

DESIGN DESIGNATION

A.A.D.T. - 2021 = 1596  
A.A.D.T. - 2041 = 2394  
T = 14%  
V = 55 M.P.H.

FUNCTIONAL CLASSIFICATION-RURAL MINOR ARTERIAL

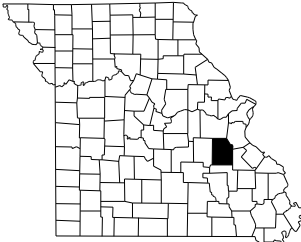
NO NEW R/W OR EASEMENTS  
TO BE ACQUIRED

CONVENTIONAL SYMBOLS  
(USED IN PLANS)

|                              | EXISTING | NEW   |
|------------------------------|----------|-------|
| BUILDINGS AND STRUCTURES     |          |       |
| GUARD RAIL                   |          |       |
| GUARD CABLE                  |          |       |
| CONCRETE RIGHT-OF-WAY MARKER |          |       |
| STEEL RIGHT-OF-WAY MARKER    |          |       |
| LOCATION SURVEY MARKER       |          |       |
| UTILITIES                    |          |       |
| FIBER OPTICS                 | -FO-     | -FO-  |
| OVERHEAD CABLE TV            | -OTV-    | -OTV- |
| UNDERGROUND CABLE TV         | -UTV-    | -UTV- |
| OVERHEAD TELEPHONE           | -OT-     | -OT-  |
| UNDERGROUND TELEPHONE        | -UT-     | -UT-  |
| OVERHEAD POWER               | -OE-     | -OE-  |
| UNDERGROUND POWER            | -UE-     | -UE-  |
| SANITARY SEWER               | -S-      | -S-   |
| STORM SEWER                  | -SS-     | -SS-  |
| GAS                          | -G-      | -G-   |
| WATER                        | -W-      | -W-   |
| MANHOLE                      |          |       |
| FIRE HYDRANT                 |          |       |
| WATER VALVE                  |          |       |
| WATER METER                  |          |       |
| DROP INLET                   |          |       |
| DITCH BLOCK                  |          |       |
| GROUND MOUNTED SIGN          |          |       |
| LIGHT POLE                   |          |       |
| H-FRAME POWER POLE           |          |       |
| TELEPHONE PEDESTAL           |          |       |
| FENCE                        |          |       |
| CHAIN LINK                   |          |       |
| WOVEN WIRE                   |          |       |
| GATE POST                    |          |       |
| BENCHMARK                    |          |       |

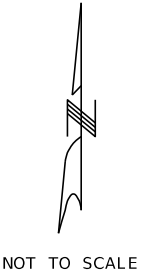
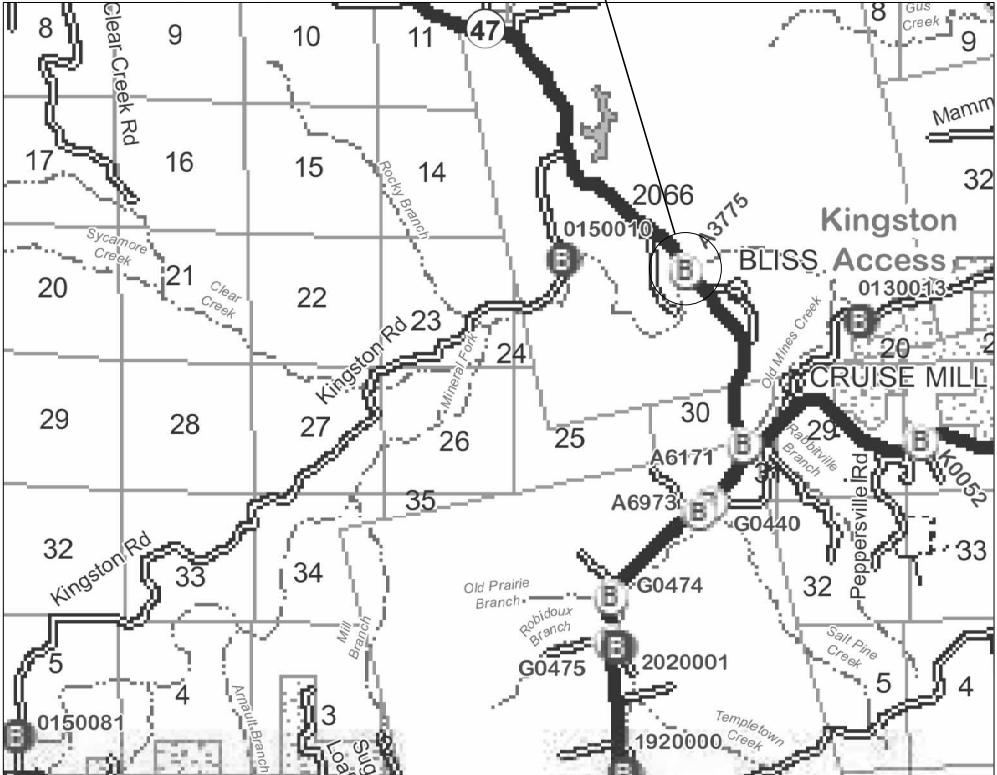
NOTE: DASHED OR OPEN SYMBOLS INDICATE  
EXISTING FEATURES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
PLANS FOR PROPOSED  
STATE HIGHWAY  
WASHINGTON COUNTY



KEY MAP  
LOCATION OF WASHINGTON COUNTY

PROJECT LIMITS BR A37751  
BRIDGE REHABILITATION,  
PAVING & STRIPING  
ROUTE 47  
STA. 522+18.42-STA. 531+29.17



INDEX OF SHEETS

| DESCRIPTION                         | SHEET<br>NUMBER |
|-------------------------------------|-----------------|
| TITLE SHEET -----                   | 1               |
| TYPICAL SECTIONS (TS) (1 SHEET)---- | 2               |
| QUANTITIES (QU) (2 SHEETS)-----     | 3               |
| PLAN-PROFILE (PP)-----              | 4               |
| SPECIAL SHEETS (SS)-----            | 5-6             |
| TRAFFIC CONTROL SHEETS (TC)-----    | 7-11            |
| PAVEMENT MARKING (PM)-----          | 12-14           |
| BRIDGE DRAWINGS (B)                 |                 |
| A37751-----                         | 1-6             |



THIS SHEET HAS BEEN  
SIGNED, SEALED AND DATED  
ELECTRONICALLY.

|                             |                |
|-----------------------------|----------------|
| DATE PREPARED<br>03/20/2024 |                |
| ROUTE<br>47                 | STATE<br>MO    |
| DISTRICT<br>CD              | SHEET NO.<br>1 |
| COUNTY<br>WASHINGTON        |                |
| JOB NO.<br>J5P3516          |                |
| CONTRACT ID.                |                |

PROJECT NO.  
  
BRIDGE NO.

| DESCRIPTION | DATE |
|-------------|------|
|             |      |
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LENGTH OF PROJECT

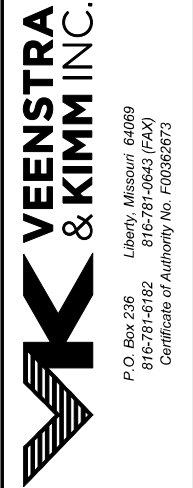
|                      |                  |
|----------------------|------------------|
| BEGINNING OF PROJECT | STA. 522 + 18.42 |
| END OF PROJECT       | STA. 531 + 29.17 |

APPARENT LENGTH 910.75 FEET

EQUATIONS AND EXCEPTIONS:

|                       |             |
|-----------------------|-------------|
| TOTAL CORRECTIONS     | 0.00 FEET   |
| NET LENGTH OF PROJECT | 910.75 FEET |
| STATE LENGTH          | 0.172 MILES |

FOR INFORMATION ONLY  
ESTIMATED DISTURBED ACRES 0 ACRES





| REMOVE/REINSTALL EXISTING GUARDRAIL |          |      |               |   |  |
|-------------------------------------|----------|------|---------------|---|--|
| STATION                             | LOCATION | SIDE | QUANTITY (LS) | REMARKS                                       |  |
| 523+88 TO 524+52                    | RTE 47   | LT   | -             | REMOVE/REINSTALL EXISTING GUARDRAIL AS NEEDED |  |
| 523+88 TO 524+52                    | RTE 47   | RT   | -             | REMOVE/REINSTALL EXISTING GUARDRAIL AS NEEDED |  |
| 528+99 TO 529+59                    | RTE 47   | LT   | -             | REMOVE/REINSTALL EXISTING GUARDRAIL AS NEEDED |  |
| 528+99 TO 529+59                    | RTE 47   | RT   | -             | REMOVE/REINSTALL EXISTING GUARDRAIL AS NEEDED |  |
| TOTAL                               |          |      | 1             |   |  |

| MOBILIZATION |   |
|--------------|---|
| LUMP SUM     | 1 |

| MODIFIED COLDMILLING (DEPTH TRANSITIONS) |          |               |                       |
|--|----------|---------------|-----------------------|
| STATION                                  | LOCATION | QUANTITY (SY) | REMARKS               |
| 523+88 TO 524+45                         | RTE 47   | 252.2         | 50' APPROACH PAVEMENT |
| 529+04 TO 529+59                         | RTE 47   | 242.8         | 50' APPROACH PAVEMENT |
| TOTAL                                    |          | 495.0         |                       |
| USE                                      |          | 495           |                       |

| 2" BITUMINOUS PAVEMENT MIXTURE PG 64-22 (BP-1) |          |           |            |                 |                                  |
|--|----------|-----------|------------|-----------------|----------------------------------|
| STATION  | LOCATION | AREA (SF) | PMBP (TON) | TACK COAT (GAL) | REMARKS                          |
| 523+88 TO 524+45                               | RTE 47   | 2270.4    | 27.3       | 25.2            | FINAL ROAD AND SHOULDERS         |
| 529+04 TO 529+59                               | RTE 47   | 2184.8    | 26.3       | 24.3            | FINAL ROAD AND SHOULDERS         |
| 522+18 TO BRIDGE APPROACH SLAB                 | RTE 47   | 1398.0    | 16.8       | 15.5            | 6' WIDE, PHASE 1 SHOULDER CONST. |
| BRIDGE APPROACH SLAB TO 531+29                 | RTE 47   | 1320.0    | 15.9       | 14.7            | 6' WIDE, PHASE 1 SHOULDER CONST. |
| 522+18 TO BRIDGE APPROACH SLAB                 | RTE 47   | 1320.0    | 15.9       | 14.7            | 6' WIDE, PHASE 2 SHOULDER CONST. |
| BRIDGE APPROACH SLAB TO 531+29                 | RTE 47   | 1374.0    | 16.5       | 15.3            | 6' WIDE, PHASE 2 SHOULDER CONST. |
| TACK = 0.10 GAL/SY                             |          | TOTAL     | 118.7      | 109.7           |                                  |
| BP-1 = 1.948 TONS/CY                           |          | USE       | 118.7      | 110             |                                  |

| 4" BITUMINOUS PAVEMENT MIXTURE PG 64-22 (BASE) |          |      |           |            |                                  |
|--|----------|------|-----------|------------|----------------------------------|
| STATION  | LOCATION | SIDE | AREA (SF) | PMBB (TON) | REMARKS                          |
| 522+18 TO BRIDGE APPROACH SLAB                 | RTE 47   | RT   | 1398.0    | 33.5       | 6' WIDE, PHASE 1 SHOULDER CONST. |
| BRIDGE APPROACH SLAB TO 531+29                 | RTE 47   | RT   | 1320.0    | 31.7       | 6' WIDE, PHASE 1 SHOULDER CONST. |
| 522+18 TO BRIDGE APPROACH SLAB                 | RTE 47   | LT   | 1320.0    | 31.7       | 6' WIDE, PHASE 2 SHOULDER CONST. |
| BRIDGE APPROACH SLAB TO 531+29                 | RTE 47   | LT   | 1374.0    | 33.0       | 6' WIDE, PHASE 2 SHOULDER CONST. |
| TOTAL  |          |      |           | 129.9      |                                  |
| BASE = 1.943 TONS/CY                           |          |      |           | 129.9      |                                  |

| PERMANENT PAVEMENT MARKING |          |       |  |   |   |
|----------------------------|----------|-------|--|---|---|
| STATION                    | LOCATION | SIDE  | 4" YELLOW WATERBORNE PAINT (TYPE P BEADS) (LF) | 4" WHITE WATERBORNE PAINT (TYPE P BEADS) (LF) | REMARKS                                     |
| 508+13 TO 545+34           | RTE 47   | CL RD | 930  |   | 3721 LF INTERMITTENT CENTERLINE (10' & 30') |
| 521+78 TO 531+69           | RTE 47   | LT/RT |  | 1982  | SOLID EDGE LINES                            |
| TOTAL                      |          |       | 930  | 1982  |   |

| PAVEMENT MARKING REMOVAL |          |       |               |   |
|--------------------------|----------|-------|---------------|---|
| STATION                  | LOCATION | SIDE  | QUANTITY (LF) | REMARKS   |
| 521+78 TO 531+69         | RTE 47   | RT    | 991           | PHASE 2-4" WHITE EDGE LINE                          |
| 521+78 TO 523+88         | RTE 47   | LT    | 210           | PHASE 2-4" WHITE EDGE LINE                          |
| 529+59 TO 531+69         | RTE 47   | LT    | 210           | PHASE 2-4" WHITE EDGE LINE                          |
| 508+13 TO 523+88         | RTE 47   | CL RD | 394           | PHASE 2-1575 LF INTERMITTENT CENTERLINE (10' & 30') |
| 529+59 TO 545+34         | RTE 47   | CL RD | 394           | PHASE 2-1575 LF INTERMITTENT CENTERLINE (10' & 30') |
| TOTAL                    |          |       | 2199          |   |

| SHAPING SLOPES, CLASS III |          |      |                   |                        |
|---------------------------|----------|------|-------------------|------------------------|
| STATION                   | LOCATION | SIDE | QUANTITY (100 FT) | REMARKS                |
| 522+89 TO 524+63          | RTE 47   | RT   | 1.7               | GUARDRAIL INSTALLATION |
| 529+03 TO 530+82          | RTE 47   | RT   | 1.8               | GUARDRAIL INSTALLATION |
| 522+69 TO 524+49          | RTE 47   | LT   | 1.8               | GUARDRAIL INSTALLATION |
| 528+89 TO 530+68          | RTE 47   | LT   | 1.8               | GUARDRAIL INSTALLATION |
| TOTAL                     |          |      | 7.1               |                        |
| TOTAL                     |          |      | 8                 |                        |

| TEMPORARY PAVEMENT MARKING                                      |          |       |                              |                      |                                       |
|---|----------|-------|------------------------------|----------------------|---------------------------------------|
| STATION   | LOCATION | SIDE  | 24" WHITE MARKING PAINT (LF) | 4" YELLOW PAINT (LF) | REMARKS                               |
| 515+38 TO 538+09  | RTE 47   | CL RD |                              | 2271                 | PHASE 2 - TEMPORARY EDGE LINE         |
| 521+78 TO 531+69  | RTE 47   | RT    |                              | 991                  | PHASE 2 - TEMPORARY EDGE LINE         |
| 515+38 TO 538+09  | RTE 47   | CL RD |                              | 1231                 | PHASE 3 - TEMPORARY EDGE LINE         |
| 521+78 TO 531+69  | RTE 47   | LT    |                              | 991                  | PHASE 3 - TEMPORARY EDGE LINE         |
| 508+13 TO 513+13  | RTE 47   | CL RD |                              | 1000                 | PHASE 2 - DOUBLE TEMPORARY CENTERLINE |
| 540+34 TO 545+34  | RTE 47   | CL RD |                              | 1000                 | PHASE 2 - DOUBLE TEMPORARY CENTERLINE |
| 513+13  | RTE 47   | RT    | 12                           |                      | PHASE 2 - STOP BAR                    |
| 540+34  | RTE 47   | LT    | 12                           |                      | PHASE 2 - STOP BAR                    |
| TOTAL   |          |       | 24                           | 7484                 |                                       |
| NOTE: NO DIRECT PAY FOR REMOVAL OF TEMPORARY PAVEMENT MARKINGS. |          |       |                              |                      |                                       |

| TYPE 1 AGGREGATE FOR BASE (4 IN. THICK) |          |      |               |               |
|---|----------|------|---------------|---------------|
| STATION                                 | LOCATION | SIDE | QUANTITY (SY) | REMARKS       |
| 522+18 TO BRIDGE APPROACH SLAB          | RTE 47   | RT   | 155           | SHOULDER BASE |
| BRIDGE APPROACH SLAB TO 531+29          | RTE 47   | RT   | 147           | SHOULDER BASE |
| 522+18 TO BRIDGE APPROACH SLAB          | RTE 47   | LT   | 147           | SHOULDER BASE |
| BRIDGE APPROACH SLAB TO 531+29          | RTE 47   | LT   | 153           | SHOULDER BASE |
| TOTAL                                   |          |      | 602           |               |

| SUBGRADE COMPACTION (6-INCH DEPTH) |          |      |                   |                       |
|------------------------------------|----------|------|-------------------|-----------------------|
| STATION                            | LOCATION | SIDE | QUANTITY (100 FT) | REMARKS               |
| 522+18 TO BRIDGE APPROACH SLAB     | RTE 47   | RT   | 2.3               | SHOULDER CONSTRUCTION |
| BRIDGE APPROACH SLAB TO 531+29     | RTE 47   | RT   | 2.2               | SHOULDER CONSTRUCTION |
| 522+18 TO BRIDGE APPROACH SLAB     | RTE 47   | LT   | 2.2               | SHOULDER CONSTRUCTION |
| BRIDGE APPROACH SLAB TO 531+29     | RTE 47   | LT   | 2.3               | SHOULDER CONSTRUCTION |
| TOTAL                              |          |      | 9.0               |                       |
| TOTAL                              |          |      | 9                 |                       |

| SUBGRADE SCARIFYING            |          |      |                   |                       |
|--------------------------------|----------|------|-------------------|-----------------------|
| STATION                        | LOCATION | SIDE | QUANTITY (100 FT) | REMARKS               |
| 522+18 TO BRIDGE APPROACH SLAB | RTE 47   | RT   | 2.3               | SHOULDER CONSTRUCTION |
| BRIDGE APPROACH SLAB TO 531+29 | RTE 47   | RT   | 2.2               | SHOULDER CONSTRUCTION |
| 522+18 TO BRIDGE APPROACH SLAB | RTE 47   | LT   | 2.2               | SHOULDER CONSTRUCTION |
| BRIDGE APPROACH SLAB TO 531+29 | RTE 47   | LT   | 2.3               | SHOULDER CONSTRUCTION |
| TOTAL                          |          |      | 9.0               |                       |
| TOTAL                          |          |      | 9                 |                       |

| REMOVAL OF IMPROVEMENTS       |          |       |               |                               |
|-------------------------------|----------|-------|---------------|-------------------------------|
| STATION                       | LOCATION | SIDE  | QUANTITY (LS) | REMARKS                       |
| 524+45 TO 524+65              | RTE 47   | LT/RT | -             | REMOVE EXISTING APPROACH SLAB |
| 528+84 TO 529+04              | RTE 47   | LT/RT | -             | REMOVE EXISTING APPROACH SLAB |
| 522+18 TO B.A.S.              | RTE 47   | LT/RT | -             | REMOVE EXISTING SHOULDER      |
| B.A.S. TO 531+29              | RTE 47   | LT/RT | -             | REMOVE EXISTING SHOULDER      |
| TOTAL                         |          |       | 1             |                               |
| B.A.S. (BRIDGE APPROACH SLAB) |          |       |               |                               |

