

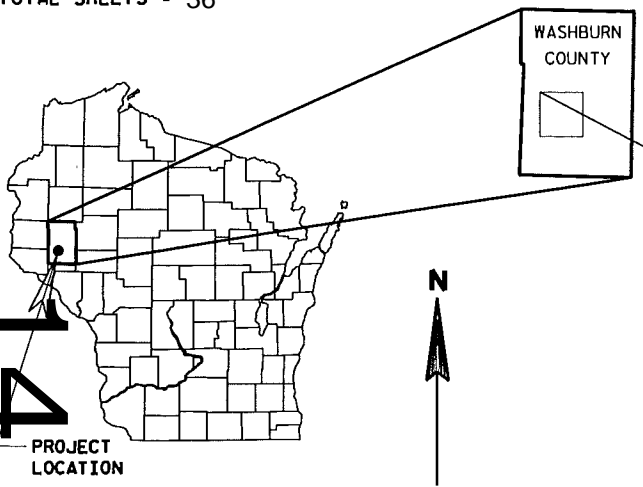
PROJECT ID: 8130-00-71
WITH: N/A

COUNTY: WASHBURN

ORDER OF SHEETS

| | |
|---------------|--|
| Section No. 1 | Title |
| Section No. 2 | Typical Sections and Details (Includes Erosion Control Plans) |
| 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 = 36



DESIGN DESIGNATION

| | | |
|---------------|---|--------|
| A.D.T. (2014) | = | 5,600 |
| A.D.T. (2034) | = | 6,800 |
| D.H.V. | = | 620 |
| D. | = | 59/41 |
| T. | = | 12.9% |
| DESIGN SPEED | = | 60 MPH |
| ESALS | = | N/A |

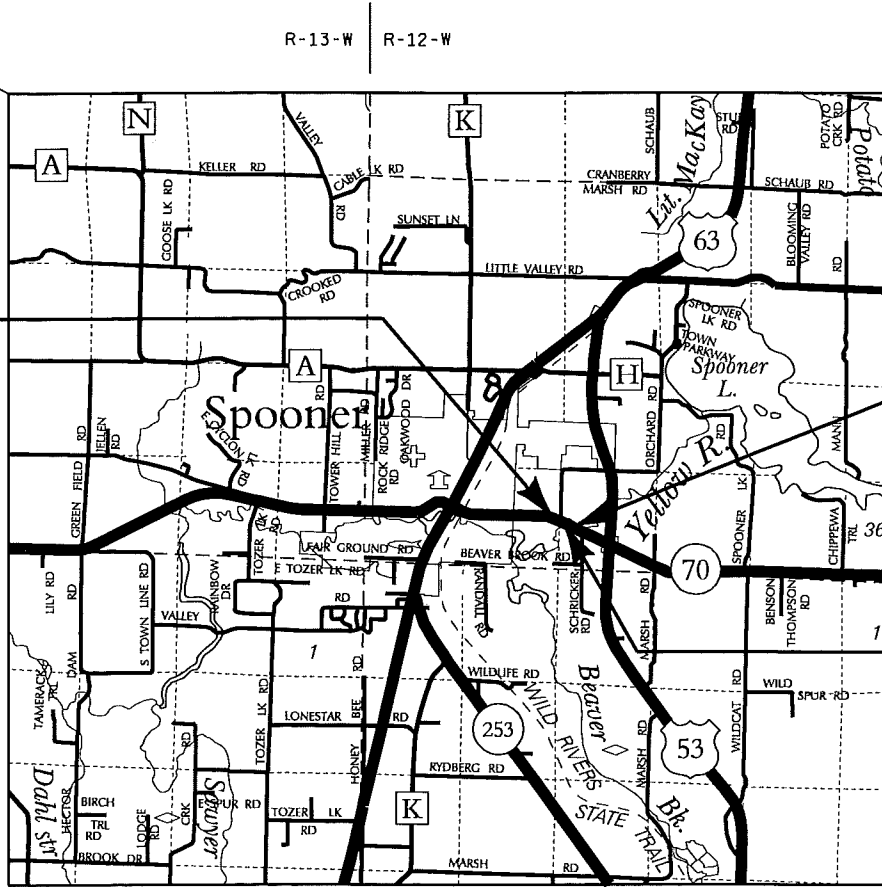
CONVENTIONAL SYMBOLS
PLAN

| | |
|-----------------------------------|--|
| 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 | |
| HIGH VOLTAGE | |
| 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 | |
| OVERHEAD | |
| ELECTRIC | |
| FIBER OPTIC | |
| GAS | |
| SANITARY SEWER | |
| STORM SEWER | |
| TELEPHONE | |
| WATER | |
| UTILITY PEDESTAL | |
| POWER POLE | |
| TELEPHONE POLE | |

BEGIN PROJECT
STA. 9+70
Y = 566792.26
X = 746759.80



END PROJECT
STA. 10+30
Y = 566767.77
X = 746814.58

STRUCTURE C-65-1

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.011 MI.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
SPOONER - STONE LAKE
YELLOW RIVER BRIDGE C-65-0001
STH 70
WASHBURN COUNTY

STATE PROJECT NUMBER
8130-00-71

| STATE PROJECT | FEDERAL PROJECT | |
|---------------|-----------------|----------|
| | PROJECT | CONTRACT |
| 8130-00-71 | | |
| | | |
| | | |
| | | |

ORIGINAL PLANS PREPARED BY

AYRES ASSOCIATES 3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

WISCONSIN PROFESSIONAL ENGINEER
CHRISTOPHER B. McMAHON
E-29454
EAU CLAIRE, WI

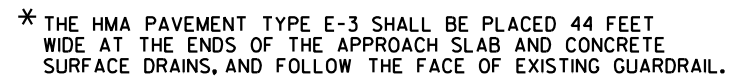
DATE 2/3/14

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

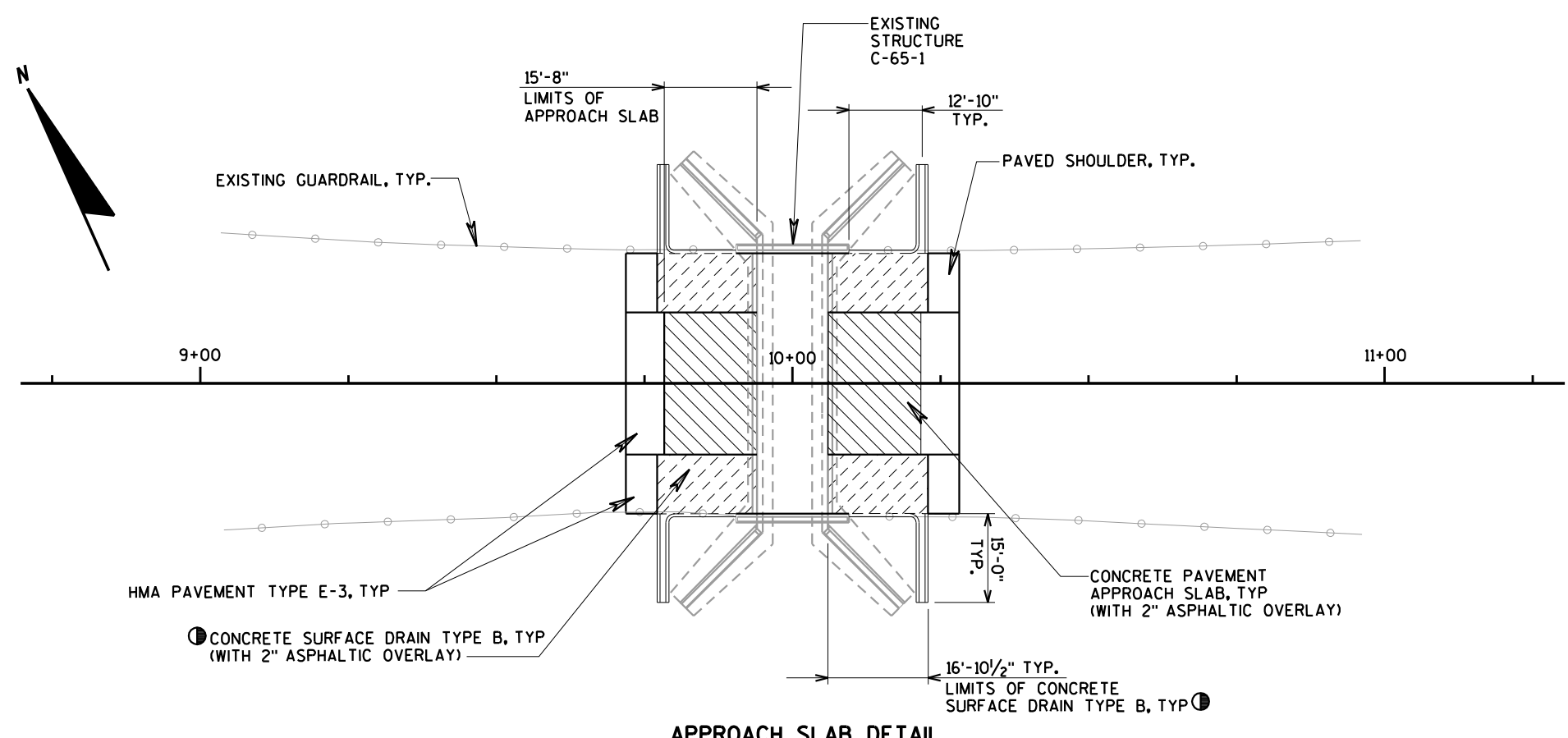
| | |
|---------------------|----------------------|
| PREPARED BY | |
| Surveyor | AYRES ASSOCIATES INC |
| Designer | AYRES ASSOCIATES INC |
| Project Manager | BETH CUNNINGHAM |
| Regional Engineer | DANIEL OJIBWAY |
| Regional Supervisor | ANDREW STENSLAND |

APPROVED FOR THE DEPARTMENT
DATE: 2/18/14 *Cindy Stensland*
(Signature)

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



SHRINKAGE IS ESTIMATED AT 30%



APPROACH SLAB DETAIL

NOTE: ASPHALTIC OVERLAY WILL EXTEND OVER THE CONCRETE PAVEMENT APPROACH SLAB AND CONCRETE SURFACE DRAINS. TAPER OVERLAY DOWN AT CURBS ON CONCRETE SURFACE DRAINS

CONCRETE SURFACE DRAINS TO BE REINFORCED SIMILAR TO CONCRETE PAVEMENT APPROACH SLAB.

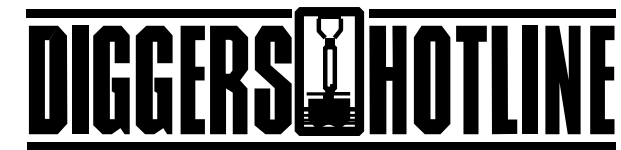
UTILITIES

WE ENERGIES
104 W. SOUTH ST.
RICE LAKE, WI 54868
ATTN: LEWIS KNAPP
715-234-9605
715-419-2196 (cell)
lewis.knapp@we-energies.com

CENTURYLINK
20 S. WILSON AVE.
RICE LAKE, WI 54868
ATTN: REED LECHNIR
715-234-5526
715-418-0029
reed.lechnir@centurytel.com

CHARTER COMMUNICATIONS
2304 S. MAIN ST.
RICE LAKE, WI 54868
ATTN: THOMAS HAASE
715-234-5341 ext. 252

* * DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS



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

ABBREVIATIONS

| | |
|-------|----------------------------|
| AC | ACRES |
| CHIS | CHISELED |
| € | CENTERLINE |
| COR | CORNER |
| CWT | COUNT |
| CY | CUBIC YARD |
| EL | ELEVATION |
| GAL | GALLON |
| H | HOUSE |
| IP | IRON PIPE |
| LB | POUND |
| LF | LINEAR FEET |
| LS | LUMP SUM |
| LT | LEFT |
| MAX | MAXIMUM |
| MIN | MINIMUM |
| MON | MONUMENT |
| NORM | NORMAL |
| OAL | OVERALL LENGTH |
| PC | POINT OF CURVATURE |
| PD | PEDESTAL |
| PI | POINT OF INTERSECTION |
| PK | PARKER-KALON |
| PL | PROPERTY LINE |
| PLE | PERMANENT LIMITED EASEMENT |
| PP | POWER POLE |
| PT | POINT OF TANGENCY |
| R | RADIUS |
| REQ'D | REQUIRED |
| RT | RIGHT |
| R/W | RIGHT-OF-WAY |
| SF | SQUARE FEET |
| SHLDR | SHOULDER |
| STA | STATION |
| SY | SQUARE YARD |
| TLE | TEMPORARY LIMITED EASEMENT |
| VAR | VARIES |
| WL | WELL |

RAILROAD

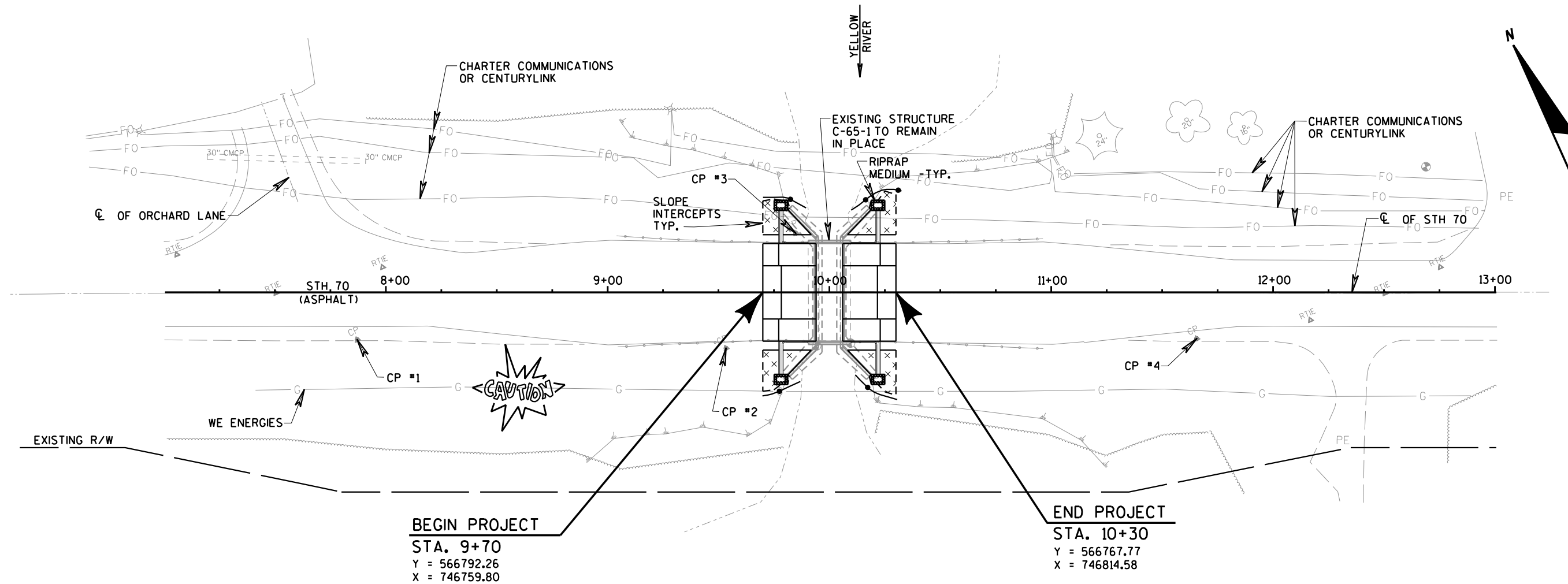
WISCONSIN GREAT NORTHERN RAILROAD
P.O. BOX 46
SPOONER, WI 54801
ATTN: GREG VREELAND
715-635-3200
greg@spoonertrainride.com

DESIGNER

AYRES ASSOCIATES
3433 OAKWOOD HILLS PARKWAY
EAU CLAIRE, WI 54701
ATTN: CHRIS McMAHON
715-834-3161
mcmahonc@AyresAssociates.com

WISCONSIN DEPARTMENT OF
NATURAL RESOURCES CONTACT:

SHAWN HASELEU
810 W. MAPLE STREET
SPOONER, WI 54801
715-635-4228
shawn.haseleu@wisconsin.gov



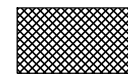
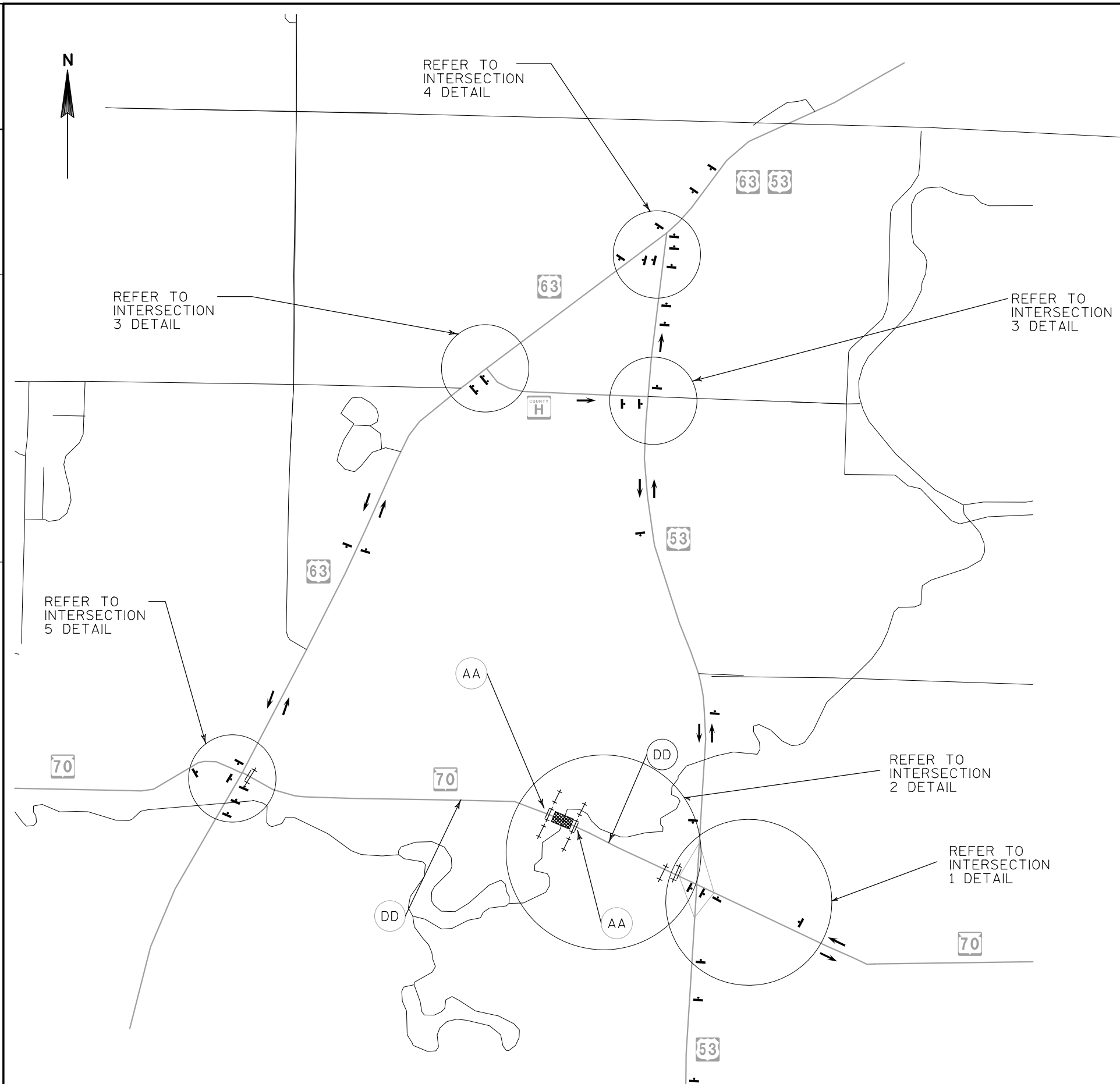
| | HYDROLOGIC SOIL GROUP | | | | | | | | | | | |
|-------------------------|-----------------------|------------|------------|-----------------------|------------|------------|-----------------------|------------|------------|-----------------------|------------|------------|
| | A | | | B | | | C | | | 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 = 0.327 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.086 ACRES

