

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-------------------------|----------|--------------------|-----------|
| 322 | D7 BRIDGE REPAIR 2023-5 | FAYETTE | 23 | 1 |
| | | ILLINOIS | CONTRACT NO. 74A91 | |

D-97-004-22

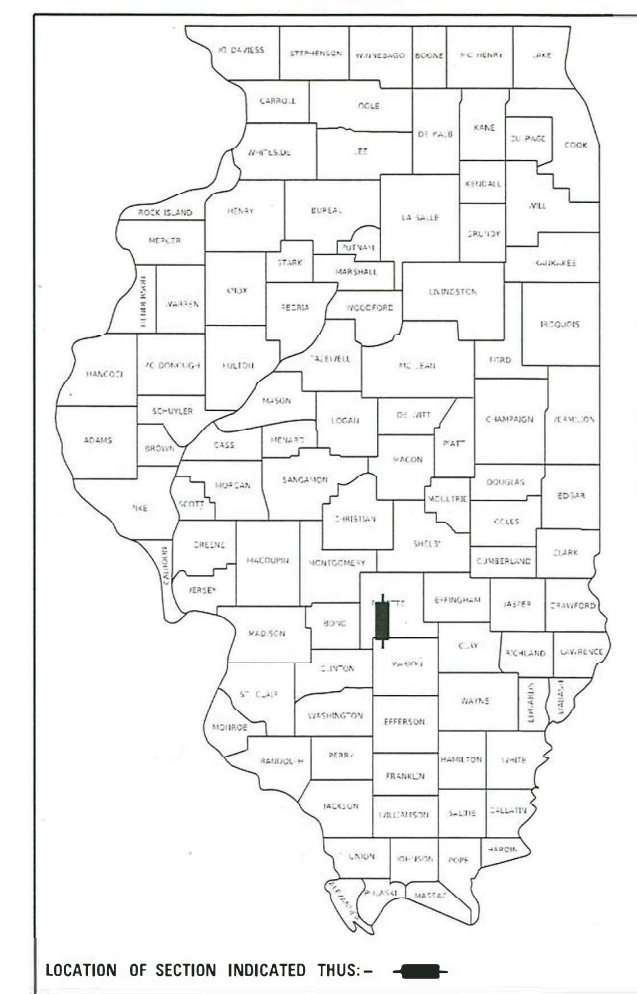
FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT = 3,900 (2021)

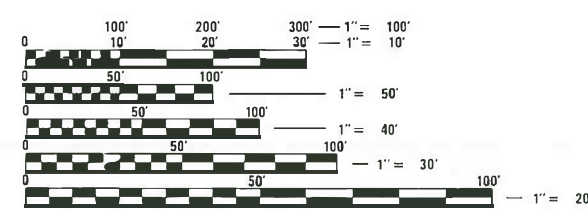
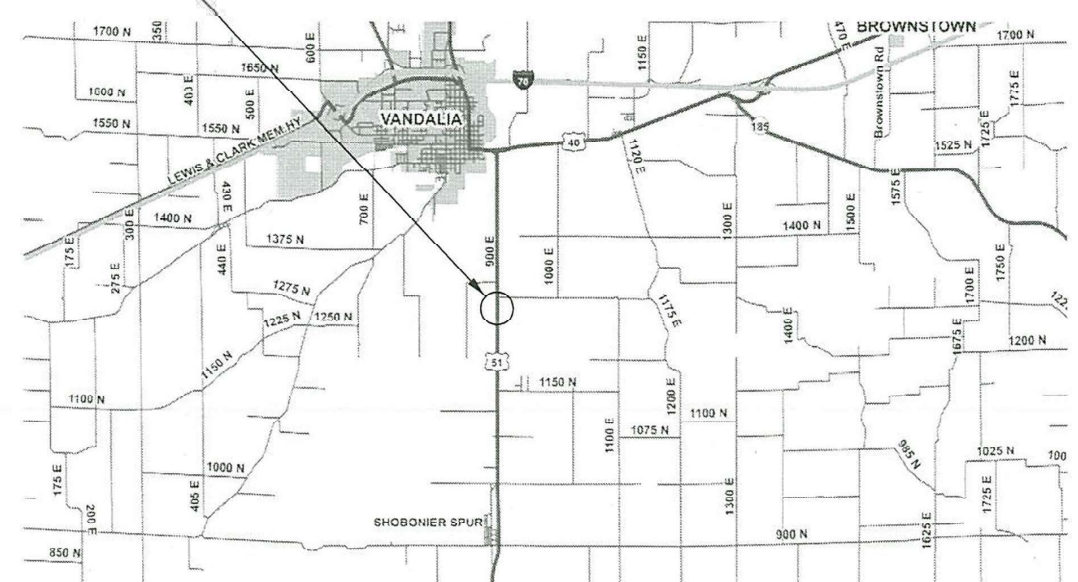
PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 322 (US 51)
SECTION D7 BRIDGE REPAIRS 2023-5
PROJECT NHPP-D26S(567)
BRIDGE REHABILITATION
FAYETTE COUNTY

C-97-018-22



PROJECT LOCATION:
026-0036 OVER
OLD HICKERY CREEK



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: MATT BOWER
PROJECT MANAGER: DALTON LANE
PHONE: (217) 342-8359
CONTRACT NO. 74A91

GROSS LENGTH = 404.00 FT. = 0.076 MILE
NET LENGTH = 404.00 FT. = 0.076 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED OCTOBER 11 20 22
Jeffrey P. Myrland REGIONAL ENGINEER
December 9, 2022
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT
December 9, 2022
[Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

| <u>SHEET NO.</u> | <u>ITEM</u> |
|------------------|---|
| 1 | COVER SHEET |
| 2 | INDEX OF SHEETS, STANDARDS, & GENERAL NOTES |
| 3-4 | SUMMARY OF QUANTITIES |
| 5-7 | TYPICAL SECTIONS |
| 8 | SCHEDULE OF QUANTITIES |
| 9 | PLAN SHEETS |
| 10-11 | STAGING SHEETS |
| 12-22 | STRUCTURE REPAIR PLANS 026-0036 |
| 23 | DETAILS |

HIGHWAY STANDARDS

| <u>STD. NO.</u> | <u>DESCRIPTION</u> |
|-----------------|--|
| 000001-08 | STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 420406 | PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB |
| 701001-02 | OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY |
| 701006-05 | OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE |
| 701201-05 | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701311-03 | LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY |
| 701321-18 | LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER |
| 701901-08 | TRAFFIC CONTROL DEVICES |
| 704001-08 | TEMPORARY CONCRETE BARRIER |
| 780001-05 | TYPICAL PAVEMENT MARKINGS |
| 420001-10 | PAVEMENT JOINTS |
| 782006-01 | GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS |

GENERAL NOTES

THE WORK IN THIS SECTION CONSISTS OF ABUTMENT MODIFICATION WITH INSTALLATION OF PREFORMED PAVEMENT JOINT SEAL, BRIDGE DECK SCARIFICATION, FULL DEPTH DECK PATCHING, CURB REPAIR, BRIDGE DECK OVERLAY, DECK DRAIN REPLACEMENT, NEW APPROACH SLABS AND PAVEMENT CONNECTORS, HMA SHOULDERS, PAVEMENT MARKING, AND ANY OTHER WORK NEEDED TO COMPLETE THIS SECTION.

THE WORK SHALL BE COMPLETED UTILIZING STAGE CONSTRUCTION WITH TEMPORARY TRAFFIC SIGNALS AND TEMPORARY CONCRETE BARRIER.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT.

| LOCATION(S) | MIXTURE USE(S) | PG | DESIGN AIR VOIDS | MIXTURE COMPOSITION | FRICTION AGGREGATE | MIXTURE WEIGHT | QUALITY MANAGEMENT PROGRAM | SUBLOT SIZE | MATERIAL TRANSFER DEVICE (REQUIRED?) |
|-------------|--|----------|------------------|---------------------|--------------------|----------------|----------------------------|-------------|--------------------------------------|
| MAINLINE | PAVEMENT CONNECTOR (TOP 2" LIFT) | PG 64-22 | 4.0% @ N=70 | IL - 9.5 | MIXTURE C | N70 | QC/QA | N/A | N/A |
| MAINLINE | PAVEMENT CONNECTOR (BOTTOM LIFTS) | PG 64-22 | 4.0% @ N=70 | IL - 19.0 | N/A | N70 | QC/QA | N/A | N/A |
| MAINLINE | HMA SURFACE COURSE, IL-9.5, MIX "C", N70 (1 1/2") | PG 64-22 | 4.0% @ N=70 | IL - 9.5 | MIXTURE C | N70 | QC/QA | N/A | N/A |
| SHOULDERS | HMA SURFACE COURSE, IL-9.5, MIX "C", N70 (TOP 2" LIFT) | PG 64-22 | 4.0% @ N=70 | IL - 9.5 | MIXTURE C | N70 | QC/QA | N/A | N/A |
| SHOULDERS | HMA BINDER COURSE, IL-19.0, N70 (BOTTOM 4" LIFTS) | PG 64-22 | 4.0% @ N=70 | IL - 19.0 | N/A | N70 | QC/QA | N/A | N/A |

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN THE CALCULATION OF PLAN QUANTITIES:

| | | |
|----------------------------------|-------------------|-----------------------|
| BITUMINOUS MATERIALS (TACK COAT) | | |
| MILLED SURFACE | BETWEEN HMA LIFTS | 0.05 LBS./SQ. FT. |
| | | 0.025 LBS./SQ. FT. |
| HOT-MIX ASPHALT | | 112 LBS./SQ. YD./INCH |

REV. - MS

MODEL: Default
FILE NAME: \\pww\planning\dwg\111022\111022.dwg
PROJECT: 111022
DRAWN: JH
CHECKED: JH
DATE: 10/13/2022

| | | |
|------------------------------|------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - | REVISED - |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX, STANDARDS, & GENERAL NOTES

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|------------------------------|-------------------------|---------|--------------|--------------------|
| 322 | D7 BRIDGE REPAIR 2023-5 | FAYETTE | 23 | 2 |
| | | | | CONTRACT NO. 74A91 |
| ILLINOIS FAYETTE PROJECT | | | | |

80% FED
20% STATE

80% FED
20% STATE

| SUMMARY OF QUANTITIES | | | TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | | |
|-----------------------|--|-------|------------------|------------------------|--|--|
| CODE NO | ITEM | UNIT | | 0047 | | |
| 40600290 | BITUMINOUS MATERIALS (TACK COAT) | POUND | 216 | 216 | | |
| 40600990 | TEMPORARY RAMP | SO YD | 72 | 72 | | |
| 40604052 | HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70 | TON | 30 | 30 | | |
| 42000070 | PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB | SO YD | 69 | 69 | | |
| 44000100 | PAVEMENT REMOVAL | SO YD | 108 | 108 | | |
| 44000155 | HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" | SO YD | 361 | 361 | | |
| 44004250 | PAVED SHOULDER REMOVAL | SO YD | 220 | 220 | | |
| 48203037 | HOT-MIX ASPHALT SHOULDERS, 10" | SO YD | 167 | 167 | | |
| 50102400 | CONCRETE REMOVAL | CU YD | 1.1 | 1.1 | | |
| 50300100 | FLOOR DRAINS | EACH | 38 | 38 | | |
| 50300225 | CONCRETE STRUCTURES | CU YD | 20.6 | 20.6 | | |
| 50300255 | CONCRETE SUPERSTRUCTURE | CU YD | 1.1 | 1.1 | | |
| 50300260 | BRIDGE DECK GROOVING | SO YD | 879 | 879 | | |

| SUMMARY OF QUANTITIES | | | TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | | |
|-----------------------|---|--------|------------------|------------------------|--|--|
| CODE NO | ITEM | UNIT | | 0047 | | |
| 50300300 | PROTECTIVE COAT | SO YD | 960 | 960 | | |
| 50301350 | CONCRETE SUPERSTRUCTURE (APPROACH SLAB) | CU YD | 87 | 87 | | |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 35610 | 35610 | | |
| 50800515 | BAR SPLICERS | EACH | 298 | 298 | | |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 4 | 4 | | |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 | | |
| 70100405 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 | EACH | 1 | 1 | | |
| 70100450 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 | L SUM | 1 | 1 | | |
| 70106500 | TEMPORARY BRIDGE TRAFFIC SIGNALS | EACH | 1 | 1 | | |
| 70107005 | PAVEMENT MARKING BLACKOUT TAPE, 5" | FOOT | 1311 | 1311 | | |
| 70107025 | CHANGEABLE MESSAGE SIGN | CAL DA | 28 | 28 | | |
| 70300100 | SHORT TERM PAVEMENT MARKING | FOOT | 40 | 40 | | |
| 70300150 | SHORT TERM PAVEMENT MARKING REMOVAL | SO FT | 560 | 560 | | |

REV. - MS

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| | | |
|------------------------------|------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100.0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

| | | | | |
|---------------------------|--------------------------|---------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 3 |
| | | | CONTRACT NO. 74A91 | |
| ILLINOIS FED. AID PROJECT | | | | |

80% FED
20% STATE

| SUMMARY OF QUANTITIES | | | TOTAL QUANTITIES | CONSTRUCTION TYPE CODE | | |
|-----------------------|--|-------|------------------|------------------------|--|--|
| CODE NO | ITEM | UNIT | | 0047 | | |
| 70400100 | TEMPORARY CONCRETE BARRIER | FOOT | 562.5 | 562.5 | | |
| 70400200 | RELOCATE TEMPORARY CONCRETE BARRIER | FOOT | 562.5 | 562.5 | | |
| 70600250 | IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3 | EACH | 2 | 2 | | |
| 70600350 | IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3 | EACH | 2 | 2 | | |
| * 78001110 | PAINT PAVEMENT MARKING - LINE 4" | FOOT | 1381 | 1381 | | |
| Z0004552 | APPROACH SLAB REMOVAL | SQ YD | 107 | 107 | | |
| Z0012111 | BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, 2 1/2" | SQ YD | 742 | 742 | | |
| Z0012144 | BRIDGE DECK SCARIFICATION 2 1/2" | SQ YD | 742 | 742 | | |
| Z0012754 | STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES) | SO FT | 22 | 22 | | |
| Z0016001 | DECK SLAB REPAIR (FULL DEPTH, TYPE I) | SO YD | 25 | 25 | | |
| Z0016002 | DECK SLAB REPAIR (FULL DEPTH, TYPE II) | SO YD | 13 | 13 | | |

* SPECIALTY ITEM

REV. - MS

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| | | |
|------------------------------|------------|-------------|
| USER NAME = Jessica.Hille | DESIGNED - | REVISED - |
| PLOT SCALE = 100.0000' / in. | DRAWN - | REVISIONS - |
| PLOT DATE = 10/13/2022 | CHECKED - | REVISIONS - |
| | DATE - | REVISIONS - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

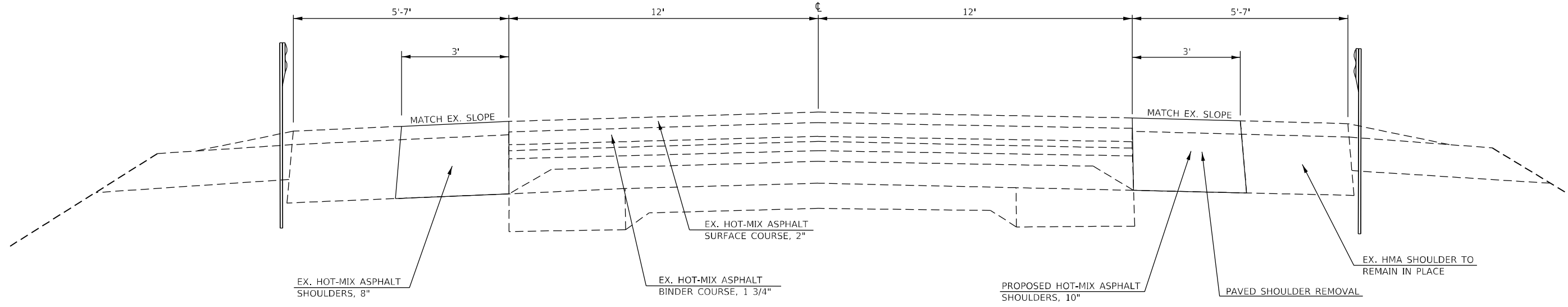
SUMMARY OF QUANTITIES

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|--------------------------|---------|---------------------------|-----------|
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 4 |
| | | | CONTRACT NO. 74A91 | |
| | | | ILLINOIS FED. AID PROJECT | |

