

PROJECT ID: 8780-00-70
WITH: N/A

COUNTY: SAWYER

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 = 112



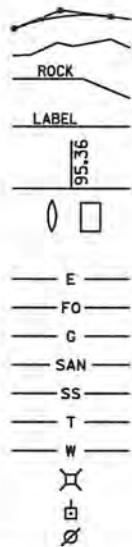
DESIGN DESIGNATION

| | | |
|---------------|---|--|
| A.A.D.T. 2014 | (PULVERIZE & RELAY) (STA. 101+50 - 221+50) | (RECONSTRUCTION) (STA. 221+50 - 243+00) |
| A.A.D.T. 2034 | = 115 | = 115 |
| D.H.V. 2034 | = 125 | = 125 |
| D.D. | = 3.1 | = 3.1 |
| T. | = 60/40 | = 60/40 |
| DESIGN SPEED | = 3.6 | = 3.6 |
| ESALS | = 45 & 35 MPH | = 40 MPH |
| | = 36,500 | = 36,500 |

CONVENTIONAL SYMBOLS

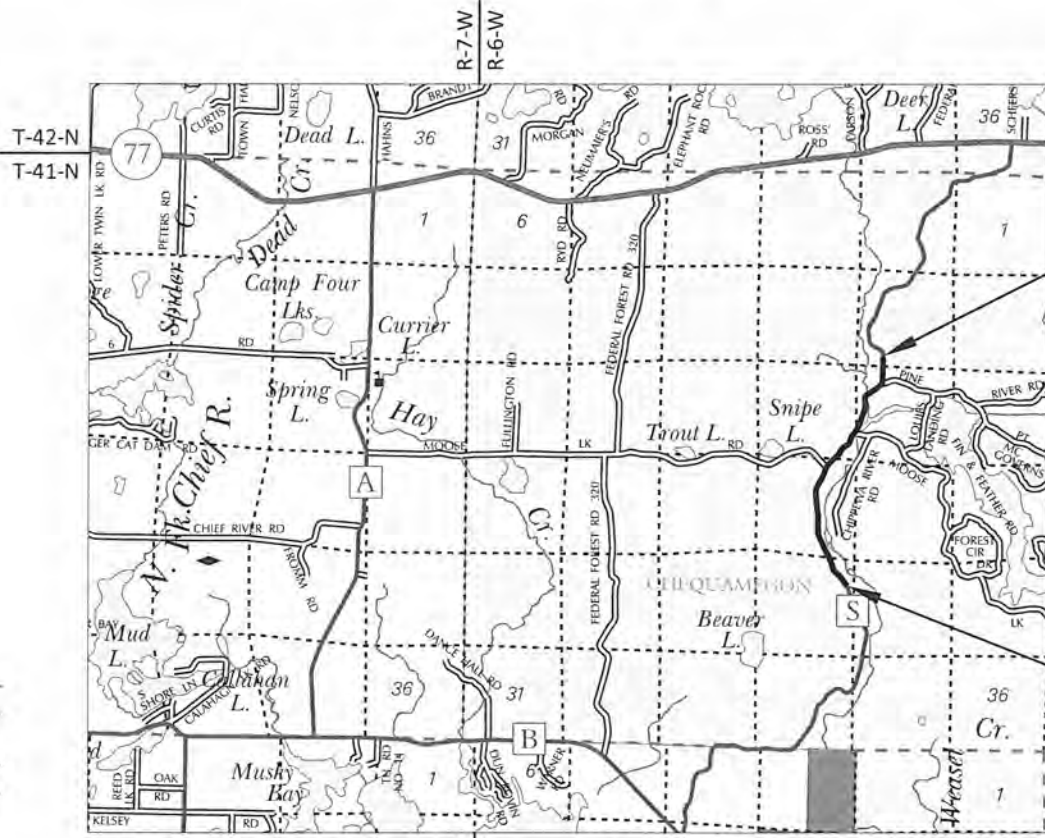
- PLAN
- CORPORATE LIMITS
 - PROPERTY LINE
 - LOT LINE
 - LIMITED HIGHWAY EASEMENT
 - EXISTING RIGHT OF WAY
 - PROPOSED OR NEW R/W LINE
 - SLOPE INTERCEPT
 - REFERENCE LINE
 - EXISTING CULVERT
 - PROPOSED CULVERT (Box or Pipe)
 - COMBUSTIBLE FLUIDS
 - MARSH AREA
 - WOODED OR SHRUB AREA

- PROFILE
- GRADE LINE
 - ORIGINAL GROUND
 - MARSH OR ROCK PROFILE (To be noted as such)
 - SPECIAL DITCH
 - GRADE ELEVATION
 - CULVERT (Profile View)
 - UTILITIES
 - ELECTRIC
 - FIBER OPTIC
 - GAS
 - SANITARY SEWER
 - STORM SEWER
 - TELEPHONE
 - WATER
 - UTILITY PEDESTAL
 - POWER POLE
 - TELEPHONE POLE



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
CTH B - STH 77 (FH 41)
MOOSE LAKE ROAD TO PINE POINT ROAD
CTH S
SAWYER COUNTY

STATE PROJECT NUMBER
8780-00-70



END PROJECT
STA. 243+00

BEGIN PROJECT
STA. 101+50

Y = 434971.94
X = 716905.97

LAYOUT
SCALE 0 1 MI
TOTAL NET LENGTH OF CENTERLINE = 2.680 MI

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), SAWYER COUNTY.

| STATE PROJECT | FEDERAL PROJECT | |
|---------------|-----------------|----------|
| | PROJECT | CONTRACT |
| 8780-00-70 | WISC 2016188 | 1 |
| | | |
| | | |

ORIGINAL PLANS PREPARED BY



DATE: 1/14/16

ACCEPTED FOR

COUNTY of SAWYER

12/15/15
(Date) (County Commissioner)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---------------|--------------------|
| Surveyor | NWBE |
| Designer | NWBE |
| Management | KNIGHT ENGINEERING |
| Consultant | |
| C.O. Examiner | |

APPROVED FOR THE DEPARTMENT
DATE: 2/1/16
(Management Consultant Signature)

E

GENERAL NOTES

COORDINATES ON THIS PLAN ARE REFERENCED TO THE SAWYER COUNTY COORDINATE SYSTEM AND SHALL BE INDICATED BY X AND Y.

ALL RADII DIMENSIONS ON THE PLAN ARE TO THE EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.

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

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AS COMMON EXCAVATION. THE LOCATION OF EBS WILL BE DETERMINED BY THE ENGINEER.

EROSION CONTROL DETAILS AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD

MISCELLANEOUS REMOVAL ITEMS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWCUT WHERE SHOWN ON THE PLANS.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED.

THE LOCATIONS OF DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

THE 3-1/2" ASPHALTIC PAVEMENT SHALL BE PLACED IN TWO LAYERS. THE LOWER LAYER SHALL BE CONSTRUCTED AT A DEPTH OF 1-3/4" (12.5mm AGGREGATE) AND THE UPPER LAYER AT 1-3/4" (12.5mm AGGREGATE).

TACK COAT HAS BEEN ESTIMATED AT AN APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD AND SHALL BE PLACED BETWEEN LAYERS OF ASPHALTIC PAVEMENT.

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

DESIGN CONTACT

GARY T. COLBERT
NORTHERN WISCONSIN BASED ENGINEERS, INC.
P.O. BOX 328
HAYWARD, WI 54843
PHONE: (715) 634-4334
FAX: (715) 634-6434

SAWYER COUNTY CONTACT

GARY GEDART
SAWYER COUNTY HIGHWAY COMMISSIONER
14688W COUNTY ROAD "B"
HAYWARD, WI 54843
PHONE: (715) 634-3789
EMAIL: highway@sawyercountygov.org

WDNR CONTACT

WDNR - NORTHERN REGION
ATTN: SHAWN HASELEU
810 WEST MAPLE STREET
SPOONER, WI 54801
PHONE: (715) 635-4227
EMAIL: shawn.haseleu@wisconsin.gov

LIST OF STANDARD ABBREVIATIONS

| | |
|-------------|-------------------------------|
| ABUT | ABUTMENT |
| AGG | AGGREGATE |
| ASPH | ASPHALTIC |
| AVG | AVERAGE |
| ADT | AVERAGE DAILY TRAFFIC |
| BM | BENCHMARK |
| BR | BRIDGE |
| CL OR C/L | CENTER LINE |
| CE | COMMERCIAL ENTRANCE |
| CONC | CONCRETE |
| CABC | CRUSHED AGGREGATE BASE COURSE |
| CY OR CUYD | CUBIC YARD |
| CULV | CULVERT |
| C & G | CURB AND GUTTER |
| DHV | DESIGN HOURLY VOLUME |
| DWY | DRIVEWAY |
| EL OR ELEV | ELEVATION |
| ESALS | EQUIVALENT SINGLE AXLE LOADS |
| EBS | EXCAVATION BELOW SUBGRADE |
| FF | FACE TO FACE |
| FL OR F/L | FLOW LINE |
| CWT | HUNDREDWEIGHT |
| HYD | HYDRANT |
| IN DIA | INCH DIAMETER |
| LHF | LEFT-HAND FORWARD |
| L | LENGTH OF CURVE |
| LC | LONG CHORD OF CURVE |
| MH | MANHOLE |
| ML OR M/L | MATCHLINE |
| NC | NORMAL CROWN |
| PC | POINT OF CURVATURE |
| PI | POINT OF INTERSECTION |
| PT | POINT OF TANGENCY |
| PVC | POLYVINYL CHLORIDE |
| PCC | PORTLAND CEMENT CONCRETE |
| PSI | POUNDS PER SQUARE INCH |
| PE | PRIVATE ENTRANCE |
| PL | PROPERTY LINE |
| R | RADIUS |
| REINF | REINFORCING OR REINFORCEMENT |
| RHF | RIGHT-HAND FORWARD |
| R/W | RIGHT-OF-WAY |
| SHLDR | SHOULDER |
| SW | SIDEWALK |
| SF OR SQ FT | SQUARE FEET |
| SY OR SQ YD | SQUARE YARD |
| SDD | STANDARD DETAIL DRAWINGS |
| STA | STATION |
| SE | SUPERELEVATION |
| TI | TEMPORARY INTEREST |

WISDOT CONTACT

NW REGION LOCAL PROGRAM MANAGEMENT CONSULTANT
ATTN: RYAN B. MCKANE, P.E.
KNIGHT E/A INC.
700 N THIRD ST., SUITE 104
LA CROSSE, WI 54601
PHONE: (608) 519-1455 EXT #2
FAX: (608) 519-1456
EMAIL: RMCKANE@KNIGHTEA.COM

UTILITIES

CENTURYLINK
ATTN: BRIAN HUHN
P.O. BOX 78
HAWKINS, WI 54530
PHONE: (715) 532-0023
EMAIL: BRIAN.HUHN@CENTURYLINK.COM

JUMP RIVER ELECTRIC
ATTN: SAM HOWARD
13895W COUNTY ROAD "B"
HAYWARD, WI 54843
PHONE: (715) 415-0539
EMAIL: SHOWARD@JREC.NET



Dial 811 or (800)242-8511

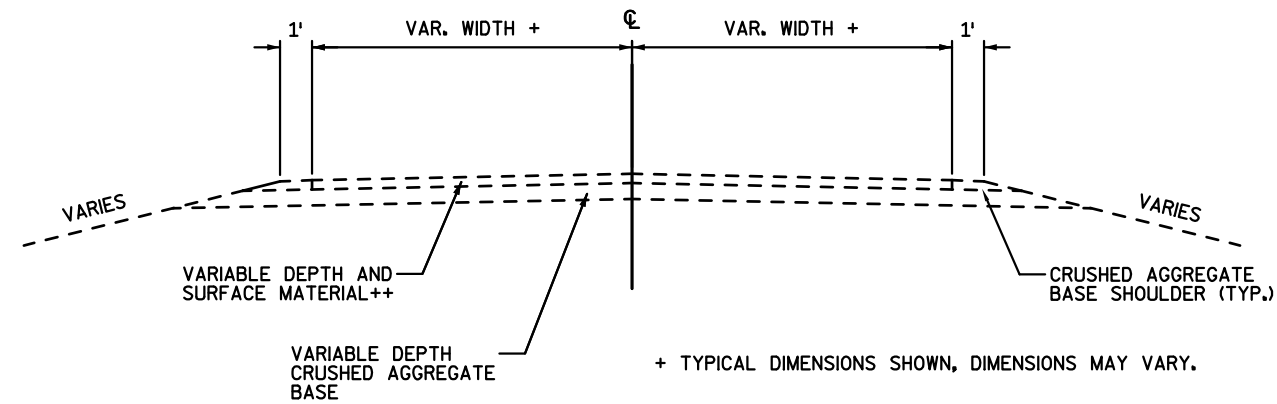
www.DiggersHotline.com

CONTROL POINTS

| PT. NO. | STATION | OFFSET | ELEVATION | Y | X | DESCRIPTION |
|---------|-----------|----------|--------------|--------------|--------------|-------------------------------------|
| CP201 | 100+36.72 | 19.32' | ELE. 1398.90 | Y 434891.671 | X 716988.192 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP202 | 108+90.02 | 19.88' | ELE. 1384.09 | Y 435549.627 | X 716443.734 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP203 | 114+48.12 | 28.43' | ELE. - | Y 436023.323 | X 716195.565 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP241 | 118+78.19 | 15.52' | ELE. - | Y 436418.308 | X 716018.796 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP240 | 124+36.01 | -12.18' | ELE. - | Y 436905.735 | X 715746.140 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP204 | 131+94.02 | -31.93' | ELE. 1375.72 | Y 437586.795 | X 715403.752 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP205 | 139+09.19 | 16.27' | ELE. 1384.36 | Y 438306.027 | X 715395.934 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP239 | 147+62.52 | 13.38' | ELE. - | Y 439157.488 | X 715332.071 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP206 | 150+54.35 | 15.70' | ELE. - | Y 439447.092 | X 715296.052 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP207 | 157+27.75 | -21.95' | ELE. 1375.76 | Y 440117.743 | X 715214.011 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP238 | 165+29.13 | -16.16' | ELE. - | Y 440842.302 | X 715563.477 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP209 | 166+85.79 | 12.90' | ELE. - | Y 440968.434 | X 715660.875 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP237 | 169+79.09 | -20.73' | ELE. - | Y 441253.753 | X 715733.360 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP210 | 172+14.78 | -31.32' | ELE. 1382.69 | Y 441482.835 | X 715814.110 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP236 | 176+48.76 | 20.95' | ELE. - | Y 441765.672 | X 716153.051 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP211 | 178+30.35 | 20.32' | ELE. 1383.43 | Y 441895.116 | X 716280.408 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP235 | 182+14.26 | 15.71' | ELE. - | Y 442195.443 | X 716524.412 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP233 | 185+47.58 | 11.45' | ELE. - | Y 442478.773 | X 716690.175 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP212 | 185+76.36 | 16.28' | ELE. - | Y 442493.556 | X 716714.180 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP215 | 189+46.88 | -11.08' | ELE. 1371.74 | Y 442727.458 | X 716993.467 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP232 | 192+02.69 | 11.15' | ELE. - | Y 442954.25 | X 717105.583 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP216 | 193+90.90 | 17.14' | ELE. - | Y 443123.765 | X 717174.015 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP231 | 196+64.28 | 34.66' | ELE. - | Y 443320.234 | X 717363.739 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP217 | 202+16.74 | 16.97' | ELE. 1361.64 | Y 443823.277 | X 717607.436 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP229 | 203+75.93 | 12.15' | ELE. - | Y 443976.033 | X 717657.306 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP218 | 210+95.74 | 21.55' | ELE. 1358.41 | Y 444661.383 | X 717886.325 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP228 | 213+41.32 | 20.15' | ELE. - | Y 444911.751 | X 717889.792 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP119 | 217+23.59 | -26.47' | ELE. - | Y 445297.774 | X 717835.422 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP221 | 234+33.85 | 18.59' | ELE. - | Y 446577.037 | X 718815.633 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| CP222 | 246+81.21 | 76.73' | ELE. 1394.14 | Y 447850.021 | X 718790.387 | 5/8" REBAR DRIVEN FLUSH WITH GROUND |
| GPS117 | 315+09.79 | -169.82' | ELE. 1420.66 | Y 453015.147 | X 720801.756 | TEAL RIVER GSP MONUMENT |

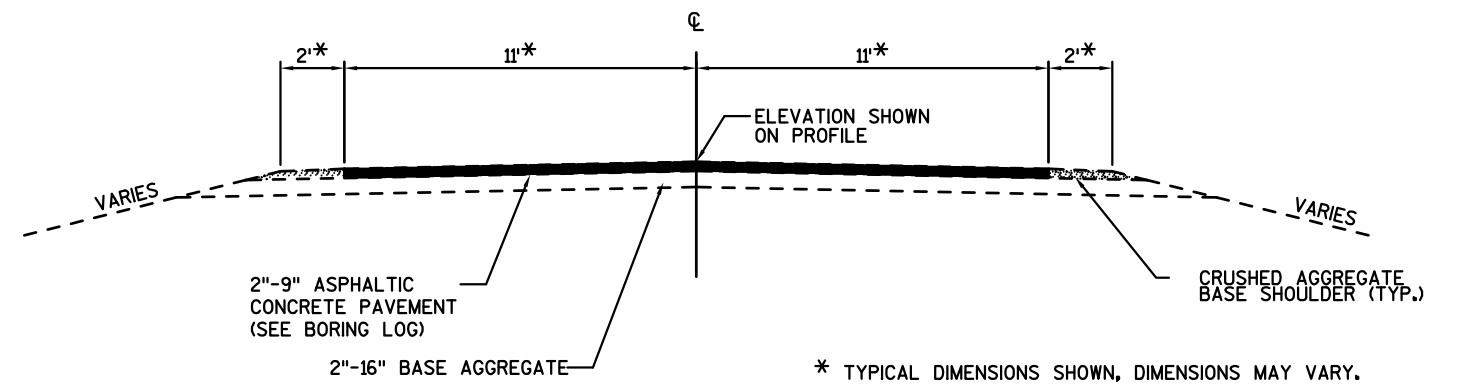
PAVEMENT CORE LOG

| CORE NO. | STATION | OFFSET | ASPHALT DEPTH | REMARKS |
|----------|----------|---------|---------------|--------------------------------------|
| B-1 | 108+02 | 6.6' RT | 2" | |
| B-2 | 140+09.4 | 4.8' LT | 4" | |
| B-3 | 160+27.6 | 8.3' RT | 4" | |
| B-4 | 186+86.8 | 7.1' LT | 9" | LOWER 5" APPEARS TO HAVE BEEN MILLED |
| B-5 | 201+45.9 | 4.9' RT | 3" | |
| B-6 | 225+43.4 | 0.9' LT | 4" | |
| | | | | |



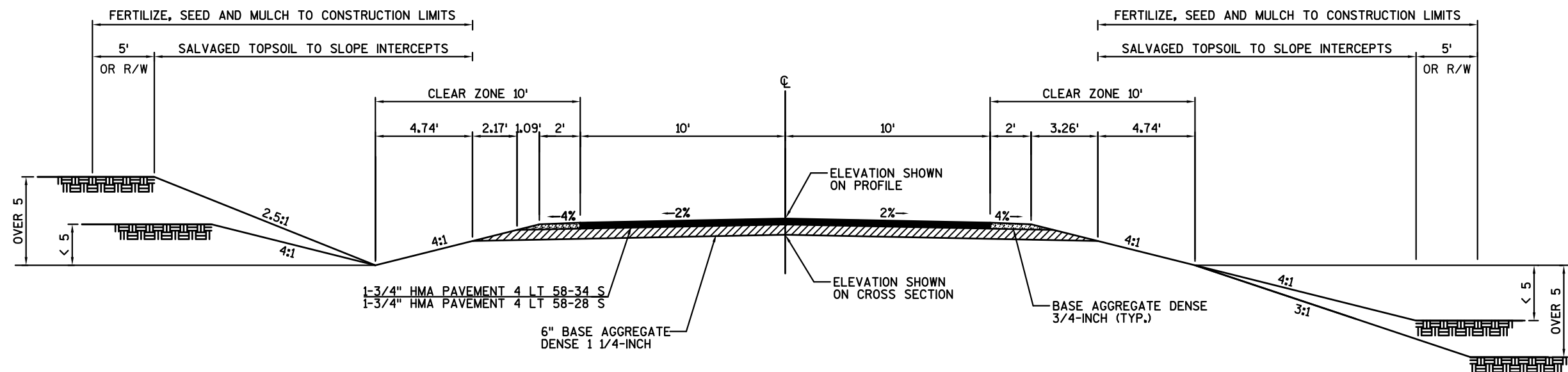
SIDE ROAD EXISTING TYPICAL SECTION

ROADWAY + ++
PINE POINT ROAD 10' ASPHALT



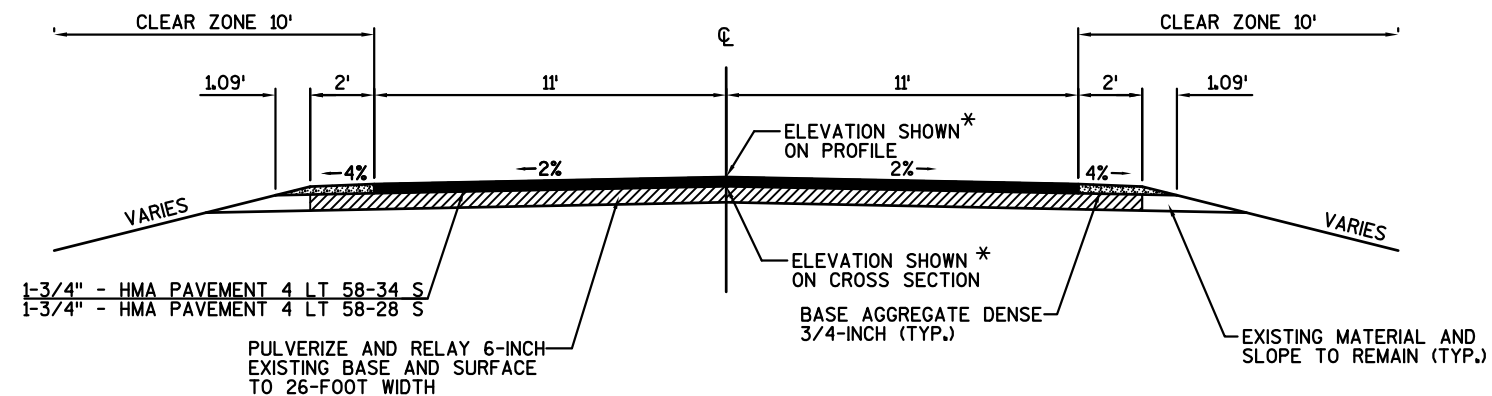
CTH S EXISTING TYPICAL SECTION

STA. 101+50 - 243+00

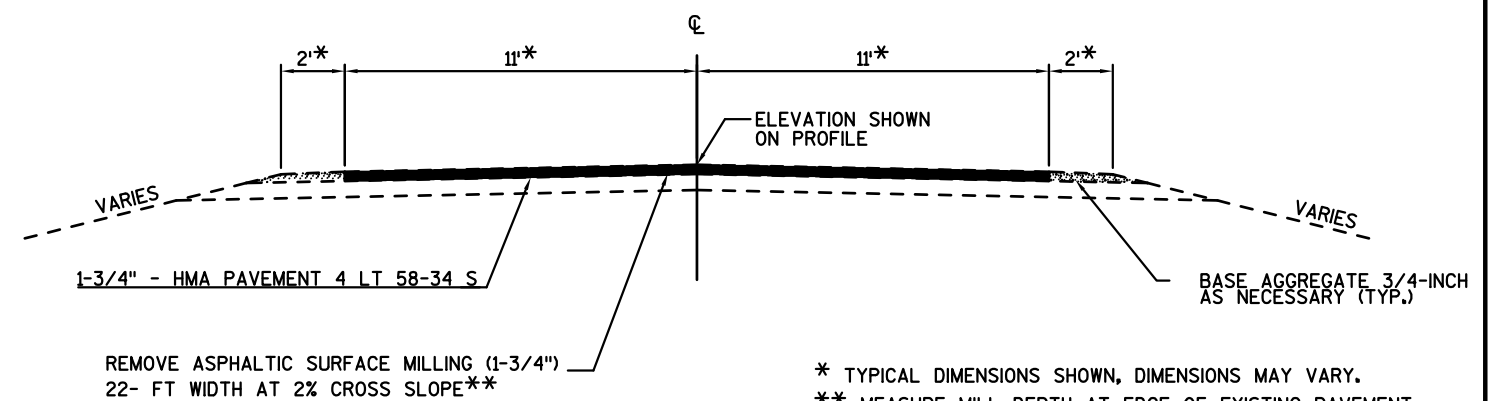
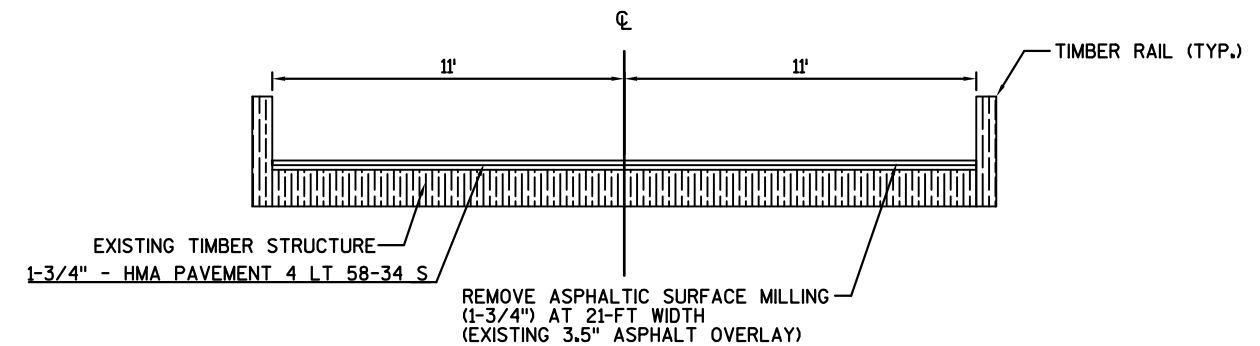


TYPICAL SIDE ROAD FINISHED SECTION

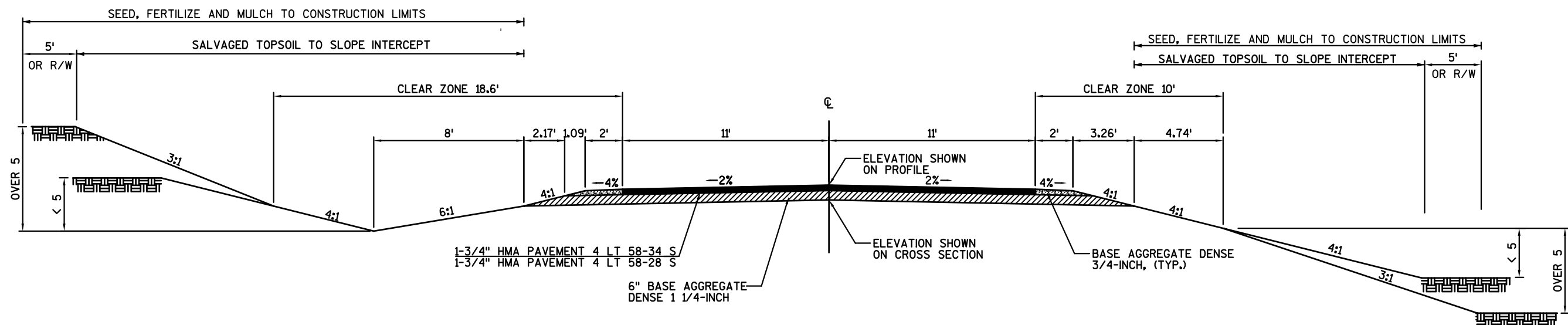
PINE POINT ROAD



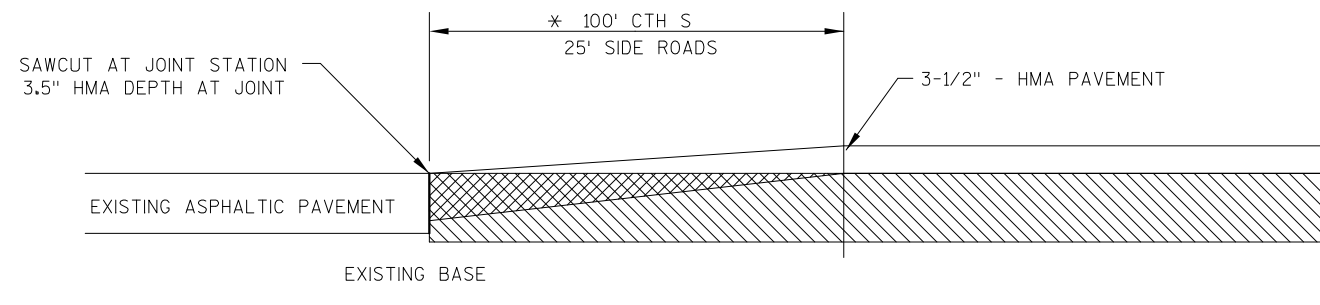
*NOTE: PROFILE CORRECTION AREA
STA 172+00 - 175+00



* TYPICAL DIMENSIONS SHOWN, DIMENSIONS MAY VARY.
** MEASURE MILL DEPTH AT EDGE OF EXISTING PAVEMENT.



NOTE: STA 221+50 - 223+50
EXCAVATE TO LIMITS SHOWN ON CROSS SECTIONS

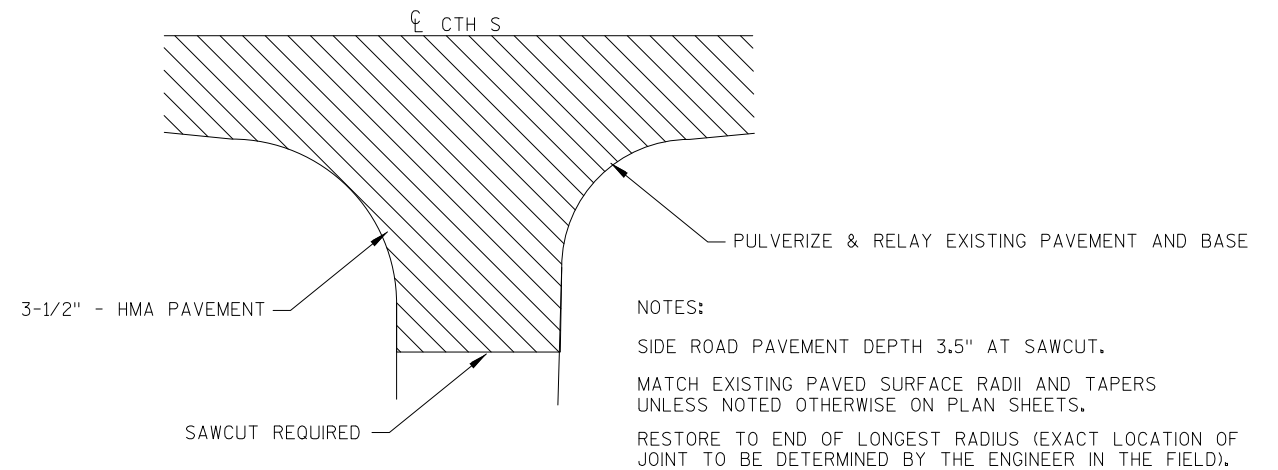


NOTES

- ☒ PULVERIZED AND RELAYED MATERIAL
- ☒ REMOVE PULVERIZED MATERIAL

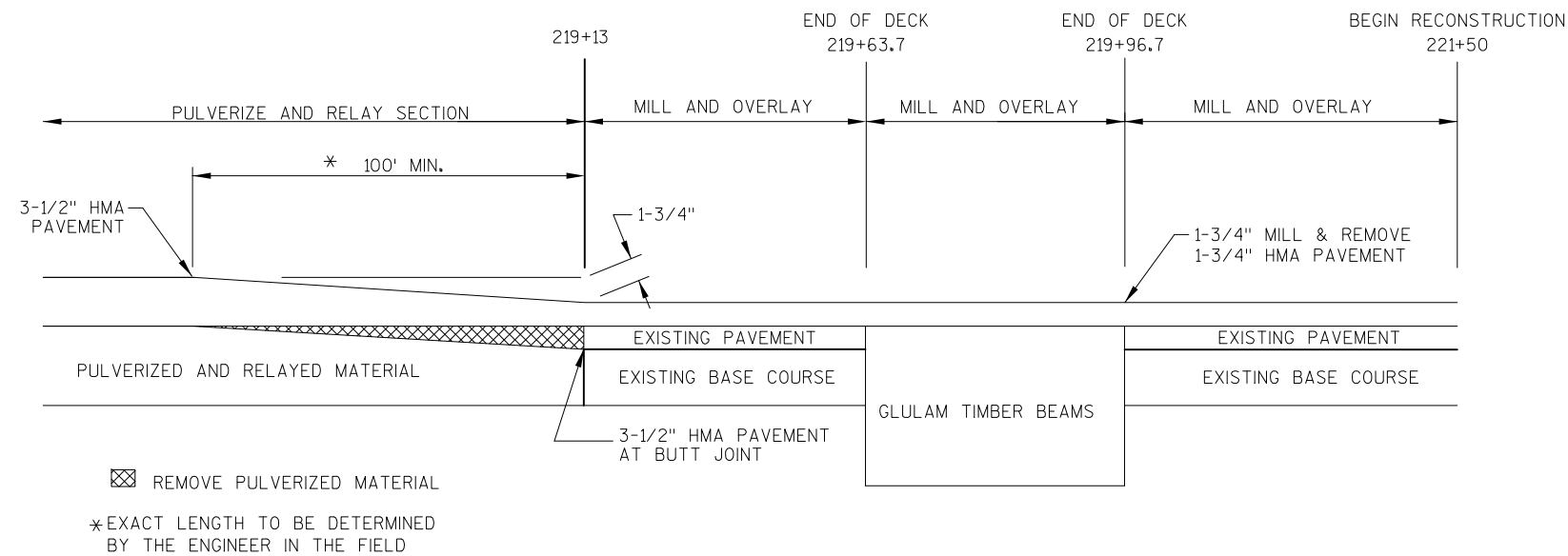
* EXACT LENGTH TO BE DETERMINED
BY THE ENGINEER IN THE FIELD

PULVERIZE AND RELAY JOINT DETAIL



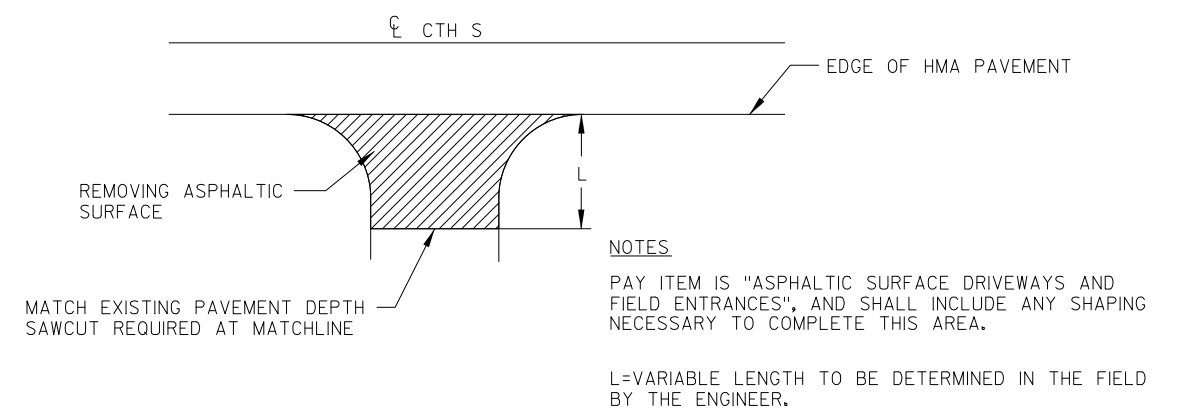
SIDE ROAD PAVING DETAIL

MOOSE LAKE ROAD (WEST JUNCTION)

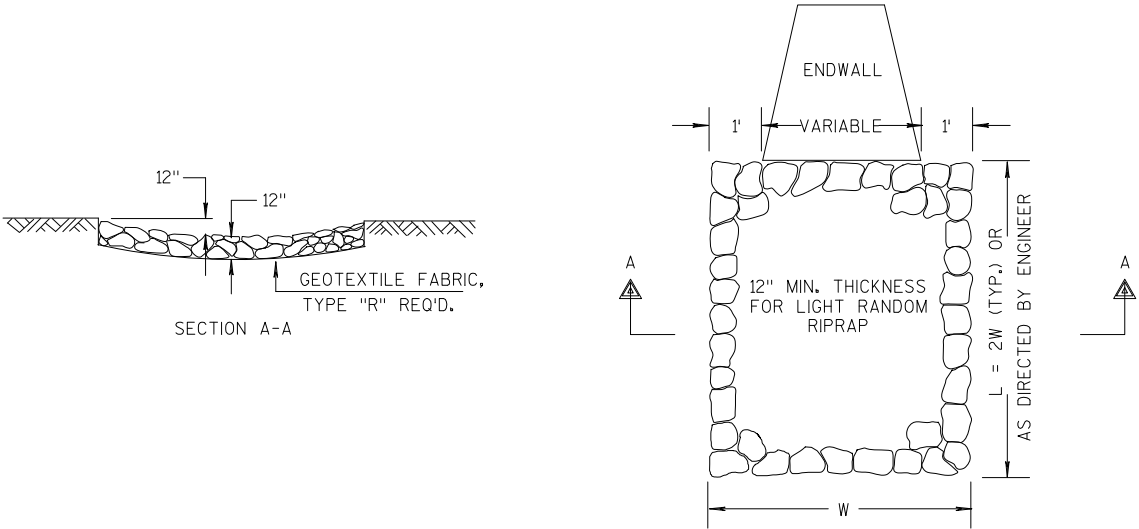


TRANSITION DETAIL AT STRUCTURE

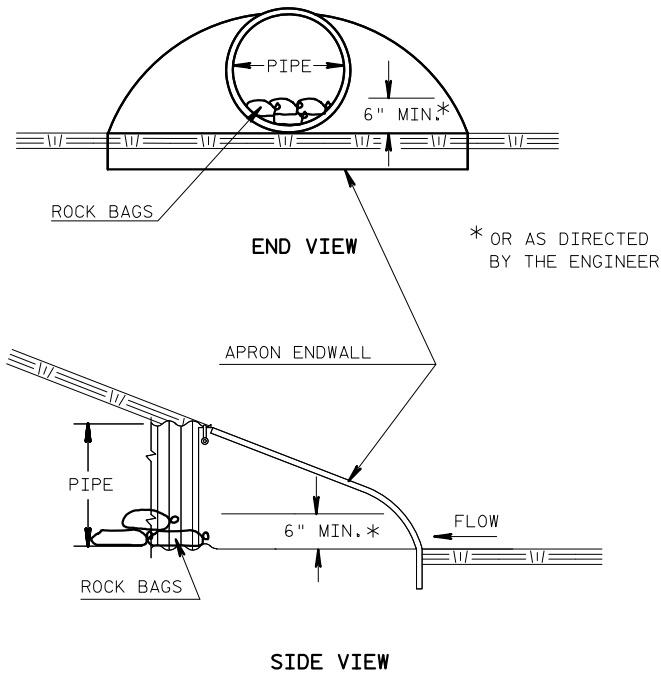
TEAL RIVER BRIDGE



DRIVEWAY PAVING DETAIL



LIGHT RIPRAP TREATMENT AT CULVERTS



CULVERT PIPE CHECKS

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 | | | | | | | | | | | |

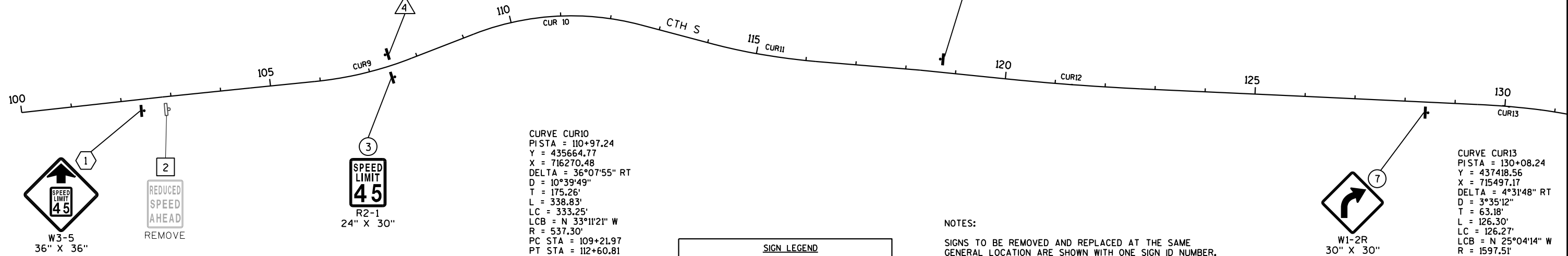
TOTAL PROJECT AREA = 12.9 ACRES (INCLUDING R/W ACQUISITIONS)
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 11.4 ACRES (INCLUDING ROADWAYS)

CURVE CUR9
PISTA = 106+89.63
Y = 435408.90
X = 716589.34
DELTA = 15°27'22" LT
D = 7°44'28"
T = 100.44'
L = 199.66'
LC = 199.06'
LCB = N 43°31'37" W
R = 740.15'
PC STA = 105+89.19
PT STA = 107+88.85

MOVE
END
SPEED
ZONE

CURVE CUR11
PISTA = 115+09.93
Y = 436074.46
X = 716159.76
DELTA = 10°03'27" LT
D = 4°35'18"
T = 109.88'
L = 219.20'
LC = 218.92'
LCB = N 20°09'07" W
R = 1248.73'
PC STA = 114+00.05
PT STA = 116+19.25

CURVE CUR12
PISTA = 121+33.56
Y = 436641.49
X = 715898.86
DELTA = 3°07'27" LT
D = 1°08'45"
T = 136.35'
L = 272.64'
LC = 272.60'
LCB = N 25°46'24" W
R = 5000.00'
PC STA = 119+97.21
PT STA = 122+69.85

**SIGN LEGEND**

- EXISTING SIGN ON WOOD/STEEL POST
- PROPOSED SIGN ON WOOD POST
- SIGN NO. - REMOVE AND REPLACE
- SIGN NO. - REMOVE EXISTING
- SIGN NO. - INSTALL NEW
- SIGN NO. - MOVE SIGN(S) AND POST

NOTES:

SIGNS TO BE REMOVED AND REPLACED AT THE SAME GENERAL LOCATION ARE SHOWN WITH ONE SIGN ID NUMBER.

SIGNS ARE SHOWN AT LOCATIONS DETERMINED BY CURRENT STANDARDS.

CURVE CUR15
PISTA = 133+86.08
Y = 437781.26
X = 715395.86
DELTA = 7°30'41" RT
D = 2°34'44"
T = 145.83'
L = 291.25'
LC = 291.04'
LCB = N 7°14'21" W
R = 2221.63'
PC STA = 132+40.24
PT STA = 135+31.49

REMOVE
SPEED
LIMIT
45

W1-2L
30" X 30"

SPEED
LIMIT
45
R2-1
24" X 30"

CURVE CUR17
PISTA = 143+29.66
Y = 438724.75
X = 715382.14
DELTA = 9°20'48" LT
D = 2°29'28"
T = 188.02'
L = 375.20'
LC = 374.78'
LCB = N 4°13'47" W
R = 2300.00'
PC STA = 141+41.65
PT STA = 145+16.84

13
REDUCED
SPEED
AHEAD
35
M.P.H.
REMOVE

14
W1-2R
30" X 30"

15
W11-2
30" X 30"

17
SPEED
LIMIT
35
REMOVE

18
W3-5
36" X 36"

W1-2L
30" X 30"

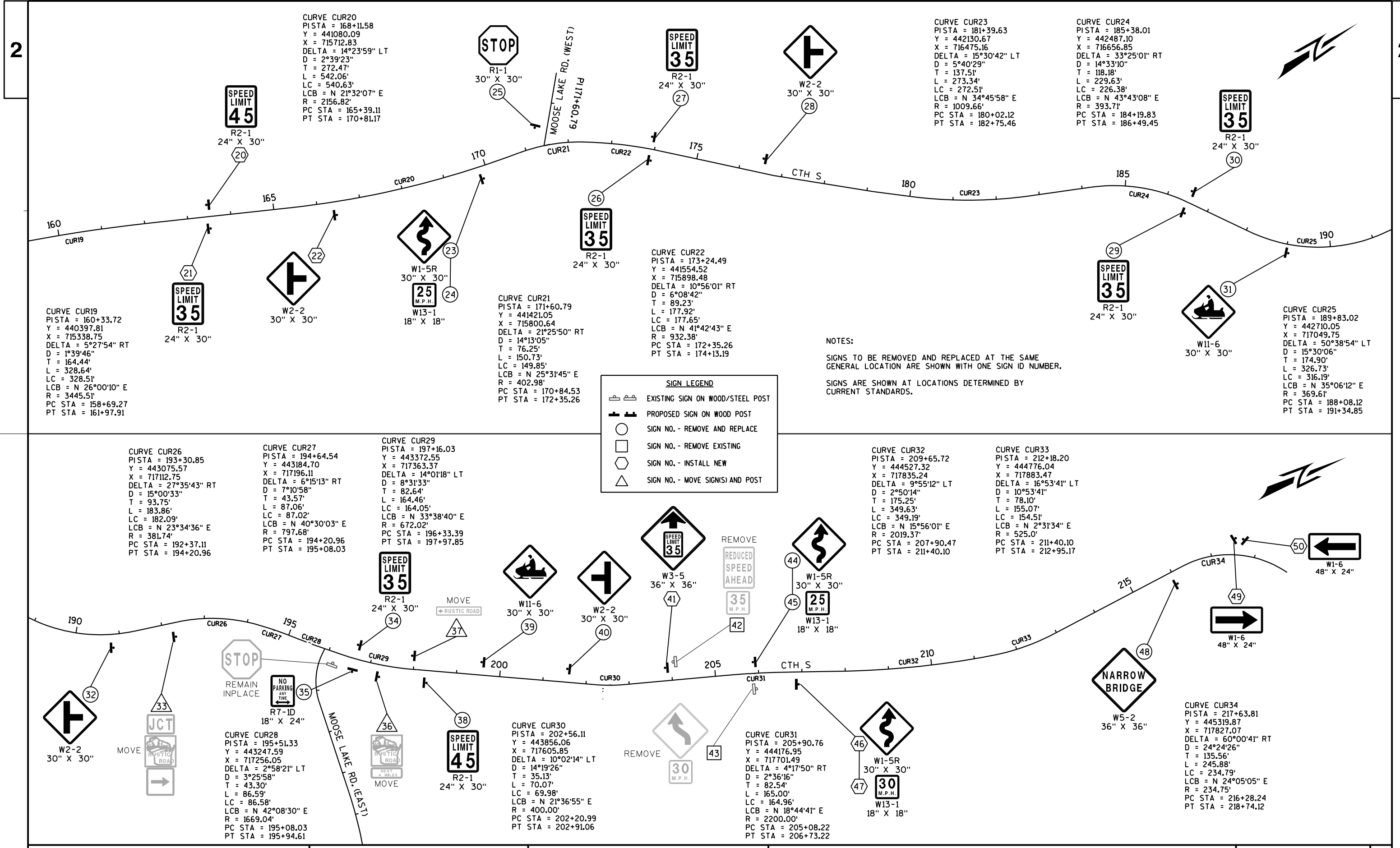
CURVE CUR14
PISTA = 131+56.10
Y = 437554.92
X = 715439.84
DELTA = 11°48'39" RT
D = 6°59'37"
T = 84.74'
L = 168.88'
LC = 168.58'
LCB = N 16°54'01" W
R = 819.27'
PC STA = 130+71.36
PT STA = 132+40.24

8
SPEED
LIMIT
45
REMOVE

CURVE CUR16
PISTA = 136+92.60
Y = 438087.64
X = 715377.21
DELTA = 3°55'38" RT
D = 2°17'31"
T = 85.71'
L = 171.36'
LC = 171.33'
LCB = N 1°31'11" W
R = 2500.00'
PC STA = 136+06.89
PT STA = 137+78.25

11
SPEED
LIMIT
45
R2-1
24" X 30"

CURVE CUR18
PISTA = 156+97.39
Y = 440081.24
X = 715202.61
DELTA = 29°59'30" RT
D = 8°31'10"
T = 180.15'
L = 352.04'
LC = 348.03'
LCB = N 8°16'27" E
R = 672.53'
PC STA = 155+17.23
PT STA = 158+69.27











NOTES:

SIGNS TO BE REMOVED AND REPLACED AT THE SAME GENERAL LOCATION ARE SHOWN WITH ONE SIGN ID NUMBER.

SIGNS ARE SHOWN AT LOCATIONS DETERMINED BY CURRENT STANDARDS.

| <u>SIGN LEGEND</u> | |
|---|----------------------------------|
|  | EXISTING SIGN ON WOOD/STEEL POST |
|  | PROPOSED SIGN ON WOOD POST |
|  | SIGN NO. - REMOVE AND REPLACE |
|  | SIGN NO. - REMOVE EXISTING |
|  | SIGN NO. - INSTALL NEW |
|  | SIGN NO. - MOVE SIGN(S) AND POST |

GENERAL TRAFFIC CONTROL NOTES

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

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

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS, AND DEVICES USED TO DELINEATE A TRAVEL PATH SHALL BE EQUIPPED WITH TYPE "C" (STEADY BURN) LIGHTS.

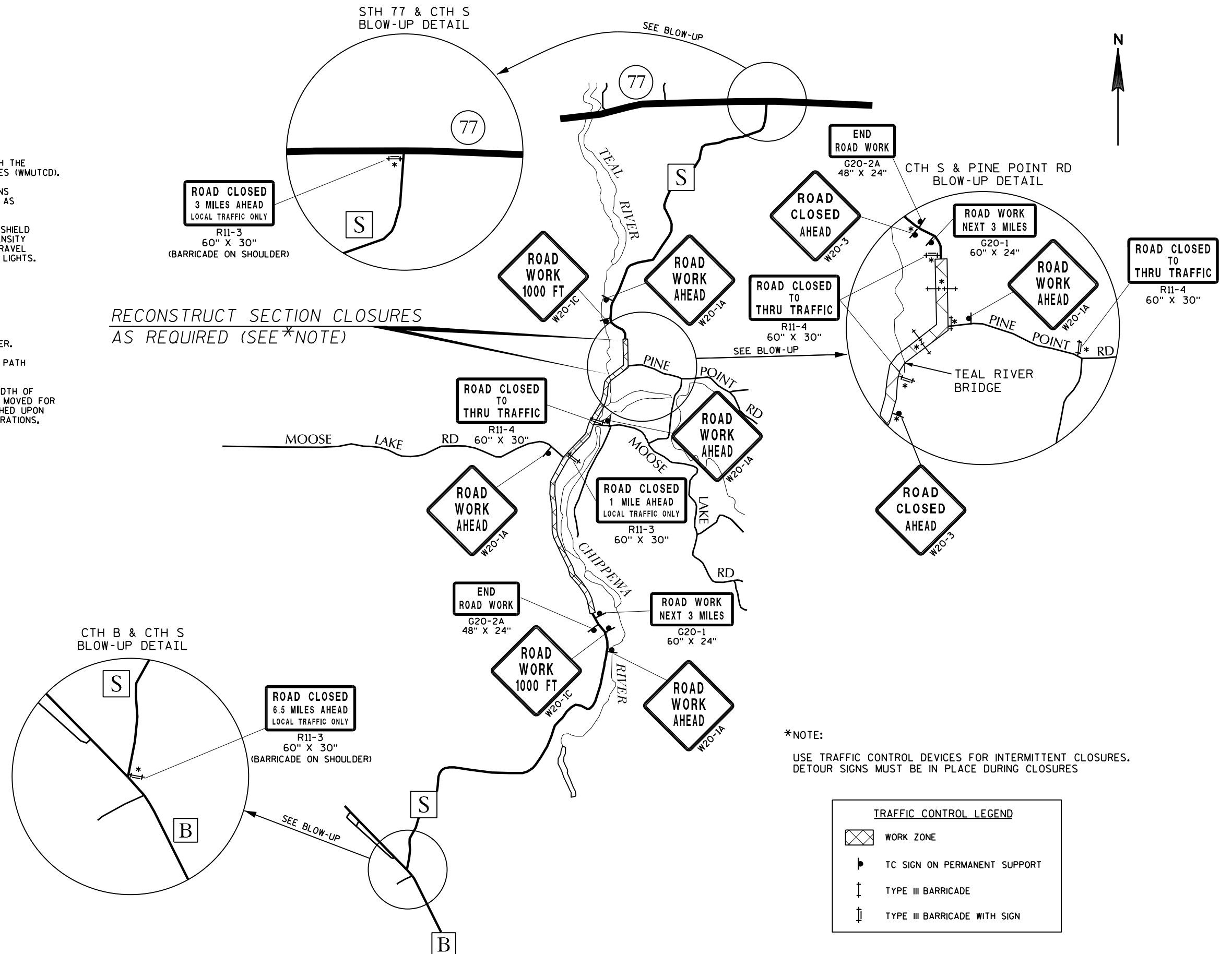
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND SHALL BE ORANGE.

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

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

PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH SHALL BE REMOVED.

ALL TYPE III BARRICADES SHALL HAVE AN EQUIVALENT WIDTH OF 8 FEET. BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.



NOTES:

DRAWING NOT TO SCALE. ALL SIGNS & POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

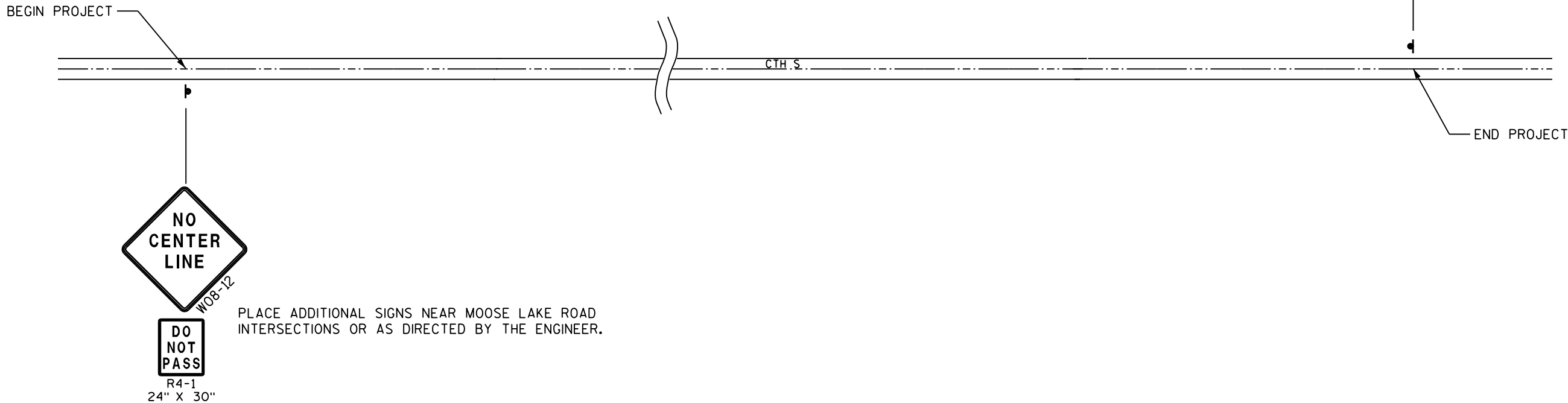
"W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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 SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

REMOVE OR COVER W08-12 AND R4-1 SIGNS IMMEDIATELY FOLLOWING PLACEMENT OF TEMPORARY OR SAME-DAY PAVEMENT MARKINGS.

PLACE ADDITIONAL SIGNS NEAR PINE POINT & MOOSE LAKE ROAD INTERSECTIONS OR AS DIRECTED BY THE ENGINEER.



DETAIL FOR SIGNING ON GRAVEL SURFACES

GENERAL DETOUR NOTES:

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

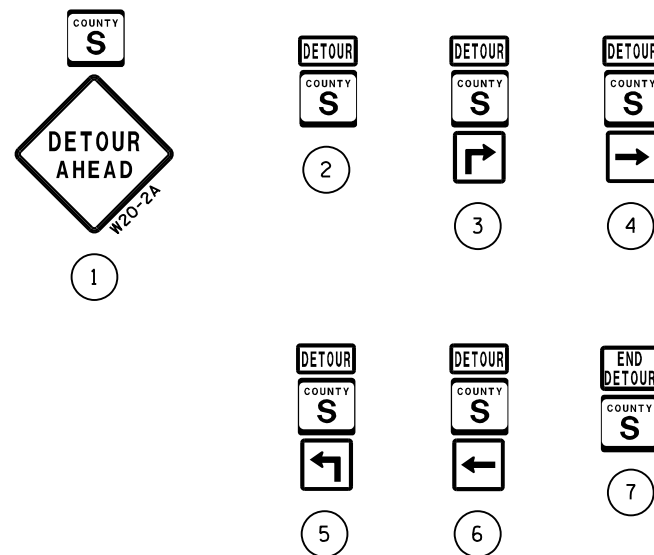
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.

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

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

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

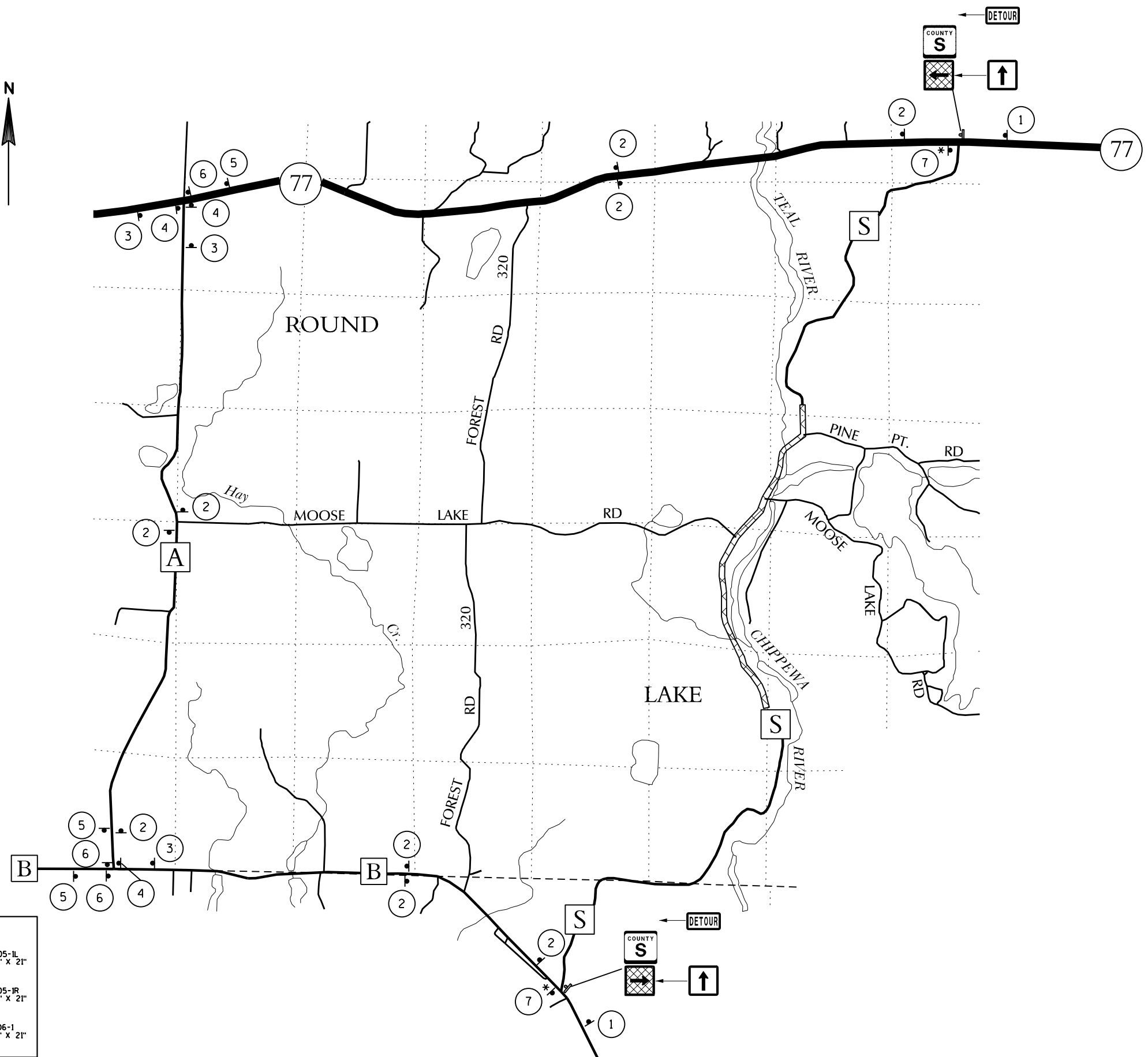
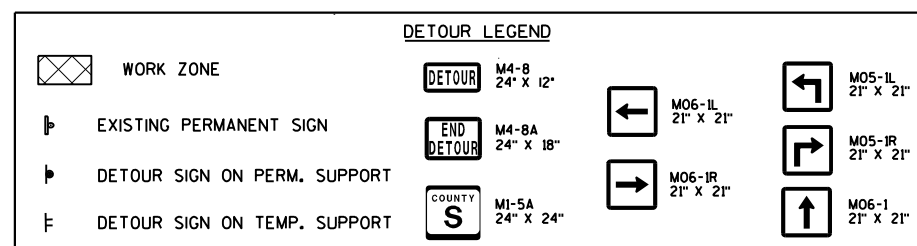


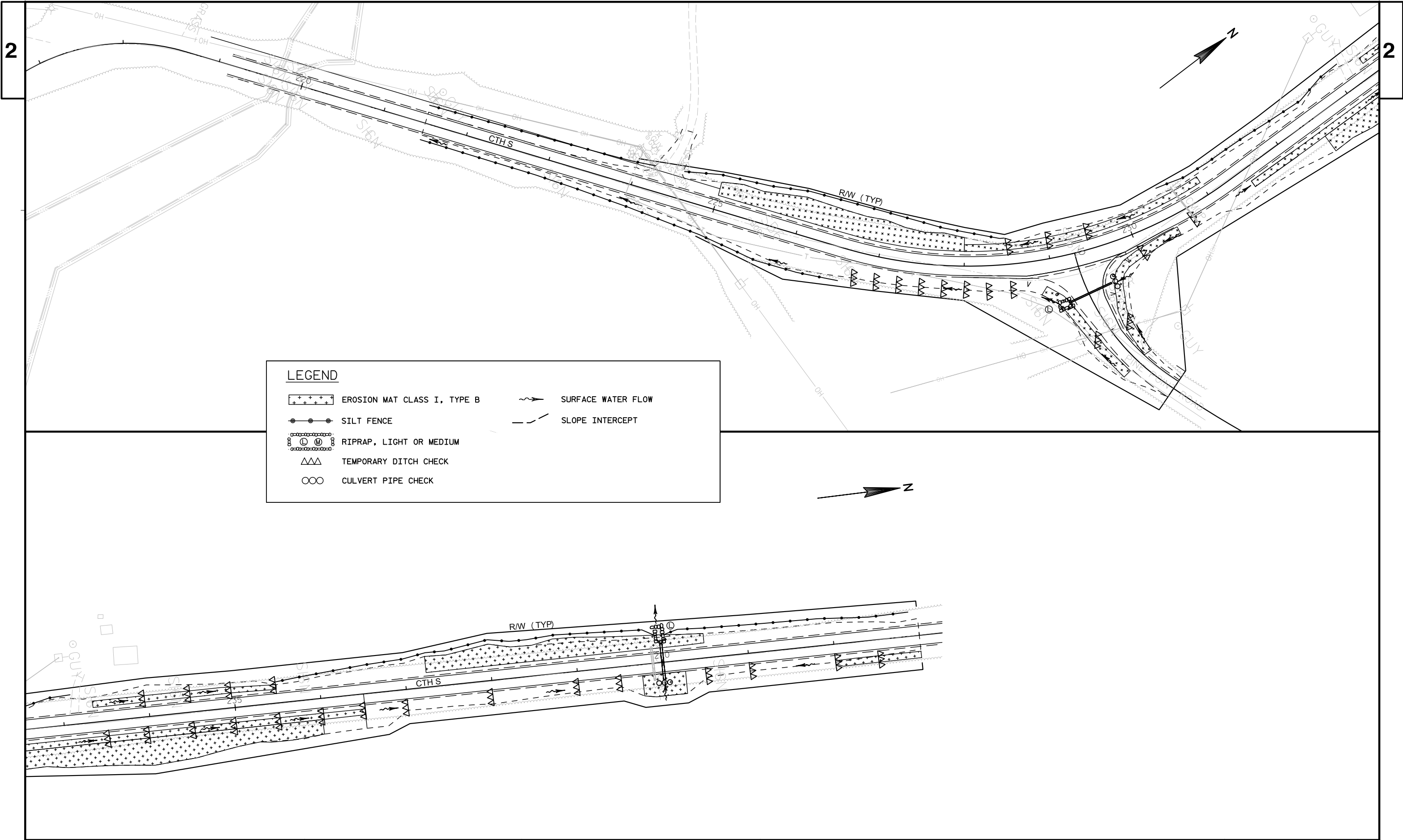
NOTES:

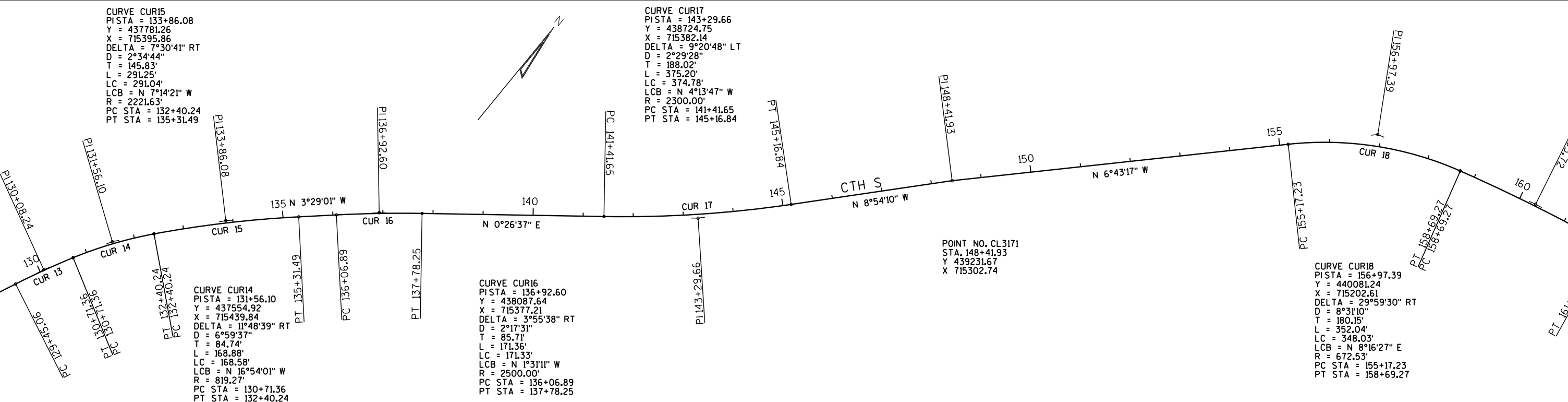
SEE TRAFFIC CONTROL DETAIL SHEET FOR ADDITIONAL CTH S SIGNING.