HIGH WATER 2 EL. UNKNOWN

LEGEND

- EROSION MAT CLASS II TYPE C
- TEMPORARY DITCH CHECKS (UNDISTRIBUTED)
- SILT FENCE
- RIPRAP MEDIUM (WITH GEOTEXTILE FABRIC TYPE HR)



WORK ZONE



INSTALL DETOUR SIGN



DIRECTION OF TRAFFIC

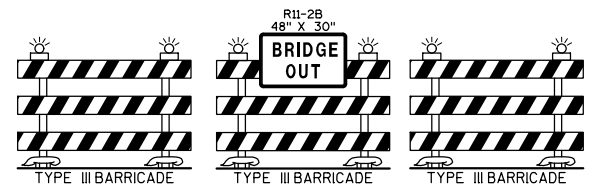


TYPE III BARRICADE WITH SIGN

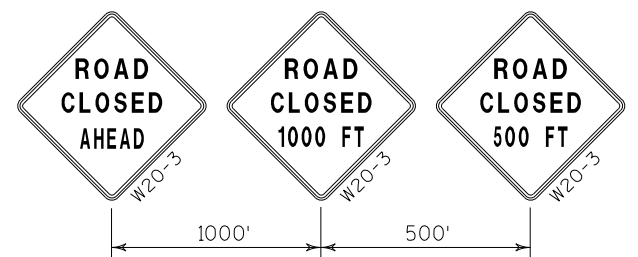


TYPE III BARRICADE

AA

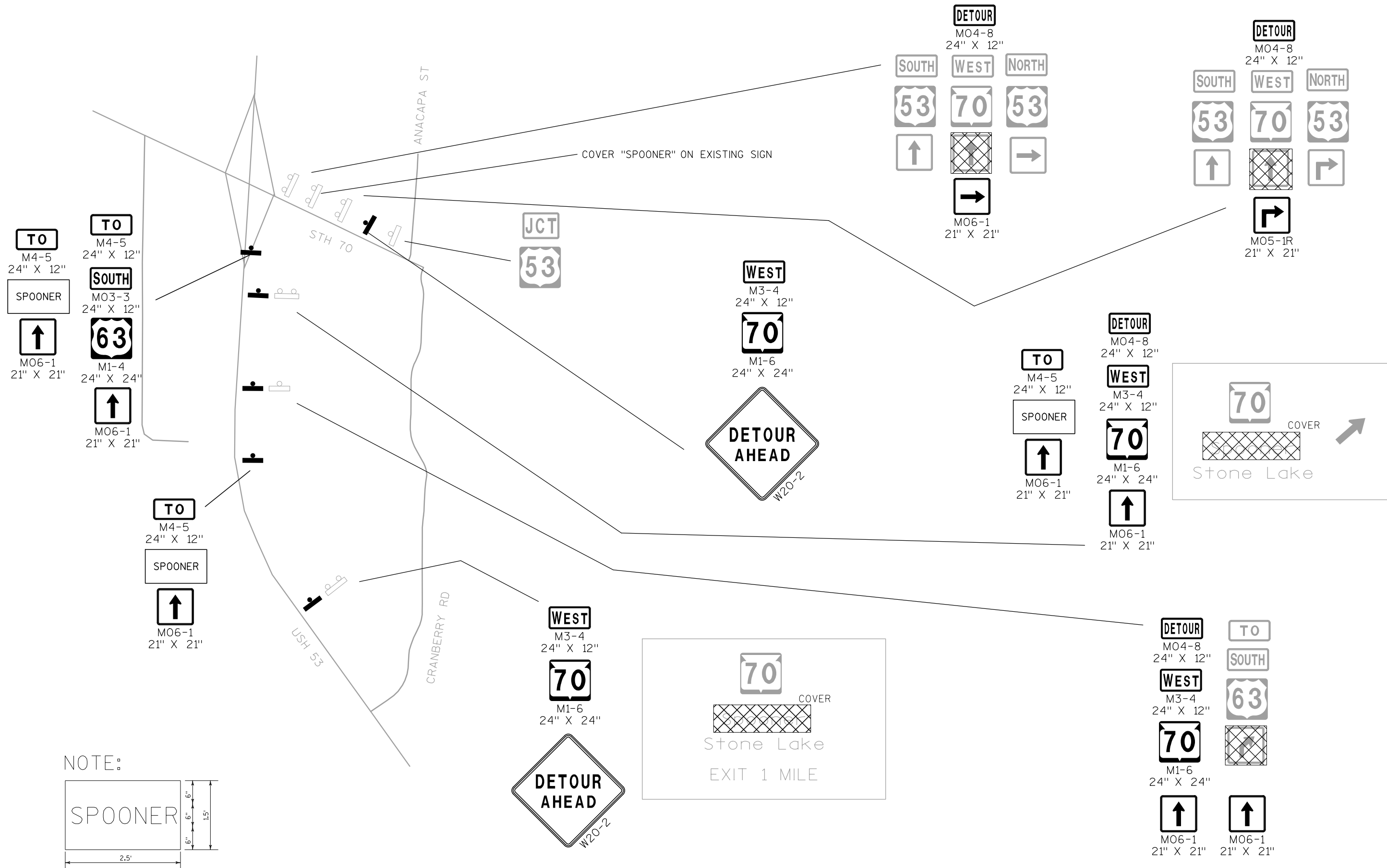


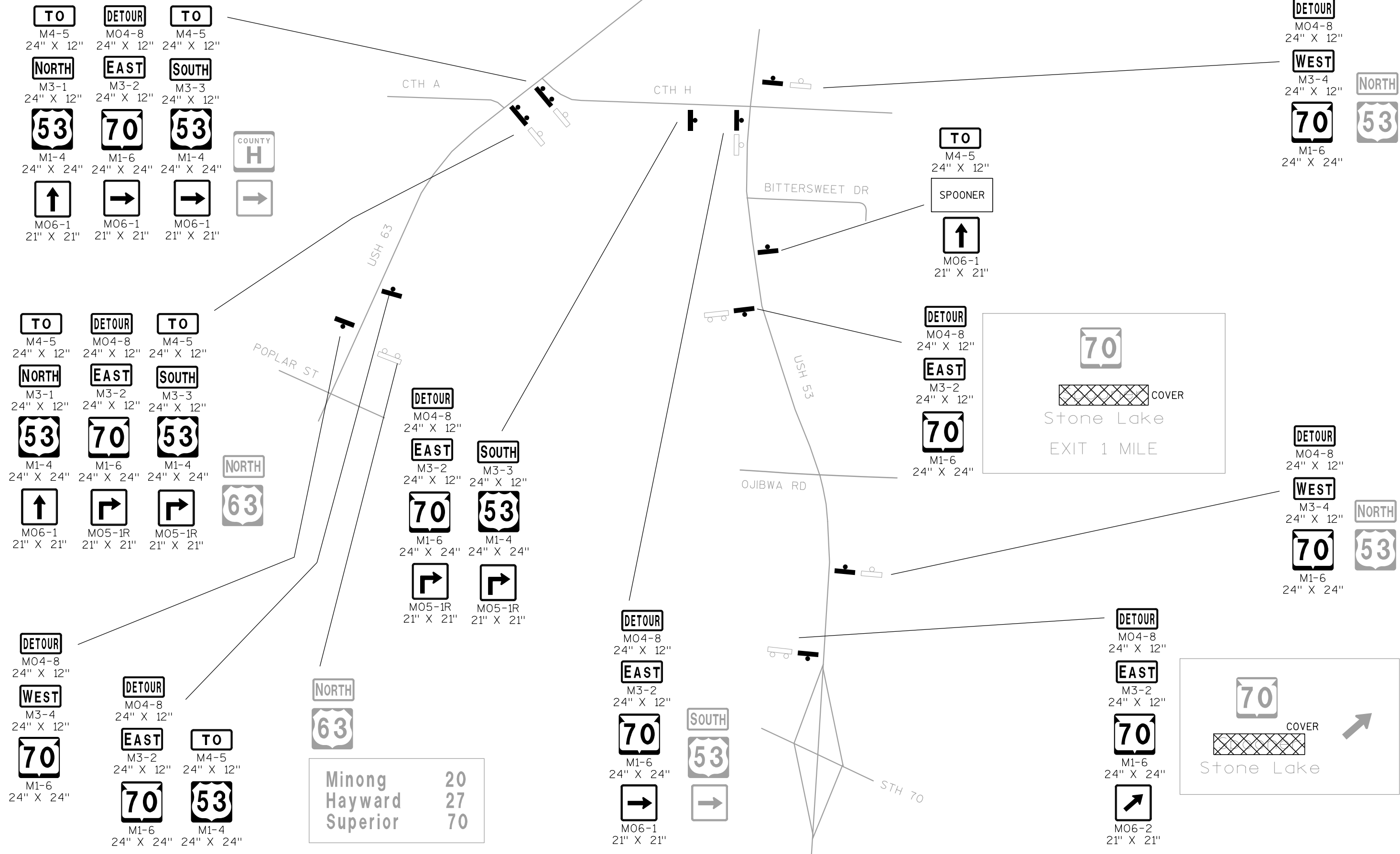
DD

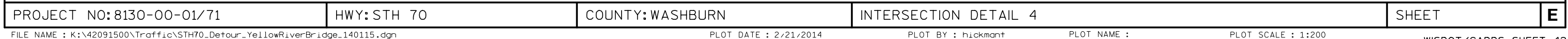


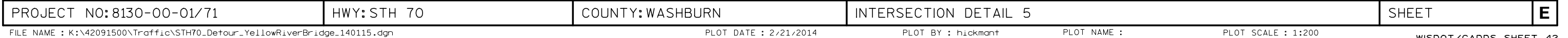
SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL A, B, C, AND D FOR GUIDANCE ON SIGN LAYOUT AND SPACING

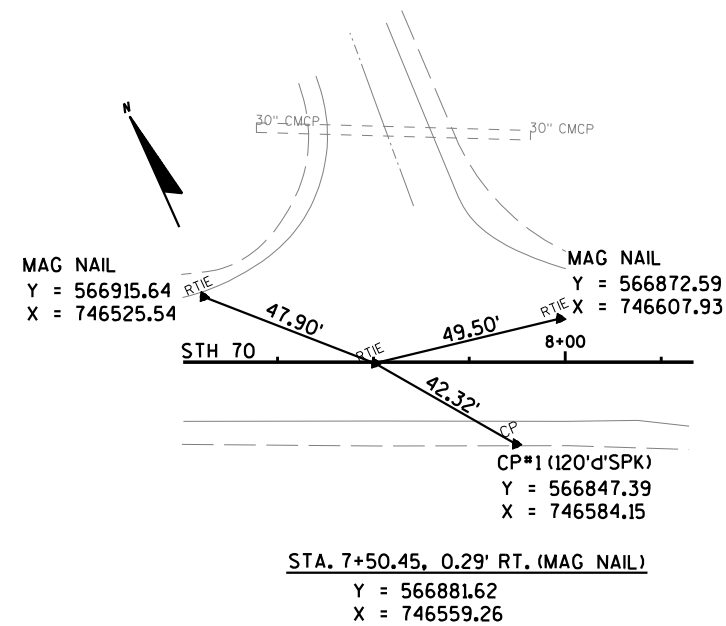
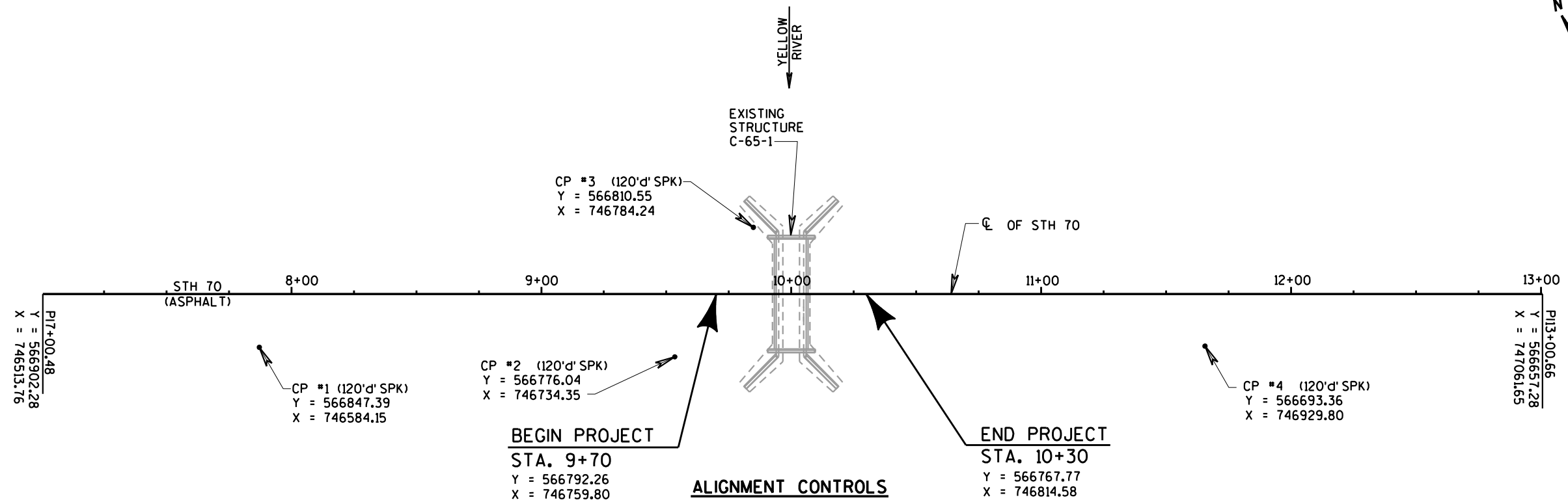
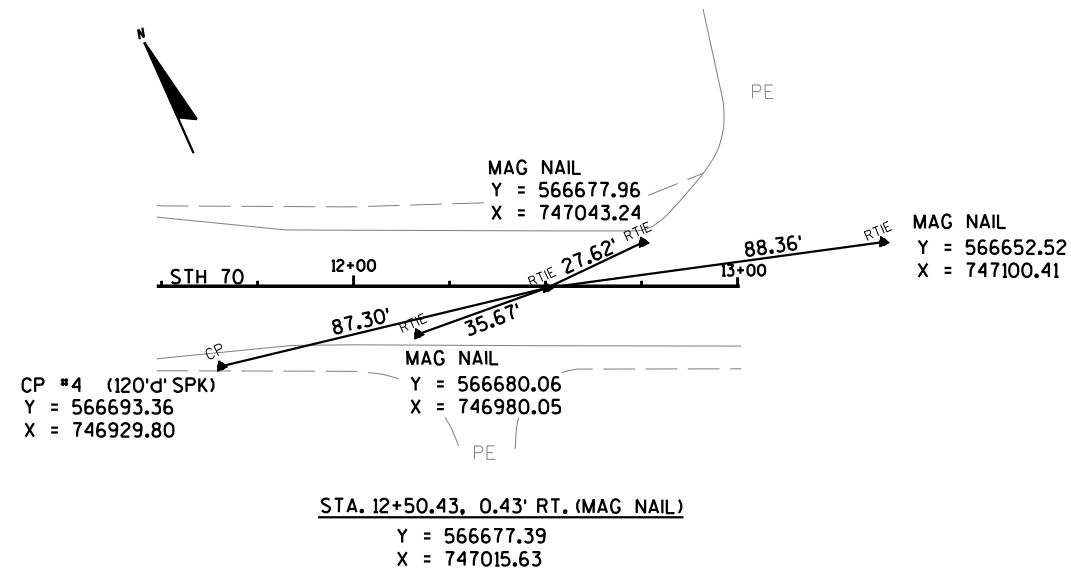
ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER









ALIGNMENT TIES

| DATE 04APR14 | | E S T I M A T E O F Q U A N T I T I E S | | | |
|--------------|-------------|--|------|-----------|------------|
| LINE | | | | | 8130-00-71 |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
| 0010 | 204.0120 | REMOVING ASPHALTIC SURFACE MILLING | SY | 230.000 | 230.000 |
| 0020 | 205.0100 | EXCAVATION COMMON | CY | 130.000 | 130.000 |
| 0030 | 213.0100 | FINISHING ROADWAY (PROJECT) 01. 8130-00-71 | EACH | 1.000 | 1.000 |
| 0040 | 305.0120 | BASE AGGREGATE DENSE 1 1/4-INCH | TON | 120.000 | 120.000 |
| 0050 | 415.0410 | CONCRETE PAVEMENT APPROACH SLAB | SY | 84.000 | 84.000 |
| 0060 | 416.1010 | CONCRETE SURFACE DRAINS | CY | 22.000 | 22.000 |
| 0070 | 455.0145 | ASPHALTIC MATERIAL PG64-34P | TON | 3.600 | 3.600 |
| 0080 | 455.0605 | TACK COAT | GAL | 16.000 | 16.000 |
| 0090 | 460.1103 | HMA PAVEMENT TYPE E-3 | TON | 65.000 | 65.000 |
| 0100 | 465.0115 | ASPHALTIC SURFACE DETOURS | TON | 30.000 | 30.000 |
| 0110 | 509.0301 | PREPARATION DECKS TYPE 1 | SY | 7.000 | 7.000 |
| 0120 | 509.0302 | PREPARATION DECKS TYPE 2 | SY | 2.000 | 2.000 |
| 0130 | 509.1200 | CURB REPAIR | LF | 7.000 | 7.000 |
| 0140 | 509.2000 | FULL-DEPTH DECK REPAIR | SY | 1.000 | 1.000 |
| 0150 | 509.9010. S | REMOVING ASPHALTIC CONCRETE DECK OVERLAY (STRUCTURE) 01. C-65-0001 | SY | 60.000 | 60.000 |
| 0160 | 606.0200 | RI PRAP MEDIUM | CY | 6.000 | 6.000 |
| 0170 | 618.0100 | MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 8130-00-71 | EACH | 1.000 | 1.000 |
| 0180 | 619.1000 | MOBILIZATION | EACH | 1.000 | 1.000 |
| 0190 | 625.0500 | SALVAGED TOPSOIL | SY | 150.000 | 150.000 |
| 0200 | 628.1504 | SILT FENCE | LF | 120.000 | 120.000 |
| 0210 | 628.1520 | SILT FENCE MAINTENANCE | LF | 120.000 | 120.000 |
| 0220 | 628.1905 | MOBILIZATIONS EROSION CONTROL | EACH | 2.000 | 2.000 |
| 0230 | 628.1910 | MOBILIZATIONS EMERGENCY EROSION CONTROL | EACH | 2.000 | 2.000 |
| 0240 | 628.2027 | EROSION MAT CLASS II TYPE C | SY | 135.000 | 135.000 |
| 0250 | 628.7504 | TEMPORARY DITCH CHECKS | LF | 50.000 | 50.000 |
| 0260 | 629.0210 | FERTILIZER TYPE B | CWT | 0.100 | 0.100 |
| 0270 | 630.0120 | SEEDING MIXTURE NO. 20 | LB | 4.000 | 4.000 |
| 0280 | 634.0612 | POSTS WOOD 4X6-INCH X 12-FT | EACH | 1.000 | 1.000 |
| 0290 | 637.2210 | SIGNS TYPE II REFLECTIVE H | SF | 6.000 | 6.000 |
| 0300 | 638.2602 | REMOVING SIGNS TYPE II | EACH | 2.000 | 2.000 |
| 0310 | 642.5001 | FIELD OFFICE TYPE B | EACH | 1.000 | 1.000 |
| 0320 | 643.0100 | TRAFFIC CONTROL (PROJECT) 01. 8130-00-71 | EACH | 1.000 | 1.000 |
| 0330 | 643.0420 | TRAFFIC CONTROL BARRICADES TYPE III | DAY | 325.000 | 325.000 |
| 0340 | 643.0705 | TRAFFIC CONTROL WARNING LIGHTS TYPE A | DAY | 650.000 | 650.000 |
| 0350 | 643.0900 | TRAFFIC CONTROL SIGNS | DAY | 275.000 | 275.000 |
| 0360 | 643.0910 | TRAFFIC CONTROL COVERING SIGNS TYPE I | EACH | 3.000 | 3.000 |
| 0370 | 643.0920 | TRAFFIC CONTROL COVERING SIGNS TYPE II | EACH | 3.000 | 3.000 |
| 0380 | 643.1000 | TRAFFIC CONTROL SIGNS FIXED MESSAGE | SF | 15.000 | 15.000 |
| 0390 | 643.2000 | TRAFFIC CONTROL DETOUR (PROJECT) 01. 8130-00-71 | EACH | 1.000 | 1.000 |
| 0400 | 643.3000 | TRAFFIC CONTROL DETOUR SIGNS | DAY | 4,650.000 | 4,650.000 |
| 0410 | 645.0130 | GEOTEXTILE FABRIC TYPE R | SY | 30.000 | 30.000 |
| 0420 | 646.0106 | PAVEMENT MARKING EPOXY 4-INCH | LF | 135.000 | 135.000 |
| 0430 | 650.4500 | CONSTRUCTION STAKING SUBGRADE | LF | 48.000 | 48.000 |
| 0440 | 650.5000 | CONSTRUCTION STAKING BASE | LF | 48.000 | 48.000 |
| 0450 | 650.6500 | CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. C-65-0001 | LS | 1.000 | 1.000 |
| 0460 | 650.9910 | CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 8130-00-71 | LS | 1.000 | 1.000 |
| 0470 | 690.0150 | SAWING ASPHALT | LF | 148.000 | 148.000 |
| 0480 | SPV.0035 | SPECIAL 01. CONCRETE MASONRY DECK PATCHING | CY | 5.000 | 5.000 |