SUMMARY OF QUANTITIES  
SHEET 1 OF 2



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED  
03/20/2024

ROUTE 47  
STATE MO  
DISTRICT CD  
SHEET NO. 3

COUNTY  
WASHINGTON

JOB NO.  
JSP3516

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DESCRIPTION | DATE    | MODIFICATIONS |
|-------------|---------|---------------|
|             | 3/13/24 |               |
|             |         |               |
|             |         |               |
|             |         |               |
|             |         |               |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

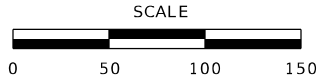


| SIGN                            | SIZE<br>IN. | AREA<br>SQ. FT. | QTY<br>EACH | TOTAL<br>SQ. FT. | QTY<br>RELOC<br>EACH | TOTAL<br>RELOC<br>SQ. FT. | SIGN<br>NUM. | DESCRIPTION  |
|---------------------------------|-------------|-----------------|-------------|------------------|----------------------|---------------------------|--------------|--|
| GUIDE SIGNS                     |             |                 |             |                  |                      |                           |              |  |
| E05-1                           | 36X48       | 12.00           |             |                  |                      |                           |              | GORE EXIT  |
| E05-2                           | 48X36       | 12.00           |             |                  |                      |                           |              | EXIT OPEN  |
| E05-2a                          | 48X36       | 12.00           |             |                  |                      |                           |              | EXIT CLOSED  |
| GO20-1                          | 60X24       | 10.00           |             |                  |                      |                           |              | ROAD WORK NEXT XX MILES                            |
| GO20-2                          | 48X24       | 8.00            | 2           | 16.00            |                      |                           | 26           | END ROAD WORK                                      |
| GO20-4                          | 36X18       | 4.50            |             |                  |                      |                           |              | PILOT CAR FOLLOW ME                                |
| GO20-4a                         | 42X30       | 8.75            |             |                  |                      |                           |              | PILOT CAR IN USE WAIT & FOLLOW                     |
| GO20-4a                         | 18X12       | 1.50            |             |                  |                      |                           |              | PILOT CAR IN USE WAIT & FOLLOW                     |
| GO20-5aP                        | 36X24       | 6.00            |             |                  |                      |                           |              | WORK ZONE (PLAQUE)                                 |
| MO4-8a                          | 24X18       | 3.00            |             |                  |                      |                           |              | END DETOUR   |
| MO4-9L                          | 48X36       | 12.00           |             |                  |                      |                           |              | DETOUR (LEFT)                                      |
| MO4-9R                          | 48X36       | 12.00           |             |                  |                      |                           |              | DETOUR (RIGHT)                                     |
| MO4-9P                          | 48X12       | 4.00            |             |                  |                      |                           |              | STREET NAME (PLAQUE)                               |
| MO4-10L                         | 48X18       | 6.00            |             |                  |                      |                           |              | DETOUR ARROW (LEFT)                                |
| MO4-10R                         | 48X18       | 6.00            |             |                  |                      |                           |              | DETOUR ARROW (RIGHT)                               |
| REGULATORY SIGNS                |             |                 |             |                  |                      |                           |              |  |
| R1-1                            | 48X48       | 13.25           |             |                  |                      |                           |              | STOP   |
| R1-2                            | 48TRI       | 6.93            |             |                  |                      |                           |              | YIELD  |
| R1-2a                           | 36X36       | 9.00            |             |                  |                      |                           |              | TO ONCOMING TRAFFIC (PLAQUE)                       |
| R2-1                            | 36X48       | 12.00           | 2           | 24.00            | 2                    | 24.00                     | 4            | SPEED LIMIT 45                                     |
| R2-1                            | 36X48       | 12.00           | 2           | 24.00            | 2                    | 24.00                     | 25           | SPEED LIMIT 55 (NORMAL SPEED)                      |
| R3-1                            | 48X48       | 16.00           |             |                  |                      |                           |              | NO RIGHT TURN (SYMBOL)                             |
| R3-2                            | 48X48       | 16.00           |             |                  |                      |                           |              | NO LEFT TURN (SYMBOL)                              |
| R3-3                            | 36X36       | 9.00            |             |                  |                      |                           |              | NO TURNS   |
| R3-4                            | 48X48       | 16.00           |             |                  |                      |                           |              | NO U-TURN (SYMBOL)                                 |
| R3-7L                           | 30X30       | 6.25            |             |                  |                      |                           |              | LEFT LANE MUST TURN LEFT                           |
| R3-7R                           | 30X30       | 6.25            |             |                  |                      |                           |              | RIGHT LANE MUST TURN RIGHT                         |
| R4-1                            | 36X48       | 12.00           |             |                  |                      |                           |              | DO NOT PASS  |
| R4-2                            | 36X48       | 12.00           |             |                  |                      |                           |              | PASS WITH CARE                                     |
| R4-7a                           | 36X48       | 12.00           |             |                  |                      |                           |              | KEEP RIGHT (HORIZONTAL ARROW)                      |
| R4-8a                           | 36X48       | 12.00           |             |                  |                      |                           |              | KEEP LEFT (HORIZONTAL ARROW)                       |
| R5-1                            | 30X30       | 6.25            |             |                  |                      |                           |              | DO NOT ENTER                                       |
| R5-1a                           | 36X24       | 6.00            |             |                  |                      |                           |              | WRONG WAY  |
| R6-1L                           | 54X18       | 6.75            |             |                  |                      |                           |              | ONE WAY ARROW (LEFT)                               |
| R6-1R                           | 54X18       | 6.75            |             |                  |                      |                           |              | ONE WAY ARROW (RIGHT)                              |
| R6-2L                           | 24X30       | 5.00            |             |                  |                      |                           |              | ONE WAY (LEFT)                                     |
| R6-2R                           | 24X30       | 5.00            |             |                  |                      |                           |              | ONE WAY (RIGHT)                                    |
| R9-9                            | 24X12       | 2.00            |             |                  |                      |                           |              | SIDEWALK CLOSED                                    |
| R9-11L                          | 24X18       | 3.00            |             |                  |                      |                           |              | SIDEWALK CLOSED AHEAD,<br>(ARROW LEFT) CROSS HERE  |
| R9-11R                          | 24X18       | 3.00            |             |                  |                      |                           |              | SIDEWALK CLOSED AHEAD,<br>(ARROW RIGHT) CROSS HERE |
| R10-6                           | 24X36       | 6.00            | 2           | 12.00            |                      |                           | 47           | STOP HERE ON RED (45° ARROW)                       |
| R11-2                           | 48X30       | 10.00           |             |                  |                      |                           |              | ROAD CLOSED  |
| R11-3a                          | 60X30       | 12.50           |             |                  |                      |                           |              | ROAD CLOSED XX MILES AHEAD<br>LOCAL TRAFFIC ONLY   |
| R11-4                           | 60X30       | 12.50           |             |                  |                      |                           |              | ROAD CLOSED TO THRU TRAFFIC                        |
| CONST-3A                        | 60X48       | 20.00           |             |                  |                      |                           |              | FINE SIGN  |
| CONST-3X                        | 56X12       | 4.67            |             |                  |                      |                           |              | SPEEDING/PASSING (PLATE)                           |
| MISCELLANEOUS SIGNS             |             |                 |             |                  |                      |                           |              |  |
| CONST-5                         | 48X36       | 12.00           | 2           | 6.70             |                      |                           | 68           | POINT OF PRESENCE                                  |
| CONST-5                         | 96X48       | 32.00           | 2           | 64.00            |                      |                           | 68           | POINT OF PRESENCE                                  |
| CONST-7                         | 48X24       | 8.00            |             |                  |                      |                           |              | RATE OUR WORK ZONE                                 |
| CONST-7                         | 72X36       | 18.00           | 2           | 36.00            | 4                    | 72.00                     | 69           | RATE OUR WORK ZONE                                 |
| CONST-8                         | 48X36       | 12.00           | 2           | 24.00            | 4                    | 48.00                     | 70           | WORK ZONE NO PHONE ZONE                            |
| SPECIAL                         | 48X48       | 16.00           | 2           | 32.00            | 2                    | 32.00                     | 71           | RUMBLE STRIPS AHEAD                                |
|                                 |             |                 |             |                  |                      |                           |              |  |
|                                 |             |                 |             |                  |                      |                           |              |  |
|                                 |             |                 |             |                  |                      |                           |              |  |
|                                 |             |                 |             |                  |                      |                           |              |  |
|                                 |             |                 |             |                  |                      |                           |              |  |
|                                 |             |                 |             |                  |                      |                           |              |  |
| 616-10.05<br>CONSTRUCTION SIGNS |             |                 |             | TOTAL<br>516     |                      |                           |              |  |
| 616-10.10<br>RELOCATED SIGNS    |             |                 |             |                  | TOTAL<br>381         |                           |              |  |

SUMMARY OF QUANTITIES  
SHEET 2 OF 2







THIS SHEET HAS BEEN  
SIGNED, SEALED AND DATED  
ELECTRONICALLY.

DATE PREPARED  
03/20/2024

|             |             |
|-------------|-------------|
| ROUTE<br>47 | STATE<br>MO |
|-------------|-------------|

|          |           |
|----------|-----------|
| DISTRICT | SHEET NO. |
| CD       | 4         |

COUNTY  
WASHINGTON

JOB NO.  
J5P3516

|              |
|--------------|
| CONTRACT ID. |
|--------------|

|             |
|-------------|
| PROJECT NO. |
|-------------|

BRIDGE NO.

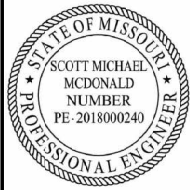
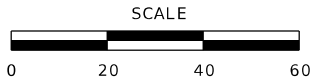
[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



**VEENSTRA  
& KIM INC.**

P.O. Box 236  
Liberty, Missouri 64069  
816-781-6182 816-781-0643 (FAX)  
Certificate of Authority No. F00362673



THIS SHEET HAS BEEN  
SIGNED, SEALED AND DATED  
ELECTRONICALLY.

DATE PREPARED  
03/20/2024

|             |             |
|-------------|-------------|
| ROUTE<br>47 | STATE<br>MO |
|-------------|-------------|

|          |           |
|----------|-----------|
| DISTRICT | SHEET NO. |
| CD       | 5         |

COUNTY  
WASHINGTON

JOB NO.  
J5P3516

|              |
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| CONTRACT ID. |
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| PROJECT NO. |
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| BRIDGE NO. |
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[illegible]

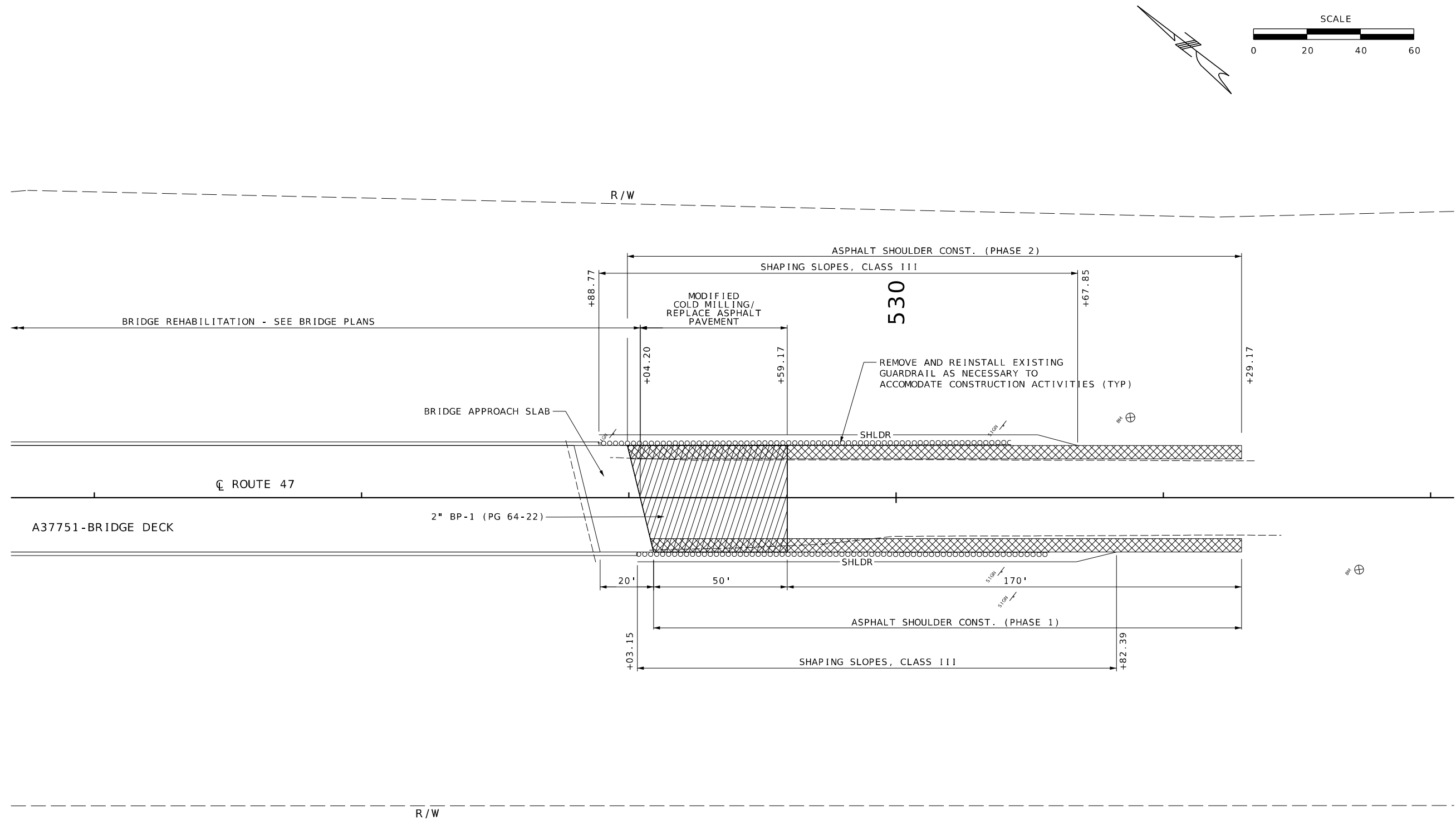
MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

**MoDOT**

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

**VEENSTRA & KIMM INC.**  
P.O. Box 236    Liberty, Missouri 64069  
816-781-0612    816-781-0643 (FAX)  
Certificate of Authority No. F00362673

SPECIAL SHEET  
SHEET 1 OF 2



|               |
|---------------|
| DATE PREPARED |
|---------------|


|             |             |
|-------------|-------------|
| ROUTE<br>47 | STATE<br>MO |
|-------------|-------------|

