

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

| ROUTE NO.             | SECTION        | COUNTY                      | TOTAL SHEETS | SHEET NO. |
|-----------------------|----------------|-----------------------------|--------------|-----------|
| T.R. 29               | 19-25110-03-BR | LIVINGSTON                  | 24           | 1         |
| FED. ROAD DIST. NO. 7 |                | ILLINOIS CONTRACT NO. 87808 |              |           |

INDEX OF SHEETS

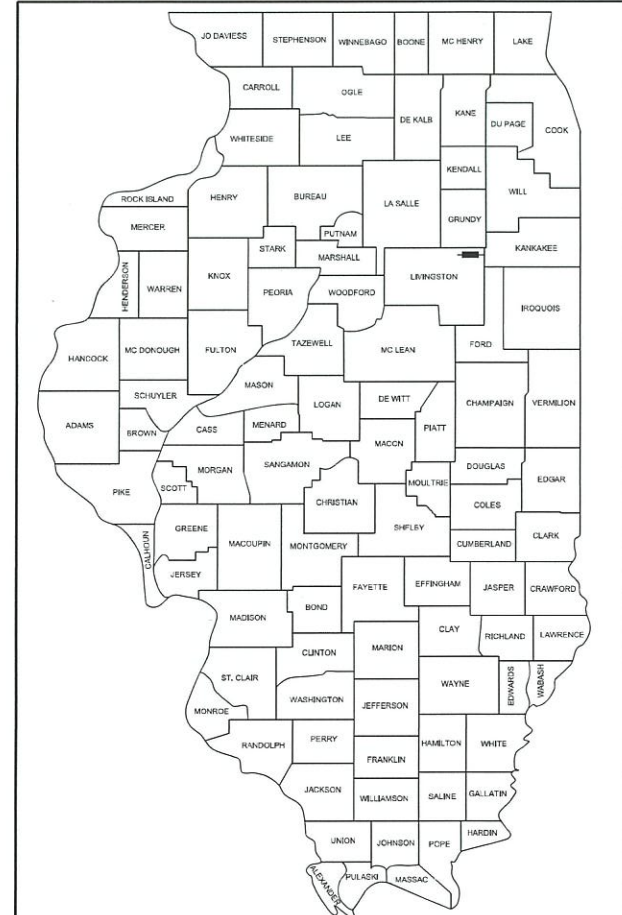
| SHEET NO. | DESCRIPTION                             |
|-----------|---|
| 1.        | COVER SHEET                             |
| 2.        | SUMMARY OF QUANTITIES AND GENERAL NOTES |
| 3.        | SCHEDULE OF QUANTITIES                  |
| 4.        | TYPICAL CROSS SECTIONS                  |
| 5.        | PLAN AND PROFILE                        |
| 6-15.     | BRIDGE PLANS                            |
| 16-24.    | STATION CROSS SECTIONS                  |

HIGHWAY STANDARDS:

|           |   |
|-----------|---|
| 000001-08 | STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS   |
| 280001-07 | TEMPORARY EROSION CONTROL SYSTEMS   |
| 515001-04 | NAME PLATE FOR BRIDGES  |
| 601001-05 | PIPE UNDERDRAINS  |
| 601101-02 | CONCRETE HEADWALL FOR PIPE UNDERDRAINS  |
| 701901-08 | TRAFFIC CONTROL DEVICES   |
| 725001-01 | OBJECT AND TERMINAL MARKERS   |
| BLR 21-9  | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS |

# PLANS FOR PROPOSED SURFACE TRANSPORTATION PROGRAM – BRIDGE

PROJECT 8YB8(638)  
SECTION 19-25110-03-BR  
ROUND GROVE ROAD DISTRICT  
LIVINGSTON COUNTY  
T.R. 29 / 3000 N. ROAD  
PROPOSED STRUCTURE NO. 053-4233  
SEVERSON BRIDGE  
C-93-020-23



LOCATION OF SECTION INDICATED THIS: — ■ —

UTILITIES

COMMONWEALTH EDISON  
ONE LINCOLN CENTRE, SUITE 600  
OAKBROOK TERRACE, IL 60181

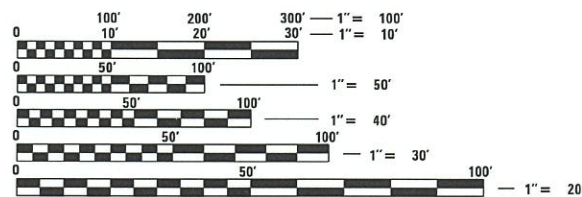
FRONTIER COMMUNICATIONS  
112 W. ELM ST.  
SYCAMORE, IL 60178

MAGELLAN MIDSTREAM PARTNERS, LP  
12424 W. 98TH ST.  
SHAWNEE MISSION, KS 66215

IMPROVEMENT ENDS  
STATION 12+50

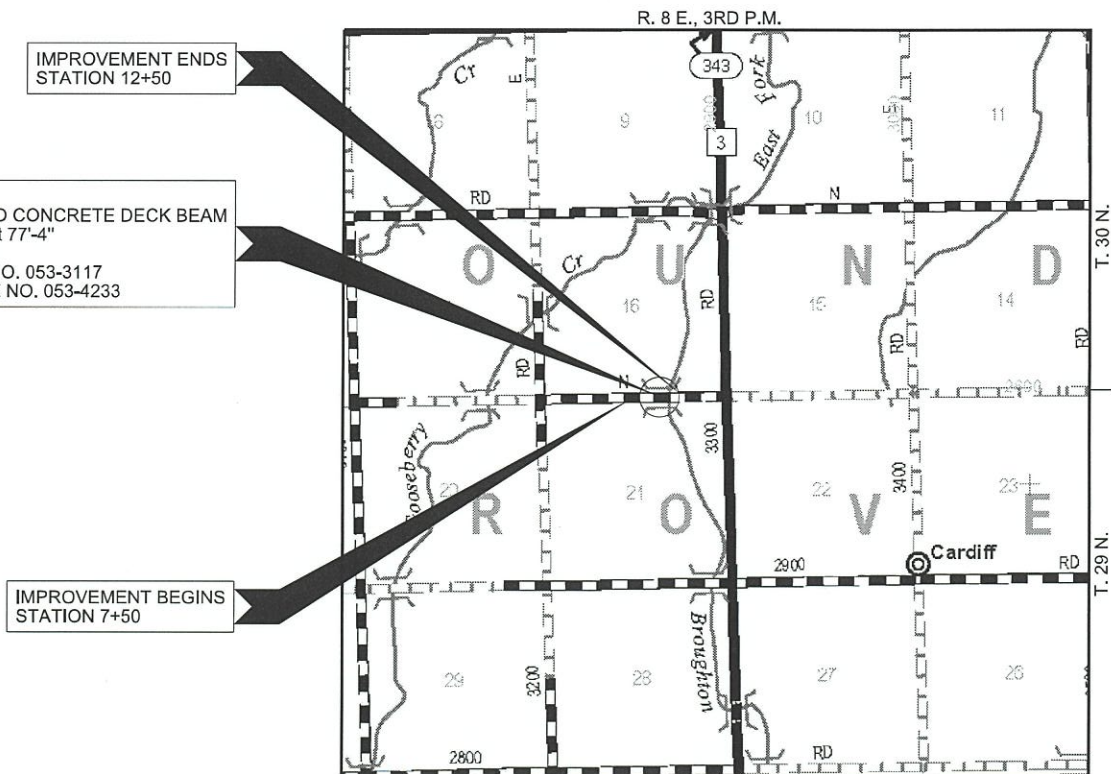
STA. 10+00  
PRECAST PRESTRESSED CONCRETE DECK BEAM  
BRIDGE. SINGLE SPAN at 77'-4"  
27'-0" RDWY.; SKEW = 0°  
EXISTING STRUCTURE NO. 053-3117  
PROPOSED STRUCTURE NO. 053-4233

IMPROVEMENT BEGINS  
STATION 7+50



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.

FUNCTIONAL CLASSIFICATION: LOCAL ROAD  
DESIGN SPEED: 30 MPH  
DESIGN TRAFFIC: 25 ADT



LOCATION MAP

APPROXIMATE SCALE: 0 1/2 MILE  
NET LENGTH OF SECTION = 500 FEET = 0.095 MILES



**WARNING**

CALL 811  
BEFORE YOU DIG  
DIG NO: X2772539

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED 12/22 2022  
*Cheryl Mitchell*  
COUNTY ENGINEER

APPROVED 12/22 2022  
*Michael A. Jones*  
TOWNSHIP COMMISSIONER

PASSED JANUARY 5, 2023  
*[Signature]*  
DISTRICT THREE ENGINEER OF LOCAL ROADS & STREETS  
JANUARY 5, 2023  
*[Signature]*  
REGION TWO ENGINEER

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DATE: 12/22/2022

EXPIRES: 11/30/2023

HAMPTON, LENZINI AND RENWICK, INC.  
CIVIL ENGINEERS - STRUCTURAL ENGINEERS - LAND SURVEYORS  
3085 STEVENSON DRIVE, SUITE 201  
SPRINGFIELD, ILLINOIS 62703  
217.546.3400 www.hirengineering.com

184.000959  
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION

**SUMMARY OF QUANTITIES**

| CODE NO. | ITEM   | CONSTRUCTION TYPE CODE 0010 |                |
|----------|--|-----------------------------|----------------|
|          |  | UNIT                        | TOTAL QUANTITY |
| 20200100 | EARTH EXCAVATION                                     | CU YD                       | 175            |
| 20300100 | CHANNEL EXCAVATION                                   | CU YD                       | 145            |
| 20400800 | FURNISHED EXCAVATION                                 | CU YD                       | 137            |
| 28100107 | STONE RIPRAP, CLASS A4                               | SQ YD                       | 390            |
| 28200200 | FILTER FABRIC  | SQ YD                       | 390            |
| 35100100 | AGGREGATE BASE COURSE, TYPE A                        | TON                         | 710            |
| 40600275 | BITUMINOUS MATERIALS (PRIME COAT)                    | POUND                       | 2,060          |
| 40600290 | BITUMINOUS MATERIALS (TACK COAT)                     | POUND                       | 205            |
| 40603080 | HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50          | TON                         | 127            |
| 40604050 | HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50 | TON                         | 76             |
| 48101200 | AGGREGATE SHOULDERS, TYPE B                          | TON                         | 120            |
| 50100100 | REMOVAL OF EXISTING STRUCTURES                       | EACH                        | 1              |
| 50300225 | CONCRETE STRUCTURES                                  | CU YD                       | 24.6           |
| 50400605 | PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)  | SQ FT                       | 2,052          |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED                     | POUND                       | 3,550          |
| 50900205 | STEEL RAILING, TYPE S1                               | FOOT                        | 149            |
| 51201400 | FURNISHING STEEL PILES HP10X42                       | FOOT                        | 495            |
| 51202305 | DRIVING PILES  | FOOT                        | 495            |
| 51203400 | TEST PILE STEEL HP10X42                              | EACH                        | 1              |
| 51500100 | NAME PLATES  | EACH                        | 1              |
| 542D0220 | PIPE CULVERTS, CLASS D, TYPE 1 15"                   | FOOT                        | 246            |
| 60100060 | CONCRETE HEADWALLS FOR PIPE DRAINS                   | EACH                        | 2              |
| 60146304 | PIPE UNDERDRAINS FOR STRUCTURES 4"                   | FOOT                        | 112            |
| 67100100 | MOBILIZATION   | L SUM                       | 1              |
| 72501000 | TERMINAL MARKER - DIRECT APPLIED                     | EACH                        | 4              |
| X2070302 | POROUS GRANULAR EMBANKMENT, SPECIAL                  | TON                         | 140            |
| X2501000 | SEEDING, CLASS 2 (SPECIAL)                           | ACRE                        | 0.3            |

^ SEE SPECIAL PROVISIONS

Δ SPECIALTY ITEMS

**GENERAL NOTES**

- 1) ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2022", (HERE IN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE DETAILS IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE DOCUMENTS.
- 2) ALL CLEARING, GRUBBING, FENCE REMOVAL, PAVEMENT REMOVAL, AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. ALL AGGREGATE AND BITUMINOUS PAVEMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR IN A METHOD APPROVED BY THE ENGINEER. REMOVAL AND DISPOSAL OF PAVEMENT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 3) WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- 4) ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARD OF THE DEPARTMENT.
- 5) THE LOCATION ON THE PLANS OF EXISTING DRAINAGE STRUCTURES, TELEPHONE LINES, ELECTRIC LINES, WATER SERVICE LINES, GAS MAINS, AND OTHER UTILITY FACILITIES AS SHOWN ON THE PLANS ARE BASED ON FIELD INVESTIGATIONS AND THE BEST INFORMATION AVAILABLE, BUT THE LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL UTILITY COMPANIES AND BY FIELD INSPECTION.
- 6) THE CONTRACTOR SHALL CONSULT THE ENGINEER IN REGARD TO THE EXACT LENGTH OF PIPE CULVERTS AND PIPE DRAINS BEFORE ORDERING THESE ITEMS.
- 7) THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES
 

|                            |                              |
|----------------------------|------------------------------|
| AGGREGATE BASE COURSE      | 2.05 TON/CU YD               |
| HOT MIX ASPHALT            | 112 LBS/SQ YD/INCH THICKNESS |
| POROUS GRANULAR EMBANKMENT | 2.0 TON/CU YD                |

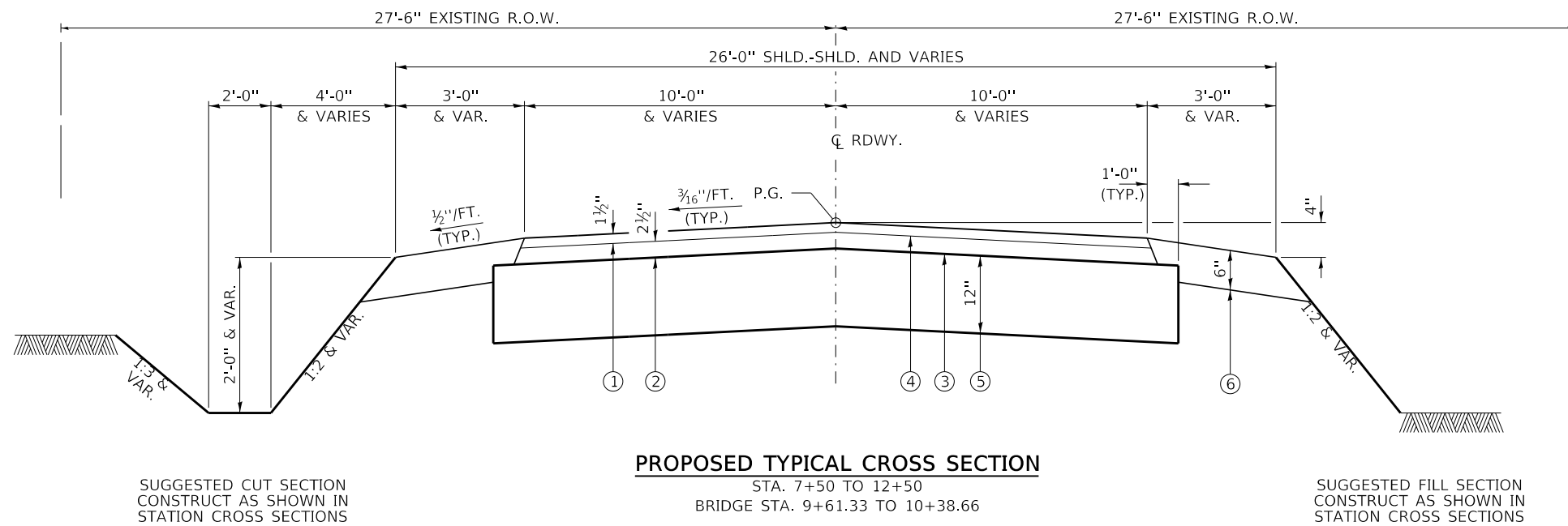
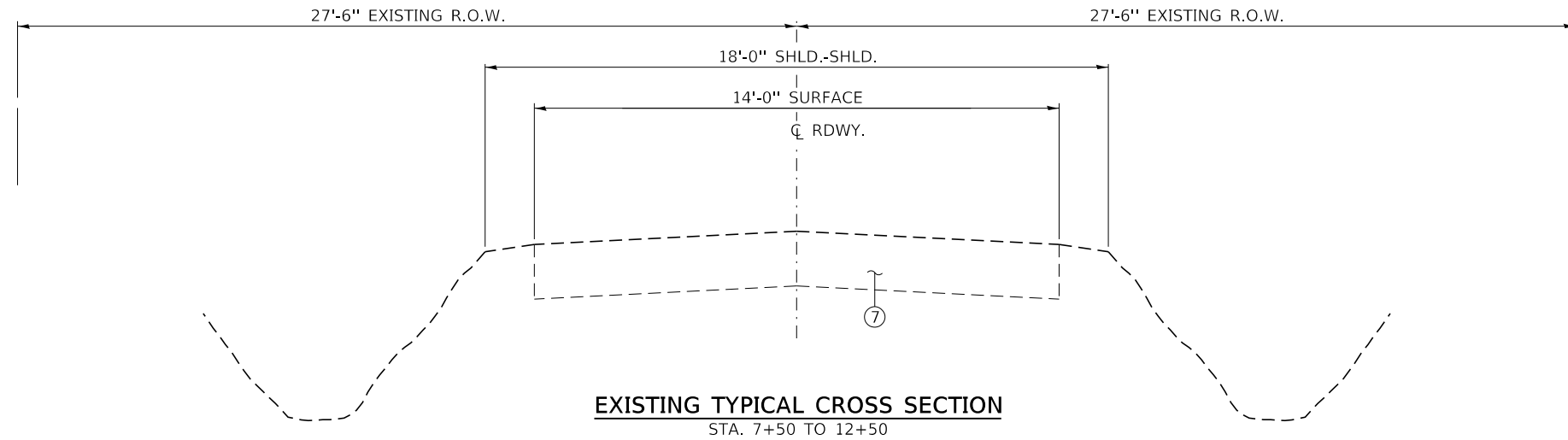
| SURFACE TYPE                  | RESIDUAL RATE  |
|-------------------------------|----------------|
| AGGREGATE BASE (PRIME COAT)   | 0.250 LB/SQ FT |
| MILLED HMA OR PCC (TACK COAT) | 0.050 LB/SQ FT |
| EXISTING PAVEMENT (TACK COAT) | 0.050 LB/SQ FT |
| TACK COAT (BETWEEN LIFTS)     | 0.025 LB/SQ FT |
- 8) THE FINAL SURFACE OF ALL EMBANKMENT AREAS SHALL BE SEEDED. THE TOP 4 INCHES OF THE SEEDED AREAS SHALL BE TOPSOIL SUBJECT TO THE APPROVAL OF THE ENGINEER. THE COST OF SHAPING THE SLOPES AND PROVIDING TOP SOIL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- 9) THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.
 