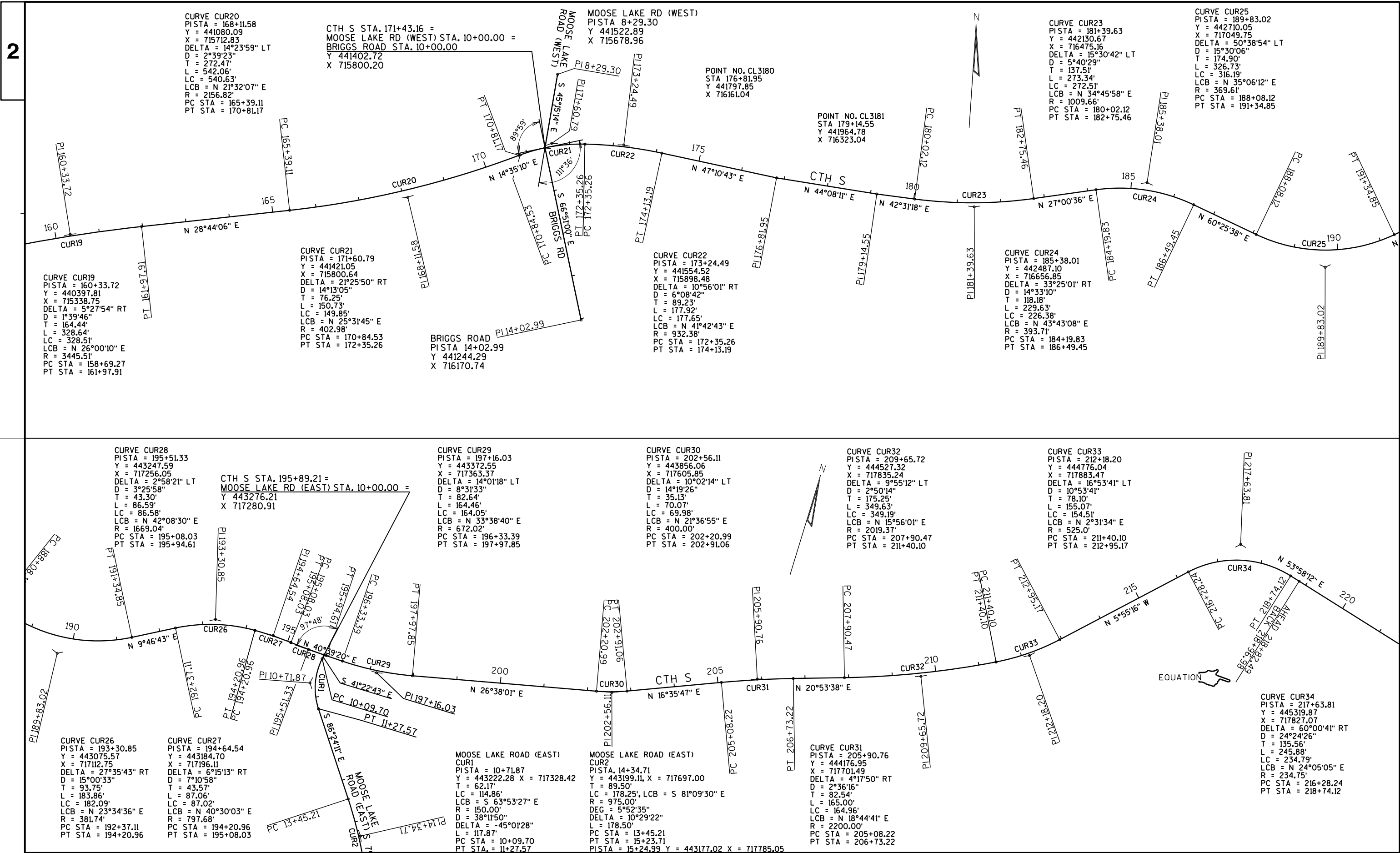
SEE 'BARRICADES AND SIGNS FOR MAINLINE CLOSURES' STANDARD DETAIL DRAWING FOR RECOMMENDED SIGN SPACING DISTANCES.

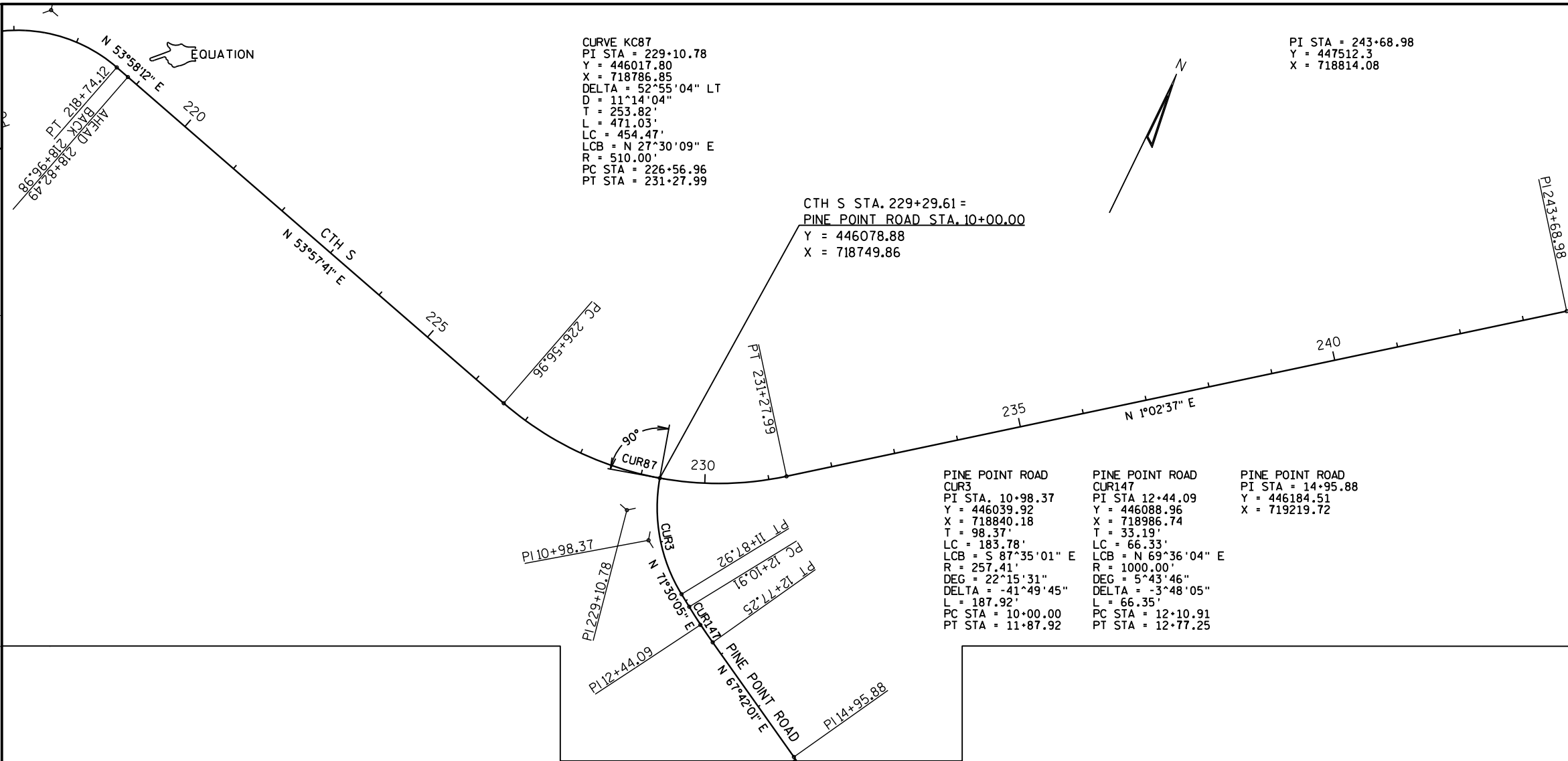
*PLACE 'END DETOUR' ASSEMBLY ADJACENT TO CTH S DIRECTIONAL ASSEMBLY.











SUPERELEVATION TABLE

| | | | |
|--|--------|--------|------------|
| 105+20.86 | -0.020 | -0.020 | End NC |
| 105+61.86 | -0.020 | 0.000 | Zero Super |
| 106+02.86 | -0.020 | 0.020 | Begin FS |
| 107+75.18 | -0.020 | 0.020 | End FS |
| 108+22.34 | -0.000 | 0.000 | Zero Super |
| 108+57.18 | 0.020 | -0.020 | Rev. Crown |
| 109+63.80 | 0.060 | -0.060 | Begin FS |
| 112+18.98 | 0.060 | -0.060 | End FS |
| 113+01.98 | 0.020 | -0.020 | Rev. Crown |
| 113+84.48 | -0.020 | -0.020 | Begin NC |
| CURVE 11 MATCH EXISTING S.E. & TRANSITIONS | | | |
| CURVE 12 MATCH EXISTING S.E. & TRANSITIONS | | | |
| 128+50.78 | -0.020 | -0.020 | End NC |
| 128+92.36 | 0.000 | -0.020 | Zero Super |
| 129+33.93 | 0.020 | -0.020 | Rev. Crown |
| 129+71.42 | 0.038 | -0.038 | Begin FS |
| 130+45.00 | 0.038 | -0.038 | End FS |
| 131+08.32 | 0.053 | -0.053 | Begin FS |
| 132+03.28 | 0.053 | -0.053 | End FS |
| 132+61.43 | 0.031 | -0.031 | Begin FS |
| 135+10.30 | 0.031 | -0.031 | End FS |
| 136+26.23 | 0.028 | -0.028 | Begin FS |
| 137+58.91 | 0.028 | -0.028 | End FS |
| 137+75.48 | 0.020 | -0.020 | Rev. Crown |
| 138+16.91 | 0.000 | -0.020 | Zero Super |
| 138+58.34 | -0.020 | -0.020 | Begin NC |
| CURVE 17 MATCH EXISTING S.E. & TRANSITIONS | | | |
| 153+96.29 | -0.020 | -0.020 | End NC |
| 154+37.67 | 0.000 | -0.020 | Zero Super |
| 154+79.06 | 0.020 | -0.020 | Rev. Crown |
| 155+57.02 | 0.058 | -0.058 | Begin FS |
| 158+29.48 | 0.058 | -0.058 | End FS |
| 158+83.86 | 0.021 | -0.021 | Begin FS |
| 161+83.32 | 0.021 | -0.021 | End FS |
| 161+86.03 | 0.020 | -0.020 | Rev. Crown |
| 162+27.07 | 0.000 | -0.020 | Zero Super |
| 162+68.11 | -0.020 | -0.020 | Begin NC |

| | |
|----------|-----------------------------------|
| CURVE 20 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 21 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 22 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 23 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 24 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 25 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 26 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 27 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 28 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 29 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 30 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 31 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 32 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 33 | MATCH EXISTING S.E. & TRANSITIONS |
| CURVE 34 | MATCH EXISTING S.E. & TRANSITIONS |

| | | | |
|-----------|--------|--------|------------|
| 225+29.96 | -0.020 | -0.020 | End NC |
| 226+14.35 | -0.020 | 0.020 | Rev. Crown |
| 226+99.29 | -0.060 | 0.060 | Begin FS |
| 230+71.17 | -0.060 | 0.060 | End FS |
| 231+55.84 | -0.020 | 0.020 | Rev. Crown |
| 231+98.17 | -0.020 | 0.000 | Zero Super |
| 232+40.50 | -0.020 | -0.020 | Begin NC |
| 242+27.50 | -0.020 | -0.020 | End NC |
| 242+69.83 | -0.020 | 0.000 | Zero Super |
| 243+12.17 | -0.020 | 0.020 | Rev. Crown |
| 243+96.83 | -0.060 | 0.060 | Begin FS |

| DATE 03MAR16 | | E S T I M A T E O F Q U A N T I T I E S | | | |
|--------------|----------|---|------|------------|------------|
| LINE | | | | | 8780-00-70 |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
| 0010 | 201.0105 | Clearing | STA | 20.000 | 20.000 |
| 0020 | 201.0205 | Grubbing | STA | 20.000 | 20.000 |
| 0030 | 203.0100 | Removing Small Pipe Culverts | EACH | 4.000 | 4.000 |
| 0040 | 204.0110 | Removing Asphaltic Surface | SY | 2,666.000 | 2,666.000 |
| 0050 | 204.0115 | Removing Asphaltic Surface Butt Joints | SY | 712.000 | 712.000 |
| 0060 | 204.0120 | Removing Asphaltic Surface Milling | SY | 565.000 | 565.000 |
| 0070 | 205.0100 | Excavation Common | CY | 3,478.000 | 3,478.000 |
| 0080 | 208.1100 | Select Borrow | CY | 4,071.000 | 4,071.000 |
| 0090 | 211.0400 | Prepare Foundation for Asphaltic Shoulders | STA | 2.000 | 2.000 |
| 0100 | 213.0100 | Finishing Roadway (project) 01. 8780-00-70 | EACH | 1.000 | 1.000 |
| 0110 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 1,444.000 | 1,444.000 |
| 0120 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 3,200.000 | 3,200.000 |
| 0130 | 325.0100 | Pulverize and Relay | SY | 34,426.000 | 34,426.000 |
| 0140 | 455.0605 | Tack Coat | GAL | 1,781.000 | 1,781.000 |
| 0150 | 460.2000 | Incentive Density HMA Pavement | DOL | 4,440.000 | 4,440.000 |
| 0160 | 460.5224 | HMA Pavement 4 LT 58-28 S | TON | 3,464.000 | 3,464.000 |
| 0170 | 460.5244 | HMA Pavement 4 LT 58-34 S | TON | 3,464.000 | 3,464.000 |
| 0180 | 465.0120 | Asphaltic Surface Driveways and Field Entrances | TON | 112.000 | 112.000 |
| 0190 | 521.1018 | Apron Endwalls for Culvert Pipe Steel 18-Inch | EACH | 2.000 | 2.000 |
| 0200 | 521.1030 | Apron Endwalls for Culvert Pipe Steel 30-Inch | EACH | 2.000 | 2.000 |
| 0210 | 522.0312 | Culvert Pipe Reinforced Concrete Class IV 12-Inch | LF | 26.000 | 26.000 |
| 0220 | 522.1012 | Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch | EACH | 2.000 | 2.000 |
| 0230 | 530.0118 | Culvert Pipe Corrugated Polyethylene 18-Inch | LF | 54.000 | 54.000 |
| 0240 | 530.0124 | Culvert Pipe Corrugated Polyethylene 24-Inch | LF | 52.000 | 52.000 |
| 0250 | 530.0130 | Culvert Pipe Corrugated Polyethylene 30-Inch | LF | 42.000 | 42.000 |
| 0260 | 606.0100 | Riprap Light | CY | 13.000 | 13.000 |
| 0270 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0280 | 624.0100 | Water | MGAL | 314.000 | 314.000 |
| 0290 | 625.0500 | Salvaged Topsoil | SY | 8,686.000 | 8,686.000 |
| 0300 | 627.0200 | Mulching | SY | 9,293.000 | 9,293.000 |
| 0310 | 628.1104 | Erosion Bales | EACH | 20.000 | 20.000 |
| 0320 | 628.1504 | Silt Fence | LF | 2,820.000 | 2,820.000 |
| 0330 | 628.1520 | Silt Fence Maintenance | LF | 2,820.000 | 2,820.000 |
| 0340 | 628.1905 | Mobilizations Erosion Control | EACH | 3.000 | 3.000 |
| 0350 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 5.000 | 5.000 |
| 0360 | 628.2004 | Erosion Mat Class I Type B | SY | 4,325.000 | 4,325.000 |
| 0370 | 628.7504 | Temporary Ditch Checks | LF | 370.000 | 370.000 |
| 0380 | 628.7555 | Culvert Pipe Checks | EACH | 21.000 | 21.000 |
| 0390 | 628.7560 | Tracking Pads | EACH | 1.000 | 1.000 |
| 0400 | 628.7570 | Rock Bags | EACH | 40.000 | 40.000 |
| 0410 | 629.0210 | Fertilizer Type B | CWT | 11.200 | 11.200 |
| 0420 | 630.0120 | Seeding Mixture No. 20 | LB | 314.000 | 314.000 |
| 0430 | 630.0200 | Seeding Temporary | LB | 197.000 | 197.000 |
| 0440 | 630.0300 | Seeding Borrow Pit | LB | 79.000 | 79.000 |
| 0450 | 633.5100 | Markers Row | EACH | 35.000 | 35.000 |

| DATE 03MAR16 | | E S T I M A T E O F Q U A N T I T I E S | | | |
|--------------|----------|---|------|------------|------------|
| LINE | | | | | 8780-00-70 |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
| 0460 | 633.5200 | Markers Culvert End | EACH | 28.000 | 28.000 |
| 0470 | 634.0614 | Posts Wood 4x6-Inch X 14-FT | EACH | 20.000 | 20.000 |
| 0480 | 634.0616 | Posts Wood 4x6-Inch X 16-FT | EACH | 26.000 | 26.000 |
| 0490 | 637.2210 | Signs Type II Reflective H | SF | 68.360 | 68.360 |
| 0500 | 637.2230 | Signs Type II Reflective F | SF | 222.250 | 222.250 |
| 0510 | 638.2102 | Moving Signs Type II | EACH | 4.000 | 4.000 |
| 0520 | 638.2602 | Removing Signs Type II | EACH | 45.000 | 45.000 |
| 0530 | 638.3000 | Removing Small Sign Supports | EACH | 45.000 | 45.000 |
| 0540 | 638.4000 | Moving Small Sign Supports | EACH | 4.000 | 4.000 |
| 0550 | 642.5201 | Field Office Type C | EACH | 1.000 | 1.000 |
| 0560 | 643.0100 | Traffic Control (project) 01. 8780-00-70 | EACH | 1.000 | 1.000 |
| 0570 | 643.0300 | Traffic Control Drums | DAY | 660.000 | 660.000 |
| 0580 | 643.0420 | Traffic Control Barricades Type III | DAY | 154.000 | 154.000 |
| 0590 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 308.000 | 308.000 |
| 0600 | 643.0900 | Traffic Control Signs | DAY | 1,398.000 | 1,398.000 |
| 0610 | 643.2000 | Traffic Control Detour (project) 01. 8780-00-70 | EACH | 1.000 | 1.000 |
| 0620 | 643.3000 | Traffic Control Detour Signs | DAY | 1,650.000 | 1,650.000 |
| 0630 | 645.0130 | Geotextile Fabric Type R | SY | 44.000 | 44.000 |
| 0640 | 646.0106 | Pavement Marking Epoxy 4-Inch | LF | 56,505.000 | 56,505.000 |
| 0650 | 648.0100 | Locating No-Passing Zones | MI | 2.680 | 2.680 |
| 0660 | 649.0402 | Temporary Pavement Marking Paint 4-Inch | LF | 28,300.000 | 28,300.000 |
| 0670 | 650.4500 | Construction Staking Subgrade | LF | 2,350.000 | 2,350.000 |
| 0680 | 650.5000 | Construction Staking Base | LF | 2,950.000 | 2,950.000 |
| 0690 | 650.6000 | Construction Staking Pipe Culverts | EACH | 4.000 | 4.000 |
| 0700 | 650.8000 | Construction Staking Resurfacing Reference | LF | 12,000.000 | 12,000.000 |
| 0710 | 650.9910 | Construction Staking Supplemental Control (project) 01. 8780-00-70 | LS | 1.000 | 1.000 |
| 0720 | 650.9920 | Construction Staking Slope Stakes | LF | 2,650.000 | 2,650.000 |
| 0730 | 690.0150 | Sawing Asphalt | LF | 368.000 | 368.000 |
| 0740 | ASP.1T0A | On-the-Job Training Apprentice at \$5.00/HR | HRS | 1,200.000 | 1,200.000 |
| 0750 | ASP.1T0G | On-the-Job Training Graduate at \$5.00/HR | HRS | 300.000 | 300.000 |
| 0760 | SPV.0035 | Special 01. Excavating Hauling and Placing Excess Pulverized Material | CY | 100.000 | 100.000 |

CLEARING AND GRUBBING ITEMS

| | | | | 201.0105 | 201.0205 |
|----------------|-----------|---------------|---------|----------|----------|
| | | | | CLEARING | GRUBBING |
| STATION | - STATION | LOCATION | | STA | STA |
| 225+00 | - 243+00 | CTH S | LT & RT | 18 | 18 |
| 10+50 | - 12+00 | PINE POINT RD | LT & RT | 2 | 2 |
| PROJECT TOTALS | | | | 20 | 20 |

REMOVING ASPHALTIC SURFACE

| | | | | 204.0110 |
|---------------|-----------|---------------|--|----------------------------|
| | | | | REMOVING ASPHALTIC SURFACE |
| STATION | - STATION | LOCATION | | SY |
| 223+75 | - 224+25 | CTH S | | 122 |
| 229+00 | - 232+00 | CTH S | | 733 |
| 236+50 | - 237+00 | CTH S | | 122 |
| 239+50 | - 243+00 | CHTS | | 856 |
| 10+50 | - 12+00 | PINE POINT RD | | 333 |
| 165+10 | - - | LT, PE | | 31 |
| 166+26 | - - | LT, PE | | 59 |
| 174+52 | - - | LT, PE | | 54 |
| 182+08 | - - | RT, PE | | 30 |
| 182+53 | - - | LT, PE | | 31 |
| 182+63 | - - | RT, PE | | 31 |
| 184+20 | - - | LT, CE | | 194 |
| 206+73 | - - | LT, PE | | 70 |
| PROJECT TOTAL | | | | 2666 |

FINISHING ROADWAY

| | | | | 213.0100 |
|---------------|-----------|----------|--|-------------------|
| | | | | FINISHING ROADWAY |
| | | | | 01.8780-00-70 |
| STATION | - STATION | LOCATION | | EACH |
| 101+50 | - 243+00 | CTH S | | 1 |
| PROJECT TOTAL | | | | 1 |

REMOVING SMALL PIPE CULVERTS

| | | | 203.0100 |
|---------------|----------|--|------------------------------|
| | | | REMOVING SMALL PIPE CULVERTS |
| STATION | LOCATION | | EACH |
| 159+02 | CTH S | | 1 |
| 173+64 | CTH S | | 1 |
| 230+70 | CTH S | | 1 |
| 239+89 | CTH S | | 1 |
| PROJECT TOTAL | | | 4 |

REMOVING ASPHALTIC SURFACE BUTT JOINTS

| | | | | 204.0115 |
|---------------|-----------|--------------------|--|--|
| | | | | REMOVING ASPHALTIC SURFACE BUTT JOINTS |
| STATION | - STATION | LOCATION | | SY |
| 101+50 | - 102+50 | CTH S | | 289 |
| 218+13 | - 219+13 | CTH S | | 289 |
| - | - - | MOOSE LK RD (WEST) | | 67 |
| - | - - | MOOSE LK RD (EAST) | | 67 |
| PROJECT TOTAL | | | | 712 |

REMOVING ASPHALTIC SURFACE MILLING

| | | | | 204.0120 |
|---------------|-----------|----------|--|------------------------------------|
| | | | | REMOVING ASPHALTIC SURFACE MILLING |
| STATION | - STATION | LOCATION | | SY |
| 219+13 | - 220+47 | CTH S | | 313 |
| 220+47 | - 221+50 | CTH S | | 252 |
| PROJECT TOTAL | | | | 565 |

BASE AGGREGATE DENSE 3/4-INCH

| | | | | 305.0110 |
|---------------|-----------|------------------|--|-------------------------------|
| | | | | BASE AGGREGATE DENSE 3/4-INCH |
| STATION | - STATION | LOCATION | | TON |
| 101+50 | - 243+00 | CTH S, LT&RT | | 1071 |
| - | - - | MOOSE LAKE RD | | 8 |
| 10+11 | - 12+00 | PINE POINT RD | | 15 |
| 10+13 | - 10+80 | PE STA 224+38 LT | | 50 |
| - | - - | ENTRANCES | | 300 |
| PROJECT TOTAL | | | | 1444 |

BASE AGGREGATE DENSE 1 1/4-INCH

| | | | | 305.0120 |
|---------------|-----------|---------------|--|---------------------------------|
| | | | | BASE AGGREGATE DENSE 1 1/4-INCH |
| STATION | - STATION | LOCATION | | TON |
| 221+50 | - 243+00 | CTH S | | 2720 |
| 10+11 | - 12+00 | PINE POINT RD | | 239 |
| - | - - | UNDISTRIBUTED | | 241 |
| PROJECT TOTAL | | | | 3200 |

PULVERIZE AND RELAY

| | | | | 325.0100 |
|---------------|------------|----------------------|--|---------------------|
| | | | | PULVERIZE AND RELAY |
| STATION | - STATION | LOCATION | | SY |
| 101+50.0 | - 218+97.0 | CTH S | | 33936 |
| 218+82.5 | - 219+13.0 | CTH S | | 88 |
| - | - - | MOOSE LAKE RD (WEST) | | 203 |
| - | - - | MOOSE LAKE RD (EAST) | | 199 |
| PROJECT TOTAL | | | | 34426 |

| Division | From/To Station | Location | 205.0100 | | Salvaged / Unusable Pavement Material (4) | Available Material (5) | 205.0500 Marsh Excavation (6) | Reduced Marsh in Fill (8) | Reduced EBS in Fill (9) | Expanded Marsh Backfill (10) | Expanded EBS Backfill (11) | Unexpanded Fill | Expanded Fill (13) | Mass Ordinate +/- (14) | Comment: |
|----------------|-----------------|-----------------|-----------------------|---|--|---------------------------|----------------------------------|------------------------------|----------------------------|---------------------------------|-------------------------------|--------------------|-----------------------|---------------------------|---------------------------|
| | | | Common Excavation (1) | | | | | | | | | | | | |
| CATEGORY 0010 | | | | | | | | | | | | | | | |
| | 173+00 - 174+00 | CTH S | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | Pipe Replacement Ditching |
| | 221+50 - 244+00 | CTH S | 3,318 | 0 | 0 | 3318 | 0 | 0 | 0 | 0 | 0 | 6014 | 7518 | -4200 | |
| | 10+50 - 12+50 | PINE POINT ROAD | 145 | 0 | 0 | 145 | 0 | 0 | 0 | 0 | 0 | 25 | 31 | 114 | |
| PROJECT TOTALS | | | 3478 | 0 | 0 | 3478 | 0 | 0 | 0 | 0 | 0 | 6039 | 7549 | -4071 | |

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

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

3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.

4) Salvaged/Unusable Pavement Material

5) Available Material =Cut - Salvaged/Unusuable Pavement Material

6) Marsh Excavation -to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 205.0500

7) Rock Excavation item number 205.0200

8) Reduced Marsh in Fill - Excavated Marsh material is usable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor =0.6

9) Reduced EBS in Fill - Excavated EBS material is usable in Fills outside the 1:1 slope. EBS in Fill Reduction factor =0.8

10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor =1.5. Item number 208.1100
- 11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor =1.3. Item number 208.1100

12) Expanded Rock - Factor =1.1.

13) Expanded Fill. Factor =1.25

Depending on selections:

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

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

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

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

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

EXCAVATING HAULING AND PLACING EXCESS MATERIAL

| SPV.0035.01 EXCAVATING HAULING AND PLACING EXCESS PULVERIZED MATERIAL | | | | |
|--|---|--------|----------|---|
| STA. | - | STA | LOCATION | COMMENTS |
| 195+00 | - | 198+00 | CTH S | PULVERIZED MATERIAL TO BE USED AS FILL BETWEEN STA. 172+00 - 175+00. |
| PROJECT TOTAL | | | 100 | |

SELECT BORROW

| 208.1100 SELECT BORROW | | |
|------------------------------|----------|----------|
| STATION - | STATION | LOCATION |
| 221+50 | - 244+00 | CTH S |
| PROJECT TOTAL | | 4071 |

3

HMA PAVEMENT ITEMS

| | | | 455.0605 | 460.5224 | 460.5244 | 465.0120 |
|----------------|------------|---------------------------|-----------|------------------------------|------------------------------|---|
| | | | TACK COAT | HMA PAVEMENT 4 LT 58-28 S | HMA PAVEMENT 4 LT 58-34 S | ASPHALTIC SURFACE FOR DRIVEWAYS AND FIELD ENTRANCES |
| STATION | - STATION | LOCATION | GAL | TON | TON | TON |
| 101+50.0 | - 218+97.0 | CTH S | 1436 | 2814 | 2814 | - |
| 218+82.5 | - 219+13.0 | CTH S | 4 | 8 | 8 | - |
| 219+13.0 | - 220+47.0 | CTH S | 16 | 16 | 16 | - |
| 220+47.0 | - 221+50.0 | CTH S | 13 | 13 | 13 | - |
| 221+50.0 | - 243+00.0 | CTH S | 263 | 515 | 515 | - |
| - | - | MOOSE LAKE RD (WEST) | 10 | 20 | 20 | - |
| - | - | MOOSE LAKE RD (EAST) | 10 | 20 | 20 | - |
| 10+11 | - 12+00 | PINE POINT RD | 29 | 58 | 58 | - |
| - | - | MOOSE LAKE RD (E) RT SHLD | - | - | - | 27 |
| - | - | ENTRANCES | - | - | - | 85 |
| PROJECT TOTALS | | | 1781 | 3464 | 3464 | 112 |

CULVERT PIPE CORRUGATED ITEMS

| | | 521.1018 | 521.1030 | 530.0118 | 530.0124 | 530.0130 |
|----------------|---------------|------------------------------------|------------------------------------|--|--|--|
| | | APRON ENDWALLS FOR CULVERT PIPE | APRON ENDWALLS FOR CULVERT PIPE | CULVERT PIPE CORRUGATED POLYETHYLENE | CULVERT PIPE CORRUGATED POLYETHYLENE | CULVERT PIPE CORRUGATED POLYETHYLENE |
| STATION | LOCATION | STEEL 18-INCH EACH | STEEL 30-INCH EACH | 18-INCH LF | 24-INCH LF | 30-INCH LF |
| 159+02 | CTH S | - | - | - | 52 | - |
| 240+00 | CTH S | - | 2 | - | - | 42 |
| 10+50 | PINE POINT RD | 2 | - | 54 | - | - |
| PROJECT TOTALS | | 2 | 2 | 54 | 52 | 42 |

CULVERT PIPE REINFORCED CONCRETE

| | | 522.0312 | 522.1012 |
|----------------|----------|---|--|
| | | CULVERT PIPE REINFORCED CONCRETE CL IV 12-INCH LF | APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH |
| STATION | LOCATION | | |
| 173+50 | CTH S | 26 | 2 |
| PROJECT TOTALS | | 26 | 2 |

RIPRAP ITEMS

| | | 606.0100 | 645.0130 |
|----------------|------------------|-----------------------|-----------------------------------|
| | | RIPRAP LIGHT CY | GEOTEXTILE FABRIC TYPE R SY |
| STATION | LOCATION | | |
| 240+00 | CTH S LT | 9 | 32 |
| 10+50 | PINE POINT RD RT | 4 | 12 |
| PROJECT TOTALS | | 13 | 44 |

LANDSCAPING ITEMS

| | | 625.0500 | 627.0200 | 629.0210 | 630.0120 | 630.0200 | 630.0300 |
|----------------|-----------|---------------------|----------|----------------------|------------------------------|----------------------|--------------------------|
| | | SALVAGED TOPSOIL | MULCHING | FERTILIZER TYPE B | SEEDING MIXTURE NO. 20 | SEEDING TEMPORARY | SEEDING BORROW PIT |
| STATION | - STATION | SY | SY | CWT | LB | LB | LB |
| 158+50 | - 159+50 | 25 | 0 | 0.1 | 1 | 1 | - |
| 172+00 | - 175+00 | 667 | 733 | 0.5 | 20 | 10 | - |
| 221+50 | - 243+00 | 3155 | 2640 | 2.7 | 117 | 59 | - |
| 221+50 | - 243+00 | 3716 | 2885 | 3.1 | 133 | 66 | - |
| 10+50 | - 12+00 | 121 | 204 | 0.1 | 6 | 3 | - |
| 10+50 | - 12+00 | 212 | 296 | 0.2 | 8 | 4 | - |
| | | BORROW SITES | | - | - | 36 | 71 |
| UNDISTRIBUTED | | 790 | 845 | 1.1 | 29 | 18 | 8 |
| PROJECT TOTALS | | 8686 | 9293 | 11.2 | 314 | 197 | 79 |

PREPARE FOUNDATION

| | | 211.0400 |
|------------------------|-----|---|
| | | PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS |
| LOCATION | STA | |
| MOOSE LAKE RD ESHLD RT | 2 | |
| PROJECT TOTAL | | 2 |

MOBILIZATION

| | | 619.1000 |
|---------------|-------------|----------------------|
| | | MOBILIZATION EACH |
| STATION | - STATION | LOCATION |
| 101+50.00 | - 243+00.00 | CTH S |
| PROJECT TOTAL | | 1 |

EROSION MAT

| | | 628.2004 |
|---------------|-----------|-------------------------------|
| | | EROSION MAT CLASS I TYPE B |
| STATION | - STATION | LOCATION |
| 158+00 | - 159+00 | CTH S LT & RT |
| 225+00 | - 228+00 | CTH S LT |
| 228+00 | - 231+00 | CTH S LT |
| 231+50 | - 236+50 | CTH S RT |
| 237+25 | - 240+50 | CTH S LT |
| 239+75 | - 240+25 | CTH S RT |
| 242+00 | - 243+00 | CTH S RT |
| 10+25 | - 11+50 | PINE POINT RD RT |
| 10+25 | - 11+50 | PINE POINT RD LT |
| - | - | UNDISTRIBUTED |
| PROJECT TOTAL | | 4325 |

EROSION BALES

| | | 628.1104 |
|---------------|----------|-----------------------|
| | | EROSION BALES EACH |
| STATION | LOCATION | |
| UNDISTRIBUTED | | 20 |
| PROJECT TOTAL | | 20 |

WATER

| | | 624.0100 |
|---------------|-----------|------------------------|
| | | WATER MGAL |
| STATION | - STATION | COMMENTS |
| 101+50 | - 219+13 | 86 PULVERIZE AND RELAY |
| 221+50 | - 243+00 | 48 BASE COMPACTION |
| 101+50 | - 243+00 | 130 DUST CONTROL |
| 101+50 | - 243+00 | 50 UNDISTRIBUTED |
| PROJECT TOTAL | | 314 |

3

3

SILT FENCE ITEMS

| | | | | 628.1504 | 628.1520 |
|----------------|---------|----------|---------------|------------|------------------------|
| | | | | SILT FENCE | SILT FENCE MAINTENANCE |
| STATION - | STATION | LOCATION | | LF | LF |
| 158+50 - | 159+50 | CTH S | LT & RT | 200 | 200 |
| 173+50 - | 174+50 | CTH S | LT | 100 | 100 |
| 221+50 - | 228+50 | CTH S | LT | 700 | 700 |
| 221+50 - | 226+60 | CTH S | RT | 515 | 515 |
| 230+50 - | 233+10 | CTH S | LT | 260 | 260 |
| 235+50 - | 239+95 | CTH S | LT | 445 | 445 |
| 240+05 - | 243+00 | CTH S | LT | 300 | 300 |
| - | - | - | UNDISTRIBUTED | 300 | 300 |
| PROJECT TOTALS | | | | 2820 | 2820 |

TEMPORARY DITCH CHECKS

| | | | | 628.7504 |
|---------------|---------------|----------|---------|------------------------|
| | | | | TEMPORARY DITCH CHECKS |
| STATION | | LOCATION | | LF |
| 173+25 | | CTH S | LT | 10 |
| 226+75 | | CTH S | RT | 10 |
| 227+00 | | CTH S | RT | 10 |
| 227+25 | | CTH S | RT | 10 |
| 227+50 | | CTH S | RT | 10 |
| 227+75 | | CTH S | RT | 10 |
| 228+00 | | CTH S | RT | 10 |
| 228+25 | | CTH S | RT | 10 |
| 228+50 | | CTH S | LT & RT | 20 |
| 229+00 | | CTH S | LT | 10 |
| 229+50 | | CTH S | LT | 10 |
| 230+00 | | CTH S | RT | 10 |
| 230+75 | | CTH S | RT | 10 |
| 233+50 | | CTH S | RT | 10 |
| 234+00 | | CTH S | LT & RT | 20 |
| 234+50 | | CTH S | LT & RT | 20 |
| 235+00 | | CTH S | LT & RT | 20 |
| 235+50 | | CTH S | LT & RT | 20 |
| 236+00 | | CTH S | RT | 10 |
| 236+50 | | CTH S | RT | 10 |
| 237+00 | | CTH S | RT | 10 |
| 238+00 | | CTH S | RT | 10 |
| 239+00 | | CTH S | RT | 10 |
| 239+50 | | CTH S | RT | 10 |
| 240+50 | | CTH S | RT | 10 |
| 241+00 | | CTH S | RT | 10 |
| 242+00 | | CTH S | RT | 10 |
| 242+50 | | CTH S | RT | 10 |
| 10+75 | PINE POINT RD | LT & RT | | 20 |
| 11+25 | PINE POINT RD | LT & RT | | 20 |
| PROJECT TOTAL | | | | 370 |

EROSION CONTROL MOBILIZATIONS

| | | 628.1905 | 628.1910 |
|----------------|--|--------------|-------------------|
| | | MOBILIZATION | MOBILIZATION |
| | | EROSION | EMERGENCY EROSION |
| | | CONTROL | CONTROL |
| LOCATION | | EACH | EACH |
| CTH S | | 3 | 5 |
| PROJECT TOTALS | | 3 | 5 |

CULVERT PIPE CHECKS

| | | | | 628.7555 |
|---------------|-----------------|----------|----|---------------------|
| | | | | CULVERT PIPE CHECKS |
| STATION | | LOCATION | | EACH |
| 159+02 | | CTH S | RT | 7 |
| 173+50 | | CTH S | RT | 1 |
| 240+00 | | CTH S | RT | 7 |
| 10+50 | PINE POINT ROAD | LT | | 3 |
| - | UNDISTRIBUTED | - | | 3 |
| PROJECT TOTAL | | | | 21 |

TRACKING PADS

| | | 628.7560 |
|---------------|--|---------------|
| | | TRACKING PADS |
| LOCATION | | EACH |
| BORROW PIT | | 1 |
| PROJECT TOTAL | | 1 |

ROCK BAGS

| | | 628.7570 |
|---------------|--|-----------|
| | | ROCK BAGS |
| LOCATION | | EACH |
| UNDISTRIBUTED | | 40 |
| PROJECT TOTAL | | 40 |

MARKERS ROW

| 633.5100 | | | |
|---------------|------------|------|------------|
| MARKERS ROW | | | |
| STATION | OFFSET | EACH | PLAT POINT |
| 224+00.11 | 31.56' LT | 1 | PRW1 |
| 225+00.00 | 45' LT | 1 | PRW2 |
| 226+00.00 | 55' LT | 1 | PRW3 |
| 227+00.00 | 55' LT | 1 | PRW4 |
| 228+00.00 | 45' LT | 1 | PRW5 |
| 228+50.02 | 35' LT | 1 | PRW6 |
| 229+00.00 | 42' LT | 1 | PRW7 |
| 230+00.00 | 37' LT | 1 | PRW8 |
| 231+00.00 | 40' LT | 1 | PRW9 |
| 232+00.00 | 40' LT | 1 | PRW11 |
| 234+00.00 | 45' LT | 1 | PRW12 |
| 235+00.00 | 43' LT | 1 | PRW13 |
| 237+00.00 | 43' LT | 1 | PRW14 |
| 238+00.00 | 55' LT | 1 | PRW15 |
| 239+50.76 | 50' LT | 1 | PRW16 |
| 241+00.00 | 45' LT | 1 | PRW17 |
| 243+00.00 | 40' LT | 1 | PRW18 |
| 243+00.00 | 33.88' LT | 1 | PRW19 |
| 243+00.00 | 32.12' RT | 1 | PRW51 |
| 243+00.00 | 40' RT | 1 | PRW52 |
| 240+50.00 | 40' RT | 1 | PRW53 |
| 240+25.00 | 50' RT | 1 | PRW54 |
| 239+75.00 | 50' RT | 1 | PRW55 |
| 239+50.53 | 40' RT | 1 | PRW56 |
| 237+00.00 | 40' RT | 1 | PRW57 |
| 236+75.00 | 50' RT | 1 | PRW58 |
| 234+00.00 | 67' RT | 1 | PRW59 |
| 230+35.00 | 45' RT | 1 | PRW61 |
| 229+99.01 | 170.28' RT | 1 | PRW62 |
| 229+69.21 | 199.48' RT | 1 | PRW63 |
| 229+66.37 | 202.52' RT | 1 | PRW64 |
| 228+00.00 | 40' RT | 1 | PRW65 |
| 227+00.00 | 40' RT | 1 | PRW66 |
| 226+00.00 | 55' RT | 1 | PRW67 |
| 224+88.93 | 36.01' RT | 1 | PRW68 |
| PROJECT TOTAL | | 35 | |

TRAFFIC CONTROL

| | | | |
|---------------|---------|----------|-----------------|
| | | | 643.0100 |
| | | | TRAFFIC CONTROL |
| | | | 01.8780-00-70 |
| STATION - | STATION | LOCATION | EACH |
| 101+50 - | 243+00 | CTH S | 1 |
| PROJECT TOTAL | | | 1 |

MARKERS CULVERT END

| | | 633.5200 |
|---------------|---------------|---------------------|
| | | MARKERS CULVERT END |
| STATION | LOCATION | EACH |
| 116+23 | CTH S | 2 |
| 124+21 | CTH S | 2 |
| 126+31 | CTH S | 2 |
| 143+75 | CTH S | 2 |
| 154+24 | CTH S | 2 |
| 157+08 | CTH S | 2 |
| 159+02 | CTH S | 2 |
| 159+42 | CTH S | 2 |
| 173+64 | CTH S | 2 |
| 190+33 | CTH S | 2 |
| 195+53 | CTH S | 2 |
| 210+99 | CTH S | 2 |
| 240+00 | CTH S | 2 |
| 10+50 | PINE POINT RD | 2 |
| PROJECT TOTAL | | 28 |

FIELD OFFICE TYPE C

| | | 642.5201 |
|---------------|--|---------------------|
| | | FIELD OFFICE TYPE C |
| LOCATION | | EACH |
| PROJECT | | 1 |
| PROJECT TOTAL | | 1 |

TRAFFIC CONTROL DETOUR

| | | | |
|---------------|---------|----------|------------------------|
| | | | 643.2000 |
| | | | TRAFFIC CONTROL DETOUR |
| | | | 01.8780-00-70 |
| STATION - | STATION | LOCATION | EACH |
| 224+00 - | 243+00 | CTH S | 1 |
| PROJECT TOTAL | | | 1 |

3

3

TRAFFIC CONTROL DEVICES

| LOCATION | (EST. DAYS) | 643.0300 | | 643.0420 | | 643.0705 | | 643.0900 | | SIGN CODE |
|---------------------------------|-------------|-----------------|-----|-----------------|-----|-----------------|-----|-----------------|------|---------------|
| | | TRAFFIC CONTROL | | TRAFFIC CONTROL | | TRAFFIC CONTROL | | TRAFFIC CONTROL | | |
| | | DRUMS | | BARRICADES | | WARNING LIGHTS | | SIGNS | | |
| | | (COUNT) | DAY | (COUNT) | DAY | (COUNT) | DAY | (COUNT) | DAY | |
| CTH S ADVANCE SIGNS | 62 | --- | --- | --- | --- | --- | --- | 6 | 372 | W20-1 & G20-1 |
| SIDE ROAD ADVANCE SIGNS | 62 | --- | --- | --- | --- | --- | --- | 3 | 186 | W20-1 |
| CTH S 'END ROAD WORK' SIGNS | 62 | --- | --- | --- | --- | --- | --- | 2 | 124 | G20-2A |
| CTH S NB GRAVEL SURFACE SIGNS | 37 | --- | --- | --- | --- | --- | --- | 6 | 222 | W08-12 & R4-1 |
| CTH S SB GRAVEL SURFACE SIGNS | 37 | --- | --- | --- | --- | --- | --- | 8 | 296 | W08-12 & R4-1 |
| CTH S TERMINI CLOSURES | 22 | --- | --- | 2 | 44 | 4 | 88 | 2 | 44 | R11-3 |
| PINE POINT TERMINI CLOSURE | 22 | --- | --- | 1 | 22 | 2 | 44 | 1 | 22 | R11-4 |
| CTH S RECONSTRUCT CLOSURE | 22 | --- | --- | 4 | 88 | 8 | 176 | 6 | 132 | R11-4 & W20-2 |
| MOOSE LAKE RD EAST INTERSECTION | 10 | 10 | 100 | --- | --- | --- | --- | --- | --- | |
| PINE POINT RD INTERSECTION | 28 | 20 | 560 | --- | --- | --- | --- | --- | --- | |
| PROJECT TOTALS | | | 660 | | 154 | | 308 | | 1398 | |

PAVEMENT MARKING EPOXY 4-INCH

| | | 646.0106 | | |
|-------------------|------------------------|--------------|-------------------|--|
| | | PAVEMENT | | |
| | | MARKING | | |
| | | EPOXY 4-INCH | | |
| STATION - STATION | LOCATION | LF | TYPE | |
| 101+50 - 243+00 | CTH S | 28320 | YELLOW CENTERLINE | |
| 101+50 - 243+00 | CTH S | 28000 | WHITE EDGELINE | |
| - - - | MOOSE LAKE RD (E) SHLD | 185 | WHITE EDGELINE | |
| PROJECT TOTAL | | 56505 | | |

CONSTRUCTION STAKING PIPE CULVERTS

| | | | 650.6000 | |
|---------------|---------------|--|----------------------|--|
| | | | CONSTRUCTION STAKING | |
| | | | PIPE CUVLERTS | |
| STATION | LOCATION | | EACH | |
| 159+02 | CTH S | | 1 | |
| 173+64 | CTH S | | 1 | |
| 240+00 | CTH S | | 1 | |
| 10+50 | PINE POINT RD | | 1 | |
| PROJECT TOTAL | | | 4 | |

TRAFFIC CONTROL DETOUR SIGNS

| | | | | 643.3000 | |
|---------------|-------------|---------|------|-----------------|--|
| | | | | TRAFFIC CONTROL | |
| | | | | DETOUR | |
| | | | | SIGNS | |
| LOCATION | (EST. DAYS) | (COUNT) | DAY | | |
| CTH B SIGNS | 25 | 24 | 600 | | |
| STH 77 SIGNS | 25 | 24 | 600 | | |
| CTH A SIGNS | 25 | 18 | 450 | | |
| PROJECT TOTAL | | | 1650 | | |

LOCATING NO-PASSING ZONES

| | | 648.0100 | |
|-------------------|----------|---------------|--|
| | | LOCATING NO- | |
| | | PASSING ZONES | |
| STATION - STATION | LOCATION | MI | |
| 101+50 - 243+00 | CTH S | 2.680 | |
| PROJECT TOTAL | | 2.680 | |

SAWING ASPHALT

| | | 690.0150 | |
|---------------|-------------------------------|----------|--|
| | | SAWING | |
| | | ASPHALT | |
| STATION | LOCATION | LF | |
| 101+50 | CTH S BOP | 20 | |
| 165+10 | LT, PE | 12 | |
| 166+26 | LT, PE | 20 | |
| 171+50 | LT, MOOSE LK RD (W) MATCHLINE | 32 | |
| 174+52 | LT, PE | 14 | |
| 182+08 | RT, PE | 12 | |
| 182+53 | LT, PE | 12 | |
| 182+63 | RT, PE | 10 | |
| 184+20 | LT,CE | 50 | |
| 195+90 | RT, MOOSE LK RD (E) MATCHLINE | 130 | |
| 206+73 | LT, PE | 16 | |
| 12+00 | PINE POINT RD, MATCHLINE | 20 | |
| 243+00 | CTH S EOP | 20 | |
| PROJECT TOTAL | | 368 | |

TEMPORARY PAVEMENT MARKING PAINT

| | | | | 649.0402 | |
|-------------------|----------|-------|-------------------|----------------------|--|
| | | | | TEMPORARY PAVEMENT | |
| | | | | MARKING PAINT 4-INCH | |
| STATION - STATION | LOCATION | LF | TYPE | | |
| 101+50 - 243+00 | CTH S | 28300 | YELLOW CENTERLINE | | |
| PROJECT TOTAL | | 28300 | | | |

CONSTRUCTION STAKING ROADWAY

| | | 650.4500 | | 650.5000 | | 650.8000 | | 650.9920 | |
|-------------------|---------------|------------------|--|--------------|--|-----------------------|--|----------------------|--|
| | | CONSTRUCTION | | CONSTRUCTION | | CONSTRUCTION STAKING | | CONSTRUCTION | |
| | | STAKING SUBGRADE | | STAKING BASE | | RESURFACING REFERENCE | | STAKING SLOPE STAKES | |
| STATION - STATION | LOCATION | LF | | LF | | LF | | LF | |
| 172+00 - 175+00 | CTH S | - | | 300 | | - | | 300 | |
| 195+00 - 198+00 | CTH S | - | | 300 | | - | | - | |
| 221+50 - 243+00 | CTH S | 2150 | | 2150 | | - | | 2150 | |
| 101+50 - 221+50 | CTH S | - | | - | | 12000 | | - | |
| 10+00 - 12+00 | PINE POINT RD | 200 | | 200 | | - | | 200 | |
| PROJECT TOTALS | | 2350 | | 2950 | | 12000 | | 2650 | |

3

PERMANENT SIGNING ITEMS

| | | | | | 637.2210 | 637.2230 | 634.0614 | 634.0616 | 638.2102 | 638.2602 | 638.3000 | 638.4000 | | |
|------------|--------------|----------|-------|------------------------------------|-----------|--------------|--------------|------------|----------|----------|----------|------------|------------|--|
| | | | | | SIGNS | SIGNS | POSTS WOOD | POSTS WOOD | MOVING | REMOVING | REMOVING | MOVING | | |
| CTH S | SIGN STATION | LOCATION | SIGN | | SIGN SIZE | TYPE II | TYPE II | 4X6-INCH | 4X6-INCH | SIGNS | SIGNS | SMALL SIGN | SMALL SIGN | |
| SIGN NO. | (APPROX) | | CODE | SIGN MESSAGE | W X H | REFLECTIVE H | REFLECTIVE F | X 14-FT | X 16-FT | TYPE II | TYPE II | SUPPORTS | SUPPORTS | |
| | | | | | (INCHES) | SF | SF | EACH | EACH | EACH | EACH | EACH | EACH | COMMENT |
| CAT. 0010 | | | | | | | | | | | | | | |
| 1 | 102+45 | RT | W3-5 | Reduced Speed Ahead 45 | 36 X 36 | --- | 9.00 | --- | 1 | --- | --- | --- | --- | |
| 2 | 102+90 | RT | --- | Reduced Speed Ahead | --- | --- | --- | --- | --- | --- | 1 | 1 | --- | |
| 3 | 107+45 | RT | R2-1 | SPEED LIMIT 45 | 24 X 30 | 5.00 | --- | 1 | --- | --- | 1 | 1 | --- | |
| 4 | 107+45 | LT | --- | END SPEED ZONE | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | Move sign & post back to same location |
| 5 | 118+67 | LT | W1-5R | Right Winding Road | 30 x 30 | --- | 6.25 | --- | 1 | --- | --- | --- | --- | |
| 6 | | | W13-1 | 30 M.P.H. | 18 X 18 | --- | 2.25 | --- | --- | --- | 1 | 1 | --- | |
| 7 | 128+47 | RT | W1-2R | Right Curve | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | --- | |
| 8 | 135+05 | RT | --- | SPEED LIMIT 45 | --- | --- | --- | --- | --- | --- | 1 | 1 | --- | |
| 9 | 135+05 | LT | --- | SPEED LIMIT 45 | --- | --- | --- | --- | --- | --- | 1 | 1 | --- | |
| 10 | 136+30 | LT | W1-2L | Left Curve | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | --- | |
| 11 | 140+00 | RT | R2-1 | SPEED LIMIT 45 | 24 X 30 | 5.00 | --- | 1 | --- | --- | 1 | 1 | --- | Replacement for same sign at Sta. 144+00 |
| 12 | 140+00 | LT | R2-1 | SPEED LIMIT 45 | 24 X 30 | 5.00 | --- | 1 | --- | --- | 1 | 1 | --- | Replacement for same sign at Sta. 144+00 |
| 13 | 149+95 | RT | --- | Reduced Speed Ahead 35 M.P.H. | --- | --- | --- | --- | --- | --- | 1 | 1 | --- | |
| 14 | 152+25 | RT | W1-2R | Right Curve | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | --- | |
| 15 | 154+40 | RT | W11-2 | Pedestrian symbol | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | --- | |
| 16 | 155+90 | LT | --- | SPEED LIMIT 45 | --- | --- | --- | --- | --- | --- | 1 | 1 | --- | |
| 17 | 155+90 | RT | --- | SPEED LIMIT 45 | --- | --- | --- | --- | --- | --- | 1 | 1 | --- | |
| 18 | 159+35 | RT | W3-5 | Reduced Speed Ahead 35 | 36 X 36 | --- | 9.00 | --- | 1 | --- | --- | --- | --- | |
| 19 | 159+70 | LT | W1-2L | Left Curve | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | --- | |
| 20 | 163+50 | LT | R2-1 | SPEED LIMIT 45 | 24 X 30 | 5.00 | --- | 1 | --- | --- | --- | --- | --- | |
| 21 | 163+50 | RT | R2-1 | SPEED LIMIT 35 | 24 X 30 | 5.00 | --- | 1 | --- | --- | --- | --- | --- | |
| 22 | 166+40 | RT | W2-2 | Side Road 90 Degrees | 30 x 30 | --- | 6.25 | --- | 1 | --- | --- | --- | --- | Orient sign with side road stub on the left |
| 23 | 169+87 | RT | W1-5R | Right Winding Road | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | --- | |
| 24 | | | W13-1 | 25 M.P.H. | 18 X 18 | --- | 2.25 | --- | --- | --- | --- | --- | --- | |
| 25 | 171+35 | LT | R1-1 | STOP | 30 x 30 | 5.18 | --- | 1 | --- | --- | 1 | 1 | --- | Moose Lake Road (West) |
| 26 | 173+96 | RT | R2-1 | SPEED LIMIT 35 | 24 X 30 | 5.00 | --- | 1 | --- | --- | 1 | 1 | --- | |
| 27 | 173+96 | LT | R2-1 | SPEED LIMIT 35 | 24 X 30 | 5.00 | --- | 1 | --- | --- | 1 | 1 | --- | |
| 28 | 176+50 | LT | W2-2 | Side Road 90 Degrees | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | --- | Orient sign with side road stub on the right |
| 29 | 186+50 | RT | R2-1 | SPEED LIMIT 35 | 24 X 30 | 5.00 | --- | 1 | --- | --- | 1 | 1 | --- | |
| 30 | 186+50 | RT | R2-1 | SPEED LIMIT 35 | 24 X 30 | 5.00 | --- | 1 | --- | --- | 1 | 1 | --- | |
| 31 | 189+05 | RT | W11-6 | Snowmobile Crossing symbol | 30 X 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | --- | |
| 32 | 190+85 | RT | W2-2 | Side Road 90 Degrees | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | --- | Orient sign with side road stub on the right |
| 33 | 192+25 | RT | --- | JCT RUSTIC ROAD Right Arrow | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | Move signs & post back to same location |
| 34 | 196+60 | LT | R2-1 | SPEED LIMIT 35 | 24 X 30 | 5.00 | --- | 1 | --- | --- | 1 | 1 | --- | |
| 35 | 196+65 | RT | R7-1D | NO PARKING ANY TIME w/double arrow | 18 x 24 | 3.00 | --- | 1 | --- | --- | 1 | 1 | --- | |
| 36 | 197+25 | RT | --- | RUSTIC ROAD NEXT 4 MILES | --- | --- | --- | --- | --- | 1 | --- | --- | 1 | Move signs & post back to same location |
| SUB-TOTALS | | | | | | 58.18 | 91.25 | 12 | 13 | 3 | 26 | 26 | 3 | |

PERMANENT SIGNING ITEMS CONT'D

| SIGN NO. | CTH S STATION (APPROX) | LOCATION | SIGN CODE | SIGN MESSAGE | 637.2210 | 637.2230 | 634.0614 | 634.0616 | 638.2102 | 638.2602 | 638.3000 | 638.4000 | COMMENT | |
|----------------|------------------------|----------|-----------|-------------------------------|--------------------------|-------------------------|-------------------------|-----------------------|-----------------------|--------------------|--------------------|---------------------------|--|---|
| | | | | | SIGNS | SIGNS | POSTS WOOD | POSTS WOOD | MOVING | REMOVING | REMOVING | MOVING | | |
| | | | | | SIGN SIZE W X H (INCHES) | TYPE II REFLECTIVE H SF | TYPE II REFLECTIVE F SF | 4X6-INCH X 14-FT EACH | 4X6-INCH X 16-FT EACH | SIGNS TYPE II EACH | SIGNS TYPE II EACH | 5SMALL SIGN SUPPORTS EACH | | SMALL SIGN SUPPORTS EACH |
| CAT. 0010 | | | | | | | | | | | | | | |
| 37 | 197+95 | LT | --- | RUSTIC ROAD w/left arrow | --- | --- | --- | --- | 1 | --- | --- | 1 | Move sign & post back to same location | |
| 38 | 198+30 | RT | R2-1 | SPEED LIMIT 45 | 24 X 30 | 5.00 | --- | 1 | --- | 1 | 1 | --- | | |
| 39 | 199+55 | LT | W11-6 | Snowmobile Crossing symbol | 30 X 30 | --- | 6.25 | --- | 1 | --- | 1 | --- | | |
| 40 | 201+55 | LT | W2-2 | Side Road 90 Degrees | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | --- | Orient sign with side road stub on the left | |
| 41 | 203+86 | LT | W3-5 | Reduced Speed Ahead 35 | 36 X 36 | --- | 9.00 | --- | 1 | --- | --- | --- | | |
| 42 | 204+00 | LT | --- | Reduced Speed Ahead 35 M.P.H. | --- | --- | --- | --- | --- | 1 | 1 | --- | | |
| 43 | 205+90 | RT | --- | Left Reverse Turn 30 M.P.H. | --- | --- | --- | --- | --- | 1 | 1 | --- | | |
| 44 | 205+90 | LT | W1-5R | Right Winding Road | 30 x 30 | --- | 6.25 | --- | --- | --- | --- | --- | | |
| 45 | | | W13-1 | 25 M.P.H. | 18 X 18 | --- | 2.25 | --- | 1 | --- | 1 | 1 | | --- |
| 46 | 206+90 | LT | W1-5R | Right Winding Road | 30 x 30 | --- | 6.25 | --- | --- | --- | --- | --- | | |
| 47 | | | W13-1 | 30 M.P.H. | 18 X 18 | --- | 2.25 | --- | 1 | --- | --- | --- | | --- |
| 48 | 216+00 | RT | W5-2 | NARROW BRIDGE | 36 X 36 | --- | 9.00 | --- | 1 | --- | 1 | 1 | Sign faces northbound traffic with right arrow | |
| 49 | 217+60 | LT | W1-6 | Night Arrow right | 48 X 24 | --- | 8.00 | 1 | --- | --- | --- | --- | | |
| 50 | 217+70 | LT | W1-6 | Night Arrow left | 48 X 24 | --- | 8.00 | 1 | --- | --- | --- | --- | | Sign faces southbound traffic with left arrow |
| 52 | 219+60 | RT | W5-52R | Clearance Striper Down Left | 12 x 36 | --- | 3.00 | 1 | --- | --- | 1 | 1 | | |
| 53 | 219+62 | LT | W5-52L | Clearance Striper Down Right | 12 x 36 | --- | 3.00 | 1 | --- | --- | 1 | 1 | | |
| 54 | 220+00 | RT | W5-52L | Clearance Striper Down Right | 12 x 36 | --- | 3.00 | 1 | --- | --- | 1 | 1 | | |
| 55 | 220+02 | LT | W5-52R | Clearance Striper Down Left | 12 x 36 | --- | 3.00 | 1 | --- | --- | 1 | 1 | | |
| 56 | 221+24 | LT | W1-5R | Right Winding Road | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | | |
| 57 | | | W13-1 | 30 M.P.H. | 18 X 18 | --- | 2.25 | --- | --- | --- | 1 | 1 | | --- |
| 58 | 223+15 | RT | --- | Left Turn 20 M.P.H. | --- | --- | --- | --- | --- | 1 | 1 | --- | | |
| 59 | 224+00 | LT | W5-2 | NARROW BRIDGE | 36 X 36 | --- | 9.00 | --- | 1 | --- | 1 | 1 | | |
| 61 | 224+10 | RT | W1-2L | Left Curve | 30 x 30 | --- | 6.25 | --- | --- | --- | --- | --- | | |
| 62 | | | W13-1 | 30 M.P.H. | 18 X 18 | --- | 2.25 | --- | --- | --- | --- | --- | --- | |
| 63 | 226+05 | RT | W2-2 | Side Road 90 Degrees | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | Orient sign with side road stub on the right | |
| 64 | 228+75 | RT | --- | Night Arrow right | --- | --- | --- | --- | --- | 1 | 1 | --- | | |
| 65 | 229+60 | RT | R1-1 | STOP | 30 x 30 | 5.18 | --- | 1 | --- | --- | 1 | 1 | | Pine Point Road |
| 66 | 232+30 | LT | W2-2 | Side Road 90 Degrees | 30 x 30 | --- | 6.25 | --- | 1 | --- | 1 | 1 | Orient sign with side road stub on the left | |
| 67 | 233+35 | LT | --- | Right Winding Road 20 M.P.H. | --- | --- | --- | --- | --- | 1 | 1 | --- | | |
| 68 | 233+7S | LT | W1-2R | Right Curve | 30 x 30 | --- | 6.25 | --- | --- | --- | --- | --- | | |
| 69 | | | W13-1 | 30 M.P.H. | 18 X 18 | --- | 2.25 | --- | --- | --- | --- | --- | | --- |
| 71 | 242+19 | RT | W1-2L | Left Curve | 30 x 30 | --- | 6.25 | --- | --- | --- | --- | --- | | |
| 72 | | | W13-1 | 25 M.P.H. | 18 X 18 | --- | 2.25 | --- | --- | --- | --- | --- | | --- |
| SUB-TOTALS | | | | | | 10.18 | 131.00 | 8 | 13 | 1 | 19 | 19 | 1 | |
| PROJECT TOTALS | | | | | | 68.36 | 222.25 | 20 | 26 | 4 | 45 | 45 | 4 | |

| | | |
|---|------------------------|----------------------|
| R/W PROJECT NUMBER 8780-00-00 | SHEET NUMBER 4.1 | TOTAL SHEETS 4 |
| FEDERAL PROJECT NUMBER | | |
| PLAT OF RIGHT OF WAY REQUIRED FOR CTH B - STH 77 (FH 41) MOOSE LAKE ROAD TO STH 77 CTH S SAWYER CO. | | |
| CONSTRUCTION PROJECT NUMBER 8780-00-70 | | |

| CONVENTIONAL ABBREVIATIONS | | |
|-----------------------------------|---------|----------------------------|
| ACCESS POINT/ DRIVEWAY CONNECTION | AP | REFERENCE LINE |
| ACCESS RIGHTS | AR | RELEASE OF RIGHTS |
| ACRES | AC. | REMAINING |
| AND OTHERS | ET. AL. | RIGHT-OF-WAY |
| CENTERLINE | C/L | SECTION |
| CERTIFIED SURVEY MAP | CSM | STATION |
| CORNER | COR. | TEMPORARY LIMITED EASEMENT |
| DOCUMENT | DOC. | VOLUME |
| EASEMENT | EASE. | |
| HIGHWAY EASEMENT | H.E. | LONG CHORD |
| MONUMENT | MON. | LONG CHORD BEARING |
| PAGE | P. | RADIUS |
| PERMANENT LIMITED EASEMENT | PLE | DEGREE OF CURVE |
| PROPERTY LINE | PL | CENTRAL ANGLE OR DELTA |
| RECORDED AS | (100') | LENGTH OF CURVE |
| | | TANGENT |

| CONVENTIONAL SYMBOLS | | |
|----------------------------|----------------------|---|
| FOUND IRON PIPE/PIN | IF (1" UNLESS NOTED) | PROPOSED R/W LINE |
| R/W MONUMENT | • (4SET) | EXISTING H.E. LINE |
| R/W STANDARD | Δ (4SET) | PROPERTY LINE |
| SIGN | ISIGN | LOT & TIE LINES |
| SECTION CORNER MONUMENT | • | SLOPE INTERCEPTS |
| SECTION CORNER SYMBOL | • | CORPORATE LIMITS |
| FEE (HATCH VARIES) | • | ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL) |
| TEMPORARY LIMITED EASEMENT | • | ACCESS RESTRICTED (BY ACQUISITION) |
| PERMANENT LIMITED EASEMENT | • | NO ACCESS (BY STATUTORY AUTHORITY) |
| R/W BOUNDARY POINT | • | SECTION LINE |
| PARCEL NUMBER | • | QUARTER LINE |
| UTILITY PARCEL NUMBER | • | SIXTEENTH LINE |
| SIGN NUMBER (OFF PREMISE) | • | EXISTING CENTERLINE |
| BUILDING | • | PROPOSED REFERENCE LINE |
| | • | PARALLEL OFFSET |

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

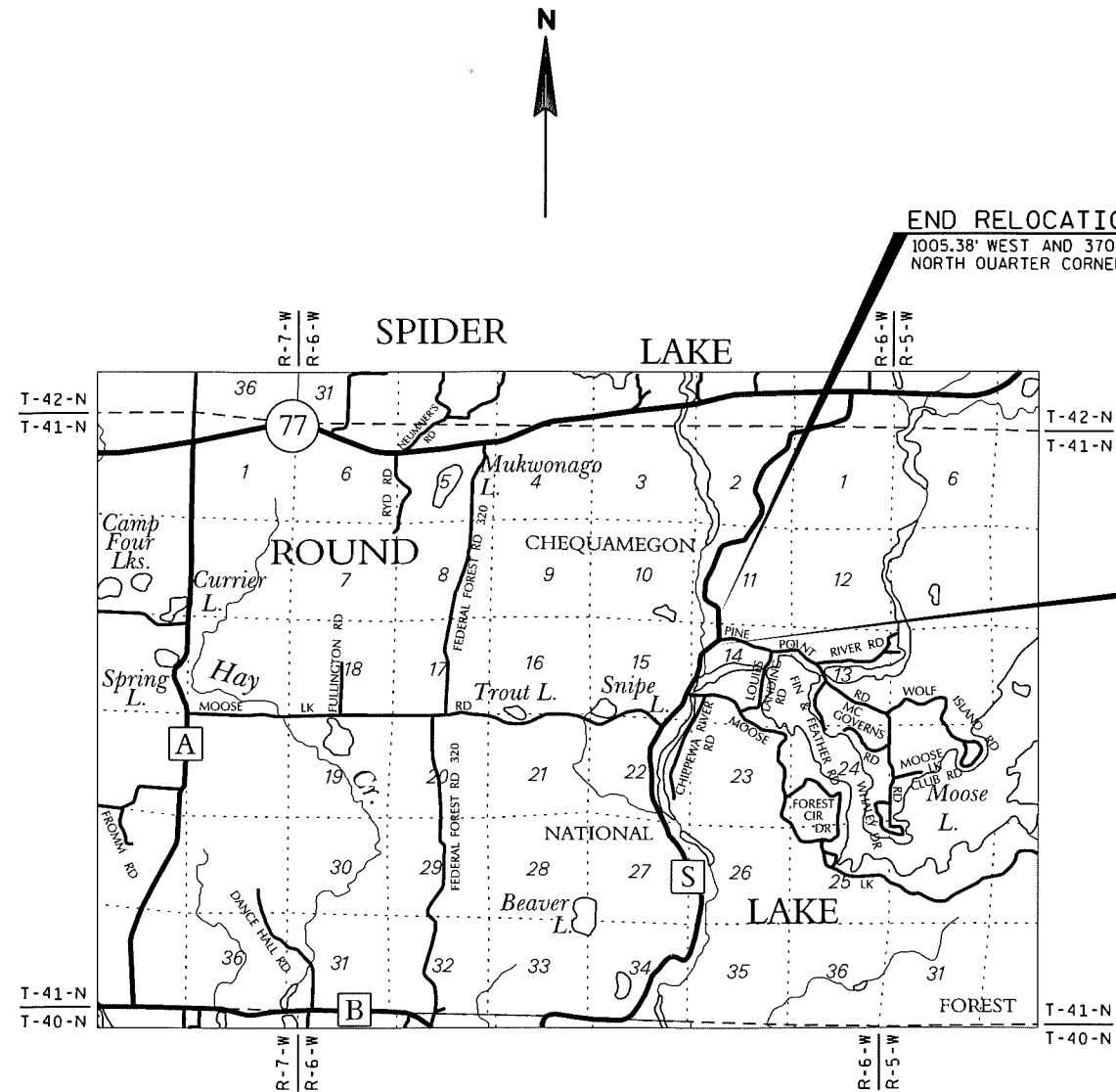
NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, SAWYER COUNTY, NAD 1983 (1991) IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS (3/4-INCH x 24-INCH REBARS), AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT SAWYER COUNTY HIGHWAY COMMISSIONER.