TYPICAL SECTION

STA. 133+18.00 TO STA. 134+40.00
 STA. 138+30.00 TO STA. 139+58.00

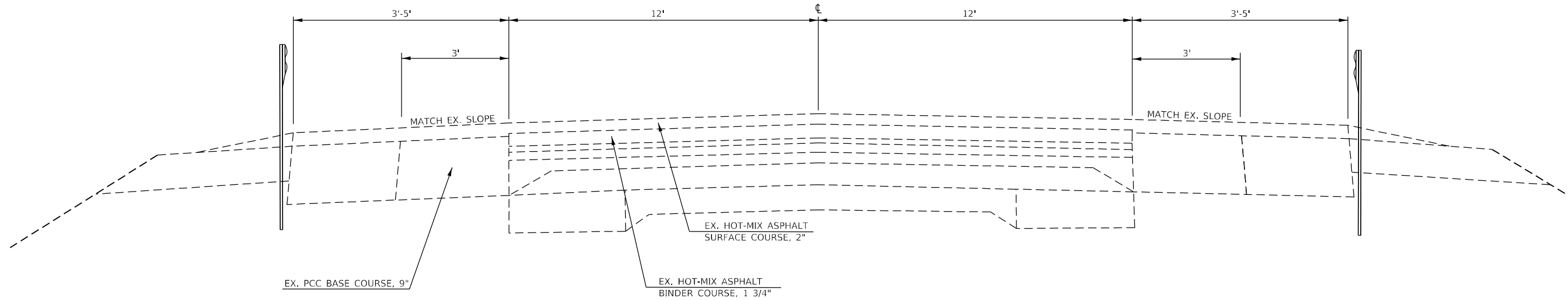


NOTE:
 PAVED SHOULDER REMOVAL WILL EXTEND
 ± 5' INTO EXISTING PCC BASE COURSE

NOT TO SCALE

TYPICAL SECTION

STA. 134+40.00 TO STA. 134+83.09
 STA. 137+87.13 TO STA. 138+30.00



NOT TO SCALE

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| | | |
|------------------------------|------------|-----------|
| USER NAME = jessica.hille | DESIGNED - | REVISED - |
| PLOT SCALE = 100,0000' / in. | DRAWN - | REVISED - |
| PLOT DATE = 10/13/2022 | CHECKED - | REVISED - |
| | DATE - | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

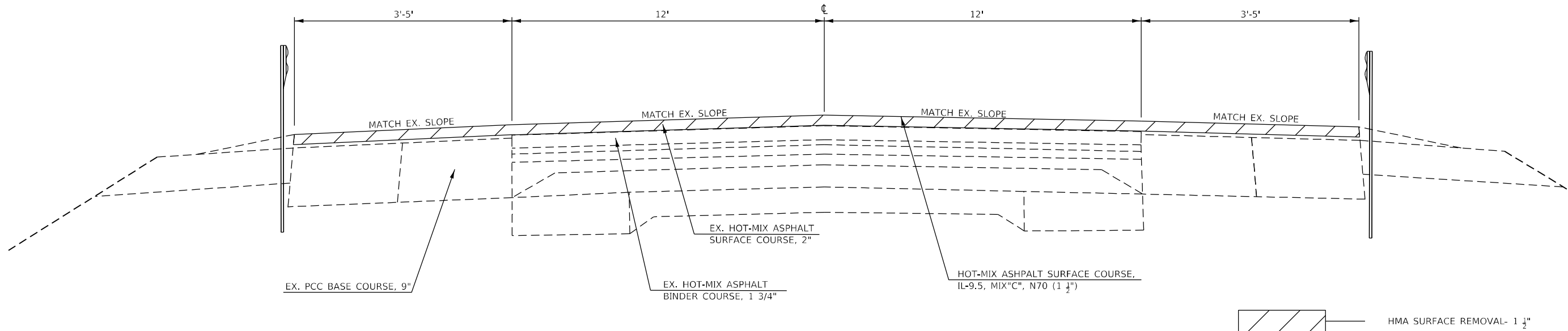
TYPICAL CROSS SECTIONS

SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|--------------------------|---------|---------------------------|-----------|
| 332 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 5 |
| | | | CONTRACT NO. 74A91 | |
| | | | ILLINOIS FED. AID PROJECT | |

TYPICAL SECTION

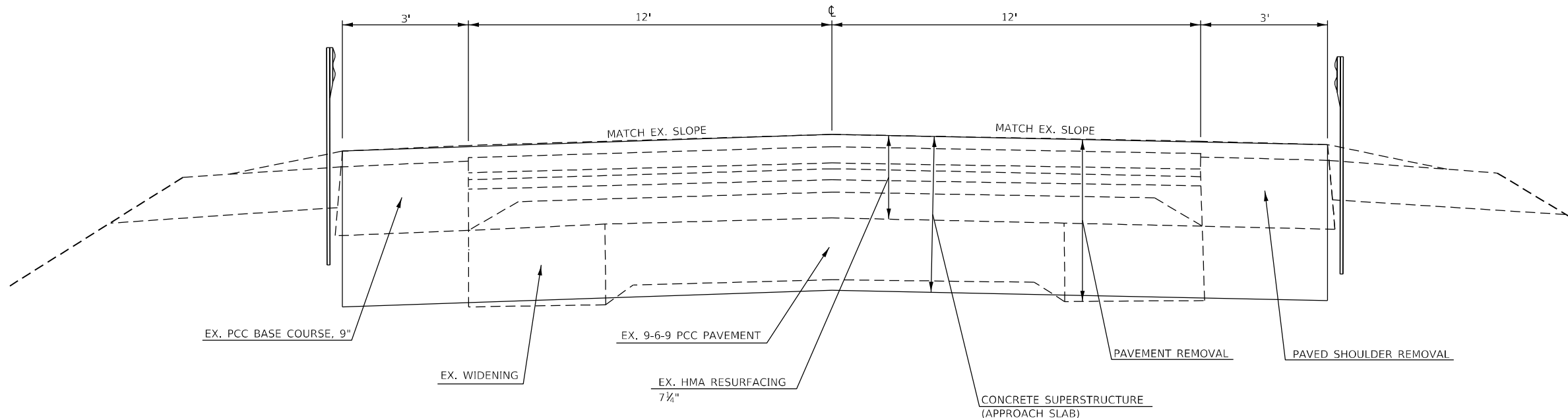
STA. 134+33.09 TO STA. 134+83.09
 STA. 137+87.13 TO STA. 138+37.13



NOT TO SCALE

TYPICAL SECTION

STA. 134+93.09 TO STA. 135+03.24
 STA. 137+66.98 TO STA. 137+77.13



SEE SHEETS 19 & 20 FOR BRIDGE
 APPROACH SLAB DETAILS

NOT TO SCALE

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| | | |
|------------------------------|------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

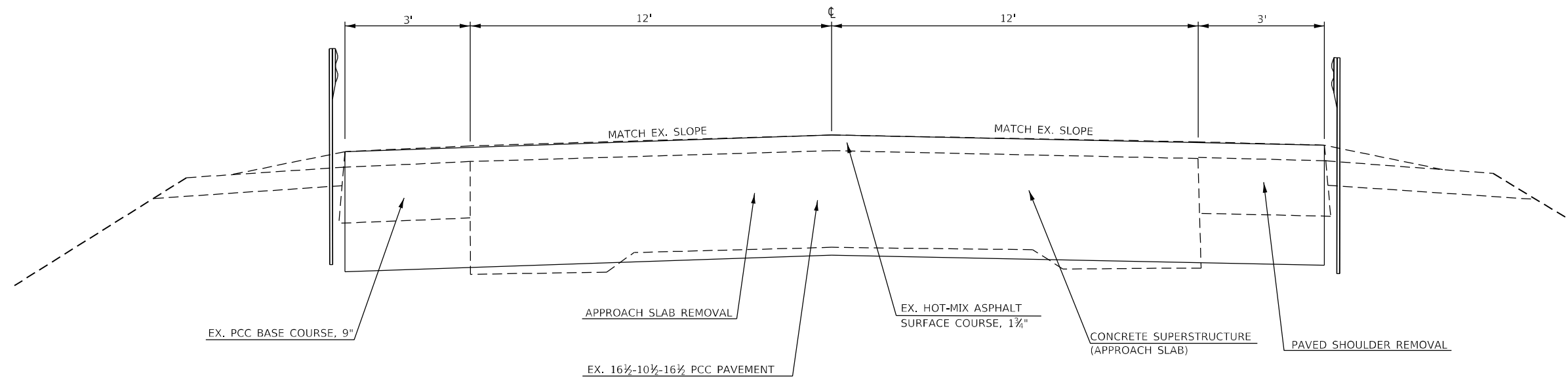
TYPICAL CROSS SECTIONS

SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------------------|---------|--------------------|-----------|
| 322 | D7 BRIDGE REPAIR 2023-5 | FAYETTE | 23 | 6 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 74A91 | |

TYPICAL SECTION

STA. 135+03.24 TO STA. 135+23.24
 STA. 137+46.98 TO STA. 137+66.98

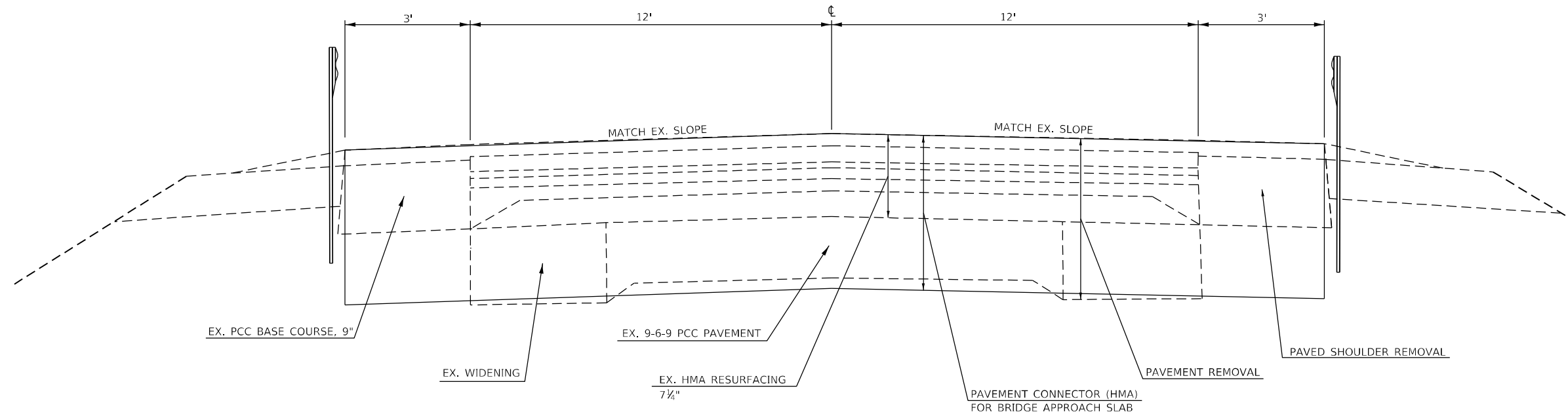


SEE SHEETS 19 & 20 FOR BRIDGE
 APPROACH SLAB DETAILS

NOT TO SCALE

TYPICAL SECTION

STA. 134+83.09 TO STA. 134+93.09
 STA. 137+77.13 TO STA. 137+87.13



NOT TO SCALE

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| | | |
|------------------------------|------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL CROSS SECTIONS

SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------------------|---------|--------------------|-----------|
| 322 | D7 BRIDGE REPAIR 2023-5 | FAYETTE | 23 | 7 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 74A91 | |

| PAVEMENT REMOVAL | | | | | | | |
|------------------|-----------|--------|-------|----------------|-----------------------|------------------|------------------------|
| STATIONING | | LENGTH | WIDTH | SHOUDLER WIDTH | APPROACH SLAB REMOVAL | PAVEMENT REMOVAL | PAVED SHOULDER REMOVAL |
| FROM | TO | FEET | FEET | FEET | SQ YD | SQ YD | SQ YD |
| 133+18.00 | 134+40.00 | 122.00 | - | 6.00 | - | - | 81.33 |
| 134+83.09 | 135+03.24 | 20.15 | 24.00 | 6.00 | - | 53.73 | 13.43 |
| 135+03.24 | 135+23.24 | 20.00 | 24.00 | 6.00 | 53.33 | - | 13.33 |
| 137+46.98 | 137+66.98 | 20.00 | 24.00 | 6.00 | 53.33 | - | 13.33 |
| 137+66.98 | 137+87.13 | 20.15 | 24.00 | 6.00 | - | 53.73 | 13.43 |
| 138+30.00 | 139+58.00 | 128.00 | - | 6.00 | - | - | 85.33 |
| TOTALS: | | | | | 107 | 108 | 220 |

| HMA RESURFACING | | | | | |
|-----------------|-----------|--------|------------|---|--|
| STATIONING | | LENGTH | AVE. WIDTH | HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" | HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70 |
| FROM | TO | FEET | FEET | SQ YD | TON |
| 134+33.09 | 134+83.09 | 50.00 | 32.50 | 180.56 | 15.17 |
| 137+87.13 | 138+37.13 | 50.00 | 32.50 | 180.56 | 15.17 |
| TOTALS: | | | | 361 | 30 |

| HMA SHOULDER | | | | | |
|--------------|-----------|--------|-------------------|-------------------|--------------------------------|
| STATIONING | | LENGTH | LT SHOUDLER WIDTH | RT SHOJDLER WIDTH | HOT-MIX ASPHALT SHOULDERS, 10" |
| FROM | TO | FEET | FEET | FEET | SQ YD |
| 133+18.00 | 134+40.00 | 122.00 | 3.00 | 3.00 | 81.33 |
| 138+30.00 | 139+58.00 | 128.00 | 3.00 | 3.00 | 85.33 |
| TOTALS: | | | | | 167 |

| PAVEMENT MARKING | | | | | | | | |
|------------------|-----------|----------|--------|------------------------------------|-----------------------------|-------------------------------------|--------------------------------|--------|
| STATIONING | | LOCATION | LENGTH | PAVEMENT MARKING BLACKOUT TAPE, 5" | SHORT TERM PAVEMENT MARKING | SHORT TERM PAVEMENT MARKING REMOVAL | PAINT PAVEMENT MARKING-LINE 4" | |
| FROM | TO | LT/RT | EOP/CL | FEET | FEET | FEET | SQ FT | FEET |
| 131+89.90 | 134+83.09 | - | CL | 293.19 | 293.19 | - | 122.16 | - |
| 137+87.13 | 140+86.36 | - | CL | 299.23 | 299.23 | - | 124.68 | - |
| 133+79.50 | 138+90.71 | RT | EOP | 511.21 | 511.21 | - | 213.00 | - |
| 133+79.50 | 134+83.09 | LT | EOP | 103.59 | 103.59 | - | 43.16 | - |
| 137+87.13 | 138+90.71 | LT | EOP | 103.58 | 103.58 | - | 43.16 | - |
| 133+18.00 | 134+33.09 | LT/RT | EOP | 115.09 | - | - | - | 230.18 |
| 134+33.09 | 138+37.13 | - | CL | 404.04 | - | 40.40 | 13.47 | 909.09 |
| 138+37.13 | 139+58.00 | LT/RT | EOP | 120.87 | - | - | - | 241.74 |
| TOTALS: | | | | 1311 | 40 | 560 | 1381 | |

| PAVEMENT CONNECTOR | | | | |
|--------------------|-----------|--------|-------|---|
| STATIONING | | LENGTH | WIDTH | PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB |
| FROM | TO | FEET | FEET | SQ YD |
| 134+83.09 | 134+93.09 | 10.00 | 31.00 | 34.44 |
| 137+77.13 | 137+87.13 | 10.00 | 31.00 | 34.44 |
| TOTALS: | | | | 69 |

| TEMPORARY CONCRETE BARRIER | | | | | | |
|----------------------------|-----------|--------|----------------------------|-------------------------------------|---|--|
| STATIONING | | LENGTH | TEMPORARY CONCRETE BARRIER | RELOCATE TEMPORARY CONCRETE BARRIER | IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3 | IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3 |
| FROM | TO | FEET | FEET | FEET | EACH | EACH |
| 133+54.13 | 139+16.09 | 561.96 | 562.5 | 562.5 | 2 | 2 |
| TOTALS: | | | 562.5 | 562.5 | 2 | 2 |

| TEMPORARY RAMP | | | | |
|----------------|-----------|--------|-------|----------------|
| STATIONING | | LENGTH | WIDTH | TEMPORARY RAMP |
| FROM | TO | FEET | FEET | SQ YD |
| 134+33.09 | 134+38.09 | 5.0 | 34.0 | 18.9 |
| 134+78.09 | 134+83.09 | 5.0 | 31.0 | 17.2 |
| 137+87.13 | 137+92.13 | 5.0 | 31.0 | 17.2 |
| 138+32.13 | 138+37.13 | 5.0 | 34.0 | 18.9 |
| TOTALS: | | | | 72 |