| | | | | | | |
|--------------|-----------|--|------|--------|----------|------------|
| DATE 04APR14 | | E S T I M A T E O F Q U A N T I T I E S | | | | |
| LINE | | | | | | 8130-00-71 |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY | |
| 0490 | SPV. 0090 | SPECIAL 01. SAWING PAVEMENT DECK PREPARATION AREAS | LF | 50.000 | 50.000 | |

204.0120 REMOVING ASPHALTIC SURFACE MILLING (CATEGORY 0010)

| LOCATION | SY |
|--|-----|
| CTH H @ RR CROSSING (DETOUR ROUTE) | 230 |
| NOTE: ALONG THE DETOUR ROUTE, AT CTH H AND THE RAILROAD CROSSING. 30 FEET EACH SIDE OF THE RAILROAD CROSSING AND IN-BETWEEN THE TRACKS WILL BE MILLED AND OVERLAYED. | |

205.0100 EXCAVATION COMMON (CATEGORY 0010)

| STATION TO STATION | LOCATION | CY |
|--------------------------|----------|-----|
| Sta. 9+70 to Sta. 9+94 | STH 70 | 65 |
| Sta. 10+06 to Sta. 10+30 | STH 70 | 65 |
| | | |
| TOTAL | | 130 |

213.0100 FINISHING ROADWAY (CATEGORY 0010)

| LOCATION | EACH |
|--------------------|------|
| PROJECT 8130-00-71 | 1 |

305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (CATEGORY 0010)

| STATION TO STATION | LOCATION | TON |
|--------------------------|----------|-----|
| Sta. 9+70 to Sta. 9+94 | STH 70 | 60 |
| Sta. 10+06 to Sta. 10+30 | STH 70 | 60 |
| | | |
| TOTALS | | 120 |

415.0410 CONCRETE PAVEMENT APPROACH SLAB (CATEGORY 0010)

| STATION TO STATION | LOCATION | SY |
|-----------------------------|----------|----|
| Sta. 9+78.33 to Sta. 9+94 | STH 70 | 42 |
| Sta. 10+06 to Sta. 10+21.67 | STH 70 | 42 |
| | | |
| TOTALS | | 84 |

416.1010 CONCRETE SURFACE DRAINS (CATEGORY 0010)

| STATION TO STATION | LOCATION | CY |
|---------------------------------|----------|-----|
| Sta. 9+77.13 to Sta. 9+94, RT | STH 70 | 5.5 |
| Sta. 9+77.13 to Sta. 9+94, LT | STH 70 | 5.5 |
| Sta. 10+06 to Sta. 10+22.88, RT | STH 70 | 5.5 |
| Sta. 10+06 to Sta. 10+22.88, LT | STH 70 | 5.5 |
| | | |
| TOTALS | | 22 |

455.0605 TACK COAT (CATEGORY 0010)

| STATION TO STATION | LOCATION | GAL |
|------------------------------------|----------|-----|
| Sta. 9+70 to Sta. 9+94 | STH 70 | 4 |
| Sta. 10+06 to Sta. 10+30 | STH 70 | 4 |
| | | |
| CTH H @ RR CROSSING (DETOUR ROUTE) | | 6 |
| | | |
| TOTAL | | 14 |

NOTE: ALONG THE DETOUR ROUTE, AT CTH H AND THE RAILROAD CROSSING. 30 FEET EACH SIDE OF THE RAILROAD CROSSING AND IN-BETWEEN THE TRACKS WILL BE MILLED AND OVERLAYED.

HMA PAVEMENT & ASPHALTIC MATERIAL (CATEGORY 0010)

| STATION TO STATION | LOCATION | 460.1103 | 455.0145 |
|-----------------------------|----------|----------|----------|
| | | TYPE E-3 | PG64-34P |
| | | TON | TON |
| Sta. 9+78.33 to Sta. 9+94 | STH 70 | 27.5 | 1.5 |
| Sta. 10+06 to Sta. 10+21.67 | STH 70 | 27.5 | 1.5 |
| | | | |
| TOTAL | | 55 | 3 |

465.0115 ASPHALTIC SURFACE DETOURS (CATEGORY 0010)

| LOCATION | TON |
|--|-----|
| CTH H @ RR CROSSING (DETOUR ROUTE) | 30 |
| NOTE: ALONG THE DETOUR ROUTE, AT CTH H AND THE RAILROAD CROSSING. 30 FEET EACH SIDE OF THE RAILROAD CROSSING AND IN-BETWEEN THE TRACKS WILL BE MILLED AND OVERLAYED. | |

606.0200 RIPRAP MEDIUM (CATEGORY 0010)

| STATION TO STATION | LOCATION | CY |
|--------------------|----------|-----|
| Sta. 9+78, RT | STH 70 | 1.5 |
| Sta. 9+78, LT | STH 70 | 1.5 |
| Sta. 10+22, RT | STH 70 | 1.5 |
| Sta. 10+22, LT | STH 70 | 1.5 |
| | | |
| TOTAL | | 6 |

618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS (CATEGORY 0010)

| LOCATION | EACH | |
|-------------------------------------|----------|------|
| PROJECT 8130-00-71 | 1 | |
| <u>619.1000 MOBILIZATION</u> | | |
| LOCATION | CATEGORY | EACH |
| PROJECT 8130-00-71 | 0010 | 0.9 |
| PROJECT 8130-00-71 | 0020 | 0.1 |
| <hr/> | | |
| TOTAL | | 1 |

SALVAGED TOPSOIL, FERTILIZER & SEED (CATEGORY 0010)

| STATION TO STATION | LOCATION | 625.0500 | 629.0210 | 630.0120 |
|-------------------------|----------|----------|----------|----------|
| | | SY | TYPE B | SEEDING |
| | | TOPSOIL | CWT | NO. 20 |
| | | SY | CWT | LB |
| Sta. 9+70 to Sta. 10+30 | STH 70 | 150 | 0.08 | 3.2 |
| Undistributed | | --- | 0.02 | 0.8 |
| | | | | |
| TOTALS | | 150 | 0.1 | 4 |

SILT FENCE & SILT FENCE MAINTENANCE (CATEGORY 0010)

| STATION TO STATION | LOCATION | 628.1504 | 628.1520 |
|------------------------------|----------|----------|-------------|
| | | LF | MAINTENANCE |
| | | LF | LF |
| Sta. 9+70 to Sta. 9+90, LT | STH 70 | 25 | 25 |
| Sta. 9+70 to Sta. 9+90, RT | STH 70 | 20 | 20 |
| Sta. 10+10 to Sta. 10+30, RT | STH 70 | 25 | 25 |
| Sta. 10+10 to Sta. 10+30, LT | STH 70 | 25 | 25 |
| Undistributed | | 25 | 25 |
| | | | |
| TOTALS | | 120 | 120 |

MOBILIZATIONS EROSION CONTROL & EMERGENCY EROSION CONTROL (CATEGORY 0010)

| LOCATION | 628.1905 | 628.1910 |
|--------------------|--|--|
| | MOBILIZATIONS EROSION CONTROL EACH | MOBILIZATIONS EMERGENCY EROSION CONTROL EACH |
| PROJECT 8717-00-70 | 2 | 2 |

628.2027 EROSION MAT CLASS II TYPE C (CATEGORY 0010)

| LOCATION | SY |
|-----------------------------------|-----|
| STH 70, NW QUADTRANT OF C-65-0001 | 25 |
| STH 70, SW QUADTRANT OF C-65-0001 | 25 |
| STH 70, NE QUADTRANT OF C-65-0001 | 30 |
| STH 70, SE QUADTRANT OF C-65-0001 | 30 |
| Undistributed | 25 |
| | |
| TOTAL | 135 |

628.7504 TEMPORARY DITCH CHECKS (CATEGORY 0010)

| STATION | LOCATION | LF |
|---------------|----------|----|
| Undistributed | | 50 |

634.0612 WOOD POSTS 4X6 INCH X 12 FT (CATEGORY 0010)

| STATION | LOCATION | EACH |
|-----------------------|----------|------|
| Sta. 9+88, RT (R9-56) | STH 70 | 1 |

637.2210 SIGNS TYPE II REFLECTIVE H (CATEGORY 0010)

| STATION | LOCATION | DESCRIPTION | # OF SIGNS | SF |
|---------------|----------|-------------|------------|----|
| Sta. 9+88, RT | STH 70 | R9-56 | 2 | 6 |

638.2602 REMOVING SIGNS TYPE II (CATEGORY 0010)

| STATION | LOCATION | DESCRIPTION | EACH |
|---------------|----------|-------------|------|
| Sta. 9+89, RT | STH 70 | R9-56 | 2 |

642.5001 FIELD OFFICE TYPE B (CATEGORY 0010)

| LOCATION | EACH |
|--------------------|------|
| PROJECT 8130-00-71 | 1 |

643.0100 TRAFFIC CONTROL (CATEGORY 0010)

| LOCATION | EACH |
|--------------------|------|
| PROJECT 8130-00-71 | 1 |

643.2000 TRAFFIC CONTROL DETOUR (CATEGORY 0010)

| LOCATION | EACH |
|--------------------|------|
| PROJECT 8130-00-71 | 1 |

TRAFFIC CONTROL (CATEGORY 0010)

| LOCATION | CALENDAR DAYS | 643.0420 | 643.0705 | 643.0900 | 643.3000 |
|--------------------|------------------|-----------------------------|-------------------------------|---------------|----------------------|
| | | BARRICADES TYPE III EACH | WARNING LIGHTS TYPE A EACH | SIGNS EACH | DETOUR SIGNS EACH |
| PROJECT 8130-00-71 | 25 | 13 | 26 | 11 | 186 |
| | | 325 | 650 | 275 | 4,650 |
| TOTALS | | 325 | 650 | 275 | 4,650 |

643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I (CATEGORY 0010)

| LOCATION | NO. OF CYCLES | NO. OF SIGNS | EACH |
|--------------------|------------------|-----------------|------|
| PROJECT 8130-00-71 | 1 | 3 | 3 |

643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II (CATEGORY 0010)

| LOCATION | NO. OF CYCLES | NO. OF SIGNS | EACH |
|--------------------|------------------|-----------------|------|
| PROJECT 8130-00-71 | 1 | 3 | 3 |

643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE (CATEGORY 0010)

| LOCATION | NOTE | SF |
|-----------------------|-------------------|------|
| DETOUR ROUTE-DETAIL 1 | SPOONER (2 SIGNS) | 7.5 |
| DETOUR ROUTE-DETAIL 3 | SPOONER | 3.75 |
| DETOUR ROUTE-DETAIL 4 | SPOONER | 3.75 |
| TOTAL | | 15 |

645.0130 GEOTEXTILE FABRIC TYPE R (CATEGORY 0010)

| STATION TO STATION | LOCATION | SY |
|--------------------|----------|-----|
| Sta. 9+78, RT | STH 70 | 7.5 |
| Sta. 9+78, LT | STH 70 | 7.5 |
| Sta. 10+22, RT | STH 70 | 7.5 |
| Sta. 10+22, LT | STH 70 | 7.5 |
| TOTAL | | 30 |

646.0106 PAVEMENT MARKING EPOXY 4-INCH (CATEGORY 0010)

| STATION TO STATION | LOCATION | DESCRIPTION | LF |
|-------------------------|----------|--------------------------|-----|
| Sta. 9+70 to Sta. 10+30 | STH 70 | WHITE EDGELINE | 120 |
| Sta. 9+70 to Sta. 10+30 | STH 70 | YELLOW DASHED CENTERLINE | 15 |
| TOTAL | | | 135 |

CONSTRUCTION STAKING

| CATEGORY | LOCATION | 650.4500 | 650.5000 | 650.6500 | 650.9910 |
|----------|----------------------------|----------|----------|------------------|-----------------------|
| | | SUBGRADE | BASE | STRUCTURE LAYOUT | SUPPLEMENTARY CONTROL |
| | | LF | LF | LS | LS |
| 0010 | PROJECT 8717-00-70, STH 70 | 48 | 48 | --- | 1 |
| 0020 | C-65-0001, STH 70 | --- | --- | 1 | --- |
| TOTALS | | 48 | 48 | 1 | 1 |

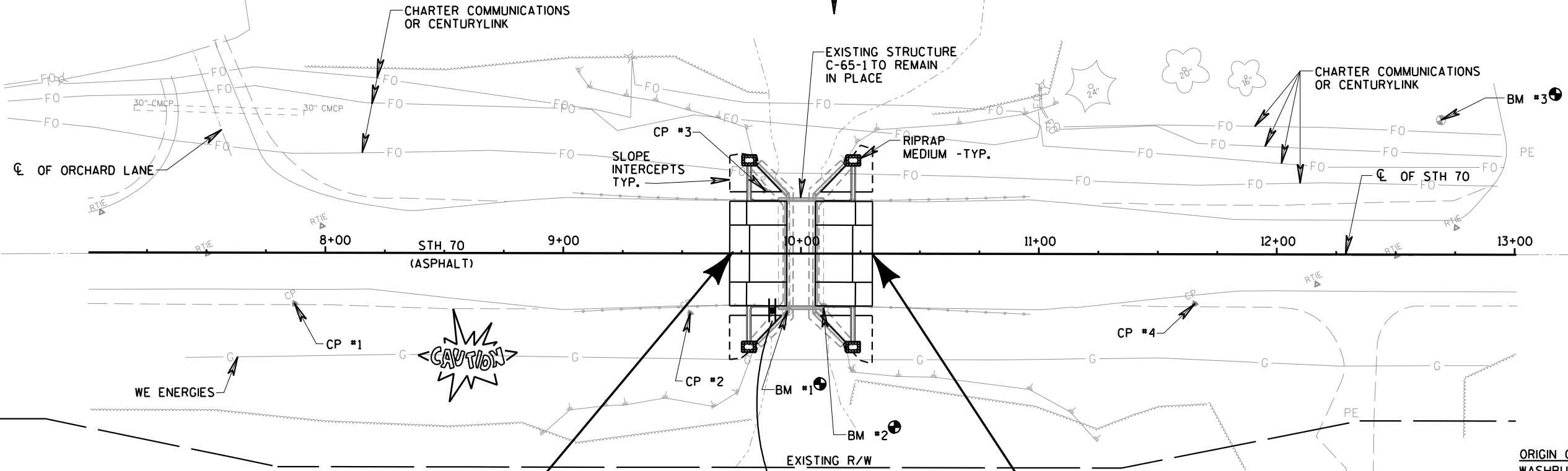
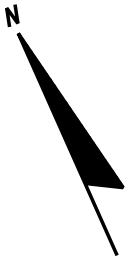
690.0150 SAWING ASPHALT (CATEGORY 0010)

| STATION | LOCATION | LF |
|------------------------------------|----------|-----|
| Sta. 9+70 | STH 70 | 44 |
| Sta. 10+30 | STH 70 | 44 |
| CTH H @ RR CROSSING (DETOUR ROUTE) | | 60 |
| TOTAL | | 148 |

NOTE: ALONG THE DETOUR ROUTE, AT CTH H AND THE RAILROAD CROSSING. 30 FEET EACH SIDE OF THE RAILROAD CROSSING AND IN-BETWEEN THE TRACKS WILL BE MILLED AND OVERLAYED.

NOTES:
FOR ALIGNMENT CONTROLS AND TIES,
SEE ALIGNMENT CONTROLS & TIES SHEET.
FOR APPROACH SLAB DETAILS SEE
TYPICAL SECTIONS SHEET.
EXISTING GUARDRAIL TO REMAIN IN PLACE.