LAYOUT
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.360 MI.

END RELOCATION ORDER STA. 243+00.00
1005.38' WEST AND 370.36' NORTH OF THE
NORTH QUARTER CORNER OF SECTION 14, T. 41 N, R. 6 W

BEGIN RELOCATION ORDER STA. 224+00.11
1307.71' NORTH AND 1192.98' EAST OF THE
WEST QUARTER CORNER OF SECTION 14, T. 41 N, R. 6 W

APPROVED FOR SAWYER COUNTY
HIGHWAY DEPARTMENT

12/17/15
Date Highway Commissioner

ORIGINAL PLAT PREPARED BY



11/18/2015
Date Signature

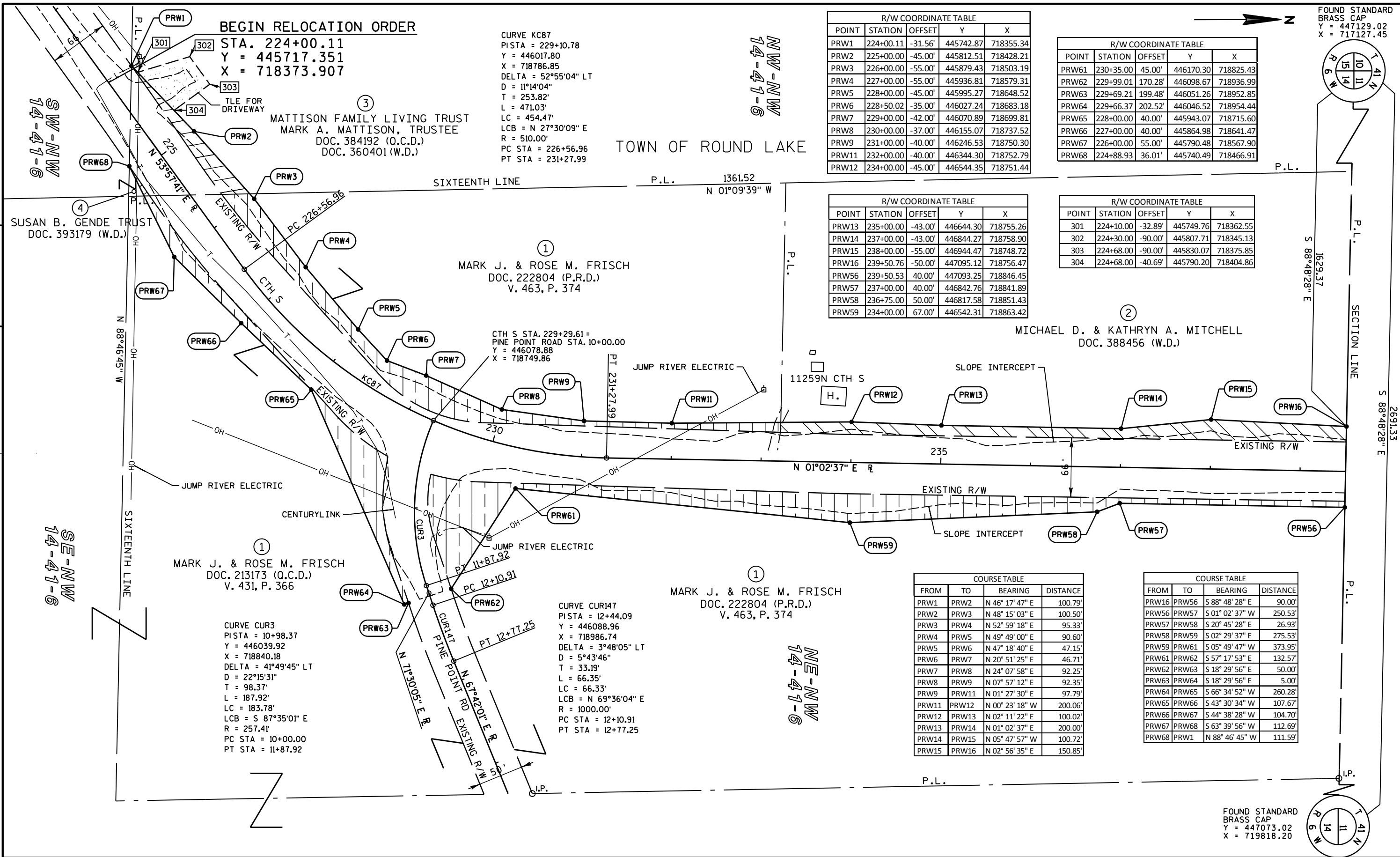
SCHEDULE OF LANDS & INTERESTS REQUIRED

(C) INDICATES CALCULATED AREA, BASED ON RECORD INFORMATION

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

| | | | | | |
|---------------|--------------|--------|------------|--------------------------|--------------|
| REVISION DATE | ROUTE | COUNTY | DATE | R/W PROJECT NUMBER | SHEET NUMBER |
| | | | | 8780-00-00 | |
| | CTH S | SAWYER | 11-18-2015 | CONSTRUCTION PROJECT NO. | |
| | NOT TO SCALE | | | 8780-00-70 | 4.2 |

| PARCEL NUMBER | SHEET NUMBER | OWNER (S) | INTEREST REQUIRED | TOTAL ACRES OR (S.F.) | R/W ACRES REQUIRED OR (S.F.) | | | TOTAL ACRES OR (S.F.) REMAINING | H.E. ACRES OR (S.F.) | TLE ACRES OR (S.F.) |
|---------------|--------------|---|-------------------|-----------------------|------------------------------|----------|-------|---------------------------------|----------------------|---------------------|
| | | | | | NEW | EXISTING | TOTAL | | | |
| 1 | 4.3 | MARK J. & ROSE M. FRISCH (DOC. 222804) | FEE | 6.07 | 0.78 | N/A | 0.78 | 5.29 | - | - |
| 1 | 4.3 | MARK J. & ROSE M. FRISCH (DOC. 213173) | FEE | 9.88 | 0.18 | N/A | 0.18 | 9.70 | - | - |
| 2 | 4.3 | MICHAEL D. & KATHRYN A. MITCHELL | FEE | 4.15 | 0.21 | N/A | 0.21 | 3.94 | - | - |
| 3 | 4.3 | MATTISON FAMILY LIVING TRUST | FEE, TLE | 39.99 | 0.06 | N/A | 0.06 | 39.93 | - | 0.06 |
| 4 | 4.3 | SUSAN B. GENDE TRUST | FEE | 0.40 | 0.01 | N/A | 0.01 | 0.39 | - | - |
| 6 | 4.4 | USDA FOREST SERVICE CHEQUAMEGON NATIONAL FOREST | H.E. | N/A | N/A | N/A | N/A | N/A | 0.17 | - |
| | | | | | | | | | | |



BEGIN RELOCATION ORDER

STA. 224+00.11
Y = 445717.351
X = 718373.907

CURVE KC87
PISTA = 229+10.78
Y = 446017.80
X = 718786.85
DELTA = 52°55'04" LT
D = 11°14'04"
T = 253.82'
L = 471.03'
LC = 454.47'
LCB = N 27°30'09" E
R = 510.00'
PC STA = 226+56.96
PT STA = 231+27.99

MATTISON FAMILY LIVING TRUST
MARK A. MATTISON, TRUSTEE
DOC. 384192 (Q.C.D.)
DOC. 360401 (W.D.)

TOWN OF ROUND LAKE

| R/W COORDINATE TABLE | | | | |
|----------------------|-----------|---------|-----------|-----------|
| POINT | STATION | OFFSET | Y | X |
| PRW1 | 224+00.11 | -31.56' | 445742.87 | 718355.34 |
| PRW2 | 225+00.00 | -45.00' | 445812.51 | 718428.21 |
| PRW3 | 226+00.00 | -55.00' | 445879.43 | 718503.19 |
| PRW4 | 227+00.00 | -55.00' | 445936.81 | 718579.31 |
| PRW5 | 228+00.00 | -45.00' | 445995.27 | 718648.52 |
| PRW6 | 228+50.02 | -35.00' | 446027.24 | 718683.18 |
| PRW7 | 229+00.00 | -42.00' | 446070.89 | 718699.81 |
| PRW8 | 230+00.00 | -37.00' | 446155.07 | 718737.52 |
| PRW9 | 231+00.00 | -40.00' | 446246.53 | 718750.30 |
| PRW11 | 232+00.00 | -40.00' | 446344.30 | 718752.79 |
| PRW12 | 234+00.00 | -45.00' | 446544.35 | 718751.44 |

| R/W COORDINATE TABLE | | | | |
|----------------------|-----------|---------|-----------|-----------|
| POINT | STATION | OFFSET | Y | X |
| PRW61 | 230+35.00 | 45.00' | 446170.30 | 718825.43 |
| PRW62 | 229+99.01 | 170.28' | 446098.67 | 718936.99 |
| PRW63 | 229+69.21 | 199.48' | 446051.26 | 718952.85 |
| PRW64 | 229+66.37 | 202.52' | 446046.52 | 718954.44 |
| PRW65 | 228+00.00 | 40.00' | 445943.07 | 718715.60 |
| PRW66 | 227+00.00 | 40.00' | 445864.98 | 718641.47 |
| PRW67 | 226+00.00 | 55.00' | 445790.48 | 718567.90 |
| PRW68 | 224+88.93 | 36.01' | 445740.49 | 718466.91 |

| R/W COORDINATE TABLE | | | | |
|----------------------|-----------|---------|-----------|-----------|
| POINT | STATION | OFFSET | Y | X |
| PRW13 | 235+00.00 | -43.00' | 446644.30 | 718755.26 |
| PRW14 | 237+00.00 | -43.00' | 446844.27 | 718758.90 |
| PRW15 | 238+00.00 | -55.00' | 446944.47 | 718748.72 |
| PRW16 | 239+50.76 | -50.00' | 447095.12 | 718756.47 |
| PRW56 | 239+50.53 | 40.00' | 447093.25 | 718846.45 |
| PRW57 | 237+00.00 | 40.00' | 446842.76 | 718841.89 |
| PRW58 | 236+75.00 | 50.00' | 446817.58 | 718851.43 |
| PRW59 | 234+00.00 | 67.00' | 446542.31 | 718863.42 |

| R/W COORDINATE TABLE | | | | |
|----------------------|-----------|---------|-----------|-----------|
| POINT | STATION | OFFSET | Y | X |
| 301 | 224+10.00 | -32.89' | 445749.76 | 718362.55 |
| 302 | 224+30.00 | -90.00' | 445807.71 | 718345.13 |
| 303 | 224+68.00 | -90.00' | 445830.07 | 718375.85 |
| 304 | 224+68.00 | -40.69' | 445790.20 | 718404.86 |

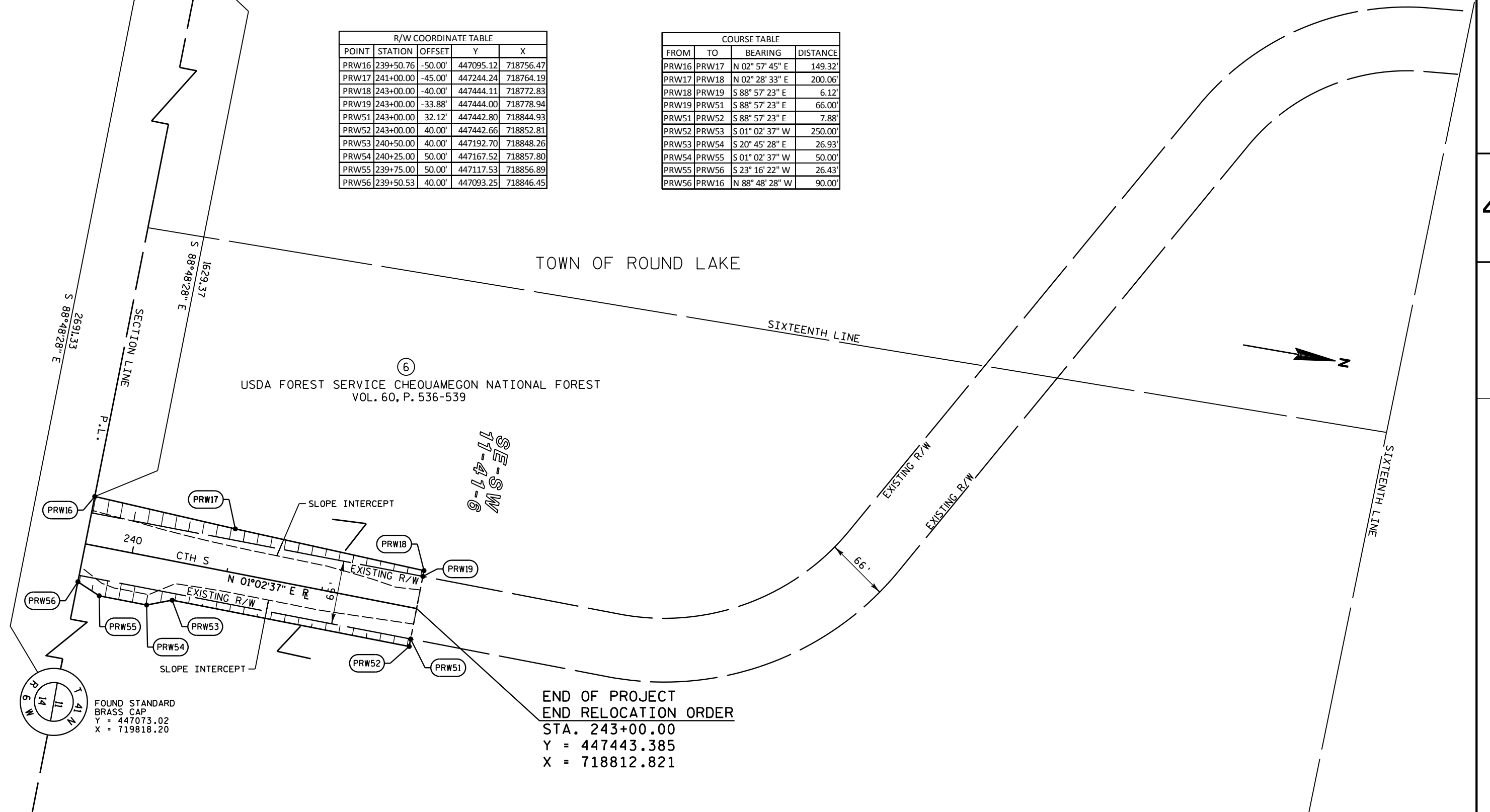
MICHAEL D. & KATHRYN A. MITCHELL
DOC. 388456 (W.D.)

| COURSE TABLE | | | |
|--------------|-------|-----------------|----------|
| FROM | TO | BEARING | DISTANCE |
| PRW1 | PRW2 | N 46° 17' 47" E | 100.79' |
| PRW2 | PRW3 | N 48° 15' 03" E | 100.50' |
| PRW3 | PRW4 | N 52° 59' 18" E | 95.33' |
| PRW4 | PRW5 | N 49° 49' 00" E | 90.60' |
| PRW5 | PRW6 | N 47° 18' 40" E | 47.15' |
| PRW6 | PRW7 | N 20° 51' 25" E | 46.71' |
| PRW7 | PRW8 | N 24° 07' 58" E | 92.25' |
| PRW8 | PRW9 | N 07° 57' 12" E | 92.35' |
| PRW9 | PRW11 | N 01° 27' 30" E | 97.79' |
| PRW11 | PRW12 | N 00° 23' 18" W | 200.06' |
| PRW12 | PRW13 | N 02° 11' 22" E | 100.02' |
| PRW13 | PRW14 | N 01° 02' 37" E | 200.00' |
| PRW14 | PRW15 | N 05° 47' 57" W | 100.72' |
| PRW15 | PRW16 | N 02° 56' 35" E | 150.85' |

| COURSE TABLE | | | |
|--------------|-------|-----------------|----------|
| FROM | TO | BEARING | DISTANCE |
| PRW16 | PRW56 | S 88° 48' 28" E | 90.00' |
| PRW56 | PRW57 | S 01° 02' 37" W | 250.53' |
| PRW57 | PRW58 | S 20° 45' 28" E | 26.93' |
| PRW58 | PRW59 | S 02° 29' 37" E | 275.53' |
| PRW59 | PRW61 | S 05° 49' 47" W | 373.95' |
| PRW61 | PRW62 | S 57° 17' 53" E | 132.57' |
| PRW62 | PRW63 | S 18° 29' 56" E | 50.00' |
| PRW63 | PRW64 | S 18° 29' 56" E | 5.00' |
| PRW64 | PRW65 | S 66° 34' 52" W | 260.28' |
| PRW65 | PRW66 | S 43° 30' 34" W | 107.67' |
| PRW66 | PRW67 | S 44° 38' 28" W | 104.70' |
| PRW67 | PRW68 | S 63° 39' 56" W | 112.69' |
| PRW68 | PRW1 | N 88° 46' 45" W | 111.59' |

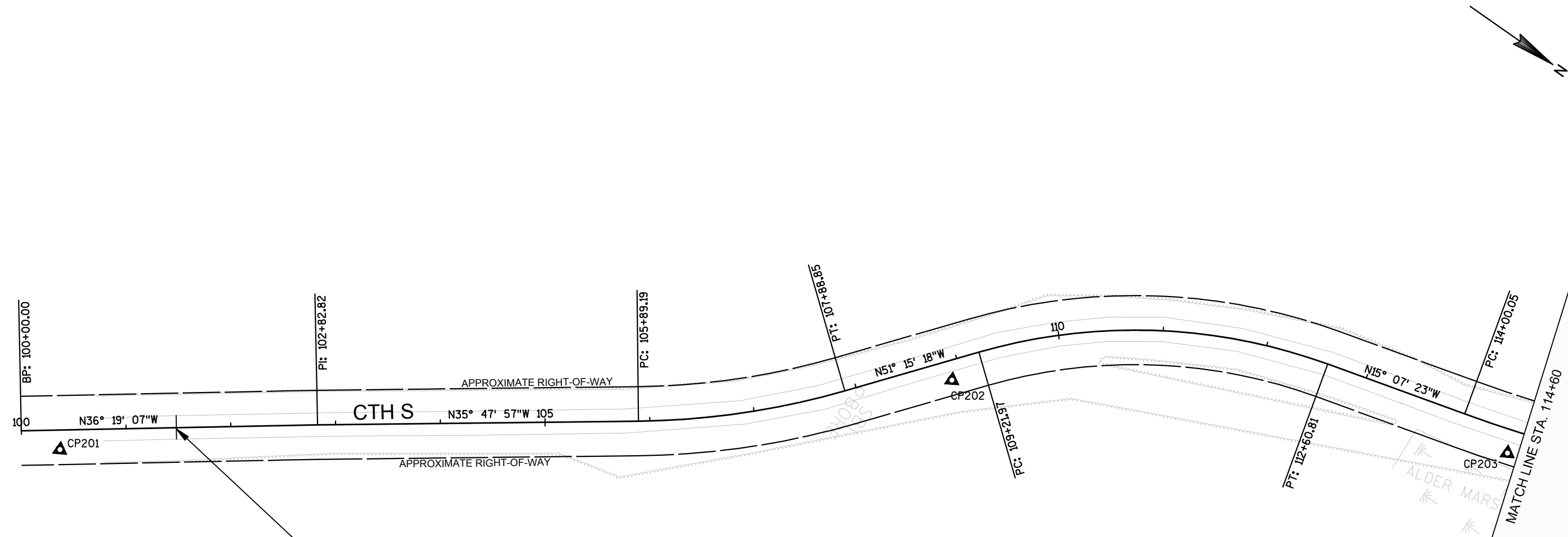
| | | | | | |
|---------------|------------|-------------------------|----------------|--|----------------|
| REVISION DATE | DATE | 0 50 100 SCALE, FEET | HWY: CTH S | STATE R/W PROJECT NUMBER 8780-00-00 | PLAT SHEET 4.3 |
| | 11-18-2015 | | COUNTY: SAWYER | CONSTRUCTION PROJECT NUMBER 8780-00-70 | PS&E SHEET |

| COURSE TABLE | | | |
|--------------|-------|-----------------|----------|
| FROM | TO | BEARING | DISTANCE |
| PRW16 | PRW17 | N 02° 57' 45" E | 149.32 |
| PRW17 | PRW18 | N 02° 28' 33" E | 200.06 |
| PRW18 | PRW19 | S 88° 57' 23" E | 6.12 |
| PRW19 | PRW51 | S 88° 57' 23" E | 66.00 |
| PRW51 | PRW52 | S 88° 57' 23" E | 7.88 |
| PRW52 | PRW53 | S 01° 02' 37" W | 250.00 |
| PRW53 | PRW54 | S 02° 45' 28" E | 26.93 |
| PRW54 | PRW55 | S 01° 02' 37" W | 50.00 |
| PRW55 | PRW56 | S 23° 16' 22" W | 26.43 |
| PRW56 | PRW16 | N 88° 48' 28" W | 90.00 |



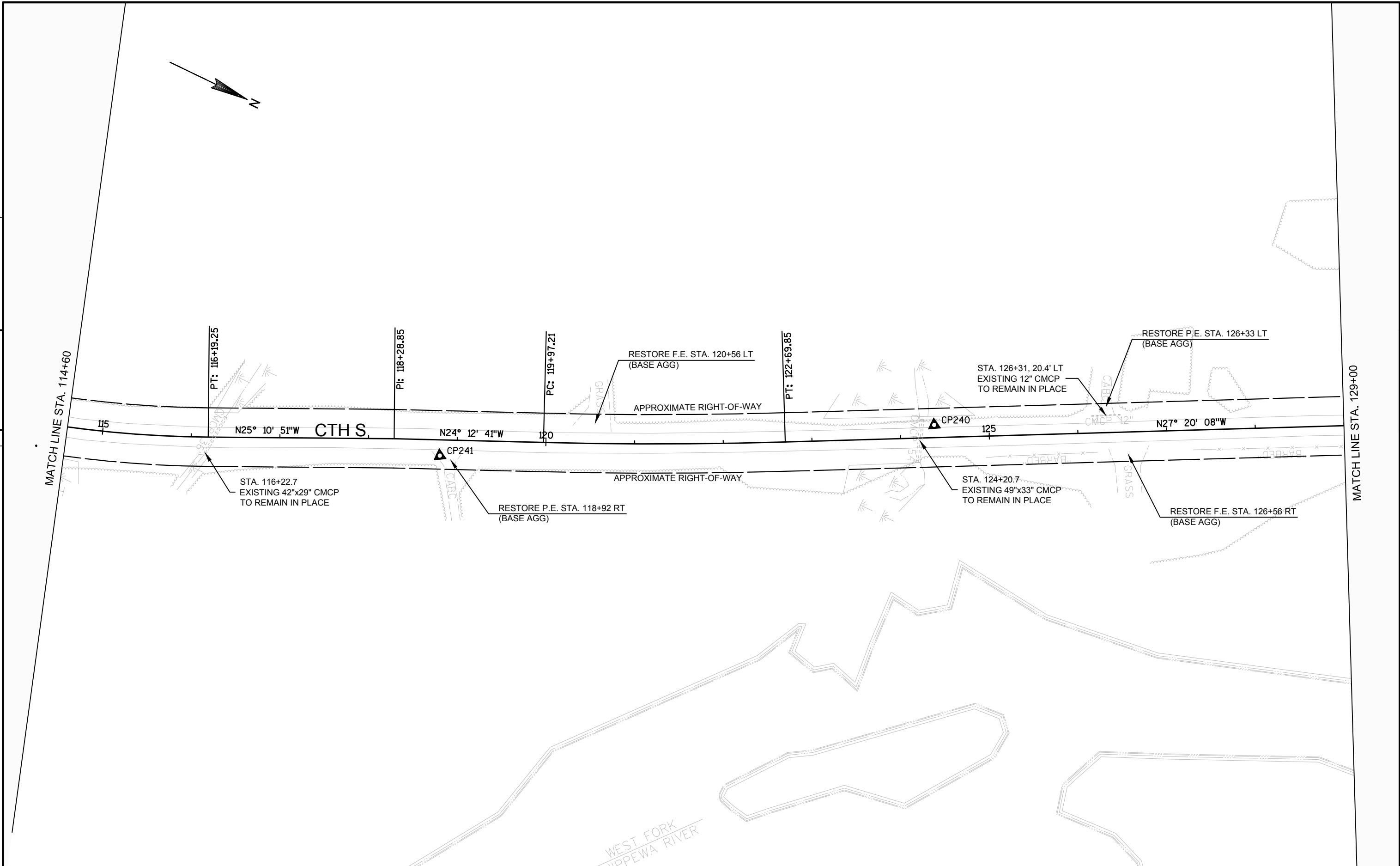
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|---------------|------------|--|----------------|--|----------------|----------|
| REVISION DATE | DATE |  SCALE, FEET | HWY: CTH S | STATE R/W PROJECT NUMBER 8780-00-00 | PLAT SHEET 4.4 | |
| | 11-18-2015 | | COUNTY: SAWYER | CONSTRUCTION PROJECT NUMBER 8780-00-70 | PS&E SHEET | E |

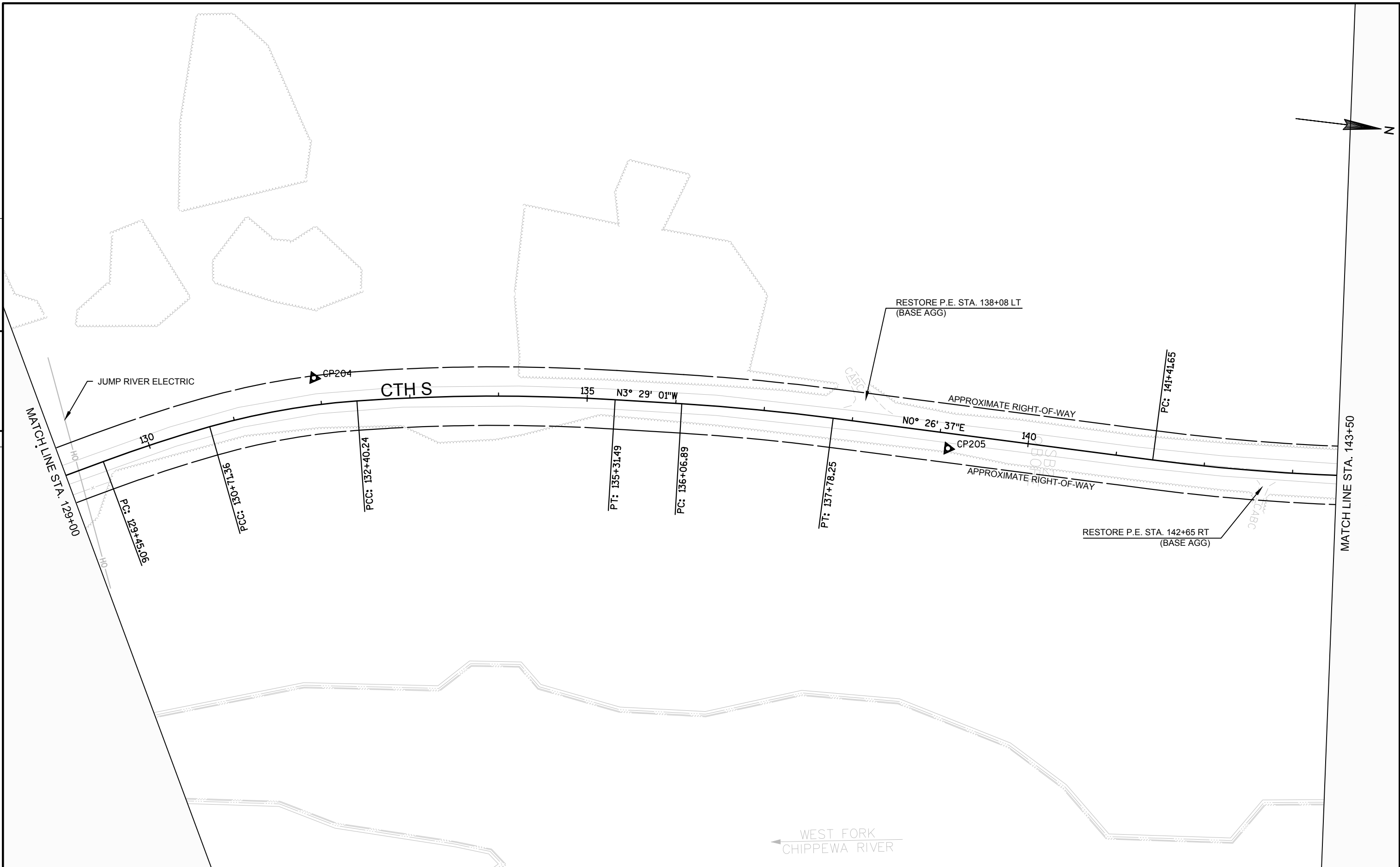
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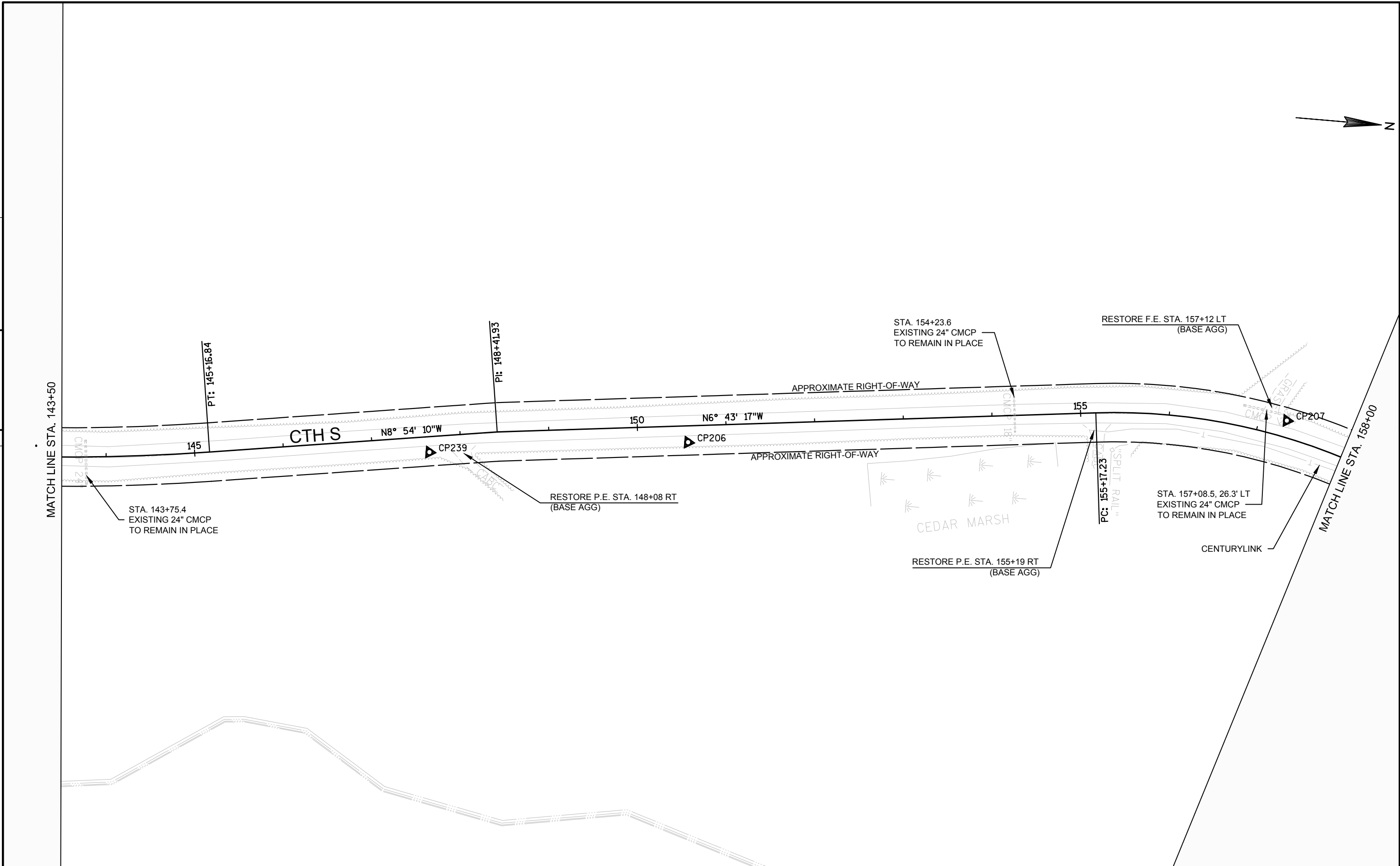


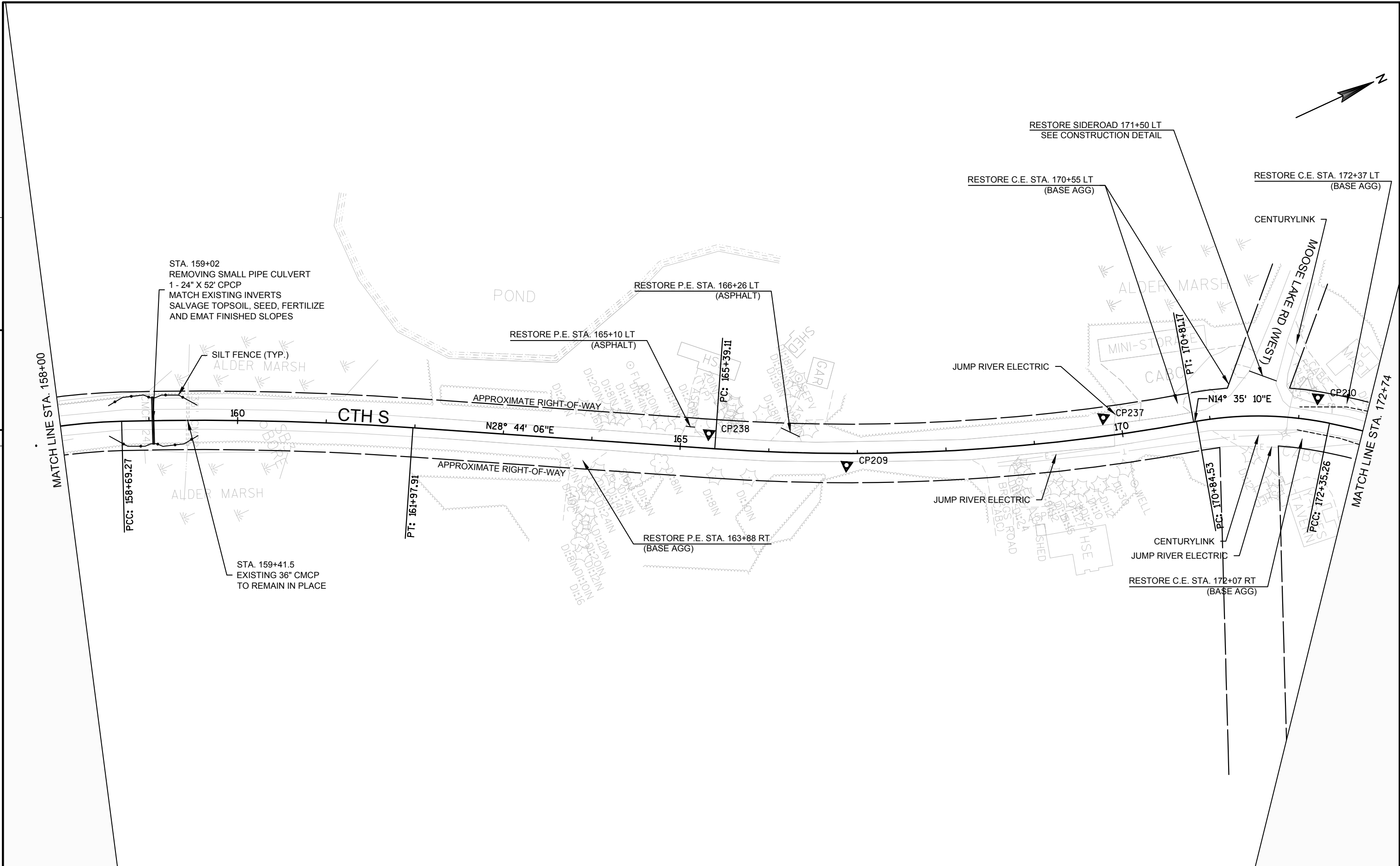
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BEGIN PROJECT 8780-00-70
STA. 101+50 C/L CTH S
SAWCUT REQUIRED

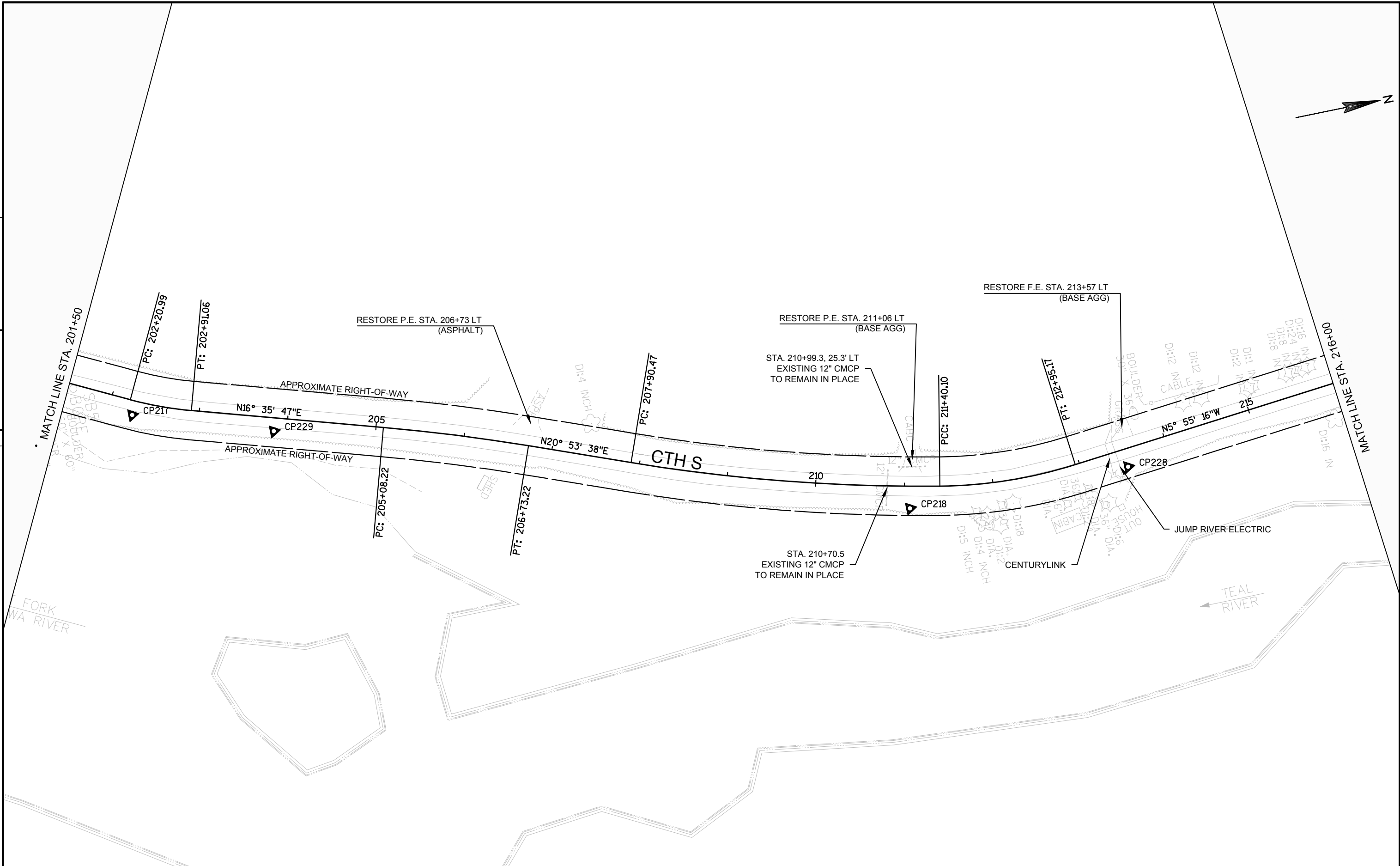


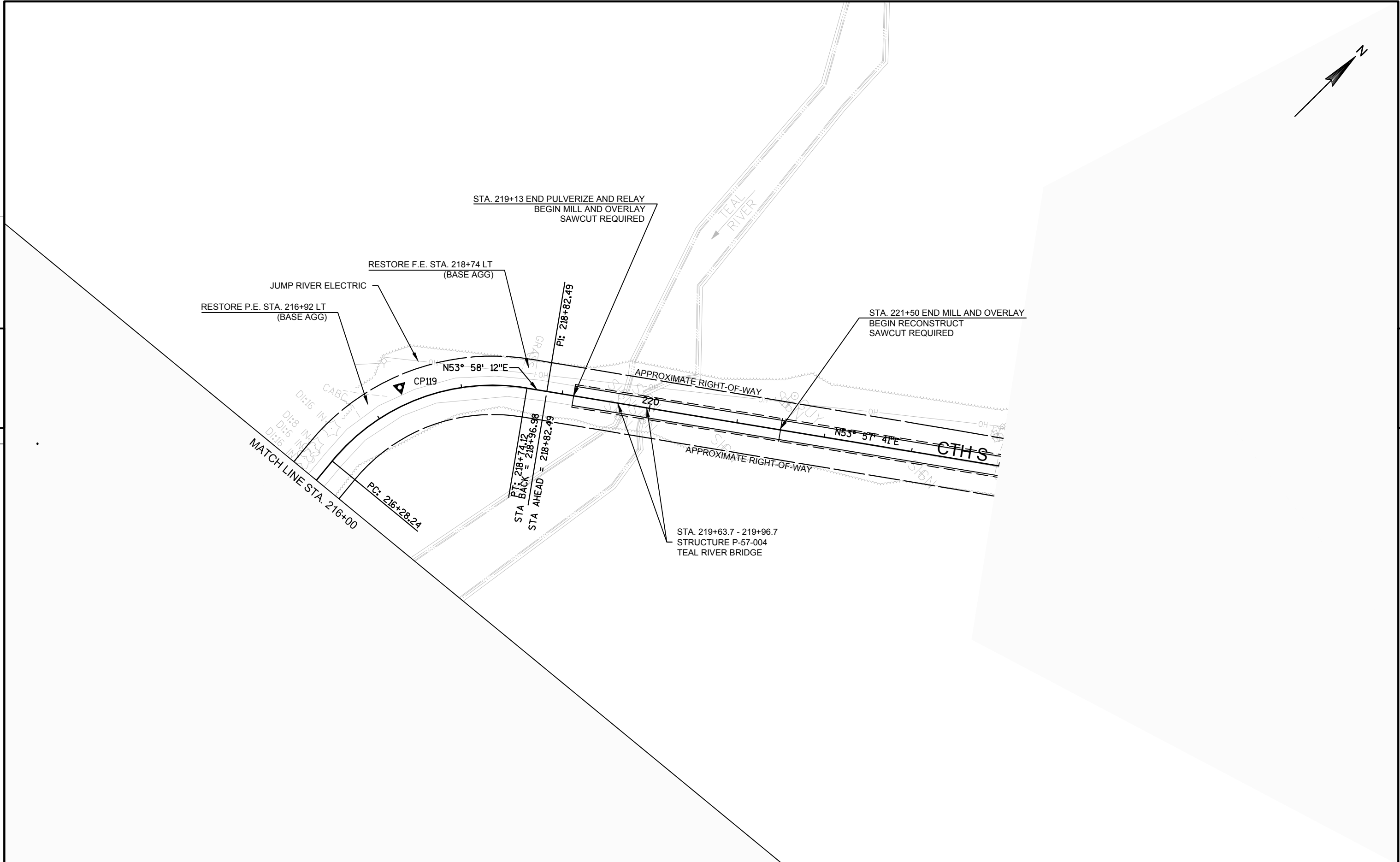






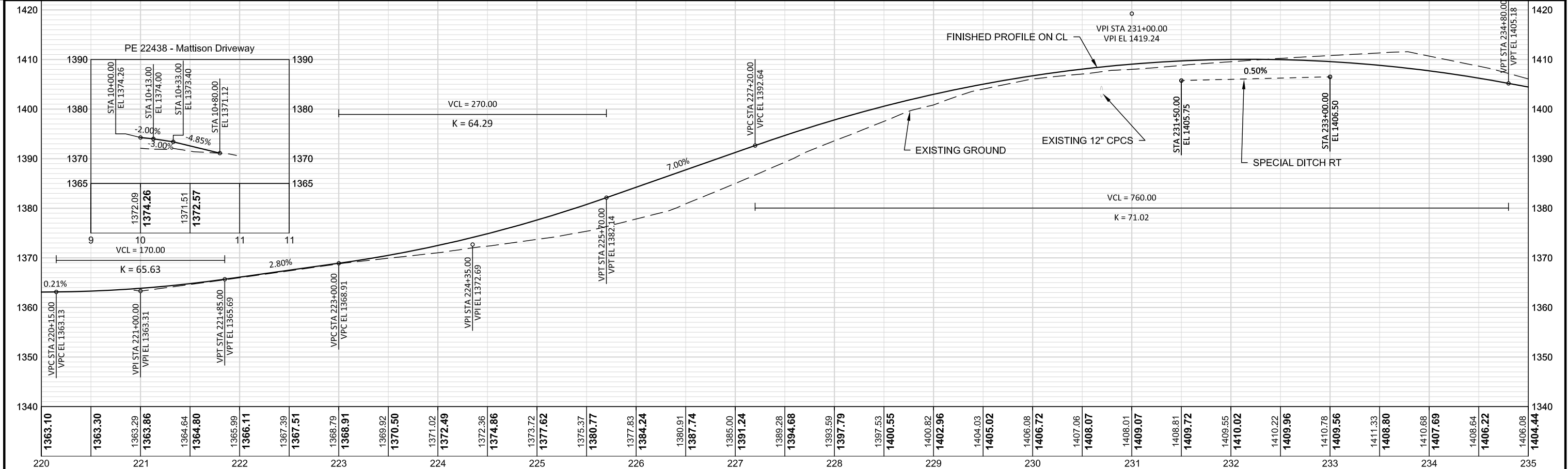
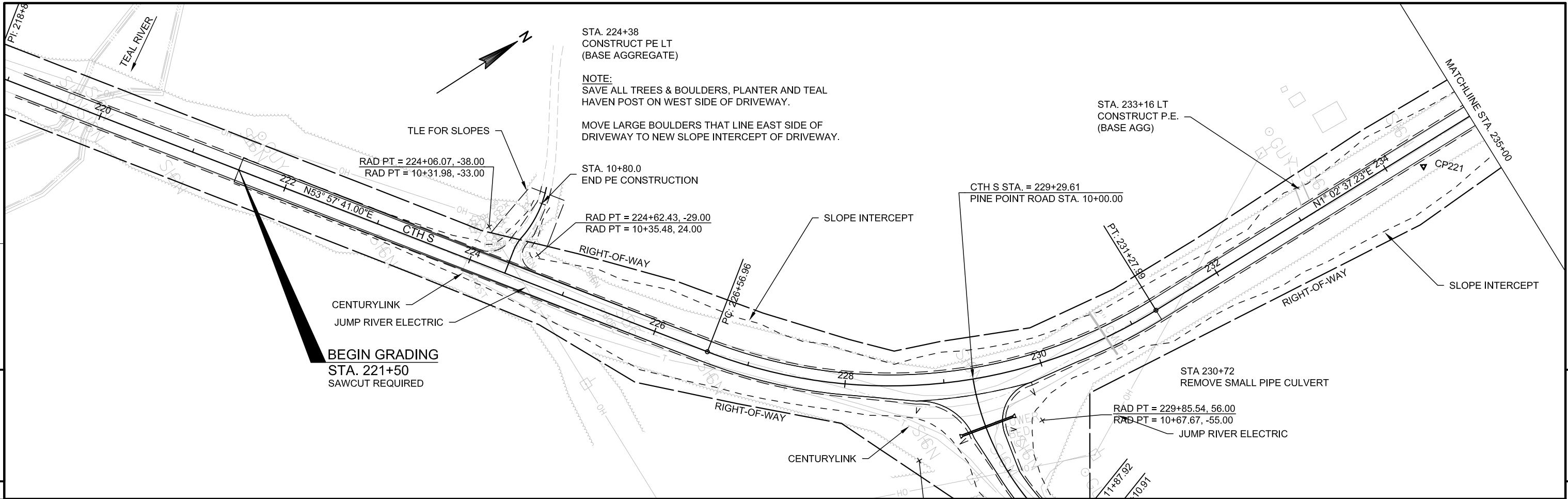
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|-----------------------|-----------|---------------|-------------|-------|---|
| PROJECT NO:8780-00-70 | HWY:CTH S | COUNTY:SAWYER | PLAN: CTH S | SHEET | E |
|-----------------------|-----------|---------------|-------------|-------|---|



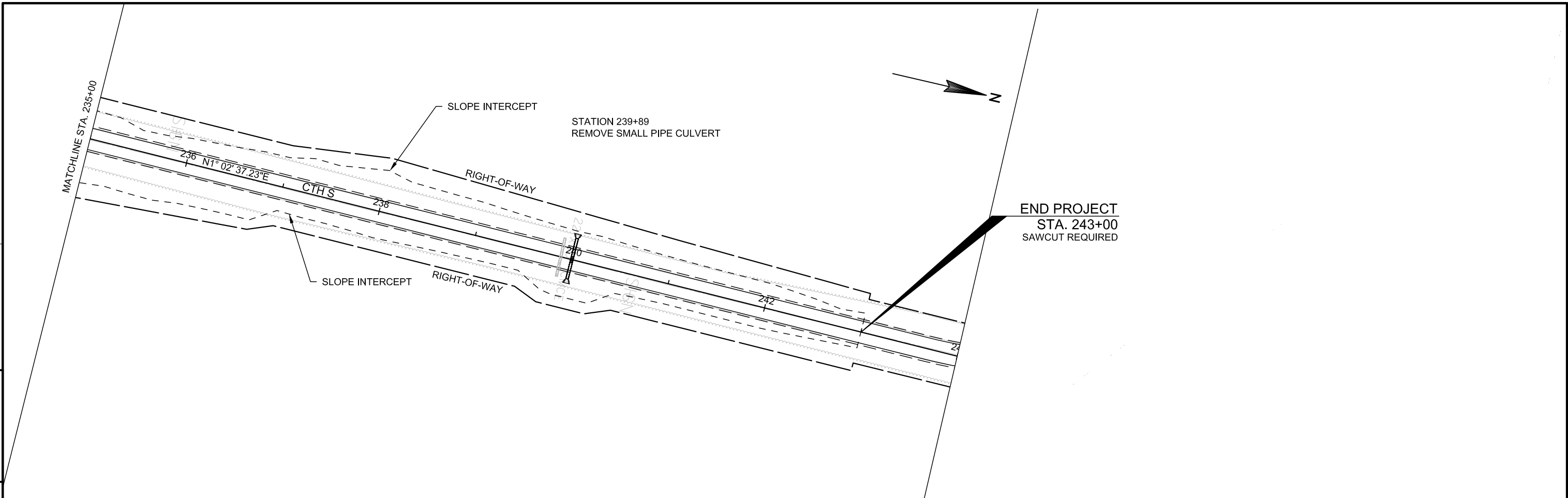


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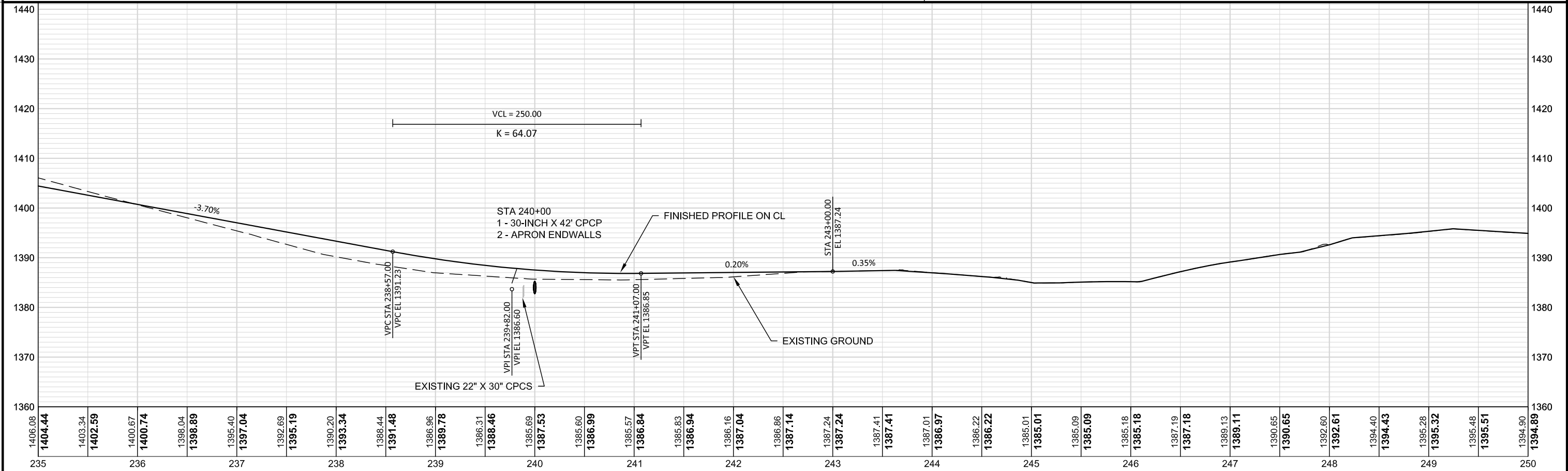
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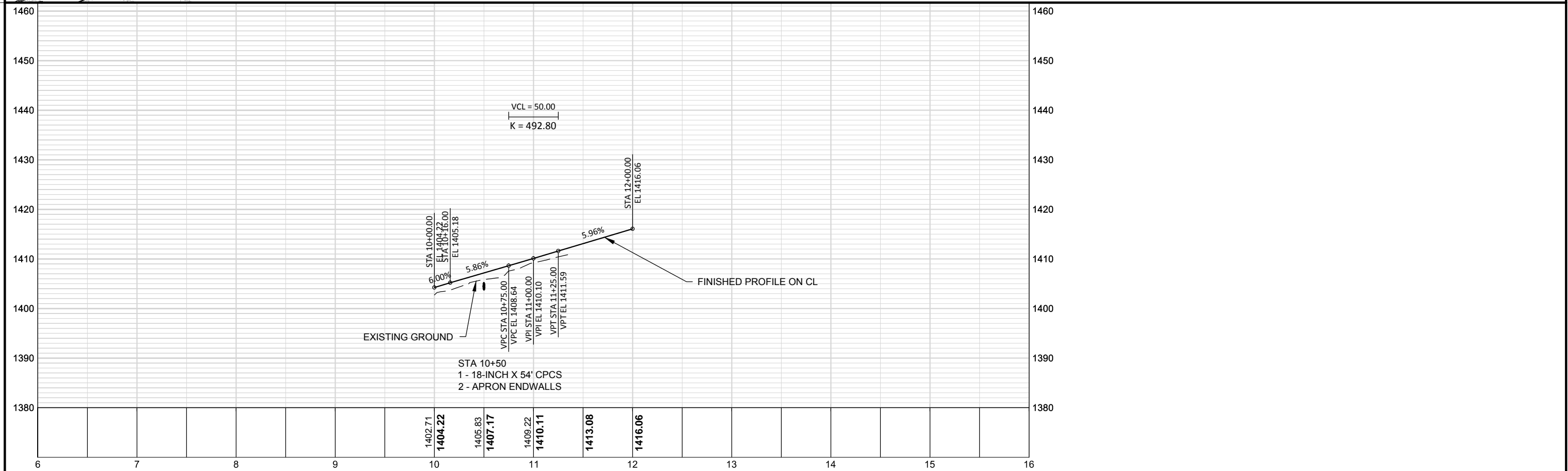
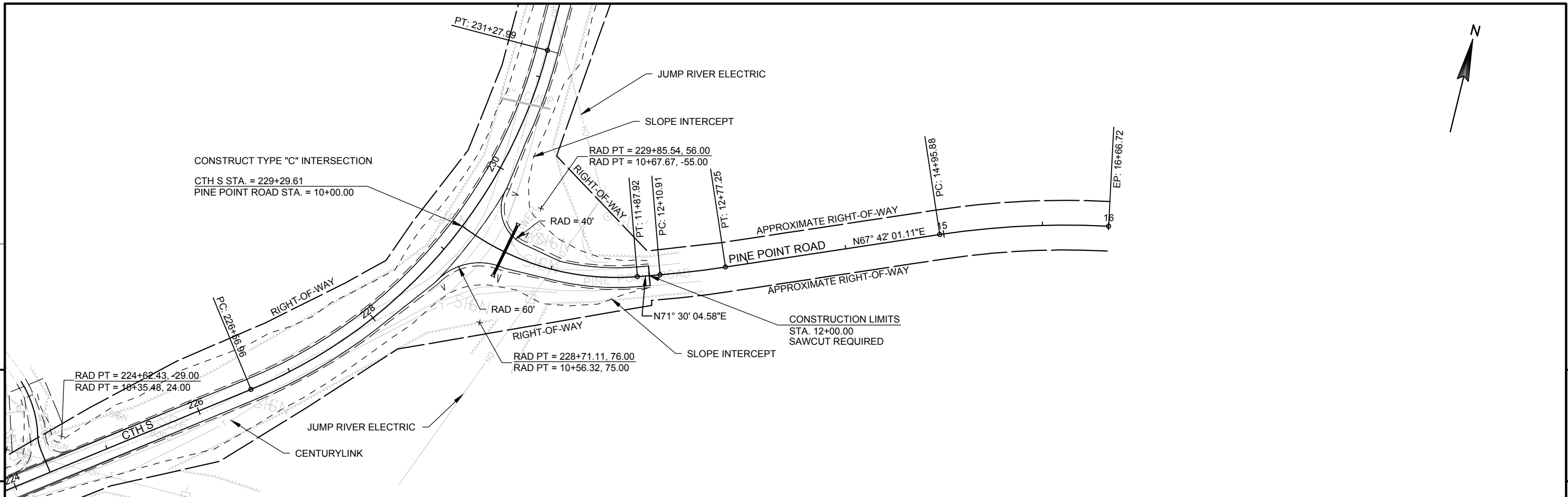
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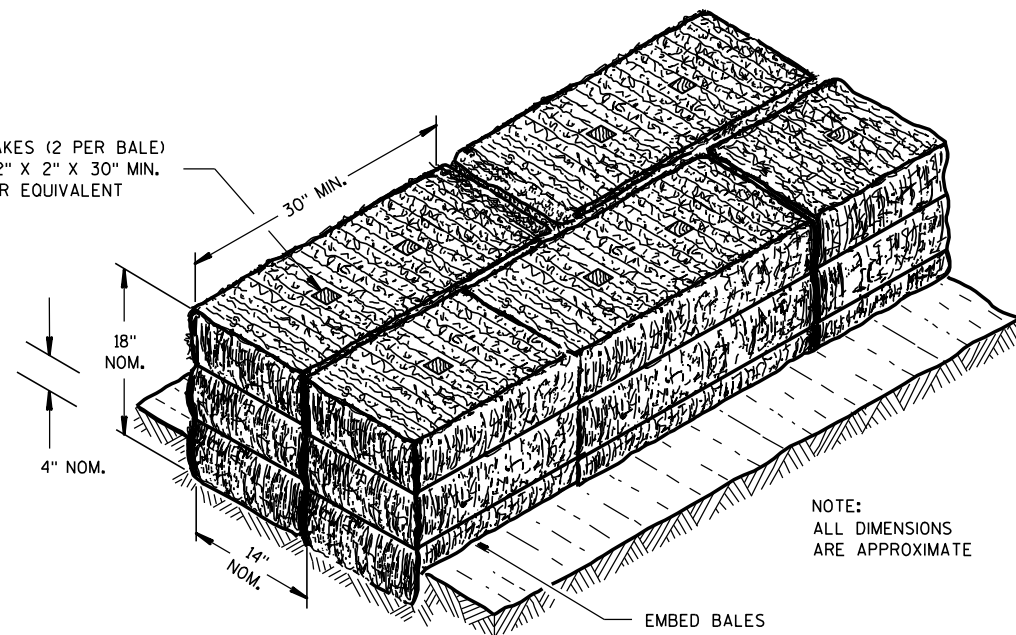
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| PROJECT NO: 8780-00-70 | HWY: CTH S | COUNTY: SAWYER | PLAN AND PROFILE: CTH S | SHEET | E |
|------------------------|------------|----------------|-------------------------|-------|---|



Standard Detail Drawing List

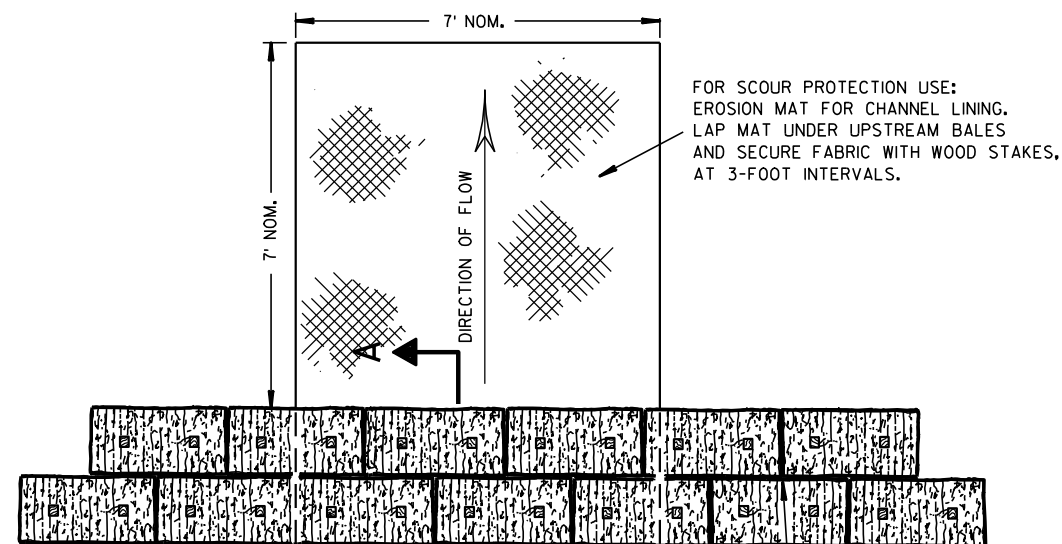
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|-----------|--|
| 08E08-03 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E09-06 | SILT FENCE |
| 08E14-01 | TRACKING PAD |
| 08F01-11 | APRON ENDWALLS FOR CULVERT PIPE |
| 08F04-07 | JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL |
| 09A01-13A | AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE |
| 15A01-12A | MARKER POST FOR RIGHT-OF-WAY |
| 15A01-12B | FLEXIBLE MARKER POST FOR RIGHT-OF-WAY |
| 15A03-02A | FLEXIBLE MARKER POST FOR CULVERT END |
| 15A03-02B | FLEXIBLE MARKER POST FOR CULVERT END |
| 15C02-06A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-06B | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-06C | DETOUR SIGNING FOR MAINLINE CLOSURES |
| 15C04-03 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC |
| 15C08-16A | PAVEMENT MARKING (MAINLINE) |
| 15C12-04 | TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS) |

WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



NOTE:
ALL DIMENSIONS
ARE APPROXIMATE

SECTION A-A

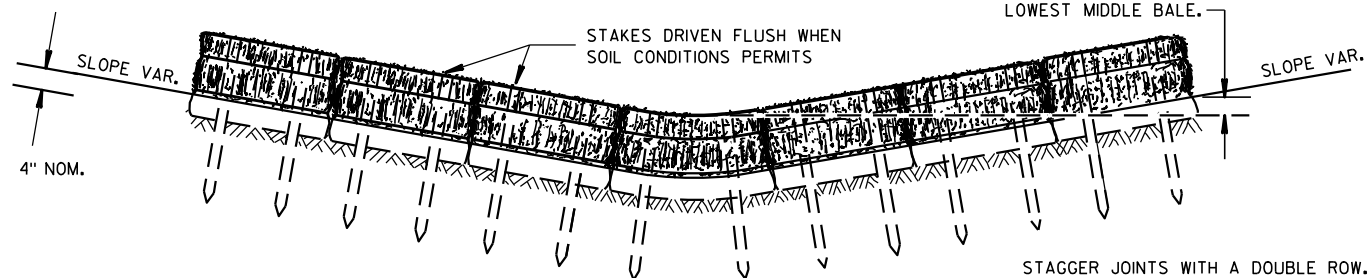


FOR SCOUR PROTECTION USE:
EROSION MAT FOR CHANNEL LINING.
LAP MAT UNDER UPSTREAM BALES
AND SECURE FABRIC WITH WOOD STAKES,
AT 3-FOOT INTERVALS.

PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT
ROWS OF BALES.

BOTTOM ELEVATION OF END BALE SHALL
BE EQUAL TO OR GREATER THAN TOP OF
LOWEST MIDDLE BALE.