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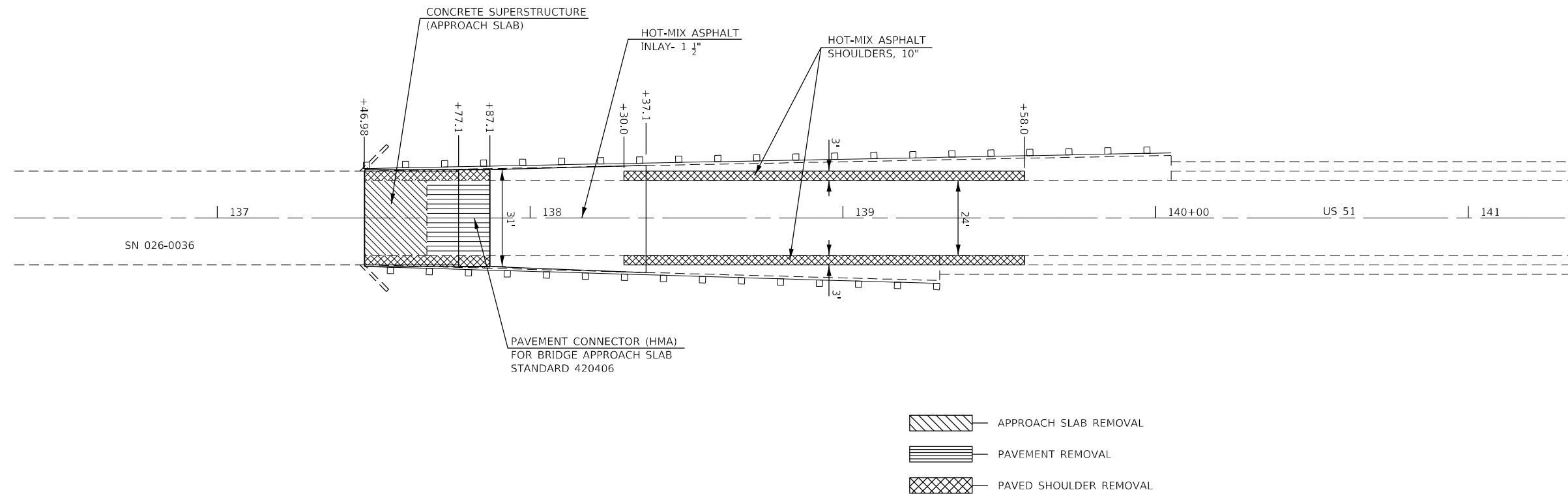
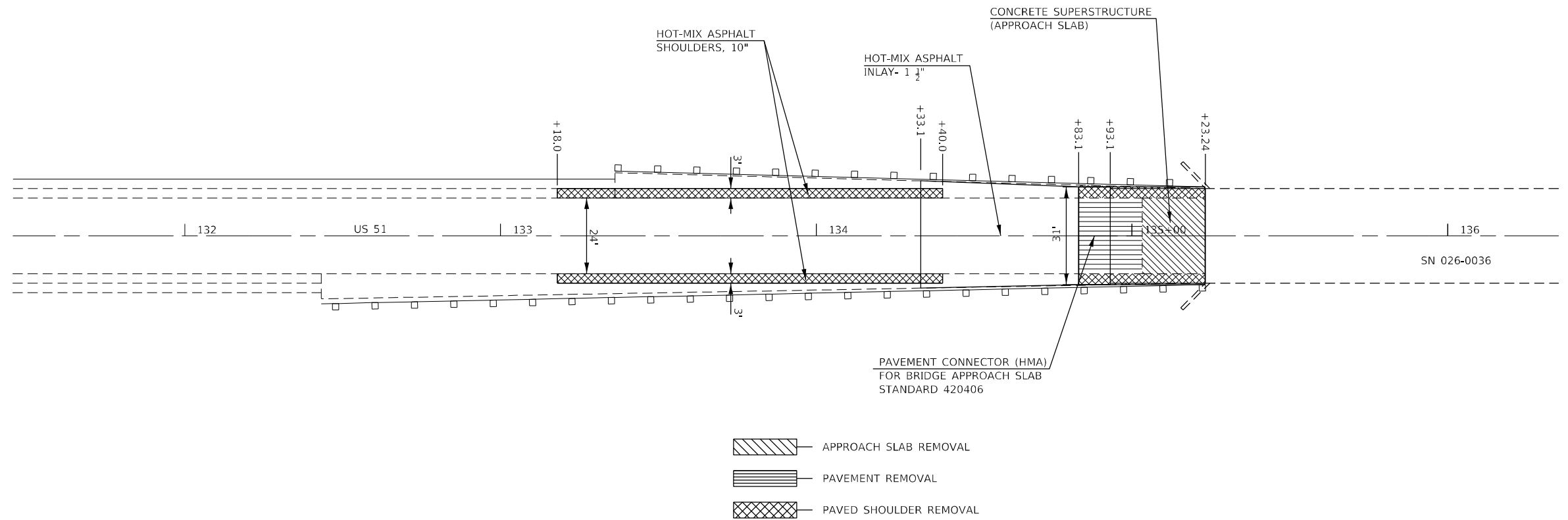
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|------------------------------|------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------------------|---------|---------------------------|-----------|
| 322 | D7 BRIDGE REPAIR 2023-5 | FAYETTE | 23 | 8 |
| CONTRACT NO. 74A91 | | | ILLINOIS FED. AID PROJECT | |



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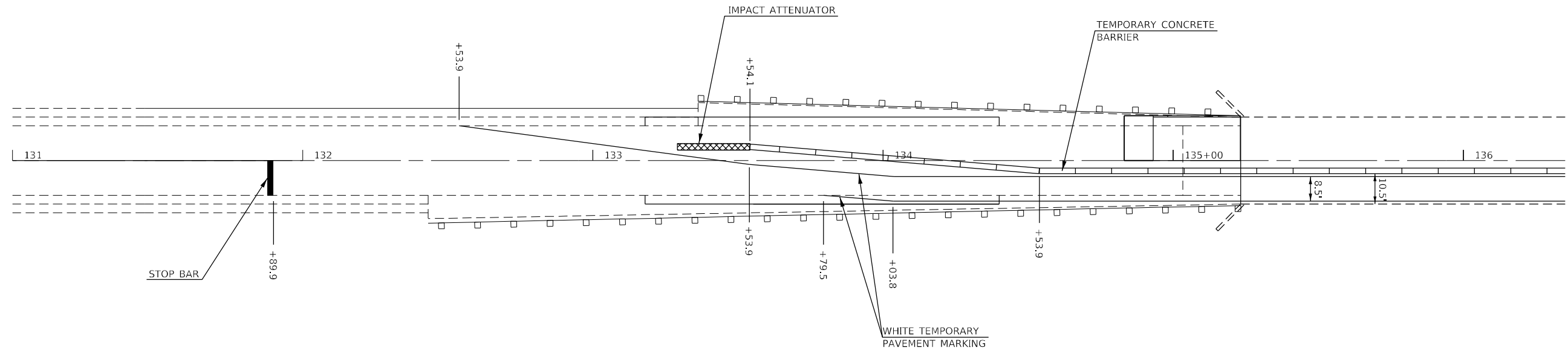
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| USER NAME = Jessica.Hille | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
| PLOT SCALE = 40,0000 * / in. | CHECKED - | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

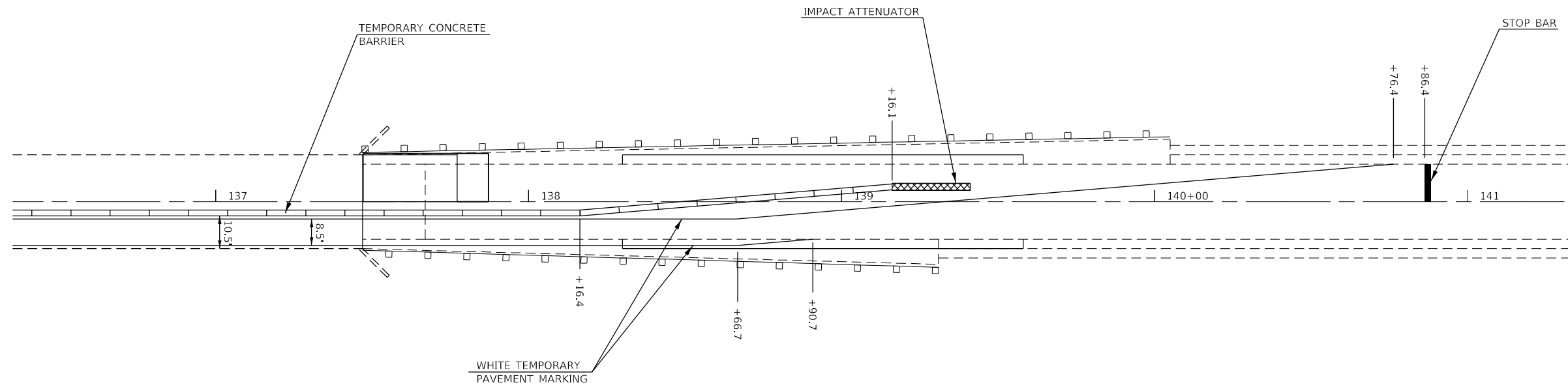
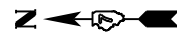
US 51 PLAN SHEET

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------------------|---------|--------------------|-----------|
| 322 | D7 BRIDGE REPAIR 2023-5 | FAYETTE | 23 | 9 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 74A91 | |



SEE STANDARD 701321 FOR ADDITIONAL TRAFFIC CONTROL FEATURES



SEE STANDARD 701321 FOR ADDITIONAL TRAFFIC CONTROL FEATURES

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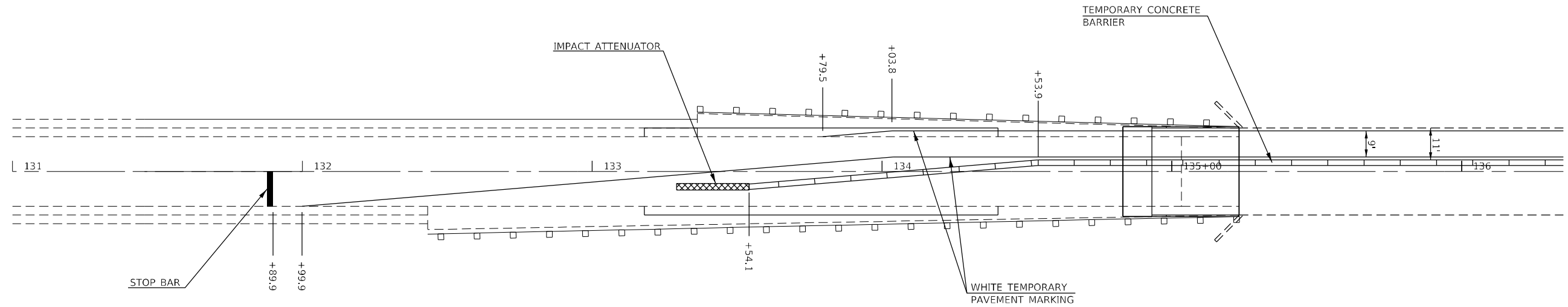
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| PLOT DATE = 10/13/2022 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

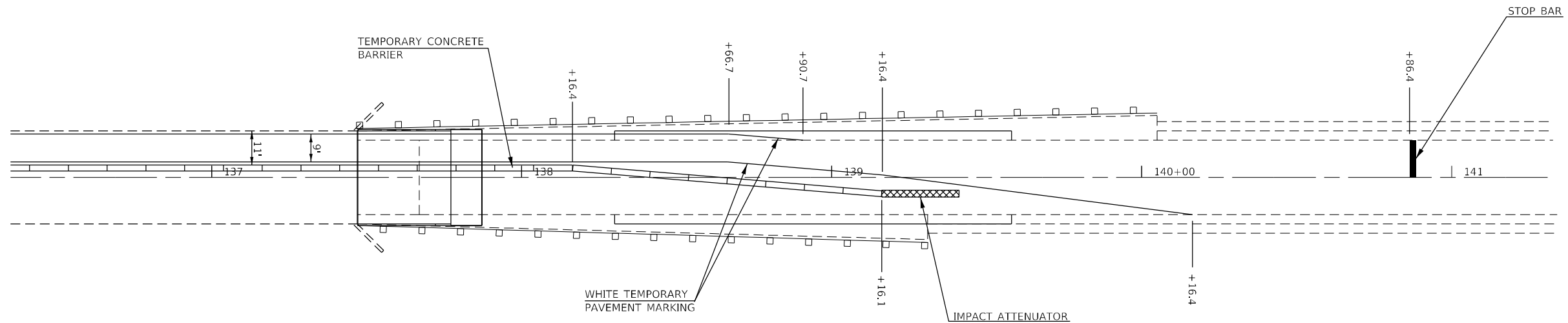
**STAGE I TRAFFIC CONTROL
PLAN SHEET**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-------------------------|---------|---------------------------|-----------|
| 322 | D7 BRIDGE REPAIR 2023-5 | FAYETTE | 23 | 10 |
| | | | CONTRACT NO. 74A91 | |
| | | | ILLINOIS FED. AID PROJECT | |



SEE STANDARD 701321 FOR ADDITIONAL TRAFFIC CONTROL FEATURES



SEE STANDARD 701321 FOR ADDITIONAL TRAFFIC CONTROL FEATURES

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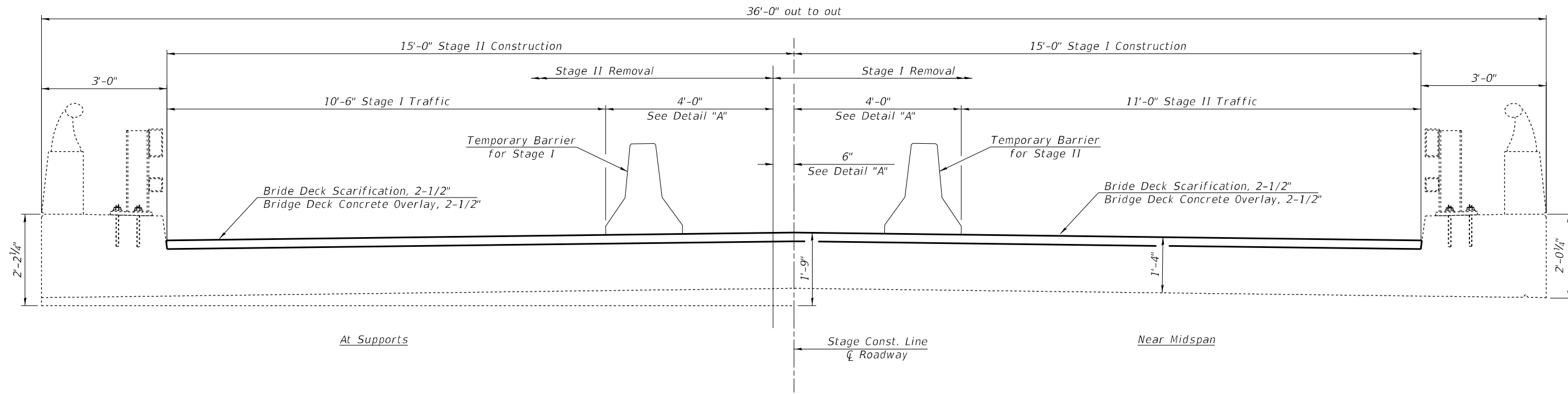
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| USER NAME = Jessica.Hille | DESIGNED - | REVISED - |
| | DRAWN - | REVISED - |
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| PLOT DATE = 10/13/2022 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE II TRAFFIC CONTROL
PLAN SHEET**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|-------------------------|---------|---------------------------|-----------|
| 322 | D7 BRIDGE REPAIR 2023-5 | FAYETTE | 23 | 11 |
| | | | CONTRACT NO. 74A91 | |
| | | | ILLINOIS FED. AID PROJECT | |



STAGE CONSTRUCTION DETAIL
Looking North

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Reinforcement Bars designated (E) shall be epoxy coated.

