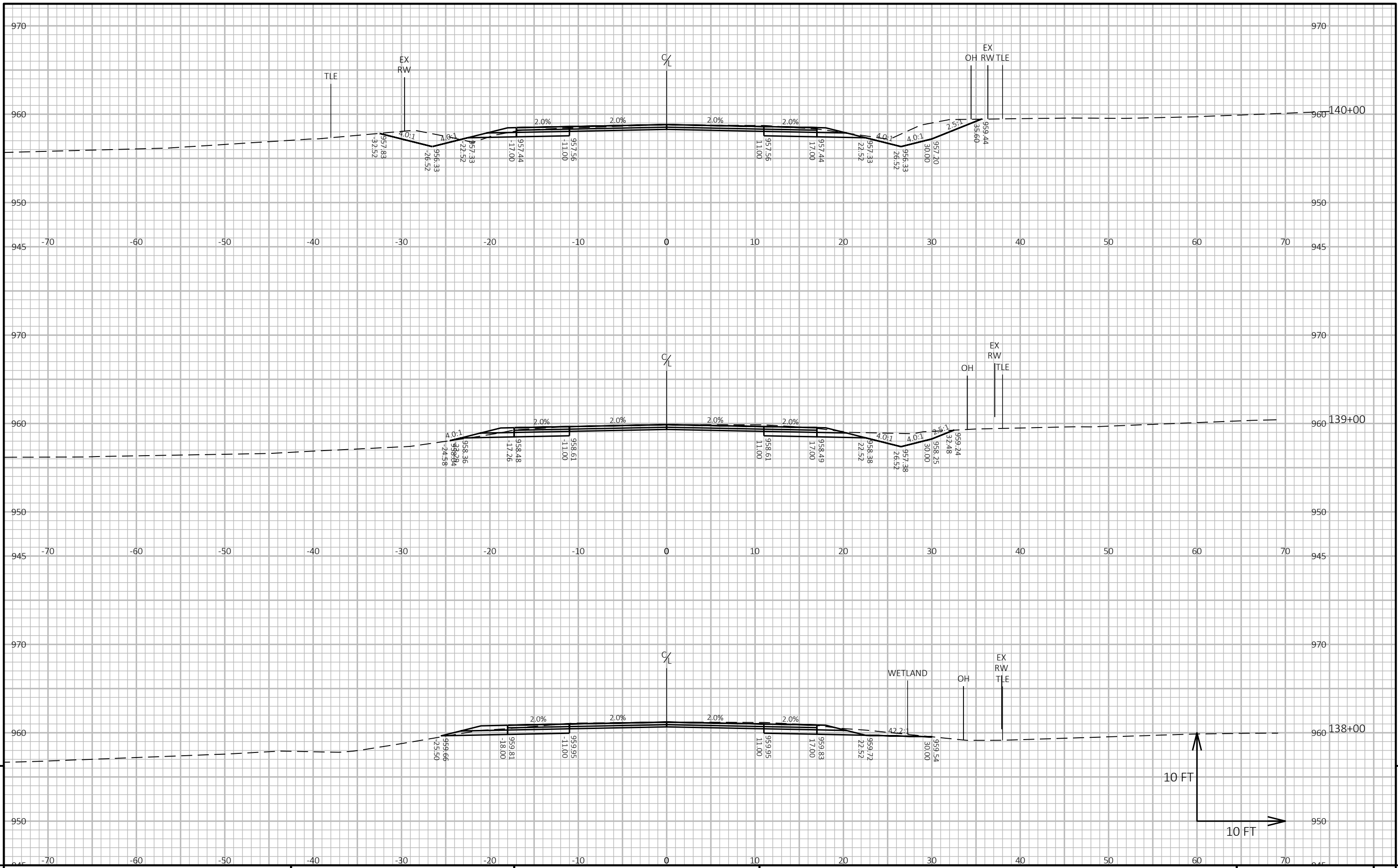
9

9

| | | | | | |
|------------------------|------------|------------------|--------------------------|-------|---|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET | E |
|------------------------|------------|------------------|--------------------------|-------|---|



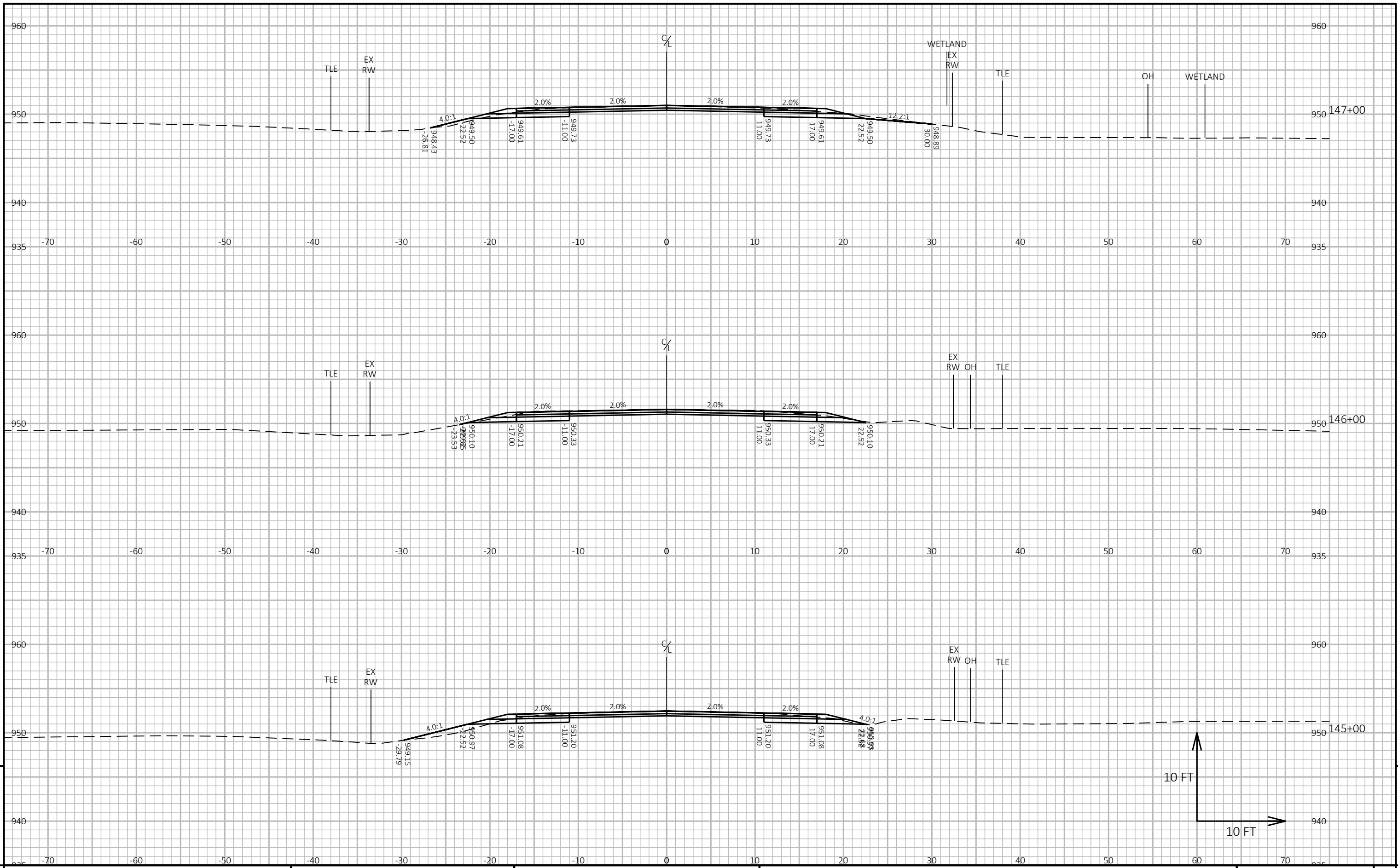
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



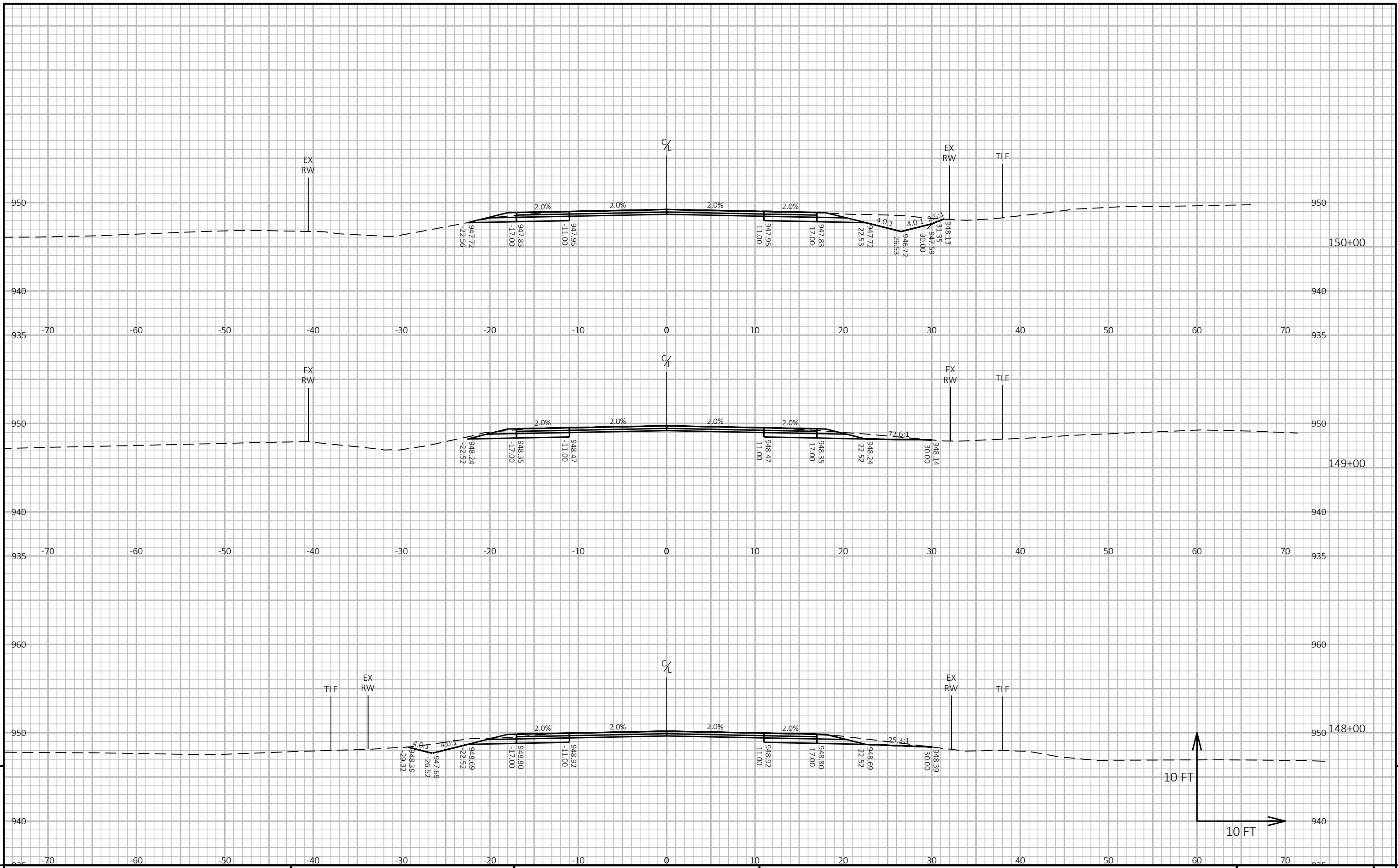
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 6/30/2023 9:01 AM PLOT BY: NICHOLAS WATKHE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 31



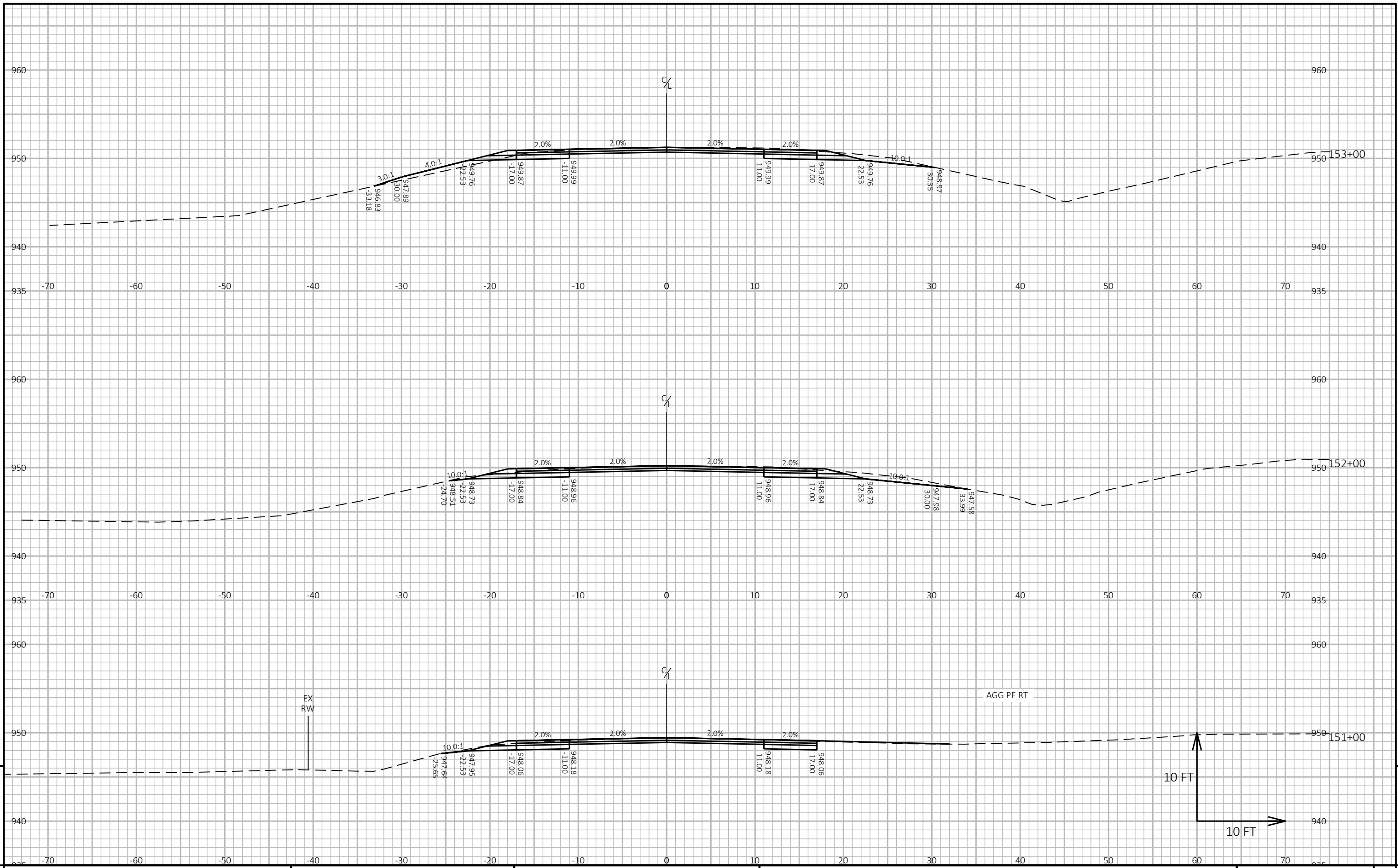
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 6/30/2023 9:01 AM PLOT BY: NICHOLAS WATKHE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 32