|                              |           |
|------------------------------|-----------|
| SEEDING, CLASS 2 (SPECIAL) = | 0.3 ACRES |
|------------------------------|-----------|
- 10) ALL WASTE MATERIAL FROM EXCAVATIONS SHALL BE DISPOSED OF BY THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 11) COMMITMENTS:
  - 1) NONE

| EARTHWORK SCHEDULE             |                  |                    |                  |              |                                   |                     |                   |
|--------------------------------|------------------|--------------------|------------------|--------------|-----------------------------------|---------------------|-------------------|
| LOCATION                       | EARTH EXCAVATION | CHANNEL EXCAVATION | SHRINKAGE FACTOR | PERCENT USED | EXCAVATION ADJUSTED FOR SHRINKAGE | EMBANKMENT REQUIRED | EARTHWORK BALANCE |
|                                | CU.YD.           | CU.YD.             |                  |              | CU.YD.                            | CU.YD.              | CU.YD.            |
| <b>TR 29/3000N</b>             |                  |                    |                  |              |                                   |                     |                   |
| STA. 7+50.00 TO STA. 9+61.33   | 71               |                    | 25.00%           | 100.00%      | 53                                | 221                 | -168              |
| STA. 9+61.33 TO STA. 10+38.66  |                  | 145                | 25.00%           | 70.00%       | 76                                |                     | 76                |
| STA. 10+38.66 TO STA. 12+50.00 | 106              |                    | 25.00%           | 100.00%      | 79                                | 124                 | -45               |
| <b>TOTAL</b>                   | <b>177</b>       | <b>145</b>         |                  |              | <b>208</b>                        | <b>345</b>          | <b>-137</b>       |
| <b>USE</b>                     | <b>175</b>       | <b>145</b>         |                  |              |                                   |                     | <b>137</b>        |

| ROADWAY SCHEDULE               |                               |                                   |                                  |   |  |                             |
|--------------------------------|-------------------------------|-----------------------------------|----------------------------------|---|--|-----------------------------|
| LOCATION                       | AGGREGATE BASE COURSE, TYPE A | BITUMINOUS MATERIALS (PRIME COAT) | BITUMINOUS MATERIALS (TACK COAT) | HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 | HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50 | AGGREGATE SHOULDERS, TYPE B |
|                                | 35100100                      | 40600275                          | 40600290                         | 40603080                                    | 40604050   | 48101200                    |
| <b>TR 29/3000N</b>             | TON                           | POUND                             | POUND                            | TON   | TON  | TON                         |
| STA. 7+50.00 TO STA. 9+61.33   | 355                           | 1010                              | 100                              | 62  | 37   | 60                          |
| STA. 10+38.66 TO STA. 12+50.00 | 355                           | 1050                              | 105                              | 65  | 39   | 60                          |
| <b>TOTAL</b>                   | <b>710</b>                    | <b>2060</b>                       | <b>205</b>                       | <b>127</b>                                  | <b>76</b>  | <b>120</b>                  |

| HOT-MIX ASPHALT MIXTURE REQUIREMENTS     |                |                |
|--|----------------|----------------|
| LOCATIONS(S)                             | TR 29 / 3000 N | TR 29 / 3000 N |
| MIXTURE USE(S):                          | HMA BINDER     | HMA SURFACE    |
| PG:                                      | PG 64-22       | PG 64-22       |
| DESIGN AIR VOIDS:                        | 4% @ 50 Gyr.   | 4% @ 50 Gyr.   |
| MIXTURE COMPOSITION: (MIXTURE GRADATION) | IL 19.0        | IL 9.5         |
| FRICTION AGGREGATE:                      | NONE           | MIXTURE C      |
| MIXTURE WEIGHT:                          | 112 LB/SY/IN   | 112 LB/SY/IN   |
| QUALITY MANAGEMENT PROGRAM               | QC/QA          | QC/QA          |
| SUBLOT SIZE                              | NA             | NA             |
| DENSITY TEST METHOD                      | CORES/NUCLEAR  | CORES/NUCLEAR  |
| MATERIAL TRANSFER DEVICE (REQUIRED)      | NO             | NO             |

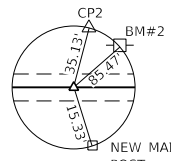


**LEGEND**

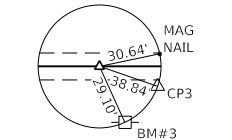
- ① HMA SURFACE COURSE, IL.-9.5, MIX C, N50 (1½" THICKNESS)
- ② HMA BINDER COURSE, IL.-19.0, N50 (2½" THICKNESS)
- ③ BITUMINOUS MATERIALS (PRIME COAT)
- ④ BITUMINOUS MATERIALS (TACK COAT)
- ⑤ AGGREGATE BASE COURSE, TYPE A (12")
- ⑥ AGGREGATE SHOULDERS, TYPE B (6")
- ⑦ EXISTING OIL & CHIP SURFACE ON AGGREGATE BASE

TRANSITIONS FROM THE PROPOSED ROADWAY TO THE EXISTING ROADWAY ARE TO BE CONSTRUCTED FROM STA. 7+50 TO 8+50 AND STA. 11+90 TO STA. 12+50. SEE SHEET 6 FOR TRANSITION AT BRIDGE.  
CONSTRUCT AGGREGATE BASE TO THE FULL 22 FT. WIDTH FOR THE LENGTH OF THE IMPROVEMENT.

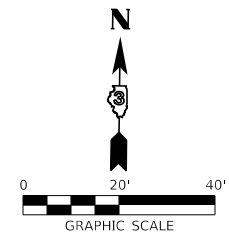
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|  |                      |                   |           |   |                               | 29   | 19-25110-03-BR | LIVINGSTON  | 24           | 4         |  |
| PLOT SCALE = \$SCALE\$<br>PLOT DATE = 1/8/2023 |                      |                   |           |   |                               | SCALE:      SHEET NO. 1 OF 1 SHEETS      STA.      TO STA. |                | ROUND GROVE ROAD DISTRICT      CONTRACT NO. 87808 |              |           |  |
| DATE = 01/06/2023                              |                      |                   |           |   |                               | ILLINOIS FED. AID PROJECT 8YB8(638)                        |                |   |              |           |  |



P.O.T. STA. 6+50.03  
MAG NAIL (SET)  
N. 1602462.162  
E. 989305.079



P.O.T. STA. 13+50.00  
MAG NAIL (SET)  
N. 1602471.462  
E. 990004.989



EVERETT P. & D.M. SEVERSON  
SE 1/4, SEC 16, T. 30 N., R. 8 E., 3RD P.M.

STA. 10+00  
PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE  
SINGLE SPAN @ 77'-4", 27'-0" ROADWAY; SKEW = 0°  
PROPOSED SN 053-4233

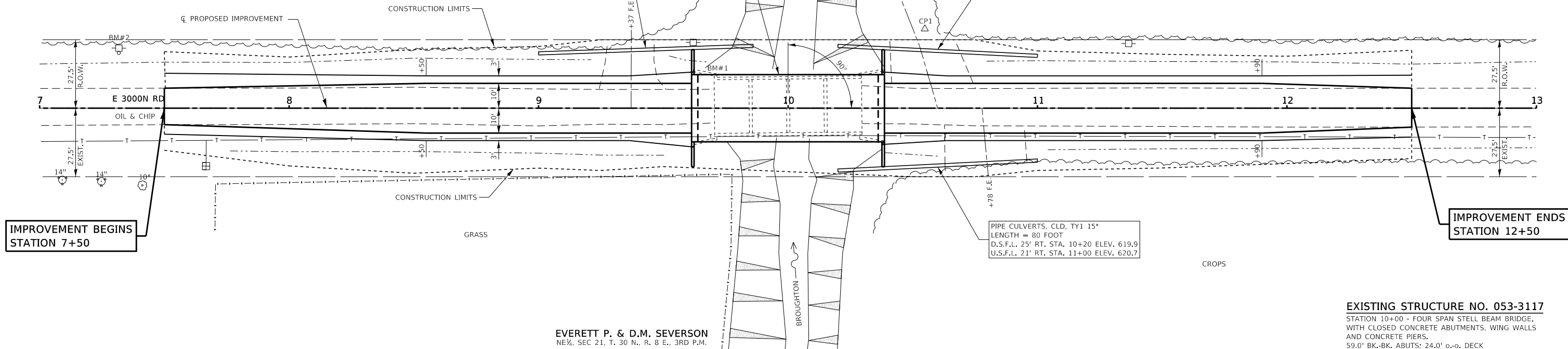
PIPE CULVERTS, CLD, TY1 15"  
LENGTH = 86 FOOT  
U.S.F.L. 22' LT. STA. 9+00 ELEV. 620.1  
D.S.F.L. 25' LT. STA. 9+86 ELEV. 619.22

PIPE CULVERTS, CLD, TY1 15"  
LENGTH = 80 FOOT  
D.S.F.L. 25' LT. STA. 10+20 ELEV. 619.9  
U.S.F.L. 21' RT. STA. 11+00 ELEV. 620.0

PIPE CULVERTS, CLD, TY1 15"  
LENGTH = 80 FOOT  
D.S.F.L. 25' RT. STA. 10+20 ELEV. 619.9  
U.S.F.L. 21' RT. STA. 11+00 ELEV. 620.7

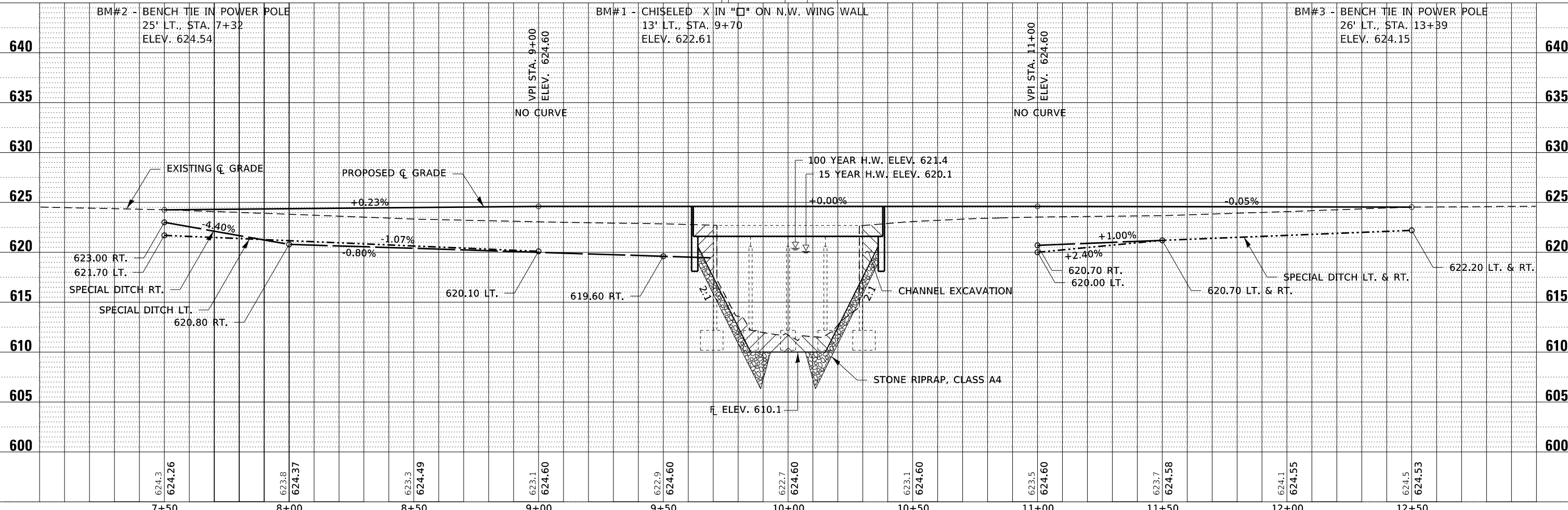
|          |  |
|----------|--|
| DATE     |  |
| BY       |  |
| REVIEWED |  |
| PLANNED  |  |
| NOTED    |  |
| NO.      |  |

|          |  |
|----------|--|
| DATE     |  |
| BY       |  |
| REVIEWED |  |
| PLANNED  |  |
| NOTED    |  |
| NO.      |  |



**EXISTING STRUCTURE NO. 053-3117**  
STATION 10+00 - FOUR SPAN STEEL BEAM BRIDGE,  
WITH CLOSED CONCRETE ABUTMENTS, WING WALLS  
AND CONCRETE PIERS.  
59.0' BK.-BK. ABUTTS; 24.0' o.-o. DECK

EVERETT P. & D.M. SEVERSON  
NE 1/4, SEC 21, T. 30 N., R. 8 E., 3RD P.M.



|  |                      |                   |               |  |  |                           |                |                    |              |           |                            |
|--|----------------------|-------------------|---------------|--|--|---------------------------|----------------|--------------------|--------------|-----------|----------------------------|
| FILE NAME = 210039-shr-planpr1.dgn   | USER NAME = gmetcaif | DESIGNED - S.A.A. | REVISED -     | <p align="center"><b>STATE OF ILLINOIS</b><br/><b>LIVINGSTON COUNTY HIGHWAY DEPARTMENT</b></p> | <p align="center"><b>PLAN &amp; PROFILE</b><br/><b>SEVERSON BRIDGE</b></p> | T.R.                      | SECTION        | COUNTY             | TOTAL SHEETS | SHEET NO. |                            |
| HAMPTON, LENZINI AND RENWICK, INC.<br>3085 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62702<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>LS / PE / SE CORP. 184.000959 | DESIGNED - S.A.A.    | DRAWN - T.W.K.    | REVISED -     |  |  | 29                        | 19-25110-03-BR | LIVINGSTON         | 24           | 5         |                            |
| PLOT SCALE = \$\$\$CALE\$  | CHECKED - J.W.F.     | DATE - 01/06/2023 | REVISED -     |  |  | ROUND GROVE ROAD DISTRICT |                | CONTRACT NO. 87808 |              | ILLINOIS  | FED. AID PROJECT 8YB8(638) |
| PLOT DATE = 1/6/2023   | DATE - 01/06/2023    | REVISED -         | SCALE: 5V:20H |  |  | SHEET NO. 1 OF 1 SHEETS   | STA. 7+00      | TO STA. 13+00      |              |           |                            |

BENCHMARK: Chisled "X" on N.W. Wingwall, 13' Lt., Sta. 9+70, Elev. 622.61

EXISTING STRUCTURE NO. 053-3117: Sta. 10+00 - Four span Steel Beam Bridge with closed concrete abutments, wing walls, and concrete piers. 59.0' bk.-bk. abuts.; 24' o.-o. deck.

Structure closed to traffic during construction.

No Salvage

**GENERAL NOTES**

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at East Abutment or approved by the Engineer before ordering the remainder of piles. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions. All bars to be epoxy coated. Excavation required to construct the Abutments shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation. All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.

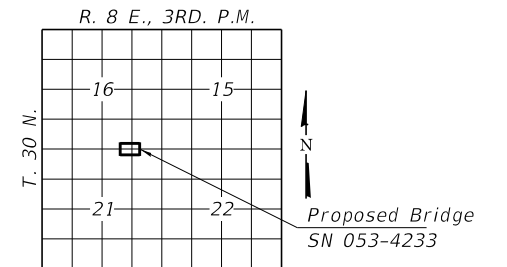
**INDEX OF STRUCTURE SHEETS**

1. General Plan & Elevation
2. Riprap Layout
3. 33"x36" PPC Deck Beam
4. 33"x36" PPC Deck Beam Details
5. Superstructure Details
6. Steel Railing, Type S-1
7. Abutments
8. Steel HP Pile Details
- 9-10. Borings

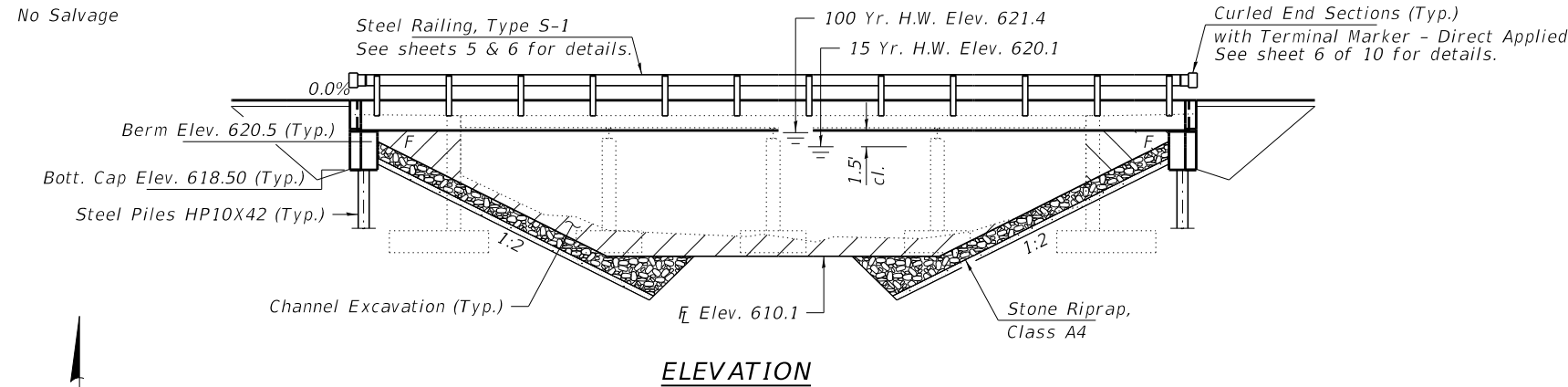
BROUGHTON CREEK  
BUILT 202\_ BY  
LIVINGSTON COUNTY  
SEC. 19-25110-03-BR  
ROUND GROVE ROAD DISTRICT  
STR. NO. 053-4233  
LOADING HL-93

**NAME PLATE**

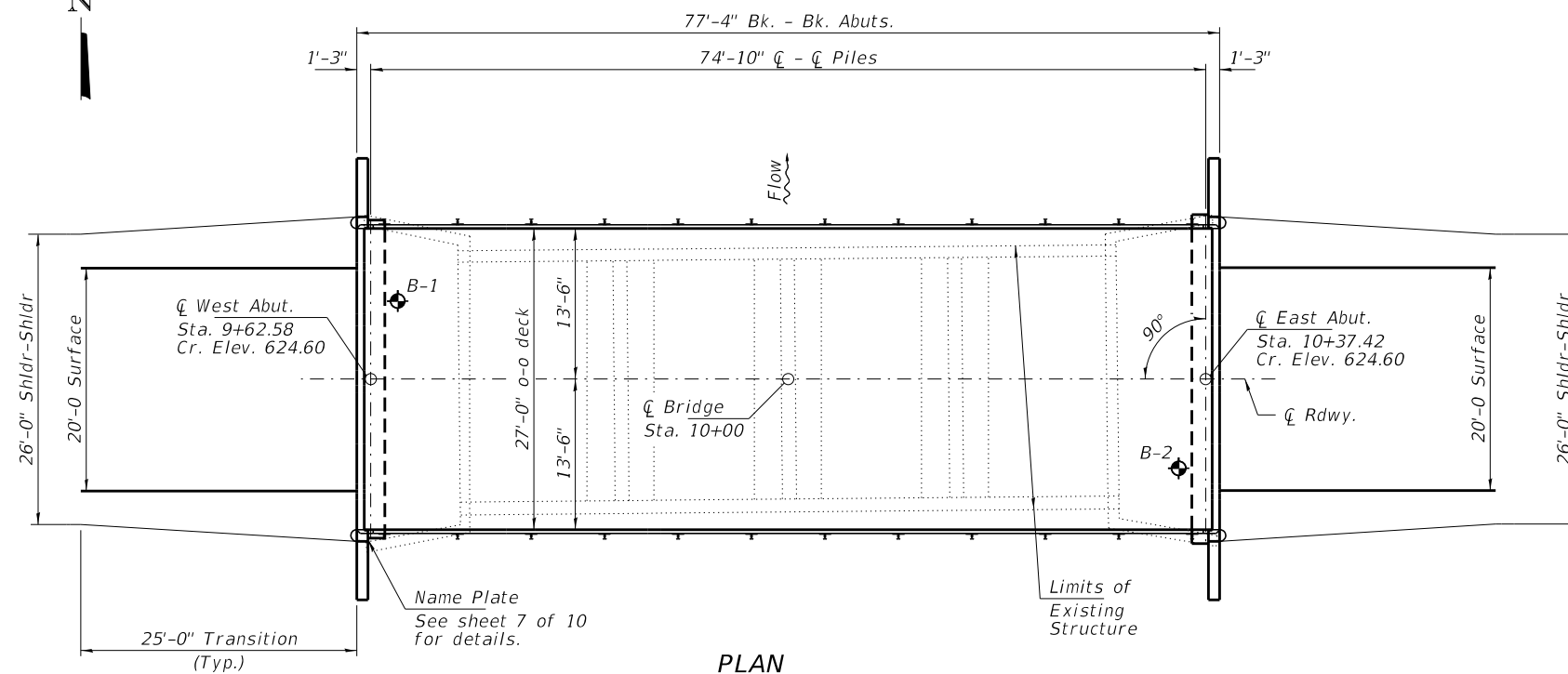
See Std. 515001



**LOCATION SKETCH**



**ELEVATION**



**PLAN**

**DESIGN SCOUR ELEVATION TABLE**

| Event/Limit State | Design Scour Elev. (ft.) |          | Item 113 |
|-------------------|--------------------------|----------|----------|
|                   | W. Abut.                 | E. Abut. |          |
| Q100              | 618.5                    | 618.5    | 8        |
| Q200              | 618.5                    | 618.5    |          |
| Design            | 618.5                    | 618.5    |          |
| Check             | 618.5                    | 618.5    |          |

**DESIGN SPECIFICATIONS**

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition with all interims.

**LOADING HL-93**

Allow 50#/sq. ft. for future wearing surface.

**DESIGN STRESSES**

**FIELD UNITS**

f'c = 4,000 psi  
fy = 60,000 psi (Reinf.)

**PRECAST PRESTRESSED UNITS**

f'c = 6,000 psi  
f'ci = 5,000 psi  
fpu = 270,000 psi (1/2"Ø low lax. strands)  
fpbt = 201,960 psi (1/2"Ø low lax. strands)  
fy = 60,000 psi (Reinf.)