STATION 10+00
EXISTING STRUCTURE C-65-1
SINGLE-SPAN CONCRETE FIXED FRAME BRIDGE
44.0' CLEAR RDWY. x 12.0' O.A.L.
0° SKEW



BEGIN PROJECT
STA. 9+70
(SAWCUT REQUIRED)
Y = 566792.26
X = 746759.80

END PROJECT
STA. 10+30
(SAWCUT REQUIRED)
Y = 566767.77
X = 746814.58

ORIGIN OF LEVELS
WASHBURN CO. GPS POINT
PID DN5027
SPOONER GPS
EL. 1096.26 (NAVD88)

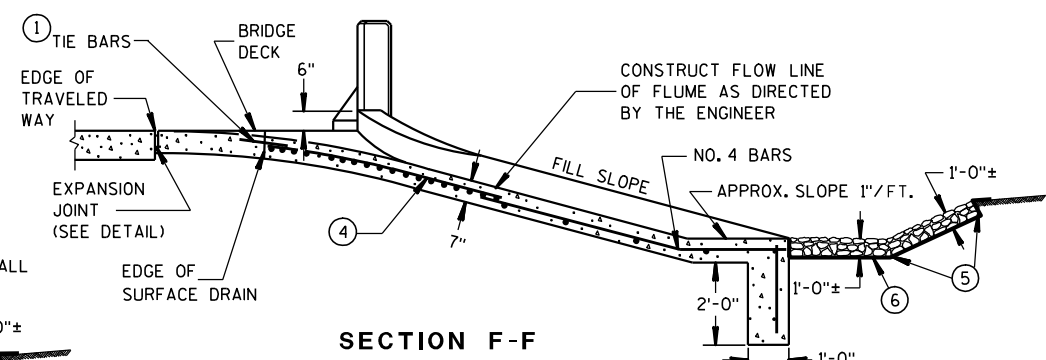
1 2
NO
FISHING
OR
DIVING
FROM
BRIDGE
R9-56
18" X 24"

○ SIGN-REMOVE AND REPLACE

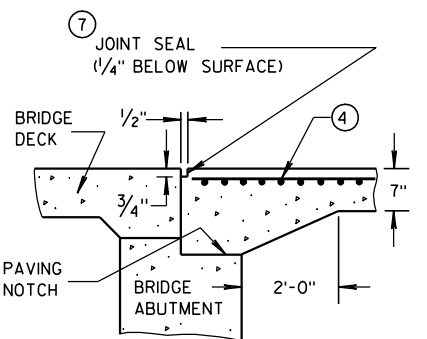
| BENCH MARKS | | | |
|-------------|-------|---|---------|
| NO. | STA. | DESCRIPTION | ELEV. |
| 1 | 9+94 | CHIS. SQ. ON SW WINGWALL OF BRIDGE, 24' RT | 1077.88 |
| 2 | 10+09 | BRASS DISK ON TOP OF SE PARAPET OF BRIDGE, 23' RT | 1079.98 |
| 3 | 12+69 | 3/4" REBAR, 57' LT | 1076.48 |

Standard Detail Drawing List

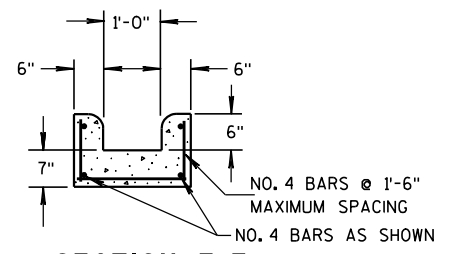
| | |
|-----------|---|
| 08D02-06 | CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES |
| 08E08-03 | TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS |
| 08E09-06 | SILT FENCE |
| 13B02-06 | CONCRETE PAVEMENT APPROACH SLAB |
| 15C02-05A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-05B | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-05C | DETOUR SIGNING FOR MAINLINE CLOSURES |
| 15C06-06 | SIGNING & MARKING FOR TWO LANE BRIDGES |
| 15C08-16A | PAVEMENT MARKING (MAINLINE) |



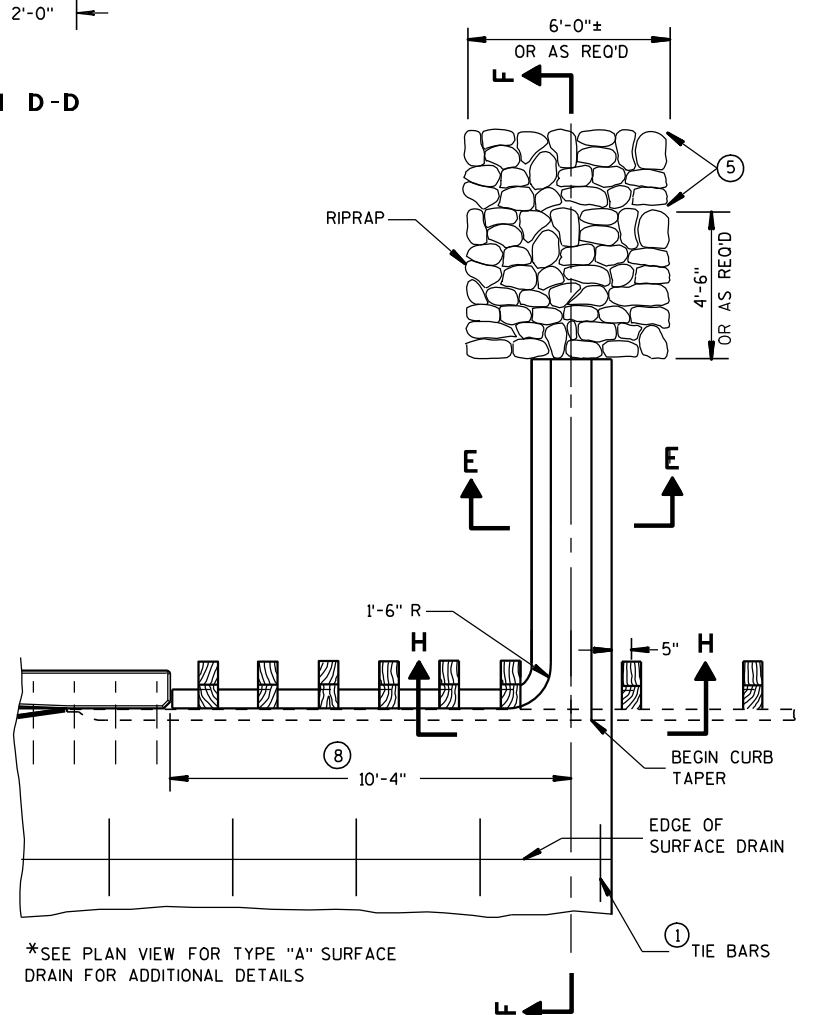
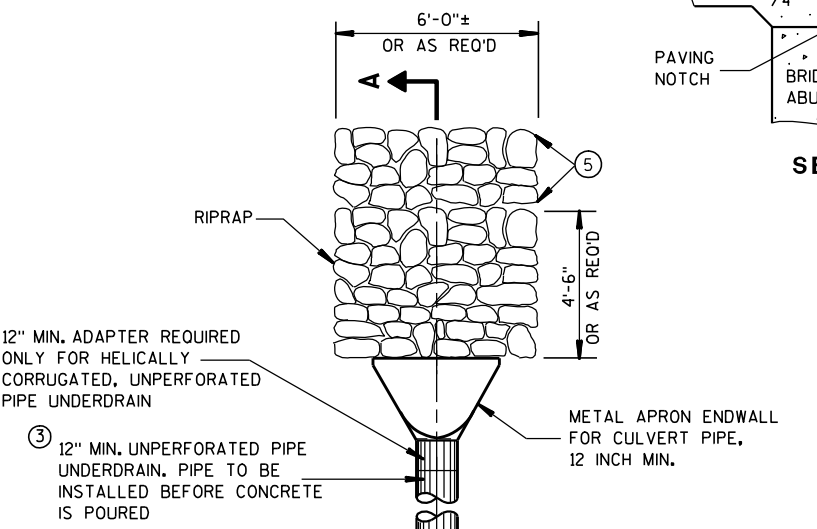
SECTION F-F



SECTION D-D

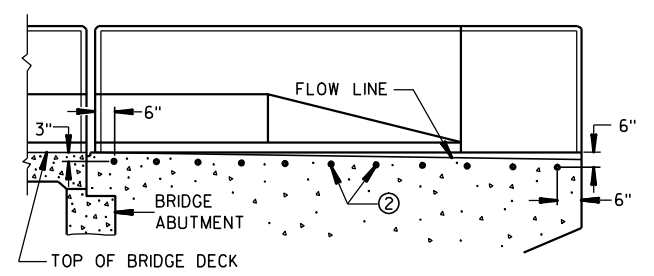


SECTION E-E

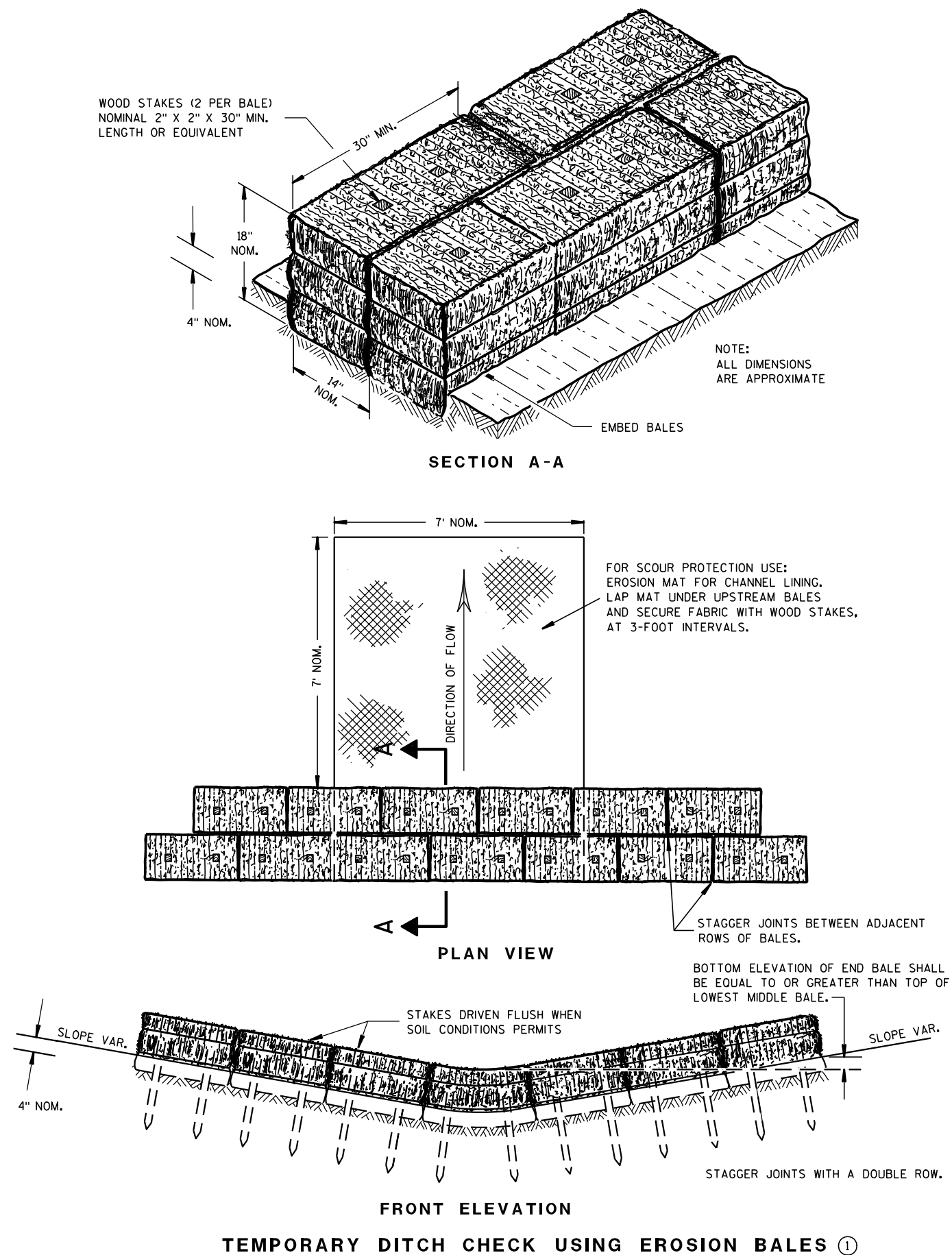


* PARTIAL PLAN VIEW
SURFACE DRAIN WITHOUT PIPE
TYPE "B"

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



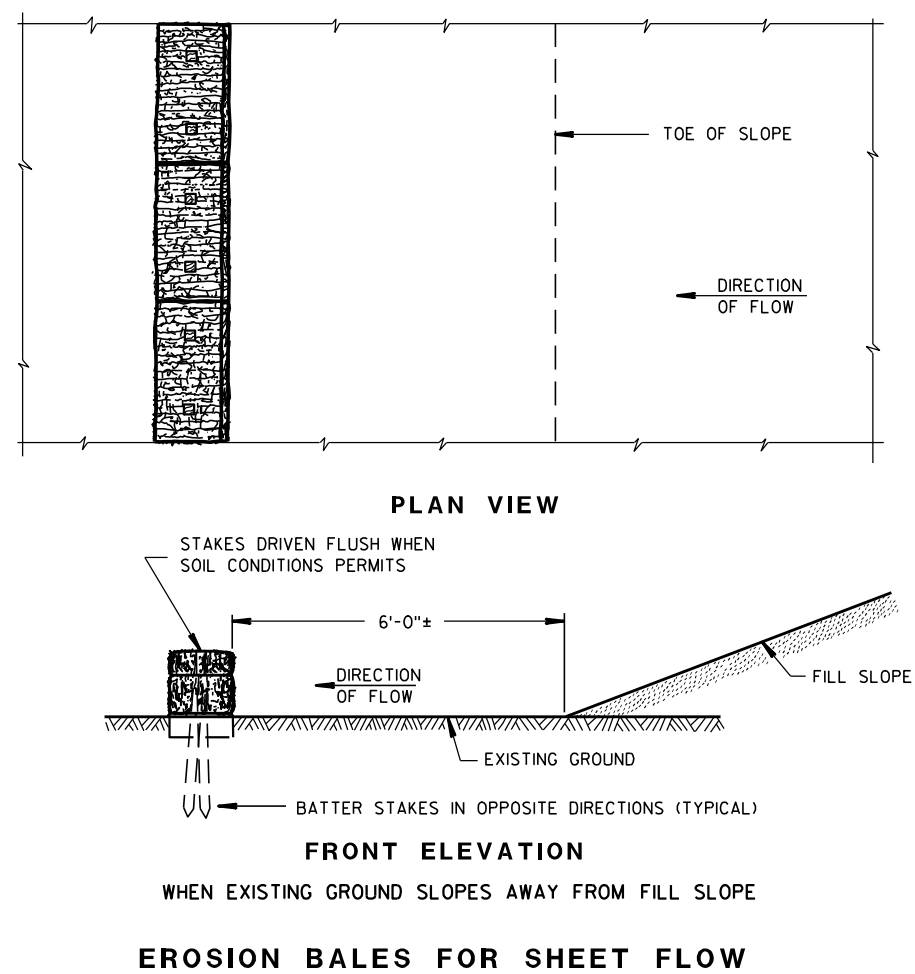
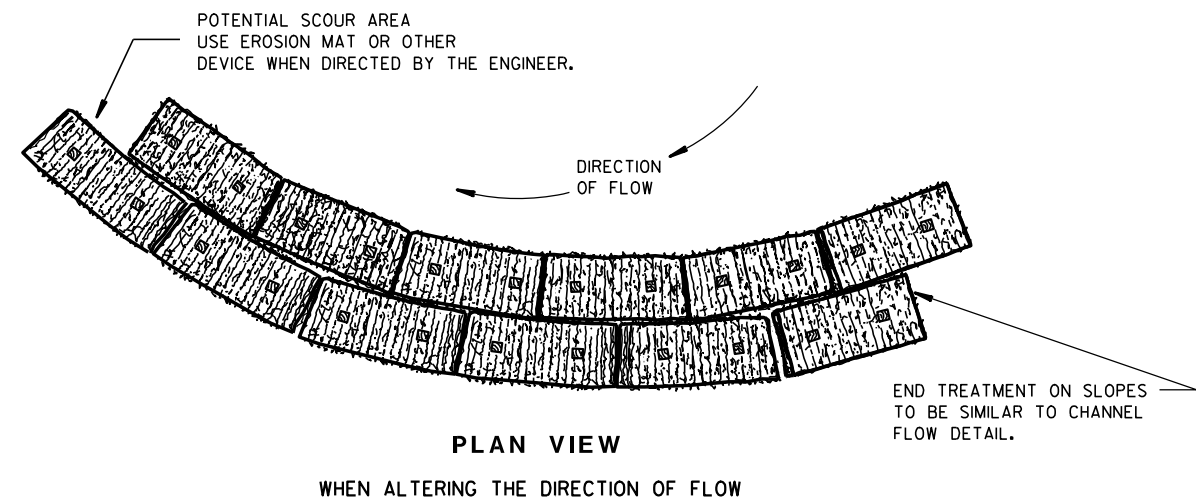
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



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.

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

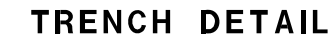
6/04/02
DATE

FHWA

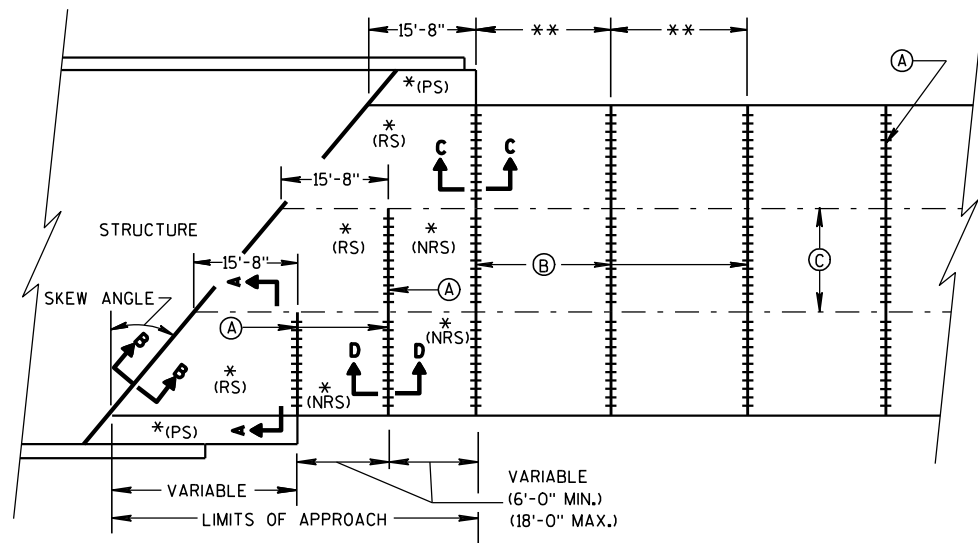
/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



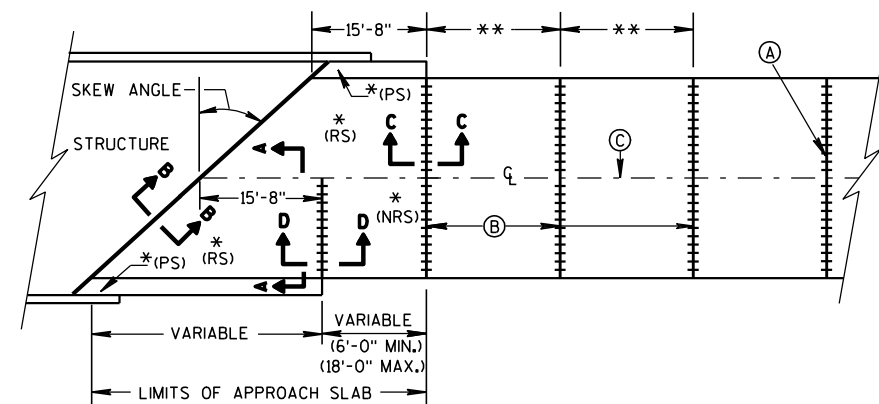
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" 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.