COUNTY  
WASHINGTON

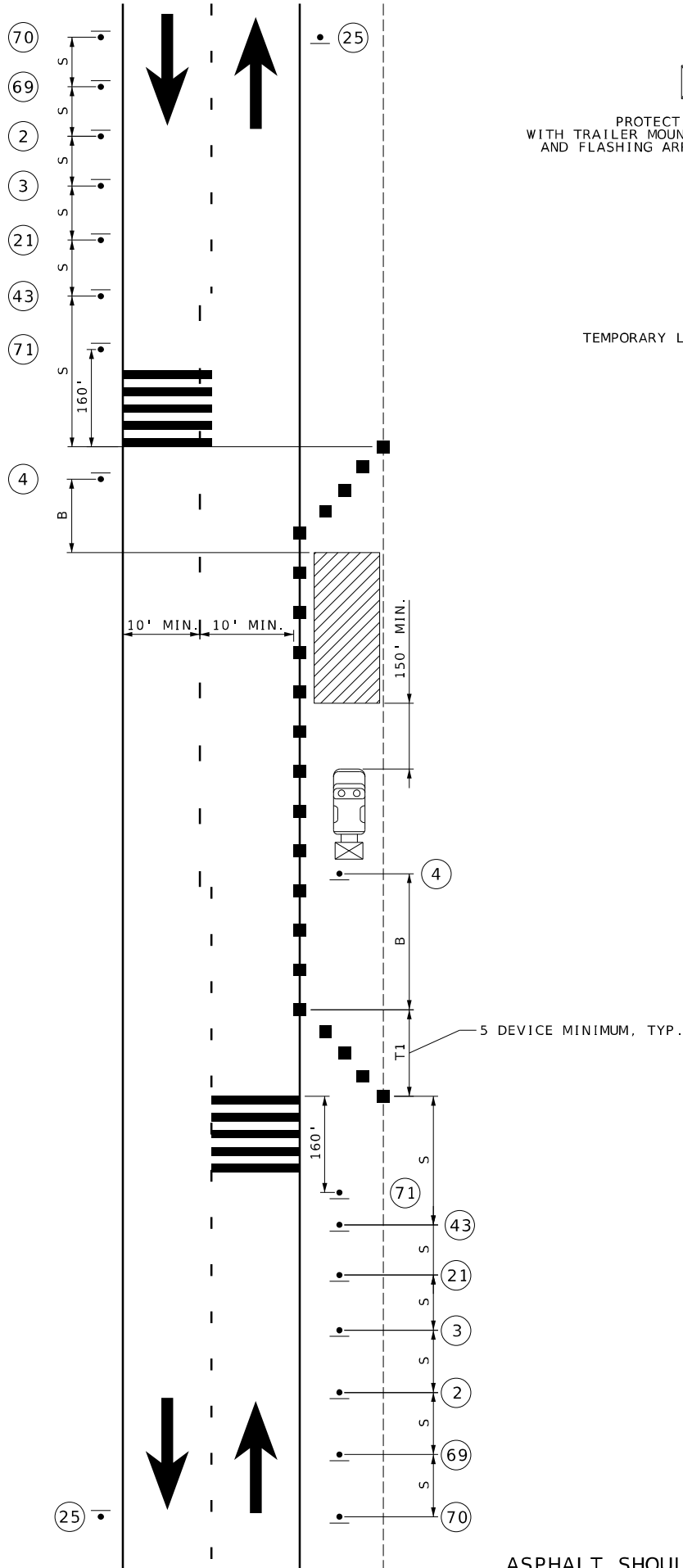
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| CONTRACT ID. |
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| PROJECT NO. |
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|------------|
| BRIDGE NO. |
|------------|

[illegible]

**VEENSTRA  
& KIMM INC.**



PROTECTIVE VEHICLE (REQUIRED)  
WITH TRAILER MOUNTED ATTENUATOR (TMA) (OPTIONAL)  
AND FLASHING ARROW PANNEL (F.A.P.) (OPTIONAL)

CHANNELIZERS

TEMPORARY LONG-TERM RUMBLE STRIPS

| SHOULDER WORK WITH MINOR ENCROACHMENT |                    |                    |               |                         |                           |                     |
|---------------------------------------|--------------------|--------------------|---------------|-------------------------|---------------------------|---------------------|
| SPEED                                 | SIGN SPACING (FT.) | TAPER LENGTH (FT.) |               | RECOMMENDED             | CHANNELIZER SPACING (FT.) |                     |
| PERMANENT POSTED (MPH)                | UNDIVIDED (S)      | SHOULDER (1) (T1)  | LANE (2) (T2) | BUFFER LENGTH (FT.) (B) | TAPERS                    | BUFFER / WORK AREAS |
| 0-35                                  | 200                | 70                 | -             | 250                     | 35                        | 40                  |
| 40-45                                 | 350                | 150                | -             | 360                     | 40                        | 80                  |
| 50-55                                 | 500                | 185                | -             | 495                     | 50                        | 80                  |
| 60-70                                 | 1000               | 235                | -             | 730                     | 60                        | 120                 |

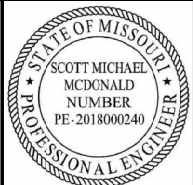
1. SHOULDER TAPER LENGTH BASED ON 10 FT. (STANDARD SHOULDER WIDTH) OFFSET.

2. LANE TAPER LENGTH BASED ON 12 FT. (STANDARD LANE WIDTH) OFFSET.

NOTE:

TEMPORARY LONG-TERM RUMBLE STRIPS SHALL CONSISTS OF 5 STRIPS SEPARATED AT 10-12 FEET ON CENTER.

FLASHING ARROW PANELS SHALL BE INCIDENTAL TO TRUCK MOUNTED ATTENUATORS WHENEVER USED NO ADDITIONAL PAYEMENT SHALL BE MADE.



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED  
03/20/2024

|          |           |
|----------|-----------|
| ROUTE    | STATE     |
| 47       | MO        |
| DISTRICT | SHEET NO. |
| CD       | 7         |

COUNTY  
WASHINGTON

JOB NO.  
J5P3516

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

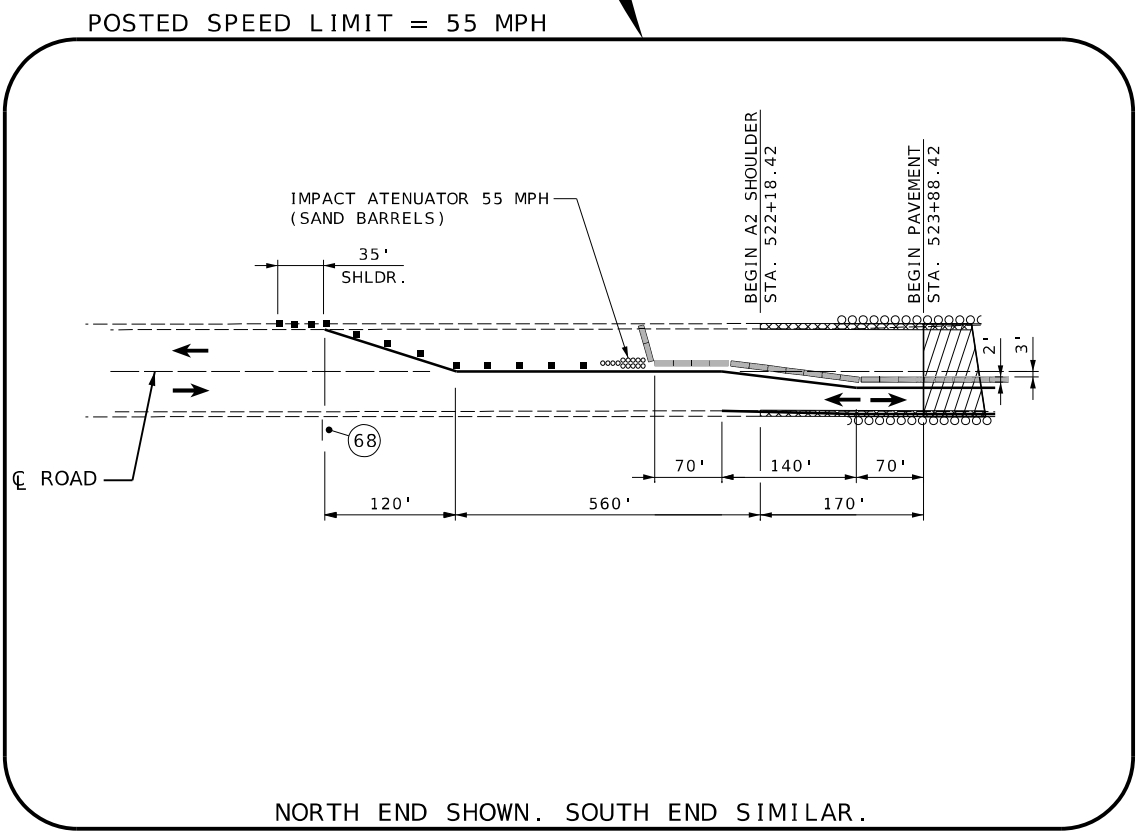
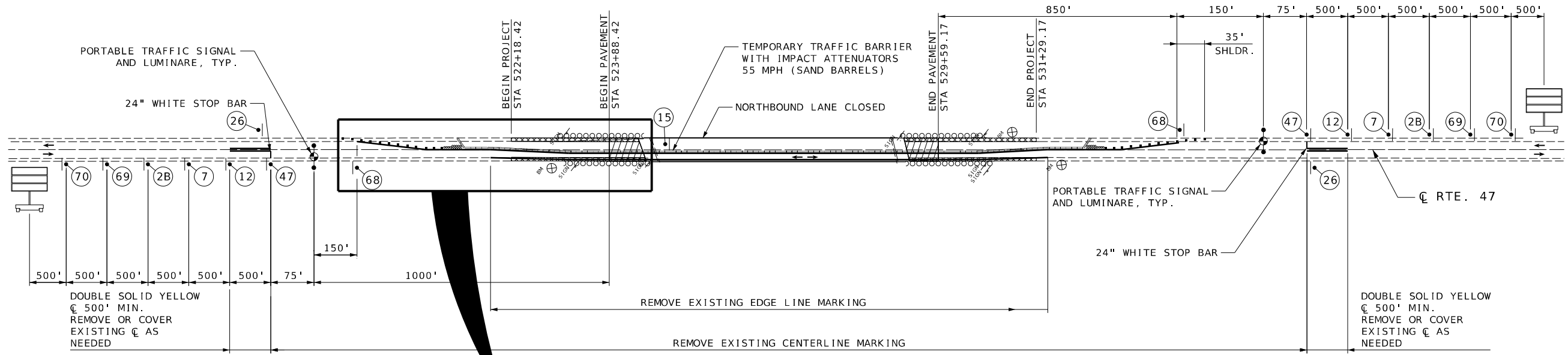
| DESCRIPTION | DATE |
|-------------|------|
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|             |      |
|             |      |
|             |      |
|             |      |
|             |      |
|             |      |
|             |      |

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

**VEENSTRA & KIMM INC.**

Liberty, Missouri 64069  
P.O. Box 236 816-781-6182 816-781-0643 (FAX)  
Certificate of Authority No. F00362673



NOTES:

FOR PAVEMENT MARKING DETAILS, SEE PAVEMENT MARKING SHEETS.

FOR CHANNELIZER SPACING, SEE TRAFFIC CONTROL SHEET 5.

FOR BARRIER CURB LOCATION, SEE TYPICAL SECTION SHEET.

ALL DISTANCES AND SPACING OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE AND MAY BE REVISED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

PHASE 2  
TRAFFIC CONTROL SHEETS  
SHEET 2 OF 5

NOT TO SCALE. FOLLOW DIMENSIONS.

STATE OF MISSOURI  
SCOTT MICHAEL  
MCDONALD  
NUMBER  
PE-2018000240  
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN  
SIGNED, SEALED AND DATED  
ELECTRONICALLY.

DATE PREPARED  
03/20/2024

ROUTE  
47

STATE  
MO

DISTRICT  
CD

SHEET NO.  
8

COUNTY  
WASHINGTON

JOB NO.  
J5P3516

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

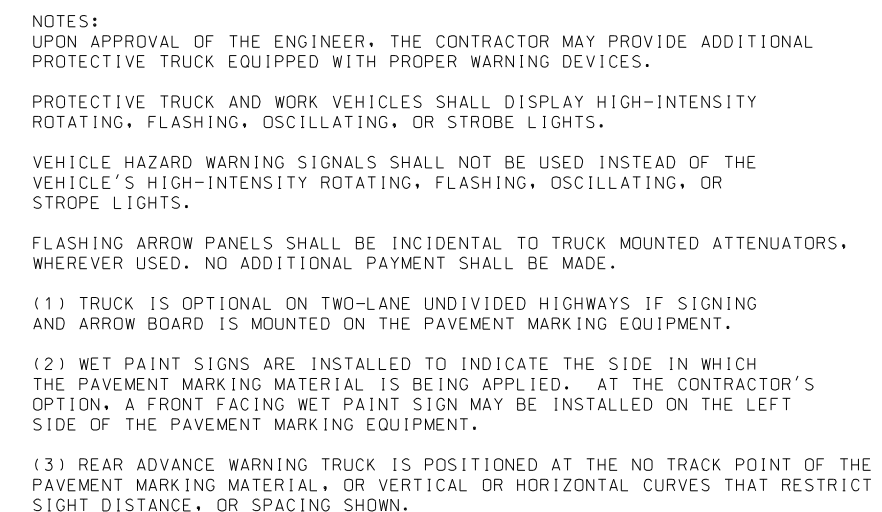
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MODOT

VEENSTRA  
& KIMM INC.

P.O. Box 236  
Liberty, Missouri 64069  
816-781-6182 816-781-0643 (FAX)  
Certificate of Authority No. F00362673





TRAFFIC CONTROL LEGEND

- PROPOSED SIGN (SINGLE SIDED)
- EXISTING SIGN (SINGLE SIDED)
- CHANNELIZER
- TYPE III MOVEABLE BARRICADE
- SEQUENTIAL FLASHING WARNING LIGHT
- TEMPORARY CONCRETE TRAFFIC BARRIER (TYPE F)
- IMPACT ATTENUATOR 55 MPH (SAND BARRELS)
- PORTABLE TRAFFIC SIGNAL AND LUMINAIRE
- VEHICLE WITH TRAILER MOUNTED ATTENUATOR
- CHANGEABLE MESSAGE BOARD
- TEMPORARY LONG-TERM RUMBLE STRIPS

| LANE CLOSURE ON TWO-LANE HIGHWAYS USING TRAFFIC CONTROL SIGNALS |                    |             |                    |               |                         |                           |                    |
|---|--------------------|-------------|--------------------|---------------|-------------------------|---------------------------|--------------------|
| SPEED   | SIGN SPACING (FT.) |             | TAPER LENGTH (FT.) |               | RECOMMENDED             | CHANNELIZER SPACING (FT.) |                    |
| PERMANENT POSTED (MPH)  | UNDIVIDED (S)      | DIVIDED (S) | SHOULDER (1) (T1)  | LANE (2) (T2) | BUFFER LENGTH (FT.) (B) | TAPERS                    | BUFFER/ WORK AREAS |
| 0-35  | 200                | -           | 35                 | 100           | 280                     | 25                        | 40                 |
| 40-45   | 350                | -           | 35                 | 100           | 400                     | 25                        | 80                 |
| 50-55   | 500                | -           | 35                 | 100           | 560                     | 25                        | 80                 |
| 60-70   | 1000               | -           | 35                 | 100           | 840                     | 25                        | 120                |

1. SHOULDER TAPER LENGTH BASED ON 10 FT. (STANDARD SHOULDER WIDTH) OFFSET.

2. LANE TAPER LENGTH BASED ON 12 FT. (STANDARD LANE WIDTH) OFFSET.

NOTES:

ANY EXISTING WARNING OR REGULATORY SIGNS (NOT SHOWN) THAT INTEREFERE WITH THE TRAFFIC CONTROL SIGNING SHALL BE REMOVED OR COMPLETELY COVERED.

ALL TRAFFIC CONTROL SIGNS ARE TO BE NON-PORTABLE UNLESS NOTED OTHERWISE.

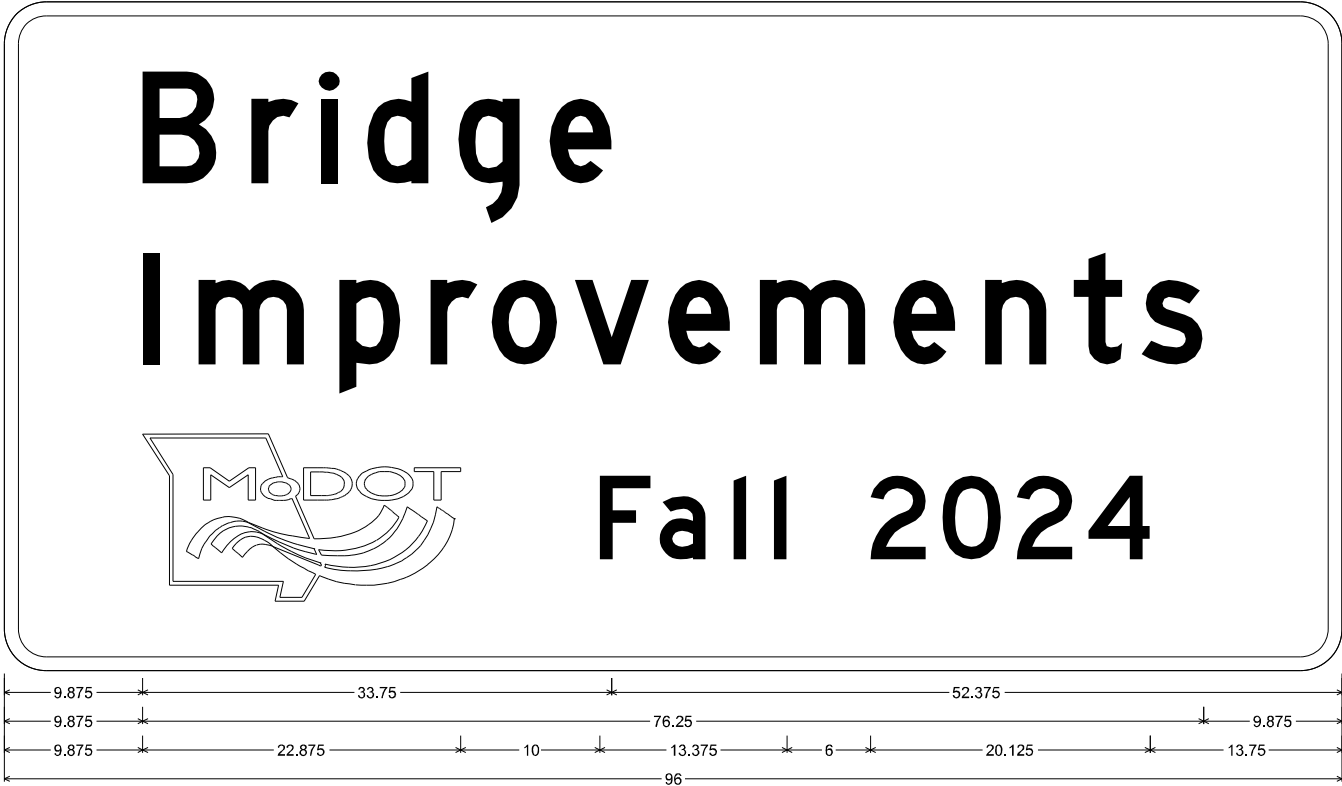
MODIFICATIONS TO EXISTING SIGN LEGENDS MAY INCLUDE REMOVAL, COVERING AND UNCOVERING OF LEGENDS. NO DIRECT PAY WILL BE MADE FOR THE LABOR OR MATERIALS REQUIRED TO MAKE THESE MODIFICATIONS.