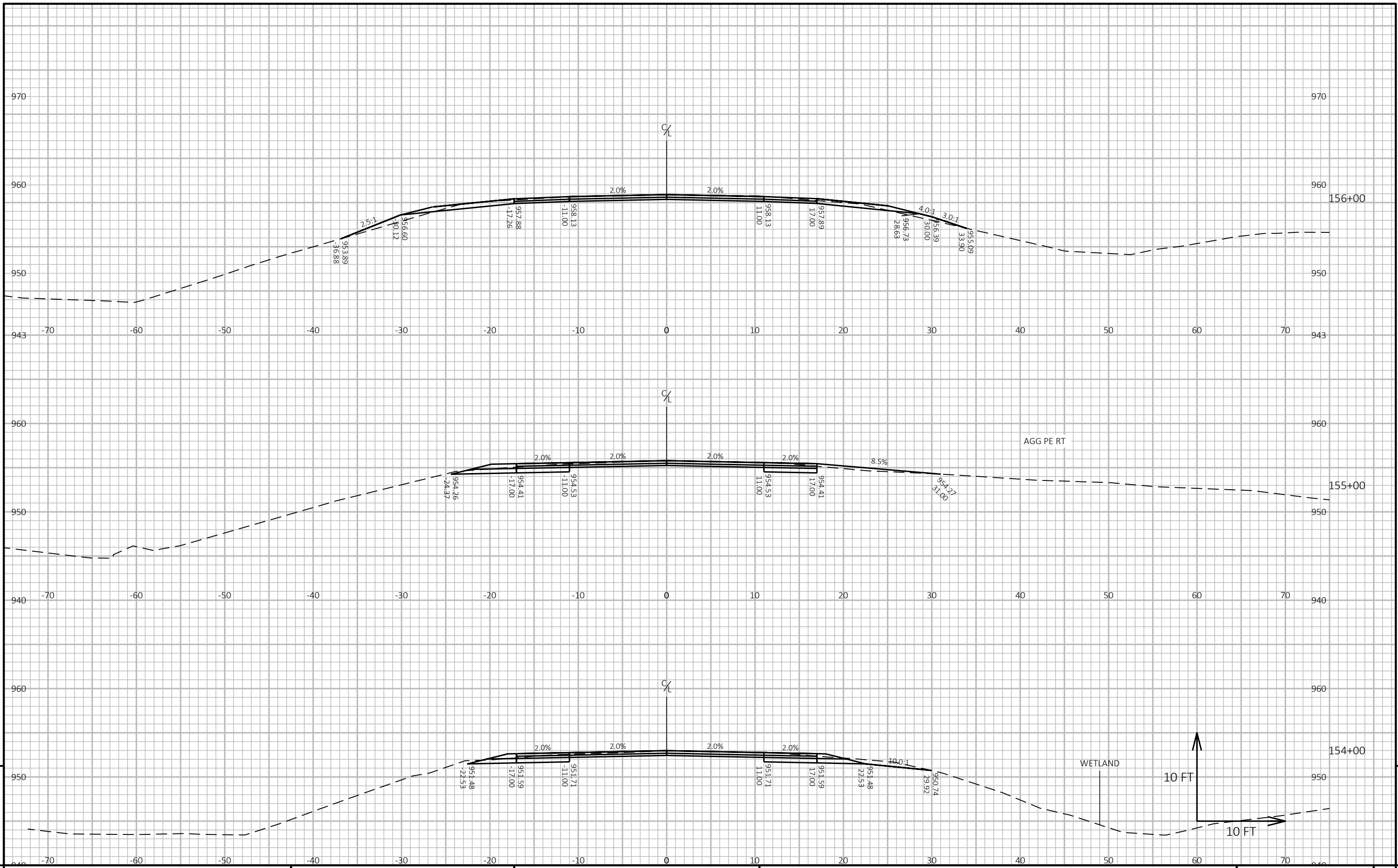
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 6/30/2023 9:01 AM PLOT BY: NICHOLAS WATHKE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

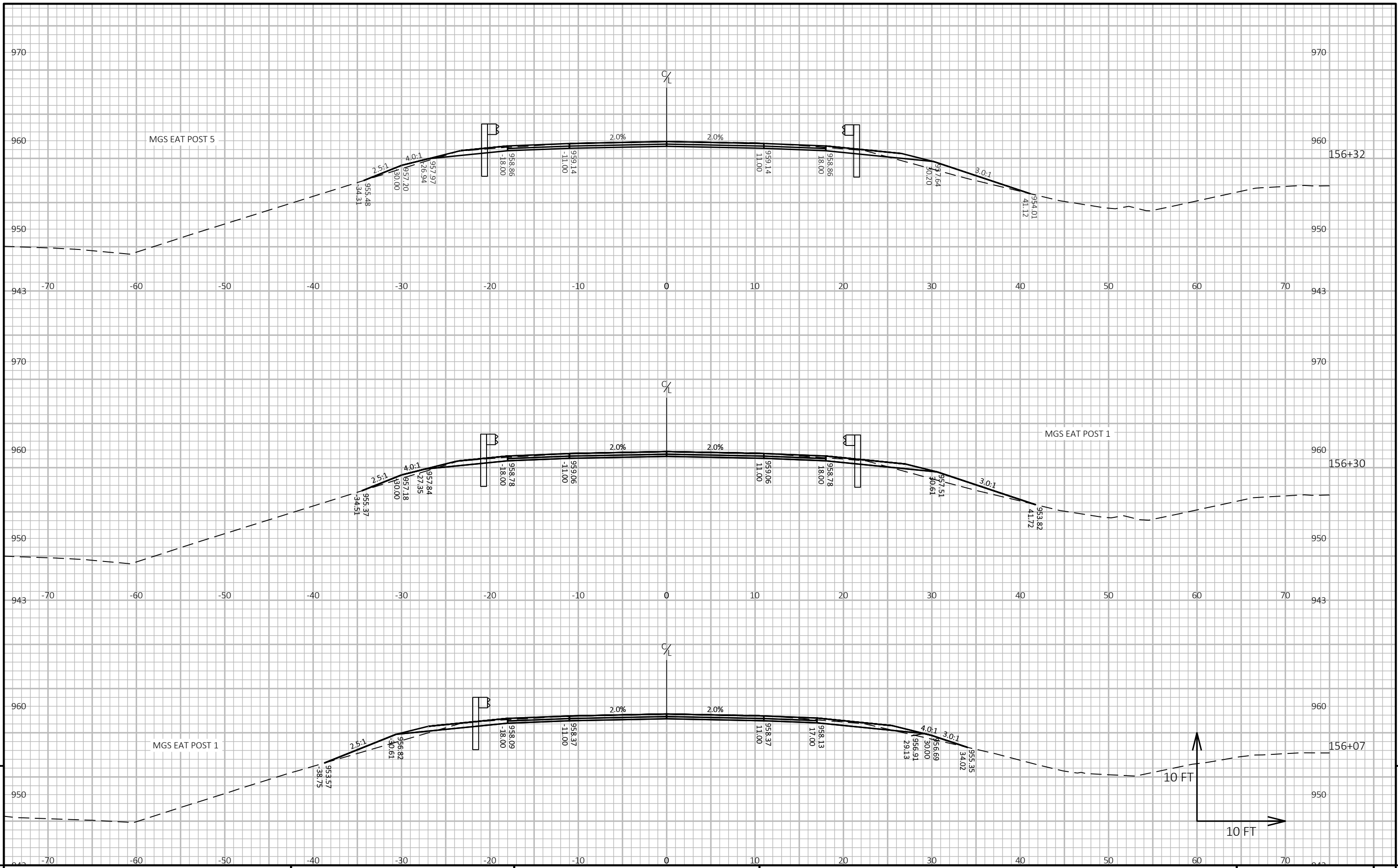
LAYOUT NAME - 33



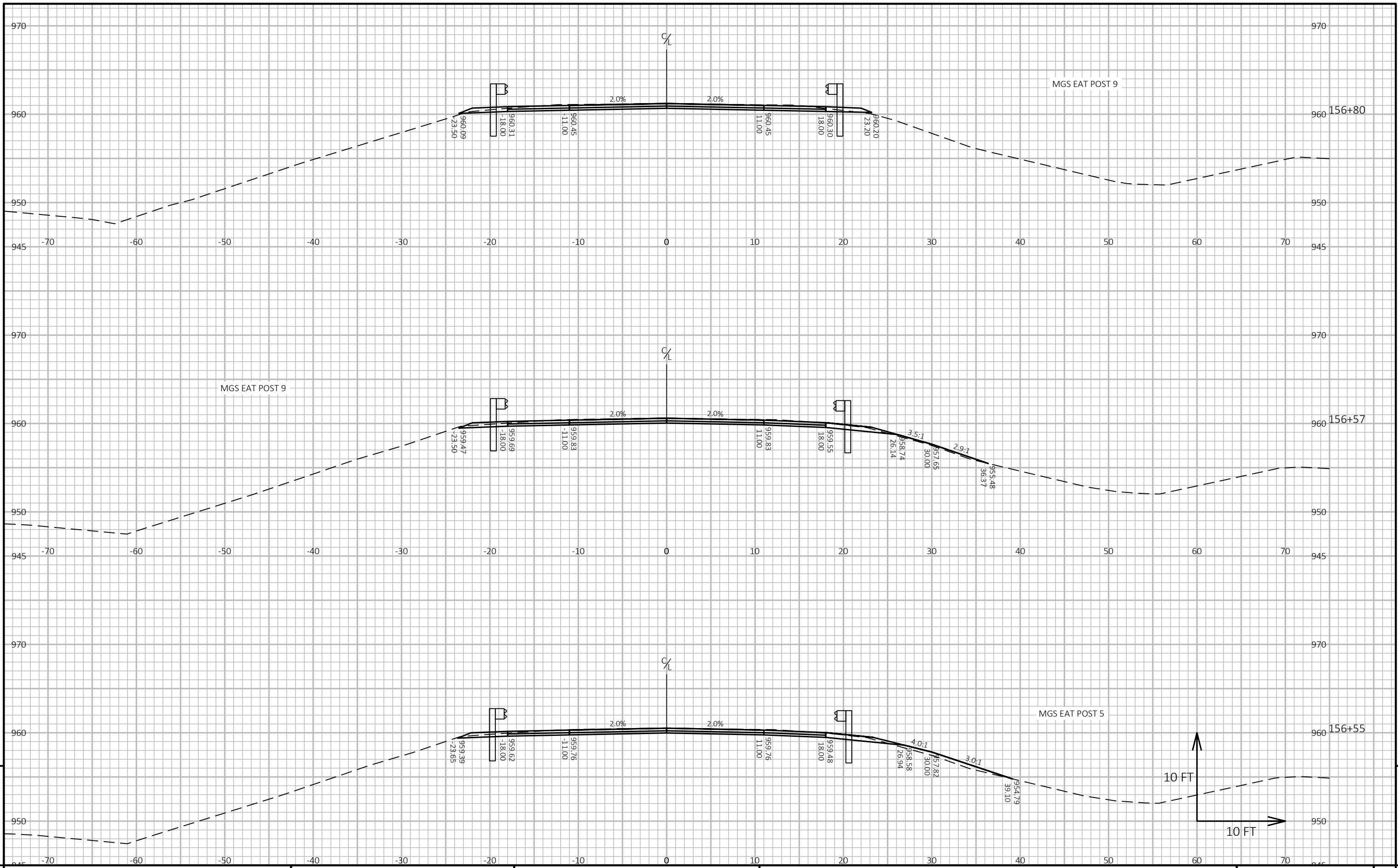
| | | | | |
|------------------------|------------|------------------|--------------------------|-------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET |
|------------------------|------------|------------------|--------------------------|-------|