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. (S01) = 0.074g  
Design Spectral Acceleration at 0.2 sec. (S05) = 0.13g  
Soil Site Class = C

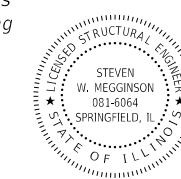
**WATERWAY INFORMATION**

| Flood        | Freq. Yr. | Q C.F.S. | Opening Sq. Ft. |       | Nat. H.W.E. |       | Head - Ft. |       | Headwater El. |  |
|--------------|-----------|----------|-----------------|-------|-------------|-------|------------|-------|---------------|--|
|              |           |          | Exist.          | Prop. | Exist.      | Prop. | Exist.     | Prop. |               |  |
| Design       | 15        | 1,240    | 390             | 500   | 620.1       | 0.1   | 0.0        | 620.2 | 620.1         |  |
| Base/Overtop | 100       | 1,880    | 460             | 600   | 621.4       | 0.2   | 0.1        | 621.6 | 621.5         |  |
| Scour Check  | 200       | 2,120    | 470             | 610   | 621.7       | 0.3   | 0.2        | 622.0 | 621.9         |  |
| Max Calc.    | 500       | 2,440    | 470             | 610   | 622.0       | 0.4   | 0.3        | 622.4 | 622.3         |  |

Existing Low Grade Elev. 622.7 @ Sta. 10+00  
Drainage Area = 23.5 Sq. Mi. Proposed Low Grade Elev. 624.3 @ Sta. 7+50  
10 Year Velocity through Existing Bridge = 3.1 fps 10 Year Velocity through Proposed Bridge = 2.3 fps

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Specifications."

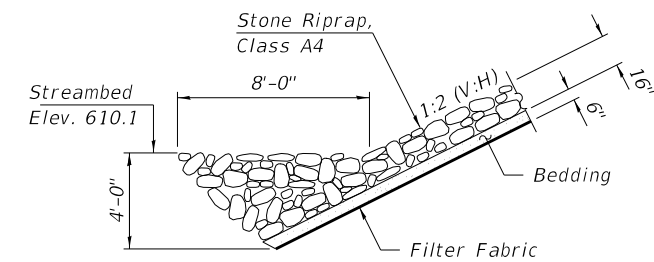
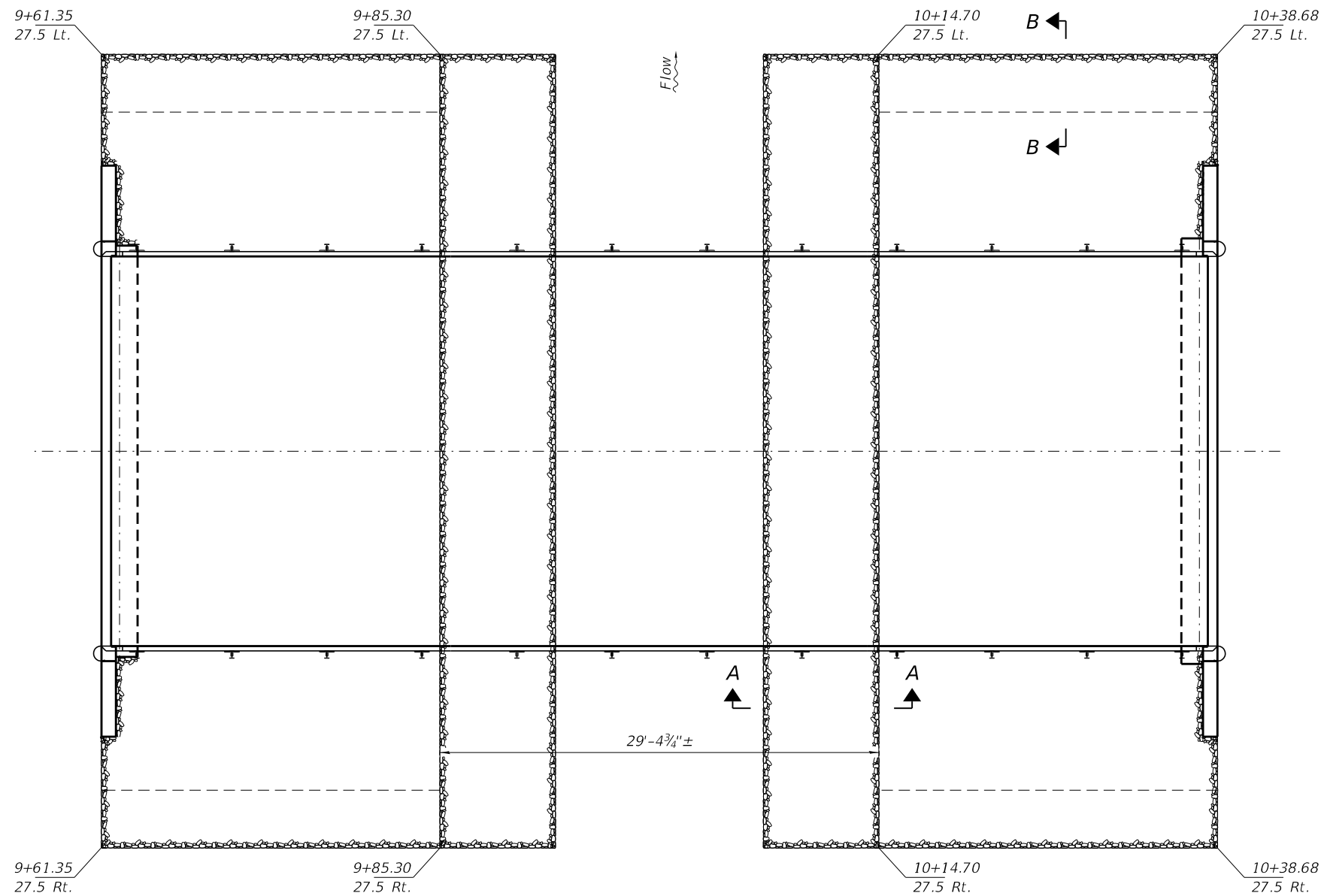
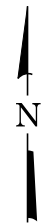
*Steven W. Megginson* 01/06/2023  
ILLINOIS STRUCTURAL ENGINEER NO. 081-6064



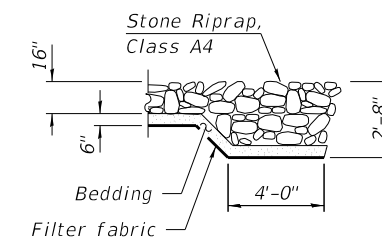
Expires 11-30-2024

**TOTAL BILL OF MATERIAL**

| ITEM   | UNIT    | SUPER | SUB   | TOTAL |
|--|---------|-------|-------|-------|
| Channel Excavation                               | Cu. Yd. |       |       | 145   |
| Stone Riprap, Class A4                           | Sq. Yd. |       |       | 390   |
| Filter Fabric                                    | Sq. Yd. |       |       | 390   |
| Removal of Existing Structures                   | Each    |       |       | 1     |
| Concrete Structures                              | Cu. Yd. |       | 24.6  | 24.6  |
| Precast Prestressed Conc. Deck Beams (33" Depth) | Sq. Ft. | 2,052 |       | 2,052 |
| Reinforcement Bars, Epoxy Coated                 | Pound   |       | 3,550 | 3,550 |
| Steel Railing, Type S-1                          | Foot    | 149   |       | 149   |
| Furnishing Steel Piles HP10X42                   | Foot    |       | 495   | 495   |
| Driving Piles                                    | Foot    |       | 495   | 495   |
| Test Pile Steel HP10x42                          | Each    |       | 1     | 1     |
| Name Plates                                      | Each    |       | 1     | 1     |
| Pipe Underdrains for Structures 4"               | Foot    |       |       | 112   |
| Terminal Marker - Direct Applied                 | Each    | 4     |       | 4     |
| Porous Granular Embankment, Special              | Foot    |       | 140   | 140   |

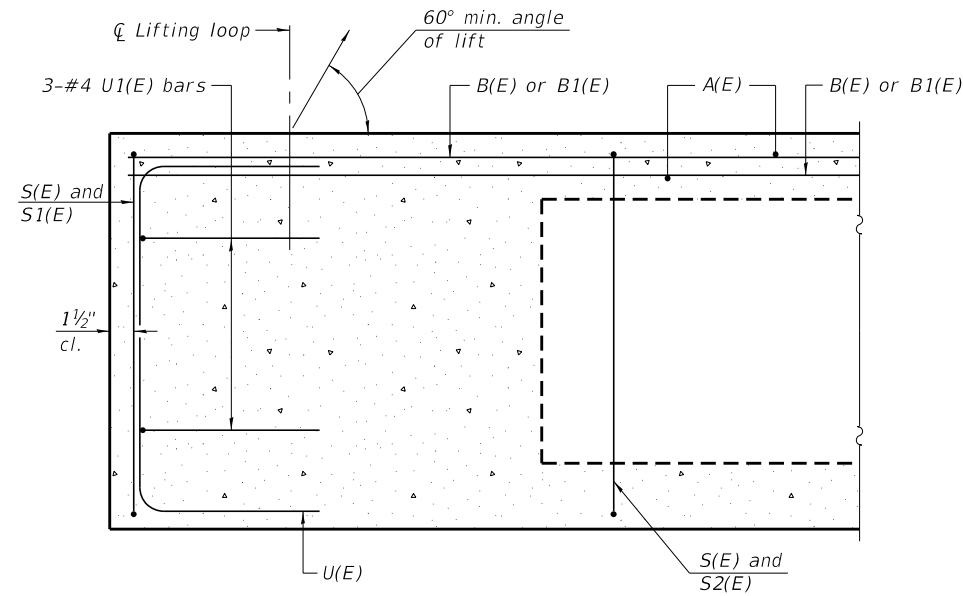


**SECTION A-A**

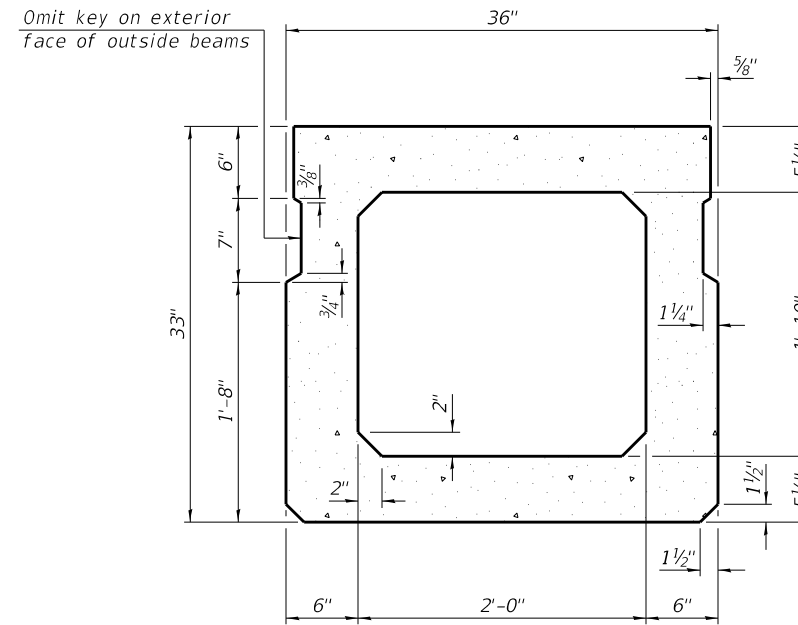


**SECTION B-B**

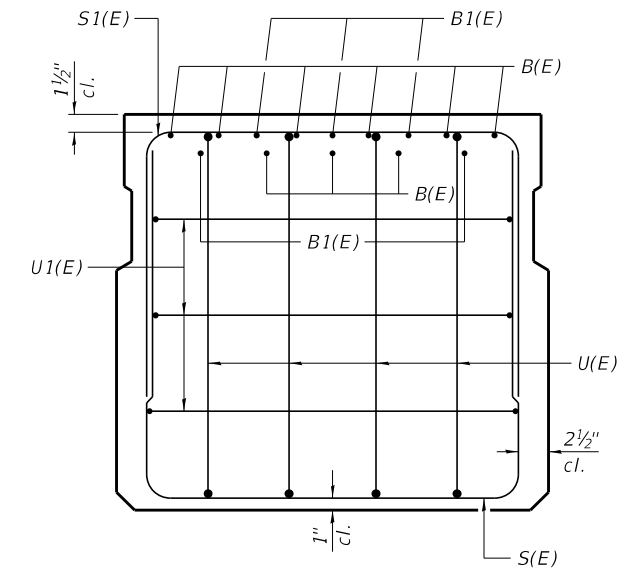
|   |                     |                   |           |   |   |                                       |                |                    |              |           |
|---|---------------------|-------------------|-----------|---|---|---------------------------------------|----------------|--------------------|--------------|-----------|
| FILE NAME = 210039-shi-bridge.dgn   | USER NAME = gmetca# | DESIGNED - J.R.B. | REVISED - | <b>STATE OF ILLINOIS<br/>LIVINGSTON COUNTY HIGHWAY DEPARTMENT</b> | <b>RIPRAP LAYOUT<br/>STRUCTURE NO. 053-4233</b> | T.R.                                  | SECTION        | COUNTY             | TOTAL SHEETS | SHEET NO. |
| <b>HAMPTON, LENZINI AND RENWICK, INC.</b><br>3085 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>LS / PE / SE CORP. 184.000959 | PLOT SCALE =        | CHECKED - S.W.M.  | REVISED - |   |   | 29                                    | 19-25110-03-BR | LIVINGSTON         | 24           | 7         |
| PLOT DATE = 1/6/2023  |                     | DRAWN - M.M.P.    | REVISED - |   |   | ROUND GROVE ROAD DISTRICT             |                | CONTRACT NO. 87808 |              |           |
|   |                     | CHECKED - S.W.M.  | REVISED - |   |   | ILLINOIS   FED. AID PROJECT 8YB8(638) |                |                    |              |           |



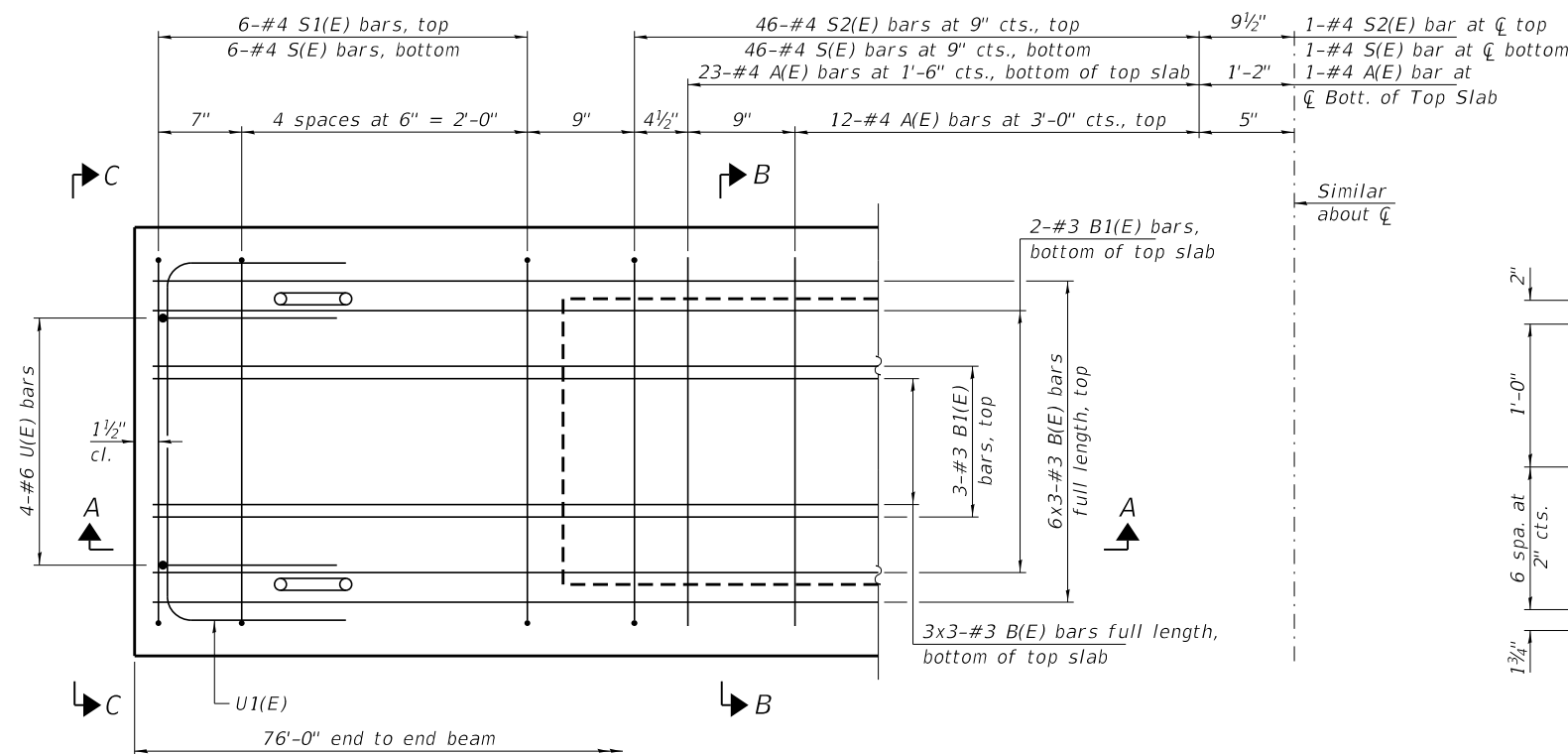
SECTION A-A



SECTION B-B  
(Showing dimensions)

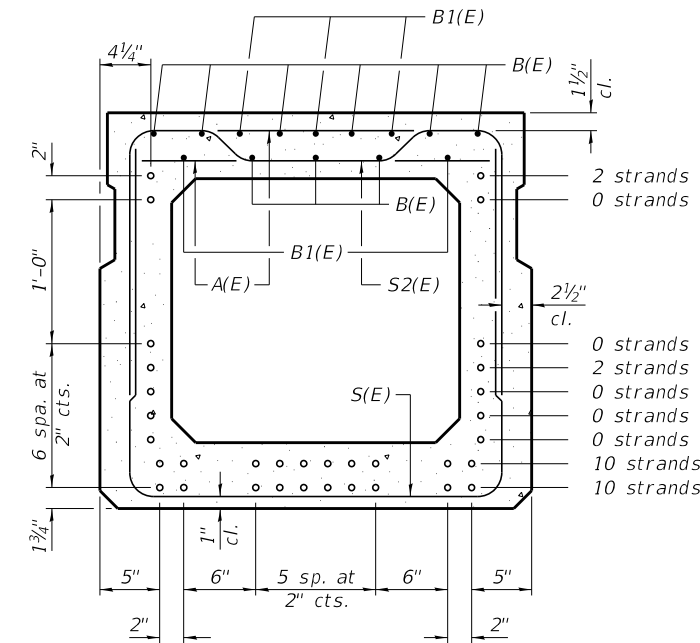


VIEW C-C



PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.  
Bars indicated thus 6x3-#3 etc. indicates 6 lines of bars with 3 lengths per line.



SECTION B-B  
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

**BAR LIST**  
**ONE BEAM ONLY**  
(For information only)

| Bar   | No. | Size | Length | Shape |
|-------|-----|------|--------|-------|
| A(E)  | 71  | #4   | 2'-7"  | —     |
| B(E)  | 27  | #3   | 26'-3" | —     |
| B1(E) | 10  | #3   | 10'-0" | —     |
| S(E)  | 105 | #4   | 7'-8"  | U     |
| S1(E) | 12  | #4   | 6'-5"  | U     |
| S2(E) | 93  | #4   | 6'-8"  | U     |
| U(E)  | 8   | #6   | 5'-0"  | C     |
| U1(E) | 6   | #4   | 5'-0"  | C     |

Note: See sheet 4 of 10 for additional details and Bill of Material.