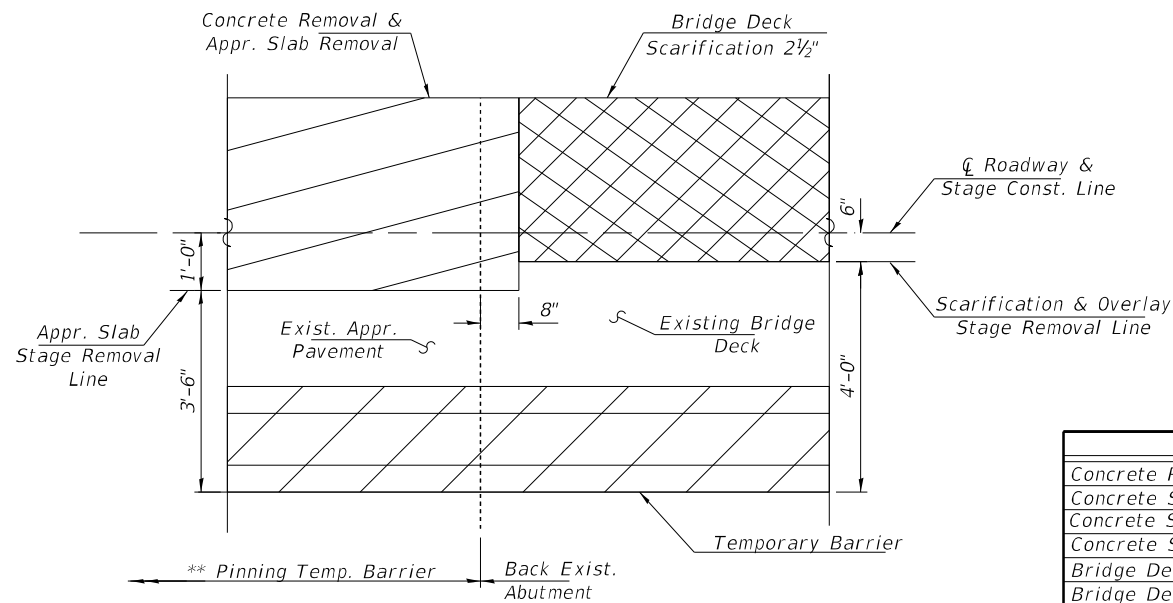
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be replaced with an approved bar splicer or anchorage system. Cost included with CONCRETE REMOVAL.

Protective Coat to be applied to areas of new concrete only, including bridge deck concrete overlay.

Existing steel bridge rail posts and anchors should be left undisturbed if possible. If removal and re-erection of rail posts is necessary or if existing anchors are disturbed, then existing rail posts shall be reused and anchors shall be replaced with new anchors drilled and set according to Article 509.06 of the Standard Specifications. This work and all materials shall be included in the price of Structural Repair of Concrete.

Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on as-built plans.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.



Detail A - Stage Removal Limits Near Abutments

Plan View North Abutment Shown, South Abutment Similar

** Temporary Concrete Barriers to be Pinned or Anchored on Approaches. Pinning Not Permitted on the Bridge Deck

TOTAL BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|---|---------|----------|
| Concrete Removal | Cu. Yd. | 1.1 |
| Concrete Superstructure | Cu. Yd. | 1.1 |
| Concrete Superstructure (Approach Slab) | Cu. Yd. | 87 |
| Concrete Structures | Cu. Yd. | 20.6 |
| Bridge Deck Scarification, 2-1/2" | Sq. Yd. | 742 |
| Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 2-1/2" | Sq. Yd. | 742 |
| Bridge Deck Grooving | Sq. Yd. | 879 |
| Protective Coat | Sq. Yd. | 960 |
| Reinforcement Bars, Epoxy Coated | Pound | 35,610 |
| Bar Splicers | Each | 298 |
| Deck Slab Repair (Full Depth, Type I) | Sq. Yd. | 25 |
| Deck Slab Repair (Full Depth, Type II) | Sq. Yd. | 13 |
| Structural Repair of Concrete (Depth ≤ 5") | Sq. Ft. | 22 |
| Floor Drains | Each | 38 |

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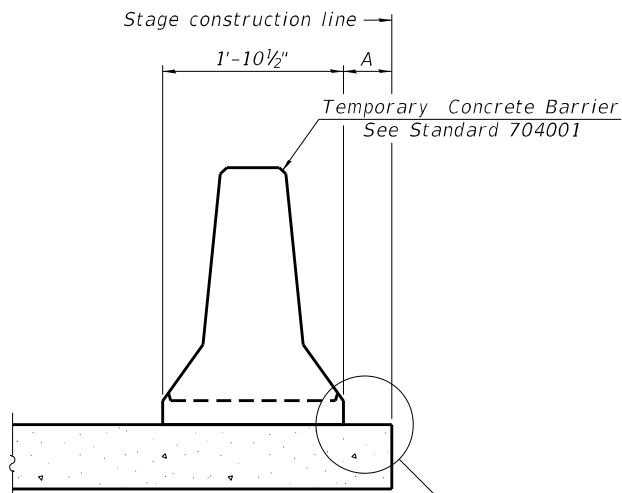
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| USER NAME = Jessica.Hille | DESIGNED - T. Walk | REVISED - |
| | DRAWN - T. Walk | REVISED - |
| PLOT SCALE = 100,0000 ' / in. | CHECKED - D. Macklin | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - June 2021 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION, GENERAL NOTES, &
BILL OF MATERIALS S.N. 026-0036**

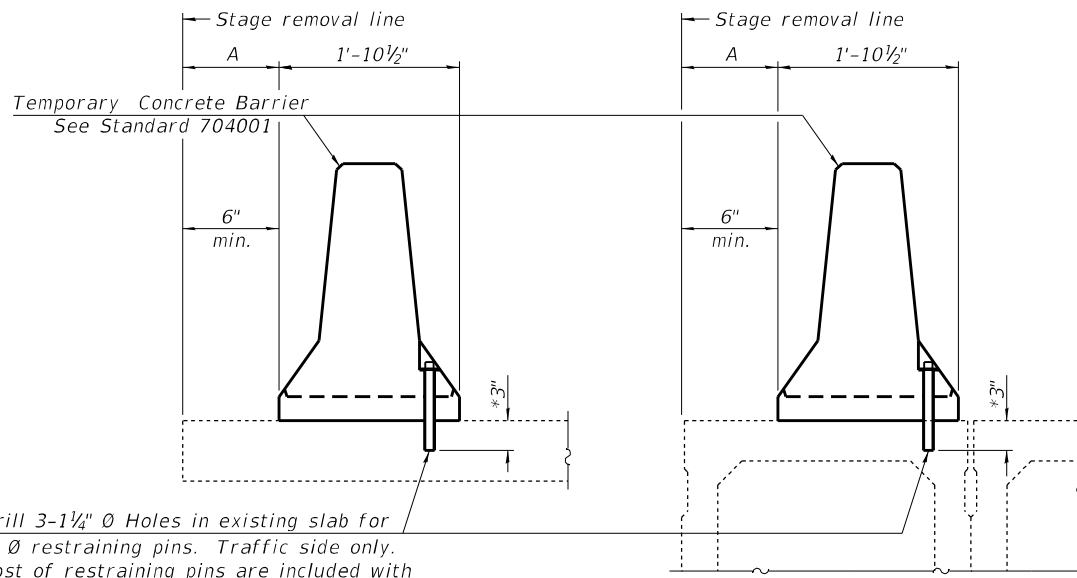
SCALE: SHEET 2 OF 11 SHEETS STA. TO STA.

| | | | | |
|---------------------------|--------------------------|---------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 13 |
| CONTRACT NO. 74A91 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



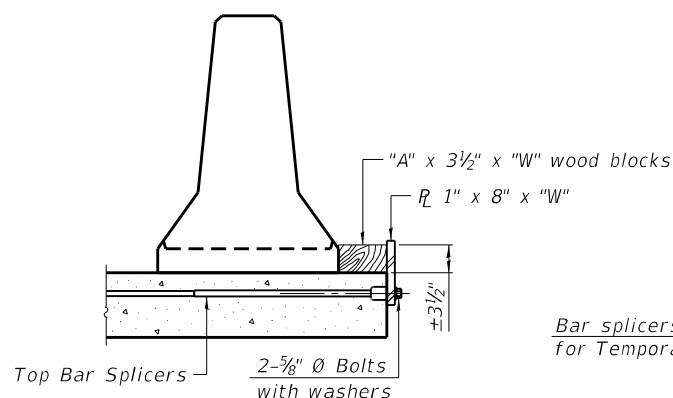
Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

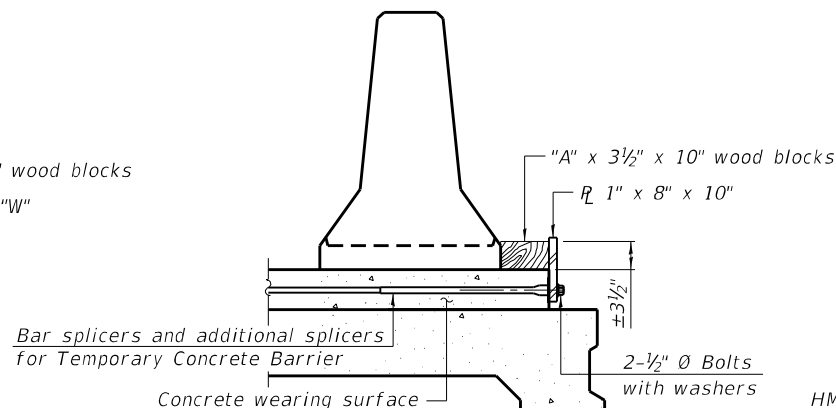
EXISTING DECK BEAM

* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

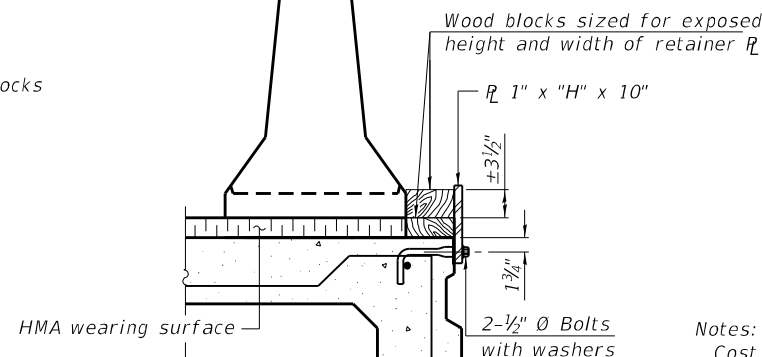
SECTIONS THRU SLAB OR DECK BEAM



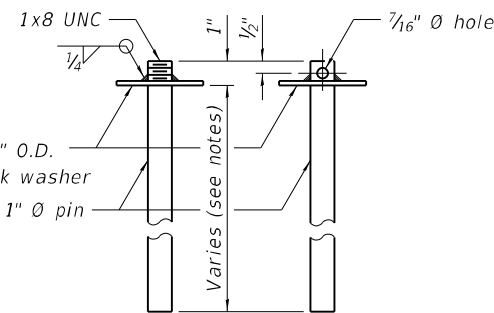
DETAIL I



DETAIL II

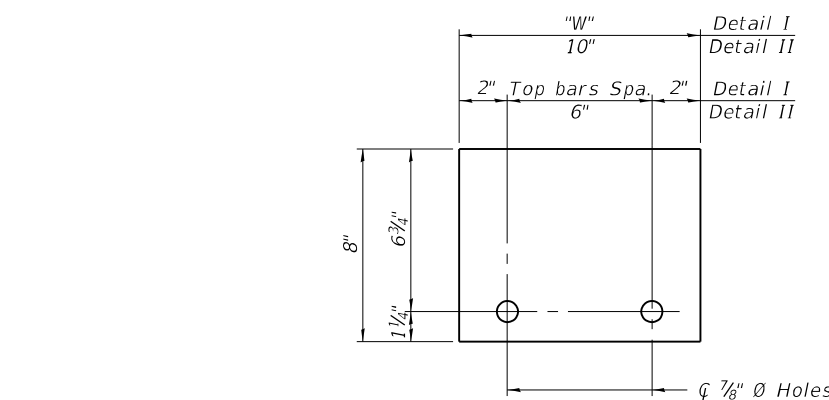


DETAIL III

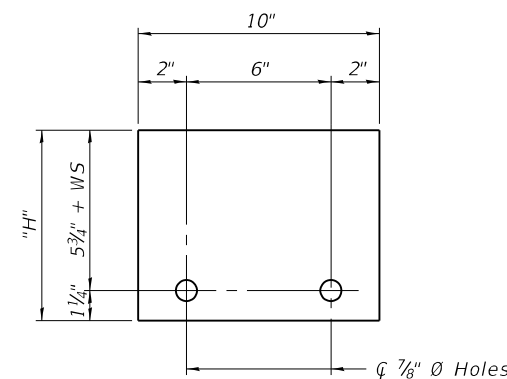


RESTRAINING PIN

US Std. 1 1/16" I.D. x 2 1/2" O.D. x approx. 8 gauge thick washer



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER R 1" x "H" x 10"
(Detail III)

BAR SPLICER FOR #4 BAR - DETAIL III

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate C of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate.
 For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.
 Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
 Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27 8-11-2017

| | | |
|------------------------------|----------------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - T. Walk | REVISED - |
| DRAWN - T. Walk | REVISED - | |
| PLOT SCALE = 100,0000' / in. | CHECKED - D. Macklin | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - June 2021 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