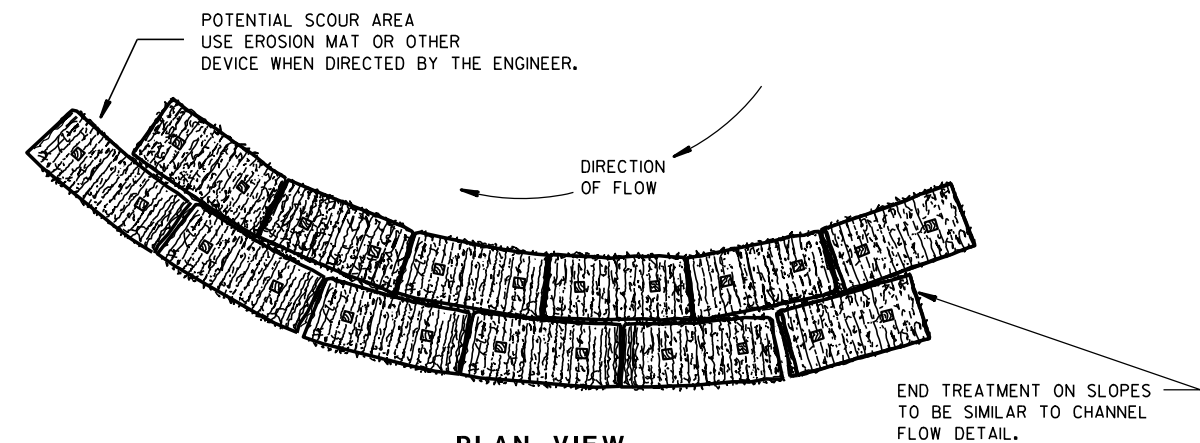
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

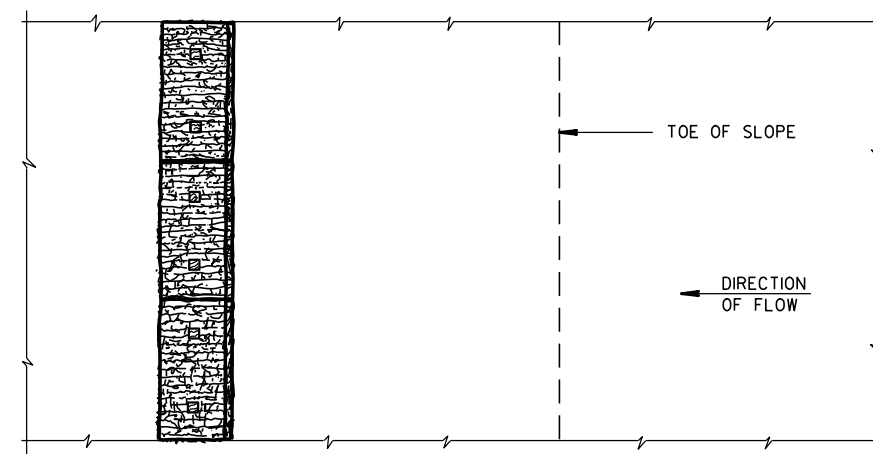
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

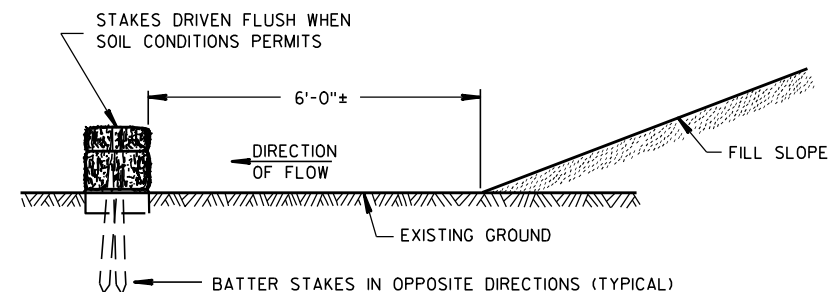


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

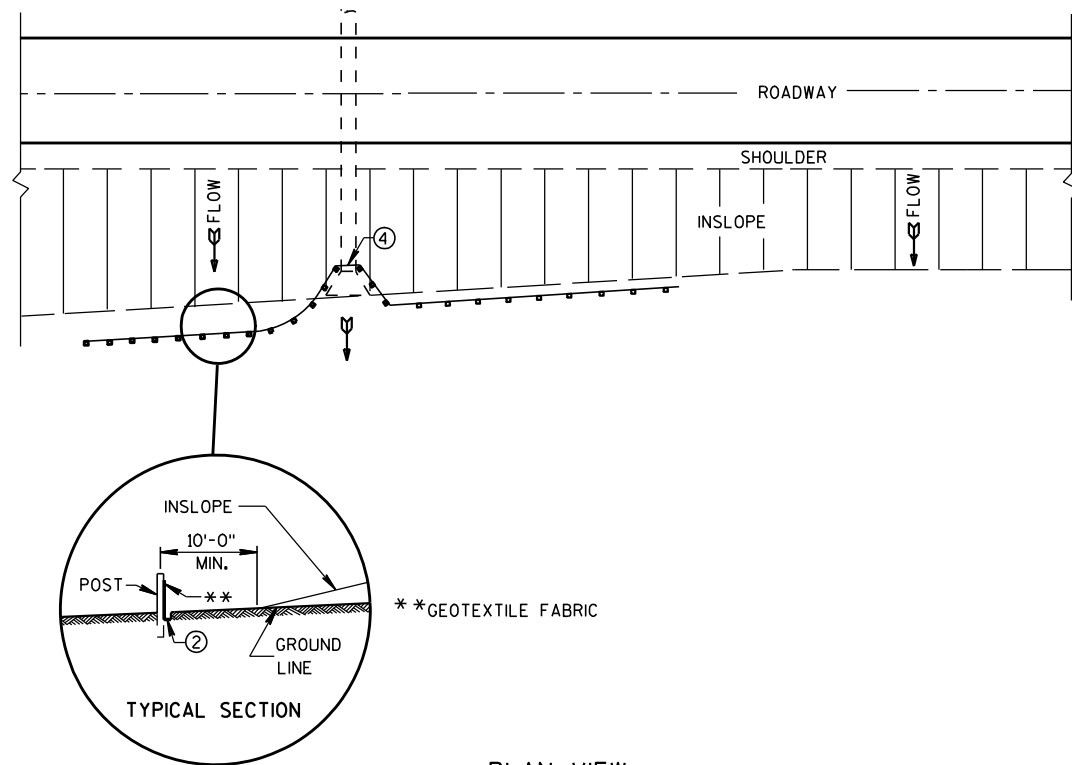
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

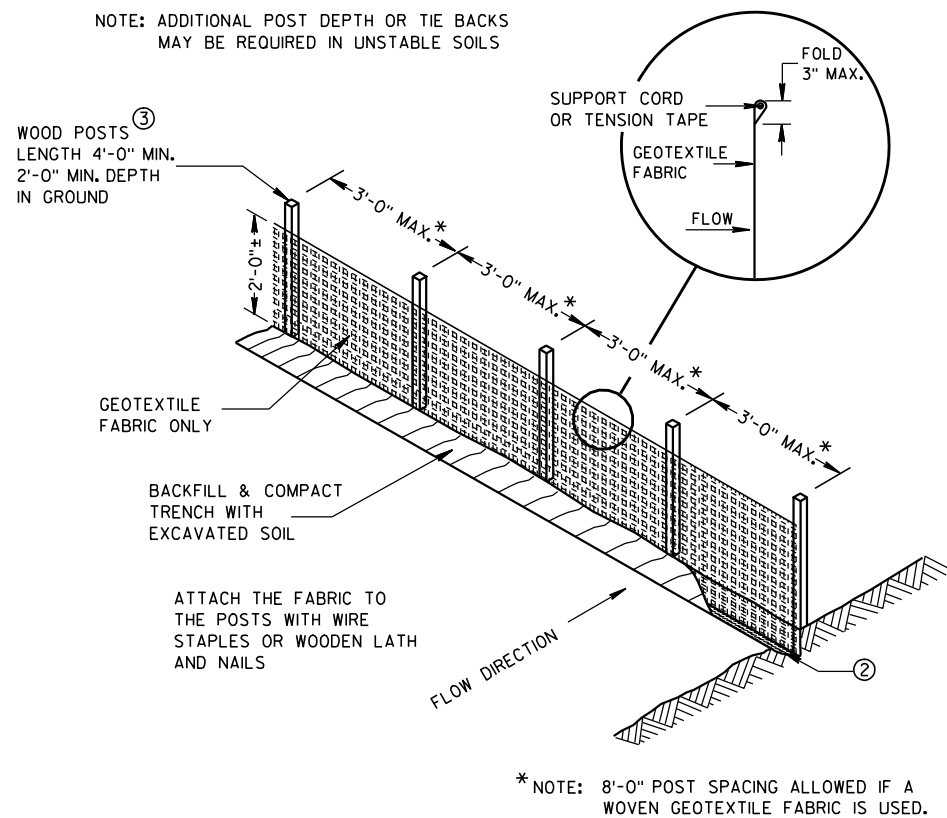
/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

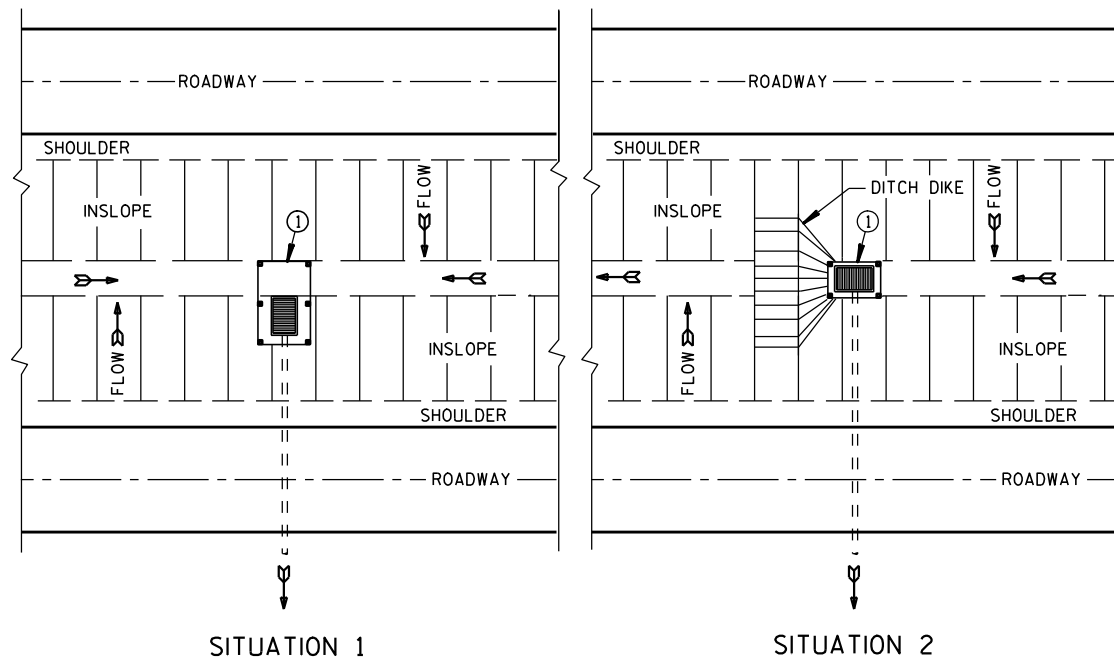


TYPICAL APPLICATION OF SILT FENCE

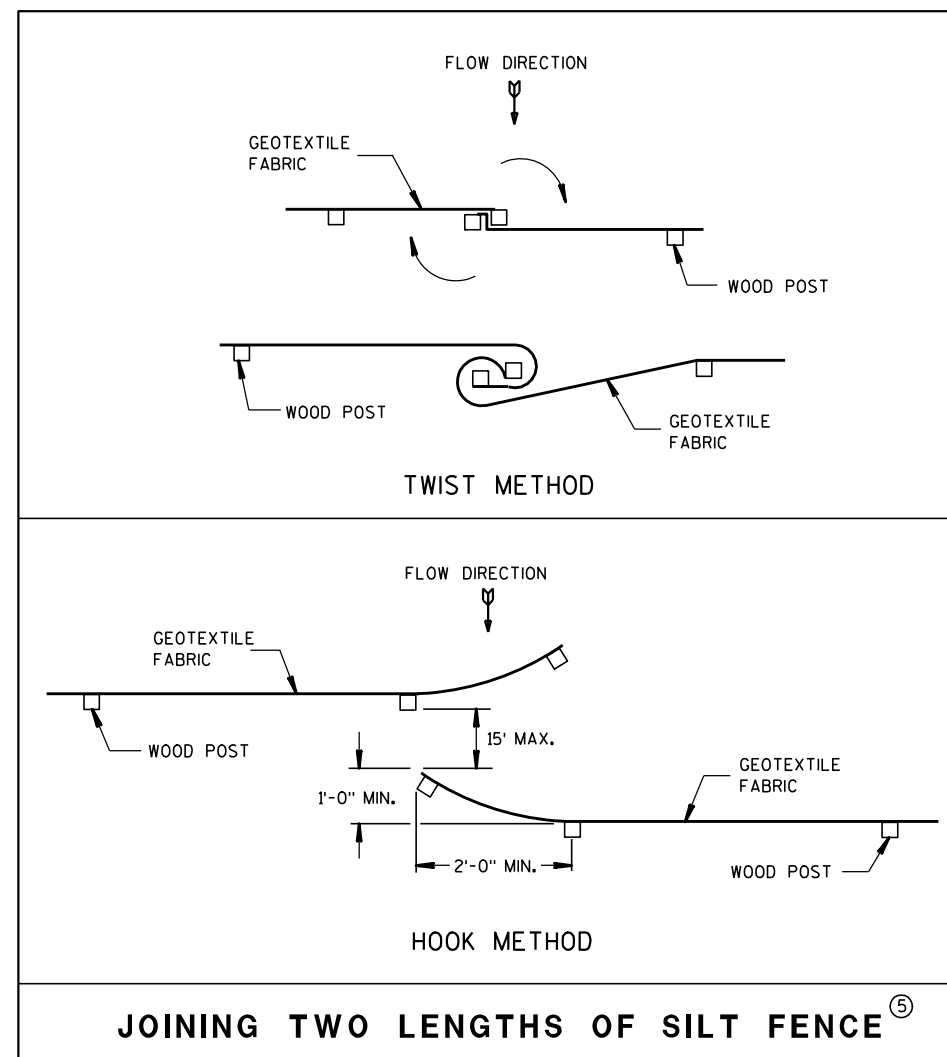
NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS



SILT FENCE



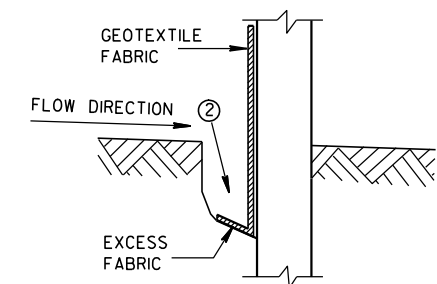
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS



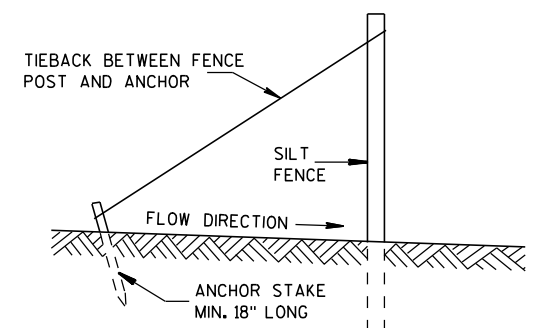
GENERAL NOTES

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

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 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



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

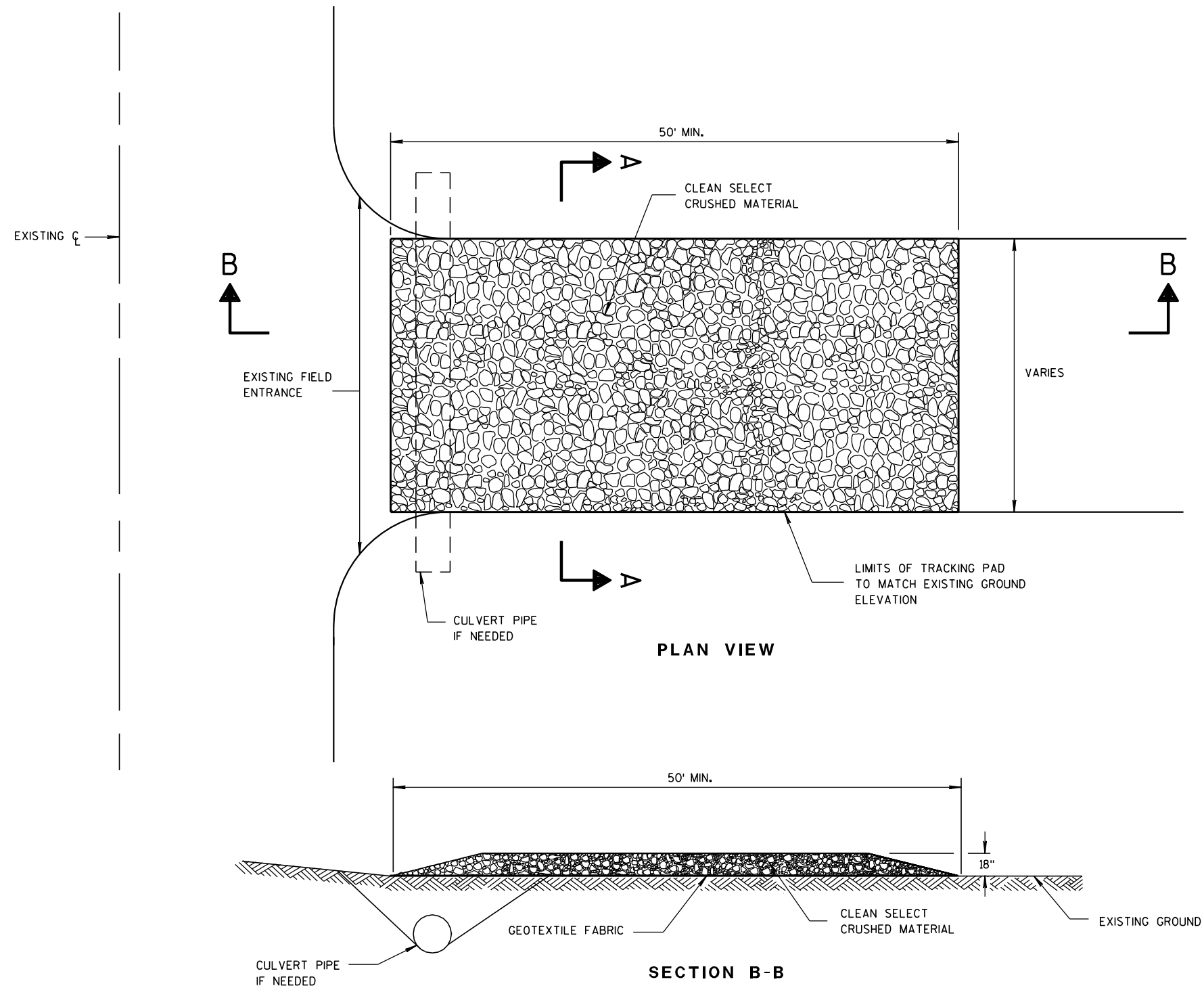
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



TRACKING PAD

GENERAL NOTES

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

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

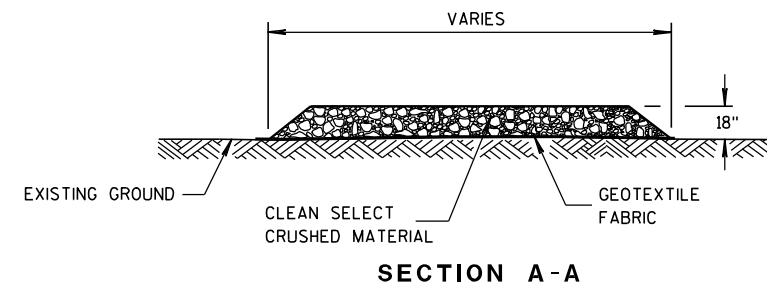
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

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

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

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



SECTION A-A

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011

DATE

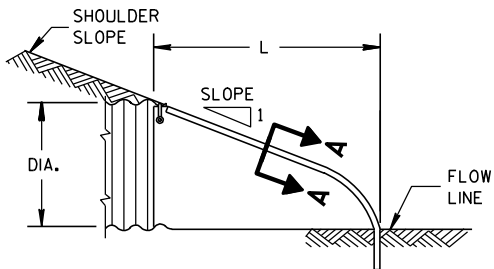
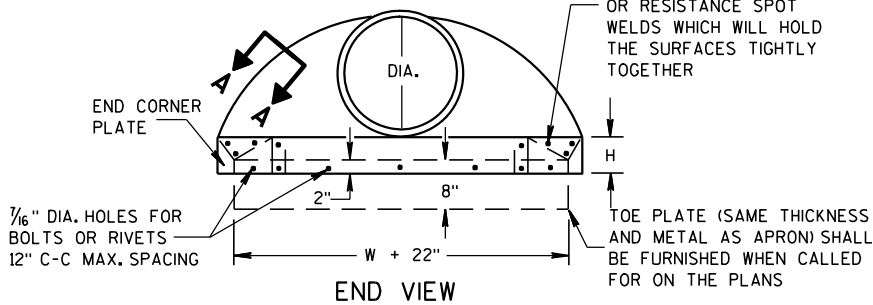
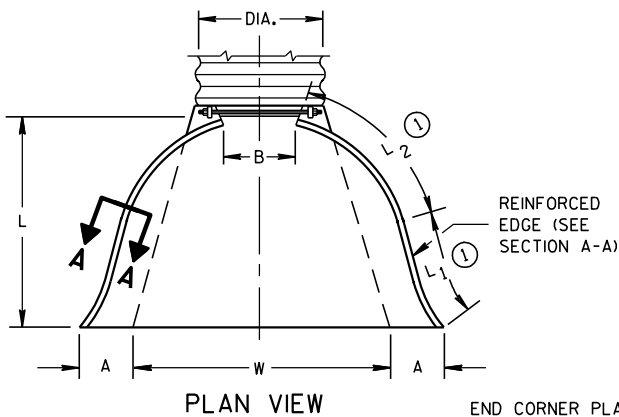
FHWA

/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT
ENGINEER

| 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. |

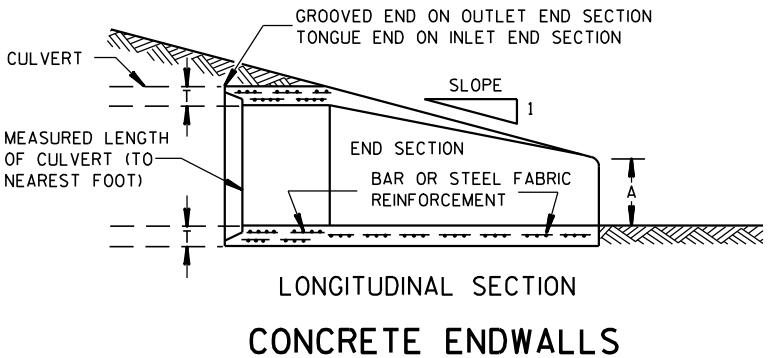
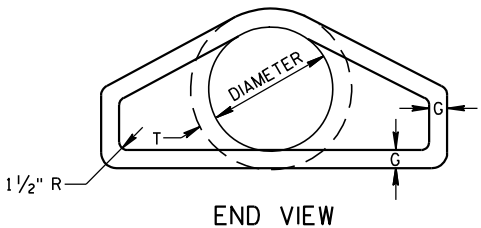
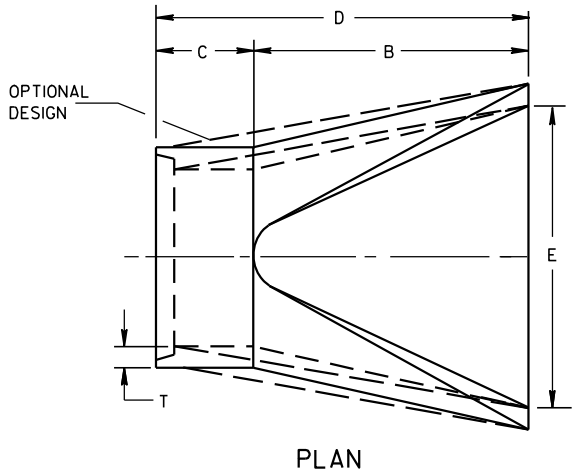
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



SIDE ELEVATION
METAL ENDWALLS

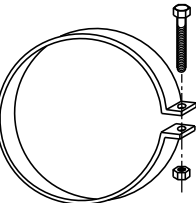
| REINFORCED CONCRETE APRON ENDWALLS | | | | | | | | | | | | |
|------------------------------------|---------------------|--------|--------|-----------|------------|-----|-------|------------------|--|--|--|--|
| PIPE DIA. (IN.) | DIMENSIONS (Inches) | | | | | | | APPROX. SLOPE | | | | |
| | T | A | 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

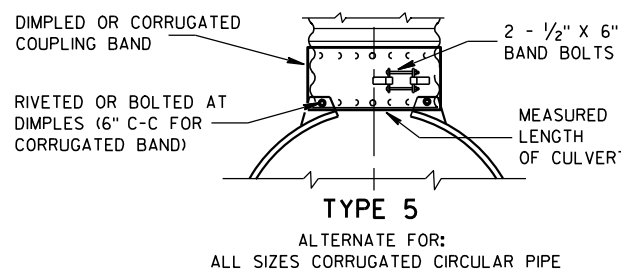
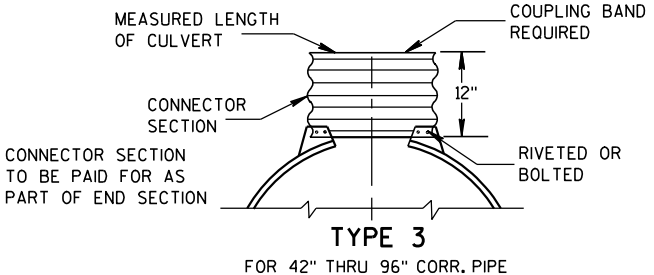
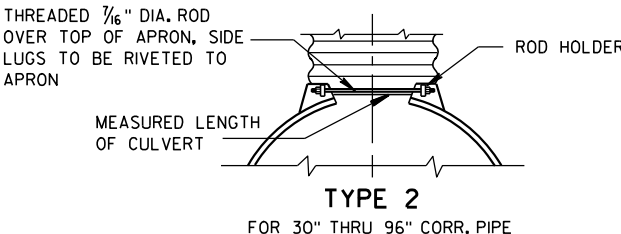
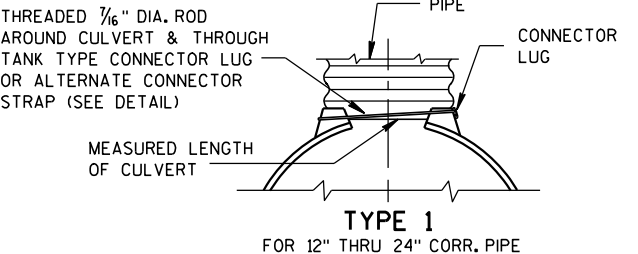


LONGITUDINAL SECTION
CONCRETE ENDWALLS

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



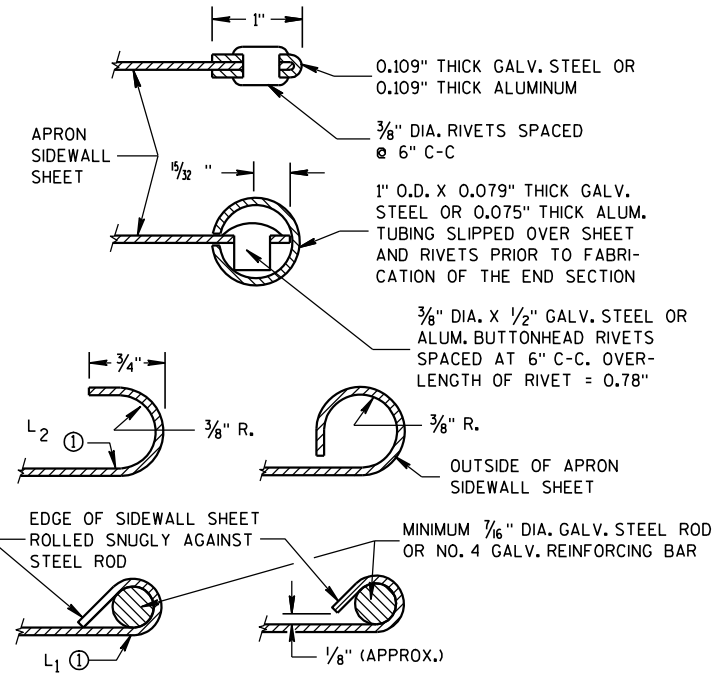
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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 VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

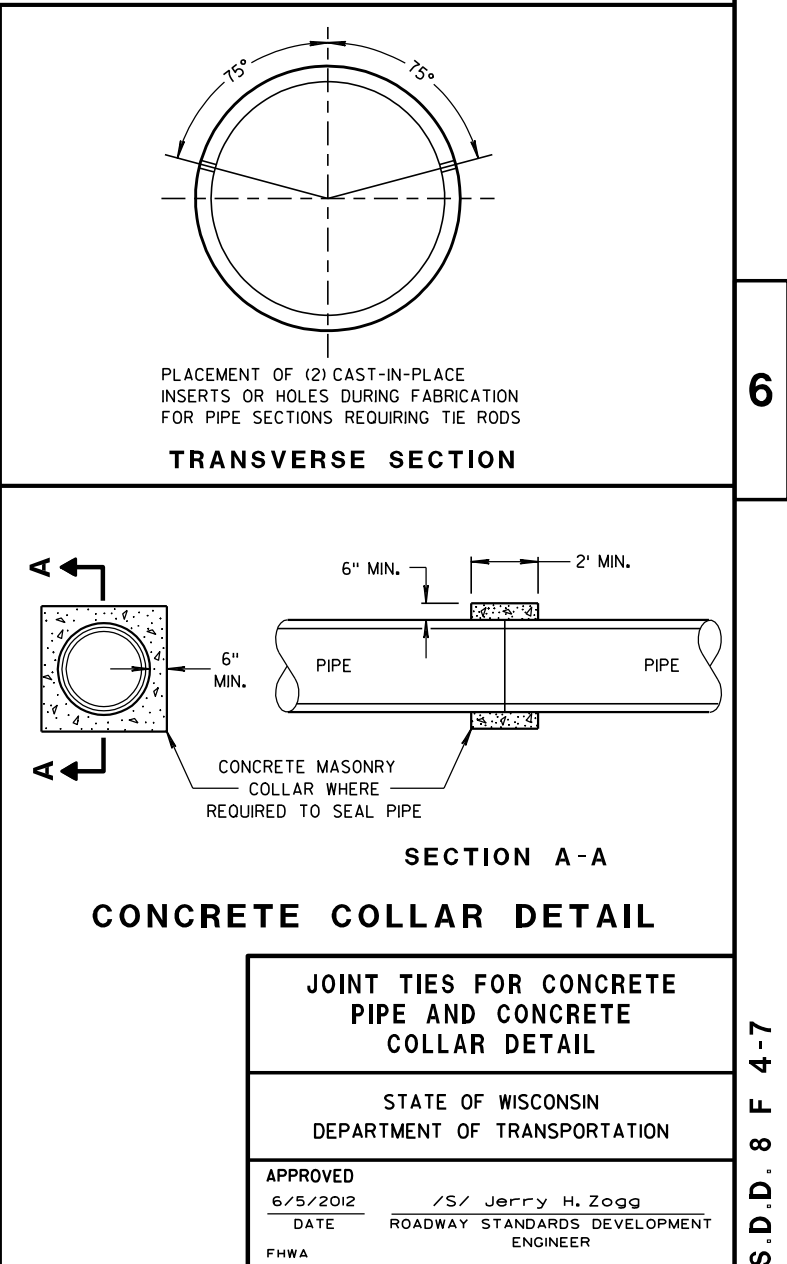
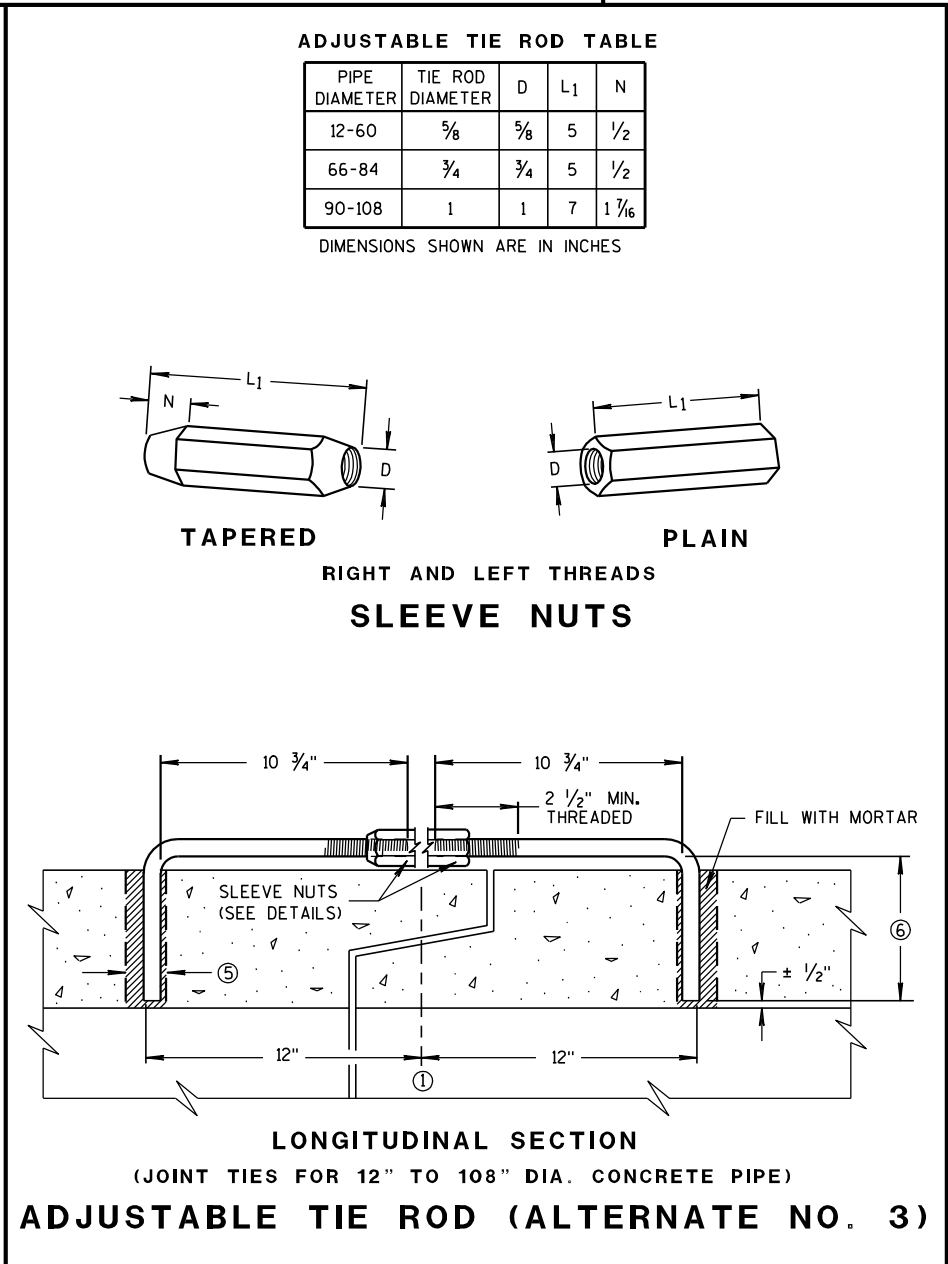
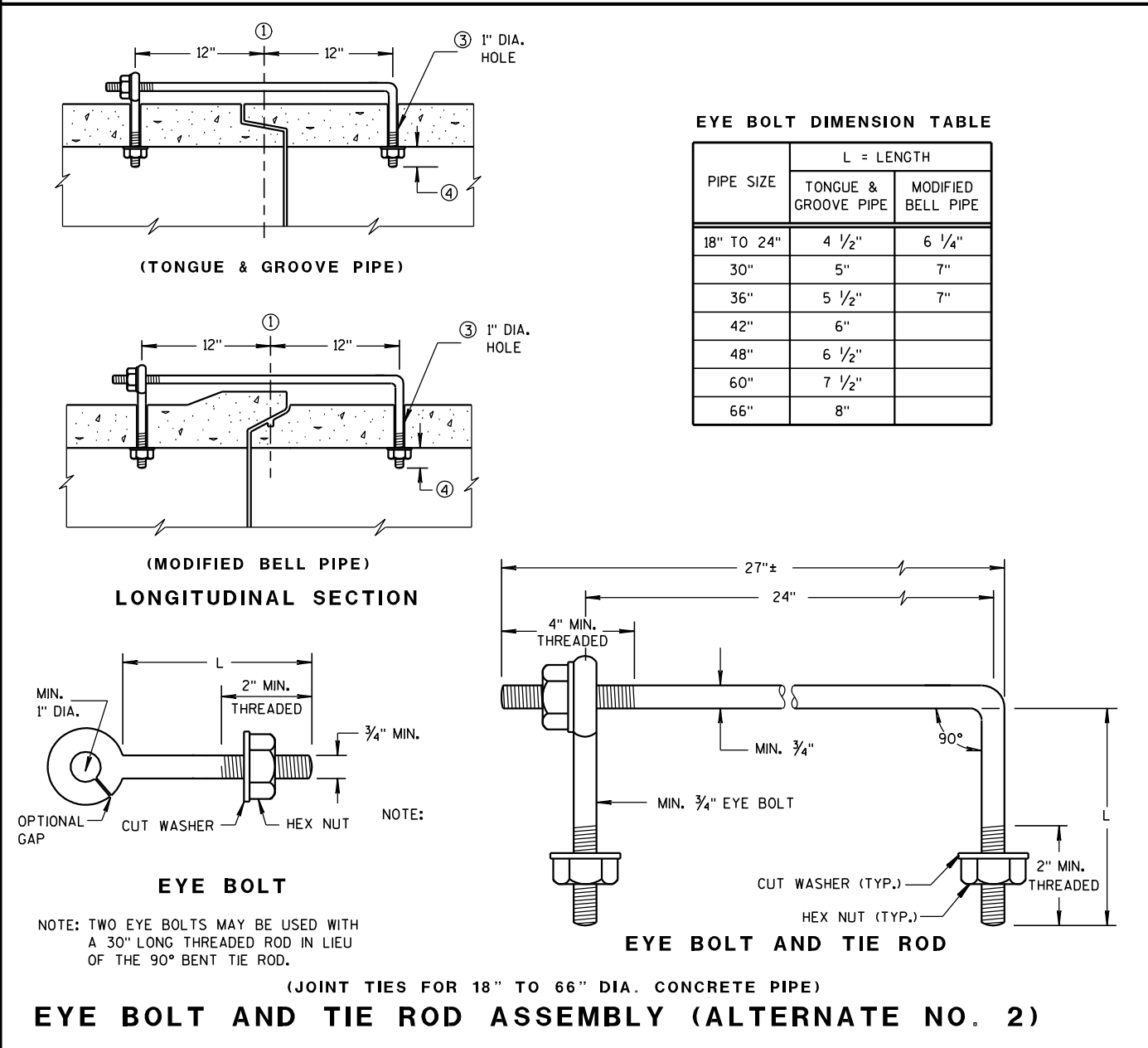
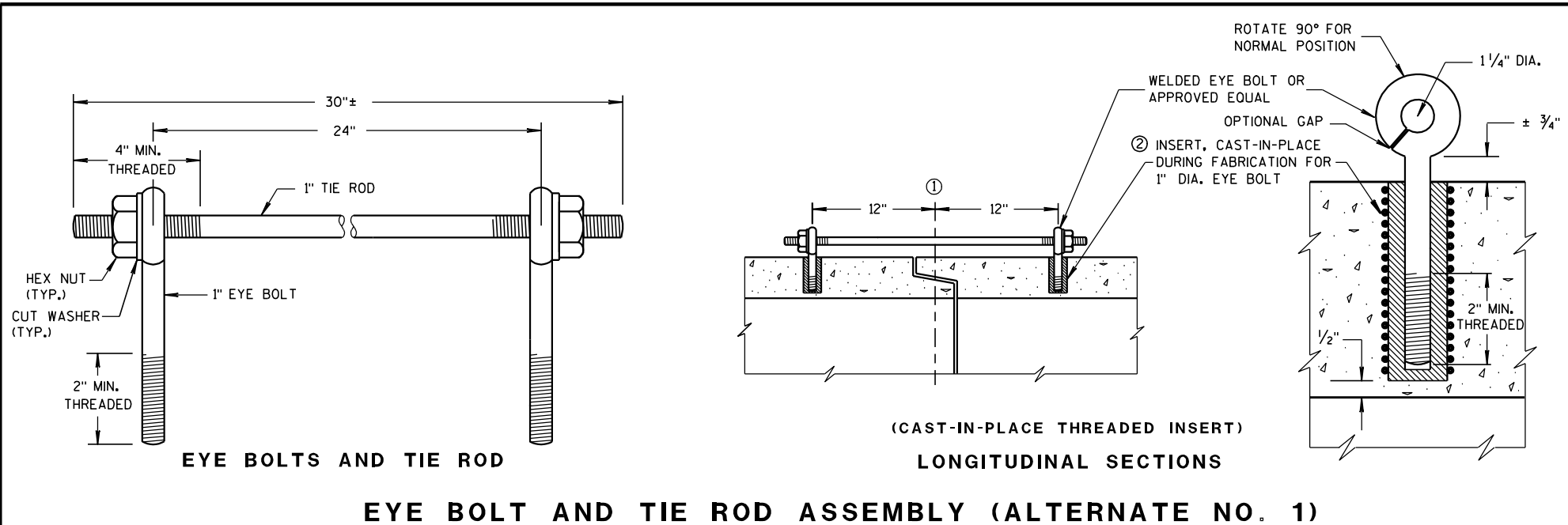
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT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

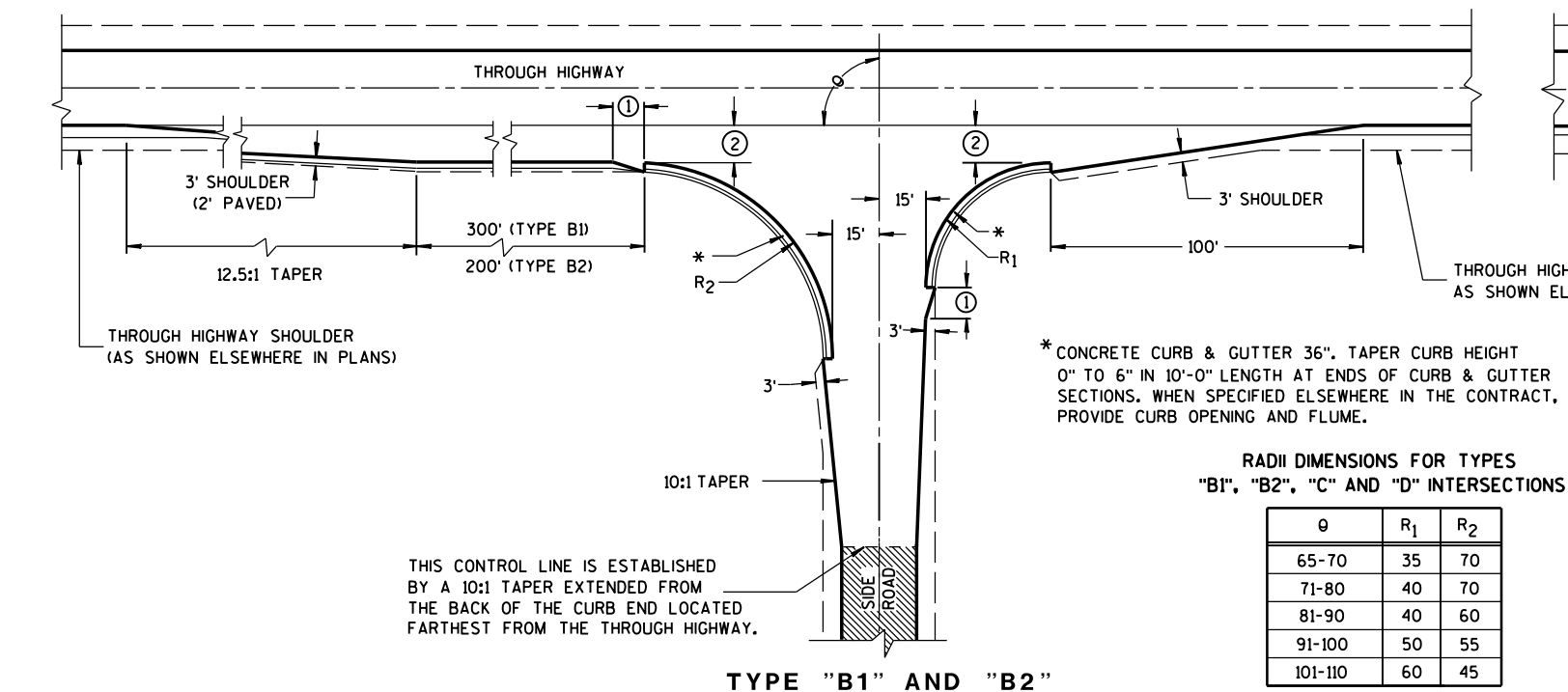
LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES.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

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

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

| | |
|--|--|
| APRON ENDWALLS FOR CULVERT PIPE | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 11/30/94 DATE | /S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER |
| FHWA | |





GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

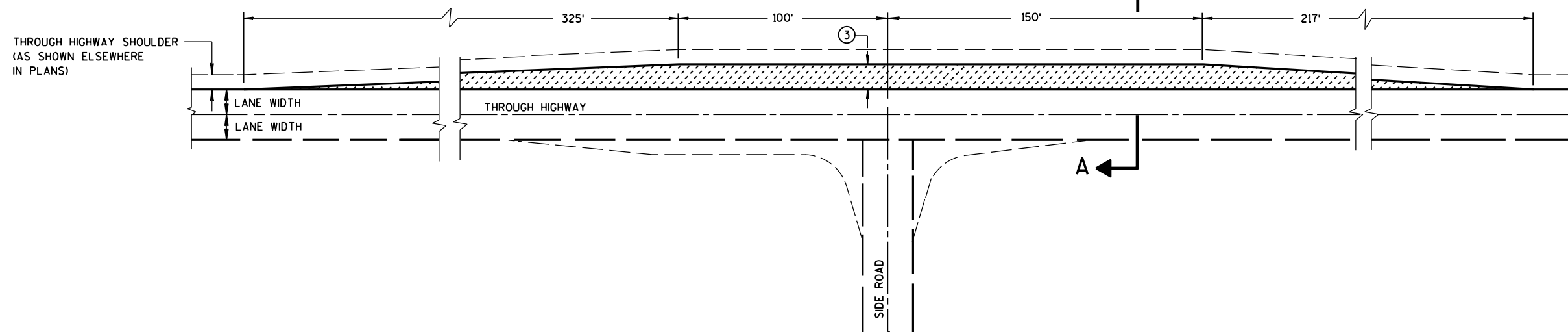
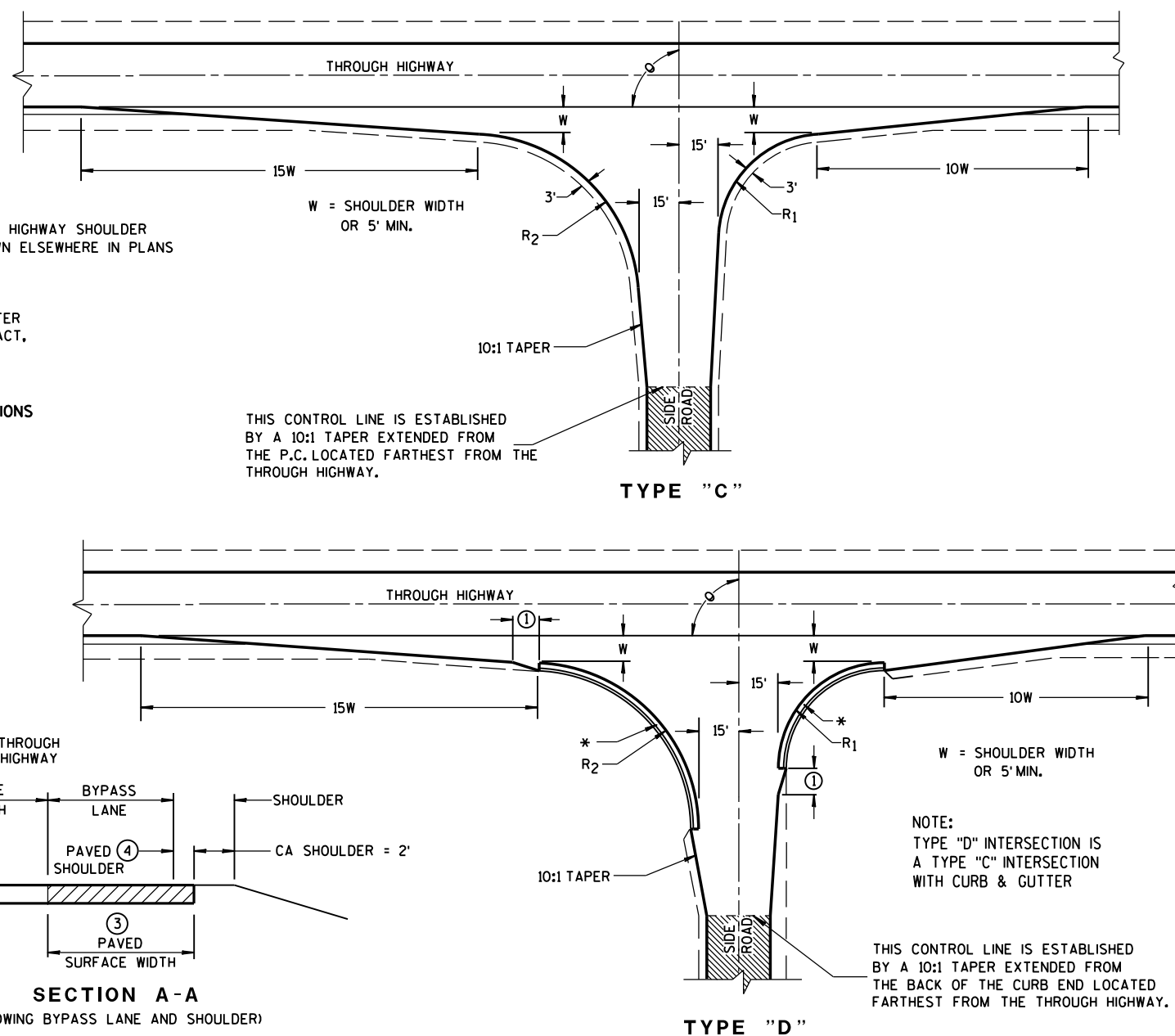
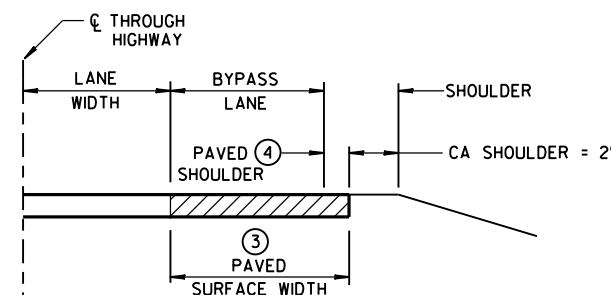
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

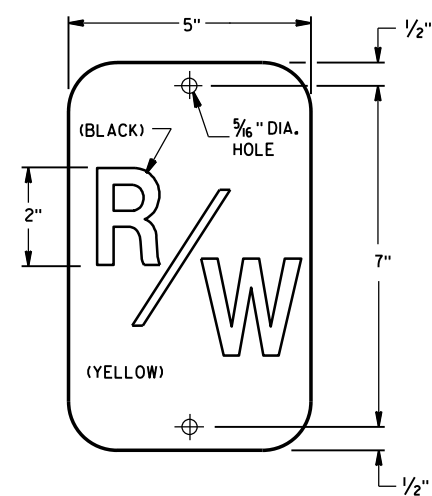
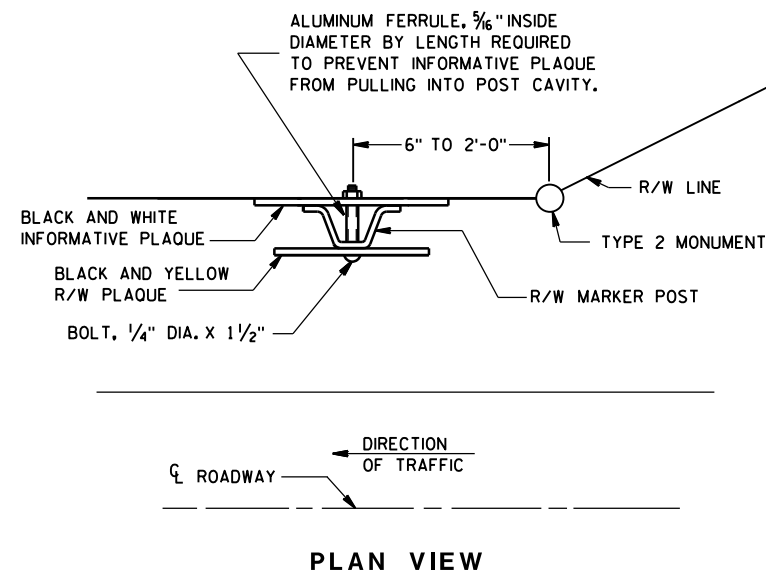
BYPASS LANE

- ① 10-FT TYPICAL.
- ② 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.
- **10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.
- ③ BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.
- ④ BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



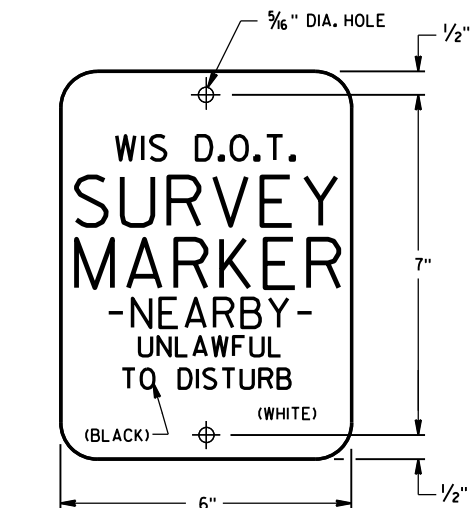
AT-GRADE SIDE ROAD
INTERSECTION, TYPES "B1", "B2",
"C" AND "D" AND TEE
INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



R/W PLaque

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE
WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT
OF TRANSPORTATION.



GENERAL NOTES

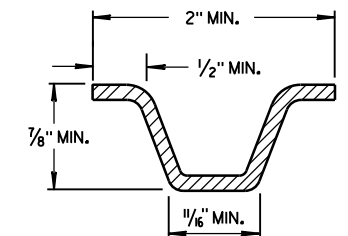
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A STEEL MARKER POST FOR RIGHT-OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY, WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. R/W AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE DEPARTMENT OF TRANSPORTATION.

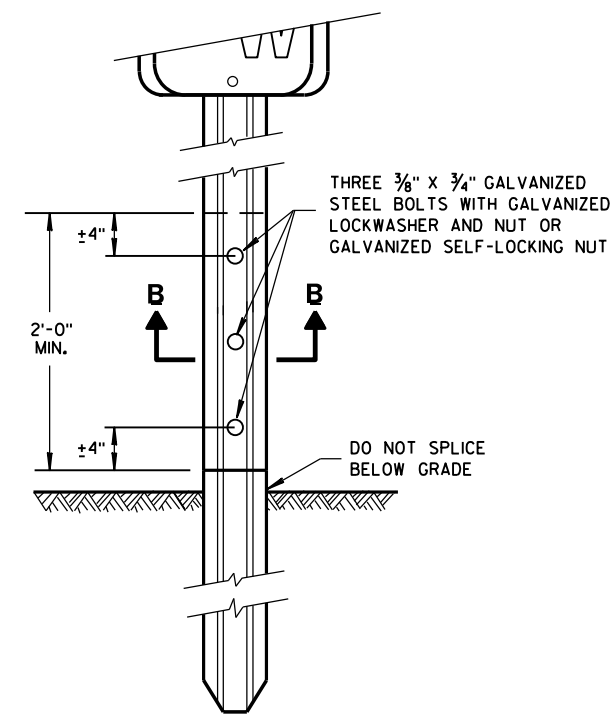
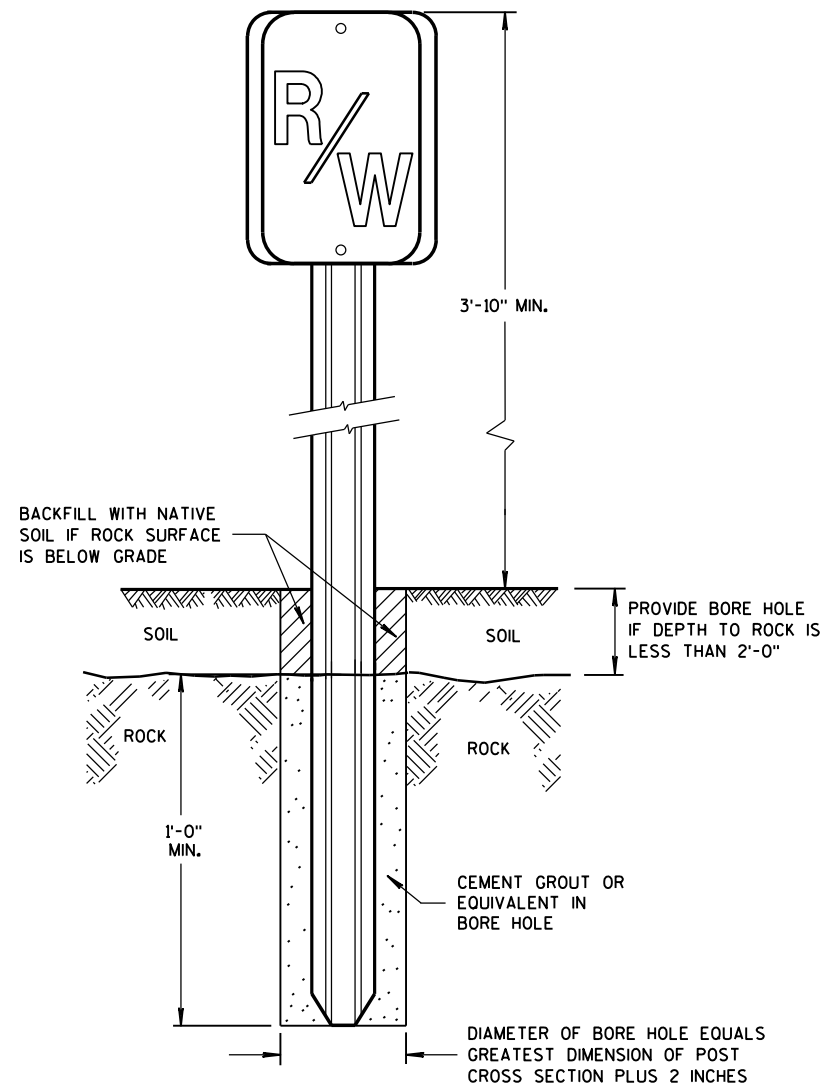
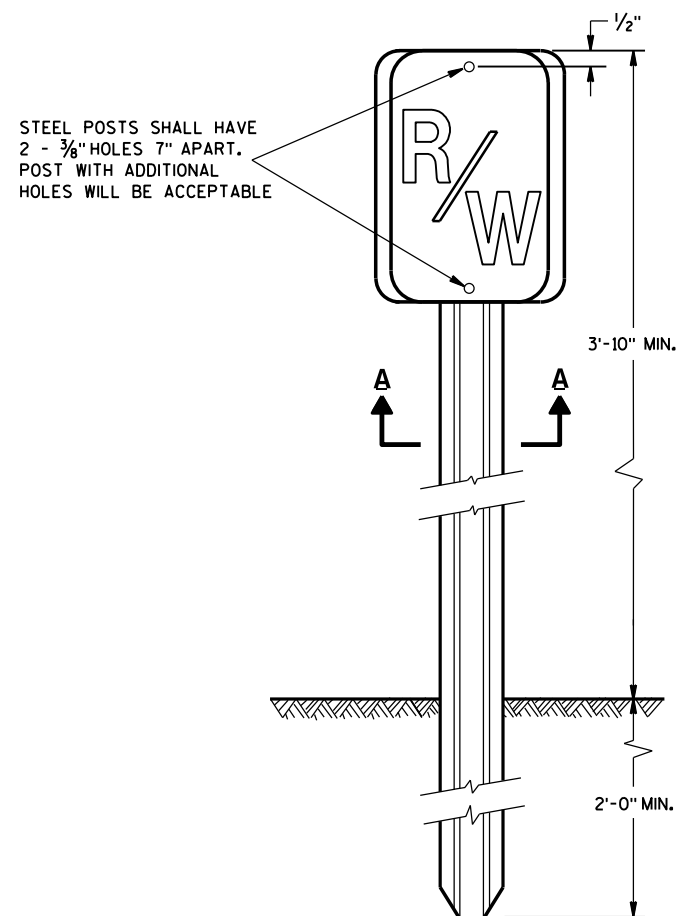
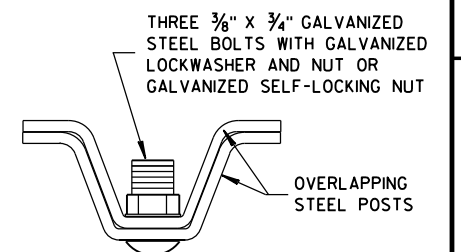
STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

- ① IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK TO A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR.
- FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



MIN. WEIGHT 1.12 LB./FT.

SECTION A-A



MARKER POST
FOR RIGHT-OF-WAY

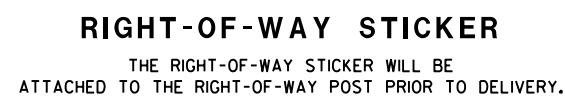
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015

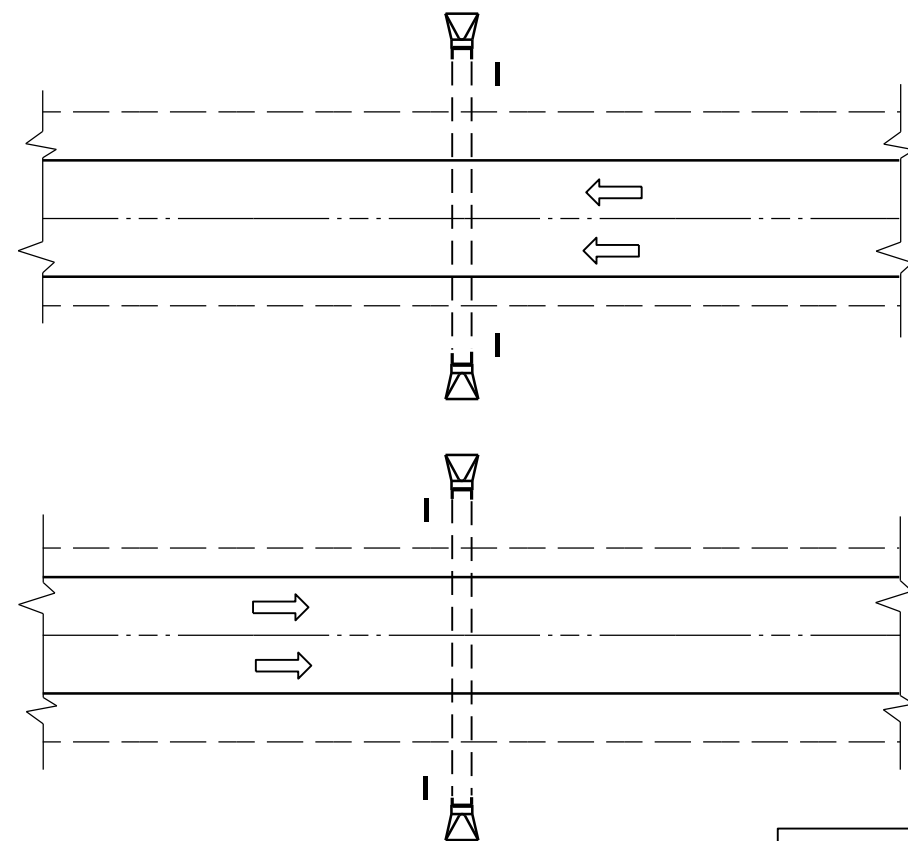
/S/ Ray Kumapayi

FHWA

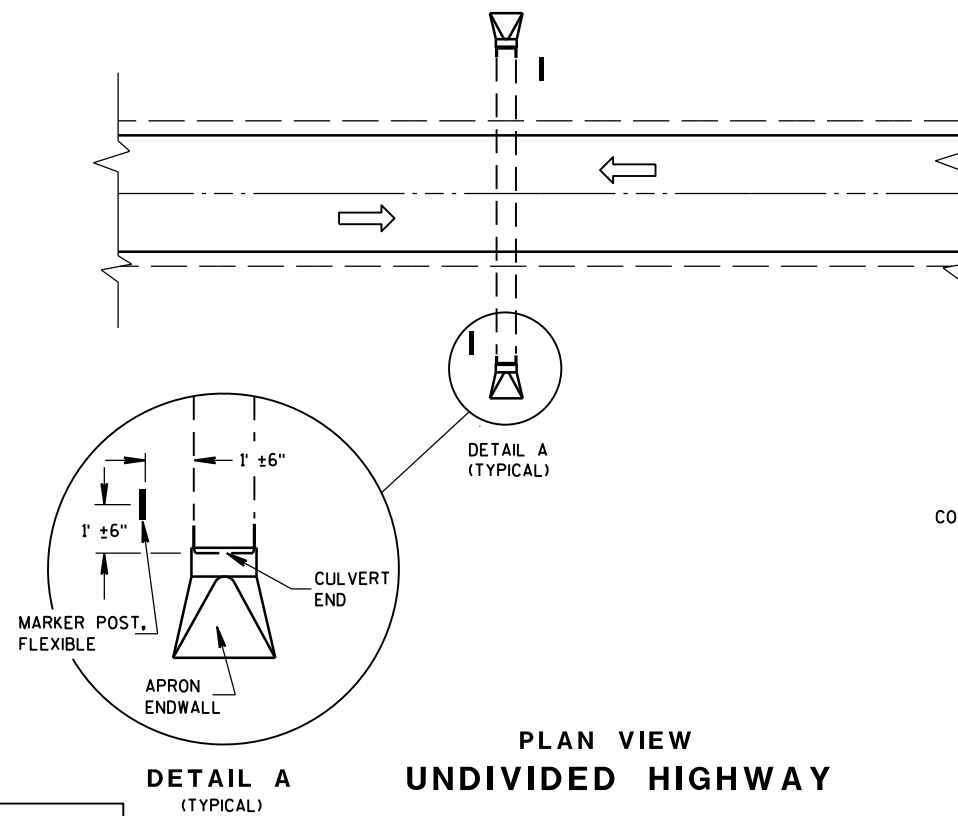


FILL THE BORE HOLE WITH CEMENT GROUT, OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.

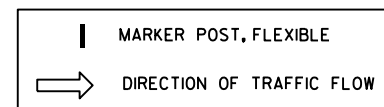




PLAN VIEW
DIVIDED HIGHWAY



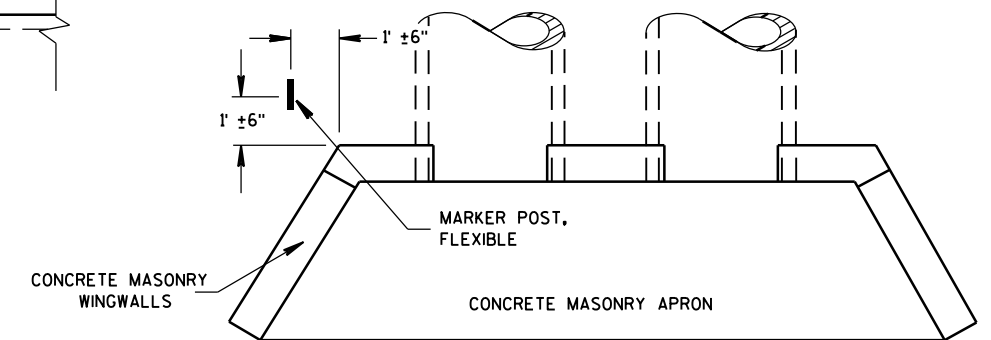
PLAN VIEW
UNDIVIDED HIGHWAY



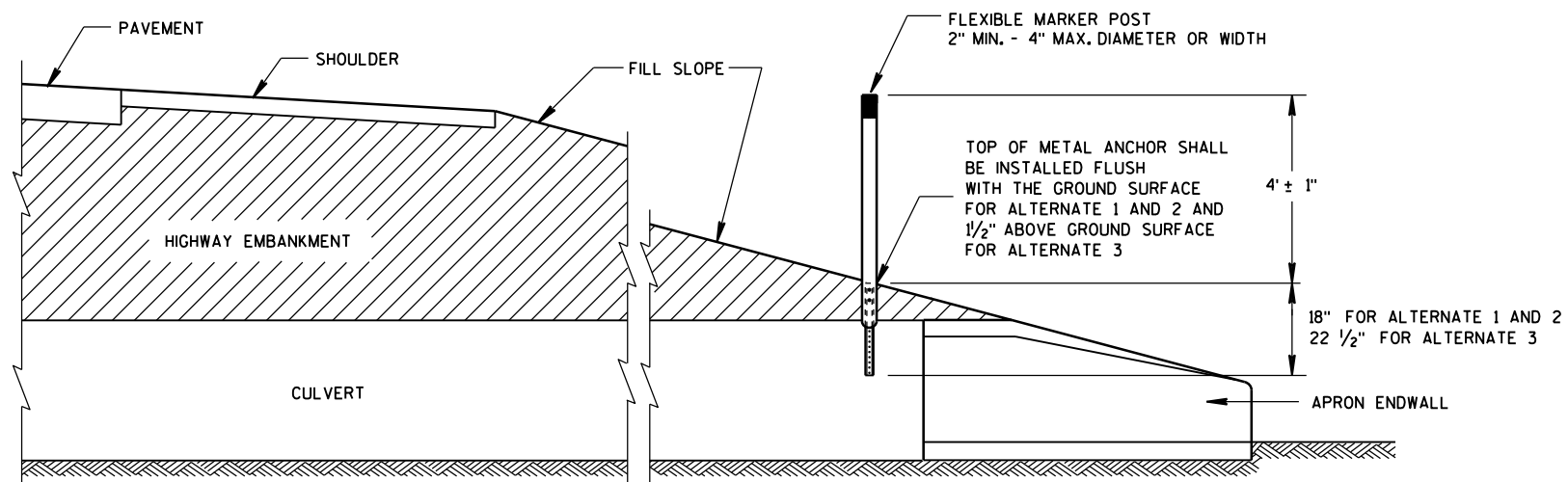
FLEXIBLE MARKER POST LOCATION

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.