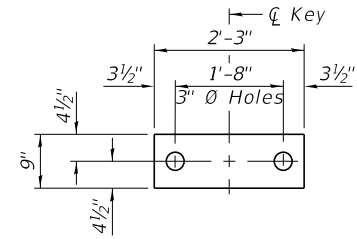
**MINIMUM BAR LAP**  
#3 bar = 1'-6"

PD-3336-0

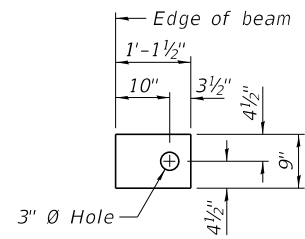
1-1-2020

|  |                      |                   |           |   |   |                           |                    |            |              |           |
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| FILE NAME = 210039-shl-bridge.dgn  | USER NAME = gmetcal  | DESIGNED - J.R.B. | REVISED - | <b>STATE OF ILLINOIS<br/>LIVINGSTON COUNTY HIGHWAY DEPARTMENT</b> | <b>33" x 36" PPC DECK BEAM<br/>STRUCTURE NO. 053-4233</b> | T.R.                      | SECTION            | COUNTY     | TOTAL SHEETS | SHEET NO. |
| HAMPTON, LENZINI AND RENWICK, INC.<br>3035 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>LS / PE / SE CORP. 184.000959 | PLOT SCALE =         | CHECKED - S.W.M.  | REVISED - |   |   | 29                        | 19-25110-03-BR     | LIVINGSTON | 24           | 8         |
|  | PLOT DATE = 1/6/2023 | DRAWN - M.M.P.    | REVISED - |   |   | ROUND GROVE ROAD DISTRICT | CONTRACT NO. 87808 |            |              |           |
|  |                      | CHECKED - S.W.M.  | REVISED - |   |   | SHEET NO. 3 OF 10 SHEETS  |                    |            |              |           |





**FABRIC BEARING PAD**  
(Interior - 16 Req'd.)

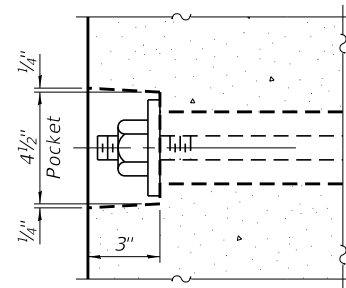


**FABRIC BEARING PAD**  
(Exterior - 4 Req'd.)

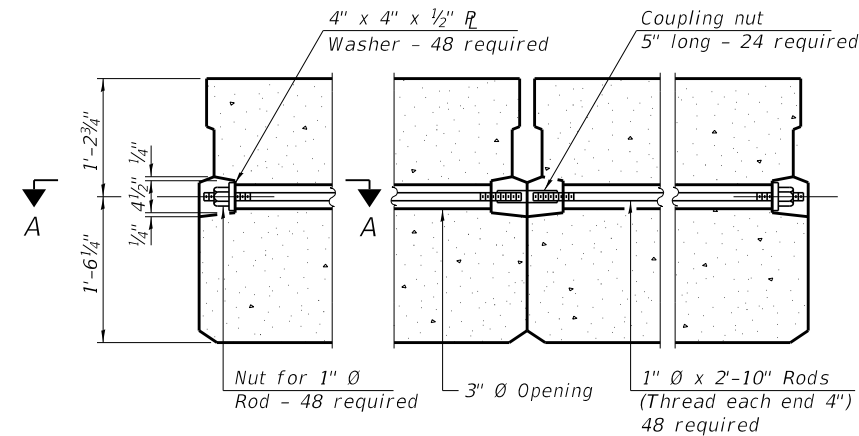
**FIXED**

Notes:

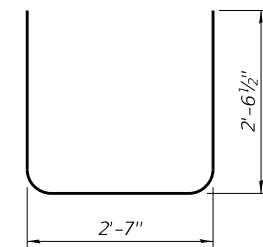
- All bearing pads shall be 1" thick.
- Omit holes when using expansion bearings.
- Expansion bearing pads shall be bonded to the substructure.



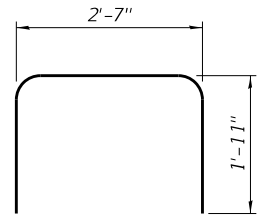
**SECTION A-A**



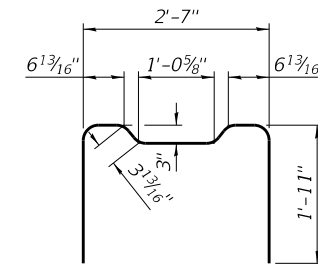
**TYPICAL TRANSVERSE TIE ASSEMBLY**



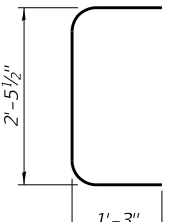
**BAR S(E)**



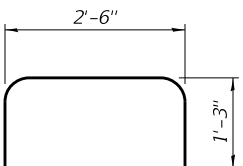
**BAR S1(E)**



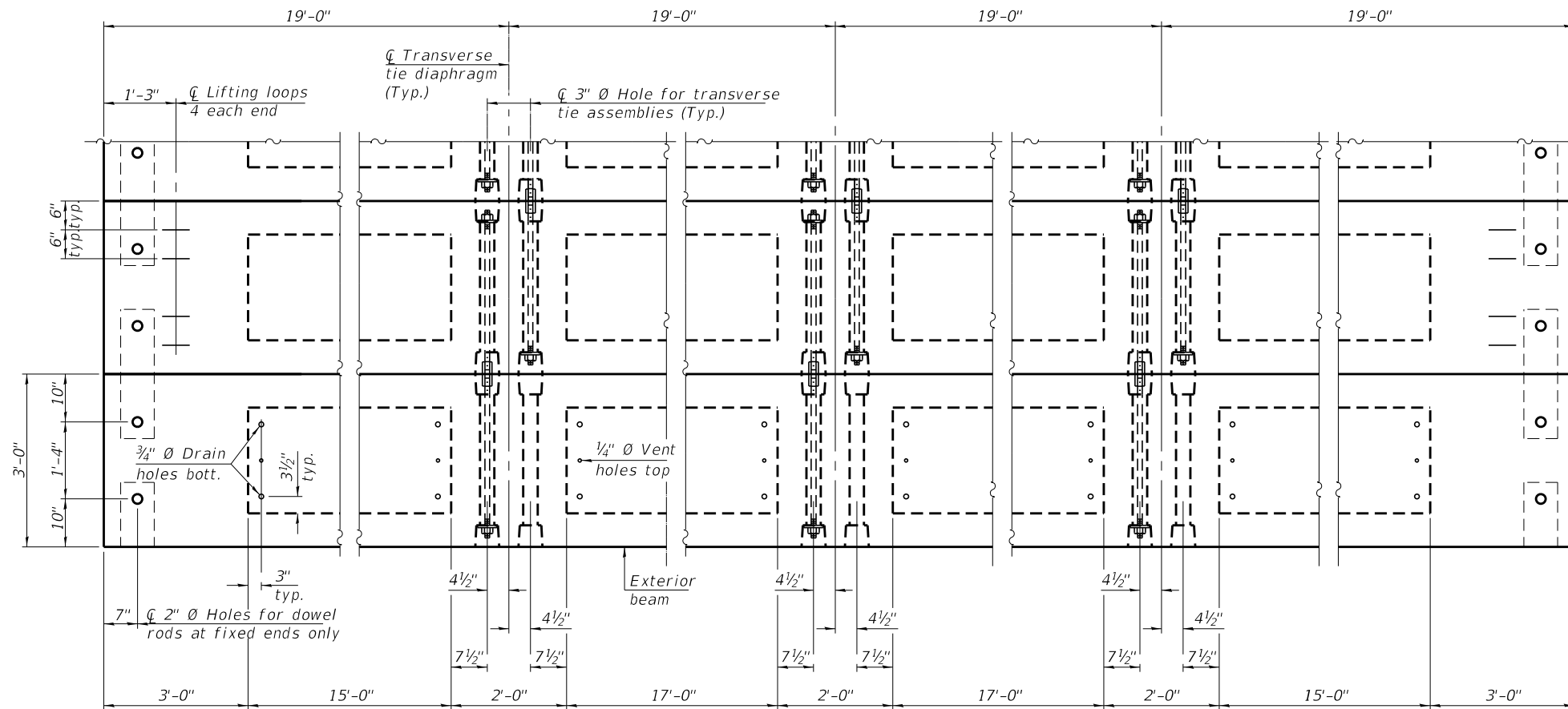
**BAR S2(E)**



**BAR U(E)**



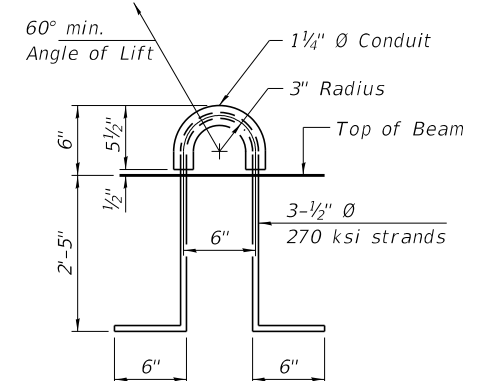
**BAR U1(E)**



**PLAN VIEW**

**NOTES**

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" Ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" Ø lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.
- Reinforcement bars designated (E) shall be epoxy coated.



**LIFTING LOOP DETAIL**

**BILL OF MATERIAL**

|   |         |       |
|---|---------|-------|
| Precast Prestressed Conc. Deck Bms. (33" depth) | Sq. Ft. | 2,052 |
|---|---------|-------|

PDD-3336-0

1-1-2020

|   |                      |
|---|----------------------|
| FILE NAME = 210039-shl-bridge.dgn   | USER NAME = gmetcal  |
| <b>HAMPTON, LENZINI AND RENWICK, INC.</b><br>3035 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>LS / PE / SE CORP. 184.000959 |                      |
| DESIGNED - J.R.B.   | CHECKED - S.W.M.     |
| DRAWN - M.M.P.  | CHECKED - S.W.M.     |
| PLOT SCALE =  | PLOT DATE = 1/6/2023 |

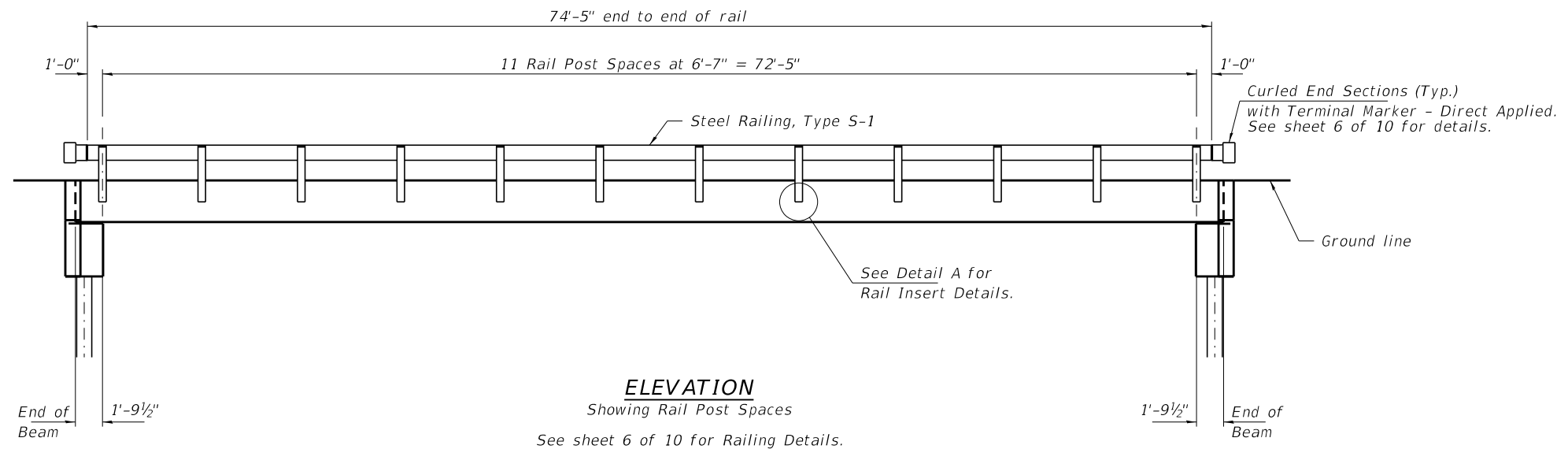
|                   |           |
|-------------------|-----------|
| DESIGNED - J.R.B. | REVISED - |
| CHECKED - S.W.M.  | REVISED - |
| DRAWN - M.M.P.    | REVISED - |
| CHECKED - S.W.M.  | REVISED - |

**STATE OF ILLINOIS**  
**LIVINGSTON COUNTY HIGHWAY DEPARTMENT**

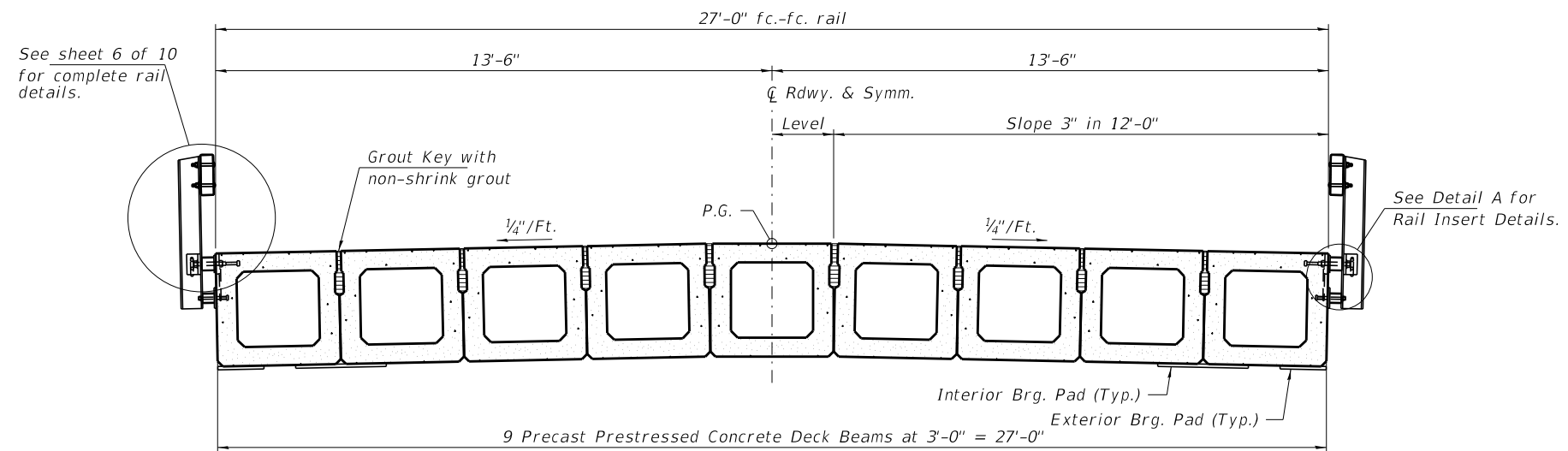
**33" x 36" PPC DECK BEAM DETAILS**  
**STRUCTURE NO. 053-4233**

SHEET NO. 4 OF 10 SHEETS

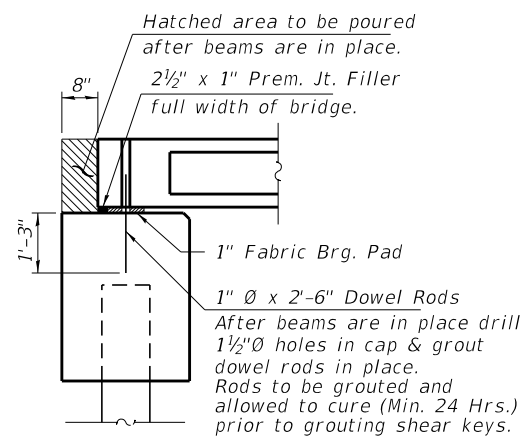
|                                       |                |                    |              |           |
|---------------------------------------|----------------|--------------------|--------------|-----------|
| T.R.                                  | SECTION        | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 29                                    | 19-25110-03-BR | LIVINGSTON         | 24           | 9         |
| ROUND GROVE ROAD DISTRICT             |                | CONTRACT NO. 87808 |              |           |
| ILLINOIS   FED. AID PROJECT 8YB8(638) |                |                    |              |           |



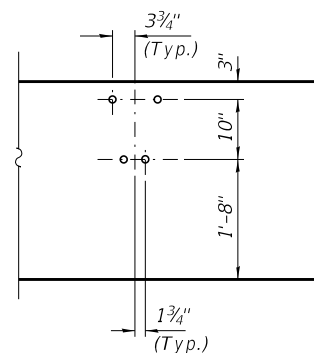
**ELEVATION**  
Showing Rail Post Spaces  
See sheet 6 of 10 for Railing Details.



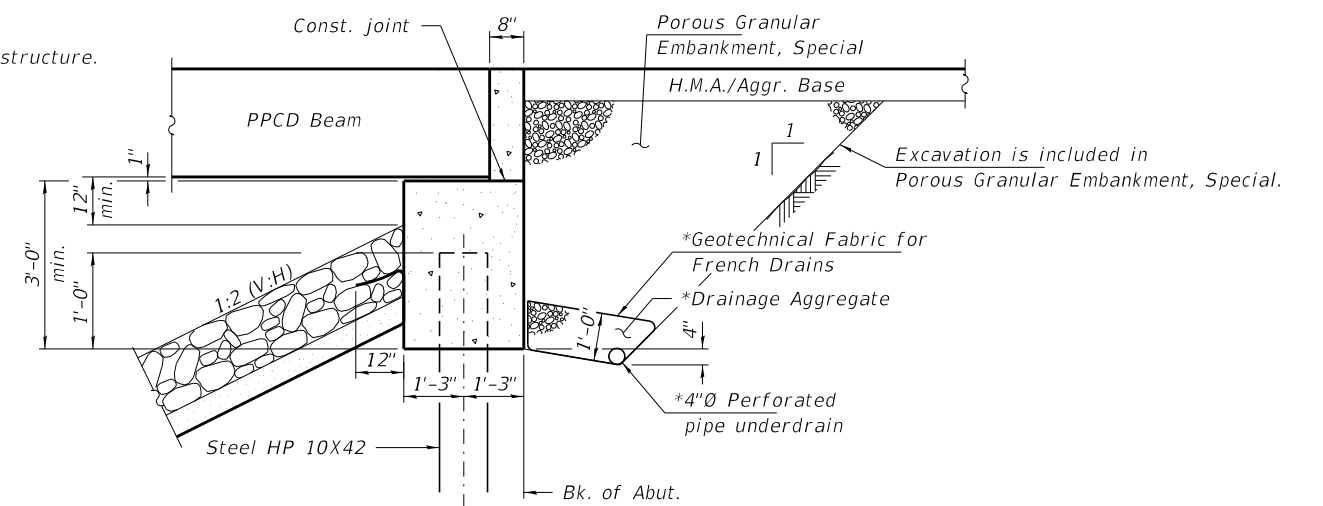
**CROSS SECTION**  
See sheets 3 & 4 of 10 for Superstructure.