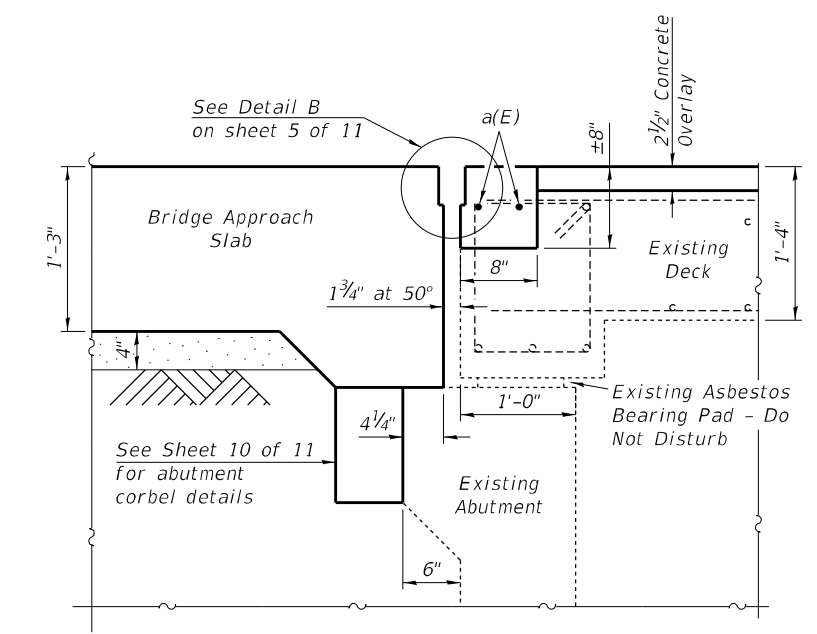
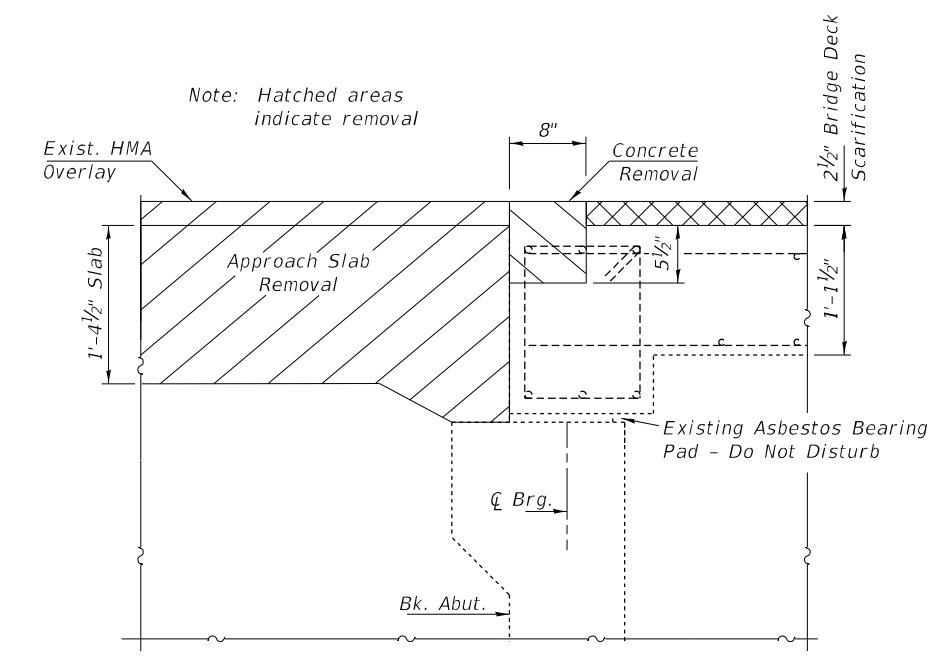
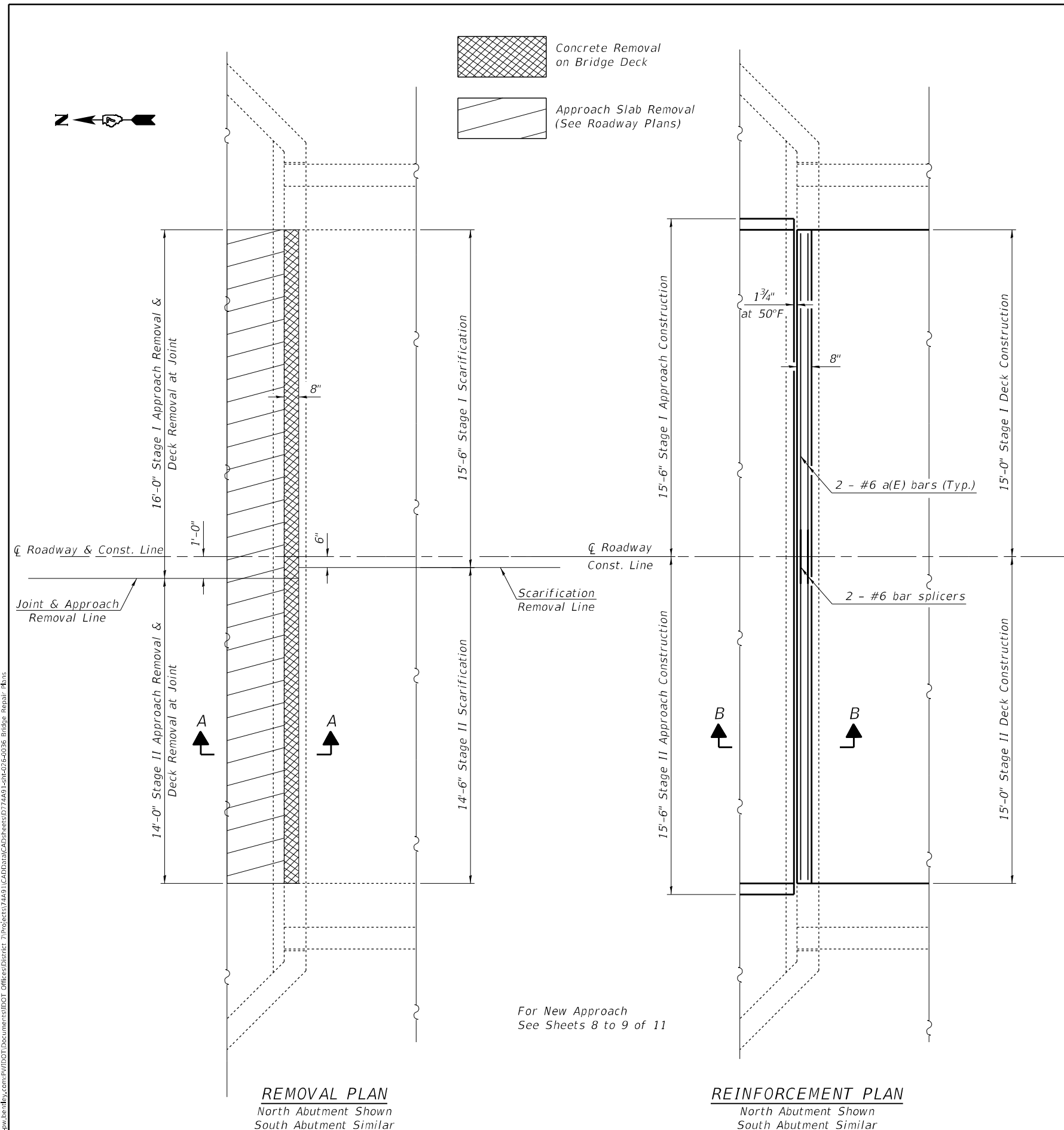
**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 026-0036**

SCALE: SHEET 3 OF 11 SHEETS STA. TO STA.

| | | | | |
|---------------------------|--------------------------|---------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 14 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 74A91 | |

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 STA: TO STA.

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 PROJECT: 74A91\CAD\Drawings\74A91-Exp-026-0036 Bridge Repair.dwg



BILL OF MATERIAL - TWO ABUTMENTS

| Bar | No. | Size | Length | Shape |
|----------------------------------|------|------|---------|----------|
| a(E) | 8 | #6 | 14'-8" | — |
| | ITEM | | UNIT | QUANTITY |
| Concrete Removal | | | Cu. Yd. | 1.1 |
| Concrete Superstructure | | | Cu. Yd. | 1.1 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 180 |
| Bar Splicers | | | Each | 4 |

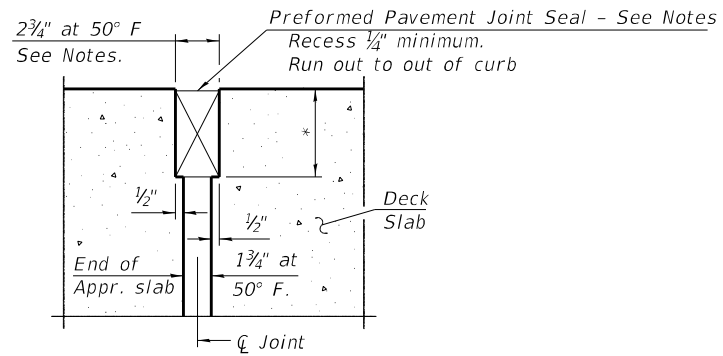
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| USER NAME = Jessica.Hille | DESIGNED - T. Walk | REVISED - |
| DRAWN - T. Walk | REVISED - | |
| PLOT SCALE = 100,0000' / in. | CHECKED - D. Macklin | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - June 2021 | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EXPANSION JOINT REPLACEMENT DETAILS
 S.N. 026-0036**

SCALE: SHEET 4 OF 11 SHEETS STA. TO STA.

| | | | | |
|---------------------------|--------------------------|---------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 15 |
| CONTRACT NO. 74A91 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



DETAIL B
(@ Rt. L's)

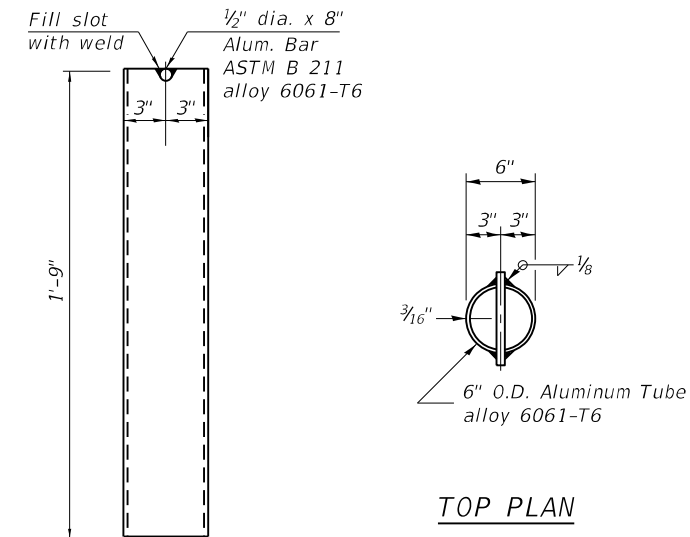
* Per manufacturer recommendations

PAVEMENT JOINT NOTES

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. The length of bridge bridge used to calculate the adjustment shall be 84ft.

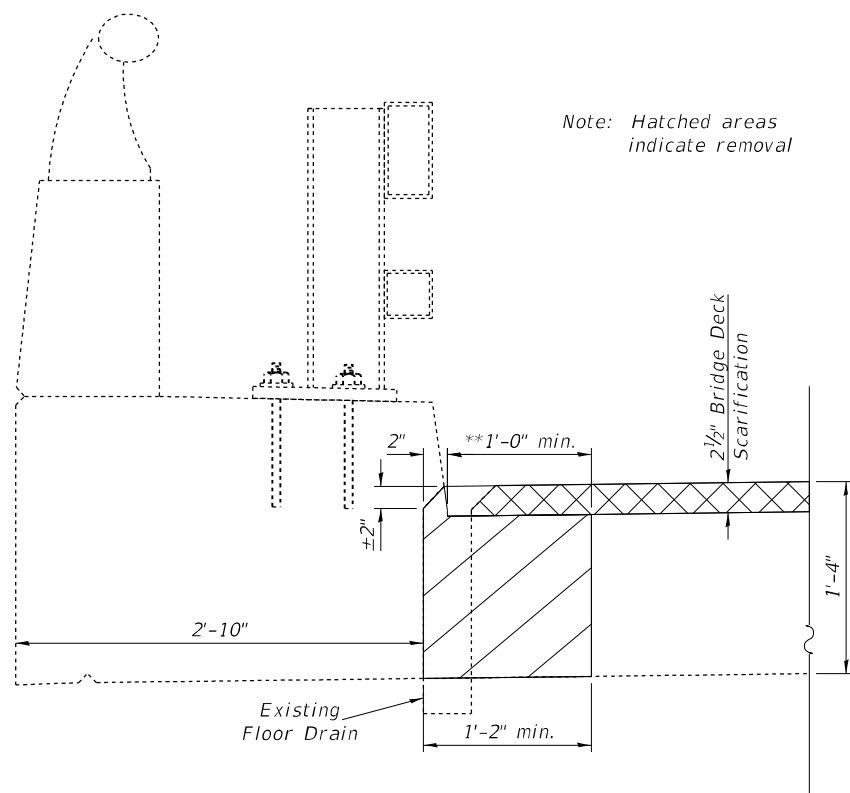
Cost of Preformed Pavement Joint Seal included with unit cost of Concrete Superstructure.

See Special Provision for "Preformed Pavement Joint Seal". Material used shall be "Preformed Elastomeric Joint Seal" according to Section 1053.01. Other joint material options shall not be allowed for this application.

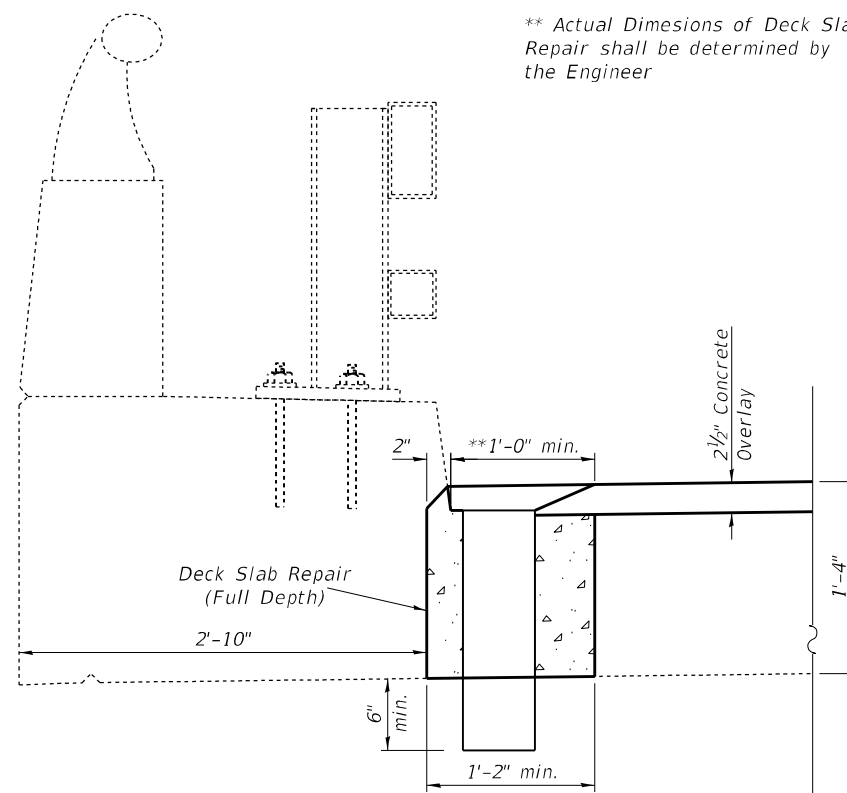


DRAIN DETAIL

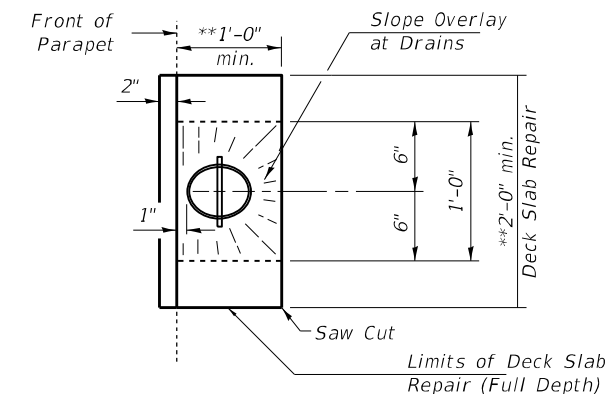
38 Required



SECTION THRU EXISTING FLOOR DRAIN



DRAIN REPLACEMENT DETAIL



TOP PLAN DECK REPAIR AT PROPOSED DRAINS

FLOOR DRAIN NOTES

Fiberglass pipe alternative shall not be allowed for floor drains.

Concrete removal and replacement quantities and locations for drains are included in Deck Slab Repair (Full Depth, Type 1) as shown on "Bridge Deck Patching" see sheet 6 to 7 of 11.

Removal & disposal of the existing floor drains shall be included in the contract unit price for Deck Slab Repair (Full Depth).