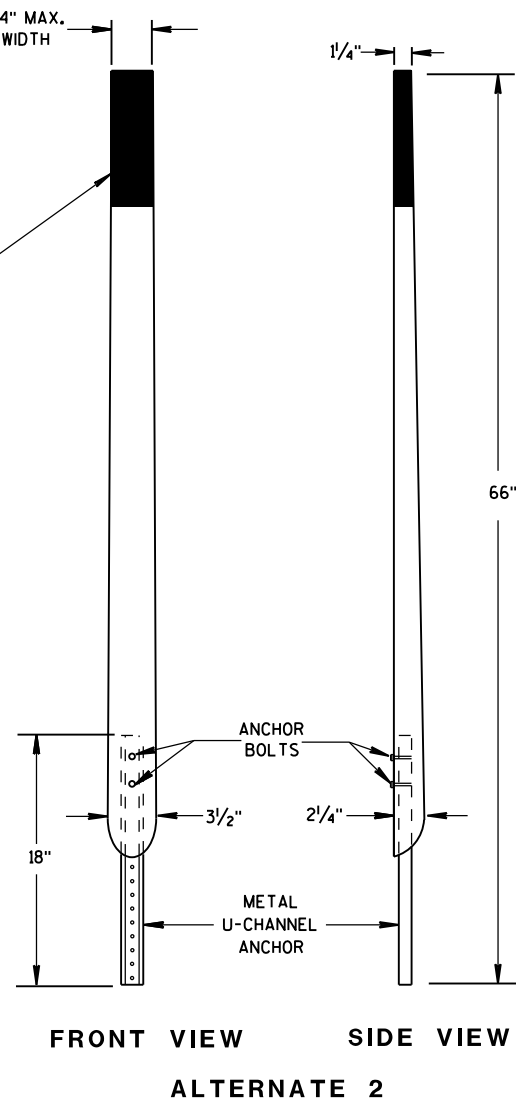
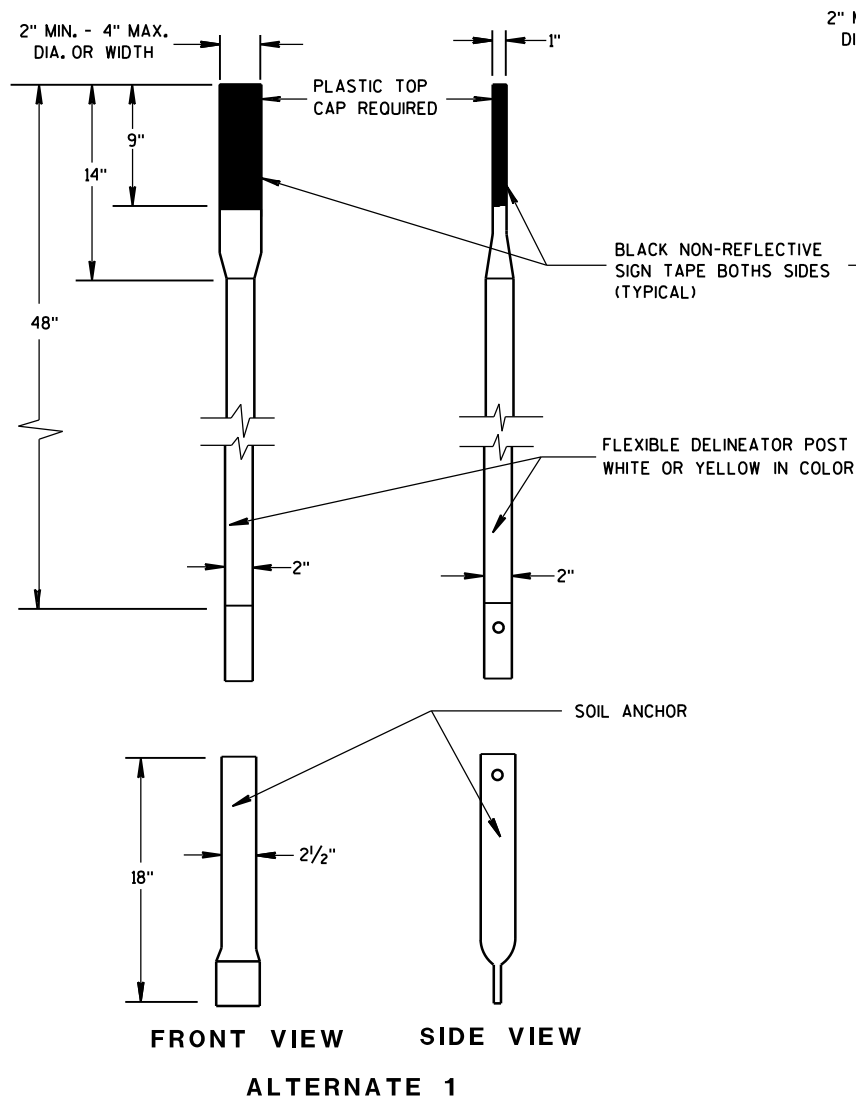
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



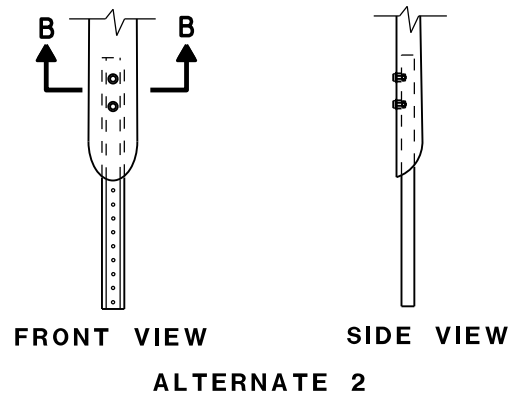
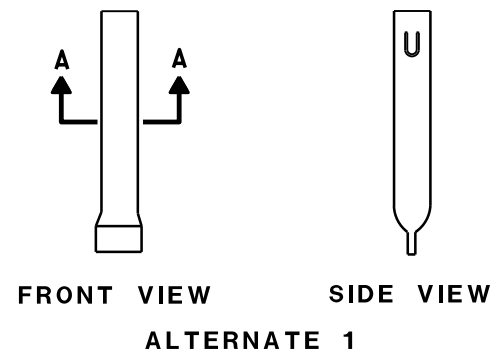
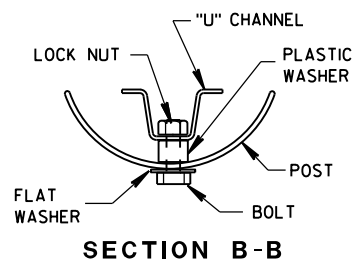
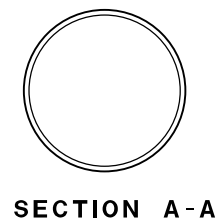
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

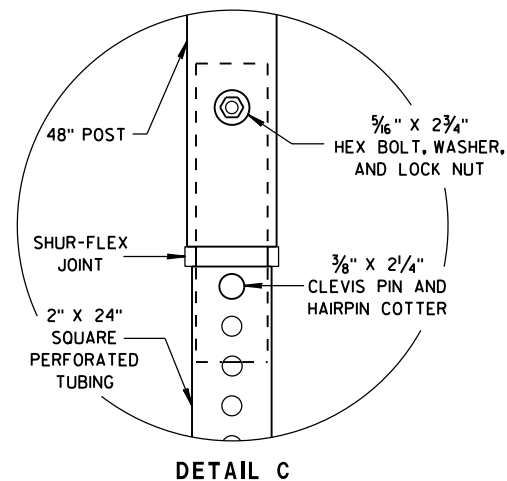
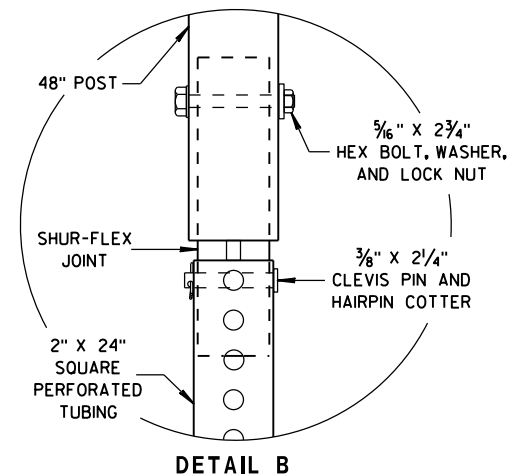
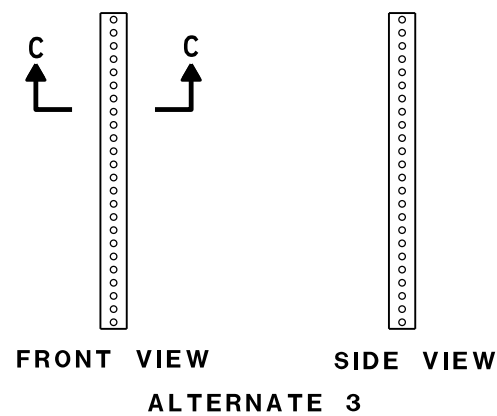
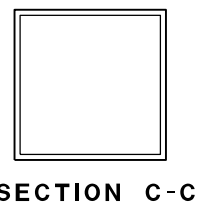
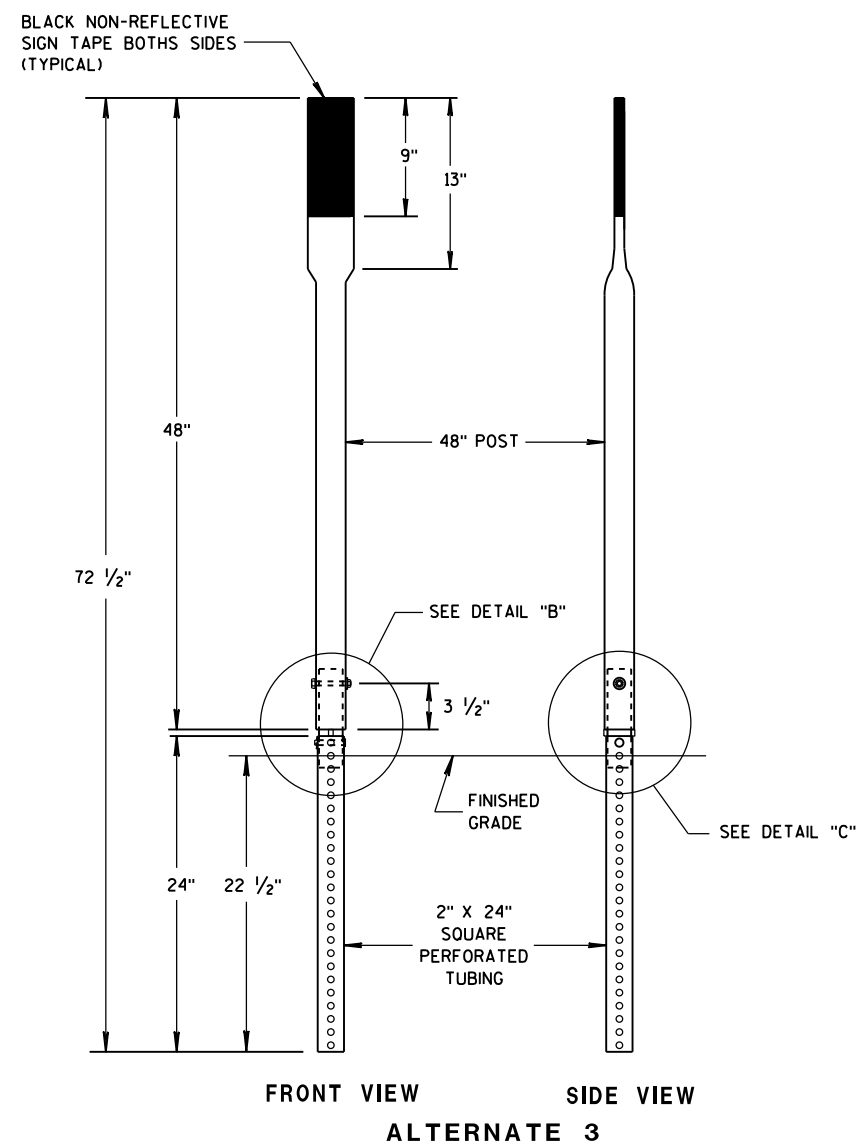
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FLEXIBLE MARKER POSTS



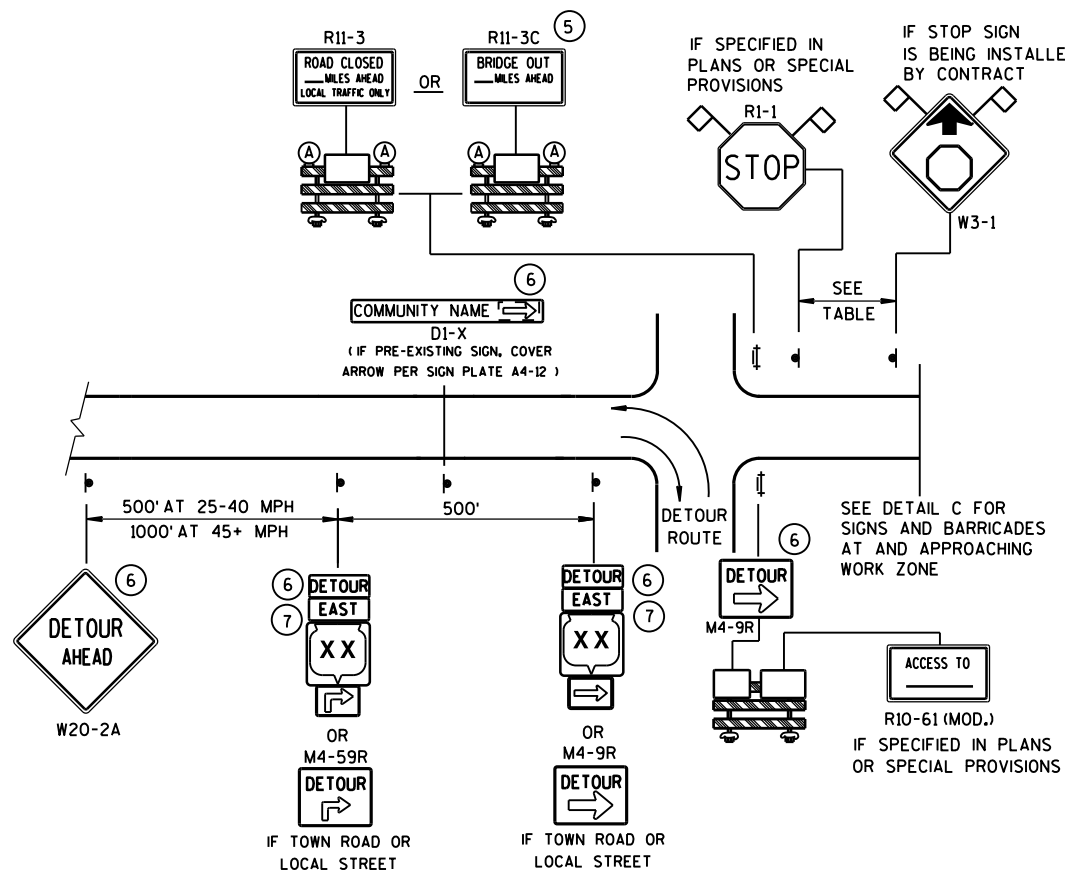
FLEXIBLE MARKER POST ANCHORS



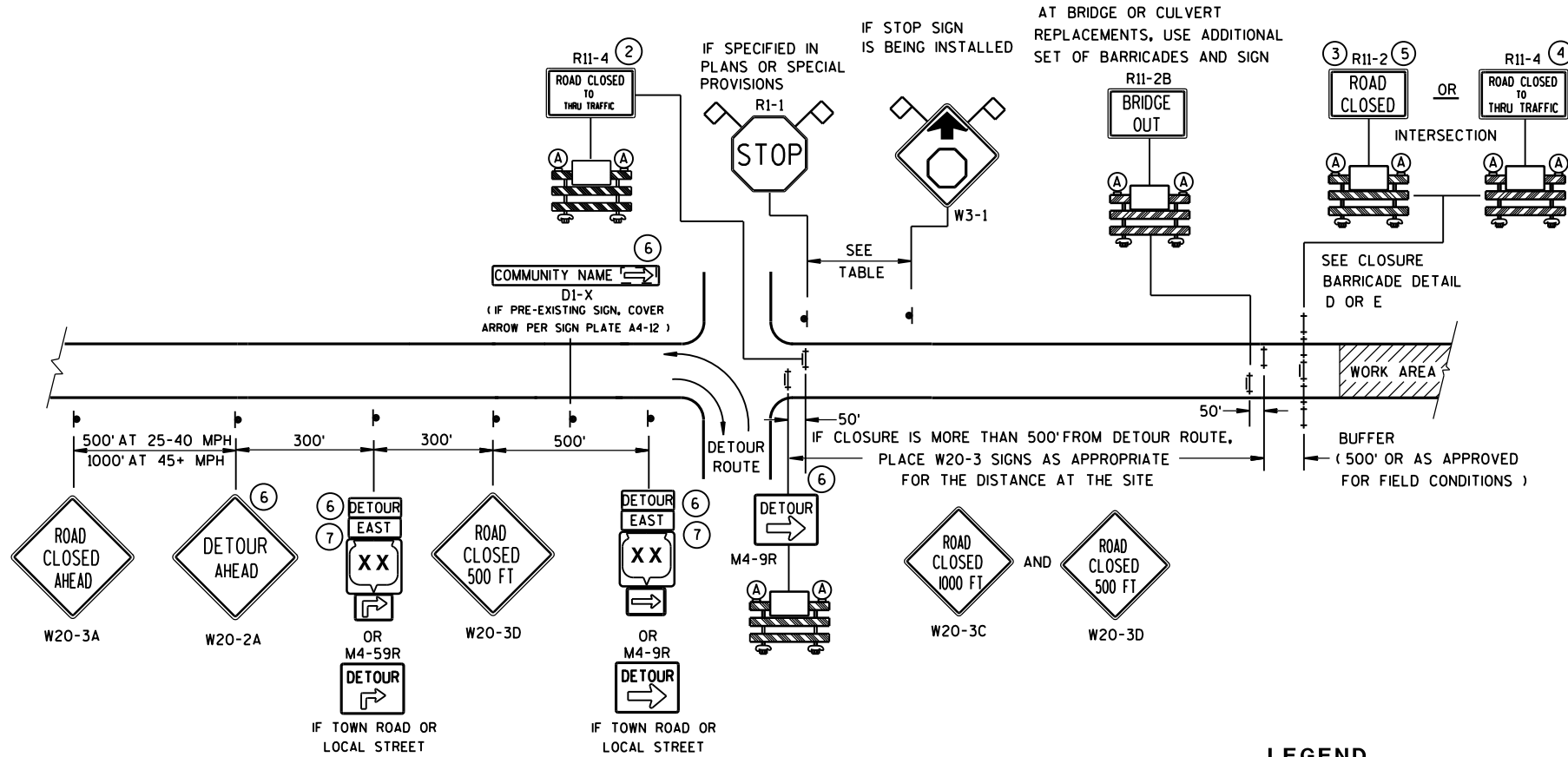
FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

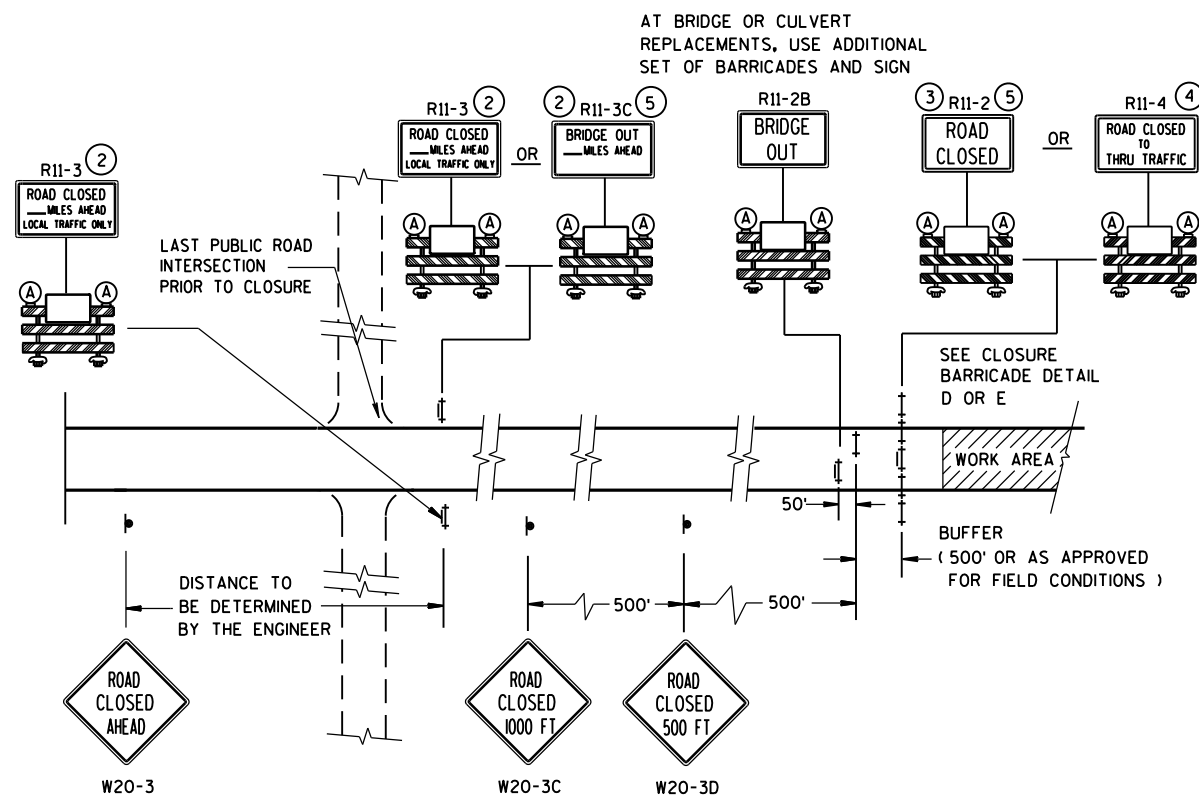
APPROVED
10/1/2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN 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)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

LEGEND

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

WORK AREA

DETOUR EAST M4-8
M3-X
XX OR COUNTY XX OR XX
M1-4 M1-5A M1-6

M05-1 OR M06-1

FLAGS, 16" X 16" MIN., (ORANGE)

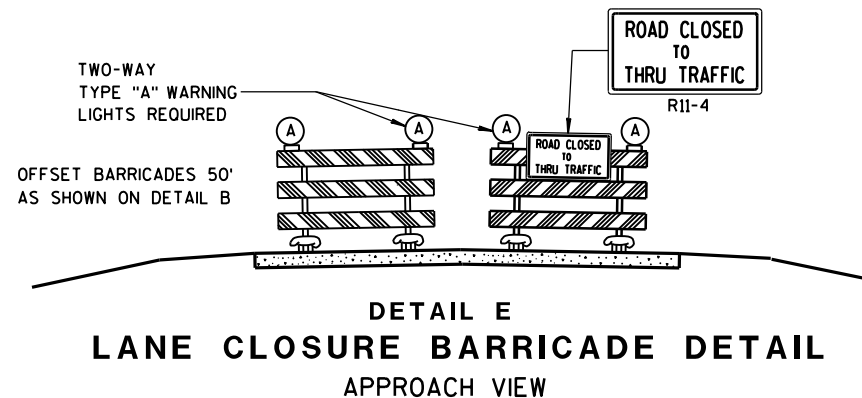
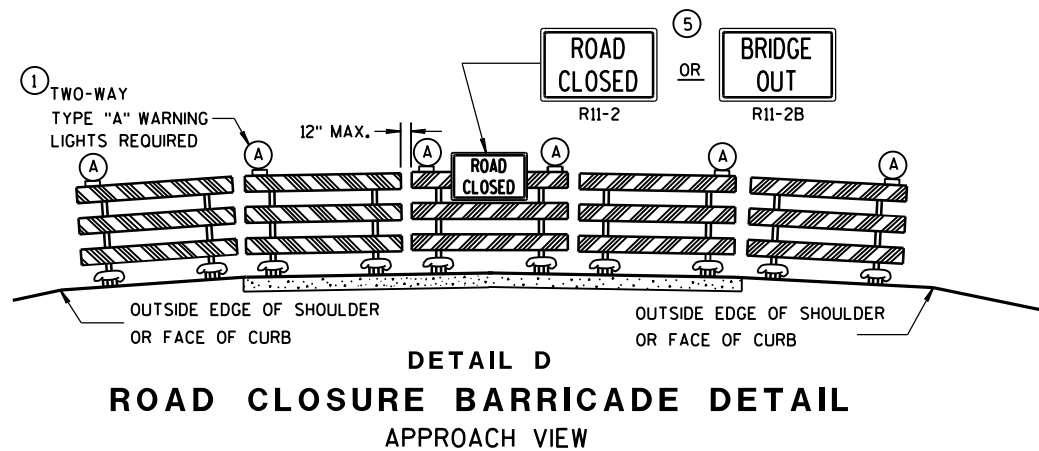
| SPEED LIMIT (MPH) | "STOP AHEAD" ADVANCE WARNING DISTANCE (FT) |
|-------------------|--|
| 25 | 200 |
| 30 | 200 |
| 35 | 350 |
| 40 | 350 |
| 45 | 500 |
| 50 | 550 |
| 55 | 750 |

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

Sept. 2015 /S/ Peter Amokobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER



SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

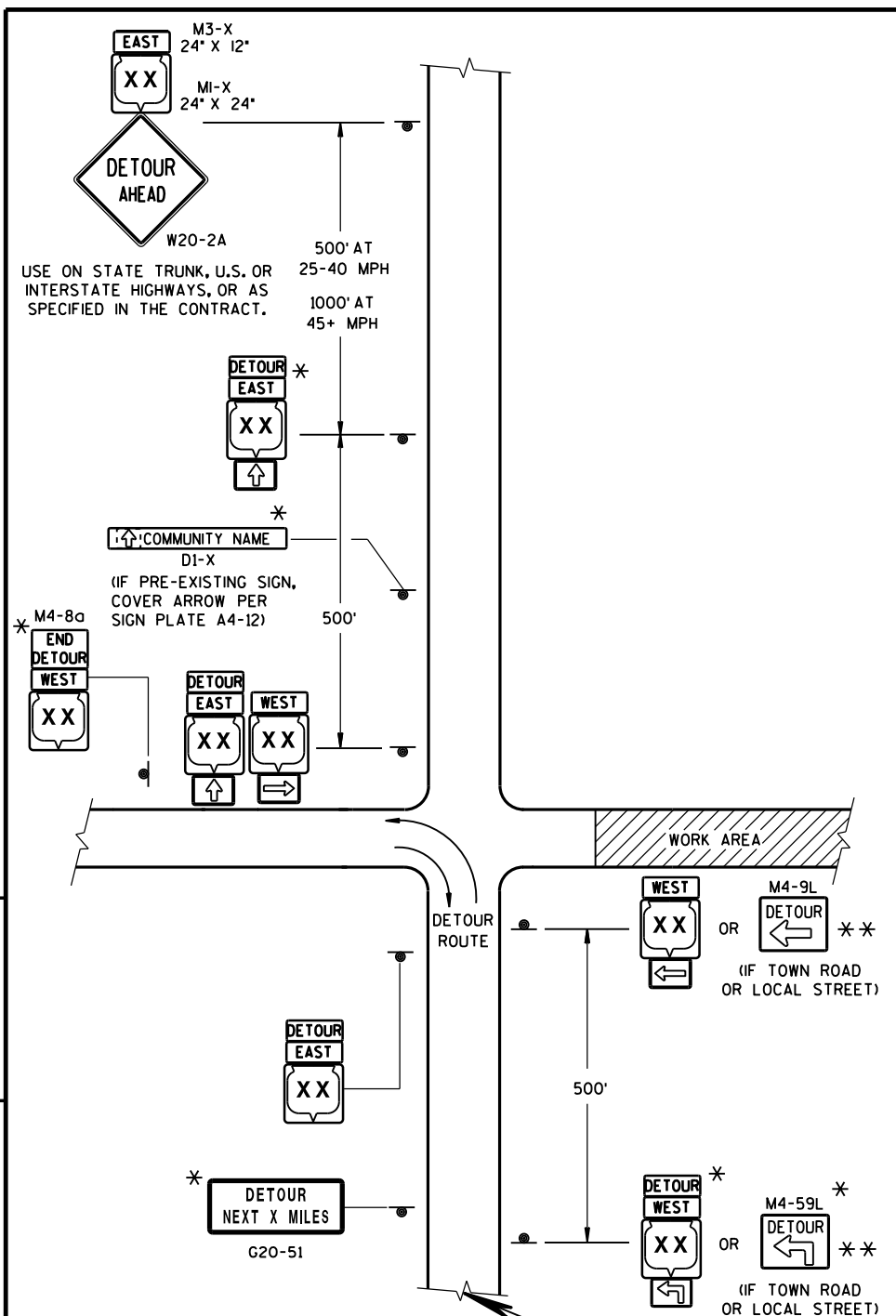
R1-1 SHALL BE 36" X 36".

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 /S/ Peter Amokobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER



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

MATCH POINT

DETAIL F
DETOUR SIGNING

GENERAL NOTES

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

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

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

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

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

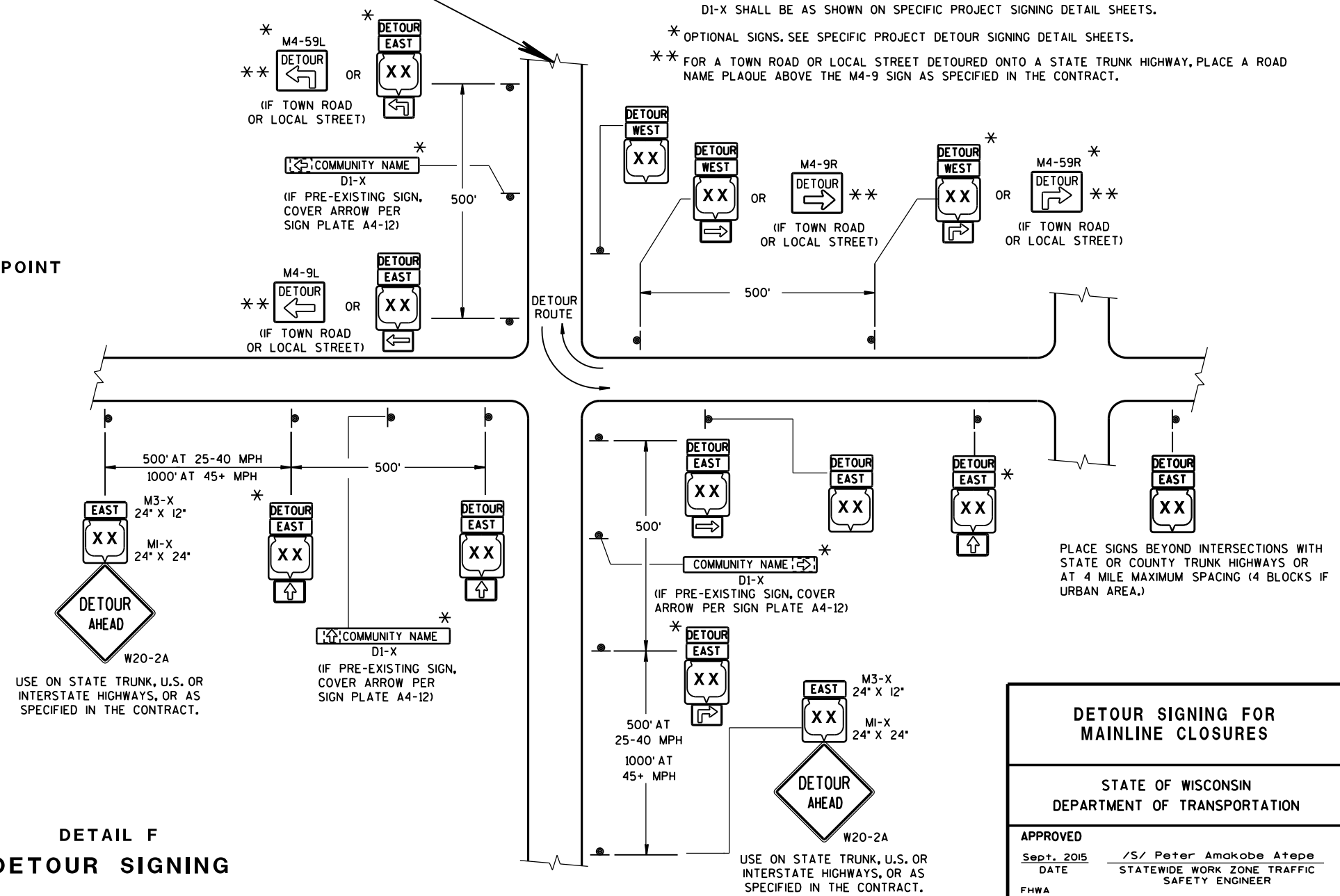
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

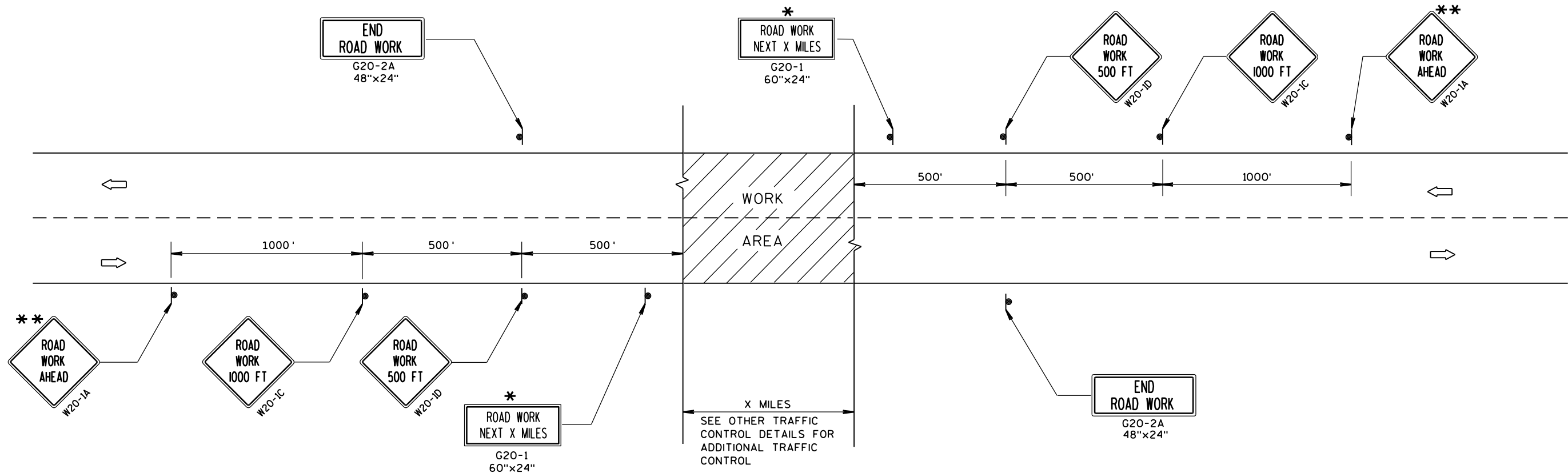


LEGEND

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

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

| DETOUR SIGNING FOR MAINLINE CLOSURES | |
|--|---|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED | DATE |
| Sept. 2015 | /S/ Peter Amakobe Atepe |
| DATE | STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER |
| FHWA | |



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

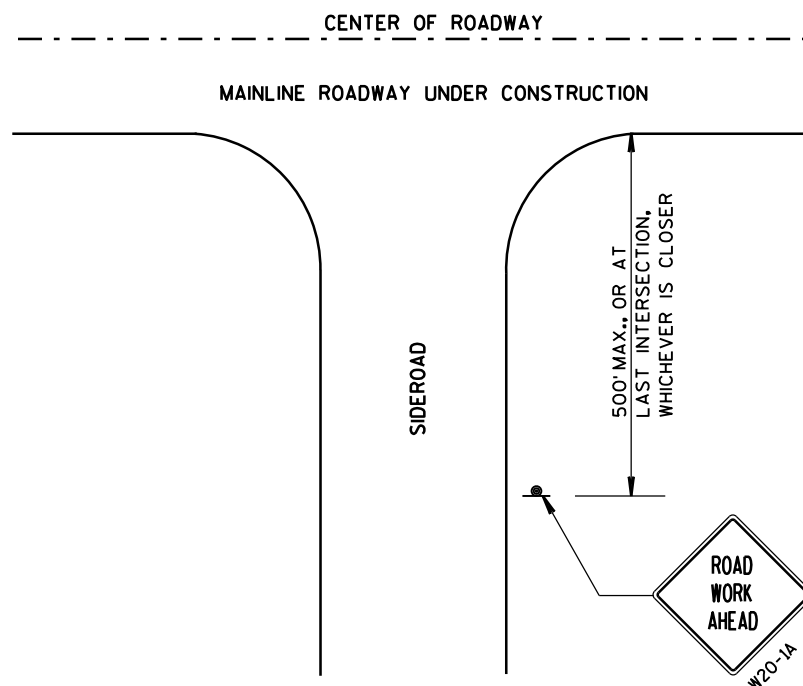
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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



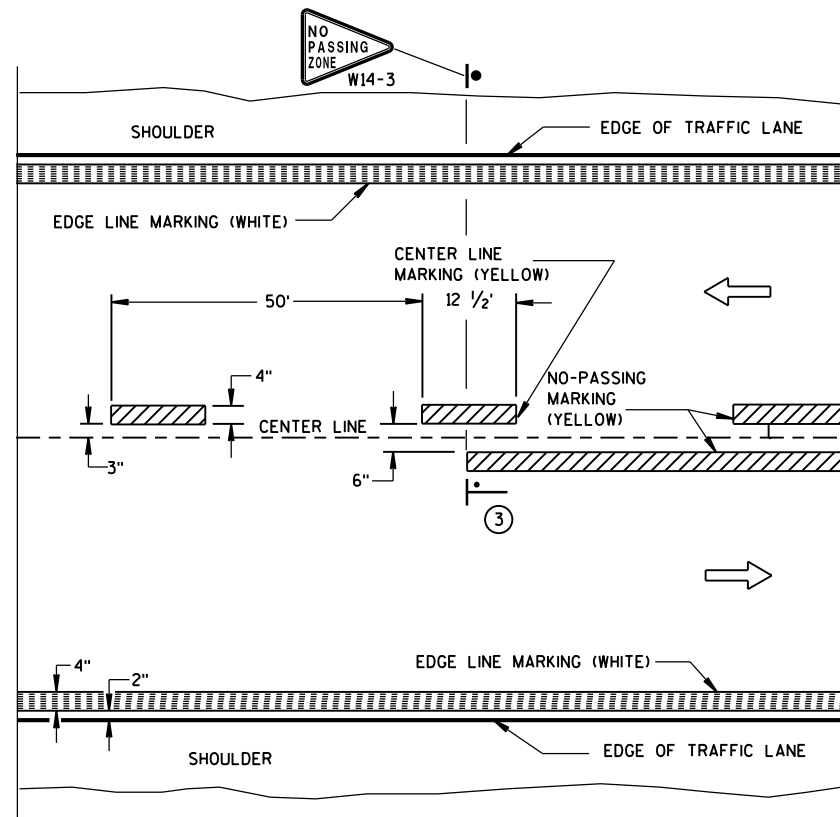
LEGEND

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

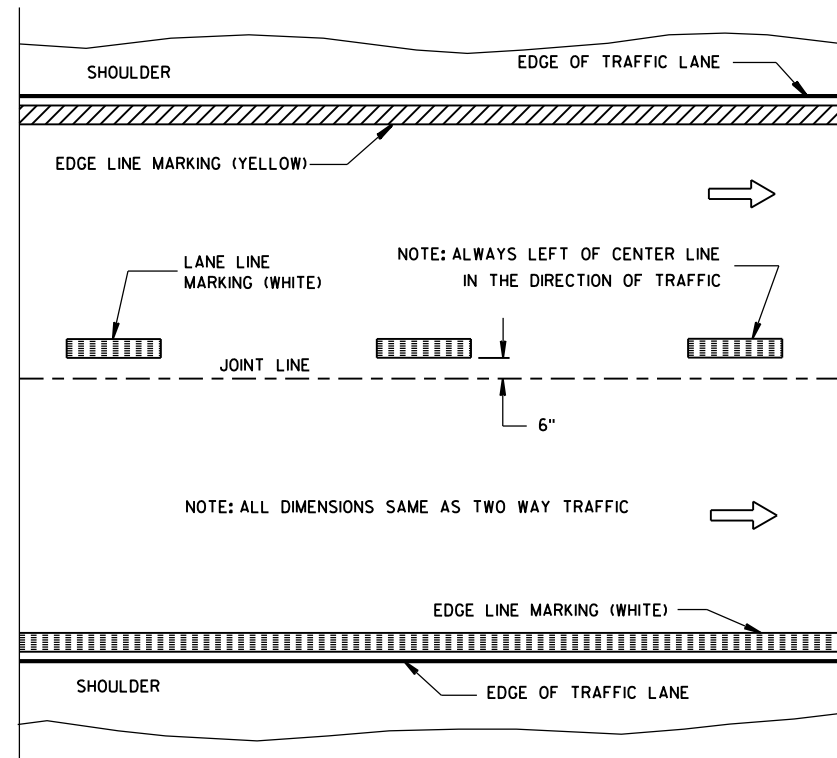
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 /S/ Peter Amokobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

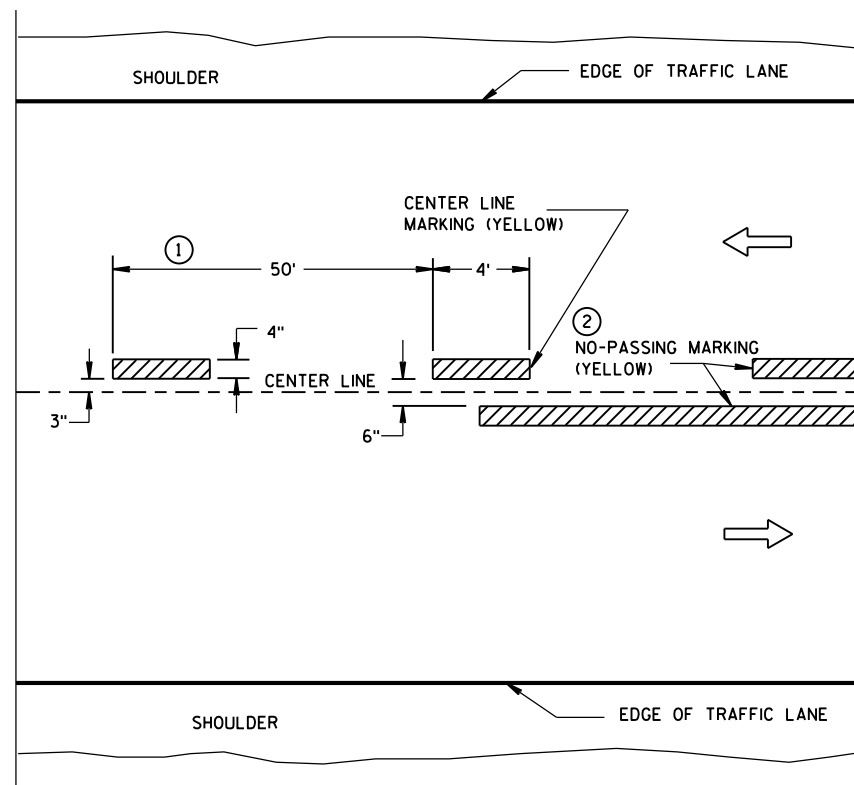


TWO WAY TRAFFIC

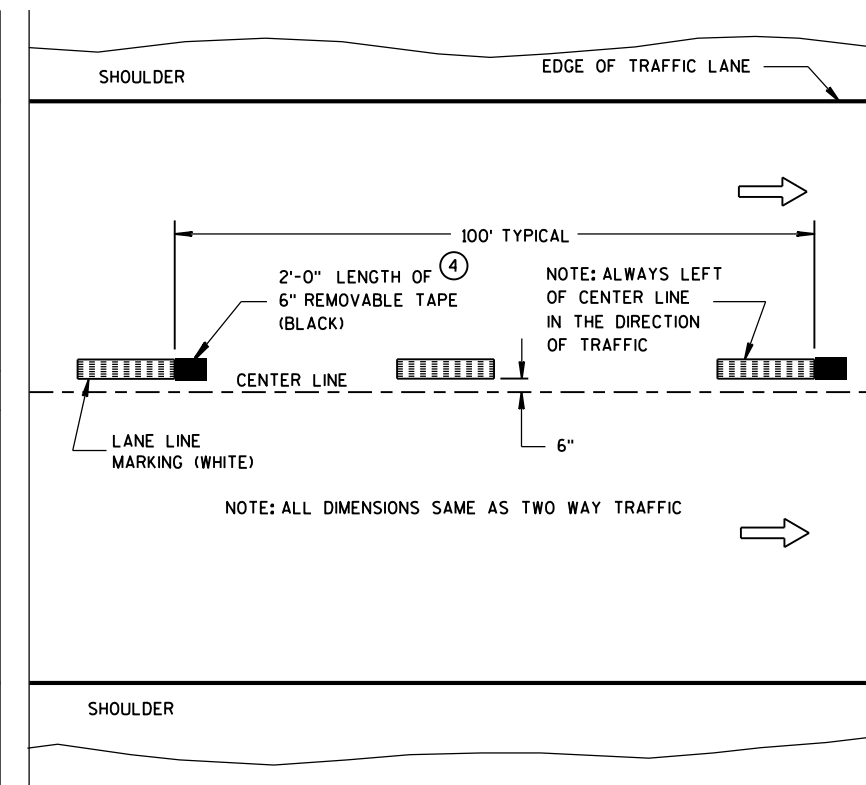


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

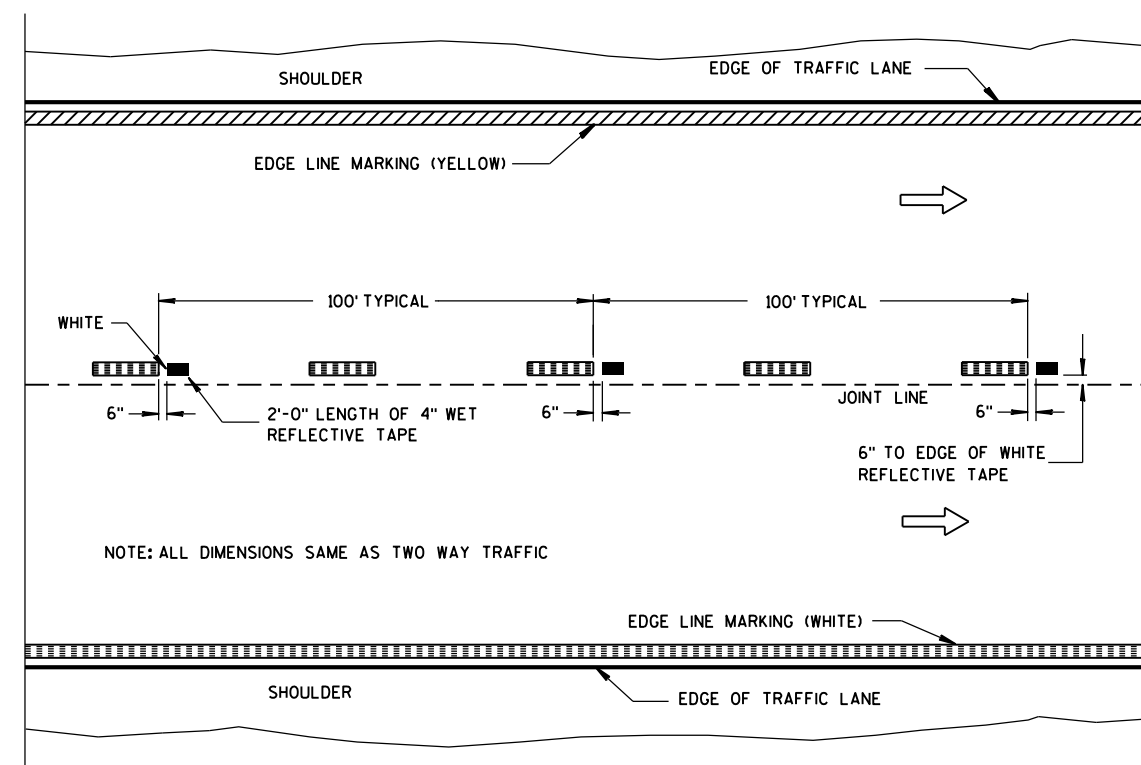
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

LEGEND

- "T" MARKING
- POST MOUNTED SIGN





PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013
DATE
FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

LEGEND

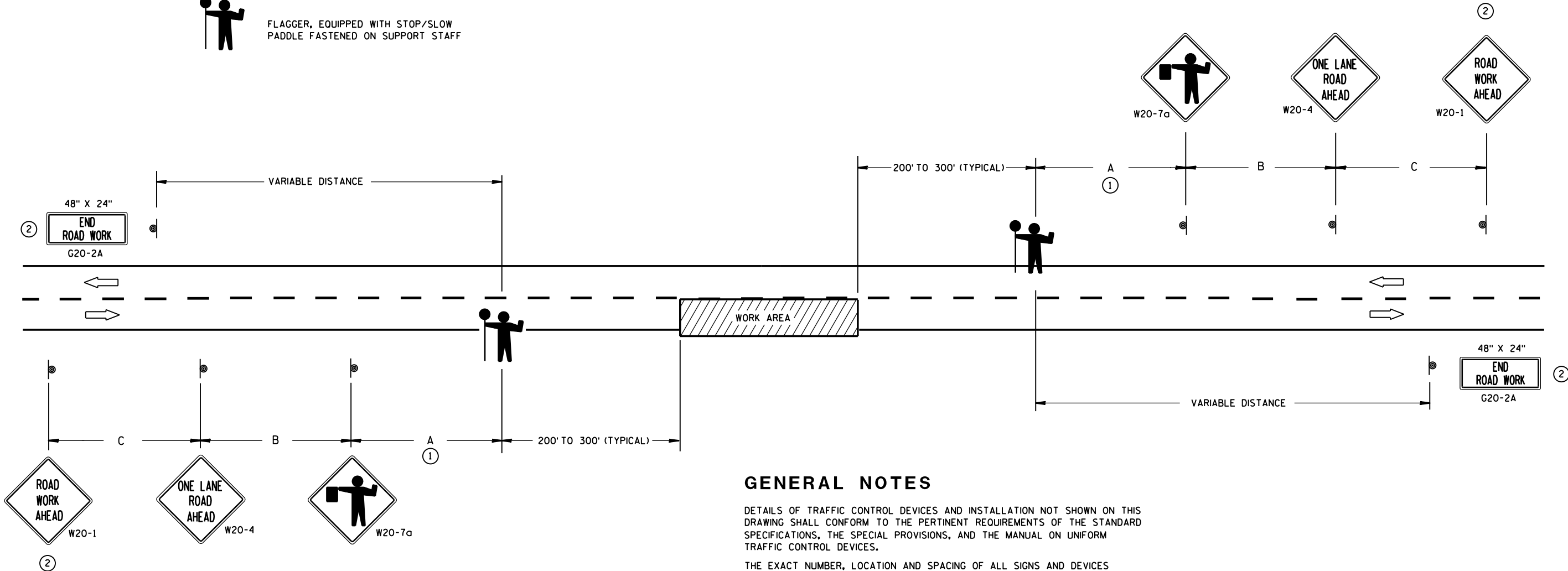
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

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



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



GENERAL NOTES

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

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

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

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

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

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

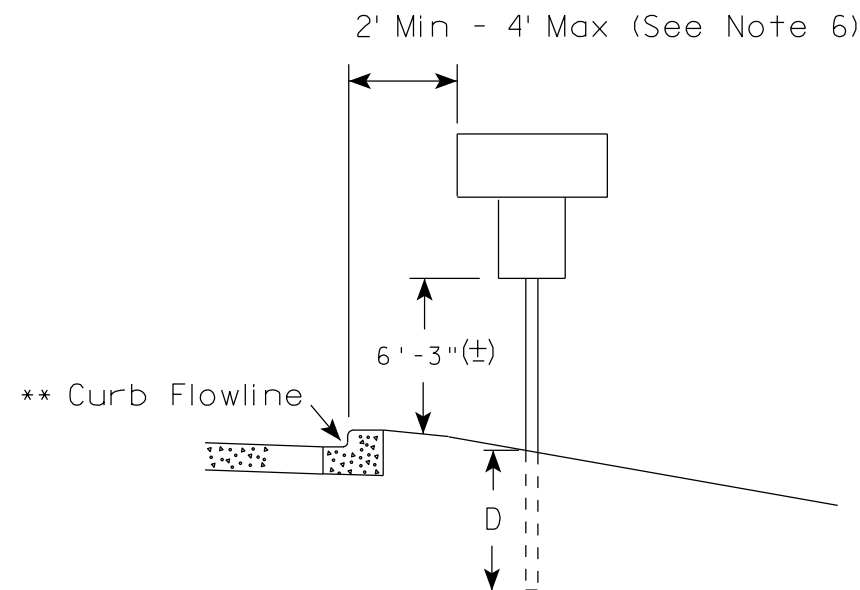
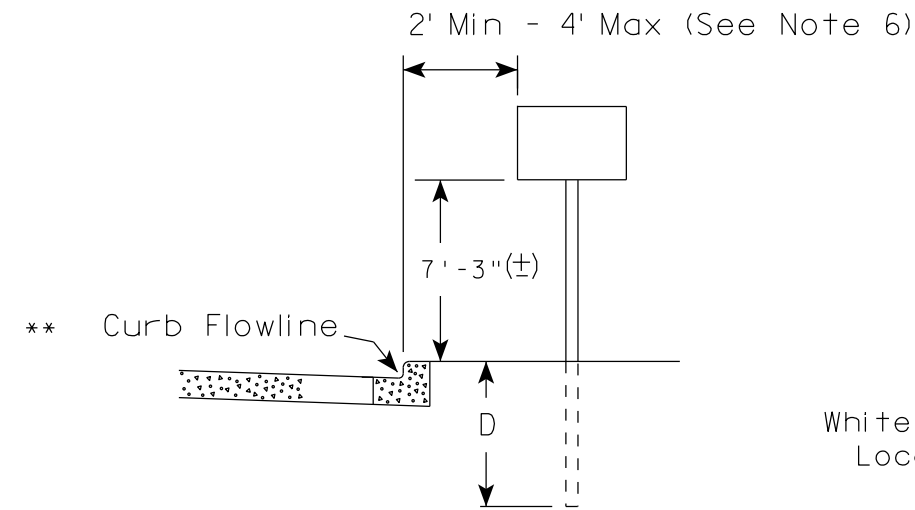
- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

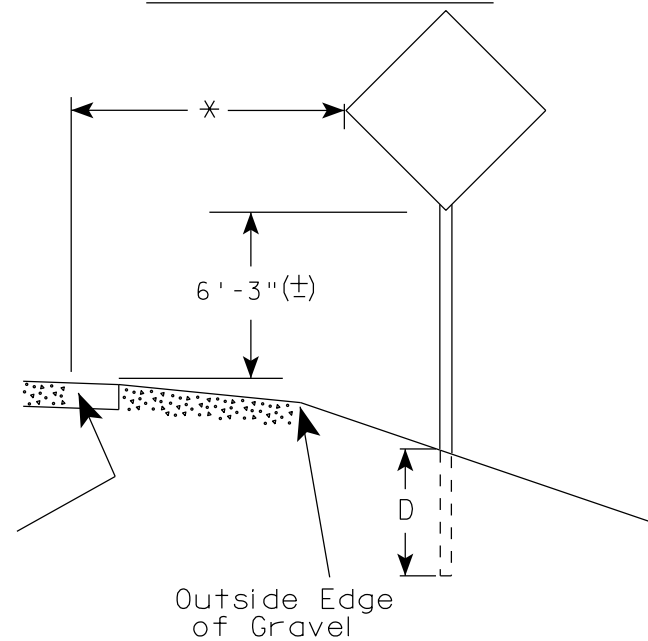
APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

URBAN AREA

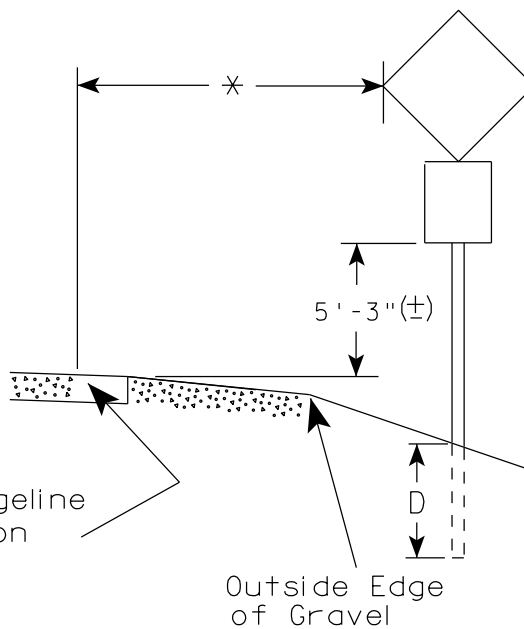


White Edgeline Location

RURAL AREA (See Note 2)



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 barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

* * 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 7/23/15

PLATE NO. A4-3.20

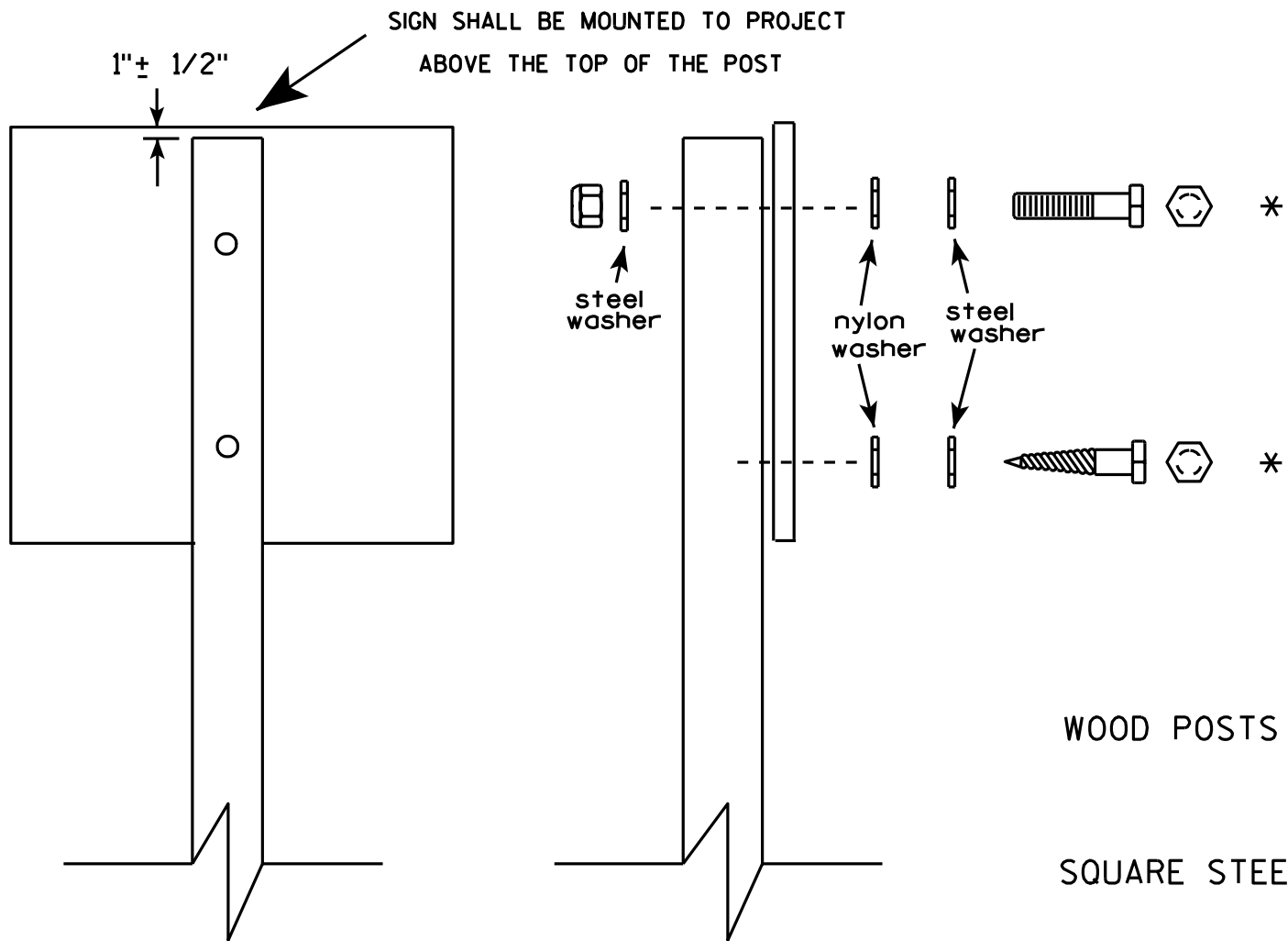
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

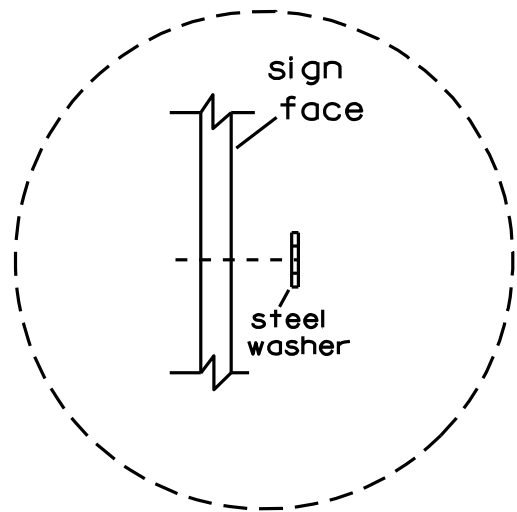


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.