ALL SPACING AND DISTANCES SHOWN ARE APPROXIMATE. DISTANCES MAY BE ADJUSTED BY THE ENGINEER TO ACCOMODATE SPECIFIC FIELD CONDITIONS.

SEE STANDARD PLAN DRAWINGS 616.10, 903.02, AND 903.03 FOR ADDITIONAL DETAILS REGARDING TRAFFIC CONTROL AND HIGHWAY SIGNING.

"POINT OF PRESENCE" SIGN 68 TO BE FURNISHED BY BY THE CONTRACTOR.

ALL RELOCATED TRAFFIC SIGNS ARE TO BE NON-PORTABLE UNLESS NOTED OTHERWISE. EXISTING POST(S) & MOUNTINGS MAY BE USED FOR TEMPORARY SIGN RELOCATIONS.

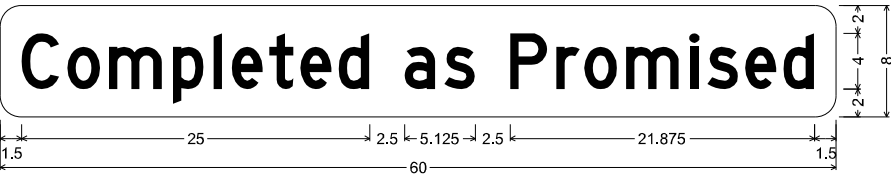


CONST-5-96 SH-FLAT SHEET;  
3.000" Radius, 1.000" Border, White on, Blue;  
"Bridge", D; "Improvements", D; "Fall 2024", D;  
Table of letter and object lefts

|       |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|
| B     | r      | l      | d      | g      | e      |
| 9.875 | 17.750 | 22.750 | 26.000 | 32.625 | 39.125 |

|       |        |        |        |        |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| l     | m      | p      | r      | o      | v      | e      | m      | e      | n      | t      | s      |
| 9.875 | 14.000 | 24.000 | 30.625 | 35.000 | 41.000 | 47.625 | 54.250 | 63.750 | 70.375 | 76.750 | 81.625 |

|       |        |        |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|
| F     | a      | l      | l      | 2      | 0      | 2      | 4      |
| 9.875 | 42.750 | 47.000 | 52.375 | 55.250 | 62.125 | 67.375 | 77.875 |

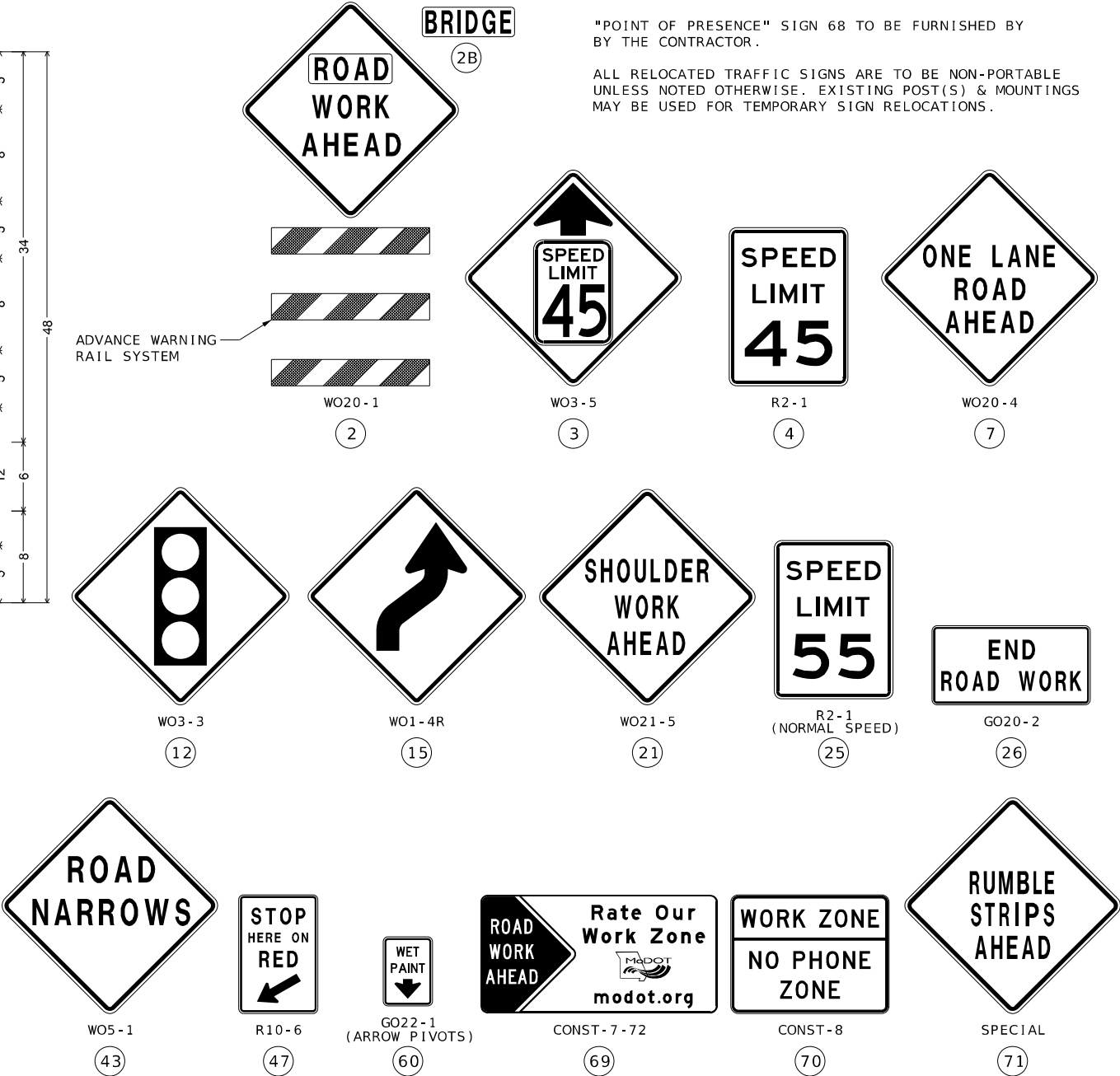


CONST-5P-60 SHF-FLAT SHEET FLUORESCENT;  
1.500" Radius, No border, Yellow;  
"Completed as Promised" Black, D 65% spacing;  
Table of letter and object lefts

|       |       |       |        |        |        |        |        |        |        |        |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| C     | o     | m     | p      | l      | e      | t      | e      | d      | a      | s      |
| 1.500 | 4.875 | 7.875 | 12.375 | 15.375 | 16.625 | 19.375 | 21.500 | 24.250 | 29.000 | 31.875 |

|        |        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|--------|
| P      | r      | o      | m      | i      | s      | e      | d      |
| 36.625 | 39.875 | 41.875 | 44.875 | 49.500 | 50.750 | 53.500 | 56.250 |

68 (2 SIGNS)



STATE OF MISSOURI  
SCOTT MICHAEL MCDONALD  
NUMBER PE-2018000240  
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED  
03/20/2024

ROUTE  
47

STATE  
MO

DISTRICT  
CD

SHEET NO.  
11

COUNTY  
WASHINGTON

JOB NO.  
J5P3516

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MODOT

VEENSTRA & KIMM INC.

Liberty, Missouri 64069  
P.O. Box 236  
816-781-0643 (FAX)  
Certificate of Authority No. F00362673



SEE TRAFFIC CONTROL PLANS FOR THE ASSUMED PROJECT PHASING. CONTRACTOR MAY REVISE PHASING ONLY OPEN APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLY FOR MODIFYING THE TRAFFIC CONTROL AND PAVEMENT MARKING PLANS ACCORDINGLY. NO DIRECT PAY.

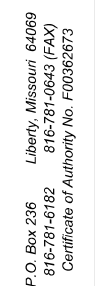
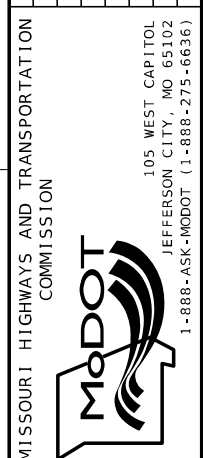
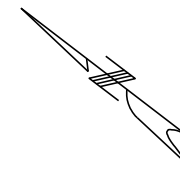


**VEENSTRA & KIMM INC.**  
P.O. Box 236 Liberty, Missouri 64069  
816-781-6182 816-781-0643 (FAX)  
Certificate of Authority No. F00362673

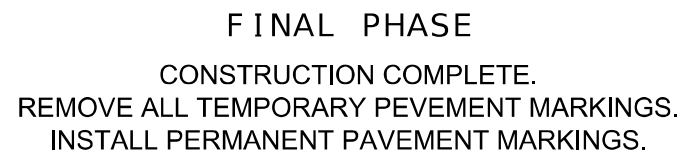
SEE TRAFFIC CONTROL PLANS FOR THE ASSUMED PROJECT PHASING. CONTRACTOR MAY REVISE PHASING ONLY OPEN APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLY FOR MODIFYING THE TRAFFIC CONTROL AND PAVEMENT MARKING PLANS ACCORDINGLY. NO DIRECT PAY.



PHASE 3  
PAVEMENT MARKING  
SHEET 2 OF 3



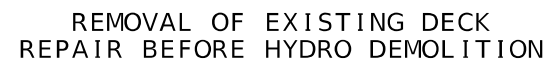
SEE TRAFFIC CONTROL PLANS FOR THE ASSUMED PROJECT PHASING. CONTRACTOR MAY REVISE PHASING ONLY OPEN APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLY FOR MODIFYING THE TRAFFIC CONTROL AND PAVEMENT MARKING PLANS ACCORDINGLY. NO DIRECT PAY.



NOT TO SCALE. FOLLOW DIMENSIONS.



P.O. Box 236  
Liberty, Missouri 64069  
816-781-6182 816-781-0643 (FAX)  
Certificate of Authority No. F00362673

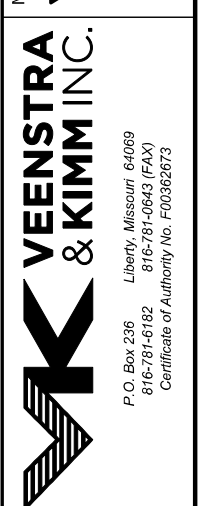


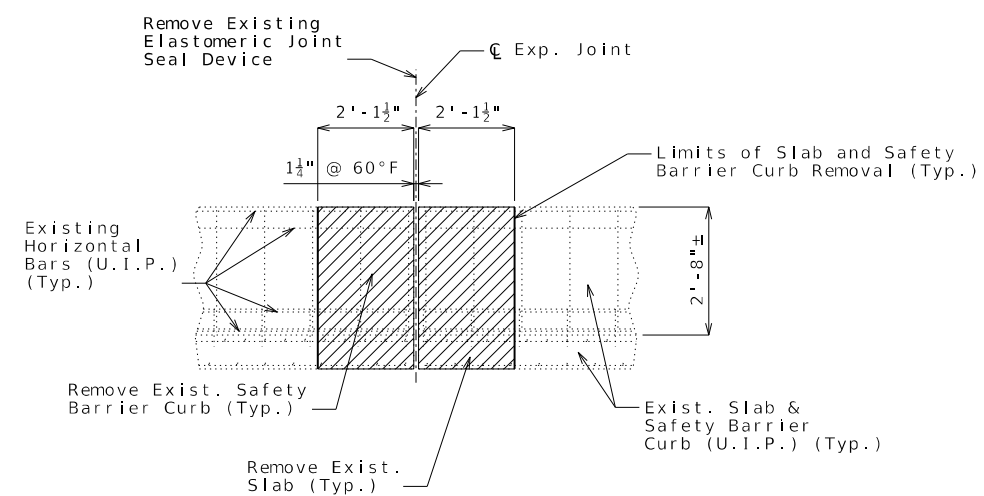
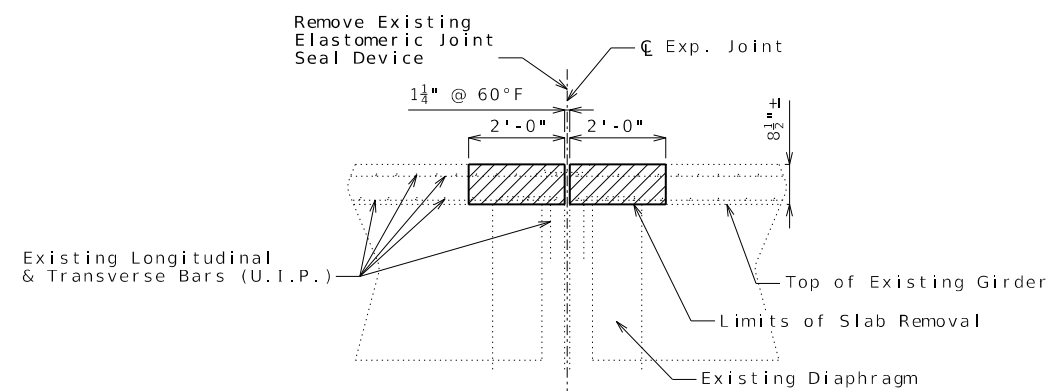
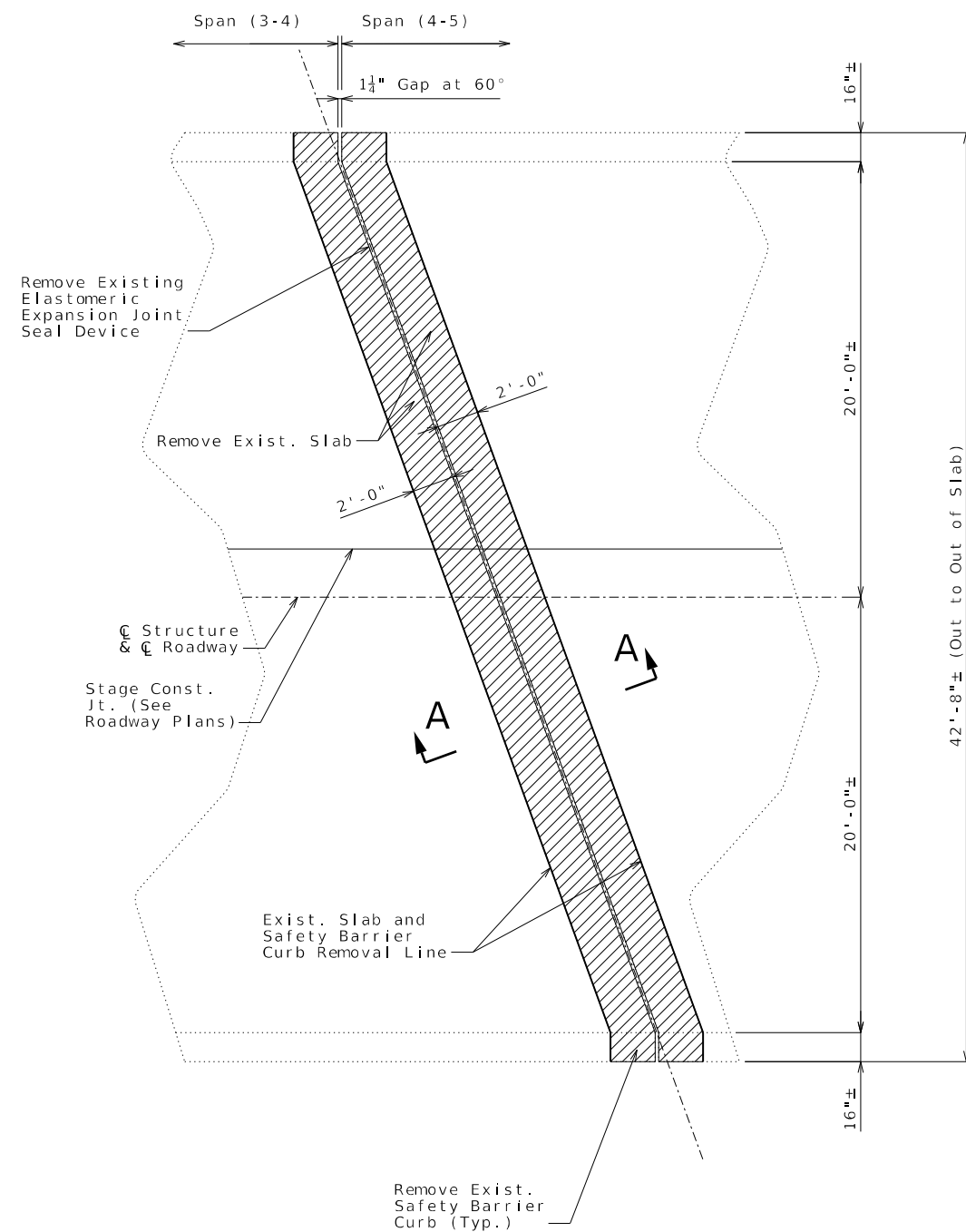
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1 of 6

\*\*\* Exposed concrete surfaces of cap at Intermediate Bent 4, Estimated quantity of 500 sq. ft.