**SECTION AT ABUTMENTS**



**DETAIL A**



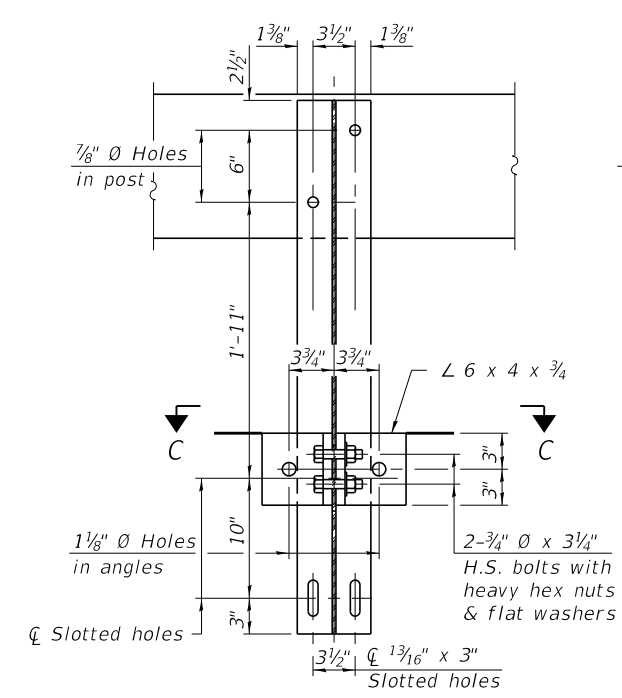
**SECTION THRU ABUTMENT**

\*Included in the cost of Pipe Underdrains for Structures (See Special Provisions)

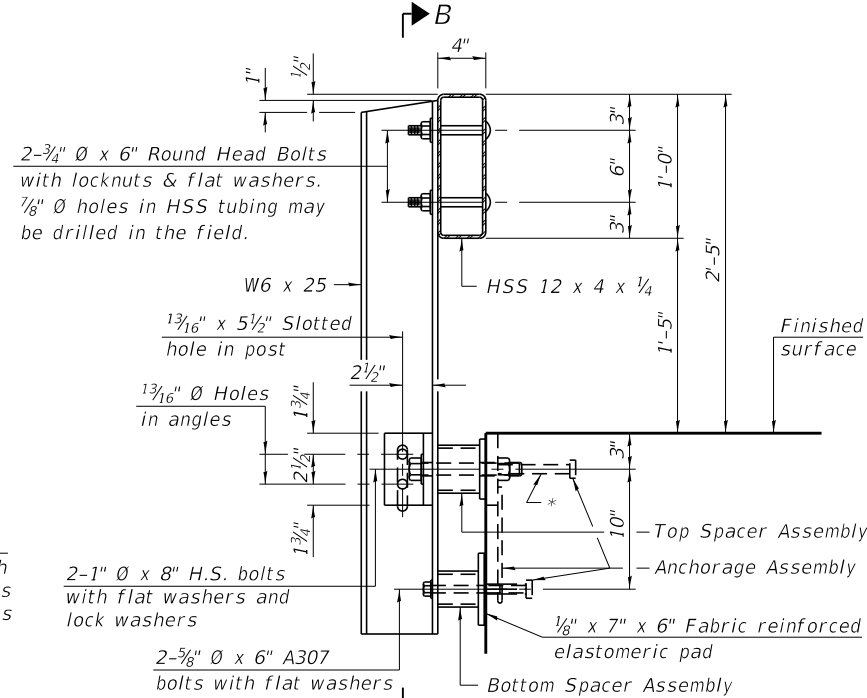
Note:  
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).  
Outlet pipe underdrains to the North only as directed by the Engineer.

|  |                      |                   |           |   |  |                           |                |                                       |              |           |
|--|----------------------|-------------------|-----------|---|--|---------------------------|----------------|---------------------------------------|--------------|-----------|
| FILE NAME = 210039-shi-bridge.dgn  | USER NAME = gmetca#  | DESIGNED - J.R.B. | REVISED - | <b>STATE OF ILLINOIS<br/>LIVINGSTON COUNTY HIGHWAY DEPARTMENT</b> | <b>SUPERSTRUCTURE DETAILS<br/>STRUCTURE NO. 053-4233</b> | T.R.                      | SECTION        | COUNTY                                | TOTAL SHEETS | SHEET NO. |
| HAMPTON, LENZINI AND RENWICK, INC.<br>3035 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>LS / PE / SE CORP. 184.000959 |                      | CHECKED - S.W.M.  | REVISED - |   |  | 29                        | 19-25110-03-BR | LIVINGSTON                            | 24           | 10        |
|  | PLOT SCALE =         | DRAWN - M.M.P.    | REVISED - |   |  | ROUND GROVE ROAD DISTRICT |                | CONTRACT NO. 87808                    |              |           |
|  | PLOT DATE = 1/6/2023 | CHECKED - S.W.M.  | REVISED - |   |  | SHEET NO. 5 OF 10 SHEETS  |                | ILLINOIS   FED. AID PROJECT 8YB8(638) |              |           |

Notes:  
 A sufficient number of shims of various thicknesses, sized to fit behind the top spacer assembly, 5" x 11 1/2", and bottom spacer assembly, 6" x 7", shall be provided to adjust posts for proper alignment. If the summation of shims is greater than 1/4" (top) or 1/2" (bottom), longer bolts are required. Cost included with Steel Railing, Type S-1.  
 All steel rail elements including shims shall be galvanized according to Article 509.05 of the Standard Specifications.  
 All HSS tubing serving as railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.  
 Rail splice inserts may be built out of 2 - 3/8" bent plates in lieu of the 4 plate rail splice inserts shown, provided the outside dimensions are matched.  
 All round head bolts shall be ASTM A307 with locknuts according to ASTM A563 grade A.

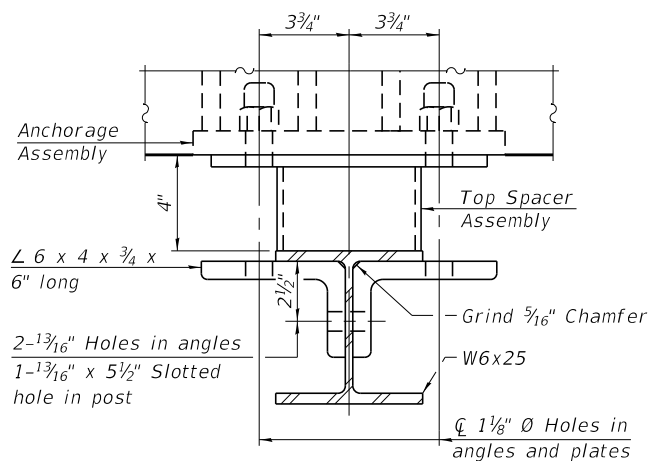


SECTION B-B

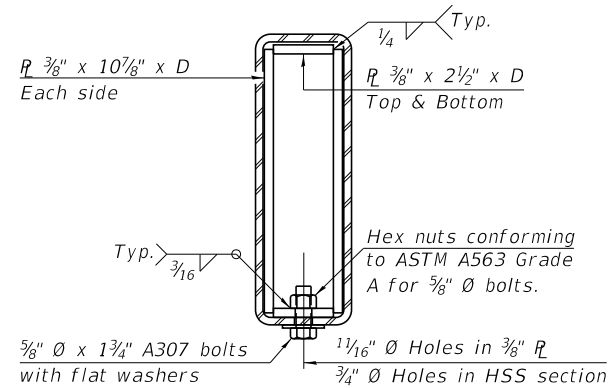


SECTION AT RAILING POST

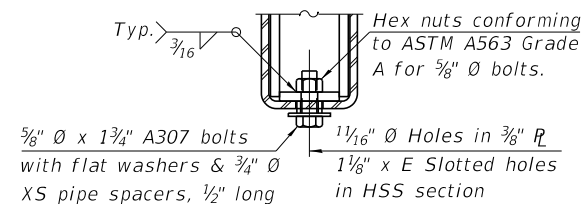
\* The outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchorage assembly. The anchorage studs may be bent down 1/2" to accommodate the top reinforcement bar placement.



SECTION C-C



SECTION AT RAIL SPLICE

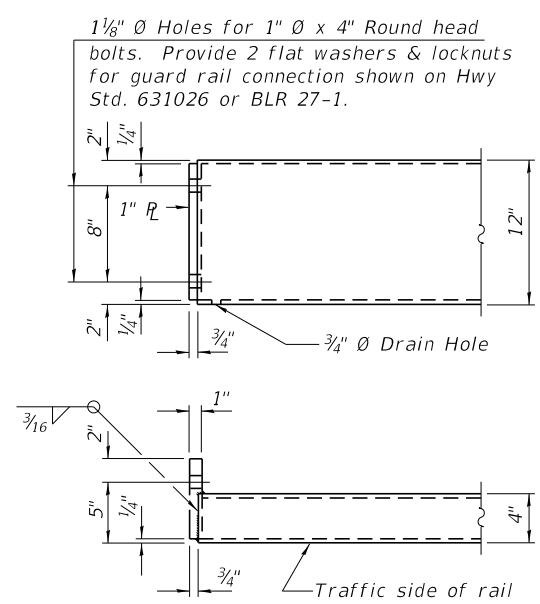


RAIL SPLICE CONNECTION AT EXPANSION JT.

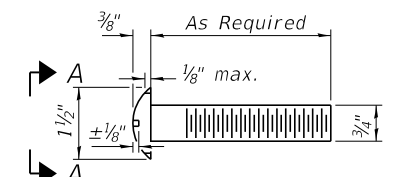
SPLICE DIMENSIONS

| Location                     | T        | A      | B       | C      | D         | E         |
|------------------------------|----------|--------|---------|--------|-----------|-----------|
| All locs. not over exp. jts. | 0        | 1/4"   | 4"      | 4"     | 1'-8"     | -         |
| Over Strip Seal Jt.          | ≤ 4"     | 2 1/2" | 4 3/8"  | 4 3/8" | 1'-10"    | 3 1/16"   |
| Over Finger or Modular Jt.   | ≤ 9 1/2" | 5 1/2" | 7 3/8"  | 7 1/4" | 2'-9 1/4" | 5 1 3/16" |
| Over Finger or Modular Jt.   | ≤ 15"    | 8 1/4" | 10 1/8" | 10"    | 3'-8 1/4" | 8 9/16"   |

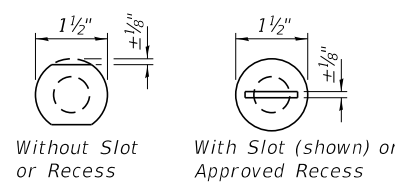
T = ; total movement along centerline of roadway at expansion joint.



END OF RAIL DETAILS

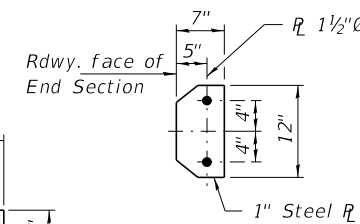


ROUND HEAD BOLT DETAIL

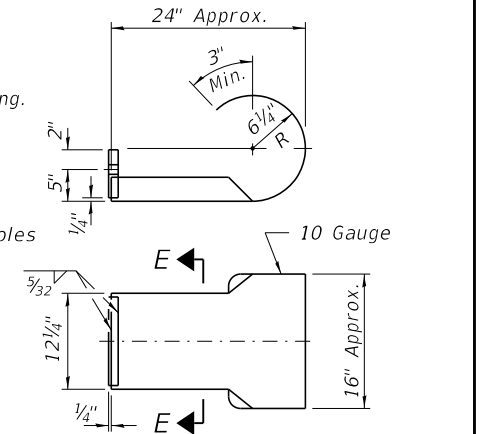


VIEW A-A

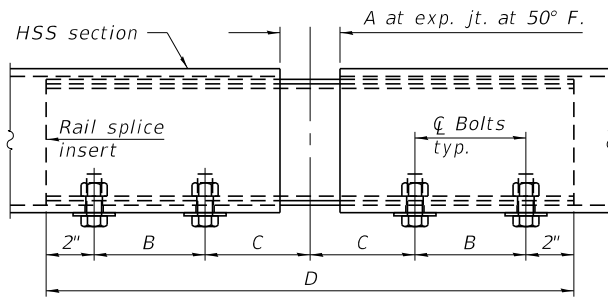
Note: Cost of curled end sections shall be included with the Steel Railing. (4 Required)



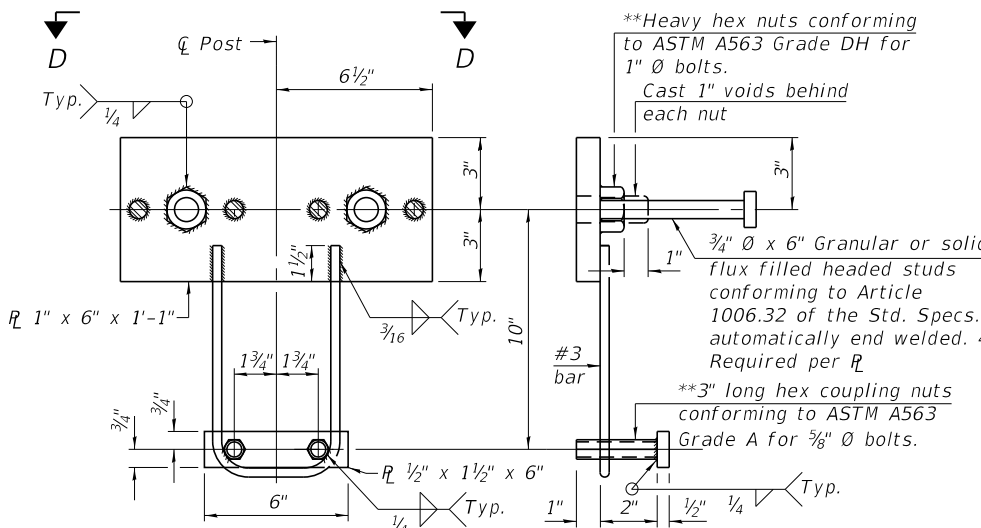
SECTION E-E



CURLED END SECTION DETAILS

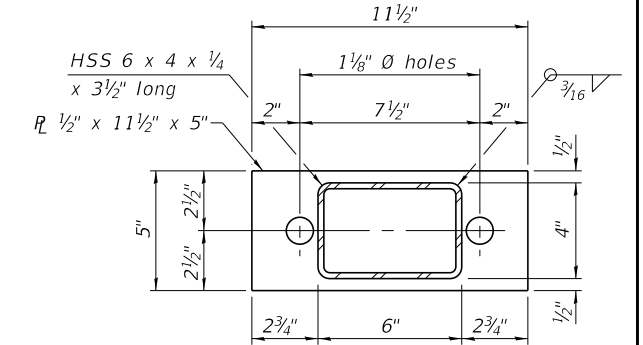


RAIL SPLICE ELEVATION

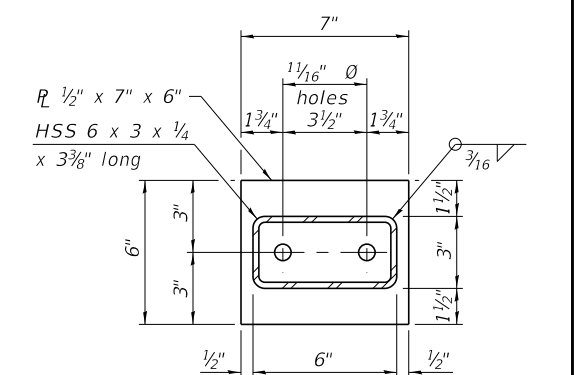


ANCHORAGE ASSEMBLY

\*\* Threaded areas shall be plugged or blocked off during casting of concrete.



TOP SPACER ASSEMBLY



BOTTOM SPACER ASSEMBLY

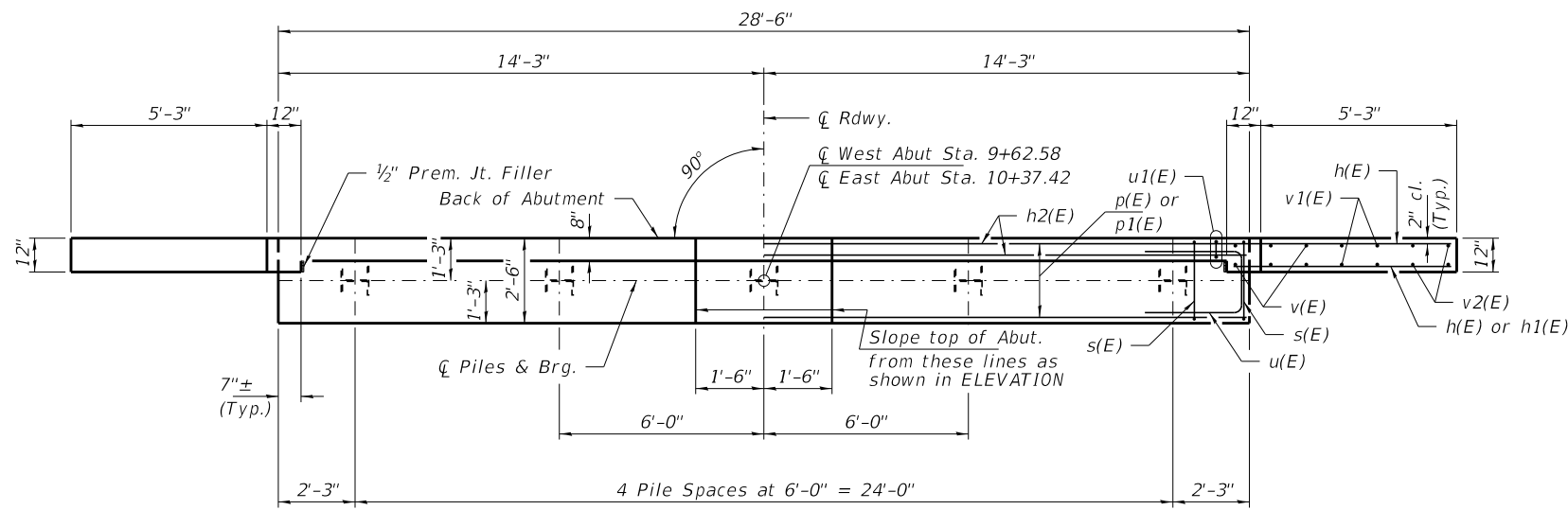
BILL OF MATERIAL

| Item                    | Unit | Quantity |
|-------------------------|------|----------|
| Steel Railing, Type S-1 | Foot | 149      |

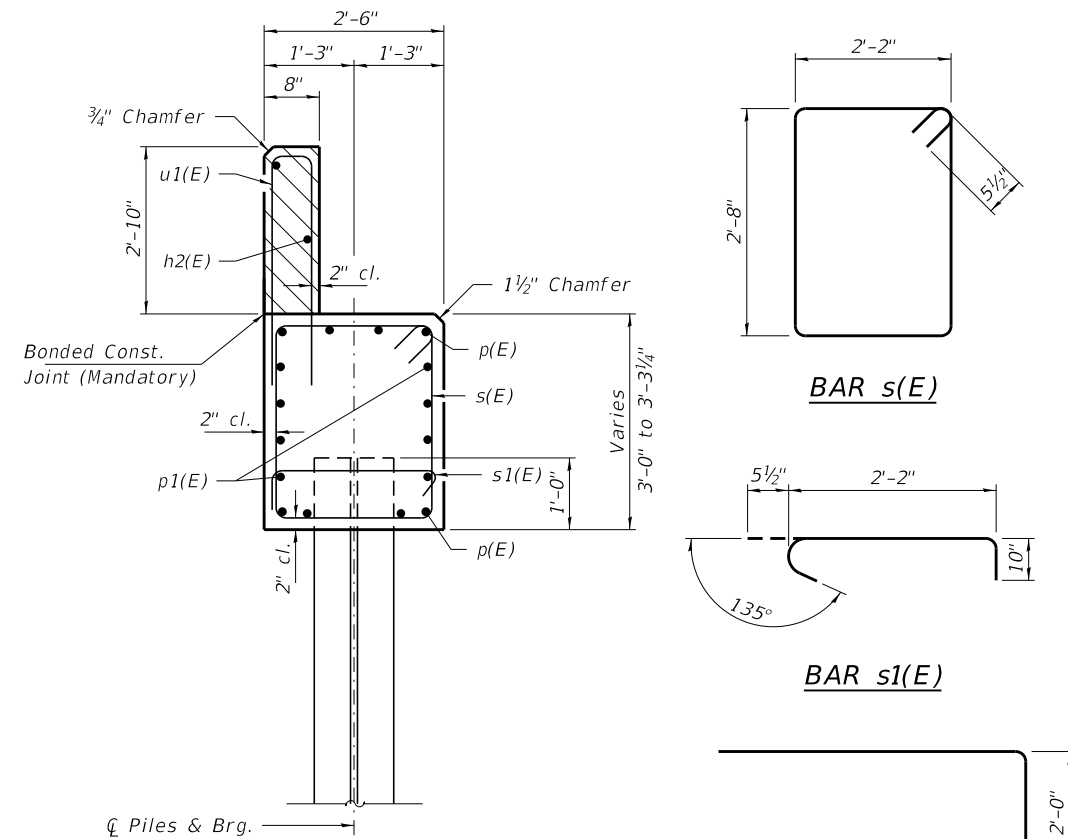
RAILING CRITERIA

|                          |                 |
|--------------------------|-----------------|
| NCHRP 350 Test Level     | 2               |
| Railing Weight (plf)     | 50              |
| Max Post Spacing         | 10'-9"          |
| HMA thickness range (in) | 1 1/4" - 3 1/8" |

R-23A 10-12-2021



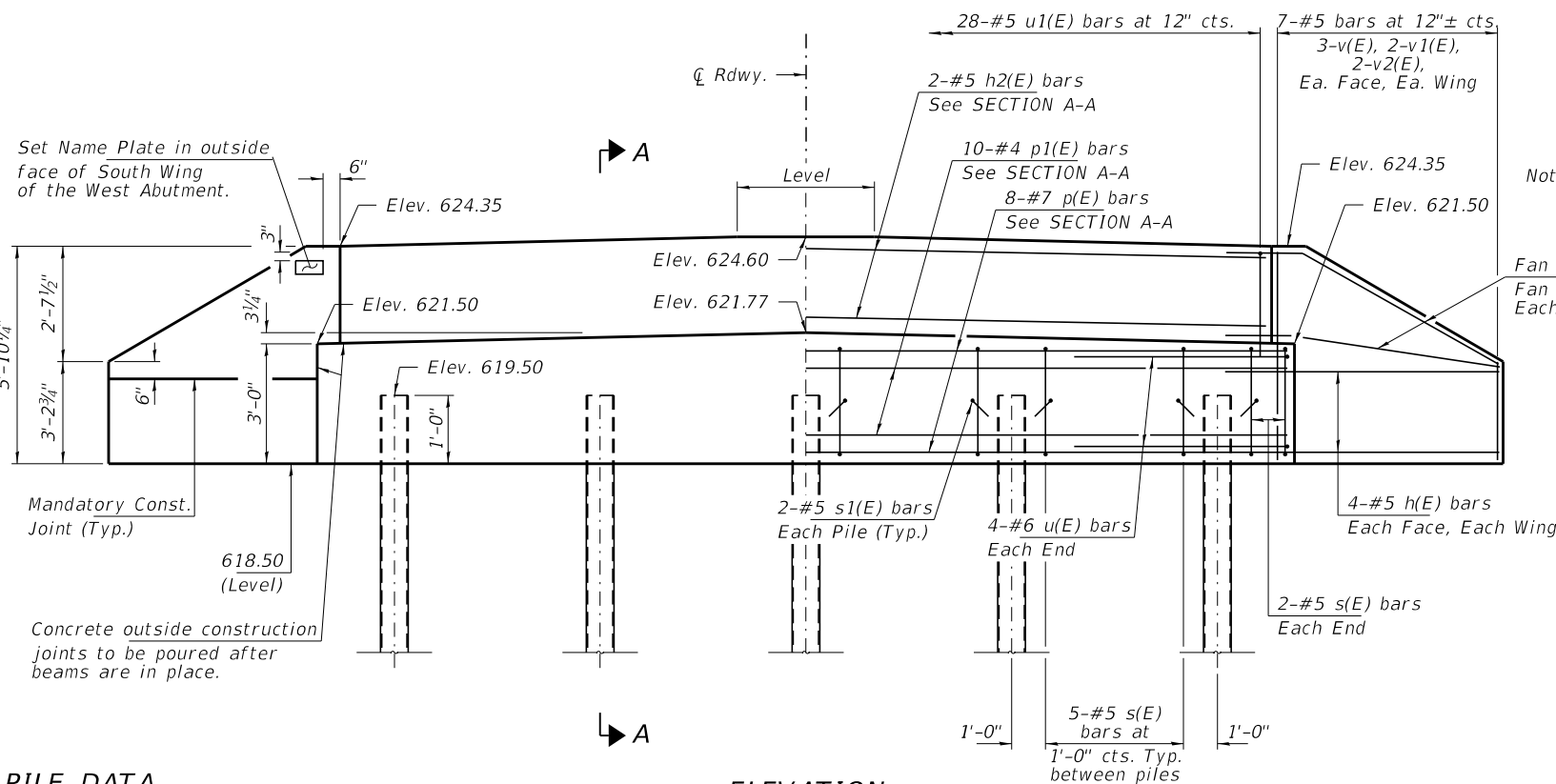
**PLAN**



**SECTION A-A**

Hatched area to be poured after beams are in place.