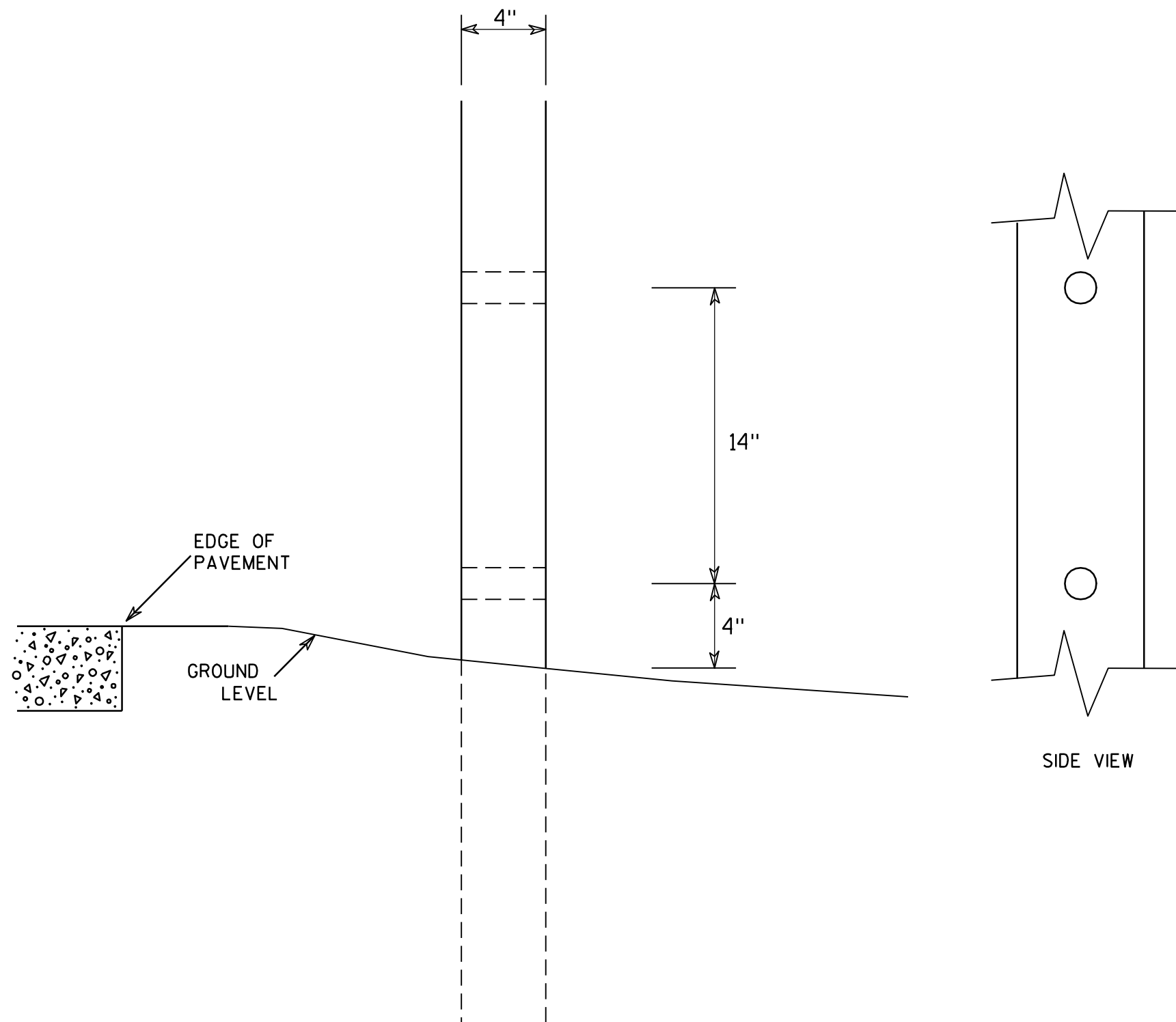


Washer Placement when Sign Has Other Than Type H or Type F Face

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

| | |
|----------------------------------|---|
| ATTACHMENT OF SIGNS TO POSTS | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> For State Traffic Engineer |
| DATE 3/23/10 | PLATE NO. A4-8.7 |

7

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

**4 X 6 WOOD POST
MODIFICATIONS**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

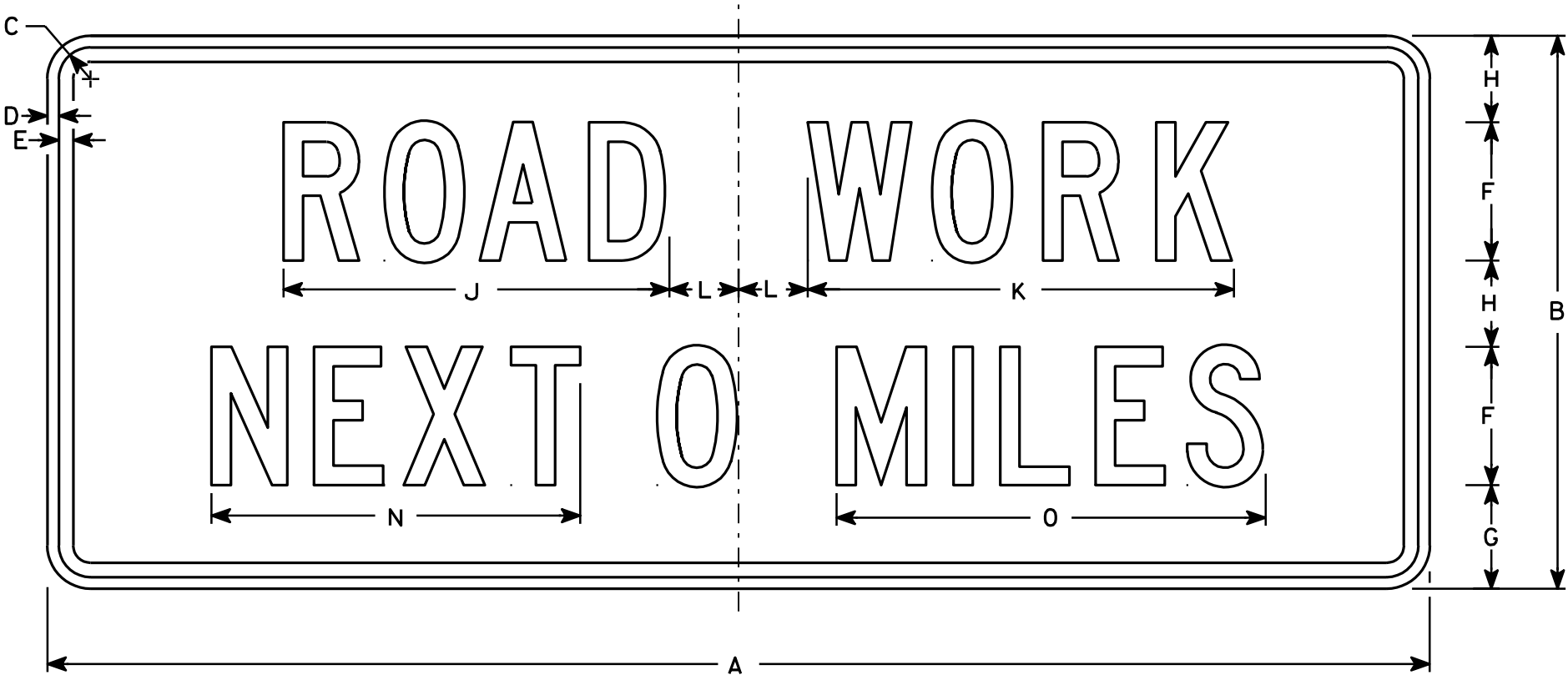
COUNTY:

SHEET NO:

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 - 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 and optically adjust spacing to achieve proper balance



G20-1

Metric equivalent
for this sign is:

| SIZE | |
|------|------------------|
| 1 | |
| 2 | 1500 mm X 600 mm |
| 3 | |
| 4 | 1500 mm X 600 mm |
| 5 | |

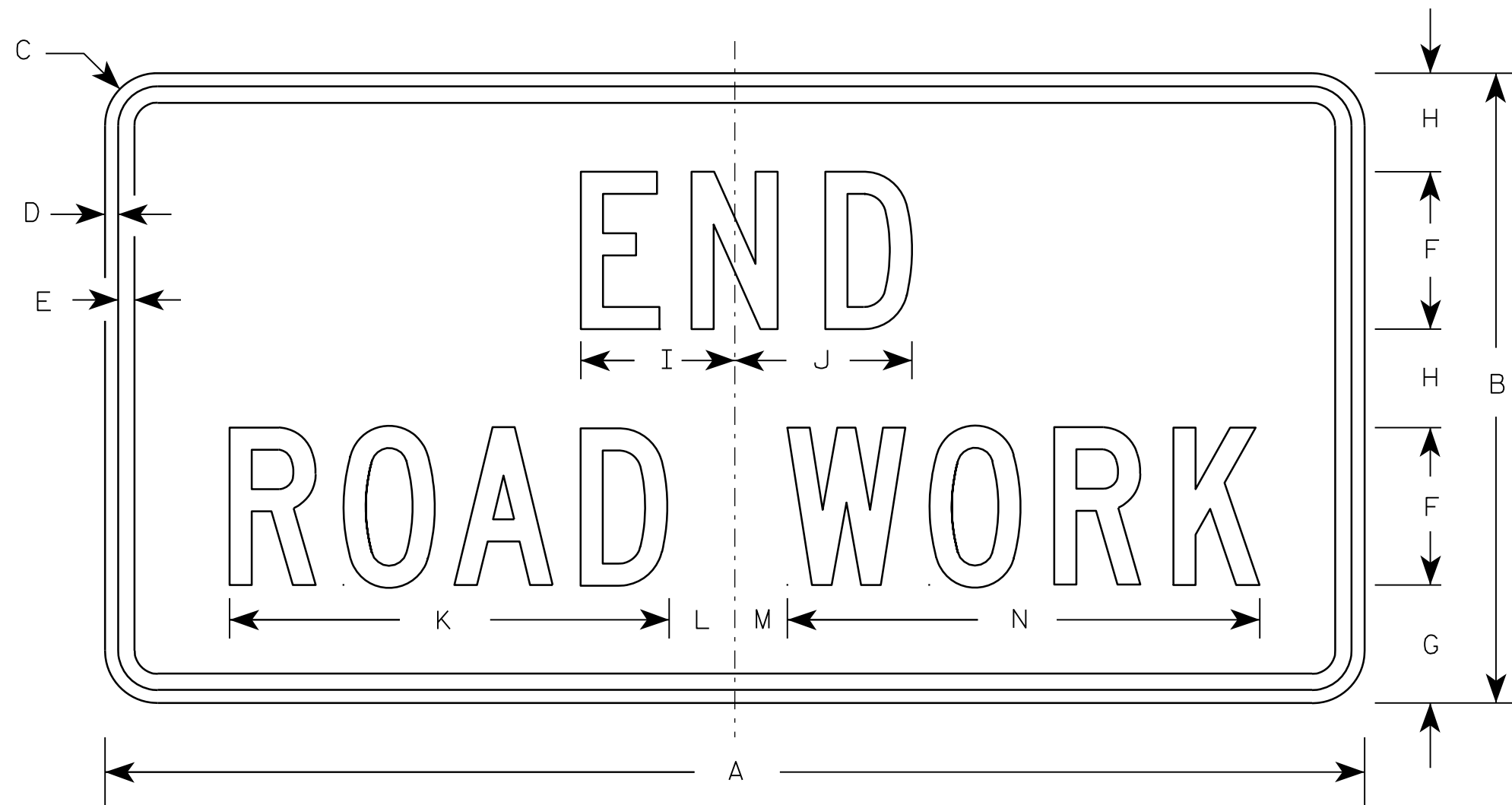
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m ² |
|------|----|----|-------|-----|-----|---|-------|-------|---|--------|--------|---|---|----|--------|---|---|---|---|---|---|---|---|---|---|---|-----------------|------------------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 60 | 24 | 1 3⁄8 | 1⁄2 | 5⁄8 | 6 | 4 1⁄2 | 3 3⁄4 | | 16 3⁄4 | 18 1⁄2 | 3 | | 16 | 18 5⁄8 | | | | | | | | | | | | 10 | .90 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 60 | 24 | 1 3⁄8 | 1⁄2 | 5⁄8 | 6 | 4 1⁄2 | 3 3⁄4 | | 16 3⁄4 | 18 1⁄2 | 3 | | 16 | 18 5⁄8 | | | | | | | | | | | | 10 | .90 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chris J. Spay
State Traffic Engineer
DATE 4/8/97 PLATE NO. G20-1.7

7



G20-2A

NOTES

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

Metric equivalent
for this sign is:

| SIZE | |
|------|------------------|
| 1 | 900 mm X 450 mm |
| 2 | 1200 mm X 600 mm |
| 3 | 1200 mm X 600 mm |
| 4 | 1200 mm X 600 mm |
| 5 | 1200 mm X 600 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m ² |
|------|----|----|-------|-----|-----|---|-------|-------|-------|-------|--------|-------|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|------------------------|
| 1 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 4 | 3 3/4 | 2 1/2 | 4 1/8 | 4 1/8 | 11 1/8 | 2 | 1 | 12 1/8 | | | | | | | | | | | | | 4.5 | 0.41 |
| 2 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 3 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 4 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |
| 5 | 48 | 24 | 1 1/2 | 1/2 | 5/8 | 6 | 4 1/2 | 3 3/4 | 5 7/8 | 6 3/4 | 16 3/4 | 2 1/2 | 1 3/4 | 18 1/2 | | | | | | | | | | | | | 8.0 | 0.72 |

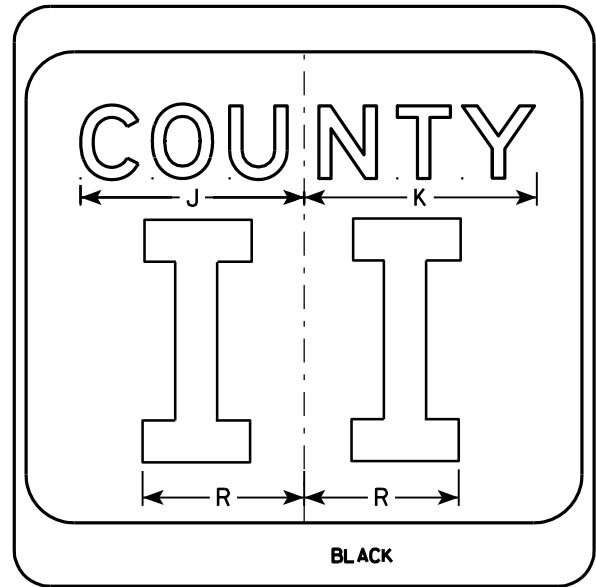
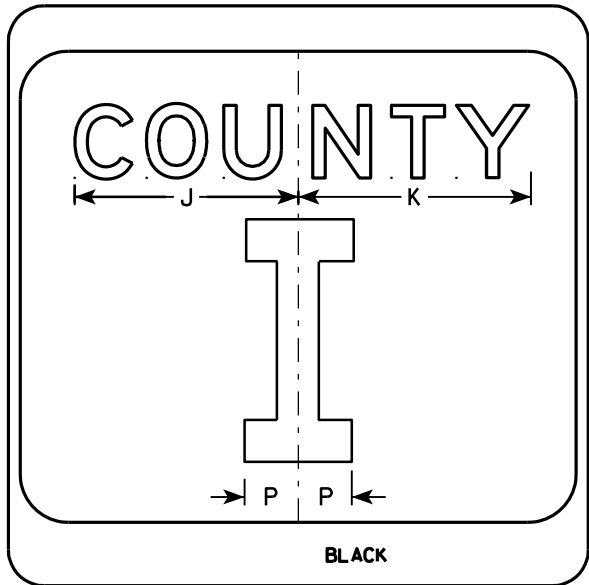
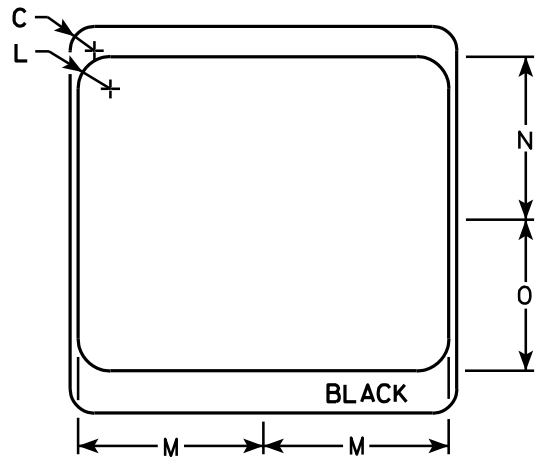
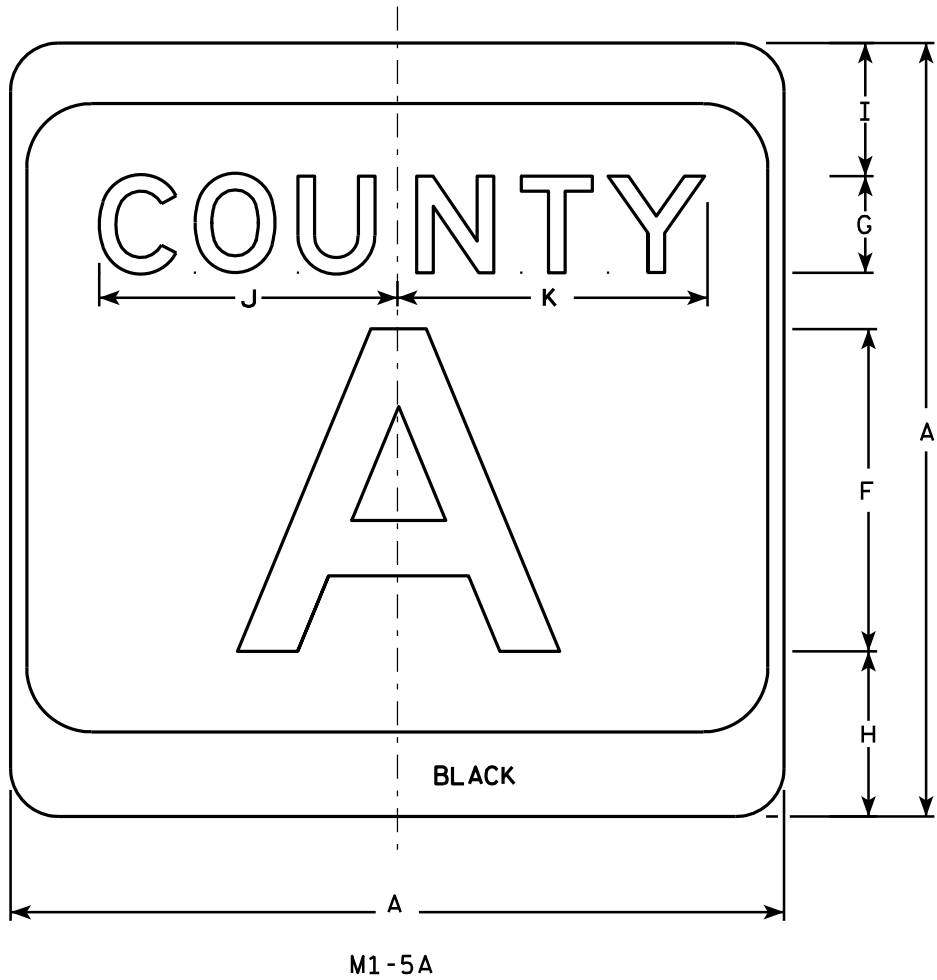
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

7



NOTES

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

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

CTH MARKER

M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO:

HWY:

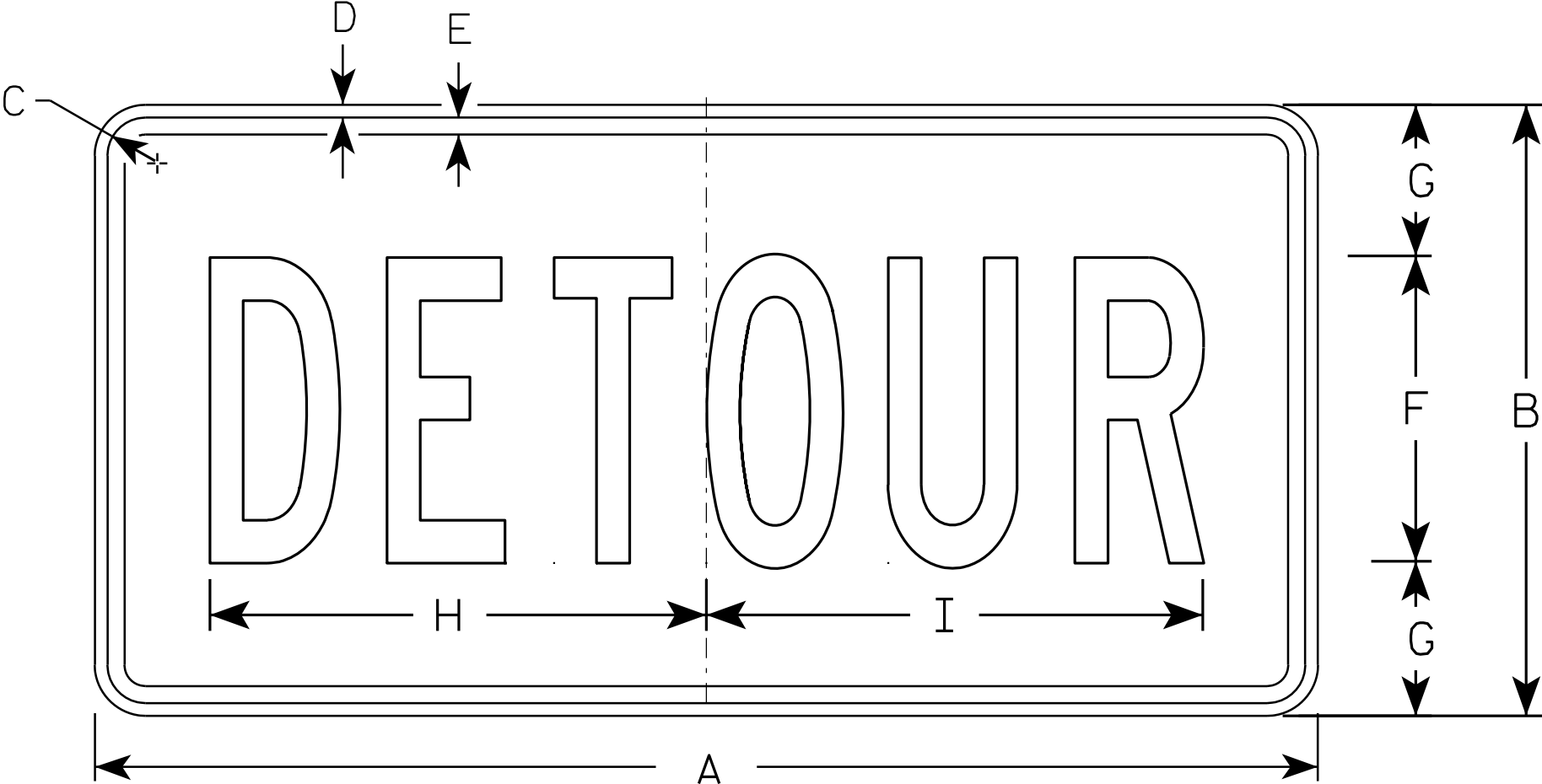
COUNTY:

SHEET NO:

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

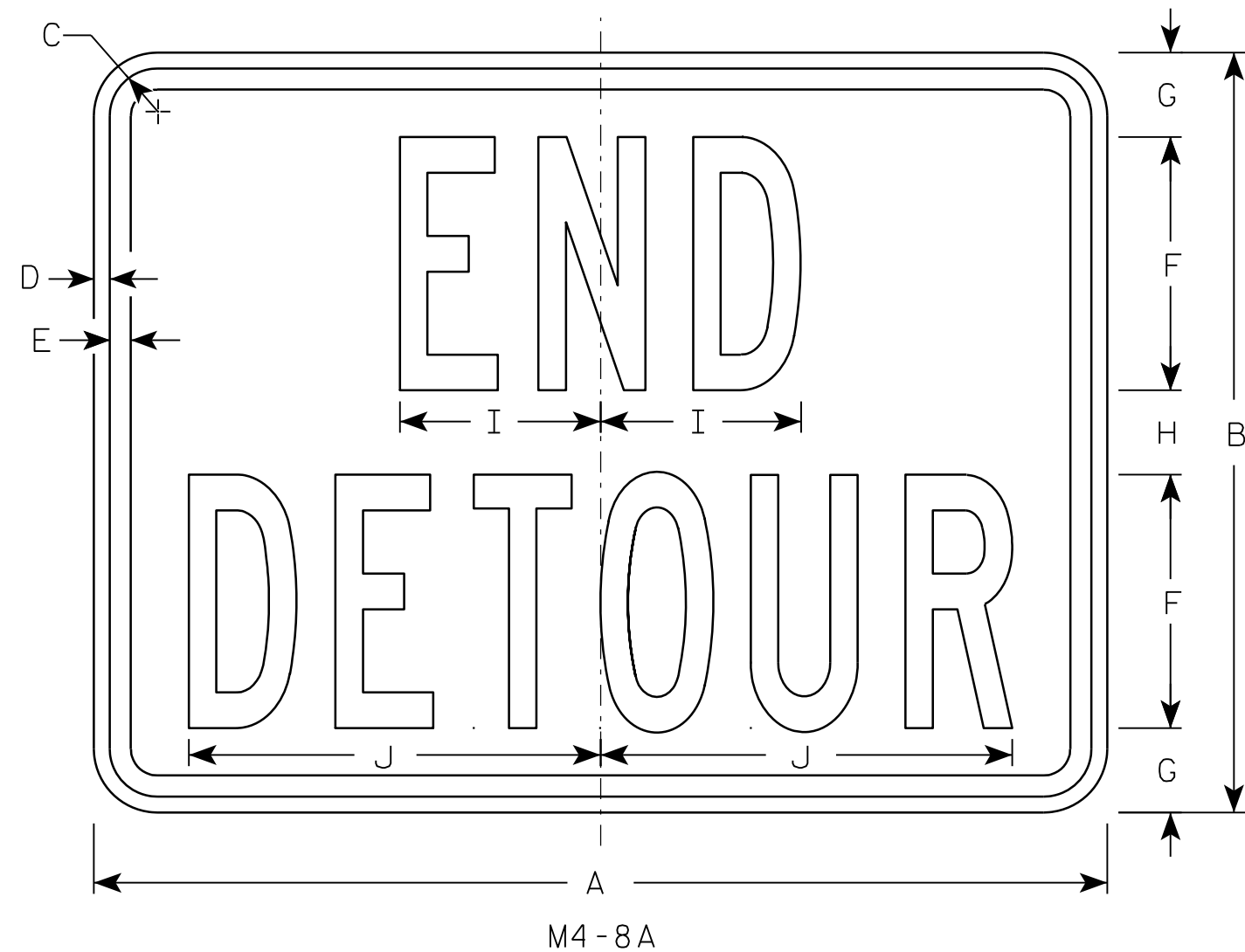
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | |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



NOTES

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

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

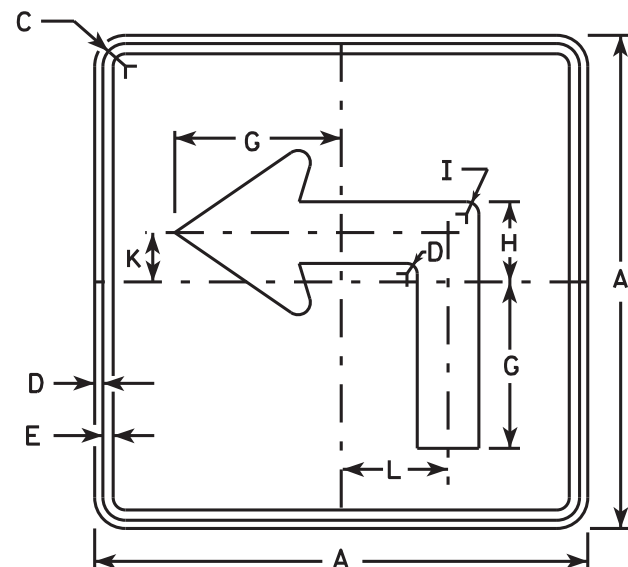
| | | | | |
|-------------|------|---------|-----------|---|
| PROJECT NO: | HWY: | COUNTY: | SHEET NO: | E |
|-------------|------|---------|-----------|---|

STANDARD SIGN
M4-8A

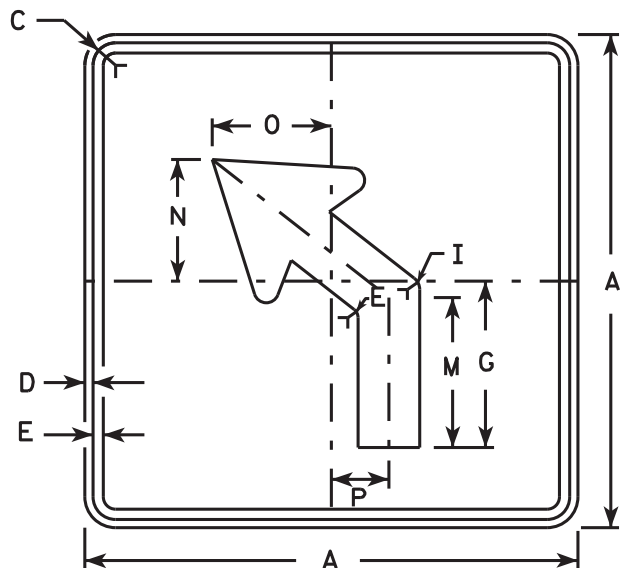
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

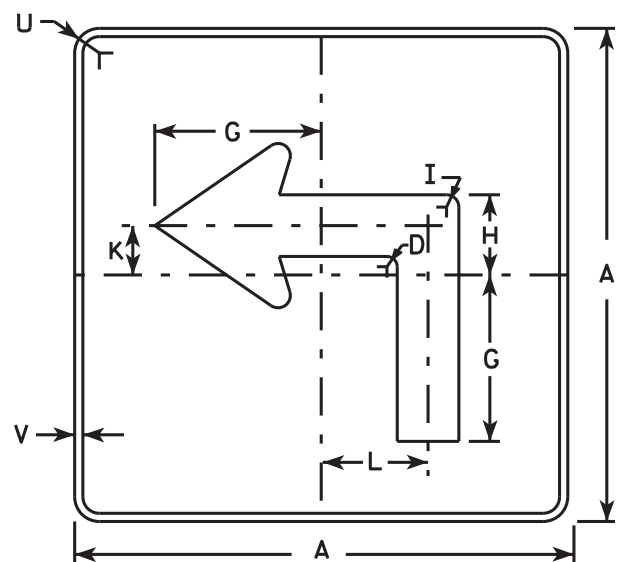
DATE 3/9/11 PLATE NO. M4-8A.2



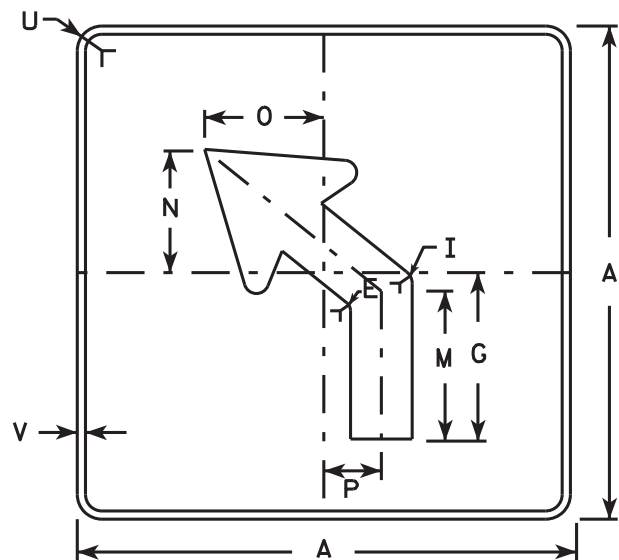
M5-1L
MM5-1L
M05-1L
MP5-1L



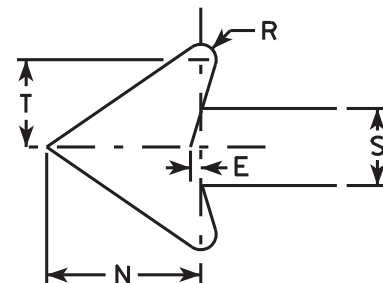
M5-2L
MM5-2L
M05-2L
MP5-2L



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 | O | 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 |

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

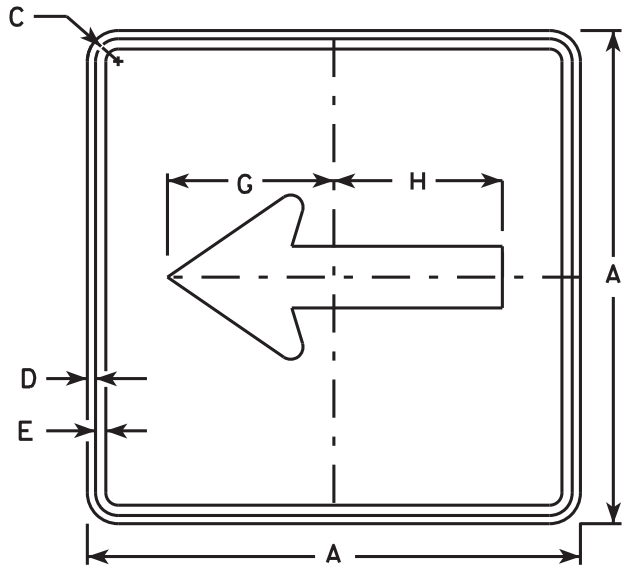
STANDARD SIGN

M5-1 & M5-2

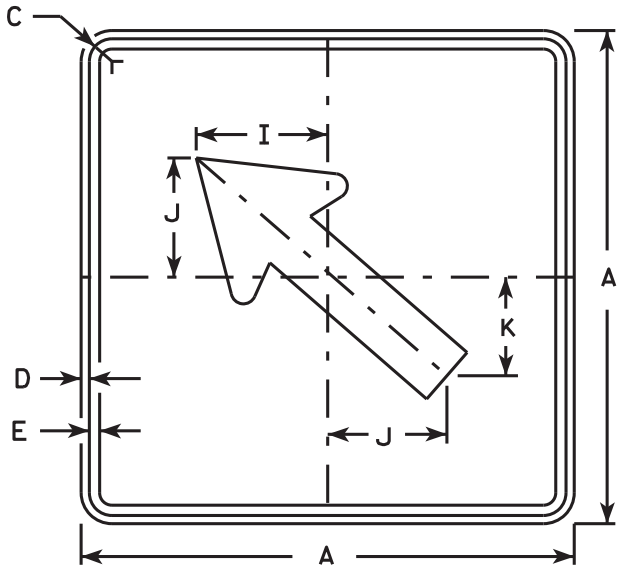
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

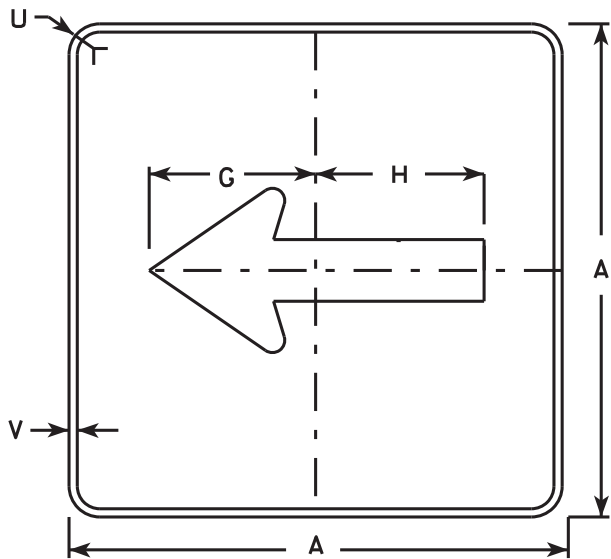
DATE 10/15/15 PLATE NO. M5-1.13



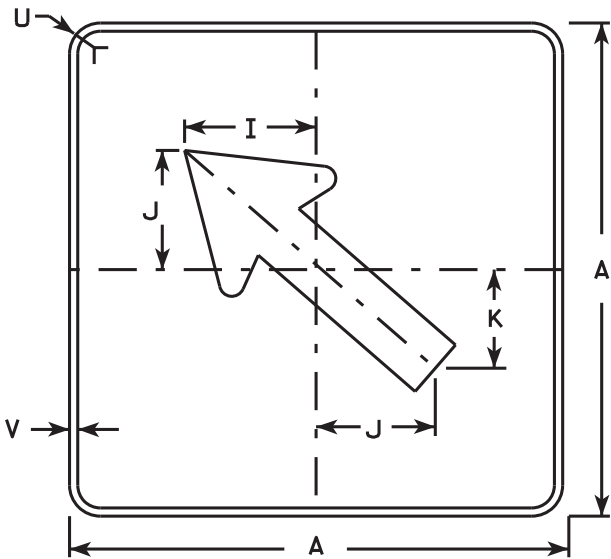
M6 - 1
MM6 - 1
MO6 - 1
MP6 - 1



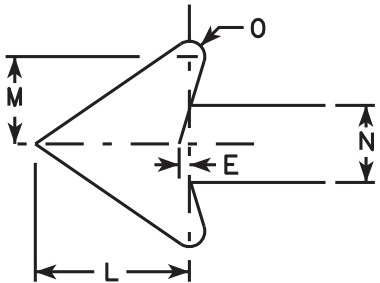
M6 - 2
MM6 - 2
MO6 - 2
MP6 - 2



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



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



NOTES

- 1. Signs are Type II - Type H except as Shown
- 2. Color:
Background - See note 4
Message - See note 4
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
MO6-1 and MO6-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

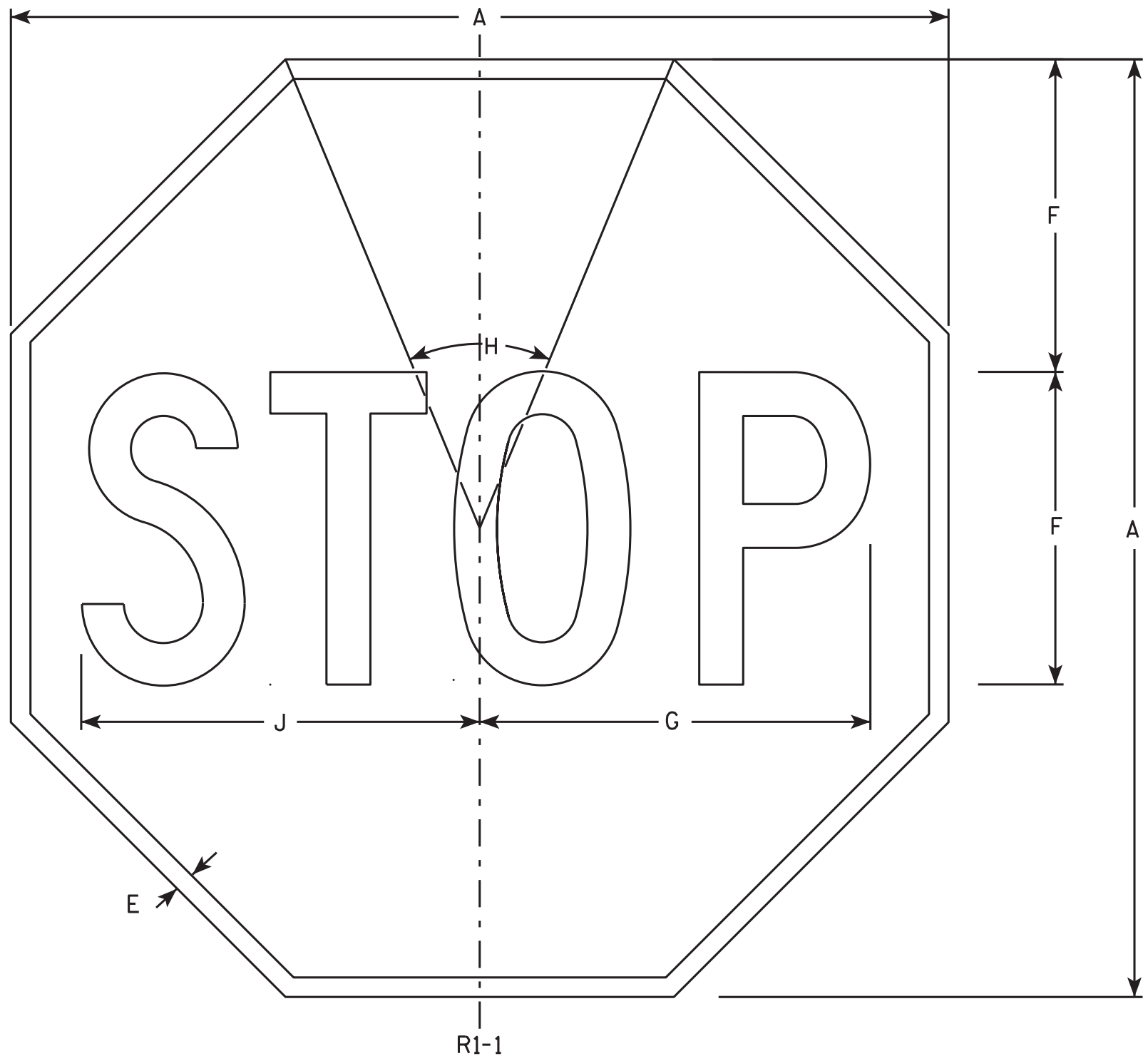
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|--------|--------|-------|-------|-------|-------|-------|-------|-----|---|---|---|---|---|-------|-----|---|---|---|---|-----------------|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



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

R1-1

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

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.12

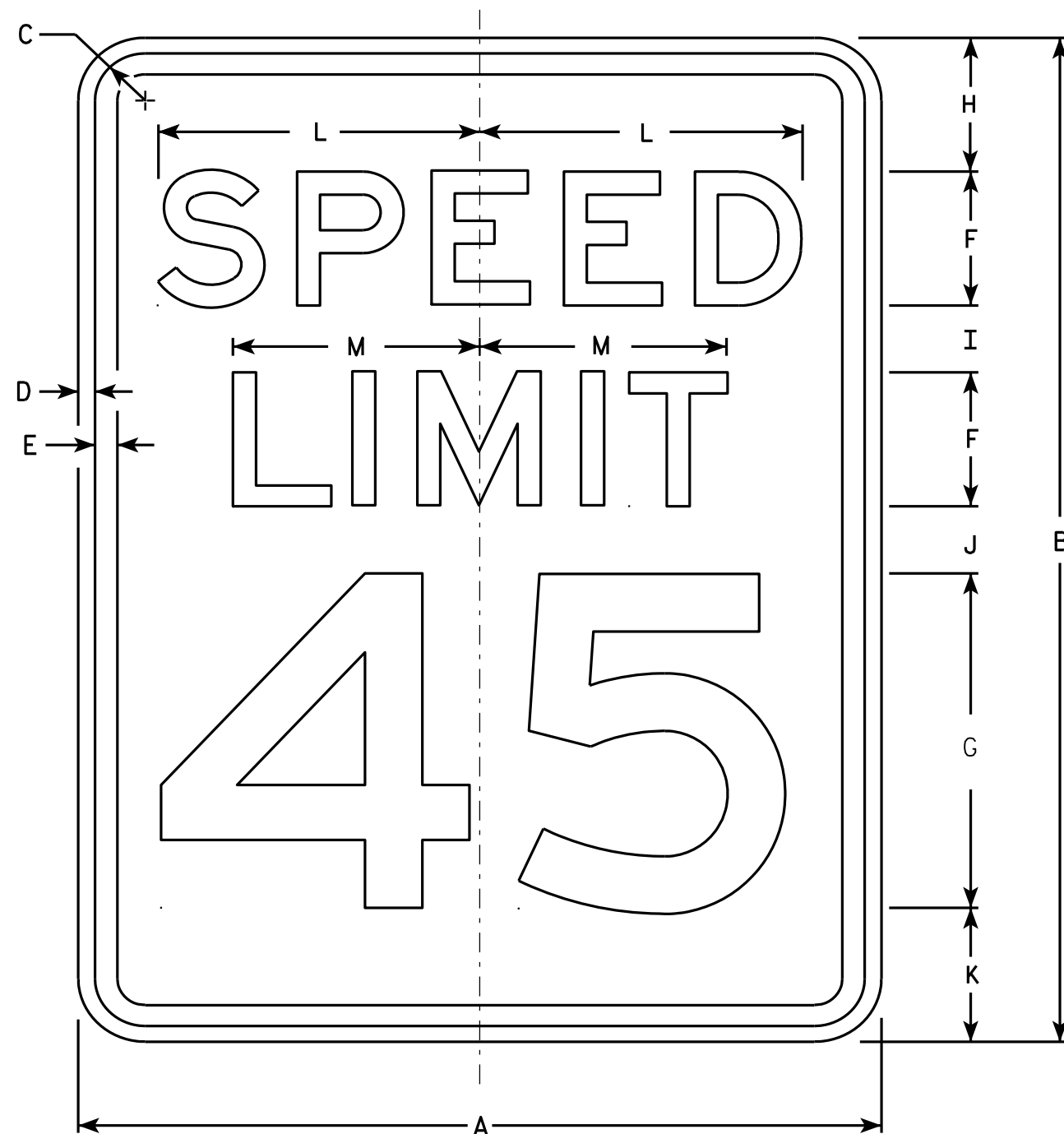
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



R2-1

NOTES

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

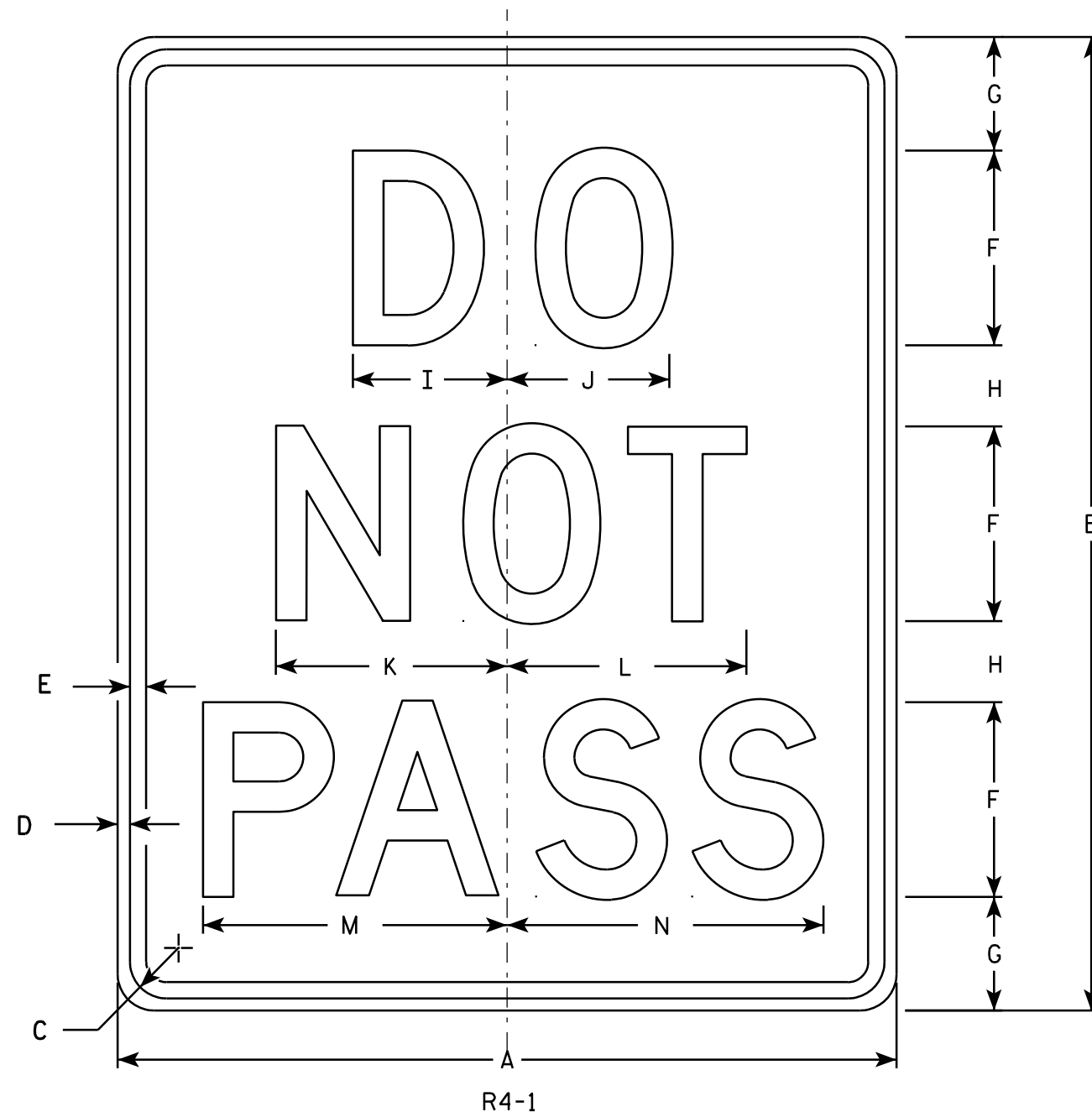
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|----|---|-------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 18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

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: E

7



NOTES

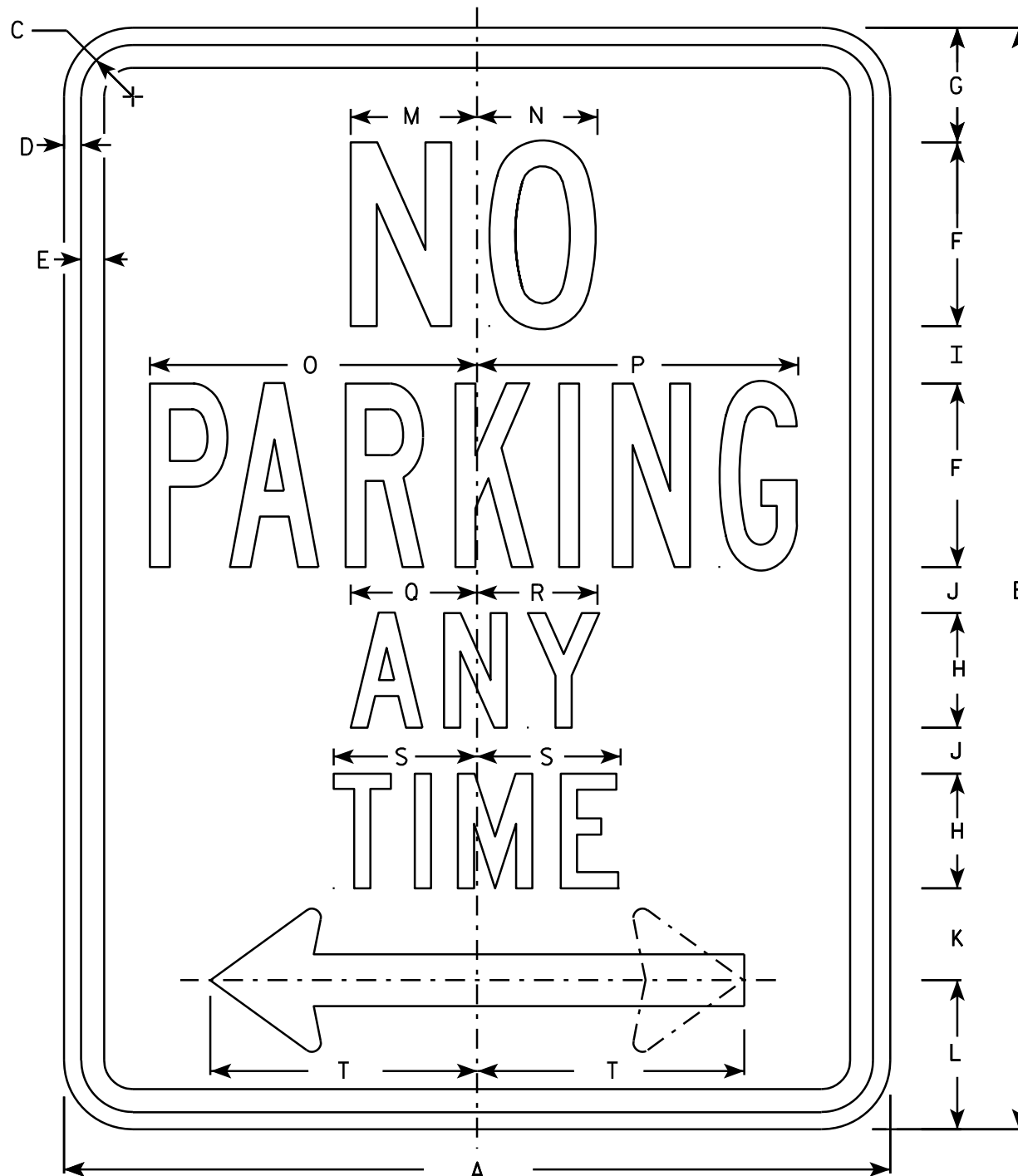
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as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

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 | 4 | 3 1/2 | 2 1/2 | 3 1/8 | 3 1/4 | 4 3/4 | 4 7/8 | 6 1/4 | 6 1/2 | | | | | | | | | | | | | 3.0 |
| 2S | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 6 | 3 1/2 | 2 1/2 | 4 3/4 | 5 | 7 1/8 | 7 3/8 | 9 3/8 | 9 3/4 | | | | | | | | | | | | | 5.0 |
| 2M | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 6 | 3 1/2 | 2 1/2 | 4 3/4 | 5 | 7 1/8 | 7 3/8 | 9 3/8 | 9 3/4 | | | | | | | | | | | | | 5.0 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 36 | 48 | 1 5/8 | 5/8 | 3/4 | 8 | 7 | 5 | 6 1/4 | 6 5/8 | 9 1/2 | 9 3/4 | 12 1/2 | 13 | | | | | | | | | | | | | 12.0 |
| 5 | 48 | 60 | 2 1/4 | 3/4 | 1 | 10 | 8 | 7 | 7 3/4 | 8 3/8 | 11 7/8 | 12 1/4 | 15 5/8 | 16 1/4 | | | | | | | | | | | | | 20.0 |

| | |
|----------------------------------|---|
| STANDARD SIGN R4-1 | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> for State Traffic Engineer |
| DATE 3/25/2011 | PLATE NO. R4-1.7 |

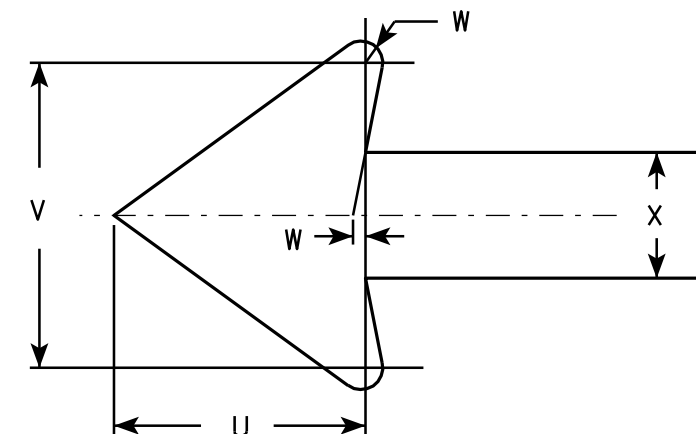
| | | | | |
|-------------|------|---------|-----------|---|
| PROJECT NO: | HWY: | COUNTY: | SHEET NO: | E |
|-------------|------|---------|-----------|---|



R7-1

NOTES

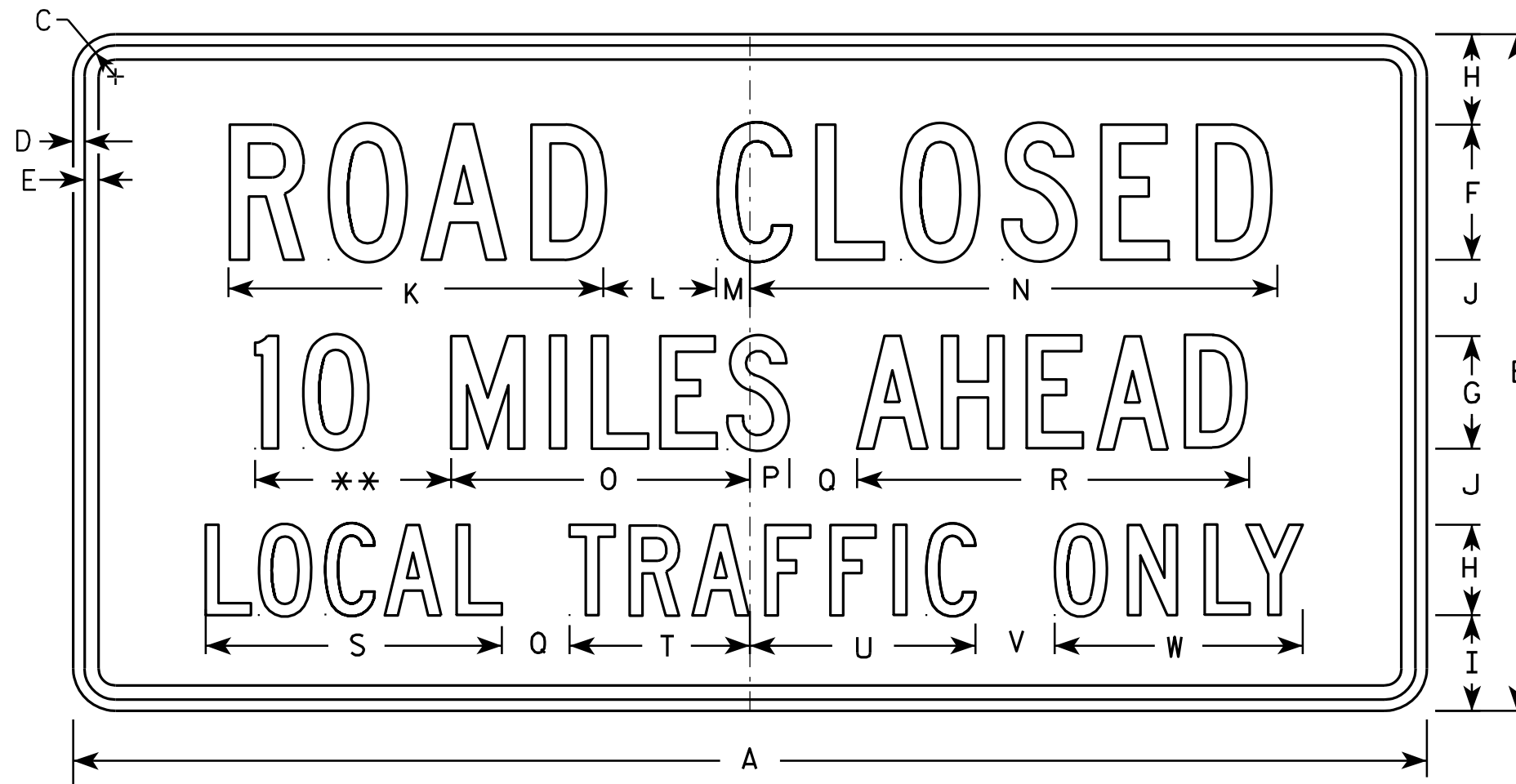
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
R7-1L (left arrow)
R7-1R (right arrow)



| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|---|---|-----------------|
| 1 | 12 | 18 | 1 1/8 | 3/8 | 3/8 | 3 | 1 7/8 | 2 | 7/8 | 5/8 | 1 1/2 | 2 1/2 | 2 | 2 | 4 7/8 | 4 7/8 | 2 1/4 | 2 1/8 | 2 1/2 | 3 7/8 | 1 1/2 | 1 3/4 | 1/8 | 3/4 | | | 1.5 |
| 2S | 18 | 24 | 1 1/8 | 3/8 | 1/2 | 4 | 2 1/2 | 2 1/2 | 1 1/4 | 1 | 2 | 3 1/4 | 2 3/4 | 2 5/8 | 7 1/8 | 7 | 2 3/4 | 2 5/8 | 3 1/8 | 5 7/8 | 2 1/4 | 2 5/8 | 1/4 | 1 1/8 | | | 3.0 |
| 2M | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 5 | 3 | 3 | 2 | 1 1/4 | 2 1/2 | 4 | 3 1/4 | 3 3/8 | 9 1/4 | 9 1/4 | 3 1/4 | 3 1/4 | 3 3/4 | 7 3/4 | 3 | 3 1/2 | 1/4 | 1 1/2 | | | 5.0 |
| 3 | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 5 | 3 | 3 | 2 | 1 1/4 | 2 1/2 | 4 | 3 1/4 | 3 3/8 | 9 1/4 | 9 1/4 | 3 1/4 | 3 1/4 | 3 3/4 | 7 3/4 | 3 | 3 1/2 | 1/4 | 1 1/2 | | | 5.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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|----------------------------------|---|
| STANDARD SIGN R7-1 | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> for State Traffic Engineer |
| DATE 3/31/2011 | PLATE NO. R7-1.9 |

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



R11-3

NOTES

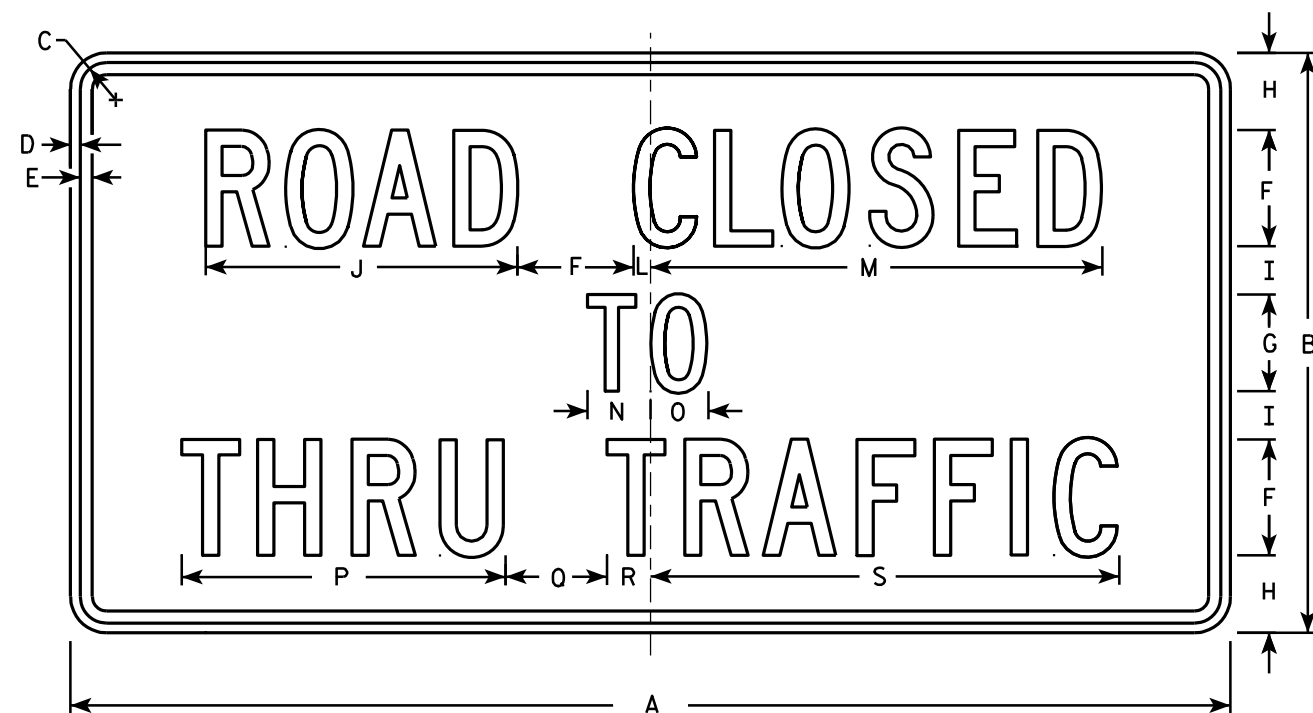
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as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

** See Note 5

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

| | |
|----------------------------------|---|
| STANDARD SIGN R11-3 | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> For State Traffic Engineer |
| DATE 4/1/11 | PLATE NO. R11-3.6 |

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



R11-4

NOTES

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

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

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

HWY:

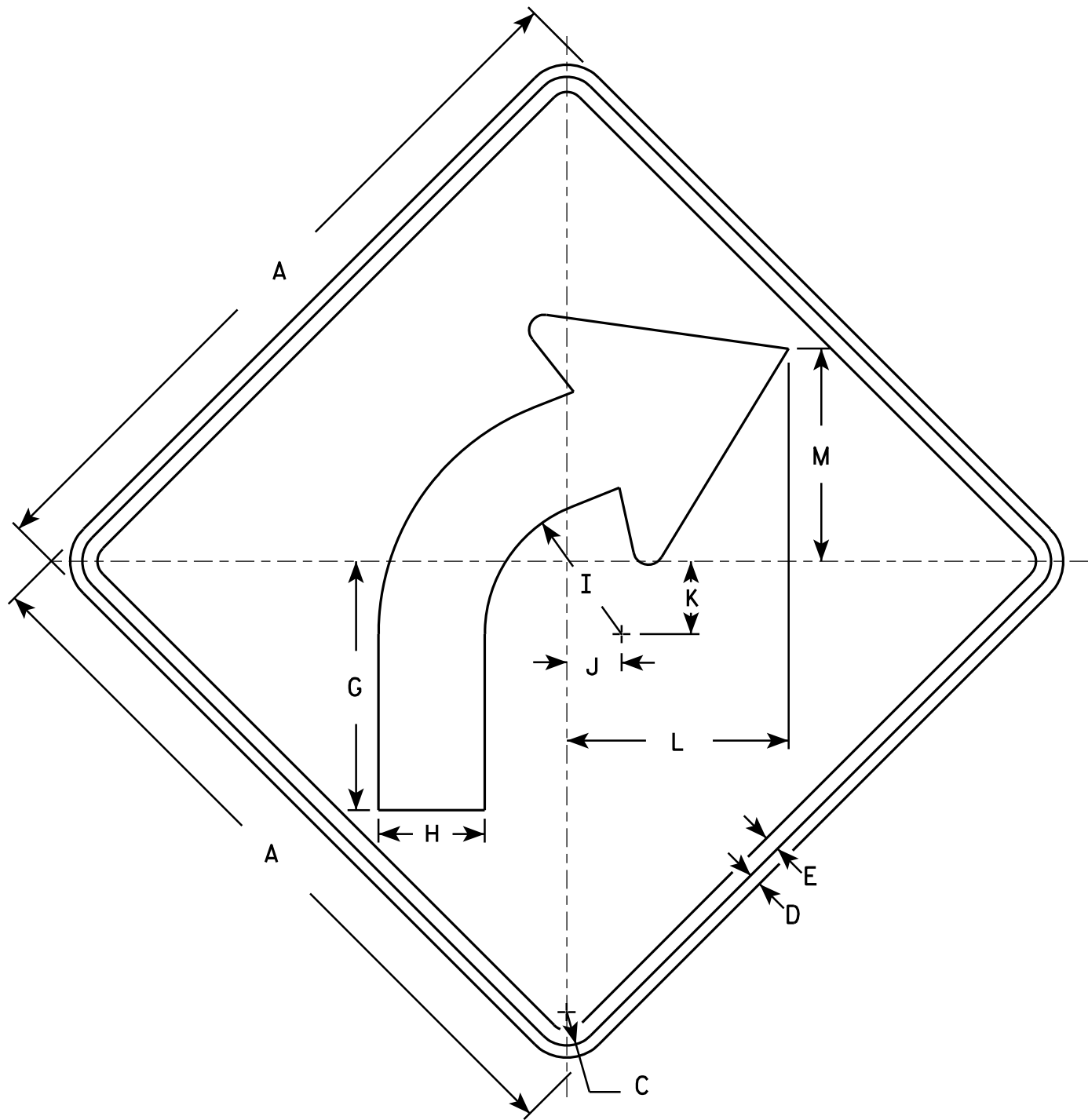
COUNTY:

SHEET NO:

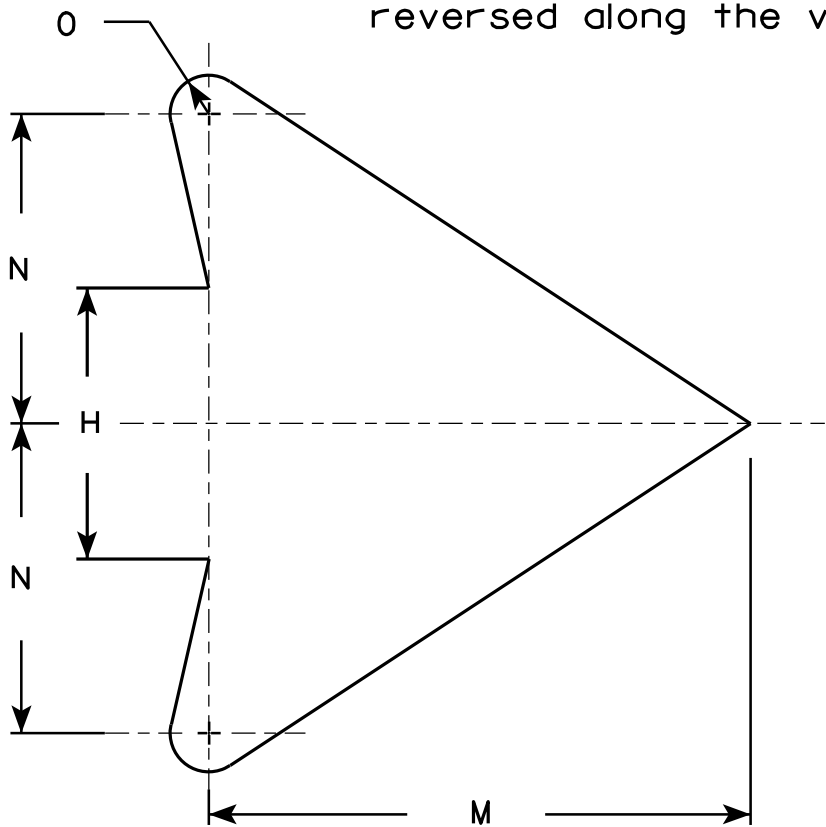
E

NOTES

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



W1-2R



ARROW DETAIL

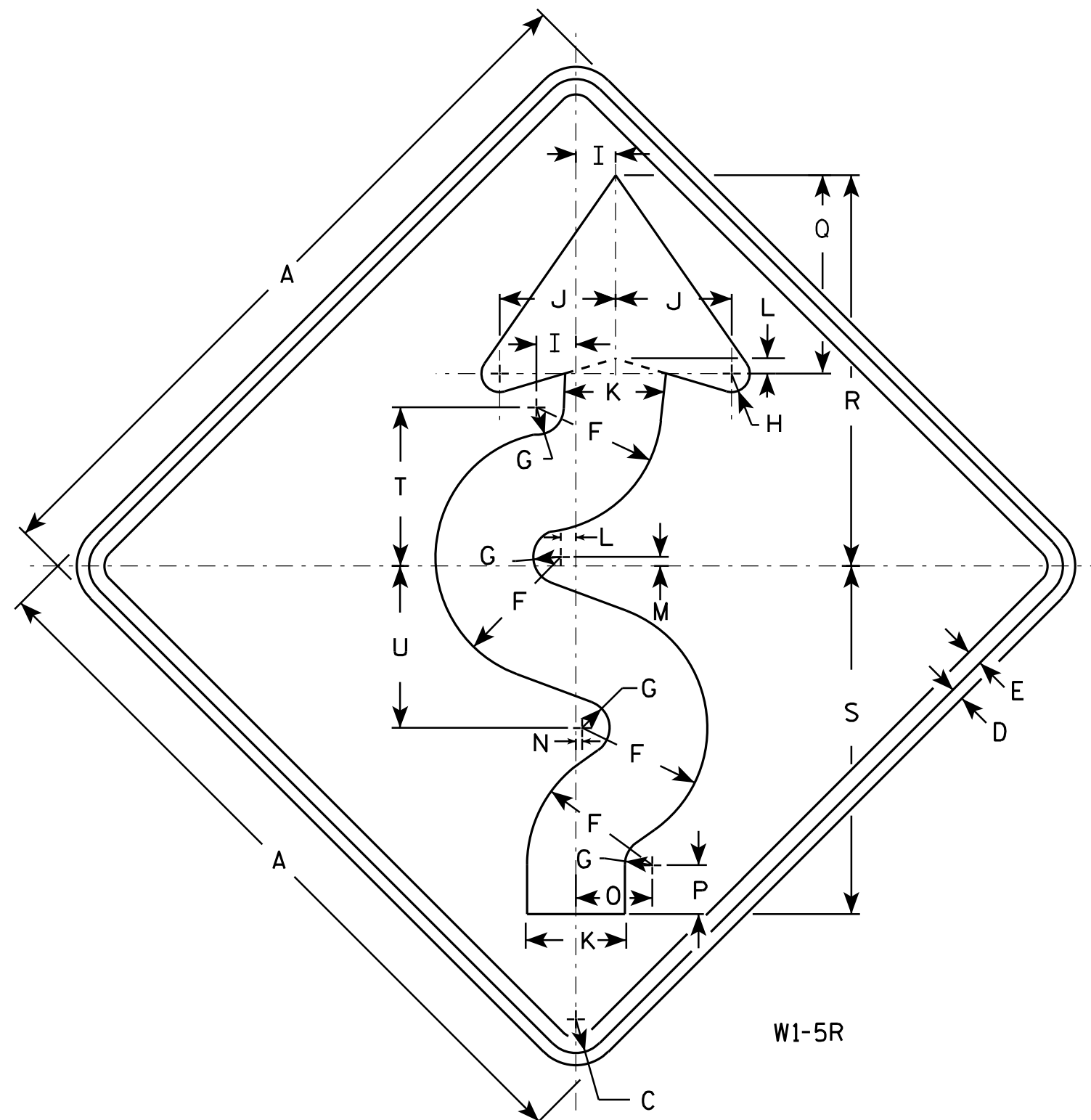
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|--------|-------|-------|-------|-------|--------|--------|---|-----|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | | 8 1/4 | 3 1/2 | 4 1/2 | 1 3/4 | 2 3/8 | 7 1/4 | 7 | 4 | 1/2 | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/4 | 4 3/8 | 5 5/8 | 2 1/4 | 3 | 9 1/8 | 8 3/4 | 5 | 5/8 | | | | | | | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | | | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

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



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-5L is the same as W1-5R except the arrow is reversed along the vertical centerline.