9

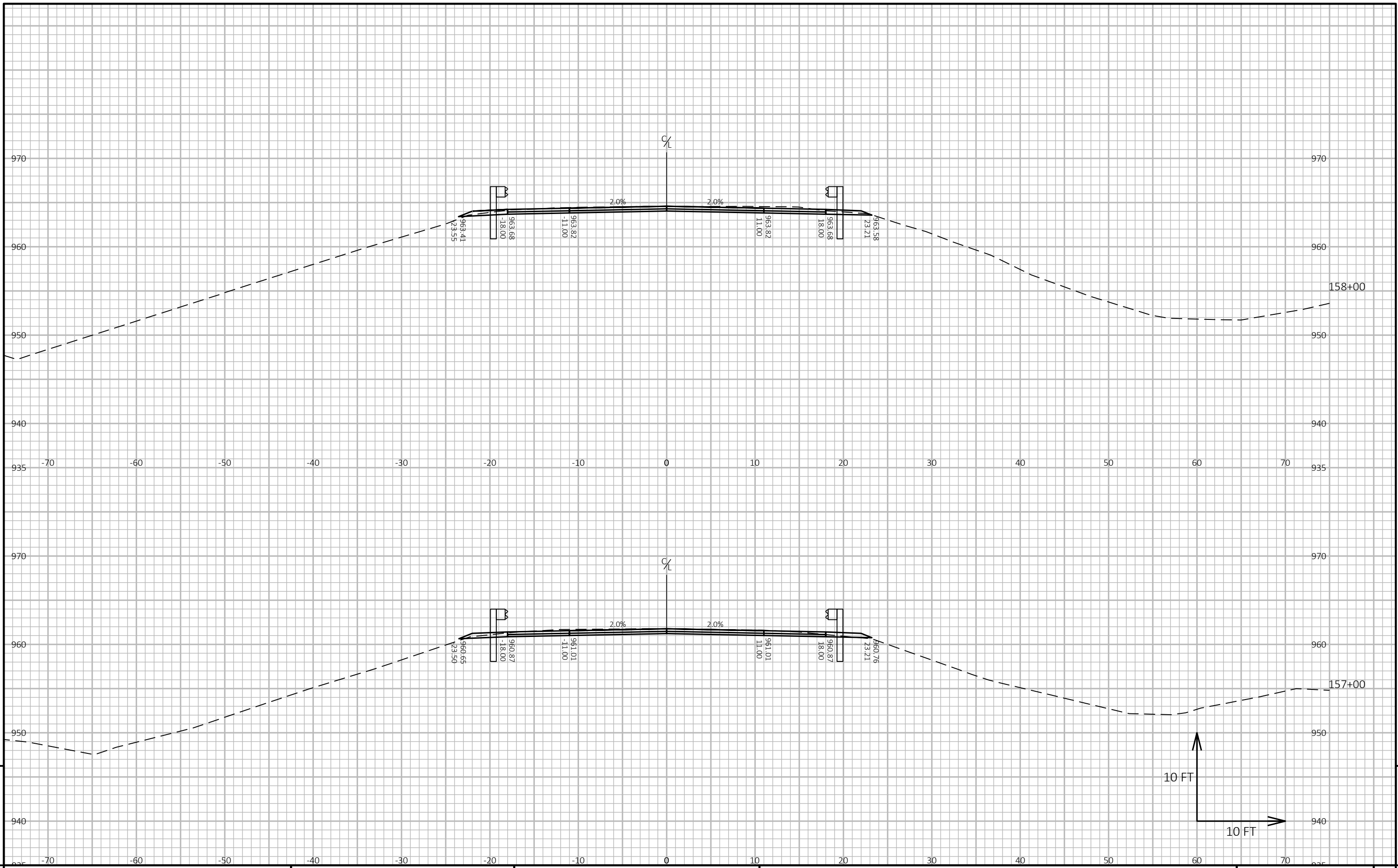
9



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET 9



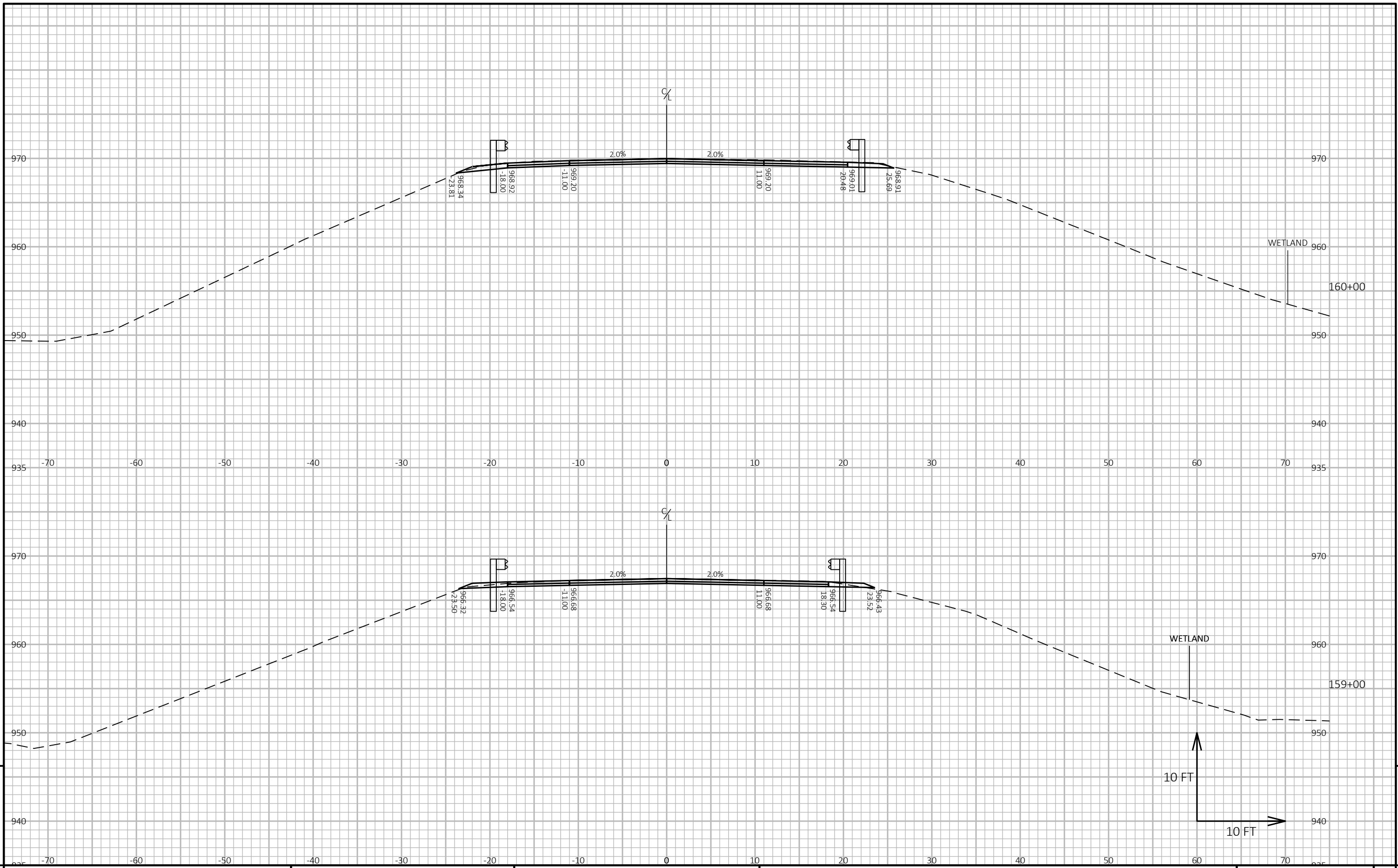
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETSPLAN\090201-XS.DWG PLOT DATE : 6/30/2023 9:01 AM PLOT BY : NICHOLAS WATHKE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 37



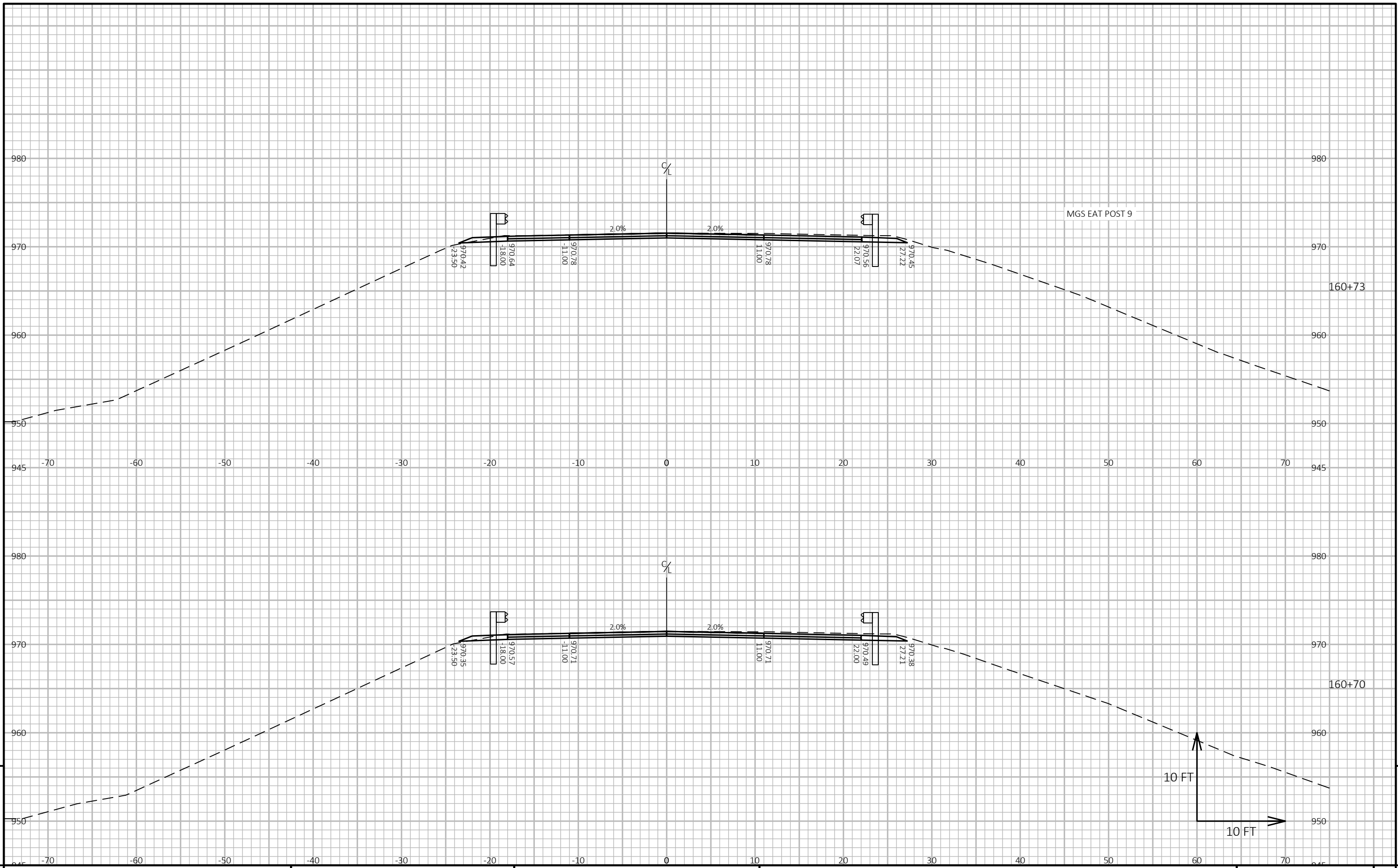
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE : 6/30/2023 9:02 AM PLOT BY : NICHOLAS WATHKE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 38



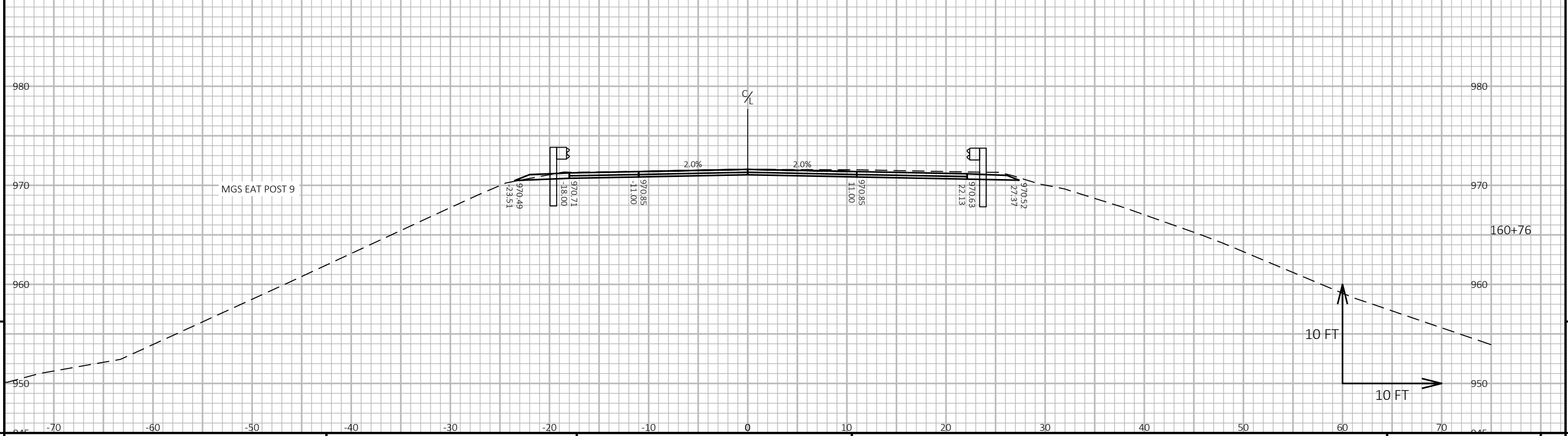
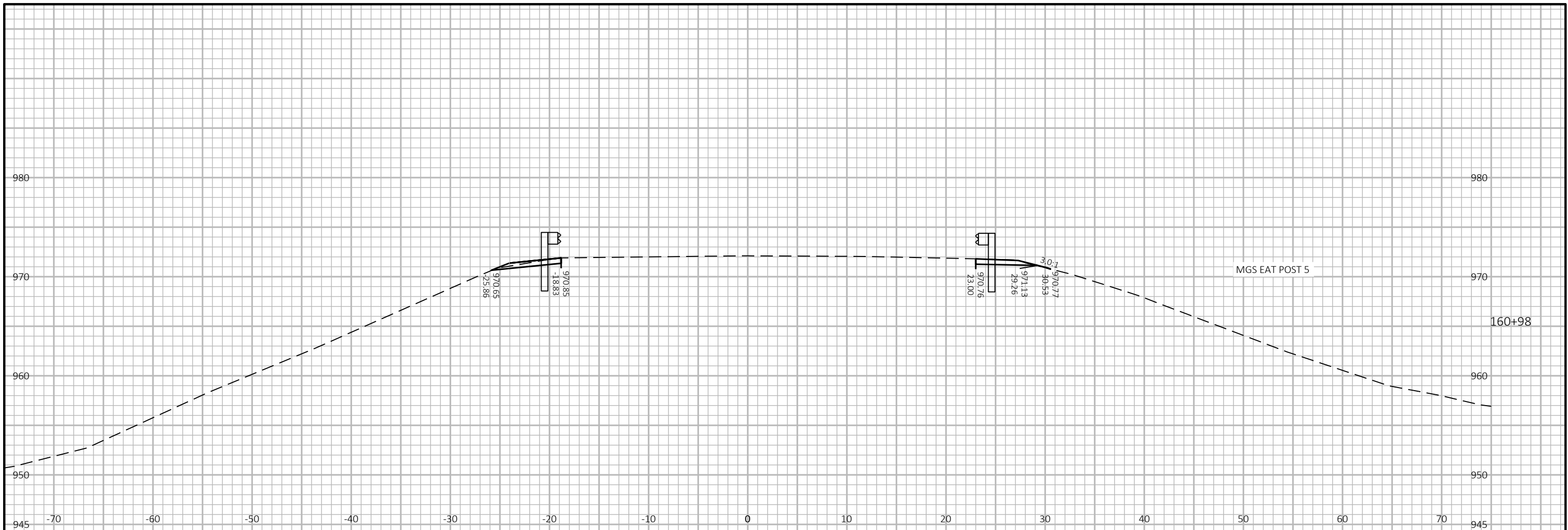
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE : 6/30/2023 9:02 AM PLOT BY : NICHOLAS WATKHE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 39