Cast top of wingwall flush with exterior beam face after beams have been erected.



**ELEVATION**

**PILE DATA**

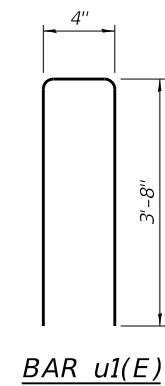
Type: Steel HP10x42  
 Nominal Required Bearing: 316 Kips/Pile  
 Factored Resistance Available: 174 Kips/Pile  
 Est. Length: 55 Ft/Pile  
 No. Production Piles: 9  
 No. Test Piles: 1

Notes: One test pile shall be driven in a permanent location at the East Abutment.

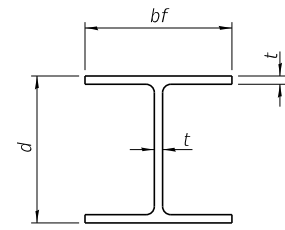
The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

**BILL OF MATERIAL - 2 ABUTS.**

| BAR                       | NO. | SIZE | LENGTH  | SHAPE |
|---------------------------|-----|------|---------|-------|
| h(E)                      | 40  | #5   | 7'-6"   | —     |
| h1(E)                     | 8   | #5   | 6'-0"   | —     |
| h2(E)                     | 4   | #5   | 28'-2"  | —     |
| p(E)                      | 16  | #7   | 28'-2"  | —     |
| p1(E)                     | 20  | #5   | 28'-2"  | —     |
| s(E)                      | 48  | #5   | 10'-7"  | □     |
| s1(E)                     | 20  | #5   | 3'-6"   | ┌     |
| u(E)                      | 16  | #6   | 10'-8"  | —     |
| u1(E)                     | 56  | #5   | 7'-8"   | —     |
| v(E)                      | 24  | #5   | 5'-6"   | —     |
| v1(E)                     | 16  | #5   | 4'-3"   | —     |
| v2(E)                     | 16  | #5   | 2'-11"  | —     |
| Concrete Structures       |     |      | Cu. Yd. | 24.6  |
| Reinf. Bars, Epoxy Coated |     |      | Pound   | 3,550 |
| Steel Piles HP10x42       |     |      | Foot    | 495   |
| Test Pile Steel HP10x42   |     |      | Each    | 1     |
| Name Plates               |     |      | Each    | 1     |

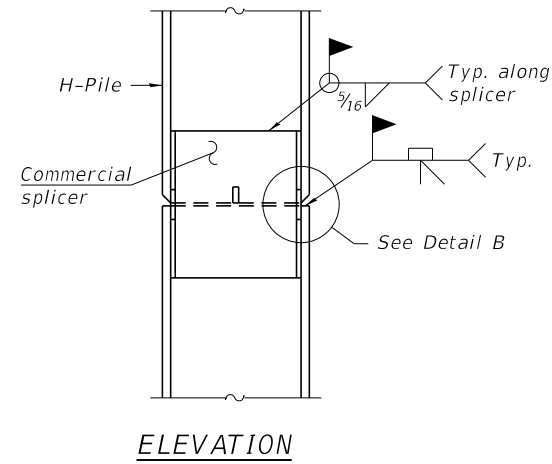


**BAR u1(E)**

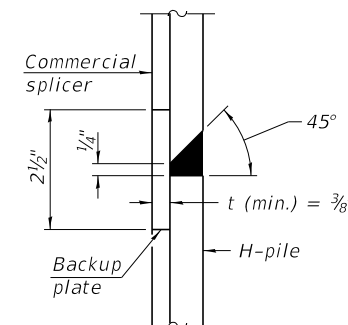


**STEEL PILE TABLE**

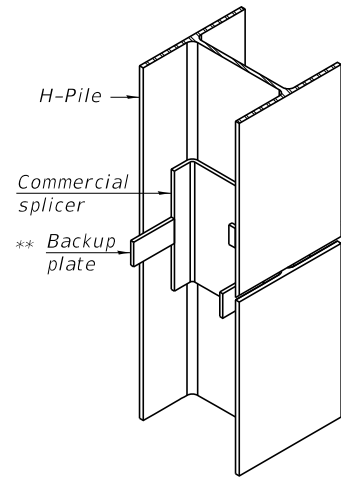
| Designation | Depth d | Flange width bf | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------|----------------------------|-----------------------|
| HP 14x117   | 14 1/4" | 14 7/8"         | 1 3/16"                    | 30"                   |
| x102        | 14"     | 14 3/4"         | 1 1/16"                    | 30"                   |
| x89         | 13 7/8" | 14 3/4"         | 5/8"                       | 30"                   |
| x73         | 13 3/8" | 14 3/8"         | 1/2"                       | 30"                   |
| HP 12x84    | 12 1/4" | 12 1/4"         | 1 1/16"                    | 24"                   |
| x74         | 12 1/8" | 12 1/4"         | 5/8"                       | 24"                   |
| x63         | 12"     | 12 1/8"         | 1/2"                       | 24"                   |
| x53         | 11 3/4" | 12"             | 7/16"                      | 24"                   |
| HP 10x57    | 10"     | 10 1/4"         | 9/16"                      | 24"                   |
| x42         | 9 3/4"  | 10 1/8"         | 7/16"                      | 24"                   |
| HP 8x36     | 8"      | 8 1/8"          | 7/16"                      | 18"                   |



**ELEVATION**

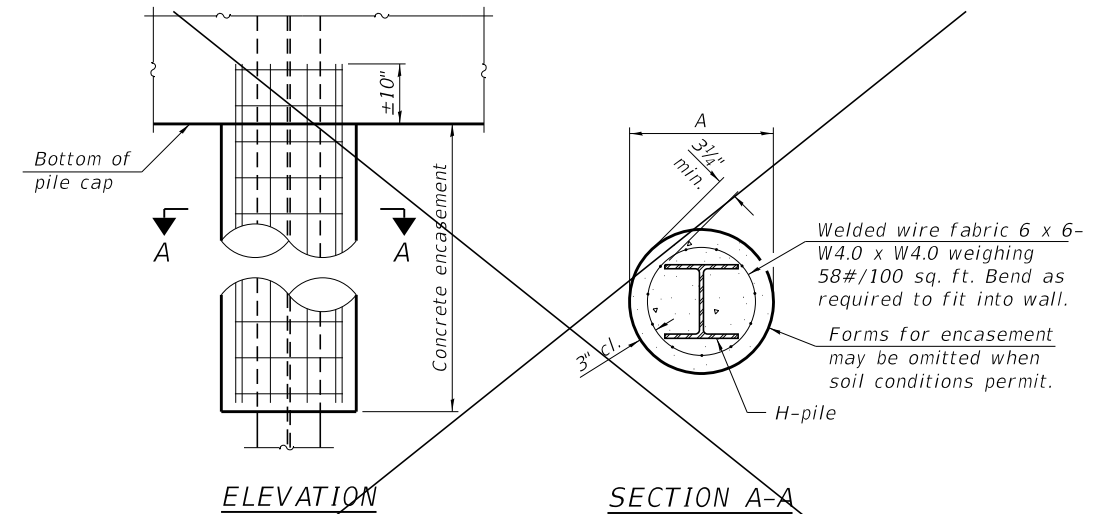


**DETAIL "B"**



**ISOMETRIC VIEW**

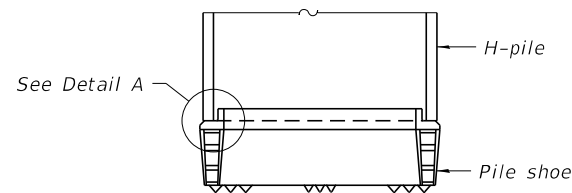
**WELDED COMMERCIAL SPLICE**



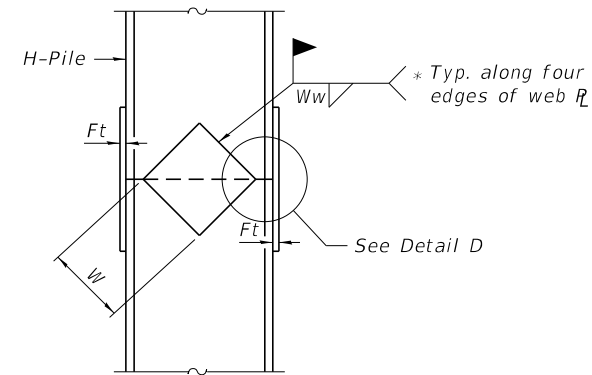
**ELEVATION**

**SECTION A-A**

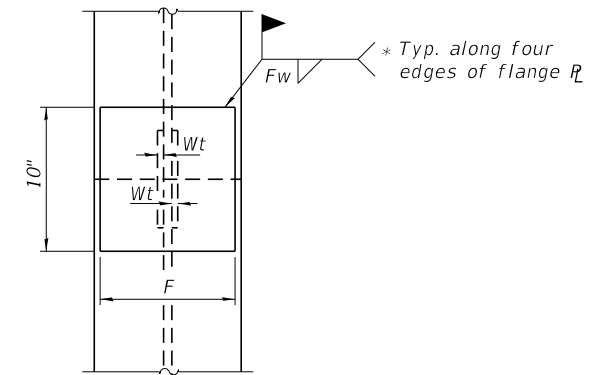
**INDIVIDUAL PILE CONCRETE ENCASEMENT IS REQUIRED**  
(Forms for encasement may be omitted when soil conditions permit).



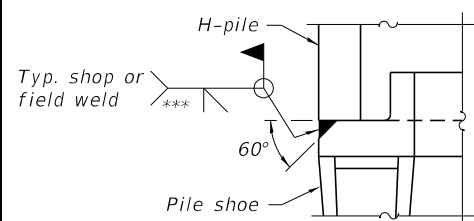
**ELEVATION**



**ELEVATION**

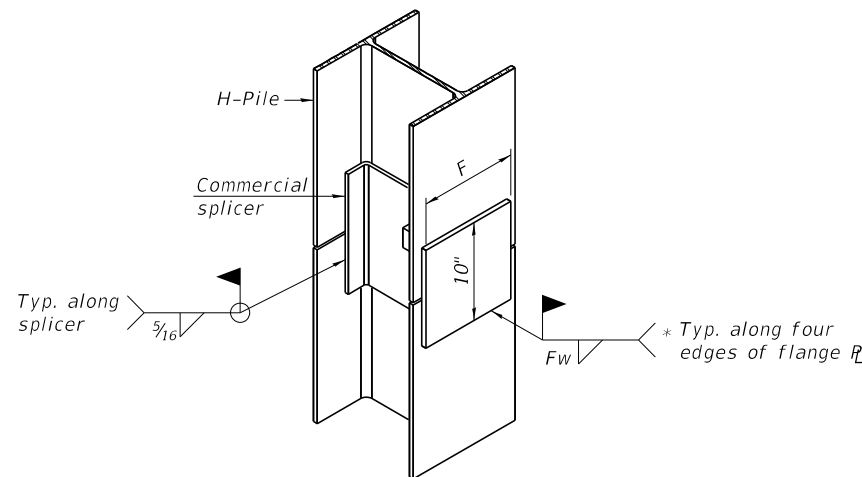


**END VIEW**



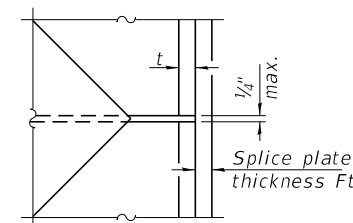
**DETAIL A**

**SHOE ATTACHMENT**



**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE ALTERNATE**



**DETAIL D**

**WELDED PLATE FIELD SPLICE**

| Designation | F       | Ft   | Fw      | W      | Wt   | Ww   |
|-------------|---------|------|---------|--------|------|------|
| HP 14x117   | 12 1/2" | 1"   | 7/8"    | 7 3/4" | 5/8" | 1/2" |
| x102        | 12 1/2" | 7/8" | 3/4"    | 7 3/4" | 5/8" | 1/2" |
| x89         | 12 1/2" | 3/4" | 1 1/16" | 7 3/4" | 5/8" | 1/2" |
| x73         | 12 1/2" | 5/8" | 9/16"   | 7 3/4" | 5/8" | 1/2" |
| HP 12x84    | 10"     | 7/8" | 1 1/16" | 6 1/2" | 5/8" | 1/2" |
| x74         | 10"     | 7/8" | 1 1/16" | 6 1/2" | 5/8" | 1/2" |
| x63         | 10"     | 5/8" | 1/2"    | 6 1/2" | 1/2" | 3/8" |
| x53         | 10"     | 5/8" | 1/2"    | 6 1/2" | 1/2" | 3/8" |
| HP 10x57    | 8"      | 3/4" | 9/16"   | 5 1/4" | 1/2" | 3/8" |
| x42         | 8"      | 5/8" | 9/16"   | 5 1/4" | 1/2" | 3/8" |
| HP 8x36     | 7"      | 5/8" | 7/16"   | 4 1/4" | 1/2" | 3/8" |

Note:  
The steel H-piles shall be according to AASHTO M270 Grade 50.

\* Interrupt welds 1/4" from end of web and/or each flange.

\*\* Remove portions of backup plates that extend outside the flanges.

\*\*\* Weld size per pile shoe manufacturer (5/16" min.).

F-HP 1-1-2020

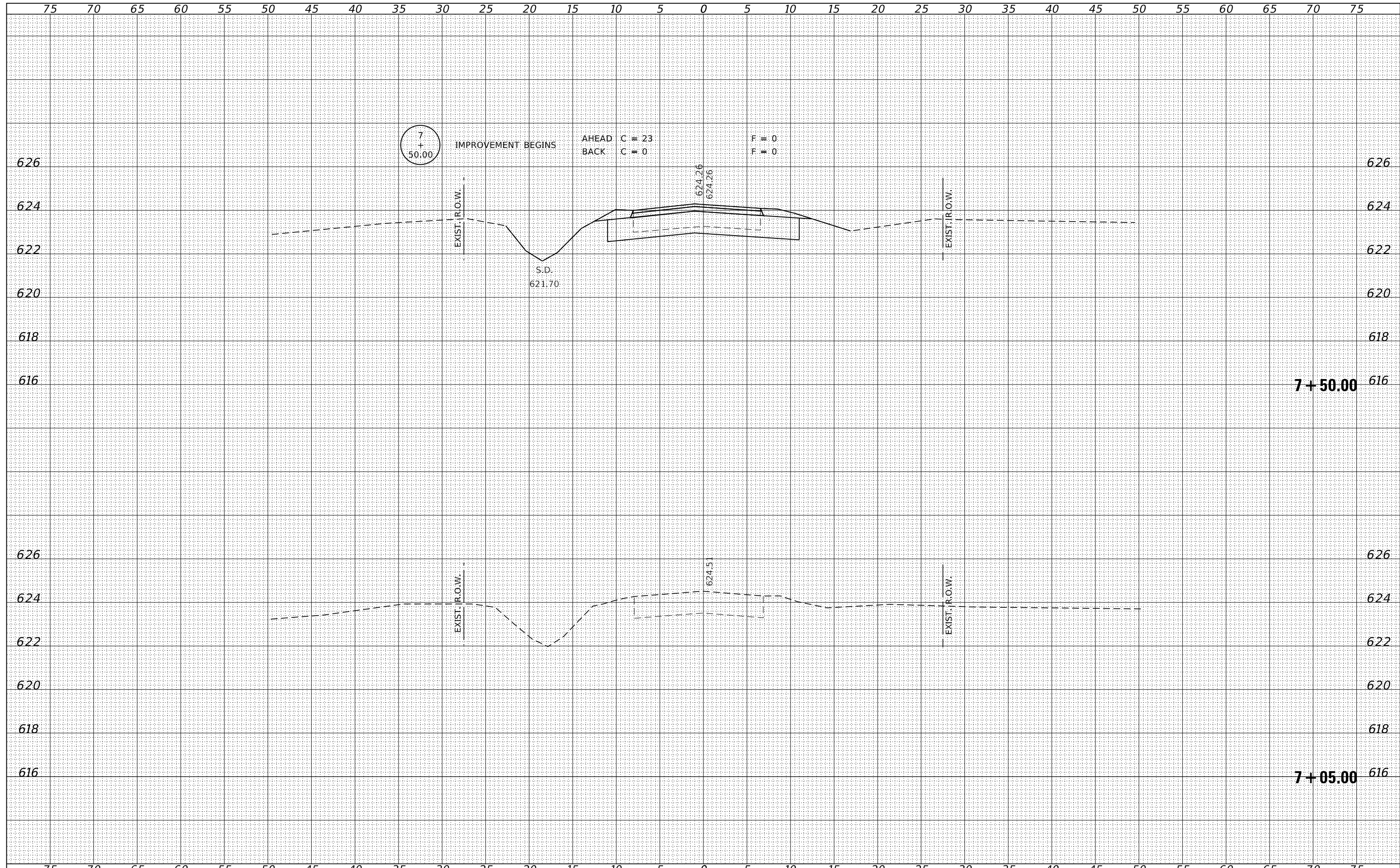
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| HAMPTON, LENZINI AND RENWICK, INC.<br>3085 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>L.S./P.E./S.E. CORP. 184.000959 | PLOT SCALE =         | CHECKED - S.W.M.  | REVISED - |   |   | 29                        | 19-25110-03-BR | LIVINGSTON         | 24           | 13                                 |  |
|  | PLOT DATE = 1/6/2023 | DRAWN - M.M.P.    | REVISED - |   |   | ROUND GROVE ROAD DISTRICT |                | CONTRACT NO. 87808 |              | ILLINOIS FED. AID PROJECT 8YB(638) |  |
|  |                      | CHECKED - S.W.M.  | REVISED - |   |   | SHEET NO. 8 OF 10 SHEETS  |                |                    |              |                                    |  |