W1-5R

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|-------|-------|-------|-------|-------|-------|-----|-----|-----|-------|-------|-------|--------|--------|--------|--------|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 4 1/8 | 7/8 | 5/8 | 1 1/4 | 3 3/4 | 3 1/4 | 1/2 | 1/4 | 1/8 | 2 1/2 | 1 5/8 | 6 1/2 | 12 3/4 | 11 3/8 | 5 1/4 | 5 1/4 | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 5 1/8 | 1 1/8 | 3/4 | 1 5/8 | 4 3/4 | 4 1/8 | 5/8 | 3/8 | 1/4 | 3 1/8 | 2 | 8 1/8 | 16 | 14 1/4 | 6 1/2 | 6 5/8 | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 6 1/4 | 1 3/8 | 1 | 1 7/8 | 5 5/8 | 4 7/8 | 3/4 | 3/8 | 1/4 | 3 3/4 | 2 7/8 | 9 3/4 | 19 1/8 | 17 1/8 | 7 3/4 | 7 7/8 | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 1/4 | 1 3/8 | 1 | 1 7/8 | 5 5/8 | 4 7/8 | 3/4 | 3/8 | 1/4 | 3 3/4 | 2 7/8 | 9 3/4 | 19 1/8 | 17 1/8 | 7 3/4 | 7 7/8 | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 6 1/4 | 1 3/8 | 1 | 1 7/8 | 5 5/8 | 4 7/8 | 3/4 | 3/8 | 1/4 | 3 3/4 | 2 7/8 | 9 3/4 | 19 1/8 | 17 1/8 | 7 3/4 | 7 7/8 | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 1/4 | 1 3/4 | 1 1/4 | 2 1/2 | 7 1/2 | 6 1/2 | 1 | 1/2 | 3/8 | 5 | 3 1/4 | 13 | 25 1/2 | 22 3/4 | 10 3/8 | 10 1/2 | | | | | | 16.0 |

STANDARD SIGN W1-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 5/18/12

PLATE NO. W1-5.8

PROJECT NO:

HWY:

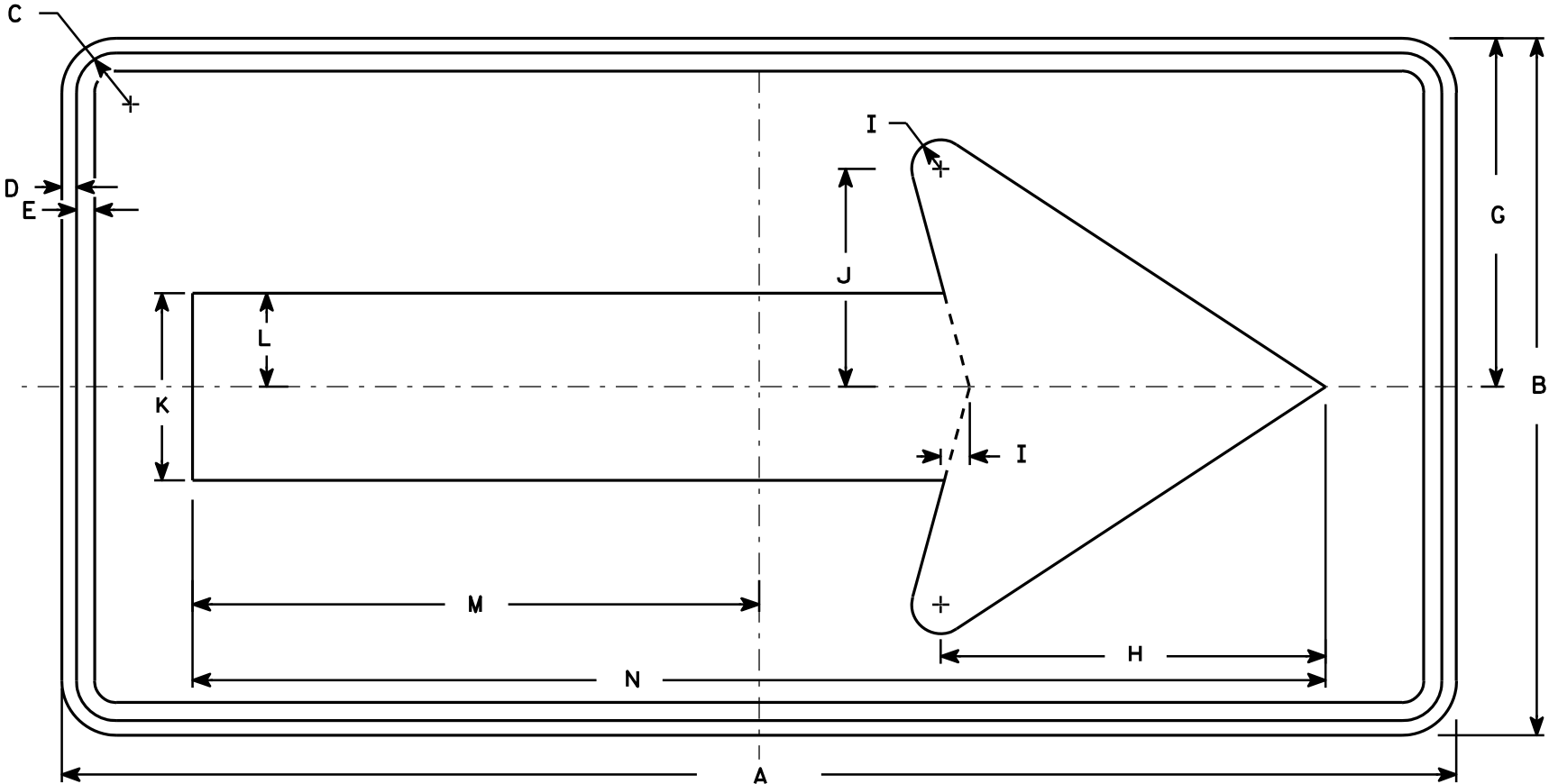
COUNTY:

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.



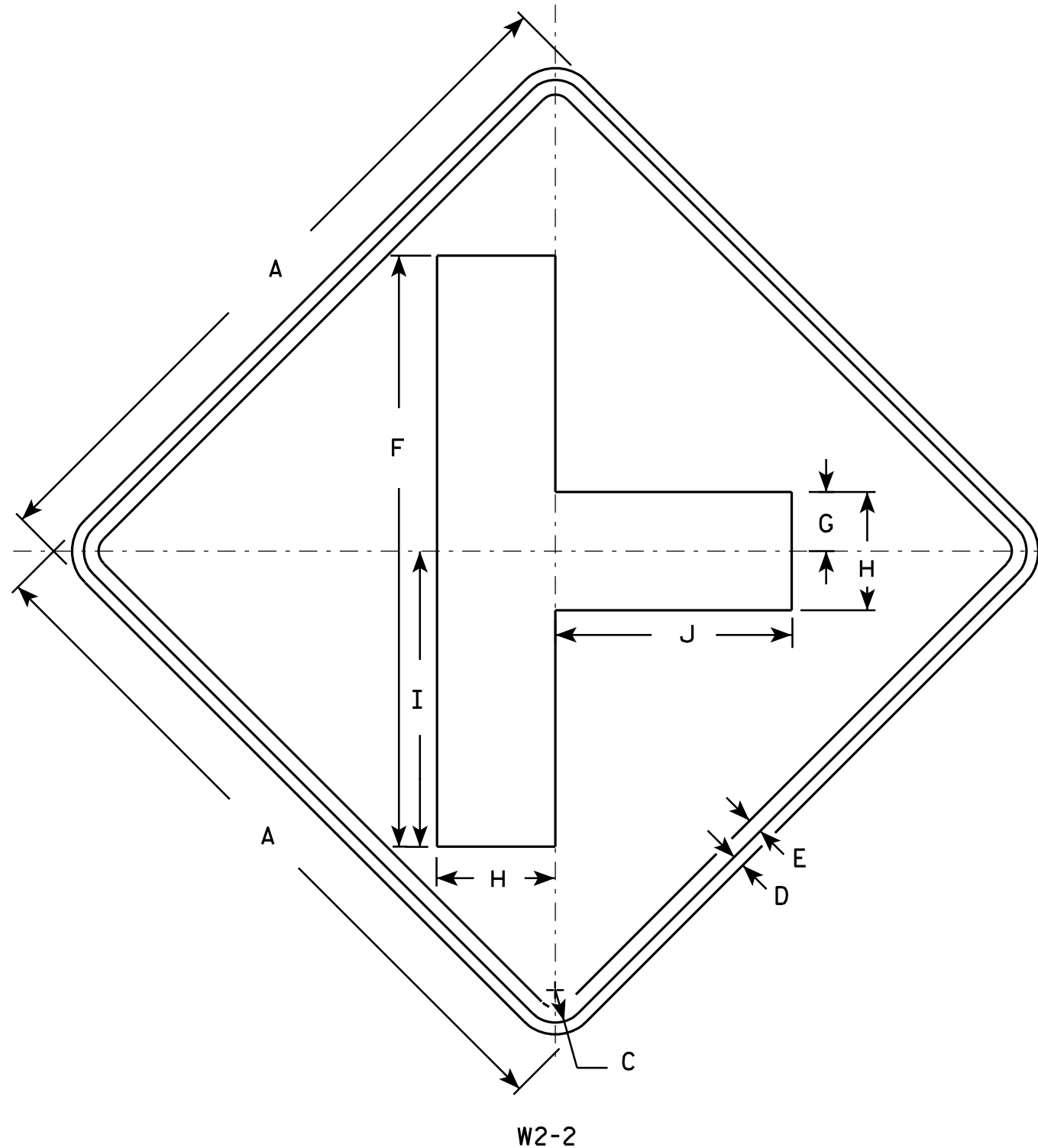
W1-6

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|----|--------|-------|-------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 36 | 18 | 1 1/8 | 3/8 | 3/8 | | 9 | 10 | 3/4 | 5 5/8 | 4 3/4 | 2 3/8 | 14 5/8 | 29 1/4 | | | | | | | | | | | | | 4.5 |
| 2S | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 5 | 96 | 48 | 2 1/4 | 3/4 | 1 | | 24 | 26 1/2 | 2 | 15 | 13 | 6 1/2 | 39 | 78 | | | | | | | | | | | | | 32.0 |

STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W1-6.8



NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|----|-------|---|--------|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 20 | 2 | 4 | 10 | 8 | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 25 | 2 1/2 | 5 | 12 1/2 | 10 | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | 25 | 2 1/2 | 5 | 12 1/2 | 10 | | | | | | | | | | | | | | | | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 30 | 3 | 6 | 15 | 12 | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 40 | 4 | 8 | 20 | 16 | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

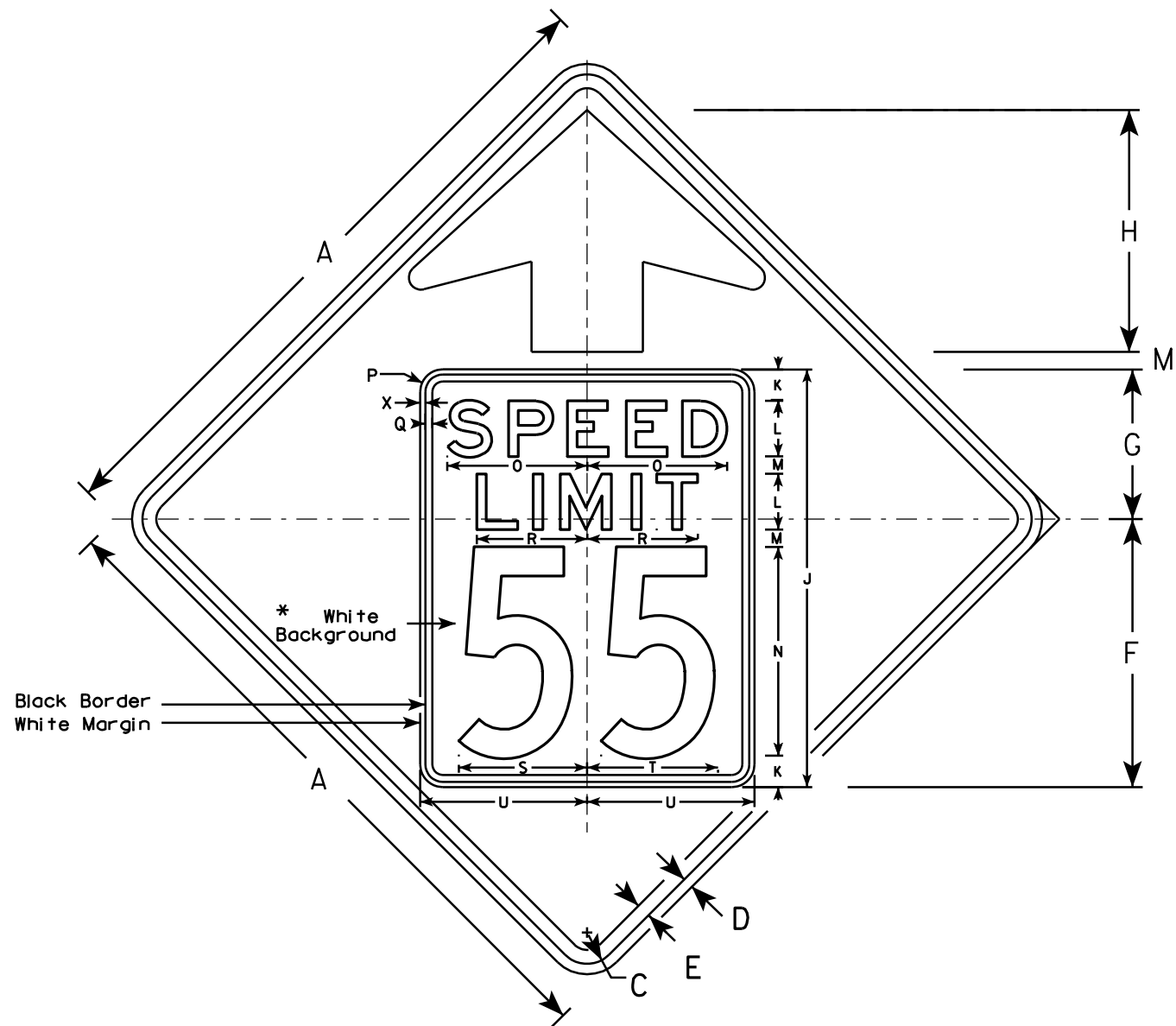
STANDARD SIGN W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

PROJECT NO: HWY: COUNTY: SHEET NO: E

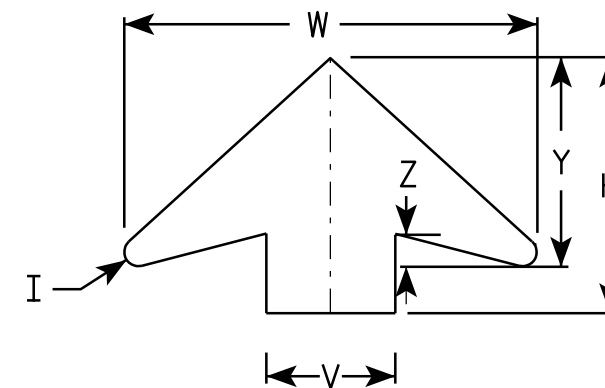


W3-5

NOTES

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

*Speed Limit Sign shall have a White Background



ARROW DETAIL

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

STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

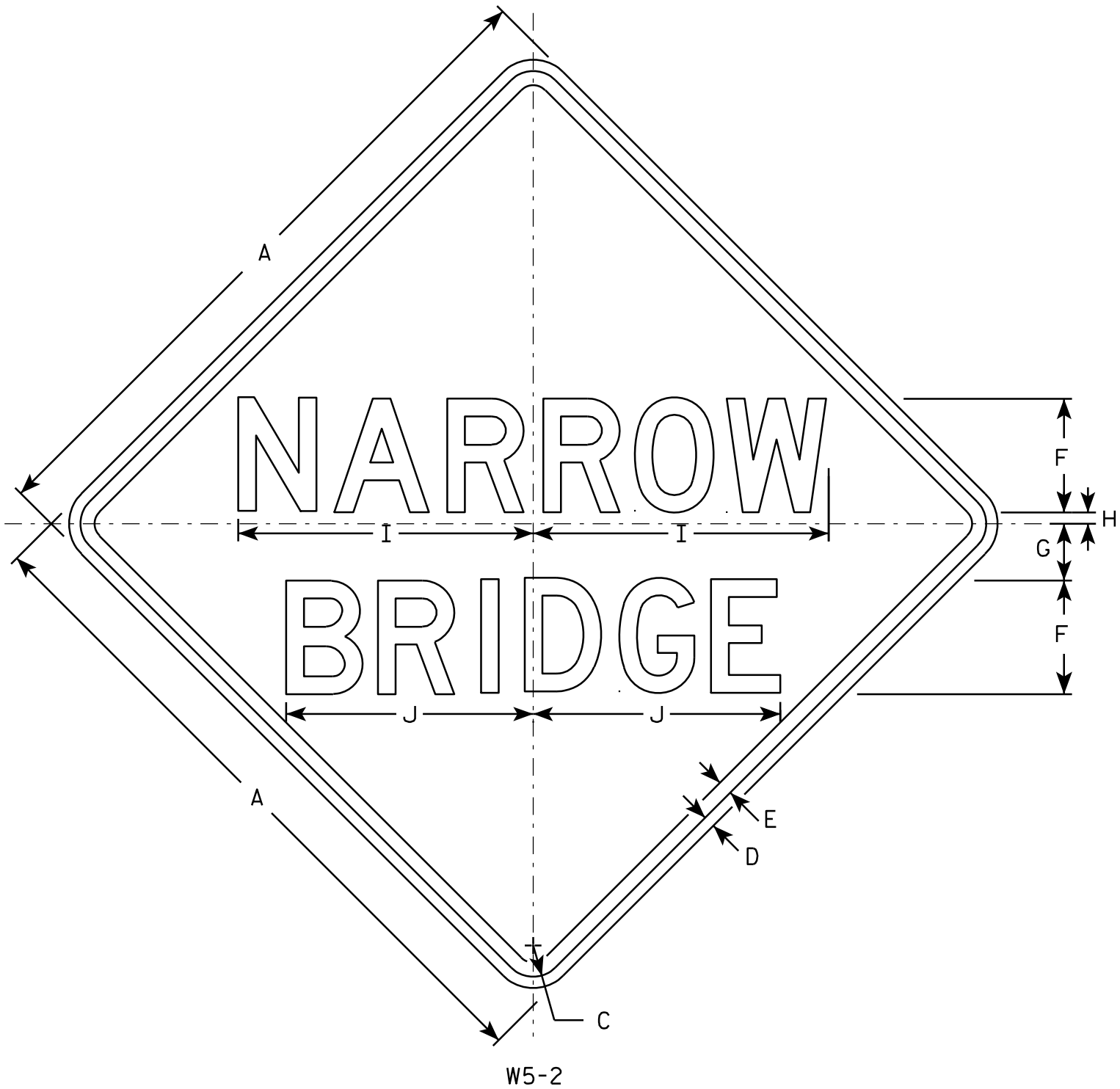
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

SHEET NO:

E



NOTES

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

W5-2

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

STANDARD SIGN

W5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W5-2.8

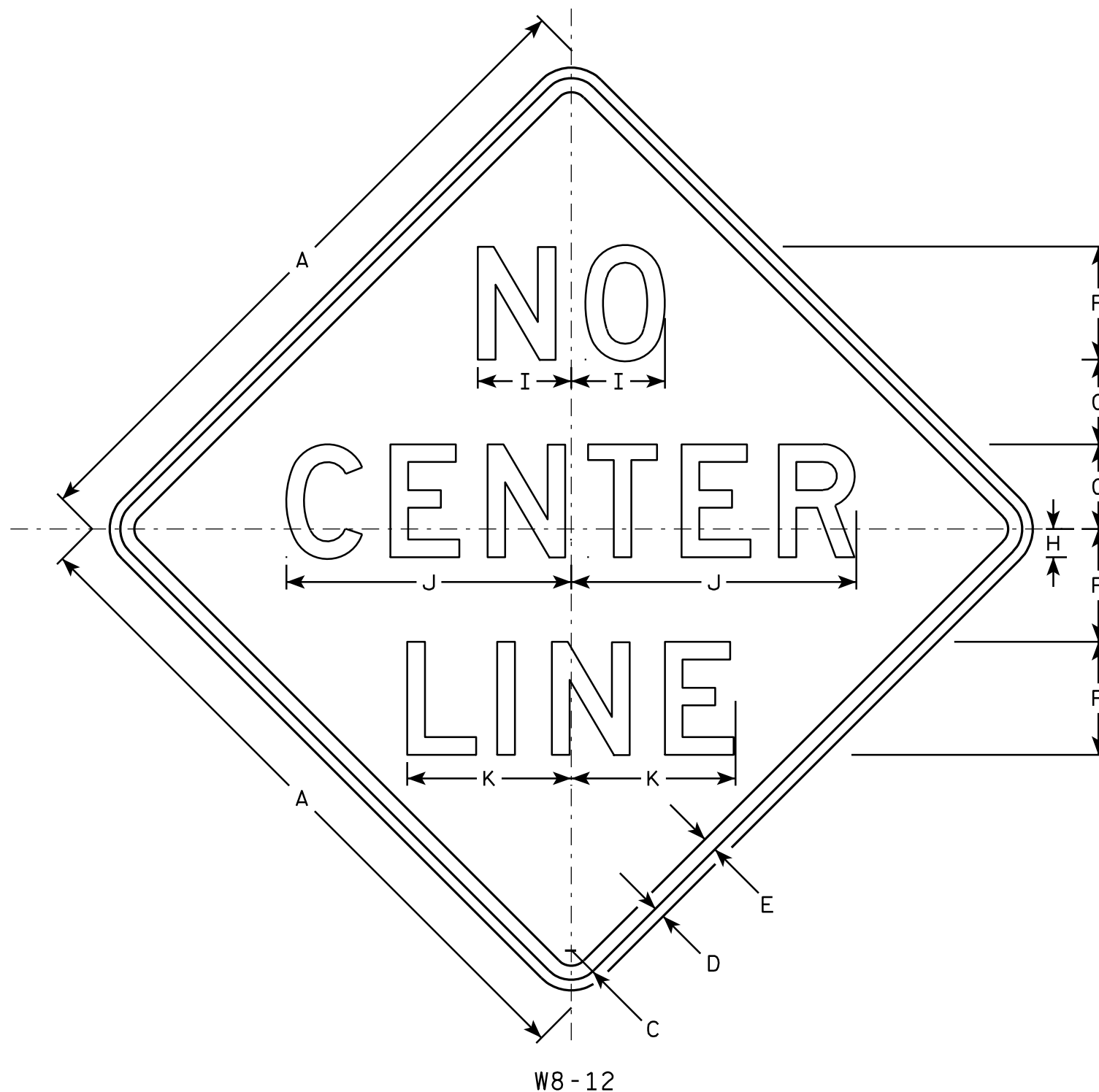
PROJECT NO:

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 - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

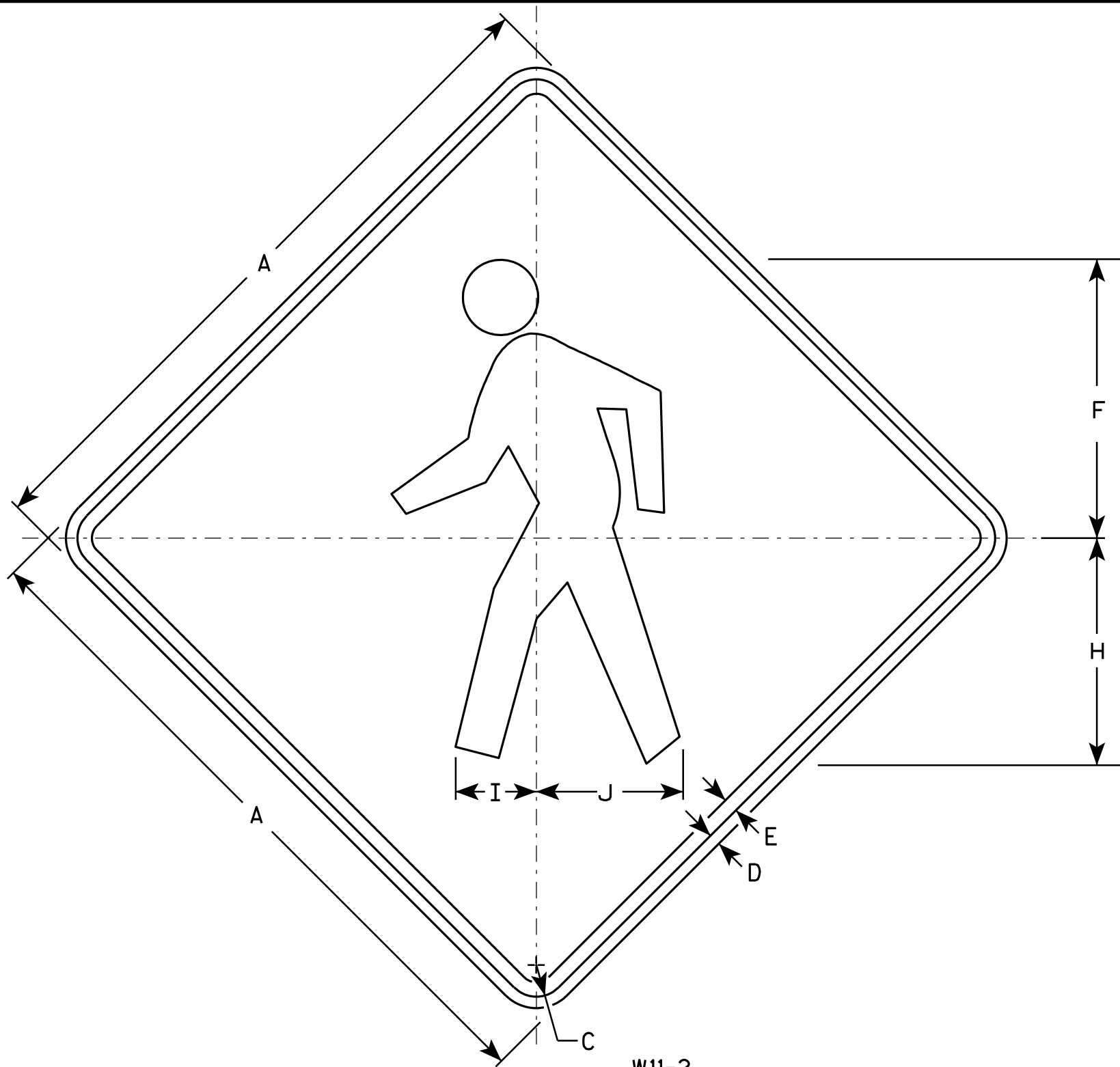
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|-------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | |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

STANDARD SIGN W8-12

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 8/24/10 PLATE NO. W8-12.3

PROJECT NO: HWY: COUNTY: SHEET NO: E



W11-2

NOTES

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

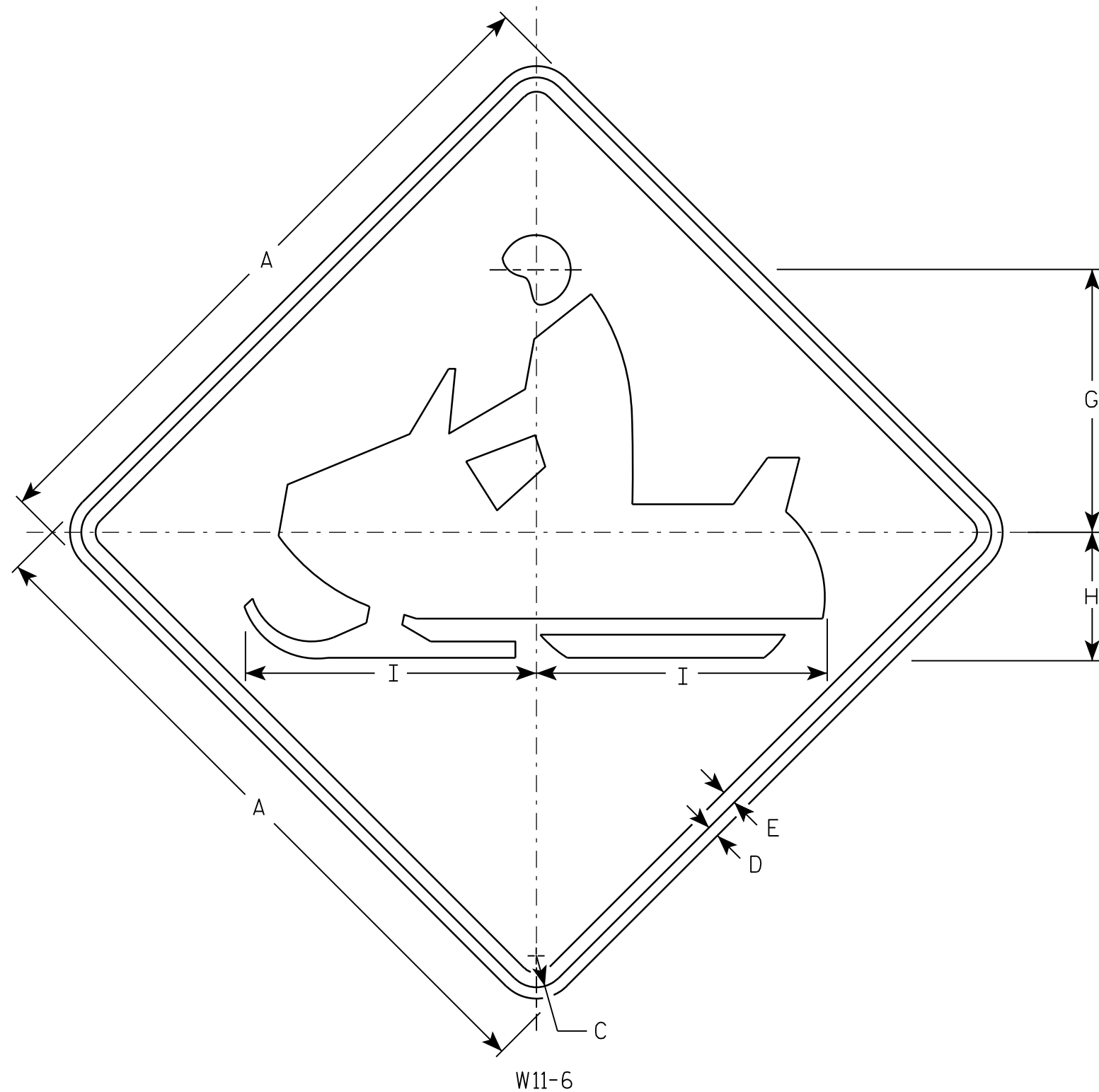
| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|--------|---|--------|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | 9 3/4 | | 7 7/8 | 2 7/8 | 5 1/8 | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 12 1/8 | | 9 7/8 | 3 1/2 | 6 3/8 | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 14 1/2 | | 11 7/8 | 4 1/4 | 7 5/8 | | | | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 14 1/2 | | 11 7/8 | 4 1/4 | 7 5/8 | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 19 3/8 | | 15 3/4 | 5 5/8 | 10 1/4 | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7



W11-6

NOTES

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

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|--------|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | | 9 1/2 | 4 1/2 | 10 1/4 | | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | | 11 1/2 | 5 5/8 | 12 3/4 | | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 30 | | 1 3/8 | 1/2 | 5/8 | | 11 1/2 | 5 5/8 | 12 3/4 | | | | | | | | | | | | | | | | | | 6.25 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 14 1/8 | 6 3/4 | 15 1/4 | | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | | 19 | 9 | 20 1/2 | | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W11-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-6.8

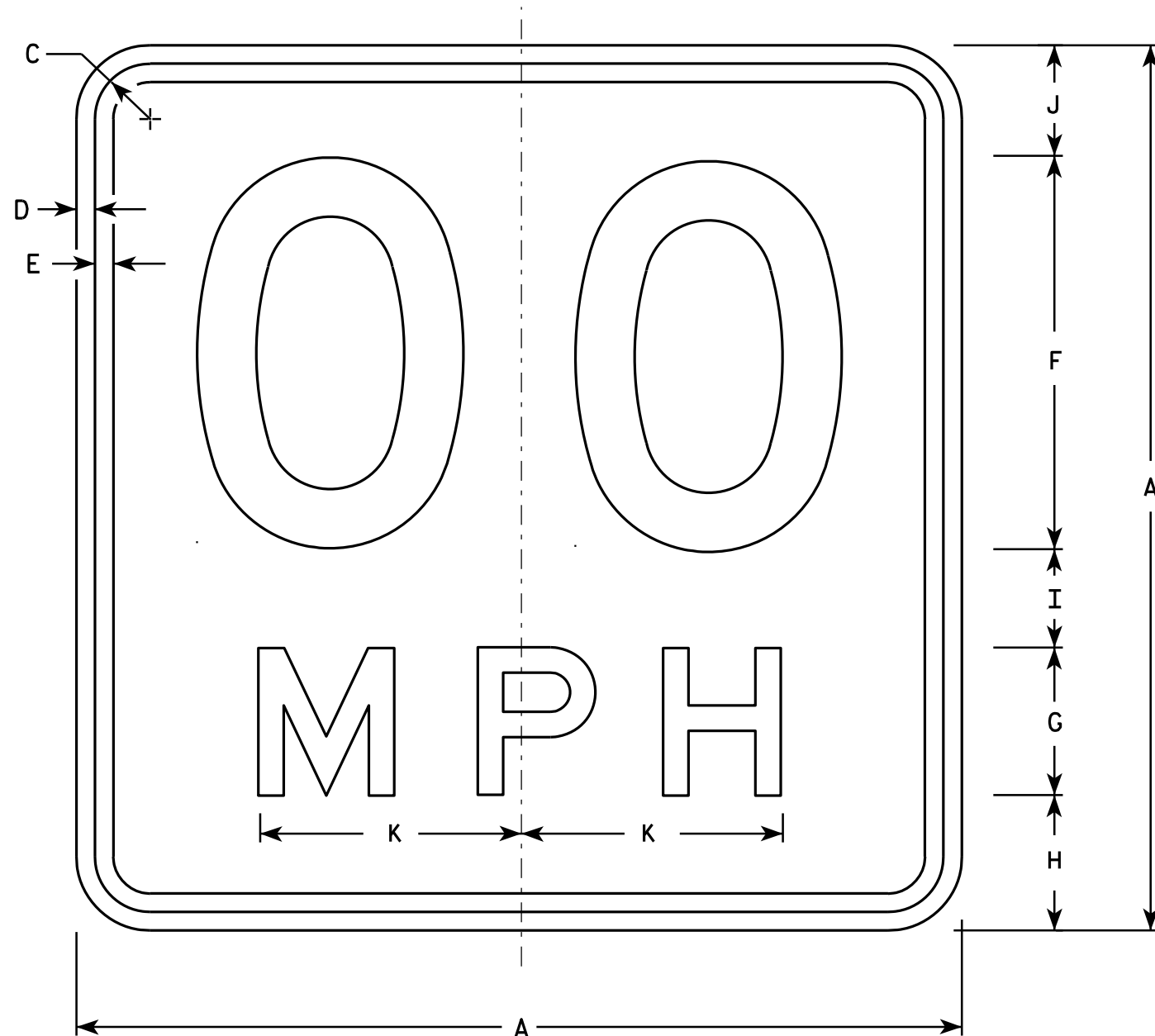
PROJECT NO:

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. Message Series - See Note 6
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 space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

| 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 | | 1 1/8 | 3/8 | 3/8 | 8 | 3 | 2 3/4 | 2 | 2 1/4 | 5 3/8 | | | | | | | | | | | | | | | | 2.25 |
| * 2S | 18 | | 1 1/8 | 3/8 | 3/8 | 8 | 3 | 2 3/4 | 2 | 2 1/4 | 5 3/8 | | | | | | | | | | | | | | | | 2.25 |
| * 2M | 18 | | 1 1/8 | 3/8 | 3/8 | 8 | 3 | 2 3/4 | 2 | 2 1/4 | 5 3/8 | | | | | | | | | | | | | | | | 2.25 |
| 3 | 24 | | 1 1/8 | 3/8 | 1/2 | 10 | 4 | 4 | 2 3/4 | 3 1/4 | 6 5/8 | | | | | | | | | | | | | | | | 4.00 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |
| 5 | 36 | | 1 5/8 | 5/8 | 3/4 | 16 | 6 | 5 1/2 | 4 | 4 1/2 | 10 5/8 | | | | | | | | | | | | | | | | 9.00 |

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

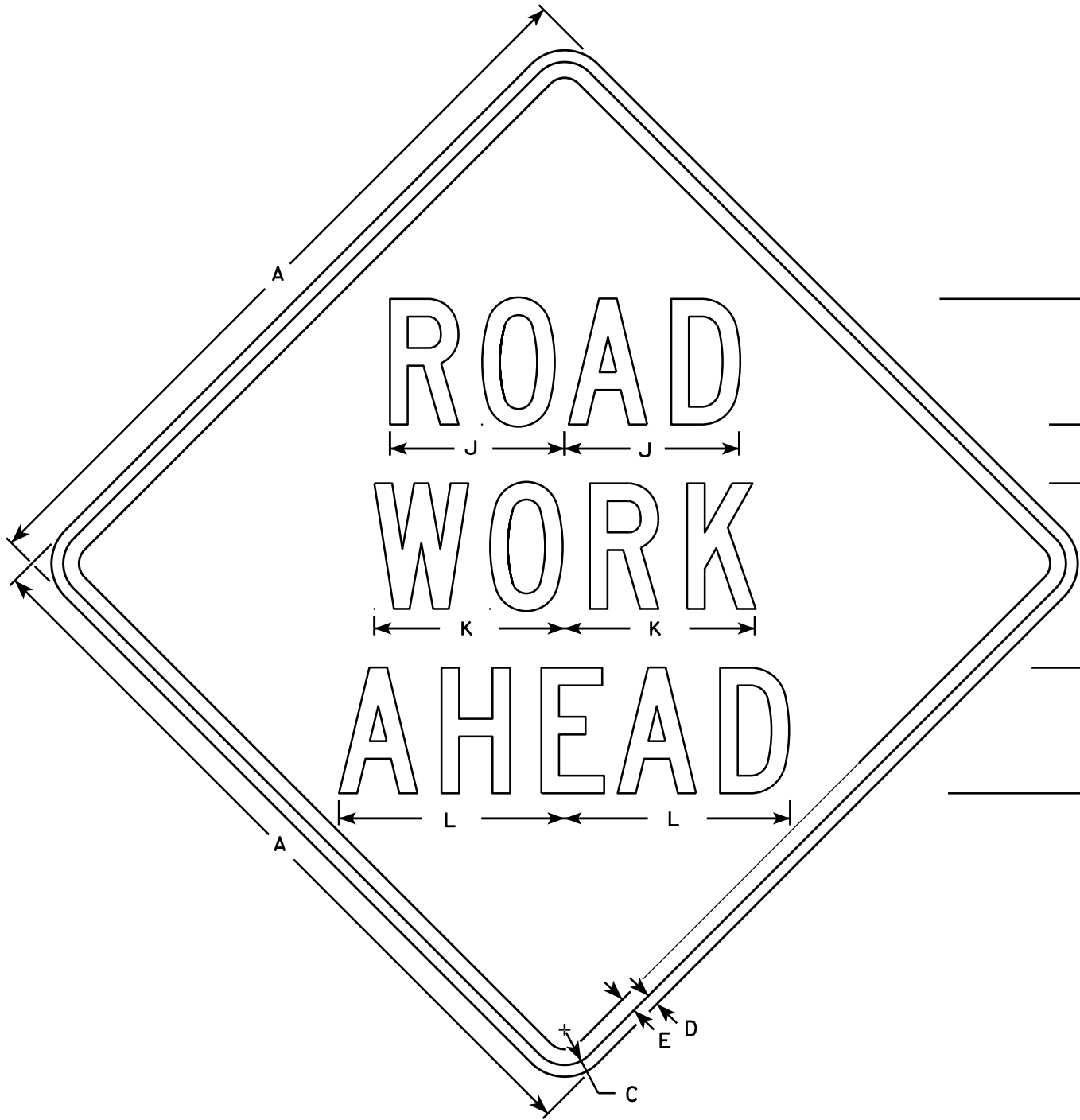
PROJECT NO:

HWY:

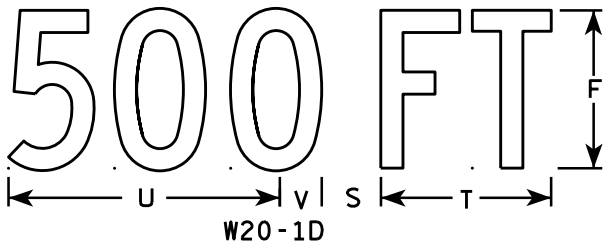
COUNTY:

SHEET NO:

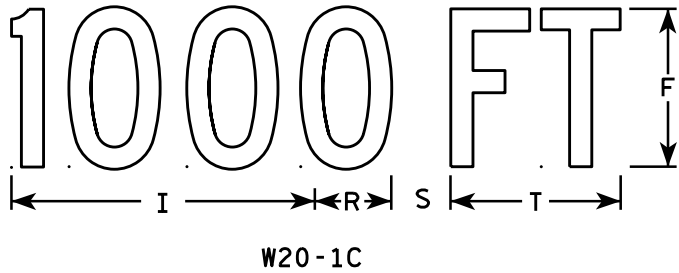
E



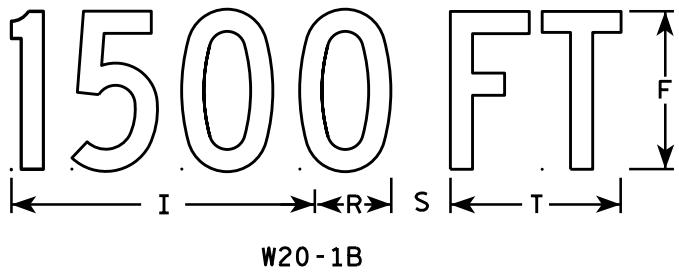
W20-1A



W20-1D



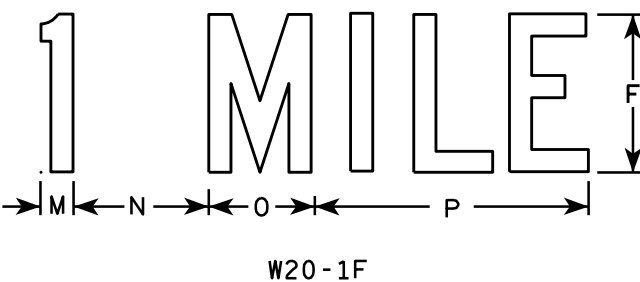
W20-1C



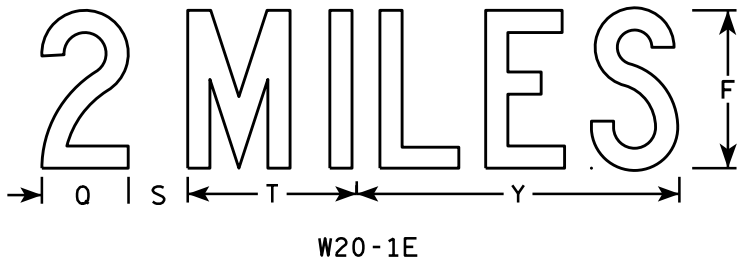
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|-------|-------|--------|--------|--------|--------|-------|-------|-------|--------|-------|-------|-------|-------|--------|-------|--------|-------|--------|---|-----------------|
| 1 | 36 | | 1 3/8 | 1/2 | 5/8 | 5 | 2 5/8 | 3 1/4 | 10 1/8 | 7 | 7 5/8 | 8 7/8 | 1 1/8 | 4 1/2 | 3 1/2 | 9 | | 2 1/2 | 2 1/4 | 5 5/8 | 9 | 1 3/8 | 8 | 1 3/4 | 10 3/4 | 6 | 9.0 |
| 2S | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 2M | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 3 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | 8 | 3 3/4 | 5 1/8 | 15 3/8 | 11 1/8 | 12 1/8 | 14 3/8 | 1 5/8 | 6 7/8 | 5 3/8 | 13 7/8 | 4 3/8 | 3 7/8 | 3 | 8 5/8 | 13 3/4 | 2 1/8 | 11 7/8 | 2 3/4 | 16 3/8 | 9 | 16.0 |

STANDARD SIGN

W20-1A, B, C, D, F & G

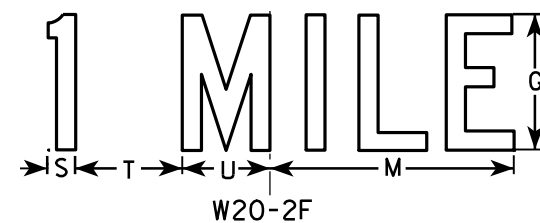
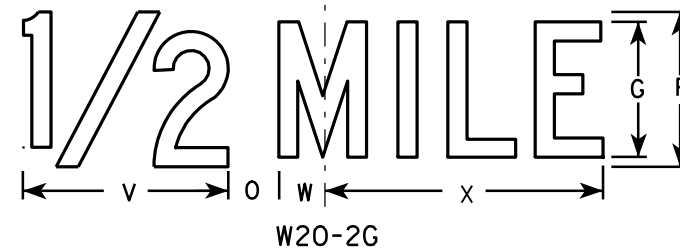
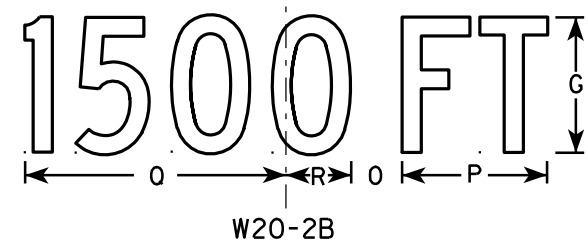
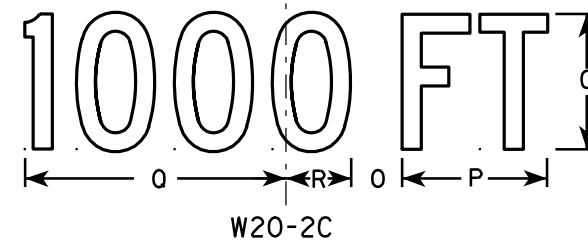
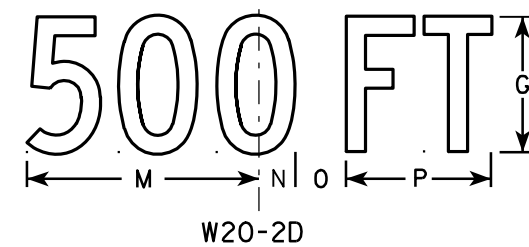
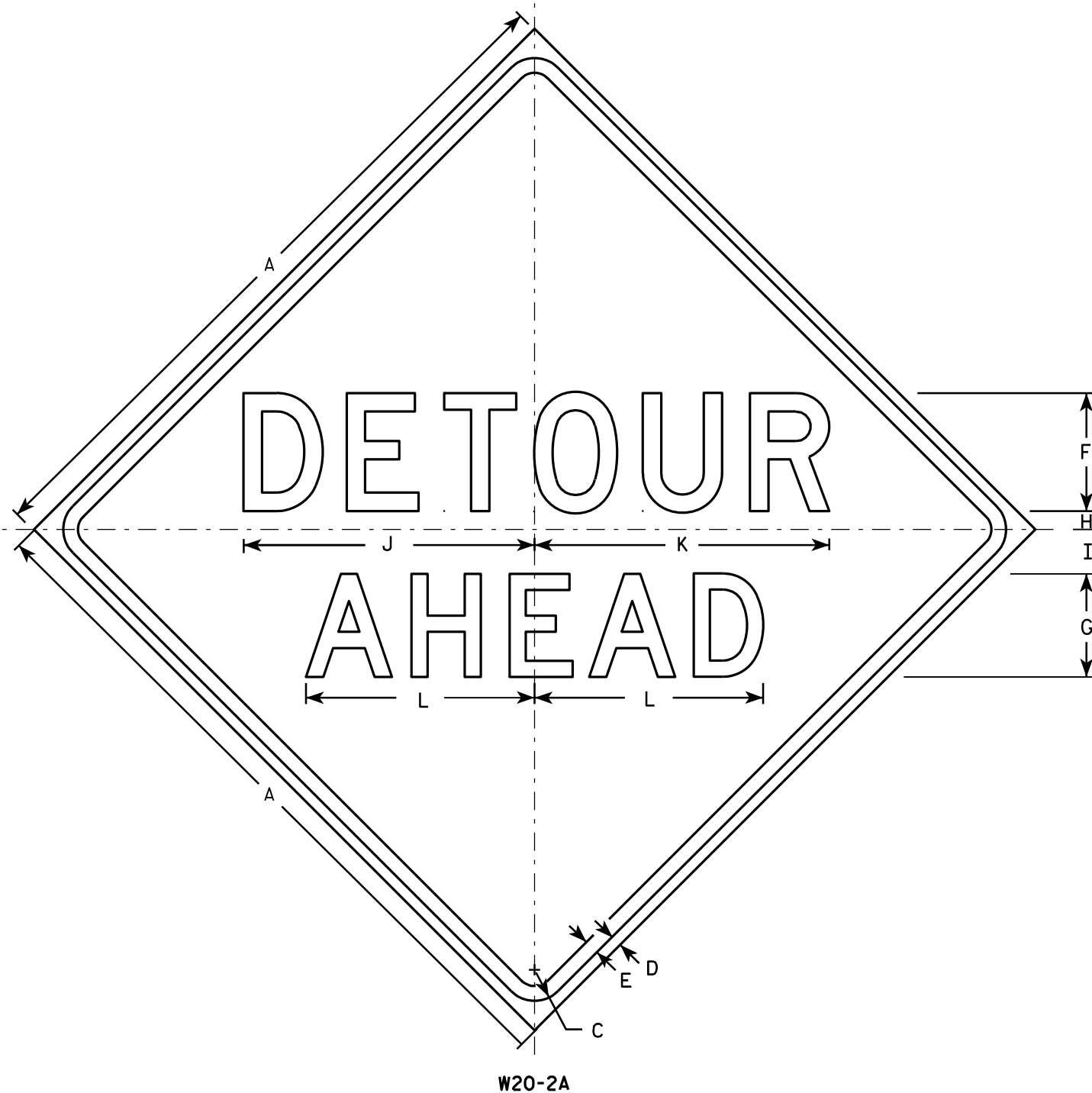
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

State Traffic Engineer

DATE 5/07/15

PLATE NO. W20-1.10



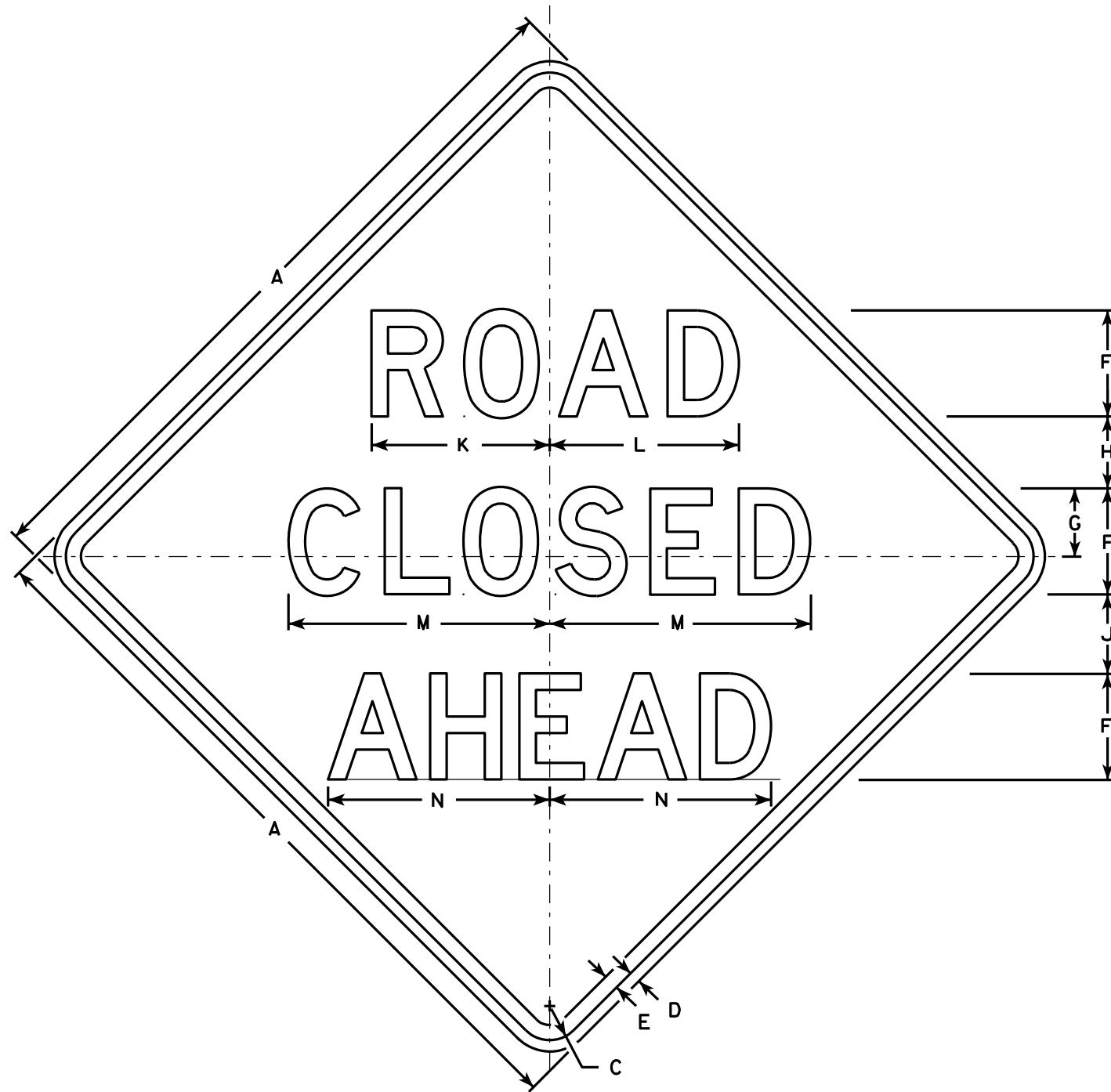
NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - See note 5
- 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.
- Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

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

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

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch* for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-2.6



W20-3A

500 FT

W20-3D

1000 FT

W20-3C

1500 FT

W20-3B

1/2 MILE

W20-3G

1 MILE

W20-3F

NOTES

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

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

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

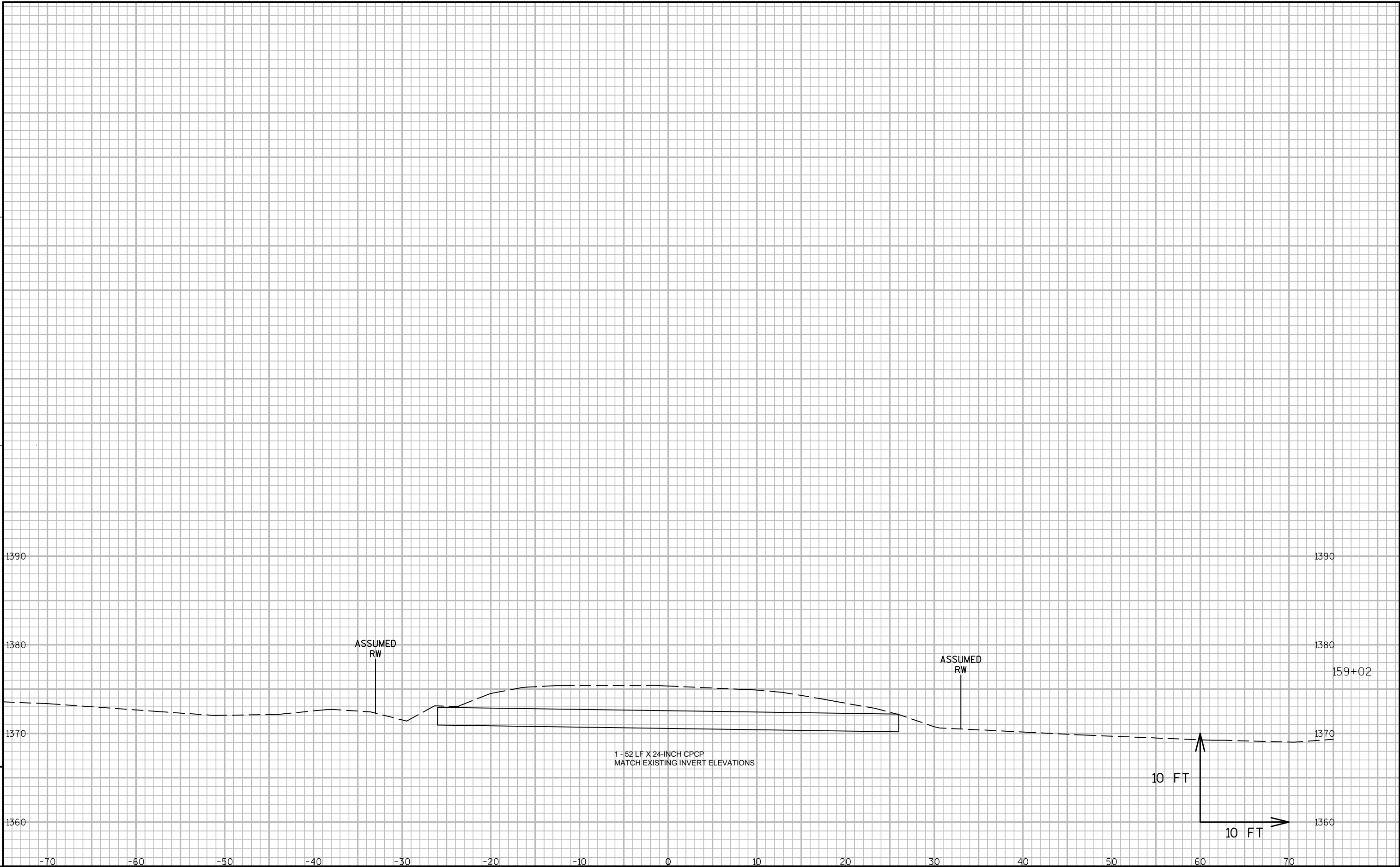
CTH S - STA. 221+50 - 244+00

| STATION | LENGTH | CUT END AREA | FILL END AREA | CUT RAW VOLUME | FILL RAW VOLUME | (ADJUSTED) FILL RAW VOLUME * 1.25 | CUMULATIVE CUT VOLUME | (ADJUSTED) CUMULATIVE FILL VOLUME | MASS ORDINATE |
|----------|--------|--------------|---------------|----------------|-----------------|-----------------------------------|-----------------------|-----------------------------------|---------------|
| | LF | SF | SF | CY | CY | CY | CY | CY | CY |
| 220+50.0 | - | 0.0 | 0.0 | - | - | - | - | - | - |
| 221+00.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0 |
| 221+50.0 | 50.0 | 18.3 | 0.2 | 17.0 | 0.2 | 0.2 | 17 | 0 | 17 |
| 222+00.0 | 50.0 | 17.3 | 0.4 | 33.0 | 0.5 | 0.7 | 50 | 1 | 49 |
| 222+50.0 | 50.0 | 17.2 | 0.3 | 31.9 | 0.6 | 0.8 | 82 | 2 | 80 |
| 223+00.0 | 50.0 | 17.2 | 0.3 | 31.8 | 0.6 | 0.7 | 114 | 2 | 111 |
| 223+50.0 | 50.0 | 6.1 | 2.1 | 21.5 | 2.2 | 2.8 | 135 | 5 | 130 |
| 224+00.0 | 50.0 | 0.0 | 25.5 | 5.6 | 25.5 | 31.9 | 141 | 37 | 104 |
| 224+37.8 | 37.8 | 0.0 | 85.5 | 0.0 | 77.7 | 97.1 | 141 | 134 | 7 |
| 224+37.8 | 0.0 | 0.0 | 85.5 | 0.0 | 0.0 | 0.0 | 141 | 134 | 7 |
| 225+00.0 | 62.2 | 0.0 | 152.0 | 0.0 | 273.5 | 341.9 | 141 | 476 | -335 |
| 225+50.0 | 50.0 | 0.0 | 249.9 | 0.0 | 372.0 | 465.0 | 141 | 941 | -800 |
| 226+00.0 | 50.0 | 0.0 | 396.5 | 0.0 | 598.5 | 748.1 | 141 | 1689 | -1548 |
| 226+50.0 | 50.0 | 0.0 | 354.3 | 0.0 | 695.2 | 869.0 | 141 | 2558 | -2417 |
| 227+00.0 | 50.0 | 0.0 | 323.2 | 0.0 | 627.3 | 784.2 | 141 | 3342 | -3202 |
| 227+50.0 | 50.0 | 0.0 | 250.1 | 0.0 | 530.9 | 663.6 | 141 | 4006 | -3865 |
| 228+00.0 | 50.0 | 0.0 | 188.2 | 0.0 | 405.9 | 507.4 | 141 | 4513 | -4373 |
| 228+50.0 | 50.0 | 0.0 | 92.6 | 0.0 | 260.0 | 325.0 | 141 | 4838 | -4698 |
| 229+00.0 | 50.0 | 39.5 | 23.5 | 36.6 | 107.4 | 134.3 | 177 | 4973 | -4795 |
| 229+50.0 | 50.0 | 36.8 | 7.3 | 70.7 | 28.5 | 35.6 | 248 | 5008 | -4760 |
| 230+00.0 | 50.0 | 17.7 | 1.4 | 50.4 | 8.0 | 10.0 | 298 | 5018 | -4720 |
| 230+50.0 | 50.0 | 2.3 | 24.6 | 18.5 | 24.1 | 30.1 | 317 | 5048 | -4731 |
| 231+00.0 | 50.0 | 0.0 | 57.8 | 2.1 | 76.3 | 95.4 | 319 | 5144 | -4825 |
| 231+50.0 | 50.0 | 13.1 | 40.4 | 12.1 | 91.0 | 113.7 | 331 | 5258 | -4926 |
| 232+00.0 | 50.0 | 30.6 | 9.7 | 40.4 | 46.4 | 58.0 | 372 | 5316 | -4944 |
| 232+50.0 | 50.0 | 89.1 | 1.0 | 110.8 | 9.9 | 12.4 | 482 | 5328 | -4845 |
| 233+00.0 | 50.0 | 183.4 | 0.0 | 252.3 | 0.9 | 1.2 | 735 | 5329 | -4594 |
| 233+50.0 | 50.0 | 260.9 | 0.0 | 411.4 | 0.0 | 0.0 | 1146 | 5329 | -4183 |
| 234+00.0 | 50.0 | 385.9 | 0.0 | 598.9 | 0.0 | 0.0 | 1745 | 5329 | -3584 |
| 234+50.0 | 50.0 | 260.0 | 0.0 | 598.1 | 0.0 | 0.0 | 2343 | 5329 | -2986 |
| 235+00.0 | 50.0 | 167.7 | 0.0 | 396.0 | 0.0 | 0.0 | 2739 | 5329 | -2590 |
| 235+50.0 | 50.0 | 102.1 | 0.4 | 249.8 | 0.3 | 0.4 | 2989 | 5329 | -2341 |
| 236+00.0 | 50.0 | 55.9 | 7.4 | 146.3 | 7.2 | 9.0 | 3135 | 5339 | -2203 |
| 236+50.0 | 50.0 | 26.6 | 27.5 | 76.4 | 32.4 | 40.5 | 3212 | 5379 | -2167 |
| 237+00.0 | 50.0 | 0.0 | 64.2 | 24.6 | 84.9 | 106.1 | 3236 | 5485 | -2249 |
| 237+50.0 | 50.0 | 0.0 | 113.0 | 0.0 | 164.0 | 205.0 | 3236 | 5690 | -2454 |
| 238+00.0 | 50.0 | 0.0 | 166.9 | 0.0 | 259.1 | 323.9 | 3236 | 6014 | -2778 |
| 238+50.0 | 50.0 | 0.0 | 143.7 | 0.0 | 287.6 | 359.5 | 3236 | 6373 | -3137 |
| 239+00.0 | 50.0 | 0.0 | 130.5 | 0.0 | 253.9 | 317.3 | 3236 | 6691 | -3455 |
| 239+50.0 | 50.0 | 0.0 | 90.8 | 0.0 | 204.9 | 256.1 | 3236 | 6947 | -3711 |
| 240+00.0 | 50.0 | 19.3 | 71.3 | 17.8 | 150.1 | 187.6 | 3254 | 7134 | -3880 |
| 240+50.0 | 50.0 | 0.0 | 42.1 | 17.8 | 105.0 | 131.2 | 3272 | 7266 | -3994 |
| 241+00.0 | 50.0 | 0.0 | 30.1 | 0.0 | 66.8 | 83.5 | 3272 | 7349 | -4077 |
| 241+50.0 | 50.0 | 0.0 | 27.8 | 0.0 | 53.5 | 66.9 | 3272 | 7416 | -4144 |
| 242+00.0 | 50.0 | 0.0 | 25.9 | 0.0 | 49.7 | 62.1 | 3272 | 7478 | -4206 |
| 242+50.0 | 50.0 | 5.3 | 4.1 | 4.9 | 27.8 | 34.8 | 3277 | 7513 | -4236 |
| 243+00.0 | 50.0 | 19.8 | 0.0 | 23.2 | 3.8 | 4.8 | 3300 | 7518 | -4218 |
| 243+50.0 | 50.0 | 0.0 | 0.0 | 18.3 | 0.0 | 0.0 | 3318 | 7518 | -4199 |
| 244+00.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3318 | 7518 | -4199 |
| TOTALS | | | | 3318 | 6014 | 7518 | | | |