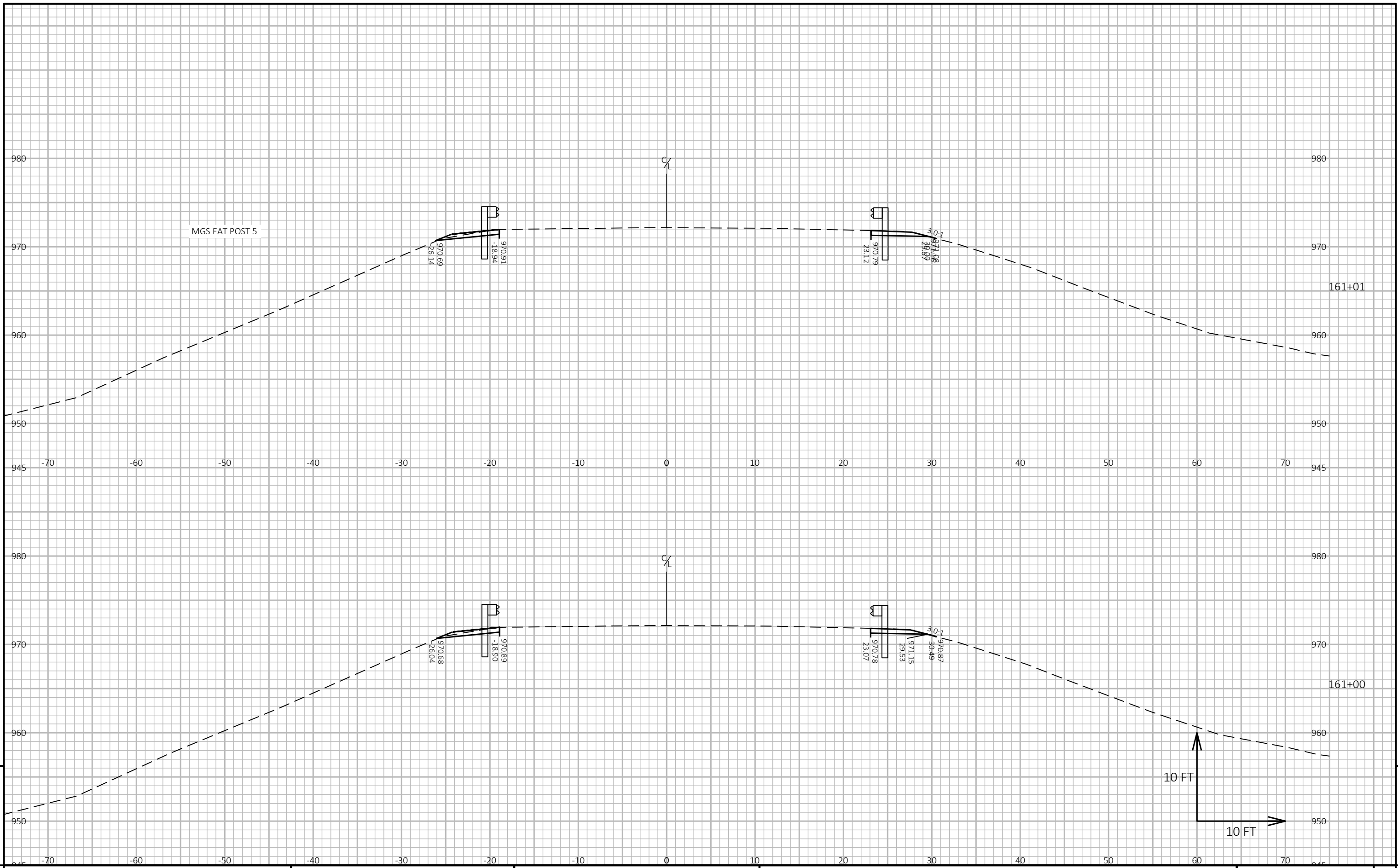
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE: 6/30/2023 9:02 AM PLOT BY: NICHOLAS WATKHE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 40



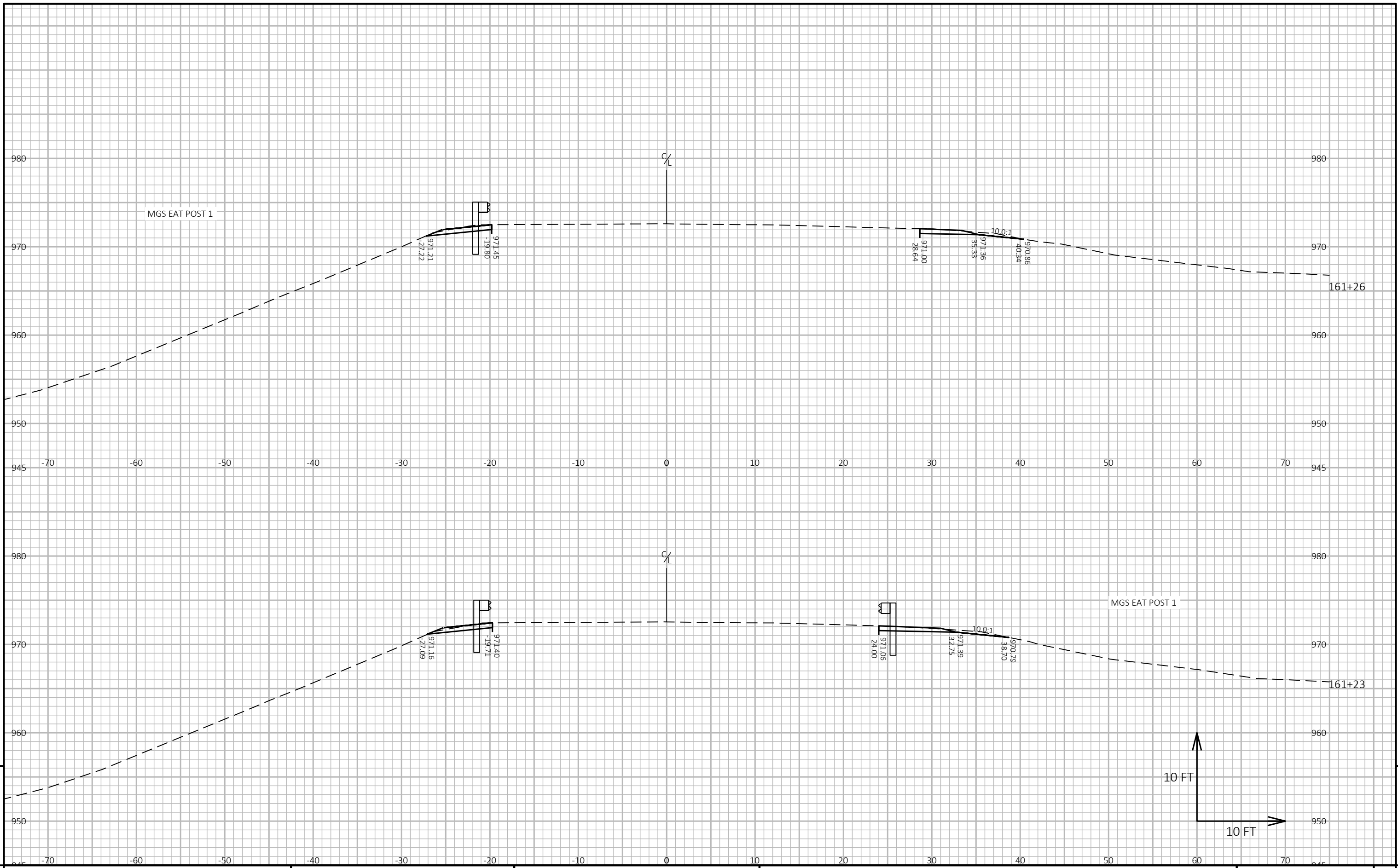
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE : 6/30/2023 9:02 AM PLOT BY : NICHOLAS WATKHE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 41



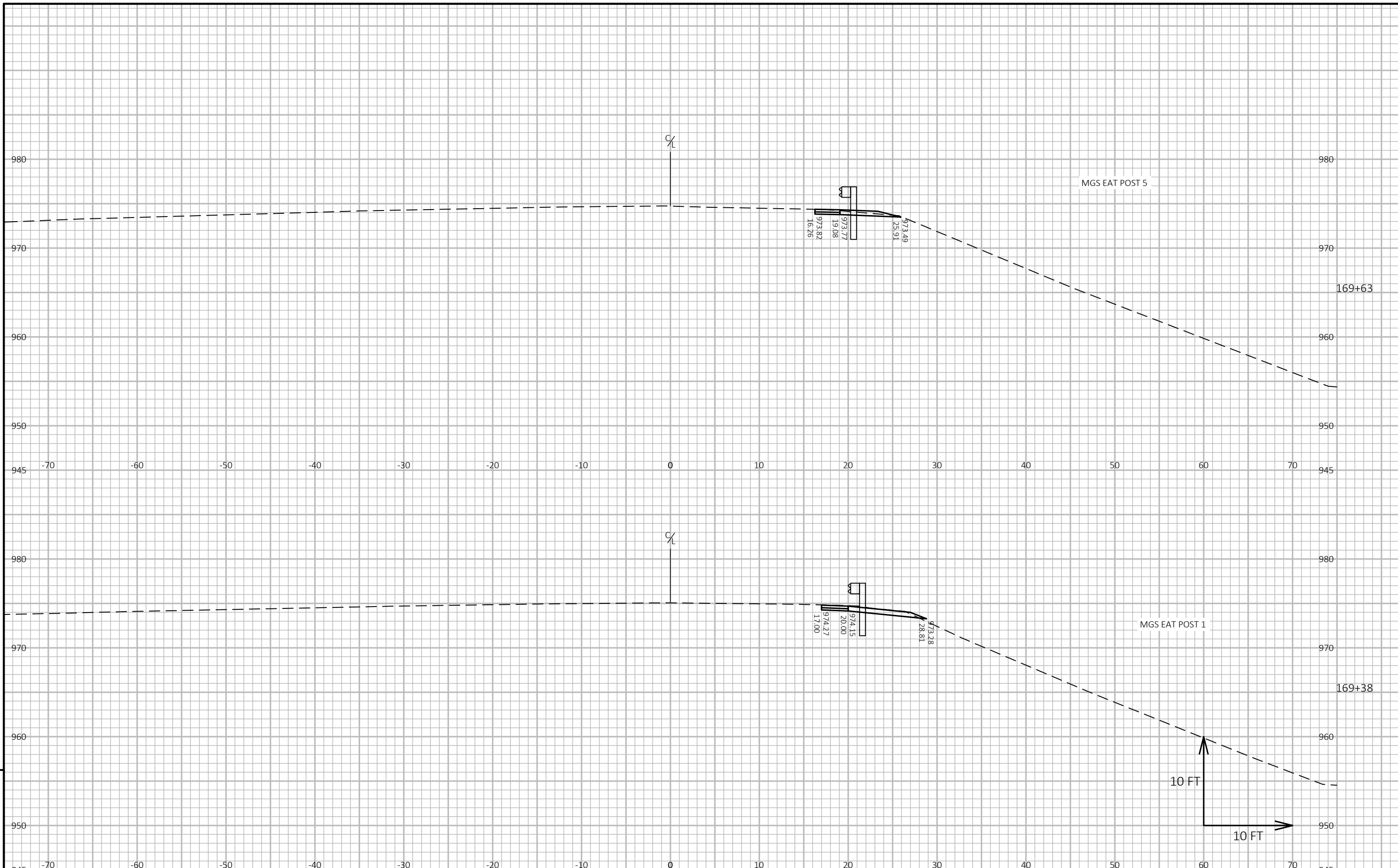
9

9

PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME: C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETSPLAN\090201-XS.DWG PLOT DATE: 6/30/2023 9:02 AM PLOT BY: NICHOLAS WATHKE PLOT NAME: PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

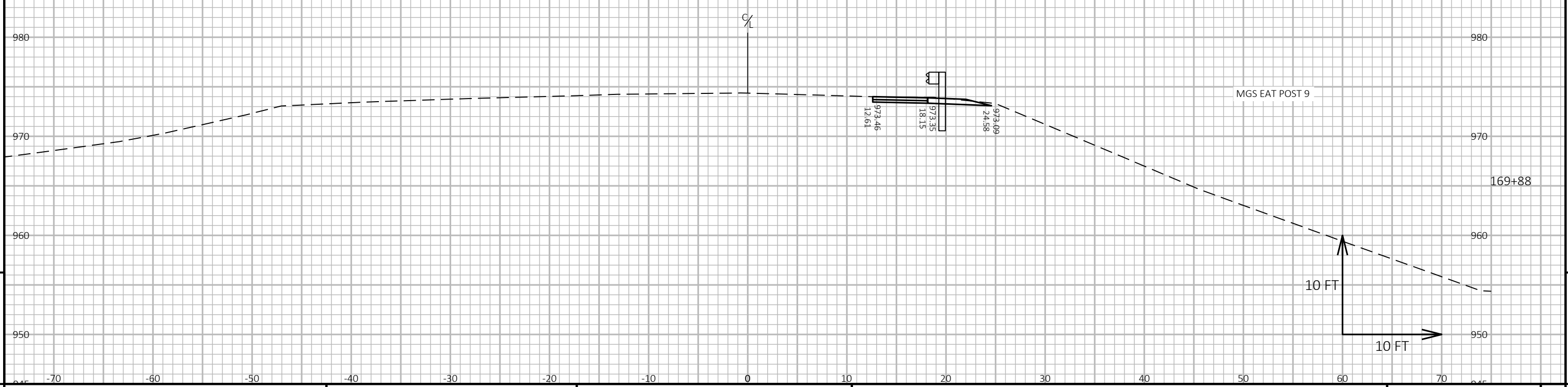
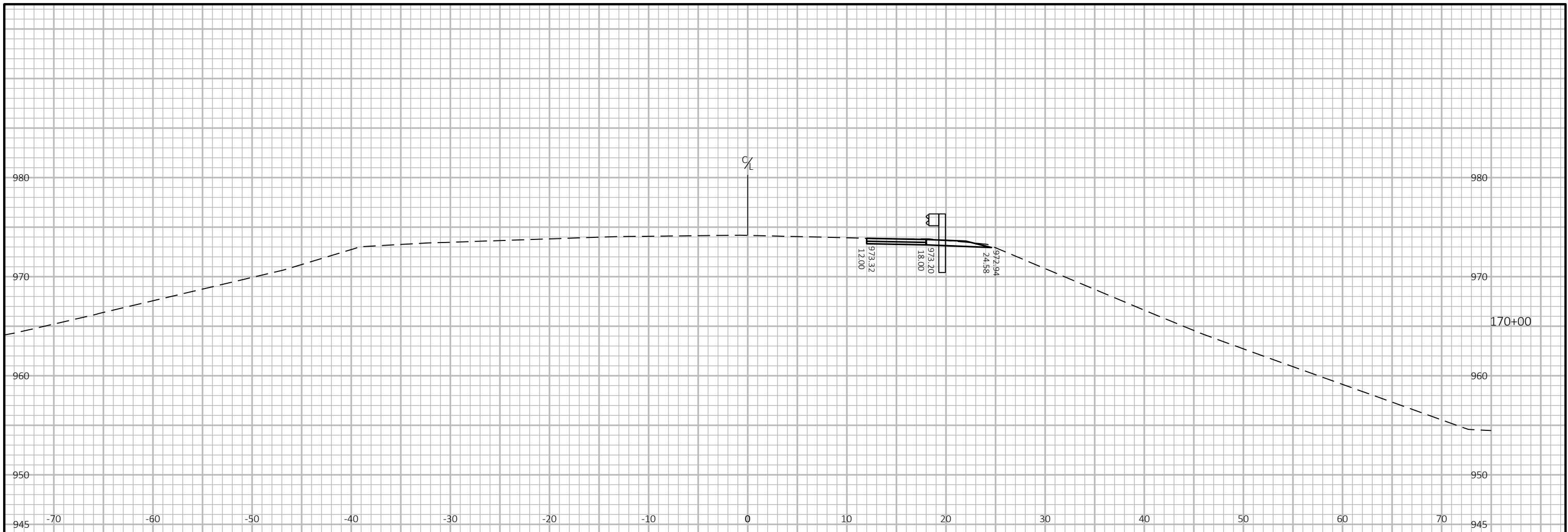
LAYOUT NAME - 42