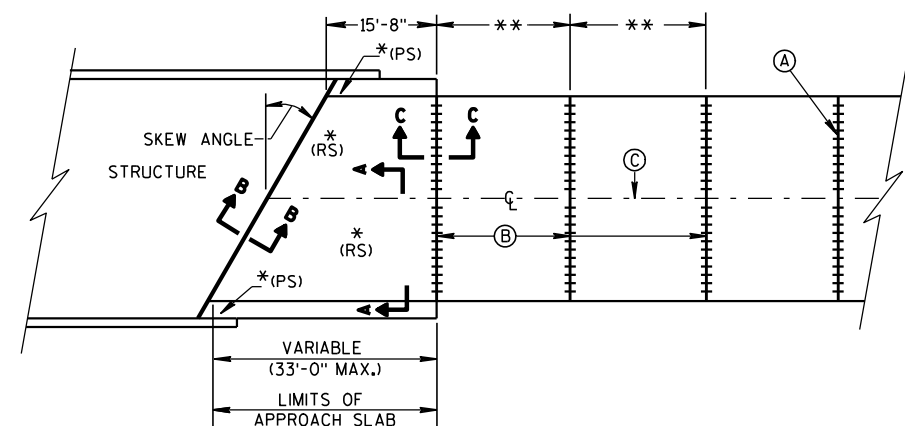
| | |
|--|---|
| <div>SILT FENCE</div> | |
| <div>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</div> | |
| <div>APPROVED</div> | |
| <div>4-29-05</div> | <div>/S/ Beth Canestra</div> |
| <div>DATE</div> | <div>CHIEF ROADWAY DEVELOPMENT ENGINEER</div> |
| <div>FHWA</div> | |



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

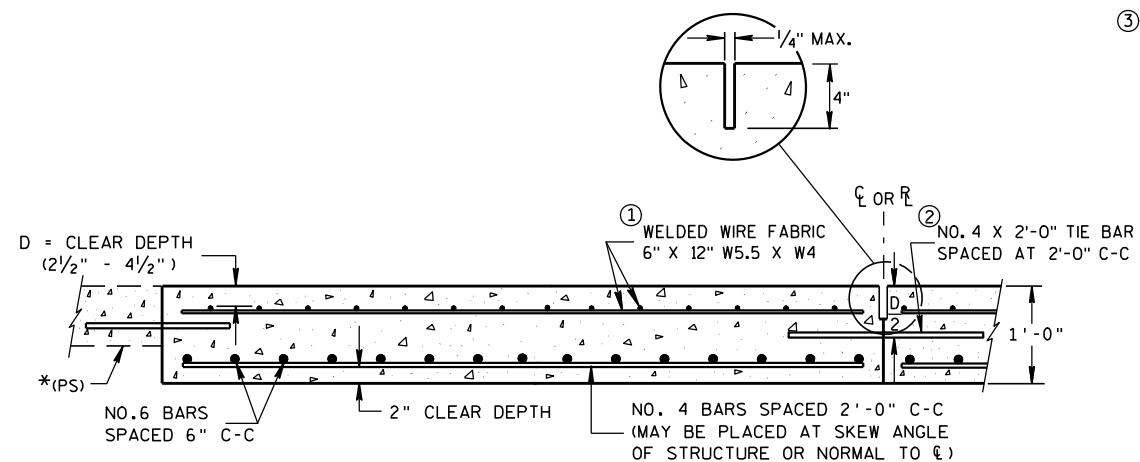


**SKEWS > 30°
(PAVEMENT WIDTH ≤ 30')**

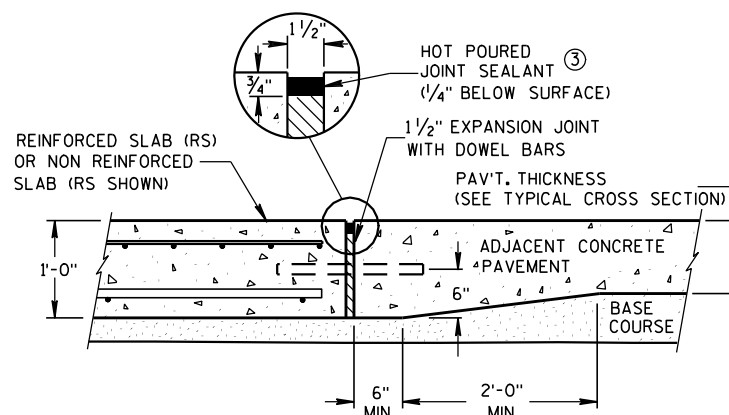


**SKEWS ≤ 30°
(PAVEMENT WIDTH ≤ 30')
APPROACH SLAB AND ADJACENT PAVEMENT**

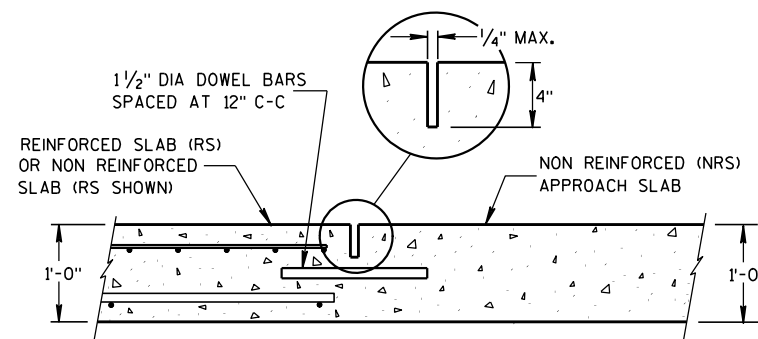
- * (RS) = REINFORCED CONCRETE SLAB
 * (PS) = PAVED CONCRETE SHOULDER, CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN
 (SEE DETAILS ELSEWHERE IN THE PLAN)
 * (NRS) = NON-REINFORCED CONCRETE SLAB
 ** STANDARD TRANSVERSE JOINT SPACING
 (SEE SDD 13C4, SDD 13C11, & SDD 13C13)
 (A) STANDARD CONTRACTION JOINT NORMAL TO R_L OR R_C
 (B) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO R_L OR R_C
 (C) STANDARD LONGITUDINAL JOINT AND TIE BARS.



**SECTION A-A
REINFORCEMENT POSITIONING DETAIL**



**SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT**



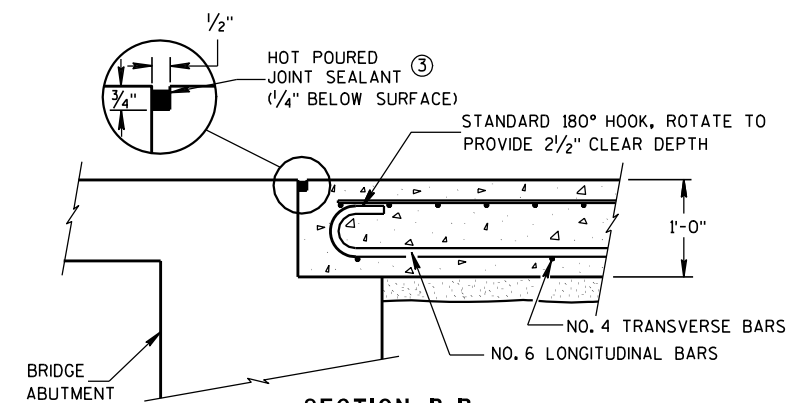
**SECTION D-D
CONTRACTION JOINT**

GENERAL NOTES

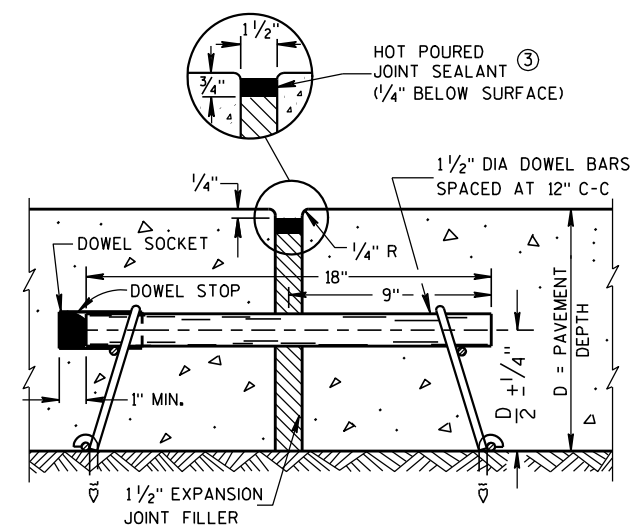
APPROACH SLABS ABUTTING AN HMA PAVEMENT OVER BASE COURSE DO NOT NEED TO BE DOWELED.

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

- THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
- THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
- USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.



**SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT**



EXPANSION JOINT

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

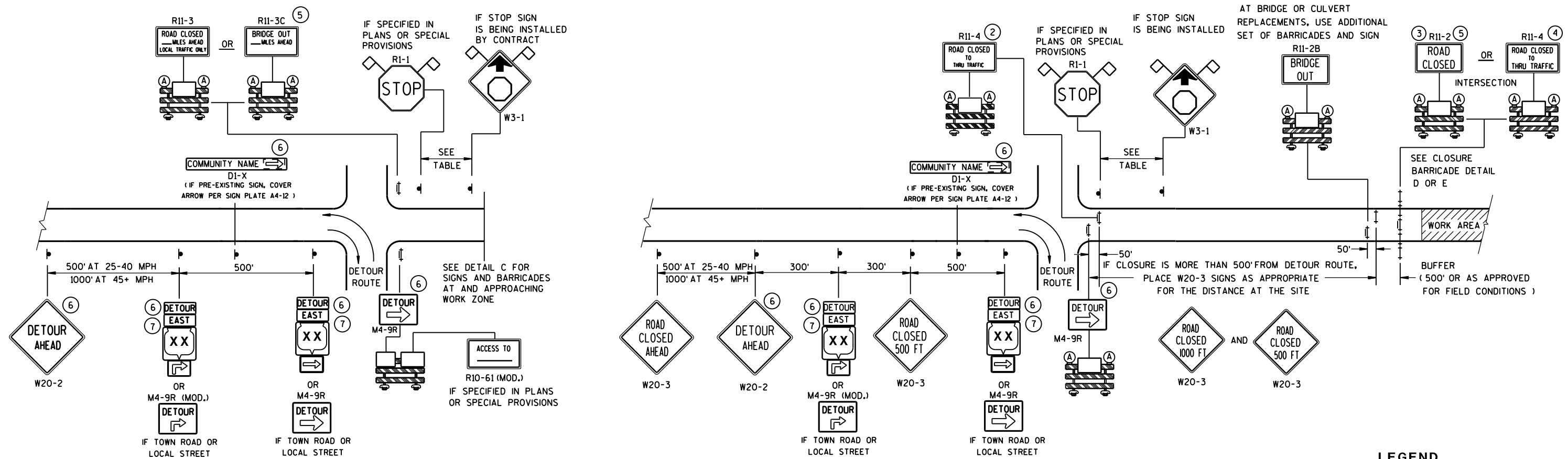
APPROVED

12/11/2009

DATE

FHWA

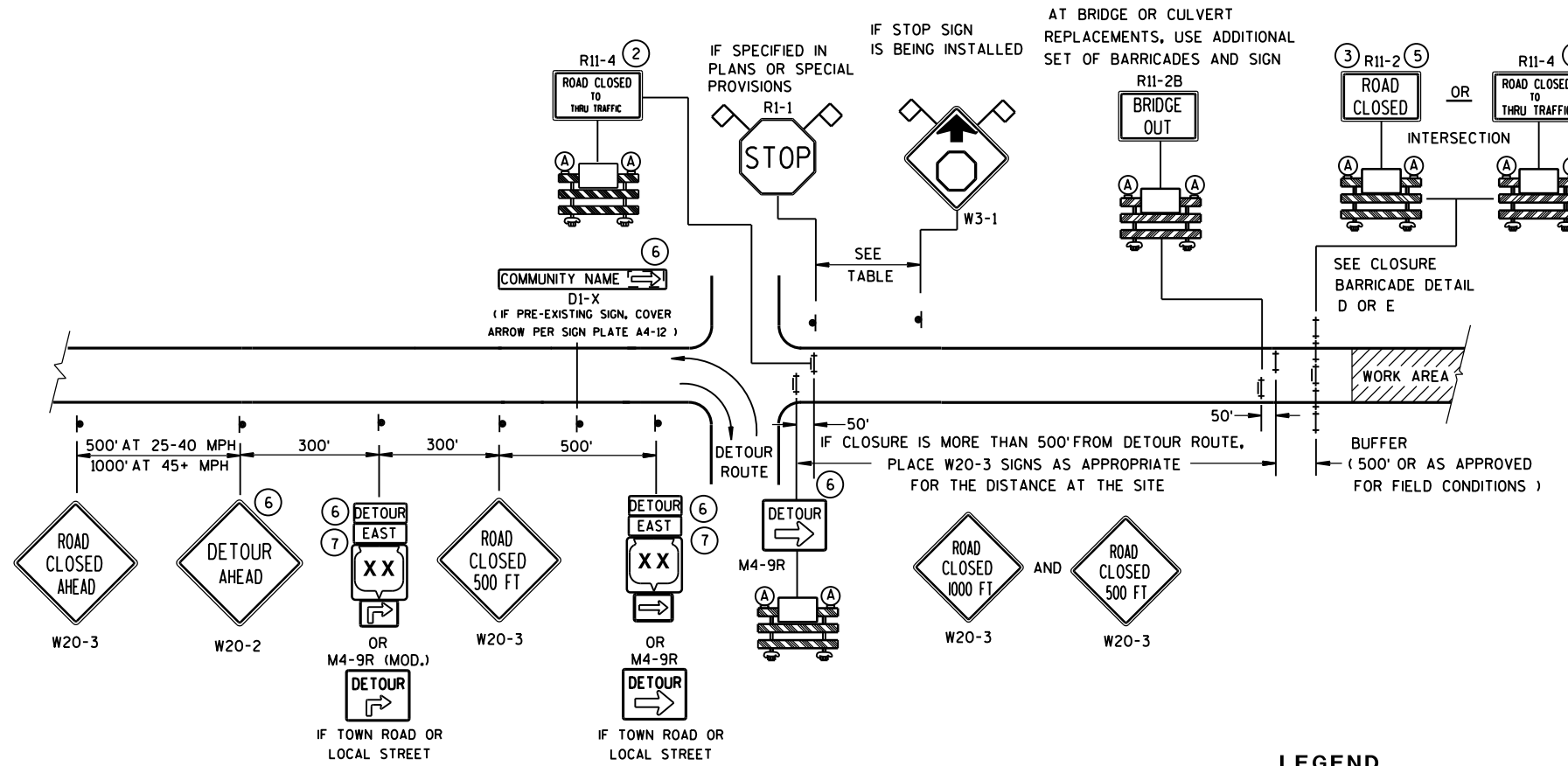
/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

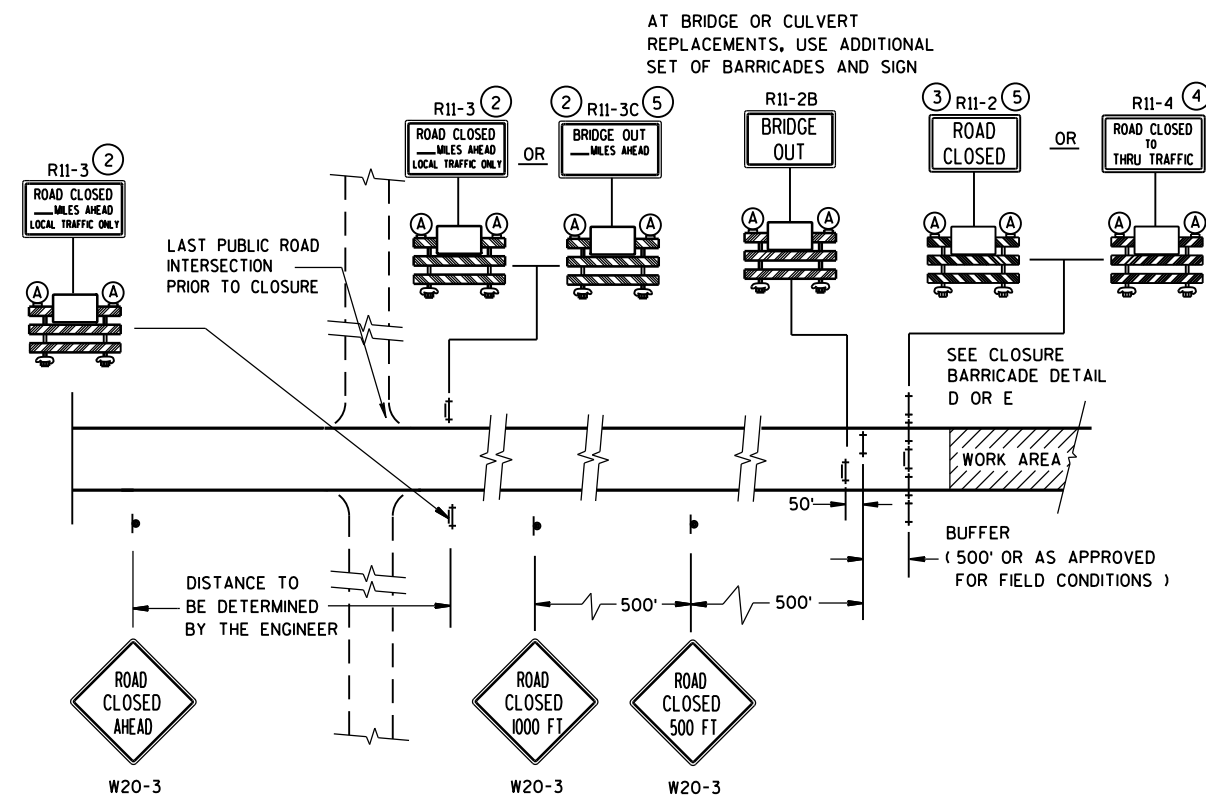
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



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

 M4-8
 M3-X
 M1-4
OR
 M1-5A
OR
 M1-6

 OR 

M05-1 M06-1

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

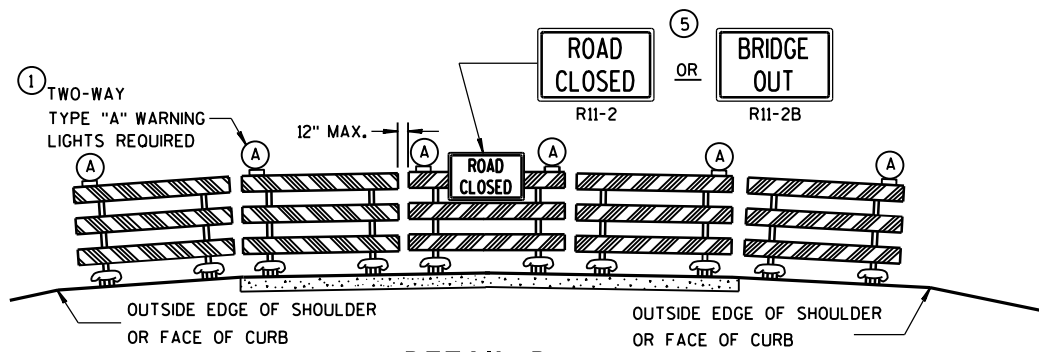
| SPEED LIMIT (MPH) | "STOP AHEAD" ADVANCE WARNING DISTANCE (F T) |
|-------------------------|--|
| 25 | 200 |
| 30 | 200 |
| 35 | 350 |
| 40 | 350 |
| 45 | 500 |
| 50 | 550 |
| 55 | 750 |