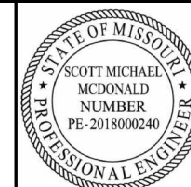
ROUTE 47 FROM ROUTE H TO ROUTE 21  
ABOUT 1.6 MILES NORTH OF ROUTE 21  
BEGINNING STATION 524+65.40± (Match Existing)





Note:

Remove existing stirrups within  
limits of Safety Barrier Curb Removal.



THIS SHEET HAS BEEN  
SIGNED, SEALED AND DATED  
ELECTRONICALLY.

DATE PREPARED  
01/09/2024

|             |             |
|-------------|-------------|
| ROUTE<br>47 | STATE<br>MO |
|-------------|-------------|

|          |          |
|----------|----------|
| DISTRICT | SHEET NO |
| BR       | 2        |

COUNTY  
WASHINGTON

JOB NO.  
J5P3516

CONTRACT ID.

PROJECT NO.

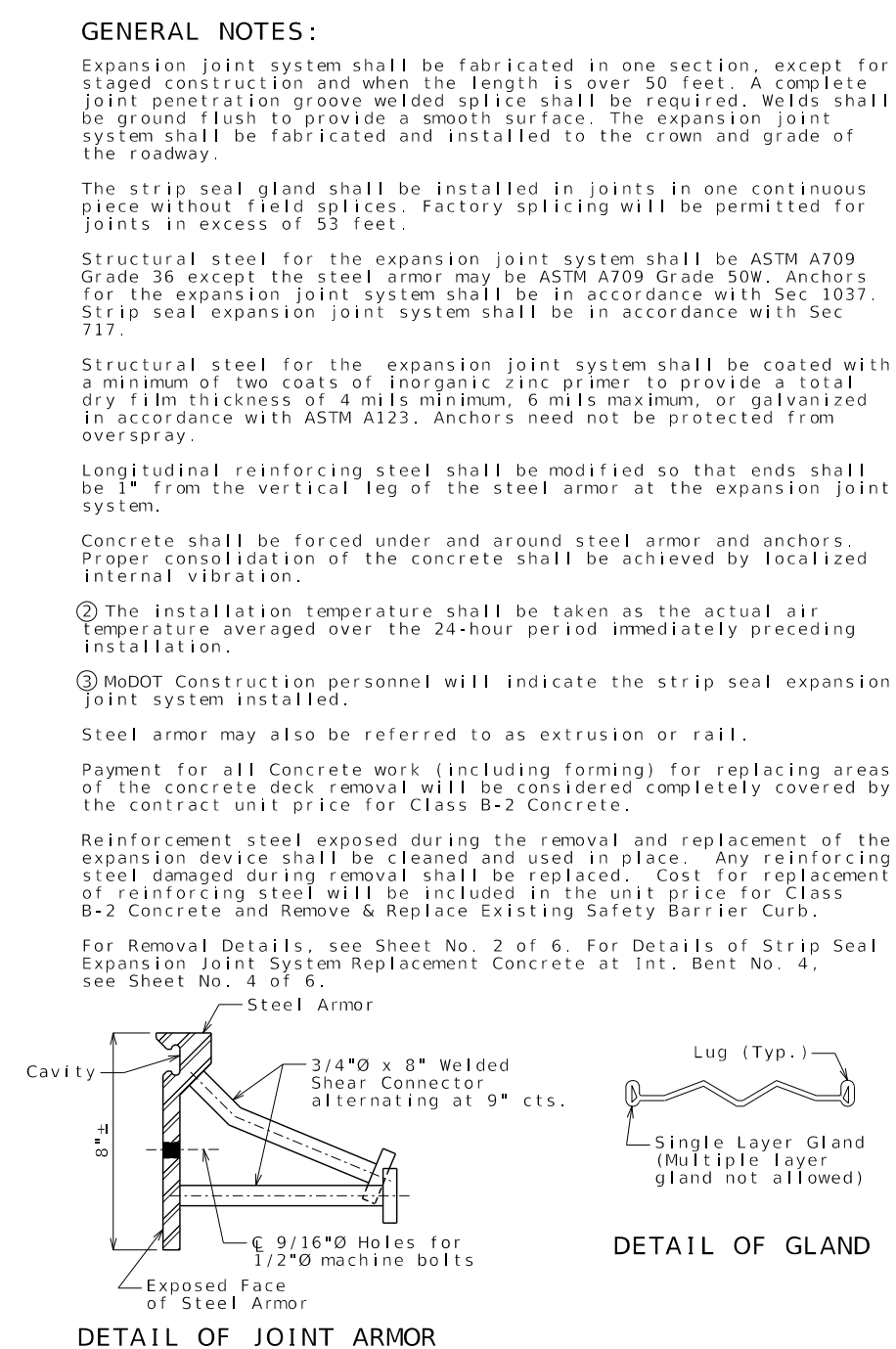
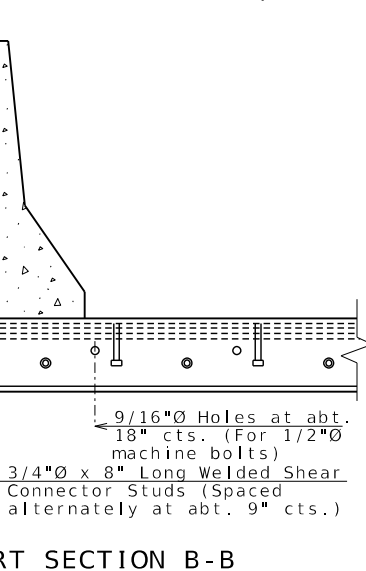
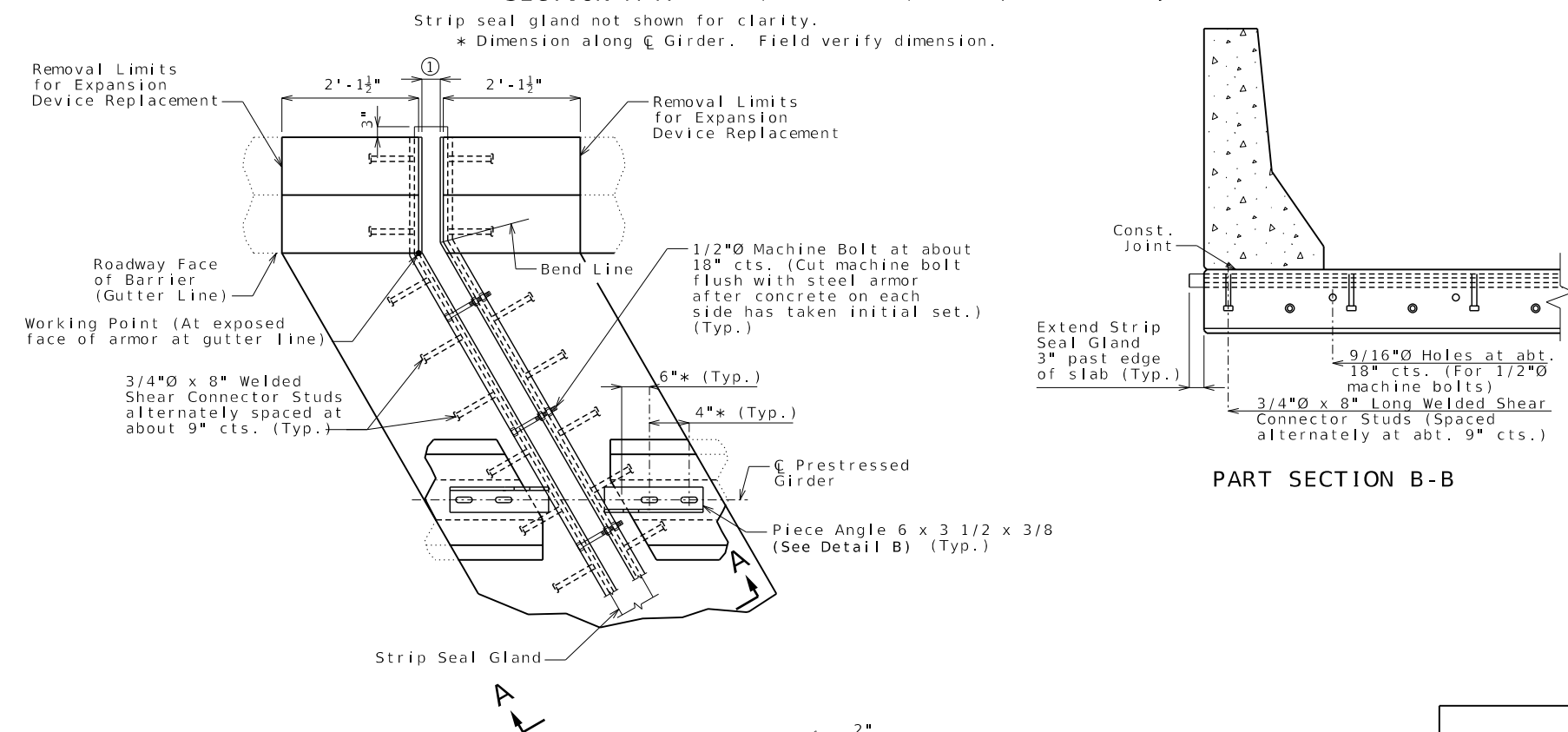
BRIDGE NO.  
A37751[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102



**VEENSTRA  
& KIMM INC.**

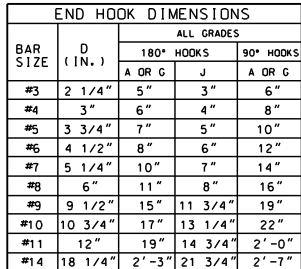
P.O. Box 236  
816-781-6182  
Certificate of Authority No. F00362673

[illegible]







[illegible]

REINFORCING STEEL (GRADE 60)  $F_Y = 60,000$  PSI.

[illegible]

Note: This drawing is not to scale. Follow dimensions.

DESIGN DESIGNATION

A.A.D.T. - 2021 = 3705  
A.A.D.T. - 2041 = 7040  
T = 15%  
V = 55 M.P.H.

FUNCTIONAL CLASSIFICATION-RURAL PRINCIPAL ARTERIAL

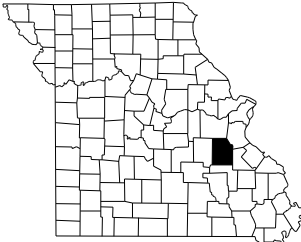
NO NEW R/W OR EASEMENTS  
TO BE ACQUIRED

CONVENTIONAL SYMBOLS  
(USED IN PLANS)

|                              | EXISTING | NEW   |
|------------------------------|----------|-------|
| BUILDINGS AND STRUCTURES     |          |       |
| GUARD RAIL                   |          |       |
| GUARD CABLE                  |          |       |
| CONCRETE RIGHT-OF-WAY MARKER |          |       |
| STEEL RIGHT-OF-WAY MARKER    |          |       |
| LOCATION SURVEY MARKER       |          |       |
| UTILITIES                    |          |       |
| FIBER OPTICS                 | -FO-     | -FO-  |
| OVERHEAD CABLE TV            | -OTV-    | -OTV- |
| UNDERGROUND CABLE TV         | -UTV-    | -UTV- |
| OVERHEAD TELEPHONE           | -OT-     | -OT-  |
| UNDERGROUND TELEPHONE        | -UT-     | -UT-  |
| OVERHEAD POWER               | -OE-     | -OE-  |
| UNDERGROUND POWER            | -UE-     | -UE-  |
| SANITARY SEWER               | -S-      | -S-   |
| STORM SEWER                  | -SS-     | -SS-  |
| GAS                          | -G-      | -G-   |
| WATER                        | -W-      | -W-   |
| MANHOLE                      |          |       |
| FIRE HYDRANT                 |          |       |
| WATER VALVE                  |          |       |
| WATER METER                  |          |       |
| DROP INLET                   |          |       |
| DITCH BLOCK                  |          |       |
| GROUND MOUNTED SIGN          |          |       |
| LIGHT POLE                   |          |       |
| H-FRAME POWER POLE           |          |       |
| TELEPHONE PEDESTAL           |          |       |
| FENCE                        |          |       |
| CHAIN LINK                   |          |       |
| WOVEN WIRE                   |          |       |
| GATE POST                    |          |       |
| BENCHMARK                    |          |       |

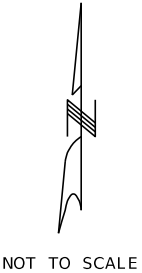
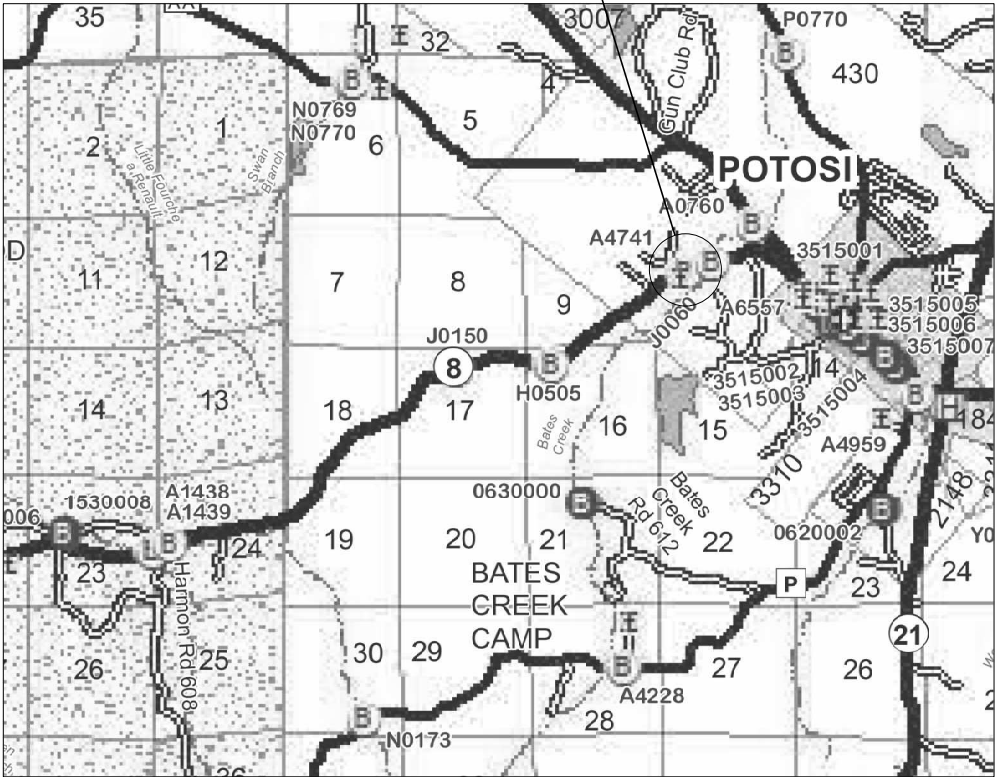
NOTE: DASHED OR OPEN SYMBOLS INDICATE  
EXISTING FEATURES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
PLANS FOR PROPOSED  
STATE HIGHWAY  
WASHINGTON COUNTY



KEY MAP  
LOCATION OF WASHINGTON COUNTY

PROJECT LIMITS BR A47411  
BRIDGE REHABILITATION,  
STRIPING  
ROUTE 8  
STA. 917+38.32-STA. 919+19.53



INDEX OF SHEETS

| DESCRIPTION                         | SHEET<br>NUMBER |
|-------------------------------------|-----------------|
| TITLE SHEET -----                   | 1               |
| TYPICAL SECTIONS (TS) (1 SHEET)---- | 2               |
| QUANTITIES (QU) (2 SHEETS)-----     | 3               |
| TRAFFIC CONTROL SHEETS (TC)-----    | 4-7             |
| PAVEMENT MARKING (PM)-----          | 8-10            |
| BRIDGE DRAWINGS (B)                 |                 |
| A47411-----                         | 1-2             |



THIS SHEET HAS BEEN  
SIGNED, SEALED AND DATED  
ELECTRONICALLY.

|                             |                |
|-----------------------------|----------------|
| DATE PREPARED<br>01/02/2024 |                |
| ROUTE<br>8                  | STATE<br>MO    |
| DISTRICT<br>CD              | SHEET NO.<br>1 |
| COUNTY<br>WASHINGTON        |                |
| JOB NO.<br>J5P3524          |                |
| CONTRACT ID.                |                |

PROJECT NO.  
BRIDGE NO.

| DESCRIPTION | DATE |
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LENGTH OF PROJECT

|                           |                  |
|---------------------------|------------------|
| BEGINNING OF PROJECT      | STA. 917 + 38.32 |
| END OF PROJECT            | STA. 919 + 19.53 |
| APPARENT LENGTH           | 181.21 FEET      |
| EQUATIONS AND EXCEPTIONS: |                  |

|   |             |
|---|-------------|
| TOTAL CORRECTIONS                                 | 0.00 FEET   |
| NET LENGTH OF PROJECT                             | 181.21 FEET |
| STATE LENGTH                                      | 0.034 MILES |
| FOR INFORMATION ONLY<br>ESTIMATED DISTURBED ACRES | 0 ACRES     |