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 PROJECT: 74A91\ICADD\Drawings\DOT Office\Drawings\74A91\74A91-026-0036 Bridge Repair Plans

| | | |
|------------------------------|----------------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - T. Walk | REVISED - |
| | DRAWN - T. Walk | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - D. Macklin | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - June 2021 | REVISED - |

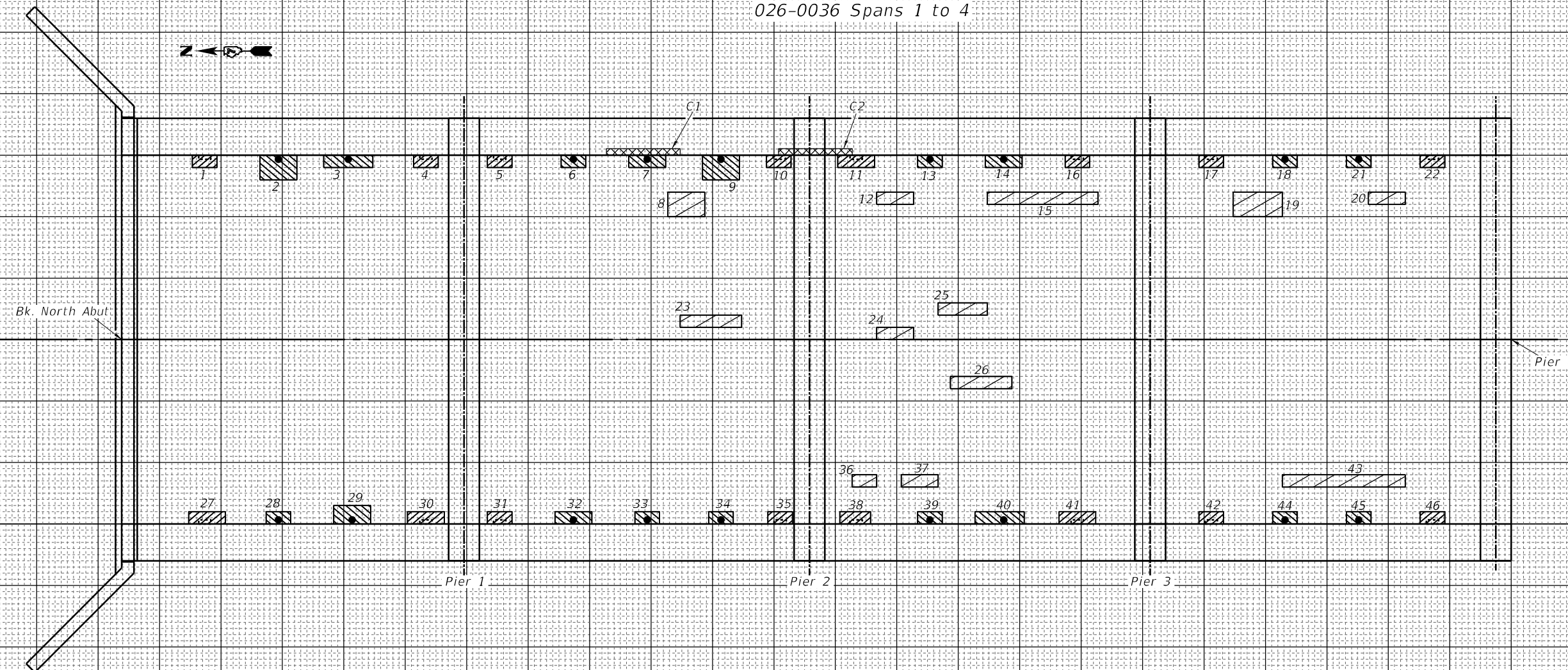
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK DRAIN DETAILS
S.N. 026-0036**

SCALE: SHEET 5 OF 11 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------------------|---------|--------------------|-----------|
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 16 |
| ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 74A91 | |

026-0036 Spans 1 to 4



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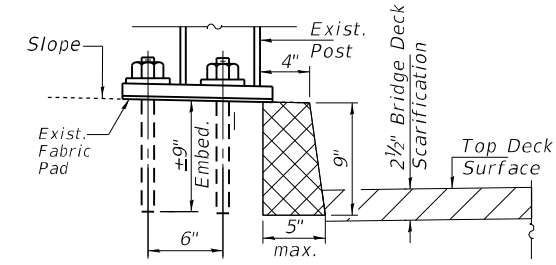
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|-----------|--------|-------|----------------------------|-----------------------------|
| | LENGTH | WIDTH | SQ YD | SQ YD |
| 1 | 2.0 | 1.0 | 0.2 | |
| 2 | 3.0 | 2.0 | | 0.7 |
| 3 | 4.0 | 1.0 | 0.4 | |
| 4 | 2.0 | 1.0 | 0.2 | |
| 5 | 2.0 | 1.0 | 0.2 | |
| 6 | 2.0 | 1.0 | 0.2 | |
| 7 | 3.0 | 1.0 | 0.3 | |
| 8 | 3.0 | 2.0 | | 0.7 |
| 9 | 3.0 | 2.0 | | 0.7 |
| 10 | 2.0 | 1.0 | 0.2 | |
| 11 | 3.0 | 1.0 | 0.3 | |
| 12 | 2.0 | 1.0 | 0.2 | |
| 13 | 2.0 | 1.0 | 0.2 | |
| 14 | 3.0 | 1.0 | 0.3 | |
| 15 | 9.0 | 1.0 | | 1.0 |
| 16 | 2.0 | 1.0 | 0.2 | |

| PATCH NO. | SIZE | | DECK SLAB REPAIR (FD TY I) | DECK SLAB REPAIR (FD TY II) |
|-----------|--------|-------|----------------------------|-----------------------------|
| | LENGTH | WIDTH | SQ YD | SQ YD |
| 17 | 2.0 | 1.0 | 0.2 | |
| 18 | 2.0 | 1.0 | 0.2 | |
| 19 | 4.0 | 2.0 | | 0.9 |
| 20 | 3.0 | 1.0 | 0.3 | |
| 21 | 2.0 | 1.0 | 0.2 | |
| 22 | 2.0 | 1.0 | 0.2 | |
| 23 | 5.0 | 1.0 | | 0.6 |
| 24 | 3.0 | 1.0 | 0.3 | |
| 25 | 4.0 | 1.0 | 0.4 | |
| 26 | 5.0 | 1.0 | | 0.6 |
| 27 | 3.0 | 1.0 | 0.3 | |
| 28 | 2.0 | 1.0 | 0.2 | |
| 29 | 3.0 | 1.5 | 0.5 | |
| 30 | 3.0 | 1.0 | 0.3 | |
| 31 | 2.0 | 1.0 | 0.2 | |
| 32 | 3.0 | 1.0 | 0.3 | |

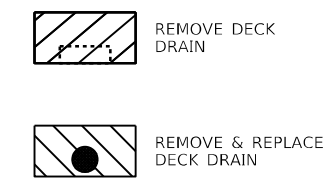
| PATCH NO. | SIZE | | DECK SLAB REPAIR (FD TY I) | DECK SLAB REPAIR (FD TY II) |
|-----------|--------|-------|----------------------------|-----------------------------|
| | LENGTH | WIDTH | SQ YD | SQ YD |
| 33 | 2.0 | 1.0 | 0.2 | |
| 34 | 2.0 | 1.0 | 0.2 | |
| 35 | 2.0 | 1.0 | 0.2 | |
| 36 | 2.0 | 1.0 | 0.2 | |
| 37 | 3.0 | 1.0 | 0.3 | |
| 38 | 2.5 | 1.0 | 0.3 | |
| 39 | 2.0 | 1.0 | 0.2 | |
| 40 | 4.0 | 1.0 | 0.4 | |
| 41 | 3.0 | 1.0 | 0.3 | |
| 42 | 2.0 | 1.0 | 0.2 | |
| 43 | 10.0 | 1.0 | | 1.1 |
| 44 | 2.0 | 1.0 | 0.2 | |
| 45 | 2.0 | 1.0 | 0.2 | |
| 46 | 2.0 | 1.0 | 0.2 | |
| TOTALS | | | 10.6 | 6.1 |
| ROUND TO | | | 11 | 7 |

| PATCH NO. | SIZE | | HEIGHT | STRUC. REPAIR OF CONCRETE (DEPTH ≤ 5") |
|-----------|--------|-------|--------|--|
| | LENGTH | WIDTH | | |
| C1 | 6.0 | 0.3 | 0.75 | 4.5 |
| C2 | 7.0 | 0.3 | 0.75 | 5.3 |
| TOTAL | | | | 9.8 |
| ROUND TO | | | | 10 |

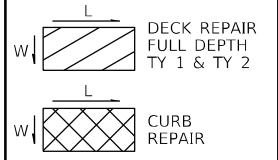
ESTIMATED PAY QUANTITIES
 DECK SLAB REPAIR (FULL DEPTH, TYPE I) = 11 SQ YD
 DECK SLAB REPAIR (FULL DEPTH, TYPE II) = 7 SQ YD
 STRUC. REPAIR OF CONCRETE (DEPTH ≤ 5") = 10 SQ FT
 DECK DRAINS = 18 EA



Typical Curb Repair Detail



THE LOCATIONS AND SIZES SHOWN GRAPHICALLY ABOVE ARE APPROXIMATE. SEE THIS TABLE FOR ACTUAL SIZES.



DATE OF SURVEY: 5-13-2021
 SURVEY BY: DPM & TMW
 METHOD OF SURVEY: VISUAL

| | | |
|-----------------------------|----------------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - T. Walk | REVISED - |
| | DRAWN - T. Walk | REVISED - |
| PLOT SCALE = 100,000' / in. | CHECKED - D. Macklin | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - June 2021 | REVISED - |

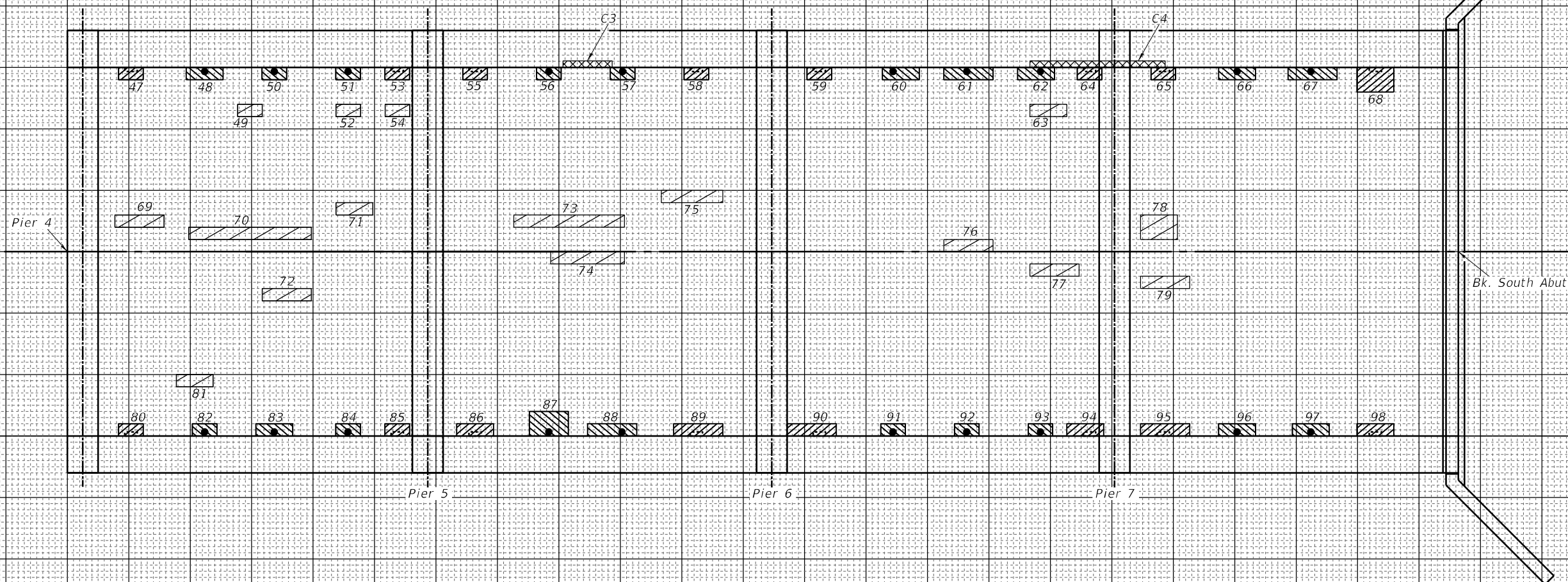
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BRIDGE DECK PATCHING, SPANS 1 TO 4
 SN. 026-0036

SCALE: SHEET 6 OF 11 SHEETS STA. TO STA.

| | | | | |
|--------------------|----------------------------------|----------------|-----------------|--------------|
| F.A.P. RTE. 322 | SECTION D7 BRIDGE REPAIRS 2023-5 | COUNTY FAYETTE | TOTAL SHEETS 23 | SHEET NO. 17 |
| CONTRACT NO. 74A91 | | | | |

026-0036 Spans 5 to 8



MODEL: Default
FILE NAME: p:\1101-pw-bentley.com\FW\DOT\Documents\DOT - Offices\District 7\Projects\7491\CA\Drawings\CAD\tees\077491-tees-026-0036 - Bridge - Repair - Plans

| PATCH NO. | SIZE | | DECK SLAB REPAIR (FD TY I) | DECK SLAB REPAIR (FD TY II) |
|-----------|--------|-------|----------------------------|-----------------------------|
| | LENGTH | WIDTH | SQ YD | SQ YD |
| 47 | 2.0 | 1.0 | 0.2 | |
| 48 | 3.0 | 1.0 | 0.3 | |
| 49 | 2.0 | 1.0 | 0.2 | |
| 50 | 2.0 | 1.0 | 0.2 | |
| 51 | 2.0 | 1.0 | 0.2 | |
| 52 | 2.0 | 1.0 | 0.2 | |
| 53 | 2.0 | 1.0 | 0.2 | |
| 54 | 2.0 | 1.0 | 0.2 | |
| 55 | 2.0 | 1.0 | 0.2 | |
| 56 | 2.0 | 1.0 | 0.2 | |
| 57 | 2.0 | 1.0 | 0.2 | |
| 58 | 2.0 | 1.0 | 0.2 | |
| 59 | 2.0 | 1.0 | 0.2 | |
| 60 | 3.0 | 1.0 | 0.3 | |
| 61 | 4.0 | 1.0 | 0.4 | |
| 62 | 3.0 | 1.0 | 0.3 | |

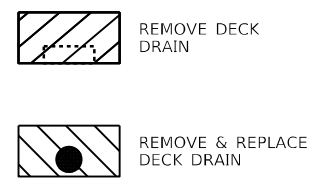
| PATCH NO. | SIZE | | DECK SLAB REPAIR (FD TY I) | DECK SLAB REPAIR (FD TY II) |
|-----------|--------|-------|----------------------------|-----------------------------|
| | LENGTH | WIDTH | SQ YD | SQ YD |
| 63 | 3.0 | 1.0 | 0.3 | |
| 64 | 2.0 | 1.0 | 0.2 | |
| 65 | 2.0 | 2.0 | 0.2 | |
| 66 | 3.0 | 1.0 | 0.3 | |
| 67 | 4.0 | 1.0 | 0.4 | |
| 68 | 3.0 | 2.0 | | 0.7 |
| 69 | 4.0 | 1.0 | 0.1 | |
| 70 | 10.0 | 1.0 | | 1.1 |
| 71 | 3.0 | 1.0 | 0.3 | |
| 72 | 4.0 | 1.0 | 0.4 | |
| 73 | 9.0 | 1.0 | | 1.0 |
| 74 | 6.0 | 1.0 | | 0.7 |
| 75 | 5.0 | 1.0 | | 0.6 |
| 76 | 4.0 | 1.0 | 0.4 | |
| 77 | 4.0 | 1.0 | 0.4 | |
| 78 | 3.0 | 2.0 | | 0.7 |

| PATCH NO. | SIZE | | DECK SLAB REPAIR (FD TY I) | DECK SLAB REPAIR (FD TY II) |
|-----------|--------|-------|----------------------------|-----------------------------|
| | LENGTH | WIDTH | SQ YD | SQ YD |
| 79 | 4.0 | 1.0 | 0.4 | |
| 80 | 2.0 | 1.0 | 0.2 | |
| 81 | 3.0 | 1.0 | 0.3 | |
| 82 | 2.0 | 1.0 | 0.2 | |
| 83 | 3.0 | 1.0 | 0.3 | |
| 84 | 2.0 | 1.0 | 0.2 | |
| 85 | 2.0 | 1.0 | 0.2 | |
| 86 | 3.0 | 1.0 | 0.3 | |
| 87 | 3.0 | 2.0 | | 0.7 |
| 88 | 4.0 | 1.0 | 0.4 | |
| 89 | 4.0 | 1.0 | 0.4 | |
| 90 | 4.0 | 1.0 | 0.4 | |
| 91 | 2.0 | 1.0 | 0.2 | |
| 92 | 2.0 | 1.0 | 0.2 | |
| 93 | 2.0 | 1.0 | 0.2 | |
| 94 | 3.0 | 1.0 | 0.3 | |

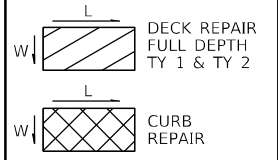
| PATCH NO. | SIZE | | DECK SLAB REPAIR (FD TY I) | DECK SLAB REPAIR (FD TY II) |
|-----------|--------|-------|----------------------------|-----------------------------|
| | LENGTH | WIDTH | SQ YD | SQ YD |
| 95 | 4.0 | 1.0 | 0.4 | |
| 96 | 3.0 | 1.0 | 0.3 | |
| 97 | 4.0 | 1.0 | 0.4 | |
| 98 | 3.0 | 1.0 | 0.3 | |
| TOTALS | | | 13.9 | 5.3 |
| ROUND TO | | | 14 | 6 |

| PATCH NO. | SIZE | | | STRUC. REPAIR OF CONCRETE (DEPTH ≤ 5") |
|-----------|--------|-------|--------|--|
| | LENGTH | WIDTH | HEIGHT | |
| C3 | 4.0 | 0.3 | 0.75 | 3.0 |
| C4 | 11.0 | 0.3 | 0.75 | 8.3 |
| TOTAL | | | | 11.3 |
| ROUND TO | | | | 12 |

ESTIMATED PAY QUANTITIES
 DECK SLAB REPAIR (FULL DEPTH, TYPE I) = 14 SQ YD
 DECK SLAB REPAIR (FULL DEPTH, TYPE II) = 6 SQ YD
 STRUC. REPAIR OF CONCRETE (DEPTH ≤ 5") = 12 SQ FT
 DECK DRAINS = 20 EA



THE LOCATIONS AND SIZES SHOWN GRAPHICALLY ABOVE ARE APPROXIMATE. SEE THIS TABLE FOR ACTUAL SIZES.