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

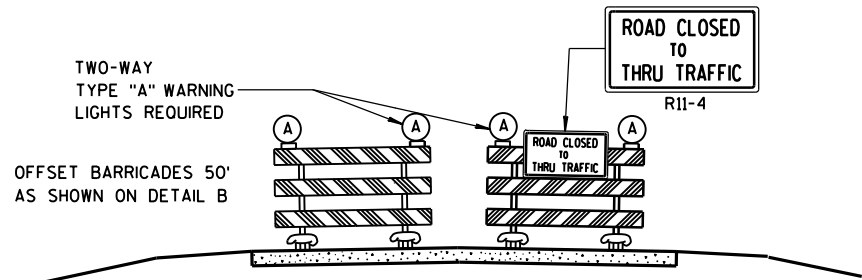
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON 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:

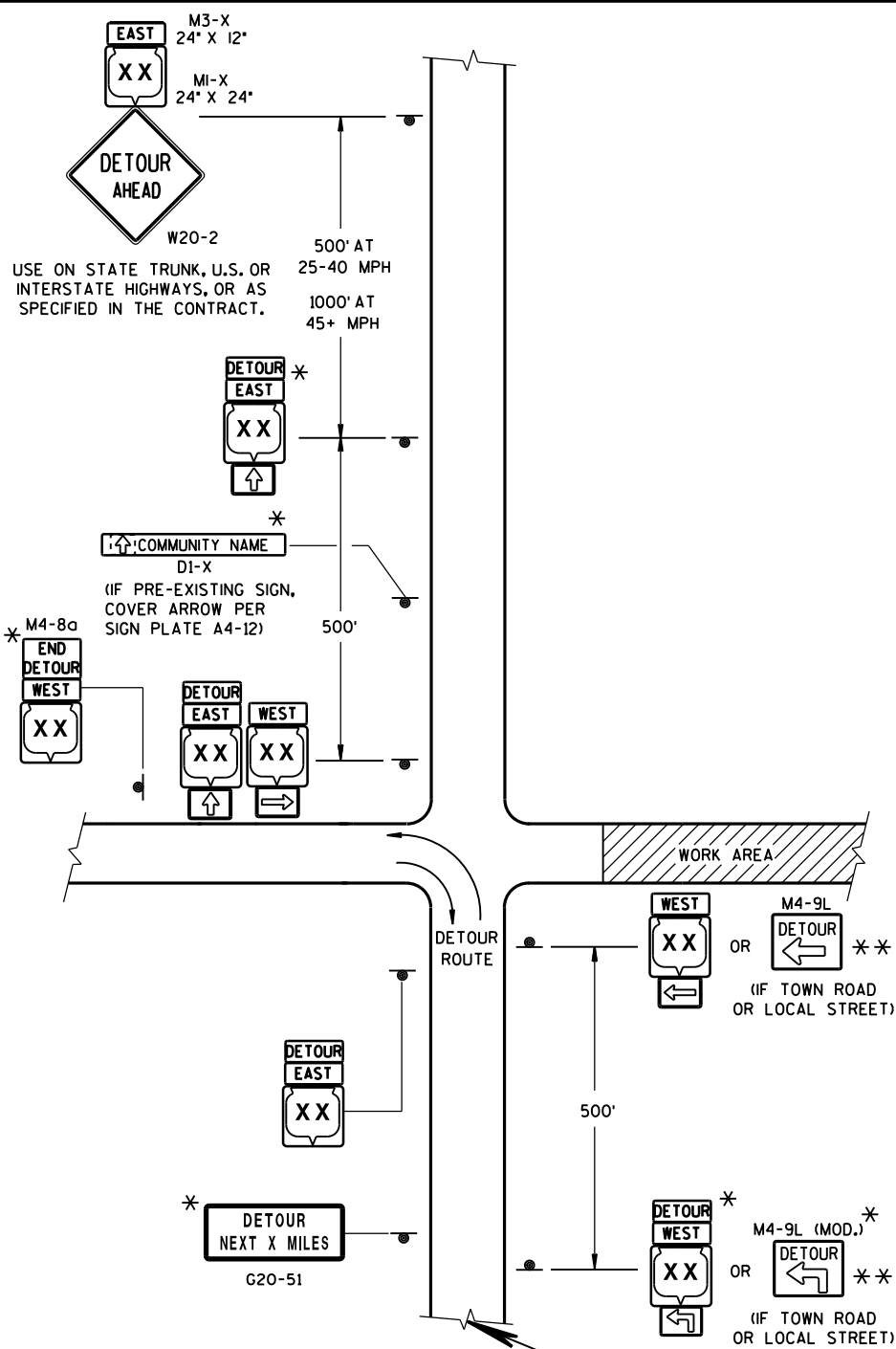
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" 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

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



LEGEND

● SIGN ON PERMANENT SUPPORT

▨ WORK AREA

DETOUR EAST M4-8 M3-X

MI-4 OR COUNTY MI-5A OR MI-6

M05-1 OR M06-1 OR M06-1

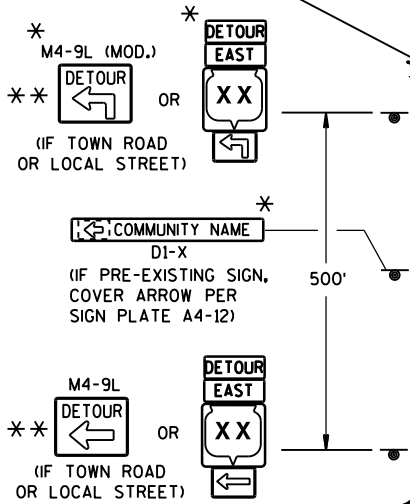
SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

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

USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT.



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.

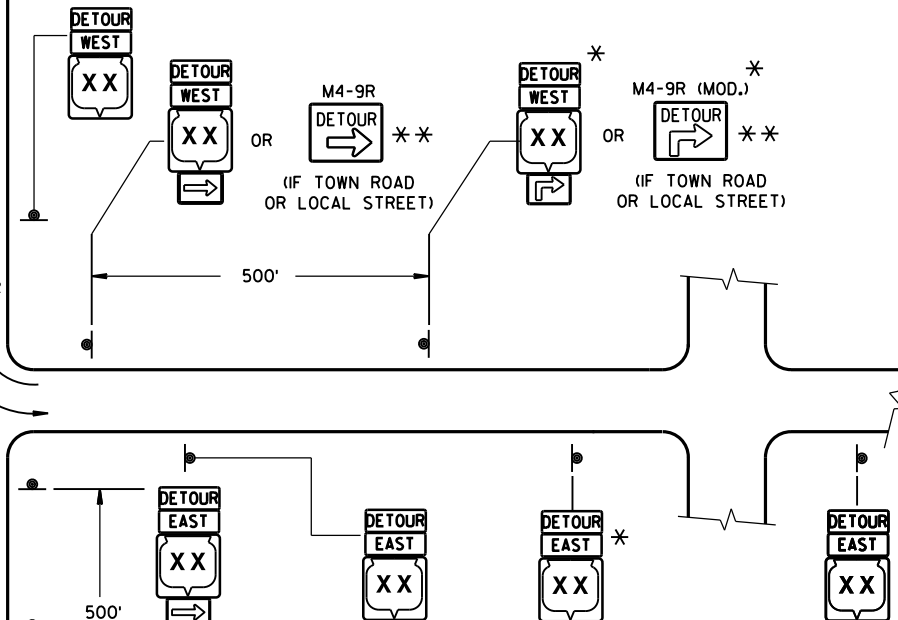
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.)
- MI-4, MI-5A, AND MI-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.

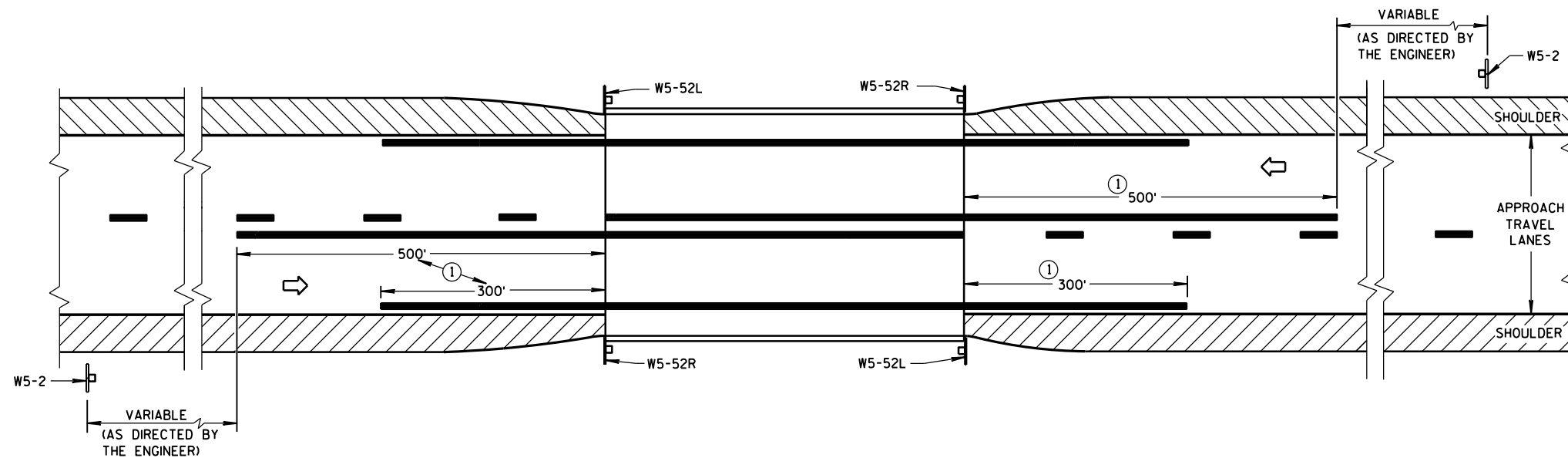


PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA.)

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

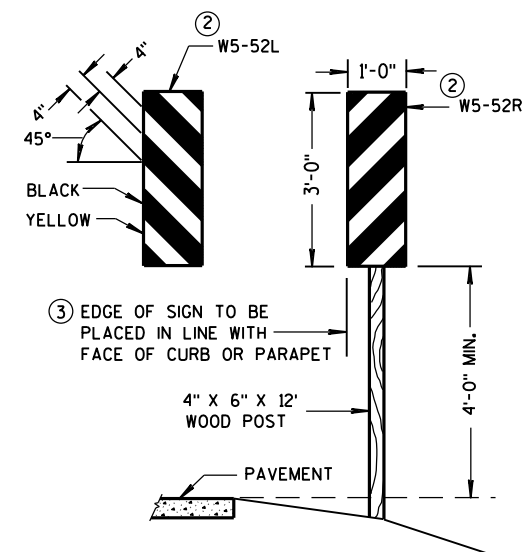
APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



SITUATION 1

WARRANTING CRITERIA:

BRIDGE WIDTH IS AT LEAST 18 FEET BUT LESS THAN 24 FEET



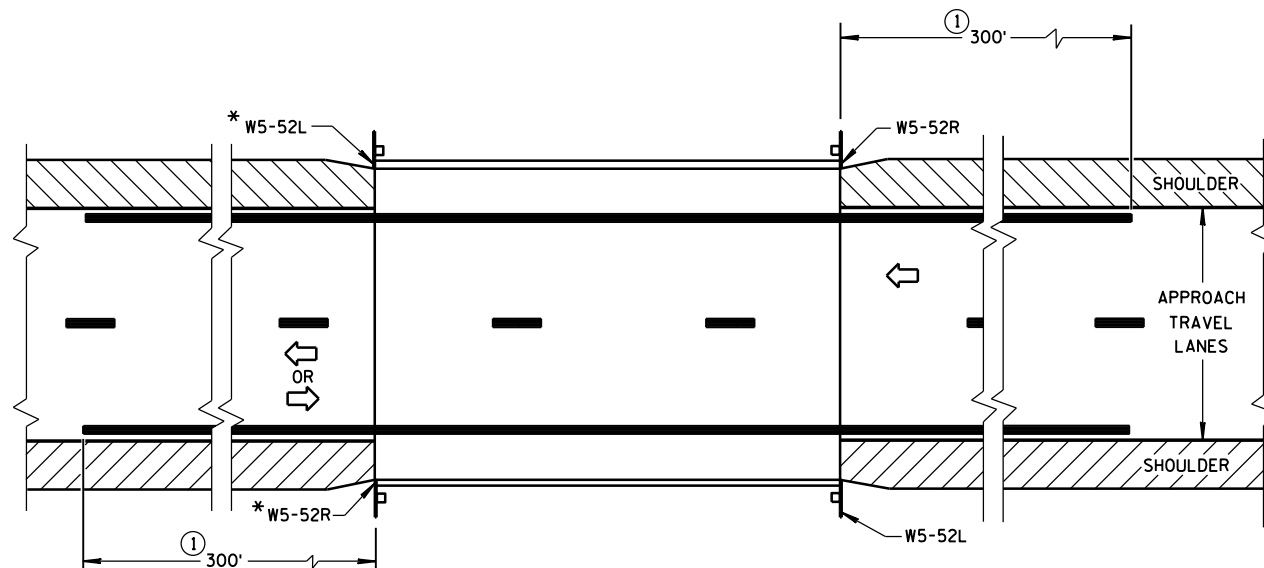
OBJECT MARKER PLACEMENT

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.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

- ① MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.
- ② FACE OF OBJECT MARKERS W5-52R, AND W5-52L SHALL BE COVERED WITH TYPE F REFLECTIVE SHEETING.
- ③ LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.

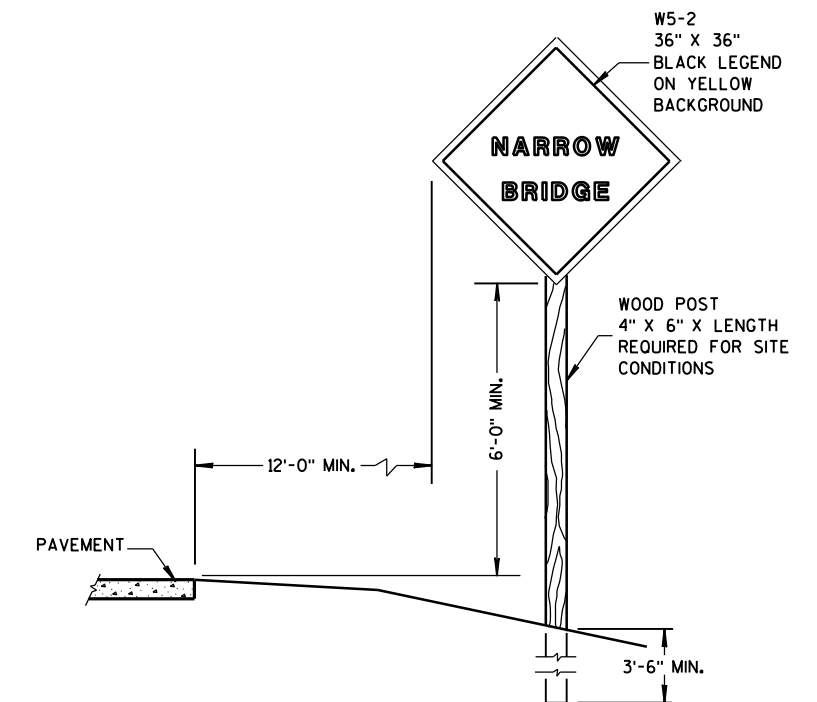


*OMIT ON ONE-WAY TRAVELLED WAYS

SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.