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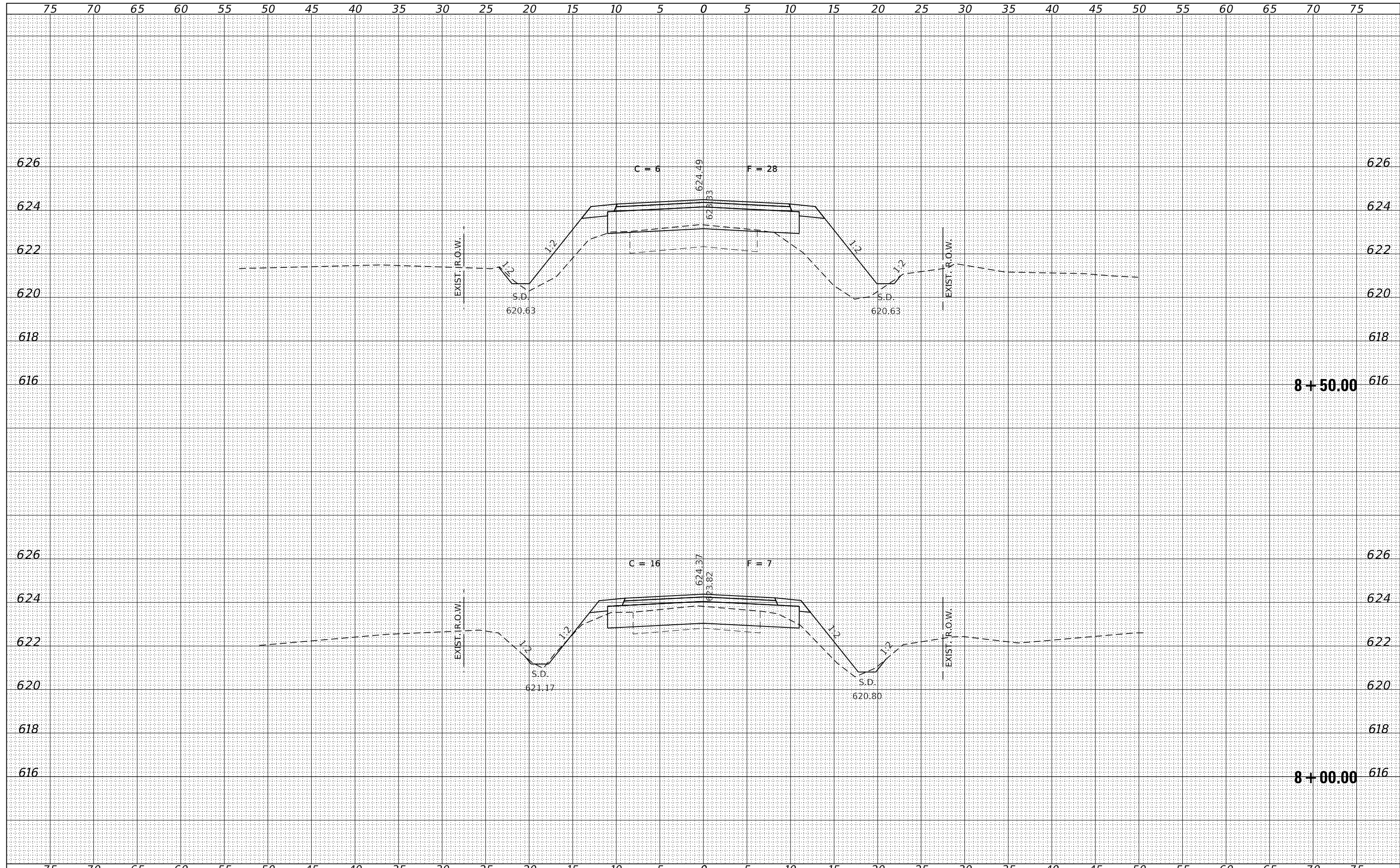


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| FILE NAME = 210039-shl-vssheets.dgn  | USER NAME = gmetcaif   | DESIGNED - S.A.A. | REVISED -    | <b>STATE OF ILLINOIS</b><br><b>LIVINGSTON COUNTY HIGHWAY DEPARTMENT</b> | <b>STATION CROSS SECTIONS</b> |  |  | T.R.         | SECTION         | COUNTY                              | TOTAL SHEETS | SHEET NO. |
| HAMPTON, LENZINI AND RENWICK, INC.<br>3885 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>LS / PE / SE CORP. 184.009958 | PLOT SCALE = \$SCALE\$ | DRAWN - T.W.K.    | REVISED -    |   |                               |  |  | 29           | 19-25110-03-BR  | LIVINGSTON                          | 24           | 16        |
| PLOT DATE = 1/6/2023   | CHECKED - J.W.F.       | REVISIED -        | SCALE: 5H:2V |   | SHEET NO. 1 OF 9 SHEETS       |  |  | STA. 7+05.00 | TO STA. 7+50.00 | ILLINOIS FED. AID PROJECT 8778(638) |              |           |
| DATE - 01/06/2023  | REVISIED -             | REVISIED -        |              |   |                               |  |  |              |                 |                                     |              |           |



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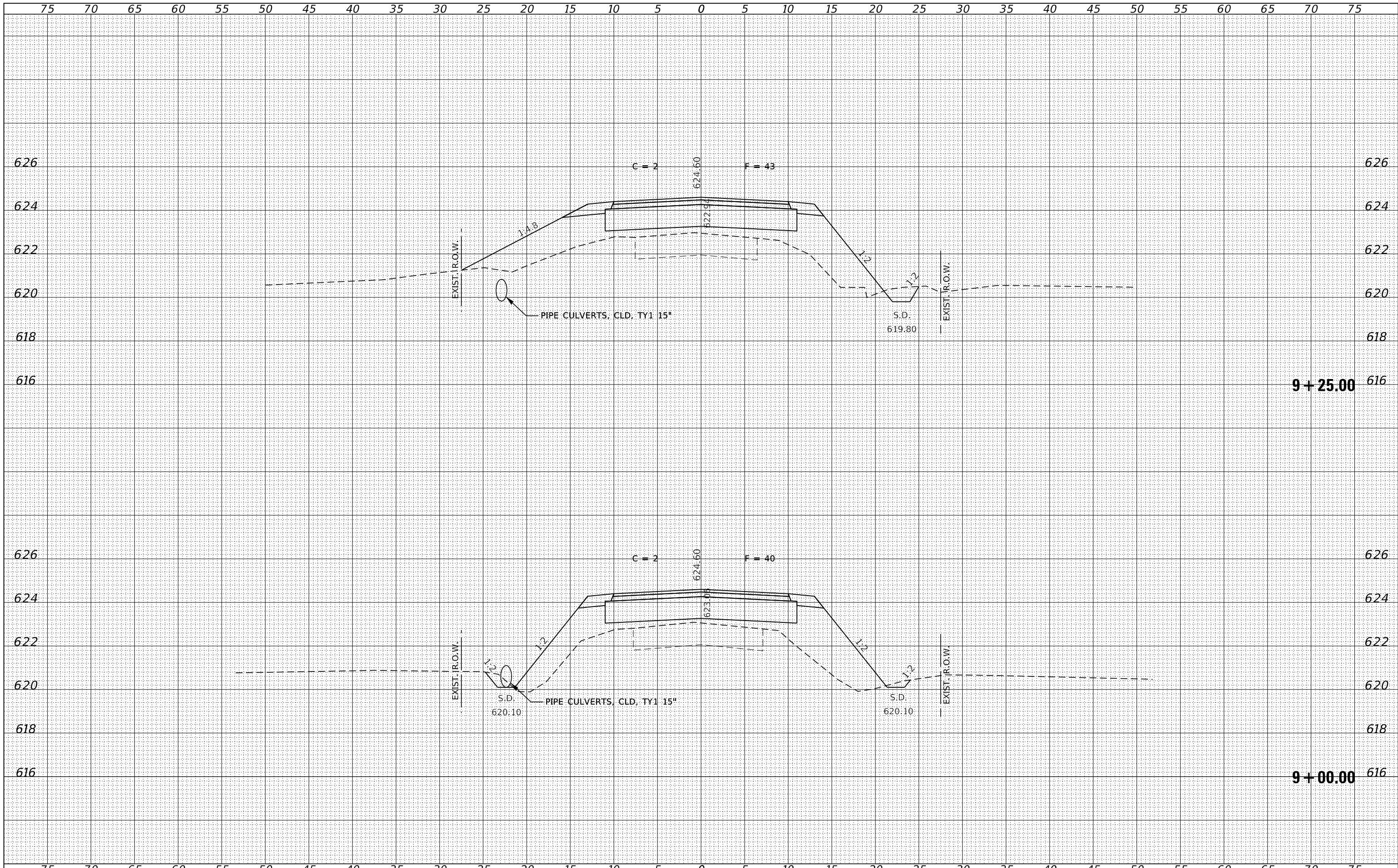
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| HAMPTON, LENZINI AND RENWICK, INC.<br>3885 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>L.S. / P.E. / S.E. CORP. 184.009958 |                      | DRAWN - T.W.K.    | REVISED - |   | 29                            | 19-25110-03-BR          | LIVINGSTON                   | 24                                  | 17      |        |              |           |
| PLOT SCALE = \$SCALE\$   |                      | CHECKED - J.W.F.  | REVISED - |   | ROUND GROVE ROAD DISTRICT     |                         |                              | CONTRACT NO. 87808                  |         |        |              |           |
| PLOT DATE = 1/6/2023   |                      | DATE - 01/06/2023 | REVISED - |   | SCALE: 5H:2V                  | SHEET NO. 2 OF 9 SHEETS | STA. 8+00.00 TO STA. 8+50.00 | ILLINOIS FED. AID PROJECT 877B(638) |         |        |              |           |

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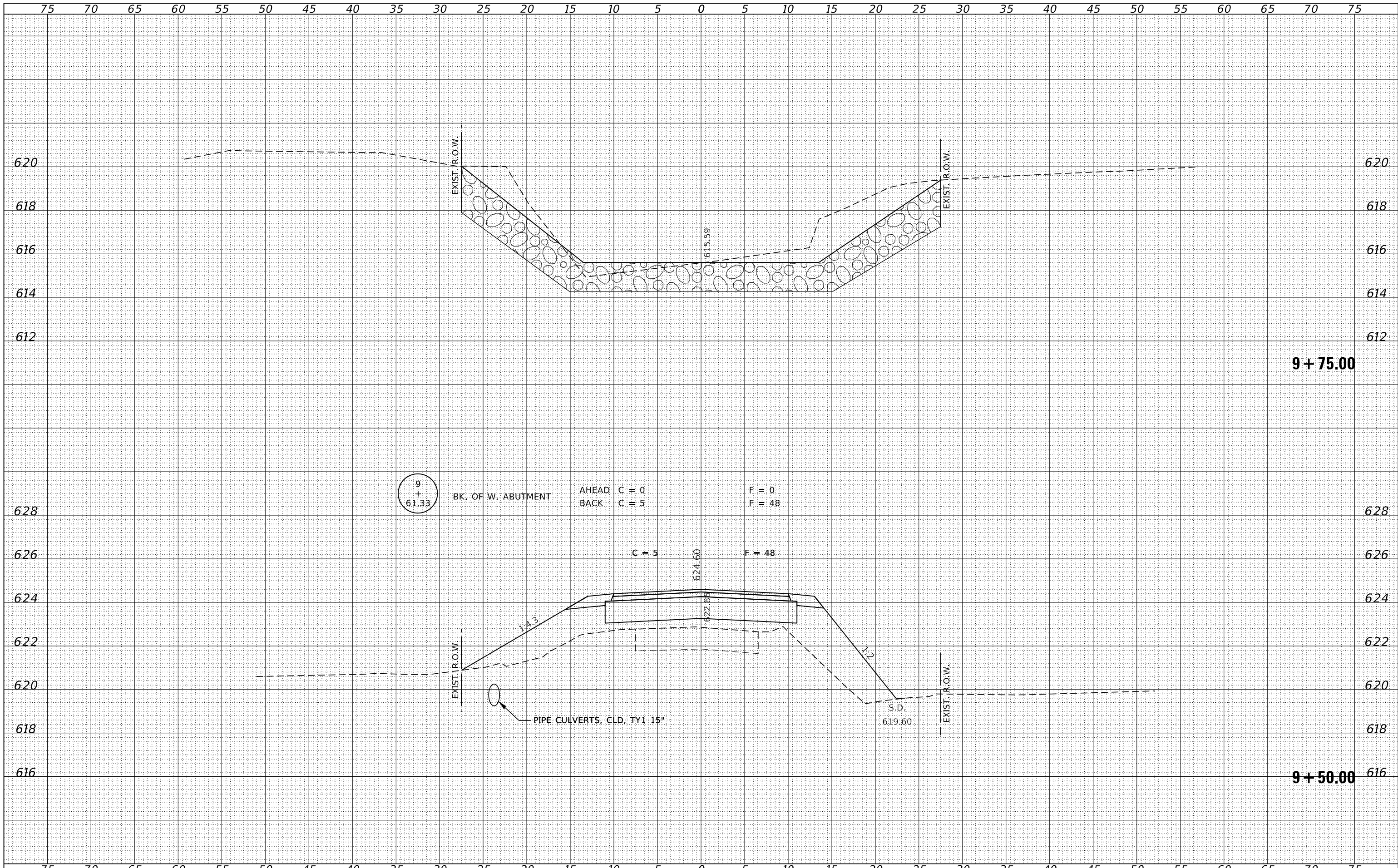
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| HAMPTON, LENZINI AND RENWICK, INC.   | DRAWN - T.W.K.       | REVISED -         | 29                                  |   |                               |                         |                              | 19-25110-03-BR     | LIVINGSTON | 24     | 18           |           |
| 3885 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>L.S. / P.E. / S.E. CORP. 184-009958 | CHECKED - J.W.F.     | REVISED -         | ROUND GROVE ROAD DISTRICT           |   |                               |                         |                              | CONTRACT NO. 87808 |            |        |              |           |
| PLOT SCALE = \$SCALES  | DATE - 01/06/2023    | REVISED -         | ILLINOIS FED. AID PROJECT 877B(638) |   |                               |                         |                              |                    |            |        |              |           |
| PLOT DATE = 1/6/2023   |                      |                   |                                     |   | SCALE: 5H:2V                  | SHEET NO. 3 OF 9 SHEETS | STA. 9+00.00 TO STA. 9+25.00 |                    |            |        |              |           |

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| DATE          |  |
| BY            |  |
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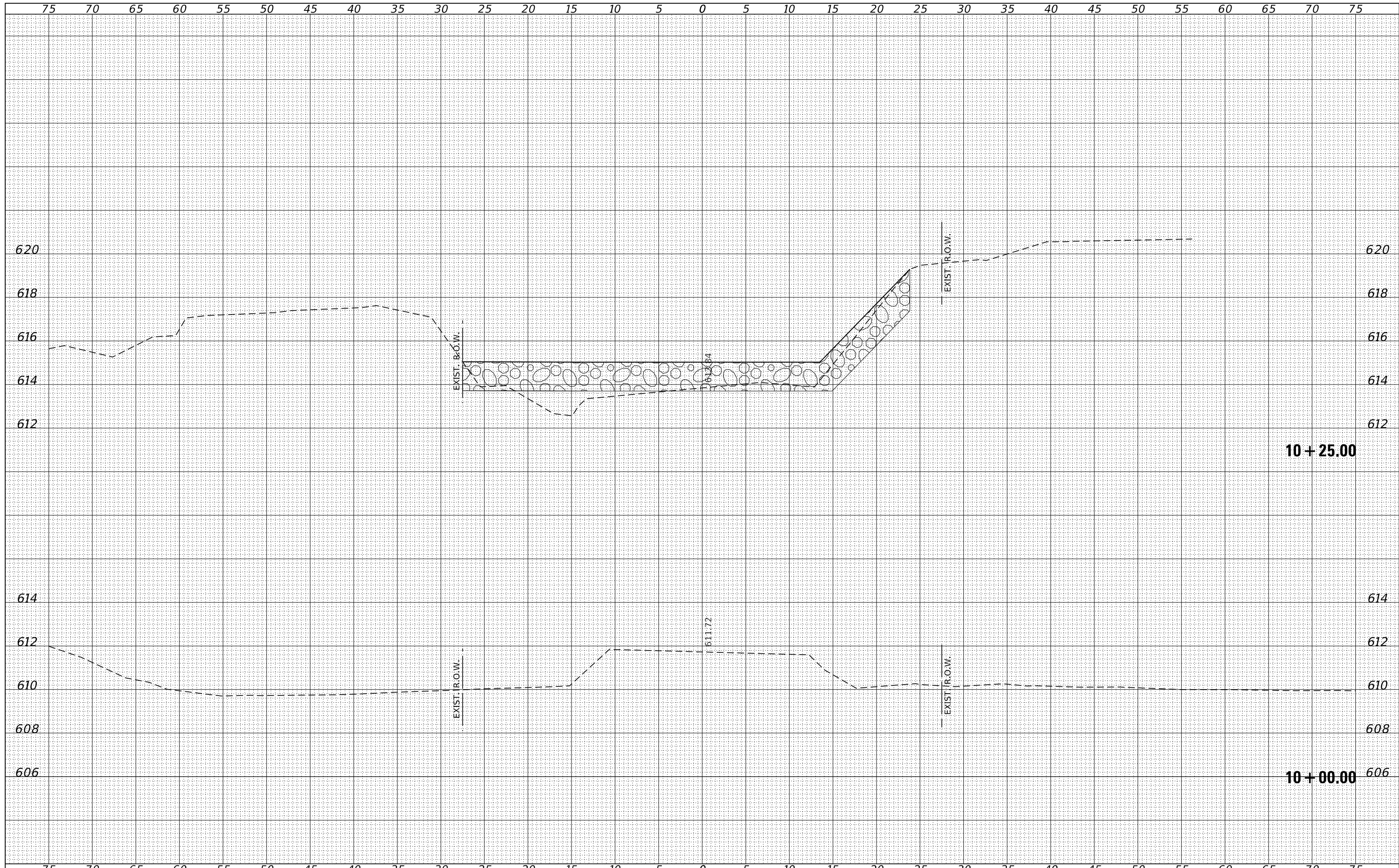
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| HAMPTON, LENZINI AND RENWICK, INC.   |                     | DRAWN - T.W.K.    | REVISED - |   | 29                            | 19-25110-03-BR          | LIVINGSTON   | 24                 | 19                                  |        |              |           |
| 3885 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>L.S. / P.E. / S.E. CORP. 184.009958 |                     | CHECKED - J.W.F.  | REVISED - |   | ROUND GROVE ROAD DISTRICT     |                         |              | CONTRACT NO. 87808 |                                     |        |              |           |
|  |                     | DATE - 01/06/2023 | REVISED - |   | SCALE: 5H:2V                  | SHEET NO. 4 OF 9 SHEETS | STA. 9+50.00 | TO STA. 9+75.00    | ILLINOIS FED. AID PROJECT 877B(638) |        |              |           |

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 PLOT DATE = 1/6/2023

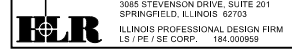
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STATE OF ILLINOIS  
 LIVINGSTON COUNTY HIGHWAY DEPARTMENT