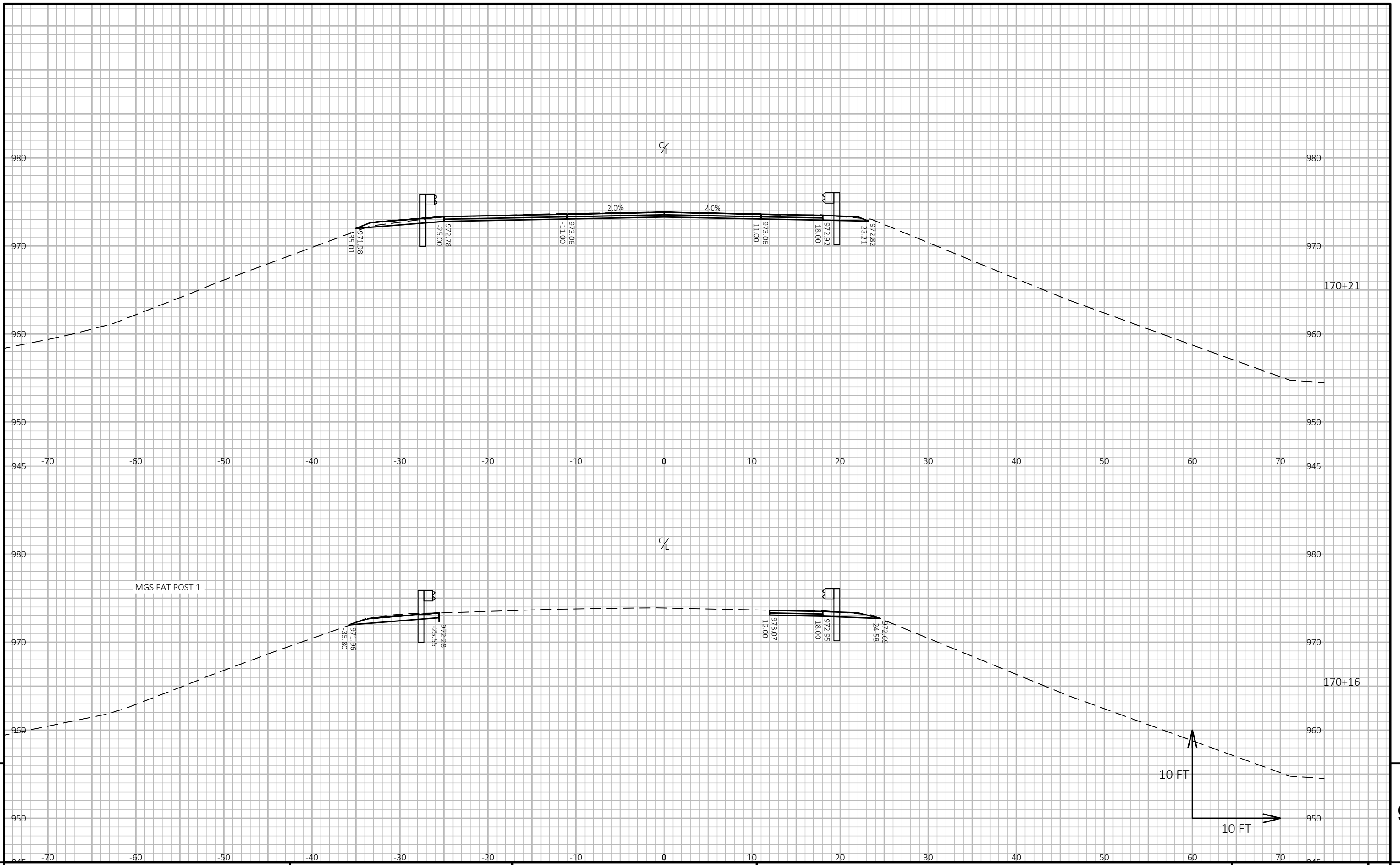
9

9

| | | | | | |
|------------------------|------------|------------------|--------------------------|-------|---|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET | E |
|------------------------|------------|------------------|--------------------------|-------|---|



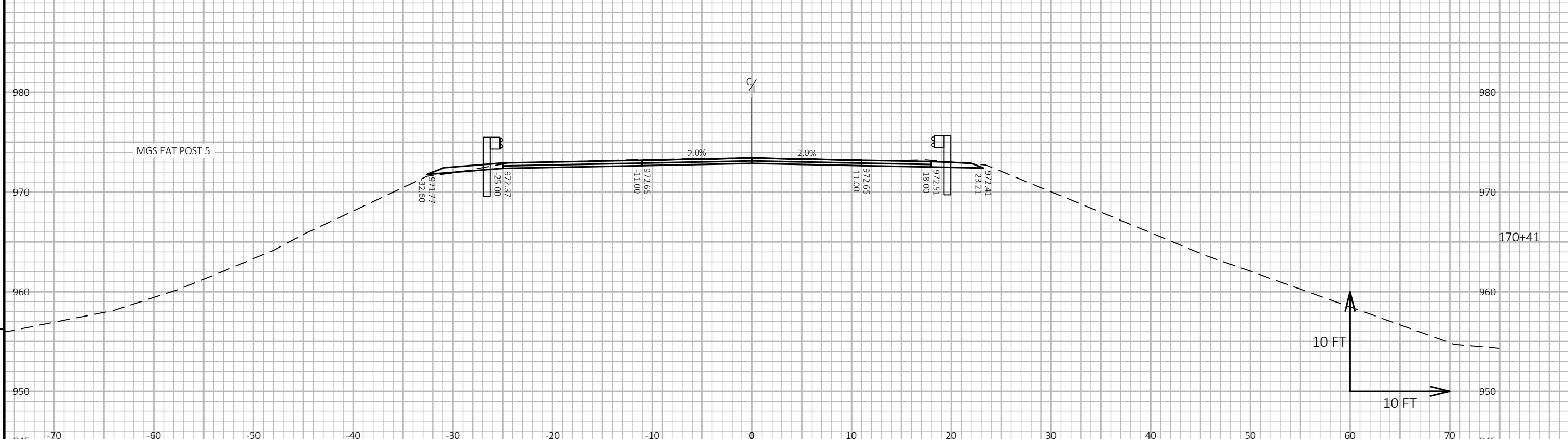
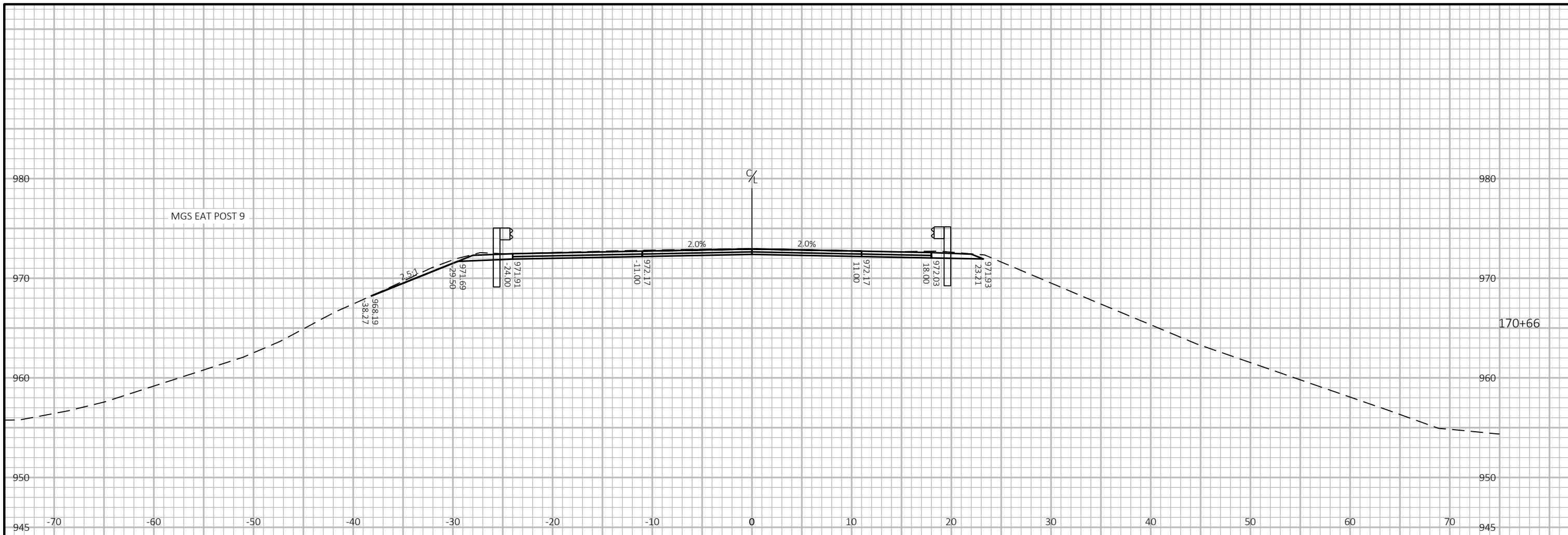
| | | | | | |
|------------------------|------------|------------------|--------------------------|-------|---|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET | E |
|------------------------|------------|------------------|--------------------------|-------|---|



9

9

| | | | | | |
|------------------------|------------|------------------|--------------------------|-------|---|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET | E |
|------------------------|------------|------------------|--------------------------|-------|---|



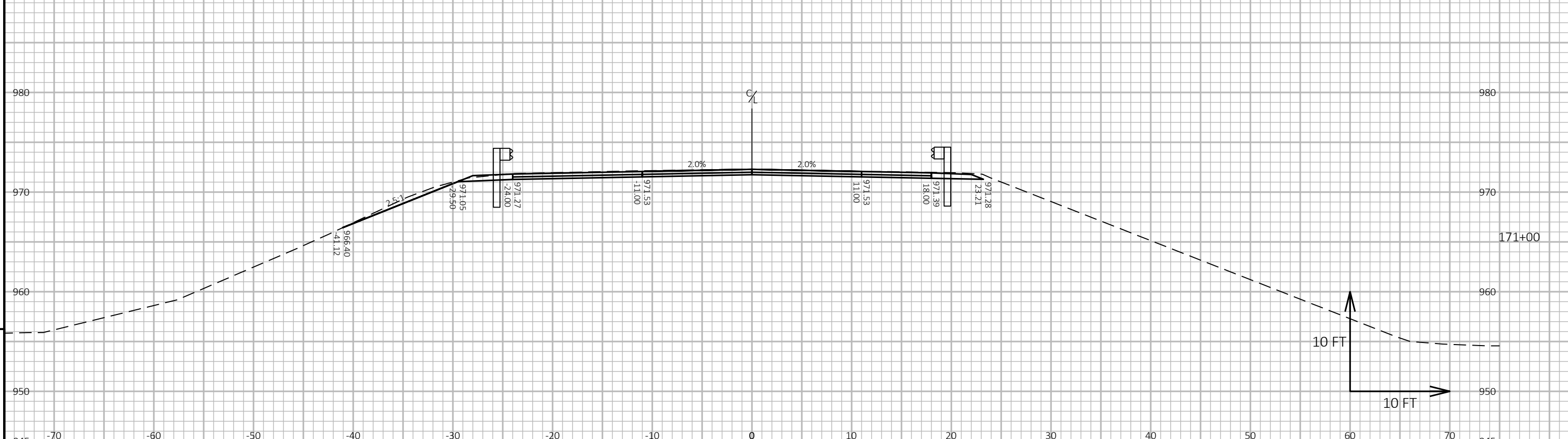
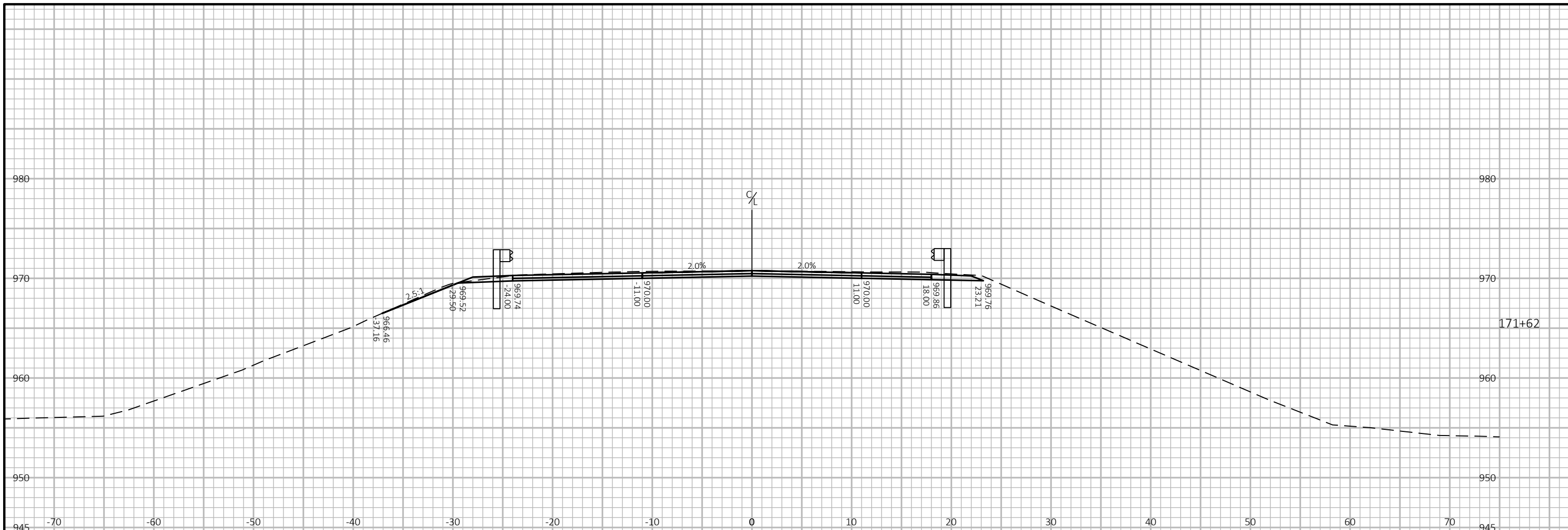
10 FT
10 FT

| | | | | |
|------------------------|------------|------------------|--------------------------|-------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET |
|------------------------|------------|------------------|--------------------------|-------|