SIGN PLACEMENT

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

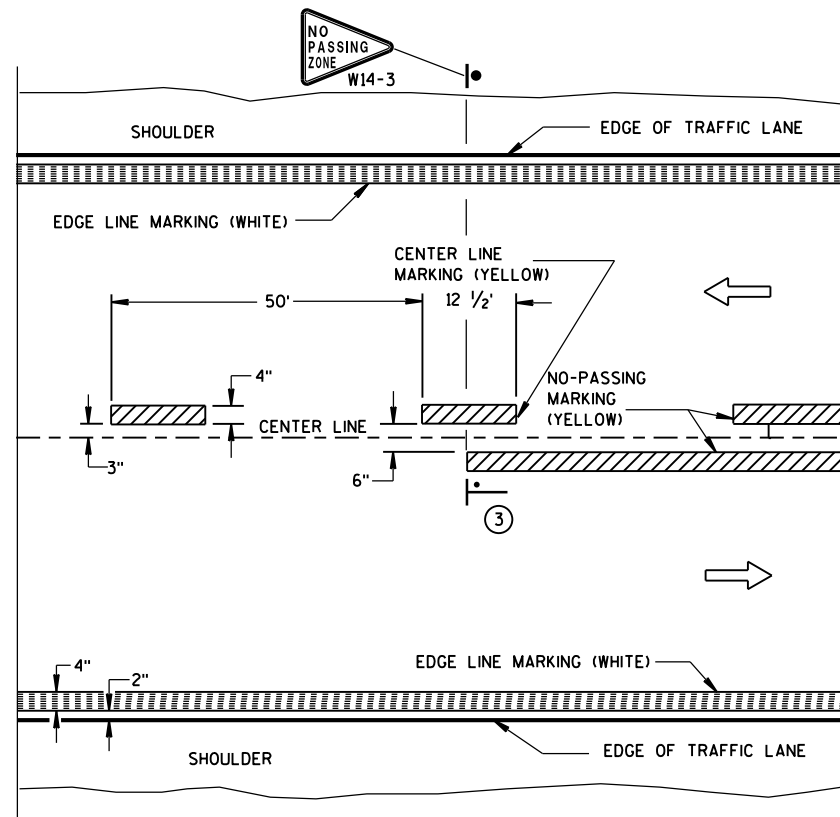
3/4/2013

DATE

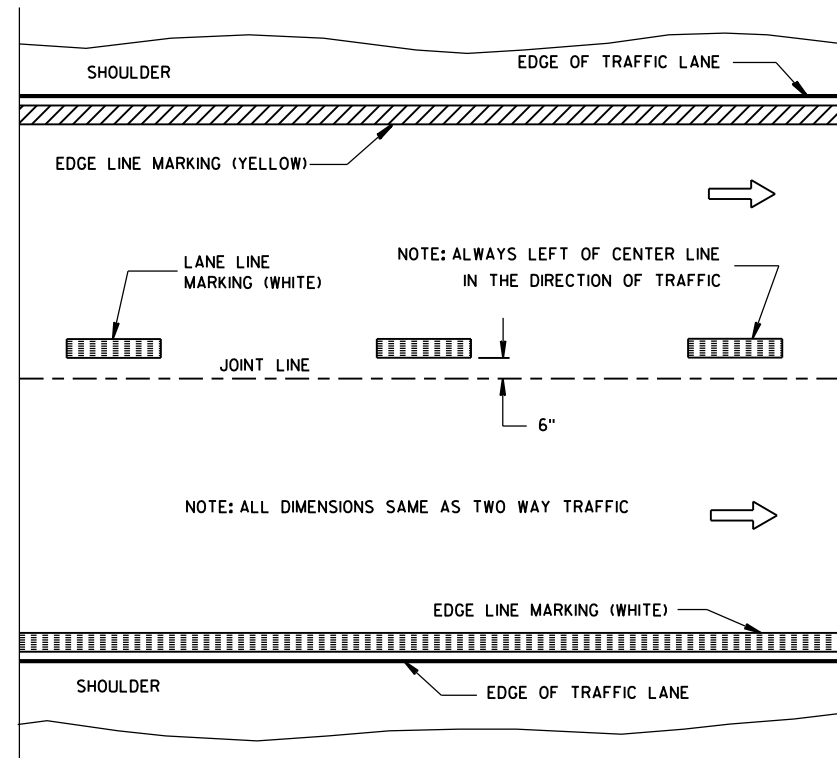
FHWA

/S/ Travis Feltes

STATE TRAFFIC ENGINEER OF DESIGN

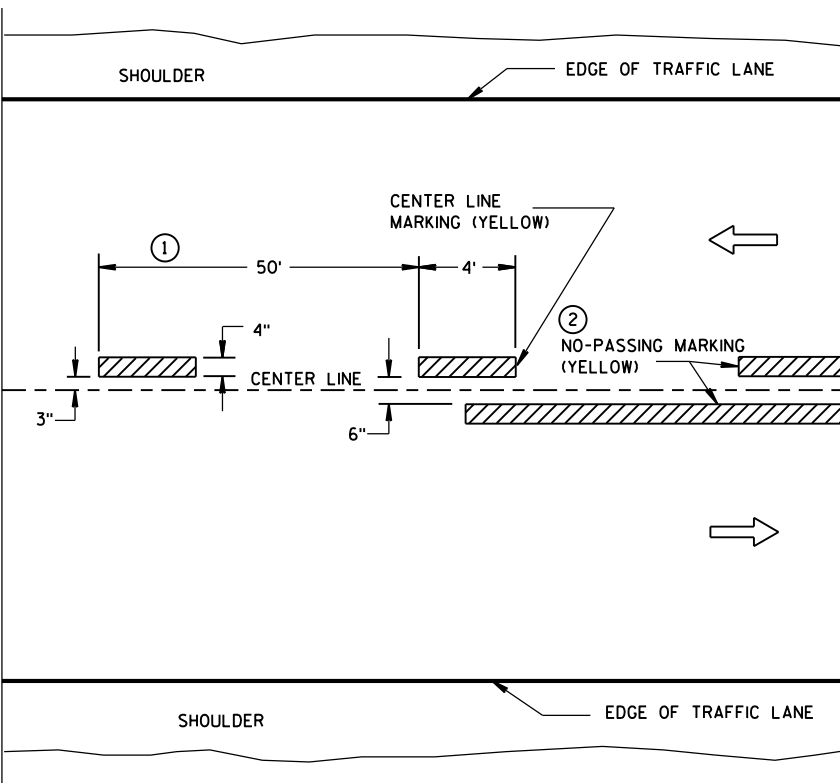


TWO WAY TRAFFIC

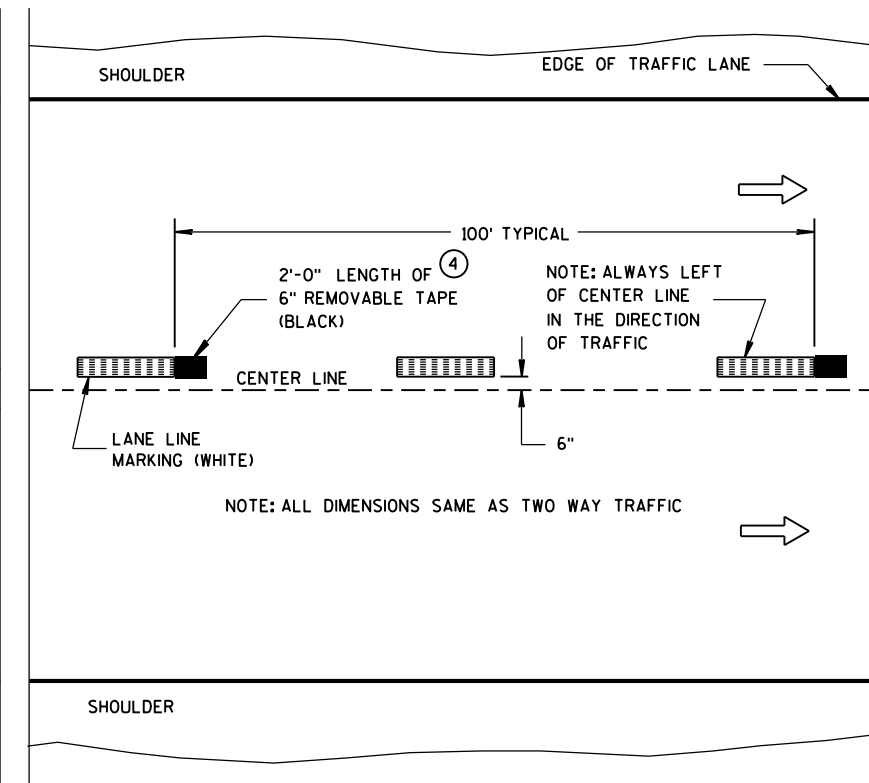


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

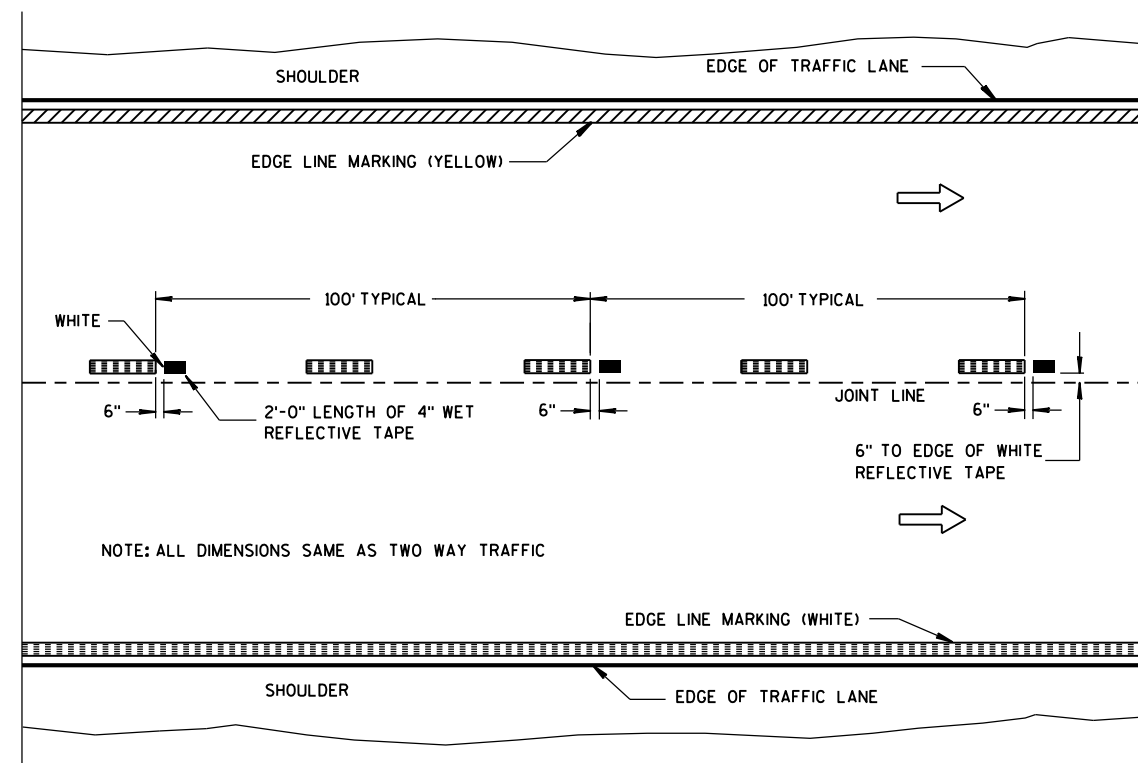
GENERAL NOTES

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

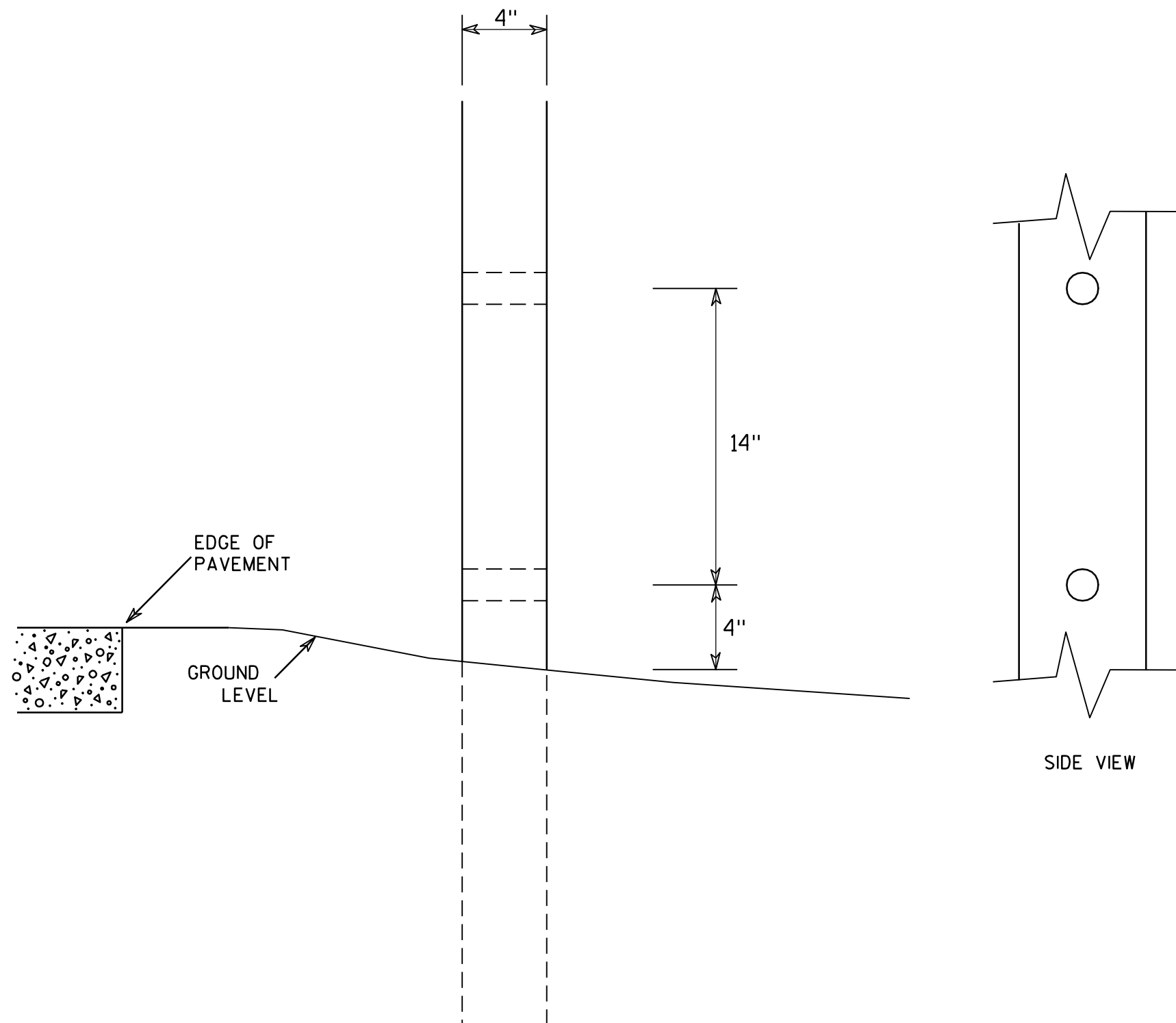
PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013
DATE
FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

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:

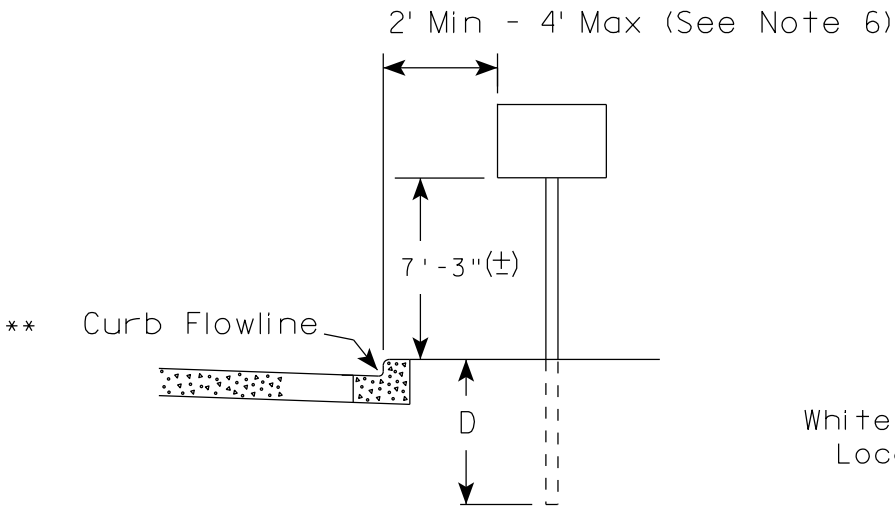
HWY:

COUNTY:

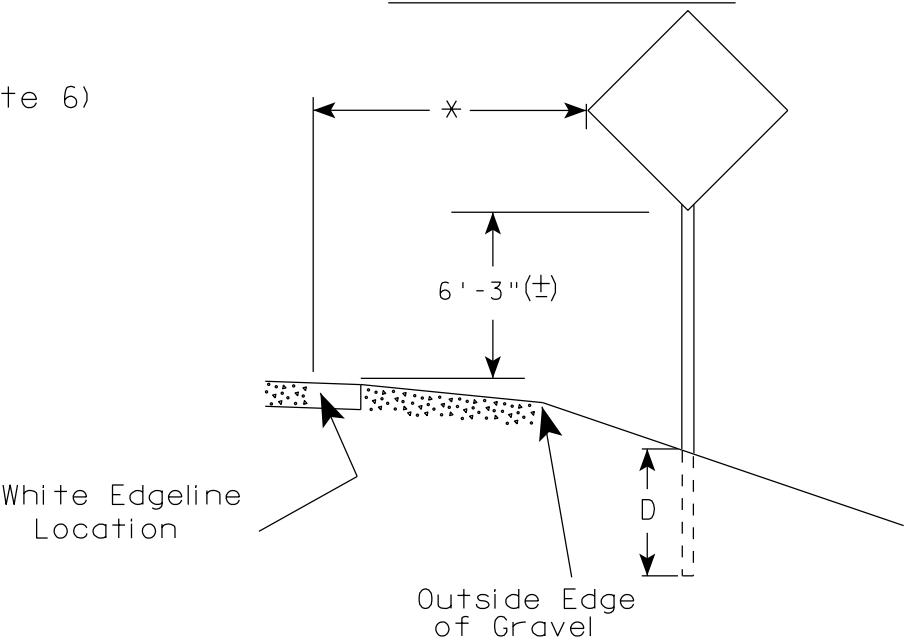
SHEET NO:

E

URBAN AREA



RURAL AREA (See Note 2)



- GENERAL NOTES
1. Signs wider than 4 feet, 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 (A4-5) 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 stop signs (R1-1F) 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) & End of Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

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

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

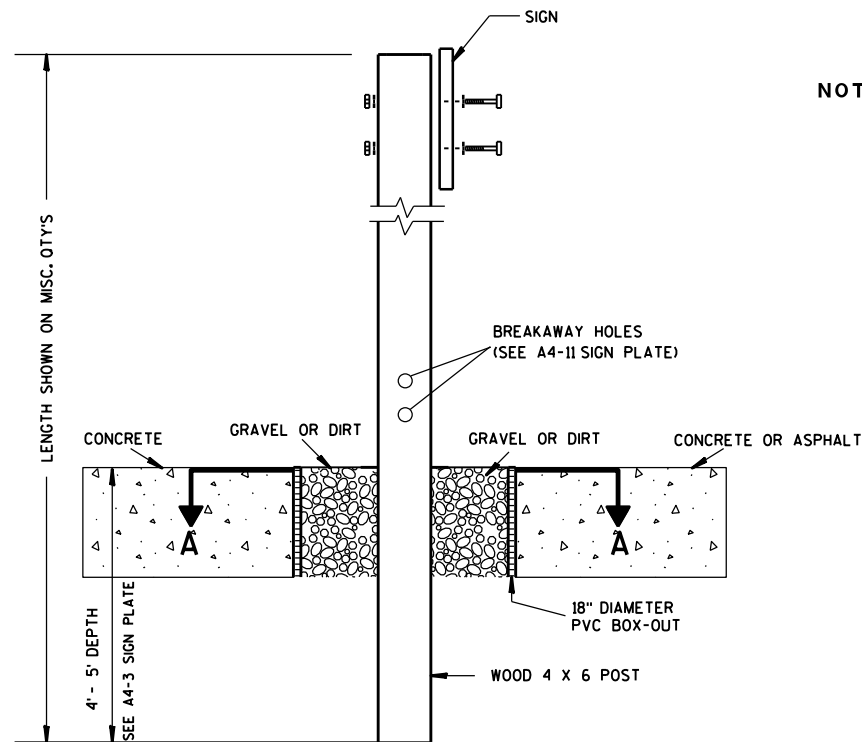
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

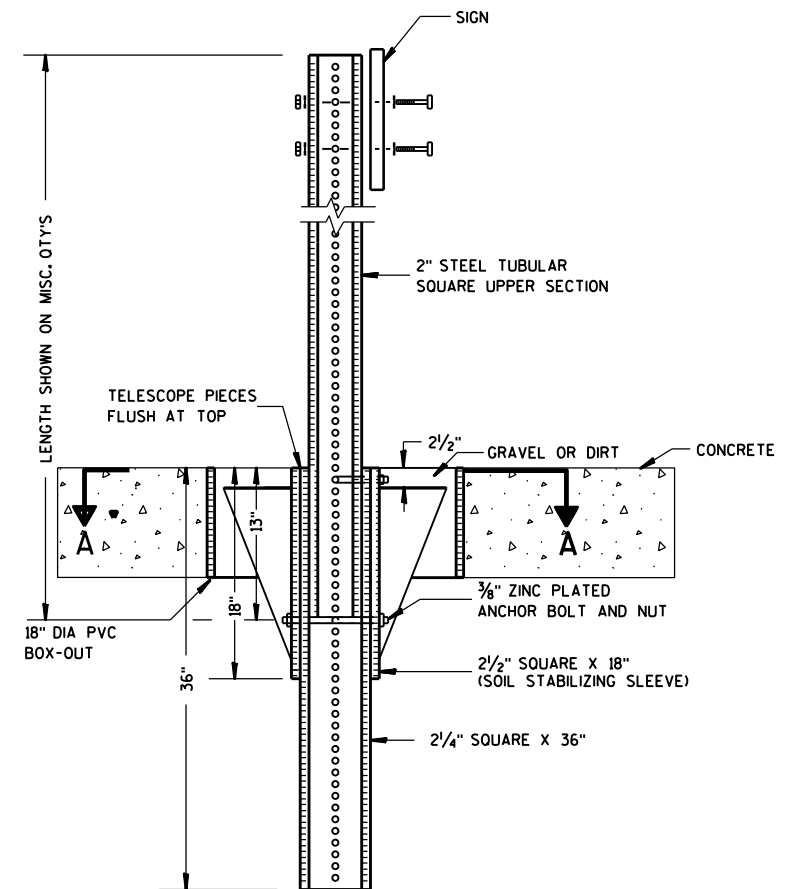
DATE 9/30/13 PLATE NO. A4-3.18



ELEVATION VIEW

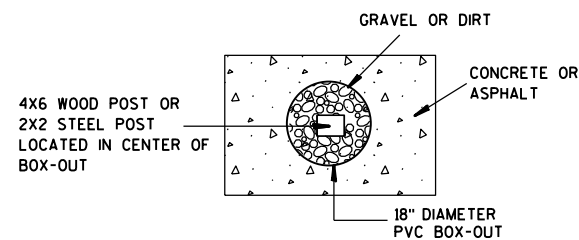
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