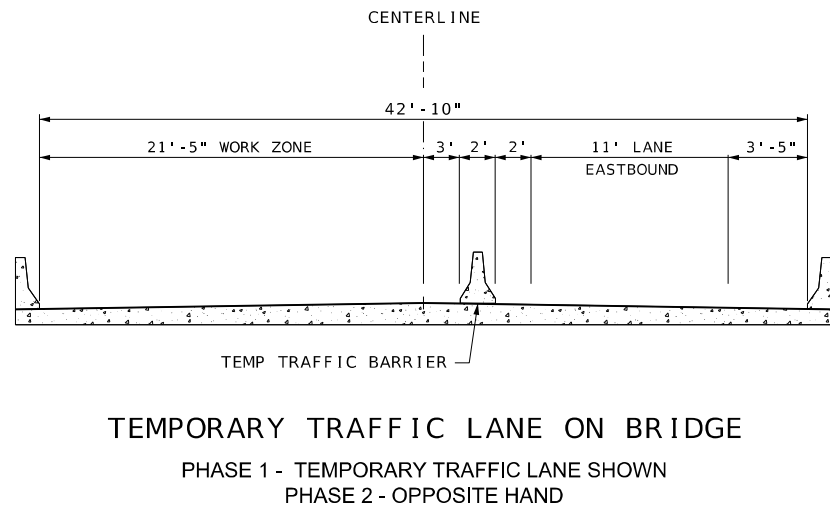
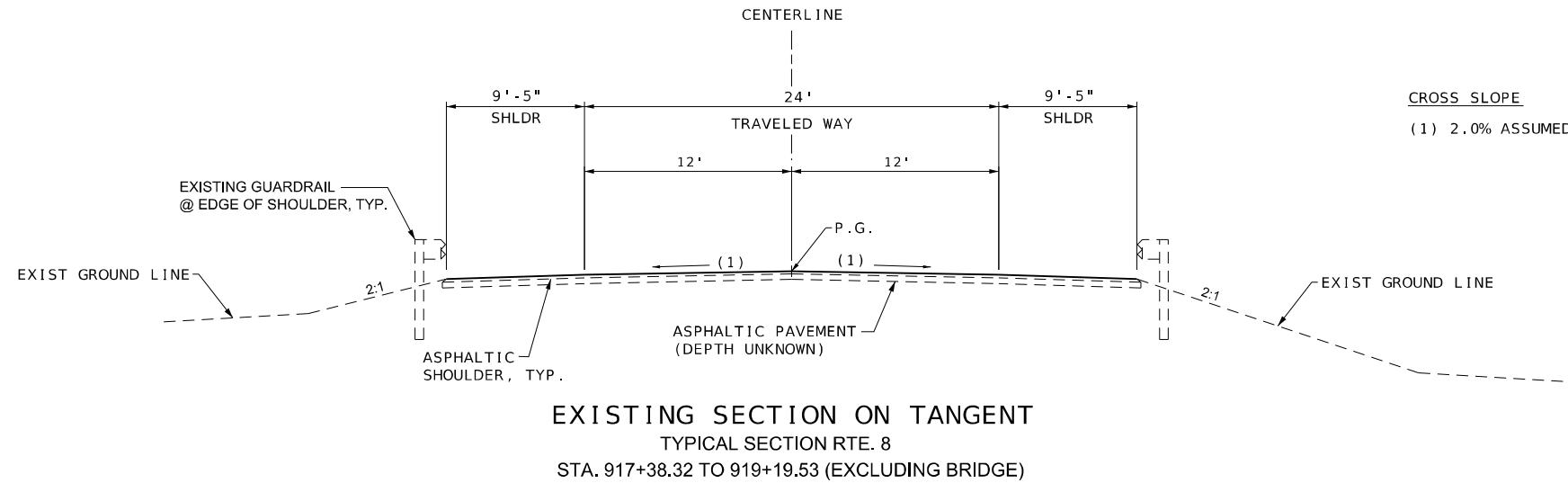
MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

**VEENSTRA  
& KIMM INC.**

Liberty, Missouri 64069  
816-781-6182 816-781-0643 (FAX)  
Certificate of Authority No. F00362673

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THIS SHEET HAS BEEN  
SIGNED, SEALED AND DATED  
ELECTRONICALLY.

DATE PREPARED  
**01/02/2024**

|                       |                       |
|-----------------------|-----------------------|
| ROUTE<br><b>8</b>     | STATE<br><b>MO</b>    |
| DISTRICT<br><b>CD</b> | SHEET NO.<br><b>2</b> |

COUNTY  
**WASHINGTON**

JOB NO.  
**J5P3524**

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

| DATE | DESCRIPTION |
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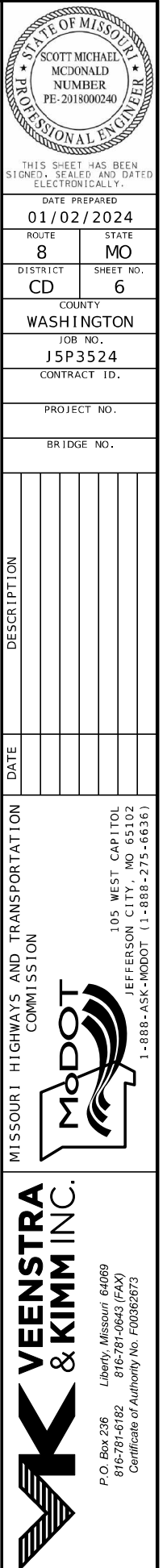
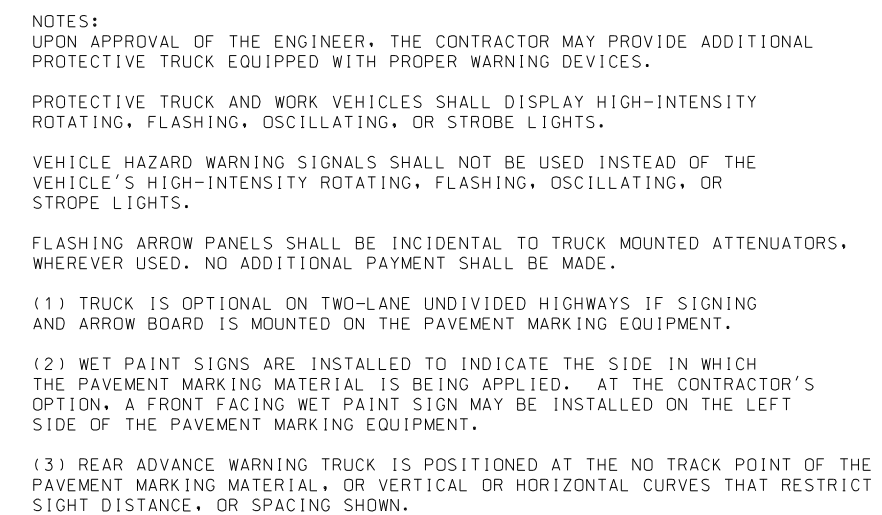


| EFFECTIVE: 04-01-2024 |        |         |      |         |      |         |      |  |  |  |  |  |  |  |  |  |  |
|-----------------------|--------|---------|------|---------|------|---------|------|--|--|--|--|--|--|--|--|--|--|
| SIGN                  | SIZE   | AREA    | QTY  | TOTAL   | QTY  | TOTAL   | SIGN |  |  |  |  |  |  |  |  |  |  |
| SIGN                  | IN.    | SQ. FT. | EACH | SQ. FT. | EACH | SQ. FT. | NUM. |  |  |  |  |  |  |  |  |  |  |
| WARNING SIGNS         |        |         |      |         |      |         |      | DESCRIPTION                                      |  |  |  |  |  |  |  |  |  |
| WO1-1L                | 48X48  | 16.00   |      |         |      |         |      | TURN (SYMBOL LEFT)                               |  |  |  |  |  |  |  |  |  |
| WO1-1R                | 48X48  | 16.00   |      |         |      |         |      | TURN (SYMBOL RIGHT)                              |  |  |  |  |  |  |  |  |  |
| WO1-2L                | 48X48  | 16.00   |      |         |      |         |      | CURVE (SYMBOL LEFT)                              |  |  |  |  |  |  |  |  |  |
| WO1-2R                | 48X48  | 16.00   |      |         |      |         |      | CURVE (SYMBOL RIGHT)                             |  |  |  |  |  |  |  |  |  |
| WO1-3L                | 48X48  | 16.00   |      |         |      |         |      | REVERSE TURN (SYMBOL LEFT)                       |  |  |  |  |  |  |  |  |  |
| WO1-3R                | 48X48  | 16.00   |      |         |      |         |      | REVERSE TURN (SYMBOL RIGHT)                      |  |  |  |  |  |  |  |  |  |
| WO1-4L                | 48X48  | 16.00   |      |         |      |         |      | REVERSE CURVE (SYMBOL LEFT)                      |  |  |  |  |  |  |  |  |  |
| WO1-4R                | 48X48  | 16.00   | 1    | 16.00   | 1    | 16.00   | 15   | REVERSE CURVE (SYMBOL RIGHT)                     |  |  |  |  |  |  |  |  |  |
| WO1-4bL               | 48X48  | 16.00   |      |         |      |         |      | DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)         |  |  |  |  |  |  |  |  |  |
| WO1-4bR               | 48X48  | 16.00   |      |         |      |         |      | DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT)        |  |  |  |  |  |  |  |  |  |
| WO1-4cL               | 48X48  | 16.00   |      |         |      |         |      | TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)         |  |  |  |  |  |  |  |  |  |
| WO1-4cR               | 48X48  | 16.00   |      |         |      |         |      | TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT)        |  |  |  |  |  |  |  |  |  |
| WO1-6                 | 60X30  | 12.50   |      |         |      |         |      | HORIZONTAL ARROW (SYMBOL)                        |  |  |  |  |  |  |  |  |  |
| WO1-6a                | 72X36  | 18.00   |      |         |      |         |      | HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)     |  |  |  |  |  |  |  |  |  |
| WO1-7                 | 60X30  | 12.50   |      |         |      |         |      | DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)            |  |  |  |  |  |  |  |  |  |
| WO1-7a                | 72X36  | 18.00   |      |         |      |         |      | DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.) |  |  |  |  |  |  |  |  |  |
| WO1-8                 | 18X24  | 3.00    |      |         |      |         |      | CHEVRON (SYMBOL)                                 |  |  |  |  |  |  |  |  |  |
| WO1-8a                | 30X36  | 7.50    |      |         |      |         |      | CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)            |  |  |  |  |  |  |  |  |  |
| WO3-1                 | 48X48  | 16.00   |      |         |      |         |      | STOP AHEAD (SYMBOL)                              |  |  |  |  |  |  |  |  |  |
| WO3-2                 | 48X48  | 16.00   |      |         |      |         |      | YIELD AHEAD (SYMBOL)                             |  |  |  |  |  |  |  |  |  |
| WO3-3                 | 48X48  | 16.00   | 2    | 32.00   |      |         | 12   | SIGNAL AHEAD (SYMBOL)                            |  |  |  |  |  |  |  |  |  |
| WO3-4                 | 48X48  | 16.00   |      |         |      |         |      | BE PREPARED TO STOP                              |  |  |  |  |  |  |  |  |  |
| WO3-5                 | 48X48  | 16.00   |      |         |      |         |      | SPEED LIMIT AHEAD                                |  |  |  |  |  |  |  |  |  |
| WO4-1L                | 48X48  | 16.00   |      |         |      |         |      | MERGE (SYMBOL FROM LEFT)                         |  |  |  |  |  |  |  |  |  |
| WO4-1R                | 48X48  | 16.00   |      |         |      |         |      | MERGE (SYMBOL FROM RIGHT)                        |  |  |  |  |  |  |  |  |  |
| WO4-1aL               | 48X48  | 16.00   |      |         |      |         |      | MERGE (LEFT)                                     |  |  |  |  |  |  |  |  |  |
| WO4-1aR               | 48X48  | 16.00   |      |         |      |         |      | MERGE (RIGHT)                                    |  |  |  |  |  |  |  |  |  |
| WO5-1                 | 48X48  | 16.00   |      |         |      |         |      | ROAD/BRIDGE/RAMP NARROWS                         |  |  |  |  |  |  |  |  |  |
| WO5-3                 | 48X48  | 16.00   |      |         |      |         |      | ONE LANE BRIDGE                                  |  |  |  |  |  |  |  |  |  |
| WO5-5                 | 48X48  | 16.00   |      |         |      |         |      | NARROW LANES                                     |  |  |  |  |  |  |  |  |  |
| WO6-1                 | 48X48  | 16.00   |      |         |      |         |      | DIVIDED HIGHWAY (SYMBOL)                         |  |  |  |  |  |  |  |  |  |
| WO6-2                 | 48X48  | 16.00   |      |         |      |         |      | DIVIDED HIGHWAY END (SYMBOL)                     |  |  |  |  |  |  |  |  |  |
| WO6-3                 | 48X48  | 16.00   |      |         |      |         |      | TWO WAY TRAFFIC (SYMBOL)                         |  |  |  |  |  |  |  |  |  |
| WO7-3a                | 30X24  | 5.00    |      |         |      |         |      | NEXT XX MILES (PLAQUE)                           |  |  |  |  |  |  |  |  |  |
| WO8-1                 | 48X48  | 16.00   |      |         |      |         |      | BUMP   |  |  |  |  |  |  |  |  |  |
| WO8-2                 | 48X48  | 16.00   |      |         |      |         |      | DIP  |  |  |  |  |  |  |  |  |  |
| WO8-3                 | 48X48  | 16.00   |      |         |      |         |      | PAVEMENT ENDS                                    |  |  |  |  |  |  |  |  |  |
| WO8-4                 | 48X48  | 16.00   |      |         |      |         |      | SOFT SHOULDER                                    |  |  |  |  |  |  |  |  |  |
| WO8-5                 | 48X48  | 16.00   |      |         |      |         |      | SLIPPERY WHEN WET (SYMBOL)                       |  |  |  |  |  |  |  |  |  |
| WO8-6                 | 48X48  | 16.00   |      |         |      |         |      | TRUCK CROSSING                                   |  |  |  |  |  |  |  |  |  |
| WO8-6c                | 48X48  | 16.00   |      |         |      |         |      | TRUCK ENTRANCE                                   |  |  |  |  |  |  |  |  |  |
| WO8-7                 | 36X36  | 9.00    |      |         |      |         |      | LOOSE GRAVEL                                     |  |  |  |  |  |  |  |  |  |
| WO8-7a                | 36X36  | 9.00    |      |         |      |         |      | FRESH OIL / LOOSE GRAVEL                         |  |  |  |  |  |  |  |  |  |
| WO8-9                 | 48X48  | 16.00   |      |         |      |         |      | LOW SHOULDER                                     |  |  |  |  |  |  |  |  |  |
| WO8-11                | 48X48  | 16.00   |      |         |      |         |      | UNEVEN LANES                                     |  |  |  |  |  |  |  |  |  |
| WO8-12                | 48X48  | 16.00   |      |         |      |         |      | NO CENTER LINE                                   |  |  |  |  |  |  |  |  |  |
| WO8-15                | 48X48  | 16.00   |      |         |      |         |      | GROOVED PAVEMENT                                 |  |  |  |  |  |  |  |  |  |
| WO8-15P               | 30X24  | 5.00    |      |         |      |         |      | MOTORCYCLE (PLAQUE)                              |  |  |  |  |  |  |  |  |  |
| WO8-17L               | 48X48  | 16.00   |      |         |      |         |      | SHOULDER DROP-OFF (SYMBOL LEFT)                  |  |  |  |  |  |  |  |  |  |
| WO8-17R               | 48X48  | 16.00   |      |         |      |         |      | SHOULDER DROP-OFF (SYMBOL RIGHT)                 |  |  |  |  |  |  |  |  |  |
| WO8-17P               | 30X24  | 5.00    |      |         |      |         |      | SHOULDER DROP-OFF (PLAQUE)                       |  |  |  |  |  |  |  |  |  |
| W10-1                 | 42RND. | 9.62    |      |         |      |         |      | RAILROAD CROSSING                                |  |  |  |  |  |  |  |  |  |
| WO12-1                | 24X24  | 4.00    |      |         |      |         |      | DOUBLE DOWN ARROW (SYMBOL)                       |  |  |  |  |  |  |  |  |  |
| WO12-2                | 48X48  | 16.00   |      |         |      |         |      | LOW CLEARANCE (SYMBOL)                           |  |  |  |  |  |  |  |  |  |
| WO12-2x               | 24X18  | 3.00    |      |         |      |         |      | LOW CLEARANCE (PLAQUE)                           |  |  |  |  |  |  |  |  |  |
| WO12-2a               | 84X24  | 14.00   |      |         |      |         |      | OVERHEAD LOW CLEARANCE (FEET AND INCHES)         |  |  |  |  |  |  |  |  |  |
| WO12-4                | 120X60 | 50.00   |      |         |      |         |      | LOW CLEARANCE XX FT XX IN XX MILES AHEAD         |  |  |  |  |  |  |  |  |  |
| WO12-5                | 120X60 | 50.00   |      |         |      |         |      | WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD     |  |  |  |  |  |  |  |  |  |
| WO13-1                | 30X30  | 6.25    |      |         |      |         |      | ADVISORY SPEED (PLAQUE)                          |  |  |  |  |  |  |  |  |  |
| WO16-2                | 30X24  | 5.00    |      |         |      |         |      | XXX FEET (PLAQUE)                                |  |  |  |  |  |  |  |  |  |
| WO16-3                | 30X24  | 5.00    |      |         |      |         |      | X MILE (PLAQUE)                                  |  |  |  |  |  |  |  |  |  |
| WO20-1                | 48X48  | 16.00   | 2    | 32.00   |      |         | 2    | BRIDGE WORK AHEAD                                |  |  |  |  |  |  |  |  |  |
| WO20-2                | 48X48  | 16.00   |      |         |      |         |      | DETOUR AHEAD                                     |  |  |  |  |  |  |  |  |  |
| WO20-3                | 48X48  | 16.00   |      |         |      |         |      | ROAD CLOSED AHEAD                                |  |  |  |  |  |  |  |  |  |
| WO20-4                | 48X48  | 16.00   | 2    | 32.00   | 2    | 32.00   | 7    | ONE LANE ROAD AHEAD                              |  |  |  |  |  |  |  |  |  |
| WO20-5                | 48X48  | 16.00   |      |         |      |         |      | RIGHT/CENTER/LEFT LANE CLOSED AHEAD              |  |  |  |  |  |  |  |  |  |
| WO20-5a               | 48X48  | 16.00   |      |         |      |         |      | 2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD           |  |  |  |  |  |  |  |  |  |
| WO20-6a               | 48X48  | 16.00   |      |         |      |         |      | RIGHT/CENTER/LEFT LANE CLOSED                    |  |  |  |  |  |  |  |  |  |
| WO20-7a               | 48X48  | 16.00   |      |         |      |         |      | FLAGGER (SYMBOL)                                 |  |  |  |  |  |  |  |  |  |
| WO21-2                | 36X36  | 9.00    |      |         |      |         |      | FRESH OIL  |  |  |  |  |  |  |  |  |  |
| WO21-5                | 48X48  | 16.00   |      |         |      |         |      | SHOULDER WORK / SHOULDER WORK AHEAD              |  |  |  |  |  |  |  |  |  |
| WO22-1                | 48X48  | 16.00   |      |         |      |         |      | BLASTING ZONE AHEAD                              |  |  |  |  |  |  |  |  |  |
| WO22-2                | 42X36  | 10.50   |      |         |      |         |      | TURN OFF 2-WAY RADIO AND PHONE                   |  |  |  |  |  |  |  |  |  |
| WO22-3                | 42X36  | 10.50   |      |         |      |         |      | END BLASTING ZONE                                |  |  |  |  |  |  |  |  |  |
| GO22-1                | 21X15  | 2.19    | 2    | 4.38    |      |         | 60   | WET PAINT (ARROW PIVOTS)                         |  |  |  |  |  |  |  |  |  |