9

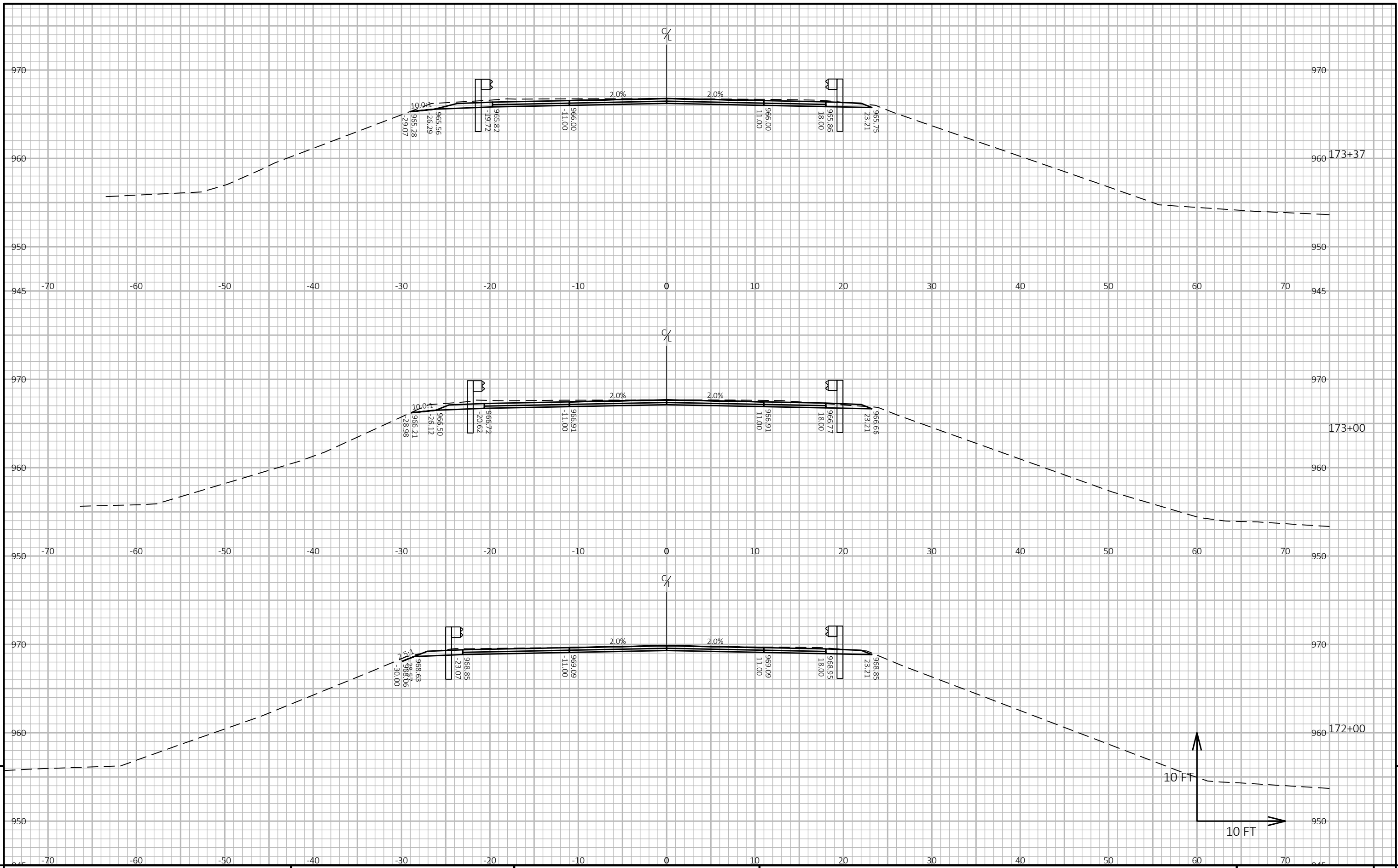
9

E



9
10 FT
10 FT
9

| | | | | |
|------------------------|------------|------------------|--------------------------|---------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET E |
|------------------------|------------|------------------|--------------------------|---------|



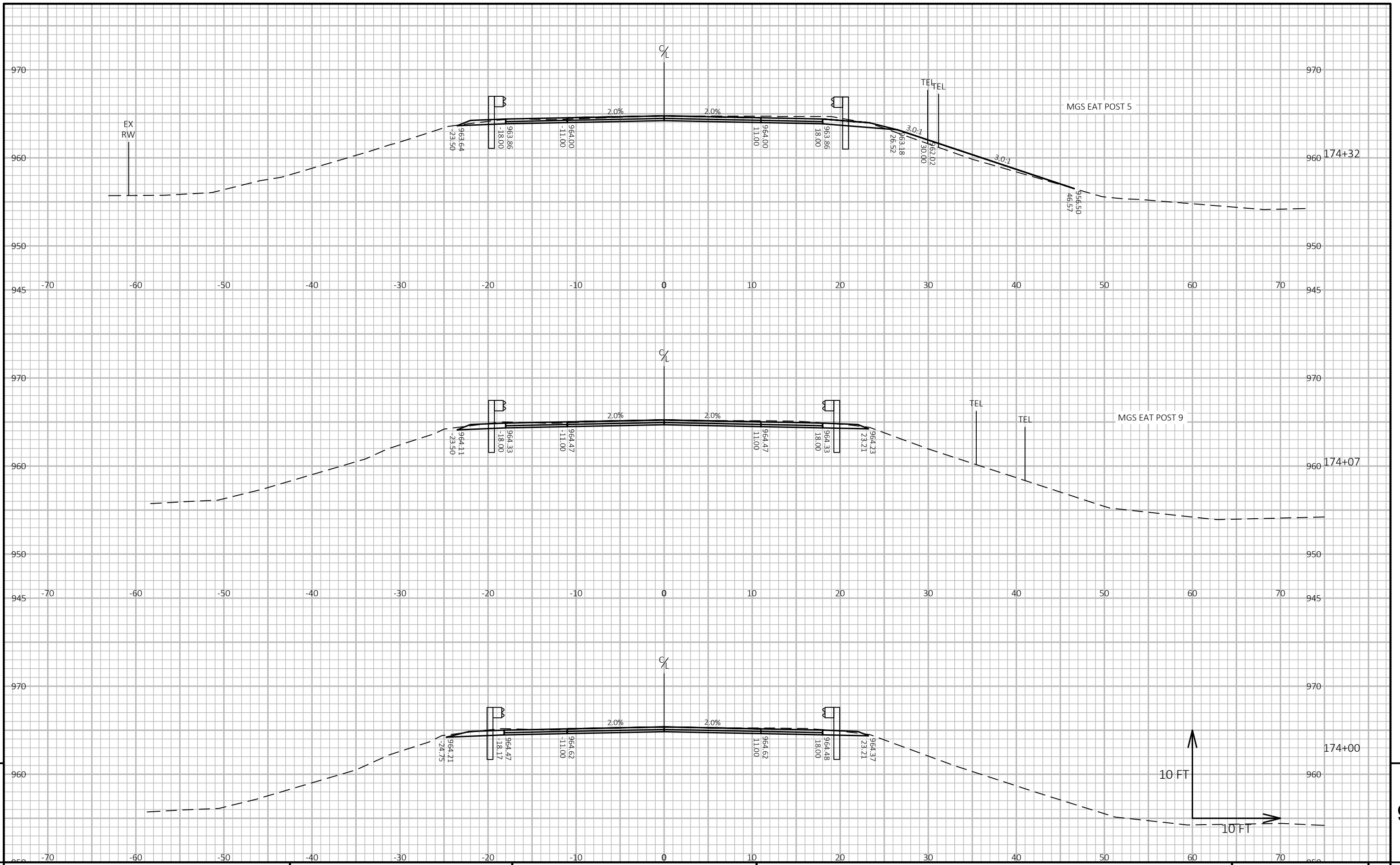
9

9

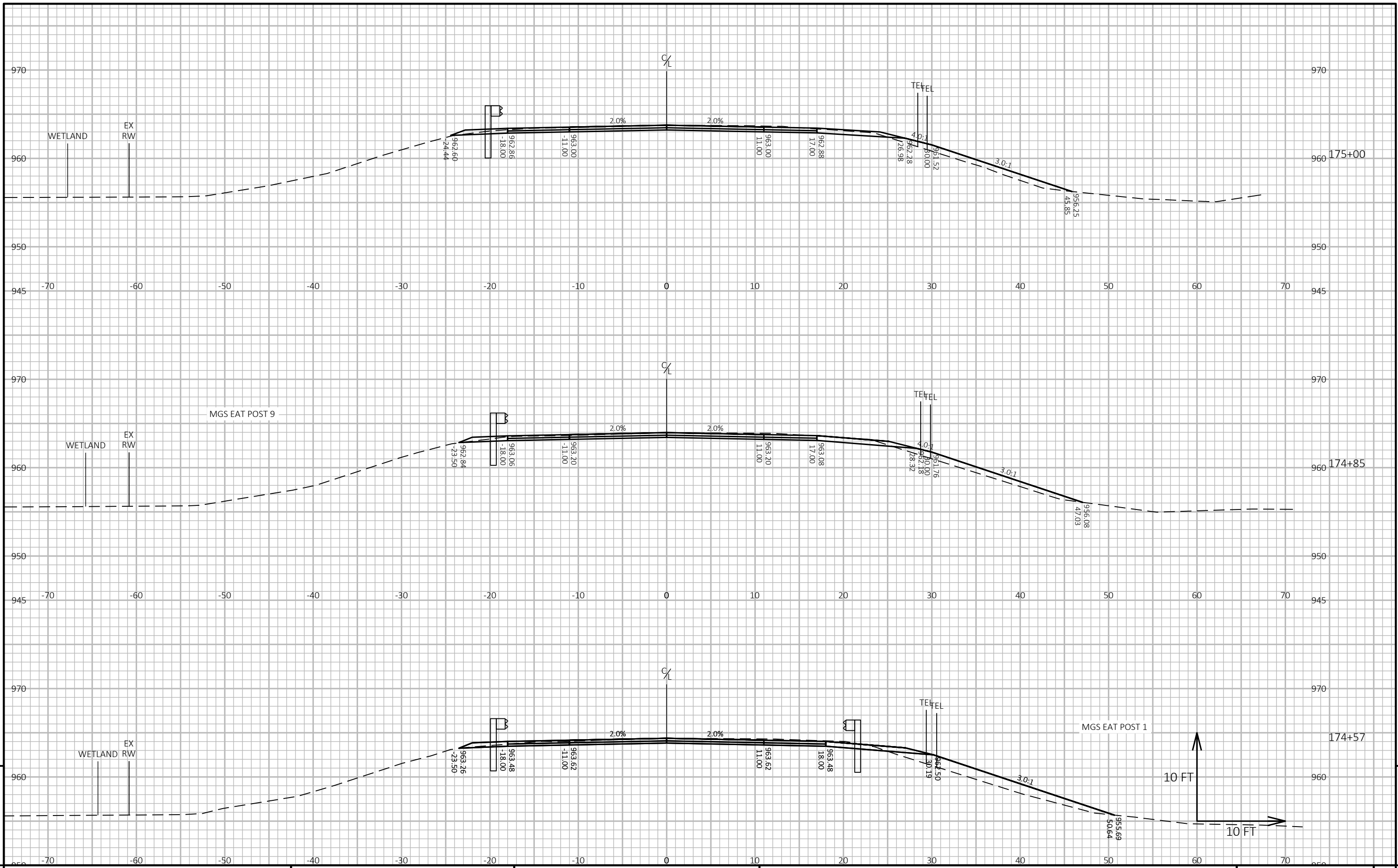
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE : 6/30/2023 9:03 AM PLOT BY : NICHOLAS WATHKE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

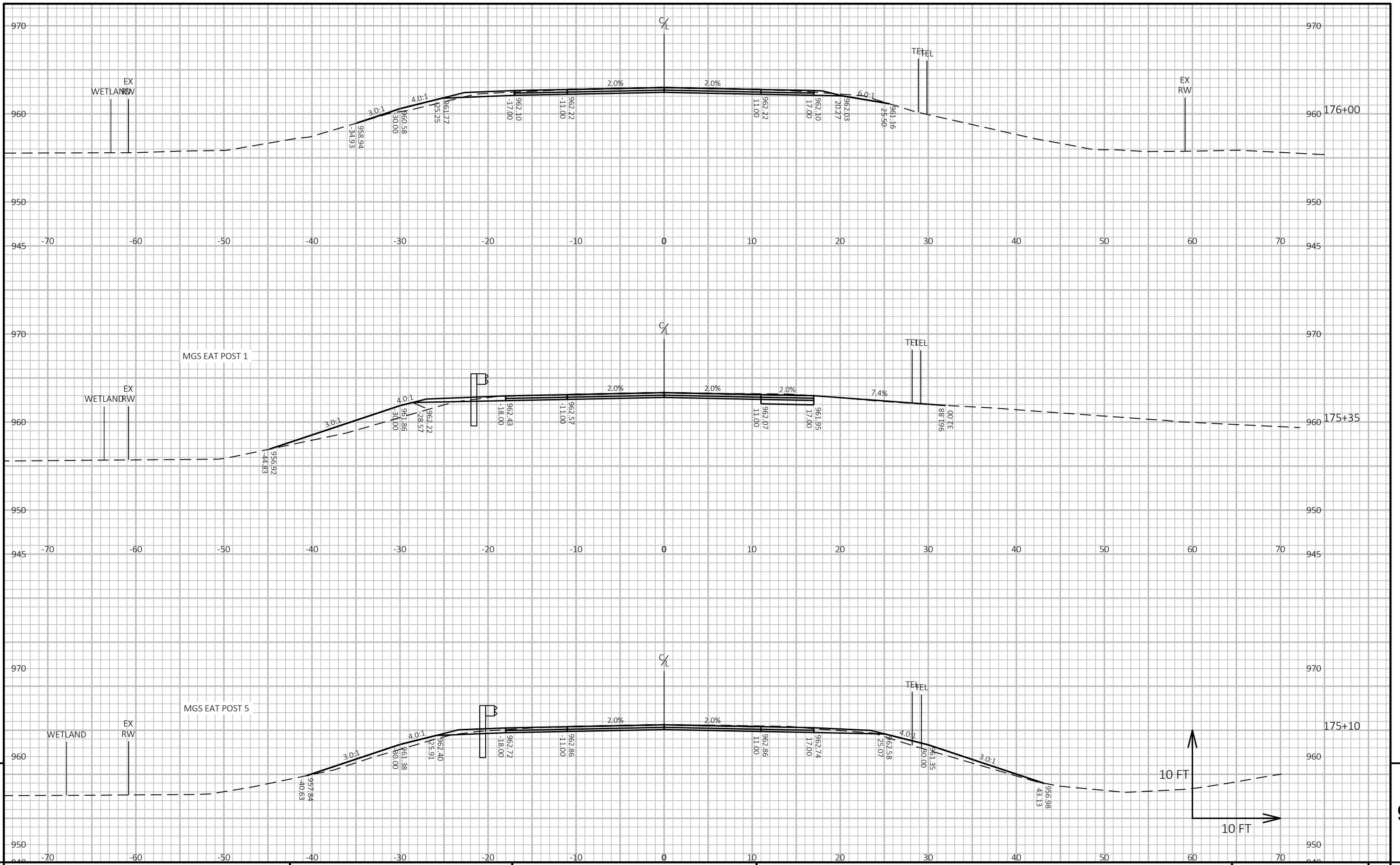
LAYOUT NAME - 48



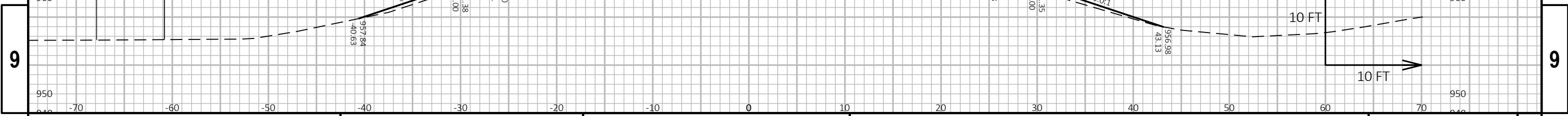
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