NOTES:
(1) - NO MARSH OR ROCK EXCAVATION ANTICIPATED
(2) - FILL EXPANSION 25%
(3) - EXISTING PAVEMENT IS INCLUDED IN CUT

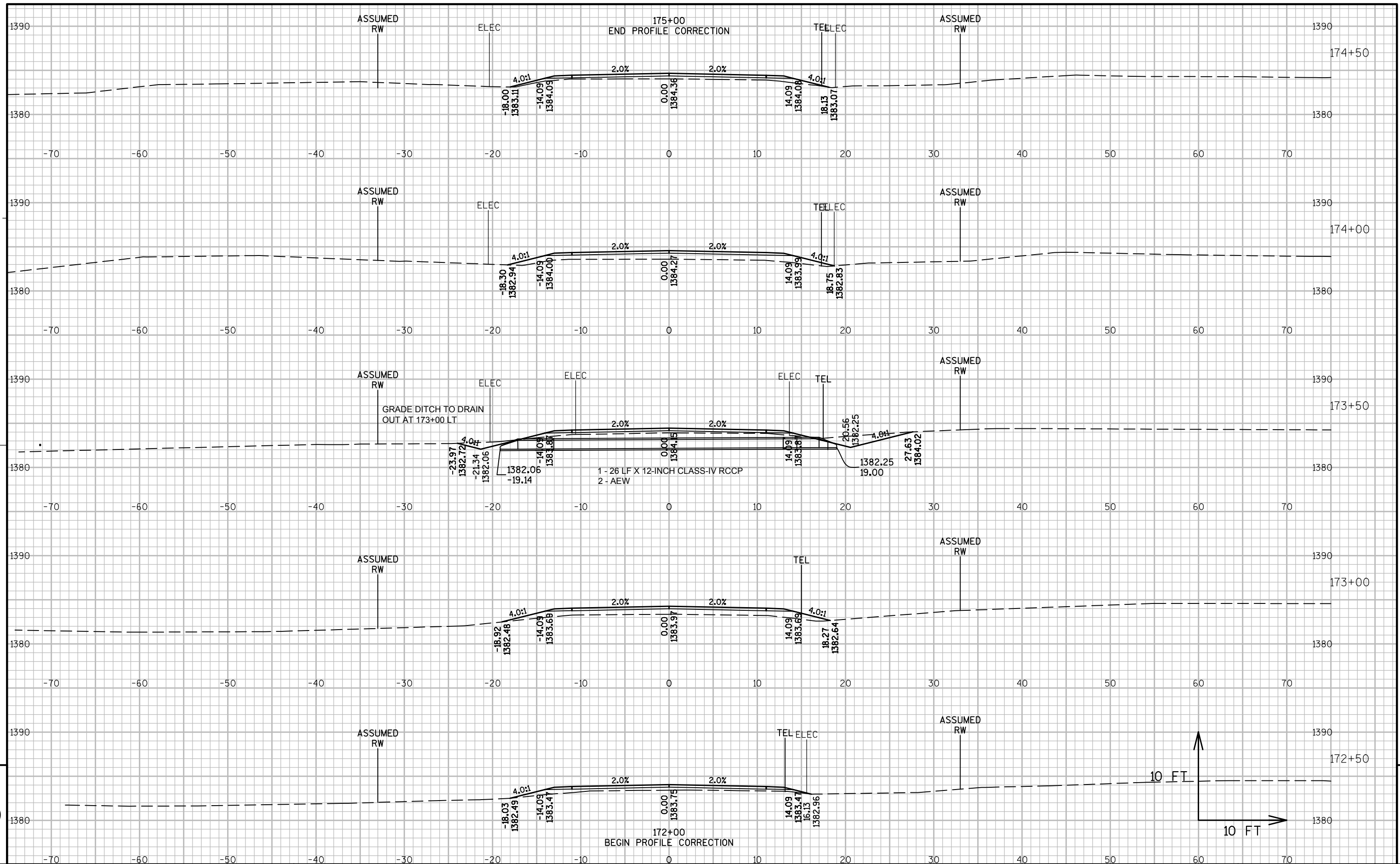
PINE POINT ROAD - STA. 10+50 - 12+00

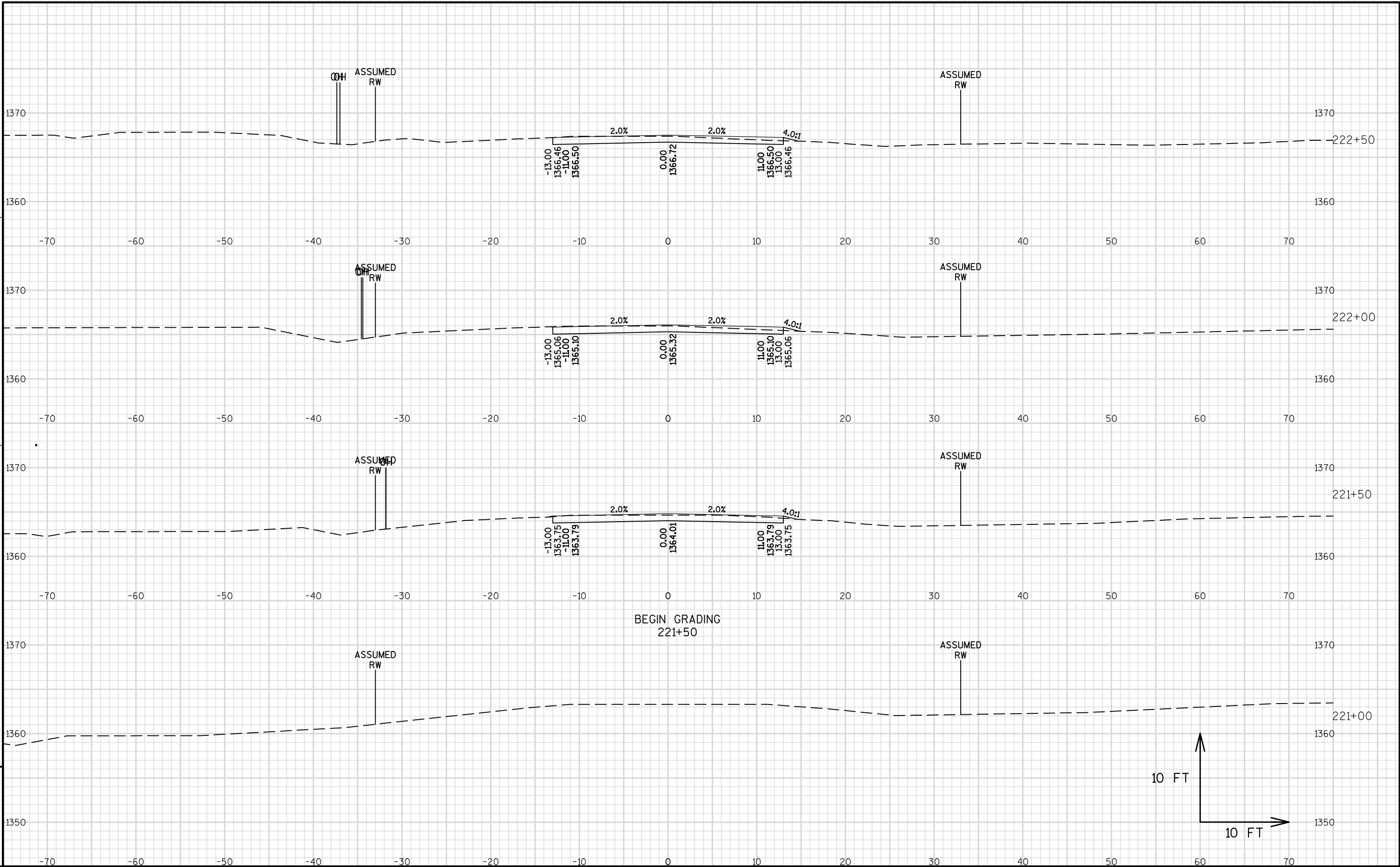
| STATION | LENGTH | CUT END AREA | FILL END AREA | CUT RAW VOLUME | FILL RAW VOLUME | (ADJUSTED) FILL RAW VOLUME * 1.25 | CUMULATIVE CUT VOLUME | (ADJUSTED) CUMULATIVE FILL VOLUME | MASS ORDINATE |
|---------|--------|--------------|---------------|----------------|-----------------|-----------------------------------|-----------------------|-----------------------------------|---------------|
| | LF | SF | SF | CY | CY | CY | CY | CY | CY |
| 10+50.0 | - | 56.3 | 15.5 | - | - | - | - | - | - |
| 11+00.0 | 50.0 | 32.7 | 4.3 | 82 | 18 | 23 | 82 | 23 | 60 |
| 11+50.0 | 50.0 | 7.9 | 1.3 | 38 | 5 | 7 | 120 | 29 | 91 |
| 12+00.0 | 50.0 | 18.7 | 0.0 | 25 | 1 | 2 | 145 | 31 | 114 |
| 12+00.0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0 | 145 | 31 | 114 |
| TOTALS | | | | 145 | 25 | 31 | | | |

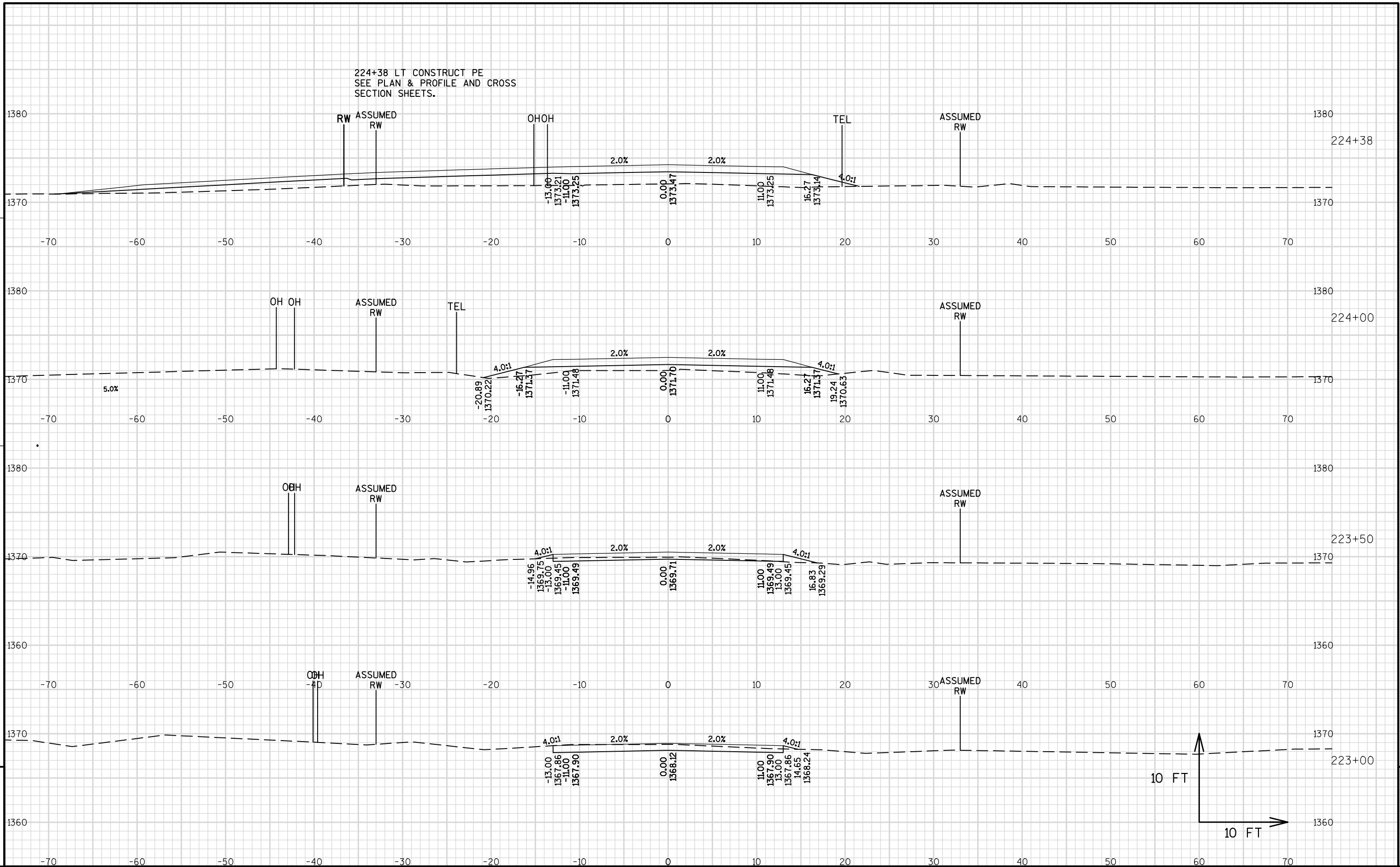


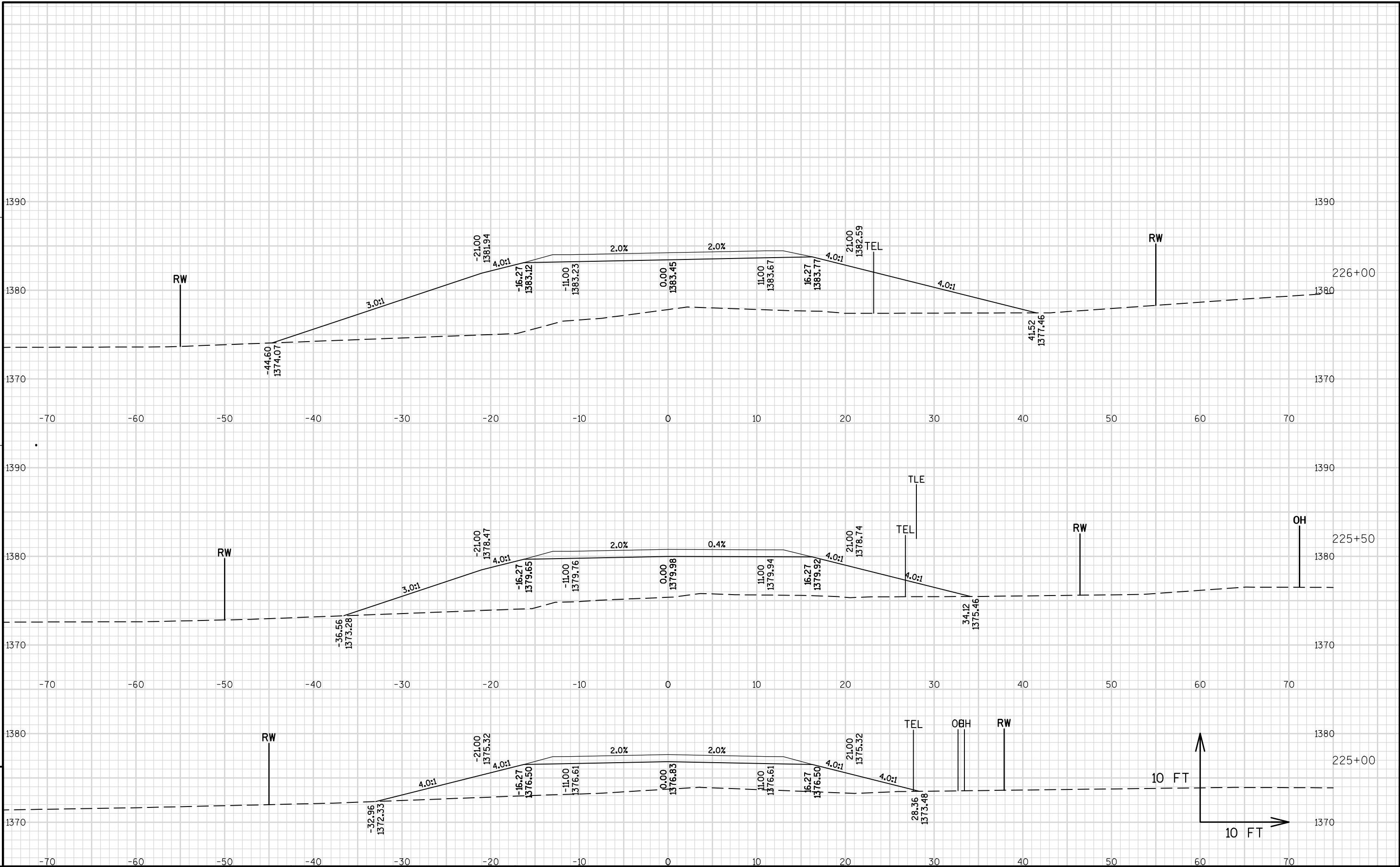
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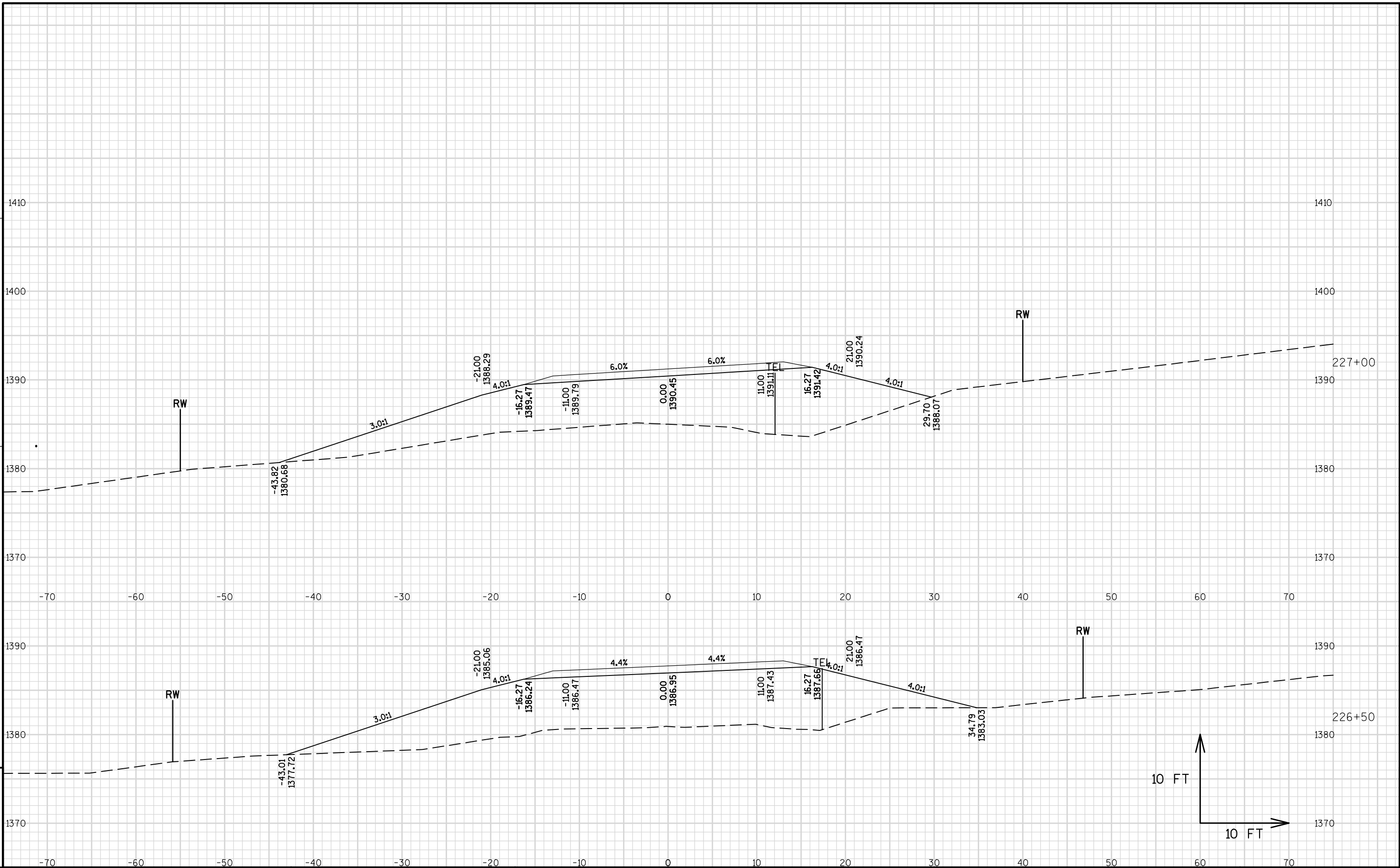
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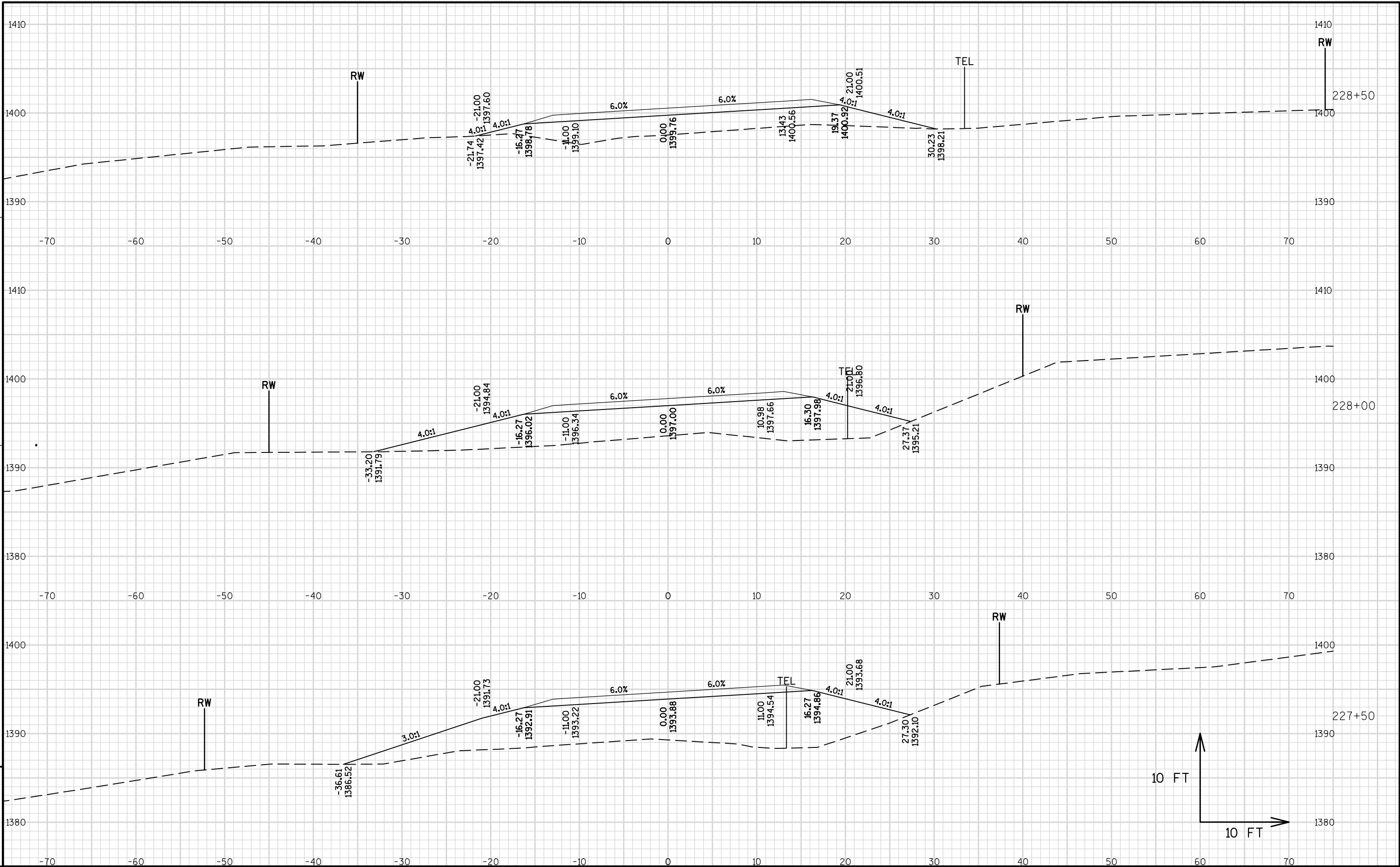


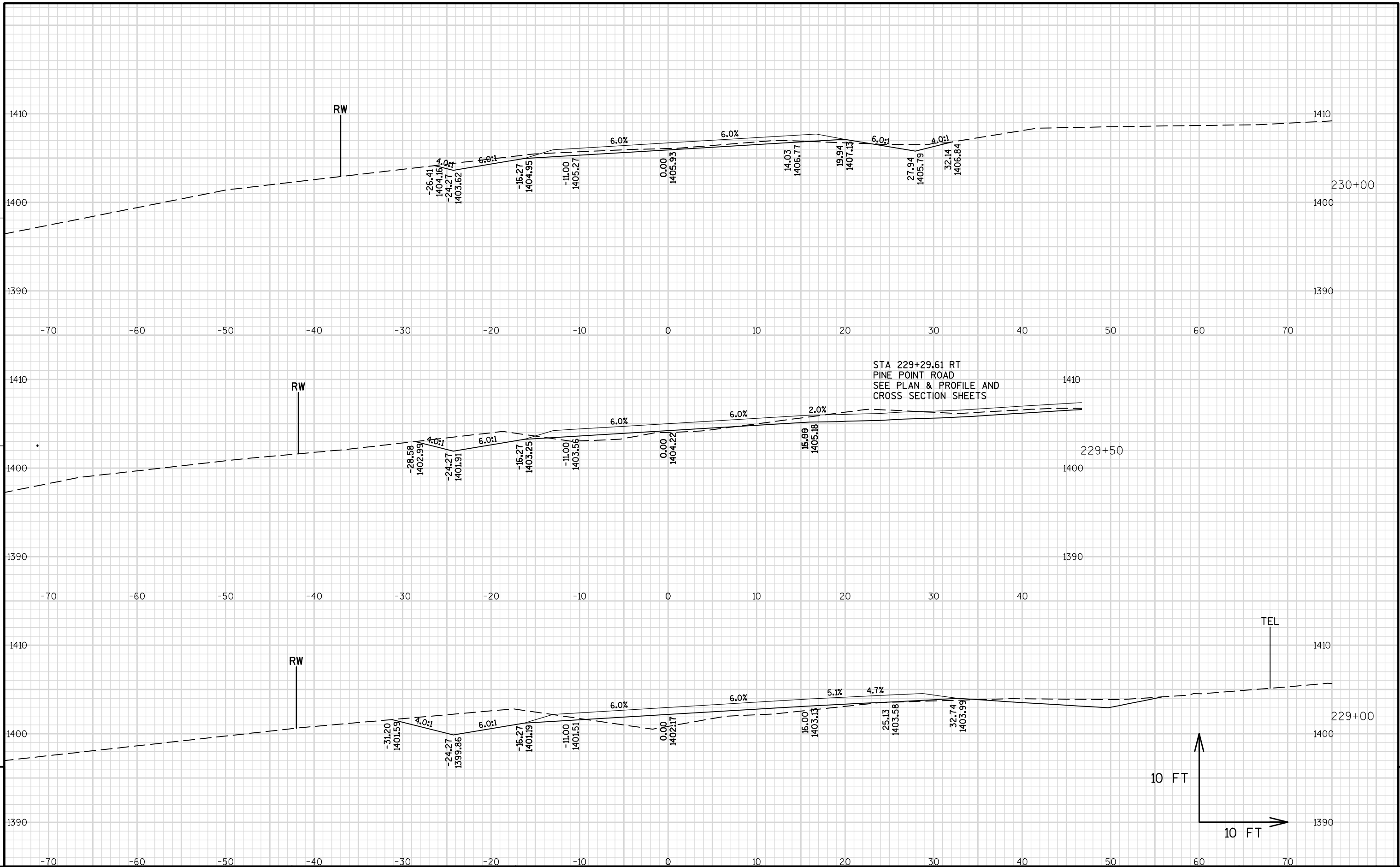


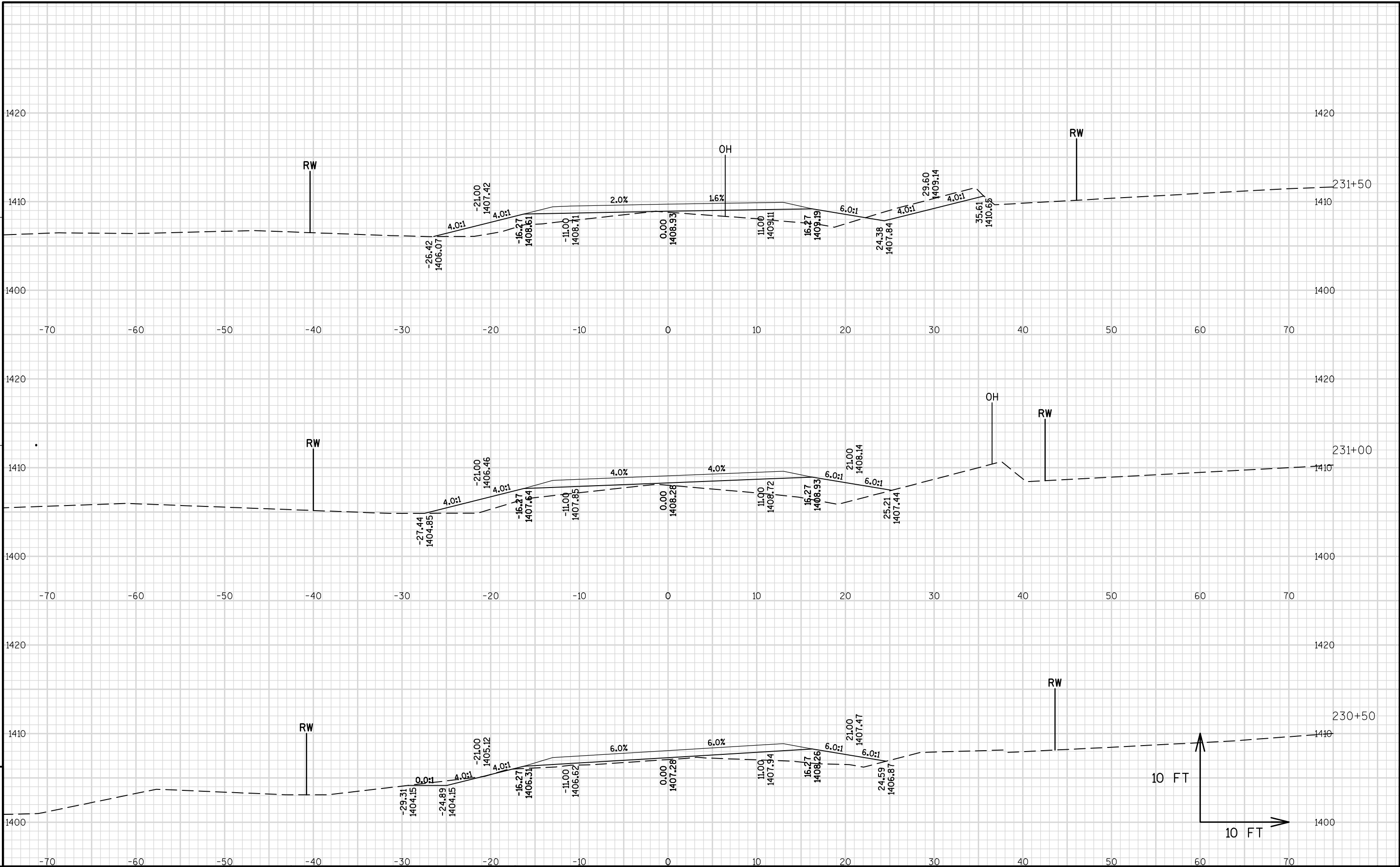


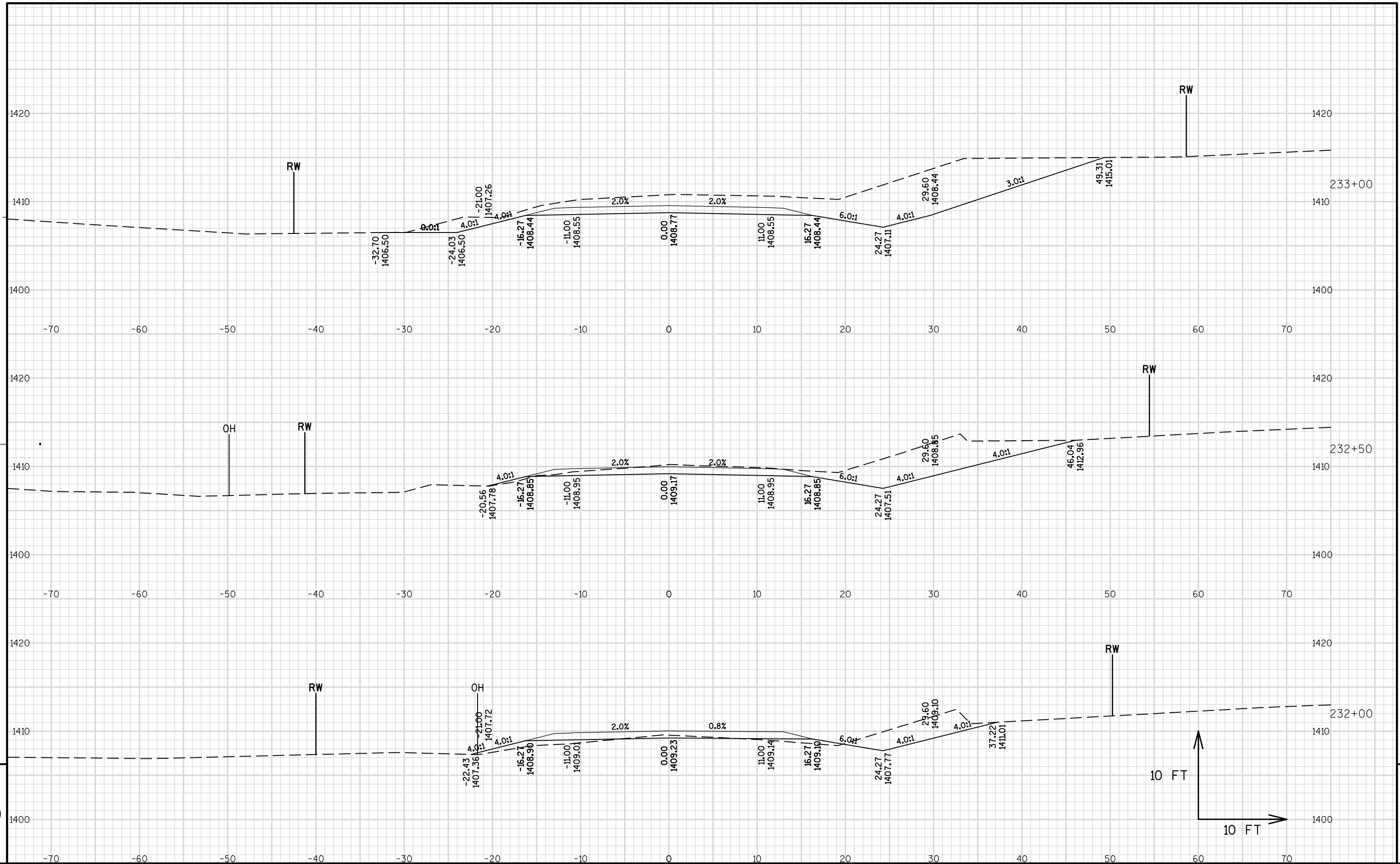


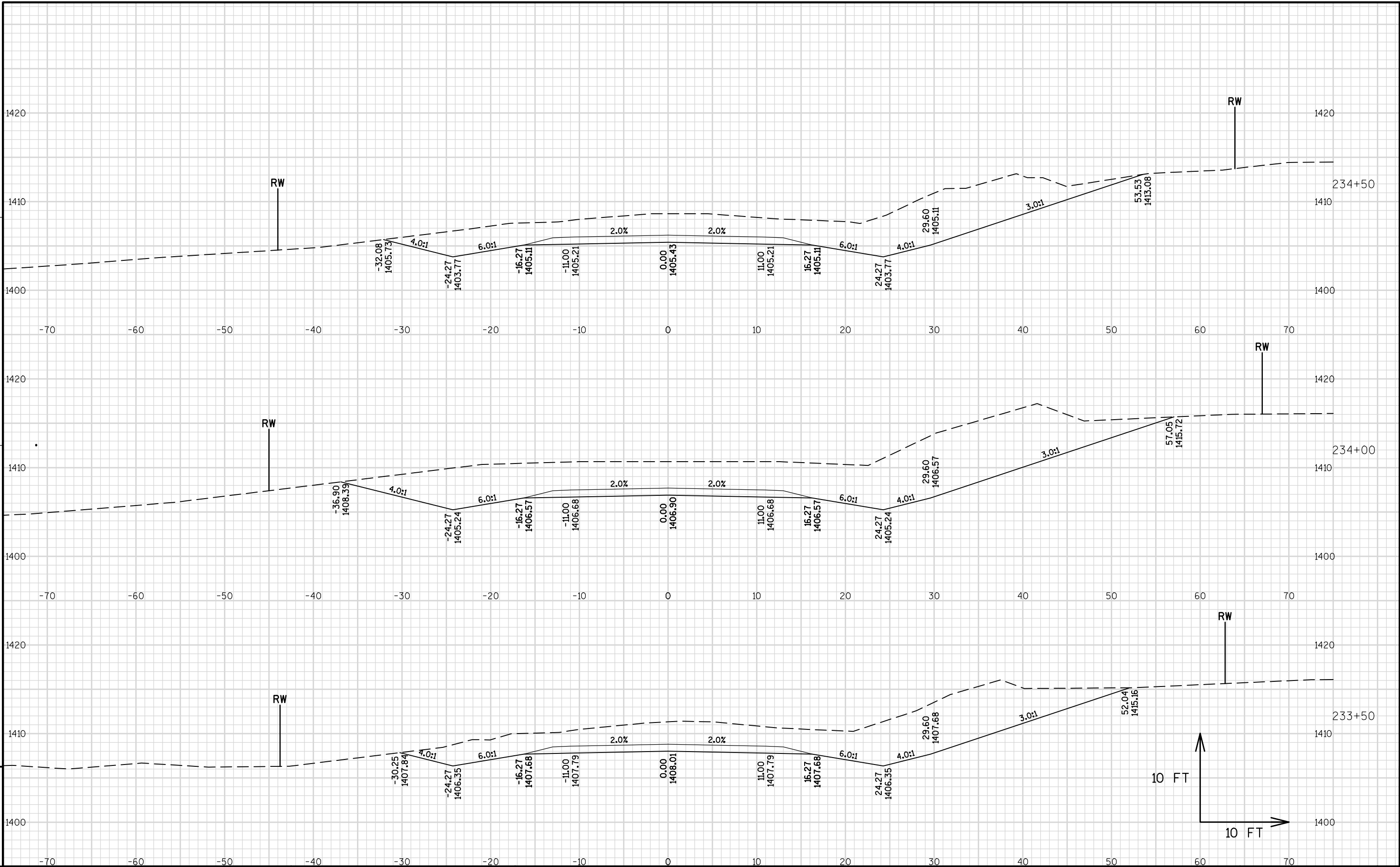


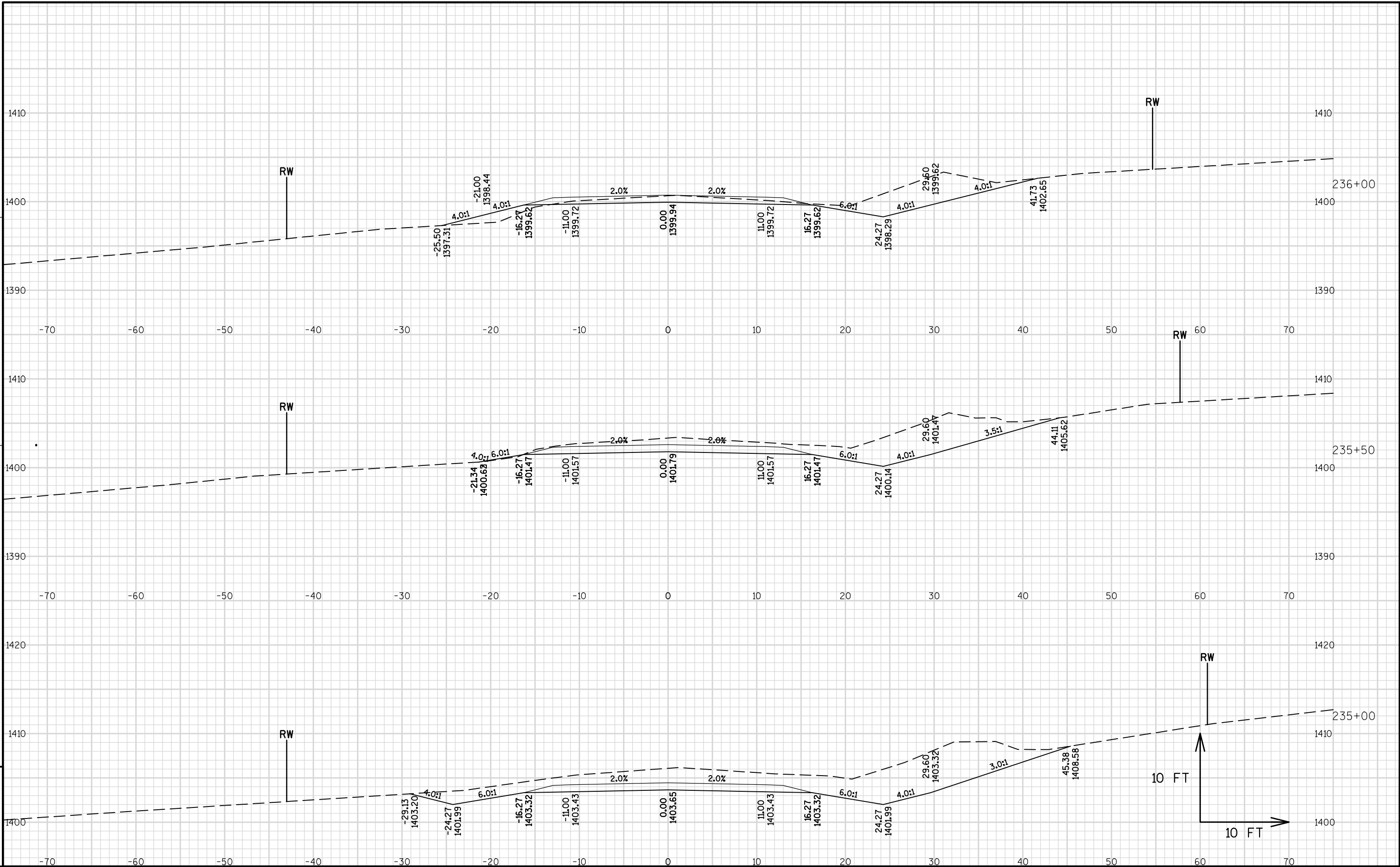


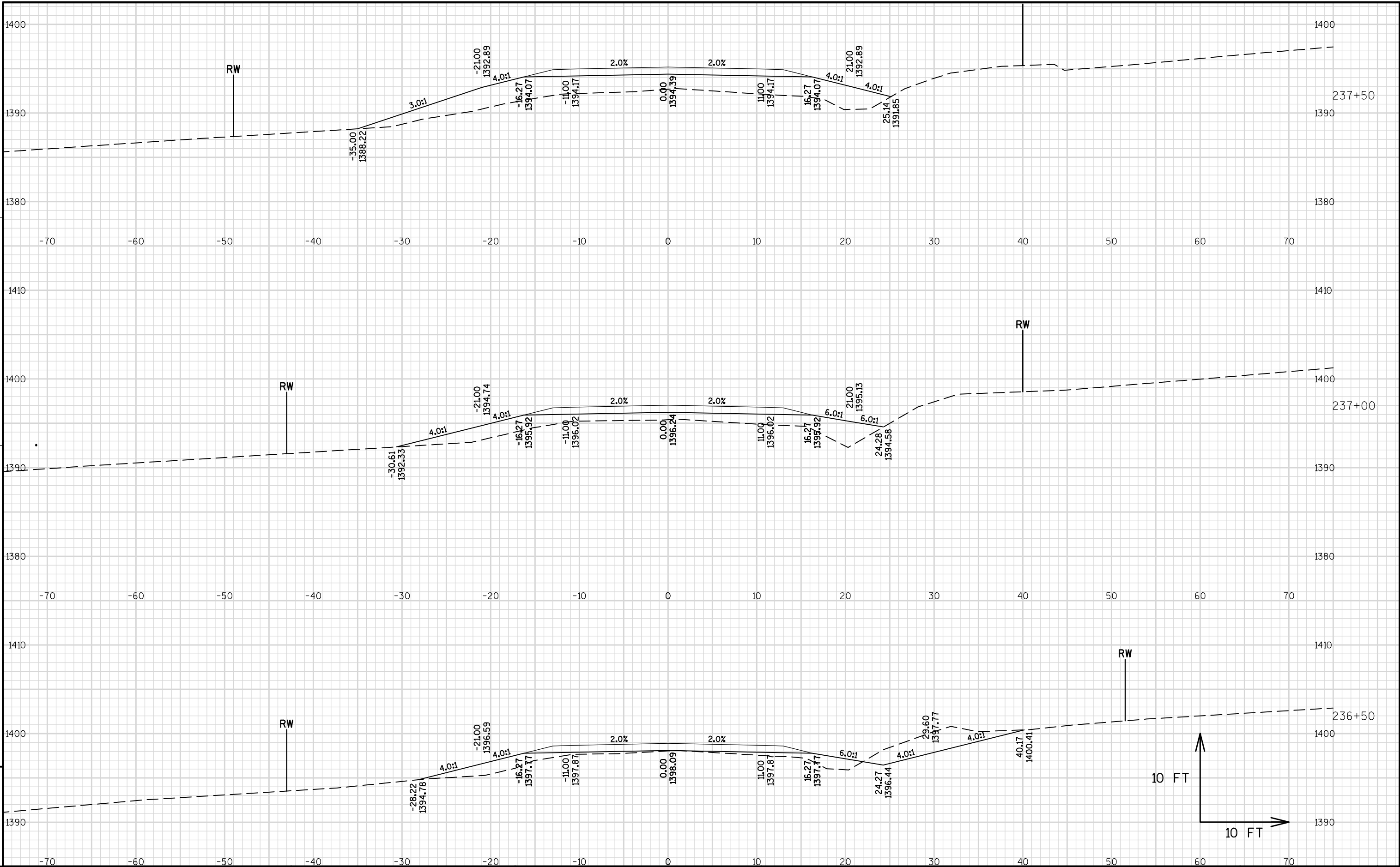


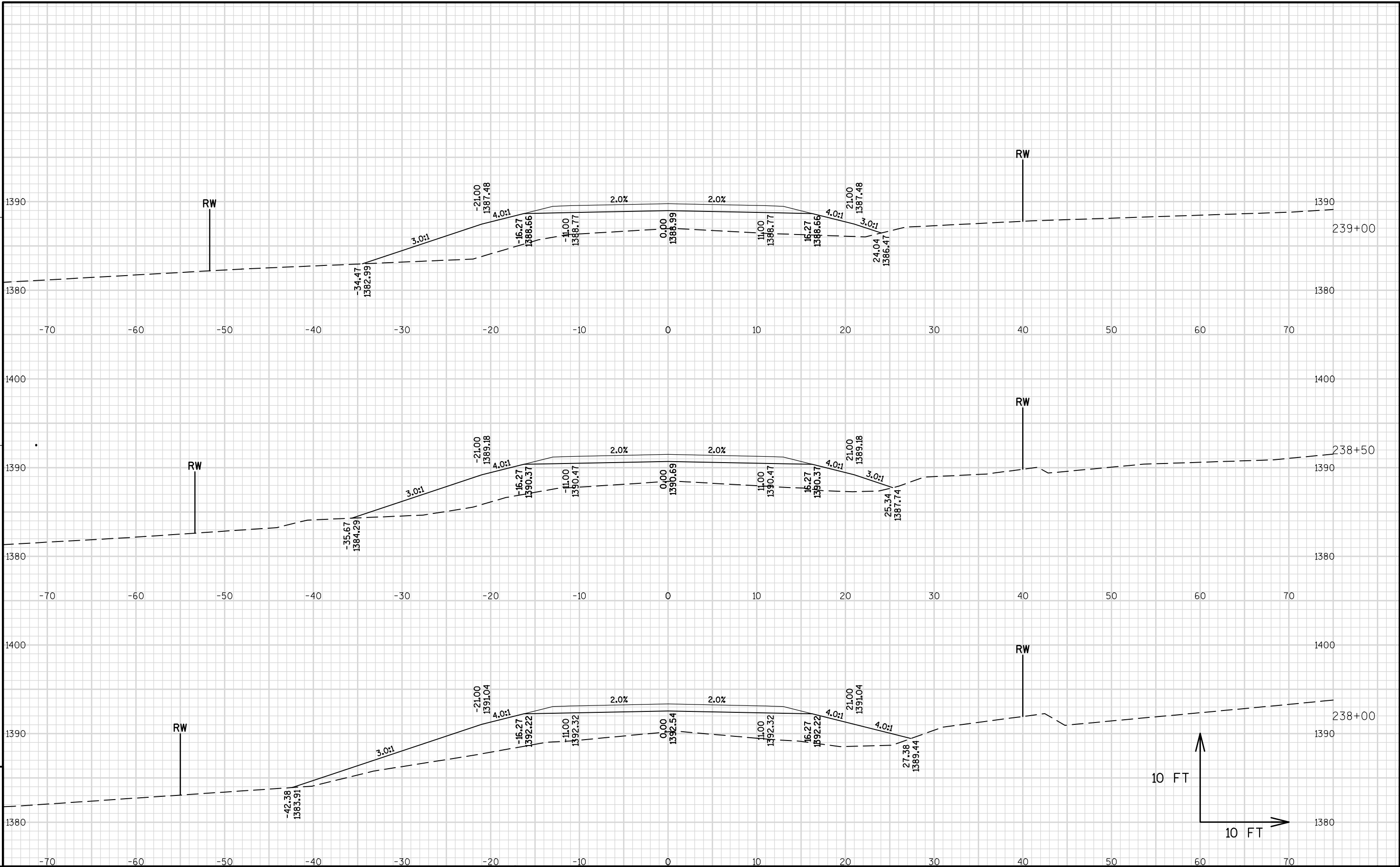


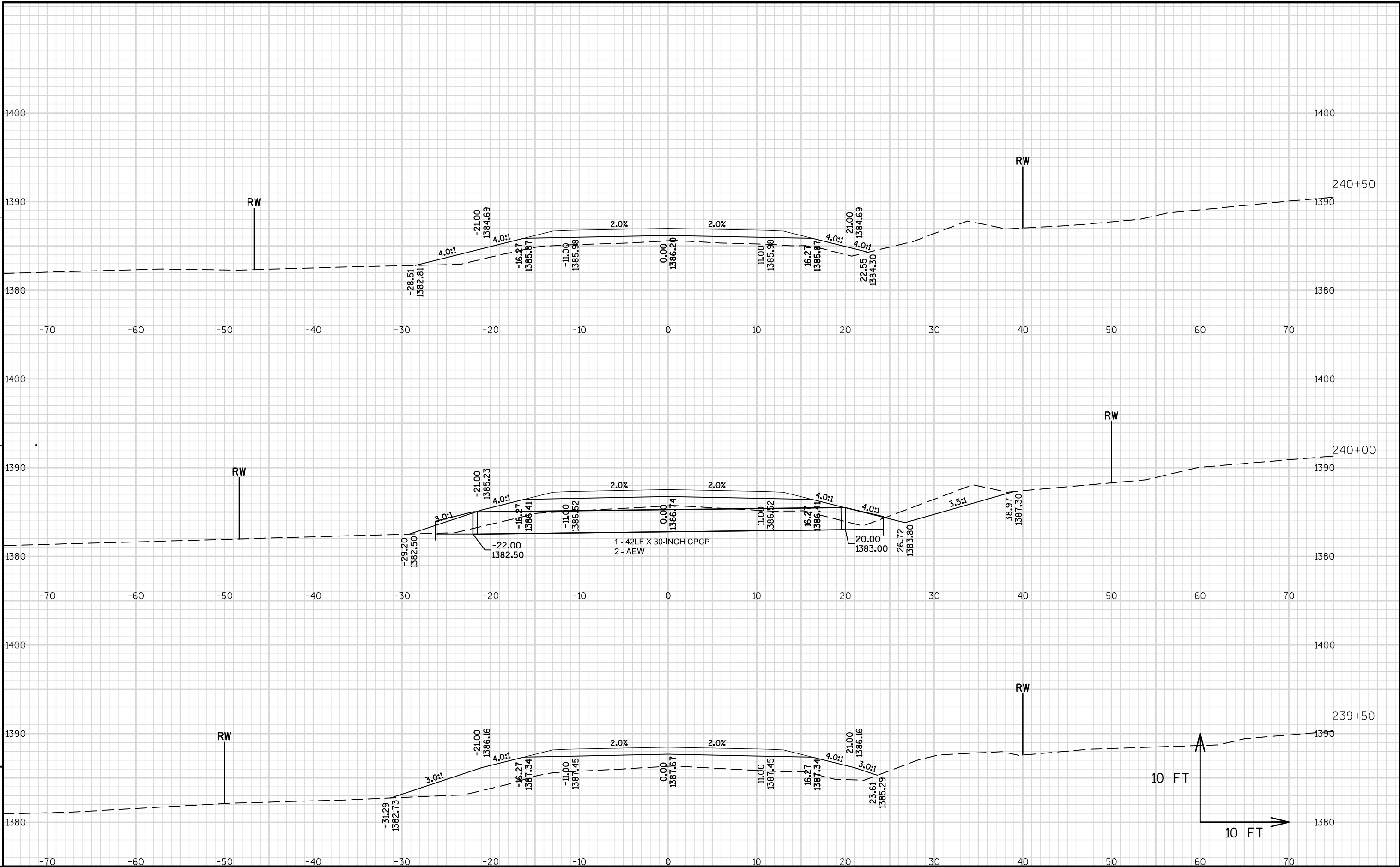


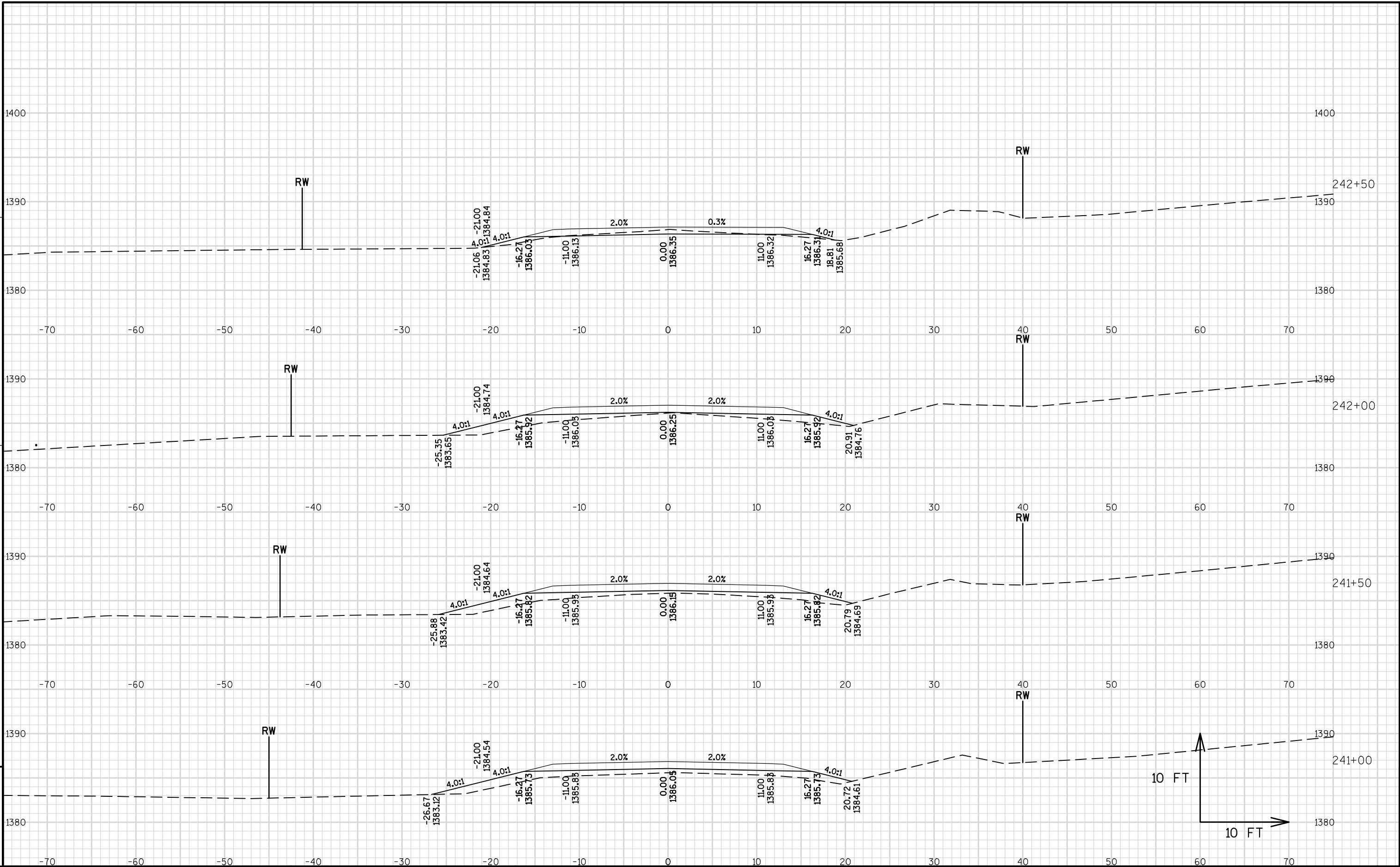


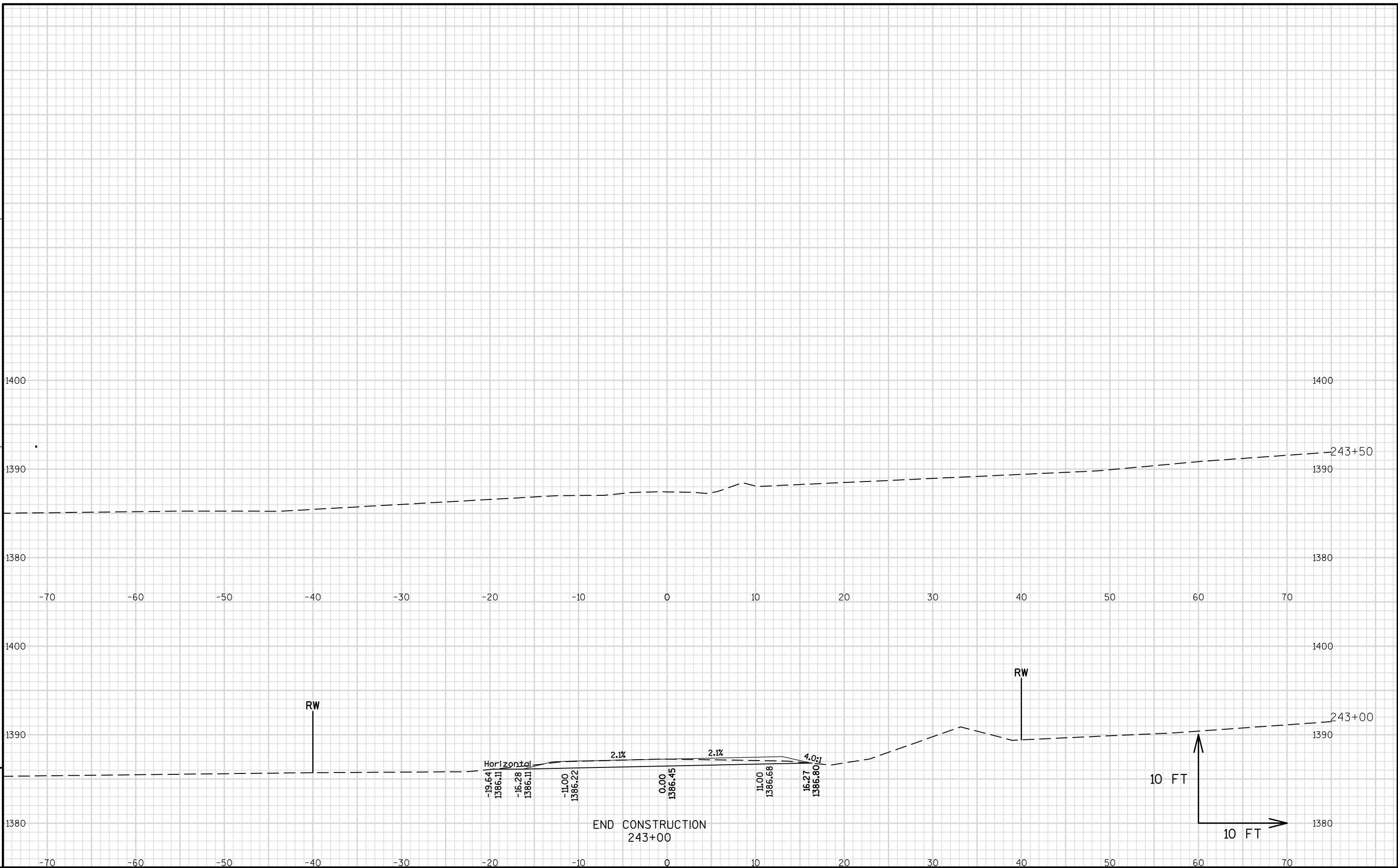


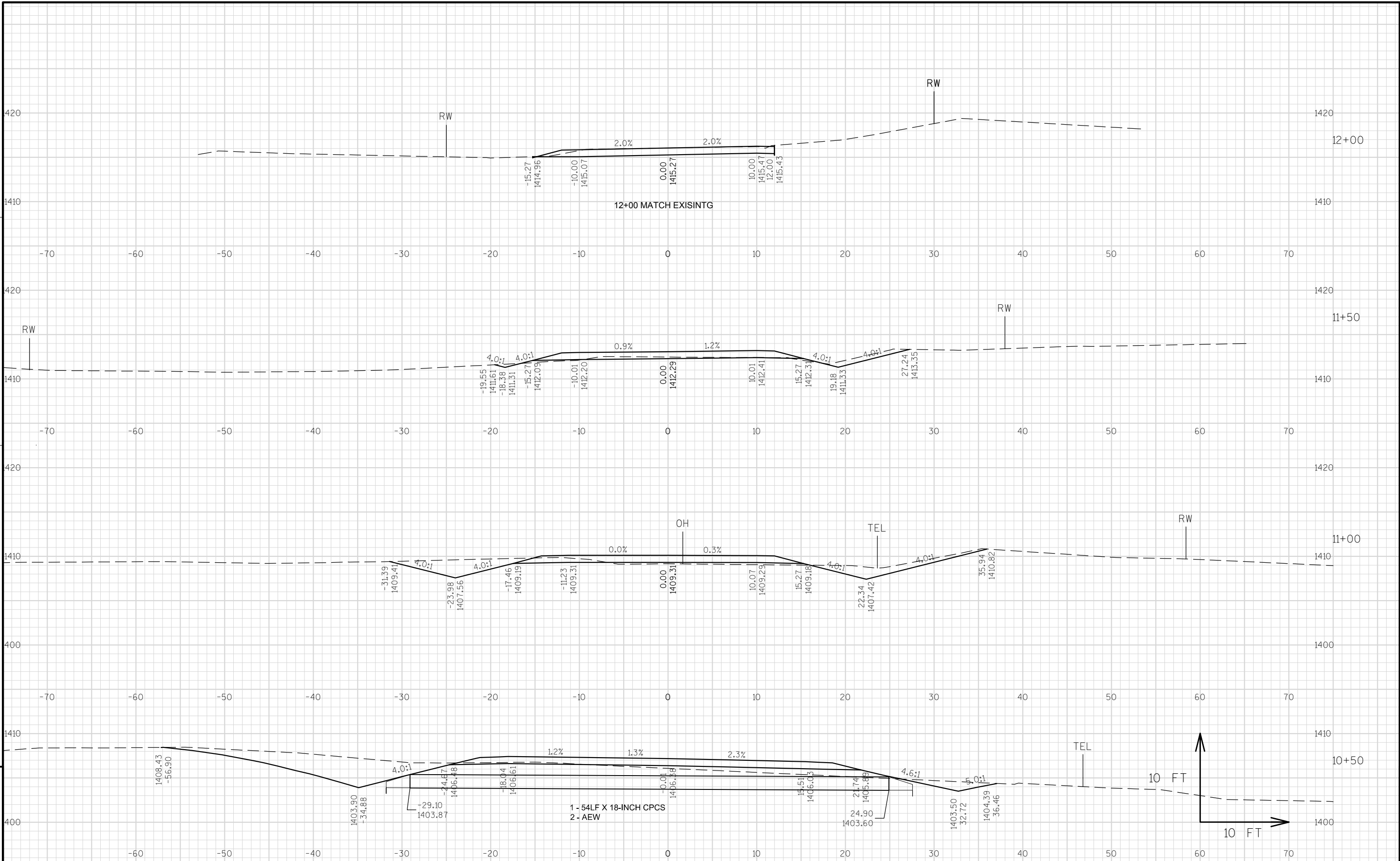


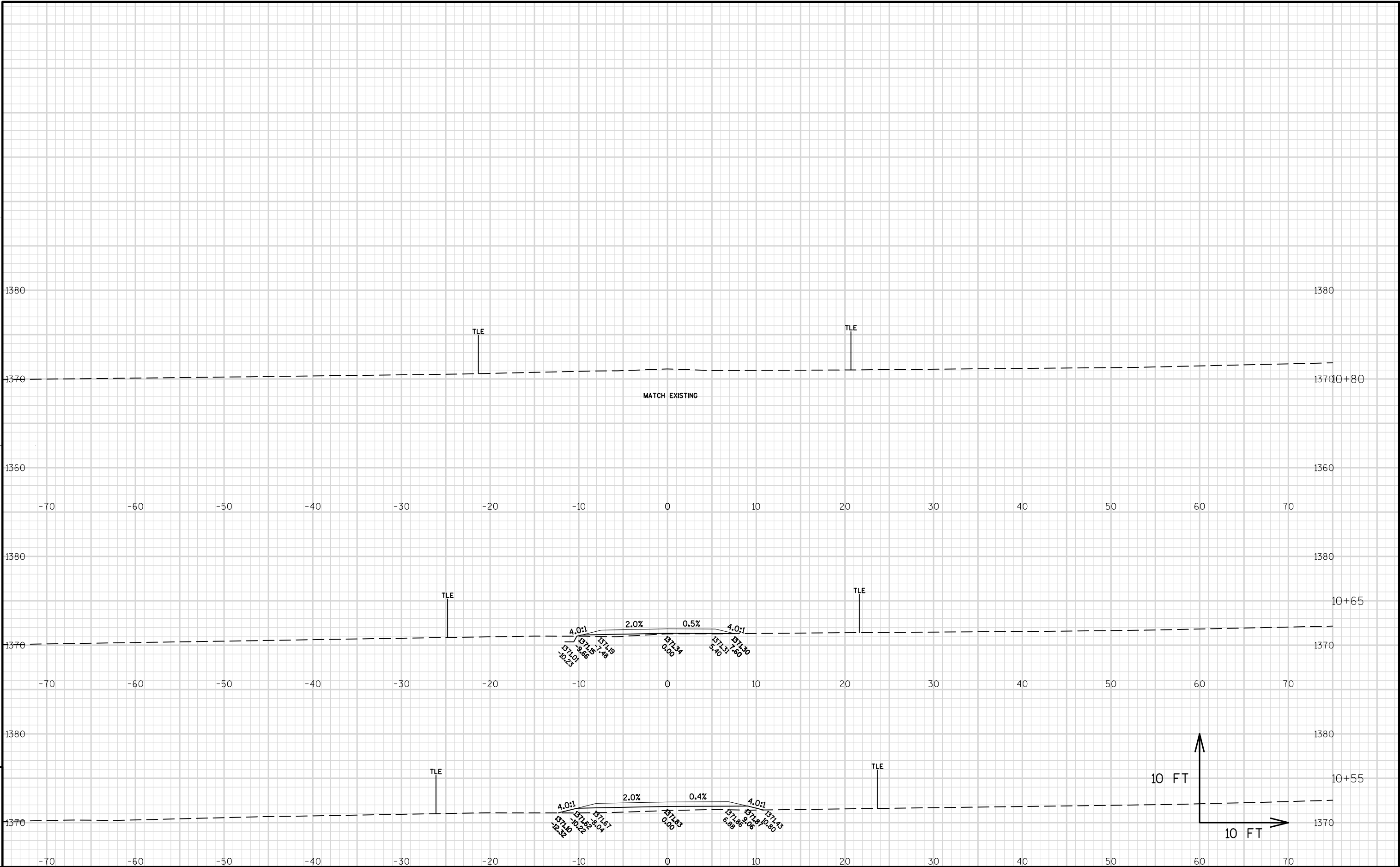












Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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