| SIGN             | SIZE   | AREA    | QTY  | TOTAL   | QTY  | TOTAL   | SIGN |   |  |  |  |  |  |  |  |  |  |
|------------------|--------|---------|------|---------|------|---------|------|---|--|--|--|--|--|--|--|--|--|
| SIGN             | IN.    | SQ. FT. | EACH | SQ. FT. | EACH | SQ. FT. | NUM. |   |  |  |  |  |  |  |  |  |  |
| GUIDE SIGNS      |        |         |      |         |      |         |      | DESCRIPTION                                       |  |  |  |  |  |  |  |  |  |
| E05-1            | 36X48  | 12.00   |      |         |      |         |      | GORE EXIT   |  |  |  |  |  |  |  |  |  |
| E05-2            | 48X36  | 12.00   |      |         |      |         |      | EXIT OPEN   |  |  |  |  |  |  |  |  |  |
| E05-2a           | 48X36  | 12.00   |      |         |      |         |      | EXIT CLOSED                                       |  |  |  |  |  |  |  |  |  |
| GO20-1           | 60X24  | 10.00   |      |         |      |         |      | ROAD WORK NEXT XX MILES                           |  |  |  |  |  |  |  |  |  |
| GO20-2           | 48X24  | 8.00    | 2    | 16.00   |      |         | 26   | END ROAD WORK                                     |  |  |  |  |  |  |  |  |  |
| GO20-4           | 36X18  | 4.50    |      |         |      |         |      | PILOT CAR FOLLOW ME                               |  |  |  |  |  |  |  |  |  |
| GO20-4a          | 42X30  | 8.75    |      |         |      |         |      | PILOT CAR IN USE WAIT & FOLLOW                    |  |  |  |  |  |  |  |  |  |
| GO20-4a          | 18X12  | 1.50    |      |         |      |         |      | PILOT CAR IN USE WAIT & FOLLOW                    |  |  |  |  |  |  |  |  |  |
| GO20-5aP         | 36X24  | 6.00    |      |         |      |         |      | WORK ZONE (PLAQUE)                                |  |  |  |  |  |  |  |  |  |
| MO4-8a           | 24X18  | 3.00    |      |         |      |         |      | END DETOUR  |  |  |  |  |  |  |  |  |  |
| MO4-9L           | 48X36  | 12.00   |      |         |      |         |      | DETOUR (LEFT)                                     |  |  |  |  |  |  |  |  |  |
| MO4-9R           | 48X36  | 12.00   |      |         |      |         |      | DETOUR (RIGHT)                                    |  |  |  |  |  |  |  |  |  |
| MO4-9P           | 48X12  | 4.00    |      |         |      |         |      | STREET NAME (PLAQUE)                              |  |  |  |  |  |  |  |  |  |
| MO4-10L          | 48X18  | 6.00    |      |         |      |         |      | DETOUR ARROW (LEFT)                               |  |  |  |  |  |  |  |  |  |
| MO4-10R          | 48X18  | 6.00    |      |         |      |         |      | DETOUR ARROW (RIGHT)                              |  |  |  |  |  |  |  |  |  |
| REGULATORY SIGNS |        |         |      |         |      |         |      |   |  |  |  |  |  |  |  |  |  |
| R1-1             | 48X48  | 13.25   |      |         |      |         |      | STOP  |  |  |  |  |  |  |  |  |  |
| R1-2             | 48TRI. | 6.93    |      |         |      |         |      | YIELD   |  |  |  |  |  |  |  |  |  |
| R1-2a            | 36X36  | 9.00    |      |         |      |         |      | TO ONCOMING TRAFFIC (PLAQUE)                      |  |  |  |  |  |  |  |  |  |
| R1-3P            | 30X12  | 2.50    |      |         |      |         |      | ALL WAY (PLAQUE)                                  |  |  |  |  |  |  |  |  |  |
| R2-1             | 36X48  | 12.00   |      |         |      |         |      | SPEED LIMIT XX                                    |  |  |  |  |  |  |  |  |  |
| R3-1             | 48X48  | 16.00   |      |         |      |         |      | NO RIGHT TURN (SYMBOL)                            |  |  |  |  |  |  |  |  |  |
| R3-2             | 48X48  | 16.00   |      |         |      |         |      | NO LEFT TURN (SYMBOL)                             |  |  |  |  |  |  |  |  |  |
| R3-3             | 36X36  | 9.00    |      |         |      |         |      | NO TURNS  |  |  |  |  |  |  |  |  |  |
| R3-4             | 48X48  | 16.00   |      |         |      |         |      | NO U-TURN (SYMBOL)                                |  |  |  |  |  |  |  |  |  |
| R3-7L            | 30X30  | 6.25    |      |         |      |         |      | LEFT LANE MUST TURN LEFT                          |  |  |  |  |  |  |  |  |  |
| R3-7R            | 30X30  | 6.25    |      |         |      |         |      | RIGHT LANE MUST TURN RIGHT                        |  |  |  |  |  |  |  |  |  |
| R4-1             | 36X48  | 12.00   |      |         |      |         |      | DO NOT PASS                                       |  |  |  |  |  |  |  |  |  |
| R4-2             | 36X48  | 12.00   |      |         |      |         |      | PASS WITH CARE                                    |  |  |  |  |  |  |  |  |  |
| R4-7a            | 36X48  | 12.00   |      |         |      |         |      | KEEP RIGHT (HORIZONTAL ARROW)                     |  |  |  |  |  |  |  |  |  |
| R4-8a            | 36X48  | 12.00   |      |         |      |         |      | KEEP LEFT (HORIZONTAL ARROW)                      |  |  |  |  |  |  |  |  |  |
| R5-1             | 30X30  | 6.25    |      |         |      |         |      | DO NOT ENTER                                      |  |  |  |  |  |  |  |  |  |
| R5-1a            | 36X24  | 6.00    |      |         |      |         |      | WRONG WAY   |  |  |  |  |  |  |  |  |  |
| R6-1L            | 54X18  | 6.75    |      |         |      |         |      | ONE WAY ARROW (LEFT)                              |  |  |  |  |  |  |  |  |  |
| R6-1R            | 54X18  | 6.75    |      |         |      |         |      | ONE WAY ARROW (RIGHT)                             |  |  |  |  |  |  |  |  |  |
| R6-2L            | 24X30  | 5.00    |      |         |      |         |      | ONE WAY (LEFT)                                    |  |  |  |  |  |  |  |  |  |
| R6-2R            | 24X30  | 5.00    |      |         |      |         |      | ONE WAY (RIGHT)                                   |  |  |  |  |  |  |  |  |  |
| R9-9             | 24X12  | 2.00    |      |         |      |         |      | SIDEWALK CLOSED                                   |  |  |  |  |  |  |  |  |  |
| R9-11L           | 24X18  | 3.00    |      |         |      |         |      | SIDEWALK CLOSED AHEAD,<br>(ARROW LEFT) CROSS HERE |  |  |  |  |  |  |  |  |  |
| R9-11R           | 24X18  | 3.00    |      |         |      |         |      | SIDEWALK CLOSED A                                 |  |  |  |  |  |  |  |  |  |









TRAFFIC CONTROL LEGEND

- PROPOSED SIGN (SINGLE SIDED)
- EXISTING SIGN (SINGLE SIDED)
- CHANNELIZER
- E TYPE III MOVEABLE BARRICADE
- ◼ SEQUENTIAL FLASHING WARNING LIGHT
- ▬ TEMPORARY CONCRETE TRAFFIC BARRIER (TYPE F)
- IMPACT ATTENUATOR 55 MPH (SAND BARRELS)
- PORTABLE TRAFFIC SIGNAL AND LUMINARE
- ☒ VEHICLE WITH TRAILER MOUNTED ATTENUATOR
- ≡ CHANGEABLE MESSAGE BOARD

| LANE CLOSURE ON TWO-LANE HIGHWAYS USING TRAFFIC CONTROL SIGNALS |                    |             |                    |               |                         |                           |                    |
|---|--------------------|-------------|--------------------|---------------|-------------------------|---------------------------|--------------------|
| SPEED   | SIGN SPACING (FT.) |             | TAPER LENGTH (FT.) |               | RECOMMENDED             | CHANNELIZER SPACING (FT.) |                    |
| PERMANENT POSTED (MPH)  | UNDIVIDED (S)      | DIVIDED (S) | SHOULDER (1) (T1)  | LANE (2) (T2) | BUFFER LENGTH (FT.) (B) | TAPERS                    | BUFFER/ WORK AREAS |
| 0-35  | 200                | -           | 35                 | 100           | 280                     | 25                        | 40                 |
| 40-45   | 350                | -           | 35                 | 100           | 400                     | 25                        | 80                 |
| 50-55   | 500                | -           | 35                 | 100           | 560                     | 25                        | 80                 |
| 60-70   | 1000               | -           | 35                 | 100           | 840                     | 25                        | 120                |

1. SHOULDER TAPER LENGTH BASED ON 10 FT. (STANDARD SHOULDER WIDTH) OFFSET.  
2. LANE TAPER LENGTH BASED ON 12 FT. (STANDARD LANE WIDTH) OFFSET.

NOTES:

ANY EXISTING WARNING OR REGULATORY SIGNS (NOT SHOWN) THAT INTEREFERE WITH THE TRAFFIC CONTROL SIGNING SHALL BE REMOVED OR COMPLETELY COVERED.

ALL TRAFFIC CONTROL SIGNS ARE TO BE NON-PORTABLE UNLESS NOTED OTHERWISE.

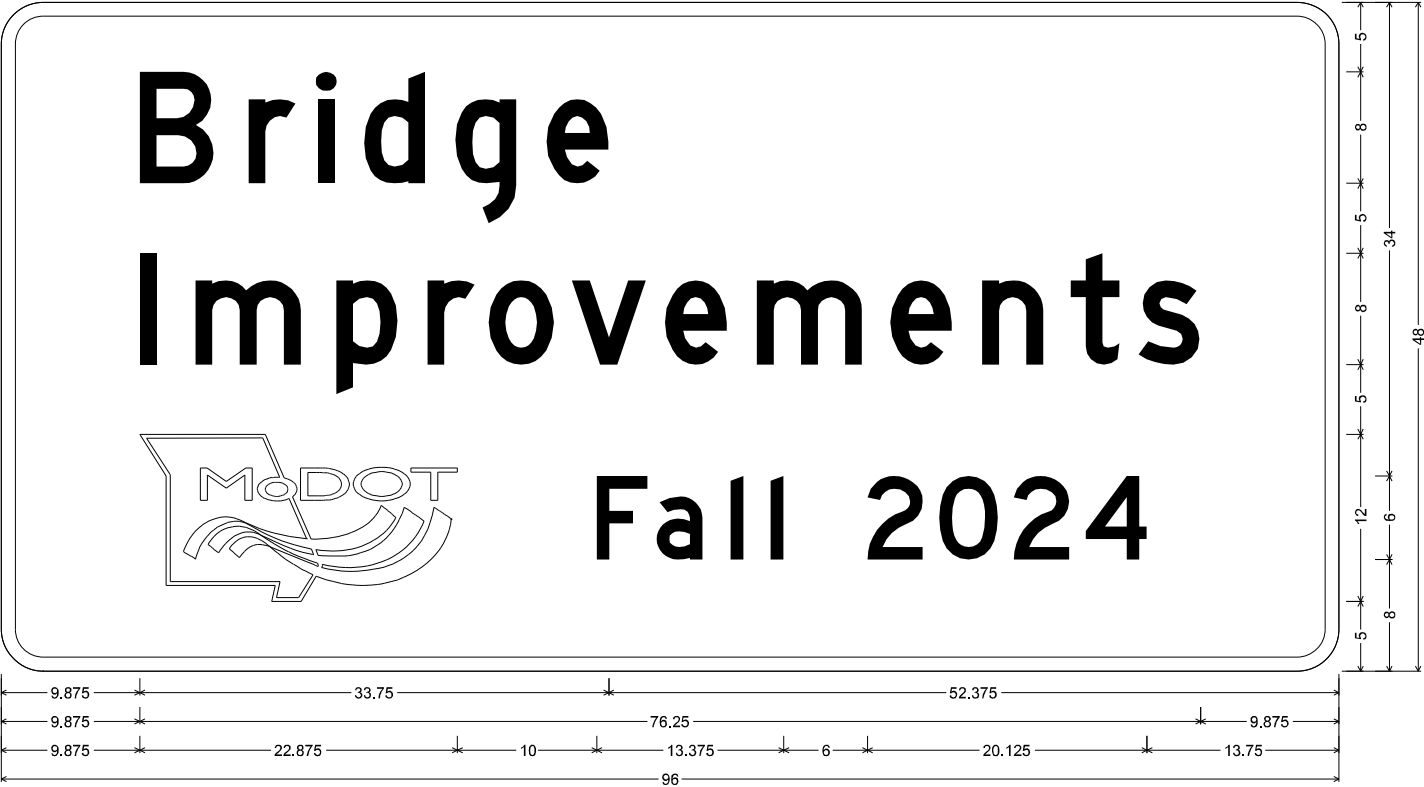
MODIFICATIONS TO EXISTING SIGN LEGENDS MAY INCLUDE REMOVAL, COVERING AND UNCOVERING OF LEGENDS. NO DIRECT PAY WILL BE MADE FOR THE LABOR OR MATERIALS REQUIRED TO MAKE THESE MODIFICATIONS.

ALL SPACING AND DISTANCES SHOWN ARE APPROXIMATE. DISTANCES MAY BE ADJUSTED BY THE ENGINEER TO ACCOMODATE SPECIFIC FIELD CONDITIONS.

SEE STANDARD PLAN DRAWINGS 616.10, 903.02, AND 903.03 FOR ADDITIONAL DETAILS REGARDING TRAFFIC CONTROL AND HIGHWAY SIGNING.

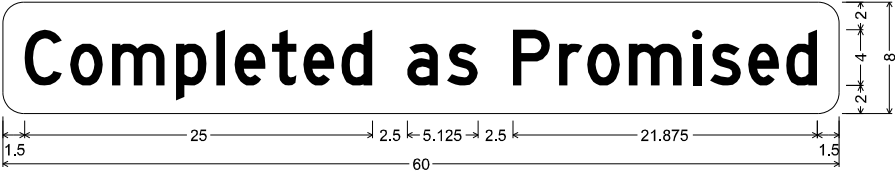
"POINT OF PRESENCE" SIGN 68 TO BE FURNISHED BY THE CONTRACTOR.

ALL RELOCATED TRAFFIC SIGNS ARE TO BE NON-PORTABLE UNLESS NOTED OTHERWISE. EXISTING POST(S) & MOUNTINGS MAY BE USED FOR TEMPORARY SIGN RELOCATIONS.