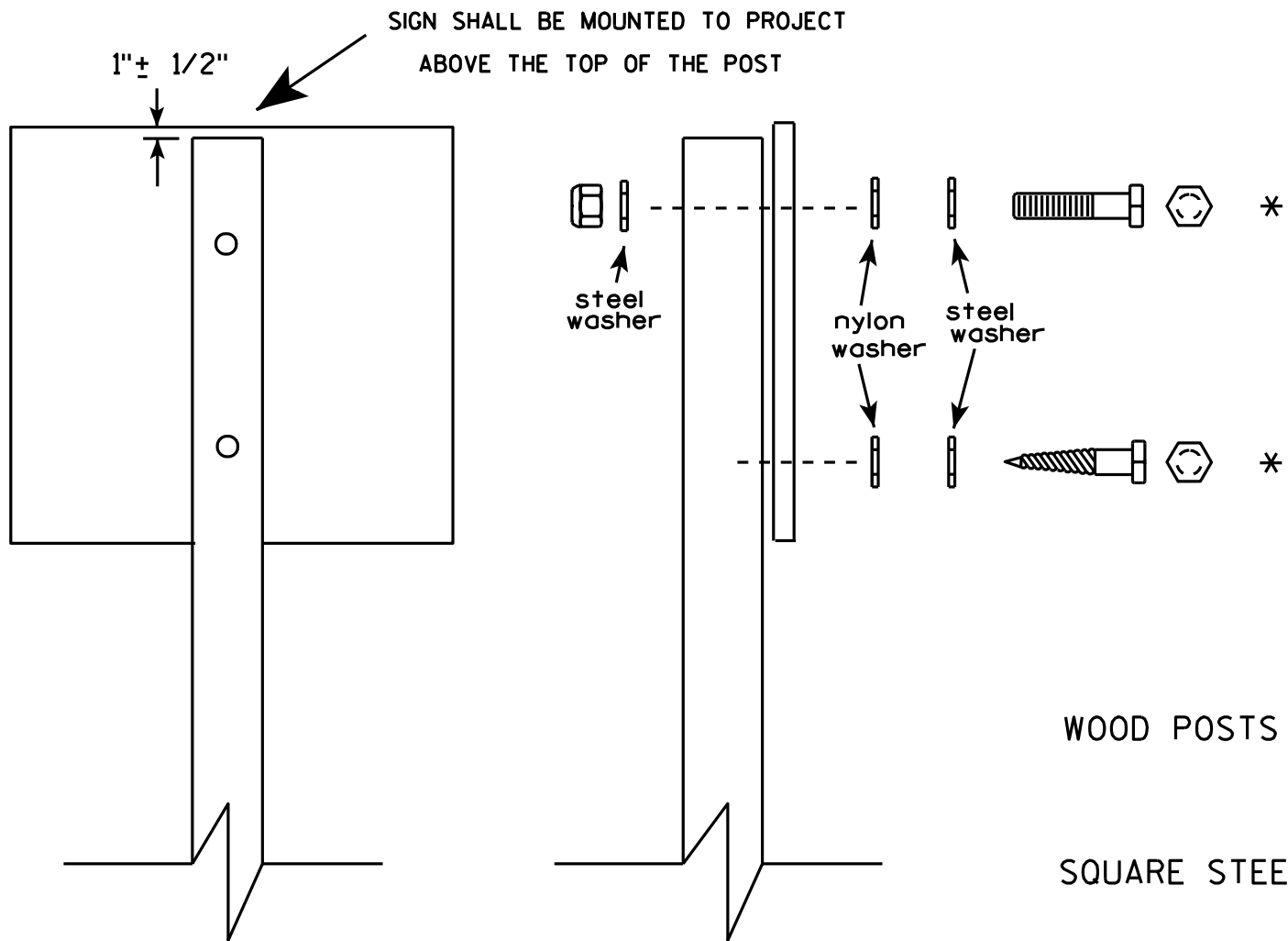
FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

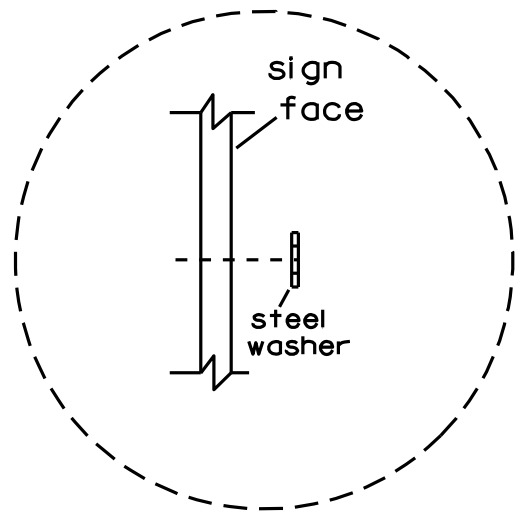


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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 - $\frac{3}{8}$ " X 3"
- MACHINE BOLTS - $\frac{5}{16}$ " X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON 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 |



R9-56

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 - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series E.
Lines 2, 3, 4, 5 and 6 are Series C.

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

STANDARD SIGN R9-56

WISCONSIN DEPT OF TRANSPORTATION

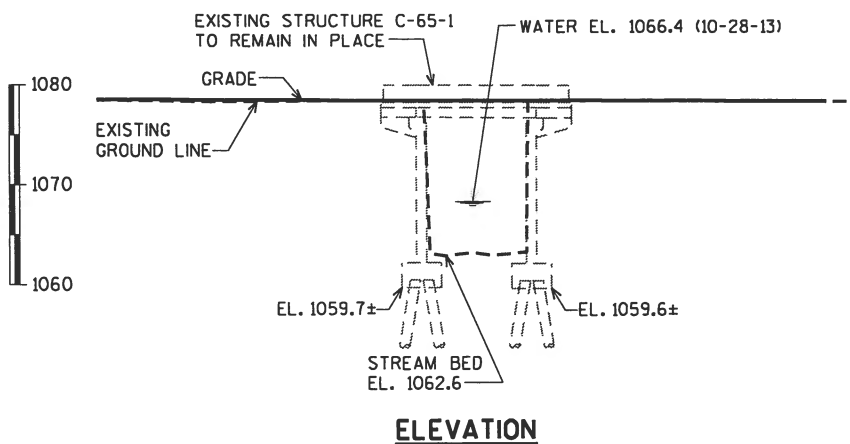
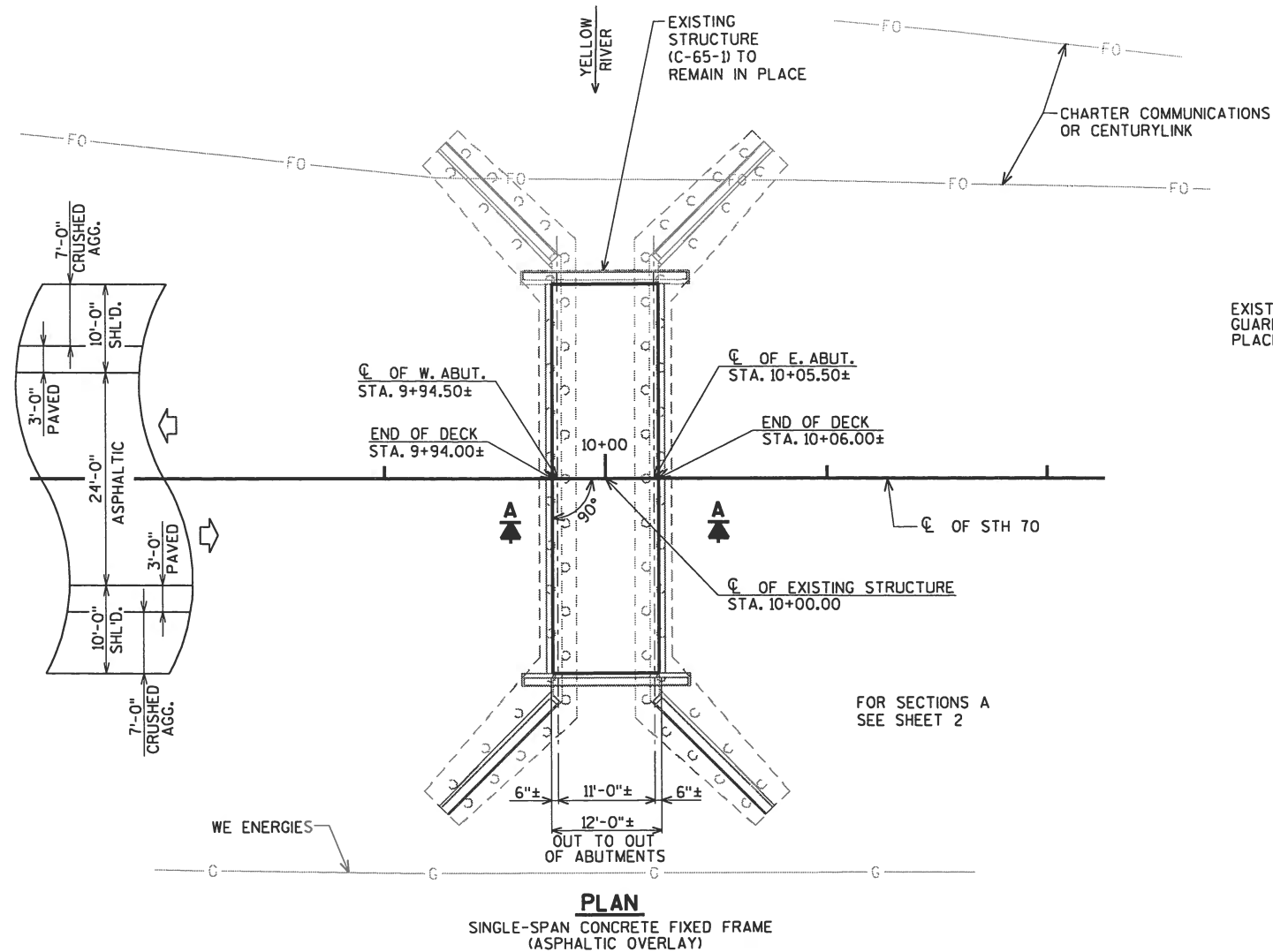
APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 4/4/2011 PLATE NO. R9-56.5

PROJECT NO: HWY: COUNTY: SHEET NO: E

\$PRNAME\$
U:\42-0915.00 - Washburn Co. STH 70 Rehabilitation\Bridges\420915gp.dgn

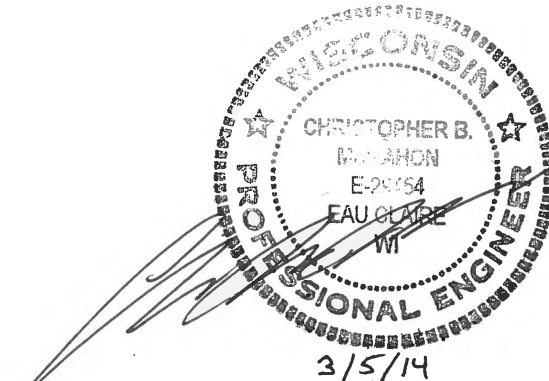
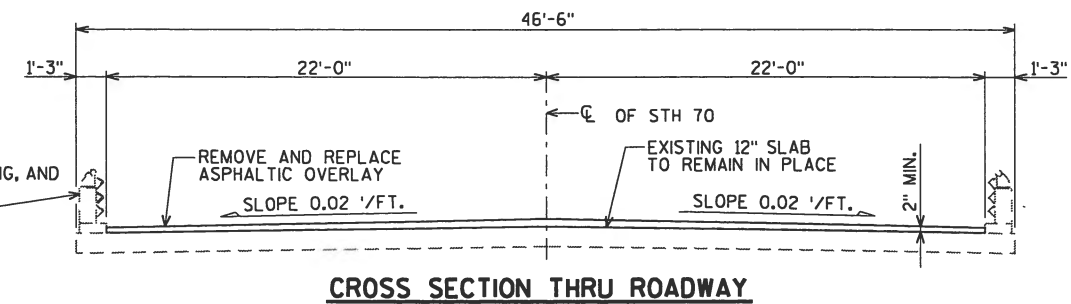
8



BENCH MARK:
BRASS DISK ON TOP OF SE PARAPET OF BRIDGE
STA. 10+09, 23' RT.
EL. 1079.98

LIST OF DRAWINGS

1. GENERAL PLAN
2. NOTES AND DETAILS



BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
CHRIS MCMAHON
(715)-834-3161

STATE PROJECT NUMBER

8130-00-71

| NO. | DATE | REVISION | BY |
|---|--------------------|-------------------|--------------|
| ORIGINAL PLANS PREPARED BY | | | |
| AYRES ASSOCIATES | | | |
| 3433 Oakwood Hills Parkway Eau Claire, WI 54701 www.AyresAssociates.com | | | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| ACCEPTED | William C. Dreher | 3/7/14 | DATE |
| CHIEF STRUCTURES DESIGN ENGINEER | | | |
| STRUCTURE C-65-1 | | | |
| STH 70 OVER YELLOW RIVER | | | |
| COUNTY | WASHBURN | TOWN/CITY/VILLAGE | SPOONER |
| DESIGN SPEC. | REHABILITATION N/A | | |
| DESIGNED BY | KLW | DESIGN CK'D. | KAH |
| DRAWN BY | KAH | PLANS CK'D. | CBM |
| GENERAL PLAN | | | SHEET 1 OF 2 |

\$PRNAME\$
U:\42-09\5.00 - Washburn Co.S\H 70 Rehabilitation\Bridg\420915gp.dgn

8

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DRAWINGS, ELEVATIONS, AND DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

QUANTITIES FOR BID ITEMS, "PREPARATION DECKS TYPE 1", "PREPARATION DECKS TYPE 2", "CURB REPAIR", AND "FULL-DEPTH DECK REPAIR" SHALL BE VERIFIED IN THE FIELD BY THE PROJECT ENGINEER.

LIMITS OF ASPHALTIC OVERLAY SHALL BE FACE-TO-FACE OF CURB AND END-TO-END OF DECK.

PROFILE GRADE LINE SHALL BE DETERMINED BASED ON OVERLAY THICKNESS OF 2" PLACED ABOVE THE DECK SURFACE. IF EXPECTED OVERLAY THICKNESS IS EXCEEDED BY MORE THAN 1/2", CONTACT THE STRUCTURE DESIGN SECTION.

SEE ROADWAY PLANS FOR HMA PAVEMENT AND ASPHALTIC MATERIAL QUANTITIES PLACED OVER CONCRETE APPROACH SLABS AND CONCRETE SURFACE DRAINS.

TOTAL ESTIMATED QUANTITIES

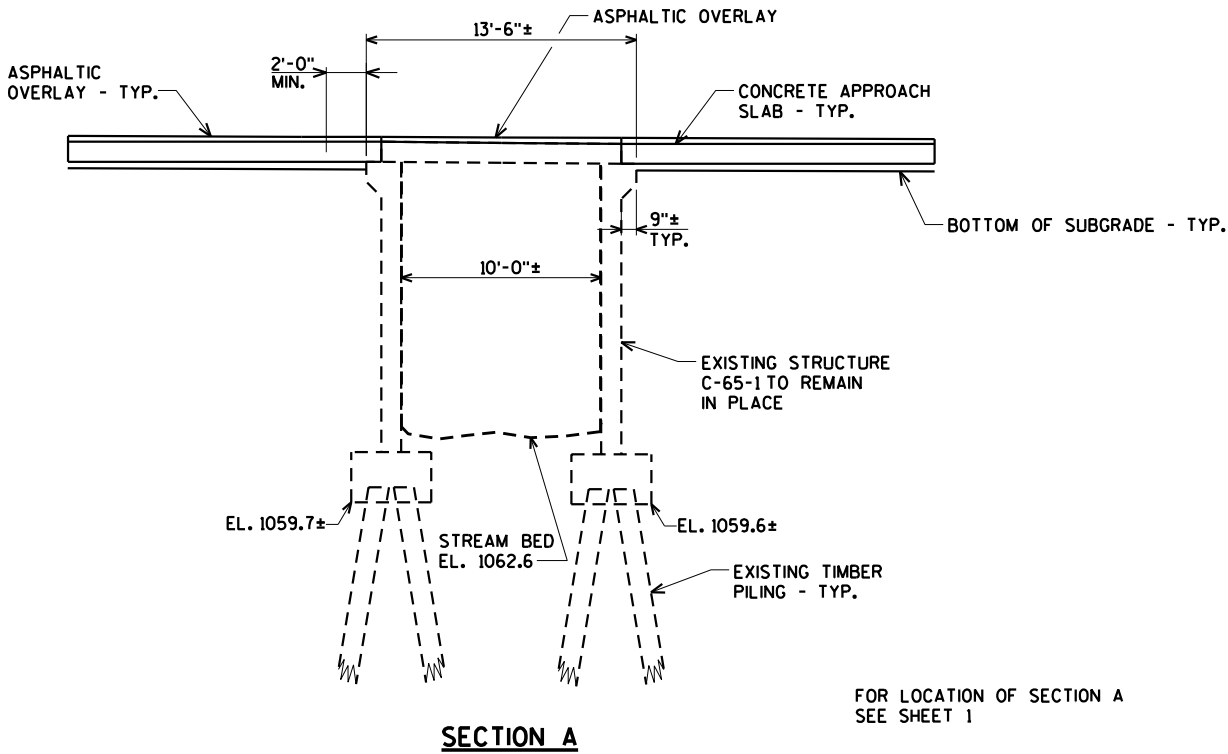
| BID ITEM NUMBER | TACK COAT | UNIT | TOTAL |
|-----------------|---|------|-------|
| 455.0145 | ASPHALTIC MATERIAL PG64-34P | TON | 0.6 |
| 455.0605 | TACK COAT | GAL | 2 |
| 460.1103 | HMA PAVEMENT TYPE E-3 | TON | 10 |
| 509.0301 | PREPARATION DECKS TYPE 1 | SY | 7 |
| 509.0302 | PREPARATION DECKS TYPE 2 | SY | 2 |
| 509.1200 | CURB REPAIR | LF | 7 |
| 509.2000 | FULL-DEPTH DECK REPAIR | SY | 1 |
| 509.9010.5 | REMOVING ASPHALTIC CONCRETE DECK OVERLAY C-65-1 | SY | 60 |
| SPV.0035.01 | CONCRETE MASONRY DECK PATCHING | CY | 5 |
| SPV.0090.01 | SAWING PAVEMENT DECK PREPARATION AREAS | LF | 50 |
| | | | |

NOTES:

EXISTING PAVING NOTCH IS 1'-0" DEEP BY 9" WIDE.

CONCRETE APPROACH SLAB WILL BE PLACED 1'-0" THICK AT THE PAVING NOTCH.

AN ASPHALTIC OVERLAY WILL BE PLACED OVER THE CONCRETE APPROACH SLAB AND CONCRETE SURFACE DRAINS. SEE ROADWAY MISCELLANEOUS QUANTITIES FOR HMA PAVEMENT AND ASPHALTIC MATERIAL QUANTITIES.



FOR LOCATION OF SECTION A
SEE SHEET 1

8

| | | | |
|--|------|-----------------|--------------|
| NO. | DATE | REVISION | BY |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | | | |
| STRUCTURE C-65-1 | | | |
| DRAWN BY KAZ | | PLANS CK'D. CBM | |
| NOTES AND DETAILS | | | SHEET 2 OF 2 |

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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