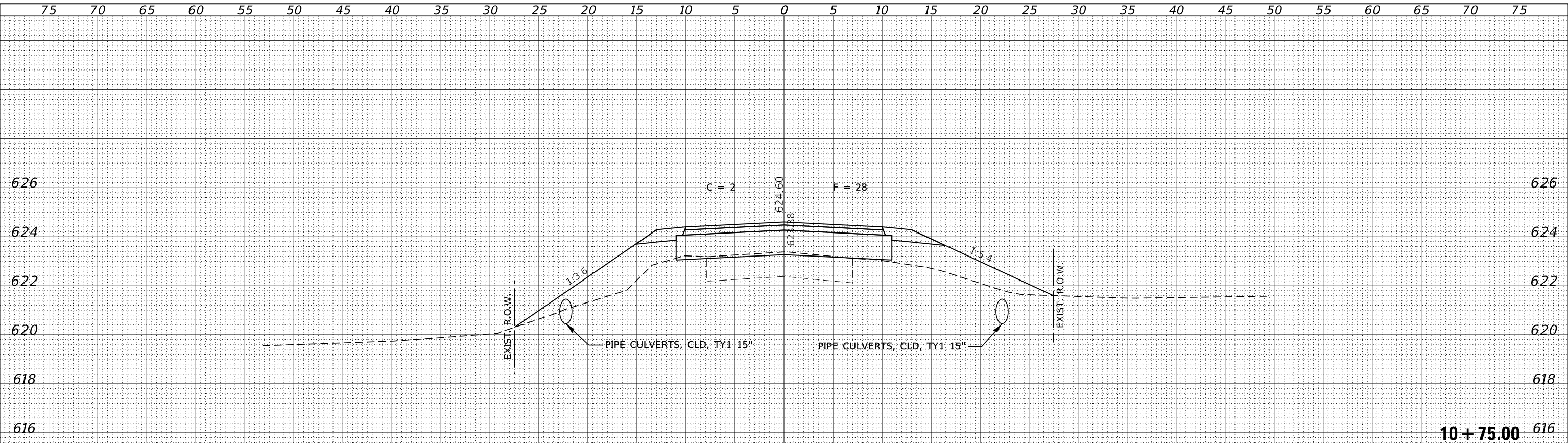
STATION CROSS SECTIONS

SCALE: 5H:2V SHEET NO. 5 OF 9 SHEETS STA. 10+00.00 TO STA. 10+25.00

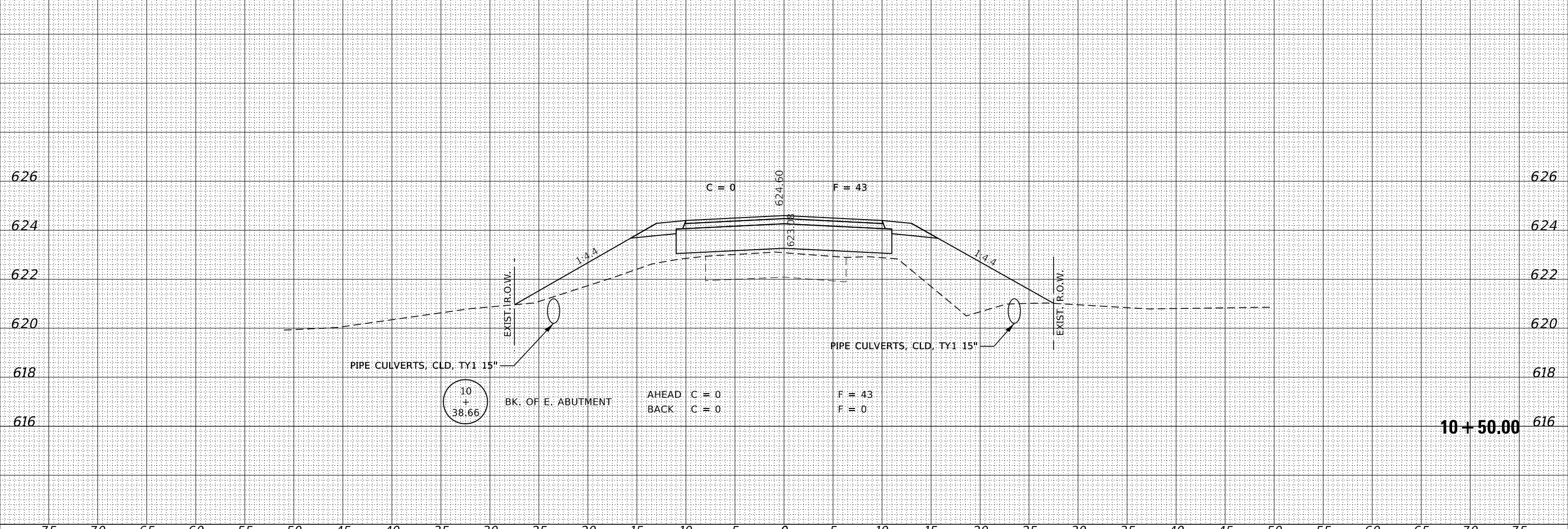
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|-------------------------------------|----------------|------------|--------------------|-----------|
| 29                                  | 19-25110-03-BR | LIVINGSTON | 24                 | 20        |
| ROUND GROVE ROAD DISTRICT           |                |            | CONTRACT NO. 87808 |           |
| ILLINOIS FED. AID PROJECT 877B(638) |                |            |                    |           |



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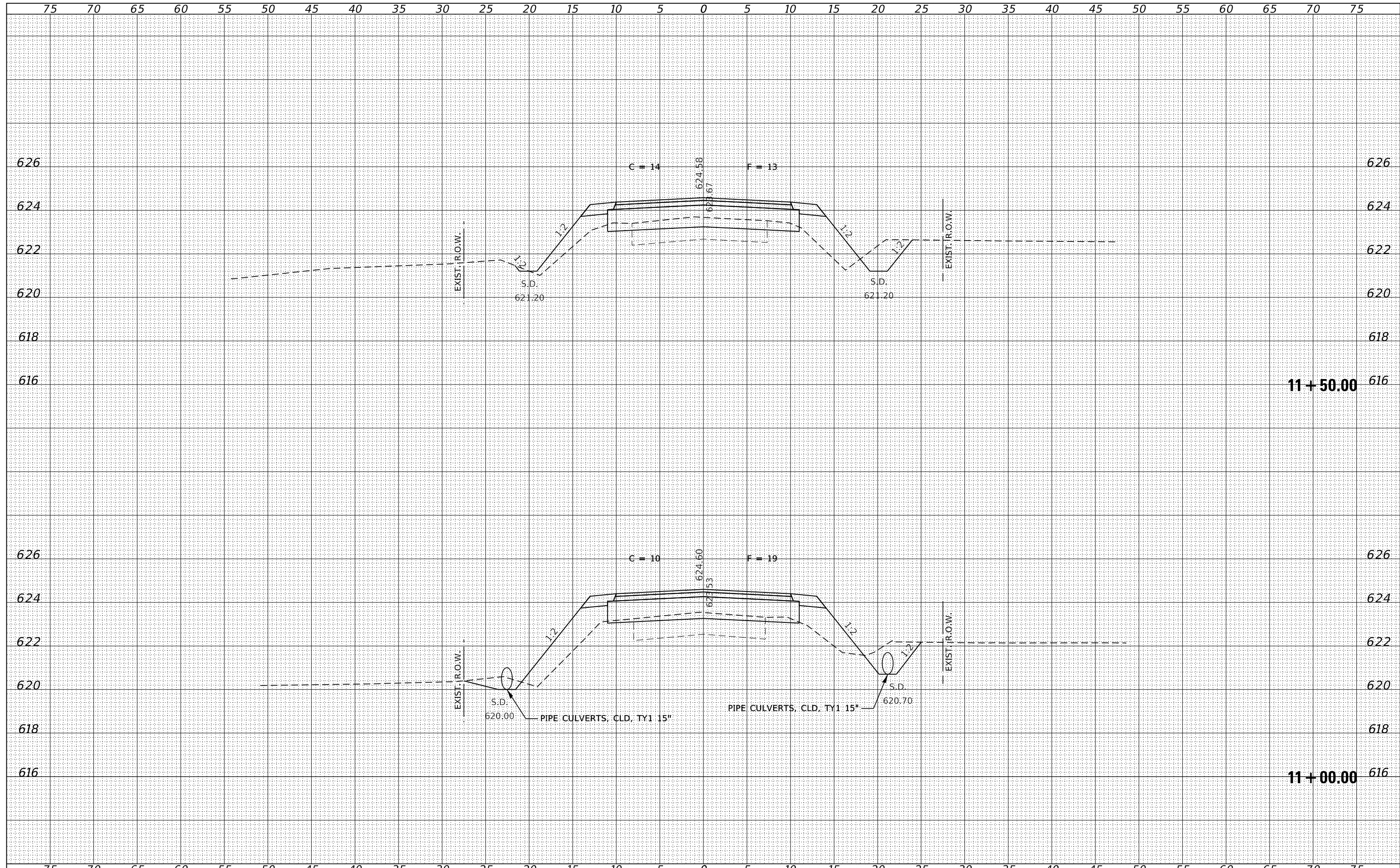
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| FILE NAME = 210039-shl-vssheets.dgn  | USER NAME = gmetcaif | DESIGNED - S.A.A. | REVISD - | <b>STATE OF ILLINOIS</b><br><b>LIVINGSTON COUNTY HIGHWAY DEPARTMENT</b> | <b>STATION CROSS SECTIONS</b> |                         |                                | T.R.                                | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| HAMPTON, LENZINI AND RENWICK, INC.   |                      | DRAWN - T.W.K.    | REVISD - |   | 29                            | 19-25110-03-BR          | LIVINGSTON                     | 24                                  | 21      |        |              |           |
| 3885 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>L.S. / P.E. / S.E. CORP. 184.000958 |                      | CHECKED - J.W.F.  | REVISD - |   | ROUND GROVE ROAD DISTRICT     |                         |                                | CONTRACT NO. 87808                  |         |        |              |           |
|  |                      | DATE - 01/06/2023 | REVISD - |   | SCALE: 5H:2V                  | SHEET NO. 6 OF 9 SHEETS | STA. 10+50.00 TO STA. 10+75.00 | ILLINOIS FED. AID PROJECT 877B(638) |         |        |              |           |

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| DATE         |  |
| BY           |  |
| SURVEYED     |  |
| PLOTTED      |  |
| TEMPLATE     |  |
| AREAS        |  |
| CHECKED      |  |
| FINAL SURVEY |  |
| NOTE BOOK    |  |
| NO.          |  |

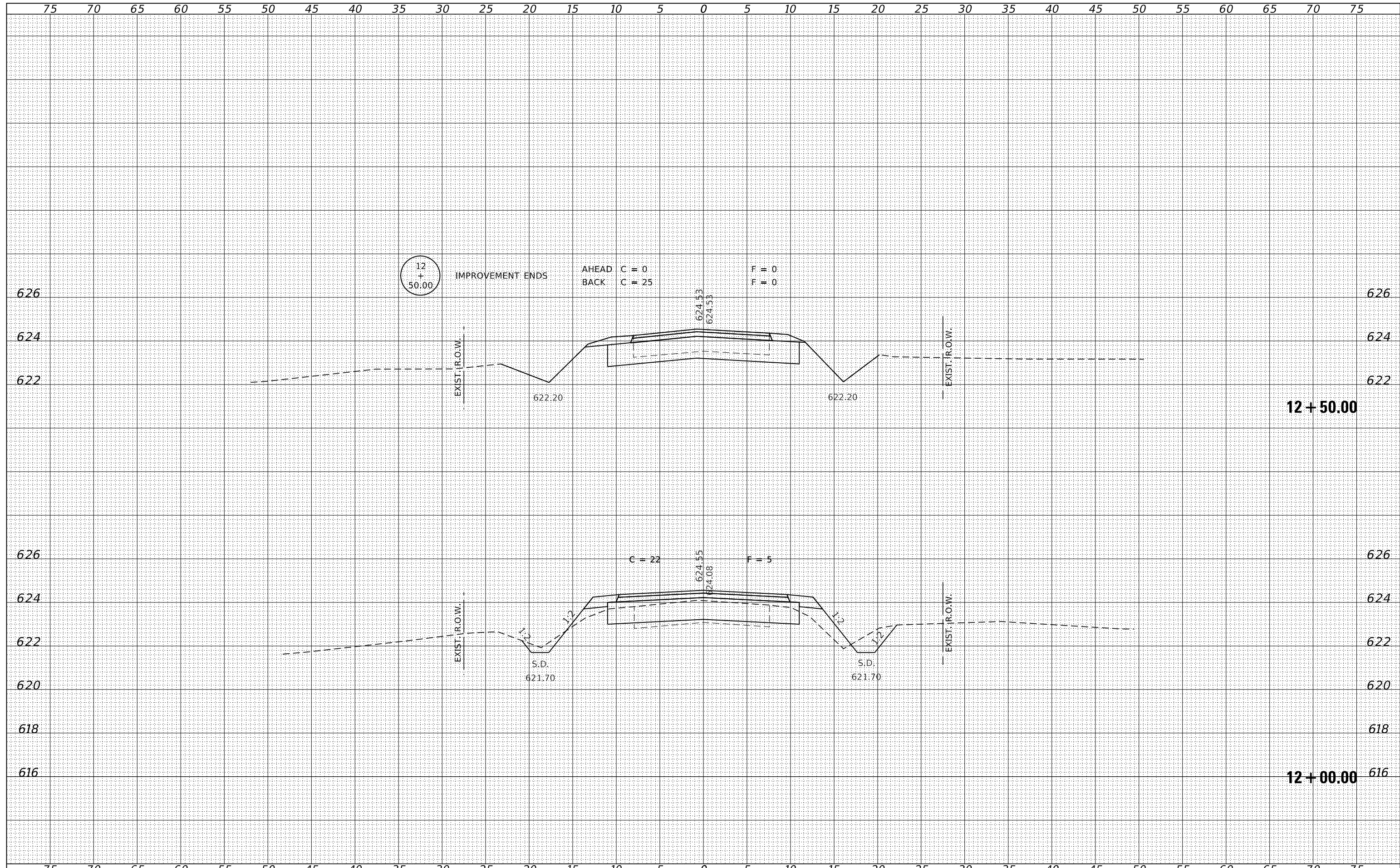
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| DATE            |  |
| BY              |  |
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| TEMPLATE        |  |
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| CHECKED         |  |
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| NOTE BOOK       |  |
| NO.             |  |



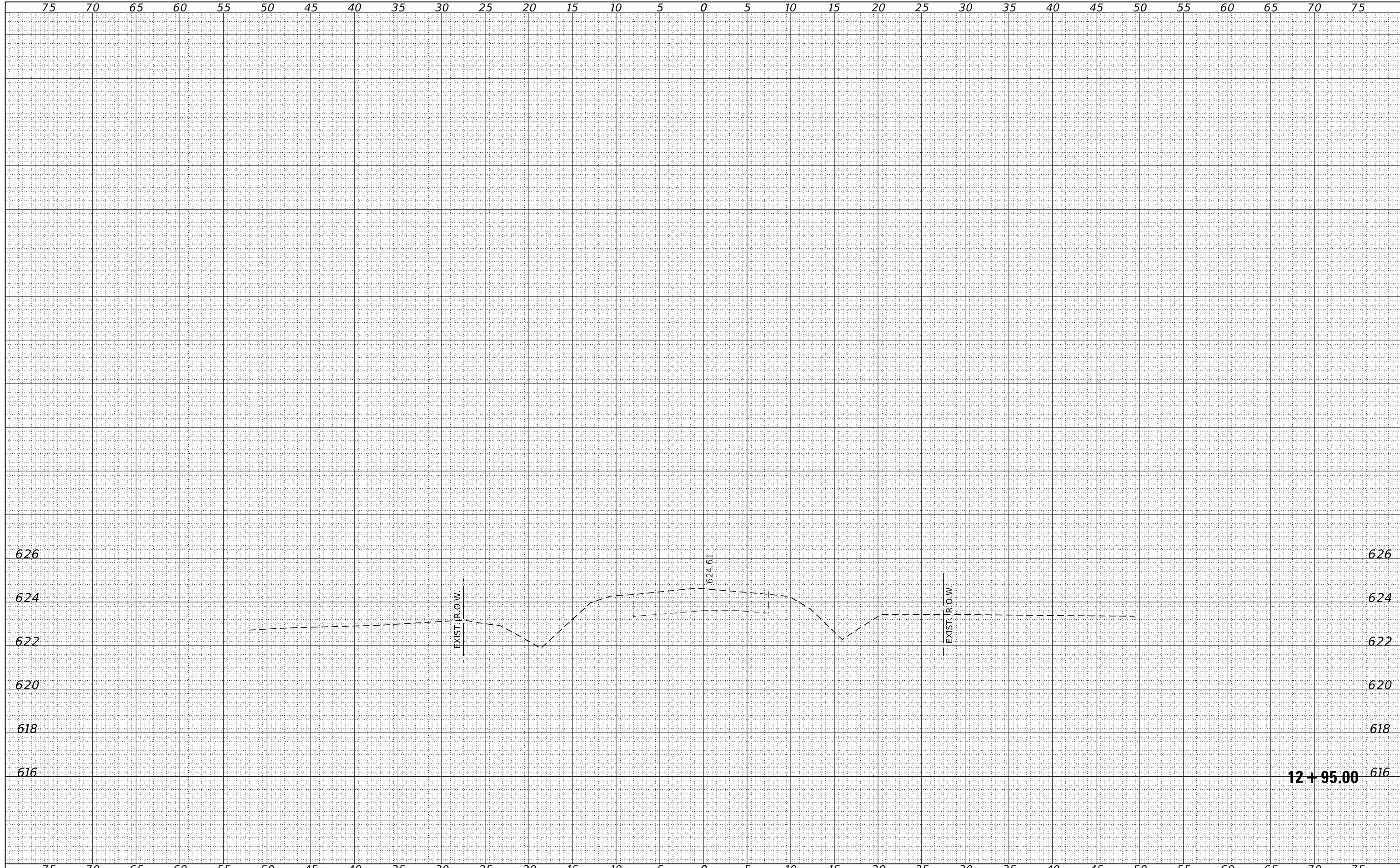
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| FILE NAME = 210039-shl-vssheets.dgn  | USER NAME = gmetcaif | DESIGNED - S.A.A. | REVISED - | <b>STATE OF ILLINOIS</b><br><b>LIVINGSTON COUNTY HIGHWAY DEPARTMENT</b> | <b>STATION CROSS SECTIONS</b> |                         |                                | T.R.                                | SECTION            | COUNTY | TOTAL SHEETS | SHEET NO. |
| HAMPTON, LENZINI AND RENWICK, INC.<br>3885 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>LS / PE / SE CORP. 184.009958 |                      | DRAWN - T.W.K.    | REVISED - |   | 29                            | 19-25110-03-BR          | LIVINGSTON                     | 24                                  | 22                 |        |              |           |
| PLOT SCALE = \$SCALES  |                      | CHECKED - J.W.F.  | REVISED - |   | ROUND GROVE ROAD DISTRICT     |                         |                                |                                     | CONTRACT NO. 87808 |        |              |           |
| PLOT DATE = 1/6/2023   |                      | DATE - 01/06/2023 | REVISED - |   | SCALE: 5H:2V                  | SHEET NO. 7 OF 9 SHEETS | STA. 11+00.00 TO STA. 11+50.00 | ILLINOIS FED. AID PROJECT 877B(638) |                    |        |              |           |

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| BY              |  |
| FINISHED SURVEY |  |
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| TEMPLATE        |  |
| NOTE BOOK       |  |
| AREAS CHECKED   |  |
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| DATE            |  |
| BY              |  |
| ORIGINAL SURVEY |  |
| PLOTTED         |  |
| TEMPLATE        |  |
| AREAS CHECKED   |  |
| NO.             |  |



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| FILE NAME = 210039-shl-vssheets.dgn  | USER NAME = gmetcaif   | DESIGNED - S.A.A. | REVISED - | <b>STATE OF ILLINOIS</b><br><b>LIVINGSTON COUNTY HIGHWAY DEPARTMENT</b><br><b>STATION CROSS SECTIONS</b> | T.R.   | SECTION                 | COUNTY                         | TOTAL SHEETS                        | SHEET NO. |
| HAMPTON, LENZINI AND RENWICK, INC.<br>3885 STEVENSON DRIVE, SUITE 201<br>SPRINGFIELD, ILLINOIS 62703<br>ILLINOIS PROFESSIONAL DESIGN FIRM<br>L.S. / P.E. / S.E. CORP. 184.009958 | PLOT SCALE = \$SCALE\$ | DRAWN - T.W.K.    | REVISED - |  | 29   | 19-25110-03-BR          | LIVINGSTON                     | 24                                  | 23        |
| PLOT DATE = 1/6/2023   | DATE - 01/06/2023      | CHECKED - J.W.F.  | REVISED - |  | ROUND GROVE ROAD DISTRICT CONTRACT NO. 87808 |                         |                                |                                     |           |
|  |                        |                   |           |  | SCALE: 5H:2V                                 | SHEET NO. 8 OF 9 SHEETS | STA. 12+00.00 TO STA. 12+50.00 | ILLINOIS FED. AID PROJECT 8Y7B(638) |           |



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| DATE         |          |
| BY           |          |
| FINAL SURVEY | SURVEYED |
| NOTE BOOK    | PLOTTED  |
| NO.          | TEMPLATE |
|              | AREAS    |
|              | CHECKED  |

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| DATE            |          |
| BY              |          |
| ORIGINAL SURVEY | SURVEYED |
| NOTE BOOK       | PLOTTED  |
| NO.             | TEMPLATE |
|                 | AREAS    |
|                 | CHECKED  |

FILE NAME = 210039-shl-vssheets.dgn  
 HAMPPTON, LENZINI AND RENWICK, INC.  
 3885 STEVENSON DRIVE, SUITE 201  
 SPRINGFIELD, ILLINOIS 62703  
 ILLINOIS PROFESSIONAL DESIGN FIRM  
 LS / PE / SE CORP. 184.009958

USER NAME = gmetcaif  
 PLOT SCALE = \$SCALES  
 PLOT DATE = 1/6/2023

DESIGNED - S.A.A.  
 DRAWN - T.W.K.  
 CHECKED - J.W.F.  
 DATE - 01/06/2023

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STATE OF ILLINOIS  
 LIVINGSTON COUNTY HIGHWAY DEPARTMENT

SCALE: 5H:2V  
 SHEET NO. 9 OF 9 SHEETS  
 STA. 12+95.00 TO STA. 12+95.00

STATION CROSS SECTIONS

| T.R.                      | SECTION        | COUNTY                     | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|----------------------------|--------------|-----------|
| 29                        | 19-25110-03-BR | LIVINGSTON                 | 24           | 24        |
| ROUND GROVE ROAD DISTRICT |                | CONTRACT NO. 87808         |              |           |
| ILLINOIS                  |                | FED. AID PROJECT 877B(638) |              |           |