CONST-5-96 SH-FLAT SHEET;  
3,000" Radius, 1,000" Border, White on, Blue;  
"Bridge", D; "Improvements", D; "Fall 2024", D;  
Table of letter and object lefts

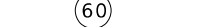
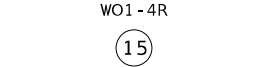
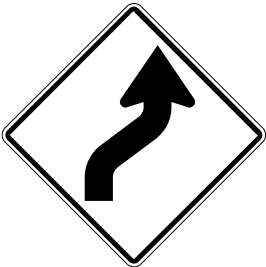
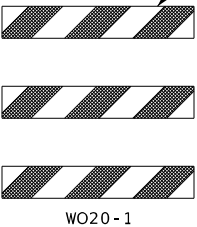
|       |        |        |        |        |        |
|-------|--------|--------|--------|--------|--------|
| B     | r      | i      | d      | g      | e      |
| 9.875 | 17.750 | 22.750 | 26.000 | 32.625 | 39.125 |
| i     | m      | p      | r      | o      | v      |
| 9.875 | 14.000 | 24.000 | 30.625 | 35.000 | 41.000 |
| 9.875 | 42.750 | 47.000 | 52.375 | 55.250 | 62.125 |
| F     | a      | l      | l      | 2      | 0      |
| 9.875 | 42.750 | 47.000 | 52.375 | 55.250 | 62.125 |



CONST-5P-60 SHF-FLAT SHEET FLUORESCENT;  
1,500" Radius, No border, Yellow;  
"Completed as Promised" Black, D 65% spacing;  
Table of letter and object lefts

|        |        |        |        |        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| C      | o      | m      | p      | i      | e      | t      | e      | d      | a      | s      |
| 1.500  | 4.875  | 7.875  | 12.375 | 15.375 | 16.625 | 19.375 | 21.500 | 24.250 | 29.000 | 31.875 |
| P      | r      | o      | m      | i      | s      | e      | d      |        |        |        |
| 36.625 | 39.875 | 41.875 | 44.875 | 49.500 | 50.750 | 53.500 | 56.250 |        |        |        |

68 (2 SIGNS)



ADVANCE WARNING  
RAIL SYSTEM

WO20 - 1

2

WO20 - 4

7

WO3 - 3

12

GO20 - 2

26

R10 - 6

47

CONST - 7 - 72

69

CONST - 8

70

TRAFFIC CONTROL SHEETS  
SHEET 4 OF 4

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED  
01/02/2024

ROUTE 8  
DISTRICT CD

STATE MO  
SHEET NO. 7

COUNTY  
WASHINGTON

JOB NO.  
J5P3524

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

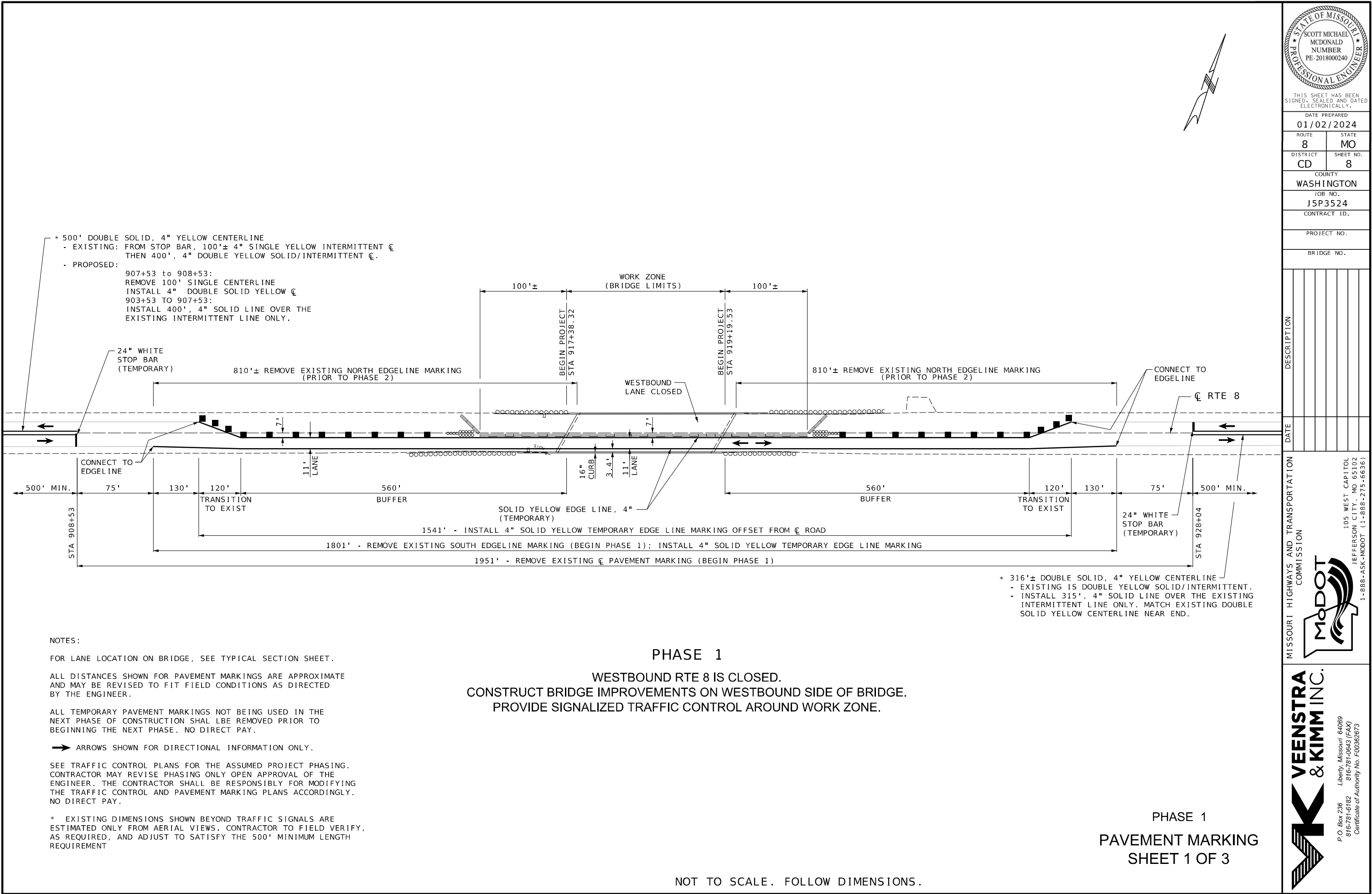
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

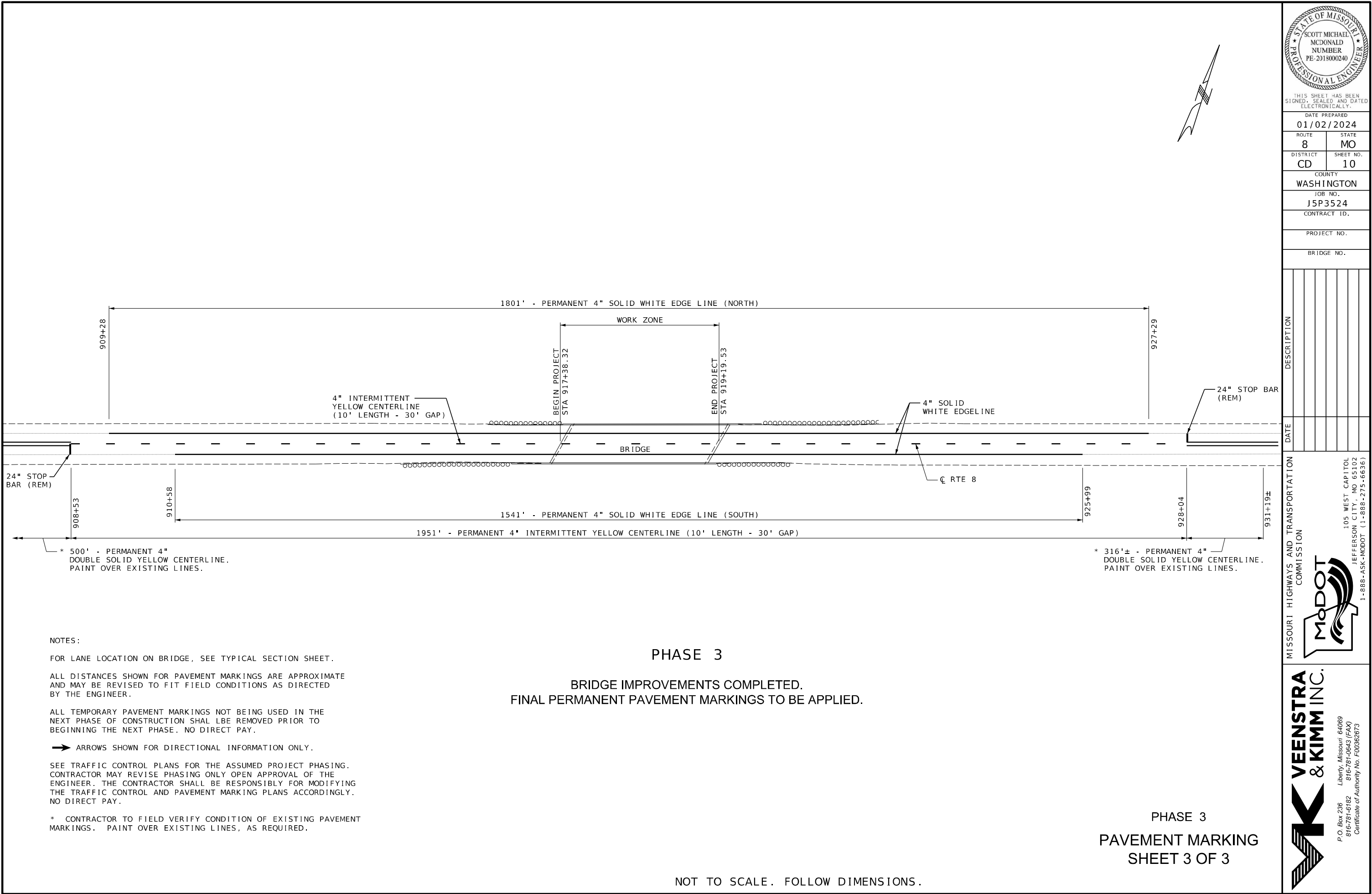
MoDOT

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

VEENSTRA & KIMM INC.  
Liberty, Missouri 64069  
P.O. Box 236  
816-781-0643 (FAX)  
Certificate of Authority No. F00362673







THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED

01/02/2024

ROUTE STATE

8 MO

DISTRICT SHEET NO.

CD 10

COUNTY

WASHINGTON

JOB NO.

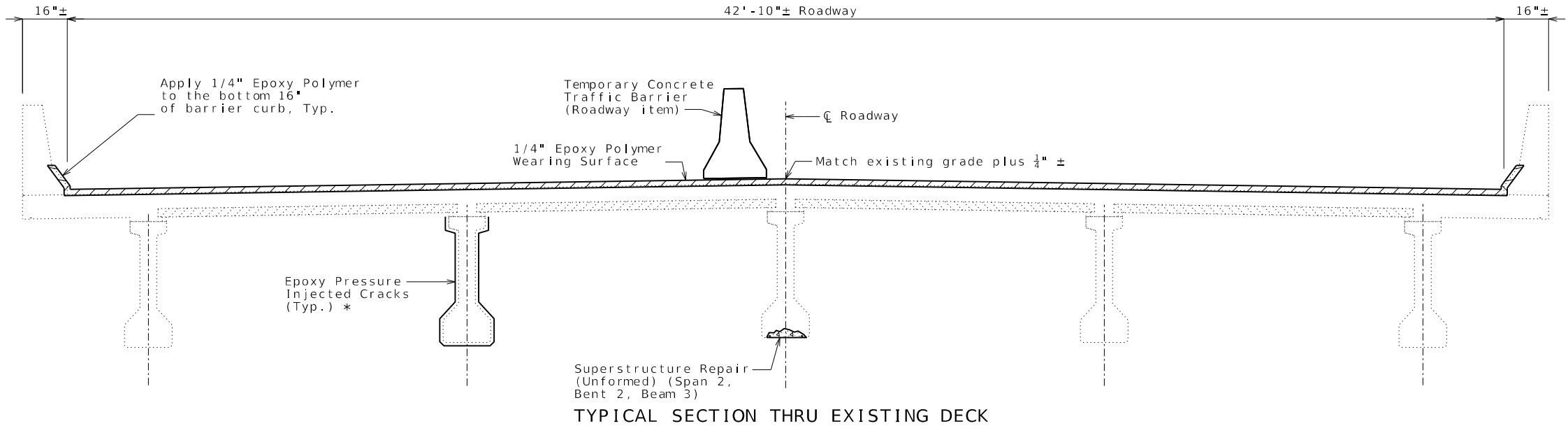
J5P3524

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

U.I.P. AND REHABILITATE EXISTING (60'-60'-60') PRESTRESSED CONCRETE I-GIRDER SPANS (SKEW: 30° L.A.)



\* Epoxy Inject cracks at the following locations:  
Span 1 Bent 2 Beam 2 & 3;  
Span 2 Bent 2 Beam 1, 2, 4 & 5;  
Span 2 Bent 3 Beam 3 & 5;  
Span 3 Bent 3 Beam 3,4 & 5.

| Estimated Quantities             |             |       |
|----------------------------------|-------------|-------|
| Item                             |             | Total |
| Epoxy Polymer Wearing Surface    | sq. yard    | 863   |
| Superstructure Repair (Unformed) | sq. foot    | 5     |
| Epoxy Pressure Injecting         | linear foot | 107   |
| Open Cell Foam Joint Seal        | linear foot | 99    |
|                                  |             |       |
|                                  |             |       |
|                                  |             |       |
|                                  |             |       |

**General Notes:**

**Design Specifications:**  
2002 AASHTO LFD (17th Ed.) Standard Specifications  
Bridge Deck Rating = 7

**Design Loading:**  
HS20 Modified (1990)

**Miscellaneous:**  
Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before ordering new material.

The Contractor shall exercise care to ensure spillage over joint edges is prevented and that a neat line is obtained along any terminating edge of the wearing surface.

**Traffic Handling:**  
Traffic to be maintained on structure during construction. See roadway plans for traffic control.

REPAIRS TO BRIDGE: ROUTE 8  
OVER BATES CREEK  
ROUTE 8 FROM ROUTE AA TO ROUTE 185  
ABOUT 0.7 MILE EAST OF ROUTE 185  
BEGINNING STATION 917+38.00± (Match Existing)

STATE OF MISSOURI

SCOTT MICHAEL

MCDONALD

NUMBER

PE-2018000240

PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN  
SIGNED, SEALED AND DATED  
ELECTRONICALLY.

DATE PREPARED  
01/02/2024

ROUTE  
8

DISTRICT  
BR

STATE  
MO

SHEET NO.  
1

COUNTY  
WASHINGTON

JOB NO.  
J5P3524

CONTRACT ID.

PROJECT NO.

BRIDGE NO.  
A47411

DESCRIPTION

DATE

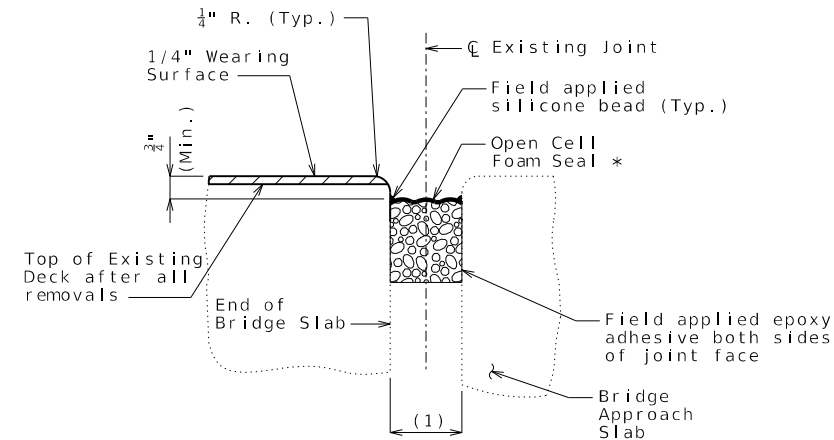
MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MODOT

VEENSTRA  
& KIMM INC.

P.O. Box 236  
Liberty, Missouri 64069  
816-781-6182 816-781-0643 (FAX)  
Certificate of Authority No. F00362673



SECTION THRU JOINT  
AT END BENTS NO. 1 & 4

SKEW = 30°

\* Manufacturer's recommended size

Extend seal 3" past edges of slab.

General Notes:

Open cell foam joint seal size (width and depth) shall be determined by the manufacturer. Manufacturer recommended seal size shall meet the movement and installation gap requirements and skew effect.

The open cell foam joint seal shall be installed according to the manufacturer's recommendations.

The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

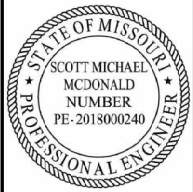
(1) Allowed installation gap (±) normal to joint at roadway surface (see table)

Any removals necessary and anything incidental to install Open Cell Foam Joint Seal will be considered completely covered by the contract unit price for Open Cell Foam Joint Seal

| Movement<br>Parallel<br>to Rdwy | Movement<br>Normal<br>to Joint | Min. Jt.<br>Width<br>(Normal<br>to Joint) | Max. Jt.<br>Width<br>(Normal<br>to Joint) | (1) Allowed Installation Gap (±) Normal to Joint<br>at Roadway Surface at Air/Surface Temperature |         |        |          | Manufacturer | Seal Name |
|---------------------------------|--------------------------------|---|---|---|---------|--------|----------|--------------|-----------|
|                                 |                                |   |   | @ 40°F  | @ 50°F  | @ 60°F | @ 70°F   |              |           |
| 9/16"                           | 7/16"                          | 1 3/4"                                    | 2 5/16"                                   | 2 1/8"  | 2 1/16" | 2"     | 1 15/16" |              |           |

MoDOT construction personnel will record the manufacturer and seal name that was used.

OPEN CELL FOAM JOINT SEAL



THIS SHEET HAS BEEN  
SIGNED, SEALED, AND DATED  
ELECTRONICALLY.

DATE PREPARED  
01/02/2024

ROUTE 8 STATE MO  
DISTRICT BR SHEET NO. 2

COUNTY  
WASHINGTON

JOB NO.  
J5P3524


CONTRACT ID.

PROJECT NO.

BRIDGE NO.  
A47411

| DESCRIPTION | DATE |
|-------------|------|
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|             |      |

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION



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