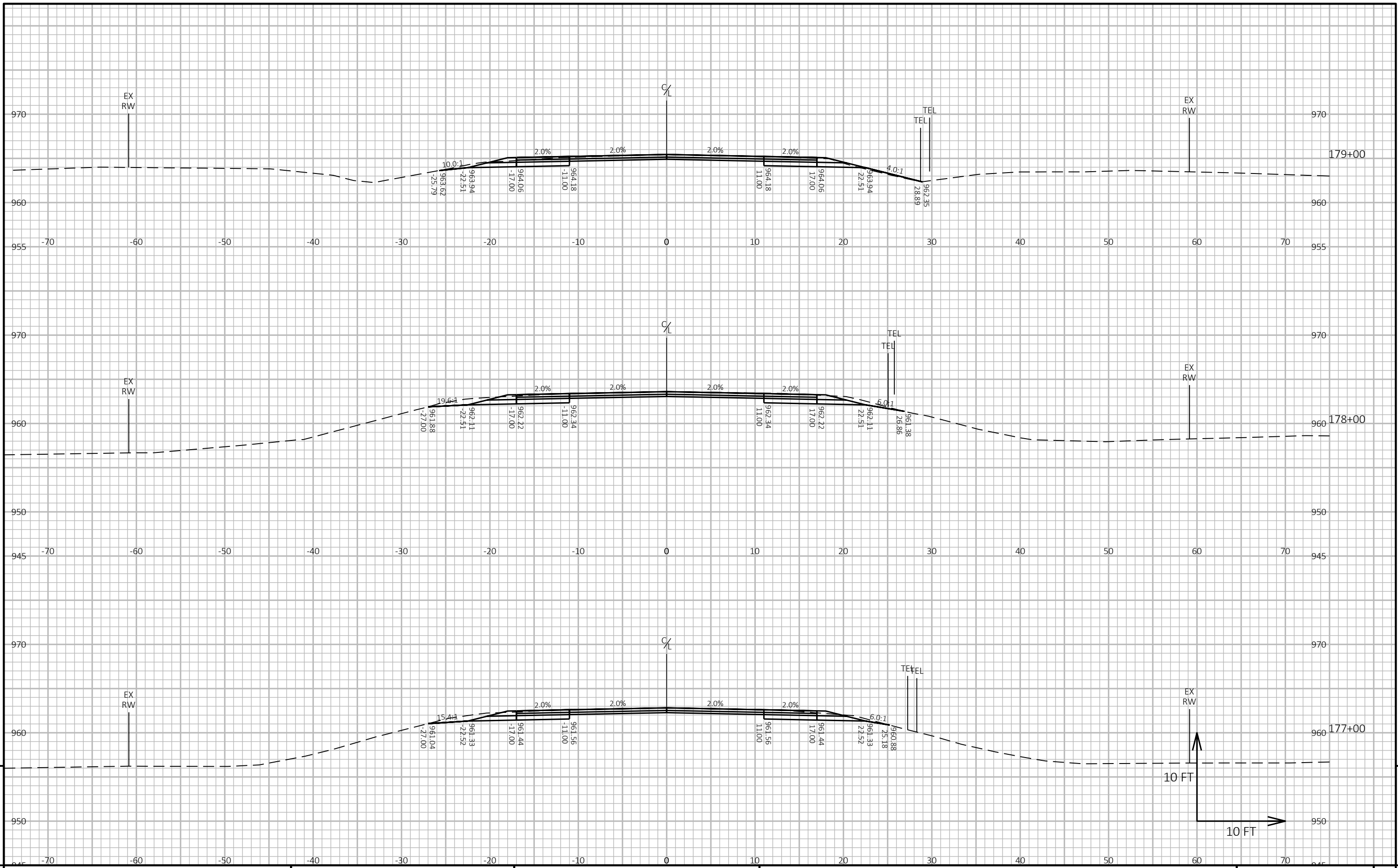


| | | | |
|------------------------|------------|------------------|--------------------------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE |
| SHEET | | | E |

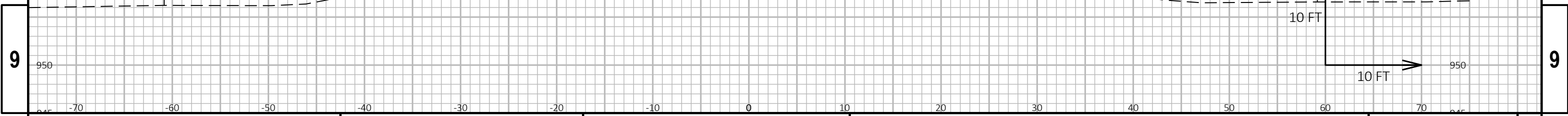


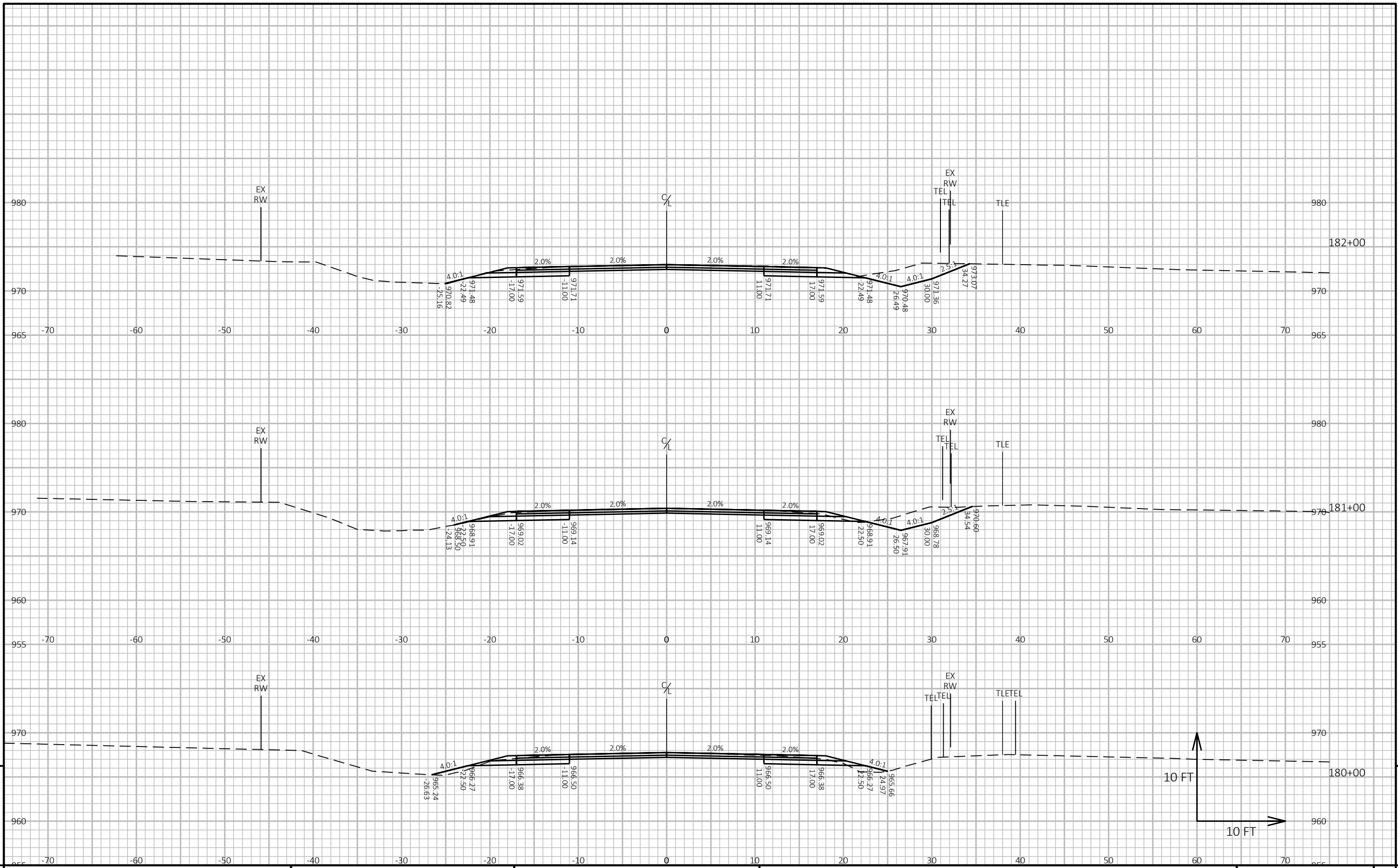
| | | | | |
|------------------------|------------|------------------|--------------------------|-------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: MAINLINE | SHEET |
|------------------------|------------|------------------|--------------------------|-------|