DATE OF SURVEY: 5-13-2021
 SURVEY BY: DPM & TMW
 METHOD OF SURVEY: VISUAL

| | | |
|-----------------------------|----------------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - T. Walk | REVISED - |
| PLOT SCALE = 100,000' / in. | DRAWN - T. Walk | REVISED - |
| PLOT DATE = 10/13/2022 | CHECKED - D. Macklin | REVISED - |
| | DATE - June 2021 | REVISED - |

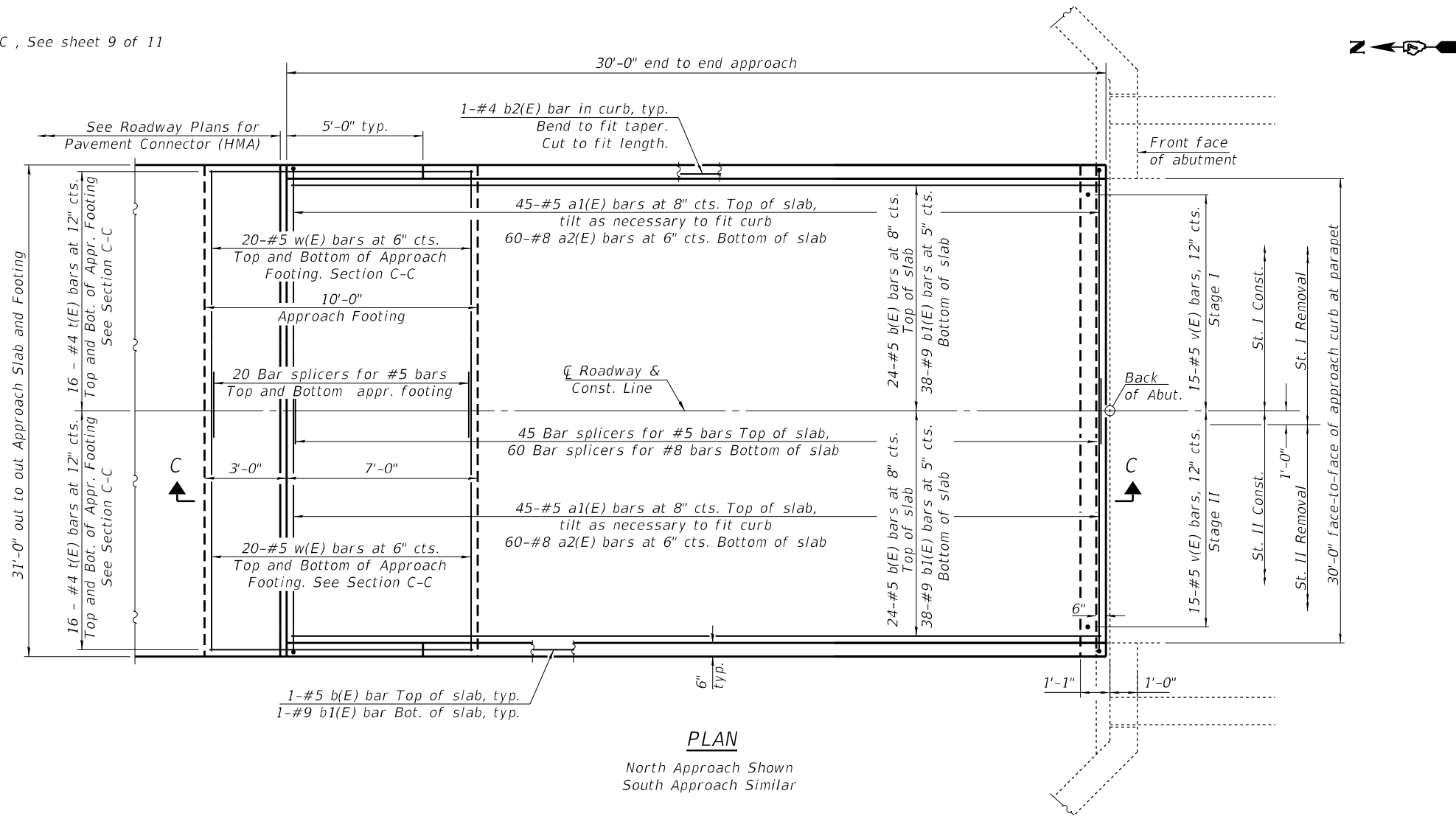
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK PATCHING, SPANS 5 TO 8
 SN. 026-0036**

SCALE: SHEET 7 OF 11 SHEETS STA. TO STA.

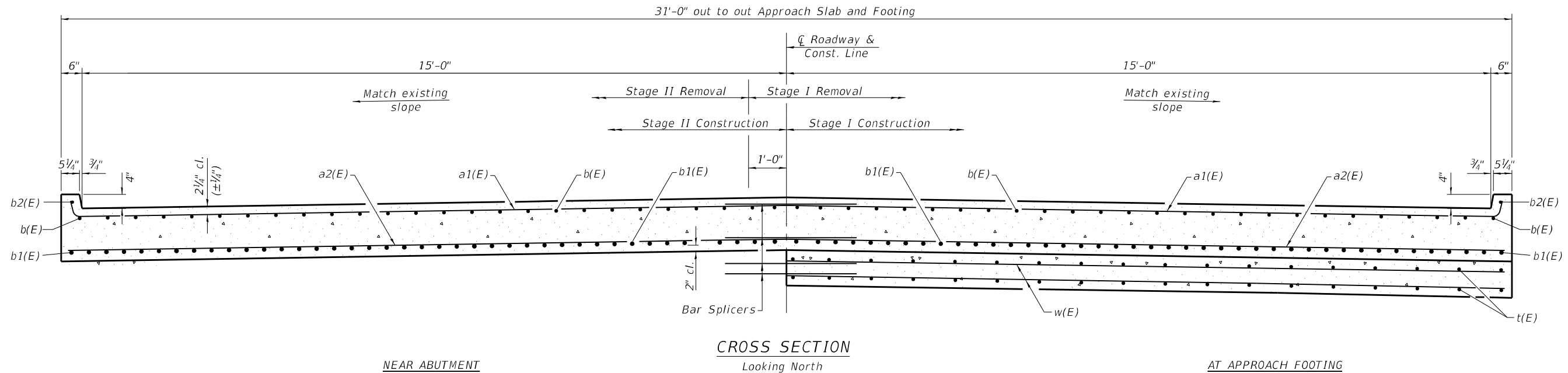
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------------------|---------|--------------|-----------|
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 18 |
| CONTRACT NO. 74A91 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

For Section C-C, See sheet 9 of 11



PLAN

North Approach Shown
South Approach Similar



CROSS SECTION

Looking North

MODEL: Default
 FILE: 3dmodel.pia
 PROJECT: 74A91\CADD\DATA\CAD\PROJECTS\74A91\14-02-2023 Bridge Repair.rvt
 PLOT DATE = 10/13/2022

| | | |
|------------------------------|----------------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - T. Walk | REVISED - |
| | DRAWN - T. Walk | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - D. Macklin | REVISED - |
| | DATE - June 2021 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

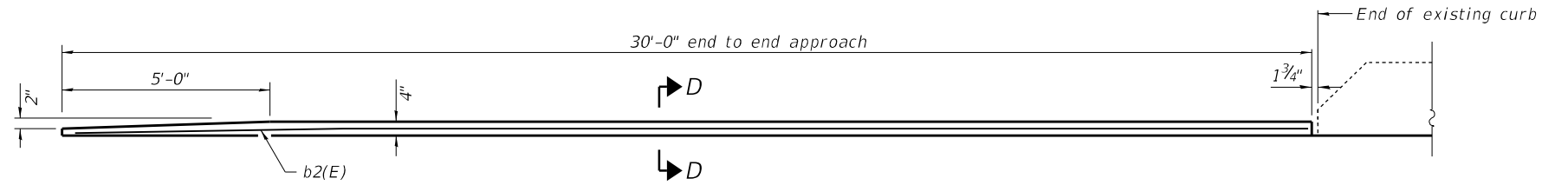
BRIDGE APPROACH SLAB DETAILS - SHEET 1 OF 2
S.N. 026-0036

SCALE: SHEET 8 OF 11 SHEETS STA. TO STA.

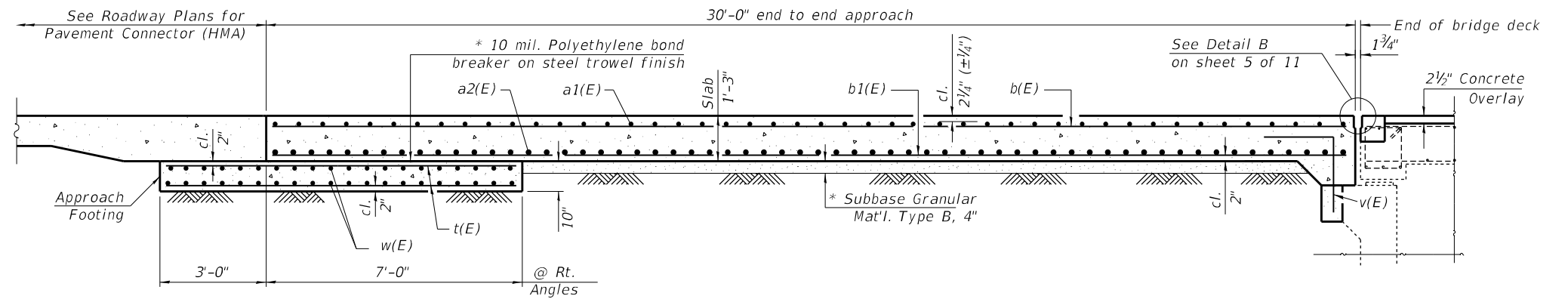
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------------------|---------|--------------|-----------|
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 19 |
| CONTRACT NO. 74A91 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

Notes:

Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 Approach footing concrete shall be paid for as Concrete Structures.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.



INSIDE ELEVATION OF CURB

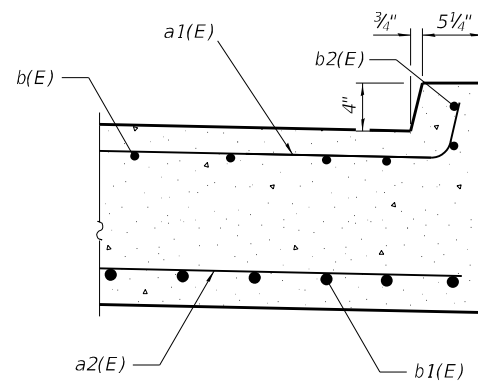


SECTION C-C

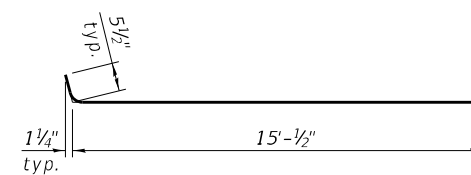
* Cost included with Concrete Superstructure (Approach Slab).

**TWO APPROACHES
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|---|-----|------|---------|--------|
| a1(E) | 180 | #5 | 15'-6" | ┌───┐ |
| a2(E) | 240 | #8 | 15'-1" | ┌───┐ |
| b(E) | 100 | #5 | 29'-8" | ┌───┐ |
| b1(E) | 156 | #9 | 29'-8" | ┌───┐ |
| b2(E) | 4 | #4 | 29'-8" | ┌───┐ |
| t(E) | 128 | #4 | 9'-8" | ┌───┐ |
| w(E) | 160 | #5 | 15'-1" | ┌───┐ |
| Concrete Superstructure (Approach Slab) | | | Cu. Yd. | 87.0 |
| Concrete Structures | | | Cu. Yd. | 19.2 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 34,830 |
| Bar Splicers | | | Each | 290 |



SECTION D-D



BAR a1(E)

MODEL: Default
 FILE: \\blm1c:\pub\lsc\paw_bentley.com\PIV\DOT\Documents\DOT Office\Dir\dir_7\Project\74A91\CAD\Drawings\74A91-Sub-026-0036 Bridge_Repair_RHS

| | | |
|------------------------------|----------------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - T. Walk | REVISED - |
| | DRAWN - T. Walk | REVISED - |
| PLOT SCALE = 100,0000' / in. | CHECKED - D. Macklin | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - June 2021 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

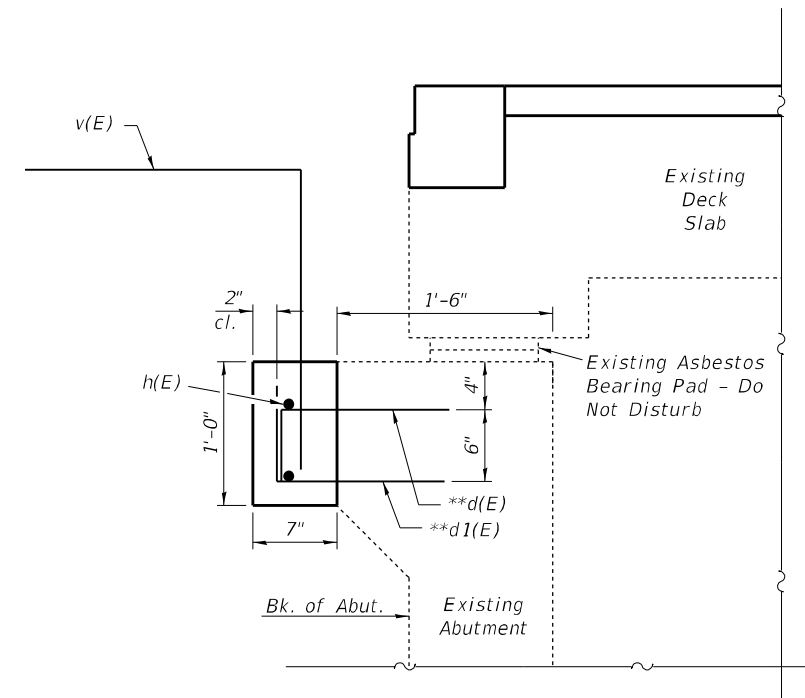
**BRIDGE APPROACH SLAB DETAILS - SHEET 2 OF 2
S.N. 026-0036**

SCALE: SHEET 9 OF 11 SHEETS STA. TO STA.

| | | | | |
|---------------------------|--------------------------|---------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 20 |
| | | | CONTRACT NO. 74A91 | |
| ILLINOIS FED. AID PROJECT | | | | |