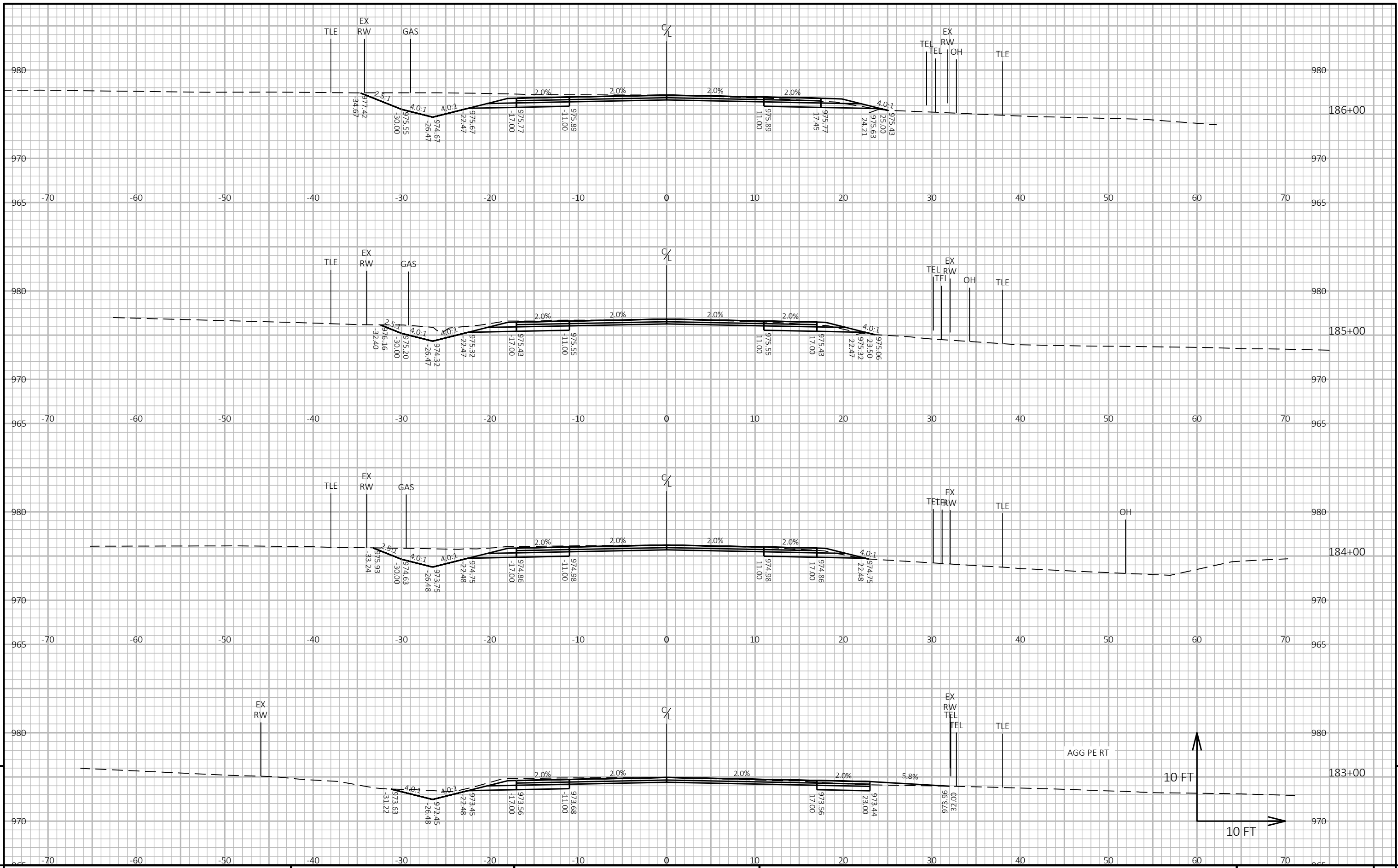


PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

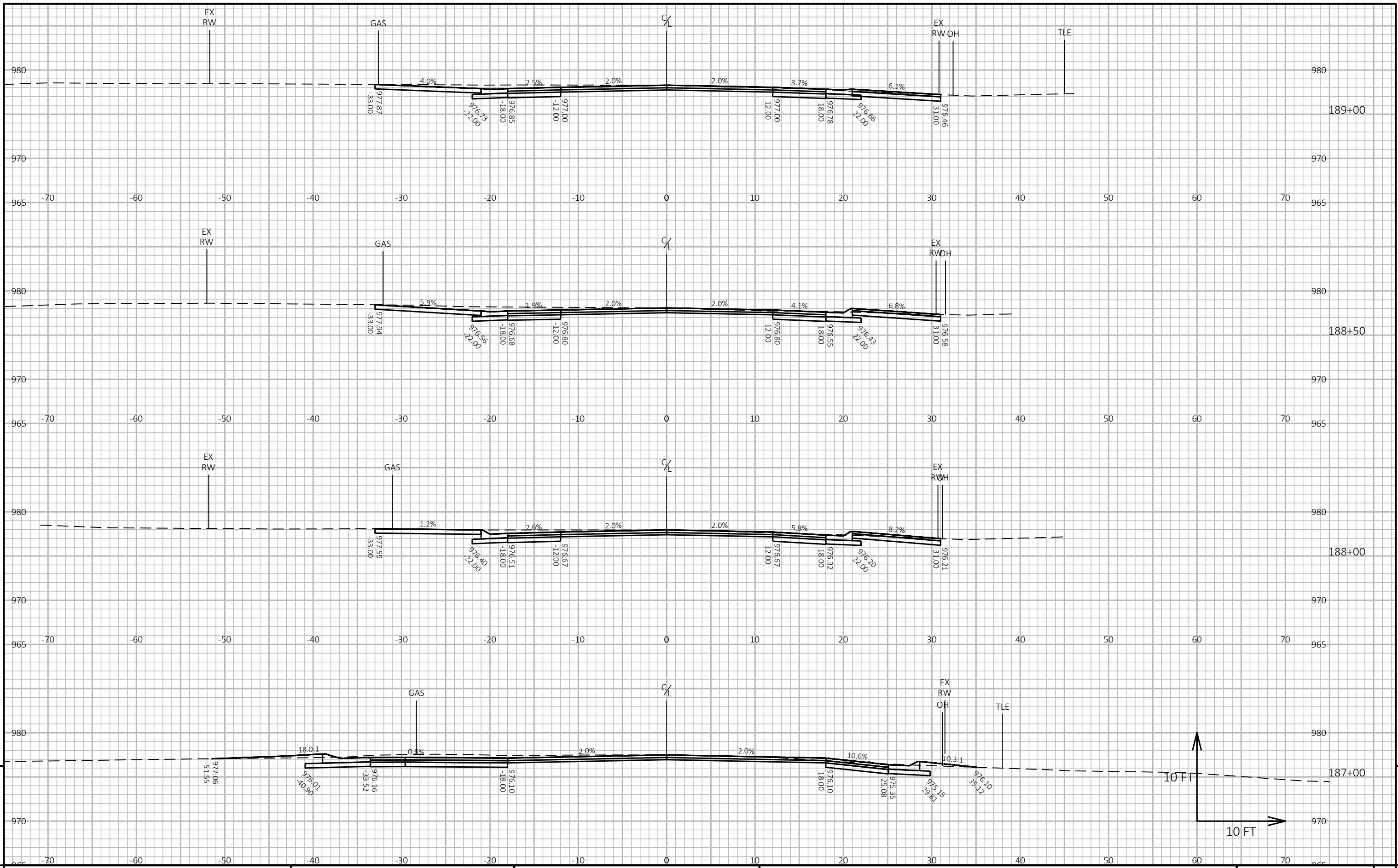




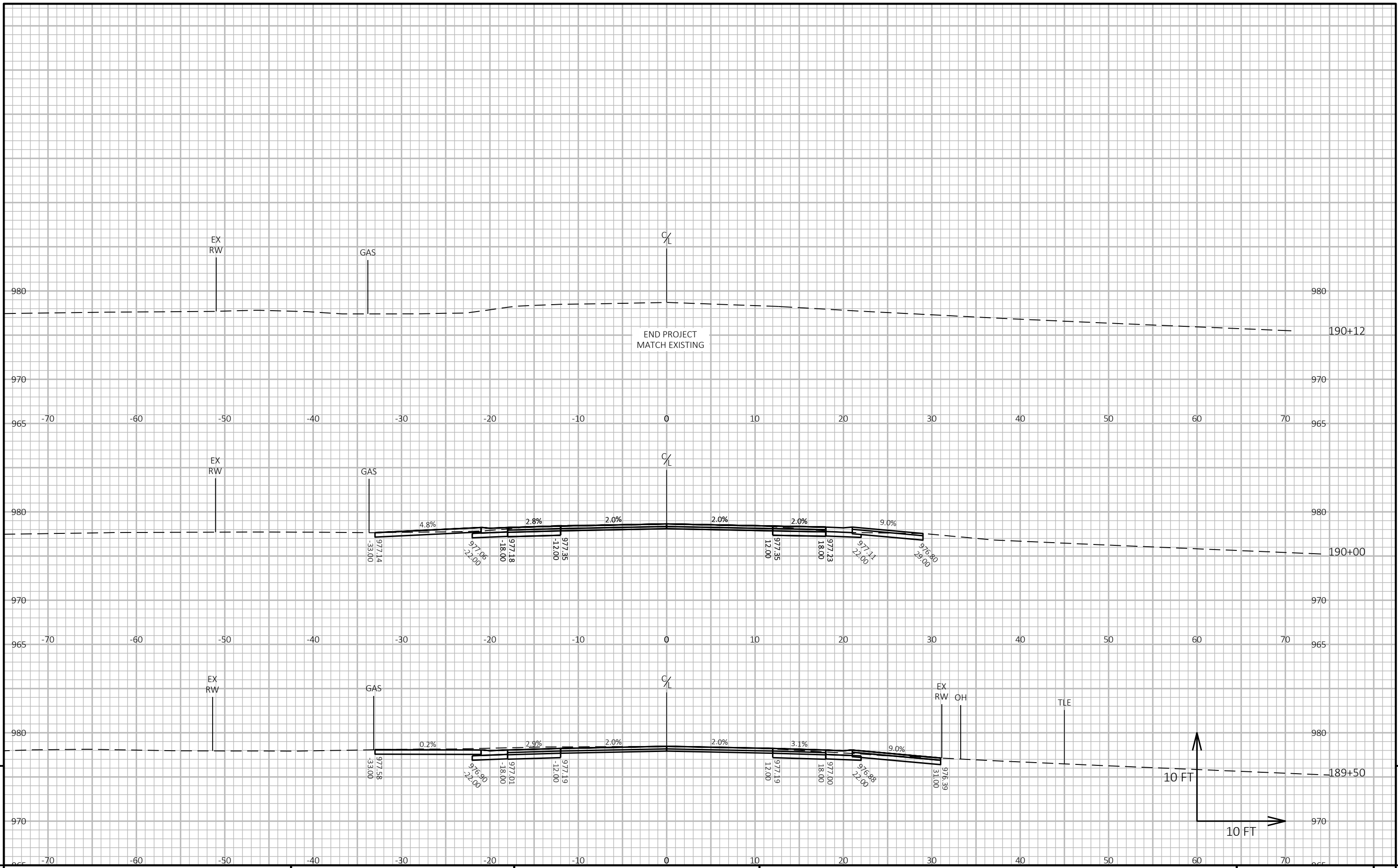
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET 9



PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E



END PROJECT
MATCH EXISTING

190+12

190+00

189+50

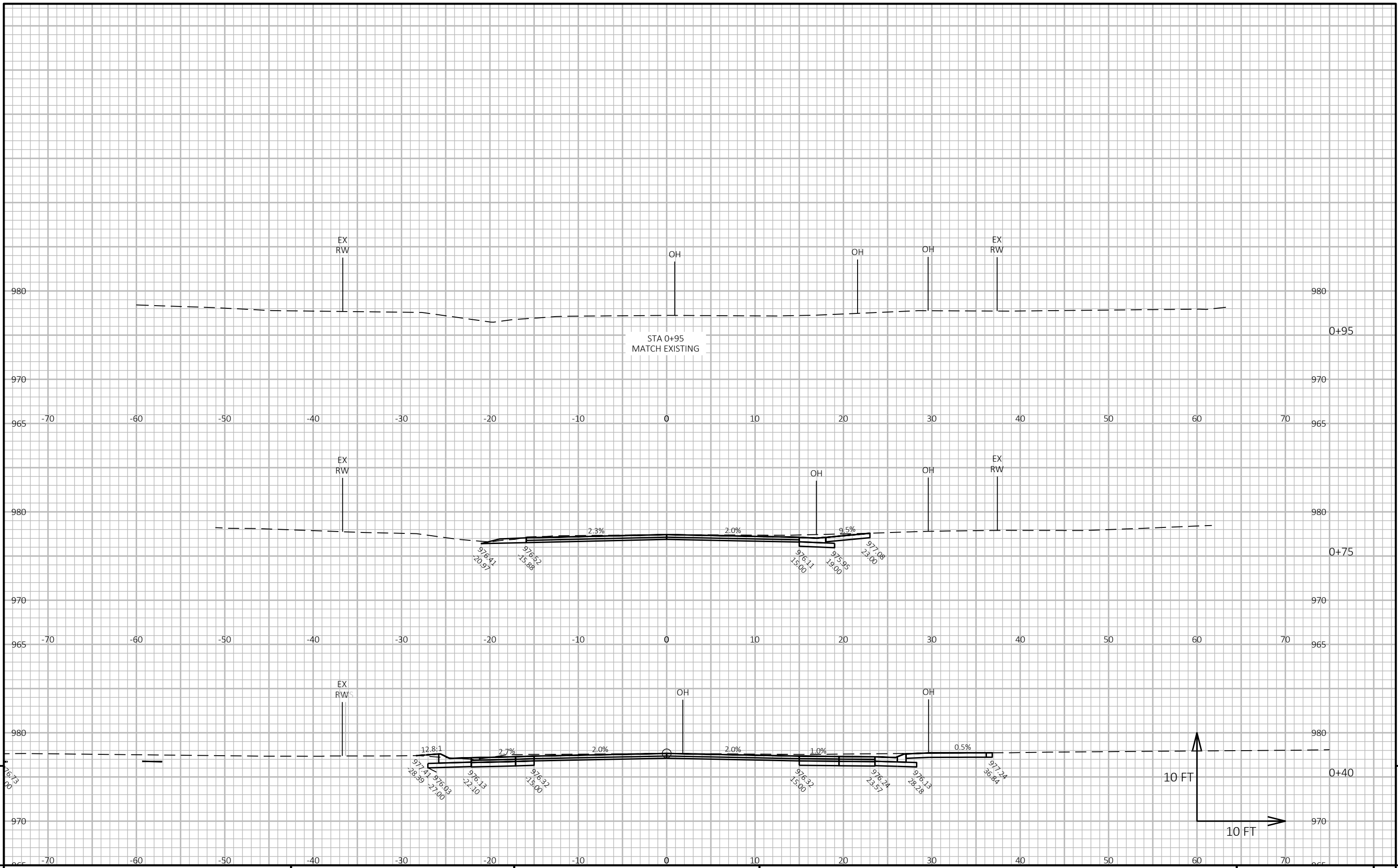
9

9

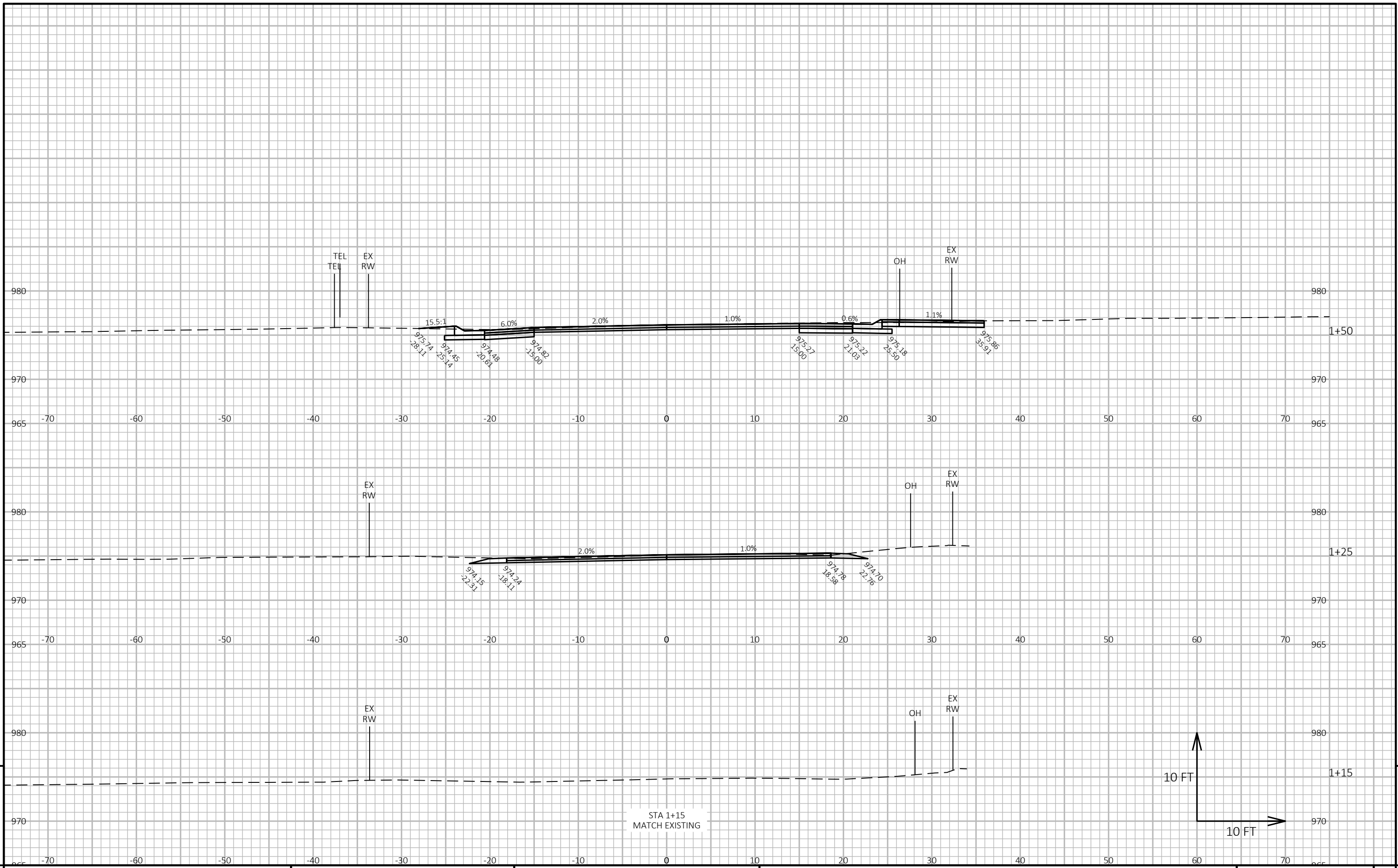
PROJECT NO: 8919-03-75 HWY: CTH X COUNTY: CHIPPEWA CROSS SECTIONS: MAINLINE SHEET E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-NW REGION\8919-03-05_CHIPPEWA CO_CTH X\500_CADD\501_C3D_2020\89190305\SHEETS\PLAN\090201-XS.DWG PLOT DATE : 6/30/2023 9:04 AM PLOT BY : NICHOLAS WATHKE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT. WISDOT/CADD SHEET 49

LAYOUT NAME - 56



| | | | | |
|------------------------|------------|------------------|------------------------------|---------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: CTH XX NORTH | SHEET E |
|------------------------|------------|------------------|------------------------------|---------|



| | | | | |
|------------------------|------------|------------------|------------------------------|---------|
| PROJECT NO: 8919-03-75 | HWY: CTH X | COUNTY: CHIPPEWA | CROSS SECTIONS: CTH XX SOUTH | SHEET E |
|------------------------|------------|------------------|------------------------------|---------|

9

9

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

<http://www.dot.wisconsin.gov>