**Epoxy grout d(E) & d1(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.

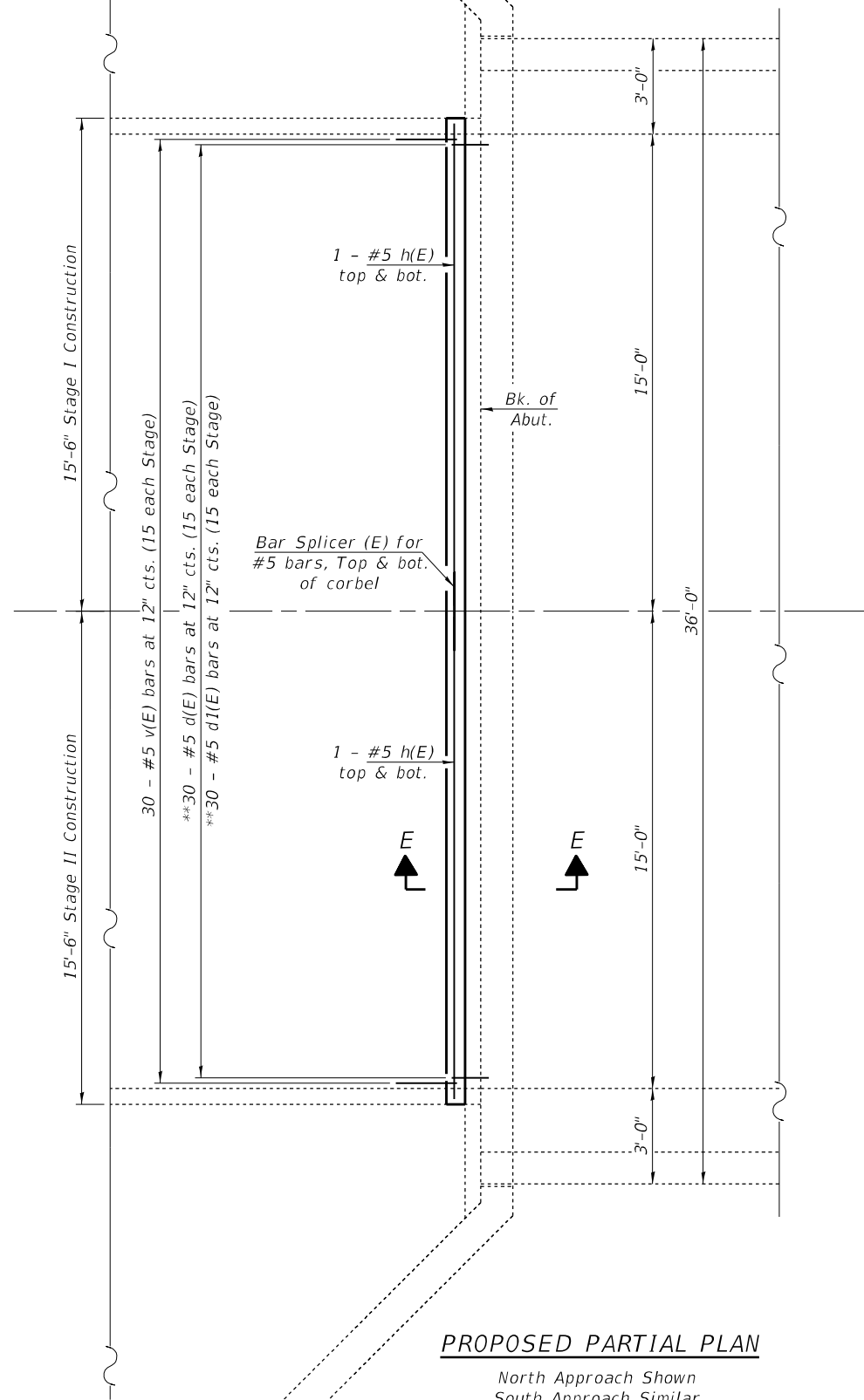
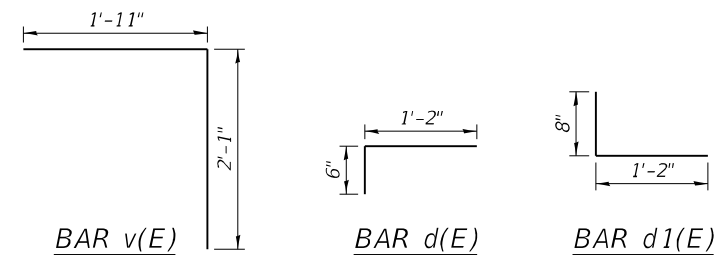


SECTION E-E

Notes:
Abutment corbel concrete shall be paid for as Concrete Structures.
Cost of excavation included with Concrete Structures.

BILL OF MATERIAL - TWO ABUTMENTS

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| d(E) | 60 | #5 | 1'-8" | ┌ |
| d1(E) | 60 | #5 | 1'-10" | └ |
| h(E) | 8 | #5 | 15'-2" | — |
| v(E) | 60 | #5 | 4'-0" | └ |
| Concrete Structures | | | Cu. Yd. | 1.4 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 600 |
| Bar Splicers | | | Each | 4 |



PROPOSED PARTIAL PLAN

North Approach Shown
South Approach Similar

MODEL: Default
 FILE: Abutment_2022.dwg
 PLOT DATE: 10/13/2022
 USER: jessica.hille
 DESIGNED: T. Walk
 DRAWN: T. Walk
 CHECKED: D. Macklin
 DATE: June 2021
 REVISED: -
 REVISED: -
 REVISED: -
 REVISED: -
 REVISED: -
 REVISED: -

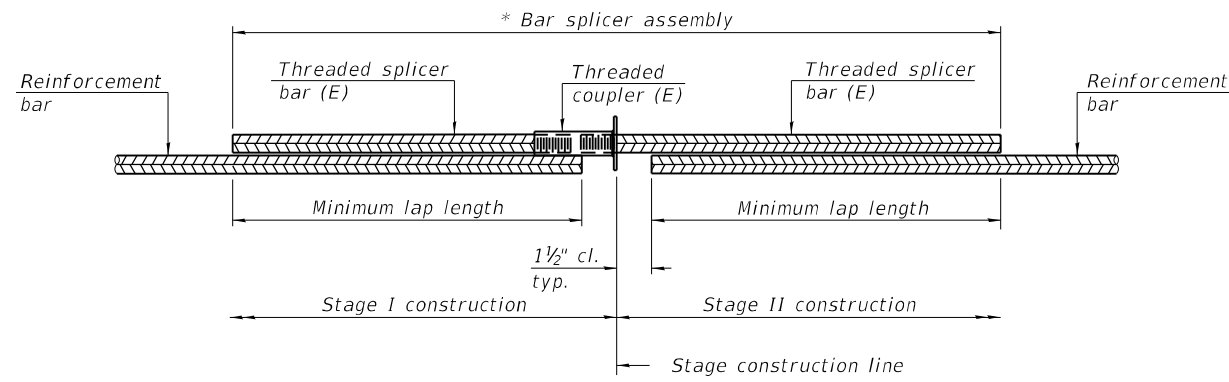
| | | |
|------------------------------|----------------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - T. Walk | REVISED - |
| PLOT SCALE = 100,0000' / in. | DRAWN - T. Walk | REVISED - |
| PLOT DATE = 10/13/2022 | CHECKED - D. Macklin | REVISED - |
| | DATE - June 2021 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT MODIFICATIONS
S.N. 026-0036**

SCALE: SHEET 10 OF 11 SHEETS STA. TO STA.

| | | | | |
|--------------------|--------------------------|---------|---------------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 21 |
| CONTRACT NO. 74A91 | | | ILLINOIS FED. AID PROJECT | |

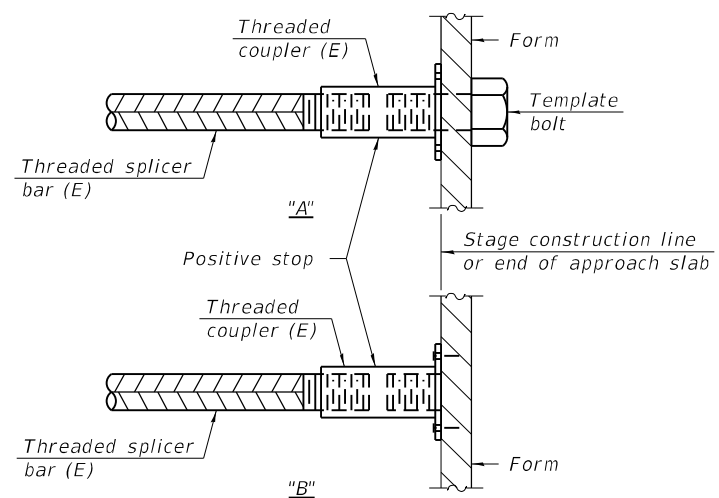


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

| Location | Bar size | No. assemblies required | Minimum lap length |
|------------------|----------|-------------------------|--------------------|
| Deck | #6 | 4 | 3'-7" |
| Abutment Corbel | #5 | 4 | 3'-2" |
| Approach | #5 | 90 | 3'-0" |
| Approach | #8 | 120 | 4'-9" |
| Approach Footing | #5 | 80 | 3'-2" |

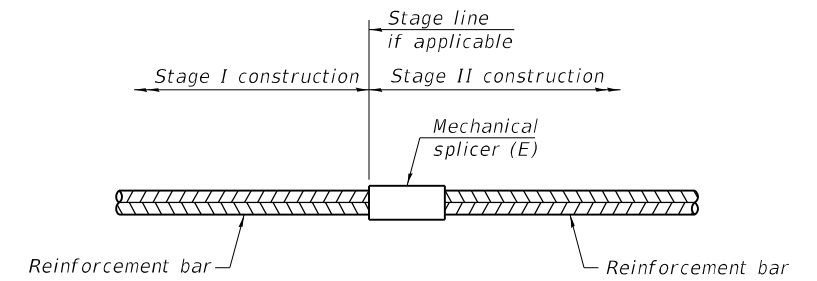


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

| Location | Bar size | No. assemblies required |
|----------|----------|-------------------------|
| | | |
| | | |
| | | |
| | | |

Notes:

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-1-2020

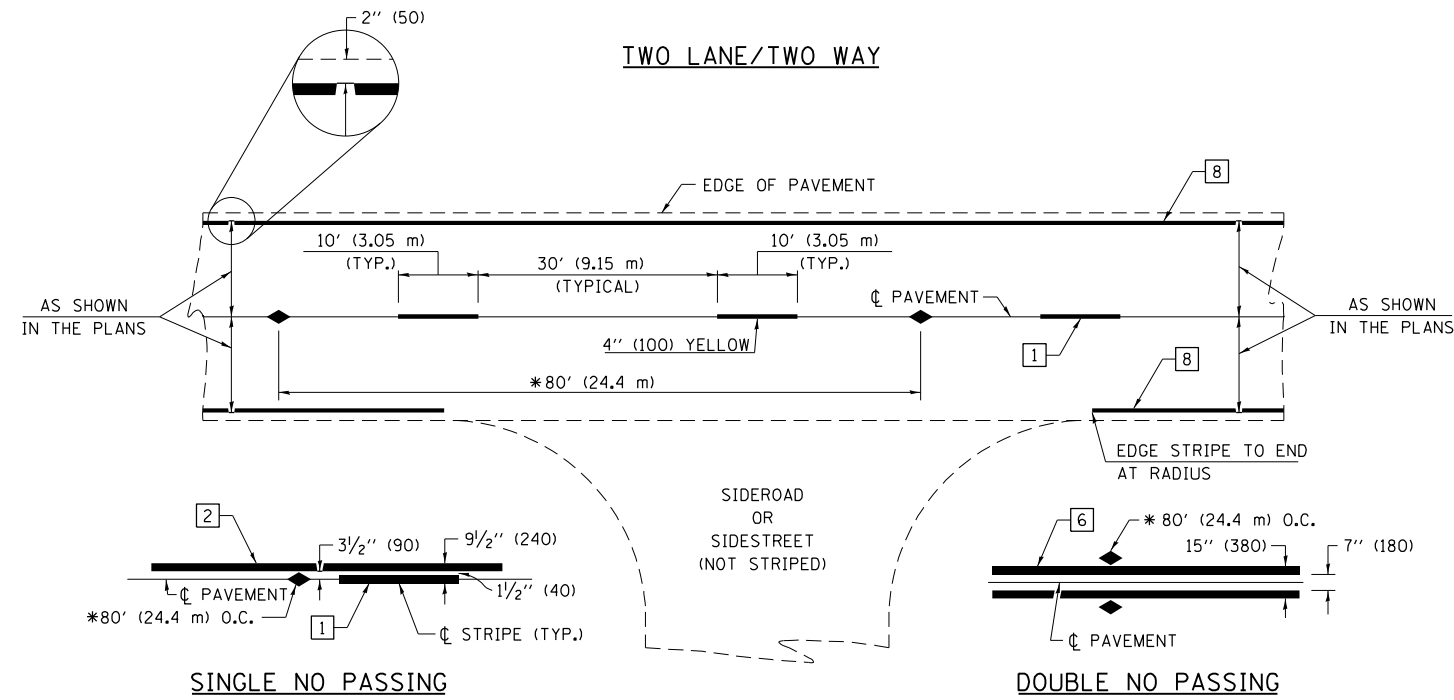
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| | | |
|------------------------------|----------------------|-----------|
| USER NAME = Jessica.Hille | DESIGNED - T. Walk | REVISED - |
| DRAWN - T. Walk | REVISED - | |
| PLOT SCALE = 100,0000' / in. | CHECKED - D. Macklin | REVISED - |
| PLOT DATE = 10/13/2022 | DATE - June 2021 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
S.N. 026-0036

| | | | | |
|-------------|--------------------------|----------|------------------|--------------------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 322 | D7 BRIDGE REPAIRS 2023-5 | FAYETTE | 23 | 22 |
| | | | | CONTRACT NO. 74A91 |
| | | ILLINOIS | FED. AID PROJECT | |



* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

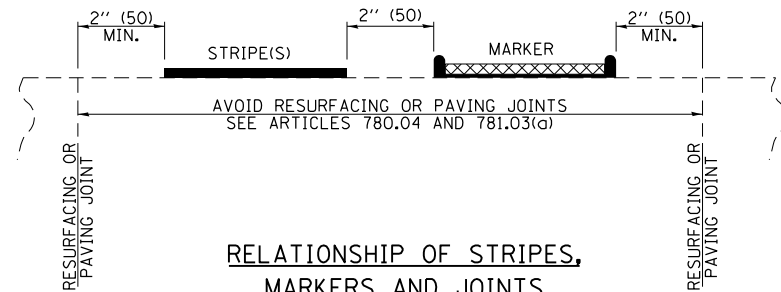
PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 12" (300) SOLID WHITE
- 6 4" (100) DOUBLE YELLOW (WIDE)
- 7 6" (150) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) PARKING WHITE

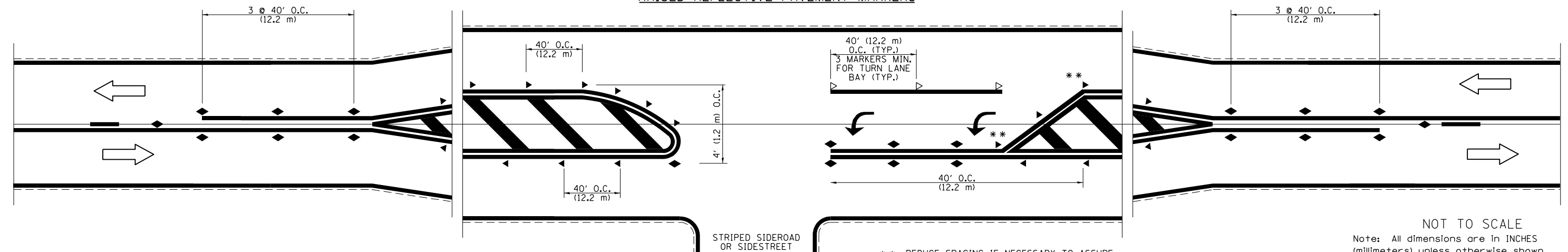
TYPICAL PAVEMENT MARKERS LEGEND

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER

RELATIONSHIP OF STRIPES, MARKERS AND JOINTS



RAISED REFLECTIVE PAVEMENT MARKERS



** REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

NOT TO SCALE
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 7 DETAIL NO. 78000001

| | | | |
|--|---------------------------|------------|---------------------|
| FILE NAME = | USER NAME = Jessica.Hille | DESIGNED - | REVISED - NAS 06/22 |
| pw:\ilidot-pw\bentley.com\PWIDOT\Documents\DOT Offices\District 7\Projects\74A91\CADD\Drawings\74A91-sht-details.dgn | | CHECKED - | REVISED - |
| | | DATE - | REVISED - |
| | | | |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS
(RURAL & URBAN APPLICATIONS)**

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|-------------------------|---------|--------------|-----------|
| 322 | 07 BRIDGE REPAIR 2023-5 | FAYETTE | 23 | 23 |
| CONTRACT NO. 74A91 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |